Nutrient Strategies That Make Sense for Agriculture and for Water Quality

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Fertilizer Industry Round Table

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"A planet that could soon be supporting as many as 10 billion human beings has to work differently from the one that held 1 billion people, mostly peasants, 200 years ago. The challenge of our age is to use human ingenuity to set things up so that the planet can accomplish its 21st-century task. Returning to the way things were is neither realistic nor morally tenable."

Economist
May 2011

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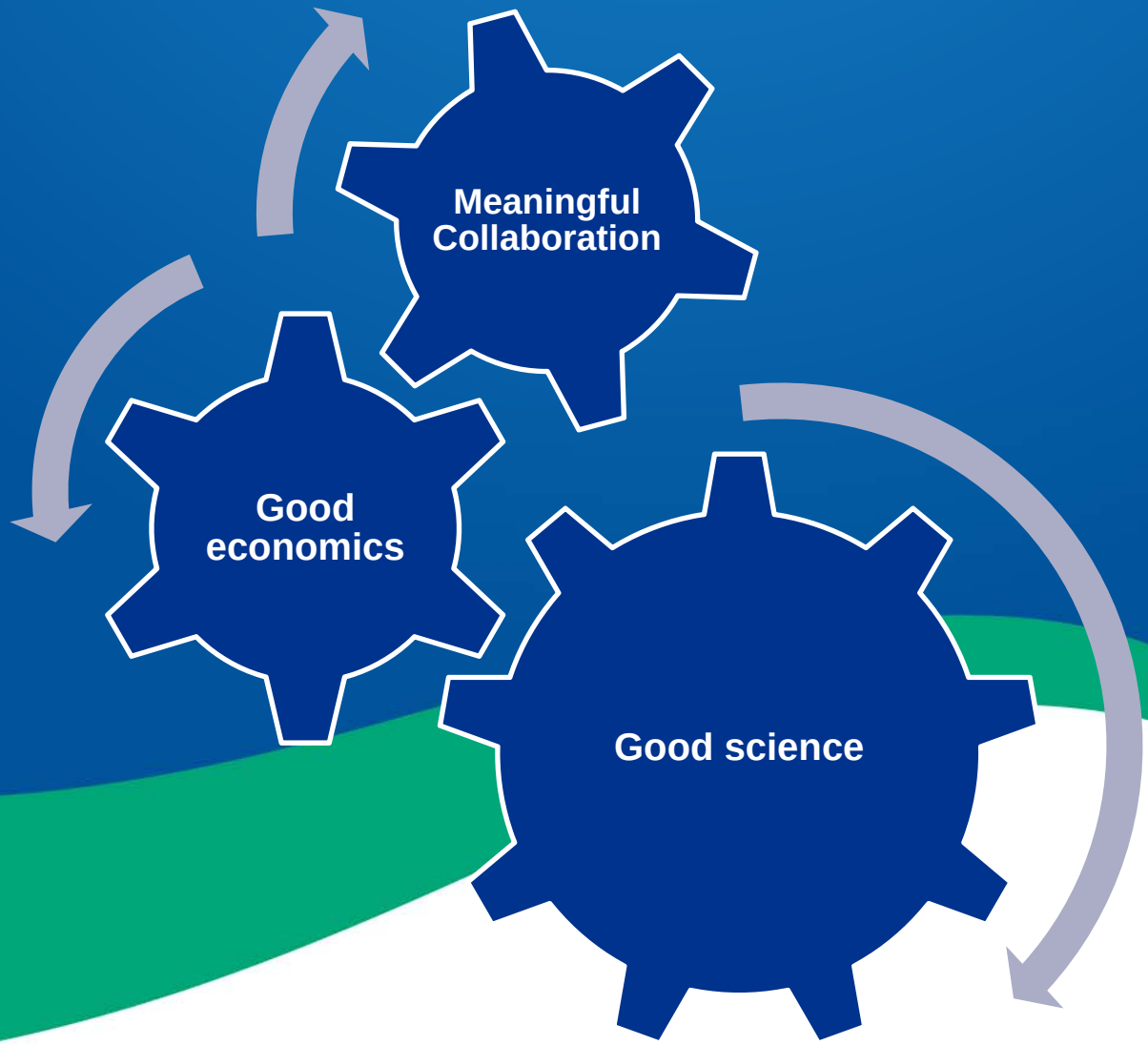
Keys to impact:



Demand of Today:

Feed the world without destroying the natural resources on which we all depend

We need to -- Double food production
to meet population growth and changing food demands

We need to -- Double productivity
on fertile, non-erodible lands already in production

We need to -- Increase yield potential and production
on existing crop lands

How?

Data-driven approach to effective and efficient use of nutrients and other inputs

Use of 21st century technologies and information management systems

Partnerships that bring together non-traditional allies around common goals

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GOAL: Meet production needs while reducing the footprint

Use information for improved impact
– improve efficiency and reduce what is lost

Improve in-field efficiency
– adaptive management, 4Rs

Strategic placement of wetlands and other filters to capture what is lost
– greatest impact on smallest footprint of land

Example – Adaptive management on the ground

Tools: CSNT, aerial imagery, replicated strip trials

Process: Analysis of data
– individual field and aggregate

Education: Farmer networking – group discussions, farmers part of making decisions how to adapt, improve

Results: In many states, more efficient use of nutrients (25-30% on average) without impacting yield

Major driver of change into the future: Supply Chain

Major supply chain initiatives making clear
the need for better ways to measure,
document performance

Now is the time
to leverage environmental performance
into supply chain values

Field to Market, DMI Innovation Center,
The Sustainability Council, Sustainable Food Lab,
and many more

Need for innovation:

New ways to collect and analyze data

-- easier, faster, more user friendly

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Need for innovation:

New ways to collect and analyze data

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New products that can help farmers improve efficiency – achieve yield goals while reducing what is lost

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Need for innovation:

New ways to collect and analyze data

-- easier, faster, more user friendly

New products that can help farmers improve efficiency – achieve yield goals while reducing what is lost

New tools to make it all easier to implement -- sensors, precision application technologies, information management

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What next?

Continue the dialogue

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Develop partnerships

to show impact on the ground

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to show impact on the ground

Align economic
and environmental goals

Questions?

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