

PROMOTING SUSTAINABILITY THROUGH EDUCATION VIA COMMUNITY-BASED SUSTAINABLE AGRICULTURE PROGRAM IN DESA HEGARMANAH

BACKGROUND OF THE ACTIVITY

Climate change, food insecurity, urban land limitations, and environmental degradation have become critical global and local challenges. In Desa Hegarmanah, although the soil is fertile, residents face limited access to knowledge and skills related to environmentally friendly and sustainable farming practices. Most residents still rely on conventional agricultural methods, which are less efficient and potentially harmful to the environment.



PRINCIPLES 8: A COMMITMENT TO PROMOTING SUSTAINABILITY THROUGH EDUCATION

ASSISTANT PROFESSOR AGUS FERNANDO, AND MR. J. BUDHI SUSETIYO,
FACULTY OF BUSINESS, PRESIDENT UNIVERSITY

AGRIBUSINESS
FACULTY OF BUSINESS

| Year 1 Fundamental Knowledge | | | | | |
|------------------------------|--------------------------------------|--|---------|---------------|--|
| Semester | Code | Subject | Credits | Total Credits | |
| 1 | PUN101 | Economic Survival 1: Business Creation / Internship Experience | 3 | 18 | |
| | AGB1001 | Fundamentals of Agricultural Science | 3 | | |
| | AGB1002 | Agribusiness Management | 3 | | |
| | AGB1003 | Agribusiness Marketing | 3 | | |
| | AGB1004 | Mathematics | 3 | | |
| | AGB1005 | Introduction to Agripreneurship | 3 | | |
| 2 | PUN102 | Economic Survival 2: Business Launch / Internship Experience | 3 | 21 | |
| | AGB1006 | Ulamas Capital Management | 3 | | |
| | AGB1007 | Sustainable Agriculture Development | 3 | | |
| | AGB1008 | Business Statistics | 3 | | |
| | AGB1009 | Introduction to Digital Business | 3 | | |
| | AGB1010 | Operations and Supply Chain Management | 3 | | |
| Short Semester 1 | AGB1011 | Rural Development and Sustainability | 3 | 9 | |
| | Economic Survival 3: Social Projects | | | | |
| | INA101 | Religion | 2 | | |
| | INA102 | Pancasila | 2 | | |
| | INA103 | Citizenship | 2 | | |
| | INA104 | Indonesian Language | 3 | | |
| Total | | | | 48 | |

To address this issue, President University initiated a Sustainable Agriculture Education Program as a practical implementation of sustainability education. This program aimed to introduce:

- Urban farming techniques,
- Hydroponic systems using recycled materials, and
- Environmentally responsible agricultural practices.

This initiative is part of President University's broader sustainability ecosystem, supported by 108 sustainability-related courses offered across 12 study programs, ensuring strong alignment between academic sustainability education and community empowerment.



PROGRESS OF THE ACTIVITY



The program was implemented on 17 July 2025 through several key stages:

a. Preparation Stage

- Community needs assessment in Desa Hegarmanah
- Coordination with village officials and Bhavana Farm
- Preparation of training materials, hydroponic prototypes, and recycled planting media

b. Implementation Stage

Activities included:

- Educational seminar on sustainable agriculture and urban farming
- Hands-on demonstration of hydroponic vegetable planting (using gallons and cocopeat)
- Training on recycling household waste into planting containers
- Interactive discussion on food security, environmental protection, and green entrepreneurship

The program involved 30 community participants, who actively engaged in both the theory and practice sessions.

c. Evaluation Stage

- Community feedback collection
- Observation of skill adoption
- Reflection session with student facilitators and supervising lecturers

OUTPUTS OF THE ACTIVITY

The key outputs achieved include:

- Increased community knowledge of sustainable agriculture practices
- Improved practical skills in hydroponic and urban farming systems
- Enhanced environmental awareness and responsibility
- Strengthened local food security through household-scale farming
- Community motivation to develop small-scale green businesses
- Strengthened collaboration between university, students, and rural communities

This program also created a sustainable mindset shift, encouraging communities to see sustainability as both an environmental responsibility and an economic opportunity





FUTURE ACTIVITIES

To ensure sustainability and wider impact, the following future plans are recommended:

- Replication of the sustainable agriculture program in other villages
- Development of advanced training modules on composting, organic fertilizers, and climate-smart agriculture
- Establishment of student-led sustainability mentoring programs
- Integration with local MSMEs for green entrepreneurship
- Long-term monitoring of food security and household farming productivity

