Soil for Water final evaluation

Welcome!

We'll get started soon!

NCAT NATIONAL CENTER FOR APPROPRIATE TECHNOLOGY

SOUTHERN SARE Sustainable Agriculture Research & Education

jg | RESEARCH & EVALUATION

Knowledge System Mapping Goals

1. Visually generate regenerative grazing network in Mississippi
2. Evaluate changes in atitudes, behaviors, and knowledge
3. Capture lessons learned from the project

Before: Defining "Regenerative Grazing"

Needs to be simple but convincing

"Getting back to nature...releasing the dogmatic approach and letting nature be itself"

Enrich soil, reduce erosion

stockpile forage

Balance of soil nutrients and adapted forage systems

Rest and recovery of pasture

Soil for Water definition: grazing that improves soil health

introduction of different grass varieties/reintroduction of native species

Careful management of cattle; moving frequently

More detailed definitions needed - almost a dictionary

After: Defining "Regenerative Grazing"

Diversification (example of forest farming)

How do you define it to others?

It is what our grandparents and great-grandparents did

Traditional agriculture - soil health, water health - is taking care of the earth and being stewards

How important is it to have a shared definition of "regenerative grazing"?

Rotational grazing interchangeable with regenerative (soil is regenerating via rotating animals)

Balancing herd size with land area/ availability

Keep it simple - rotating animals, soil and grass can rest and grow back

Words might change but "it's not changing the type of farming we are doing"

Weed management and shifting away from spraying is one component

Economic efficiency - extend growing season and put a "paddock in the bank"

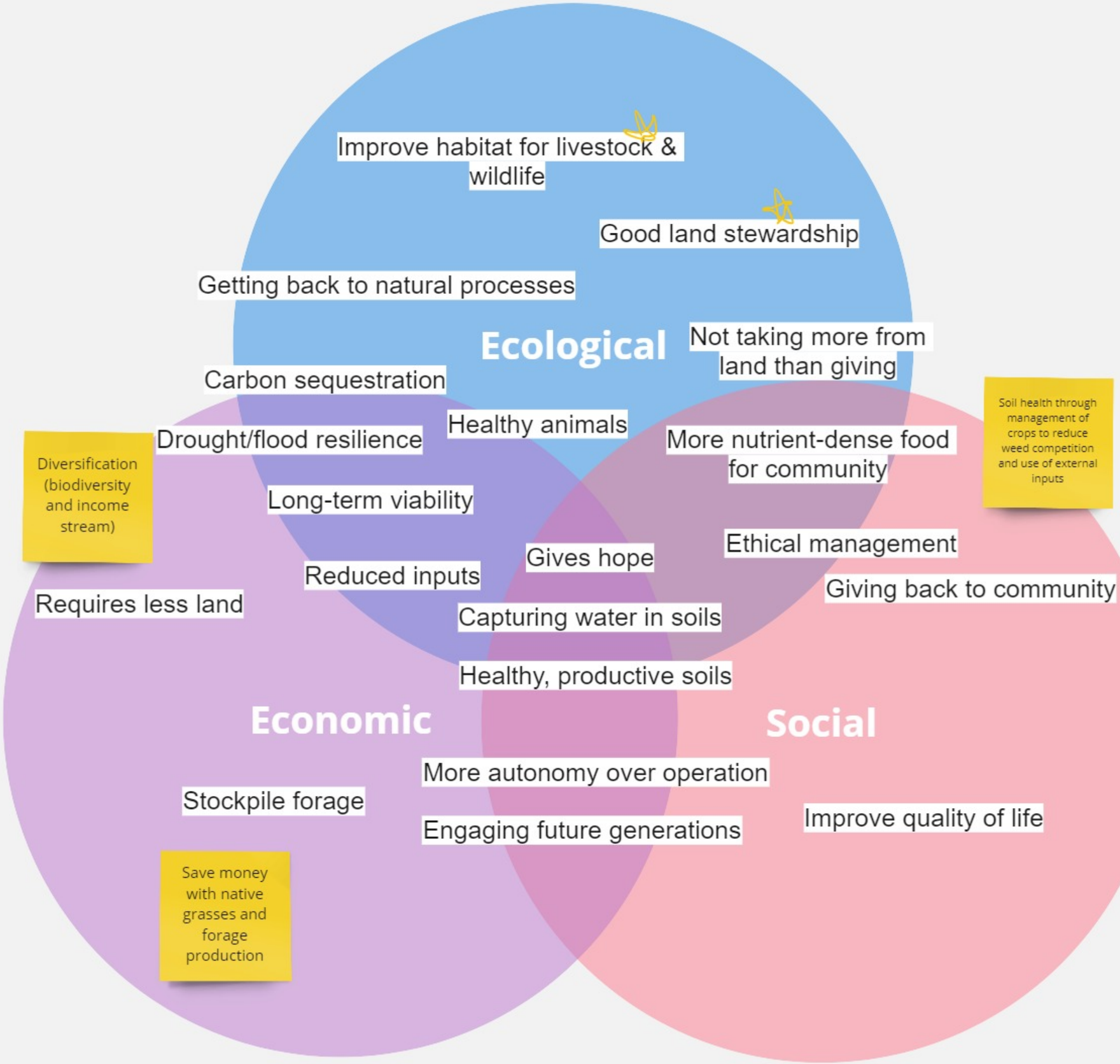
It is a spectrum - requires practice and time

Need to avoid confusion

Shared definition and including history and common actions (with recognition of where they come from) needed to avoid excluding people

Is it just another name for 'holistic ag'?

Motivations for adoption of Regenerative Practices



Barriers to Adoption

BEFORE

Item	Overall Rank	Rank Distribution
It goes against the status quo	1	
Lack of hands-on training and/or mentorship opportunities	2	
There is a steep learning curve	3	
It is perceived as labor-intensive	4	
Lack of evidence/information about the benefits of adoption (financial, environmental, etc.) /Lack of awareness	5	
High initial investment cost	6	

How has your understanding of barriers evolved?

There is no labor surplus/help so if perception is that it's labor-intensive then they won't even try

Contemporary orientation toward systems that use more equipment and inputs, and less labor

Land access and balance with number of animals

How has the project addressed these barriers?

Need to communicate that the practices aren't different

Keep it simple, communicate clearly, connect to history

Lay out how it can be simple and straightforward it can be

Learning makes it less daunting

Facilitators of adoption

Promotion by universities, research groups

Mentorship by experienced regenerative grazier

Hands-on learning opportunities (e.g. workshops and trainings)

On-farm learning opportunities (e.g. pasture walks)

Trusted educator/messenger

Participation in grazing groups

Scientific research and evidence on the benefits of regenerative

Promotion by agencies (e.g. NRCS, Extension)

Others?

Keeping it simple

Needs to be hands-on and visual

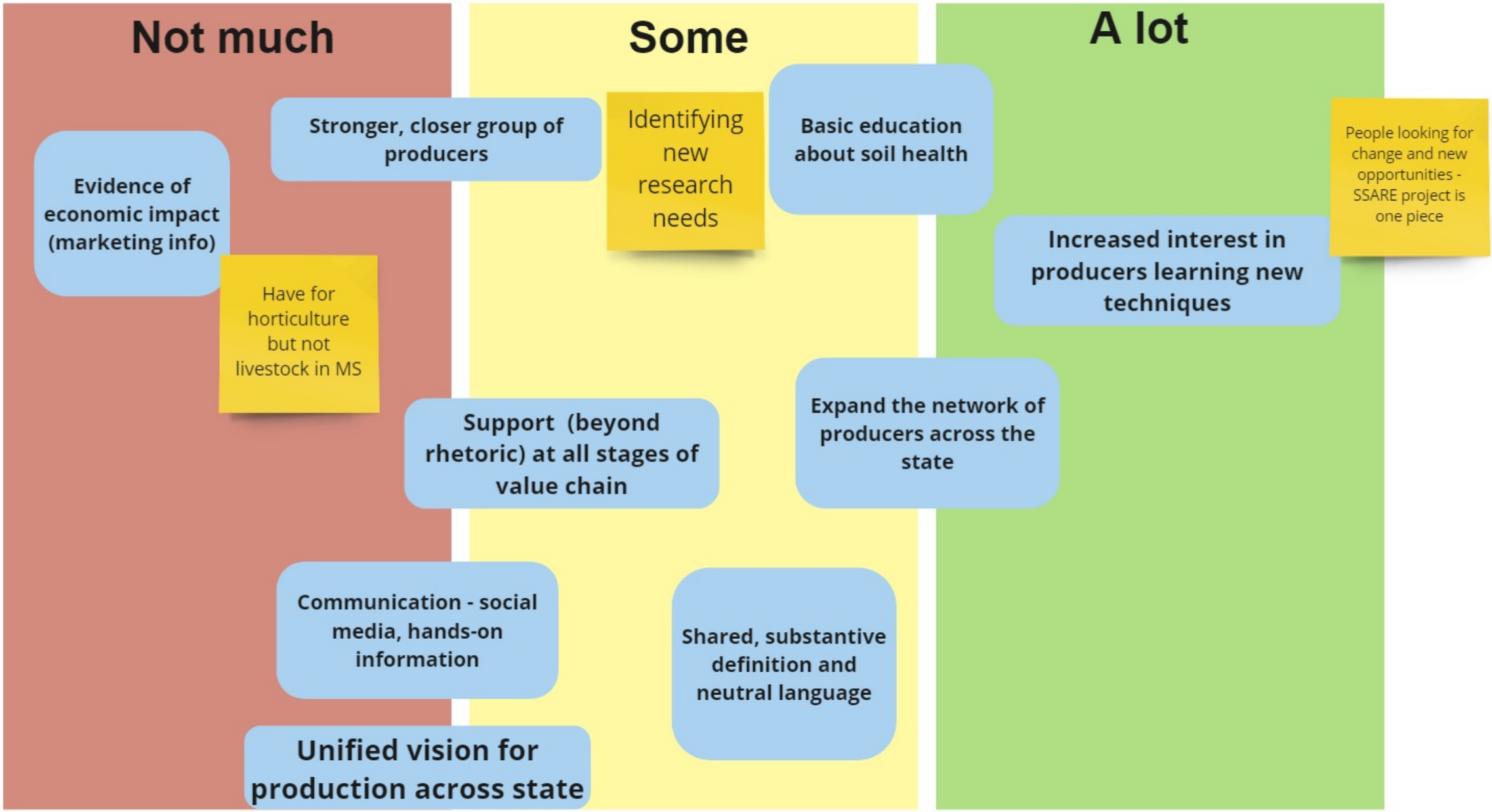
See to believe

Which ones rise to the top in MS?

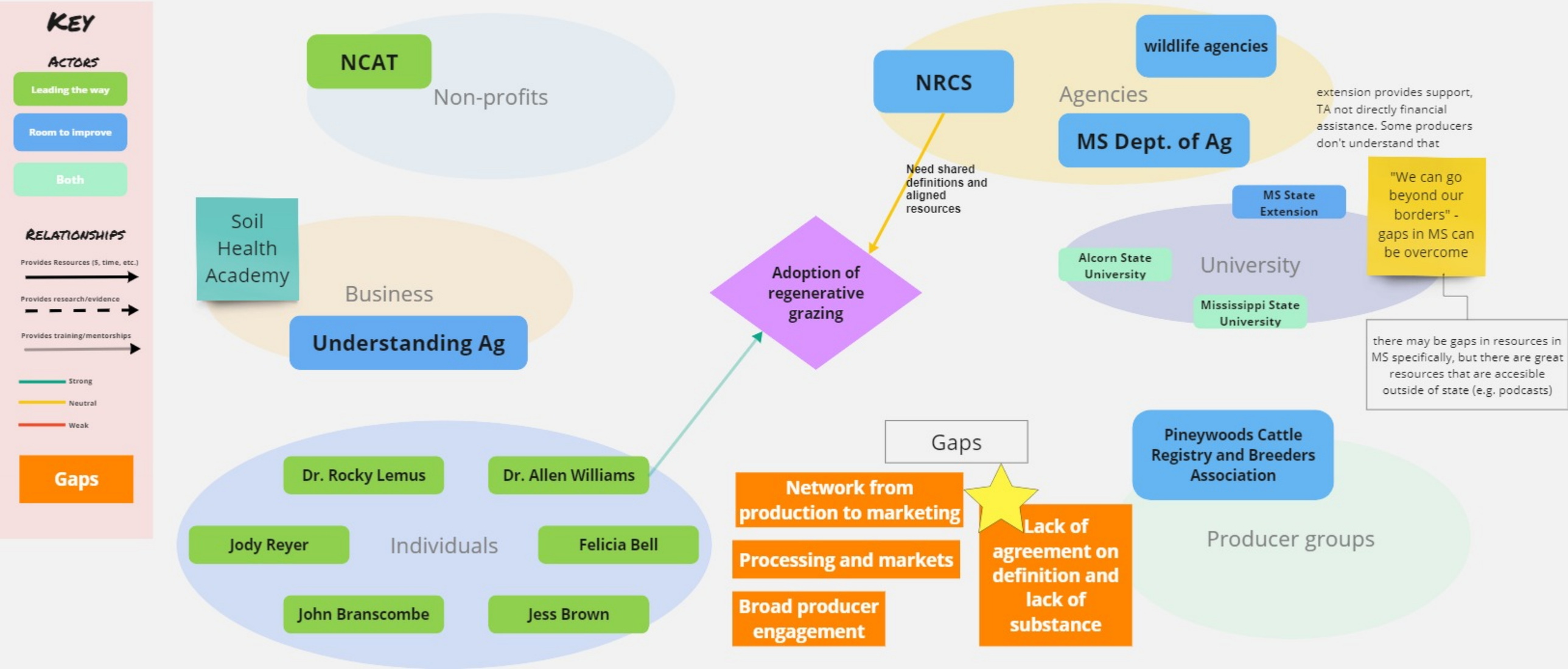
Would like this to grow/rise - look at AR model

Farmers helping farmers - connects to on-farm learning

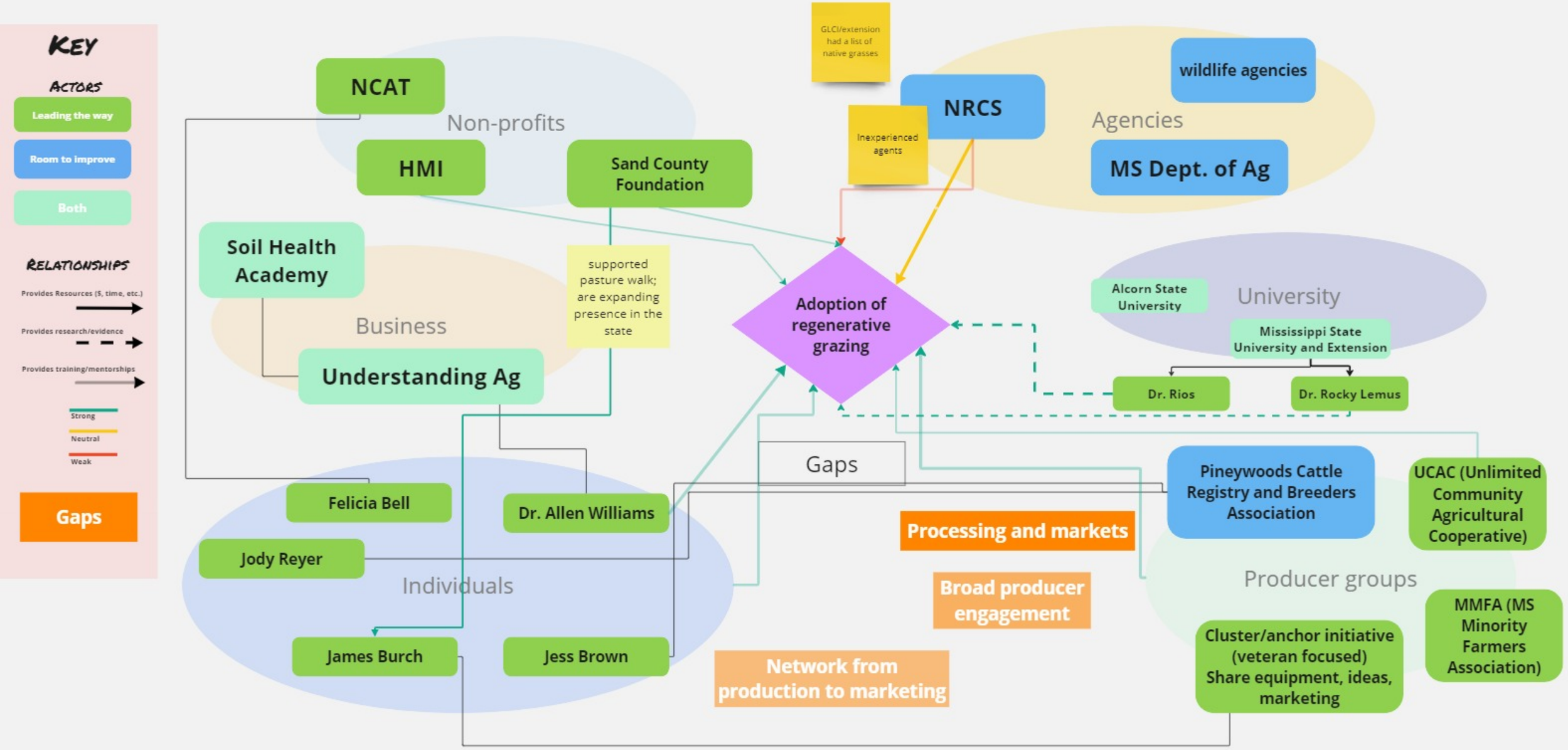
Progress on priorities from first mapping



BEFORE


KEY
ACTORS
Leading the way
Room to improve
Both
RELATIONSHIPS
Provides Resources ($, time, etc.)
Provides research/evidence
Provides training/mentorships
Strong
Neutral
Weak
Gaps
NCAT
Non-profits
NRCS
wildlife agencies
Agencies
MS Dept. of Ag
extension provides support, TA not directly financial assistance. Some producers don't understand that
Need shared definitions and aligned resources
MS State Extension
"We can go beyond our borders" - gaps in MS can be overcome
Soil Health Academy
Business
Understanding Ag
Adoption of regenerative grazing
Alcorn State University
University
Mississippi State University
there may be gaps in resources in MS specifically, but there are great resources that are accesible outside of state (e.g. podcasts)
Gaps
Dr. Rocky Lemus
Dr. Allen Williams
Jody Reyer
Individuals
Felicia Bell
John Branscombe
Jess Brown
Network from production to marketing
Processing and markets
Broad producer engagement
Lack of agreement on definition and lack of substance
Pineywoods Cattle Registry and Breeders Association
Producer groups

AFTER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Neutral
Weak
Gaps
GLCI/extension had a list of native grasses
NCAT
Non-profits
HMI
Sand County Foundation
Inexperienced agents
NRCS
wildlife agencies
Agencies
MS Dept. of Ag
Soil Health Academy
supported pasture walk; are expanding presence in the state
Business
Understanding Ag
Adoption of regenerative grazing
Alcorn State University
University
Mississippi State University and Extension
Dr. Rios
Dr. Rocky Lemus
Gaps
Pineywoods Cattle Registry and Breeders Association
UCAC (Unlimited Community Agricultural Cooperative)
Felicia Bell
Dr. Allen Williams
Processing and markets
Jody Reyer
Individuals
Broad producer engagement
Producer groups
MMFA (MS Minority Farmers Association)
James Burch
Jess Brown
Network from production to marketing
Cluster/anchor initiative (veteran focused) Share equipment, ideas, marketing

What's next?

How can the work continue?

- New practices like forest farming, no-till drill
- Connect the dots across states
- Building evidence base
- Working with old-timer producers to re-find resources
- Work with non-adopters and demonstrate implementation
- List of native grasses and forage crops
- Build farmer cluster model
- Producers need to have skin in the game - sweat equity
- Field days with local producers
- Fields days with experts from other states
- NRCS collaboration in combining training for producers and NRCS agents new to the field

Who needs to be involved?

- Adopters AND non-adopters
- Subject-matter experts (extension, non-profits)
- Experts (researchers and producers) from other states
- LA producer group, AR grazing group
- Young/new and beginning people
- Funders
- NRCS decision-makers (not more junior staff)
- Preferably with hands-on experience

Thank you!

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Send any additional thoughts/feedback to us or Felicia

Mississippi: final knowledge mapping summary

Definition of regenerative grazing

- Similar definitions to Before, but more discussion of the social and cultural aspects of it
- Discussion about it being a new word for an old practice, want to be sure not to exclude people in defining it while also nodding to ancestors/those who came before who were working regeneratively
- What matters is conveying the benefits of regenerative in a simple, easy to understand way
    - It's working with what you have, it's more economical, and it's caring for the land
    - Emphasis on the fact that it's not one-size-fits-all, but it's a spectrum and it requires patience, practice, and time
    - It's not just one part, it's the whole system

Barriers to adoption

- MS group didn't complete survey prior to final mapping exercise, were asked to reflect on barriers ranking from initial mapping
- Additional barriers: land access; contemporary orientation toward systems that rely on equipment rather than labor; labor is also scarce so if it's perceived as labor-intensive, it's a non-starter
- MS group has made progress on breaking down barriers:
    - status quo—helping producers see that it's actually not different, it's something they have the capacity to do. There is a growing network of producers helping to spread the word about regenerative
    - more learning opportunities—has helped to make it feel less daunting, producers can see it being done and how simple it can be

Facilitators of adoption

- Emphasized hands-on learning and on-farm learning opportunities
    - Sitting in a classroom or on Zoom doesn't resonate
- Interested in developing a grazing group like AR's GGG, farmers helping farmers connect to on-farm learning opportunities
- Underscored that producers need to see it to believe it, education opportunities need to be hands-on and visual

Progress on priorities

- Not much: evidence of economic impact (have this for horticulture, but not livestock in MS), communication (social media, hands-on info), and unified vision for production across state
- Some: stronger, closer group of producers, support at all stages of value chain, shared/substantive definition and neutral language, identifying new research needs
- A lot: basic education about soil health, increased interest in producers learning new techniques—there's a sense that people are looking for change, wanting to do something different, Expand the network of producers across the state,

Map

- New actors:
    - Non-profits: HMI, Sand County Foundation (supporting pasture walks, expanding presence in MS)
    - University: under MS State and extension: Dr. Rios, Dr. Rocky Lemus
    - Producer groups: Unlimited Community Agricultural Cooperative, MS Minority Farmers Association, Cluster/anchor initiative (Mr. Burch)
- New partnerships: NCAT/HMI, Sand County Foundation/James Burch/Cluster/anchor initiative,
- NRCS interactions still a challenge—inexperienced agents
    - They need training/expertise, too
- More available region-specific research/evidence, training and mentorship opportunities, more organizations supporting on-farm/hands-on learning opportunities, technical assistance/more support from Extension

What's next

- To continue work:
    - Connect dots across states/leverage models from other states
    - Keep building evidence base
        - List of native grasses, forage crops
    - Field days with local producers and experts from other states (don't need to be confined by MS)
    - Collaborating with NRCS to offer train the trainer events, help new agents learn alongside producers
    - On-farm/demonstrating opportunities for non-adopters
    - Work with old-time producers to rediscover/document traditional practices that may otherwise be lost
        - Pass the torch
    - Connect with young producers—they are looking for fellowship
    - Producers need to have skin in the game, too—they need to be putting in sweat equity and sharing the lessons learned with others
- Who needs to be involved:
    - Potential funders, NRCS decision-makers (not just junior staff)
    - Subject matter experts
    - Youn and new/beginning farmers
    - Adopters and non-adopters
    - LA producer group

Overall observations

- There are more producers involved with sharing their regenerative journey, breaking down barriers
- There's more interest/energy/buzz around regenerative practices
    - Opportunities moving forward
    - Important to reach young, new/beginning farmers

- There is more support for producers looking to learn about/connect with resources for regenerative
    - HMI RAMP program
    - MSU Extension: Dr. Rios & Dr. Lemus
- People involved in SSARE project have found that the simpler the explanation, the easier it is to bring people on board
    - From a common sense standpoint, regenerative practices resonate with people
    - There is interest in caring for land, reducing off-farm inputs, increasing profitable
- Agency support continues to be a major challenge, in large part because agents are often inexperienced, don't have the training to support producers interested in regenerative practices
    - Untapped resources/funding for producers
- A collective approach is powerful, but it requires producers getting involved/leading the way
    - E.g. James Burch's cluster/anchor initiative project