



Byanyas Project

The Byanyas project is an initiative for the Napsan region of Palawan in the Republic of the Philippines. The program's initiators believe that human health is inseparable from societal health and environmental health (at both global and local level), and intend to use this project to help preserve one of the most endemic regions in the world. The central focus is on protecting and maintaining local natural resources and species diversity, as well as providing support for the development of a stable local society and economy, specifically by working with the indigenous population, the local Tagbanua tribe. Work on the project began in 2017; it is registered in the Philippines as Byanyas Foundation Inc.



The Tagbanua use the term Byanyas to describe small tables woven from bamboo and covered with gifts where they make offerings to their ancestors and to natural spirits – usually honey, rice, and rice wine and rice wine.

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Key points in brief:

- The Napsan region has some of the last tropical and subtropical rainforest areas in the Philippines, and endemic animal and plant species there are severely threatened.
- Overuse and decimation of the forests through exploitation by the local and international timber industry and slash-and-burn farming to create rice plantations and palm farms.
- Poaching of severely endangered species for food and for the international trade in live wild animals and animal products (Palawan peacock, Palawan bearcat, Palawan leopard cat, Palawan hornbill, Palawan scops owl, Palawan pangolin); according to the Rainforest Trust, the jungle of Palawan is one of the 15 most endemic regions on earth.
- Land speculation has led to habitat fragmentation.
- The existence and culture of the Tagbanua tribe is in danger.
- Migration to cities due to removal of their traditional way of life.
- Suppression of tribal culture. Only a few tribe members still know how to write in the Tagbanua language (declared by UNESCO to be a "Memories of Mankind" in 1999); formerly common carving and weaving arts and other crafts are dying out. This loss of identity is loosening the fabric of communities. The result is cultural depletion and discord, or even open hostility bet ween populations.
- Tribal members sell land and goods and become impoverished due to their lack of of financial competence.
- Lacking or inadequate educational opportunities and ignorance of rights lead to abuse.



Palawan Peacock (Polyplectron napoleonis)



Palawan Bearcat (Arctictis binturong whitei)



Palawan Leopard Cat (Prionailurus bengalensis heaneyi)



Palawan Pangolin (Manis culionensis)

Project Goals

The goal of the Byanyas project is to help facilitate a sustainable co-existence between man and nature in the Napsan region and to use the knowledge gained to promote the pursuit of sustainability across the region. Through education, by creating jobs and training opportunities, and by providing access to community projects, we hope to help the population find a sustainable way to live with their environment. Our long-term goal is to create a nature conservation area in the Napsan region. The local population, in particular the local Tagbanua clans, will be offered a chance to improve their prospects in a quickly modernizing world through education and community projects. Awareness of the unique nature of their culture and their opportunities to maintain it will help future generations to find their identity, assert their rights, and care for their environment. Our goal is to treat this indigenous culture and their vast knowledge of the jungle with respect. By combining this knowledge with the resources, technology, and networking of the Byanyas projects, we hope to build the foundation for social and economic change and create healthy ways to coexist with the environment. Just like all communities, the Tagbanua community is in a constant change. The goal is not to maintain a specific status, but to facilitate a graceful transition in an era of drastic changes. Economic independence and cultural exchange will create space for reflection and identity formation, cultural independence, and the opportunity to find a sustainable way to interact with the environment. The success of this program would serve as an example for how remote regions can be developed without dooming their native populations and the environment to destruction. The results will be documented and published.



The Babalyan, the tribes shaman, connection to the world of spirits and ancestors.

Palawan Province

Palawan is the fifth largest island in the Philippine archipelago, and is often referred to as "the last frontier." It provides access to the last remaining breathtaking wilderness left in the Philippines. Geographically part of the Sunda Shelf, and with flora and fauna closer to the Island of Borneo than other Philippine islands, many animal and plant species are endemic to this region. Some can only be found on certain parts of the island.

The reason this eco-region has remained partially untouched to this day is due to the island's former dubious reputation. Thanks to a gigantic open-air prison and a leper colony, for many years the island was seen as a place full of lepers and other tropical diseases. However, today the region is facing different difficulties. The sub-tropical rainforest, which covered an estimated 90% of the island in 1900 (Eder/Fernandez 1996: 1-22), has shrunk dramatically. Due to heavy pressure by settlers from other regions of the archipelago, the native populations culture and ethnicity are disappearing at an alarming pace. Although a population of approx. 10,000 individuals formerly lived on Palawan at the turn of the 19th century in an area of 14,649.73 km2, according to the last census the population is now 849,469 (source Philippine Statistics Authority). More than 1.8 million visitors came to the tourist centers springing up all around in 2018 (compared to 283'037 ten years earlier; source: Provincial Tourism Office). The regional airport was reclassified as an international airport in 2019, which will likely lead to additional pressure on the natural environment and native population from the growing tourist industry.



The Tagbanua in Napsan

The Napsan region lays on the opposite coast of Palawan's capital, Puerto Princesa. Although separated by a thickly forested mountain range from Puerto, Napsan is still under the city's jurisdiction. The cement road leading to the region was completed in 2019. A journey to the capital city that 10 years ago involved crossing five rivers and took around four hours in good conditions – or was completely impossible during heavy rain – now is accessed by bridges, with settlements along the road. Today, the same journey takes about an hour. This will result in an increase of population and therefore more pressure on the environment in the near future. The power line that winds along the road and through the jungle provides the town of Napsan with electricity since 2020. The installation of antennas for a wireless network are likely to be installed in the near future.



Like many sub-tropical regions still containing fairly untouched resources, the Napsan region is facing massive changes. Population numbers are currently subject to heavy fluctuation; according to the 2015 census, 1'797 people lived in the district, 36% of whom were under 14 years of age. About half of the population belongs to the Tagbanua tribe, one of the oldest ethnic groups in the Philippines. The government estimates the total number of Tagbanua in Palawan to be around 10,000. The largest part of this group still lives primarily by hunting and gathering and fishing with the simplest means. Slash and burn agriculture is their traditional form of farming.

Broad areas in Napsan have been designated as "ancestral homeland / ancestral domain" – areas where rules developed specifically for the indigenous population apply. This means that the tribal populations involved do have well-anchored rights from a legal standpoint. However, the population is also undergoing serious change, and these rules are bypassed and circumvented on a daily basis. While the older generation comes from a semi-nomadic existence moving between the jungle and ocean, with little understanding of property and monetary systems; the younger generation faces an extremely uncertain future. Money is becoming increasingly important. Their parents sell land and property, ritual and antique objects, hardwoods and other goods from their jungle for derisory sums, in some cases under duress and often without understanding exactly the consequences of what they are doing.

A large part of the tribal population sees little value in school education. Young men still prefer to spend their days hunting or trapping in the jungle or by the sea. Many young women become pregnant before they graduate from school and therefore drop out of their training prematurely. Accordingly, the next generation will not find many opportunities on the future job market. If current trends do not change, they won't have their own land, or resources. In addition, mixed marriages blur the clear lines of tribal affiliation and thus the rights to claim and use the land.

The current mentality is one focused on fast money. Sale of tribal lands are driving deep wedges between clan family members – some of whom want to retain and farm their land, while others prefer to try and get rich quickly. Investors, primarily large conglomerates and local political dynasties, are intentionally approaching and taking advantage of them. Outsiders pressure the population to log the rainforest. Its products bring money, and cleared land is easier to reclassify from protected "timberland" into easily sellable "domain land." To do so, a tribe member only needs to claim an area for itself, clear it, plant it, and pay a one-time property tax. With enough money and local connections, the laws passed to protect the rainforest are simply circumvented. In most cases, however, the newfound riches of the native population do not last long. Their money is quickly invested in old motorcycles, and alcohol. They follow millions of other Philippine natives who move to the cities after selling their land and fall into poverty thereafter, ill equipped with the skills they need to live in a modern city. In addition, there is a growing conflict between the native population and the growing population of settlers from different over-populated parts of the Philippines. A mixture of jealousy over fast fortunes, typically short-lived, and derision for "uneducated savages" continually creates fertile ground for a simmering sense of hostility.

The Tagbanua have become second-class citizens in their own land in just a short time, since they have no experience in handling money, come from a mainly oral culture, and as a result are a severely disadvantaged minority in a modern constitutional state, abused and exploited on many levels. Economic impoverishment is accompanied by cultural scorn and ridicule, causing the indigenous culture to quickly dissolve and leaving youth without any identity. This is also associated with a great loss of valuable knowledge about the area.

The exploitation of natural resources has grave effects on the environment. Besides clear-cutting giant rainforest trees and using secondary forest products like rattan and almaciga (resin products), the practice of slash and burn agriculture has the most severe impact of any practice in the region. It causes the regional climate to change, increasing the temperature by multiple degrees and drying out the thin layer of humus during the summer season, which then washes away during the monsoon. Without the thick rainforest, hills don't stand up to the rainy season, and the ground water level is dropping each year. The only way to fight these changes is sustainable agriculture and setting up protected zones where the rainforest can remain to help keep ground water at a healthy level. Residents of the area in question do understand all of these facts and measures. However, their perspectives are also limited by their current economic reality.





Project Outline

The long-term goal of the program is to create a natural conservation area. This requires the creation of a stable local economy and society not based on destroying the environment. Ecosystems are constantly changing, dynamic entities. This means the consequences of protecting them are changing too. The key to sustainable treatment of the environment is to first create the conditions for sustainability within the communities, namely by supporting projects for the local population and community representatives. The way to do this is to create alternative, sustainable sources of income through information and organization. The local indigenous population will be provided with support and education in their current transition process, helping create the conditions for establishing a protected region. The goal is to create visible and sustainable benefits for the whole community. Growing infrastructure, like roads, electricity, and mobile phone networks – and quickly growing tourism – should not represent a danger to natural conservation, but rather an opportunity - if well managed. It must be utilized. The creation of an exemplary ecotourism business is one of the main goals of the project.

Financial independence and economic sustainability will be the focus of the campaign right from the start. The transition process and economic considerations are an integral part of the program and will be a priority in all projects and initiatives. Adaptive management and community integration into all phases of the project will ensure good flexibility. Mechanisms to monitor and assess the project and test market receptivity to specific products will allow for constant adaptation and help illuminate and facilitate necessary compromises between natural conservation and development. Our program has three phases.

Phase 1

Firstly, the launch phase is the most important, resource-intensive phase in the program, during which the necessary funds will be acquired and core personnel identified and trained. During this first four-year phase, we will create the necessary infrastructure, a building for community work and training, administrative facilities and workshops. This stage focuses heavily on testing and improving sustainable agricultural methods. A sensitivity for the heterogeneity and complexity of the community is especially important in this phase. Project participants shouldn't merely see themselves as paid employees, but rather as part of a regional transition. The project should be perceived as an opportunity for social change, education, and cultural and economic opportunities. The first phase ends with a mid-term review. This review will consider all facets of the project, from personnel management to economic efficiency and developments in the communities and the natural conservation program.

Phase 2

The second phase commences with the improvements and activities identified from the key learnings from the mid-term review. These findings will determine how we proceed in the second phase - what measures have proven useful? which initiatives should be expanded? which approaches to maintaining biodiversity and community development have been most successful? Production in the workshops and on the farm will be optimized and readied for the market. Profit distribution models will be developed and established.

The methods in agriculture are optimized and can be put on the market, production will be expanded. This creates new jobs. The core team is familiar with the processes and can train new staff and lead their own teams. A committee for project management is recruited from the core team, which receives intensive training during this phase, preparing them to run regular operations independently in the third phase.

In cooperation with TESDA (Technical Education and Skills Development Authority), courses and apprenticeships are being developed in the areas of tourism, agriculture and handicrafts. This guarantees training standards and participants and apprentices receive accredited diplomas. Many former poachers, illegal woodcutters, and others should have found work by this point as rangers, forestry workers, or farmers, or be involved as partners. Children and young people will be offered training and educational opportunities.

The projects will be structured and personnel sufficiently trained such that it can be opened up to visitors. The necessary structures for sustainable tourism will then have been created.

Phase 3

During the third phase, we will initiate a protected area on the community level. By this time, the program should have established itself as an economic and cultural benefit for the community, which will lay the groundwork of support for nature conservation projects. During this last project phase, the project reaches its break-even point. Training sessions, community projects, and natural conservation projects, as well as salaries, maintenance and operational costs will be covered by income from agriculture, ecotourism, construction projects and artisanal products by this point. At best, external financing in this stage is only necessary for scientific consultation on habitat protection and for the administrative operations needed to establish the nature conservation area.

Project Implementation Phases

1.	Phase (4 years)	2. Phase (4 years)	3. Phase (4 years)
•	Land acquisition	 Economic optimization, profit distribution models, market- ability 	Economic independence
•	Core personnel	 Extension of production and personnel 	• Establishing protected area
•	Infrastructure (farm, work- shop, storages, irrigation system, training facilities)	 Community Center, infor- mation / organization (info events, courses, seminars, training) 	• Scientific support for habi- tat protection program
•	Cooperation with LGO's (local government organisa- tions	 Cooperation with TESDA, akkredited Apprenticeships. 	Project publication
•	forrestry, agriculture	 Commissioning resort und workshop 	• Tourism, forestry, hospitali- ty, agriculture, crafts
•	Creating a functional work- structure with the indigenous community (staff recruitment, work distribution, appren- ticeships)	• Management training	 Management by local per- sonnel

Community Projects

In order to effectively protect nature and resources, the population must be given alternatives to their current path. Community work forms the foundation for creating a nature conservation area and preserving the environment. The Byanyas project does this through 2 approaches:

1. Information and Organization

Creating a central point for orientation and education. Economic, ecological, and legal matters are transmitted in a clear way through events, workshops and seminars, and alternatives to the current path are explained. Ideas can be collected, inspired, and exchanged. The entire project is publicized, and approaches for continued development are illustrated. For example, ecology or biology experts can test and teach basic principles of permaculture and sustainable agriculture.

Education is a key to handling resources, the environment, and social problems in an appropriate way. Byanyas offers support in creating a platform for public discussion, representing the tribe, and forming self-governing structures. The center is also a place of cultural exchange, where the tribal culture finds a place to document and make presentations. It serves as a point of contact, an information center, and a teaching space where younger generations can learn about their origins and teach interested visitors. Tribal members will gain access to cultural diversity and ways to express themselves. Visitors will gain access to the project and the local tribal culture. The center will also serve as a library and a data collection point.

2. Jobs, Training, and Education

Tribal populations will receive access to formal education, training, and jobs in the fields of agriculture forestry, tourism, and crafts. We plan to implement an apprenticeship training model, offering paid training and work. Professional employees will assign work to apprentices even while establishing an infrastructure during the first project phase, in order to set up the model right from the start. A job doesn't just financially benefit one person, but usually their entire family as well. Goods produced in the workshops (furniture, weaving, art objects) can be offered for sale and marketed both locally and nationally while respecting sustainability principles. Experts will be trained as workshop leaders, and can teach courses on their crafts to both community members and visitors. This helps maintain and further develop traditional arts. An organic farm complex can offer work, income, and food for many people, and serve as a training facility. Efficient and environmentally protective agricultural methods can be tested and taught. A working farm can serve as an example and inspire others to adopt sustainable agricultural practices. The consistent growth in tourism on Palawan is increasing the demand for high-quality food. As in other areas, organic products command higher prices here. More stable local production will be able to take a much larger share of the market in the long-term, not only creating but also maintaining jobs. Tour guides will be trained and hired to teach tourists and visitors about the jungle, the project, and the culture and lifestyle of the Tagbanua.

Nature Conservation Area

Multiple action steps can be used to make a conservation area a political priority in the Philippines. An organization or a private person must apply for such a conservation area with the appropriate "Environmental Legal Assistance" (ELAC) offices. In this case, an application must be made first to CENRO (Community Environment and Natural Resources Office), then to PENRO (Provincial Environment and Natural Resources Office) and NAMRIA (National Mapping and Resource Information Authority), after which the DENR (Department of Environment and Natural Resources), the supervising body for the agencies above, will make the conservation area official.

A group of scientists ("local research team") will be asked to prepare an assessment of the situation known as a "rapid biodiversity assessment," in coordination with the Barangay ("community," smallest political unit in the Philippines). If this assessment results in the conclusion that there are endangered animal or plant species in the area observed (which is certainly the case here), and the Barangay in question supports the project, it will be possible to define a "local protected area." A"public consultation" will be organized to do so, for the purpose of transmitting information to community members. The purpose of this consultation is to discuss concerns and then either accept or reject the project. This is where the past community work and engagements will hopefully pay off. If the community members understand the importance and economic benefits of creating a protected area, and support the project, there will be nothing else standing in the way of continuing the project and the matter can then be transferred to the agencies and the DENR.



Status Quo

Work on site began in 2017. Since then, the most important cornerstones have been established and the project is expected to complete its first phase in the second half of 2022. The on-site team currently consists of 22 permanent employees, 17 of whom are Tagbanua tribespeople.

Depending on season and projects at hand the number of employees may temporarily double. The focus in the first project phase is on farming and building infrastructure. One of the top priorities in the Byanyas project is sustainability. The management is constantly finding methods, testing them and evaluating. To do this, we network with local people and international partner organizations that pursue similar principles. The knowledge gained flows into everyday work and is constantly shared with partners, visitors and the local community.



Team members finishing work on a solar cooker.

Agriculture on the slope (Zone 1)

Byanyas operates in two different agricultural zones. On one hand, we currently cultivate an area of 18 hectares between the village of Pag-Asa and the jungle inland (Zone 1). On the other hand, we have set up a farm in the immediate vicinity of Labtay (Zone 2). The two areas differ in topography, cultivation intensity and work methods and particularly in the target group.



The first zone is on the slope and in close proximity to the jungle. We develop this area as a buffer zone between the Tagbanua village of Pagasa and the jungle. So far this area has mainly been cultivated with the slash and burn method, the consequences of which are catastrophic for the environment. A designated area is burned down and thus rid of the entire vegetation and then planted with highland rice. After the harvest, the area lies fallow for a few years, after which the process is repeated. This method was not a major problem in the past. With the rapidly increasing population however, the forest disappears so quickly that the consequences for the environment are serious. Our team employs agricultural techniques that are suitable for sloping terrain and require an absolute minimum of capital to be realistic and easy to replicate for our neighbours and the community.

Swales are dug on contour and densely planted with deep rooting perennial crops to hold water and humus layers thus keeping moisture in the earth. Ponds are created to catch excess water during the heavy monsoon rains and serve as a reservoir and for fish farming. Undesired vegetation is not burned, but cut up and used as mulch or eaten by goats, that in turn fertilize the land with their dung. The soil quality increases over the years so the highland rice can be grown annually and with increasing yield.



Team Byanyas during the first highland rice sowing ceremonies.

In order to counteract the consequences of deforestation and slash and burn practices, we are testing different regenerative methods. We plant native hardwoods and fruit trees in strategic places. Zone 1 is also our main growing area for the various types of bamboo that will be used in our workshop. Wherever possible, we work with cultivation methods compatible with our efforts to reforest these areas, i.e. by planting species that thrive in the lower leaf layers in between the existing hardwood trees. We are currently in the process of planting one of Palawan's largest coffee plantations on this site. For this particular project we are collaborating with LICK (Lost Island Center for Cape, lick.ph), an organization well versed in cooperating with indigenous communities for coffee production in the Philippines. LICK will train our team in the cultivation of plants and coffee bean processing. Thanks to the close proximity to the jungle and the large population of civet cats we obtain the coveted Kopi Luwak (coffee cherries eaten by civet cats, partially digested and fermented). There are also around 300 cashew trees on the site from which we yield between one and two tons of cashew nuts annually. Zone 1 is crossed by many Tagbanua on their way to their daily forages in the forest and changes are constantly noticed. The observed progress creates increasing interest and is constantly promoted as an attractive alternative to slash and burn agriculture. Currently the site is being run by a family of four whose task is supervision and management of the area with the support of the team and conveying the employed methods to interested tribe members. In the second phase, the area is to be expanded and settled with more families.

Zone 1 is our most important resource in the effort to counter the prevailing, destructive agricultural methods. The techniques employed show good progress and we want this zone to increase in the second phase of the project in order to protect the jungle behind it more effectively and to continue spreading our farming methods.

Farm (Zone 2)

The organic farm in zone 2 operates largely self-sufficient and is divided into different sectors, which differ mainly in the intensity of management. The most labor-intensive part and therefore in the center of the area is the vegetable and herb garden. Dozens of different species grow in close proximity and experiments are ongoing to find suitable varieties and cultivation methods.

Closeby is the chicken and goat shed. The goat and cow dung goes directly into the poultry enclosure, where the chickens remove insects, larvae and insect eggs. The cleaned manure then ends up in the vermiculture, which is located between the garden and the stable. Turned to Vermicast, the final products of this process get into the garden as fertilizer and germination soil. The plants are only fertilized with compost and additives from the vermiculture. Insect protection is achieved by interplanting of species, cultivation of plants that deter pests and the creation of pond systems and other installations that house pest controllers such as frogs, lizards or bats. The ponds also produce protein-rich aquatic plants that are used as feed additive for the farms livestock.

The entire livestock consists of native species that are more frugal and more resistant than hybrids so we are also making an important contribution to the conservation of these species, which are rapidly replaced by introduced hybrids. Black native pigs, 30 years ago the only domesticated pigs in Palawan, are only held in the most remote areas of the island today. Currently the livestock on the farm consists of cattle, water buffalo, goats, pigs, ducks, chickens and various farmed fish. All animals are integrated into the cultivation processes of the surrounding areas. First the goats and cows graze an assigned area and clear it of bushes, grasses and weeds. The pigs follow, completely plowing the area while removing grubs and other unwanted insect larvae. Finally, the chickens and ducks finish the job. The result is a clean, fertilized field that is then planted with cassava, various sweet potatoes, corn, beans and other food for humans and animals alike. After the harvest the cicle is repeated. Thus, the animals are kept occupied and free-range, which has a positive effect on their quality of life and eliminates the need for heavy agricultural machinery, pesticides and fertilizers.



Philippine Native Pigs on the Byanyas Farm.

All feed for the animals is produced on the farm itself. Live trees are planted as fence posts, their leaves used as food reserves for the dry season. For the chickens and ducks, black soldier fly maggots are cultured with kitchen waste, manure and aquatic plants. The high protein content and fast life cycle of the black soldier flies make them an excellent source of animal feed. Fermentation further increases the nutritional value of the feeds.

Surrounding the vegetable and livestock area of the farm we employ the "Food Forest" system. This cultivation method is based on the biotope of forests, regulating itself and not requiring any maintenance. All elementary components of a forest are planted; trees of different sizes, shrubbery, ground vegetation, creepers, palms, short- and long-lived species, fruit trees, vegetables, bamboo, timber, and supportive species. Every plant in this forest is usable. The established food forest needs very little care. A microclimate is created, the soil remains moist due to the multi-layered cover of leaves and does not need to be watered. It houses its own predator population that keeps pests at bay and its fungal and microbial cultures that decompose organic matter and produce nutrients. The bulk of the work is in planting. After that, unwanted species have merely to be regularly cut down and reintroduced into the nutrient cycle as mulch.

This form of cultivation has a longstanding tradition with the Indigenous people and we benefit immensely from the extensive knowledge of our team. Contemporary knowledge and working methods complement and optimize the system and our experiences and insights are shared with our community and visitors in seminars and guided tours. Our Food Forest is expanded annually to draw conclusions about the strategies employed based on the various stages. This allows us to impart our methods to our community and visitors and deliver a more complete picture of the system and its evolution. Byanyas is working with various organizations in Palawan to set up a seed bank. For the second project phase we are planning a large farm kitchen for the processing and refining of products and developing a unique cuisine based on traditional Tagbanua dishes, a mushroom cultivation facility and an apiary.



Even during the first dry season the freshly planted food forest exhibits clear advantages in its capacity to retain moisture.

Construction

Once the workshop is operating, we want to establish the Byanyas building/construction team, as experts in sustainable tropical building in Palawan. The focus will be on bamboo processing and building, but we want to employ other locally available sustainable materials and offer a wide variety of concepts; all buildings on our sites, be they residential houses, workshops, stables or lounges are therefore also examples for potential customers and for our communities.



Our first farn house displaying masonry and design features uncommon to Palawan.

Our buildings made of bamboo, plantation wood, stone and clay are met with great interest in the region, as we are testing construction methods that are uncommon here but show enormous advantages in terms of design, economy and sustainability. Training for our team members is conducted by local and international master craftsmen. We also facilitate courses at TESDA (Technical Education and Skills Development Authority) for our apprentices in masonry, welding and carpentry.

A bamboo treatment facility was completed early 2021 and a team formed specifically for this job. The same team will work with our German partners on the construction of our bamboo workshop.



Storage and garage construction. Our Apprentices get the oppertunity to practice their newly acquired skills.



Our team learning masonry.



Installing bamboo shingles.





Pouring concrete for the bamboo treatment pool, working to plans designed by our german partners.



Team bamboo at work.



Building a well



Production and Training Facility / Community Center

A core part of the project will be our production and training facility. Byanyas is very fortunate to be supported by the Ilse and Johann Hoff Foundation through our partner, engineer Hendrik Alsmann from the german engineering company HOFF und Partner.

In collaboration with students of the University of Applied Sciences Münster under Prof. Reichardt, drafts for the center were designed meeting the needs of the project and applying principles of sustainability.



Hendrik Alsmann, Marina Hülsmann and Jasmina Abendroth



Entrance to the class rooms.



Bamboo was obvious as a sustainable and readily available building material. Hendrik Alsmann researched extensively and exchanged ideas with experts, traveling and attending bamboo workshops and launching a project that developed into a groundbreaking element for Byanyas. He came up with the plans for a bamboo treatment and processing facility with room for classes, seminars and events. The best draft was provided by the two Architecture Students Marina Hülsmann and Jasmina Abendroth.

The building site is located at the entrance to the farm. A group of German carpenters led by Julian von der Heide will join forces with our Byanyas building team to construct what will be Palawan's largest bamboo structure. The collaborations for this project allow unique knowledge transfers between the groups involved and will provide the Byanyas building team with important experiences and insights for future construction projects.



The building will be unparalleled in terms of sustainability and bamboo engineering in Palawan. We hope to create impulses for the use of bamboo in construction on the island and promote our building team, thus creating jobs for our community.



pound is used to treat, bleach and dry the bamboo poles and produce biochar with waist from the productions.



Julian von der Heide during model construction.



Top view on the entire complex. The main buildings contain classrooms, workshop and storage area. The surounding com-



Our team of german carpenters.

Byanyas Community Center

The Community Center will be the interface between our project and the community and will have its headquarters in our bamboo building. This is where the project will be presented to the public, goals and ideas are communicated, courses, seminars, events and film evenings are held and leisure activities are offered. For children and young people, a library, a day care, a music school, a pottery, sports activities and lessons in arts and traditional crafts such as braiding and weaving are planned. We work closely with the community, the tribal elders, our partner organizations and local and international experts who work in the respective fields and have the necessary qualifications. Offers for young people and adults include educational and career counselling, family planning, financial planning, permaculture courses, bamboo workshops and English lessons. Preparations for the program are in full swing and some activities have already started. The offers are free for residents of the communities, but adults will have to attend certain seminars to gain membership (e.g. financial planning, family planning, first aid). For children and young people, smaller waste collection campaigns are part of the activities, especially on excursions.



With the team of the club "Surf Surf Cafe Palawan" we organize surf lessons and excursions with beach clean-ups. The surf club donated two surfboards for our lessons and the classes are very popular. We therefore want to expand this area and purchase additional equipment.



We run a campaign for nature conservation with the Katala Foundation. These pictures are from the "Pangolin Day" 2020. Presentations, guizzes and documentaries were held at the well-attended event to provide information about this endangered animal and its protection. The village children had a lot of fun and opportunity to perform their diligently practiced traditional dances.



An important partner for the seminars in the Community Center is "Roots of Health". This organization is committed to the health of girls and women, holds seminars on pregnancy and family planning, and provides access to contraceptives and pregnancy examinations.



The completion of our workshop facilities will increase our capacity for crafts classes. Master carver Simpio Mata from the Palawan tribe in the south of the island has already led a two-week carving course with our team and is looking forward to further assignments with Byanyas.



A visit by Swiss blacksmith Daniel Gentile was planned for spring 2020; However, his departure was prevented by the COVID pandemic. Daniel Gentile will set up a workshop for us and introduce our staff to blacksmithing.







Financial Plan

Byanyas is currently in the final year of the first project phase. Four years were initially planned for the entire first phase, financially secured by the donated start-up capital. Due to the COVID pandemic, this phase will drag on by a year and is expected to end with the completion of the production and training facility in the second half of 2022.

The foundation aims to be financially independent within the third phase and to create as many jobs and apprenticeship positions as possible for the surrounding communities. In the current planning, we estimate the annual operating costs in the third phase at CHF 75,000. This amount will be covered with income from agriculture, ecotourism, workshop production as well as construction projects and consult-ing. In the best case scenario, it may be possible to generate this amount with the operating income at the earlier part of the third phase. External financing of the economic elements would therefore no longer be necessary throughout the last stage.

Agriculture

In the first phase, the focus was set heavily on establishing the agricultural infrastructure of the project. Methods were tried out and contacts were established with customers for the farm products. In the second phase, the successful models will be expanded and income and personnel in this area will be increased accordingly. This area has been generating income since the second year of the project and so far shows a very promising development.

The COVID pandemic and the total collapse of tourism in Palawan led to some changes in our farm operations. Before the pandemic, we had placed emphasis on the production of herbs, vegetables and fruits, which were sought after in the restaurants and hotels of the tourist hubs and in the second phase should also supply the project's own resort. A significant part of this capacity was shifted to the production and cultivation of animal feed as the farm management is currently concentrating on raising and selling pigs, cattle, poultry and eggs for the local market, as these products continue to sell well. We are assuming a steady increase of income and stable long-term profitability in this area during the second project phase. Special focus is given to goat breeding in the farm. In 2018, the Buliluyan-Kudat trade route between Palawan and Sabah (Malaysia) was opened, creating a connection to the so-called "Brunei Darussalam-Indonesia-Malaysia-Philippines East ASEAN Growth Area" (BIMP-EAGA). The Islamic states in the west of the Philippines are seeing a rapidly growing demand for goat meat and goat milk products. The Department of Agriculture on Palawan has since made efforts to meet this demand, but is still far from the export target of 20,000 goats a year. We have planted substantial areas of the farm with fodder plants in preparation for sustaining increased numbers of goats during the second stage.

Another important source of income that we develop is coffee production. In 2019, over 100,000 tons of coffee were consumed in the Philippines. The country itself produced 62,062 tons in the same year; almost half of the amount consumed was imported from the USA and Brazil. We expect a considerable part of the income to be covered by this agricultural sector by the end of the 2nd phase. We are already harvesting the coveted Civet Coffe for the specialty market.

Ecotourism

The KIAO Resort is made available to the project by the Lobsiger family as a work and training facility. Based on the last operating years 2015/2016, the income is estimated at CHF 10,000 - 12,000 annually with the existing infrastructure. A renovation and expansion of the resort, which was built in 1986, can increase this assessment considerably. However, this presupposes normalized conditions in tourism. In 2018, the Department of Tourism recorded 1.8 million visitors to Palawan. The COVID pandemic brought this industry to a complete standstill in the Philippines in 2020.

Initially we planned to begin operations in the resort at the end of the first project phase in order to have current representative data available for the mid-term evaluation and to enable corresponding projections for the second phase. At the moment it is very difficult to make forecasts and this project has been suspended until further notice. However, if the situation in tourism improves, operations can be activated at any time. The project will be marketed as an overall concept, the stay at the resort can be complemented with tours on the farm and in the jungle as well as courses in the community center. The farm is open for local tourism.

Workshop Production

The production and training facility contributed by the Ilse and Johann Hoff Foundation provides the project with the capacity to treat and process bamboo to the highest standard. Byanyas will thus have the largest, most progressive and most sustainable treatment facility for bamboo products on Palawan. In addition to selling bamboo poles and furniture, we want to be able to produce panel materials (boards, laminated panels, parquet) and other components made of bamboo. Bamboo has a number of advantages over wood-based materials, especially when it comes to sustainability. In view of the steadily rising building material and wood prices in Palawan and the increasing use of bamboo as a building material and raw material in the Philippines, we expect a long-term financial return. According to the Department of Environment and Natural Resources (DENR), the bamboo-based furniture industry in the Philippines is currently growing at 15% per year. The demand is far greater than the supply and the department estimates the annual national deficit of bamboo poles at 20 million pieces. Around 40% of the raw material is used in the furniture industry, 25% in the fishing industry and construction sector, 10% in agriculture and 25% in the manufacture of products such as toys, household goods or musical instruments. We currently plant around 300 cuttings of bamboo per rainy season in our agricultural zones and encourage our communities to invest in this sector as well.

In addition to processing bamboo, we are also planning a pottery and a forge. These two workshops are initially intended for farm operations and the community center. With increasing quality, the products from these workshops are also marketed.

Construction

Our construction team is currently involved in the planning and construction of a showroom for a local furniture workshop that is integrating our stone wall construction into its concept. In spring 2020 we were contracted for the design and construction of several buildings for a local resort. However, the COVID pandemic thwarted our plans. The resort project has been discontinued for the time being, but the goal remains to continue working in this direction in the coming years and to establish our Byanyas building/ construction group, as a construction team with a high quality standard and innovative concepts. The workshop will enable us to store and process material and allow us to deliver prefabricated elements to construction sites.

Consultations and Courses

With the experience gained in the project, we want to offer consultations and seminars, particularly in the fields of sustainable agriculture, permaculture and sustainable tropical building. Agriculture courses in cooperation with TESDA are already in progress.

Initiators

The two initiators Joel Lobsiger and Joel Arida have very different backgrounds, qualifications, and relationships to Palawan. Nevertheless, they share a deep appreciation for this habitat and its human inhabitants, animals, and plants, and want to combine their efforts to help retain some of the magic that makes this island so special.

Joel Lobsiger



- 1983 born in Basel, Switzerland, early childhood in Palawan
- Primary and secundary school in Allschwil (CH), Matura
- at Gymnasium Leonhard, Basel (CH)
- Master in Education of Art and Design, Zürich University of the Arts (CH)
- Teacher at various schools and workshops in Switzerland, Sekundarschule Meilen and Sissach, Gymnasium Münchenstein, WBS Basel among others
- Workshops at International School Denmark
- Freelance Artist, Exhibitions in Switzerland, Germany, France, Italy, Russia and the Philippines
- Founder Cicolupo Art Company, Switzerland
- Management Kiao Resort, Palawan, Philippines •
- Hayian Rescue Project, Palawan
- Treasurer Byanyas Foundation and Project Manager

As the son of a Filipina mother and a Swiss father, I have spent a lot of time in Palawan and felt a strong connection to the island and to the indigenous population in particular since my early childhood. I have always felt very privileged to have this unique access to such diverse cultural groups and lifestyles - Switzerland, on the one hand, with its prosperity, excellent infrastructure, first-class education and social security, where I was able to complete my training and gain professional experience; and on the other hand, the wilderness of Palawan and the culture of the Tagbanua, who have accepted me as one of their own, taught me how to survive in the jungle and on the sea, and initiated me into their rituals and way of life.

When Typhoon Haiyan swept across northern Palawan in 2013, I collected funds for a spontaneous aid campaign with friends in Switzerland. Within just a few days, we collected over CHF 20,000 from our circle of friends and customers. A three-person team came together to seek out three small communities on the north of the island affected severely by the storm but located in an area receiving no aid from the government, the Red Cross, or any other aid organization. Within a few weeks, these communities received urgently needed medical aid, construction materials for buildings and boats, tools, generators, hygiene items, seeds, school materials, and food from us. In addition, we set up new schools in every community, as the old ones had been destroyed in the storm. We built the new buildings so that they could serve as typhoon shelters in the future if needed. All of the workers we hired received low pay, but they also received other items they can use to support their families in the long-term, such as tools and financial aid in purchasing boats or machinery for agriculture or trades. The project proved a groundbreaking, long-lasting experience for me. Above all, it showed that it's possible to use relatively modest funds, a good local network, and a well thought-out administration to do big things.

A year later I decided to settle on the island with my wife. During that time, I became even more aware of the urgent need to protect this one-of-a-kind social framework. The island is dealing with an immense influx of tourism, however only a few people truly profit from it. Raw materials from the forests, mines, and sea are exported all over the world. Very few people are working to ensure this island paradise is treated sustainably, and most people doing this work don't have access to the resources needed for effective engagement. Over the following 4 years, my wife and I frequently worked on a private basis doing training and development work, giving English and general educational courses, initiating small projects like "plastic for seeds" in our village, which compensates villagers with seeds for collecting garbage, and providing support in legal concerns and medical emergencies.

We volunteered to help in critical situations, as we did in 2015 to help save and reintroduce over 4,400 Palawan forest turtles, which had been collected in a warehouse by poachers and were being prepared for transportation to Hong Kong. We paid bail for tribal members imprisoned because they wouldn't voluntarily give up their land, and gained plenty of experience in healing wild animals so they could be returned to the wilderness.

At some point I realized that these well-intentioned commitments made little sense if they were not embedded in a more wide-ranging program. These incidents were not isolated events, but rather expressions of a global development, the effects of which affect us collectively. This awakened the desire in me to design a platform that makes comprehensive change possible. I decided to deepen my commitment and found a competent ally in Joel Arida, who shared my views and passions. We founded the Byanyas Project together in 2017.

For me, this project is the continuation and expansion of a commitment I will continue to live out regardless because of my strong concern for our environment. As a person whose life experience unites such highly disparate worlds, I want to use my unique position, my resources, and my contacts to generate an impulse that has a long-term positive effect for my environment and the people around me.



Hayian Rescue Project 2013; construction works on site and opening of one of the newly built schools.



A small part of the 4'400 rescued forest turtles shortly before reintroduction into the wild



Joel Arida



Joel Arida holds a Diploma in Electrical Engineering from the University of the Philippines, which he complemented with a Program for Executive Development (PED) from the International Institute for Management Development (IMD) in Lausanne, Switzerland. He has built his own consulting business and brings more than 30 years of international management and multi-cultural experience in the pharmaceutical and financial services industry. Joel Arida is currently engaged as Vice President within the Global Information Systems departement at Idorsia Pharmaceuticals Ltd., a biotechnology start-up company based in Allschwil, Switzerland. Prior to his consulting career, he held managerial roles for Hoffmann-La Roche Ltd, Du Pont den Nemours, Ascom Telematic, and the Bank of the Philippine Islands. Joel was born and raised in the Philippines, and both his parents dedicated their working lives for the Philippine government - his father worked for the Central Bank of the Philippines, and his mother was a well-respected woman scientist in the Philippines.

Joel Arida lives in Switzerland since more than 30 years, and has also lived previously in the USA, and the Philippines. He is married to a German, and while proud of his Filipino heritage, he cherishes the good interaction of the Asian and European cultures. He realized from his various travels around the world, that Palawan has a rich heritage and has a lot of unique and endangered species that need much attention. He has decided to spend more of his later years in life there. He believes Palawan truly has a lot to offer and every effort should be taken to preserve it's beauty, rich natural resources, traditions and heritag. He would like to pay back for the blessing her has received by contributing to the realization of the objectives of the Byanyas Program.

Partners and Staff Members

The project involves several areas where professional expertise, cultural insight, and networking are highly important. Thus, it is very important to have partners who support the project, advise, create contexts, and transmit knowledge.

We consider ourselves lucky that our partners and team members have been standing by us from the start and support this project with all their hearts.

Sabine Schoppe



- Graduated in Biology in 1990 and PhD in Biology in 1993 at the Justus Liebig University In Giessen.
- Working in wildlife conservation since 1994.
- Ornithological surveys in Panay& Negros, Philippines (1994)
- community-based coastal resource management in Leyte, Philippines (1995-1999)
- Guest professor in aquatic and marine biology at the Western Philippines University, Palawan, Philippines (1999-2005)
- Freshwater turtle trade consultant of Traffic Southeast Asia in Malaysia and Indonesia (2006)
- Since February 2007 Co-manager of the Philippine Cockatoo Conservation Program
- Project director of the Philippine Freshwater Turtle Conservation Program
- Founding member of KFI and since December 2008 serving as Secretary and Treasurer of the Foundation

Sabine Schoppe assists us in coordinating our campaign for the establishment of a protected area in Napsan and advices us on matters of nature preservation and community work.

Melinda V. Acala



- Resident of Puerto Princesa, Palawan
- sity (PSU)

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 Area Coordinator DSWD-Palawan Field Office 2008- 2009 Executive Assistant CRMMDINC Medical Office, 2009-2011 Master in Public Administration, 2015, (PSU) Master of Arts in Management, 2016 (PSU) PhD ind Public Administration, 2019, Holy Trinity University Since 2017 Instructor II at TESDA-Palawan Provincial Office. • Melinda Acala is our liaison at TESDA and developes courses for our apprentices with us. Since 2020 Melinda is in charge of accounting and administration of the Byanyas Founda-

tion in Palawan.

Jannis Gress



- Born 1990 in Baden-Baden, Germany elementary school in Karlsruhe
- secondary school in Köln
- one year internship in various companies
- Civil Engineering at University Münster
- Earthship building Workshop with Michael Reynolds
- Management Beachhostel Clarkville, Puerto Princesa, Palawan
- Permakultur Workshop with Steve Cran in Palawan
- self-study and practice sustainable agriculture, since 2019 managing Byanyas permaculture projects

Hendrik Alsmann



- Born 1987 in Münster, Germany •
- Kaethe-Kollwitz secondary school

- Haiyan Relief Mission in Cullion 2013
- Born 1993 in Labtay, Palawan, Philippines
- Hunter, gatherer and fisherman
- plantings and festivities.



Pukong Bakaltos



Born 1980 in Bataraza, Palawan, Philippinen Palawan National High School, Puerto Princesa Bachelor of Arts Major in Philippine Studies, 2007, Palawan State Univer-

technical diploma in construction and wood technology, Köln

Carpenter at Heeke & Efler GmbH Emsdetten (DE) Travels abroad 2010 – 2014 Australia / Philippines Bachelor of Engineering in Civil Engineering, Area of specialisation: Construction management, BA-thesis (high distinction): Investigation of the transferability of German construction competence Master in Engineering FH Münster 2021 Since 2017 working at HOFF & Partner GmbH, Gronau (DE) Manager of project Produktions- und Ausbildungsstätte Byanyas

• Member of Byanyas Core Team since its foundation 2017

Pukong works in all projects of Byanyas. His most important job consists of collecting knowledge from the tribal elders. Assisted by the team he documents and learns traditions and practices. Every week he organizes an afternoon of practice in traditional Tagbanua dance, music and singing on the Byanyas Farm and holds ceremonies for the start of projects, harvests,

The Bakaltos Family

The Bakaltos family, the largest Tagbanua family based in Napsan, play a key role in the Byanyas project. They know their habitat as well as the legends and stories of this region like no one else. Tatay and Bulundung Bakaltos (father and son) were the last shamans of the local Tagbanua clan and their advice and support lead the way for the project.

Unfortunately, Tatay Bakaltos died during the first year of the project. Then his son Bulundung died two years later. Both worked hard to the very end of their lives to ensure that this project could be established. Without Bulundung's passion to convey his culture, his constant search for a future for his community and his tireless urge for dialogue, the Byanyas project might never have come about. Their passing is a great loss for our community.



Bulundung and his father Domingo at one of their last shared rituals.



Bulundung on his boat.



Tatay (father) und Nanay (nanay) Bakaltos in their home.



Pukong and Pepoy Bakaltos practicing traditional dances with the entire team on the Byanyas Farm.

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For the Tagbanua, shamans are the connection to their ancestors and to the spirits of the surrounding nature. Ancestral cult and rituals are an expression of the deep bond that the clan has with the land that they have lived in for countless generations. Nanay and Tatay Domingo Bakaltos were the heads of the Bakaltos clan and members of the council of elders.

Pukong and Pepoy Bakaltos, Bulundung's two oldest sons, both work in the Byanyas project. their grandmother instructs them in the shamanistic rituals and teaches our team traditional dances and chants. They and their families try to preserve their land with their own means and tirelessly support the project with their knowledge of the jungle and their community.

When the time is right, the two brothers want to take over the duties of their father and grandfather and become shamans of their tribe.

The Bakaltos family are among the last Tagbanua in Palawan to continue this tradition.

With the kind support of our partners and sponsors

