

# Garden Fleet (P032)

## Quick recap

The Garden Fleet team met to discuss the project's strategic pivot toward a more focused approach to addressing plastic pollution in the Philippines. The meeting covered project scope refinement, funding strategies, technical development plans, and local implementation challenges.

## Key Decisions

- **Primary Focus:** Center the project on the Garden Cube technology for processing plastic waste into eco-bricks
- **Funding Strategy:** Pursue angel investment (particularly through Rotary Club connections) rather than crowdfunding at this stage
- **Immediate Priority:** Develop technical blueprints before approaching investors
- **Scope Reduction:** Scale back broader environmental initiatives to make the project more fundable and achievable

## Main Discussion Points

- **Garden Cube Technology:** Abu-Bakr presented the Garden Cube as an emissions-controlled device that will process plastic waste into building materials (eco-bricks) using automated machinery
- **Technical Challenges:** Petros raised concerns about the lack of blueprints and mechanical designs, emphasizing that proper documentation is essential before seeking significant funding or government collaboration
- **Funding Approach:** The team discussed the need for pre-seed funding to develop structural ideas and prototypes. Larger funding sources typically require university involvement
- **Alternative Focus Areas:** Petros suggested considering soil erosion as a potential angle to attract broader societal interest and government funding

- **Local Implementation:** Braiden shared insights from field work, highlighting that while communities are actively collecting plastic waste, there's no effective processing or disposal system in place, with municipal governments struggling to handle collected materials
- **Government Accreditation:** Therese discussed ongoing efforts to get Garden Fleet accredited with the city government to facilitate partnerships and networking with other NGOs in the environmental sector
- **Successful Pilot:** Implementation in Mandarangat where street cleaners were paid to collect plastic waste for a community garden project
- **Future Projects:** Plans include an eco-building project at a penal colony using prisoners to create eco-bricks, and interest from an NGO in Port Barton

## Next steps

- Abu-Bakr: Start working on preliminary blueprints for the Garden Cube device with an engineering friend, to prepare for future presentations to angel investors 📅
- Braiden: Send local interview files and materials (including interviews with LGUs and community members) to Abu-Bakr for inclusion in presentations 📅
- Therese: Share the ECO IWahig proposal/report with Abu-Bakr 📅
- Abu-Bakr: Incorporate LGU/community materials into updated presentations and proposals 📅
- Abu-Bakr: Refocus and reword project scope to lead with Garden Cube for future presentations 📅
- Braiden: Continue engagement with local government officials regarding accreditation and partnerships 📅
- Therese/Braiden: Submit necessary papers for accreditation with the city government to join the local people's Council 📅
- Abu-Bakr: Wait to approach angel investors until blueprints and updated materials are complete 📅
- Abu-Bakr: Share the new presentation with Therese (as requested by Therese) 📅
- Braiden: Share the link to his drive with Abu-Bakr (follow-up from earlier in the meeting) 📅

# Summary

## Universal Credit and Project Updates

### Meeting Setup & Universal Credit Discussion

The meeting began with technical setup discussions between David and Abu-Bakr, including screen sharing capabilities.

**PHC Port System:** David explained that the PHC port system serves as a central hub for various projects, with hundreds of projects currently active and a human rights project overseeing and lobbying for support across these initiatives.

## Angel Investment and Project Planning

### Funding Strategy Discussion

David and Abu-Bakr explored various funding approaches for kickstarting the Garden Fleet project.

- **Angel Investment Focus:** The team decided to prioritize angel investment through Rotary Club connections as the primary funding pathway
- **Rosemary Connection:** David mentioned having a conversation with Rosemary about inviting Abu-Bakr to the next Rotary Club meeting
- **Presentation Reformatting:** Plans to create a leaner presentation more focused on humanitarian efforts, with three different approaches being considered
- **Governance Inclusion:** David emphasized the importance of including governance in funding proposals, though acknowledged that finding funding specifically for governance might be challenging

## Project Governance and Cost Structure

### Project Governance & Cost Structure

The team discussed governance structures and cost considerations for the project.

 **Key Point:** While the PAC platform itself would be free to use, David and others involved would not be free of charge

**Cost Optimization:** The group discussed potentially reducing costs by removing allocations for trainees and project people, though David emphasized the importance of providing sufficient support during the initial 6-month period.

**New Participants:** The meeting included welcoming Therese who joined later, and technical discussions about file sharing through Dropbox.

## Garden Fleet Plastic Pollution Initiative

### Garden Fleet Overview & Problem Statement

Abu-Bakr presented a comprehensive update on Garden Fleet's mission and approach to addressing plastic pollution in the Philippines.

#### Two Main Problems Identified:

1. **Public Health Crisis:** Microplastics causing serious health issues in local communities
2. **Environmental Impact:** Massive plastic waste accumulation affecting beaches, waterways, and streets

#### Garden Fleet's Solution:

- **Waste Interception:** Collecting plastic from beaches, waterways, and streets before it causes further damage
- **EcoBricks Production:** Processing and recycling collected plastic into EcoBricks, described as the simplest and lowest-cost solution
- **Community Engagement:** Working with indigenous communities for cleanup activities
- **Education Component:** Providing educational opportunities about anti-pollution and recycling practices

# Plastic Waste to Eco-Bricks Project

## Eco-Bricks Production Process

Abu-Bakr detailed the technical process for converting plastic waste into usable building materials.

### Production Method:

- **Collection:** Gathering plastic waste from various sources
- **Sorting:** Categorizing plastics by type
- **Processing:** Using a simple method involving Coca-Cola bottles, rice husk, mud, and sand
- **Automation:** The approach aims to be faster and more automated than traditional manual methods
- **Equipment Sourcing:** Machinery potentially sourced from suppliers like Alibaba

### Partnership with Golden Door Education Program:

Abu-Bakr outlined a partnership with Tahira Amir Khan's Golden Door Education Program, which includes:

- Youth education about plastic pollution
- Creating a recycling culture in communities
- Development of eco-homes using eco-bricks
- Promoting behavioral change regarding waste disposal

## Garden Fleet Project Updates

### Garden Fleet Technology & Systems

Abu-Bakr demonstrated new features and systems being developed for the Garden Fleet project.

## **PHC Database System:**

- Public database for transparency and accountability
- Tracks financial oversight and donations
- Monitors project impact and outcomes

## **Garden Cube Device:**

- Future emissions-controlled plastic recycling device
- Designed to process plastic waste more efficiently
- Requires blueprints and engineering specifications (currently in development)

## **Local Implementation Progress:**

**City Government Accreditation:** Therese discussed the project's application for city government accreditation to facilitate partnerships.

**Successful Implementation in Mandarangat:** Street cleaners were paid to collect plastic waste, which was then used to create a community garden using eco-bricks.

**School and Community Programs:** Ongoing efforts to implement eco-brick production in schools and local communities.


## **Eco-Brick Project Planning Discussion**

### **Expansion Projects & Technical Concerns**

#### **New Eco-Building Initiatives:**

- **Penal Colony Project:** Therese discussed a new project at a penal colony where prisoners will help create eco-bricks from plastic waste using a mobile machine
- **Port Barton NGO Interest:** Another NGO in Port Barton expressed interest in the technology, though they would need to fund the machine themselves

#### **Critical Technical Gap:**

 **Petros' Concern:** Lack of blueprints or mechanical design for the plastic processing machine. Proper documentation is essential before seeking significant funding or government collaboration.

## Project Funding and Scope Reduction

### Project Scope & Funding Challenges

The team had an in-depth discussion about narrowing the project scope to improve fundability.

### Key Concerns Raised by Petros:

- Lack of specific blueprints and technical specifications
- Need for pre-seed funding to develop structural ideas and prototypes
- Suggestion to focus on soil erosion as it could attract broader societal interest and government funding
- Questions about timeline for measuring environmental damage and the methodology needed to track changes over time

### Abu-Bakr's Response - Scope Reduction Strategy:

- **Phase 1:** Start with eco-brick production using pre-existing machines
- **Phase 2:** Later expand to include environmental testing and GIS data collection
- **Rationale:** Making the project more fundable and achievable by focusing on concrete, immediate solutions

## Plastic Disposal and Microplastic Strategy

### Strategic Discussion: Microplastics & Education

Petros and Abu-Bakr discussed the balance between immediate plastic disposal solutions and longer-term educational initiatives.

## **Petros' Recommendations:**

- Focus on both plastic disposal and microplastic removal
- Emphasize educational initiatives about plastic pollution
- Engage with government on soil erosion issues in the Philippines

## **Abu-Bakr's Pragmatic Approach:**

- **Current Limitations:** Garden Fleet is a small, decentralized team with limited resources
- **Gradual Scaling:** Start with manual EcoBricks production, then scale to mechanized systems and education programs
- **Investment Focus:** Keep initial goals investable for angel investors
- **University Partnerships:** Noted that larger funding sources typically require university involvement

## **Garden Cube Plastic Waste Solution**


### **Final Strategy: Garden Cube as Primary Solution**

The team reached consensus on focusing the project around the Garden Cube technology.

### **Strategic Pivot:**

- Focus on Garden Cube technology as the primary solution for plastic waste disposal in Palawan
- Move away from pursuing broader environmental initiatives in the short term
- Concentrate resources on developing one viable solution rather than spreading efforts too thin

### **Field Reality Check - Braiden's Insights:**

 **Local Challenge:** Communities are actively collecting plastic waste, but there's no effective processing or disposal system in place. Municipal governments are struggling to handle the collected materials.

This gap validates the need for the Garden Cube as a practical processing solution.

### **Revised Funding Strategy:**

- **Primary Path:** Pursue angel investment rather than crowdfunding
- **Immediate Action:** Abu-Bakr to work on blueprints for the Garden Cube device
- **Hold Crowdfunding:** Put crowdfunding efforts on hold until the project is further developed with technical specifications

### **Government Relations:**

Therese reported that the team needs to submit papers for city government accreditation, which will enable networking with other NGOs and government officials in the environmental sector.