

**Address**

C/o. Mahenderpal Gangwar
Vill.:Kanakor, Khudaganj
Dist.:Pilibhit, Uttar Pradesh

Scouted by

SRISTI GYAN Kendra



Modified stove with kerosene heating⁵⁵

CONSOLATION

Niranjan Prasad Sharma (43) hails from Khudaganj, Pilibhit, in Uttar Pradesh. He has studied up to the 8th standard. He is married and has four sons and a daughter. His sons are studying in school and his daughter has completed her B.A. He owns a house and a shop in Pilibhit. A stove repairing mechanic, he earns his livelihood mainly through the business of manufacturing furnace stoves. He earns Rs. 36000 per annum. He also has a keen interest in painting.

Genesis

Niranjan got the inspiration for developing the innovation by observing the kerosene lantern, which is widely used in villages. He faced a lot of difficulties in procuring the raw materials for developing the innovation and arranging finances. Niranjan Prasad admits that in his pursuit of developing this stove, he was not helped by his family. It was his own strong determination that kept him going. At the same time, he remembers with gratitude the help given by the Bank Manager of Bank of Baroda, Pilibhit. Niranjan is quite interested in starting a business of his own with this innovation for which he expects the initial investment to be around two lakh rupees.

NIF in coordination with the GIANS has sanctioned an amount of Rs. 37, 250 from its Micro Venture Incubation Fund for prototype development for market research for the improved kerosene stove and three other innovations.

The innovation

This stove is based on the principle of kerosene atomization. The key concept is that of pre-heating the kerosene

flowing in from the cylinder thereby converting it into gaseous form. It is then fed into the burner to give a clear blue flame without any smoke, sound or deposition of carbonaceous soot on the cooking vessel. The heating is achieved through a delivery pipe fitted above the flame.

Advantages

This innovation enables higher combustion of kerosene. It consumes 25% less kerosene and burns with a blue flame thus eliminating smoke. In addition as there are no soot deposits on the bottom of the cooking vessels it removes the drudgery involved in cleaning them.

Scientific bent of mind

From his early childhood, Niranjan had a keen interest in science. His foray into innovations include tinkering with several useful devices such as kerosene gas burner, dosa maker, diesel burner as well as small machinery like combustion engines, valves, pistons etc. The kerosene gas burner, he has developed consumes 200 ml oil per hour. It is less noisy and due to the presence of rotating burners, there is less accumulation of carbon. In his dosa

burner, the plate is made of copper and has eight pores in it. It burns with a blue flame and there is less deposition of carbon. The diesel burner he has improved utilizes both water and diesel. A special chamber is made over the burner, from the

corner of which passes a small pipe which is used for pouring drops of water over the plate. Apart from the above innovations, he has also designed a diesel furnace, a snack dryer and a heavy-duty cloth dryer.