



Generating Local Economy by Regenerating Local Resources : Bangladesh

Converting rice mills to generate carbon credits and create value chains around rice husk

Project description

In 2008, the initiative introduced an energy efficient technology in rice mills that will generate carbon credits. In addition, it protects the environment and generates income by producing cement from recycled rice husk ash (RHA), and it turns saved rice husks into household fuel.



Business model

The partnership has developed an energy-efficiency innovation in rice mills to reduce carbon emissions and create value chains around rice through the production of low-cost RHA cement.

The low-cost innovative technology reduces the energy consumption of conventional rice mill furnaces by roughly 60% and enables the production of RHA cement.

The technology can be applied to thousands of rice mills in Bangladesh. The first targeted market is the Chalan Beel area, with about 1,500 mills.

Scaling up activities

- After installing the technology in two model mills, conduct field tests to make the technology marketable
- Raise awareness among rice mill owners in the region to replicate the technology
- Conduct a baseline assessment to quantify the carbon savings potential under various assumptions, with financial support from Palli Karma-Sahayak Foundation (PKSF)
- Develop and test rice husk ash (RHA) cement
- Develop and test experimental production of building materials such as slabs, pipes and hollow blocks.

Immediate needs

- Assistance in linking up with carbon markets
- Support with research and development (R&D)
- Liaise with other rice husk initiatives to exchange experience.





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Partnership

- **SHISUK** is a pioneer NGO in community enterprise approaches for sustainable development which received National Gold in 1999 by the Ministry of Fisheries and Livestock.
- **PPRC** is an independent centre for research and social action.
- **Khulna University of Engineering & Technology's** Faculty of Civil Engineering is the technical partner, represented by Md Azad Khan and Dr. Alamgir.
- **Masers Progoti Rice Mill** at Ullahpara, Sirajgonj will serve as a model and demonstration site.



Social, environmental and economic impacts

Social impact: Besides offering steady income, the initiative will enable the local population to become entrepreneurs. The cost-effective RHA cement will improve rural infrastructure. Furthermore it will reduce the disposal of RHA into the wetlands, improving the livelihoods of fishing communities.

Environmental impact: The technology significantly reduces carbon emissions which result from rice parboiling. Additionally, the decrease in dumping rice

husk ash into the environment will prevent pollution and protect biodiversity.

Economic impact: Local communities will benefit from additional income as micro-entrepreneurs become established. The energy efficient technology also increases the competitiveness of rice mill owners. The carbon credits generated will make the initiative financially sustainable in the long run.

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SEED Partners

SEED is hosted by the United Nations Environment Programme (UNEP). Other current partners are the United Nations Development Programme (UNDP); IUCN (International Union for Conservation of Nature); and the governments of Germany, India, the Netherlands, Norway, South Africa, Spain, the United Kingdom and the United States of America.



About the SEED Initiative

The SEED Initiative identifies and supports promising small scale social and environmental entrepreneurs around the globe, entrepreneurs that while working towards a greener economy also tackle poverty, marginalisation and social exclusion.

SEED provides these social entrepreneurs with know how and networks, taking the lessons learnt at local level up to decision-makers to promote evidence-based policy making.

More information: www.seedinit.org

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