

# Poverty, Nutrition and health – The Individual vs. Society

# **Individual right, collective responsibility**

- Adequate access to food is both an individual right and a collective responsibility under both the 1948 Universal Declaration of Human Rights and the International Covenant on Economic, Social and Cultural Rights developed nearly 20 years later.
- The majority of countries, 141, have recognized the right to adequate food as contained in the International Covenant on Economic, Social and Cultural Rights.

- 21 States have already enshrined food rights explicitly in their national constitution.
- Many more recognize and protect closely related rights, such as the right to an adequate standard of living, the right to social security, minimum wage and care for specifically vulnerable groups.

Human Rights Covenants	Countries that Have Ratified			
	U.S.	U.K.	OECD	All Countries
Covenant on Economic, Social and Cultural Rights	No	Yes	27/29 (U.S.) (Turkey)	141/191
Covenant on Civil and Political Rights	Yes	Yes	28/29 (Turkey)	143/191
Covenant on the Rights of the Child	No	Yes	28/29 (U.S.)	189/191
Covenant on the Elimination of All Forms of Discrimination Against Women	No	Yes	27/29 (U.S.) (So. Korea)	163/191
Geneva Convention IV Relative to the Protection of Civilian Persons in Time of War	Yes	Yes	29/29	184/191

- Food insecurity occurs whenever the availability of nutritionally adequate and safe food, or the ability to acquire acceptable foods in socially acceptable ways, is limited or uncertain.
- Hunger is defined as the uneasy or painful sensation caused by a recurrent or involuntary lack of food and is a potential, although not necessary, consequence of food insecurity. Over time, hunger may result in malnutrition.
- Food insufficiency refers to an inadequate amount of food intake due to lack of resources.



Availability	Sufficient supplies of food for all people at all times
Accessibility	Physical & economic access to food for all at all times
Acceptability	Culturally acceptable & appropriate food & distribution systems
Adequacy	Nutritional quality, safety, sustainability or available sources/methods of food supply
Action	Ensuring the social & economic infrastructures are in place to enable action that will ensure the previous 4 elements of food security

# Food Security

Adequate  
Food supply

Stable food  
supply and access

Nutritional  
adequate  
diet

Safe  
food

Culturally  
acceptable  
food

Ecological  
sustainable

Economic and  
social  
sustainable

Consumer concerns

# Availability

- Despite a broad response - the population in need is larger than anticipated.
- The need is not only in quantity but also in quality





# Accessibility

- Purchasing power
- Curfews
- Transport
- Distribution
- Targeting

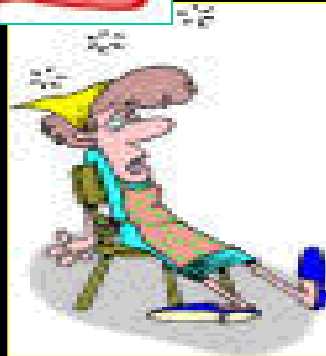


# Adequacy



- Life cycle (children, BF, pregnant, elderly)
- Special nutrition and feeding (metabolic diseases, tube-feeding, TPN, etc.)
- Sick and disabled

# Vulnerable Groups



Pregnant & lactating women

- Adolescents
- Elderly
- Children under 5y (“indicators”)

# Famine

- An extreme and general scarcity of food
  - usually life-threatening hunger



# Malthus's Observation

- ❖ Plants, animals and men produce far **more offspring than can survive.**
- ❖ Poverty and famine were **natural** outcomes of population growth and were **God's way of preventing man from being lazy.**



- He blamed the decline in living conditions in England in the 19<sup>th</sup> century on three elements:
  - The overproduction of young;
  - The inability of resources to keep up with the rising human population;
  - The irresponsibility of the lower classes;
- Suggested the regulation of family size of the lower class

- Prior to 1980, most of the literature on famines focused on food production and availability
- Malthusians and Neo-Malthusians concentrate on food output per capita
  - claim that **exogenous events** such as draught and floods, cause famines

# Professor Amartya Sen - Nobel Prize Winner, 1998

"famines have occurred  
even when the supply  
of food **was not**  
significantly lower  
than during previous  
years"





- Market has great role to play in processing information at a low cost.
- But what, if people are **bypassed in the process ?**
- He has taken economics into new areas including moral philosophy.

- Malnutrition in the modern world is preventable by human action
- There is almost invariably some massive social failure
- During famines, the victims typically come from the bottom layers of society -
  - these layers of society need protection by the state.

# Bypassed populations – Day to day



# Engel's Law

The proportion of a family's budget devoted to food declines as the family's income increases



# Bennett's Law



- The proportion of calories derived from starchy staples declines with increases in income
  - reflects the seemingly universal desire for variety in the diet and for high quality protein and refined sugar

## Table 1: Hunger's Top Ten

### Total Number Undernourished

in millions

#1-India	204.4
#2-China	164.4
#3-Bangladesh	44.0
#4-Ethiopia	28.7
#5-Pakistan	26.3
#6-DR Congo	25.8
#7-Brazil	16.2
#8-Philippines	15.6
#9-Thailand	14.3
#10-Vietnam	14.1

### Undernourished as Percent of Population

#1-Somalia	73%
#2-Eritrea	67%
#3-Burundi	63%
#4-Afghanistan	62%
#5-Haiti	61%
#6-DR Congo	55%
#7-Ethiopia	51%
#8-Korea, DPR	48%
#9-Mongolia	48%
#10-Chad	46%

Source: World Food Programme / FAO estimates 1995/97

THE WORLD HEALTH ORGANIZATION ESTIMATES THAT 11 MILLION CHILDREN UNDER THE AGE OF FIVE DIE EACH YEAR IN DEVELOPING COUNTRIES. IN ONE HALF OF THESE DEATHS, MALNUTRITION IS A FACTOR.

### Table 3: Common Micronutrient Deficiencies

	Vitamin A	Iron	Iodine
Number affected	250 million preschool children affected	1 billion people (mostly women and children)	1.5 billion people live in iodine deficient areas
Impact	higher risk of infections—can lead to death; eye damage; blindness	reduced energy and mental capacity; risk of death in childbirth	slowed growth; goiter (swelling in neck); speech and hearing disabilities; reduced mental capacity; infant death

# The two faces of food & nutrition insecurity

- ❖ Obesity has been declared an epidemic
- ❖ Both obesity and hunger = food insecurity
- ❖ Their existence sounds contradictory
  - ❖ those with insufficient resources to purchase adequate food can still be overweight
  - ❖ Policymakers and the public need to better grasp this apparent paradox



# Food Insecurity – The Hidden Crisis

- **OBESITY IS GROWING IN ALL POPULATION GROUPS**  
Simply stated, obesity results when energy intake exceeds energy expenditure
- This explanation, however, provides little insight into the important social and environmental causes of higher energy consumption or lower energy expenditures
- These causes include energy-dense high-fat foods and larger portion sizes, for example, and lower levels of physical activity
- Overall, the Israeli population is growing more obese
  - More from lower SES
- ...and we know why...

# CAN OBESITY CO-EXIST WITH HUNGER AND FOOD INSECURITY?

- Most Israelis are affected by the social and environmental causes of higher energy consumption or lower energy expenditures
- Additional burdens to households with low income - Insufficient money to buy food

**Can a lack of adequate resources for food result in Obesity?**



## *The need to maximize caloric intake –*

- ❖ Low SES families need to stretch their food money as far as possible
  - ❖ Without adequate resources they must make decisions to maximize the number of calories they can buy so that their members do not suffer from hunger
    - ❖ when they lack the money to purchase healthier, balanced and more nutritious foods
  - ❖ The greater the economic constraints - the harder it is to achieve the nutritional quality of foods they desire
  - ❖ This in turn affects the overall energy density of the diet

# *The trade-off between food quantity & quality*

- ❖ Shown by research on coping strategies among food-insecure households:
  - Along the continuum of typical coping strategies, food quality is generally affected before the quantity of intake
  - Households reduce food spending by changing the *quality* or *variety* of food consumed before they reduce the *quantity* of food eaten (6)

# *Overeating when food is available*

- ❖ Obesity can be an adaptive response to periods when people are unable to get enough to eat
  - Research indicates that chronic ups and downs in food availability can cause people to eat more, when food is available, than they normally would (7 )
  - Over time, this cycle can result in weight gain (8)
  - Research among food-insecure families shows that mothers first sacrifice their own nutrition in order to protect their children from hunger (9)
  - Contributing to obesity among poor women?

# *Physiological changes*

- The body can compensate for periodic food shortages by becoming more efficient at storing more calories as fat (10)

# COSTLY CONSEQUENCES

- With fewer resources to buy food - the poor are susceptible to damage from food insecurity



# ADVERSE CONSEQUENCES OF HUNGER AND FOOD INSECURITY FOR CHILDREN

## Health

- ◆ Poorer overall health status and compromised ability to resist illness
- ◆ Elevated occurrence of health problems such as stomachaches, headaches, colds, ear infections, and fatigue
- ◆ Greater incidence of hospitalizations

## Psychosocial and Behavioral

- ◆ Higher levels of aggression, hyperactivity, and anxiety as well as passivity
- ◆ Difficulty getting along with other children
- ◆ Increased need for mental health services

## Learning and Academic

- ◆ Impaired cognitive functioning and diminished capacity to learn
- ◆ Lower test scores and poorer overall school achievement
- ◆ Repeating a grade in school
- ◆ Increased school absences, tardiness, and school suspension



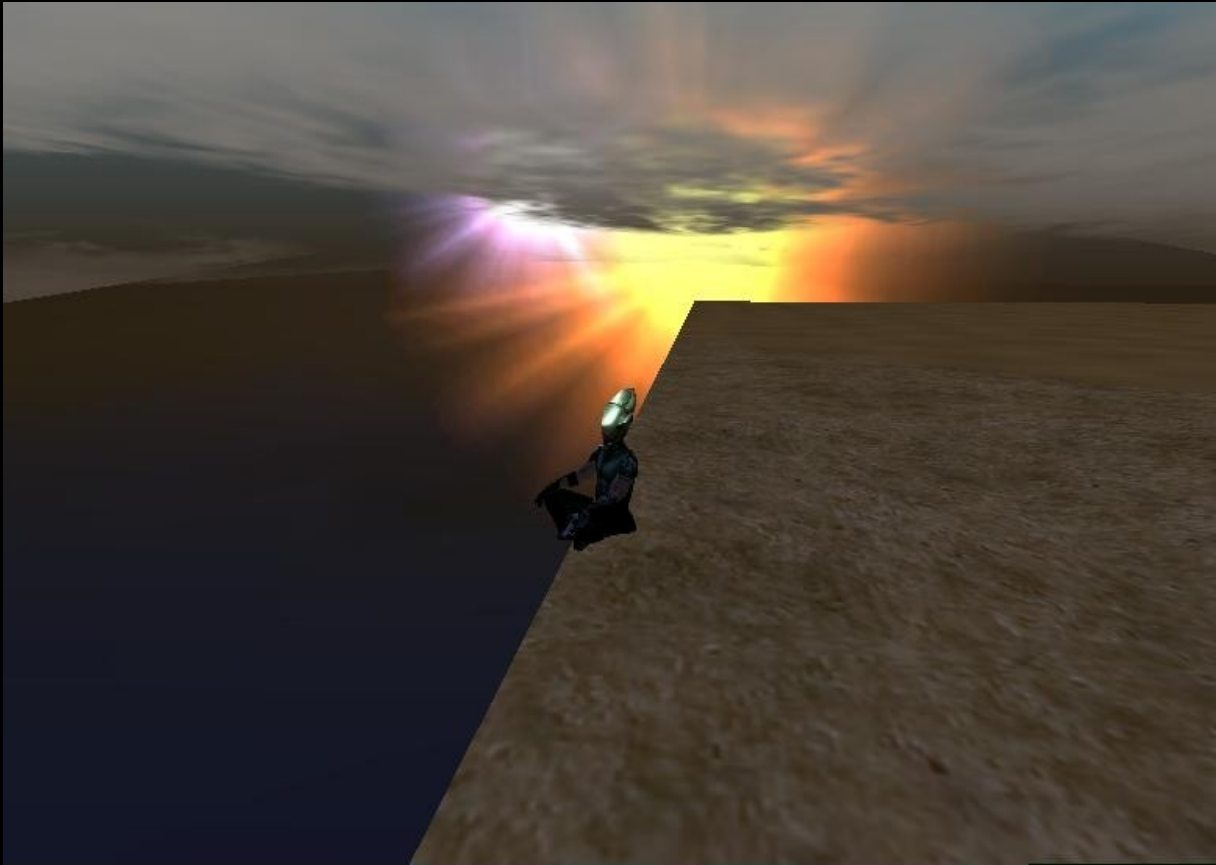
Human Capital Social Capital

Nutrition

"I don't think that there is contradiction between there being a lot of food in the country and some people not having access to it. All one needs to have is the means to buy the food."

Sen

***vulnerability:  
living on the edge***



# *Social Stratification*

## Thinking About Poverty

I. What is Poverty?

II. The Measurement of Poverty

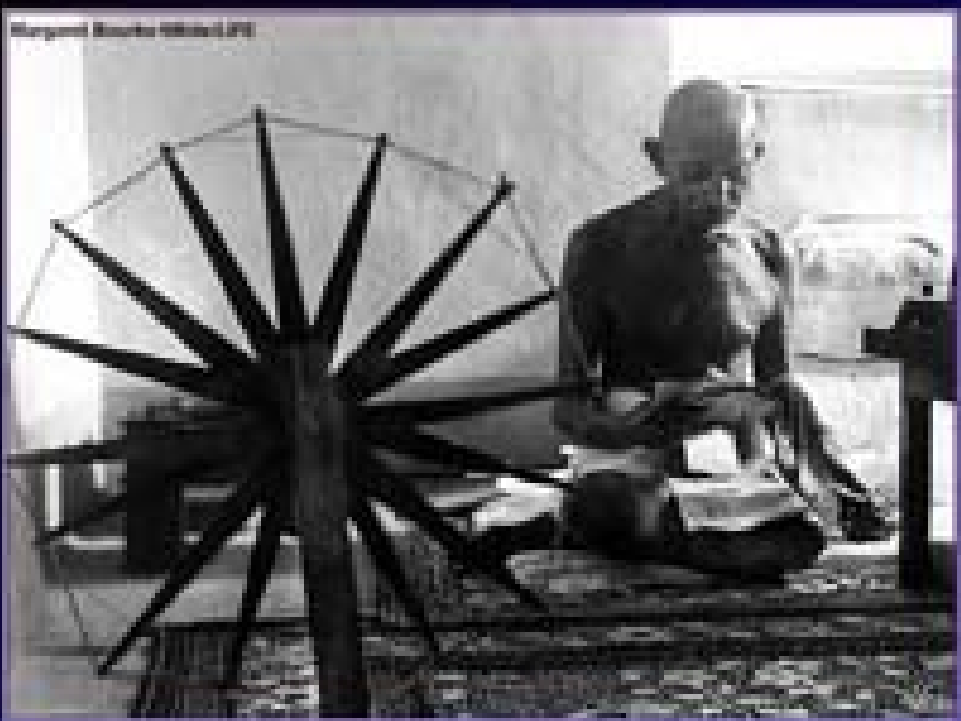
III. Data and Trends



## **What is Poverty?**

- **Absolute poverty: a basket of goods for subsistence**
- **Relative poverty: a relation to a community's standard of living**

*e.g. 1/2 the median family income*



"Be the Change you wish to bring about"

*- M. K. Gandhi*

# Thank you

