

B.Sc (Ag) IIIrd Semester

Course Name- Farm Power and Machinery

Course Code- BSCAG-215

Scope and Benefits of Farm Mechanization

SCOPE OF FARM MECHANIZATION:

There is a good scope of farm mechanization in India, Gulf countries, South East Asia and African countries due to the following reasons:

- Improved irrigation facility in the area.
- Introduction of high yielding varieties of seeds.
- Introduction of high dose of fertilizers and pesticides for different crops.
- Introduction of new crops in different parts of the country.
- Multi cropping system and intensive cultivation, followed in different parts of the country.

The above factors are responsible to encourage farm mechanization, which can be viewed with the following points in mind:

- Population of the country is increasing day by day. Steps have to be taken to arrange food and fibers for such large population by adopting intensive farming in the country. Intensive farming required machines on the farm.
- In multiple cropping system, generally high yielding variety of seeds are sown, so farm operations are required to be completed in limited time with economy and efficiency. This is possible only with help of mechanization.
- Farm mechanization reduces drudgery (boredom, monotony) of labor to a great extent. A ploughman has to walk about 66 km on foot while ploughing one hectare of land once by bullocks having 15 cm. furrow width.
- A large number of female worker and children work on farms unwillingly due to shortage of power. From the human stand point,

It is not desirable to engage females and children for arduous farm work.

A child must go to school and women must devote time for managing home affairs to make life enjoyable. If machines are used the following relief may be expected.

- A farmer and his animals can be relieved of hard work.
- He will do his job with machine better and quicker.
- He will get more leisure and devote more time to other work.
- He will earn better living and enjoy life in nice manner.
- The proper utilization of basic inputs like water, seed and fertilizer will be possible only when proper equipments are used.
 - (i) The seeds and fertilizer should be placed at a certain depth with respect to each other for the optimum interactions of the two which is possible by a seed drill.
 - (ii) Seed bed should be prepared to require tilth for better crops.
 - (iii) The field should have uniform slope for better irrigation and drainage.
 - (iv) There are certain operations which are rather difficult to be performed by animal power and human labor such as:
 - Deep ploughing in case of deep rooted crops.
 - Killing the pernicious weeds by deep tillage operation.
 - Levelling of uneven land.
 - Land reclamation.

- Application of insecticides during epidemic seasons.

These operations need heavy mechanical equipment for satisfactory completion.

BENEFITS OF FARM MECHANIZATION:

The following are the benefits of farm mechanization:

- Timeliness of operation.
- Precision of operation.
- Improvement of work environment.
- Improvement of safety.
- Reduction of drudgery of labor.
- Reduction of loss of crops and food products.
- Increased productivity of land.
- Increased economic return to farmer.
- Improved dignity of farmer.
- Progress and prosperity in rural areas.

REFERENCES:

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| 2. | Farm Machinery | S.C. Jain and Er. Grace Philip |

Prepared By:
Er. Sharwan Kumar
Department of Agriculture
Monad University, Hapur (U.P.)