



Food and Hunger

Global Perspective

Muge Akpinar, MD, MPH

Professor and Chair, School of Community
and Environmental Health

Director, Center for Global Health

What is a healthy diet?

- We need calories according to our gender, age, body size, climate and activity.
 - 2,300-2,900 calories for men
 - 1,900-2,200 calories for women
- Macronutrients
 - Carbohydrates, fats, proteins
- Micronutrients
 - Vitamins, minerals



What food do we rely on?

- There are 80,000 potentially eatable plants
- We supplied 75 % of our diet from eight crops
 - Top 4 crops: Wheat, Rice, Corn, Potatoes
- Nine staple animals
 - Cattle, Pigs, Sheep, Poultry, Goats, Horses, Mules/Asses, Camels, Buffalo

Where does food come from?

- We supplied our foods from
 - Sea
 - Estuaries, Continental Shelves, Wetlands, Reefs
 - These four ecosystems are 25 times more productive than the rest of ocean.
 - Land
 - Available fertile land is 3.7 billion acres, which can be used easily to produce food.



Apple vs Earth



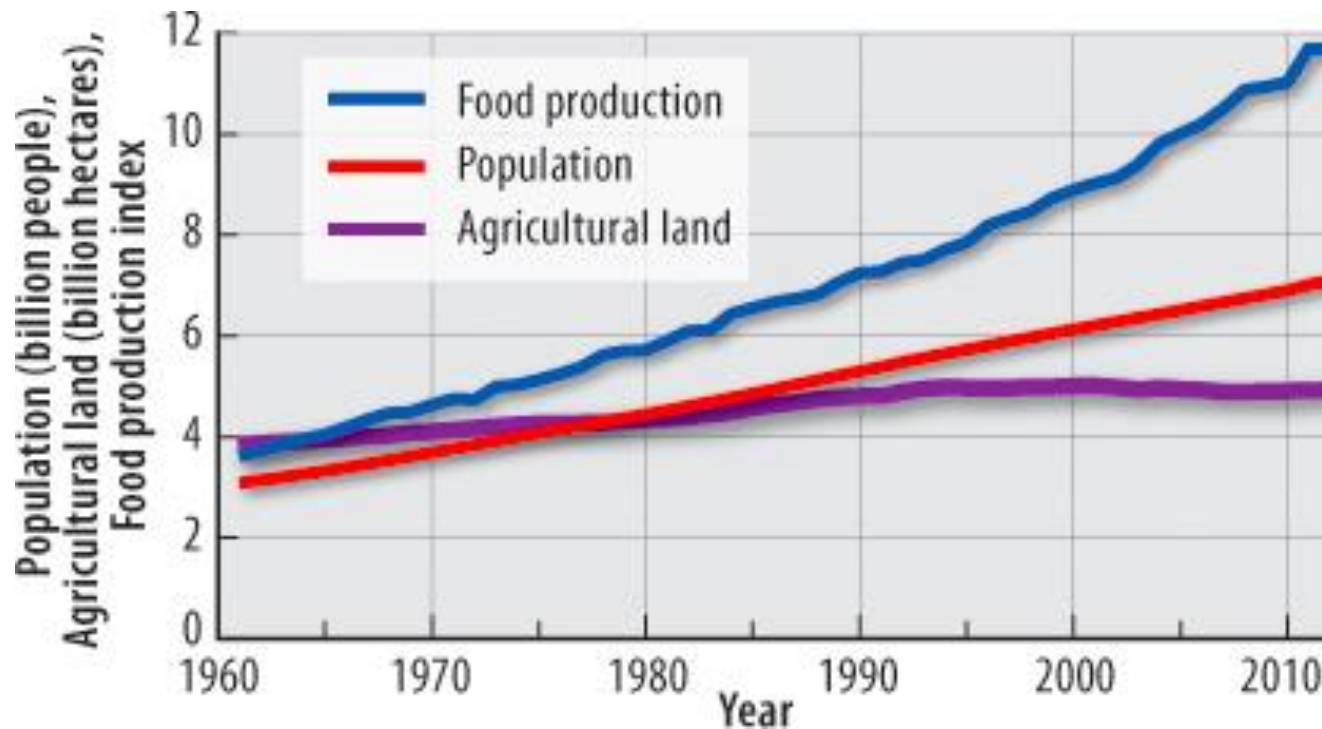
Slice this piece into 4 sections

- 3 sections represent areas too cold, wet, rocky steep or with soil too poor to produce food, cities, towns, suburbs, highways, shopping centers, schools, parks, factories, parking lots and other places where people live but do not grow food.
- Then slice the quarter in half.
- Carefully peel the remaining slice. This represents the soil surface on which humankind depends. It is less than five feet deep.

the oceans
and

Set aside one half to represent land inhospitable to people

What is the current status of food production?



Know The Enemy



Photo: Kevin Carter, Sudan 1993, Winner of 1994 Pulitzer prize

Terminology

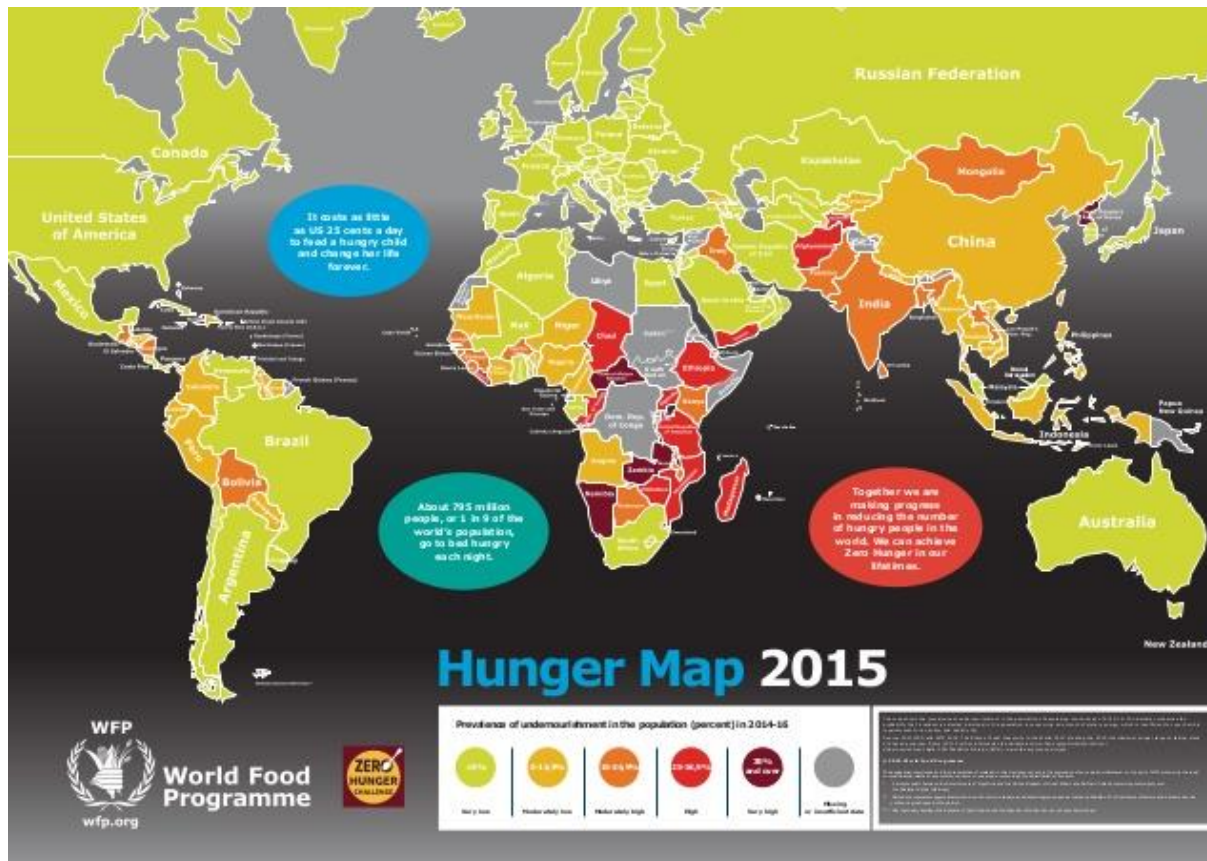
- Starvation: suffering/death caused by deprivation of nourishment
- Famine: widespread starvation, result of many factors such as natural disasters, war, etc.
- Undernutrition: Consumption of too few calories/protein over an extended period of time (<2,000)
- Malnutrition: Consumption of too little, or too many, specific nutrients- more about quality than the quantity of food

Cost of Hunger

- Nearly 800 million people go hungry each day
- One in 7 Americans rely on food programs
- Seasonal hunger
 - Occurs at a time before new harvest when old harvest runs out
 - In the US, occurs at the end of the month when food stamps run out
- Annually 10 million children under the age five die as a result of malnutrition
- The cost of prevention= \$5-10 per children/year

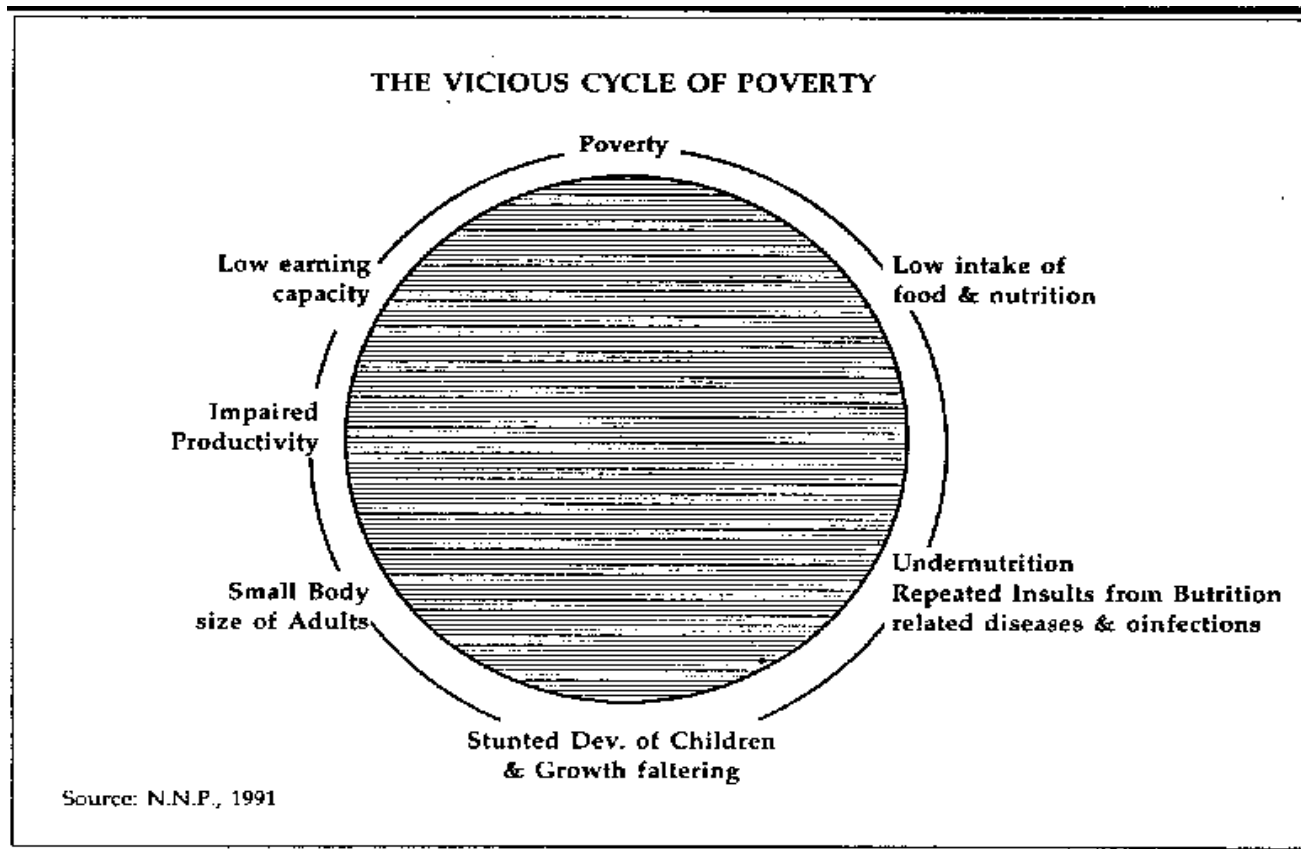
Where do they live?

- 70 % of chronic hunger – Children and women



Why hunger is on the rise in the world?

Poverty



Reason of Hunger

- Environmental degradation
 - Erosion, Desertification, Increased salinity
 - Contamination of water
- War

**Every 5 seconds,
a child dies for lack of food**

• Poor crop yields, Inequitable land distribution, faulty economic policies

How can we end hunger?

- Attack root causes
 - Poverty
 - Environmental degradation
- Promote food security
 - Modify diet, management of resources
- Address the health crisis in poor nations
 - Increase assistance from MDCs to LDCs



Stop Hunger Now

Humanity Against Hunger Game



Thank you!

makpinar@odu.edu