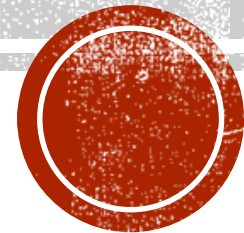


# **STUDENT DEFINITION AND PERCEPTION OF SUSTAINABLE AGRICULTURE**

Marcy M. Beverly, Ph.D., Stanley F. Kelley, Ph.D., Philip Urso  
and Cody Wellmann

Sam Houston State University ~ Huntsville, Texas



# INTRODUCTION . . . .

- Sustainable agriculture is becoming more prevalent in today's society
- Classes that promote the teachings of sustainable practices
  - More common in institutions of higher education
- Sustainable Agriculture and Food Environment (SAFE)
  - Sam Houston State University
- Alternative Ag Enterprises
  - Require course



# MATERIALS AND METHODS.....

- Eighteen graduate students enrolled in SAFE course in the fall of 2015
- Students completed pre/post-free response surveys polling their knowledge and perceptions of sustainable agriculture
- Survey responses were analyzed using NVivo™



# SURVEY QUESTIONS.....



- ✓ Define the term “sustainable”
- ✓ Define the role of food agriculture
- ✓ Do you believe sustainable agriculture is organic?
- ✓ Is there a difference between sustainable agriculture and organic agriculture?
- ✓ What caused the movement toward sustainable agriculture?
  - ✓ Is the movement a short-term trend or long-term movement?
- ✓ Is sustainable agricultural production global or regional?
- ✓ Who should be responsible for regulating worldwide agricultural production?
- ✓ What should this entity do in order to regulate worldwide agricultural production?



# RESULTS . . . . .

- ✓ 38% of students reported a shift in their belief from no/not sure to yes.....
  - ✓ Distinct difference between sustainable agriculture to organic agriculture
  - ✓ Student Response Example:
    - ✓ *Pre: ...* I am not sure the difference of the 2 terms. I can see how they can be the same and I can also see how they could be different
    - ✓ *Post: ...* Both are independent processes related to production
- ✓ 33% modified their opinion from regional to global.....
  - ✓ Sustainable agriculture a regional or global concept and management practice
- ✓ 72% to 100% change in belief....
  - ✓ Sustainable agriculture practices will be a long-term production strategy



# RESULTS.....



- ✓ What caused the movement towards sustainable agriculture.....
  - ✓ Technology
  - ✓ Health craze
  - ✓ Environmental health and animal welfare
  - ✓ Population increase and available land decrease
  - ✓ Generation “Y”



# CONCLUSIONS.....

- ✓ Students exposed to trending management concepts are more likely to displace their preconceived traditional notions of agriculture and sustainable practices, in favor of more accurate and descriptive definitions and philosophies
- ✓ More research further examining the opinions of students exposed to these SAFE courses could help further explain the need for future course development



Industrial Agriculture	Sustainable Agriculture
<ul style="list-style-type: none"><li>• CAFOs concentrate large amounts of animal wastes in one place, overloading the ability of the area to utilize it</li></ul>	<ul style="list-style-type: none"><li>• Smaller numbers of animals are raised on integrated farms</li><li>• Animal wastes provide nutrients for growing crops without polluting watersheds;</li></ul>



"THE WAY WE EAT HAS CHANGED MORE IN THE LAST 50 YEARS THAN IN THE PREVIOUS 10,000."  
~FOOD INC.

"CULTIVATORS OF THE EARTH ARE THE MOST VALUABLE CITIZENS. THEY ARE THE MOST VIGOROUS, THE MOST INDEPENDENT, THE MOST VIRTUOUS, AND THEY ARE TIED TO THEIR COUNTRY AND WEDDED TO ITS LIBERTY AND INTERESTS BY THE MOST LASTING BANDS."  
~THOMAS JEFFERSON

"THE NATION THAT DESTROYS ITS SOIL DESTROYS ITSELF."  
~FRANKLIN D. ROOSEVELT

Define the role of food agriculture.....

- ✓ basis of human life
- ✓ science of food production and distribution
- ✓ animal or crop that will be used to feed animals or humans to ensure survival
- ✓ to feed the world
- ✓ one of the most important aspects of the world
- ✓ backbone of society
- ✓ produce safe high quality food products to feed people.

