

Sprayers

Kushal Sprayer

Mr. Khimjibhai Kanadia

“Bestow” Sprayer

Mr. Parbatbhai Vaghan

Automatic Spray Pump

Mr. Arvindbhai Patel

Hand Driven Pump

Mr. Gopalbhai Sutariya

Bullock Driven Sprayer

Mr. Dayarjibhai Aslaliya



Bicycle Sprayer

Mr. Mansukhbhai Jagani

Motorcycle Driven Sprayer

Mr. Ganeshbhai Dodiya

Battery Operated Sprayer

Mr. Lalit Surana

“Jayant” Sprayer

Mr. Rameshbhai Bhalala

Tractor Mounted Sprayer

Mr. Dahyabhai Patel

Kushal Sprayer

Mr. Khimjibhai Kanadia

- A small, portable sprayer, with ease of use
- Fine droplet size (mist spray) due to nozzle improvisation.
- Light weight makes it maneuverable for aged people and also for women.
- Most cost efficient (Rs. 475) in the range of sprayer products
- Maintenance free



[Video](#)

“Bestow” Sprayer

Mr. Parbatbhai Vaghani

- Energy derived from movement of feet while walking is converted into pressure with the help of cylinder and piston. This in turn enables the spraying of the liquid.
- No additional energy is required to operate the sprayer.
- Operator can cover two parallel rows simultaneously and thereby cut down the operation cost and time by half.



[Video](#)

Automatic Spray Pump

Mr. Arvinbhai Patel

- When user walks with this sprayer mounted on his back, jerks experienced by the user are used to create pressure in tank for spraying.
- Does not require any external additional energy and effort.
- Prototype already tested with concept, under development stage.



[Video](#)

Hand Driven Pump

Mr. Gopalbhai Sutariya

- Rotary motion of wheels used to generate pressure in the tank for spraying.
- 40 litre barrel mounted on the chassis of the hand driven body of the sprayer.
- Adjustable nozzle and spray boom giving better performance.



Bullock Driven Sprayer

Mr. Bhanjibhai Mathukia

- Consists cylinder pump assembly mounted on iron bar attached with two small iron wheels at both ends.
- A small kit consisting of two wheels and cylinder-piston arrangement is attached to harrow.
- Rotary motion of the wheel is utilized to build the pressure for spraying
- Easy to assemble and covers 12 acres of land in a day.



[Video](#)

Bicycle Driven Sprayer

Mr. Mansukhbhai Jagani

- Mansukhbhai has reversed the sprocket arrangement of cycle-chain drive to get the required pressure for spraying.
- Pedals are replaced by piston rods, connected with brass cylinder pumps on either side. Movement of bicycle builds up pressure for spraying.
- Less space is required to move compared to other power sprayers, especially in between rows of plants.
- The innovation came up with the aim of utilizing wide-availability of cycles with small and marginal farmers.



[Video](#)