

# Paddy straw to be used as fuel

Centre okays 70% grant | Total project cost of unit is ₹1 crore

**VIJAY C ROY**

TRIBUNE NEWS SERVICE

**CHANDIGARH, APRIL 24**

The Union Ministry of Environment, Forests and Climate Change has approved the state government's ambitious project to use paddy straw as a fuel in the brick-kiln industry.

This is for the first time that the state will use paddy straw briquettes to burn the bricks through state-of-the-art technology developed by it.

Currently, in Punjab to make briquettes, press mud, saw dust, mustard straw and cow dung are used by mixing them in different proportions.

The total project cost of the unit to convert paddy straw into briquette is estimated to be Rs 1 crore and the Centre will give a grant to the tune of 70 per cent.

The successful adaptation of utilising paddy straw as fuel instead of coal would lead to consumption of more than one million tonnes of paddy straw from two lakh hectares of agricultural land annually.

The first-of-its-kind project is aimed at reducing the consumption of fossil fuel especially coal in the brick industry and also to reduce pollution. Moreover, the technology will help address



the problem of paddy straw burning in the fields.

The Punjab State Council for Science and Technology (PSCST) has already developed the technology and has conducted three pilot trials.

Maganbir Singh Kalouria, Process Engineer, PSCST, said "Paddy straw in loose form is not appropriate to use as fuel as it is a health hazard for workers besides high emissions. Therefore, we developed a technology to prepare briquettes using paddy straw. Under the technology, over 4.8 lakh bricks were fired and it has been established that more than 50 per cent loose biomass or coal being used as fuel in brick-kilns can be safely replaced with paddy

straw briquettes."

The study was initiated in January 2014 and three pilot trials were conducted during March to June 2014 in the southern districts of Punjab and May-June 2015 in Ludhiana.

The fuel cost works out to be Re 1 per 1,000 kilo calorie (kcal) as compared to conventional coal firing which is Rs 1.3 to 1.4 per 1,000 kcal.

He added that the project had a potential of utilising around one million tonnes of paddy straw per annum by brick-kilns across the state. Besides, it will also help in the socio-economic uplift of the farming community as a lot of paddy straw is burnt in the fields every year.

In addition to this it will

## No harmful disposal

- The project aims at reducing the consumption of fossil fuel in the brick industry and at cutting pollution
- It will help improve air quality in the state as well soil properties resulting in reduction in carbon footprint & increased crop yield
- The technology will help address the problem of paddy straw burning in the fields
- Greenhouse gas emission is likely to be reduced by 550 tonnes per kiln per annum

help in improving the air quality in the state as well soil properties resulting in reduction in carbon footprint and increased crop yield.

Punjab generates around 18 millions of paddy straw every year. Out of the total, 10-15 per cent is used in co-generation. It is likely that 50 per cent of the fossil fuel will be replaced by deploying this technology in the brick-kiln industry. Punjab has around 3,000 units spread across the state.

Besides, greenhouse gas emission is likely to be reduced by 550 tonnes per kiln per annum and the reduction potential for the state greenhouse gases is around 16.5 lakh tonnes of CO<sub>2</sub> per annum.