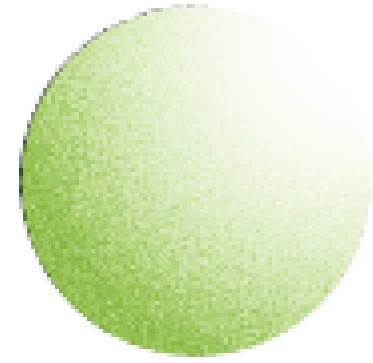




ATENEO DE NAGA UNIVERSITY

madya,
makakan
FOOD TO FOOD CIRCULARITY



The Team



ELLAINE BASTERECHIA
1-LAW
Procurement



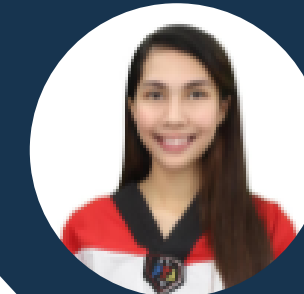
KRISTALEEN TRISHA LAGASCA
4-BS Civil Engineering
Communications



JHON REI DEL MUNDO
4-BS Civil Engineering
Finance



JERICO REMOROZA
3- BS Marketing Management
Marketing



MICHELLE DE VERGARA
4- BS Civil Engineering
Research & Development



PROBLEM

CAMPUS STAKEHOLDERS SURVEY



daily food wastes in ADNU cafeteria



tons of food waste



dump truck of waste

vendors, students, faculty and staff, and ADNU administration

NAGA CITY SOLID WASTE MANAGEMENT OFFICE, 2022



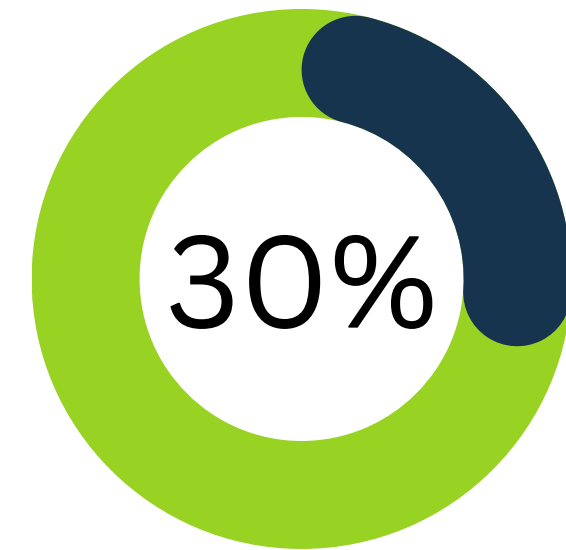
tons of garbage every day



dump trucks



NAGA CITY PLANNING AND DEVELOPMENT OFFICE, 2015



of solid waste in the city is food waste



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SOLUTION

- **Co-creation**
- **Take -back system**
- **Partnership**
- **Commendable Customer Service**
- **Customer Feedbacks**

FOOD-TO-FOOD FRAMEWORK

1

Organic food compost production through bioreactors that use energy from the grid and solar panels

2

Food waste utilization as fertilizer through accelerated composting

3

Food resilience in ADNU through Makakan kitchen garden

4

Promotion of farm-to-plate scheme through the partnership with ADNU cafeteria



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BENEFICIARY & PROGRESS

MARKET SEGMENTS



Local & Immediate Farmers



Local & community-based vendors



External Partners & stakeholders

BENEFITS



Reduction of Food waste that emits Carbon



Promotion of Organic & sustainable farming

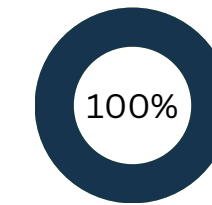


Co-creation & social enterprising

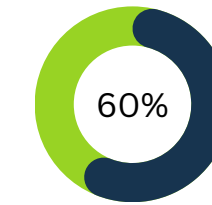


Responding to the call for Social Responsibility

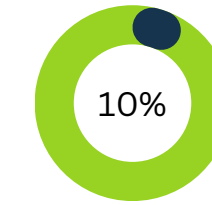
PROGRESS



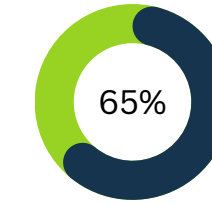
Procurement of Biocomposter



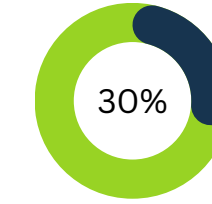
Establishing of an organization



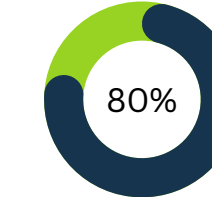
Trial of Composting process



Research & Development



Establishing of Partnerships



Membership recruitment



GOALS

SHORT-TERM

- Encourage students in the University to compost their own food wastes
- Increase the number of bio-composter
- Increase the use of food waste as fertilizer for soil-based plants and hydroponics
- Reduce the electric cost of composting
- Increase the number of students and members that promotes the food circularity to increase manpower
- Create more partnership with external stakeholders to promote collaboration

LONG-TERM

- Develop our own bio-composter
- Expedite the composting process at least 3/4 to 1/2 of the time spent using the current composter.
- Promote sustainable and organic farming to the local farmers
- Expand partnerships to neighboring schools, municipalities, and provinces and further the networks and linkages to the whole country.
- Create an application that connects a device to the composter to allow automatic composting.



IMPACTS & RESULTS

PROJECT IMPACTS



Encourages more individual to partake in the common goal of achieving no food waste in the campus.

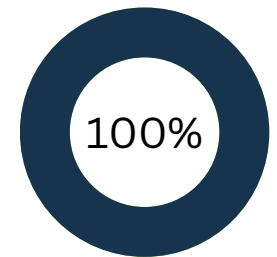


Promotes social and environmental responsibility through sustainable actions and practices

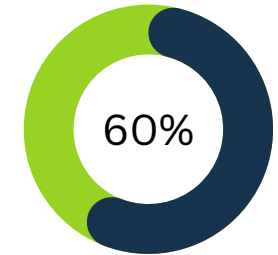
GOALS & MILESTONES ACHIEVED



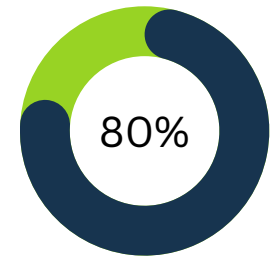
Procurement of composter



Creation of an organization



Recruitment of new members



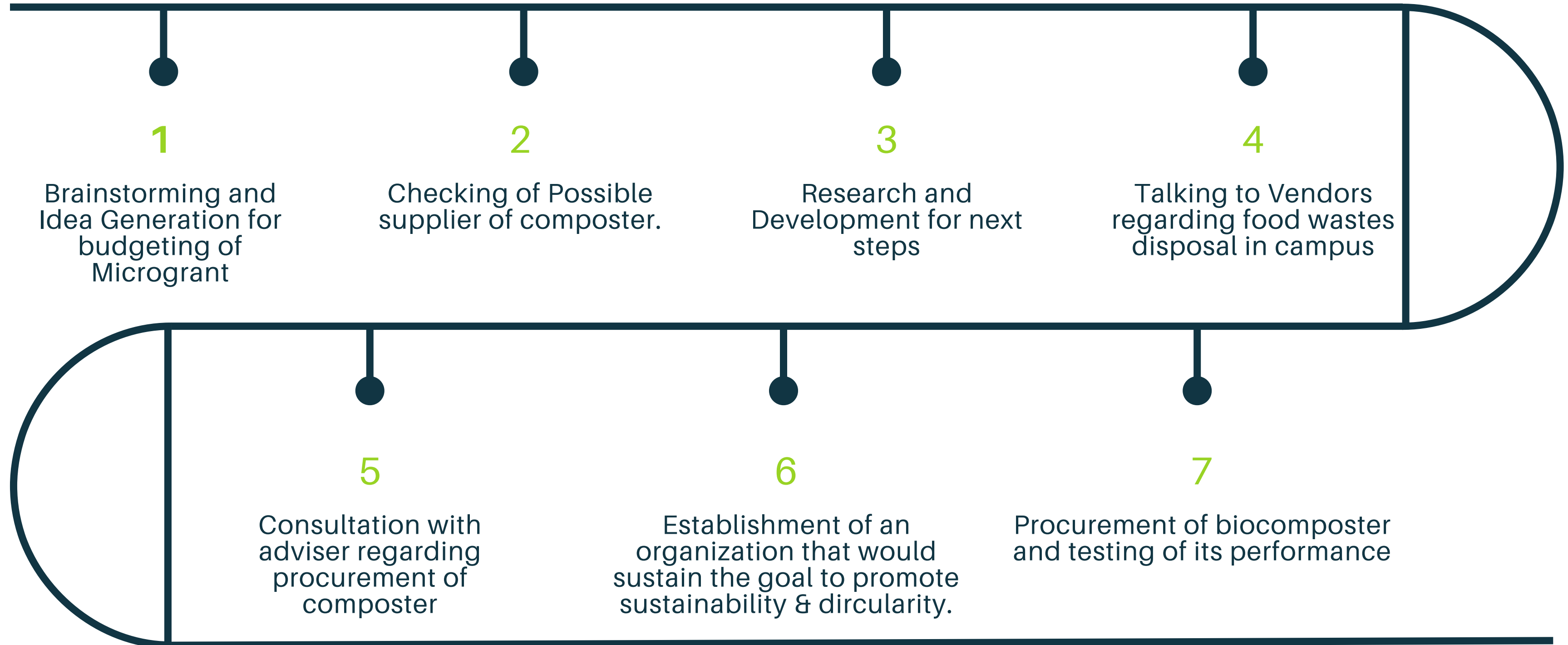
"We have an unwavering commitment to our social responsibility program; it's good for business, and we know it's the right thing to do."

Robert J. Fisher



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MICROGRANT MILESTONES





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Pilot Testing

Quantify the volume of fertilizers produced everyday according to the situation of food waste.



Partnerships

Develop partnership with local farmers and business owners to supply ferstilizers



Marketing

Create a concrete marketing strategy to strengthen the sales and promote the goals of the startup



Bio-composter

Develop a biocomposter that composts food waste at least 1/2 to 3/4 of the time spent on composting using the current composter

**MAKAKAN NEXT STEPS
PROJECT ROADMAP**





STORIES & LESSONS

“

The Circular Cities Asia Bootcamp program allowed me to experience and venture into the world of startups and businesses. The microgrant that planted hope in us to pursue our solution allowed us to devise solutions to some issues and enhanced our skills in responding to immediate calls and adapting to unforeseen changes. ”



JHON REI DEL MUNDO



MICHELLE DE VERGARA

“

The progress of business and technological ventures is not always aligned with our ideals in a linear fashion. Instead, it can exhibit exponential growth or follow a non-monotonic path, influenced by the decisions we make and the risks we take.

”



STORIES & LESSONS

“

There are lots of ideas and ideals that can come up during the planning stage of the project. However, the next steps we thought we could follow ultimately changed due to the constraints of reality's affairs. As such, we also gained skills that allow us to adjust and compromise for the interest of both parties, that we know will help us in achieving the very goal of our project.



KRISTALEEN TRISHA LAGASCA



JERICO REMOROZA

“

Attending Circular Cities Asia is a transformative journey that not only provides valuable knowledge and skills but also ignites my lifelong passion for sustainability and empowers individuals like me to make a positive impact to the whole universe as a whole. ”



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STORIES & LESSONS



ENGR. KHIM CATHLEEN SADDI

“

It was fun and also challenging to serve as a mentor in Circular Cities. Above all, we are grateful that initiatives like this are being made available to encourage and promote revolutionary science applications, opening more opportunities far away from the traditional corporate career path. With programs like these, and students like Team Makakan, it is a bright future indeed.

”



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NEW MEMBERS



BERNADETTE STA. CLARA



JOHN CARLO PEÑAS