

# Energy from Rice Straw

**Energy and International Development: Understanding Sustainable Energy Solutions (USES) in Developing Countries Programme**

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# Objectives

- Identify end user energy needs among rice farmers in S & SE Asia
- Find clean, economic and workable technologies and business models for meeting those needs using rice straw
- Reduce emissions and other pollutants from rice farming and energy use in S & SE Asia
- Build capacity among the project research partners

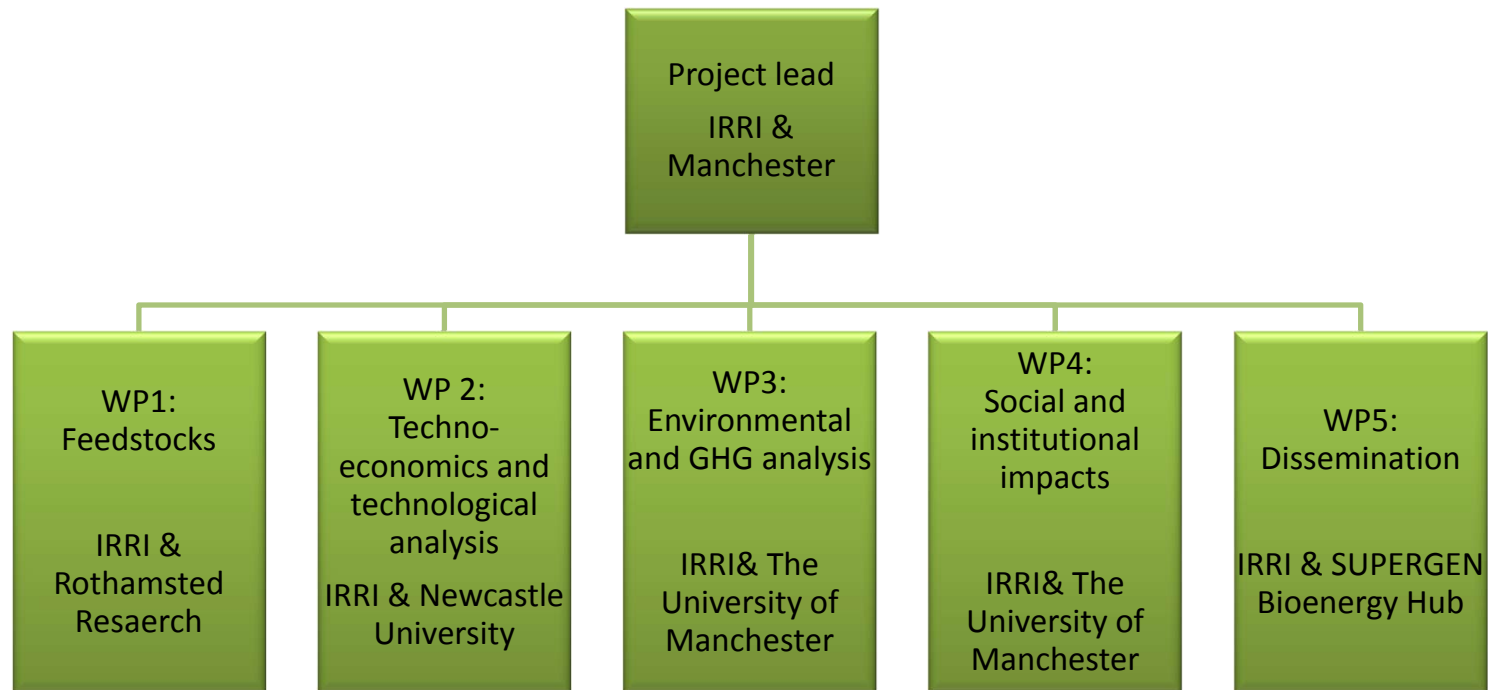


# Aims

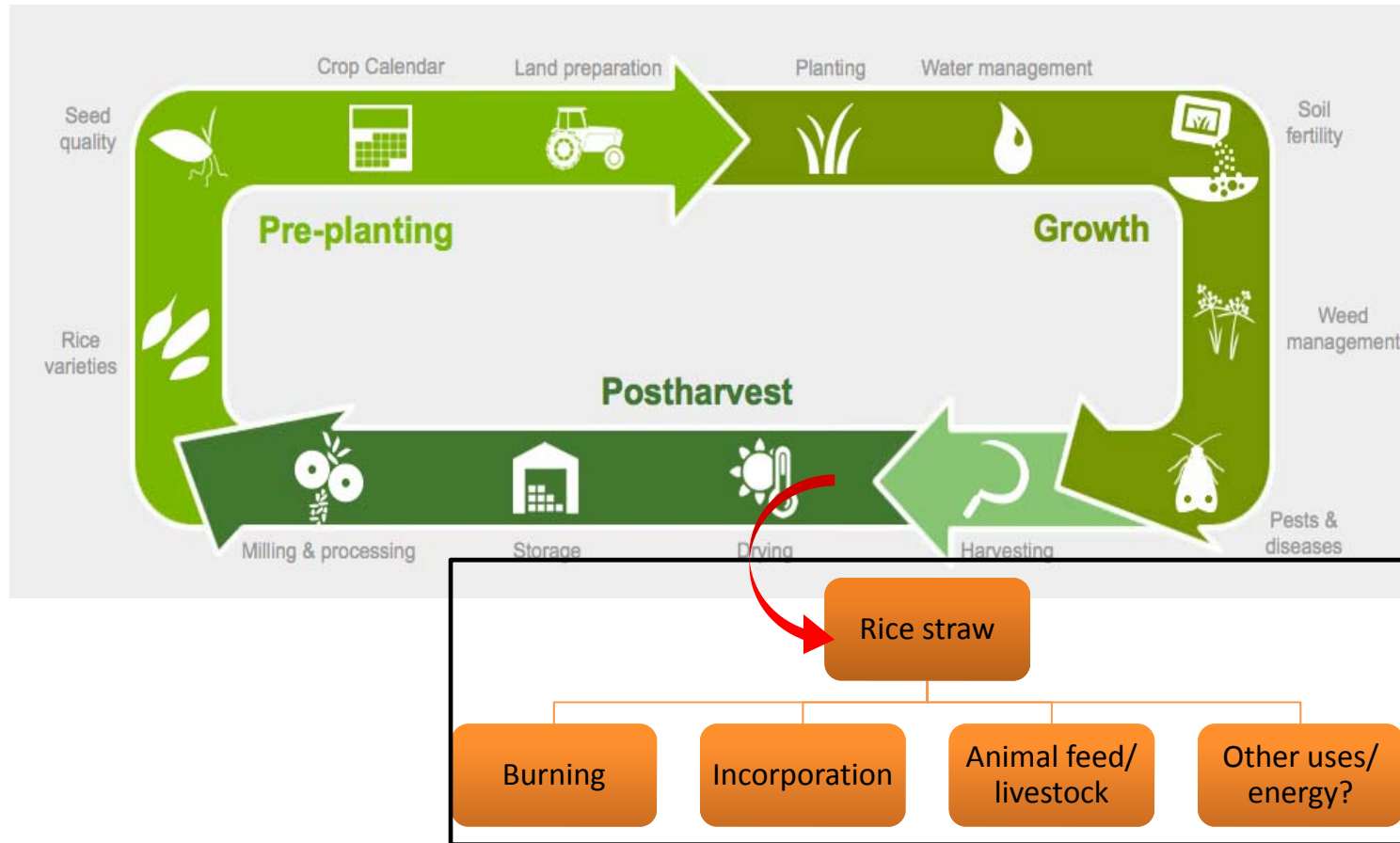
- Using stakeholder engagement to identify the technical and non-technical barriers
- Understanding the rice straw and the specific challenges (technical, economic and social) associated with using it for energy purposes
- Evaluating the technical and economic performance of different technology options
- Quantifying the environmental impact of the most promising conversion options



# Project overview



# Rice production



<http://www.knowledgebank.irri.org/step-by-step-production>



## Key considerations

- Unlikely to significantly impact on emission intensity of rice production
- But may make useful emission and pollution reductions from field burning
- May introduce a low carbon energy source not displacing a high carbon intensity existing system – so actually global GHGs still increase



## Key challenges

- Engineered variation and natural variability
- Scale of activity and penetration level
- Not oversimplifying by extrapolating single number (complexity, scale, interfaces)
- Avoid policy recommendations based on tunnel vision!
- But consider each option in its own context






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