

# Natural science education in sustainable agriculture curriculum: *Context, experience, and interdisciplinarity*

---

KRISTA JACOBSEN, PHD  
SUSTAINABLE AGRICULTURE PROGRAM  
UNIVERSITY OF KENTUCKY



# Introduction

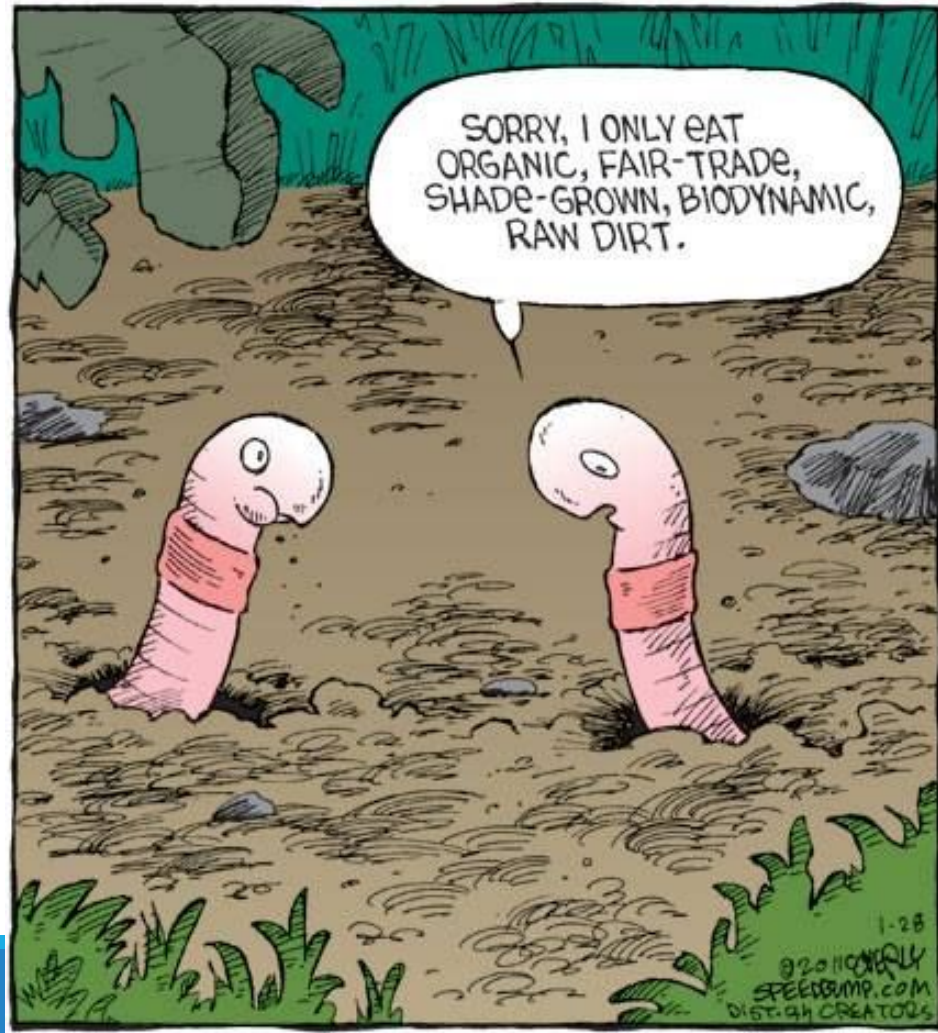
---

1. Some Context and Framing
2. Univ. of Kentucky Sustainable Agriculture and Community Food Systems Undergraduate Program
3. The Role of Experiential Education

# The Natural Sciences in Context

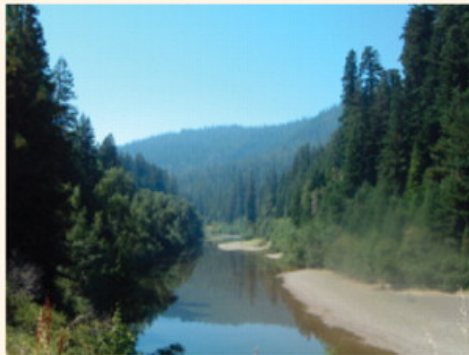
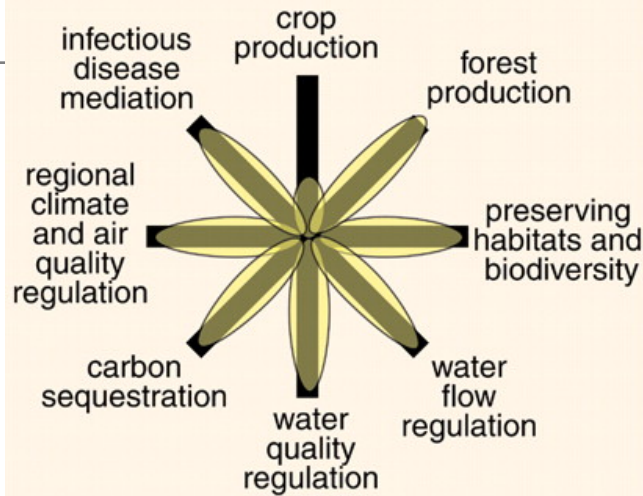
Trade-offs are everywhere.

Food is a focus!

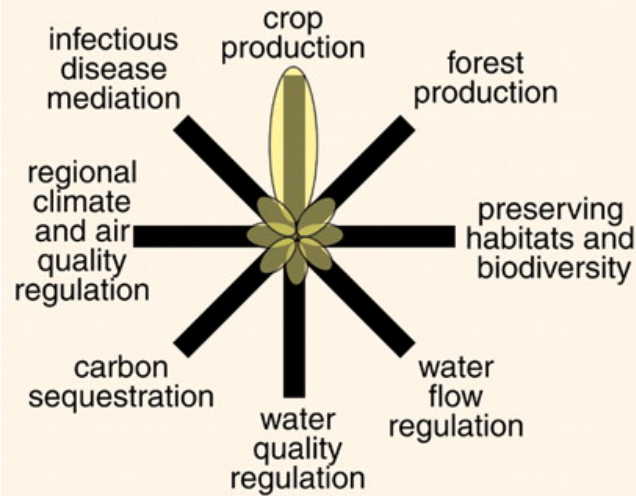




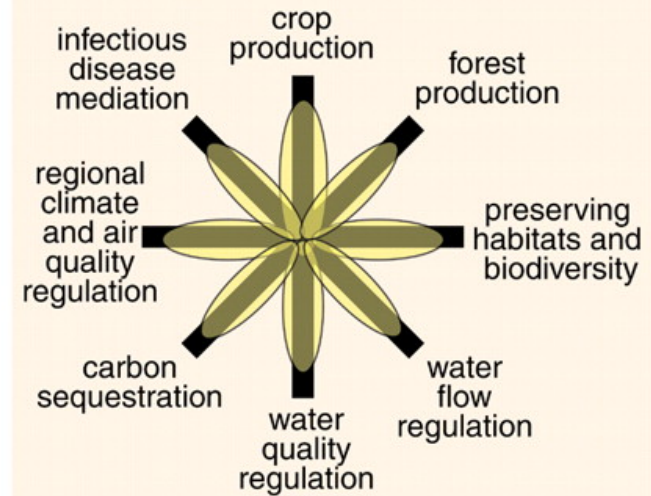
# Our goal: an understanding of the mechanisms driving these “tradeoffs”



natural ecosystem

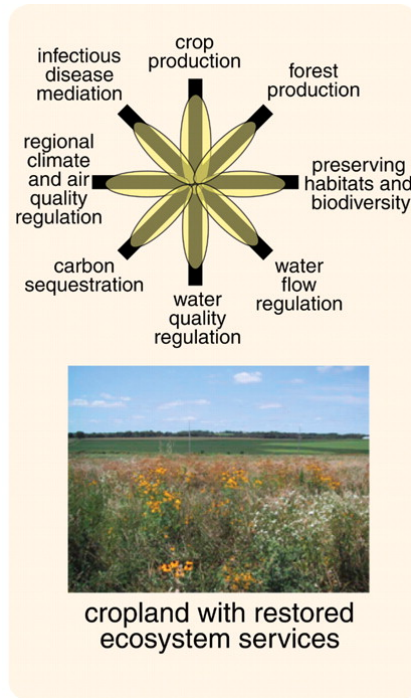
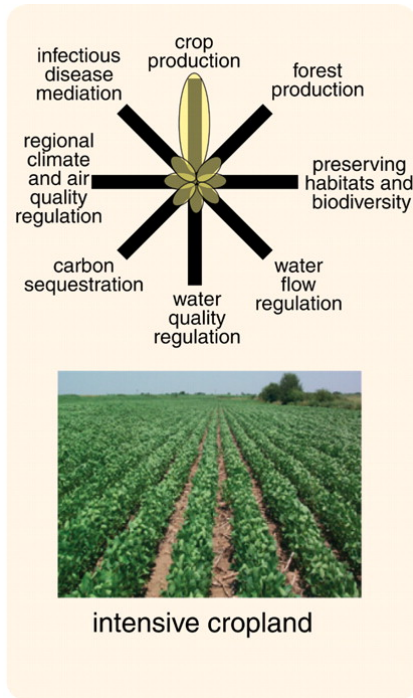
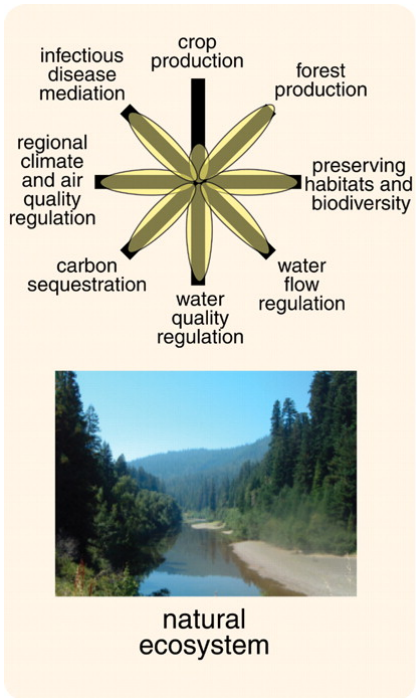


intensive cropland



cropland with restored ecosystem services

# Our goal: an understanding of the mechanisms driving these “tradeoffs”



## Skills our students need:

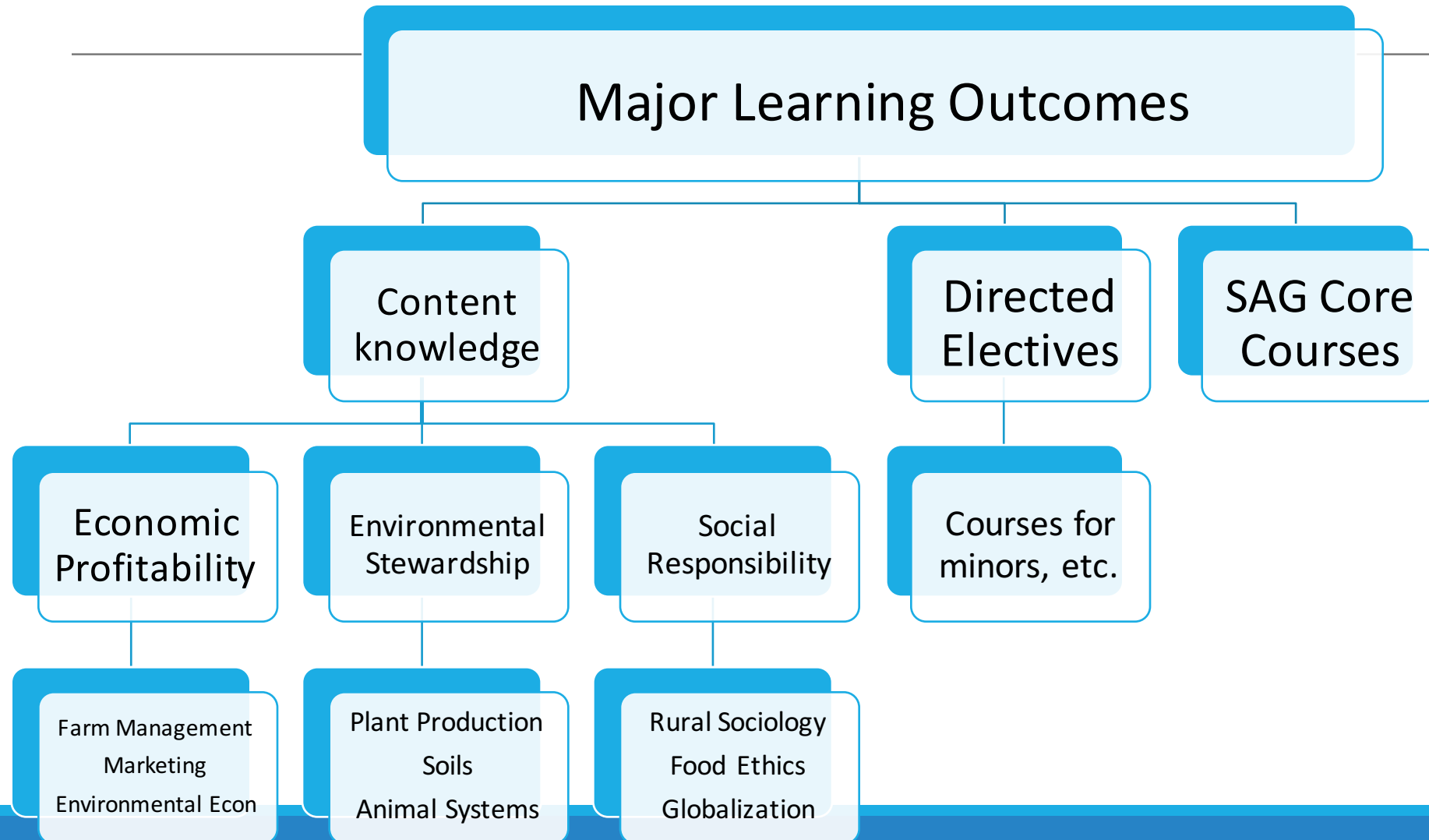
✓ **Systems thinking**

✓ **Site-specific perspective**

✓ **In-depth content knowledge**

✓ **Understanding and appreciation of socioeconomic context**

# Sustainable Ag and Community Food Systems Undergrad Program





# SAG @ UKY: Core coursework

---

SAG 490: Integration of Sustainable Ag Principles



SAG 101: Introduction to Sustainable Ag and Community Food Systems

SAG 201: Cultural Perspectives on Sustainability

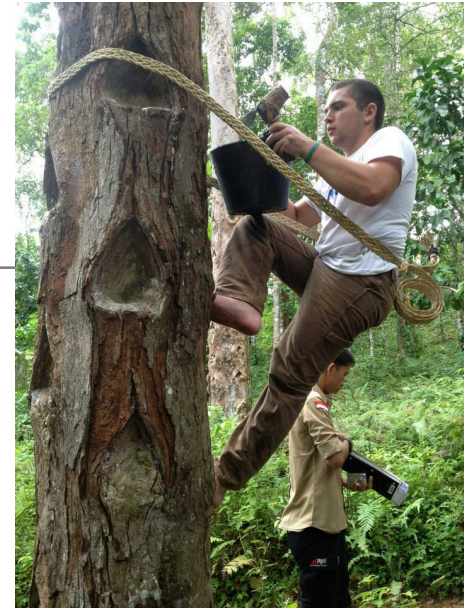
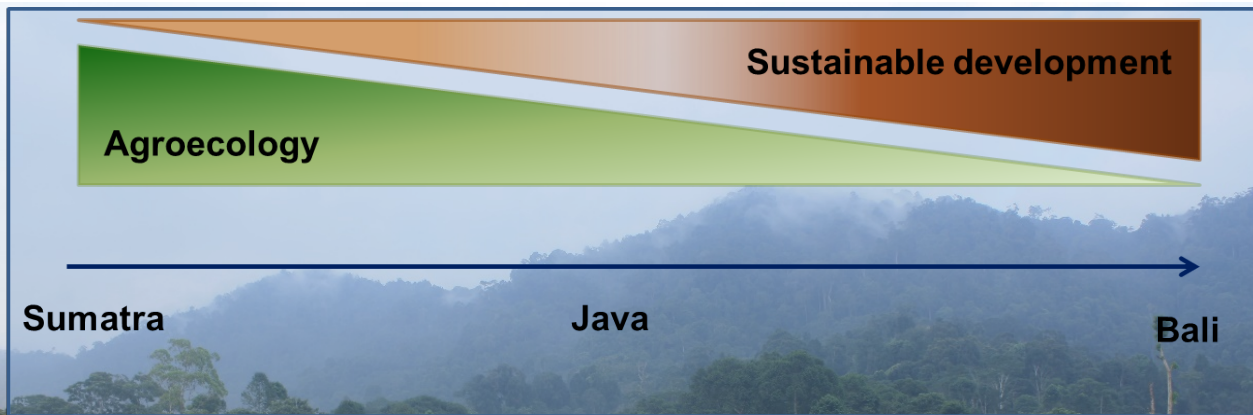


SAG 397: Apprenticeship in Sustainable Agriculture



# Expanding World Views

## Tropical Agroecology and Sustainable Development in Indonesia





# Engaging with a community of sustainable ag educators

www.sustainableaged.org



sustainable agriculture education association  
*promoting the teaching and learning of sustainable agriculture*

[ABOUT](#)

[CONFERENCES](#)

[PROGRAM LISTINGS](#)

[TEACHING RESOURCES](#)

[GET INVOLVED](#)

[RESOURCES](#)

[FIELD LESSONS](#)



The SAEA champions innovative educational approaches for sustainable agriculture through the development, application, and research of teaching and learning practices.

The SAEA exists to serve and connect educators, teachers, students, staff, and administrators who focus on the teaching and learning of sustainable agriculture at the adult level.

Our activities include hosting participatory conferences, collecting sustainable agriculture educational program listings, and

# Thank you!

---

Krista Jacobsen

University of Kentucky

[Krista.Jacobsen@uky.edu](mailto:Krista.Jacobsen@uky.edu)

