

BEYOND THE SMOKE The untapped potential of carbon markets for crop residue management

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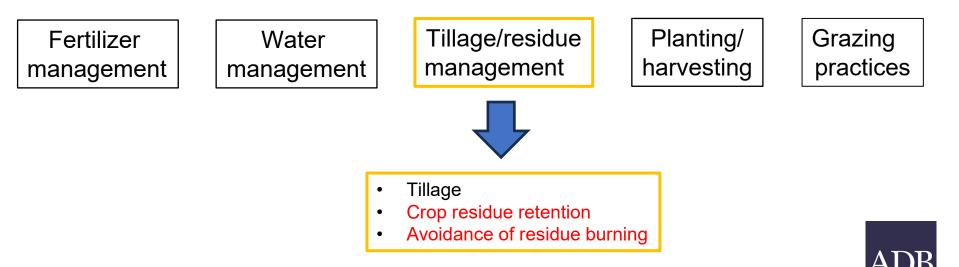






VM0042: Methodology for Improved Agriculture Land Management, v2.0





Stop burning – Start earning?

Can we earn carbon credits for avoided residue burning?









Avoided emissions

Carbon sequestration



On farm circular economy - 1

Can animals solve the (rice) residue problem for us?

- Poor digestibility
- Low crude protein
- High cellulose
- High hemicellulose
- High lignin
- High silica







Is incorporating residue in soil a sustainable practice?

Improved soil health

But

- Slow decomposition
- Up to 2 times higher GHG emissions when residue incorporated (Rosamanta/IRRI 2017)





Residue as a source of energy

GHG

















Tillage





Inefficient stoves





Fossil fuel energy



Firewood















Biochar – the stable carbon

- Made from biomass using low-oxygen combustion at 300-700 C
- Soil carbon sequestration
- Soil health improvement
- GHG mitigation
- Strong carbon market candidate









- Identify activities for carbon market projects
- Technical, logistic, and economic feasibility
- Learn from previous carbon market projects
- Identify appropriate carbon markets for crop residue management

All solutions for sustainable residue management rely on mechanization.





Thank you

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