

RNS Institute of Technology Department of Mechanical Engineering

Design and Fabrication of Multipurpose Agriculture Machine

Agriculture has been the backbone of the economy and it will continue to remain. Agriculture is the science and art of farming including cultivating the soil, producing crops and raising livestock. Generally, cultivation of any crop involves various steps like ploughing, harvesting, sowing, and irrigation. Farmer has to use various agricultural equipment and labours for carrying out all these steps. Hence, the main objective of this project is to combine all the individual tools in to one so as to provide farmers with a multipurpose equipment which implements all the scientific farming techniques, suitable for all type of seed cultivation with minimum cost. This multipurpose agro machine is wireless remote operated, designed and fabricated as a multipurpose equipment which is used for agricultural processes like ploughing, sowing seeds and sprinkling water. This machine works in both directions when it is pushed forward it ploughs the field with the help of plough. The height of the plough can be adjusted, with the help of screw arrangement and the seed feeder is mounted directly to the motor. The motor rotates and the shaft attached to it has holes. The motor is directly attached to the shaft with holes. When it is pushed in a backward direction, the plough is lifted up from the ground and the pump which is attached to the front shaft will start pumping the water from the tank and starts sprinkling water over the field.