

# ***Loss of Farmland & Local Food Systems***

*(photos not for publication)*

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# Rural Land Use Issues



- Conversion of rural land to urban uses and loss of agricultural land
- Loss of wildlife habitat, ecosystem services and human communities
- Policy considerations for preserving farmland
- Potential for smaller-scale agriculture and open space near cities
- Public lack of knowledge: agriculture and food sources

# Conversion of Rural Land - U.S.



- Between 1980 & 2003, land for urban uses increased 34%, most from crop and forest lands
- USDA: 12% decrease in crop land 1982 to 2003, 420M to 368M acres
- Current farmland loss 2M acres/yr., population increase 1.1%/year
- Yields/acre must more than double in next 50 yrs. to meet demand
- Scarcity of fossil fuel, water, biofuel demand, global warming
- Possible food & fiber shortages

# Long-term Implications of Rural Land Conversion for Nebraska



- Reduction in supply of fresh local food;
- Decline in local businesses serving agriculture;
- Fewer opportunities in rural economic development;
- Loss of wildlife habitat and ecosystem services;
- Reduced recreational opportunities;

# Long-term implications of conversion



- Elimination of rural “viewshed”;
- Reduced water quality & less ability to recharge groundwater supply;
- Lower flood control capacities;
- Reduced potential to retain and attract highly skilled persons who value rural amenities;
- Increased pressure on public finances to provide services.

# Slowing Farmland Conversion in Nebraska - Obstacles



- Urban expansion
- Land prices unaffordable for farming
- Demand for corn
- Inadequate resources for beginning farmers
- Government zoning & other regulations
- Non-farm neighbor complaints hindering farm management

# Slowing Farmland Conversion in Nebraska - Successes



- Policies to protect floodplains
- Zoning, cluster plans
- Transfer of development rights talks
- Farmers markets & metro-area growers
- Expanded nursery crop production
- Regional, multi-disciplinary & stakeholder studies
- Consensus-building in land use practice, policy & planning talks

# Impacts of Conventional Agriculture



- Concentration of crop monocultures & livestock feeding operations (CAFO)
- Loss of biodiversity, ecosystem services
- Resource depletion & pollution
- Loss of plant & animal diversity, human communities
- Dependent on cheap fuel, external inputs & subsidies
- External costs to environment
- Short-term profit vs. long-term sustainability

# Sustainable Agriculture



- Uses resources within its ability to renew
- Disposes wastes no faster than can be absorbed
- Supports local communities
- Provides income for farmers

## Includes:

- Organic crop and food production
- Grass-based livestock production
- Greater rural-urban connections, sense of place

# Local/regional food systems



- Urban-rural connections
- Viable alternative to industrial food systems
- Promotes economic & ecological diversity
- Preserves character of rural landscapes

# *Ecosystem Structure & Function*



- Purify air & water, store moisture, slow wind
- Reduce floods, recharge groundwater
- Trap sediment, slow runoff
- Provide natural predators & pest control, pollinators
- Wildlife habitat, diversity for greater system stability

*Green Topeka (KS) Project*

# *Economic Issues*



- Farmland = both resource & commodity
- Not all land's services captured in its market price
- Increased land values greatly influence land-use policy
- City services to rural developments paid for by all
- No consensus in policy or planning to preserve farmland

# *Economic Issues*



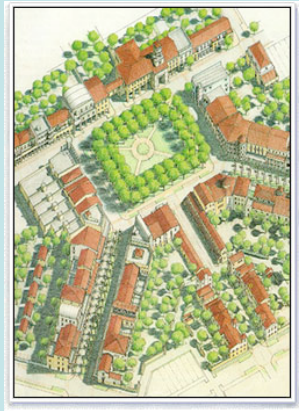
- Acreage developments demand city services, increase energy use, fragment wildlife habitat
- Ag land conversion irreversible; future costs ignored
- Policies should retain a sustainable agriculture system & renewably productive land base

# Farmland preservation - Nebraska



- Ag competitiveness efforts:
  - differential valuation assessment
  - right-to-farm statute
  - agricultural zoning
  - federal farm income support
- Planning efforts
  - comprehensive land use planning
- Conservation tools
  - conservation easements
  - Federal conservation programs:  
FRPP, GRP, CSP, WHIP

# “Smart Growth” practices for urban areas



## Challenges:

- Planning & development policies inadequate for integrated, sustainable landscapes & communities
- Housing & commercial development dependent on vehicle systems

# *Peri-Urban Agriculture*



- Horticulture crops & livestock products for direct markets
- Increase food freshness
- Reduces materials for processing & packaging, energy for shipping
- Local systems: accountable producers, grows local economy
- Small scale: opportunities for beginning farmers

# *Peri-Urban Agriculture*



- Rural-urban connections, food source
- Increased net return for farmers
- Farmers markets, CSA, on-farm sales, food co-ops
- Agri-tourism, recreation, education
- Employment opportunities

*Woodbury Co. IA organic food purchase mandate*

# Food for Communities in the Future



- Farmers' markets
- Community-supported agriculture (CSA)
- Sustainable and organic agriculture
- Local food systems

*Michael Pollan "Farmer in Chief" NY Times 12 Oct 08*

# Multifunctional Rural Landscapes for the Future



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