INNOVATION OF FARMERS IN GADAG DISTRICT

Compiled by: KVK, Gadag

NAME OF THE INNOVATIVE TECHNOLOGY: TWO WHEELER (BAJAJ M-80) MOUNTED SPRAYER

1) Description of innovation: Mr. Chandragoud Mallanagoud Lingadal of Harti village in Gadag district has designed two wheeler mounted sprayer for taking up plant protection measures in Bengalgram, Tur, Chilli, Cotton and Fruit & Plantation crops. Compression pump is mounted on Bajaj M-80 two wheeler to generate pressure. Two water cans each of 25 liter capacity are fixed on either side of the carrier. Horizontal pipe having 4 nozzles is fixed at the rear end for spraying of field crops. There is also provision for fixing 2 guns having 30 feet pipe length on either side for spray of orchard crops like Mango, Sapota and Coconut. This innovative sprayer is cost effective, timely and saves labour.

2) Problem statement: Labour problem for taking up of plant protection measures was the major problem in Harti village. This problem has led to genesis of idea of two wheeler mounted sprayer. The farmer himself innovated the idea, designed and fabricated the sprayer.

3) Process of technology development: Farmer has conceptualised the idea based on the problem faced by the majority of the farming community. The innovation, he has designed is very simple and based on the scientific rationality. Initially the farmer conducted number of trials by investing Rs.10000/- from his pocket. When the trial was found successful, the farmer finally fabricated the sprayer and mounted it on his own M-80 two wheeler vehicle. Some of his friends in the village helped him financially for the innovation development.

4) Relative advantages of innovation:
   a. Increased area coverage: This innovative sprayer can cover 30 acres in bengalgram, 15 acres in chilli, 20 acres in cotton in a day
   b. Timely spray: Timely spray ensures better crop productivity as manual spray is not possible due to labour problem.
c. **Reduced cost of spray:** One manual labour can cover 1 acre per day whereas this sprayer can cover 15-30 acre depending on the type of crop, thus saving the cost of labour.

d. Effective and uniform spray is possible.

5) **Replication and promotion:**

This innovative sprayer is developed during 2007-08 and it has been effectively used by the farmers of Harti and surrounding villages on hire basis. The farmer has applied for the patent for the innovation. At present there are 10 orders for fabrication of the sprayer. The farmer charges Rs.18,000/- for the fabrication.

During Kharif and Rabi season of 2009-10 the farmer has covered about 1200 acres on hire basis, thus earning Rs.30000. He charges Rs.150 per acre as hiring charges. The innovation is exhibited in the Krishi Mela organised by UAS, Dharwad during 2009. The innovation is also published in Samyukta Karnataka, a Kannada daily. The farmer has given interview in AIR, Dharwad and TV-9.

6) **Recognition:** University of Agricultural Sciences, Dharwad has accepted the innovation and recognised the farmer by conferring certificate.

![Innovative farmer receiving award from Vice Chancellor of UAS, Dharwad](image)

7) **Supporting documents:**

a. Photograph of innovation

![Innovative sprayer](image)

b. Copy of certificate

![Certificate](image)
8) Profile of farmer:
   
a. Photograph of farmer

   Mr. Chandragouda M. Lingadal

b. Name and address:
   
   Mr. Chandragouda Mallanagouda Lingadal
   At post: Harti
   Tq/Dist.: Gadag
   State: Karnataka

c. Phone: 9481680987

d. Age: 40

e. Qualification: Illiterate

f. Farming experience: 20 years