

SUBJECT: AGRICULTURAL SCIENCE

WEEK: 4

CLASS: SS1

TOPIC: MAINTENANCE PRACTICES AND PRECAUTIONARY MEASURES FOR FARM MACHINES

TERM: 3<sup>RD</sup> TERM

REASONS FOR MAINTAINING FARM MACHINES

Farm machines must be maintained for the following reasons;

1. TO REDUCE THE COST OF REPAIR: The damaged part of farm machine should be repaired immediately it is discovered. Failure to do so may lead to damage of another part or total condemnation of the whole machine.
2. TO PREVENT ACCIDENT: Routine and periodic maintenance helps to prevent avoidable accident which may occur as a result of tractors, the hydraulic level of the tractor must be checked daily the worn out tyres should also be replaced when necessary to avoid accident on the farm.
3. TO MAKE OPTIMUM USAGE OF THE MACHINES: Adequate maintenance extends the life span of a machine. The machine becomes strong and durable .it prevents farmer from buying the same kind of machine all the time.
4. TO MEET THE FARM OPERATIONAL DEMANDS: Adequate maintenance of farm machines make the work easy and faster .machines often demoralize the operator and may frustrate his plan and work schedule.
5. It helps to prevent time loss
6. It prolongs the life span of the machine

DAILY MAINTENANCE OF A TRACTOR

1. Check the compartment of the engine oil and fill it to the required level if the need arises.
2. Check the radiator compartment and fill it to the required level.
3. Wash and dry or clean the tractor after use.
4. The loose bolts and nuts must be thoroughly tightened.
5. Inflate the tyre pressure when necessary.
6. Fill the electrolyte of the battery to the required level
7. Check the break fluid (i.e hydraulic fluid) and fill it to the required level.

PERIODIC MAINTENANCE OF A TRACTOR

1. Paint the body of the tractor
2. The broken metal parts must be welded
3. The old fan belt must be replaced with new one
4. All the movable parts must be lubricated to reduce friction

5. Replace oil filter with oil with a new one when necessary
6. The spark plug must be replaced on time
7. Adjust the break when necessary.

#### MAINTANANCE OF PLOUGH, HARROWS, CULTIVATORS AND RIDGERS

1. wash and dry or clean the implement after use
2. the loose bolt and nuts must be tightened
3. The movable parts must be lubricated to avoid rusting and reduce friction.
4. Store the implement in a cool and dry place after use.