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# INTEGRATED FARMING TOOLS



**Integrated Farming Machineries**



**Integrated Farming Tools**

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GREENTREE FREEDOM ACADEMY

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Date;24/11/2022

## Introduction

Agriculture has been very successful in addressing the food and fiber needs of today's world population. However, there are growing demands about the economic, environmental and social costs of this success. Integrated agricultural structure may provide a means to address these concerns while increasing sustainability.

**Integrated farming system** is the process whereby high-quality organic food, feed, fiber and renewable energy are produced by using resources such as soil, water, air and nature as well as regulating factors to farm sustainably and with as little polluting inputs as possible. **Integrated farming** means incorporating crop production and livestock management that enhance one another in a way that there is a mutual relationship that is economically profitable, environmentally friendly and benefitting from diversity production. Agriculture can be integrated with livestock, fishery, poultry, piggery, cattle rearing etc.

## TOOLS USED IN INTEGRATED FARMING

1. **Spade**; this is a long tool with handle, it is used to dig the ground.



2. **Sickle**; a sickle is a tool that consist of a curved metal blade with a handle attached to it. It is used to harvest rice, sorghum, barley, wheat, maize, millet etc.



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3. **Hoe**; a traditional agricultural tool used to cultivate the soil in order to plant seeds.



4. **Backpack sprayer**; it is used to carry water on the back so you can spray water on crops.



5. **Pick mattock**; this is a tool used to break up earth/clay into pieces.



6. **Brush cutter**; is a powered garden or agricultural tool used to trim weeds, small trees, and other foliage not accessible by a lawn mower.



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7. **Mower;** is a machine that cuts grass or other plants that grow on the ground.



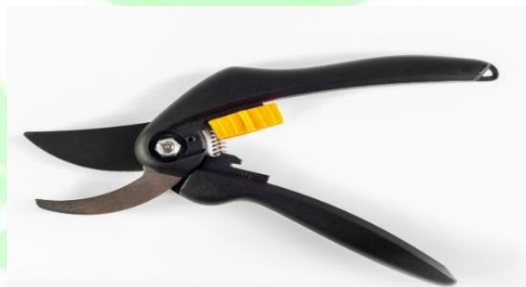
8. **Spading fork;** is a tool used for uprooting crops such as potatoes, beets, and carrots. It consists of a long metal blade with a bent tip on one end and a curved handle.



9. **Cutlass;** a long metal with a wooden or rubber handle used to cut grasses.



10. **Pruning Shears;** a sharp scissors used to cut branches of trees and also prune flowers.





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11. **Wheel barrow**; wheelbarrow is used for moving lightweight items such as fertilizers, manures, plants, seeds, waste materials, and other things around the field.



12. **Shovel**; a metal that looks like spade, used to dig and mix the soil.



13. **Hand fork**; used for lifting and transplanting young seedlings.



14. **Bolo**; a knife-like metal with wooden handle that is used for cutting tall grasses and branches of trees.



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15. **Crowbar**; used for digging out stones and stumps stuck in the ground.



16. **Rake**; a broom like metal used for clearing fields and gathering weeds, hay, etc.



17. **Grab-hoe**; helps to brake hard topsoil. It is also used to crush hard soil smoothly.



18. **Harvesting knife**; harvest some cash crops like cocoa, oil palm, mango, oranges and kolanut. It is also used for light pruning.



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19. **Watering can;** used for light irrigation of crops in the dry season. It is also used to apply liquid fertilizer, the application of water to seedlings in the nursery.



### Agricultural Machineries

- a. **Bulldozer;** a heavy machinery used to remove stumps of trees from the land that is about to be cultivated.



- b. **Tractors;** It essentially consist of petrol or diesel engine, two small front wheels and two large rear wheels. The function of the tractor as a farm machinery is that it provides the power used for pulling and lifting agricultural implements such as the ploughs, harrows, drills, sprayers and other heavy equipment.





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- c. **Dusting machine;** It is a machine to apply chemical in dust form. Duster makes use of air streams to carry pesticides in dry form on the plants.



- d. **Seed drill;** used for sowing seeds at the appropriate length and distance.



- e. **Cultivator;** a piece of gardening equipment that can cultivate the soil, amend the soil, aerate the soil, and plant seeds. The main function of the cultivator is to prepare a proper seedbed for the crop to be planted, to bury crop residue in the soil, to control weeds, to mix and incorporate the soil to ensure the growing crop has enough water and nutrients to grow well during the growing season.





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- f. **Fertilizer spreader machine;** a device that is used to apply liquid or granular fertilizers, soil amendments, or other agricultural chemicals to fields.



- g. **Hay baler;** a machine that cuts and separates the stems of a bale of hay. It is typically used in feedlots, where the crop from the fields has been harvested and brought to a central location for storage or feeding.



- h. **Irrigation pump;** a device that moves water from one place to another. It is used to move water from a lower point to a higher point so that it can irrigate crops.



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- i. **Subsoiler**; used to break up and loosen the soil during deep tillage. It is used to improve the growth of crops in areas where soil compaction is a problem.



- j. **Sprayer machine**; this machine is used to apply fluids in the form of droplets, it is also used to apply herbicides, pesticides, and fertilizers on agricultural crops.



- k. **Harrow**; is a farm tool made up of curved metal lines attached to a frame. They are used to break up soil or smooth it, level the ground, turn over the earth, aerate it, and rake in compost.



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- I. **Backhoes;** a machine used for digging fence post holes or minor excavation jobs such as digging small ponds and water features.



### Reference

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2. [Agriculture Tools Names: Farming Tools and their Uses with Pictures \(occupationtools.com\)](#)
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