



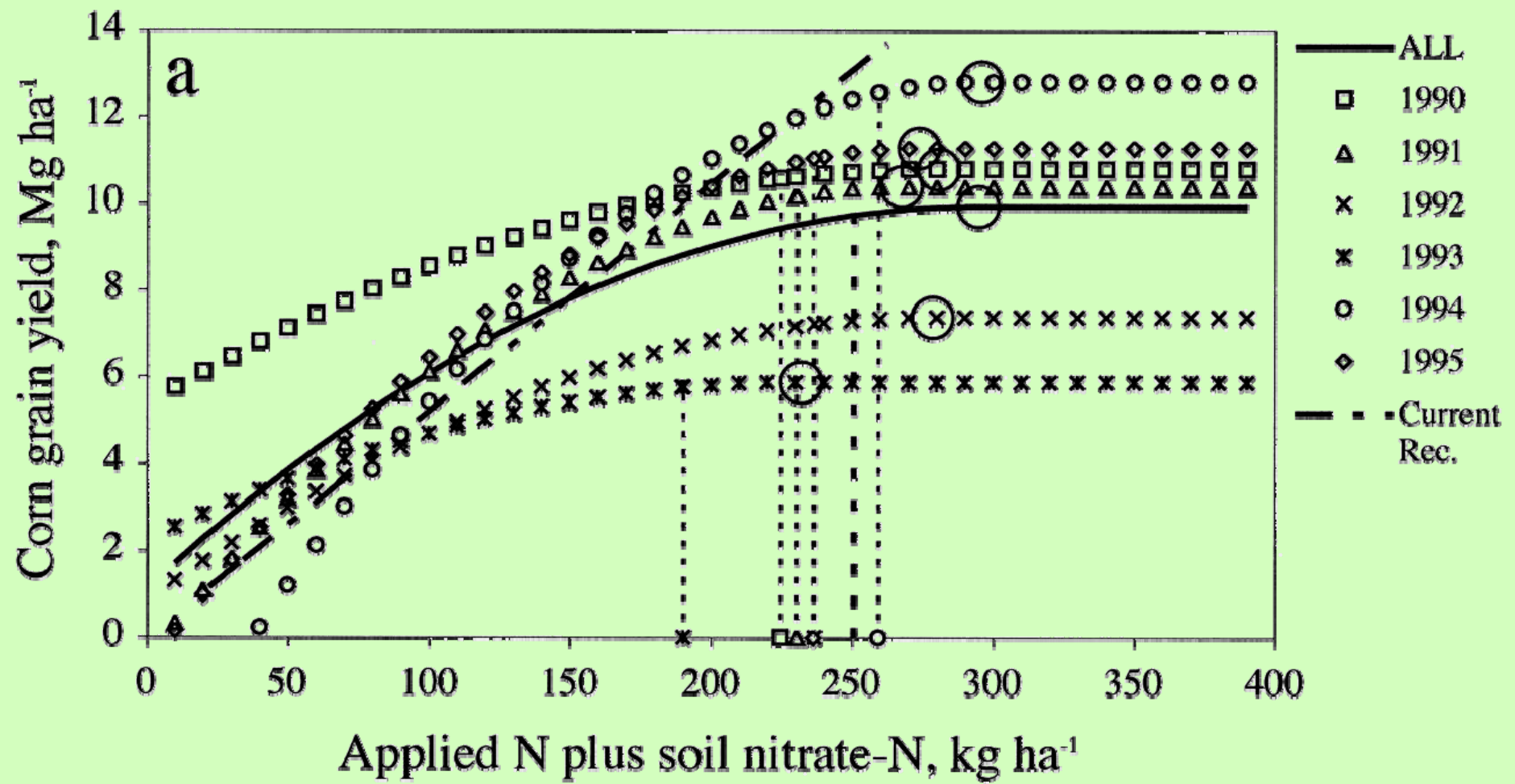
United States Department of Agriculture



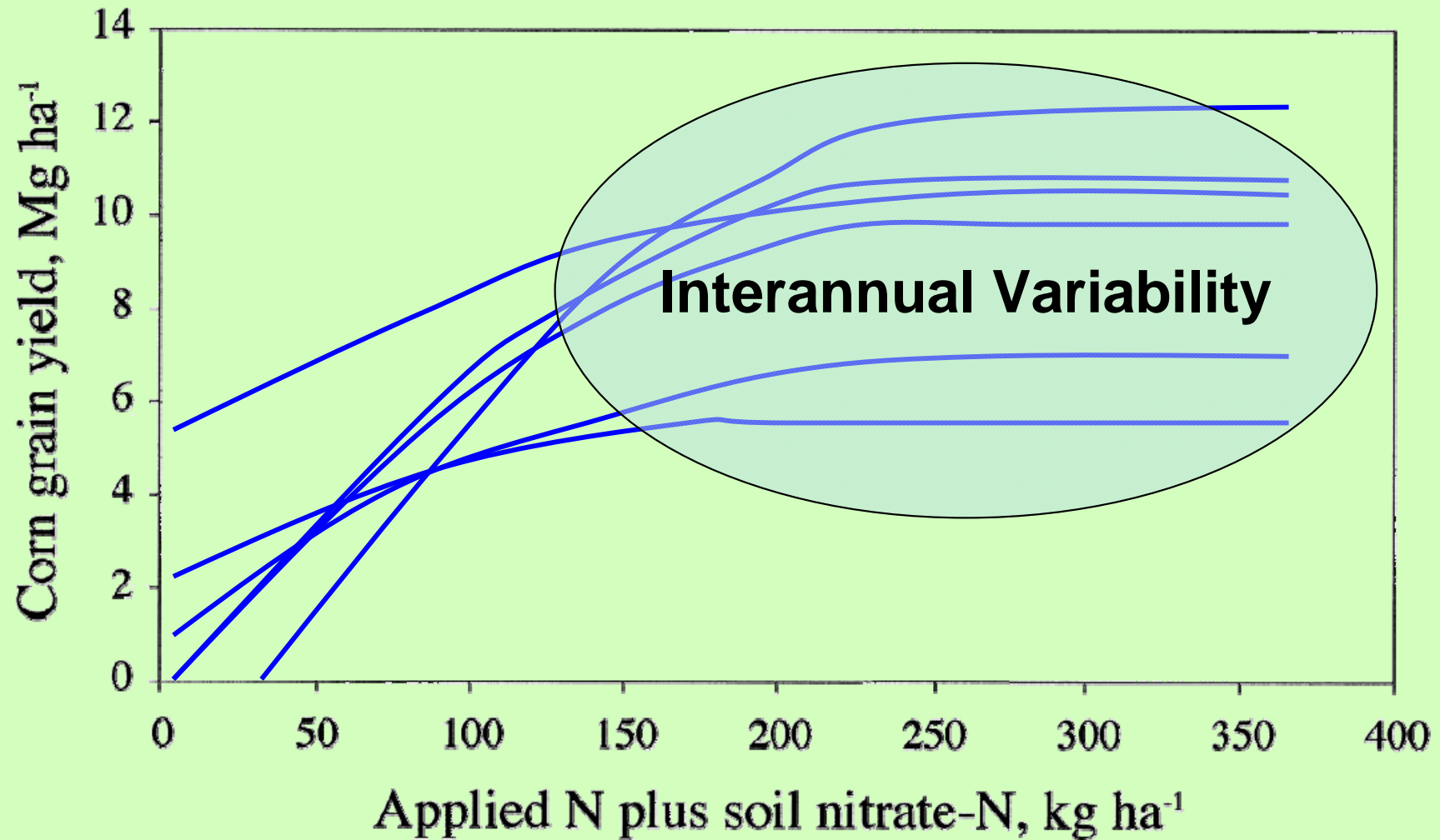
Cooperative State, Research, Education
and Extension Service

Setting Acceptable Levels: Who Takes Responsibility?

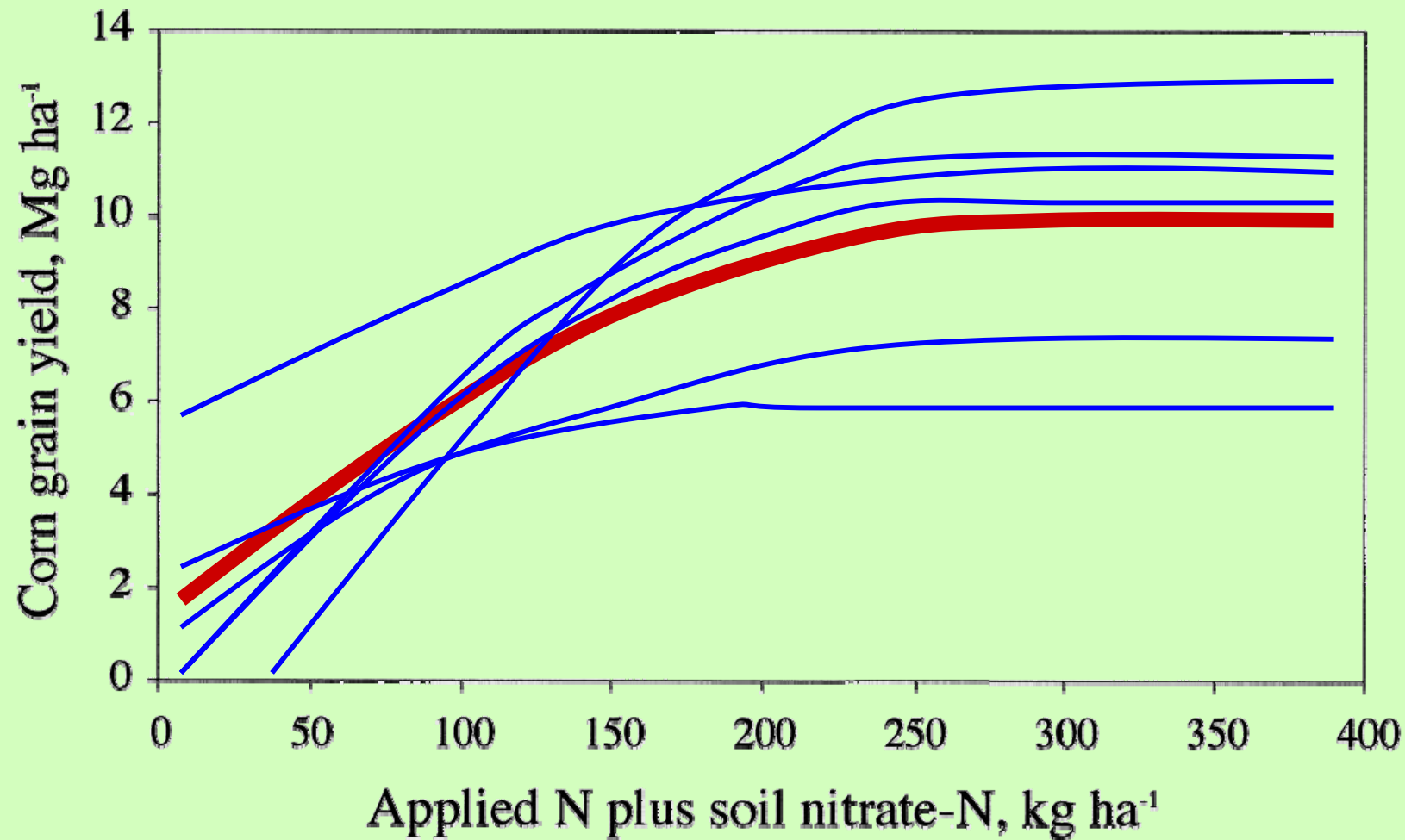
Mike O'Neill & Ray Knighton
National Program Leaders



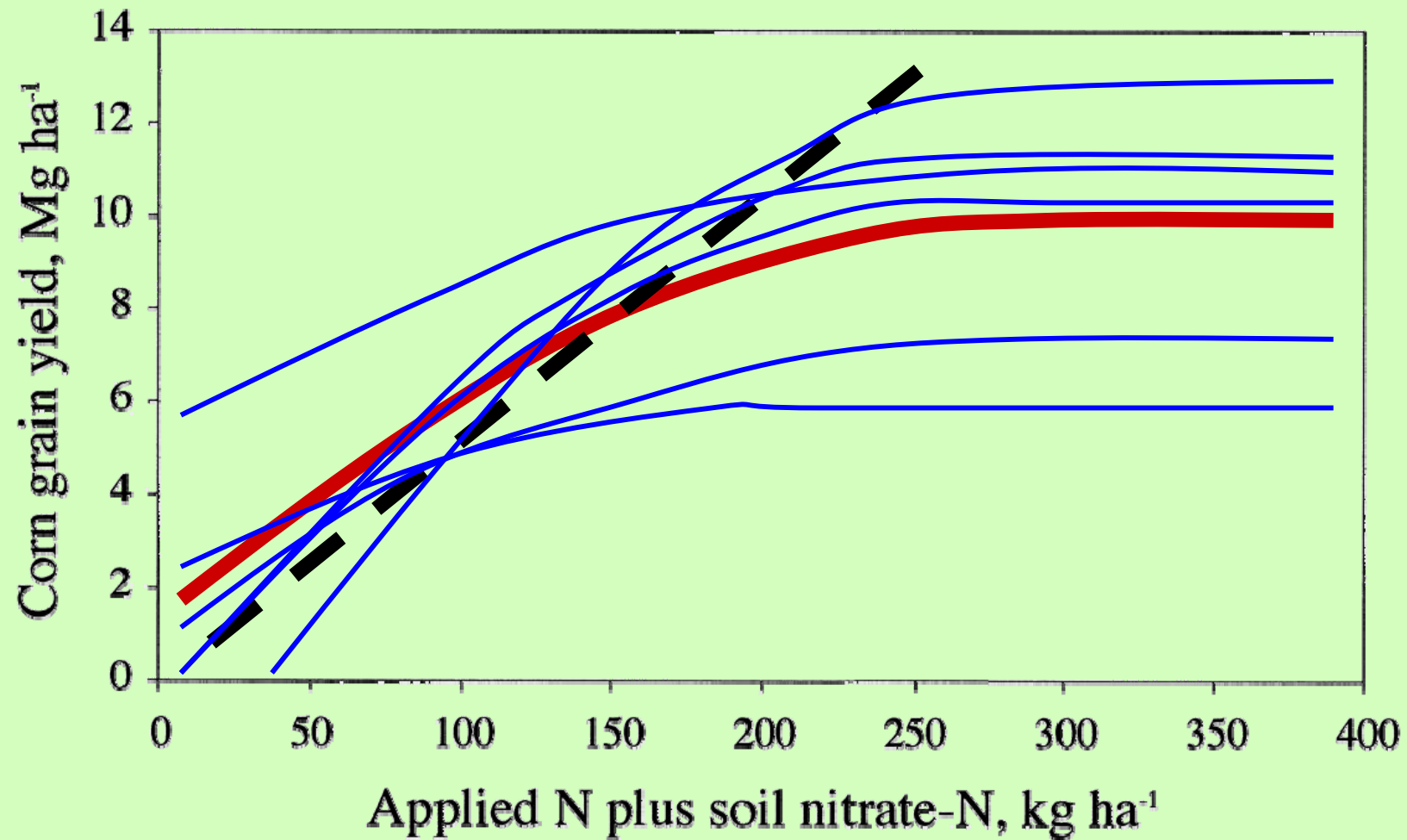
After Derby et. al., 2005



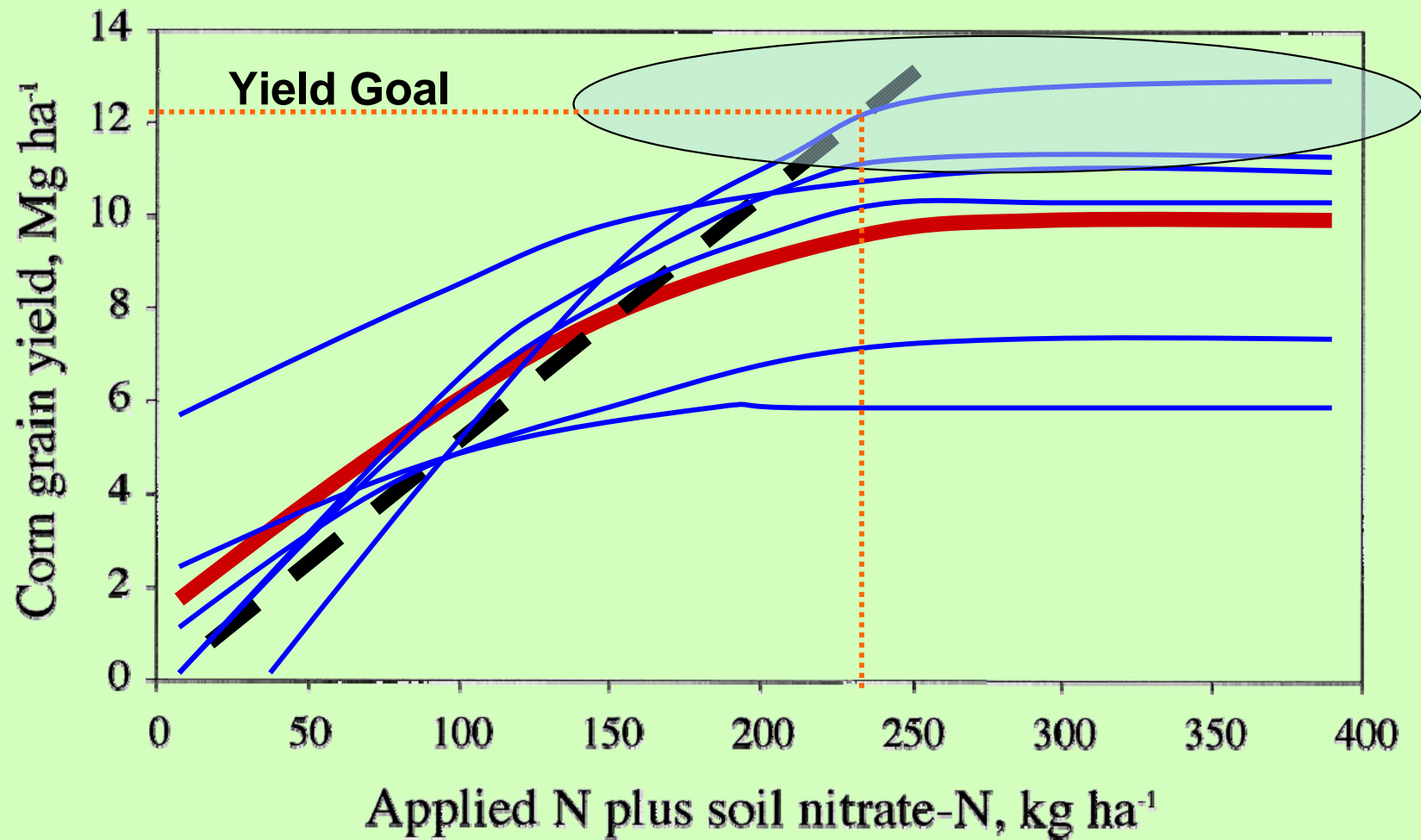
Research Community: What causes interannual variability and can we do anything about it?



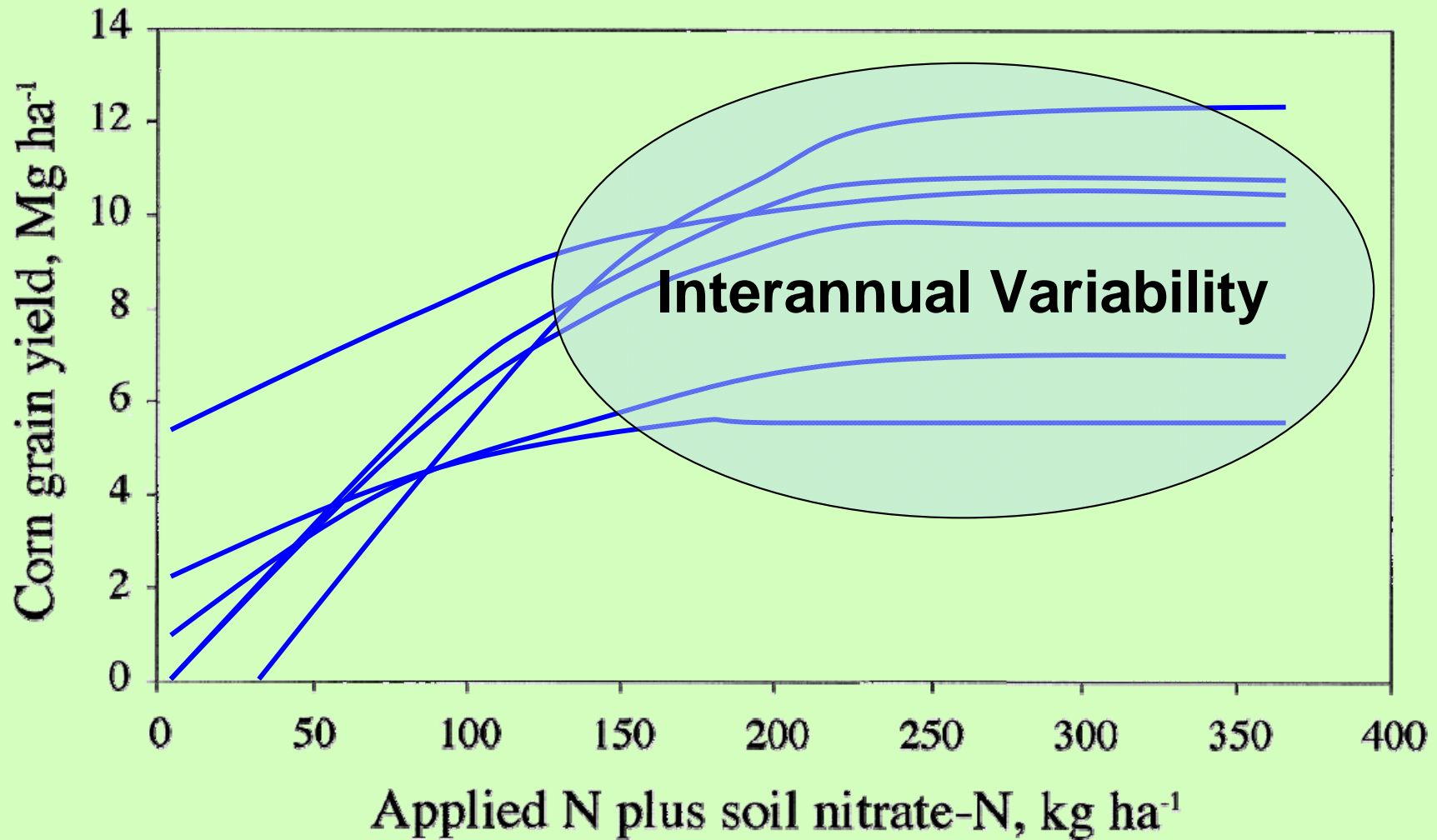
Extension Community to Research Community: What is the take home message from your research?



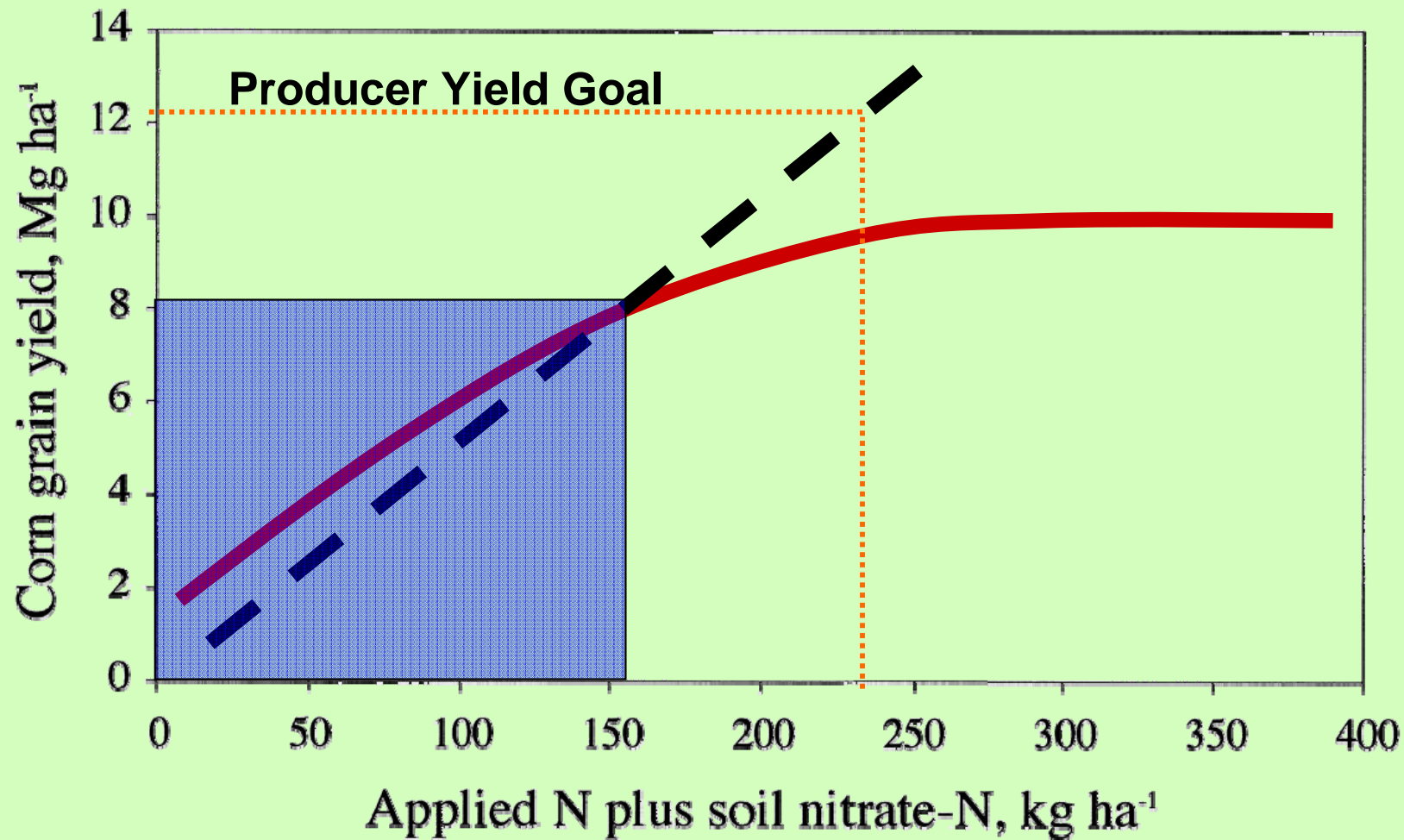
Extension Community to Producer Community: Here is a simple tool that will help you manage N fertilizer.



Producer Community to Extension Community : I finally met my yield goal. How do I get this yield every year?

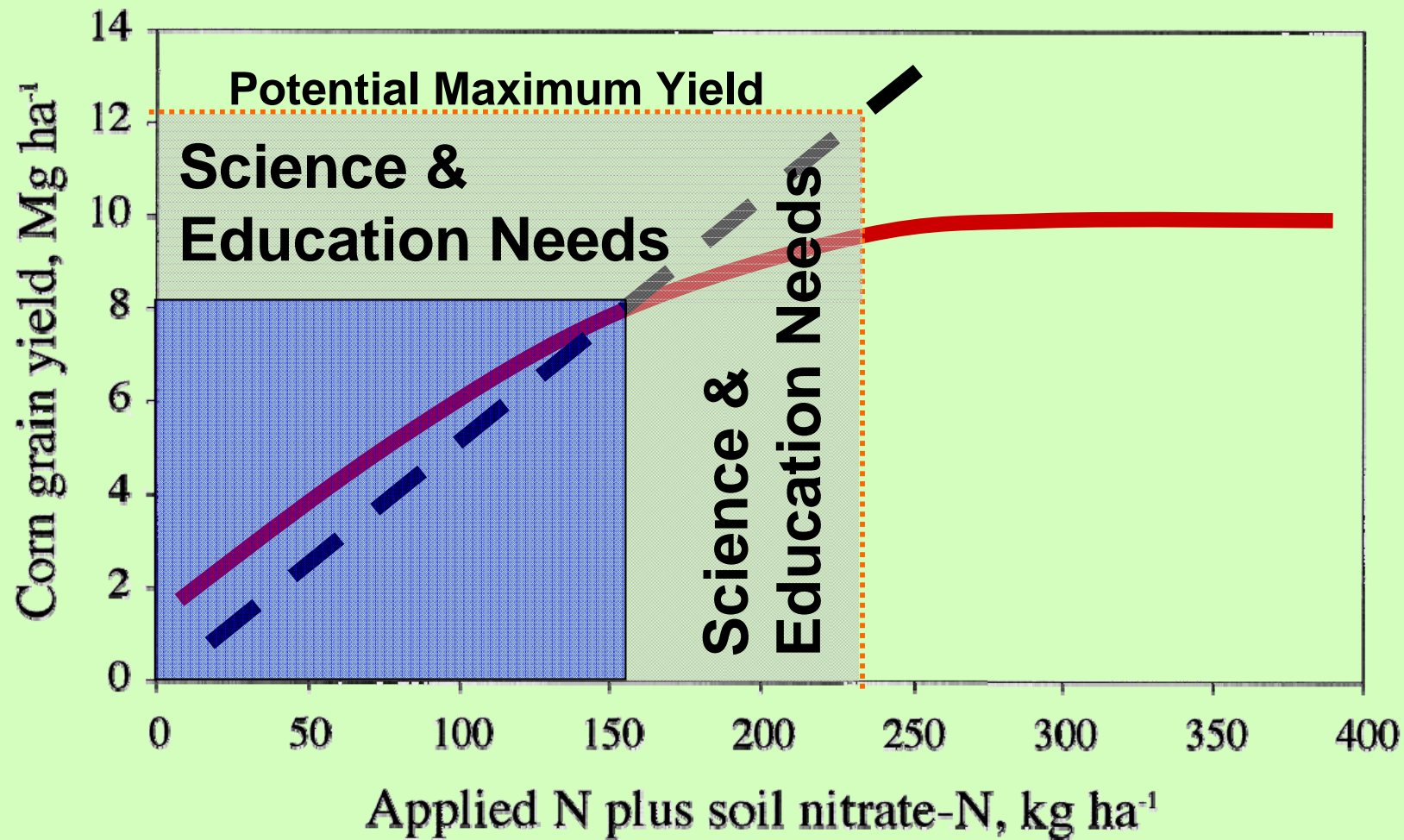


How do I get this yield every year? Sounds a lot like:
What causes interannual variability and can we do anything about it?

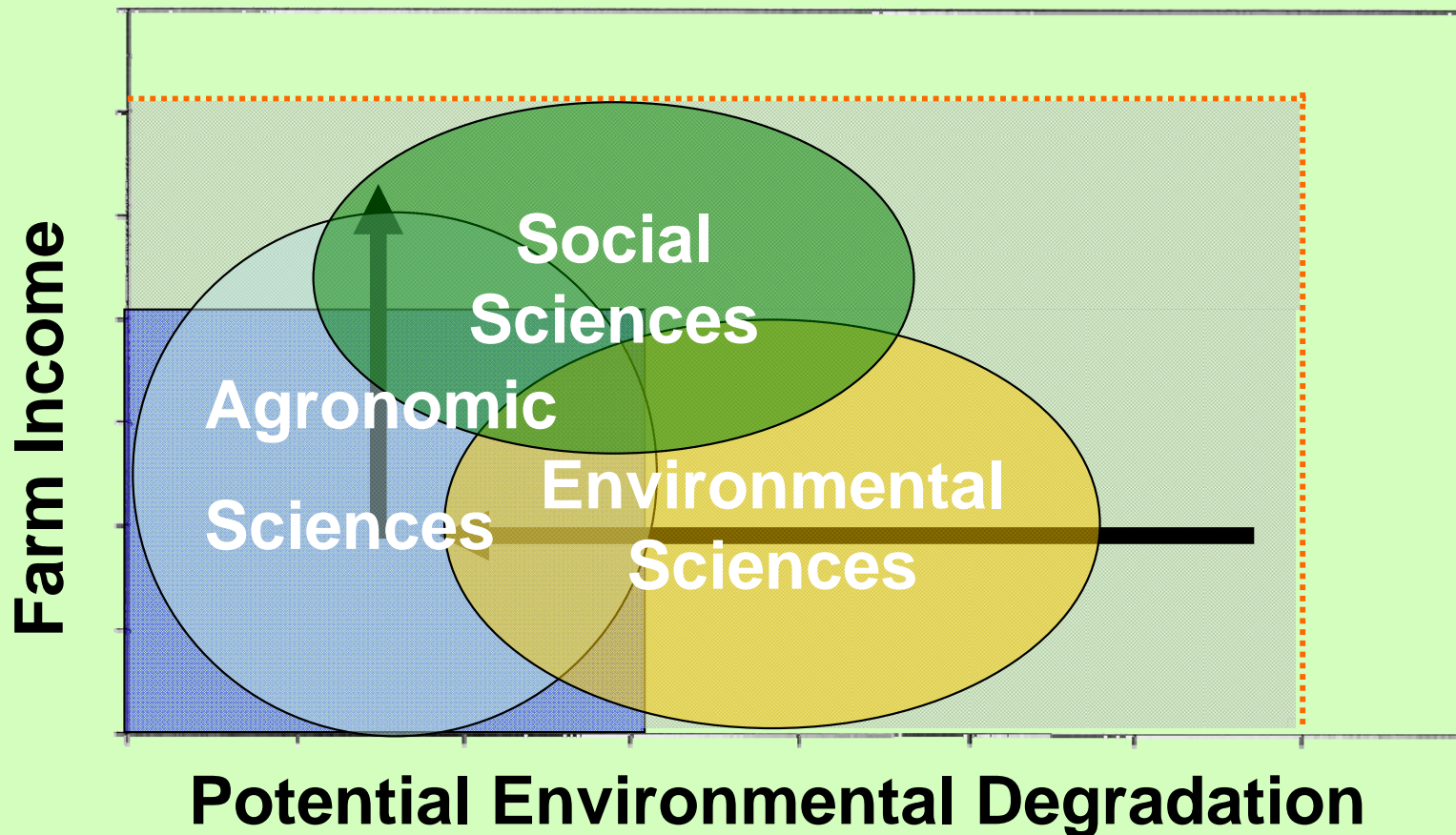


Are current recommendations meeting the needs of producers?

Will we be able to meet environmental and energy goals with the current recommendations?



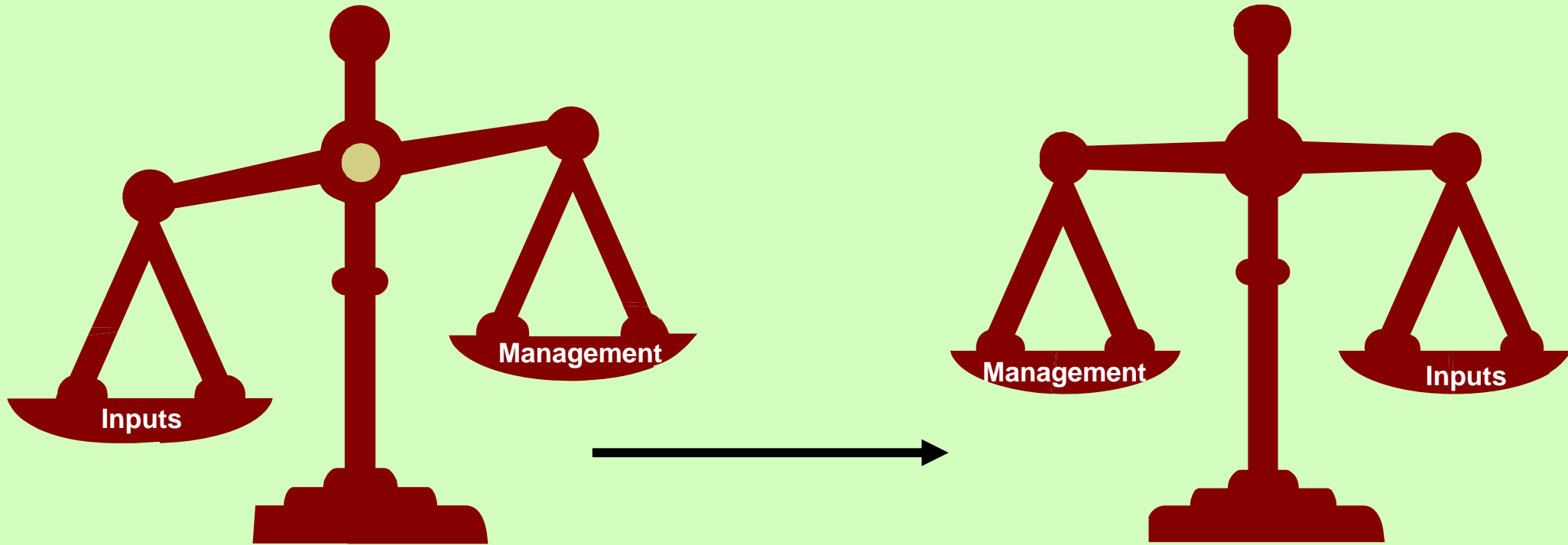
What are the science and education needs to optimize production while minimizing environmental degradation?



A multi-disciplinary approach is needed to:

- Produce more food, fiber, and energy with fewer inputs
- Solve complex environmental issues
- Overcome socio-economic barriers
- Change public policy

Change



Need a balanced approach to resource management

Research needs to be more closely linked to education/extension objectives to effect change

Taking CEAP

“To infinity and beyond”

- CEAP is an assessment of willing participants implementing reasonable practices
- How do we go beyond this level?
 - What is the appropriate science and extension approach to address the “unwilling” and the unknown?
 - How do we better understand the likelihood of interannual variability?