

# Fractured Farmers:

Human and Ecological Implications of Absent Social Networks

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Qualtrics survey sent to all farmers in the Upstate of South Carolina

Surveys



NodeXL

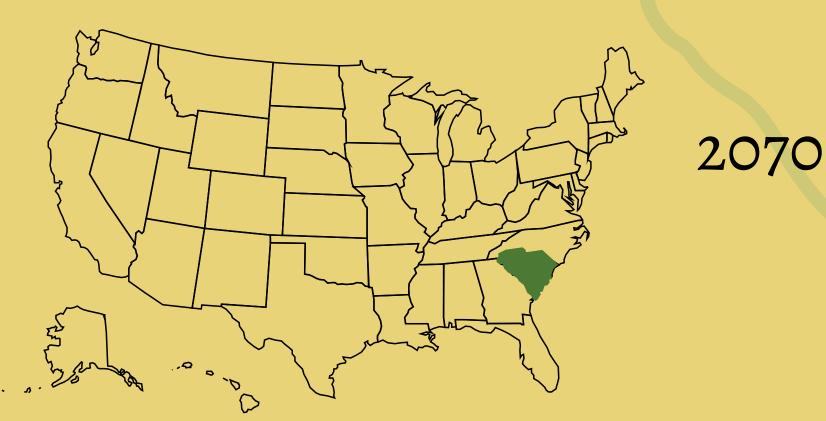
Social network data analyzed in NodeXL for in-degree, out-degree, betweenness, closeness and eigenvector measures



Semi-structured interviews with four pork producers and ten small-scale farmers

Interviews

Interviews recorded, transcribed, and coded with MaxQDA for emergent themes relating to lack of social network

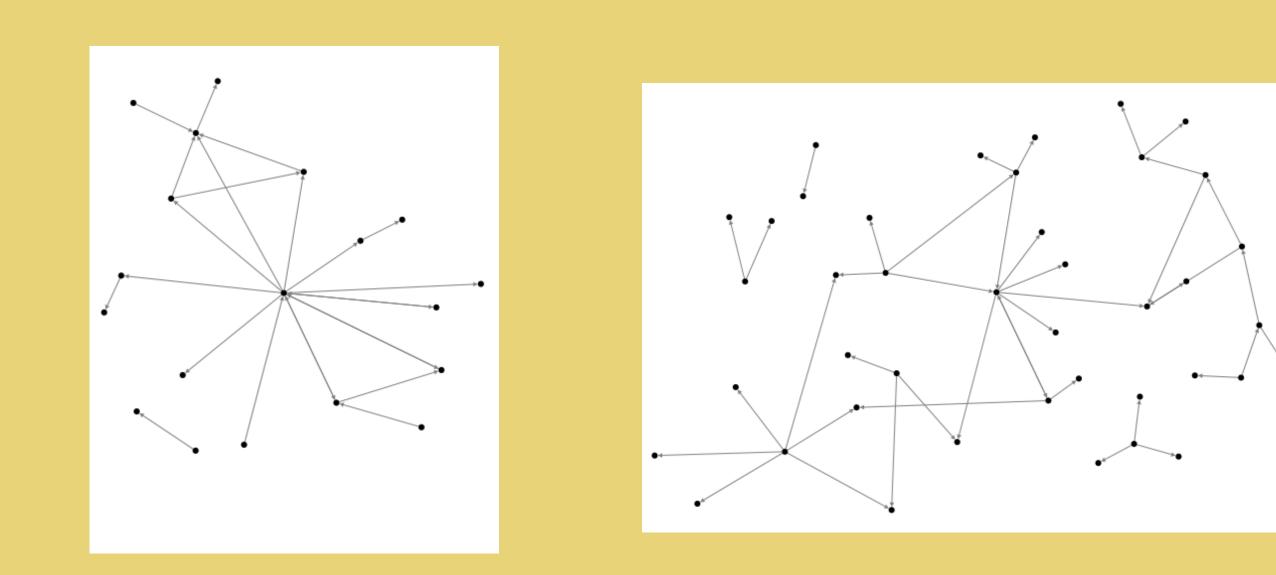


20 million acres 10 million people

In the last four decades, the southeastern United States has experienced rapid land-cover change, driven by urban development and land-use demands. Our study region falls within the center of the rapidly developing Southern Megalopolis (Terando et al. 2014) where the population is expected to increase by over 100% by 2050, resulting in greater urban development and continued pressure on farmland and farmers. At present, farming contributes \$36 billion in annual revenue in SC and \$12.9 billion in NC (NASS 2017). Yet, 40% of farms are small (less than 49 acres).

### Results

## Conclusion



Study 1 Results: Social network of pork producers in South Carolina

Study 2 Results: Social network of small scale farmers in Upstate SC

Four primary drivers of an absent social network; 1) use of professional services (ie. extension) instead of farmer-associates 2) the increased use of the internet for information gathering

### Implications

Farmers in our studies communicated that the lack of a social network created challenges for their farming knowledge and practice. Quick turnover of farmers, coupled with using the internet instead of personal connections for information, has left farmers feeling alone in their work. Although they respect each other, the view of a competitive marketplace also further alienates farmers from each other. This brings both human and ecological challenges including loneliness, confusion about market changes, slower adoption of new sustainable farming techniques, and less political and social power for farmers as a whole in South Carolina.

#### **Recommendations and Next Steps**

Phase Two of our project involves understanding the relationship between farmers and consumers as well as the overall food and

3) the fast turnover of small-scale farmers in the area 4) a viewpoint of the marketplace as extremely competitive which discourages information sharing

"When I need to learn a new technique, I tend to just Google the information or read an extension pamphlet before I will call up another farmer. They're just as busy as I am and we're not close."

"I really respect the hard work we all put in as farmers, and many of them are my friends, but I do see them as my competitors and so I'm not going to share all of my growing secrets with them."

farming system of Upstate South Carolina. We are investigating whether or not participation by customers in our local food system is a zero sum game or a reinforcing feedback loop that increases consumer involvement (and economic support) over time. Results from this study will influence educational materials and exentsion activities.







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