



Evergreen Agriculture Partnership: *Success Stories of Food and Fuel Together*

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The Opportunity

**South-South Extension of Two
Commercial Food-Energy
Systems**

OPPORTUNITY 1: Gliricidia for feed and fuel

Gliricidia trees
intercropped, e.g.
with coconut.
Pruned every 8
months.
Wood for
electrical power
generation.
Leaves for
fertilizer and
livestock feed.



Smallholder harvesting his wood for sale to the power plant. Gliricidia can be grown across Africa and Asia.



**Gasification units can
be village-scale...**



**...or Industrial scale
(5-15 MW)**



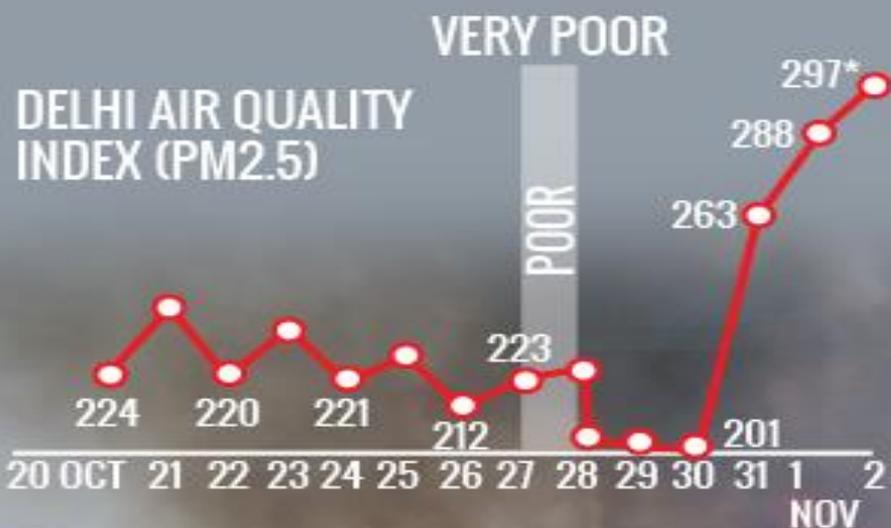
OPPORTUNITY 2: Rice Straw

- Around 60% of rice stalks and leaves are burnt in the field for disposal (300m tonnes/year)
- Serious health impacts



DELHI CHOKES ON PUNJAB'S FIRES

The uncontrolled burning of paddy stubbles by Punjab's farmers has again put the health of residents in the National Capital Region at risk.



A NASA SATELLITE IMAGE DATED OCT 31 SHOWS 1000S OF 'FIRE-SPOTS' IN PUNJAB AND THE RESULTANT SMOKE OVER NORTHERN INDIA

▶ NASA data shows that farm fires in Punjab, that began to register on satellite images around Oct 10, have increased in intensity since Oct 30

▶ Smog in Delhi from Oct 30 night, led to visibility dropping to 700-800m from 2km at IGI Airport

▶ Air quality has fallen sharply from Oct 31 onward and it now hovers close to a 'very poor' range level

Rice Straw Biogas Plants (Early Commercial)

1. R2B Project

- Village Scale
- Philippines
- UK Consortium
- Focus on clean cooking fuel and rice grain drying
- Early pilot phase

2. Sampurn Agri-Ventures

- Industrial Scale (15,000 tonnes straw/yr)
- Punjab, India
- Electricity generation
- Preparing for scaling-out

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CONCLUSION

Gliricidia and rice straw are two food AND fuel opportunities ripe for scaling out.

What Needs to be Done?

- 1) Feasibility analyses of pilot plants, and public-private partnership development**
- 2) Attracting and harnessing substantive levels of commercial and public investment**
- 3) Implementing new commercial-scale projects in seven countries that can fully demonstrate the potential for expansion.**