

# Village Supply System

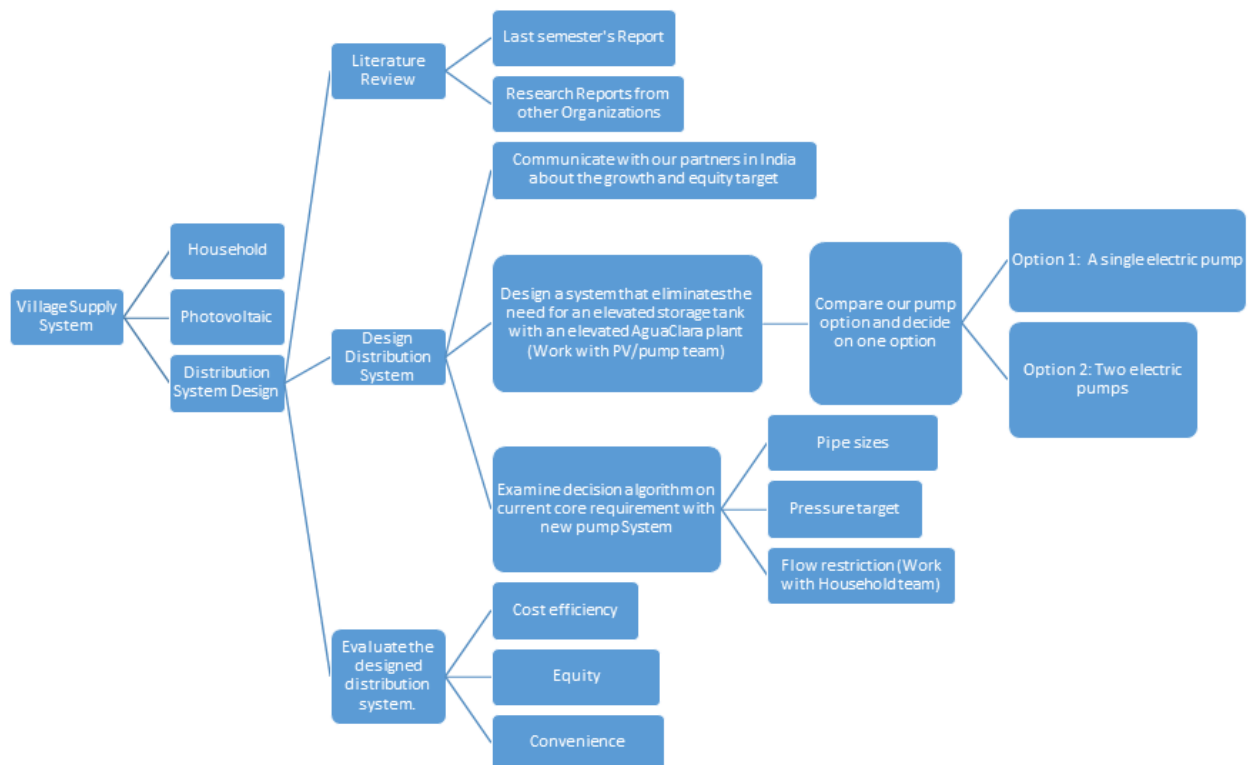
## Distribution System Design

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### Task List

#### Task Map



#### Task details

##### Literature Review **Completed**

- Last semester's Report (Maria Veronica 9/24)
- Research Reports from other Organizations (Tianchen 9/24)
- Write a comprehensive summary (Ji Young 9/24)

The new design will base mainly on the previous work. The main goal of our team is to achieve the flow equity between the houses with a relatively low cost.

## Design Distribution System *Continue working on it*

- Communicate with our partners in India about the growth and equity target (Jiyoung 10/10)
- Evaluate the design that eliminates the need for an elevated storage tank and an elevated AguaClara plant (Maria Veronica 10/18)
- Compare and decide on the number of pumps (work with PV/Pump subteam)
  - Option 1: A single electric pump sends water through a pressurized LFSRSF and to the town. Chlorine and coagulant are both somehow metered into the influent of the pump (Tianchen 10/18)
  - Option 2: One electric pump lifts water from the well to an Agua Clara facility that is at ground level. A second electric pump sends water to the distribution system (Jiyoung 10/18)
- Core requirement
  - pipe sizes (Tianchen 10/25)
  - Pressure target (Maria Veronica 10/25)
  - Flow restriction (work with Household team) (Jiyoung 10/25)

## Evaluate the designed distribution system.

- Cost efficiency (Tianchen 11/25)
- Equity (Maria Veronica 11/25)
- Convenience (Jiyoung 11/25)