Motorized Paddy Thresher

The development of agricultural mechanization is closely related to the development of modern agriculture. Mechanization is one of the factors responsible for improving the economy besides improving production and efficiency and intern help in alleviating the drudgery involve in execution of different tasks

Like most of India, agriculture is one of the most significant sectors of the economy of Uttarakhand. Rice, wheat, soybean, groundnut, coarse cereals, pulses, and oil seeds are the most widely grown crops. Small and scattered landholding, abundance of manpower, extensive use of hand tools and high drudgery involved in various tasks/farm operations has been a typical scenario of Indian hill agriculture. Therefore, ergonomic research and their application and use of physiological studies of various agricultural activities would be helpful in finding out the ways and means for drudgery relief in agriculture as well as reduce the burden of the worker .As agriculture is the only source of livelihood for most of the population residing in Indian villages so technological empowerment becomes the need of hour. In addition to the other agriculture inputs, farm mechanization also played pivotal role in increasing production and productivity through timeliness of field operations and by enabling proper and efficient uses of inputs. The mechanization of farming activities help in improving the quality of life in respect to the society and in respect to the drudgery relief through minimization of occupational health problems.

Women are major participants in farming activities in the rice growing regions. They usually pull the seedlings for transplanting and do the transplanting. They weed the rice paddles and join in the harvest. On top of that they are usually responsible for threshing and milling of the rice. So the relative shortage of agriculture implements for mountain hills is not conducive to the development of agricultural mechanization and large scale operation.

In hills the plot size is small and some low weight easily transportable small implements are to be intervened /introduced for mechanization of the farming system. So that their time and energy can be reduced which interns reduces their drudgery and increase the productivity. The agricultural mechanization should be promoted in a planned way, step by step in order to achieve prosperity through agricultural mechanization and sustainable development this technology was designed to provide them with the best suitable model of paddy thresher which can facilitate threshing activity with ease without much physical efforts, cost effective and easy to transport from one place to another place in hill areas.

Advantages:

- 1. Performance evaluation of paddy threshers shows that on an average 180 kg of paddy can be threshed in one hour duration by motorized paddy thresher in comparison to 25 kg/hour traditional method. The pace of work was found higher. Respondents were very much satisfied by doing threshing with motorized paddy with its threshing capacity.
- 2. The motorized paddy thresher was found best suited relation to the occurrence of the incidences of pain and discomfort while working. The improved technology reduced the drudgery score while paddy threshing from the score of 27 to the score of 15 and disorders score was found to reduce to 6 which indicates that respondent faced lower intensity of pain and discomfort while working with the motorized paddy thresher. Thus it can said that motorized paddy thresher is best suitable for hill farmers as it increases the efficiency of the workers and intern increased the productivity as well.