

# Together, We Can !

## TABLE OF CONTENTS

More than just a building	1
Second prototype and ... garden	2
Real activism	3
Hands-on learning!	4

## GREEN VILLAGE

Edition spéciale

### Editorial

The key words for the Green Village project must surely be Perseverance and Professionalism, in the North as in the South:

- June 7th, 2015, official opening of the pilot building on Southville 7 relocation site in Philippines,
- June 22nd, 2015, the Cooperation department of the Luxembourg Ministry informed us that the project is validated for co-financing
- July, the prototype greenhouse comes into use

This special GV newsletter will give you a clear insight into the daily challenges, both technical and human, experienced by the Young Adults and the volunteers who work beside them, the considerations and concerns, the choices dictated by the terrain or by local constraints, the ongoing dialogue with the engineers and technicians who support and guide us,

and, finally, the permanent collaboration work with all the Green Village partners.

We hope that this newsletter, written by those in the field and put together by our local communication team, will allow you to experience this adventure alongside them.

In the South it's all systems go. In the North, with the help of our friends at CHL (Coopération Humanitaire Luxembourg) we have been able to acquire vital financial backing!

As the weeks go by we get to watch as this enormous dream become reality. We must not lose sight of that dream; let us all commit to doing whatever is necessary to guarantee its success.

**Jean-Marie DEMEURE**  
President, LP4Y Luxembourg



## MORE THAN JUST A BUILDING

**With the inauguration and blessing in June, the pilot structure in the Green Village officially became an important part of the community at Southville 7!**

A key role from the moment of its completion. Ever since its completion in April this building has had a special role for the Calauan Center and the surrounding community.. Before even its official inauguration it had already been used for 3 important events for the Young Adults:

- A presentation by our local partner, Lorna Tepper from the Bureau of Plants and Industry, on the construction of the greenhouse prototype, including technical issues regarding the design, optimizing the location, and typhoon emergency preparedness;
- A weekend of sharing and exchanging ideas with members of the Stars Club, the association which brings together graduates of the LP4Y programs; a fantastic opportunity for the Young Adults at the center to see what awaits them at the end of all their hard work;
- And finally, the award ceremony for five Young Adults from the Calauan center.

**Blessing by the Salesians of Don Bosco.** On June 7th thanks to the generous support of the Salesians of Don Bosco, who have supported the Calauan center since the beginning, we held the official opening of the Training Room prototype, in the presence of LP4Y founders Jean-Marc and Laure Delaporte. LP4Y is particularly grateful to Father Pablo Boy, who blessed the building, and to Levin Berris from the Municipality of Calauan, for her presence at this important event.

**A subject for a thesis!** Following the official opening the prototype has grown ever more important, and promises great



things for the Green Village project. Indeed professors and research students from the architecture and civil engineering departments of the renowned University of the Philippines Los Baños (UPLB) have come to view the pilot building on the site of the future Green Village. We will be setting up an exchange program allowing students from UP to write their theses on the subject of the building (with help from the Young Adults in the case of completed activities) in return for technical assistance provided in the Green Village. Representatives from the Forest Products Research and Development Institute (FPRDI) have also been to admire the Training Room and are considering making it the subject of future studies. These openings represent an amazing opportunity for the Young Adults at LP4Y who have for so long been excluded from education, giving due recognition for their work which is now the subject of academic research, and thus bringing them closer to the world that LP4Y is helping them aim for. Just one more accolade for the Training Room!

**It's growing!** We had talked of creating a community garden around the pilot structure, as always with a view to educating the Young Adults. And now it's a reality, thanks to the enthusiasm of the Young Adults, and with help from the parish of St Martin and once again the ever supportive Bureau of Plants and Industry. The first shoots are showing and the Young Adults can now look forward to balanced and nutritious meals.

**"Thank you."** We never get tired of saying it: a huge thank you to EDF Energie Nouvelles for giving us this amazing opportunity and for this wonderful new community learning center. The most recent event to be held there was the Life Project Presentations (LPP) on July 11th.



## SECOND PROTOTYPE AND... GARDEN



**There have been many incredible changes in the landscape on site 2 at Southville 7, between the first arch of the greenhouse prototype (the second pilot structure at the Green Village) and the first shoots in the garden round the Training Room prototype.**

**A real technical challenge.** As we described in the second newsletter, the Young Adults at the Calauan center are always looking for new learning opportunities (and challenges), and didn't hesitate when in May they were faced with the project of building the greenhouse prototype. They had already acquired numerous skills and construction techniques during their work on the Training Room, so work on this simple frameless greenhouse should have been easy ... But not at all! A greenhouse is nothing more than ... a tunnel. So how about a rectangular tunnel? Too easy! The Young Adults were drawn to the challenge of making arches out of bamboo. Over a period of several weeks they carried out various experiments on bending bamboo. But not just any bamboo; this bamboo has a diameter of over 100mm! So ... they tried applying heat with a blowtorch before bending, bending by cutting and gluing, bending after soaking, etc. They tried everything. But without success; the structure is extremely fragile and the techniques they tried are hard to put into practice on a building site. The Young Adults, unperturbed by these failures, attempted new methods and experiments, new approaches.

At last, a decision: to build a series of rough arches – sorts of bamboo polygons. They carried out new tests, starting with 20 pieces of bamboo, then 10, then 6 ... It proved extremely difficult to connect the sections of bamboo, and once again the Young Adults had to try different techniques, but this time they were helped enormously by the skills they had acquired when building the Training Room. It didn't take them long to decide to use bamboo pegs to make the connections, which seemed to be the right choice.

**Expert help.** As always, the Young Adults

are not alone; working alongside them are bamboo construction experts and their coach, Loïc. Moreover we are extremely fortunate in having the support of Lorna Tepper, a regular partner who is an expert in organic planting and crops and who has already enabled several Young Adults from the center to take a two week training course in the Bureau of Plants and Industry (BPI). So we asked her to come and see the design, at its already advanced stage, to give it her seal of approval and some technical pointers. With Lorna, the Young Adults learned about the importance of correctly orientating of the structure, largely in terms of wind direction, and positioning the greenhouse in relation to topography and surrounding trees (not really very important in this instance since it is just a prototype, but essential for the actual greenhouses in the Green Village). Next they learned how to protect the beautiful arched bamboo structure from storm damage. You just

have to remember to create a wind passage! Lorna shared with us all her expertise in greenhouse design, taking into account structural resistance in the face of typhoons, but also caring for the plants inside (drainage channels, trees for screening ...). This invaluable aid from a BPI expert has allowed the Young Adults to perfect and finalize their plans. And she has already made several suggestions regarding the organic planting on the future site of the Green Village at Lamot 2, specifically in terms of water supply options and the siting of the greenhouses etc.

**No need to reinvent everything.** In terms of the foundations and anchoring the arches, the Young Adults already know what to do. They just need to refer back to the Training Room. They will anchor the arches by means of metal plates soldered to the foundation's metal frame. The frame will in turn be bolted to the bamboo





## Testimony of **Lorna Tepper** from **Bureau of Plants and Industry**

**“The Bureau of Plant Industry-Los Baños National Crop Research, Development, and Production Support Center (BPI-LBNCRDPS) is grateful and honored to become part of LP4Y’s endeavor in helping and supporting Filipino youths who have been deprived of economic and academic opportunities. It is our pleasure to be of service by sharing the Center’s generated technologies like good quality organic seeds and planting materials and by having the youth for our internship program, where they had first-hand experience in agricultural production. We are inspired that even though most of your organizers are not Filipinos, it did not hinder your compassion to serve and uplift the Filipino youths’ potential. The Center believes that the future of the Philippines truly depends on the youth, thus their generation must be guided very well. BPI-LBNCRDPS will always welcome your organization and the youth for any assistance that the Center could provide. We hope that your initiatives can also encourage other Philippine government agencies and organizations to do the same.”**



arches, and “voila”.

**But wait a minute.** You may not know it, but water is one of bamboo’s worst enemies. Indeed if dry bamboo remains in contact with stagnant water for too long the bamboo will become moldy, losing its strength and thus its structural qualities. For this reason all the buildings in the Green Village have been designed to ensure they do not come into prolonged contact with water (wide sloping roofs, raised floors, ...). In view of the fact that the greenhouse has neither roof nor concrete slabs to protect it from the rain, the reinforced concrete at the base of the arches has been inclined to allow rain water to run off and not accumulate and stagnate.

**A second garden on its way!** Three arches have already been built, including one which has been raised into position. The greenhouse should be finished by early August, allowing for the planting of numerous organic seeds donated by the BPI. This covered garden will be in addition to the one which has already been planted around the Training Room, and is growing nicely, as explained on page 1. We were lucky enough to receive a donation of organic seeds and fruit trees from the BPI. The selection was made by their specialists to ensure a balanced supply of nutritional vegetables providing essential vitamins and minerals for the Young Adults. In addition the Young Adults have been collecting a range of plants from the surrounding wasteland, as well as from kind neighbors, usually in the form of young shoots (banana saplings, sweet potatoes, pineapples etc). In addition the Young Adults have transplanted those herbs which survived the typhoon’s destruction of the old greenhouse. The rainy season will do the rest: 5-6 hours of rainfall, every day, and



## REAL ACTIVISM

The Green Village project has evolved in pace with the challenges it has faced. As it has progressed, new needs and technical requirements have been drawn to our attention, calling for new partnerships. This increased activism in support of our ecological community project has served as further motivation for the Young Adults and the whole LP4Y team, as well as ensuring the success of the project.

**Local specialist experts.** In light of the new challenges we have faced, specifically a complete review of structural techniques to cope with natural disasters, and the need to adapt our plans to the terrain of the new site (mountains flanking an unusual topography), we have had to enlist the help of even more experts. In fact the project now requires highly specialized support in many key areas. In particular we have called on experts in the realms of bamboo construction, natural disaster management, and water management. In addition the Green Village needs partners who will work closely with the team; local experts who know the limitations of region and who have an existing local network of people who can be of help with the project.

**UPBL’s response.** With this in mind we are in the process of setting up a partnership with the renowned University of the Philippines, Los Baños (UPBL) which is about 35 minutes from the Southville 7 resettlement site. UPBL has been providing support for LP4Y since 2014 by inviting Young Adults from the program to their campus for English and IT tuition. This experience has been a resounding success, resulting in an exchange with the Green Village project.

Firstly through architect and Professor Aaron Julius Lecciones, a specialist in bioclimatic architecture and risk reduction who has shown great interest in the project and offered technical support for all things related to architectural design. He has also provided more general support for the Calauan Center, offering training in technical drawing to the Young Adults from the program.

Civil engineer and Professor Perlie Velasco was also quick to offer support, giving the benefit of her expertise in the areas of topographical problems, soil studies, phyto-purification of waste water, foundations and the structural strength of buildings, as well as supervising her research students who chose to make the Training Room prototype the subject of their research.

And lastly, researchers from the Forest Products Research and Development Institute (FPRDI) invited us to their center to set up collaborative work group. They are interested in carrying out tests on the finished prototypes and wish to discuss with us our reasons for choosing to work with bamboo, bringing to the table their own experiences of working with this material (drying techniques, treatment, different species etc).



# HANDS-ON LEARNING !

We make sure that the Young Adults acquire new skills at every turn, to ensure they get all they can out of the project and understand every aspect. For this reason we organize as many trips as possible to open them up and expose to life beyond the resettlement sites.

**Architecture exhibition.** The Young Adults were invited to De la Salle - College of Saint Benilde for the architecture students' end of year show. For many, this was their first opportunity to get a glimpse of university life, which some of them wish to explore after completing the PL4Y training. It also provided them with an excellent opportunity to learn about what architecture actually is, and to understand the factors and constraints which typically have to be taken into account, such as the flow of human and motorized traffic, utilities and features, environmental impact, topography, landscape ... These will be useful considerations when they come to review the architecture of the Green Village.

**Visit to a geothermal power plant.** The whole Calauan team got the chance to visit Aboitiz Power, a geothermal power plant. The Young Adults gained a first-hand understanding of energy production and consumption, discussing issues such as greenhouse gases, renewable energy, energy savings, and protecting the planet! The Young Adults are about to embark on the construction of the first eco-village in Luzon, the largest of the Philippine islands, and these notions are therefore of key importance, underpinning the construction and operating principles which must respect the environment and be energy efficient.

**Bamboo and automation.** George Berris, Mayor of Calauan, invited us to visit his family's bamboo factory which is automated with a range of cutting machines. The Young Adults observed the industrial process and the automation of repetitive tasks. We were also able to talk about the possibility of a partnership for the construction of the Green Village, whereby the Young could bring the bamboo here to manufacture the slats. At present this is done by hand, like the rest of the construction process. This partnership would reduce the construction time by two weeks for each site. The Young Adults also took the time to observe the treatment and drying techniques used in the factory. They were then able to compare them with the techniques they chose to use in the Green Village project, resulting in much valuable discussion.



## Comments of Nami, Keith & Richard

### Top moments

« Seeing and touching the stones and minerals removed from the soil at Aboitiz. »

« Watching the factory machines processing the bamboo, with explanations from one of the employees. »



### We didn't know

« ... that you could make water vapor from the heat of the ground and then use it to make electricity. »

« ... that there were machines that could cut bamboo, then make smaller slats, sand them and polish them ... that quickly! I didn't know that existed. »



### How we felt

« Impressed that you can make electricity with the ground. »

« I was scared – the machines were so quick!! »

« Surprised. I didn't know such machines existed. And I was inspired, because we could use that for the Green Village and we would save a lot of time! »

### Good reasons to start again

"It's really easy to learn like this."

"You learn without realizing."

"It will be useful for the project!"

## Together, We Can !

The newsletter of the LP4Y Alliance  
Written, edited and adapted in French and English by the LP4Y team in the Philippines, Vietnam, Indonesia, India, with help from LP4Y France, Belgium, Luxembourg and the USA.  
**Green Village Special Edition #3**, Together We Can! July 2015