

# YOUTH CLIMATHON

**Innovative solutions for the acceleration of climate action  
in Asia & the Pacific**

**EarthGuard Visionaries**

**Sustainable Harvests, Resilient Futures: Tackling Food  
Waste and Rice Field Catastrophes in the Philippines**

# Problem

The frequency and intensity of typhoons, flashfloods, and drought have exposed vulnerabilities in our agricultural sector. The root causes of this problem are twofold:

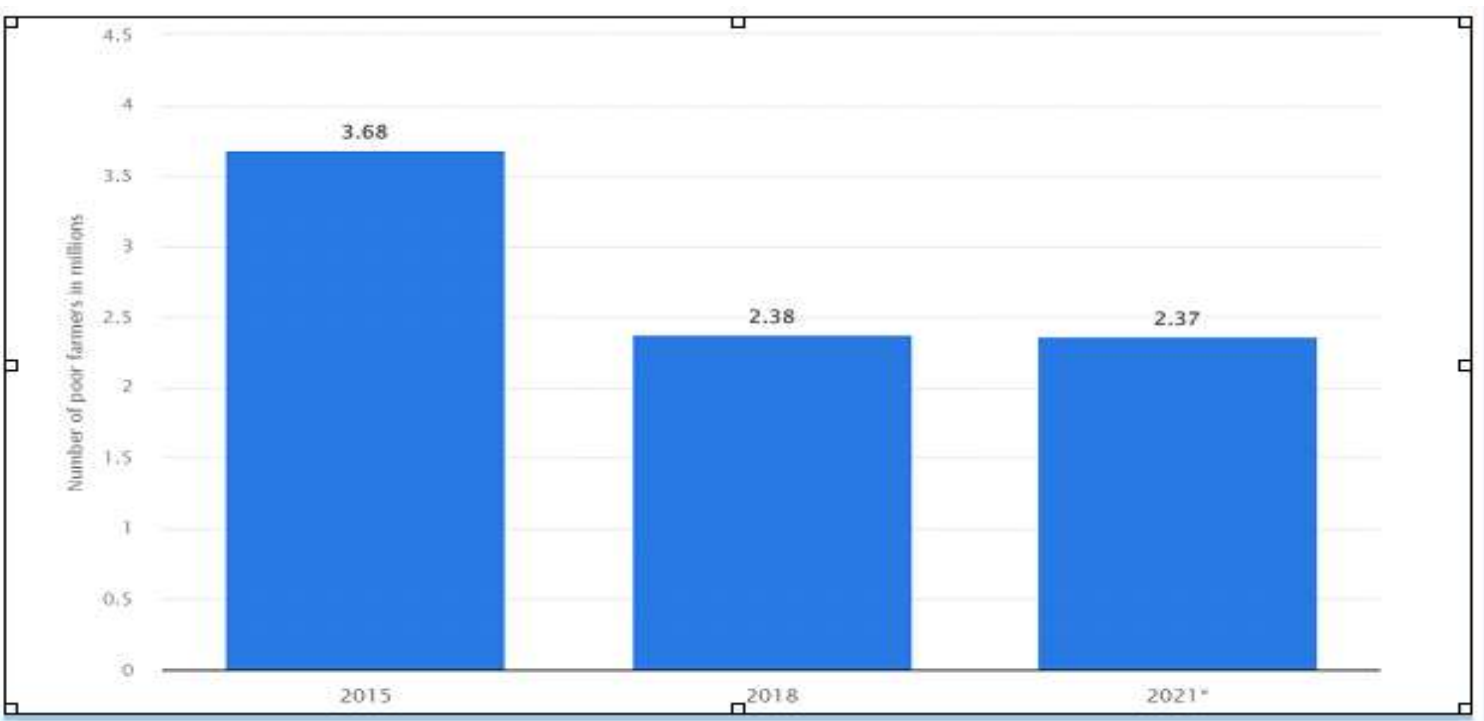
## Financial Challenges:

- Limited resources to address the impacts of extreme weather events.
- Farmers face significant financial burdens due to damage to crops and infrastructure.

## Educational Gaps:

- Insufficient knowledge and skills among farmers to adapt to changing climate conditions.
- Lack of access to modern farming practices exacerbates the challenges faced by our agricultural community.

These challenges lead to substantial investments in recovery efforts, farming failures, and a reduction in rice supply, affecting both the livelihoods of farmers and the overall stability of our food production



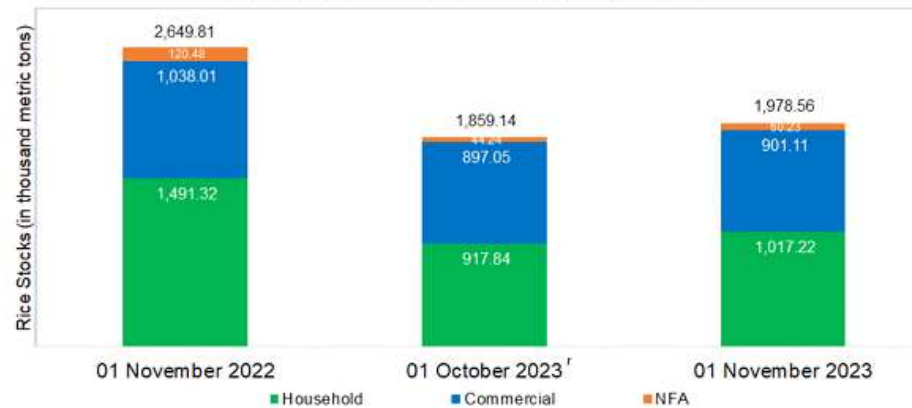
Source: Statistica.

Transitioning to the catastrophic events affecting rice fields. In recent years, the Philippines has experienced an increase in extreme weather events, including typhoons, flash floods, and droughts, leading to severe consequences for rice farming.

These catastrophic events directly impact the rice supply chain. Floods and droughts lead to crop failures, reducing the overall rice production and availability.

The economic losses for farmers are substantial, leading to increased poverty rates in affected communities. The broader impact includes food shortages, food insecurity, and potential malnutrition.

Figure 1. Inventory of Rice Stocks, Philippines  
November 2022, October 2023<sup>1</sup>, and November 2023



Source: : Philippines statistics Authority



# Interconnected Solutions

As young and EarthGuard visionaries, we have long-term practical objectives which will have positive outcomes and aim to achieve the objective set by international organizations and the government of Philippines about the food self-sufficiency

## ▶ Addressing Food Waste

**Implementing Efficient Practices:** To address food waste, there is a need to implement more efficient agricultural practices. This involves adopting modern technologies, improving storage facilities, and enhancing post-harvest management.

**Educational Initiatives:** Educating farmers on sustainable practices is crucial. Awareness campaigns at the consumer level can also contribute to reducing food waste.

## ▶ Mitigating Rice Field Catastrophe

**Climate-Smart Agriculture:** Adopting climate-smart agricultural practices is essential to mitigate the impact of changing weather patterns. This includes the use of drought-resistant crops, better water management, and early warning systems.

**Investment in Infrastructure:** Investing in infrastructure is key to protecting rice fields from extreme weather events. This includes the development of resilient irrigation systems and the use of technology for weather forecasting.

# Target Group

Our project aims to empower farmers between the ages of 20 to 40, embracing diversity in educational backgrounds, technological familiarity, and family structures so we can achieve our goals which seeks to enhance sustainable farming practices, instill financial literacy, open pathways to market access, and build resilient farming communities.



## Environmental and social impact

- **Empowerment of Farmers:**

Training programs empower farmers with knowledge, skills, and tools, enabling them to make informed decisions and enhance their livelihoods.

- **Community Resilience:**

Strengthening community ties through shared learning and collaborative practices builds resilience against economic and environmental challenges.

- **Economic Diversification:**

Entrepreneurial opportunities and market access initiatives support economic diversification, reducing dependency on traditional farming methods and create more job opportunities for young people working in this sector.

- **Local Market Growth:**

The connection between farmers and markets, facilitated by the project, supports local economies and contributes to the growth of sustainable agriculture.

- ▶ **Climate Resilience:**

Adoption of climate-smart agricultural practices increases the resilience of farming systems to changing weather patterns, mitigating the impact of climate change.

- ▶ **Biodiversity Preservation:**

Sustainable farming techniques, such as crop rotation and agroforestry, contribute to biodiversity preservation and healthier ecosystems.

- ▶ **Reduced Chemical Usage:**

Emphasis on organic and eco-friendly farming reduces the reliance on harmful pesticides and fertilizers, promoting a healthier environment.

- ▶ **Carbon Sequestration:**

Agroecological practices contribute to carbon sequestration, helping combat climate change.

## Costs & considerations

\$	฿	₱	₹	₺	₪	₹
<b>Initial Investment:</b>	<b>Tech nological Infras truct ure:</b>	<b>Educ ational Mater ials:</b>	<b>Tools and Equip ment for Farm ers:</b>	<b>Traini ng Progr ams and Work shops :</b>	<b>Infras truct ure Devel opme nt:</b>	<b>Mark eting and Outre ach Camp aigns:</b>
Mobile Applica tion/Pl atform Develo pment: \$2,000 - \$3,000 Data Analyti cs Tools: \$500 - \$1,000	Develo pment of Multime dia Conten t: \$1,000 - \$2,000 Transla tion Service s: \$100 - \$500	Drough t-resista nt seeds, farmin g implem ents, etc.: \$1,000 - \$3,000	Trainin g Materi als: \$500 - \$700 Facilita tor Fees and Travel Expens es: \$600 - \$1,000	Resilie nt Irrigati on System s: \$1,000- \$2,000	Adverti sing and Promot ion: \$100 - \$300 Contingency: \$500	

- ▶ **Ongoing Costs Per Year :**
- ▶ **Platform Maintenance and Upgrades:**
  - ▶ *Software Maintenance:* \$500 - \$1,000
  - ▶ *Regular Updates:* \$500 - \$800
- ▶ **Educational Programs and Workshops:**
  - ▶ *Continued Training Initiatives:* \$1,000 - \$2,000
  - ▶ *Training Materials:* \$700 - \$900
- ▶ **Monitoring and Evaluation:**
  - ▶ *Data Analysis and Evaluation:* \$1,500 - \$3,000
- ▶ **Community Engagement Programs:**
  - ▶ *Events and Field Schools:* \$1,000 - \$1,500
- ▶ **Marketing and Outreach:**
  - ▶ *Continued Promotion:* \$500 - \$800
- ▶ **Miscellaneous:**
  - ▶ *Contingency:* \$600 - \$800



## IMPLEMENTATION PLAN

### Project Launch and Foundation Project Kickoff

Established partnerships and secured agreements.  
 Launched awareness and community engagement initiatives.  
 Conducted a thorough needs assessment and baseline study.

**JUNE 2024**

### First-Year Milestones

Met first-year milestones.  
 Evaluated SMART objectives.  
 Launch the mobile application EarthGuard

**DEC 2024**

### 6-Month Progress

Initiated actions, showing 6-month progress.  
 Potentially achieved outlined goals.

**DEC 2025**

### 2-Year Projection

Completed actions aligned with the 2-year projection.  
 Achieved goals and objectives set for this period.

**DEC 2027**

### 3-Year Projection

Completed actions outlined for the 3-year projection.  
 Successfully achieved mid-term goals and milestones.

**DEC 2030**

### 5-Year Projection

Wide-scale adoption of sustainable farming practices.  
 Established network of resilient irrigation systems.  
 Enhanced financial stability for 100,000 farmers.

### Visionary Goal

Transform agricultural landscapes, fostering climate-smart practices across the Philippines.  
 Ensure long-term food security, biodiversity preservation, and thriving rural communities.

**2035**

# Partnerships

For the success of our we look forward to partnering with local government agricultural departments for access to resources, expertise, and potential funding such:

- ▶ **Philippine Rural Reconstruction Movement (PRRM):**

PRRM is a non-governmental organization focused on rural development, sustainable agriculture, and community empowerment. They have extensive experience working with farming communities and could provide valuable insights, networks, and support for your project.

- ▶ **International Rice Research Institute (IRRI):**

IRRI is a leading research institution based in the Philippines, specializing in rice research and sustainable agriculture. Partnering with IRRI can offer access to cutting-edge agricultural practices, research findings, and expertise in rice cultivation, which is a crucial aspect of Philippine agriculture.

As well independent national or international organizations which want to support the implementation of our plan.



# Team Members



**MINE MADJIREBAYE Delamour**

**Role:** Project Coordinator

**Education:** BSc. In Environmental Science, BTech. In IT

**Experiences :** I am a fourth-year student at Eurasian National University, specializing in environmental science with a focus on ecology and climate policy. I am also a student in IT, specializing in Cybersecurity. My participation in the II OIC Scientific Congress in Kazan reflects my engagement in cutting-edge scientific discussions. I have actively contributed to sustainable development goals projects, marking the beginning of my commitment to addressing global issues such as climate change. My leadership extends to winning the Best Project Presenter at the Bicocca Milano University Summer School in 2023. As an advocate for climate smart agriculture management and a participant in the youth smart agriculture Fellowship in 2022 in Kenya, I showcase dedication to environmental causes.



**JAMAICA Y. Taypin**

**Role:** Collaborator

**Education:** Bachelor of Elementary Education

**Experiences :** As a fourth-year Bachelor's student of Elementary Education, I've gained a strong academic foundation. My participation in the AYLIP 2023, both online and in-person, reflects a commitment to leadership development and cross-cultural understanding. I am an active member of the Guild of Elementary Educators, engaging in discussions and initiatives to enhance teaching practices. Additionally, my role as a community volunteer underscores my dedication to social impact and addressing local needs.

