

Targeted audience: residents near confined animal production areas, crop farmers, livestock farmers, policymakers, and biogeochemistry researchers.

6-word-story: From Pollution to Solution: Manure Recovery

Explanation: As livestock production becomes more intensive and specialized in the US, accumulated manure nutrients threaten environmental quality, so manure can be considered as “**Pollution**”. However, through “**Manure Recovery**”, these wasted nutrients can be used as resources to support crop production, and subsequently reduces the synthetic N fertilizer consumption, which can be thought as “**Solution**” in improving the efficiency of agricultural production.

Why is it appropriate for my intended audiences? These 6 words clearly stated the current dilemma of recycling manure. The current limited recovery rate of manure leads to environmental pollution, but we want to approach an idealistic management condition in which manure can be considered as one of the solutions for approaching Food, Energy, and Water sustainability. The life quality of residents who live near the livestock production areas is impacted by the odor and potential disease, so they care about the potential solutions for mitigating those negative impacts brought by manure. Crop farmers are also interested in substituting N fertilizer with manure if it is provided at a relatively lower price. Meanwhile, for livestock farmers, selling manure can also produce economic benefits. Biogeochemistry researchers are interested in investigating the manure recycling potential and they can provide recommendations to policymakers regarding why, how, and where to recycle more manure for reducing N pollution. Policymakers can also have a basic understanding of the current issue on manure recovery and decoupled crop and livestock production systems through these six words, later decision-making still needs inputs from diverse participants' insights.