Production System Issues

This group decided to rename the focus area Production Systems, rather than Food Systems, to better reflect the scope of agriculture from grower to consumer, including
- Production
- Farm-to-fork
- Food safety/security (chain from farmer to consumer regardless of the actual community)
- Logistics/transportation

Critical Issue #1: How do we deal with consumer-driven production systems? (region-wide)
For example:

- Organic
- Conventional
- Local
- Source verification
- Urban
- Crops for health
- Emerging
  - Perception of conventional production vs. organic production (RW, global)
  - Uninformed consumer confusion (GMO, organic, natural)
  - Increase local food production (RW)
  - Biotechnology, conventional and organic integration
  - Sustainability => using all resources economically => human inputs AND natural inputs (H2O, energy, fertilizer) (global)
  - Consumer preferences => education on the value of agricultural items (RW)
  - Viticulture and Enology (RW, global)
  - Capturing more value (local) – post harvest. VALUE-ADDED
  - Public demand for organic or is outpacing investment in research to maintain economically sustainable production (RW)
  - Support to beginning and small urban fringe farms
  - Policy development for sustained production
  - Conventional versus “natural”?/“organic” – costs involved, consumer acceptance, markets (local)
  - Constraints Young farmer & rancher & grower opportunities (land, funds, mentors/network)
  - Farmer market operations
  - Market Fragmentation: locavores; organic; green-sustainable; non-GMO; ready to eat – minimum prep. Opportunity for new consumers – increased value
  - Crops for health – using food for health, to treat and prevent disease (i.e., beans to prevent breast cancer) (RW)

- World café comments
  - The central definitional role of land grant universities is development & extension (implementation) of technologies (new knowledge) to assure the productivity, sustainability, & competitiveness of agricultural production systems
  - And, consumer understanding & acceptance of technologies (food is safe!)
Critical Issue #2: Ensuring a safe, sufficient, and secure food supply (region-wide - global):
  - Accessibility (socioeconomics, e.g., food deserts)
  - Nutritious (fresh fruits, vegetables, e.g., food deserts)
  - Food safety throughout the value-added chain (processing & distribution system)
  - Importance of plant & animal health in food safety & security

- Food safety: pests; disease; consumer behavior
- Food safety; raw and processed products
- Need continued food safety research from an integrated/systems approach
- Food safety along the distribution chain
- Food deserts (availability)
  Food security: access to affordable, nutritious, food

- World café comments:
  o Using science to help production agriculture with regulations
  o Food storage, preservation

Critical Issue #3: Awareness, development and adoption of new technologies, applications & methodologies (region-wide)
- Yields under various pressures – biotic and abiotic (global)
- Breeding/and GM to respond to climate change
- Enhance understanding and use of sustainable production practices (RW, global)
- GMO technology acceptance and/or necessity
- Food labeling (non GM/GM)
- Need social research aimed at increasing consumer/public acceptance of new technologies, including GMO’s, that will be needed to feed 9 billion people by 2050
- Recognize the role of transgenics in fulfilling global food demands
- Need production systems (crops/commodities) that are resilient to climate change
- GMO’s: education, use, impact on consumption

- World café comments:
  o And, consumer understanding and acceptance of the technologies

Other Issues Related to Production Systems:
- Animal Systems (RW)
  o Animal welfare
  o External pressures: PETA, other organizations
- Water
  o Water: availability; quality
  o Water pricing and availability (RW) (but discussed in NRM)
- International
  o Export markets: growing markets; maintaining markets
  o Input/Export of food, grain, and animals and global concerns (global)
  o Trade policy complexities (GMO and safety)
- Broader market access (quarantine systems, trade agreements, etc.)
- Increased complexity of export regulations; trade barriers (phytosanitation)
- International competitiveness challenged
- Labeling “cool” food products

- Public Education and Policy
  - Educated public – that know how food gets to their plate (RW)
  - Need to recognize that the “West” produces more than 400 commodities: “The West sets America’s Table” (RW)
  - Failure of general public to recognize where their food comes from (national-wide)
  - Impact of invasives on production (prevention and management) (RW)
  - Urban-rural interface (issue of air, pesticide uses)
  - Urban understanding of production agriculture
  - Food waste: food distribution mechanisms; public behavior
  - Price of food: pushing small producers out of business by asking: “Who sells one gallon of milk for $2.00 rather than negotiating price with producer?”
  - Regulatory decisions being more based on public opinion rather than on sound science; now being driven by retailers
  - Need to limit scope to those items we are able to impact (RW)
  - Food distribution over long distance (US Pacific)
  - Loss or inadequacy of crop protection materials and methods by state and federal regulation; resistance issue new invasive pes ?? (RW)
  - Transportation costs, avail. Carbon footprint, weight limits, regulations

- Labor
  - Labor: lack of available skilled labor; immigration issues
  - Availability of farm labor
  - Labor and workforce availability
  - Labor shortage: skilled, field, processing
  - Competitive food systems: labor, environmental (RW)
  - Labor availability and cost: limited and more costly = higher cost to consumer and offshore competition issues