

**PARAHYANGAN CATHOLIC UNIVERSITY –
INTERNATIONAL TROPICAL ARCHITECTURE DESIGN COMPETITION 2013**

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Parahyangan

“Green Community (For University) – Green Shortcut (For Local Kampung Inhabitant)”

GREEN COMMUNITY

Green community in campus area is a vessel for inspiration and catalyst for improving nature’s condition and life quality of its inhabitant. It has to be able to act as a “wisemen” for every colleger and community around campus.

Nowadays its still rare to find a green community intergrated into campus in Indonesia. Many of this community have its own base and place, therefore they act on themselves as an independent organization. As an independent organization they have their own limit to find resources or support. By intergrating green community into campus we can get rid of the limitation and spreading nature friendly lifestyle as well as giving lesson to increase the respect and concern towards nature for the next generation.

The design placed in the center of Parahyangan University as a landmark. It act as a gathering space with the landscape of sustainable harvesting and conservation area. The harvesting area act as an example of nature potency, it gives vision to everyone about the benefit of conservation.

The green community gives contribution for local inhabitant around campus by giving them space for work and raise their economy, social and culture potency . This green community area create mutual symbiosis between campus and local inhabitant, where our campus could carry out our motto “Bakuning Hyang Mrih Guna Santatya Bhakti” (Based on Belief studying as a dedication for giving service to others) and local inhabitant around campus could get a job and better living.

GREEN SHORTCUT

The vision is to design a green system in the university through simplicity (Re-designing unfeasible building that cut the chain of student activity at the center of university area)

Design purpose is to create two main things :

1. To create more green and permeable area in 5 hectare site. Equipped with water, energy and biodiversity conservation system ,actively or passively.
2. Design as linkage :
 - a. To connect two student area activity existing (main plaza and student center)
 - b. To Connect a passive wind cycle university design in the macro with the strengthening wind tunnel in the middle area of the university
 - c. To connect and maximize energy and water treatment, effectively and efficiently
 - d. To connect university area with local housing area,, public green areas so that it can be enjoyed by all walks of life and make it easier and save energy for mobility, permeability of the 'Bukit Jarian Kampung'

BACKGROUND : PARAHYANGAN CATHOLIC UNIVERSITY

Small and Compact

Parahyangan Catholic University located in Ciumbuleuit Bandung. It was constructed in a 5 hectare site area which contain of 7 faculty and 15 department. Every department accommodate almost 200 new student every year which make this 5 hectare site area quite small to accommodate up to 3000 student everyday.

Hill area

The Ciumbuleuit area is a hill area with a lot of contour enveloping its surface. This condition gives character to landscape form in the site. There's almost 15m in difference of surface levelling which make contour as a notable element in landscaping of Parahyangan University.

Important Role of Parahyangan University

Parahyangan University is the catalyst for development of ciumbuleuit area. In the past, Ciumbuleuit area was just a rular area which have a very limited inhabitant. The construction of Parahyangan University attract

many people from different area in Bandung to move away from their initial location to Ciumbuleuit. The presence of Parahyangan University are giving economic chance for many people around Ciumbuleuit. The area around began to develop with Parahyangan University as its orientation thus making it into a developed area with adequate facilities as we can see right now.

However there's no container of activity for their colleger and local inhabitant, this condition creating a gap between them. Rarely we see interaction between colleger and local inhabitant around campus. This condition does not fit with the principle of catholic academy, which is to serve other nearby us.

SUSTAINABILITY DESIGN : Humble + Simple = Big Impact

a. GREEN HABITAT – Sustainability in green environment and atmosphere in university

- 1.** Create canal greywater water conservation system and water treatment that being combinated with waterscape and landscape in the university 'heart' area with simplicity and quiet from outside . Electricity conservation and micro biodiversity (solar panel and green house as the container of activity)
- 2.** Local inhabitant mobility energy saving as design indirect donation to help local inhabitant (green university not only in micro scale but also in macro scale) through the green shortcut connecting the entrance and public zone university straight to the local housing area . with the cooling system and natural lighting (sun tunnel and cross ventilation) on the path towards the village area

b. SIMBIOSIS (Sustainability in social aspect) – Interraction between student and local inhabitant

When the design is convenient, simple and innovative, it will make a social interraction between student and local inhabitant that causes a corporation norm and culture which led to the sustainability of social relationships - mutually beneficial between the parties

c. Reviving local inhabitant economy (sustainability in economy aspect)

Because of the interaction (symbiosis) will certainly produce needs and people trying to fulfill their needs, then the area designed to be a container of economy exchange area by maximizing the potential of local people to fulfill students needs (with selling foods,etc)

GREEN COMMUNITY AS THE GOAL

The gap between colleger and local inhabitant not only seen from rare interaction but also from less attention towards the condition of environment around. There is no concern and respect between them and nature of the environment.

We respond to this phenomenon by creating a container for activity between them with expectation that in the final stage this container could become a green community which maintain its environmental and social sustainability by preserving the interaction through economy and social activity.

Creating Social Activity

We respond the lack of concern and respect towards nature by creating a gathering area. This gathering area use a simple and humble form to accommodate many people and to synchronize the existing form with our new form. To ignite the interaction we put the gathering area in the center of our university. This gathering area act as a new focal point of our campus to attract colleger. The gathering area connects with 2 student plaza and act as a central gathering area. Local inhabitant around campus could gather there too from a shortcut that connect bukit jarian street (main road behind campus) with the gathering area.

Preserving Social Activity and Interaction

We accommodate the activity and interaction by creating a canteen area. This canteen area unite colleger with local inhabitant through economic activity thus bring out the sense of belonging and needs among the colleger and local inhabitant. Economic activity become the generator of activity that ensure the sustainability of social interaction (meeting – interacting – economic trading – sustainable activity).

Shaping Green Community Culture

As the interaction and social activity been made, to develop the environment we intergrate preservation of nature resources into the design. The circulation surrounded by green wall. The green wall can be used to plant crop that can be harvested. The waterscape not only using rain harvesting system but also to grow water vegetation. Fish can be grown in the waterscape too, it can be used for harvesting or act as a scenery in the big aquarium. In the end every harvested product can be given to local inhabitant to support their life as an act of concern and respect from the colleger. This system will give birth to green community around campus that sustain and give benefit to everyone involved.

SELF PROCESSED MATERIAL

The green community using bamboo as its primary material. It designed to be as simple as possible so it can be built by college. We use bamboo because it has been our local material so its easy to get. Bamboo is easy to processed (low effort) and low budget in maintenance. It gives strong local impression and character of Bandung – Indonesia. This low effort material can save a lot of energy while having a lot of the benefit it have.

Because of the low effort character, development of the green community building can be handled by college. By doing this we expect to build the independent character of other college and increasing their skill in manufacturing bamboo material.

HARVESTING

The principle of harvesting concept is to maintain the sustainability of nature and life. As we know through harvesting we could get renewable nature product. Food, drug substance, oxygen, and water are basic needs of every human to stay alive. Doing harvesting means staying alive by maintain the balance of nature. If human wants to keep alive they must not destroy the environment they lived in. A destroyed environment could not maintain the sustainability of every living things within. Why harvesting? So college and local inhabitant around campus could appreciate nature through personal experience and enjoy the result with maximum excitement. Yet through the simplicity of harvesting we can find the benefit within : to train our patience, to respect others, to blend with nature.

The basic nature product we proposed to be planted are : food product, drug substance product, and eco wetlands support product. Eco wetlands is a system where we preserve nature quality by using nature itself. Some example of eco wetlands support products are, akar

wangi/*chrysopogon zizanioides* (water treatment), enceng gondok/*eiichornia crassipes* (water treatment), catfish (waste eater), etc. The food products and drug substance products are planned to be given to local inhabitant. By doing this, college not only help them to live life easier but also to maintain good relationship.

WATER TREATMENT

Water canal was designed to intergrate within the green community area. The water canal designed to contain grey water and rainwater to be recycled and reused. Grey water and rainwater must be processed through ultrafiltration process and eco wetlands process before it can be used again.

The waste from harvesting can be reused too as a fertilizer and food for fishes. Through reusing material, much energy can be saved.

