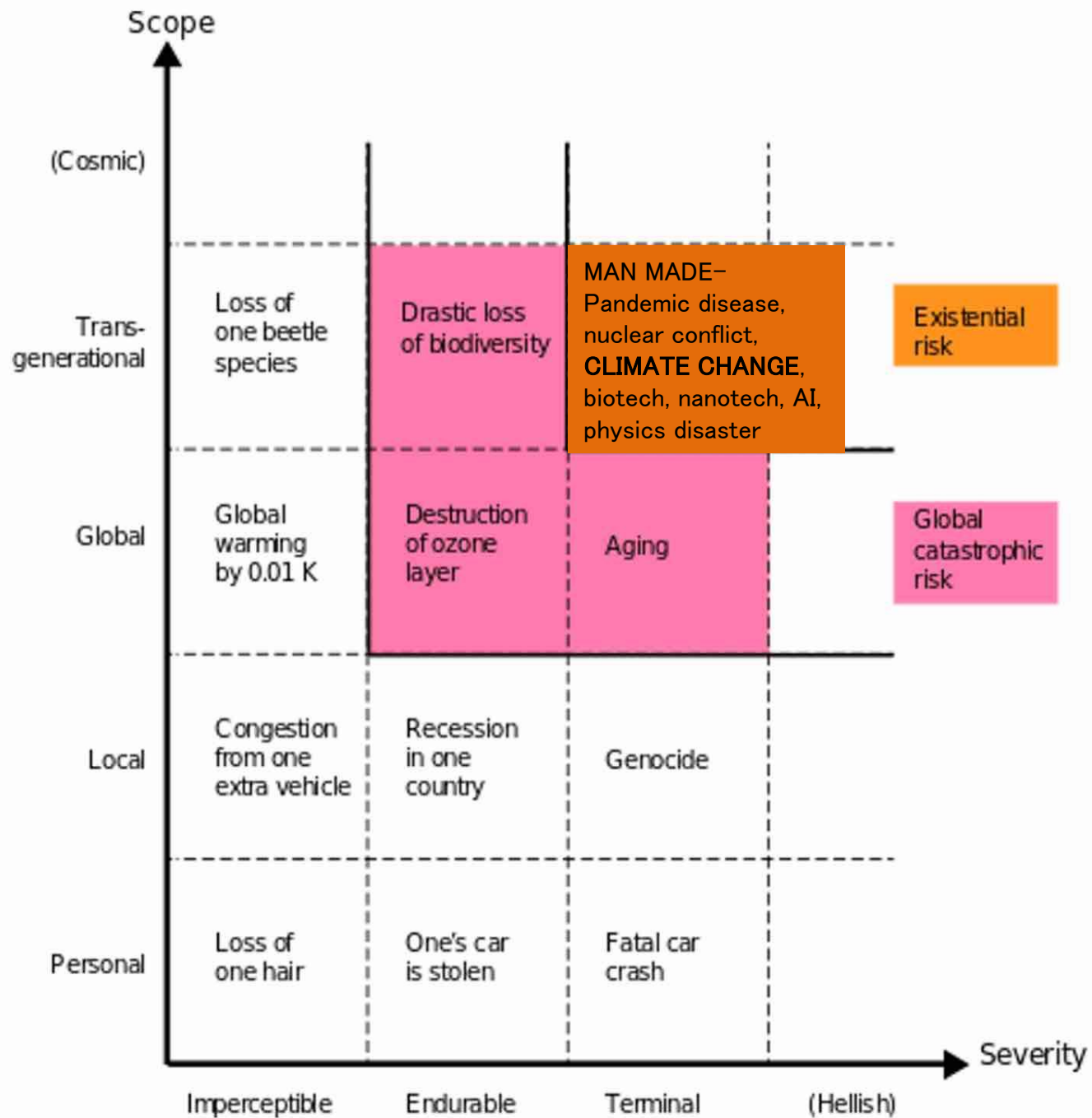
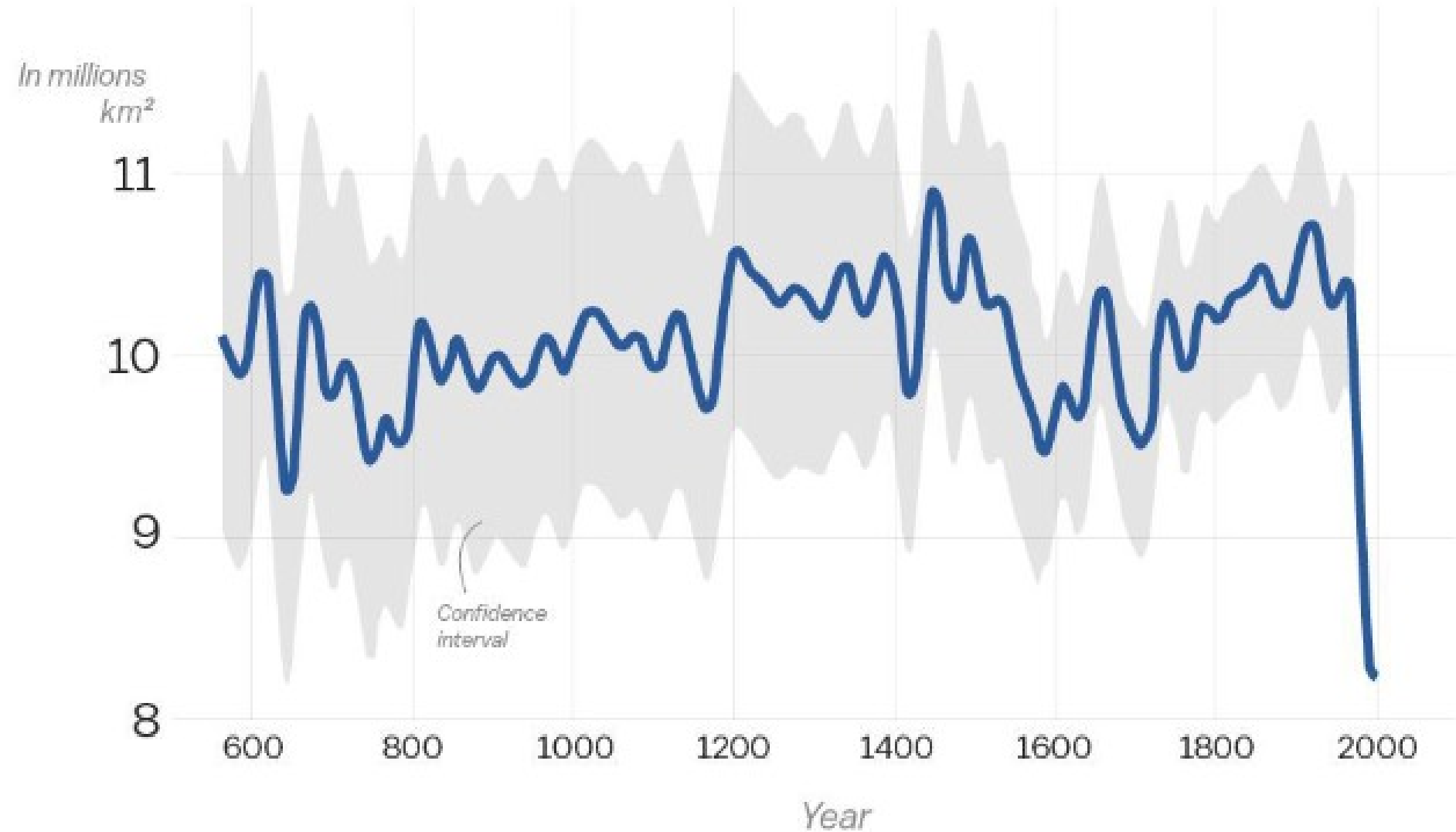


# The Right Mindset

Jack Geiger, **GEIGER FARM**



# Annual arctic sea ice extent



# WHERE IS OUR AGRICULTURE HEADING????

- All Land Owned controlled by one Entity/Farmer
- Full Automation of Agriculture by AI and Robots
- Agriculture in a Degraded Environment/Hydroponic in controlled Environments?
- Endless War based upon Resources (Cradle of Civilization to the Present Middle-East)
- De-Populated Rural Areas AND Megacities

**OCMS-----We Don't Grow Tobacco**

Hardest work that I ever done, bent beneath that burning sun  
Haulin' that tobacco 'round to cure  
How we chopped that wicked weed 'till our hands and fingers bleed  
Workin' like a mule, maybe more  
We been farmin' on this land  
Since eighteen hundred ten  
Through flood and drought  
And pestilence and war  
Now I sure am sad to say  
That I lived to see this day  
And we don't grow tobacco round here no more  
We don't grow, we don't grow  
Oh, it's still the only work will ever know  
Well, we don't grow, we don't grow  
We don't grow tobacco around here no more!  
Grandpa told me this, I know , change is coming, won't be slow  
Knocking just like a thunder at the door  
Fallow fields are all around, empty barns just falling down  
With iron weeds coming up through the floor  
Once we growed it by the pound  
Now the kids all move to town  
And all that's left are elderly and poor  
Now I sure am sad to say  
That I've lived to see this day  
We don't grow tobacco 'round here no more

**HARD WORK**

**SENSE OF PLACE---  
THROUGH ADVERSITY**

**RESISTANCE TO CHANGE--- EVEN  
THOUGH REGOCNIZING CHANGE IS ALWAYS  
COMING**

**DEPOPULATION OF RURAL AMERICA**

**LOSS OF YOUTH FROM OUR COMMUNITIES**

**RESISTANCE TO CHANGE + LOSS OF YOUTH IN RURAL AMERICA + REDUCTIONIST APPROACH  
TO RESOURCE MANAGEMENT = **OUR CURRENT RURAL ENVIRONMENT****

If I have seen further  
than others, it is by  
standing upon the  
shoulders of giants.

Sir Isaac Newton



- Five generations in Brown County, KS
- Older neighbors willing and able to give opportunities to YOUNG farmers
- Kansas State University– motto: “**RULE BY OBEYING NATURES LAWS**”
  - Professors who taught:
    - Critical/ Enterprise Analysis
    - Reasoning--MLF
    - Economics (by survivors of the eighties farm crisis)
    - To view soil as a living, breathing organism  
**NOT DIRT!**

I am a link in the chain, I am not the chain.

Multi-generational approach to stewardship,  
**RECOGNIZING**, I hold land in trust for future  
generations.



# Reductionist (adj)

Analyzing and describing a complex phenomenon in terms of its simple or fundamental constituents

This perspective has allowed us to commoditize single variables while discouraging awareness of system implications.

Successful Farming—50 Harvests + Glossy Pictures

New Tractor = More Debt = Greater Risk = Lower Margin =  
More Land = **VICIOUS CYCLE**, and repeat

“It must be obvious to every man, who considers the agriculture of this country... how miserably defective in the management of [our lands]... A few years more of increased sterility will drive the Inhabitants of the Atlantic States westward for support; whereas, if they were taught how to improve the old, instead of going in pursuit of new and productive soils, they would make these acres which now scarcely yield them anything, turn out beneficial to themselves.”

# George Washington

- Referring to tobacco monoculture
- 1794, invention of the cotton gin
- In 1836, more than 100,000 slaves were shipped out of Virginia\*
- “Census data for 1860 suggest that the value of slaves directly accounted for almost half the value of all personal property in the South, including land.”\*

# Factors affecting crop production

- **Soil factors:** Soil types, soil fertility (levels of nutrients), soil depth, soil moisture etc.

**Pest factors:** Historical or current infestations of soil fungus, bacterial diseases, insects or weeds etc.

**Management factors:** Crop rotation practices, fertilizer and pesticide applications, tillage practices etc.

**Technological factors:** Use of farm implements, improved seed, irrigation, soil moisture conservation methods etc

- **Weather factors:** Rainfall, insolation temperature and humidity.

**Climatic factors:** Long range weather patterns (frost, length of growing season, start of the rains, end of the rains, degree days etc.)

## CONCEPTS AND DEFINITIONS

\* A perverse incentive is a **POLICY** or **PRACTICE** that encourages either directly or indirectly, resource uses leading to degradation of biodiversity, such as:

- **Environmentally harmful subsidies**
- **Persistence of environmental externalities (shall not be considered)**
- **Laws and customary practices governing resource use.**

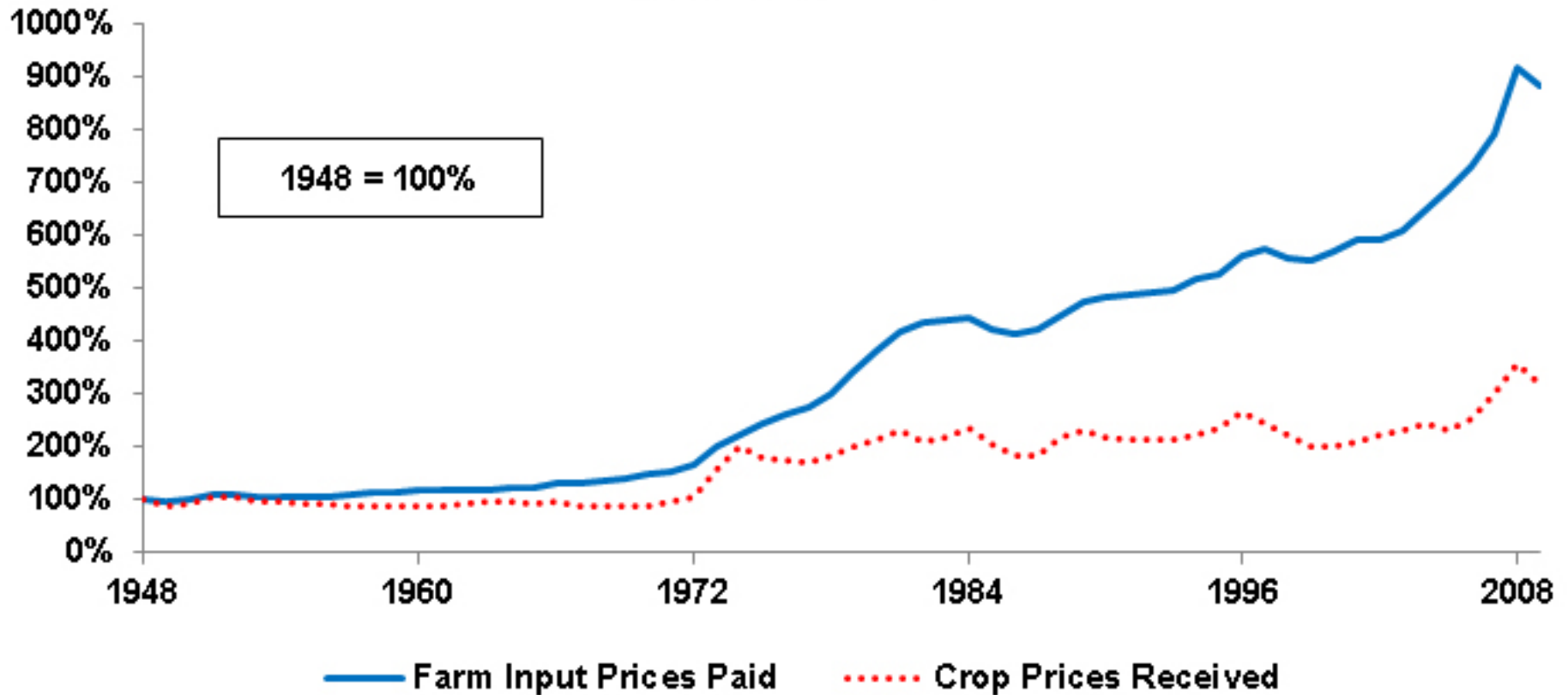
**Removal of biodiversity perverse subsidy could save biodiversity directly and financial savings could be used to invest to save biodiversity.**

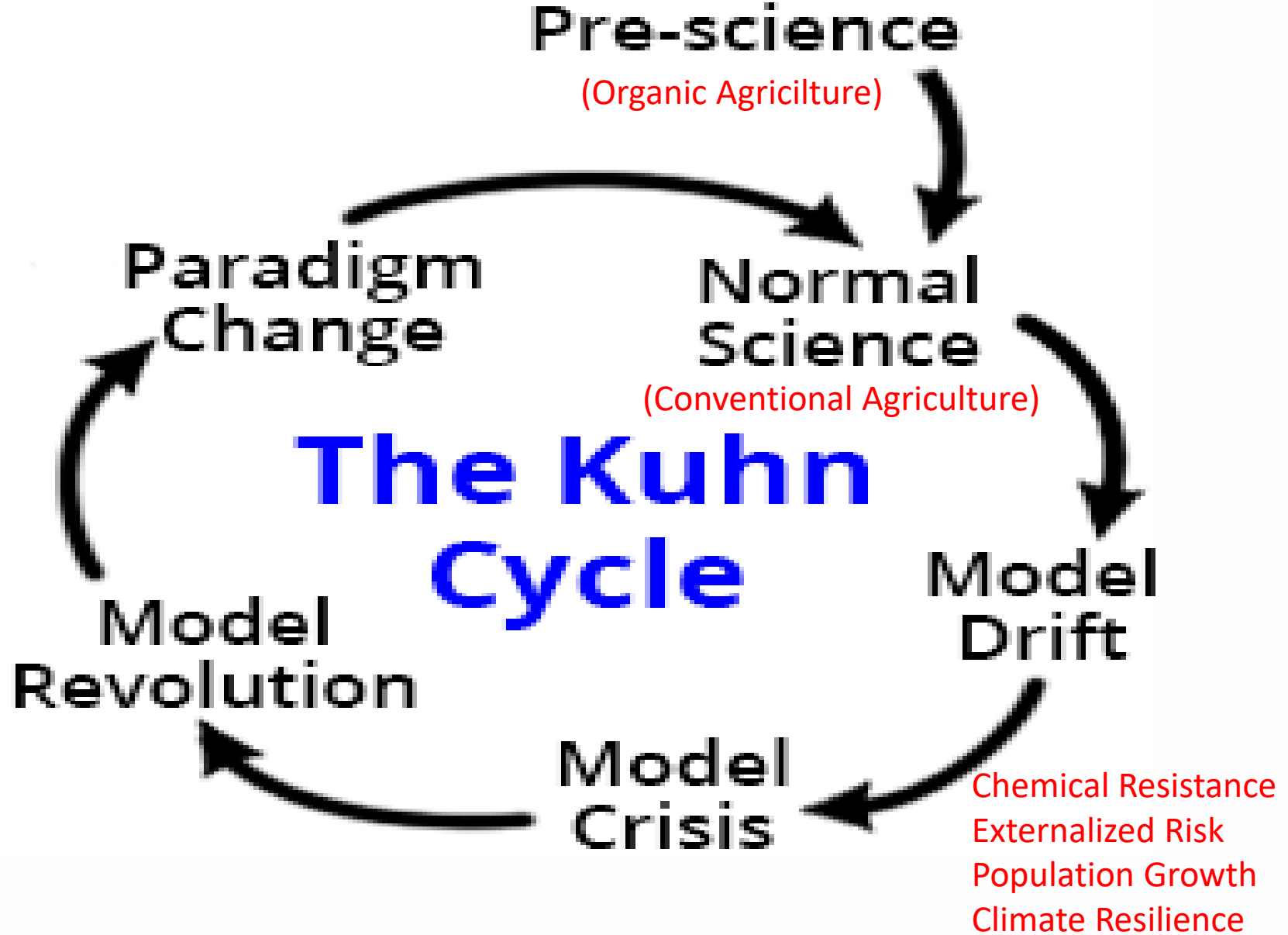


# Traditional Economic Theory: Agricultural Factors of Production

- Land
- Labor
- Capital
- Entrepreneur

Figure 1. Index of Prices Paid for Farm Production Inputs, Interest, Taxes, and Wage Rates and Index of Prices Received for Crops, U.S., 1948 - 2009





THOMAS KUHN, 1962, "The Structure of Scientific Revolutions",  
His seminal work...scientific revolutions require paradigm shifts.

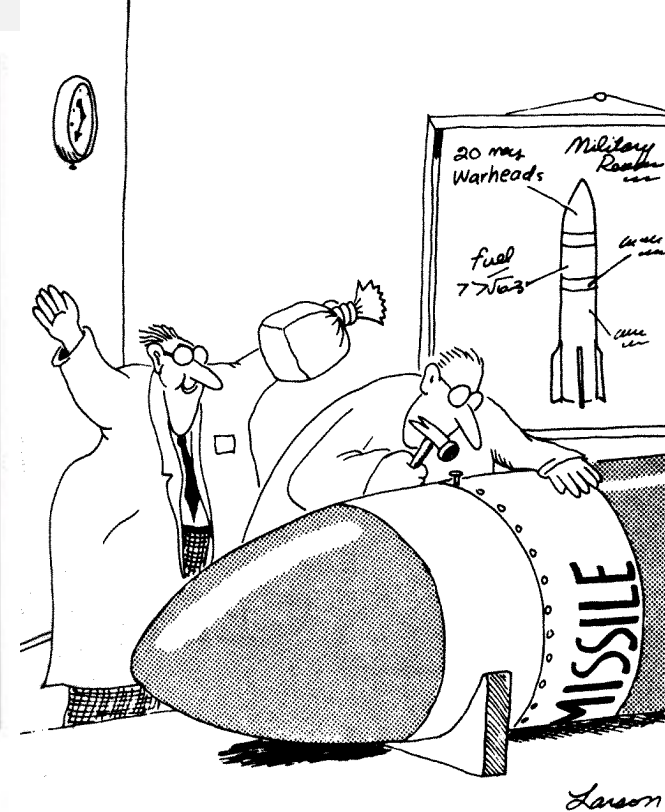




"Thank God! ... Those blasted crickets have finally stopped!"



"I lft, you grab ... was that concept just a little too complex, Carl?"



- Unknown/Unforeseen reality in the environment will CHALLENGE paradigms
- Communication about paradigms is difficult but NECESSARY
- The human factor is UNPREDICTABLE but always PRESENT

# A Better Paradigm?...For Ag

- **Labor-**

Family (w/ Generational Replication) v Employee (Indentured Servant)  
Individual Value-Added Enterprises v Corporate (Scale)

- **Capital-** Low Input (Less Risk) v High Input (High Risk)

System Risk Mitigation v Externalized Risk Subsidies

- **Management-** Diversity v Monoculture

Societal Benefits v Personal Enrichment



WHAT IS THE CROP GROWING IN THIS PICTURE?

**Miner** (People)

+ **Mine**(Family Farms)

= **Gold**(Stable Society)

“Agriculture is our wisest pursuit, because it will in the end contribute most to real wealth, good morals, and happiness.” -Thomas Jefferson

# DEFINE YOUR GOALS

## My Goals:

- Bring next generation to the farm
- Maintain the health of our land base

**WHAT ARE**

**YOUR**

**GOALS?**