

**Intensive Farming Techniques,
Features, Advantage and
Disadvantage****The Scientific Agriculture (July 2022)
Volume 01, Issue 01, Page No. 12-17****Intensive Farming Techniques, Features, Advantage and Disadvantage**Tejendra Kumar^{1*}, Dr. Deepak Kumar²,
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Eternal University, Baru Sahib (H.P.) India^{3,4&5} Department of Floriculture, SVPUAT Meerut (U.P)*Email: - tejendrarsm@gmail.com**Introduction**

Intensive farming is the practice where a high quantity of labour and capital are engaged to maximize agriculture production. But the question always arises in everyone's mind:

What is intensive farming?

The answer is that it is labour-intensive agriculture whose main purpose is cultivation on a small tract with the help of manpower. To produce quality crops and maximum output, farmers use fertilizers and pesticides to a great extent. With the help of an intensive production system, farmers enhance the soil and crop quality.

It is a method where a large number of crops are grown with intensive use of agrochemicals and other input strategies to achieve a higher output. This farming system is the latest farming technique that helps increase the higher production from a specific land.

Basically, it is characterized by the high use of fertilizers for crops, medication and concentrated feeding for the livestock. This method mainly raises the livestock and feeds them on small land and increases their productivity which is generally known as intensive livestock farming.

Practices of Intensive Farming**A. Globally**

Intensive agriculture meaning is basically achieving high production from per unit of land. Mainly intensive subsistence farming is practiced in areas of globes such as Thailand, Korea, Japan, Indonesia, Taiwan and others. This farming is prominent in the high population density regions such as India, Bangladesh, China, Thailand etc.

B. In India

Indian farmers practice intensive wet paddy farming and intensive subsistence farming in India in many

regions such as Kerala, Tamil Nadu and West Bengal etc.

Intensive cropping agriculture registers a higher production per unit of the tract. For the best intensive agriculture examples, you can check the report of Japan, where the land available for farming is limited. Also, a similar kind of situation can be observed in Kerala, India.

Techniques of Intensive Farming

A. Livestock

The technique of intensive livestock production has many other technologies, including Pasture intensification, Rotational grazing and concentrated animal feeding operations.

1. Pasture Intensification

Pasture intensification is a term for pasture soils and grasses to increase the food production potential of livestock systems. This process is characterized by loss of forage because of overgrazing, poor nutrient management and lack of soil conservation. These adverse effects lead to the degradation of pasture soils which can decrease the water availability, and fertility and may increase the acidification. Deteriorate pastures may significantly lower productivity.

2. Rotational Grazing

Rotational grazing is a type of pasture in which herds are regularly and systematically moved to fresh, resting grazing areas to increase the quality and quantity of forage growth.

It can be used with cattle, sheep, goats, pigs, chickens, turkeys, ducks and other animals also. Herds graze one part of the pasture while allowing others to recover.

3. “Concentrated Animal Feeding Operations”, CAFO

Intensive **livestock farming**, or we can say factory farming is a kind of process where the livestock is raised in confinement at high density. The “Concentrated animal feeding operations” (CAFO), or “intensive livestock operations” department, can raise large numbers of livestock which can go up to hundreds or thousands, including intensive cow farming, turkeys, and hogs, intensive chicken farming etc. The motive of such kinds of farms is only the concentration of livestock in a given space. Aim of the CAFO is to provide higher output at low cost with the greatest level of food safety.

B. Crops

As we know, the green revolution transformed farming methods in many developing countries. It started many technologies and farming methods that already exist but have not been used extensively outside of the agriculture industry. However, even many average farmers are still unaware of such technologies. These technologies generally include “miracle seeds”, pesticides, irrigation, etc.

1. Seeds

That is, there is a need to buy seeds every season for annual crops, thereby increasing the cost and profit for the farmers.

2. Crop Rotation

Crop rotation is a method of practice of growing a series of different types of crops on the same land according to the seasons. The method of crop rotation also seeks to balance the demands of nutrients of different crops to avoid soil nutrient depletion. Crop rotation also helps to improve soil structure and fertility through alternative deep-rooted plants and shallow-rooted plants.

3. Irrigation

Although flood irrigation is the oldest and most prominent irrigation type in which a field receives excess water to deliver adequate quantities. But Crop irrigation mostly depends on the world's 70% freshwater.

4. Weed control

Weed management is necessary before every farming and is oftenly performs by machines, by manpower (manually) and by spraying.

C. Aquaculture

Aquaculture is a part of the cultivation of natural species of water that includes intensive fish farming, algae, and other water organisms. But intensive aquaculture techniques are implements on the land using ponds, tanks, and other water-controlled systems.

D. Sustainability

Practices of intensive farming in India are sustainable, which is develop to stop degrading agricultural land and then regenerate soil health and ecosystem services also. These upgrades include the intensive and organic farming category, a combination of organic and traditional farming. It includes bio intensive farming, agroforestry, intercropping and **vertical farming**.

Features of Intensive Farming

This farming is very prominent in India and more preferable by the farmers because it includes some of the basic characteristics/features. Here are some popular features of intensive subsistence farming which make it more demanding.

- 1) Needs smaller size land
- 2) Maximize labour are engaging
- 3) High crop production
- 4) Low capital requires
- 5) Climatic dependency is higher
- 6) Emphasis on grains production
- 7) Soil dependency is higher
- 8) Focused on manual or animal farming
- 9) Less modern technology



Advantage of Intensive Farming

There are some good effects of intensive farming that directly emphasize on higher production by intensive animal agriculture or manually. The advantage of this farming considers some of the advantages which we have mentioned below.

1. High Crop Production

High production of crops is one of the main benefits of intensive farming. Because agricultural products are in high demand in the global food market, including meat, eggs, milk, fish, cereals and so on. This farming and crop production are basically executed on a small piece of land in higher quantities.

2. Produce More Food Varieties

It is mainly concentrated on bulk food production in a crop cultivation or livestock farming also. This process prompts more resources of nourishment for human utilization. This farming requires high manpower, resources and capital, which makes it more focused on production area and quantity also.

Accordingly, the different farming in different areas by different farmers are engaged in intensive poultry production, intensive animal farming, intensive crop farming, etc. So this is the different kinds of intensive farming that mean a large production of more food in variety.

3. High Efficiency

Intensive farming is highly efficient because farmers make a higher profit on a small piece of tract compared to conventional farming. Additionally, it is more economical and efficient.

4. Affordable Prices

It produces vegetables, fruits, beef, meat, eggs, milk prices are more economical compared to traditional farming. Because it produces food in large quantities and requires less space. Intensive subsistence agriculture also helped in solving the scarcity of food by producing a good amount.

5. Helps in ensuring regulated farming

Various agricultural institutes and environmental protection agencies have taken the initiative to monitor and control the possible adverse effects of intensive farming.

Consequently, the agencies and agricultural research institutes have set certain rules and regulations on the use of farm inputs such as fertilizers, pesticides, growth hormones, and herbicides, and have even stated clear measures on how to maintain and manage livestock. This

ensures regulated farming which results in healthy, safe, and affordable farm produce.

6. Sustainable supply of food

With the demand for food soaring across the world due to the ever-increasing number of human populations, intensive farming offers the advantage of high crop productivity with the possibility of meeting the food market demands

Besides, it requires less amount of land which means that it significantly contributes to economies of scale in meeting the ever-escalating demand for food supplies.

Disadvantages of Intensive Farming

1. Poor living conditions and hygiene for livestock

Intensive farming is highly criticized and thought to be cruel to the animals. Because it involves the use of various chemicals, growth hormones and excess crowding on a small space, the outcome is usually poor living conditions and hygiene for the livestock. Keeping livestock above their capacity is associated with pollution and poor hygiene which results in infections and various diseases.

2. Excessive use of agro-chemicals

Intensive farming as earlier stated involves the utilization of numerous types of agro-chemicals including chemical pesticides, fertilizers, herbicides, insecticides, and acaricides. When these

chemicals are used, they not only destroy their intended targets such as pests, weeds and parasites but also contaminate the food products.

The insecticides and pesticides also kill beneficial insects which contribute to biodiversity loss. The workers and humans nearby are equally affected by the chemical sprays and humans who consume the food indirectly take in the chemicals.

3. Deforestation and alteration of the natural environment

Environmental studies and reports indicate that intensive farming impacts and degrade the environment in countless ways. The removal of trees, slash and burn techniques and the clearing of forest areas to create room for agriculture has led to massive deforestation and soil erosion.

As an outcome, natural habitats and wild animals have been heavily affected as the destructive practices have persistently contributed to habitat loss. The use of chemical fertilizers and herbicides contaminates water soils, wildlife habitats, and water bodies like oceans, rivers and lakes. Fertilizer nutrients in particular are the main cause of eutrophication in most of the world's water bodies such as oceans, lakes, and rivers.

4. Risks to human health

The vegetables and fruits are sourced from areas that practice intensive

farming and are full of invisible pesticides. The challenge is that the pesticides cannot be washed away easily and since the fruits and vegetables appear clean after a simple wash, humans indirectly consume the chemical pesticides.

The consumption of pesticides affects the health of humans with health risks such as physical deformity, skin allergy, and congenital diseases. ADHD in children, for example, is associated with the consumption of pesticides in agricultural food products.

5. Higher risks of cancer and birth defects

Public health publications and cancer statistics prove a direct correlation between the consumption of food sourced from intensive farming areas and an increasing number of cancer victims.

The consumption of food products procured from intensive farming areas is also said to be responsible for the increase in the number of congenital abnormality cases. Public health researchers say that the rising cases of children born with defects and cancer are probably caused by the consumption of inorganic fruits, meat, vegetables, and poultry.

6. The use of chemical hormones in food

The majority of the food products used in intensive farming systems, especially vegetables, fruits, poultry, and livestock are full of growth hormones. If

one takes a keen look at the intensive farming systems, he or she will realize there are many hybrid varieties of plants, poultry and livestock. Most of them are injected with growth hormones and other chemicals to augment production.

7. Possibility of poor quality food products

Since intensive farming centres primarily on mass production of nice-looking food products, the production strategies overlook the need for quality and nutritious food products.

As a consequence, the quality of foods sourced from intensive farming sites often lacks the same nutrition values as compared to those produced using conventional farming methods or organic farming.

Intensive farming simply aims to produce perfectly looking yields and to possibly extend their shelf life instead of enhancing nutritional value and taste which breeds room for poor quality food products in the long run.

8. Traditional farmers are unable to gain enough profits and less job creation opportunities

Intensive farming as opposed to traditional farming utilizes less space, labour and resources to produce much greater volumes. This makes it very hard for traditional farmers to compete. Also, considering how industrialized intensive farming is, it does not lots of job per unit of food produced which means less job creation opportunities.