

FEASIBILITY STUDY

Feasibility is defined as the practical extent to which a project can be performed successfully. To evaluate feasibility, a feasibility study is conducted to determine whether the proposed solution is workable, beneficial, and implementable using available resources. It examines the technology, operational needs, and cost implications associated with the system. The study helps determine whether AgroHub should proceed to further stages of system development.

The results of this feasibility study recommend whether it is worth continuing with requirements engineering and system development. A system with no support to real user needs or business goals has little value. Therefore, this feasibility study ensures AgroHub aligns with the needs of farmers, equipment owners, and administrators involved in agricultural activities.

The primary objective of the feasibility study is to establish solid reasons for developing the AgroHub system in a manner that is acceptable to users, adaptable to future changes, and compliant with academic and industry standards.

Objectives of Feasibility Study:

- To analyze whether the software meets organizational and user requirements.
- To determine whether AgroHub can be implemented using current technologies and within acceptable time and budget limits.
- To examine whether the platform can integrate with additional systems such as weather APIs or external data sources.

Types of Feasibility

1. Technical Feasibility

Technical feasibility determines whether the existing technical resources are sufficient to develop and run AgroHub.

- The required technologies such as HTML, CSS, JavaScript, PHP, MySQL are stable, well-established, and widely supported.
- These technologies are suitable for developing modules like machine rental, tutorials, workforce hiring, and digital agreements.
- The development team possesses the necessary skills to work with the chosen technologies.
- Hardware requirements are minimal (standard computer system, local server/XAMPP).

Thus, AgroHub is technically feasible.

2. Operational Feasibility

Operational feasibility evaluates whether the system will operate smoothly once it is developed.

- AgroHub solves real problems such as difficulty in accessing machines, workers, and safe rental processes.
- Farmers, owners, and admins will find the system easy to use with dedicated login portals and simple navigation.
- Users will adapt easily since the platform provides clear tutorials, guidelines, and structured flows.
- Digital agreements and insurance options increase trust and acceptance among users.

Hence, AgroHub is operationally feasible.

3. Economic Feasibility

Economic feasibility assesses the cost-effectiveness of developing AgroHub.

- The project uses free or open-source tools (PHP, MySQL, HTML/CSS) reducing software development cost.
- No additional hardware investment is required beyond standard computers.
- The project increases long-term value by reducing manual effort and improving access to machines.
- Development costs are limited to academic project requirements.

Thus, AgroHub is economically feasible.