



RICE STRAW BIOGAS HUB



RSBH





RICE STRAW


Rice straw, also known as "dayami" in the Philippines, is a farming byproduct frequently discarded as waste because of inadequate economic and technical capabilities.

Burning and rotting rice straws in flooded fields lead to greenhouse gas emissions, significantly contributing to climate degradation.


RICE STRAW BIOGAS HUB


The Rice Straw Biogas Hub (RSBH) is a collaborative climate-mitigation project funded by Innovate UK. It aims at converting rice straw to biogas and other forms of bioenergy supporting circular economy in agriculture.


6 WORK PACKAGES


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1 utilize innovative technology such as combine harvester for rice straw harvesting
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2 provide biogas and other forms of energy in rice drying services and other farm operations
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3 provide energy-efficient rice milling
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4 conduct socio-economic analyses among farmers on bioenergy generation from rice straw
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5 analyze GHG emissions and reductions arising from rice straw management
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6 create an enabling environment on rice straw management and climate mitigation





RICE

is among the top 4 food crops produced globally, with

91%

of it produced and consumed in Asia




~700

Mt *


*metric tonnes

rice straw produced globally, every year

300Mt

burned 

400Mt

left to decay 

In 2023 in the Philippines:

20 Mt

rice ("palay") production

(Philippine Statistics Authority, 2024)

14-28 Mt

rice straw production

using 0.7-1.4 straw to paddy ratio (International Rice Research Institute, n.d.)

2.7 kg

CO₂e/kg rice grain

(irrigated fields) based on baseline survey in Laguna, Philippines

24%- 38%

projected emission reduction when biogas system is adopted in rice production

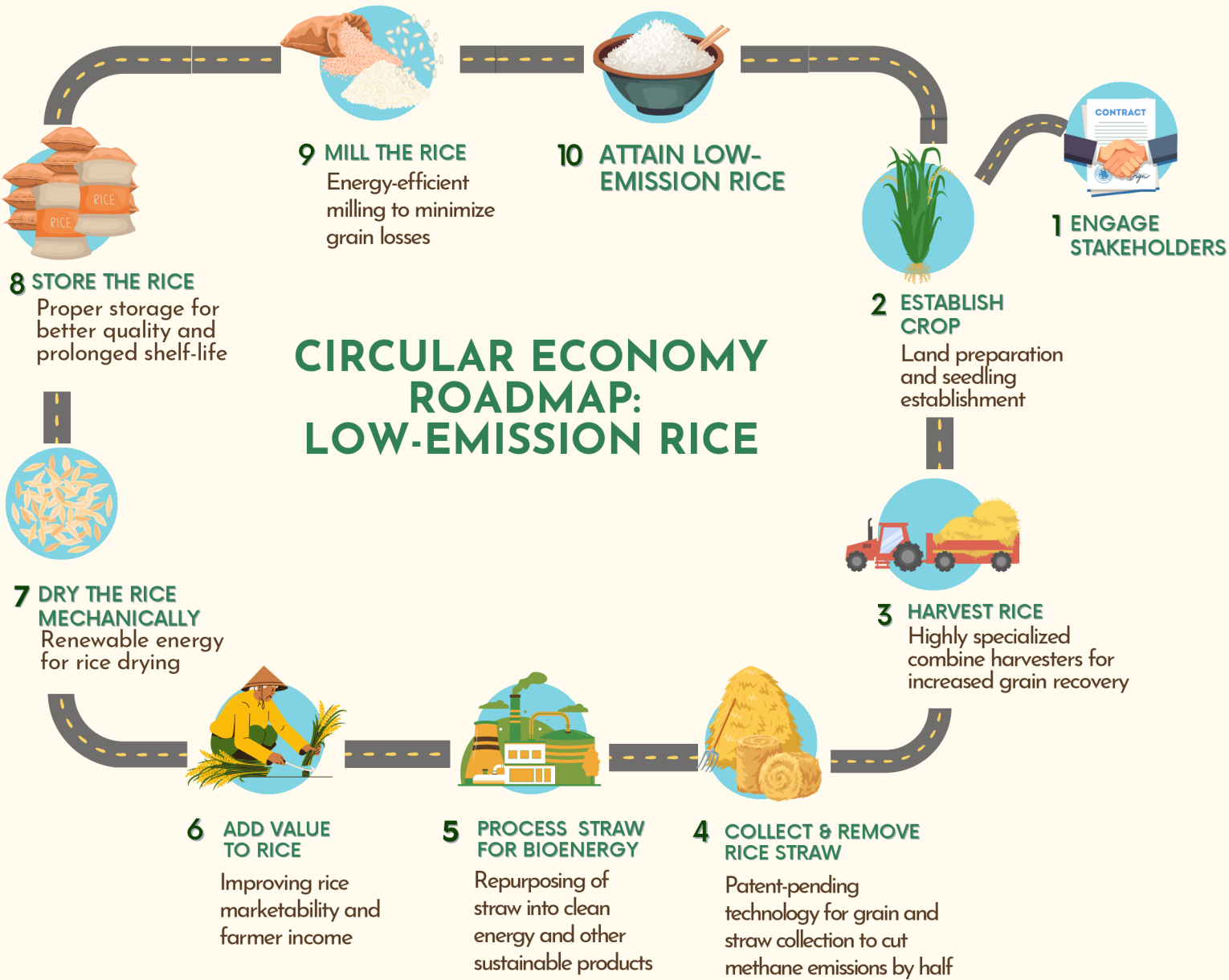
based on LCA of rice straw biogas system



References

International Rice Research Institute (IRRI). (n.d.). Rice straw. <http://www.knowledgebank.irri.org/step-by-step-production/postharvest/rice-by-products/rice-straw>

Philippine Statistics Authority. (2024). Updates on January-March 2024 Palay and Corn Estimates Based on Standing Crop. 01 February 2024. <https://www.psa.gov.ph/content/updates-january-march-2024-palay-and-corn-estimates-based-standing-crop-01-february-2024>



POWERING OUR COLLECTIVE ACT



Let's champion resource recovery

Advocate for efficient and effective rice straw management, turning residues to revenues



Let's support sustainable businesses

Partner with business establishment to promote sustainable practices



Let's unite for clean energy

Harness clean energy sources and technologies, to ensure a thriving environment for future generations

IT'S TIME TO TAKE ACTION!

To learn more about RSBH, contact Angeli Gerone R. Platino, Project Associate at eigd@searca.org