



The Rural Innovation Network Model

A collaborative approach to commercialization

Outline



- Background Research
- Findings
- The Rural Innovation Network Model
- RIN Model Application

Background



The Problem:

- The information needed to support and spur innovation exists, but in disjointed venues within the region's collective knowledge.
- We have valuable assets in MN, but they aren't necessarily aligned.
- Clusters are hard to develop in geographically disperse locations.



Contributing Research

- Mega Communities
- Value Chains
- Wealth Creation Concepts
- Network Theory
- Systems Thinking
- Asset Mapping & Asset Based Thinking
- Approaches to Managing Innovation
- Characteristics of Entrepreneurs

Background



Expert Advisors

- Public Sector
- Private Sector
- Nonprofit Sector
- Academia

Background



AURI's Experience Includes

- 20-plus years of experience delivering scientific and technical assistance to the ag processing industry
- Work with hundreds of entrepreneurs and small to medium sized businesses to develop new products or processing in the food, renewable energy, biobased or co-product industries.
- A strong tie to rural communities throughout Minnesota with offices, staff, laboratories and pilot labs located in rural areas
- Partnerships with industry that ensure research and services are aligned with industry need

Background



Drawing on our **RESEARCH**,
insights from **ADVISORS**,
and our organization's **EXPERIENCE**,
we found...



Rural Communities

- Are less dense & have fewer actors that are less likely to run into one another.
- Need more than just money and jobs in order to generate wealth.
- Need to be uniquely positioned to reduce out-migration.
- Are asset-rich: natural resources, agriculture, cost of living, etc.



Rural Entrepreneurs and Businesses

- Are more likely to keep wealth in their communities, which means less need for costly incentives, more community ownership opportunities, and more community engagement.
- Do not have procedures in place to generate and select new ideas, nor bring them to the market.
- Lack globally competitive research and development capabilities.



Strong Networks

- ***Are THE MOST IMPORTANT tool in an entrepreneur's toolbox.***
- Share a vision.
- Need actors representing the entire value chain – from idea to commercialization.
- Require a participant driven strategy.
- Are built on a foundation of trust and engagement.
- Can be “communities of practice” which foster “relational” clusters not confined by a geographical or spatial proximity.



Innovation

- Innovation is like physics: increase the number of actors/particles, increase the pressure, decrease the space...the more likely the actors/particles are to run into one another and make something happen....
- Innovation = Idea + **Implementation**
 - *Innovation only occurs when an idea is implemented.*

Findings



Innovation must be managed!

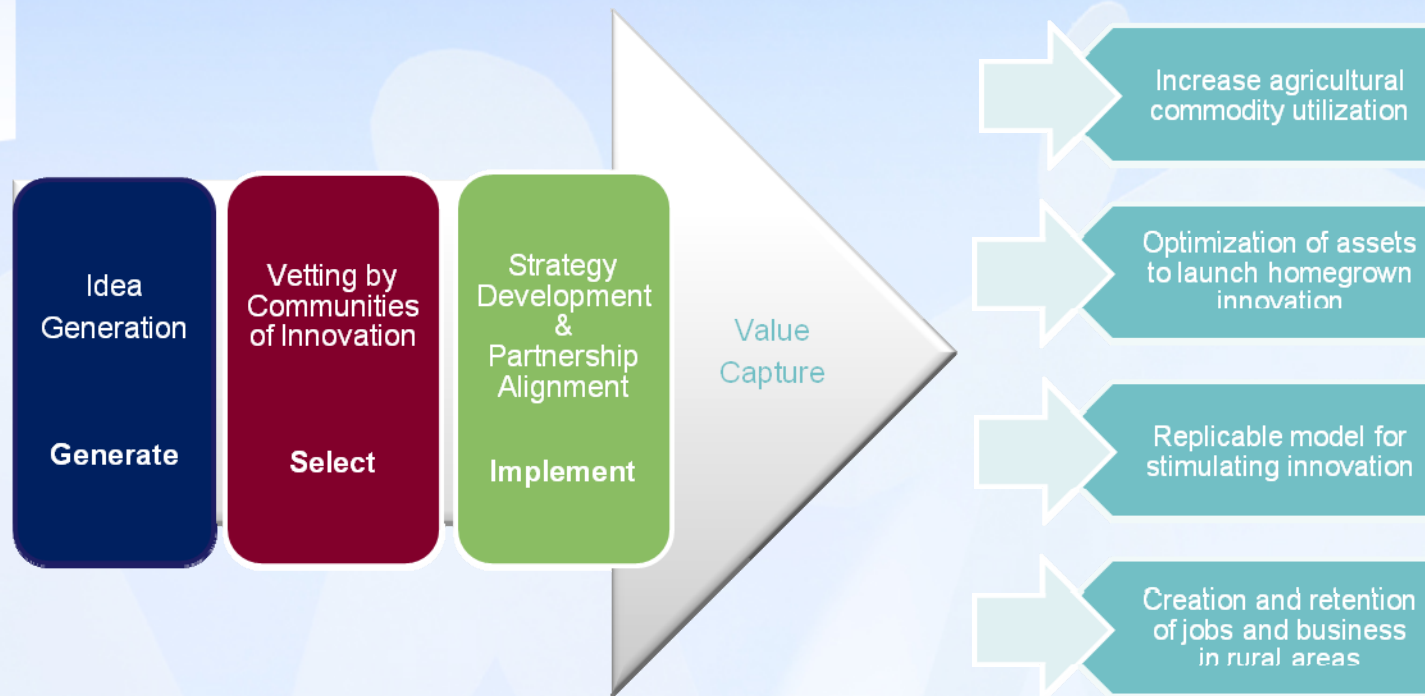


Findings



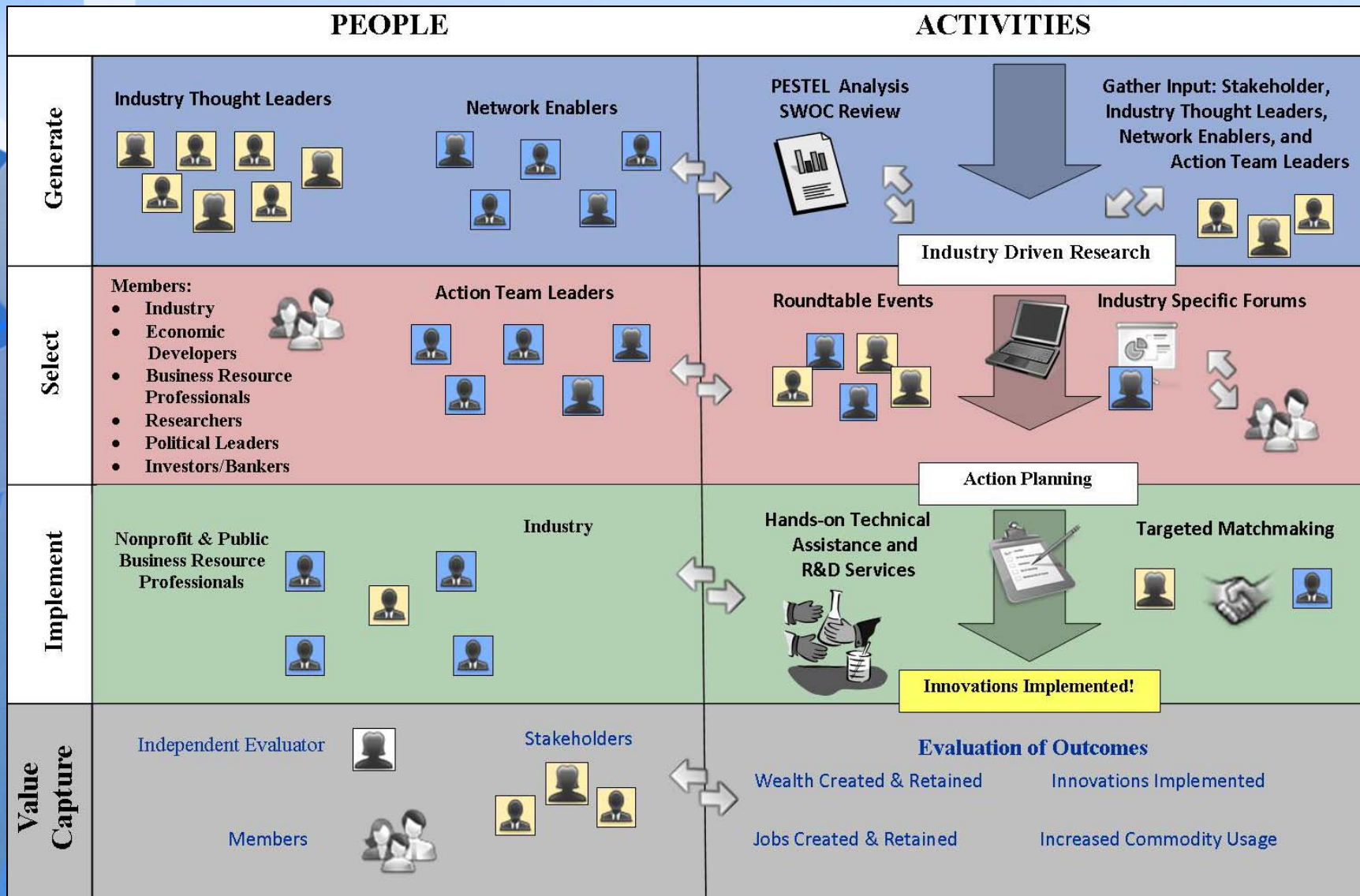
With these findings, AURI set-out to refine its approach to delivering services.

The Rural Innovation Network Model



The RIN Model provides a systematic method to generate, select, and implement innovation. The network manages innovation to support economic development beginning with research and technology.

The Rural Innovation Network Model



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*A Targeted and Diverse
Representation of an
Industry Sector*

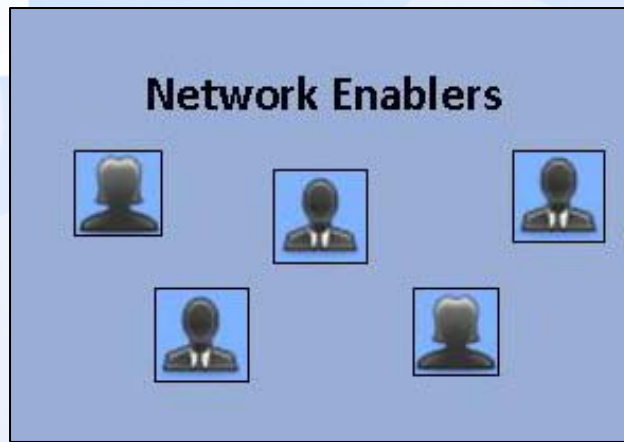
What defines an Industry Thought Leader?

- ***Extensive knowledge in a field***
- *Well connected and respected within the industry*
- *Supportive of the work of the network and willing to dedicate time and energy to help it succeed*
- *Able to advise on trends in the industry*
- *Willing to provide feedback on research*

What is required?

- Attend 1-2 meetings a year
- Review pertinent research
- Advise organizers on trends or hot topics
- Serve as a technical resource for the network

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*A Well-Connected Group
of Actors Interested in
Supporting the Needs of
the Network*

What defines a Network Enabler?

- **Commissioners, Academic Leaders, Foundation Trustees, Presidents**
- Able to dedicate resources and staff
- Have broad view of the MN assets and resources
- Familiar with the industry sector of focus

What is Required?

- Dedicate staff and organization resources
- Provide connections with other top officials
- Be engaged – through email, phone calls, occasional meetings
- Attend one meeting or networking event a year

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Action Team Leaders



*Dedicated Individuals
Willing to Provide Hands-
On Leadership for their
Respective Action Teams*

What defines a Team Leader?

- **Appointed by a Network Enabler**
- Has the ability to move forward with action plans originating from the Network
- Has expertise in the area he/she will lead
- Has an interest in industry sector
- Has a willingness to partner with others
- Propensity for action

What is Required?

- Provide leadership/direction to the team
- Provide appropriate connections for action plans and encourage participation and collaboration among institutions
- Work with AURI staff and to arrange meetings, follow-up with participants, and develop projects
- Attend 2-3 Roundtable events and 3-5 Retreats throughout the year.

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Members:



Diverse group of engaged and knowledgeable professionals who collectively representing the entire value chain.

Members:

- Industry
- Economic Developers
- Business Resource Professionals
- Researchers
- Political Leaders
- Investors/Bankers
- Others

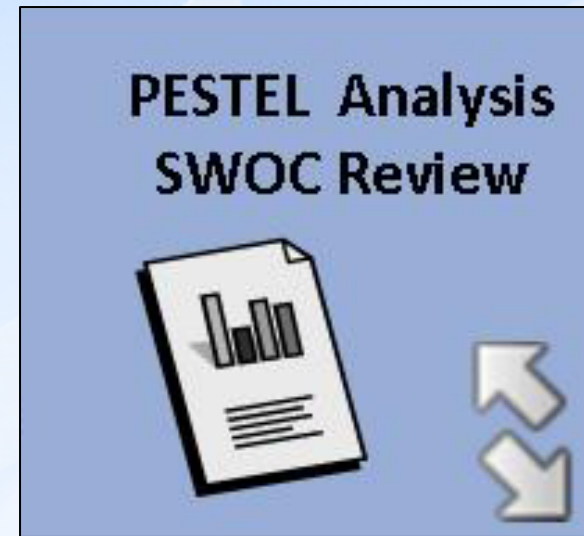
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PESTEL Analysis

- Includes:
 - Political
 - Economic
 - Social
 - Technical
 - Environmental
 - Legal

- As part of the RIN:
 - has an industry-wide focus
 - Is used to **Generate Ideas for innovations**

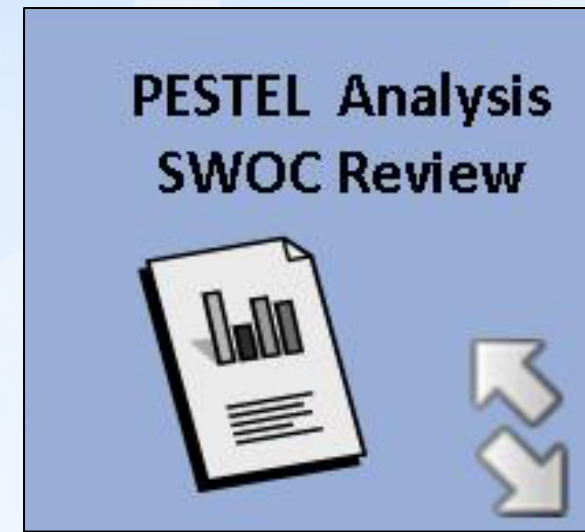


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SWOC Review

- Includes
 - Strength
 - Weaknesses
 - Opportunities
 - Challenges
- As part of the RIN
 - ***Generates Ideas for innovations***
 - identifies assets and areas where capacity should be built



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Gather Input:

- Stakeholders
 - What challenges are you facing and what opportunities would you like to realize? How can we help?
- Industry Thought Leaders
 - What research is needed? What does this research mean for the industry?
- Network Enablers
 - Who are the players in the system and how do we engage them?
- Team Leaders
 - What can we do collectively to address opportunities for the industry? How can we move this research to commercialization?

**Gather Input: Stakeholder,
Industry Thought Leaders,
Network Enablers, and
Action Team Leaders**



**Strategic Input
*Generates Ideas for
innovation***

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Industry Driven Research

- **Generates ideas** for businesses, entrepreneurs, and industry leaders that lead to innovations and informs **idea selection**
- Focuses on near-term, implementable technologies or advancements that are likely to create economic impact
- Addresses specific needs or opportunities for an industry
- Seeks industry input throughout the research process to ensure end product meets industry need and is implementable
- Often involves an industry partner(s) investing in the research or evaluation of the technology



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Roundtable events

•Characteristics

- Supports members as they seek to **select ideas** to advance their businesses, organizations and industry
- Creates shared vision and systems thinking
- Advances the industry through collaboration
- Draws on the insight, knowledge, resources and leadership of members
- Implements short- and long-term strategic action

•Structure

- Plenary sessions focused on research, overarching policy, or professional development that impacts the entire community,
- Breakout sessions for Action Teams
- Each Action Team represents a fundamental building block for the industry: Research, Talent Development, Infrastructure, Policy, Finance, etc.
- Lead by the Action Team Leaders



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Industry Specific Forums

•Characteristics

- Supports businesses as they seek to **select ideas** to advance their business
- Disseminates research on emerging opportunities and are often focused on new technology
- Targets a specific set of entrepreneurs and businesses
- Accommodates industry participation (time of year/day, length of meeting, location, etc)
- Focuses on implementable take-home strategies

•Structure

- Research and/or technology is presented to a group of 10-20 business or entrepreneurs. This presentation is often fairly technical in nature and participants are typically well versed in the area of the research.
- Facilitated conversation develops business specific action-plans intended to drive implementation



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Action Planning

- Is the bridge between **idea selection** and **implementation**
- Moves research from the general to the specific business (organization) application
- Answers the questions:
 - How does this information change day to day business?
 - How to I incorporate this new knowledge into my business?
 - What questions do I still need answered?
 - Who can help me address those questions?
 - What resources do I need?
 - How do I obtain those resources?
 - Who should be on my team from inside and outside my business? Are they in the room today?



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Hands-on Technical Assistance and R& D Services

- Characteristics
 - Focused on **Implementation** and overcoming the challenges of developing new products or processes
 - Geared toward providing proof of concept, technical feasibility, process or product formulation, etc
 - Answers the questions of **IF** and **SHOULD** it be done
 - Allows for informed decision making that mitigates risk and increases likelihood of accessing capital
 - Business-centric
 - Confidential
 - Take a holistic approach

Hands-on Technical Assistance and R&D Services



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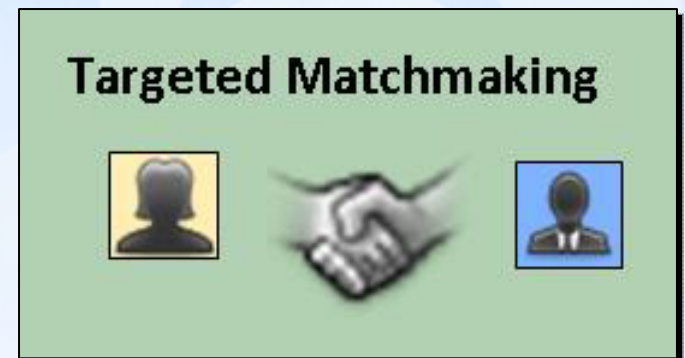
Targeted Matchmaking

•Characteristics

- Focused on **Implementation** and overcoming the challenges of developing new ventures
- Business focused
- Holistic and coordinated approach

•Structure

- Business Resource Professionals in the RIN work with businesses and Action Plans to identify the needs of the business (from business plan development, to employee training questions, to product formulation)
- Business Resource Professionals work collectively to address the businesses needs through each organization's programs and service models

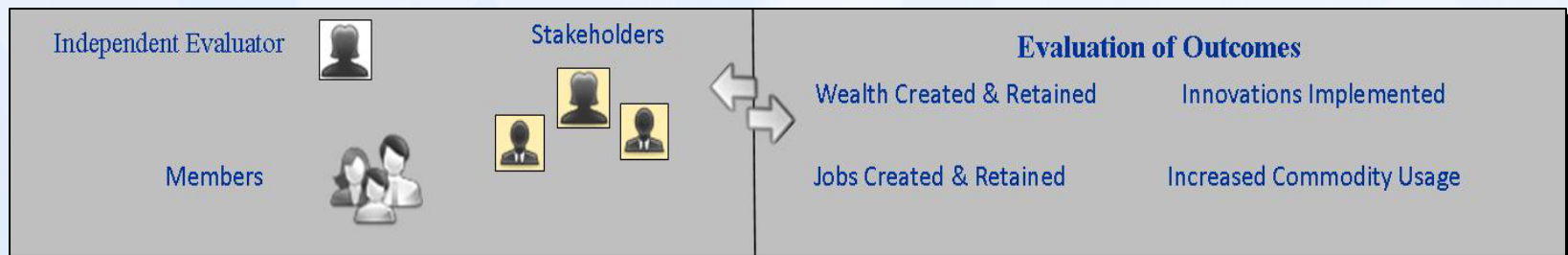


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Evaluation

- **Structure**
 - Independent evaluator evaluates the overall program
 - RIN member surveys
 - Stakeholder check-in meetings
- **Characteristics**
 - Attempts to quantify the **value captured** as part of the implementation of innovations
 - Measures:
 - Wealth Creation and Retention
 - Innovations Implemented
 - Commodity Utilization
 - Job Creation and Retention



RIN Model Application



AURI is applying the Rural Innovation Network to Minnesota's

- Renewable Energy Industry
- Biobased Products Industry
- Food Processing Industry
- Co-Product Utilization Industry

However...

RIN Model Application



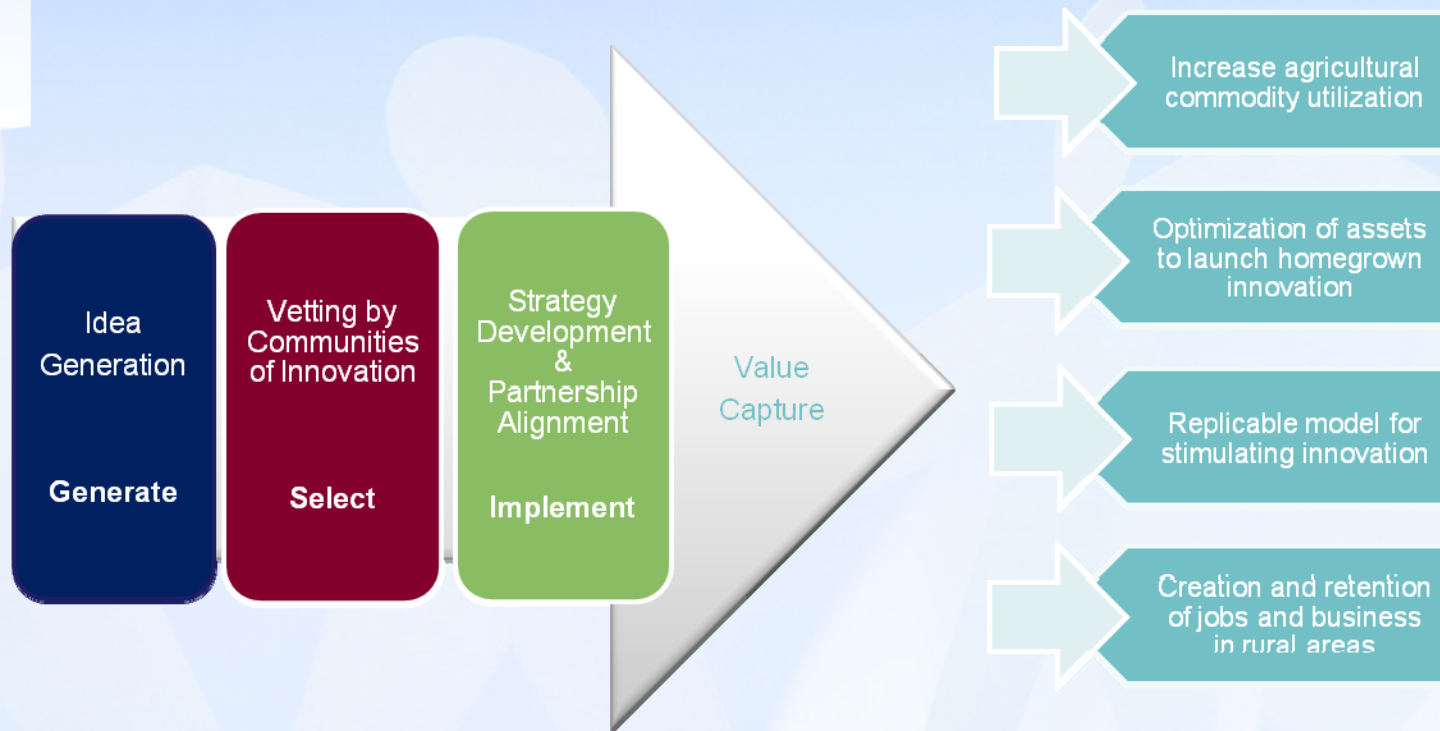
The RIN Model can be applied to any community looking to:

- Spur and **IMPLEMENT** innovation
- Align resources and realize efficiencies
- Foster collaboration and systems thinking
- Create and retain wealth

Questions?



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Abbreviated Reference List



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Questions?



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