MSU TODAY

• 47,278 students
  – 36,489 undergraduate (4-year)
  – 10,789 graduate and professional
  – 131 countries

• 4,985 faculty members

• 2100 ha campus (East Lansing)
  – 6,000 ha throughout Michigan

• 577 buildings (83 with teaching space)

MSU TODAY

• Colleges within MSU
  – Agriculture and Natural Resources
  – Arts and Letters
  – Business
  – Communication
  – Education
  – Engineering
  – Human Medicine
  – Law
  – Music
  – Natural Science
  – Nursing
  – Social Science
  – Veterinary Medicine
ORIGINS THE LAND GRANT SYSTEM

• Morrill Land Grant College Act of 1862
  – Each state given grants of land to fund a college for teaching “agricultural and mechanical arts”
  – MAC created by state of Michigan in 1855

• Hatch Experiment Station Act of 1887
  – Much teaching had been of traditional practices
  – Scientifically-based knowledge needed

• Smith-Lever Extension Act of 1914
  – Provision of research results to farmers needed
TODAY’S LAND GRANT MISSION AT MSU

• Mission of College of Agriculture and Natural Resources (CANR)

The mission of the MSU College of Agriculture and Natural Resources is to enhance the quality of life for the people of Michigan and the world by advancing knowledge for the management of communities and agricultural, natural resource and food systems to meet diverse human needs in a sustainable manner.

• Mission achieved through
  – Teaching (CANR)
  – Research (Michigan Agricultural Experiment Station)
  – Extension (Michigan State University Extension)
TODAY’S LAND GRANT MISSION AT MSU

• Academic majors in the teaching mission of CANR
  – Agribusiness and Food Industry Management
  – Animal Science
  – Biosystems Engineering and Technology Systems Management
  – Construction Management
  – Crop and Soil Science
  – Dietetics and Food Science
  – Entomology
  – Environmental Economics and Policy
  – Environmental Studies and Agriscience
  – Fisheries and Wildlife
  – Forestry
  – Horticulture
  – Interior Design
  – Landscape Architecture
  – Packaging
  – Plant Pathology

TODAY’S LAND GRANT MISSION AT MSU

• The research mission of CANR is achieved through the Michigan Agricultural Experiment Station (MAES)

The mission of MAES is to engage in innovative, leading-edge research that ensures the wise use of agricultural, natural and community resources and enhances the quality of life in Michigan, the nation and the world.
Michigan Agricultural Experiment Station: Sources of Funding (Million Dollars)

- Federal appropriations: 5.8
- State appropriations: 34.3
- Federal, State, Private Grants: 75.2
TODAY’S LAND GRANT MISSION AT MSU

• The extension mission of CANR is achieved through Michigan State University Extension (MAES)

The mission of MSUE is to help people improve their lives through an educational process that applies knowledge to critical issues, needs and opportunities.
From Land Grant to World Grant

• MSU has extended the Land Grant philosophy from just addressing the problems of Michigan and the US to addressing critical problems around the world.
• For example, MSU has 160 faculty members & many graduate students working on 60 projects in 39 African countries in partnership with African institutions, covering a broad range of disciplines.
KEYS TO THE PERFORMANCE OF THE LAND GRANT SYSTEM

• Geographic distribution
  – Agricultural/economic development requires geographic adaptation

• Research user involvement
  – Articulation of problems from research users
  – Articulation of scientific potential from researchers

• Balance of basic disciplinary and applied problem-solving research
  – Adaptation to local conditions often required

KEYS TO THE PERFORMANCE OF THE LAND GRANT SYSTEM

• Diversity of funding sources
  – National, state, and local government sources combined with private sources

• Stability of funding sources
  – Development and dissemination of knowledge is inevitably a long-term investment

• Complementarity of research, extension and teaching functions
  – Development and dissemination of knowledge
KEYS TO THE PERFORMANCE OF THE LAND GRANT SYSTEM

• Complementarity to other public/market institutions
  – Credit market access
  – Commodity market access
  – Public infrastructure
  – Food safety
  – Primary education
  – Health services

• Complementarities capture the four drivers of economic change/development
  – Technological change
  – Institutional change
  – Human capital change
  – Bio-physical capital change

Thank you!