



Article

AGPAY SARIGAN: Exploring a Revamped Alangan Tribe Communal House

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Abstract

Architecture evolves in response to modernization and emerging environmental challenges; however, Indigenous communities residing in traditional dwellings remain particularly vulnerable to the intensifying impacts of climate change. This study focused on the Alangan tribe of Mindoro, one of the island's eight Indigenous sub-groups, whose communal housing system known as the balay-lakoy has been increasingly compromised by severe typhoons. Traditionally constructed from bamboo, cogon grass, rattan, and tree bark, the balay-lakoy embodies the Alangan philosophy of collective living, mutual support, and cultural unity. Recurrent disasters have led to cycles of destruction and rebuilding, contributing to material depletion, displacement, and gradual erosion of communal housing practices.

In response, the Bayani Challenge 2013 introduced a revitalized balay-lakoy prototype in Mayabig, Baco, Oriental Mindoro, integrating concrete and steel with traditional materials. Guided by the principle of Agpay-Sarigan ("togetherness"), the initiative aimed to enhance disaster resilience while preserving Indigenous cultural values. This study examined the lived experiences and perceptions of Alangan residents who occupied the revamped communal house from 2013 to 2023, employing interviews, participant observation, and video documentation.

The significance of this study lies in demonstrating how culturally sensitive, participatory architectural design can simultaneously promote disaster resilience, preserve heritage, and enhance social cohesion. Findings reveal that revamped balay-lakoy improved safety, structural durability, and typhoon resilience without disrupting communal living, cultural practices such as the palanganan system, or daily routines.

In conclusion, residents reported greater family cohesion, reduced maintenance burdens, and strengthened trust in the durability of their homes. By aligning with SDGs 1 (No Poverty), 8 (Decent Work and Economic Growth), 9 (Industry, Innovation and Infrastructure), 11 (Sustainable Cities and Communities), and 13 (Climate Action), the study offers a replicable model for sustainable housing interventions among Indigenous communities in Mindoro and beyond, contributing to broader discussions on heritage preservation, climate adaptation, and community-centered design

Keywords: Alangan tribe, architecture, balay-lakoy, communal housing, climate-responsive, culture, Mangyan, , revamp

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Introduction

Prevalent through the rapid modernization accentuated in structures, architecture has consistently evolved as a result of advancing solutions for present problems. However, those who reside in traditionally-built houses and away from urban spaces, have fallen behind in the topic of updating the quality of their building materials to counter the intensified natural calamities. Such is the case of the Alangan tribe of Mindoro.

The Alangan is one of the eight (8) sub-branches of the indigenous people local to the island of Mindoro. Adventist Frontier Missions (n.d) lists the locations of their ancestral domains in the inner highlands, that being the municipalities of Baco, San Teodoro, Naujan, and Victoria in Oriental Mindoro and the municipality of Sablayan in Occidental Mindoro. The Alangan community places a high value on family and communal living, as reflected in their concept of "balay-lakoy." For the Alangan tribe, "balay-lakoy" signifies a "large house" shared by multiple families, embodying not only a physical space but a philosophy of collective life.



This communal structure nurtures mutual support and security, especially during times of hardship. Additionally, the Indigenous tribe of Mindoro's commitment to sharing their stories, perspectives, and aspirations serves to reinforce bonds within the community, enhancing the sense of solidarity and resilience (Logdat, 2023). They are observed to mostly live in a *balay-lakoy*, overseen by an elderly person (Kuyay). "*Balay*" translates to big and "*lakoy*" translates to house; these houses, built with bamboo poles, cogon grass, rattan strip or vines, and tree bark for the exteriors, shelters twenty (20) to fifty (50) families in a divided but shared space (Sapit, 2023). Though these materials had served to protect them in the past, these can no longer withstand the severity of the typhoon and flooding impact experienced as climate change progressive worsens. Several national news outlets over the course of years had reported Indigenous people of Mindoro as victims of typhoons and suffering from losses of shelter, property, livelihood and life.

In a case study outlining the disaster response after Typhoon Haiyan for the *Alangan* tribe at Sitio Longgani, Naujan by De Leon, et. al (2016), the *Alangan* tribe were shown to construct a *libaong* (temporary shelter) as one of the means of coping. Lacre (2020) offers additional details on the materials used from the testimony of *Buhay at Kinabukasan* Development Foundation Inc. 's Patrick John Mamba, writing that banana stems, banana leaves, coconut leaves and bamboo were

gathered and the family heads combined and fixed them deep into the soil. Despite these efforts, there still exists a cycle of destruction and rebuilding whenever typhoon season hits the Philippines. If this scenario remains to persist, materials will be exhausted and these indigenous people might end up displaced and threatened. Inopportunately, the physical destruction of the *balay-lakoy* is just one of the underlying crises faced by the *Alangan* tribe.

Chronicled by the Department of Social Welfare and Development (DSWD) dating June 2016 was a narrative by Ka Beting, also known as Barangay Sub-Project Management Committee Chairperson Vicente Sara of Barangay Caburo, Naujan, Oriental Mindoro, on the past decline of the *balay-lakoy* culture. In it, Ka Beting notes that the *Alangan* tribes had scattered into individual houses due to external influences and that the communal houses were now scarce. This move was said to be opposite of the group's value of togetherness, as well as made it difficult for the community leaders to detect conflicts and monitor members. All this is further evidence of the interrelation between architecture and culture given that the *balay-lakoy* is the *Alangan's* tangible reminder of unity under a single roof.

Despite the modern shift, the *Alangan* culture needs to be preserved. Architecture can encourage this through the reintroduction of a *balay-lakoy* and integrating robust materials in its revival. An example of this very initiative are the erected communal houses from the Bayani Challenge 2013, at Mayabig, Baco, Oriental Mindoro. Baco was one of the thirty-four (34) identified sites for this national event under the Ninoy Aquino administration. With the theme "*Isang Bayan, Isang Bayanihan*", volunteers gathered to construct three communal houses made of concrete posts for the *Alangan* tribe settled in the area owned and donated by Francisco Buhay. Due to insufficient budget of three hundred fifty thousand (350,000) pesos, only two houses were assembled.

There was limited documentation on this project, consisting mostly of Facebook posts from Eldie Roldan, an active constituent of the challenge as volunteer and architect. She explained that the prototype for the housing has a concrete foundation and has plywood, bamboo, and straw features. Roldan (2013) recounts that the spirit of bayanihan was present in every volunteer as they carried hollow blocks up the site, had doctors provide medical missions, weaved the straw (pawid) roof themselves, held group sessions, participated in lectures for awareness while completely being on equal ground (disregarding the differences in social status). The main event spanned from March 23 – 27, 2013 with improvements added continuously for ten years.

Agpay Sarigan, the *Alangan* counterpart of "*sama-sama*" (togetherness), represents the main role of this case study in detailing the perceptions and experiences of the *Alangan* tribe at Mayabig, Baco on living in a revamped communal house (*balay-lakoy*) from 2013-2023. A decade's worth of information from the residents are to be analyzed to gauge user satisfaction and to note insightful changes brought about by the transition. This research encompasses the points by which

architecture and culture connect to synthesize a purposeful reinterpretation of traditional housing in a modern context. It serves to produce an indicator on whether the outcomes of the *Bayani* Challenge 2013 (concrete communal house) can be recommended for mass implementation among other *Alangan* sectors and Indigenous tribes of Mindoro. Data collated in the form of interviews, surveys and video documentations, also aims to provide a record to tie in research gaps on the subject of indigenous people housing in Mindoro and shed light on the possible architectural interventions that can be applied to preserve local culture.

This study is conducted with the main goal of observing and recording the possible responses of the people towards innovating and updating the pre-existing cultural structures with much newer materials and design strategies. The integration of present methods to past architecture had taken various forms throughout the years, notably in the case of the *Alangan* communal house in Baco.

As 10 years have passed since their transfer from the traditional dwelling to that of the introduced communal house, we aim to gather the perceptions of the *Alangan* tribe in order to determine whether the idea implemented is accepted and can be recommended for the other indigenous groups of Mindoro.

Alongside the principal aim are the following specified goals that the study intends to answer:

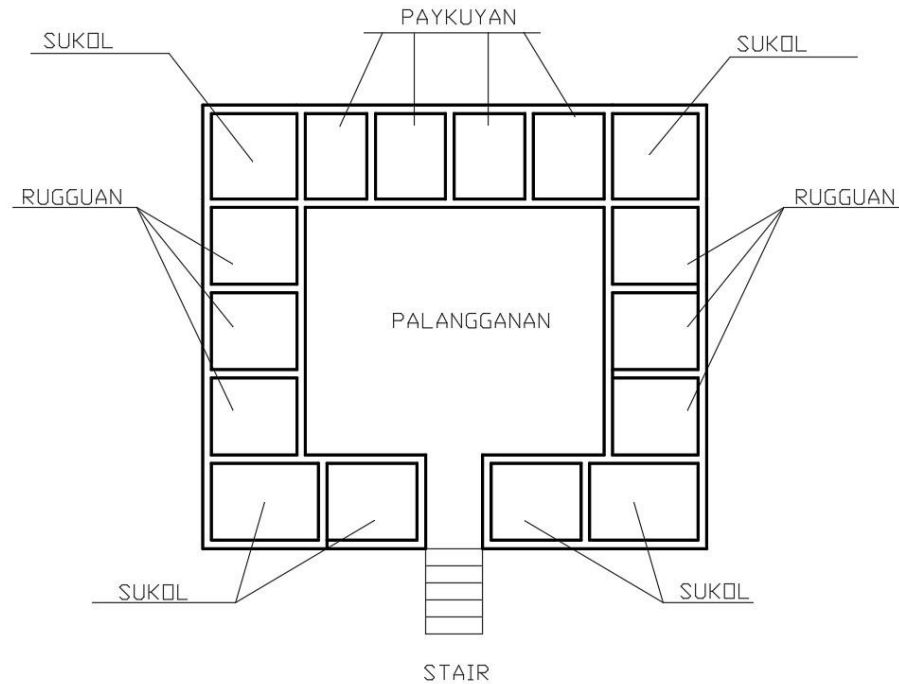
- To analyze the effectiveness of adapting revamped communal houses among *Alangan* Tribe
- To evaluate the effects of the improved communal house on the livelihoods of the *Alangan* community, investigating any shifts in their economic activities, culture, tradition, access to resources, and overall well-being.
- To compare between the experiences of the *Alangan* tribe at their former dwelling and at the communal house after their 10-year stay.
- To assess the features and the modifications of the new communal house that have been most favored and appreciated by the *Alangan* community, considering aspects like design, functionality, and community utility.
- To gather feedback and recommendations to address the concerns of *Alangan* tribe living in a revamped communal house.
- To identify the perceived effects on the transition from traditional dwellings to communal housing among *Alangan* tribes.
- To gain practical insight on the influence of architecture in gradually shaping traditional communal living.

Research Locale

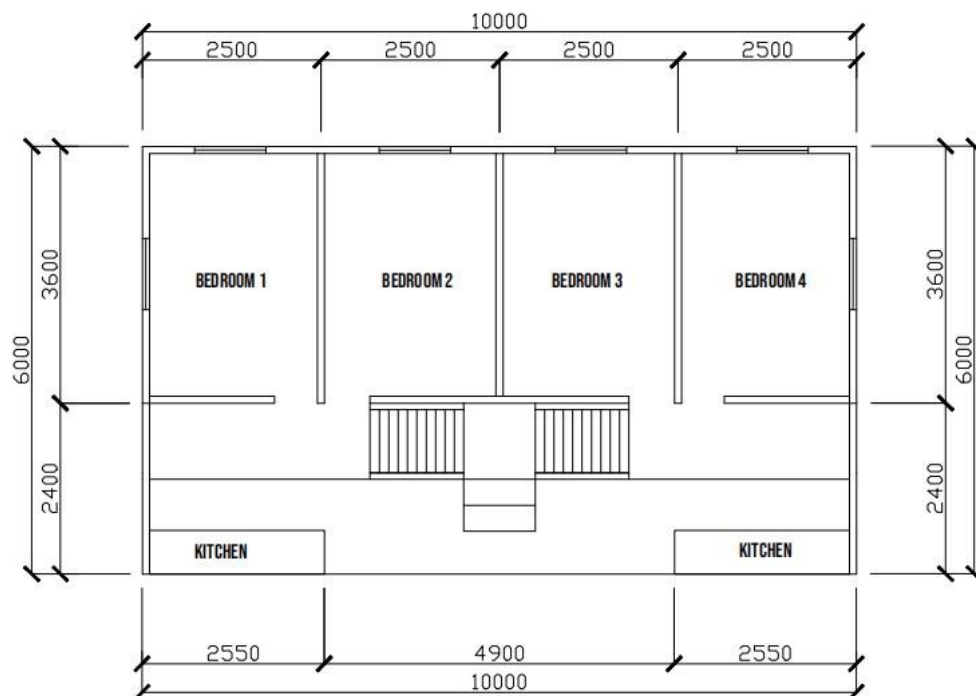
This study was conducted at the Communal House in Sitio Balikat, Mayabig, Baco, Oriental Mindoro, where the *Alangan* community served as the primary respondents. To gather comprehensive insights into their perspectives and experiences, the researchers employed a face-to-face interview approach conducted within the comfort of their homes. This engagement took place during the first

semester of the academic year 2023-2024. By choosing this locale and method of interaction, the research aims to establish a culturally sensitive and immersive context for understanding the views of the *Alangan* community and narratives regarding their housing transitions and living situation at the revamped communal house.

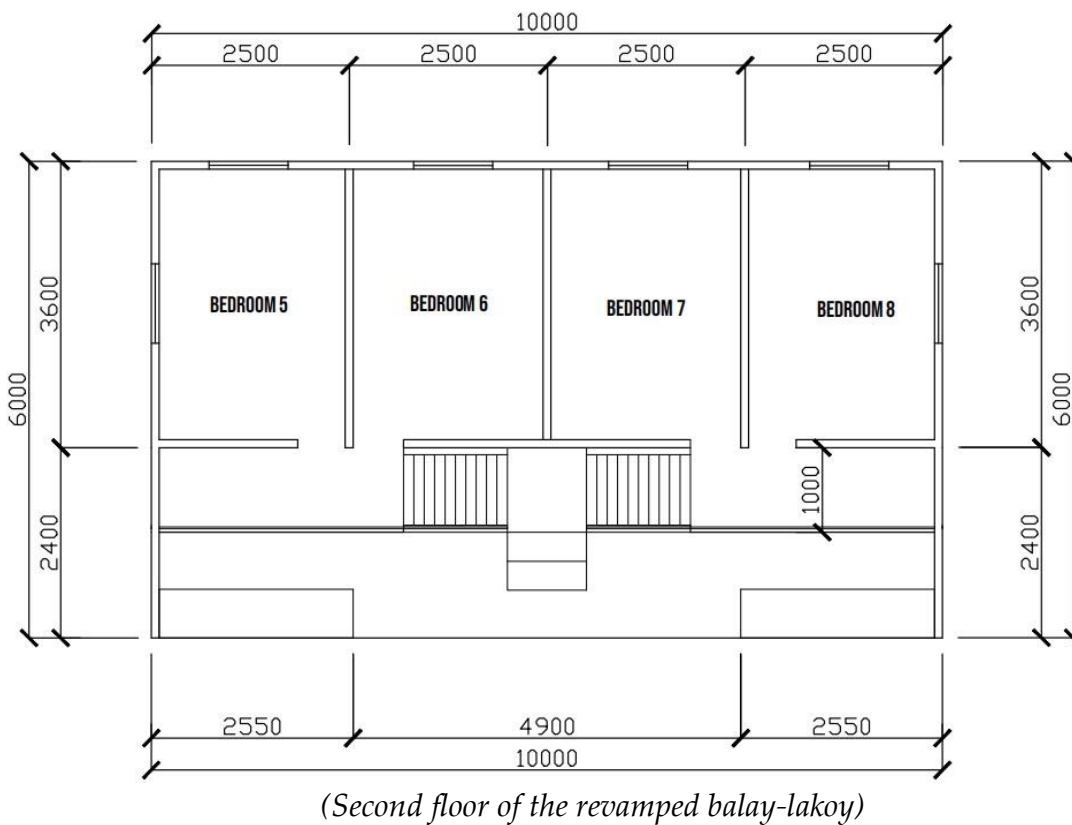
Comparison between the two floor plans:



(Old and original plan of Balay-Lakoy)



(First floor of the revamped balay-lakoy)



With the introduction of innovative materials and construction techniques in the revamped Balay-Lakoy, the revamped communal houses not only offered structural strength and durability but also enhanced their resilience to calamities. This transition not only improved their physical living conditions but also symbolized a significant step towards a more secure and sustainable future, bridging their cultural heritage with modern innovation. It underscores the importance of adaptive approaches in preserving indigenous traditions while addressing the practical needs and challenges of contemporary life.

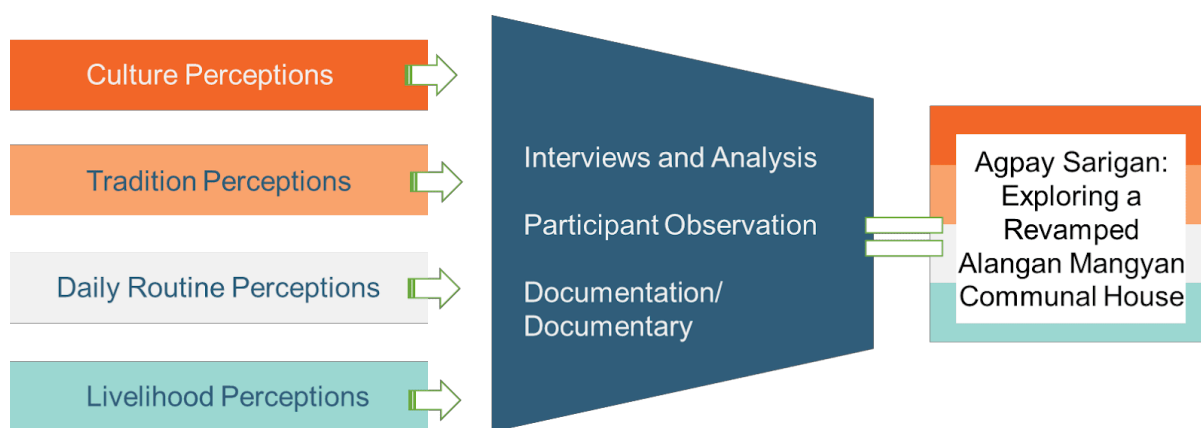


Figure 1. *Input-Process-Output Model*

Methodology

Research design

This is a case study with primarily ethnography and phenomenology as its roots as it involves an in-depth immersion in the *Alangan* community at the specified site to properly document and present findings on the outcome of the certain condition that occurred: *the introduction of a revamped balay- lakoy*.

Participants and Setting

The Alangan tribe at Sitio Balikat, Mayabig, Baco are the main participants of the study followed by the concerned people in the development of the revamped *balay-lakoy* project such as Jason Angcaco, Amando Dayrit Jr., and Mimo Perez.

Instrumentation

For the purpose of this research study, a comprehensive instrumentation was employed to gather and analyze data. Three primary research methods were utilized, each serving a specific purpose.

First, interviews were conducted with participants to gain in-depth insights into their perspectives and experiences. This qualitative data collection method allowed for the exploration of individual narratives and the uncovering of nuanced information. The researchers utilized a self-made interview protocol. Under the interview protocol are questionnaires categorized into two: (1) questionnaires for the members of the *Alangan* community living in the revamped communal house for 10 years and (2) members of the *Alangan* tribe in the neighboring community. Both questionnaires are composed of questions that were enough to acquire and analyze the perceptions and opinions of the respondents.

Second, participant observation was employed to immerse the researcher within the context of the study, facilitating a holistic understanding of the subject matter. This method allowed for the collection of real-time, firsthand data by observing and interacting with participants in their natural settings. The researchers

conducted a two-day immersion into the community as part of their participant observation method. During this period, they embedded themselves within the community, striving to gain a deep and nuanced understanding of the subject matter under investigation. Throughout these two days, they actively observed and interacted with community members.

Lastly, documentary and documentation analysis was used to examine existing records, texts, and materials related to the research topic. This approach allowed for the examination of historical context and secondary sources, complementing the primary data gathered through interviews and participant observation.

Together, these instrumentation methods provided a robust and multifaceted approach to data collection and analysis, enabling a comprehensive exploration of the research objectives.

Data Gathering Procedures

To obtain the necessary data for evaluating the *Alangan* community's perception of their newly revamped communal house, the researchers initiated the process by seeking official permission. They composed a formal letter addressed to the National Commission on Indigenous Peoples, requesting authorization to conduct their study. Once granted permission, the researchers proceeded by developing comprehensive interview protocols that they would follow during their interaction with the target subjects. They carefully scheduled appointments, taking into account the subjects' availability and preferences, within the comfort of their homes.

During these interactions, the researchers took the time to introduce themselves and the objectives of the study to the community members, ensuring that they were fully informed and willing to cooperate. Subsequently, they conducted unstructured interviews with the participants, covering a range of topics related to the communal house, such as their perceptions, its current status, and the construction process. Additionally, the researchers carried out participant observation, immersing themselves in the community and actively participating in their daily activities. This comprehensive approach allowed the researchers to gather in-depth insights and firsthand experiences to assess the community's perspective on the revamped communal house.

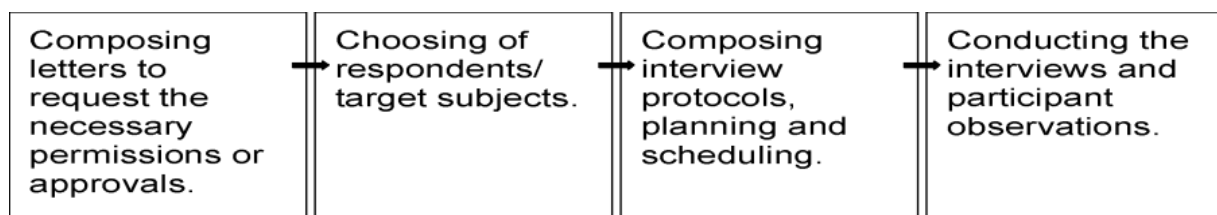


Figure 2. Data Gathering Procedure

Data Analysis

The data analysis for this study involved a multi-step process, beginning with the collection of primary data through interviews and participant observation. The recorded interviews and observational notes were transcribed meticulously to ensure accuracy and comprehensiveness. Following transcription, a systematic content analysis was conducted, wherein the textual data was analyzed to identify recurring themes, patterns, and insights.

According to Columbia University Irving Medical Center (2023), content analysis is a research technique employed to identify specific words, themes, or ideas in qualitative data, typically text. This method enables researchers to measure, assess, and explore the occurrence, interpretations, and connections of these particular words, themes, or concepts.

Through this approach, the researchers were able to distill the rich qualitative data collected from the interviews and observations into a structured and coherent representation of the participants' perspectives and the observed phenomena, facilitating a comprehensive understanding of the research objectives.

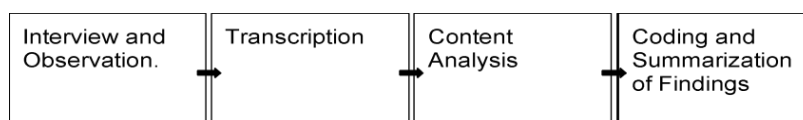


Figure 3. Data Analysis

Statistical Treatment Applied

As this case study falls under the qualitative realm, no statistical treatments are used as the specific *Alangan* community with the revamped communal house made under the *Bayanihan* Challenge 2013 is the main focus group. The supplemental sources would be the key players in the aforementioned events. Given so, random sampling of larger and generalized groups was inapplicable for this research.

Repertory Grid

A research repertory grid is a structured interviewing technique that helps researchers understand how individuals perceive and make sense of a particular topic or domain. It is grounded in personal construct theory, which posits that people construct their own unique understandings of the world through bipolar constructs (e.g., good vs. bad, friendly vs. unfriendly). According to Hadley and Grogan (2022), the repertory grid technique, as cited in Fransella et al., (2004); Jankowicz, (2004), was originated by George Kelly (1905-1967), a prominent figure in 20th-century cognitive and humanistic psychology. Kelly designed this research tool to assist individuals in articulating their worldview without being overly swayed by his own perspectives or interpretations.

The repertory grid works by examining elements and constructs of the same topic. Elements here, as defined by Cohen et al. (2007), refers to the tangible and personally significant aspects such as people, events, objects, ideas, institutions, etc., that are meaningful to the individuals providing the information. Easterby-Smith (1981) also states: “think of elements as being the objects of people's thoughts, and constructs as the qualities that people attribute to these objects.” After examining, the completed grid is then analyzed using various statistical and visual techniques to reveal patterns, relationships and underlying meanings in the participants' answers.

Coding System

The repertory grid made from the answers of the respondents are sectioned per main interview question. Questions that did not make the cut will be explored in the succeeding analysis and may have been indirectly answered through participant observation. Keywords were handpicked from the responses; they represent the main idea of their perception and the answers to the research problem at hand.

Results and Discussion

During the conduct of the research, there are three main data sources utilized: *(1) Semi- structured In-depth Interviews, (2) Participant Observation, and (3) Video Documentation*. Throughout the three modes of data collection and analysis, the *Alangan* tribe had a positive reception to the revamped *balay-lakoy*. Their decade-long experience provided a plethora of valuable inputs summarized below:

Culture

In terms of culture, the introduction of the revamped *balay-lakoy* has not led to significant negative changes in the *Alangan* culture. Instead, the structure was designed to protect the community from calamities without intending to erase or alter their cultural practices. The cultural essence of the *Alangan* community, specifically the practice of families living together in one house remains unchanged, thus suggesting that the communal living aspect, a significant cultural tradition, has been preserved.

Tradition

Indigenous people are indeed rich in traditions. The *Alangan* community specifically, have traditions that are still practiced over the years. The tradition of making fire inside the house has been maintained even with the introduction of the new structure. The *palanggan*, a tradition of judgement unique to the community, continues to be observed in the revamped *balay-lakoy*. This implies that architectural interventions did not eliminate the traditions within the community.

Daily Routine

Over the past decades, the *Alangan* community residing in *balay-lakoy* has maintained an unaltered daily routine. The behaviors and way of life of the *Alangan* have remained unchanged, even after transitioning from the traditional *balay-lakoy* to the revamped version. This consistency can be attributed to the influence of tradition, livelihood, and culture, which significantly impact the daily routines of the *Alangan* tribe. Despite the transformative shift in their living arrangements, the tribe has steadfastly adhered to the established daily routines, which persist to this day.

The *Alangan* community had found that the revamped communal housing offers enhanced security compared to the traditional *balay-lakoy*. This is due to its increased durability, permanence, low maintenance requirements, and overall safety. Unlike the traditional *balay-lakoy*, which is constructed using materials like cogon grass, bamboo poles, and wood, the revamped housing provides a greater sense of security for the *Alangan* community. They have expressed feeling more secure and safe in the revamped *balay-lakoy*, highlighting the significant contrast between their experiences in the two types of housing.

Livelihood

The way of life of the *Alangan* tribe remains unaffected by the modifications made to the communal housing they inhabit. Geographically, their livelihood is closely tied to the revamped communal housing, including the kaingin and farm. The *Alangan* tribe typically chose to settle in areas abundant with resources. The *Alangan* tribe residing in the revamped communal housing had embraced the concept of a “sari-sari store,” a compact and convenient shop located within the *balay-lakoy*, where various commodities are made available for sale to the members of the *Alangan* community and neighboring community.

Effectiveness of Revamped Balay-lakoy during Calamities

The *Alangan* people have found the revamped *balay-lakoy*, constructed with steel, to be highly effective in withstanding calamities. Over the course of the last decade, they have experienced numerous disasters, yet the revamped communal housing remains standing, providing a secure and safe shelter. In comparison to the traditional *balay-lakoy* made of traditional materials, the revamped version has proven to be more resilient and reliable.

Features Favored

The *Alangan* tribe holds a preference for concrete and steel materials over the traditional ones like cogon grass, bamboo poles, and wood. This inclination is due to the modern materials enhanced durability and ability to withstand calamities more effectively. Based on the features of the revamped *balay-lakoy*, the new version manages to achieve an aesthetically pleasing appearance while still preserving the

cultural traditions of the *Alangan* Mangyan tribe despite the adjustments made from the transition from traditional shelter to revamped *balay-lakoy*.

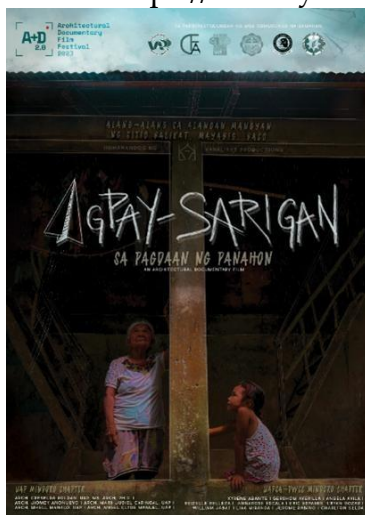
Architectural Improvements Suggested

The *Alangan* tribe had proposed the construction of additional revamped *balay-lakoy* structures using concrete and steel. This is due to their requirement for more durable housing in order to avoid the repetitive cycle of destruction and reconstruction during times of calamity. Drawing from their previous years of experience, they have recognized the effectiveness of utilizing sturdier and innovative materials, as well as the significance of architectural advancements that have positively impacted their lives while still preserving their cultural traditions.

Documentary Output

The 10-minute documentary, “*Agpay-Sarigan: Sa Pagdaan ng Panahon*”, was completed last November 20. It is currently uploaded at the Sentro ng Arkitekturang Filipino YouTube Channel under the title: “A+D 08 AGPAY SARIGAN”, premiered December 4, 2023, through the link:

<https://www.youtube.com/watch?v=OPIOwIckRpI>.



AGPAY-SARIGAN: *Sa Pagdaan ng Panahon*: For the Alangan Tribe of Sitio Balikat, Baco

“In a world where architecture is known to be grandiose: towering skyscrapers, curving forms, and contemporary systems, there exists a small project at the foot of Mt. Halcon for the tribe who had spent year after year worrying. Ten whole years had passed since then, we wonder: how are they now, and did architecture manage to reunite and reignite the dwindling culture they cherished? Come and witness the true meaning of AGPAY-SARIGAN –the word that modern architecture has saved from the tides of time.”

Conclusions

It is therefore concluded that the revamped *balay-lakoy* had gained a generally positive reception from the *Alangan* community, both from those residing in it and those who are not.

Several aspects of their way of living had stayed the same with the notable perk of being motivated to do so as they are assured that their *balay-lakoy* can withstand the fire when they burn trash (*sigá*). They also appreciate how the structures helped their families stay together and eliminated their need to move from one place to another. Other members of the *s* community would also praise and comment on how their house is the best in the area and how they would also like to live in one.

Compared to the previous dwellings that had the following problems: (1) termite infestation because of the wood, (2) *cogon* roof is weak against strong winds, (3) often needs to be rebuilt after a typhoon, and (4) indoor flooding, they no longer experience them in the revamped *balay-lakoy*. In essence, one can say the alterations made to the materials were proven very effective against the forces of the typhoon. This was also the top reason why the *Alangan* tribes are in favor of the revamped version of the *balay-lakoy* –they are assured that they are safe in the *balay-lako*, and it would not fall down and fly away.

They did not have any specific features that they favored as they viewed the revamped *balaylakoy* in a holistic manner. The most mentioned descriptions that garnered the most attention would be (1) the metal roofs that replaced the *cogon* roof for the better, and (2) the concrete/cement/stone house that is by their experience much stronger than wood and bamboo.

When it comes to architectural improvements, the *Alangan* tribe had taken it upon themselves to do their own additions and extensions to the house. They use hollow blocks and decide among themselves what to expand. In addition, they are quick in constructing their preferred changes, as with every visit of the research team, works in progress have turned into a new section of the house. The presence of a mini-store for the children may also be a modern influence and is reminiscent of the Filipino sari-sari store. With their newfound preference for steel roofs, they would often acquire donations from the local government and readily install them to replace the old, *cogon* roof.

In summary, the revamped *balay-lakoy* managed to fulfill its role of safeguarding the people from the harsh elements, hosting their accustomed traditions, and maintaining the *Alangan* culture of families under a single roof, all that which reaps positive receptions from the community and prompting enthusiasm by introducing such concepts to their fellow members in other areas. This is also a go signal for similar projects to be established and a testament to how architecture can provide solutions for every person or group out there. All in all, the old and the new intertwine and reconnect for a structure that will last and will pass on from generation to generation.

Recommendation

Upon the completion of this research, there are three points of recommendation identified for those who wish to explore this topic further.

First is the allocation of an extended research period to fully immerse in the *Alangan* culture and their lives in the revamped communal housing. Detailed journaling of observations and dates are crucial to the validity of the study, as well as referencing for the analysis. With the longer timeframe, future researchers could also implement various data-gathering techniques at spaced intervals and with a larger number of concerned people interviewed.

Second is the introduction of other innovative and/or stronger construction materials to minimize worries of the indigenous people during typhoon season. One may look into a comparative analysis of present building techniques and materials that the society can share to minority groups in the far-off distance area.

Third is branching out to the nearby communities on their opinions and perceptions of the *Alangan* tribe and the integration of non-indigenous materials in the construction of their residence. Through this, one may gain an outside perspective on how others, especially those from other tribes and barangays, view this phenomenon of revamping while resuscitating an endeared tradition.

Recomended Design

To better illustrate the results of the study, here is the architectural application of the revamped balay-lakoy –noting material choices, site context, and distinct features.

From the published documentary titled: “A+D 4 BALAYLAKOY AT PALANGGANAN” uploaded at the Youtube channel, Lenteng Malaya on December 21, 2024, the following key-points were extracted regarding the design of the balay-lakoy.

Emmanuel D. Guarde (Mangyan Artisan Alangan): *“...kahit ngayon basta magtayo kami ng isang balay lakoy, ay sadyang ilalagay naming dapat yung palanggan. ang palanggan wala naman siyang simula ehh sadyang kasama na ito ng aming kultura, na istraktura ng aming bahay. Nung balay lakoy, dun sa palanggan, doon lahat nangyayare ehh. Isa itong common place sa lahat ng nakatira sa loob ng balay lakoy..”*

[Even now, whenever we build a “balay-lakoy”, we always make sure to include the “palanggan”. The “palanggan” doesn't have a specific origin, it's just inherently part of our culture, an integral structure of our house, of the “balay-lakoy”. At the “palanggan”, everything happens there.]

Ms. Ligaya Lintawagin (Tribong Mangyan): *“Yung palanggan ay simbolo ng sharing, bahaginan, kung ano man ang mayroon sa kanila sa kwentuhan, kukwento ang mga elders para yung mga kabataan makikinig, dun di sa palanggan ginaganap. Tapos po yung bawat isang pamilya kung ano ang mayroon sa kanila, magbibigay doon sa bawat isa, kahit iyan ay isang kalderong maliit. Lahat yan bibigyan kahit na kabiya na kamote o kaya ay kaputol na balinghoy, ibibigay sa isang pamilya. Pag buo, lahat magbibigay, magiging marami. Halimbawa kahoy, mga baboy ramo, yung karne, yung ganyan. Doon sa palanggan ginaganap. pag mag papatay ng baboy pero yung mga malalaki, kapag nakakuha sila ng mga pagkain mula sa kalikasan doon nilalagay sa gitna at ibabahagi sa lahat ng pamilya.”*

[The “palanggan” is a symbol of sharing and giving. Whatever they have, even in stories, the elders will tell stories so that the youth can listen; it takes place at the “palanggan”. Then, each family, whatever they have, will be given to each other, even if it's just a small pot. All of that will be given, even a half of a sweet potato or a piece of cassava, it will be given to one family. When it's complete, everyone will

contribute, and it will be plenty. For example, wood, wild boars, the meat, things like that. It takes place in the “*palangganan*”; when they slaughter pigs, but the big ones, when they gather food from nature, they place it in the middle and share it with all the families.]

Gabby Oybad (Tribong Hanunuo): “*Kung ano yung napagusapan sa community ganun din ginaganap, sa amin (Tribong Hanunuo) ay hindi ganito ang pagkakagawa, para siyang papag, parang papag na pwedeng paikot din pero hindi masyado kaming particular katulad nito. (palangganan). Talagang alangan talagang kwan, napaka kwan nila, napakamalinaw sa kanila yun. Hindi lamang sa material, pati yung mungkahi ng mga tao, mas madaling mapakinggan ng lider, kapag ang lider ay nasa ibaba, hindi yung nasa taas hirap pakinggan. Yan yung Magandang kwan siguro, common sa mga mangyan. Ang lider ay hindi dapat nasa taas, kundi nasa among the members, nandoon sa mga tao.*”

[Whatever is discussed in the community is also practiced. For us (Hanunuo Tribe), it is not made like this; it resembles a pallet bed, like a pallet bed that is around the structure, but we are not very particular about it like this. (*palangganan*) The Alangan tribe is very clear on them. (the difference of *palangganan* of Hanunuo Tribe). Not only in terms of material things, but also the suggestions of the people, it's easier to listen when the leader is at the bottom (stage), not at the top where it's hard to listen. That's probably a good thing, common among the Mangyan. The leader should not be at the top, but among the members, with the people.]

Narration: “*Tanging tribo lamang ng mga Alangan ang mayroong balaylakoy, kaakibat ang natatanging palangganan. Ang disenyo ng palangganan ay sadyang quadrado, o may apat na sulok at apat na haligi, na sumisimbolo sa apat na lider ng kumunidad. Ang disenyo ng bubong nito ay tinatawag na quatro-aguas, na ang ibig sabihin ay apat na daluyan ng tubig. Noong una, ang mga sahig, dingding, haligi, at mga trusses ng balaylakoy ay yari sa mga bilog na kahoy at ang bubong naman ay yari sa kogon. Tanging panali lamang ang kanilang ginagamit noon upang mabuo ang istrakturang ito. Sa pag tagal ng panahon kasabay ng modernisasyon, napalitan ng kawayan, pako, tabla at ibang pang materyales ang yari nito. Sadyang nakaangat sa lupa ang sagradong palangganan na kanilang kinagisnan, at hindi puwedeng ilapat sa lupa.*” **English Translation:**

Only the Alangan tribe has the *balaylakoy* (a traditional house), along with the distinctive *palangganan* (sacred platform). The design of the *palangganan* is purposely square, with four corners and four pillars, symbolizing the four leaders of the community. The roof design is called *quatro-aguas*, which means four waterways. Originally, the floors, walls, pillars, and trusses of the *balaylakoy* were made of round wood, and the roof was made of cogon grass. Only ties were used to construct this structure back then. As time passed and modernization came, the materials were replaced with bamboo, nails, planks, and other materials. The sacred *palangganan* is elevated from the ground as part of their tradition, and it cannot touch the ground.

Summary of Design Points from the Documentary:

- *Balay-lakoy* needs to have a *palangganan* – a multipurpose communal area for telling stories, eating, and trials.
- The *palangganan* is square with four corners and four pillars made of round wood for the four leaders of the community.
- *Quatro-aguas* (four waterways) design for the roof
- Round wood for floors, walls, pillars, trusses
- Cogon grass for roof
- It was constructed by only ties (tying pieces of the wood together).
- Modern materials like bamboo, nails, and planks can be seen in newer *balay-lakoy*s
- *Palangganan* is considered sacred – elevated and not touching the ground.

Materials

Tabulated below are the key materials in mind for the construction of the three proposed balaylakoy, drawing references from the one at Sitio Balikat, Baco and from the reviews stated in Chapter 2.

Material Picture	Material Name	Application	Reason/Description for Use
	Concrete	Walls, Columns, Floors	To combat compressive forces from water weight and forceful winds, avoid water from entering because of its solid composition (no gaps)
	Stone Masonry	Bottom Walls	Can be found within the vicinity, laid to be a wind and water resistant base for the upper walls and roof compared to wood.

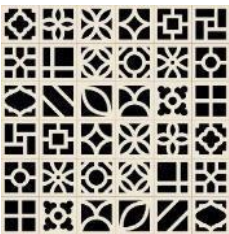
	Bamboo	Palangganan, Windows	Local material that is both flexible and tough; used for palangganan floor for the water to be drained to the natural ground via the gaps.
	Galvanized Iron	Roof sheets, trusses	To prevent water seeping inside the house due to it being non-absorbent; it can be reinforced with fixings every two (2) corrugations at ridges, eaves and overhangs (Agarwal, 2007). Trusses made from this can easily be customized and reinforced with gussets, collar ties, and metal straps at the rafters and ridge.
	Breeze Blocks	Walls/Windows	To allow ventilation while still providing a sturdy structure; an added design feature for interest and uniqueness.

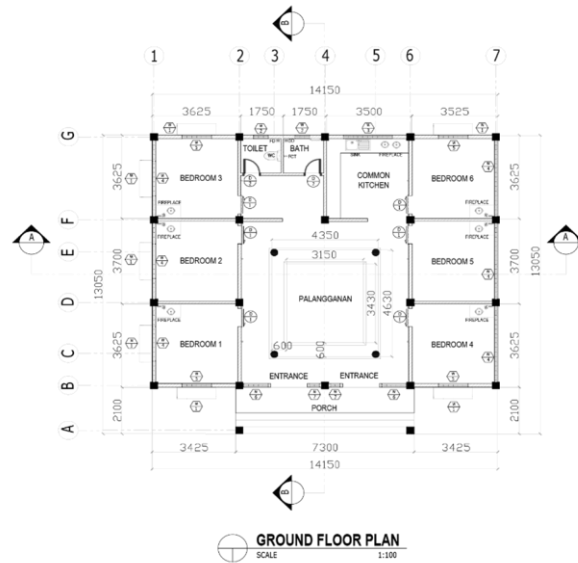
Figure 9. Proposed Materials for the Recommended Revamped Balay-lakoy

Applied Designs

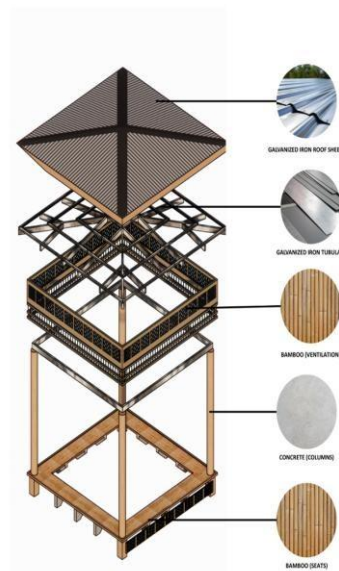
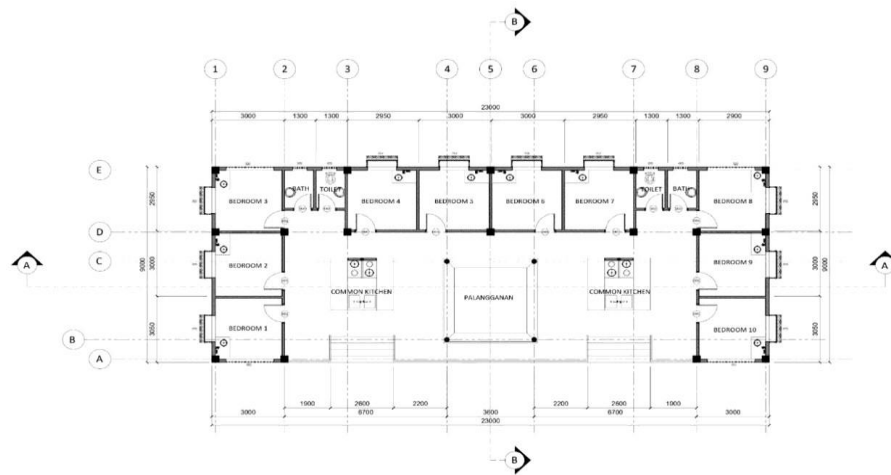
As the culmination of the theoretical and observation research, three models are made with each site found across Baco, Oriental Mindoro where other groups of *Alangan* Mangyans have lived. This architectural interpretation of a renewed traditional house was done through utilizing AutoCAD for 2D drafting, SketchUp for 3D modelling, and Enscape for final rendering.

All three are unique reflections of their site, indicative of how balay-lakoys as homes can be adapted but still retain their cultural themes and primary purpose: security and safety so families can stay together.

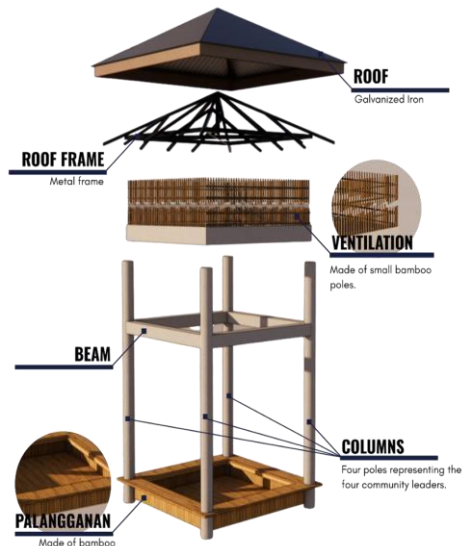
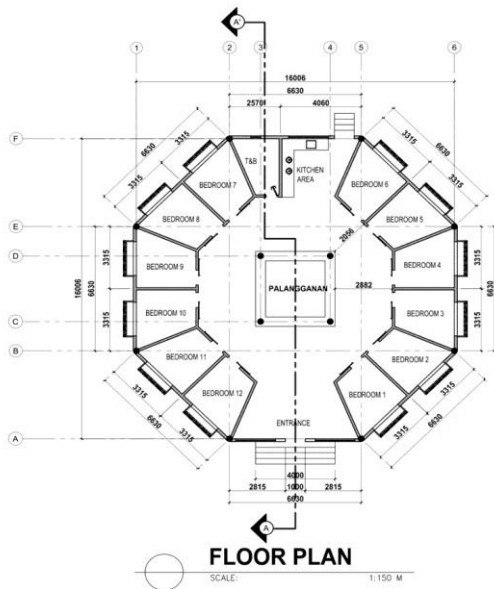
Site No. 1 : Adaptive Reuse Balay-lakoy
Location: Sitio Centro, Brgy. Lantuyan, Baco



Site No. 2 : Rectangular Balay-lakoy
Location: Lagunlong, Water, Baco



Site No. 3 : Octagonal Balay-lakoy
Location: Brgy. San Ignacio, Dulangan III, Baco



Addressing climate resilience and durability, the materials used in this revamped *balaylakoy* have been carefully selected. Concrete walls, metal roof framing, and galvanized iron (G.I.) roofing replaces traditional materials such as bamboo and thatch for greater durability, resistance to extreme weather, and longer lifespan. These changes do not disregard tradition, but rather adapt it for sustainability, making the *balaylakoy* both culturally rooted and future-ready.

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