# The Green Village - An Outline

A training center and eco-village dedicated to the integration of Young Adults from the slums of Manila, by means of entrepreneurship through 4 micro-economic activities.

In July 2012 we started visiting relocation sites. After completing an extensive needs study LP4Y decided to settle in Southville 7 (which we first visited with the Consuelo Foundation). We decided to set up a Life Project Center (LPC) which would be the main training center for our organization. Southville 7 today is home to more than 7,100 resettled families evicted from the slums of Manila and includes over 1,000 Young Adults aged between 17 and 24.

The project will have three main roles: as the new training center for Calauan’s Youth, known as the Calauan LPC; as a model eco-village for the surrounding community; and lastly as a center for excellence providing training for professionals who work for the integration of excluded Young Adults living in extreme poverty.

**A Life Project Center.** A training center and economic activity incubator providing the Young with the means to find lasting employment when they complete their entrepreneurial training. In fact the Green Village will become the new LP4Y training center in Calauan, replacing the current LPC where 30 Young Adults have been receiving training and working on their Life Project since May 2013. The new LPC will be based on the 3 existing programs with the addition of a fourth program providing training for the hotel and restaurant sector.

- Eco-construction: construction and building design using bamboo.
- Green Program: homemade jams, fresh fruit juices and muffins for sale in various partner companies 2 days a week.
- Green Garden: growing and selling organic herbs.
- Hotel and Restaurant Service (HRS): this new program will be launched once construction of the lobby-restaurant and guest-houses is complete.

The Green Village will enable 80 Young Adults every year to achieve professional and social integration through entrepreneurship.

**A center for professionals.** A training center for people or organizations who, like LP4Y, are working for the integration of disadvantaged Young Adults. There will be free seminars and training sessions for community workers, local development units, NGOs and associations. The Green Village will become a center for the exchange and development of good practices to ensure such knowledge is spread as widely as possible.

**An eco-village.** A construction area covering 2 hectares and representing an ecological and sustainable model for the surrounding community. 16 houses, 5 classrooms and workshops, 6 greenhouses and a central restaurant all designed according to the principals of traditional Philippine architecture and built entirely out of natural local materials.

The building of the Green Village by the Young Adults of the Eco-construction Program and Green Garden Program is at the very center of the project. Under the supervision of the program’s coach, the Young Adults will be trained in construction techniques by building trade professionals who understand LP4Y’s pedagogy (and who are themselves wherever possible, from Southville 7). Young Adults from the local community will also be allowed to get involved in the construction project without following the LP4Y training sessions. Finally Young Adults from other programs might also become involved.

**What the Youth say**

- **“I like the Green Village program because it really is our own program that we must build ourselves. We get to show what we can do.”**
  - Mark Connie, 18, in Autonomy Level

- **“It’s great because we can each do something with our own hands and say “I did that.” Plus we learn lots of things and we all work together.”**
  - Antonino, 22, in Responsibility Level

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**Editorial**

LP4Y, founded in 2009, assists in the social and professional insertion of excluded Young Adults living in extreme poverty.

To date 500 Young Adults have been accompanied by means of 12 centers set up in close proximity to slum areas. Living amongst these Young and sharing their daily experiences of a place of exclusion where no one has the time or means to ensure that babies, children and Young Adults grow up harmoniously, we decided to work on alternative solutions to the problem. How could we help create a better place to grow up, post slum?

So we started looking at relocation sites. Having been warmly welcomed by Don Bosco, we decided to set up the first community for the Young in March of 2013 in Calauan in Laguna Province. The Young Adults were immediately enthusiastic about the idea of building their Green Village, which represents so much hope for the disenfranchised. They set up partnerships and today the Green Village exists. We now need your help to develop it.

**Come and get involved with the Young Adults of Southville 7!**

Jean Marc DELAPORTE

LP4Y
Let’s get technical!

A building site for training, designed to promote a healthy and sustainable cooperation between humans and the environment, inspired by traditional local techniques and working towards local development.

The Green Village has been fortunate to bring together imaginative, competent actors to bring about a realistic project based on highly developed technical considerations.

Architectural design contest. It all began with the rather crazy idea of developing a source of dynamism for the population and the environment right at the heart of the relocation sites which are notoriously isolated, both socially and economically. The main principles were straightforward: a space where people could come together and become informed, a space which would encourage exchanges and development, built on the very pillars of our future – the Youth.

The idea started to come together on paper in 2013 with the launch of a contest between 200 architecture students, thanks to our partnership with the architecture department of the De La Salle College Saint Benilde in Manila. The specifications drawn up by the volunteers responsible for the Green Village were very clearly defined:

- innovative and esthetic “green design” using natural materials
- a healthy and esthetic “green design” using natural materials
- an optimized living environment for the people and the surroundings
- an optimized layout of the buildings for the effective operation of the LPC micro-economic activities
- And lastly - the key element of the project - a school of construction design and techniques for the Young Adults of LP4Y.

Furthermore, the project seeks to teach traditional building skills, developing renewed appreciation of such skills while at the same time ensuring sustainable management of resources.

- installing renewable energy systems (solar panels),
- bioclimatic design and orientation of buildings,
- sorting and recycling of trash,
- recovery of rainwater (for watering plants in particular)
- Dry composting toilets (to produce natural fertilizer for the greenhouses)
- Grey water treatment by plants (constructed wetland)

The winning proposal was then given to the architecture and engineering firm Censea which is still working on perfecting the plans, with the help of various external consultants for those points which require specific expertise (structure, electrics, hydraulics, landscaping, ...). The work is being carried out under the direction of architect and professor Richard Martin Rinen.

The Lobby concept. The eco-village has been designed around several buildings: a central lobby with restaurant, 5 training rooms (4 classrooms and 1 IT room), 5 workshops (for practical activities) 6 greenhouses and 16 houses. The plans have been designed so as to root the project in its environment in order to optimize the use of local resources and to minimize energy and water requirements. The central lobby will be used for seminars and catering for the HRS program which lies at the heart of the project.

The digging of the artificial lake for the recovery of rainwater will also provide soil which can be used to raise the level of the houses so that each can enjoy a view of the mountainous landscape.

The location of the LPC, at the heart of the relocation centers, allows it to have a central position within the Southville 7 community.

Bioclimatic architecture. The eco-village, in addition to encouraging the sustainable management of resources, will be built using traditional techniques with predominantly local and natural materials such as bamboo, wood from coconut palms and nipa leaves. Furthermore the structures have been studied from a bioclimatic viewpoint to take into account the following:

- Maximum natural ventilation.
- The major winds, South Westerly during the dry season (“habagat”), and North Easterly during the rainy season (“amihan”).
- Minimal direct exposure to direct sunlight opting for sun first thing in the morning and shade from midday onwards.
- Natural daylight to avoid the necessity for artificial lighting thus saving on energy.
- Natural risks. It has been necessary to anticipate natural risks, paying particular attention to load-bearing structures, following the realization of the first prototype (see p.3).

Management and follow up. The project is supervised and monitored by dedicated personnel. The site is supervised by the Green Village coordinator (a volunteer whose time is 100% dedicated to the project) with the support of the architecture and engineering firm responsible for drawing up the architectural plans. The same firm also provides expertise in the drafting of tenders for certain interventions that Young from LP4Y are not qualified to provide (excavation for example). The director for Asia and the coordinator for the Philippines will provide global supervision of the project. The Young Adults are fully involved at all levels: participating at the meetings with the various partners, sharing their thoughts on the design of the Green Village, preparatory work such as the construction of a scale model, selection of building materials, testing the building techniques on the prototype building ... The Eco-construction program coach accompanies the Young Adults at all stages of the construction.
The energy and resilience of the Young Adults in the face of the project's issues.

The Green Village project is just one more challenge for the Young Adults of LP4Y. They are deeply invested in the progress of the project which constitutes a showcase to the community of their skills and talents.

Each stage of the project concerns them; they seek solutions, they consult, they take decisions with the help of their coach and the Green Village coordinator. They are the project’s motor and they approach each difficulty with energy.

Pilot structures. In order to develop the Young Adults’ skills, but also to test the chosen construction techniques, the Eco-construction team, assisted by the Eco-construction coach, built a first prototype of a training room in June-July 2014, following the architectural plans supplied by the architecture and engineering firm Censea.

The region of Calauan is not considered at risk from typhoons, and this was a factor in the design and structure of the Green Village. However in July 2014 Typhoon Glenda hit Calauan with full force, destroying all the pilot structures build by the Young Adults. This natural disaster actually turned out to be to the benefit of the project, providing the opportunity to question the concept and to bring the Young Adults face to face with real issues on the ground. Censea and the Young Adults therefore took a fresh look at the existing issues and at the various possible solutions: reinforcing load-bearing structures (additional supporting beams), new ways of connecting sections of bamboo (more complex knots with tenons), using a type of bamboo known for its mechanical strength (Matinik), using metal supports at the base of supporting bamboo, etc.

In late January 2015 construction began on the second prototype, supervised by a team of workers with specialized knowledge of bamboo construction who were ready to share their highly technical working practices with the Young Adults of LP4Y. This second successful prototype will be the model for the actual constructions of the Green Village.

Site. One year after signing the official agreement concerning the donation of the site which was to become the Green Village, the owner of the intended site decided to sell it.

This turnabout, initially discouraging, in fact gave the Young Adults many professional opportunities (with many meetings) and allowed them to become involved in the search for partnerships. There are now several options available to us, all of them in the heart of the relocation site, thanks to the many connections that LP4Y has managed to create near the Calauan center.

Indeed many organizations are offering us help to find quickly a new land, notably Habitat for Humanity, the Municipality of Calauan and the Government via the National Housing Authority. The Young Adults are therefore now involved in working with the architecture firm Censea to modify the plans, taking into account the topography and dimensions of the future site.
**What’s our budget?**

The provisional budget for the Green Village was calculated using data collected by numerous volunteers (and based on quotes provided by local firms) using a range of estimates provided by French volunteer engineers and various volunteer specialists and engineers such as Michael Malici of the ABS-CBN Foundation, general supervisor for the development of Southville 7. These contributors allowed us to produce a credible and realistic budget.

The budget is based on different cost categories:

- **Acquisition of services**: building trade professionals come to supervise the construction project and to train the Young Adults. We have based our estimate on a foreman’s daily wage with 5 professionals per week. The costs of drawing up architect’s plans and of weekly visits from architecture and engineering firm Censea have also been included.

- **Personnel costs**: Allowances for the 15 Young Adults of the Eco-construction program directly involved in creating the Green Village program; as well as expenses incurred by the Green Village coordinator and the Eco-construction program coordinator who will be in charge of coordinating the project and of the Young Adults. These last two have international Solidarity Volunteer status.

- **Acquiring furniture**: it is intended that the Young Adults of the Eco-construction program will make some of the furniture. Therefore the budget depends on their being able to make enough furniture for the entire Green Village.

- **Evaluation and site check costs**: Financial partners and representatives from LP4Y Luxembourg are expected to visit the Philippines once a year to follow and evaluate the project.

The financial package is based on construction lasting 2 and a half years. It is currently priced at about $16,000. LP4Y’s share should therefore represent the total cost of $108,000 which, bearing in mind both the sums raised in the past, and the intended, structural partners wishing to support the project should easily be attainable. In addition, there is the possibility of future partnerships which can be added to the total budget.

The Hotel and Restoration Service Program (HRS) could potentially start operating at the end of the second year and the first 2 training sessions could occur in year 3. The money raised by these activities, along with the share of the other two programs in the Green Village (Green Gardens and Green Program) should allow us to recover the operating costs of the HRS program during the first year.

<table>
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<tr>
<th>Total Budget</th>
<th>2015 to 2017 (PHP)</th>
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<tr>
<td>Year 1 (PHP)</td>
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<td>Year 3 (PHP)</td>
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<tr>
<td>Total Budget</td>
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**On we go!**

The LP4Y team and the Young Adults of Calauan are all more motivated than ever at the thought of seeing the project come to fruition, bringing its dynamism to the development of Southville 7. Several small projects within the larger Green Village project are underway.

Adapting the plans. The change of site required changes to be made to the plans in order to maintain the vision developed on the old site: allowing appreciation of the mountainous landscape; placing the greenhouses away from the main transport routes. Free bamboo palm air will make it possible for us to complete the scale model. The Young Adults of the Eco-construction program and the partner architects from Censea are actively working on these different elements.

Greenhouse pilot. Thanks to a partnership with the Philippine organization BPI (Bureau of Plant Industry) a construction prototype of the future Green Village the Green Village will be built through collaboration between the Young Adults from all the LPC programs in Calauan. The Eco-construction team will be in charge of construction while the other Young Adults will start preparing all the technical aspects of the concept (for example, protecting the bamboo against the bacteria which develop in organic agriculture) and the functional requirements of the programs which will be used in the greenhouses. They will also be responsible for checking the site during construction.

Communication. To increase local awareness of the Green Village it has been decided to create a visitor center in the prototype of the training room. There will be a display of all the scale models and other items related to the project made by the Young Adults. Information panels as well as an interactive panel describing latest developments (allowing the Young Adults to show off their creative talents and develop their communication skills). A poster at the entrance to Site 2 will encourage people to come and visit the pilot construction. Meanwhile work is ongoing on the creation of a logo for the Green Village.

Organization. As the Green Village rises from the ground it’s time to have a team of Young Adults fully dedicated to this project. Two Green Village managers have been selected, each working on different aspects with the coordinator and to report back to the other Young Adults at the center.

**Bringing people together**

A whole network of partners has come together to assist this project on the ground, such as the ABS-CBN Foundation (see opposite):

- **Consuelo Foundation**, which also works with Young Adults by providing training and which invited LP4Y to set up here, offering technical assistance for the project.
- **Habitat for Humanity**, which is not only helping in our site search for the Green Village, but has also made available 12 houses on Site 2 for the last 2 years.
- **National Housing Authority**, which runs projects at relocation sites and is helping LP4Y during our search for a site.
- **The Don Bosco community**, which develops projects for the community. Their knowledge of the sites and their support with different local actors has been of enormous value to the project.
- **The municipality of Calauan**, which supports LP4Y and is providing invaluable help as we search for a new site.

But beyond local support, hidden in the shadows of the first bamboo structures there are numerous organizations and partner companies which support us through financial or material donations.

In particular, LP4Y Philippines and LP4Y Luxembourg have signed an invaluable three-year partnership agreement with Coopération Humanitaire Luxembourg (CHL) providing financial support and an evaluation from the Ministry of Foreign Affairs in Luxembourg (MAE). This has enabled us to raise 2/3 of the budget. Recently while visiting one of CHL’s projects with Camelean which works towards the reininsertion of abused young women, François PRUM, the President of CHL, paid us the honor of visiting the slum area of Tondo and the LP4Y center located to Young Mothers. CHL is a vital partner, bringing us real experience based on the success of many collaborations.

EDF Energies Nouvelles has committed to financing the Green Village to the tune of €60,000 and provided precious support during the construction of the first buildings after Typhoon Haiyan 2013. Meanwhile the Banque Degroof Luxembourg has offered to support the project over the next 3 years by financing 1/3 of the budget remaining after contribution of MAE. Two exceptionally important partners for the project. Various other partners support LP4Y’s Green Village, such as SunPower (donating solar panels) following the exciting collaboration on the solar lamp project at Tondo.

Capgemini (donations of computers and plants) has made a logical follow up to their regular donations by contributing to LP4Y’s IT Park.

Apprentis d’Auteuil also provided financial support for the project in 2013 to the tune of €10,000.

Other opportunities for partnerships are currently being explored, notably with the Philippine Luxembourg Society for the Luxembourg International Bazar, Electricians without Borders, etc.