

Expectations of Extension

Duane Acker, 25x25 Steering Committee

25x'25 Vision: By 2025, America's farms, ranches and forests will provide 25 per cent of the total energy consumed in the U.S. while continuing to produce safe, abundant, and affordable food, feed and fiber.

(- - - while maintaining and enhancing the natural resource base.)

Reference

Research and Education Priorities in
Agriculture, Forestry and Energy to
Achieve the 25x'25 Renewable Energy
vision - - NACTA Journal, March 2008

www.25x25.org, click Resources, then click 25x25 priorities. Also check out National Security, Carbon Initiative, On the Hill, News Room, Newsletters and other.

When WalMart Comes to Town

- How WalMart functions - - buys, prices, re-stocks, advertises, competes.
- Winners and losers – auto agencies vs. groceries, quality furniture vs. Pamida.
- What will locals do about it? - - customer relationship, follow-up satisfaction, specialty products and services.

When Internet Comes to Extension Clientele

- How internet functions - - Info spectrum, search engines, 24/7 availability, speed
- Winners and losers - - information availability vs. Extension budgets
- What Extension does about it - - restructure, close some positions, re-train, seek other funds, complement Internet resource.

When Energy Comes to the Top of Political/Economic Issues

- How the energy sector functions
- Potential winners and losers
- What should Extension do about it?

(This conference agenda touches those three. Take notes, summarize on your laptop tonight. At the close, send to your director, dean, provost, president, unit head, colleagues.)

How Energy Sector Functions

- Transportation fuels – Oil from volatile regions, 150 years since first U.S. oil well, multiple products, current investment.
- Electricity – water, coal, gas, nuclear, wind generation; transmission lines, long-term contracts, commissions, cost/kwh.
- Energy efficiencies/inefficiencies – Design and HVAC traditions, vehicle traditions.

New Energy Winners and Losers

- Potential winners – land owners and operators, renewable equipment interests, insulation providers, architects, consumers.
- Potential losers – oil, coal and gas interests - - extractors, transporters, processors, handlers; those on potential transmission line routes.

What Should Extension Do about it?

- Know the energy territory – functions, potential winners and losers. Think trade-offs.
- List potential Extension audiences – land owners, timber and crop producers, transportation sectors, teachers, city councils, consumers, legislators, investors.
- Tap knowledge resources university-wide.

Some Specific Extension Programs

- Societal cost:benefit - military protection of oil flow vs. renewables - Economics
- Transmission line siting – Zoning, law
- Biomass siting and size – Transportation, economics, logistics
- Co-products – Chemical engineering
- Conservation – Architecture, Construction science, mechanical engineering.

Some Specific Extension Programs

- Biomass production – Forestry, Agronomy
- Carbon - soil release vs. sequestration – Soils, Forestry, plant physiology
- Animal manure, CHO vs. N, P, K – Soils, Agri. Eng., Animal Science, fermentation
- Projects for 4-H, FFA, Jr. Achievement, Scouts and Economic Education
- K-12 teacher workshops

Some Specific Extension Programs

- Transportation fuel qualities
- Harnessing biomass reservoirs - landfills, wood and food processing wastes
- Sustainability - - water, soils and wildlife; economic
- Eminent domain and energy transmission
- Biomass conversion technologies
- Link with 25x'25 state alliance

Expectations of Extension

- Respond to the changed priority
- Know the territory
- Think audiences, think trade-offs
- Prioritize
- Use total university as resource
- Use Extension model: alternatives and likely consequences, so audience can make most informed and wise decisions.