#### LINKING AGRICULTURE AND FOOD SYSTEMS TO NON-COMMUNICABLE DISEASES

Eufemio T. Rasco Jr. Academician, NAST

CGPS FOR CSR



# A bit of history

- For 6 million years since man diverged from the apes, man ate meat, nuts, some insects, leaves
- In the last 10,000 years since agriculture, diet has shifted to cereals



# Agriculture gave rise to diseases of civilization

- Arthritis
- Diabetes
- Hypertension
- Heart disease
- Stroke
- Depression
- Schizophrenia
- cancer



# What do the last 84 tribes of hunter gatherers eat

- Meat, fowl, fish, leaves, fruits of many plants, nuts, insects
- Human teeth are made for meat, not cellulose; human stomach are singular and secrete acid



### New food

- Cereal grains
- White rice and bread
- French fries
- Hamburger
- Carbonated drinks, alcohol



### New food system

- Reliance on a few species of plants and animals
- Industrial farming
- Highly processed food
- Globalization
- Cheap, fast, convenient

PHILRICE CERTIFICATION

#### Alarming trends, Philippines

- Increasing rice consumption
- Preference for rice with high glycemic index
- Low consumption of fruits and vegetables
- Increasing consumption of convenience and junk food

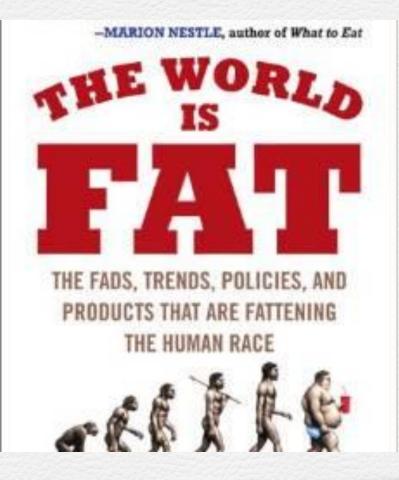






#### The world is fat!

- 1.6 billion
   overweight vs 700
   million
   undernourished
- Even in poor countries, there are more overweight people





### Backlash

- Organic food, anti-GMO, anti-chemical
- Locally produced food
- Vegetarian diet
- Paleolithic diet



#### Questions

- Is there any doubt about the link between modern food and modern diseases?
- What changes in eating habits, food system and agriculture are needed to prevent the "diseases of civilization"
- What policies and programs are needed to promote the healthy diet?
- What policies and programs are needed to establish a suitable agriculture and food system



# The bigger question

- Hunger, a question of volume
- Nutrition, a question of quality
- Modern food system evolved to solve hunger, perhaps at the cost of nutrition
- What agriculture and food system can solve both hunger and malnutrition, to prevent the "diseases of civilization"

