



FUND RAISING PRESENTATION UDALO GREEN FABLAB Project

by

ECOSQUARED.Inc

57 Saint Francis street, Mabini Homes Subdivision, Lipa City Batangas

Tel: +63 918 252 6127

Website: <https://www.ecosquared.org>

Director & Project Coordinator: Philippe COUTURE

ECOSQUARED Field of Activity:

ECOSQUARED is citizen-driven initiative and a non-profit research and development organization officially registered in the Philippines. It is active since 2015. It builds networks of proactive individuals sincerely concerned by global environmental and social contemporary challenges. The organization designs field projects with the cooperation of local communities, professionals and experts from diverse domains such as sciences & technology, education, finance, arts, law and commerce. By gathering confirmed professional and young volunteers around concrete field actions, we support communities to anticipate and respond to globalized hazards. Our approach is to promote a holistic and cooperative economy that relies on local communities and ecosystems natural resilience. Our primary strategy is to implement a pilot project at geographical scale as proof of concept for a “qualitative” economy. Our strategy is to build systemic solutions.

Our Current Actions:

In northern Mindoro island, we are implementing a multidisciplinary program that studies, develops and fosters long-term, local and global capacities. Five sub-platforms are currently launched, supported by a network of expert teams:

1. [“Acting Witness”](#)
2. [“HATCHabitat”](#)
3. [“Ecole Hors Murs”](#)
4. [“Ripple Watch”](#)
5. [“Terra Farming”](#)

UDALO GREEN FABLAB project

Project Overview:

Udalo is a barangay located in the municipality of Abra de Ilog in northern Mindoro Island.

Mindoro has been left out of development until the 20th century. Therefore, its communities as well as its biodiversity have been remarkably preserved. The main indigenous population, the Mangyan Iraya, are still striving without electricity. Their traditional environmental knowledge, and social structure are still very much alive and thriving, but could be totally wiped out in the next generation by rapid acculturation.

FabLabs are traditionally citizen-initiated spaces equipped with high-tech tools where local communities can access global expertise and equipment, such as 3D printers and laser cutting machines, etc. It is an interface that allows high-end technology to find applications in actual concrete local needs. These laboratories act as a social accelerator by providing a place for diverse social layers to freely interact and where open cooperation stimulates education, creativity and entrepreneurship, enhancing adaptation to fast evolving natural and economic environments.

The Udalo Green FabLab is an environmentally oriented equipped laboratory and a community space for exchange, learning and contributory researches. It brings international connections, know-how and high technology in agronomy and ecology to be probed at scale by farmers, fishermen and indigenous communities while being at the same time an R&D hub that document, collect, apply and re-valorize indigenous knowledge.

Objectives:

- There are two concomitant main objectives for this project: in one hand, to develop local capacities by giving access to international scientific & technological resources that could inform complement local practices; and in the other hand, to acknowledge, preserve and disseminate existing traditional successful practices.
- It expects to open a physical access to modernity, through social and cyber interactions, for young local generations about topics that are directly related to their environment and the welfare of their communities, bridging tradition and modernity.
- The FabLab will facilitate collection of environmental and social data for a larger research about the socio-environmental dynamics at play in a watershed which will inform and support decision support systems (DSS) for common good governance.
- It will maintain on the field a long term scientific presence, through international, national and local students and researchers, as a living contributory education hub.

Beneficiaries

- **Local farmer and fishermen communities** will be the immediate beneficiaries by the introduction of innovative techniques in agro-ecology developed by research centers such as CIRAD, IRD and SEARCA. Udalo population is around 4.000 people (2015 census) who are essentially farmers or fishermen.
- **Indigenous community's** knowledge will be accounted for, documented and valorized for following generations. Mangyan Iraya community is estimated representing 40% of the population.
- **Young generations** will have access to high-end technology and education directly connected to their daily environment. There are 3 primary and 1 secondary schools, and 59,8% of the population is below 16 years old.
- **Governance & decision-makers** will benefit from multidisciplinary researches that will inform decision support system such as computer modeling platform giving a holistic understanding of complex economic, social and environmental consequences resulting from diverse policy options.
- **Global community**, and more specifically scientists and students will have a locally integrated base to conduct field researches and experimentation building long term observation and data accumulation.

Integration of the project in the association's current activities

The construction of **Udalo Green FabLab** is the essential corner stone at the intersection of the 5 current projects. It will be designed by the architects and engineers of **HATCHabitat**, to shelter contributory process of the community facilitated by the experts of **Acting Witness**. It will be the interface to crowd-source field data that will feed the scientific studies from "ridges to reef" connectivity done by **Ripple Watch**. This in order to inform socio-environmental practices susceptible to enhance and reinforce local biodiversity as well as food security and agricultural entrepreneurship undertaken by **Terra Farming** project. The FabLab intend to be an open space for researches and education from primary to university level and is an essential feature of the project **Ecole Hors Murs**.

Resources

- ECOSQUARED has gathered around its strategy 5 teams of professional experts and qualified volunteers whose profiles can be found on their respective project websites. We are now studying cooperation opportunities with IRD, CIRAD, Ateneo Uni, UPs, and SEARCA.
- An experimental land of 4 hectares has been acquired in 2017 in the barangay of Udalo for environmental observation, agricultural experimentation and building location for the Green FabLabs.
- The Abra de Ilog municipality and LGU has been following and supporting the evolution of the different iterations of the project since 2015 and the local communities have demonstrated sustained interest.
- The French Embassy in Manila has been following and helping the project since its first iteration.
- ECOSQUARED expects to raise a budget of 85.000 Euros for year 2020. (Total budgets for 2018 and 2019 was around 130.000 Euros)

Program and Schedule

Two successive versions of the FabLab will be build because, according to permaculture principles, anything durable happens and evolves through successive phases. Good architecture does also happen only once social practice and acceptance has been established and consolidated. A first “light” wooden building will be installed on the land before the more expensive final one.

April 2020

First wooden building design and construction: 6.000 Euros

Second steel building study and design: 4.000 Euros

May 2020

Scientific and technical equipment: 4.000 Euros

Internet Connection 700 Euros

July 2020

1st contributory research program: 5.000 Euros

September 2020 (or Sept 2021, according to the level of acceptance)

Second steel building construction: 60.000 Euros

December 2020

2nd contributory research program: 5.000 Euros

TOTAL COST: 84.700 Euros