Food security and nutrition in emergencies

What is an Emergency?

- Different definitions-used by international aid organizations.
- Emergencies are characterized in these definitions as
  - ***'extraordinary', 'urgent'*** & ***'sudden'*** situations.
- Urgent situation, caused mainly by famine or displacement
- Why called emergency ?
  - ✓ Fast action is needed based on proper assessment to save life
  - ✓ Once the livelihood system of the people is disrupted(collapsed) it will be difficult to reverse it
- 'emergency', 'disaster' & 'crisis' tend to be used inter-changeably

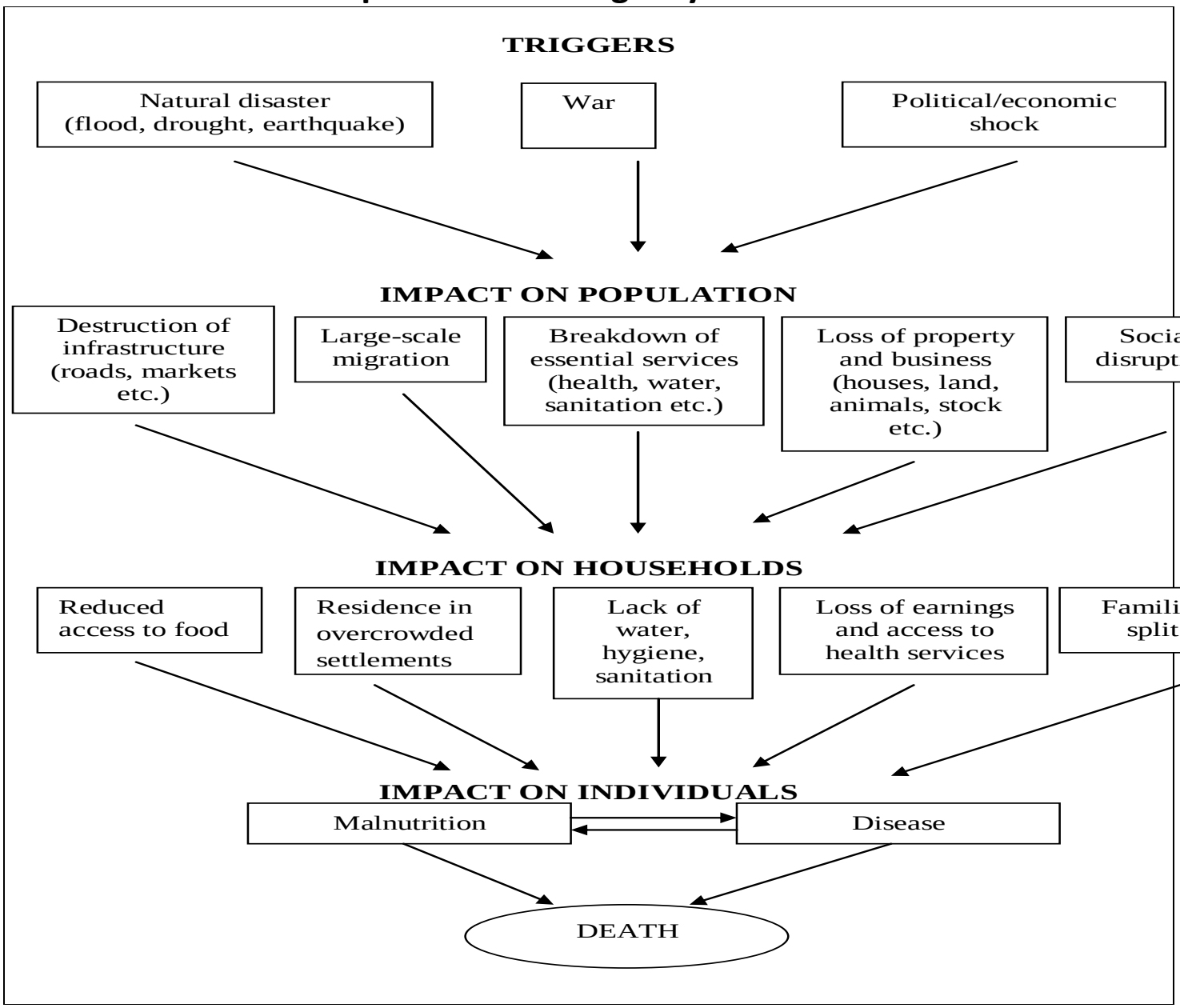
What is an Emergency?

- ‘disaster’-emergency that requires a call for international assistance
- CRED only enter a disaster into the database if:
  - ✓≥ 10 people reported killed; 100 people reported affected; declaration of a state of emergency; or call for international assistance.
- **'complex emergency‘**
- **“Loud” vs. “Silent” emergencies**

Emergency…

- The population groups most nutritionally vulnerable in emergencies can be categorised according to their:
  - ✓ Physiological vulnerability
  - ✓ Geographical vulnerability
  - ✓ Political vulnerability
  - ✓ Internal displacement & refugee status
- In nutrition emergencies women, young children & elderly are particularly vulnerable
- ***Triggers*** for nutrition emergencies- where there is underlying vulnerability, sudden events such as natural disasters, conflict or economic shocks can trigger a nutrition emergency.

The impact of an emergency on nutrition



Emergency Food Security Assessment

- The **three** types of EFSA:
  - Rapid initial assessment;
  - Systematic survey;
  - Continuous monitoring-surveillance
- The analytical basis is **the same** for each type of EFSA.
- The essential differences lie in the **time available** for the assessment & the **constraints** to access to the areas concerned.
- These factors affect the scope of information that can be collected & the depth of the analysis.

Rapid assessment-

- following an initial assessment in a sudden crisis, or as a component of a reassessment. Provides information in a **fast-changing context** where results are needed quickly for decision-making:
  - ✓ the nature & scale of the crisis: effects on food security, nutrition, & livelihoods;
  - ✓ the affected population: estimated numbers & locations;
  - ✓ access constraints: logistics, security, etc.;
  - ✓ recommendations for immediate, short-term and, possibly, longer-term interventions.
  - ✓ baseline information needs to be created or updated for monitoring purposes.

In-depth assessment-

- Undertaken when more time, access & resources are available. It provides **detailed & often statistically representative** information that can be extrapolated to wider population groups and areas. may be carried out when:
  - ✓ the situation seems to be **deteriorating slowly**, and detailed information is required to inform programming decisions;
  - ✓ an emergency has **stabilized**, and detailed analysis is necessary and feasible;

Rapid Initial Assessment

- A basis for planning food relief program
- Origin of the problem
  - Harvest failure
  - Civil unrest
  - Increased food prices
  - Population movement
  - Logistic constraints
- Affected population
  - How many people are affected
  - Who is the most vulnerable group
  - How the different socioeconomic groups are affected

Rapid Initial Assessment …

- Logistical problems
  - Security
  - Roads
  - Availability of lorries
  - Skills available in the affected/refugee population

Rapid Initial Assessment …

- Mortality
  - IMR
  - CMR
  - Crude death rate
- Incidence of PEM related diseases-diarrhea, measles whooping cough ….
- Malnutrition in < 5 years
- Rapid nutritional surveys-at least 200 households
  - Wt, ht, MUAC, edema
  - Questions about the previous months deaths & causes of death
  - Distance of water supply

Rapid Initial Assessment …

- Mapping
  - Rough number of people
  - Structure of settlement
- Interviews & records
  - Health professionals
  - CHWs
  - Local authorities

Types of emergency nutrition assessment

Type of assessment	Objectives	Data collection methods
Rapid assessment	• To verify the existence or threat of an nutritional emergency • To estimate the number of people affected • To establish immediate needs • To identify local resources available • To identify the external resources needed	• Direct observations of population and environment • Interviews with key informants • Focus group discussions • Review of records from available feeding centres and/or health facilities • Rapid surveys
Surveys	• To establish the prevalence of malnutrition (including micronutrient deficiencies) • To identify likely causes of malnutrition	• Cluster sample surveys of under-fives (sometimes women or older children)
Nutrition surveillance	• To identify trends in nutritional status.	• Repeated surveys • Growth monitoring • Sentinel site surveillance

Nutrition Intervention in Emergency

Nutrition Responses in Emergencies

- **Curative** such as therapeutic care
- **Preventative** such as improving the water supply & sanitation to prevent epidemics of disease.

Aims of Emergency intervention

Aims at **reduction of excess mortality** that results during the first few weeks to months. It involves provision of :

- Food
- Shelter(if displaced)
- Program to control diarrheal diseases
- Epidemiological surveillance system
- Training of community health workers
- Curative care unit
- Coordination of operational partners

Interventions…

- Locating a situation on the **food security/famine continuum** helps identify the **most appropriate** type of intervention.

Interventions…

- In a food insecurity situation the focus of interventions should be **on preservation of livelihoods** to prevent people sliding into food crisis & famine, e.g. food for work.

- Early warning systems are crucial at this stage.

- Support can be given to existing health structures to enhance treatment of individual cases of severe malnutrition.

Interventions Cont..

- In a **food crisis** situation it is crucial to prevent further movement along the continuum by **ensuring enough food.** E.g. general food distribution.
- As the **social caring** systems comes under pressure provisions should be made to support special **vulnerable groups**, e.g. elderly, orphans, under five's in general.

Nutritional Interventions

The major focus is on:

- General food distributions(GFD)
- Selective feeding Programs
  - Supplementary feeding program(SFP),
  - Blanket supplementary feeding(BSFP), &
  - Therapeutic feeding(TFP)

General Food Distribution(GFD)

- The aim of GFD is to cover the **immediate basic food needs of a population** in order to eliminate the need for survival strategies which may result in long-term negative consequences to human dignity, household viability, livelihood security & the environment
- Ideally **a standard general ration** is provided in order to satisfy the full nutritional needs of the affected population.
- In a population affected by an emergency, the general ration should be calculated in such a manner as to meet the population's **minimum energy, protein, fat & micronutrient requirements for light physical activity.**
- **May not** provide rations that satisfy the full nutritional needs of the population

The Modes of Food Distribution Include

- Employment Generation Schemes (EGS)
- Gratuitous Relief (GR) /General [Free] Food Distribution (GFD)
- Due to the fact that food aid dependency is a major concern in Ethiopia, **80%** of the food aid is distributed through EGS, especially in areas that are chronically food insecure.

Example of recommended ration

General Food Ration Composition for a Daily Calorie Requirement of 2,100 kcal with a nutrient composition of 10-12% kcal from PROTEIN [52-63g] and 17% kcal from FAT (minimum) [40g] Composed of specific foods most commonly used in Ethiopia

Type of Commodity	Specific foods most commonly used in Ethiopia	Quantity	Calorie Content
GRAINS	Wheat – 330 kcal/100g	500g pppd**	1,650 kcal
	Sorghum – 335 kcal/100g	(15kg pppm***)	1,675 kcal
	Maize – 350 kcal/100g		1,750 kcal
PULSES OR BLENDED FOODS	Lentils – 340 kcal/100g		170.0 kcal
	Peas & Dried Beans – 335kcal/100g	50g pppd	167.5 kcal
	CSB – 380 kcal/100g	(1.5kg pppm)	190.0 kcal
	Famix – 402 kcal/100g		201.0 kcal
VEGETABLE OIL	Vit.A – fortified Vegetable Oil*	20g pppd	177.00 kcal
		25g pppd	221.25 kcal
		30g pppd	265.50 kcal
		(0.600kg – 0.900kg pppm)	

*The quantity of vegetable oil will vary depending on the kcal content of the combination of grains and pulses used in the ration.
**per person per day
***per person per month

- **The recommendation in Ethiopia is for the complete ration/full basket:**

15kg cereal + 0.6 - 0.9kg oil + 1.5kg pulses PER PERSON PER MONTH

Ration composition should give consideration to micronutrient deficiencies

Commodity	Risk	Possible solution
Maize	Pellagra(vitamin B3 deficiency)	Nuts,beans, whole grain cereals, meat, fish, eggs, milk
Polished rice	Beriberi (Vitamin B1 deficiency)	Parboiled rice, whole grains, ground nut, legumes, meat, fish, egg, milk
No fresh fruit or vegetables	Scurvy(vitamin C deficiency)	Onions, cabbage, canned tomato paste, vitamin c tablets

Selective Feeding Programs

- Supplementary Feeding Programs (SFP)-targets **the most nutritionally vulnerable** groups
- Therapeutic feeding centers(TFP) -those in need of nutritional **rehabilitation**
- Health care systems & water resources may also require support.
- In a famine situation, the primary goal is to ensure survival, to reduce mortality.

Supplementary Feeding Programs

- **Targeted SFP**
  - Supplementary food is **restricted** to only those individuals identified as the **most malnourished or most nutritionally vulnerable/at risk during nutritional emergencies**
  - Includes pregnant women, lactating mothers & young children under 5 years of age.
  - The main objective is to prevent the moderately malnourished from becoming severely malnourished & consequently, reduce the prevalence of severe acute malnutrition & associated mortality.

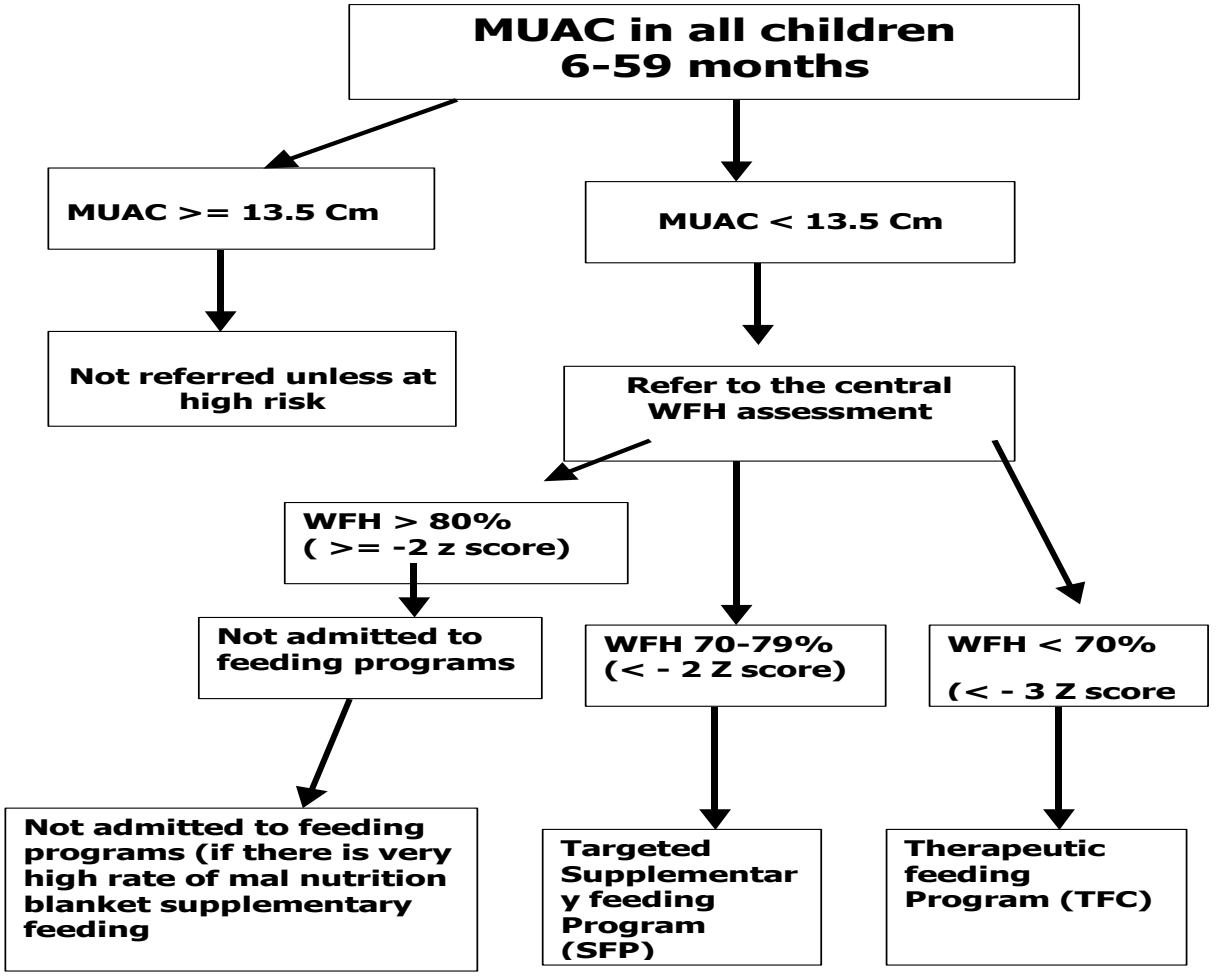
Supplementary Feeding Programs

- **Blanket SFP**
  - Supplementary food is distributed as a temporary measure to all vulnerable members of a population at-risk of becoming malnourished without identifying the most malnourished.
  - The general objective of a blanket SFP is to prevent widespread malnutrition & mortality.

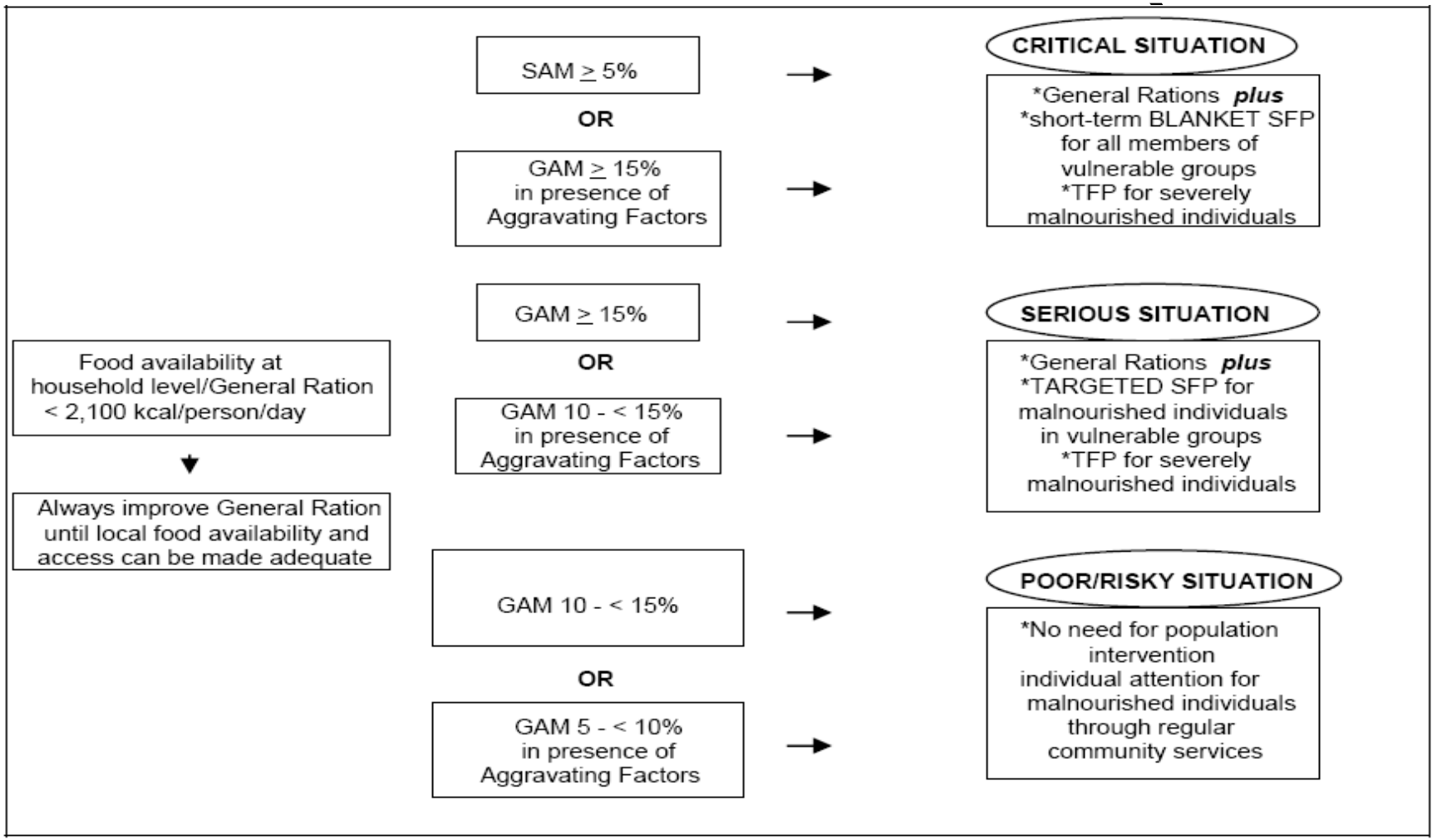
Therapeutic Feeding Program

- Provide a rehabilitative diet together with medical treatment for diseases & complications associated with the presence of severe acute malnutrition.
- The specific aim is to reduce mortality among acutely severely malnourished individuals & to restore health through rehabilitating them.
- Administered through the following venues:
  - Therapeutic Feeding Center **(TFC)**
  - Nutrition Rehabilitation Unit **(NRU)** at a hospital or health facility
  - Community-Based Therapeutic Care **(CTC/OTP)** program

Emergency Nutritional intervention



Classification Tool for Implementation of Selective



*Source: Modified from DPPC *Emergency Nutrition Assessment Guideline*, 2003, pp.127-8.

Cont..

- **GAM:** percentage of child population (6-59 months) with WFH z score < -2 **and/or** manifesting bilateral oedema.
- **SAM:** percentage of child population (6-59 months) with WFH z score < -3 **and/or** manifesting bilateral oedema.

Aggravating Factors:

- Poor household food availability & accessibility, general food ration below mean energy requirement
- Crude mortality rate >1 per 10,000 per day
- Epidemic of measles, whooping cough (pertussis), cholera, shigella & other important communicable diseases
- High prevalence of respiratory or diarrheal diseases
- High prevalence of HIV/AIDS
- Outbreaks of diseases (malaria, etc.)
- Low levels of measles vaccination & vitamin A supplementation
- Inadequate safe water supplies & sanitation
- Inadequate shelter
- War & conflict, civil strife, migration & displacement

Shifting from Humanitarian to Developmental Approach

Shifting to Livelihoods Approach

- There is a critical need to shift from ***project- driven approach*** to a ***systems approach*** that addresses the root causes of development failure.

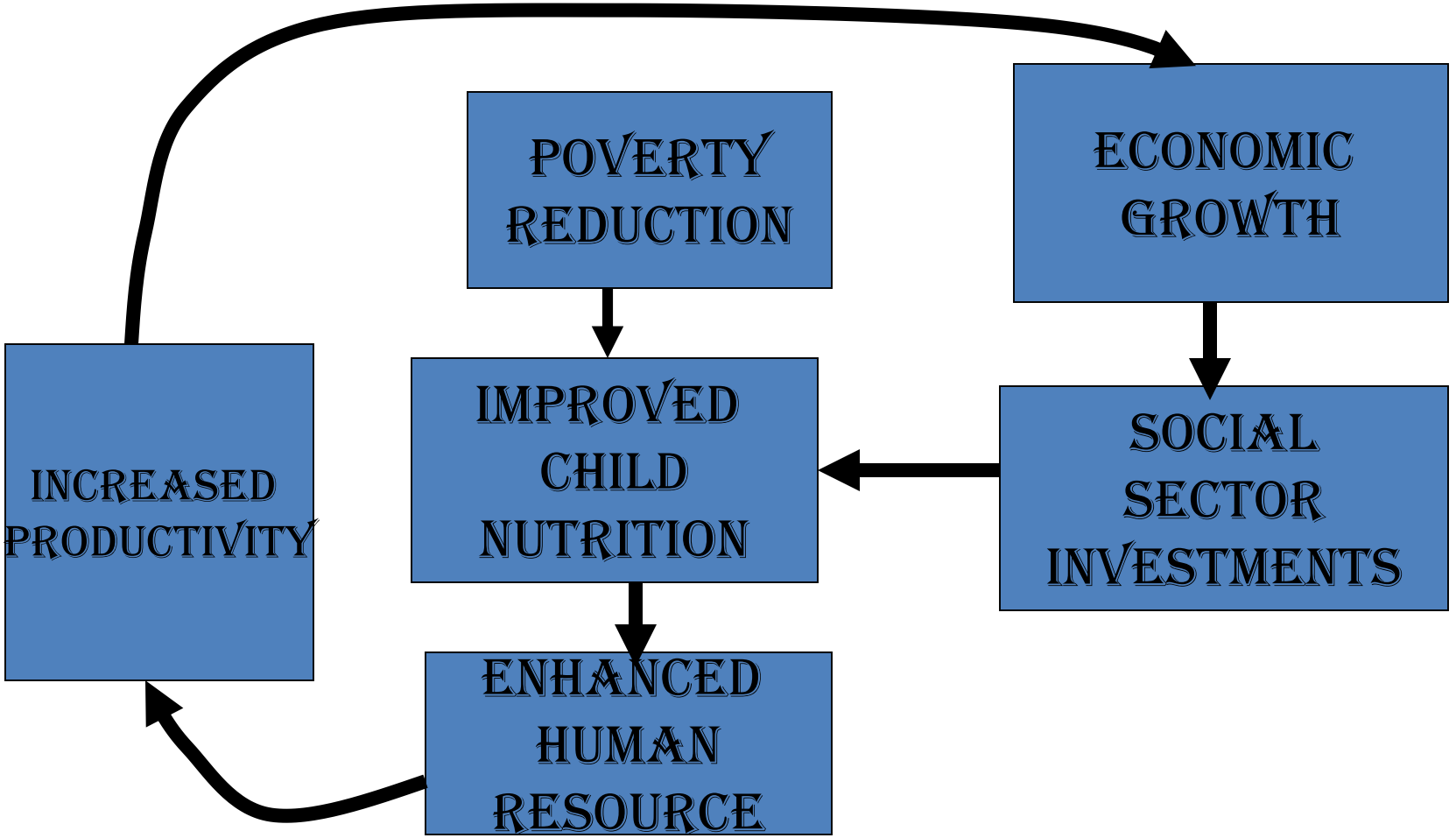
- There was broad agreement that ***livelihoods approach*** might best help use resources during an emergency to **move away from a food-first approach toward a broad**, more complex definition of famine, emphasizing a multi-sectoral approach to drive an earlier & more appropriate response.

The six principles central to livelihood strategies in crisis response

- Rigorous assessment
- Appropriate market support
- Protecting essential assets
- Easing vulnerable peoples' burdens
- Timely interventions &
- Increasing protection for populations at risk of displacement.

- These principles can guide the need for a shift from a **project-driven approach to a systems response that addresses the underlying causes of famine.**

Long term strategies



Long term…

Strategies to reduce malnutrition should

Be implemented at different levels

- households
- Community
- regional
- National
- International

Long term…

Strategies to reduce malnutrition should

Combine different approaches

- Bottom up – Triple A Cycle
- Top-down
  - Supplementation programs
  - Fortification
  - Food relief programs