

An Overview on the Problems of Small Scale Farming

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ABSTRACT: *Tiny-scale farming refers to the practice of farming on a small plot of land. Aside from the many advantages of small-scale farming, such as increased production, better quality, and more employment, it also has significant disadvantages, such as financial instability, lower profit, and a high health risk (because most of the work has been done manually). Because of the excellent quality of the food produced by small-scale farming, there is a strong demand for it, which leads to better health. This review article addressed the difficulties and possibilities of small scale farming by examining all elements of the small scale farming. It will also investigate every varied component connected to small scale farming, such as its characteristics, advantages, demerits, and challenges. Because small-scale farming requires less equipment (and thus more manpower), it is critical to promote small-scale farming as a means of generating employment in rural regions in the near future.*

KEYWORDS: *Crop, Farming, Food, Farmers, Small Scale Farming.*

1. INTRODUCTION

Because it supplies food for survival, farming has been regarded a cornerstone of our civilization for thousands of years. It makes use of natural resources such as land, water, and light to create food. For many years, people have used tiny plots of land to produce food for their family and others close to them. Tiny-scale farming is the practice of farming on a small piece of land. Small-scale farming is often carried out by small farmers in rural regions due to a lack of money. With the passage of time, the world's population grows dramatically, increasing the need for food. Commercial farming is born out of the need for food. Commercial farming is often done on vast plots of land to provide food for society rather than for individual households. Profit is a factor in commercial farming. Although it provided a huge amount of food for humanity, the most frequent problem connected with industrial farming is poor food quality. Chemical pesticides and plant growth regulators are used in commercial farming to produce food, which have negative health and environmental consequences[1]–[3].

Small-scale farming, on the other hand, provides high-quality food because it utilizes bio-fertilizers and self-grown seeds to create high-quality crops. Most individuals nowadays have unhealthy lifestyles that include little physical exercise, a high intake of junk food, and a stressful work life, all of which contribute to ill health. People in metropolitan areas primarily eat food produced by commercial farming; commercial farming produces food with less nutrients, resulting in nutritional deficiency in the body. People nowadays value their health above all else, which is why they seek for nutritious foods. The increasing demand for high-quality food propels small-scale farming in a favorable direction. Small-scale farming uses biological components to develop crops, which is why the food produced by small-scale farming is nutrient-dense. Small-scale farming has a number of advantages, including better supervision (because to the fact that it is done on a small piece of land), more employment (due to the fact that it uses less machinery), more

productivity (due to the high cropping rate), and the ability to react quickly (because it is easy for the owner or farmer to take quick decision in frequent weather and climate change condition for relatively small land farm). Aside from the many benefits, small-scale farming has certain disadvantages, such as lower profits due to a lack of commercial motivation[4]–[6]. Figure 1 illustrates the Small Scale Farming.



Figure 1: Illustrates the Small Scale Farming[7]

1.1 Evolution of Farming:

Farming began at least ten thousand years ago in southern and northern China, as well as in certain parts of America. Crop rotation, herbicides, irrigation, and fertilizers were all investigated long ago, but considerable progress was achieved in the last century. People hunted animals using various homemade tools in the early stages, and after learning about fire, they began to roast animals in fire by hanging on top of it. As human understanding grew, people began to investigate plants and animals for food, followed by agricultural production expertise. People have begun to investigate agricultural production techniques after gaining sufficient understanding about plants.

Initially, the majority of people began farming on tiny plots of land. They began to manufacture their meals by using natural resources like as land, water, and light. Farmers use natural ways to produce their own seeds for their crops. Small-scale farming produces high-quality food since it mostly uses bio fertilizers, which have a beneficial effect on crops. In terms of environmental health and human health, small-scale farming plays a critical role. As the world's population grows, so does the need for food. In this respect, an improved agricultural system is required to meet the

increasing society's food requirements. Commercial farming enters the scene to meet this need. In order to produce food on a big scale, commercial farming is done on comparatively larger area. In general, the commercial agricultural system is profit-driven. Commercial farming systems use chemical pesticides and plant growth regulators instead of bio-fertilizers to produce food. The primary disadvantage of commercial farming is the poor quality of food produced as a result of chemical fertilizers. Another disadvantage is the release of carbon dioxide as a result of the usage of equipment[8]–[10].

1.2 Small Scale Farming and Its Characteristics:

Small-scale farming is often carried out by small farmers from rural regions who lack sufficient money. In general, most farmers in rural regions possess a small plot of land that they use for food production. They typically prepare meals for their immediate family and friends. The food that is produced is usually sold in the local markets. Manpower and manual tools, rather than equipment, are used in small-scale farming. There are a number of features connected with small-scale farming, which are shown in Figure 2.

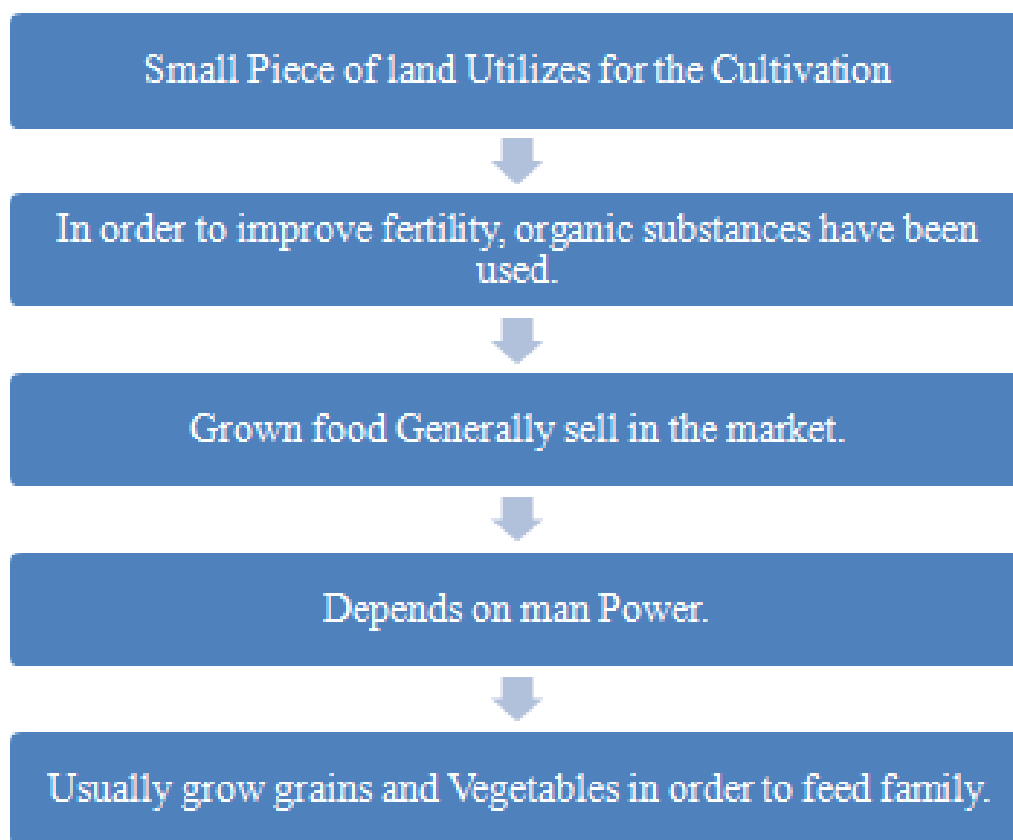


Figure 2: Schematic Representation of the Small Scale Farming Characteristics.

1.3 Merits of Small Scale Farming:

Small-scale farming is well-known for the high quality of its produce, as well as a variety of other characteristics and features. The following are the primary advantages of small-scale farming:

- *Better Management of Crop:*

As previously said, small-scale farming is carried out on tiny plots of land. Farmers can easily manage their crops due to the limited amount of land they have. The cultivation is dependent on labor and small-scale farming. Due to a lack of equipment, all cultivation processes in small-scale farming rely on people. Workers' supervision and management play a critical role in this respect. Better supervision may be provided simply and successfully in small-scale farming to ensure that work is completed correctly and efficiently.

- *Provide Higher Employment:*

Small-scale farming relies on a large number of people rather than big machinery and equipment. Small-scale farming is often done by rural farmers, who do not utilize equipment for crop production owing to a lack of money and resources. Small-scale farming offers large-scale employment in rural regions, allowing individuals who do not own property to make a livelihood. This is a significant benefit of small-scale farming. Because the majority of the people in India lives in rural regions, small-scale farming plays an important role in generating employment.

- *High Production:*

Another advantage of small-scale farming is increased production. The high yield is attributable to the efficient use of labor per acre in the cultivation process. The high cropping rate is the primary cause for the increased output in small-scale farming. To meet the family's need for food, the domestic work standard rises in order to produce on a small plot of land farm. Higher productivity has been shown in many research linked to agriculture. Small-scale farming encourages the consumption of local, fresh foods, which is beneficial to one's health. After employment, high productivity is the second most important benefit of small-scale farming.

- *Better Control during Frequent Weather or Climate Change:*

Nature's weather and environment are totally unpredictable. Because farming is heavily influenced by weather and environment, small-scale farming plays an essential part in crop production. Small-scale farmers can make fast decisions in favor of crop output preservation in the event of frequent weather or climatic change. Crop output may be improved by making good and timely decisions; yet, making late decisions might have a negative impact on crop productivity. Because of the tiny size of the property, the owner or farmer can keep a close eye on crop output, allowing for greater agricultural management during periods of extreme weather or climate change. Small-scale farming will be more successful than commercial farming in areas where the weather varies often, since commercial farming requires a large amount of land.

Challenges Associated With Small Scale Farming:

Small-scale farming confronts a number of difficulties and issues that obstruct development. The following are some of the potential obstacles:

- *Lack of Financial Assistance:*

Small-scale farmers confront many challenges during economic downturns due to a lack of financial support. They can't afford adequate comfort since they spend the majority of their money on farming in order to feed their families.

- *Lack of Education and Research:*

Because small-scale farmers lack the financial resources to invest in education and research, they are unable to improve their farming methods, which have an impact on crop production.

- *Health Risk:*

Manpower, rather than machinery, is used in small-scale farming. Laborers often utilize basic instruments for cultivation, which may result in damage.

- *High Dependency on Natural Factors:*

Small-scale farmers are beset by inclement weather and climate change. Small-scale farmers' crops may be totally destroyed by severe weather conditions, which would have a negative impact on their financial situation.

- *Certification:*

Small-scale farmers' products have a certification issue, which has an impact on their saleability.

1.4 Factors That Promote Better Future of Small Scale Farming:

Small-scale farmers' products offer a lot of advantages, which makes this farming method more popular. Aside from the many benefits, the small-scale agricultural system has certain difficulties. It is critical to overcome difficulties in order to ensure a better future for small-scale farming systems. There are certain issues that need to be solved in order for small-scale farming to have a brighter future. Some are stated below:

- *Financial Assistance:*

Small-scale farmers may benefit from improved financial support in a variety of ways. During economic downturns, they may continue to invest in farming, which will help feed their families while also allowing them to make money by selling part of their goods on the market. Another benefit of financial support is that it may assist in the upgrading of their farming methods in order to increase crop output.

- *Better Transportation Connectivity:*

Small-scale farmers often sell their crops or commodities in local markets, which provide lower profits. Better transportation connection will enable them to move their products and sell them in distant markets for a higher profit.

- *Education and Research:*

Education and research are critical for every field's development. Small-scale farmers often cultivate their land using traditional methods. Investing in education and research to enhance agricultural yield or output may be very beneficial.

- *Certification and Promotion:*

Small-scale farmers' goods are now confronted with the issue of standardized products. The absence of standardized goods has an impact on sales. Certification and marketing are required to promote products produced by small-scale farmers. The involvement of government policy may

be critical in this situation. Small-scale farmers' goods will sell better if proper certification and marketing policies are in place.

2. DISCUSSION

The majority of the world's population still lives in rural regions and relies on agriculture. Tiny-scale farmers with little plots of land conduct farming on their small plots of land (generally referred as small scale farming). The main goal of small-scale farming is to feed their families. Because small-scale farmers employ biological ingredients for growing, the food they produce is of high quality. Instead of using equipment, family members and few local employees have been doing various tasks of agriculture in small scale agricultural systems. Small-scale farming employs a significant number of people, which boosts employment in rural regions. Small-scale farmers often sell their produce in a local market, which helps to ensure that people have access to fresh food. Small-scale farming comes with a number of advantages as well as some drawbacks. Small-scale farming is often carried out by rural farmers. These farmers lack the financial resources to invest in education and research, and they confront many challenges in surviving during economic downturns. Climate and weather change are another major issue. There is a risk of crop damage during severe weather. Financial support, certification and promotion, education and research, and improved transportation connections are all elements that must be addressed in order to make small-scale farming more successful and productive.

3. CONCLUSION

Small-scale farming is a well-known agricultural method due to the high quality of the food it produces. Small-scale farming is carried out on a small farm with a large number of people doing various agricultural chores using basic equipment. The primary benefits of small-scale farming include high output, high employment, better crop control in the face of frequent weather and climatic change, and better crop management. Small-scale farming is unable to progress due to a number of obstacles, including financial constraints, high production costs, difficulties obtaining financing, expensive raw materials, and a lack of research and development, among others. Proper policies may aid in the promotion of small-scale farming in order to overcome such obstacles. Increase agricultural yields through giving financial aid, improving transportation connections, and investing in research and development. It is suggested that small-scale farmers be educated about progress. The education may include subjects such as water management, soil nutrient management, and plant protection, among others. Another suggestion is to give small-scale farmers more electricity so that they may become self-sufficient.

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