Creating a Beautiful Social Landscape by New Indigenous Architecture

A System of Building and Planting by Private Sectors

As a new business model, architects and housing manufacturers are collaborating to establish a lifecycle of building newly-designed indigenous houses and afforestation. It is a sustainable cycle for the environment and regional economy of OKINAWA. As part of the system, owners of the houses are to manage the forestry by cutting branches they planted.



Development of a New Type of Indigenous Houses

New indigenous houses optimize the values of the context by combining and evolving the unique traditional wisdom with knowledge. Its ultimate aim is to make the houses harmonize with the landscape, enhance their cultural value, and create a starting point for a beautiful social landscape.

Evolutionary History of Indigenous Houses in Okinawa

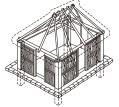






Approx. 9th century - Pre-WWII Anaya dwelling style





Approx. 14th century - Pre-WWII Nuchiya style





Timber and RC construction





New indigenous houses

Inherited Methods from Indigenous Houses in Okinawa



Ventilating Fence





Ventilating hipped roof

"Vertical Cane"

· Low cost

Suburban type < Parasol House> Maintains ventilation · Eave strength





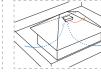
Windproof hedge

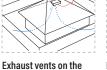














Prototype -

Hedge to shield the afternoon sunlight

Variation of Newly-Designed Indigenous Houses in Okinawa

Fixed plan





2022 Motobu Town, Okinawa Structural frame fabrication program



Coming next







'Vertical Wall" Suburban type · Maintains ventilation · Openness

· Eave strength · Structural reinforcement





2020 Shuri, Naha City, Okinawa

"Parallel Louvers' Urban type

- · Maintains ventilation
- · Privacy control
- · Eave strength
- · Storm shutter function during typhoons

Coming next Suburban type <Separated building with courtyard >





A Project Team to Regenerate a Village by Renovating Stone Warehouses

A Passion Project that Changes a Community

The idea of regenerating YOSHIDA-MURA village, located in Tochigi Prefecture, started with a man born in the village, who led a team to renovate an abandoned Oya stone warehouse. The team consisted of local farmers, architects, planners, art directors, and academics who either live or are from the village, and an NPO was founded later to work with the project team.

As a result, residents came to appreciate the value of living in the village.











Bucolic setting in Yoshida Mura Village

Village Before the Project

At the center of the community was an agricultural co-op facility that used to support the industry. As the co-op moved out, the Oya stone warehouses and the former office building lost their purpose, left as an industrial heritage. The area had also lost a communal place, turning into a tedious, inconvenient rural village.



Four-Phased Strategy to Create a Sustainable Economy with Pride

Phase 1: Rediscover and disseminate local charm

- Open a restaurant to use local ingredients
- Organize hands-on agricultural events
- Hold regular Village Festival

Phase 2: Establish an epicenter

- Renovate the stone warehouses
- Utilize the warehouses as a shop, hotel, bakery, etc.

Phase 3: Expand to the entire village

- Develop agritourism with local farmers
- · Utilize abandoned houses as hotels

Phase 4: Enhance culture and economy

- Offer diverse lifestyles for residents
- Revitalize a sustainable community
- Promote new economic activities

Conversion of an Abandoned Oya Stone Warehouse

The 80-year-old Oya stone warehouse was renovated and converted into the project's epicenter, with a local specialty shop, hotel, and bakery. The warehouse that is remembered as the co-op facility before its moving out is an essential industrial heritage that reflects the area's history and is a place to embrace the residents' nostalgia. Thus the renovation was limited to utilizing the existing structure adding a few necessary elements. As masonry does not meet the structural requirements of the current standards, a steel structure was adopted by inserting a frame into the existing masonry. Oya stone became exterior cladding from a structural element. We hope this project could become a prototype for utilizing similar warehouses in depopulated areas abandoned by co-ops across Japan.



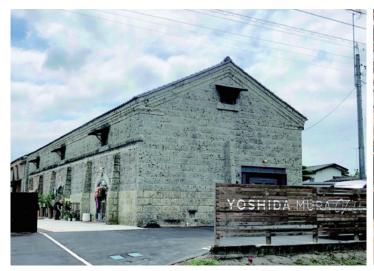
Farmers' market at the festival



The festival bustled with visitors



A restaurant using local ingredients



Exterior view of renovated Oya stone warehouse



Experience area



Bakery/retail area

Responsible Architecture and Partnership with the Community

After numerous discussions with the chairpersons of four national committees of JIA on what architects can do to achieve Sustainable Development Goals (SDGs), we have formulated a concept of "Four Manners for Architecture and Community."

A Cycle of Four Manners for Architecture and Community

Basing ourselves on constant growth, we are causing climate change and more natural disasters. We are demolishing still-usable buildings and beautiful cityscapes, but we need to change. To pass down a society and environment that is rich and sustainable, we need to raise awareness of the value of material/production cycles.

A Cycle of Four Manners

Make with Heart

Buildings and towns must be carefully designed and constructed with all our heart. Proper materials and details must be selected for long-lasting use.

きちん と つくる

Use with Care

Once they are built, buildings and towns must be used with care. Proper maintenance, repair, and improvement with sufficient attention is the key to a longer life.

だいじ に つかう

ちいき を つなぐ

Connect with Community

The connection between architecture, town, community, and people must be valued and enhanced. The idea of the partnership must be shared.

すてず に いかす

Recycle and Reuse

When buildings reach the end of useful life, parts and materials must be recycled or reused. The space can also be converted, embracing the memories.

Referred to "JIA/SDGs Architecture Forum 2021 Report" (JIA, 2021), p.15



At Any Level, At Any Scale, Think Seamlessly

Attempts to take one big action may be more than one can chew, but shifting our focus to keep making smaller changes is something we can do today. Now is the time to "think globally, act locally" and take one step further. We must not limit ourselves within the profession of architects but must focus on what we can do now, and what we are good at. There must be things that we can do for architecture, community, or even somewhere between them. Some issues are good for one person to tackle, and others are for ten persons or a thousand, or even for a whole country.

1 person Parts
10 people
Mate<mark>rials</mark>
on 100 people
Furniture
1000 people
Rooms
10000 people
Architecture
100000 people
Community
1000000 people
Organization •
organization •
City/Town/Millogo
he Prefecture •
•
• Country
•
Continent •
•
Planet More

*There could be any other cross section of our planet.