

Point A to B

Facilitating Climate Driven Internal Migration Among Small Filipino Families Moving from Rural to Urban Settings

Problem

Slow onset climate change has fueled the internal migration in the Philippines. Issues come from both sides, wherein challenges are faced before and after migration. Migrants leave their rural life in search for a better future but spaces are not primed to receive this move.

- Lack in sources of livelihood
- Sense of security and stability is threatened, environmentally, financially, mentally and physically

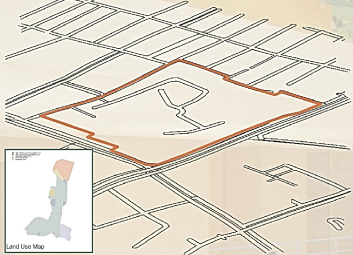
- Further stress placed on city centers due to influx of population

Thesis Statement

The project addresses the issue of internal migration in the Philippines with priority to small and young families moving from rural to urban settings. It focuses on climate migrants, their socioeconomic needs and the need for security and stability. In light of this, a cohousing model with mixed public urban community uses is proposed for the project.

Site Analysis

Location Map



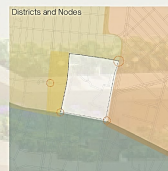
District 3 is mainly made up of commercial use followed by residential land use.

The site is located in Sta. Cruz, Manila. It is situated in the Old Bilibid Compound.

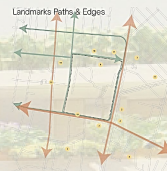
The site reaches a total of 8.4 hectares and within the property is the Manila City Jail, Dr. Jose Fabella Memorial Hospital and the Central Market.



Floods, liquefaction, and storm surge are the main hazards within the area of the site.



Commercial, institutional and residential districts were identified within the site.



Notable landmarks around the site include Far Eastern University along Quezon Boulevard, Isatani Mall along CM Recto. Two railway stations can also be found around the site.

User Analysis

User Profiles

Migrant Residents
These include migrant families, permanent migrants and young circular migrants.

Transient Users

These include students, pedestrians, and transients who come and go.

Part of this pool of migrant residents, one can expect to find young men and women, senior citizens, and rural residents who previously lived as farmers or fisherfolk.

Conceptual Framework

Problem

- Lack in sources of livelihood
- Sense of security and stability is threatened, environmentally, financially, mentally and physically
- Further stress placed on city centers due to influx of population

Goal

Use architecture to facilitate the inevitable movement of rural communities into the city.

Objective

- Applying a communal housing set up in a site with diverse users to act as a platform for job opportunities and training
- Taking a neuroscientific lens in developing a restorative residential environment for incoming migrants
- Introducing climate change related technology to address problems of climate change

Approach

Self Sufficient Community Refuge

Restorative Urban Sanctuary

Strategies

- provide a medium for people to sustain themselves
- job opportunities, or training to help in finding jobs
- provision of solutions to soften the blow of moving
- create a feeling of comfort and wellbeing
- address environmental problems such as flooding, liquefaction, rainfall harvesting, heat management, urban agriculture

- Urban Agriculture for Self-Sufficiency, Training and Better Social Cohesion
- Application of Biophilia
- Climate Technology

Relationship of Spaces

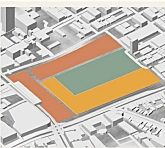


A feedback loop between the residential area and public urban space is proposed. In the functioning of the public urban space, the climate migrants have as much a role as the transient users who visit.

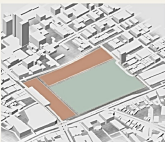
Architectural Programming

Residential Area	Public Urban Space	Support Spaces
Migrant Clusters Migrant Unit Type 1 Migrant Unit Type 2 Migrant Unit Type 3	Urban Community Space Outdoor Park and Garden Playground and Court Vehicle Terminal Indoor Greenhouse Outdoor Urban Agriculture	Support Spaces Administration and Management Conference Rooms
Communal Areas Urban Agriculture Pockets Communal Kitchen Community Dining Area Community Domestic Spaces Child Daycare Area Workspaces Recreational Space Resident's Cooperative	Commercial Space Market Restaurants Educational Space Climate Tech Learning Lab Workshops	Climate Tech Climate technology strategies are integrated within both the residential spaces and the public urban space.

Design Development



Zoning
● unbuildable ● buildable
The site will be broken up into 3 main zones. The residential area, public urban space, and green spaces. This was based on the determination of buildable and unbuildable areas, as well as factors considering noise, privacy, and hazards.



Buildable & Unbuildable
● residential ● public urban space
The unbuildable zone is at the left and bottom part of the site. This was in keeping with preserving a privacy as this serves as a buffer from the adjacent train stations nearby.

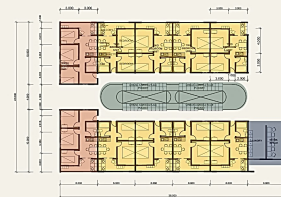


Circulation
Resident Entrance
The vehicles with can enter along Quezon Blvd. Svc. Road. There is one main internal roadway within the site to accommodate cars coming in.

The main entry point for residences are placed along Oroquieta St. since it is closer to the other residential zones of the site. It is acknowledged that more of residents would prefer to pass through this area since (1) more tricycles and PUVs pass through this street (2) privacy (3) easier access coming from the train station

Pedestrian/Visitor Entrances
The interior road cuts across the site, dividing the site into two. This road provides access to all the residential zones of the site.

The Migrant Cluster



- Three Bedroom Units
- Two Bedroom Units
- Laundry and Workspace
- Centerpiece

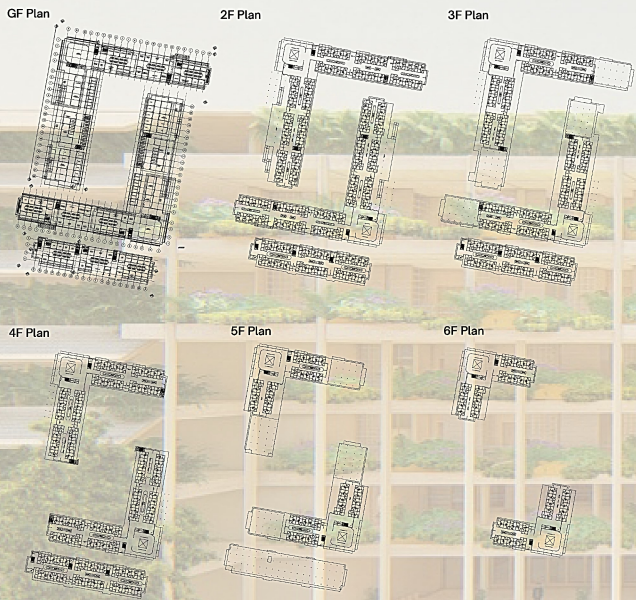
The migrant cluster serves as the basis of the whole building configuration. It is composed of eight (8) two-bedroom units and two (2) three-bedroom units. The two-bedroom unit has two bedrooms, a toilet and bath, a kitchenette, and a dining room that extends directly into the balcony space. The dining room in the two bedroom unit is flexible in that it can be exchanged for a living room type arrangement. The three-bedroom unit shares the same format as the two bedroom units with allowance for both a living area and dining area.



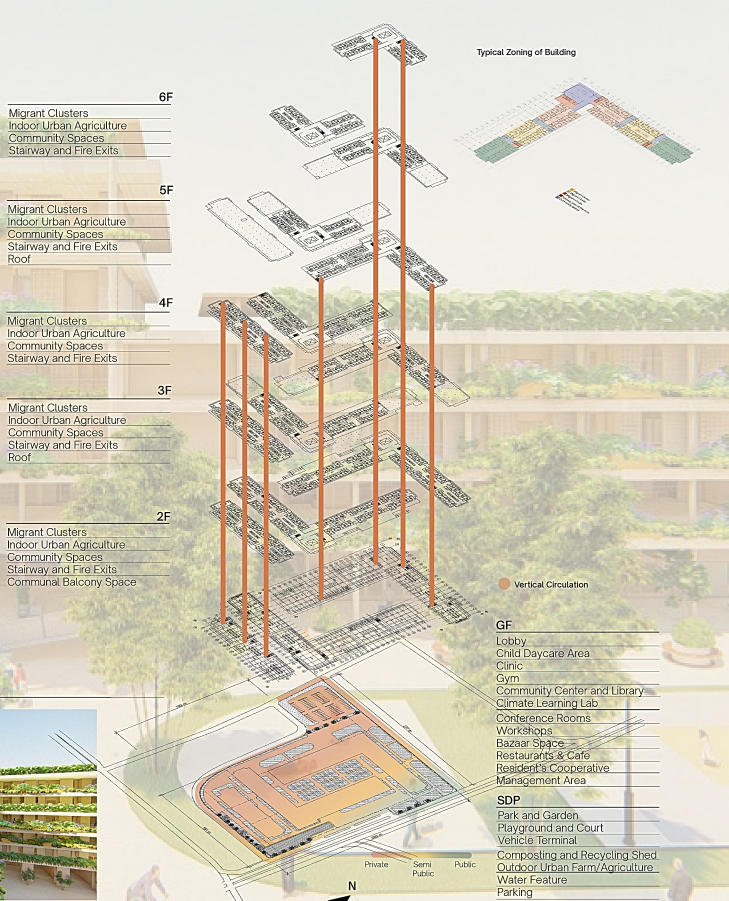
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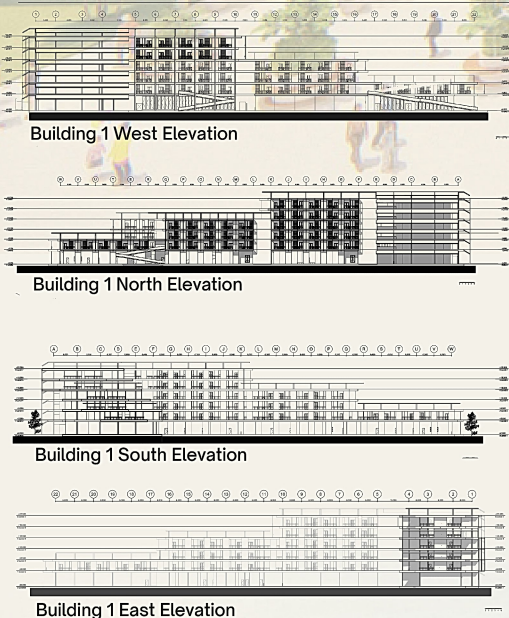
Floor Plans



Building Axonometric



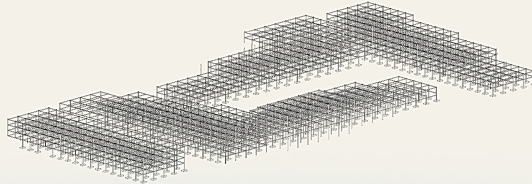
Elevations



Structural Details

Structural Isometric

A lightweight steel framing system arranged in a 6x6 m grid was used. This was the chosen system to achieve low floor to floor heights and maximized floor to ceiling heights. A shallow pad foundation sized at 2x2m along with 0.3m by 0.3m steel columns, a slendek floor system, a balloon framing wall system, asymmetric steel beams that can carry a slab of 225mm thickness make up the structural elements of the building.



Sections

