

The Impact of Ethanol Plants on Rural Communities



Cornelia Butler Flora

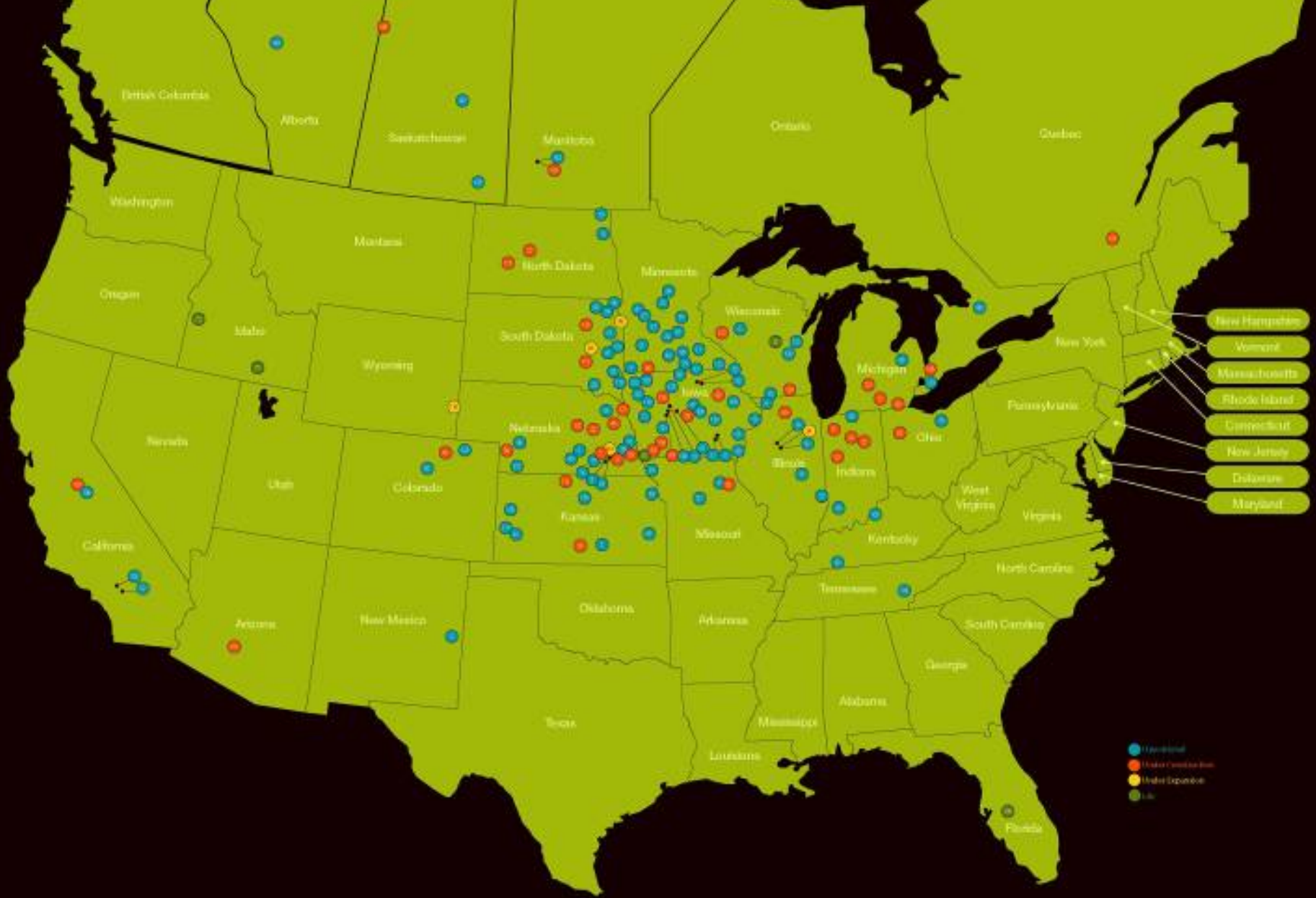
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Research Question

- What is the impact of ethanol plants on rural communities?
- Specifically, what capitals did a community mobilize in establishing a plant?
- How did the process of establishing the plant impact community capitals?
- How the operation of the plant over time impact community capitals?



Methods

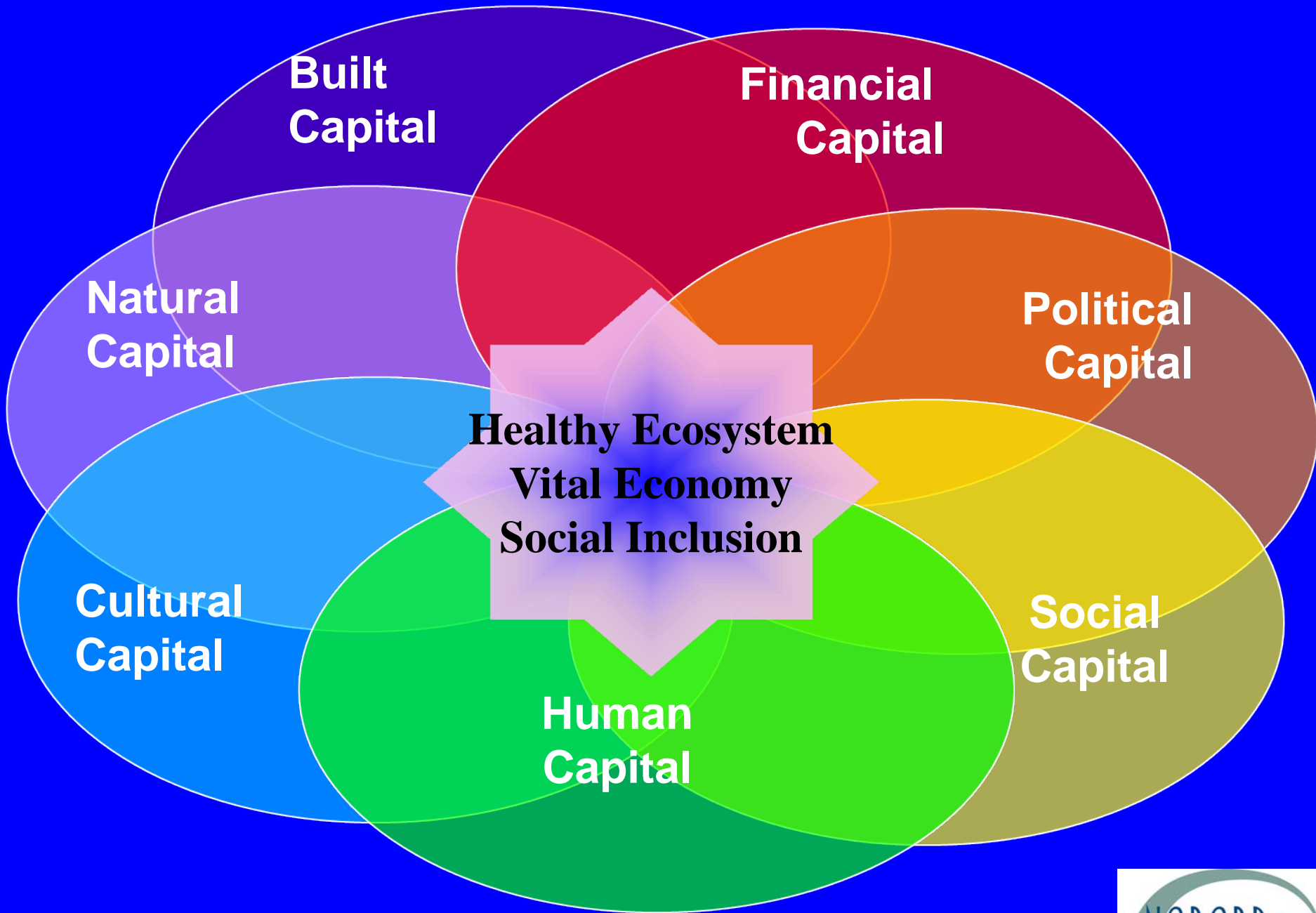
- Selection of community
 - Age of plant – began operation since 2005
 - Size of plant (over 50,000)
 - Location of plant – town of less than 10,000
- Interview Question
 - Based on Community Capital framework
 - Goal of questions: Elicit impact of plant
- Towns studied to date
 - Jackson, Nebraska*
 - Denison, Iowa*
 - Nevada, Iowa*



Methods for NCRCRD-based studies

- Interviewee Selection
 - Community Capital framework
 - Who is best suited to answer our questions?
 - Internet searches
 - News papers
 - Snowball sampling method
 - Letter of invitation
 - Presenting research
 - Requesting an interview



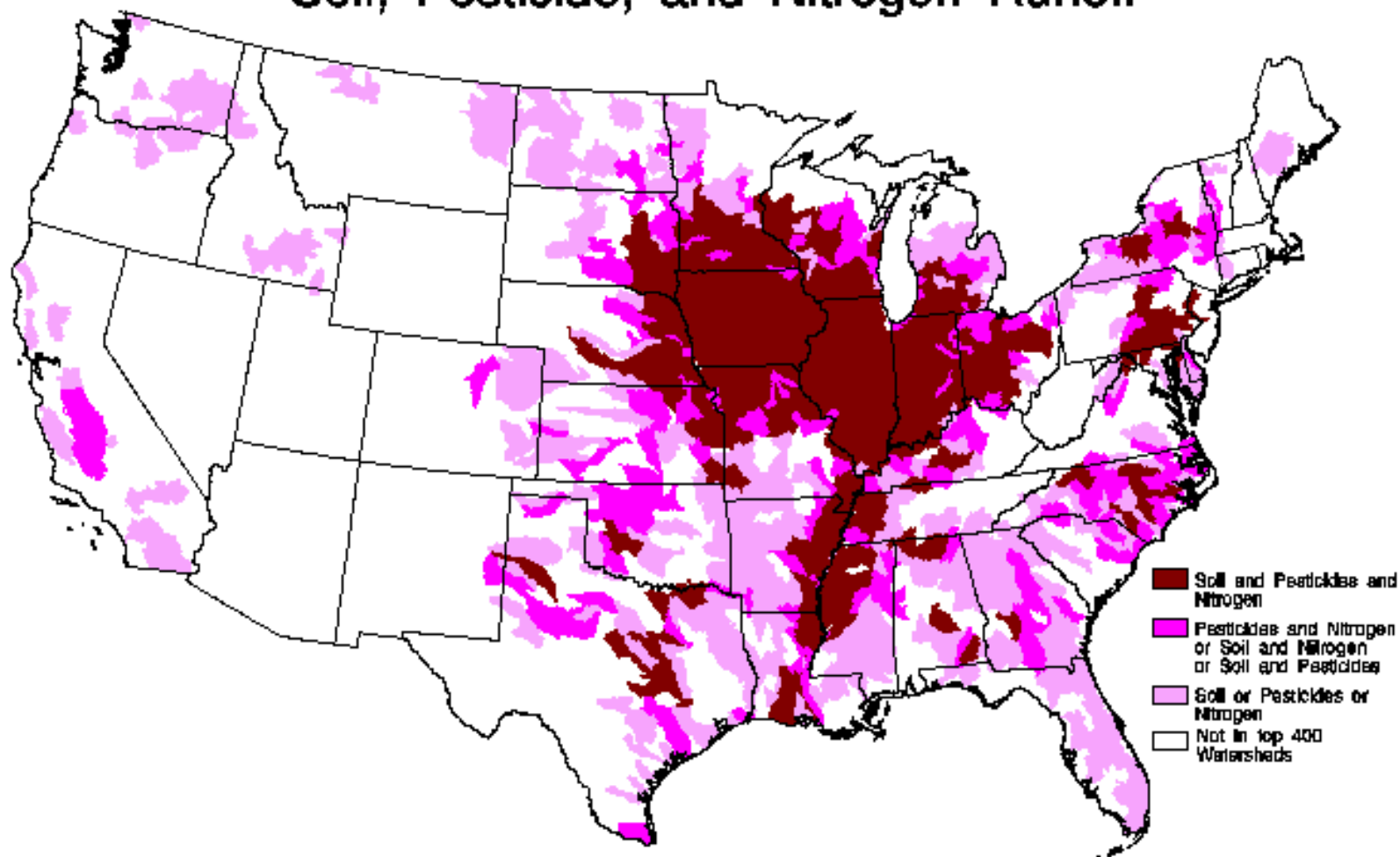


Natural Capital

- Prerequisite NC
 - Corn
 - Water
 - Land
 - Coal and Natural Gas
- Affected NC
 - Subject of local media attention regarding EPA violations
 - Slight concern of ensuing environmental problems
 - Water (over)usage, air pollution, odors, land use, global green house gas emissions, agricultural runoff
 - “Our plant is very clean.”



Watersheds with a High Potential for Soil, Pesticide, and Nitrogen Runoff



Cultural Capital

- Communities' progressive identity intimately tied to plant
- Community defines itself as “green”
- Goal of maintaining small town identity despite growth
- Plant participation in community
 - Ribbon cutting ceremonies very well attended by community members
- Pride and confidence
 - Most actors believed “their” plant to be more capable of weathering hard ethanol times than are other plants.



Town of Nevada, Iowa



Town of Jackson, Nebraska



Human Capital

- Plant employees
 - Imported high paid management
 - Regional employee base
 - Average plant = 40 employees
- Biofuel education programs
 - LWE paid for electrician's continuing education
 - Local community college in NE put in a curriculum
 - 500 hours of employee training
 - Transferable skills



Social Capital

- Entrepreneurial social capital in place
 - Open boundaries
 - Acceptance of alternatives
 - Wide-spread participation
- Strong hegemony kept nay-sayers from publically expressing criticism



Political Capital

- Political support
 - A key element to “paving the road” for the plant
 - Re-zoning and annexation of land
 - Federal, State, and township incentive programs
 - Federal subsidies
 - County and township tax abatement
 - Advocacy
 - Economic Development Councils
- Opposition groups and concern
 - Opposition group had access to political power structure and succeeded in reaching their objective – negotiating site location, environmental protections, etc.
 - One ethanol pessimists kept his/her opinion private due to community dynamic



Private Financial Capital

- Local investors
 - Unique
 - Egalitarian ownership
- 40 jobs @ av. \$18/hr
- Buy from local businesses
- Outside investors come in later



Public Financial Capital (cont.)

Areas of investigation

- Bonds (city and county)
- Tax incentives (Federal, state and local)
 - 10 year incremental abatement
- Grants (Federal and state)



Built Capital

- Prerequisite Transportation and distribution infrastructure
 - Proximity to highway and rail
- Affected Transportation and distribution infrastructure
 - Rail Road spurs
 - County and Township Roads expansion
 - Reinforced Bridges
- Water treatment facilities



Conclusions

- High Prerequisite Social Capital
 - Proactive approach
- Pride in the plant
 - Emotion based optimism
 - Most actors believed “their” plant to be more capable of weathering hard ethanol times than other plants.
 - Ardent enthusiasm of organizers overrides an objective and realistic view.
 - Plant managers tended to have a more objective and pragmatic perspective.



Conclusions

- Future hopes and expectations
 - Mostly positive despite possible geographical shift in production.
 - Few local negative views of ethanol future
- Plant is a symbol of community's progressive identity.

