

# Human Needs & Food Production



# What is Food Science?

- A study concerned with all technical aspects of food, beginning with harvesting or slaughtering, and ending with its cooking and consumption. It is considered one of the life sciences, and is usually considered distinct from the field of nutrition.

# Basic Human Needs

- **Three basic needs that support life world wide.**
  - **Food-** provides nutrition to allow us to grow, repair ourselves and reproduce
  - **Fiber-** Provides protection from elements and hazards
  - **Shelter-** Provides protection from weather, animals etc.



# Food

- **Solid & liquid material humans and other living things consume that provide essential nutrients**
  - **Nutrient- Substance necessary for an organism to live and grow**
- **Humans need food for 4 purposes**
  - **Energy**
  - **Growth & Repair**
  - **Good Health**
  - **Body Processes**

# Sources of Food

- Food comes from two main sources

- Plant Sources- wheat, corn, rice, vegetables, fruits etc.



- Animal Sources- muscles, organs, milk, eggs



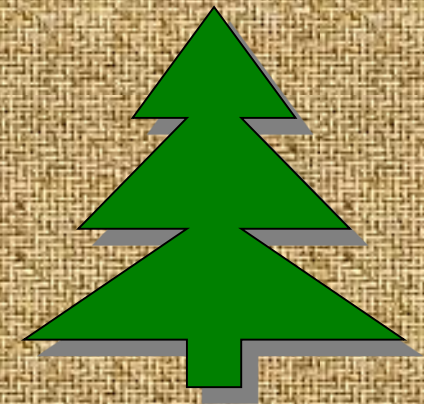
# Fiber

- The material used to make clothing and shelter
- Fiber is produced in three ways
  - **Animals**- wool, mohair, fur, silk, leather etc. mostly used for clothing, blankets, furniture and rugs
  - **Plants**- cotton, flax, hemp, etc. used for clothing, rope, paper etc.
  - **Manufactured & Mineral**- made from wood or chemicals- nylon, yarn, plastic etc.



# Shelter

- A building of some sort used for protection
- Forestry- a specialized area of plant production that involves trees to produce wood



# Major Events in the History of Agriculture

- **Domestication-** taming or controlling of wild plant and animal species
- **Agriculture-** the science of growing crops and raising livestock
- **Agri-science & Technology-** development of fertilizers, crop rotation and machinery
- **Industry-** Development of new foods and fibers, less farms and more factories



# Agricultural Industry

- The process of getting food, fiber and shelter to the consumer
- There are three major areas of Agricultural Industry
  - **Supplies & Services**- provide materials and equipment for producing crops & livestock
  - **Production Agriculture**- producing plants & livestock
  - **Marketing & Processing**-prepares plants and livestock for human use

# Examples of Production Agriculture

- **Farming-** raising grains, cotton, animal feeds such as hay, vegetable production, fruit production
- **Livestock Production-** raising pigs, sheep, cattle, chickens, horses and even fish for food or for work purposes
- **Forestry-** raising trees for use as building materials

# How Does Agriculture Make Life Better?

✘ Food

✘ Fiber

✘ Shelter

✘ Landscape

✘ Natural Resources- fuel, forests, fish, wildlife

✘ Recreation