Definition Of Ready

# Background

Smart Hydro has been a project that has been going on since 2023. Since then, as data is collected on the plants grown, what went right and wrong over the years, it subsequently affects the following years research. As of now (2025), below are things that need to be addressed before the team jumps into design, development and possible deployment of the project, as well as defining the new research.

## Definition of Ready – Mobile app checklist with hardware connection

### Hardware

* Acceptance criteria are clearly defined and testable for the hardware.
* Design specifications are documented, reviewed, and validated against farmer needs.
* Improvement strategies based on previous year’s research are documented and approved.
* Tunnel system specifications are complete, reviewed, and aligned with research criteria
* Design strategies for timings and solution management are identified, outlined and verified against farmers need.
* Strategies to keep costs low as well as account for minimal infrastructure align with farmers constraints.
* Risk mitigation is drawn up to minimize delay in working with the tents. (Example blown components).

### Tech-stack

#### Technical Capabilities

* User story is clearly defined and involves pertinent users.
* Farmer requirements for application are documented and used in planning
* Appropriate technology stacks are researched and documented to go forward with for development.
* Constraints for remote farms are considered.
* Objective is clear and aligns with requirements.

#### UI/UX

* Users of all age are considered and defined.
* UI/UX mock ups are drawn up.
* Design is for ease of use for even non-technical members.
* Design a user-friendly interface with consistent theming.

#### Backend

* Proposed APIs or other services are defined, and appropriate patterns are used.
* Platform-specific capabilities are considered when designing backend.
* Researching 0 cost services to provide no cost to farmers.

#### Testing

* Acceptance criteria are revised and through testing is done.
* Necessary CI/CD pipelines are designed via GitHub.
* High quality level defined early on for reference.