



Aga Khan Award for Architecture

Document B

ARCHITECT'S RECORD

2013 AWARD CYCLE

I. IDENTIFICATION

[Name of project. If the project has been known by a different or previous name, please indicate this in brackets. Please provide the actual street number or location of the project, even if the correspondence address is different. The longitude and latitude are required so the project can be documented on Google Maps.]

Project Title: The Reconstruction of The Mbaru Niang	
Street Address: Kampung Waerebo - Desa Satar Lenda Kec. Satar Mese Barat	
City: Manggarai	Country: INDONESIA
Longitude: 120° 17'02.51" E	Latitude: 8° 46'08.89" S

II. PERSONS RESPONSIBLE:**A. Architect/Planner**

[Name and address of architect(s), architectural firm(s), or other person(s) responsible for the project; for joint projects, be sure to indicate the name of the principal designer(s) at the end of this section. (Other project staff should be listed as project affiliates in section C of the record.)]

Name : Rumah Asuh	
Mailing address : Jl. Palem Puri No. 7. Bintaro Sektor IX.	
City : Tangerang	Postal code : 15413
Country : INDONESIA	Telephone : +62 816 773 149
Facsimile : +6221 745 8922	Email : han.awal2@gmail.com
Principal Designer: Ir. Yori Antar IAI	Website : N/A

B. Client

[Name of the individual, company or institution who commissioned the project. If the project owner is different from the client, or if the current users of the building are not the client, please note their name(s) as project affiliates in section C. If the main client is the local, regional or national government, please indicate the responsible government ministry or department. Where known, please indicate the name of the individual responsible within the ministry or department.]

Name : The People of Waerebo	
Mailing address : Kampung Waerebo - Desa Satar Lenda Kec. Satar Mese Barat	
City : Manggarai, Flores	Postal code : 86561
Country : INDONESIA	Telephone : +62852 530 15186, +62813 373 224 997
Facsimile : N/A	Email : warisanbudayawaerebo@yahoo.com

C. Project Affiliates/Consultants

[Please list the other key people involved in the project and indicate their roles and responsibilities, e.g. engineers, consultants, contractors, economists, master craftsmen, technicians, site supervisors, other architects, clients, etc. who have played a significant role in the project. Please cite their addresses and contact details on a separate sheet.]

Name	Role
Tirto Utomo Foundation	Donor for Tirta Gena Ndorom, Tirta Gena Jekong and Tirta Gena Maro
Mr. Arifin Panigoro	Donor for Panigoro Gena Mandok
Mr. Laksamana Sukardi	Donor for Laksamana Gena Jintam
Mr. Martinus Anggo	Project Leader from Waerebo
Mr. Fransiskus Mudir	Construction Manager

III. TIMETABLE

[Please specify year and month for both commencement and completion of each step in the design and construction processes. For large projects, or for those completed in phases, indicate the dates for the first phase and for each subsequent phase, and clearly note which phases of the project have been completed.]

A.Commission		2008	
B.Design	Start	August 2008	Completion December 2008
C.Construction	Start	May 2009	Completion May 2011
D.Occupancy		2009	

Remarks: The "Design" Phase is more of a coordinating phase in which the strategies are set out.

IV. AREAS AND SURFACES

[Please specify in square metres. The total combined floor area should include basement(s), ground floor(s) and any and all upper floors. If you wish to provide details for any particular elements within the overall project, please use and attach a separate sheet.]

A.Total site area	6500 m2
B.Ground floor area	505 m2
C.Total combined floor area (Including basement(s), ground floor(s) and all upper floors)	1005 m2

Remarks: Each Mbaru Niang is a 5-storey construction. Only the first floor is used as the living area for the people, while the other floor acts mainly as storage or places for their rituals.

V. ECONOMICS

[Specify the amount, currency and date of transaction. Please indicate the amount both in U.S. dollars and in the local currency, along with the exchange rate used.]

	Amount in local currency	Amount in US dollars
A.Total initial budget	Rp. 1.500.000.000,00	154.623,23 USD
B.Cost of land	Rp. 0,00	0 USD
C.Total actual costs (Without land)	Rp. 2.000.000.000,00	206.164,31 USD
D.Actual cost (Per square metre)	Rp. 1.990.049,75	205,14 USD
Remarks:	Amount in USD applied for an exchange rate of Rp. 9.701,00 for 1 USD (Bank of Indonesia, December 11th 2012). Difference between the total actual cost and the total initial budget lies mostly on the cost for sending the students for the live-in programme which started on the second phase of the project, as well as documentation and communication fees.	

VI. PROJECT DESCRIPTION

[Describe the nature and function of the project. For example, how did the project come about; what was the initial brief from the client; what is the guiding idea behind the project; were there any major constraints on the development of the design? How do you move through the building and how does it relate to its surroundings?]

Waerebo is a traditional village, located in the hilly areas of West Flores, East Nusa Tenggara, Indonesia. The remote location of the village, which could only be reached by five hours trip by cars followed by a four hour trekking, made the village is almost unknown, even to the people in the Flores Island. However, the beauty of the village has somehow captured the attention of some international tourists. Mr. Blasius Monta, a local teacher who makes a list of the visitors coming to Waerebo has recorded an average number of 20 to 40 tourists per year during the period of 2002 to 2007. None of them are Indonesian, most of them are Dutch, Australian, Japanese and many other nationalities.

On 2008, a group of Indonesian young architects planned their annual trip to different islands in Indonesia. That year, the group was arranging their itinerary to Flores Island when they found two images of the Waerebo village on the internet. Despite the limited information, the group finally managed to visit the village. The short visit has opened their eyes to the richness of the culture and architecture. However, it challenged their contribution as Indonesian young architects as they watched the struggle of the people to preserve their culture and architecture.

The Waerebo is the last village on Manggarai, West Flores in which the signature Manggarai conical houses called the "mbaru niang" could still be found. Originally, the village consists of seven conical houses, but on 2008, there were only four left in the village. The other three houses had been replaced by gable houses. Out of the four houses left, two of them are not in a good condition as they have been used for seventy years, while the other two have been reconstructed around 1998 by the help of some donators. Although some of the villagers want to rebuild the conical house, they postponed to do so as the villagers will need to leave some of their daily life to work together in building the house. Before the reconstruction planning, the villagers were getting ready to lose two more of their conical houses.

Back to Jakarta, the group of architects then started to set a program to conserve the village. The motivation was to save the precious local wisdom of Waerebo. Looking towards the broader agenda, the group of young architects, later known as the Rumah Asuh team, believes that the local wisdom are the key towards a more sustainable architecture, as the vernacular architecture has evolved for hundreds of years to fit its local culture and environment.

The reconstruction process is quite unique as the process is intensely involves the people living in the village. A conical house is seen not only as a physical shelter, but also as symbol of unity within a family and within the villagers as an extended family. The house is also the ritual space for the people to have their ceremonies to respect their ancestors. The main goal of the reconstruction was to preserve and support the living culture, rather than preserving the houses merely as a dead monument. A sensitive strategic planning were done during the process to make sure the donations will not destroy the community system and the people are aware that this project is a collaboration in which all stakeholders including the villagers need to give their best.

Therefore the participation of the villagers is the key point. Mr. Fransiskus Mudir, the leader of LPW (the tourism committee of Wae Rebo) was appointed as the construction manager. The village elders work as the supervisor, mentoring the younger generation in doing each construction details. This process by itself is a conservation process, as this is the way the local people conserve their local knowledge, techniques and wisdom. The people are not used to keep a written record, but the young generations of the village learning the techniques by doing.

The project physically brought back the village to its authentic formation of seven houses. However, not only as empty structures, the people are now choosing to live in the house and preserving their culture. The progressing reconstruction project has brought back the spirit and pride of the villagers of their own culture and local genius. Two of the families that had been given up their conical house and choose to live in more practical gable houses few years ago, then agreed to live in the conical house, therefore the phase three construction is arranged. Only one family refused to rebuild their conical house, therefore, the seventh house is designed as a guest house. The idea of making a proper guest house is to answer the increasing demand of eco-tourism in Wae Rebo these days.

Aware of the huge impact, starting on the reconstruction of the second mbaru niang (second phase), a "scholarship" program was established, in which 2-3 university students are selected to join the villagers in the reconstruction. Not only joining the villagers, they were also documented the construction as well as the culture during their stay in the village. This documentation later has become a precious documentation of a culture and tradition of one remote part of Indonesia. This "scholarship" program is actually aimed to increase the awareness of the young generations to understand and to love their own culture.

VII. MATERIALS, CONSTRUCTION AND TECHNOLOGY

[Describe the principal materials used and indicate the basic construction technology. What are the innovative features of the project, if any?]

Professor Josef Prijotomo, an expert in Indonesian vernacular architecture, while observing this conservation process stated that re-construction, is a way of conservation while we are talking about an organic structure. This is because the organic materials have shorter lifespan than the more modern materials such as steel or concrete. Some of the materials need to be replaced more often than the others, and at certain point, the materials could not be replaced anymore and need to be reconstructed, like the case of the phase one and phase two in Wae Rebo.

However, looking to the layers of Mbaru Niang, we can find quite a smart system, in which materials with shorter lifespan are used in the outer layers, while the core structure of the building used the most durable materials. The core structure of the house is using the worok wood, which could last for up to seventy years, while the building skin is using bamboo structure and thatched roof which should be replaced regularly every five to ten years. The tied construction methods, using rattan and ijuk ropes enable the parts of the building to be replaced without destroying another part of the structure.

In terms of technical issues, the significant achievement is the improved craftsmanship of the young generations of Wae Rebo after constructing several houses of the village. The knot details looks more artistic, while the people took shorter amount of time to finish the construction. The people's first experience about the construction knowledge came when they were dismantling the old structure layer by layer. After the dismantling process, the elders work closely with the workers to teach them about the construction details, especially for the phase one.

In terms of materials, the core structure of the old mbaru niang which is seventy years old could not be reuse, but some of the small woods (kenti wood) used to form the circular shape in each floor are reused in the new structure.

In the construction process, although almost all of the villagers work together in every stage, different people are chosen as supervisors to make sure about the construction quality. Different people are in charge in setting the main structure, checking the quality of the roof materials, carving the main structure, even providing food for the workers. For example, in the roof materials gathering, the people in charge for the part carefully examine the quality of the grass for the roof cover, also make sure on the later process that the grass are dried and put together in a right way to form sheets of roof cover to be layered as the building skin. This method enabled all of the construction to be done within the schedule and done in a good quality.

VIII. PROJECT SIGNIFICANCE AND IMPACT

[How would you describe the project's significance? Describe the project as it is today – who uses it and how is it used? Describe the aspects of the project that represent a particular achievement (e.g. a technical, economic or social achievement or the project's response to culture, climate etc.)]

| local impact |

For the people of Wae Rebo, the project brings significant impact. Facing the crisis of losing their young generation's spirit in preserving their culture, the conservation has brought a new spirit to the village. The young people of Wae Rebo are now familiar and interested in their culture. Attentions from different parties have opened their eyes to the richness of their culture. In the future, this village will be managed by Lembaga Pariwisata Wae Rebo, their initiatives body which focusing to serve as better host for the visitors as well as better guardian for their own culture. The conservation project has strengthen their bonding between one another, and now the people have better experiences in conservation and maintaining their own culture.

| social and academic impact |

The project has shown a solid collaboration of three main parties : Rumah Asuh Foundation as the project coordinator, Tirta Utomo foundation and the other donators, and the people of Wae Rebo themselves.

The project has quite complex social values. While Indonesia's today building industry is dealing with the sustainability issues, the conservation of the Wae Rebo's mbaru niang brings up the discussion towards the vernacular architecture. Publications and several discussions are held throughout the process, attracting people's attention to explore more of their own local wisdom. Starting on the second phase, architecture departments of different universities are involved by sending their students to join the people in the construction. These days, most of those universities are taking their steps forward by having their specific Indonesian architecture course or as their final assignment materials for the students.

| policy impact |

In terms of its policy impact, the success of this project brings attention from the local government towards this remote village. Was previously an unknown village, Wae Rebo is now one of the main assets of the province for its architectural and cultural richness. While for the national government, the project was a challenge for the ministry of tourism and culture, as a new way of conservation practice, which focusing on the living culture rather than the dead monuments.

| environmental impact |

In terms of environment, the project has also brought their awareness that they need to also preserve their forest. The worok woods, used as the main structure for the house is the hardest to look for. Ten years ago, while building their mbaru niang, the wood could be found within the radius of 2 km from the village. In this project, the villagers got the woods on the radius of ten kilometers from the village. As a result of this construction, the villagers are now committed to replant the trees that they have taken for the house. In the future, if some building materials are needed, their forest will still provide for them.

| tourism impact |

On the other side, tourism is another significant impact from this conservation project. The enormous formation of the village has attracted tourist from different countries and background. Yet, the flow of tourist to the village is naturally selected by the locations of the village. Wae Rebo is always an attractive destination for people with great interest in eco-tourism, nature or culture, as they have to travel extensively to reach the village. From the main airport of Indonesia, the visitor have to take plane to Labuan Bajo in Flores Island; then from Labuan Bajo, they have to do five hours trip on the cars to reach Denge, the small village in the lower part of the mountains which leads to Wae Rebo. From Denge, the people then have to take 3 to 5 hours hike before reaching Wae Rebo. The village is not easy to be visited, however, the amazing culture and setting of this village has made the journey worthwhile.

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Name (please print)

Ir. Yori Antar IAI

Signature

Date December 10th 2012

**Please note: All candidates for the Award must sign, date and return the Permissions Form to the Award office; the submission of this form is a prerequisite to candidacy for the Award.*

Additional Information for Document B II.C PROJECT AFFILIATES / CONSULTANTS

1. RUMAH ASUH

The team is consisting of several Indonesian young architects who “found” the village in 2008, and acted as the project coordinator in this conservation process. The role of Rumah Asuh includes setting up the conservation strategy, working together with the funding organization and university partners, as well as arranging the complete documentations of the whole process.

People involved :

- **Ir. Yori Antar** - The Founder of Rumah Asuh, as the head of the program
Telephone : +62 816 773 149
Email : yori.antar@gmail.com
- **Varani Kosasih** - Team member in charge for this project
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Email : varanikosasih@yahoo.com
- **Paskalis Khrisno Ayodyantoro** - Team member in charge for this project
Telephone : +62 852 8737 9717
Email : bincang2.cupleez@gmail.com

2. THE PEOPLE OF WAEREBO

The people acted as the main actors of the conservation itself.

- **Martinus Anggo** - Project Leader from Waerebo
Telephone : +62 852 3934 4046
Email : martin_anggo@yahoo.com
- **Fransiskus Mudir** - Construction Manager
Telephone : +62 852 530 15 186
Email : warisanbudayawaerebo@yahoo.com

3. THE TIRTO UTOMO FOUNDATION

The foundation aims to help the development of culture and education in Indonesia. The foundation is not only acted as the donor for the Tirta Gena Ndorom (first phase), Tirta Gena Jekong (second phase) and Tirta Gena Maro (third phase), but also gave their full support during the overall project.

- **Lisa Tirto Utomo** - The Founder of Tirta Utomo Foundation
Telephone : +62 812 105 5291
Address : Jl. Bangka Raya No 29. Pela Mampang. Jakarta Selatan
- **Yusni Suganda** - Team member in charge for this project
Telephone : +62 858 111 777 00
Email : yusnilu@yahoo.com
Address : Jl. Bangka Raya No 29. Pela Mampang. Jakarta Selatan

4. MR. LAKSAMANA SUKARDI, as the donor for the Laksamana Gena Jintam (third phase)

Email : wulansdp@gmail.com (Attn. to Ms. Wulan - his secretary)
Address : Jl. Birah 2 No 80. Jakarta Selatan

5. MR. ARIFIN PANIGORO, as the donor for the Panigoro Gena Mandok (third phase)

Email : sjarach.sjachfara@medcoenergi.com (Attn to Ms. Sjarach - his secretary)

Address : Jl. Jenggala I No 2. Kebayoran Baru. Jakarta Selatan.

6. UNIVERSITY STUDENTS

Aware that the university students are the young generations and the agents of change in the future generations, started at the second phase, several students from different universities in Indonesia are invited to join the people of Wae Rebo during the construction process as well as making the complete documentation for of the process.

- **Robin Hartanto** - from the University of Indonesia (second phase of construction)
Telephone : +62 817 985 3676
Email : robin.hartanto@yahoo.com
- **Faiz Hamdi Suprahman** - from Sebelas Maret University (second phase of construction)
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- **Ronaldiaz Hartantyo** - from Bandung Institute of Technology (third phase of construction)
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- **Adi Reza Nugroho** - from Bandung Institute of Technology (third phase of construction)
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- **Arya Wisnu Wardhana** - from Surabaya Institute of Technology (third phase of construction)
Email : enjoythemisery@gmail.com

Additional Information for Document B III. TIMETABLE

The project last from May 2009 to May 2011, consisting of three phases

1. Phase one (May 2009 - October 2009), dismantling the old conical house and reconstructing the Tirta Gena Ndorom.
2. Phase two (November 2009 - May 2010), dismantling the old conical house and reconstructing the Tirta Gena Jekong.
3. Phase three (November 2010 - May 2011), reconstructing another three conical houses. Two of them are used as the house for the people (Laksamana Gena Jintam and Panigoro Gena Mandok), while the other one is used as a guest house with two smaller conical houses attached to the building as a separate kitchen and bathrooms (Tirta Gena Maro).

First two houses take up to 6 months for each house. The first three months was to ask for the permit to take the wood from the forest, then the next two months was for gathering the materials, while the last month was to assemble, constructing the house. However, the second house took slightly faster than the first house.