

## User Story:

Once upon a time, in a small town, a visionary company decided to build a new factory, which can make ecological fuel from microplastics gathered from the ocean. They had acquired a piece of land and were eager to create not just a factory, but an ecological community for their employees. In the beginning, the factory would employ twenty people: Two in management, one in marketing, five in research and development, eight factory workers, a janitor, a cleaner, and two kitchen staff.

The company wanted to ensure that their employees and their families would have everything they needed. So, they planned to build apartments for those who needed temporary housing. to accommodate different needs and preferences. They also planned to build a grocery store, health care, a daycare and a sports center to make the workplace attractive for families.

The company was committed to sustainability. They wanted work and living environments to be as ecologically sustainable as possible. They believed that a green, self-sufficient community would not only attract employees but also ensure they stayed happy and healthy.

The project had a tight timeline. The company aimed to have everything ready in about 12 weeks. They knew it was ambitious, but they were determined to make it happen. They believed that with careful planning and hard work, they could create a thriving, sustainable community that would be a model for others to follow.

## Initial Plan:

The overall goal is to build a sustainable factory that turns microplastics into ecological fuel while simultaneously creating an ecological community for employees and their families. The project is planned to be completed within 12 weeks, following an Agile Scrum methodology. It is best way to initial planning. And our owner is Khuman Singh Rana and as par development, and scrum master is Parth Mangukiya.

### Key Objectives:

**Factory Setup:** Establish the factory that processes microplastics into ecological fuel.

**Community Infrastructure:** Build apartments, grocery store, healthcare, daycare, and sports center for employees.

**Hiring and Onboarding:** Recruit management, marketing, R&D, factory workers, janitors, and kitchen staff.

**Sustainability:** Ensure the factory and community are environmentally sustainable.

**Project Delivery:** Complete everything within the 12-week timeline.

## **Product Backlog:**

The product backlog contains all tasks needed for project completion.

## **Backlog Item:**

### **Factory Setup:**

- Finalize the eco-friendly design of the factory.
- Clear land and lay foundation.
- Install production machinery for processing microplastics.
- Set up energy systems (solar panels, water recycling, etc.).
- Conduct safety and operational tests.

### **Community Infrastructure:**

- Design and build apartments for temporary housing.
- Set up a grocery store.
- Construct a daycare center and a healthcare clinic.
- Build a sports center for employee recreation.
- Install utilities (electricity, water, internet).

### **Sustainability Features:**

- Plan and implement waste recycling and management.
- Set up renewable energy sources (solar panels, wind energy).
- Build community gardens and green spaces.

### **Hiring and Onboarding:**

- Recruit two managers, one marketing staff, and five R&D employees.
- Hire eight factory workers, one janitor, one cleaner, and two kitchen staff.
- Onboard and train all employees.

### **Procurement and Setup:**

- Procure factory equipment and machinery.
- Purchase raw materials for factory operations.
- Procure furniture and supplies for apartments and communal spaces.

### **Permits and Legal:**

- Secure environmental and building permits.

- Ensure compliance with health and safety regulations.
- Set up legal contracts for employees and suppliers.

### **Marketing and Community Engagement:**

- Plan and execute a marketing campaign for hiring.
- Communicate with the community about the project's environmental impact.

## **Sprint 1 (Weeks 1–3): Setup and Early Development**

### **Sprint Goals:**

- **Factory and Land Preparation.**
- **Initial Hiring.**
- **Begin Design of Community Buildings.**

### **Week-1 Planning:**

As a construction team, we need the factory site cleared so we can start laying the foundation.

As HR, we need to hire key management and marketing personnel to begin planning operations.

As a project team, we need to finalize the design of apartments and the grocery store to ensure they are ecologically sustainable.

### **Sprint Tasks-To Do:**

- Clear the factory land and lay the foundation.
- Begin construction of the factory building.
- Finalize eco-friendly design of apartments and community infrastructure.
- Hire two managers and one marketing staff.
- Procure initial equipment for the factory setup.
- Submit all necessary building and environmental permits.

### **Expected Deliverables:**

- Factory land prepared and foundation laid.
- Construction of the factory initiated.
- Initial hiring completed (management and marketing).
- Design of apartments and grocery store finalized.

## **Sprint 2 (Weeks 4–6): Construction and Intermediate Setup**

### **Sprint Goals:**

- **Continue Construction of the Factory.**
- **Begin Construction of Community Infrastructure.**
- **Further Hiring**

### **Week - 2 Planning:**

As a construction team, we need to build the factory walls and install basic infrastructure to move forward with machinery installation.

As HR, we need to hire the R&D team and factory workers to begin planning operations and processes.

As a project team, we need to start the construction of the apartments and communal facilities.

### **Sprint Tasks – To Do:**

- Complete factory building structure (walls, roofing, etc.).
- Start installing production machinery in the factory.
- Start construction of apartments and communal facilities (grocery store, healthcare).
- Hire R&D team and factory workers.
- Set up utilities (electricity, water) for the factory and housing.

### **Expected Deliverables:**

- Factory building structure completed.
- Initial factory machinery installed.
- Construction of community apartments and facilities initiated.
- R&D team and factory workers hired.

## **Sprint 3 (Weeks 7–9): Operational Testing and Final Construction**

### **Sprint Goals:**

- **Factory Operational Testing.**
- **Complete Community Infrastructure.**
- **Final Hiring and Onboarding.**

### **Week-3 Planning:**

- As the project team, we need to finish the factory setup and begin testing production systems to ensure everything works smoothly.
- As construction workers, we need to finish building the community apartments, grocery store, and healthcare facilities to be ready for employee occupancy.
- As HR, we need to complete the hiring of remaining staff and train them for their roles.

### **Sprint Tasks – To Do:**

- Complete factory setup, including final machinery installation.
- Conduct testing for factory operations and safety.
- Finish the construction of apartments, grocery store, daycare, and healthcare center.
- Complete hiring of janitors, cleaners, and kitchen staff.
- Onboard and train remaining employees.

### **Expected Deliverables:**

- Factory operational with successful testing.
- Community infrastructure completed.
- All staff hired and trained.

### **Sprint 4 (Weeks 10–12): Final Launch and Handover**

#### **Sprint Goals:**

- **Final Testing and Launch.**
- **Move Employees into Apartments.**
- **Official Launch of the Factory and Community.**

#### **Week-4 Planning:**

- As the project team, we need to ensure that all systems are fully operational and ready for the final launch.
- As the HR team, we need to move employees and their families into the new community and ensure that they are settled.
- As management, we want to hold a grand opening to launch the factory and community officially.

#### **Sprint Tasks-To Do:**

- Conduct final testing of factory production.
- Finish furnishing and outfitting community buildings.
- Move employees and their families into their new apartments.
- Conduct a grand opening ceremony for the factory and community.

#### **Expected Deliverables:**

- Factory fully operational with product being produced.
- Employees moved into their new community.

- Official grand opening held.

## **Burndown Chart:**

### **Week 1-12 Burndown Chart:**

Total Week	Total Tasks (100)	Remaining Taskas
1	100	90
3	90	70
6	70	45
9	45	20
12	20	0

### **Explanation:**

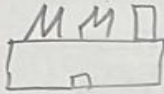
The chart starts with 100 total points (representing all tasks).

Progressively, the number of tasks decreases as sprints are completed.

By the end of week 12, all tasks are completed, reaching 0 remaining task.

## Which I need

1) Factory Setup

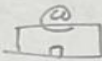


→ Factory - 2

2, Community infrastructures.



- Apartment



grocery store

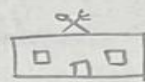


health center

3, office areas



office



kitchen



clean land

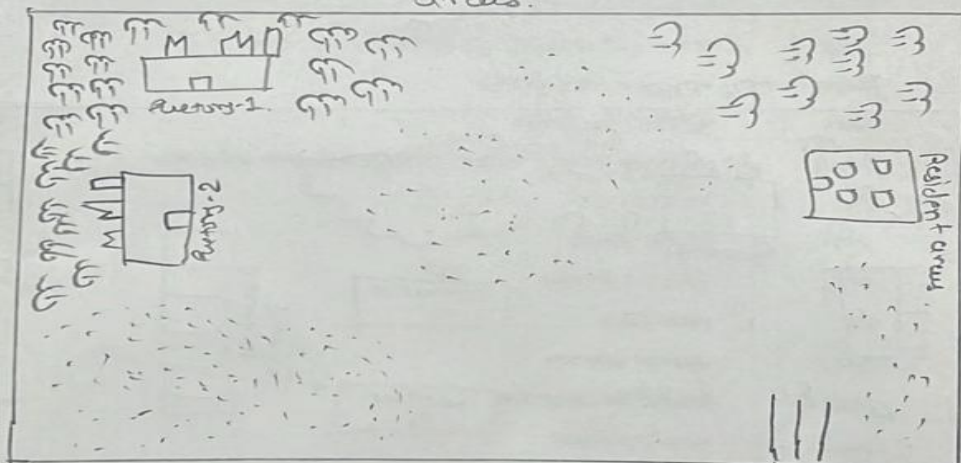
4, Environmentally areas



} all Required need given within 12 weeks before.

1) first week - 13 → To - Do.

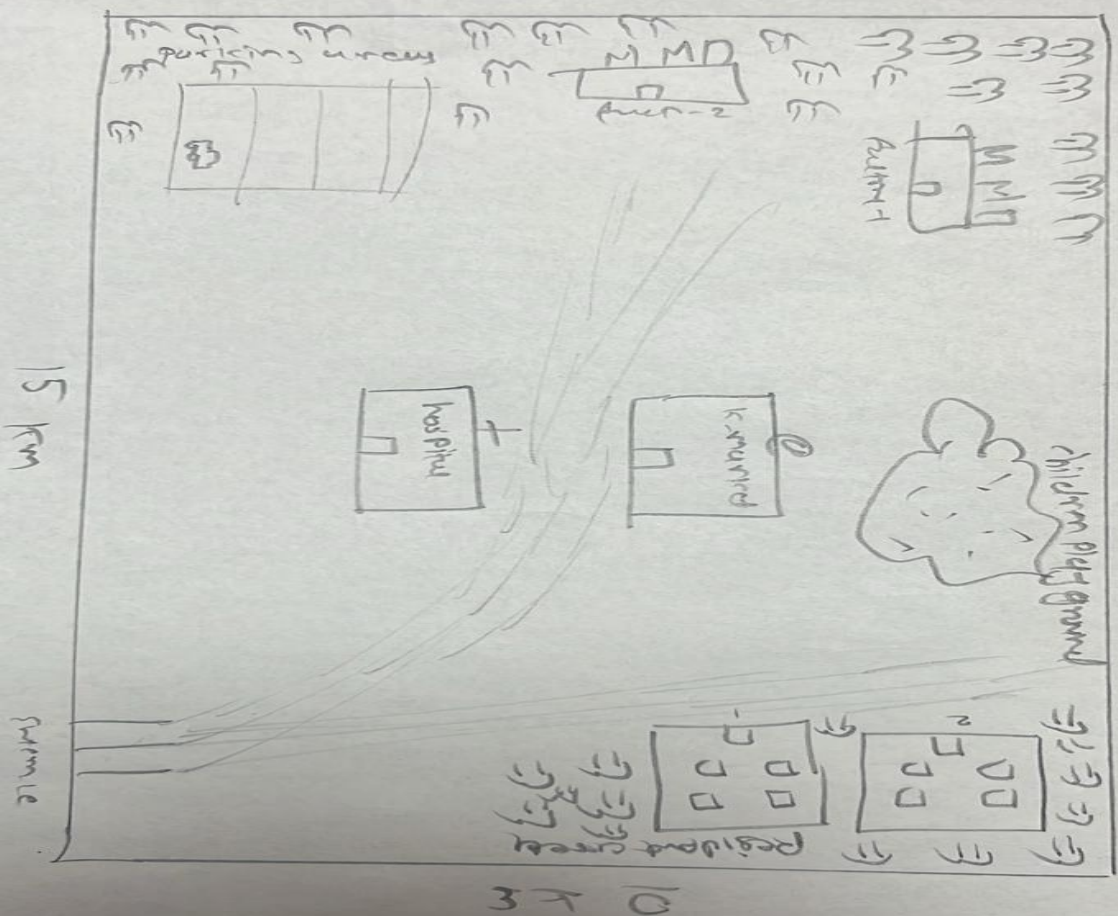
areas.



15 km.

10 km

2) Week-4-6 : To Do :



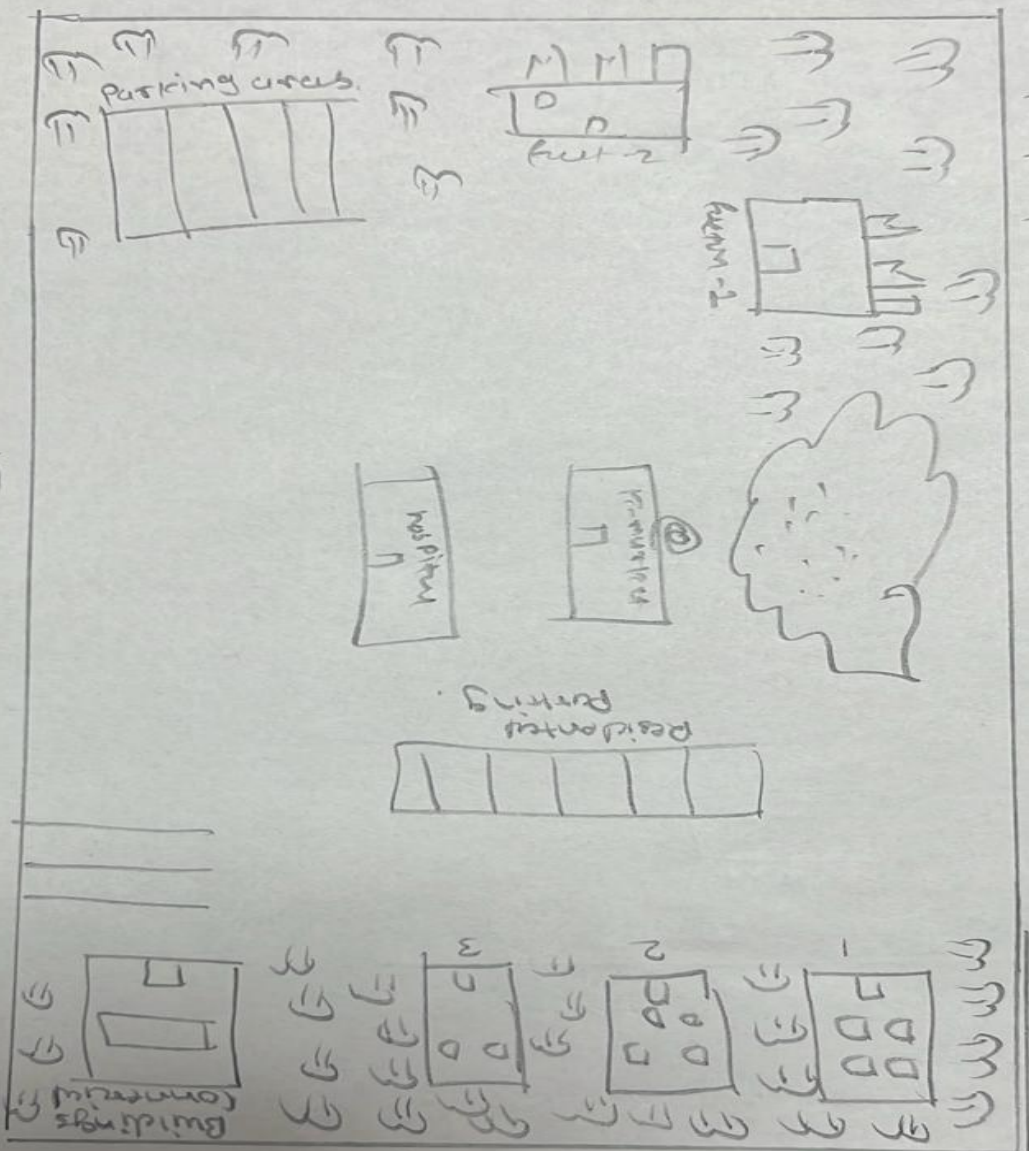
3) Week-7-9 To Do :



15 km

Sample

③ week-7-9 to do:



15 km

10 km