POST GRADUATE DPLOMA ASSIGNMENT

ASSIGNMENT FOUR

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POST GRADUATE DIPLOMA IN FOOD SECURITY AND MANAGEMENT

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# ASSIGNMENTS THREE QUESTIONS

1. How do you ensure appropriate data is captured for purposes of assessing food security in emergencies?
2. Discuss the indicators of food security taking your country as an example
3. What are the expectations of national governments as well as county governments on issues to deal with food security?
4. What is the importance of supplementary feeding programmes?
5. Explain the therapeutic care strategies in emergencies.
6. Discuss the health interventions in emergencies linked with food security.

**QUESTION ONE**

**Ensuring appropriate data is captured for purposes of assessing food security in emergencies**

**Introduction:**

The latest Humanitarian Practice Network (HPN) paper produced by ODI describes the theory and practice of Oxfam GB's livelihoods approach to assessing food security in emergencies. This involves assessing the longer term risks to livelihoods as well as short-term nutritional or life threatening risks. During emergencies there is food insecurity. Emergencies destroy food stocks in houses, gardens, grazing lands, forests mention a few.

Food security, therefore, refers to access by all people at all times to sufficient, safe and nutritious food for health and active life. Hence the main elements of food security include food availability that is to do with sufficient food, access to food based on adequate income and other resources, and food utilization; of food that is safe and healthy and have nutritious value.

**Purposes for assessing food security in emergencies**

Food security, or rather insecurity, is at the heart of food crises and food-related emergencies. It is an underlying cause of malnutrition and mortality and a significant factor in longer term livelihood security. Food insecurity may cause irreparable damage to livelihoods, thereby reducing self-sufficiency. It is therefore an issue that leads to malnutrition, morbidity and mortality.

In addition, the stateof being food insecure directly contributes to destitution and damaged livelihoods in the long term. In other words, if there is acute food insecurity, there is a nutritional risk. Depending on the aims of the assessment, different approaches to assessing food security in emergencies arise. However, the theory behind each approach is based on the same underlying concept. This concept incorporates issues of availability and access to food, severity of food insecurity and acknowledges that, in an emergency, people may adopt a variety of coping strategies in response to food insecurity. The concept also includes issues around vulnerability, and sees famine as a process, comprising distinct stages.

To estimate the severity of food insecurity, analyses shifts in food entitlements, coping strategies and nutritional status assessing food security at conceptual level. It takes into consideration a livelihoods approach simply which means emergency programming with the aim of supporting livelihoods, as well as saving lives. Assessments need to incorporate an analysis of the food security of different livelihood groups, and the risks they face.

This often means doing a more in-depth assessment than would be the case if lives alone were in question, analysis of the food security of different livelihood groups will lead to the identification of different interventions for each group.

Finally, a livelihoods approach to food-security assessments has implications for food-aid recommendations, because the proportion of the population targeted will increase, and more rations will be required.

**Bases for assessing food security in emergencies:**

According to Helen (2001), she says Oxfam defines food security as to “When everyone has at all times access to and control over sufficient quantities of good quality food for an active healthy life”. Of course, the availability of food near to the household is a prerequisite of food security. Availability is influenced by factors such as a community’s proximity to centres of production and supply, or by market forces, restrictions on trade and international policies that affect food supplies. All of these are key to food-security analysis.

A livelihoods approach to food-security assessments considers both the severity of food insecurity (in terms of people’s ability to feed themselves and the impact on nutritional status), and the processes that generate food insecurity (vulnerability, risk and coping), and that have a long-term impact on livelihoods.

**Methodology:**

In order to ensure appropriate data is captured for purpose of assessing food security in emergencies, the focus is based on whether it is short-term food needs or long-term livelihood issues, the same assessment principles apply:

* Find out about food availability;
* Find out about the ability of people to feed themselves, and how different groups of people gain access to food;
* Gauge the severity of food insecurity in terms of its impact on entitlements and nutritional status (risks to lives); and
* Analyse the severity of food insecurity in terms of livelihood vulnerability and risk (risks to livelihoods).

**The type of information collected**

**Information on the context**

The food-security assessment includes a review of basic information about the emergency context

In an acute emergency, where people may be at risk of starvation, decisions must be made quickly. The main questions and decisions relate to:

* Whether food assistance is needed;
* If so, how much and what type;
* Who needs assistance, and why;
* How long food aid is required, and/or the point at which the situation must be reviewed; and
* Whether there are locally-available resources and capacities to transport, store and distribute food.

Assessing risks to livelihoods requires a more in-depth analysis of the severity of food insecurity. In addition to assessing people’s ability to feed themselves assessing shifts in entitlements and impact on nutritional status, it must also include the wider aspects of vulnerability. Based on this, let me describe in details procedures of how to capture appropriate data.

**Information on availability, access and severity of food insecurity**

A checklist of key areas where information may be needed regarding the availability of food, and a population’s access to it is required that indicate the severity of food insecurity in terms of ability to meet immediate food needs, and risks to livelihoods.

However, the checklist may vary depending on people’s livelihoods, the nature of the external shock and people’s ability to cope.

**Information on nutritional status**

The prevalence of acute malnutrition and the nutritional status of children in a population can be used to judge the severity of food insecurity, as long as the health and care determinants of nutritional status are taken into account. As a rule of thumb, unless there have been reported outbreaks of either measles or acute diarrheal disease it is unlikely that a sudden decline in nutritional status has occurred as a result of disease. Similarly, the major care factors to look out for are significant population displacements, which might affect care-giving behaviours such as bottle-feeding.

In the early stages of an acute emergency where people have obviously been cut off from their normal sources of food, as in the early days of a refugee emergency and other rapid-onset emergencies like earthquakes and floods, measuring nutritional status is not a priority. In slow-onset or protracted emergencies, a nutritional survey may be useful to confirm the severity of food insecurity.

**Sources of information:**

In rapid assessments, a combination of ‘secondary’ information from existing sources, and new or ‘primary’ information, which is collected during field visits is crucial. The type of primary data collected (quantitative or qualitative) depends on where the gaps in the secondary information are, and on the constraints on fieldwork, particularly to do with time, access and the availability of resources.

**Secondary sources of information**

Secondary sources of information encompass existing knowledge among local government, UN and INGO, NNGO representatives, academics, journalists and other experts. These sources form the backbone of any assessment, particularly in relation to the historical context and trends in food security over time. For example, it can be like use of crop-assessment reports as a source of important secondary data. A desk study of this existing information is a vital first step in any food security assessment.

**Primary sources of information**

In emergency assessments, time rarely permits an in-depth household survey, nor is one necessarily appropriate. Rapid-appraisal techniques provide a preliminary understanding of the situation, which allows for quick decisions about the initial response.

If a response programme is planned, follow-up investigation could be incorporated into programme activities, for example by including a food-information system, or regular monitoring or review visits, for a survey to produce valid and reliable results, it must be appropriately designed, use standard methods and procedures, and be managed by qualified personnel.

If people are scattered over a large area, access may be limited and accurate population estimates may be unavailable. Some of these problems may be solved by sampling smaller areas, reducing cluster size or doing purposive sampling Young, (1992). In a purposive sample, areas, villages or population groups are selected as being representative of the population or area of interest. This is done only where anthropometric data is complemented with qualitative information on food security and the health environment. Data cannot be inferred to give a malnutrition prevalence for the population or area as a whole.

**QUESTION TWO**

**Indicators of food security taking your country as an example**

**Introduction:**

South Sudan’s population is overwhelmingly rural and primarily dependent on subsistence farming or animal husbandry for their livelihoods. The risk of food insecurity varies markedly with rainfall, conflict, soil types, topography, drainage and access to markets among other factors. The majority of rural population practice various combinations of agricultural types, animal husbandry and pastoralism/agro-pastoralism, gathering of wild plant foods, hunting, fishing, income sources from timber, gum Arabic and other natural resources.

Livelihoods are largely differentiated according to topography. Those households living along rivers are mostly engaged in activities related to fishing. In low lying areas, households typically rely on agriculture and pastoralism. Households living in areas characterized by plains, highlands and mountains with equatorial rain forest do crop farming and livestock production supplemented by food obtained from hunting and wild foods, and food purchased with income from agricultural and casual labor.

Households on highlands, plateau and foothills with a mixture of forest, bush shrubs and grasslands are endowed with some natural resources such as wild honey and shear butternut trees. Households in vast plain and foothills of the mountainous ranges with vegetation characterized by dense forest with mahogany and bamboo trees, bush shrubs and savanna grasslands do livestock keeping. Meanwhile, some poor households are involved in the sale of products such as charcoal, firewood, poles, bamboo and ropes.

Those in semi-arid do pastoralism and those in flood plains characterized by swampy vegetation do fishing as well as agro-pastoralism. Household incomes especially from the sale of surplus crops, livestock and natural products are heavily dependent on access to external markets.

However, the risk situation of South Sudan due to conflict, climate-related hazards; floods, droughts, land degradation, livestock diseases, crop pests among others have detrimental effects on livelihoods, for example, conflict and floods destruction of livelihood assets and destruction of agricultural land which have had persisted for years since 2013 update (2020) thus the below scenario.

 

*Photo taken by the student (Batikayo) October, 2019 in Leer*

**Food insecurity and malnutrition situation remains at dire levels across South Sudan:**

As published in the Integrated Food Security Phase Classification (IPC), in September 2018, 6.1 million people (59% of the total population) are facing Crisis (IPC Phase 3), Emergency (IPC Phase 4) and Catastrophe (IPC Phase 5).

During the post –harvest period October-December 2018, the number of people in need of humanitarian assistance (IPC Phase 3 and above) was expected to reduce to 4.4 million (43% of the total population), out of which 26,000 would experience catastrophic conditions (IPC Phase 5) and extreme food gaps.

In September 2018, populations facing “Catastrophe” (IPC Phase 5) were located in the following counties: Leer, Mayendit, Yirol East, Yirol West, Canal/ Pigi, Panyikang, Greater Baggari, and

in October - December 2018, people would continue to face catastrophic levels of food insecurity in the following counties: Leer, Mayendit, Panyikang, Greater Baggari and Pibor.

In January - March 2019, the catastrophic outcomes were expected to persist especially in Pibor, Canal/ Pigi, Leer and Mayendit counties. Severe food insecurity affecting the population as a whole, with internally displaced persons (IDPs) being the most vulnerable due to persistent insecurity and armed conflict disrupted livelihood activities, affected market functionality and limited physical access to markets. In addition, an anticipated earlier-than-normal start of the lean season in many areas will further hamper people’s food security, impairing the very survival of the most vulnerable.

In 2019, crisis (IPC Phase 3) and Emergency (IPC Phase 4) outcomes persisted throughout South Sudan, and some households were in catastrophe (IPC Phase 5). According to the May IPC analysis, an estimated 6.96 million people were estimated to face crisis (IPC Phase 3) or worse outcomes through the July/August peak of the lean season in the presence of already planned humanitarian assistance. Food security would improve somewhat in late 2019 with the harvest, though crisis (IPC Phase 3) or worse outcomes would remain widespread. A risk of Famine (IPC Phase 5) would also persist.([FEWS NET, 27 Jun 2019](https://reliefweb.int/report/south-sudan/south-sudan-food-security-outlook-update-june-2019-january-2020))

**Food Security Indicator in South Sudan**

All the indicators used i.e. conflict, floods, drought, land degradation, livelihood diversification and food insecurity are weighted based on the estimated 2013 population for the three years period. Most parts of South Sudan are between poor to low resilience considering the overall relative resilience indicated by WFP/VAM Nairobi Regional Bureau (2014). The most resilient livelihood groups based on this analytical approach are those in the Equatorial maize and cassava, and partly in the western groundnuts, sesame and sorghum.

Households that depend on pastoralism in the northern part of the country (zone SS06) have poor resilience as they have limited livelihood diversity and are often hit by livestock disease and cattle rustling. Most of the poor households in the central parts of the country who depends on rain fed agriculture and related activities have poor resilience due to chronic poverty and very low diversity of livelihoods.

In light of a projected long-term increase in rainfall variability and the accompanying intensity and frequency of floods and droughts, as well as hazards such as animal diseases, conflicts and land degradation, water management and climate adaptation strategies are becoming ever more necessary.

**QUESTION THREE**

**Expectations of National Governments as well as County Governments on issues to deal with Food Security:**

**Introduction:**

In the first two decades after much independence, the countries witnessed a significant growth and improvement in living standards. However, economic growth was either stagnant or negative in many countries compared to high population growth rates especially in the 1980s and 1990s. In the agricultural sector, annual growth rates declined from 6% in the 1960s to 1.3% in the 1990s according to Government of Kenya (2011). In recent years, there have been upturn of many economies, providing renewed opportunity to enhance food security and nutrition. In 2005, many economies at average grew by 5.8 % while in 2006 it grew by 6%. As a result the absolute poor dropped.

That means in recent years, it is estimated that at any one time about two million people require assistance to access food. During periods of conflict, drought, heavy rains and/or floods, the number of people in need could double. This is a question for institutions and professionals promoting and funding policies, programmes and projects of what is sometimes termed “the Food Security sector”.

It is the policy of the government that all citizens, throughout their life-cycle enjoy at all times should have access to safe food in sufficient quantity and quality to satisfy their nutritional needs for optimal health.

**The broad objectives are:**

* To achieve good nutrition for optimum health.
* To increase the quantity and quality of food available, accessible and affordable to all at all times.
* To protect vulnerable populations using innovative and cost-effective safety nets linked to long-term development.

National Governments and International Government in trying to handle the chronic-poverty-based food insecurity and malnutrition, as well as the perpetuity of acute food insecurity and malnutrition associated with frequent and recurring emergencies, and the critical linkages thereof, resort to policies that address:-

**Food availability and access:** The government policy objective is to increase the quantity and quality of food available and accessible in order to ensure that all citizens have an adequate, diverse and healthy diet.This will be achieved by working towards sustainable production increases for food that is diversified, affordable and helps meet basic nutrition requirements.

Another aspect is better storage and processing to reduce post-harvest losses and help smooth availability over time. The governments maintain strategic reserves comprised of both food and cash stocks to ensure rapid response to emergencies. Well-functioning rural and urban markets are a key objective of governments, along with promoting food trade to ensure a predictable supply of commercially available food. Efforts to enhance employment opportunities and income will focus on both on-farm and off-farm opportunities in rural areas, with related initiatives to promote urban employment and improved food access.

**Food safety, Standards and quality control:**

The government policy objective to ensure safe, high quality food is by creating public awareness on relevant issues, and by setting, promoting and enforcing appropriate guidelines, standards and a regulatory framework. Various government bodies are responsible for food safety and quality, which are governed by no less than 20 legislative acts. Coordination of activities and harmonizing the regulatory and institutional framework is, therefore, essential.

While food safety and quality control are national issues, concerns about public health are particularly acute in urban and peri-urban areas, which require special efforts to ensure safe production, handling, storage, preparation and sale of food. Guidelines and standards, based on international standards, developed, revised and updated. These standards and guidelines focus not only on food and food products but also service delivery in various sectors. The private sector are substantial partners that further efforts to improve food product quality, regulations and safety.

**Nutrition improvement:**

The governments’ policy objectives are to achieve good nutrition for optimum health of all people. Enhancing food access, providing special nutrition interventions for specific vulnerable groups and creating awareness to provision of nutritious foods to all family members and especially children are among other major governments’ objectives.Policies adopt the life-cycle approach to improved nutrition that emphasizes the biological needs in terms of different specific amounts, types and varieties of nutrients for population groups who are at specific stages of life: For instance, (i) during pregnancy and for the newborn child, (ii) during early and late childhood, (iii) during adolescence, (iv) during adulthood, and (v) for older persons.

Micronutrient deficiencies are being addressed by promoting more diversified diets, food fortification, bio-fortification and vitamin and mineral supplementation. Strategies are developed to address diet-related non-communicable diseases caused by excessive energy intake associated with purchase of meals and processed foods.

**School nutrition and nutrition awareness:**

Some government policies’ objective is to have all citizens knowledge the need for good basic nutrition requirements for a healthy and active life, with clear and substantive roles for relevant government institutions, the media and other key stakeholders.Efforts is focused on improved nutrition and nutrition education in schools with an emphasis on good nutrition practice and positive food habits. Building capacity amongst service providers in all sectors, enhancing nutrition-related adult education amongst the general population, and mounting effective public awareness campaigns are essential. Well founded and internationally accepted dietary guideline, for example, adapted for Kenya consolidates key nutritional information in a single user-friendly package.

**Food security and nutrition information:**

Information is power and everybody should have access to it. The government policies’ objective is to build capacity and ensure the availability of quality and timely food and nutrition security data, information and analysis for better formulation and management of integrated food and nutrition security strategies, programmes and action.Recognizing the broad scope of food security and nutrition related information; sectoral institutions and agencies gather and manage crucial data and information. Cross-sectoral data are brought together into special databases, and in some cases supplemented with more specific indicators, to allow for integrated and holistic food security analysis.

**Early warning and emergency management:**

The government policy objective is to protect vulnerable populations and address food insecurity concerns in developing capacity for purposes of early warning and emergency management using innovative and cost-effective safety nets and emergency relief programmes linked to long-term development.Early warning systems are expanded and strengthened to provide crucial information and analysis for emergency preparedness and response, and also to guide emergency mitigation and longer-term development.

Kenya for example have put in place innovative emergency response mechanisms aimed first and foremost at saving lives, linked with strategic efforts towards recovery, rehabilitation, restoration of livelihood systems, and development. These include transfers-based entitlements, cash transfers, public works programmes, input support and special measures for the protection and management of livelihood assets, particularly in Arid and Semi-Arid Lands (ASALs) of Kenya

**Institutional and legal framework and financing:**

The governments ensure an adequate institutional and legal framework, and to mobilize sufficient resources in order to achieve the objectives of the National Food and Nutrition Security Policy (NFNSP).Existing institutional coordinating mechanisms; National Food and Nutrition Security Policy including at national and sub-national levels, are strengthened and broadened to support the NFNSP and related strategies and programmes.

**Strategic approaches for policy implementation, monitoring and evaluation:**

A strong, logical and realistic strategic framework is required, with associated programmes and action plans. Actions must be purposefully linked and coordinated with one another and with sectoral initiatives of governments and partners at international, national and sub-national levels. An essential component of the implementation strategy is to create strong and lasting advocacy mechanisms. Particular importance is the role of the media and phasing out of programme activities. The policies are implemented in a manner that acknowledges changes in people’s food security and nutritional status and conditions over time. In this manner, the strategy remains dynamic and programmes reflect the changing context, knowledge and requirements. An effective monitoring and evaluation system help identify particular success and effective initiatives.

**QUESTION FOUR**

**The importance of supplementary feeding programmes**

**Introduction:**

Mohit (2017) give a vivid example to Kenya with its feeding programme. The Kenyan Government recently started its Home Grown School Feeding Program (HGSFP) in primary schools across the country. However with roughly 70-80% of the Kenyan population still living in rural areas, a majority of primary schools are yet unable to reap the benefits of the HGSFP because of a myriad of factors: poor infrastructure, unpredictable weather patterns, and mismanagement of resources. As the Kenyan government looks to limit the role of foreign players such as the World Food Program (WFP) in order to transform the HGSFP into an independent national enterprise, many Kenyan organisations have stepped in to support schools that the government cannot. Amongst these are churches, religious organisations and NGOs.

**What a supplementary feeding is:**

The nutritional needs of an infant for example, from age six months onward can no longer be met with breast milk alone. To ensure adequate energy and nutrients, an infant’s diet must be gradually expanded to include complementary ‘family foods’. The term ‘complementary’ is important – these first foods complement breast milk, not replace it. Continued breastfeeding for up to two years or beyond provides an essential source of energy and nutrients in the child’s diet, even with appropriate breastfeeding.

The decision to implement a Supplementary Feeding Program is usually based on raised prevalence of acute malnutrition among children under five and the presence of aggravating factors such as poor food security in the general population, disease epidemic and raised mortality (severity of a crisis). The justification for intervention, the objectives, the target groups and a viable exit strategy is always defined at the start of the program.

Patients from [admission](http://motherchildnutrition.org/malnutrition-management/management-moderate-acute-malnutrition/admission.html) that fulfill the criteria for MAM and do not have medical complications should be registered and all their information recorded in the Client Card  [[Front](javascript:plainWindow2()) | [Back](javascript:plainWindow3())] including the target weight for discharge ([WHO/NCHS table](http://motherchildnutrition.org/malnutrition-management/info/nchs-who-normalized-reference.html)). The ration for one child normally provide a maximum of 1000 to 1200kcal/person/day and 10-12% of energy from protein foods, and these include the following foods are used:- **Local foods** such as rice, beans and locally-produced vegetables should be the basis for supplementary rations. A [fortified food](http://www.unu.edu/unupress/food/8f154e/8f154e03.htm) or micro-nutrient supplement (e.g. [sprinkles](http://www.sghi.org/about_sprinkles/index.html)) should be added where the minimum required diet cannot be met using available resources.  
  
**Blended cereals** provide 350-400 Kcal per 100gr of dry product. Combined mineral and vitamin mixes is added to blended cereals that are not pre-fortified. The most common example of blended cereal is the Corn Soya Blend. Supplementary porridges made at home by mixing one part of blended cereal with three parts of water and by cooking the mixture until it has boiled and the consistency has thickened.

A **dry-food ration** consists of blended cereals, oil and sugar that are not pre-mixed. A **pre-mixed ration** is when blended cereals are mixed with oil and sugar prior to distribution.   
**High-energy and protein biscuits** are usually provided only in the onset of an emergency. They are not be given priority over locally-available products and it is normally avoided in the long-term.

**A dry-food ration** can be provided weekly, fortnightly or monthly depending on resources, needs of target population. Food is distributed by weight using a balance or calibrated container and, wherever possible, is transported home by mothers in their own containers.

A **wet-food ration** may place an economic burden on the caregiver that has to come on a daily basis, as well as on the facility because of increased logistic demands. This is cooked and consumed at the location of distribution. Caregivers bring their admitted child for **surveillance** through weighing, [Mid-Upper Arm Circumference (MUAC)](http://motherchildnutrition.org/early-malnutrition-detection/detection-referral-children-with-acute-malnutrition/screening-for-acute-malnutrition.html#Mid-upper%20Arm%20Circumference%20(MUAC)) screening, [oedema checking](http://motherchildnutrition.org/early-malnutrition-detection/detection-referral-children-with-acute-malnutrition/screening-for-acute-malnutrition.html" \l "Bilateral%20pitting%20oedema" \t "_blank) and assessment of standard clinical signs.

**Importance of Supplementary Feeding:**

Supplementation is targeted to the severely malnourished and those whose growth is found, through surveillance activities, to be faltering. Specific targeting criteria normally determined by the project staff's detailed review of other targeting methods employed in similar activities. Supplementary feeding is crucial due to the following importance as it leads to improvement in physical and psychological outcomes for children.

**Physical Health:**

Weight and height; weight gain and linear growth are common measures used to judge the success of infant feeding programme in part because they are simple, rapid and inexpensive to obtain. According to Elizabeth, K. (2016), weight is often reported as weight gain in kilograms, but it can also be reported as the change in the weight-for-age. Similarly, height is reported either as linear growth in centimeters or change in height-for-age. Supplementary feeding has substantial effect on weight especially for adult.

Hemoglobin; the concentration of hemoglobin in blood is commonly used as an indicator of nutrition status. Hemoglobin carries oxygen around the body. Supplementary feeding improved hemoglobin levels in children reducing the risk of anemia.

Illness and death; supplementation does not heal diseases but rather can reduce the rate of death. Children, who receive supplementary feeding helps to boost their immune, thus fight minor illness like diarrhea.

**Psychosocial health:**

Supplementary feeding provides higher energy. Children who are given supplementary energy for example, protein and micronutrients, his/her body use the resources for brain development first, and for growth and other aspects later.

**Implication of Supplementary Feeding:**

Supplementation can be more effective if delivered earlier in time. Young children respond better to supplementary food if they are provided during the critical window for growth, which is before the age of two, the period after exclusive breastfeeding is a key period to work with the family to ensure that appropriate complementary foods are provided.

Supplementations that target the poorest or most undernourished children is more responsive to supplementary feeding, especially where feeding is limited it becomes appropriate and cost-effective.

Supervision increases the total energy consumed by children. Children take in more total energy if supplementary feeding is delivered in supervised feeding day-care centres, preschool, which leads to greater benefits in terms of growth and development.

Working with parents or caregivers and the community, programme enhances their motivation and capacity to deliver supplementary food to children. This leads to effectiveness of the programme in a later time.

The programme provides extra rations for other family members to reduce leakages (where supplementary foods are shared among other family members). Beaton as quoted by Elizabeth (2016) says, “Rather than seeing leakages as a problem, it can be also seen as providing benefit to the family, so providing rations to reduce sharing of supplementary food is useful strategy”.

Supplementary feeding that provided moderate (30-59%) of dietary energy intake result into greater growth than those that provide less the 30 percent. Young children tend to have less appetite, so food that is energy and nutrient-dense will be easy for them to consume. Ready-to-use therapeutic food is ideal for younger children and older people who are severely malnourished.

**QUESTION FIVE**

**The therapeutic care strategies in emergencies**

**Introduction:**

Therapeutic Care (TC) is a new approach for the management and treatment of severe acute malnutrition (SAM). Therapeutic Care strategy in emergencies provides guidance on supporting children and young people. Individuals more vulnerable are found in public health emergencies. The main indicators of the strategy include, admission rates, average weight gain, exit rates etc. which may be plotted against time (months) to provide a picture of how the strategy has evolved. Until 2001, emergency response to high levels of acute malnutrition has predominantly been through Therapeutic Feeding Centres (TFCs). TFCs are large, in-patient centres where patients are admitted for 21 days or longer.

**Therapeutic care strategies in emergencies**

Acutely malnourished children are identified through screening of the affected population or by the community or directly in the health facility. Three forms of treatment are provided according to the severity of the child's condition:

1. Individuals with moderate acute malnutrition and no medical complications are supported in a supplementary feeding programme (SFP) which provides dry take-home rations (or in some cases on-site feeding) and simple medicines. The objectives of supplementary feeding programmes are to decrease the incidence of Severe Acute Malnutrition (SAM) and treat moderate acute malnutrition. While this is not therapeutic care, however, supplementary feeding programme are usually coordinated with therapeutic care in emergencies.

2. Individuals with Severe Acute Malnutrition with no medical complications are treated at outpatient care sites where they receive RUTF and routine medicines to treat simple medical conditions. These are taken at home, and the child attends the outpatient care site weekly or bi-weekly for monitoring and more supplies of RUTF.

3. Individuals who are acutely malnourished with associated medical complications and infants with Severe Acute Malnutrition need to be treated in inpatient care for metabolic stabilization, until they are well enough to continue nutritional rehabilitation in outpatient care.

**When to start therapeutic care programmes**

Community-Based Therapeutic Care ((CTC) is an innovative concept that mobilizes communities and supports local health services to rapidly and effectively treat those with acute malnutrition in their homes. A typical emergency response Community-Based Therapeutic Care programme is comprised of 4 elements: community mobilization, out-patient therapeutic care (OTP) for cases of severe acute malnutrition without medical complications, in-patient care for those with medical complications and supplementary feeding for those with moderate malnutrition to prevent them from becoming severely malnourished.

Concern Worldwide for example, is an international, humanitarian NGO with experience developing and implementing Community-Based Therapeutic Care programmes. Concern is also currently engaged in working directly with national governments to build their capacity in the community treatment of acute malnutrition and to support the adaptation of health and nutrition policy to incorporate community-based therapeutic care in several countries including South Sudan.

Community-Based Therapeutic Care programmes in Ethiopia and Malawi according Valerie, G. (2005) was initially an emergency response to increased levels of acute malnutrition. However, as the overall food security and nutritional situation improved the caseload decreased and the supplementary feeding component of the programme was dropped for longer term health interventions while Concern focused on the integration of the treatment of severe acute malnutrition at the basic health facilities. Therefore, in transition contexts, the therapeutic care according to Concern’s focus included out-patient treatment of Severe Acute Malnutrition in combination with referral services for complicated cases (stabilization services) built on a strong community mobilization, health education and wider support to strengthening the health system.

The potential long-term application of a modified Community-Based Therapeutic Care approach to treat Severe Acute Malnutrition in transitional and nonemergency situations has brought to the forefront of the Community-Based Therapeutic Care services (out-patient therapeutic care, stabilization care (SC), and community mobilization and screening).

**Requirements for Therapeutic Care service provision:**

**National commitment and policy change.**

Fundamental to therapeutic care programming is the commitment by national Ministries of Health (MOH) as well as UN agencies to adhere to the methodology, components and principles of therapeutic care for severe acute malnutrition.

In countries where therapeutic care programme is implemented or supported, successful integration of therapeutic care activities into MOH Primary Halth Care (PHC) systems has to be variable. Although there has been national level support for implementation of therapeutic care in a number of countries, the process of national policy change takes time; however therapeutic care implementation is informing and shaping the national policy debate in a number of countries including South Sudan.

**Primary Health Care (PHC) system:**

A PHC system encompasses services provided by the Ministry, NGOs and community structures. For the therapeutic care approach to be sustainable, a PHC system needs to be in place, with adequate, accessible structures and staffing capacity able to provide basic health services. It is through these facilities that therapeutic care activities should be provided.

In the majority of emergency contexts ensuring functioning PHC facilities, in which to integrate therapeutic care services is challenging and often relies heavily on external resources. Implementing therapeutic care in nutrition emergencies can support and strengthen the PHC structure.

**Nutrition reporting and monitoring system:**

Consistent and accurate reporting of severe acute malnutrition would allow for the early detection of a deteriorating nutrition situation and could foster timely scale-up of activities. However, in order for the primary health care services to be responsive to changing levels of malnutrition over time, cases of acute malnutrition should be incorporated into existing health management information system. In contexts where health management information systems are weak, the need to monitor levels of severe acute malnutrition could be used as a catalyst for improving reporting systems. In other contexts, reporting formats exist, yet are complicated and challenging for local health workers and thus a simplified national format could allow for more accurate and effective reporting. To support this, global reporting formats and protocols, like that of IMCI, need to include standardized assessment criteria and treatment of acute malnutrition.

**Training and capacity building**:

Some NGOs involved in therapeutic care programming are taking a long-term look at the capacity development of staff in the primary health care facilities to support therapeutic care services. While this is a step forward, due to the high turnover of facility staff, the likelihood is that there will be a continual need for training at facility level unless training is more formally institutionalized. Training of health staff to implement therapeutic services requires national planning and support. To increase the institutional knowledge at all levels of health service (facility based staff and extension/outreach workers), training on the therapeutic care principles, out-patient care and management of complicated acute malnutrition needs is incorporated into existing medical and nursing curricula of health training institutions.

**Ready-to-Use-Therapeutic-Foods (RUTFs):**

The development of RUTFs has allowed for the development of out-patient therapeutic care. The sustainability of Community-based Therapeutic Care (CTC) in non-acute emergency contexts

RUTFs are currently used; however, as the therapeutic care approach is modified to address severe acute malnutrition in longer-term emergencies, post-emergency contexts, or even developmental contexts, RUTF needs to be more easily accessible and affordable for the approach to be sustainable.

**QUESTION SIX**

**The health interventions in emergencies linked with food security**

**Introduction:**

Agriculture, food security, nutrition and health are fundamentally linked, with the issues of food quantity and food quality being pivotal. While lack of energy is generally an issue only in highly food-insecure areas, micronutrient malnutrition is much more widespread and pervasive. As problems of insufficient and poor quality food persist, changes in the global environment are creating new emerging nutritional issues such as the “nutrition transition”–a process by which globalization, urbanization and changes in lifestyle are linked to excess energy intake, poor quality diets, and low physical activity which lead to rapid rises in obesity and chronic diseases even among the poor in developing countries.

Other major long-wave challenges currently pressuring agriculture-nutrition-health pathways include the AIDS epidemic in Africa, climate change and environmental degradation. Yet despite these linkages and processes, agriculture and health policies and programmes tend to remain locked in sectoral silos, rarely integrated with each other.

Agricultural policies address natural resource management, farmers' livelihoods, food security, and food safety–while public health policies revolve around the provision of prevention and curative care within clinic-based health systems. Agriculture is driven by an economic development rationale, while health aims to maximize human development. Levels of chronic child malnutrition in Africa and elsewhere are disturbing.

**Food Security and Nutritional Status:**

Government of Kenya (2011) in its agricultural sectoral report million people suffer from chronic food insecurity and poor nutrition. In recent years, it is estimated that at any one time about two million people require assistance to access food. During periods of drought, heavy rains and/or floods, the number of people in need could double.

Keeping in mind the definition of food security, it is said to exist when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life. This requires a nutritionally diverse diet. Approach to food security should combine longer-term action to enhance productive potential and incomes, with programmes and policies that respond to immediate needs of the poor and food insecure.

Nutrition security is said to exist when food security is combined with education, a sanitary environment, adequate health services and proper care and feeding practices to ensure a healthy life for all household members (UNSCN 6th Report on the World Nutrition Situation).

Lack of access to adequate and diversified diet therefore, results in various forms of nutrition problems.

Malnutrition occurs when dietary intake is inadequate and health is unsatisfactory, being the two immediate causes of malnutrition. In developing countries, infectious diseases, such as diarrhoeal and acute respiratory diseases are responsible for most nutrition-related health problems. And also, unavailability of food, inadequate health systems, unhealthy environment resulting to the absence of proper care in households and communities are necessary elements of the underlying causes of malnutrition.

As reported earlier, the WHO’s “Global Strategy on Diet, Physical Activity and Health” indicates that one should eat a minimum of 400g of fruit and vegetables daily. Low fruit and vegetable intake is a main contributor to micronutrient deficiencies in the developing world, especially in populations with low intakes of other nutrient dense foods like meat and dairy.

Hunger and malnutrition (including micronutrient deficiencies) affect people’s ability to move out of poverty as they affect people’s energy levels which ultimately affect their productivity. Hunger and malnutrition impair people’s ability to develop mentally and physically and cause long term damage to health.

**The problem with nutrition and food security**

*Conceptual or analytical framework;* food security and nutrition security tend to use different conceptual frameworks. The food security definition introduces four main dimensions - availability, access, utilization and stability. Food utilization is often seen as the ‘nutrition dimension.

FAO talks about undernourishment, which is purely a theoretical calculation of calories at population level derived from the (FAO) food balance sheet. Nutritionists talk about undernutrition – which includes growth faltering from conception onwards (e.g. wasting) and deficiencies of essential micronutrients – and is measured by surveys such as anthropometric surveys making nutrition a (small) component of food security. Nevertheless, both nutrition and food security have frameworks that recognise the role of the other and they are not incompatible.

*The problem levels, trends, nature, and analysing its causes; a*lthough food security actors should be interested in understanding undernutrition better – and in particular the links to food insecurity at community, household and individual level – they often assume that ‘understanding undernutrition’ means undertaking an anthropometric survey. These are costly, and require specialised skills usually beyond the technical capacity of food security actors. They therefore leave any analysis of undernutrition to “the nutrition sector”.

***Deciding on an appropriate response****; o*bviously, it is not done adequately, then the decision on an appropriate response cannot be done in the most appropriate way. The food security sector often chooses to limit its own responsibility for nutrition and instead often assumes that increased production will lead to better nutrition. As a result, it does not programme adequately for nutrition as an outcome.

***Establishing a monitoring system****; i*n many instances, the food security sector lost nutrition from its radar long before this step. Since nutrition is so rarely included as a genuine objective, nutrition-specific objectives are not monitored. Food Security actors believe that nutritional monitoring is technical and someone else’s business. There is much that they could and should do – most particularly to assess and monitor food consumption. For example, dietary diversity is simple to measure and a reasonably good indicator of diet quality.

The failure to monitor any aspect related to nutrition means that over the years we have not built up understanding or evidence of the actual nutritional impact of food security interventions. This is needed to determine and prioritise effective interventions and to re-orient those actions which prove to be ineffective or have a negative impact.

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