

- o Farming to protect the environment, aid and expand natural resources, and to make the best use of nonrenewable resources
- U.S. Code Title 7, Section 3103: Sustainable agriculture means an integrated system of plant and animal production practices having a site-specific application that will over the long-term:
  - o 1) Satisfy human food and fiber needs
  - o 2) Enhance environmental quality + natural resource base upon which agriculture economy depends
  - o 3) Make efficient use of nonrenewable resources and on-farm resources and integrate, where appropriate, natural biological cycles and controls
  - o 4) Sustain the economic viability of farm operations
  - o 5) Enhance the quality of life for farmers and society as a whole
- **Solutions – Eating Lower On The Food Chain:**
  - o In a food chain/web, energy is lost as it is transferred btw trophic levels
  - o Eat lower on the food chain = less energy is lost
  - o Producing animal-based foods uses more water + causes more GHG emissions, especially CAFO-produced meat
- **Solutions – Reducing Food Waste:**
  - o Wasted food: food not used for its intended purpose + managed in a variety of ways (donation, creation of animal feed, composting, anaerobic digestion, or disposal in landfills)
  - o Excess (or surplus) food: food that is donated to feed people
  - o Food waste: food not consumed by humans that is discarded or recycled, such as plate waste, spoiled food, or peels and rinds considered inedible
    - Occurs at retail, food service, and residential levels and is managed by landfill; controlled combustion; sewer; litter, discards, and refuse
    - Solve by: donate/upcycle feed, animals/leave unharvested, compost/anaerobic digestion, anaerobic digestion/apply to land
  - o Food loss: unused product from the agricultural sector
- **How do we recycle and reuse waste:**
  - o 40% of food produced in US is uneaten and wasted, which amounts
  - o Can be diverted from waste stream by eating leftovers or composting
  - o Composting: form of recycling that decomposes and converts food waste into organic material that can be used to grow crops

## **Waste:**

### **What Is Waste?**

- Waste or garbage – what we determine to be unusable or unwanted
- Waste ends up in a waste stream: flow of materials from “upstream” processes such as extraction, production, and distribution to disposal – “downstream”

### **Municipal Solid Waste (MSW):**

- American consumers directly contribute 5 lbs of garbage per person per day
- Produces 1,800+ lbs of garbage per year as municipal solid waste (MSW)
  - o Majority of MSW is landfill