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Beyond Survival

Building resilient communities through co-creation for the Rohingya refugees in Bangladesh

LAMIA AHMED

MARIIA SMOLIAKOVA



**KTH ROYAL INSTITUTE OF TECHNOLOGY
SCHOOL OF ARCHITECTURE AND THE BUILT ENVIRONMENT**

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BEYOND SURVIVAL

Building resilient communities through co-creation
for Rohingya refugees in Bangladesh

Mariia Smoliakova &
Lamia Ahmed

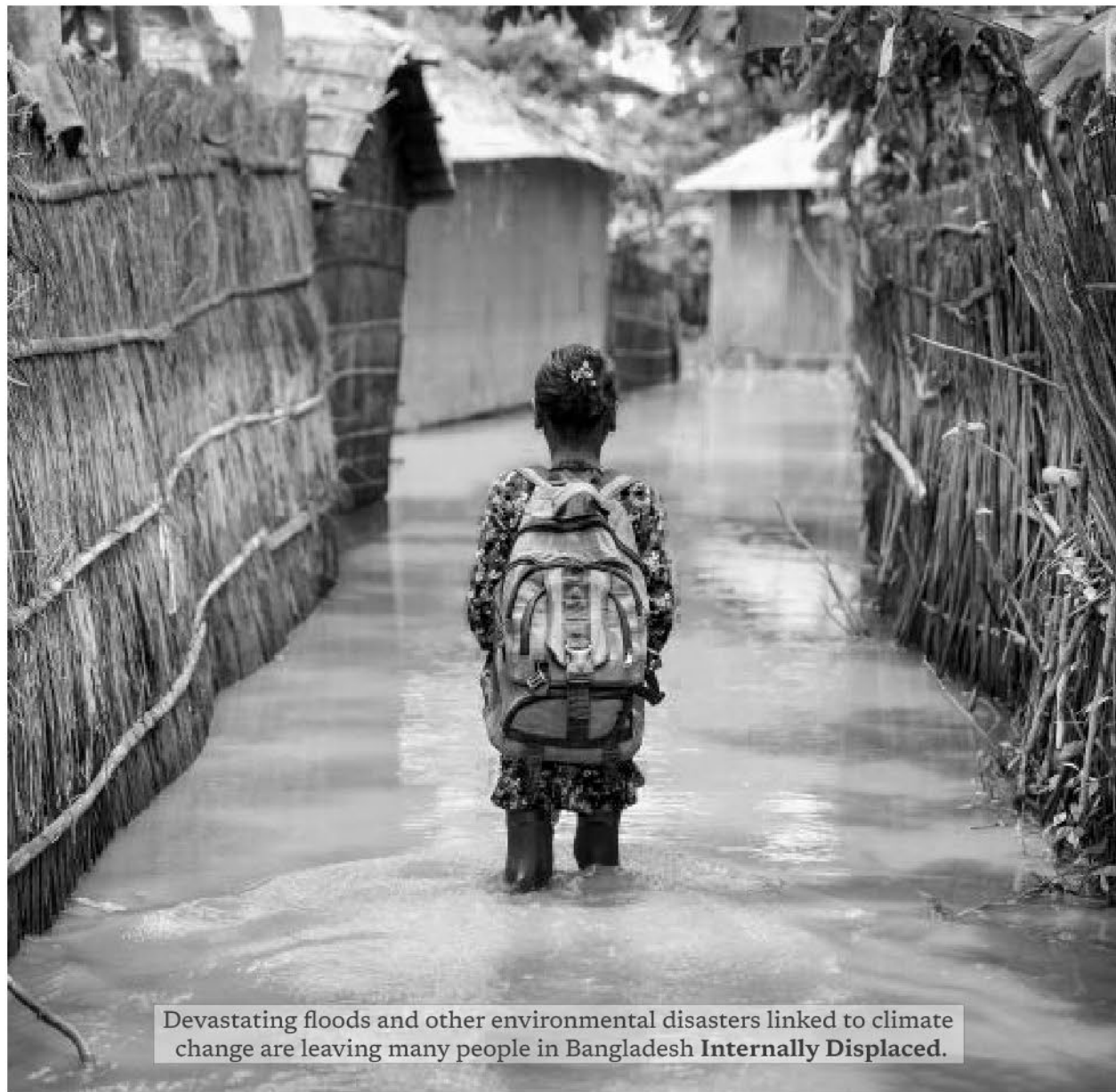
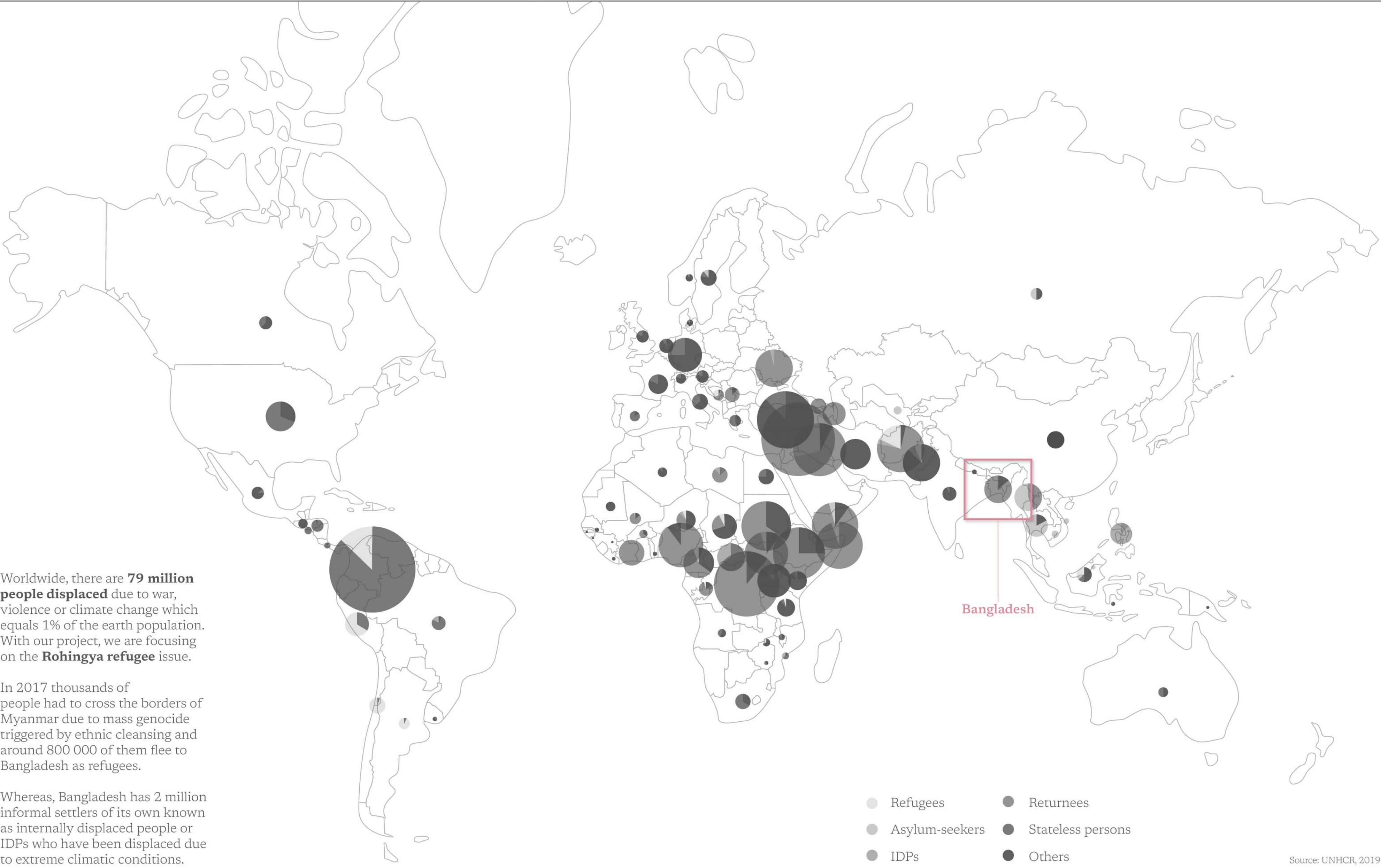
Supervisor: Alejandra
Navarrete Llopis

Year: 2021



Survival - the state or fact of continuing to live or exist in spite of an accident, ordeal, or difficult circumstances such as climate change, rising inequality, warfare etc. With **beyond survival** we mean having the opportunities for aspirations in life in spite of overcoming difficulties and hardships in life.

CHAPTER 1: THE STORY OF THE DISPLACED PEOPLE



Devastating floods and other environmental disasters linked to climate change are leaving many people in Bangladesh **Internally Displaced**.

Source: UNICEF/UN0286416/Akash



Decades of systematic discrimination, statelessness and targeted violence in Rakhine State, Myanmar forced Rohingya refugees to flee.

Author: Adam Dean for The New York Times

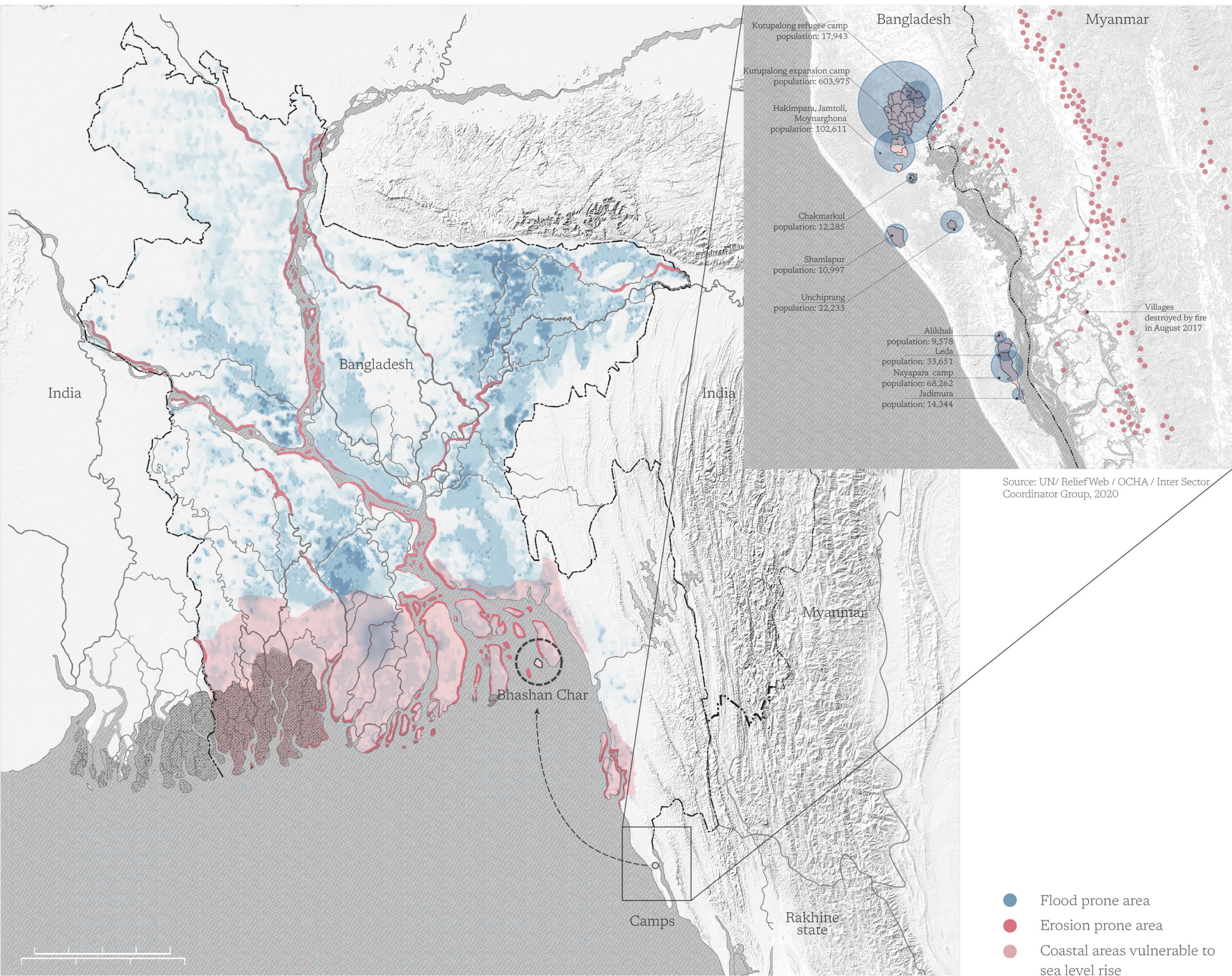
Internally displaced people (IDP) - people who have not crossed a border to find safety. Unlike refugees, they are on the run at home (UNCHR).

Refugees - people who have fled war, violence, conflict or persecution and have crossed an international border to find safety in another country (UNCHR). They are unable to return to their country of origin due to the fear.

Since Bangladesh is a delta, two-thirds of the country is less than 5 m above sea-level. Large share of the land might be vulnerable to the sea-level rise.

Moreover, Bangladesh is a densely populated country where Rohingya refugees are living in 34 extremely congested camps in Cox Bazar which has ruined the ecosystem of the hill tracts of the region in the Southern part of the country.

Now Bangladesh is proposing to relocate 100,000 refugees to a remote island in the bay of Bengal, which is called Bhashan Char.



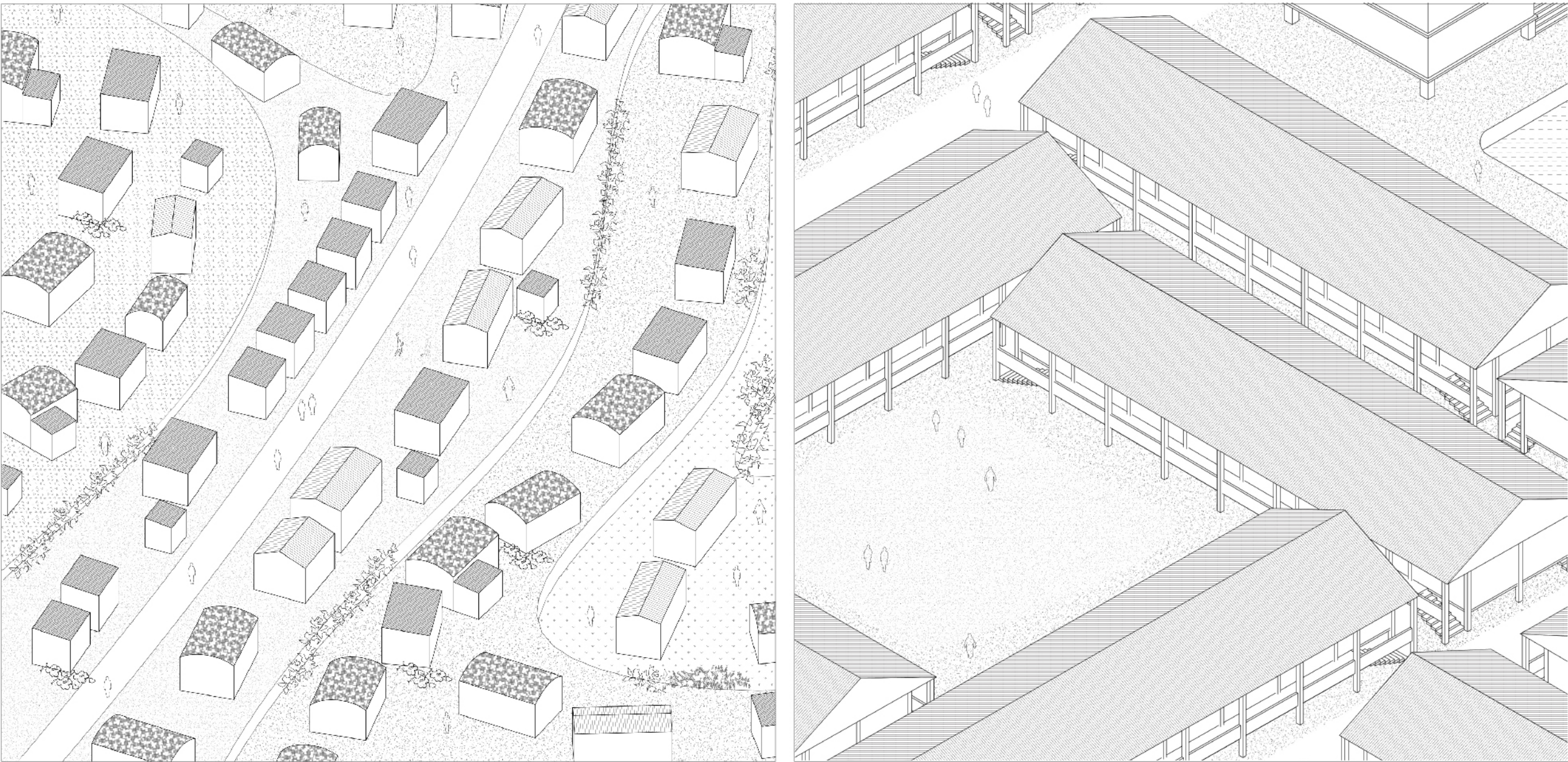
Camp
Lifestyle of Rohingya refugees in the camps of Bangladesh

Built form
Makeshift structures without formal planning. Lack of infrastructure and restriction on permanent material

Social structure
No permanent occupation, low-wage contract based work arranged by the NGOs and small scale trading

Occupation
Muslim majority. Conservative outlook towards women is changing due to NGO initiatives

Infrastructure
Congested structures built with bamboo, thatch and plastic sheets. Destroyed acres of forest and wildlife sanctuary



Bhashan char
Lifestyle of Rohingya people in the built structures of Bhashan char

Built form
Whole infrastructure built in a rigid manner colonizing a newly formed territory

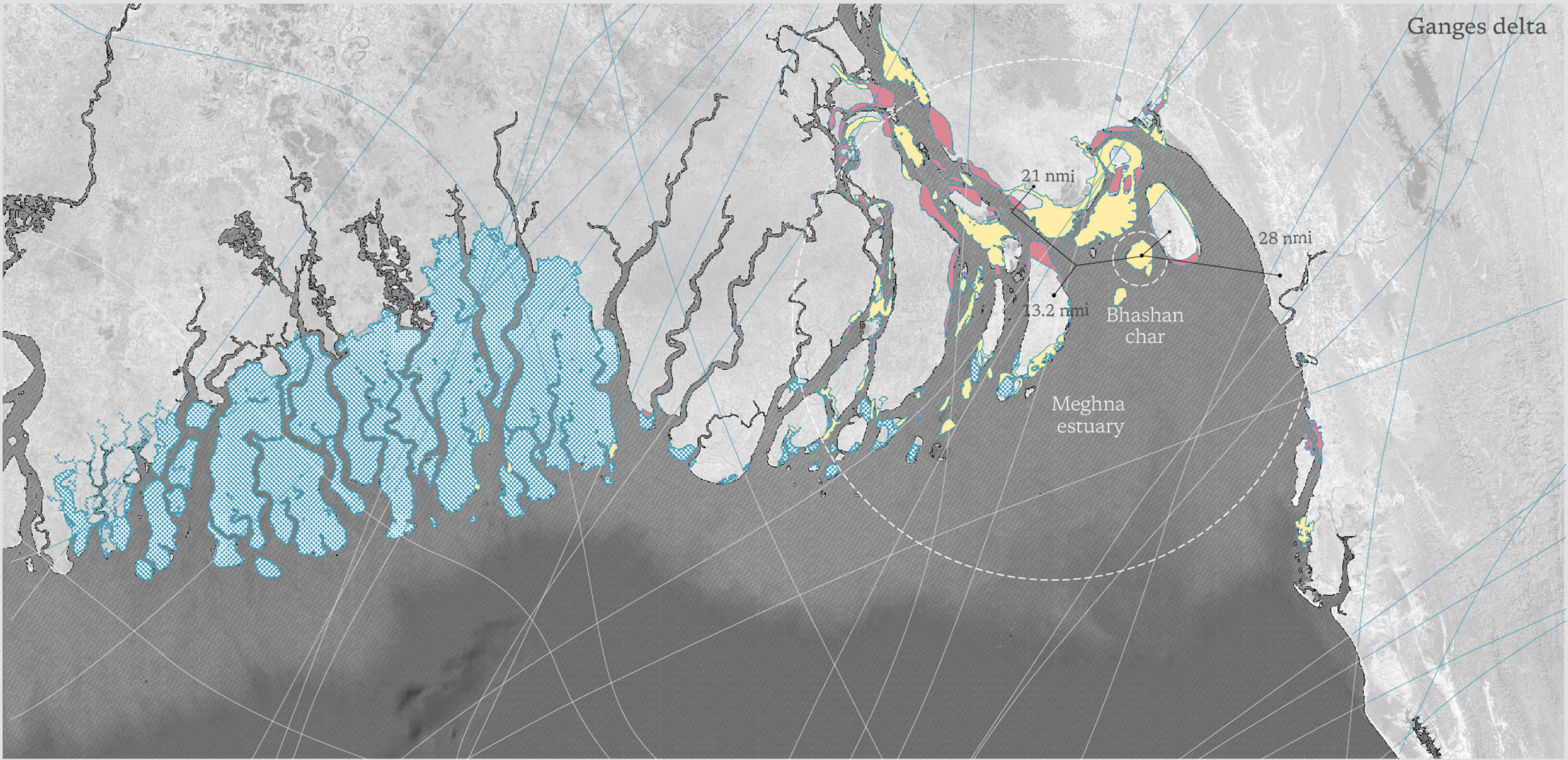
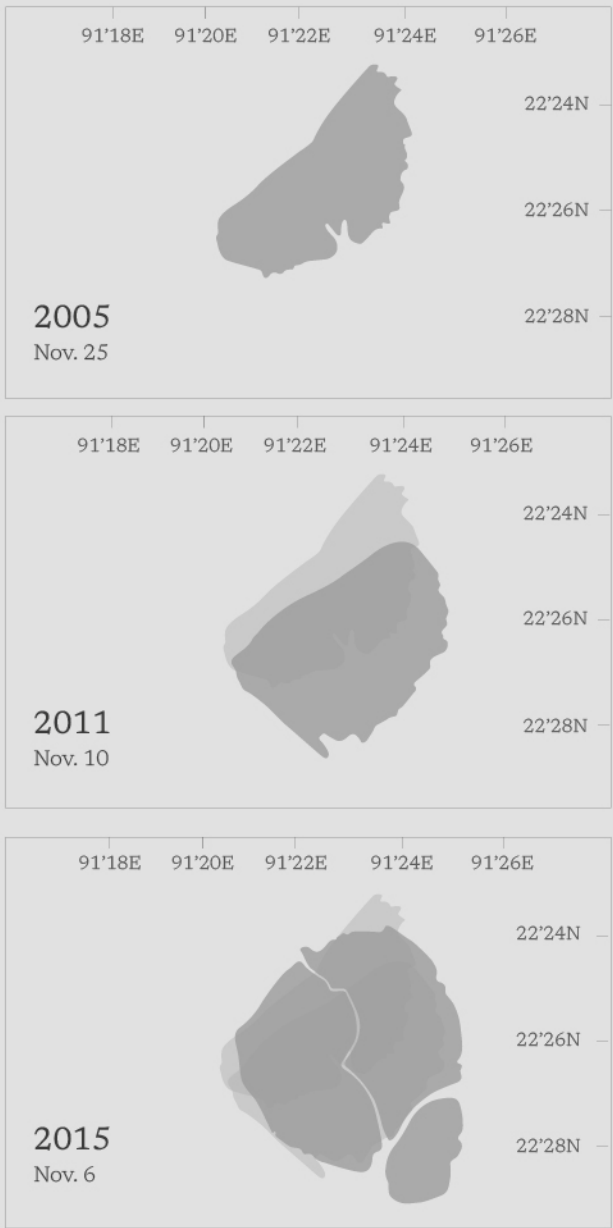
Social structure
Lack of scope for pursuing a stable occupation. The model functions only with ensured continuous supply of ration

Occupation
Social structure yet to be formed. Refugees are coming breaking their ties with their families in the camps.

Infrastructure
Rigid and monotonous one storied houses arranged around a courtyard with shared kitchen and toilet facilities



After exploring all the possible scenarios for these people and considering all the circumstances, we have decided to explore the scope and possibility for both the refugees and local IDPs to coexist and benefit from each other in Bhashan char.



Bhashan Char

Area: Approx. 13000 acres
 Habitable land: 6427 acres
 Refugee relocation area: 1702 acres

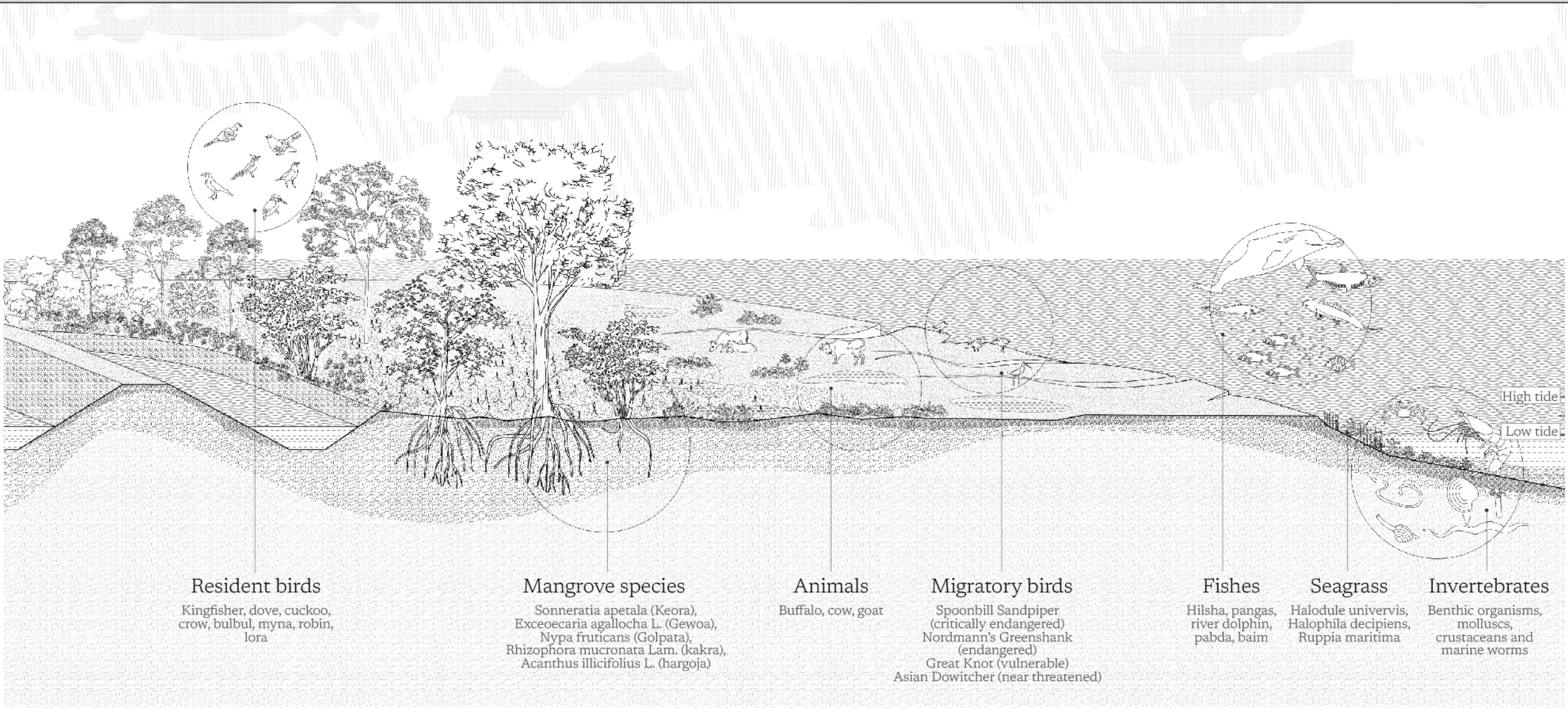
Legend

- Mangrove forest (Sundarbans)
- Erosion (1989 - 2018)
- Accretion (1989 - 2018)
- Tropical storm or cyclone lines since 1970

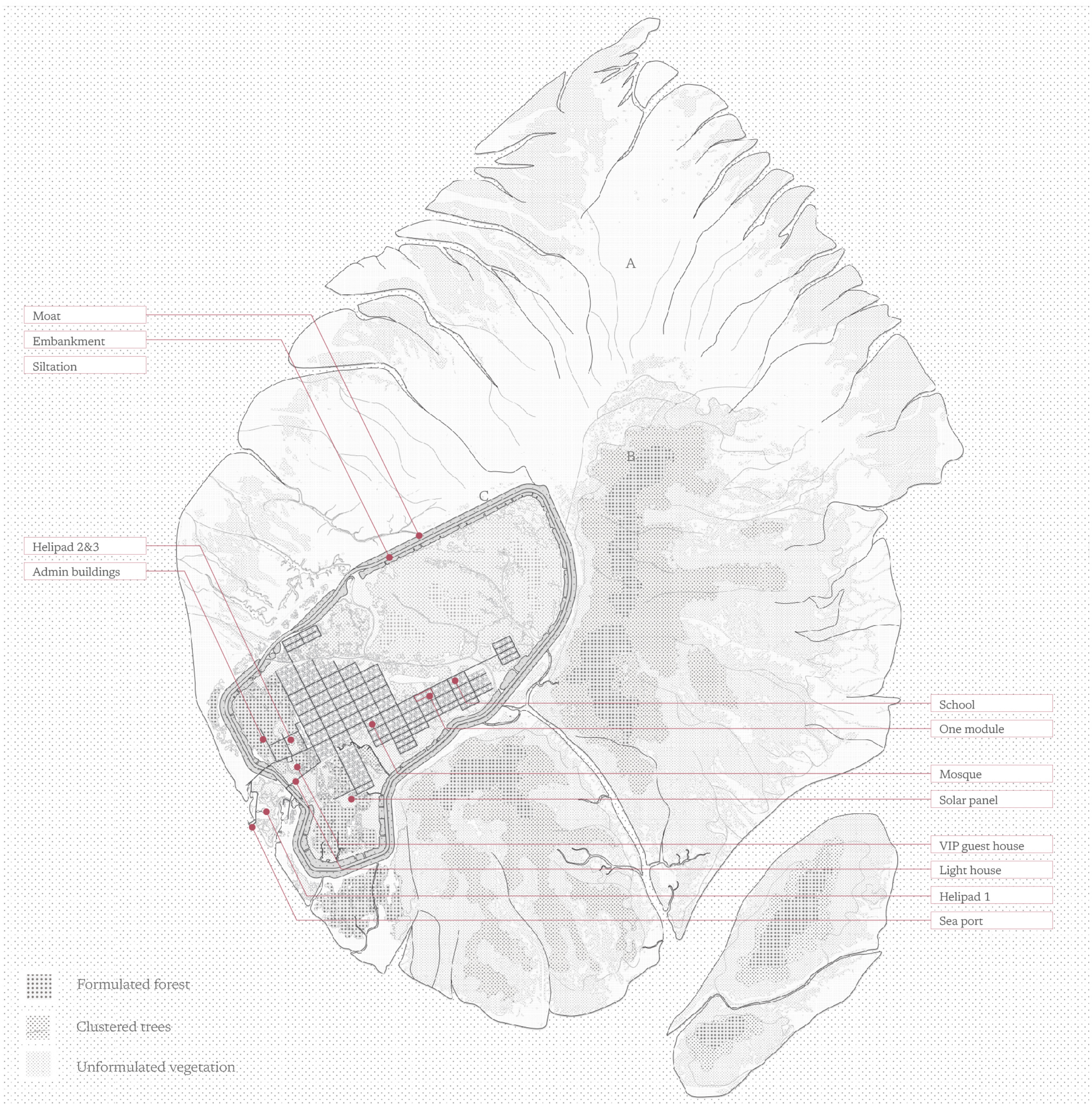
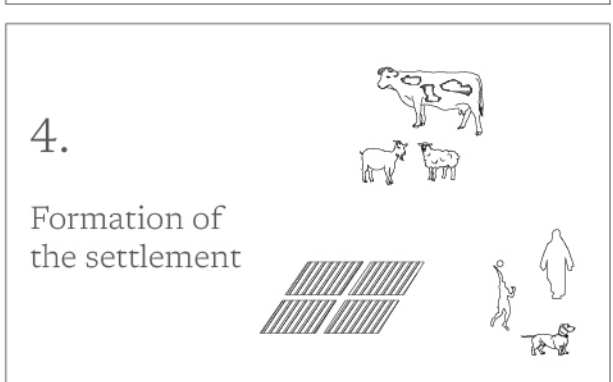
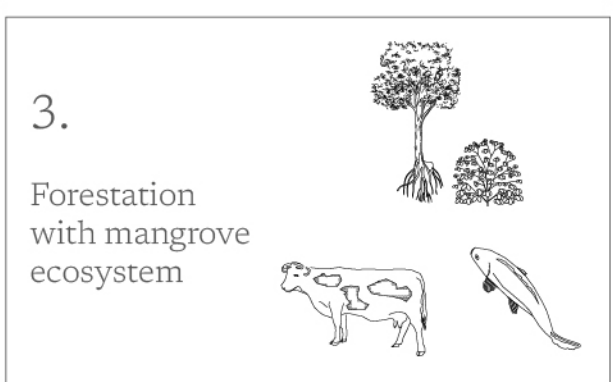
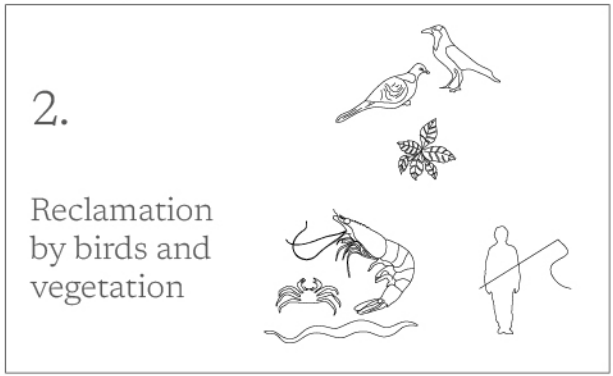
CHAPTER 2: THE STORY OF THE DISAPPEARING LAND

Biodiversity of the estuary

The estuaries are called the nursery of the sea since the counter-currents trap sediment and nutrients for the habitats as a place to live, feed and reproduce. The area also coincides with 3 major routes of the migratory birds and shelters endangered species during winter.



1. Emergence of the sand bar



Ecology

Formulated mangrove forest covers a share of the island which is in dark grey on the map, the rest is mostly covered with clustered trees and most part in the north is a mudflat. Following traditional techniques an embankment was built surrounding the settlement to protect it from flooding and reserve fresh water.

Settlement

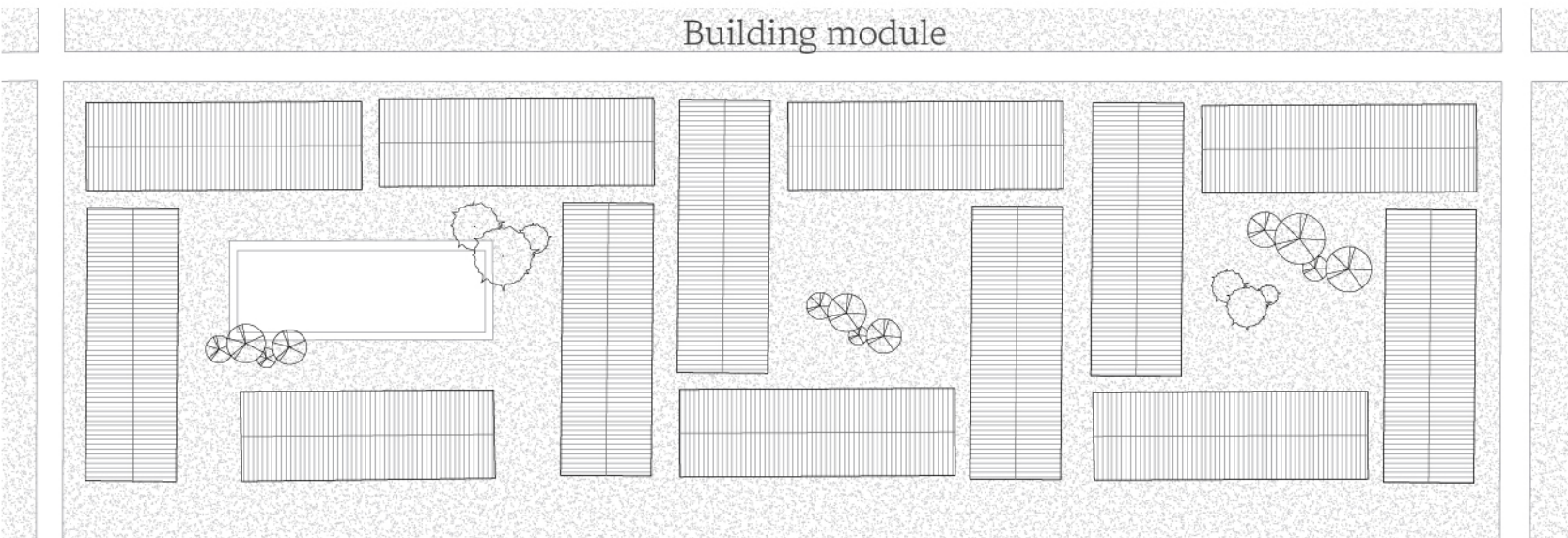
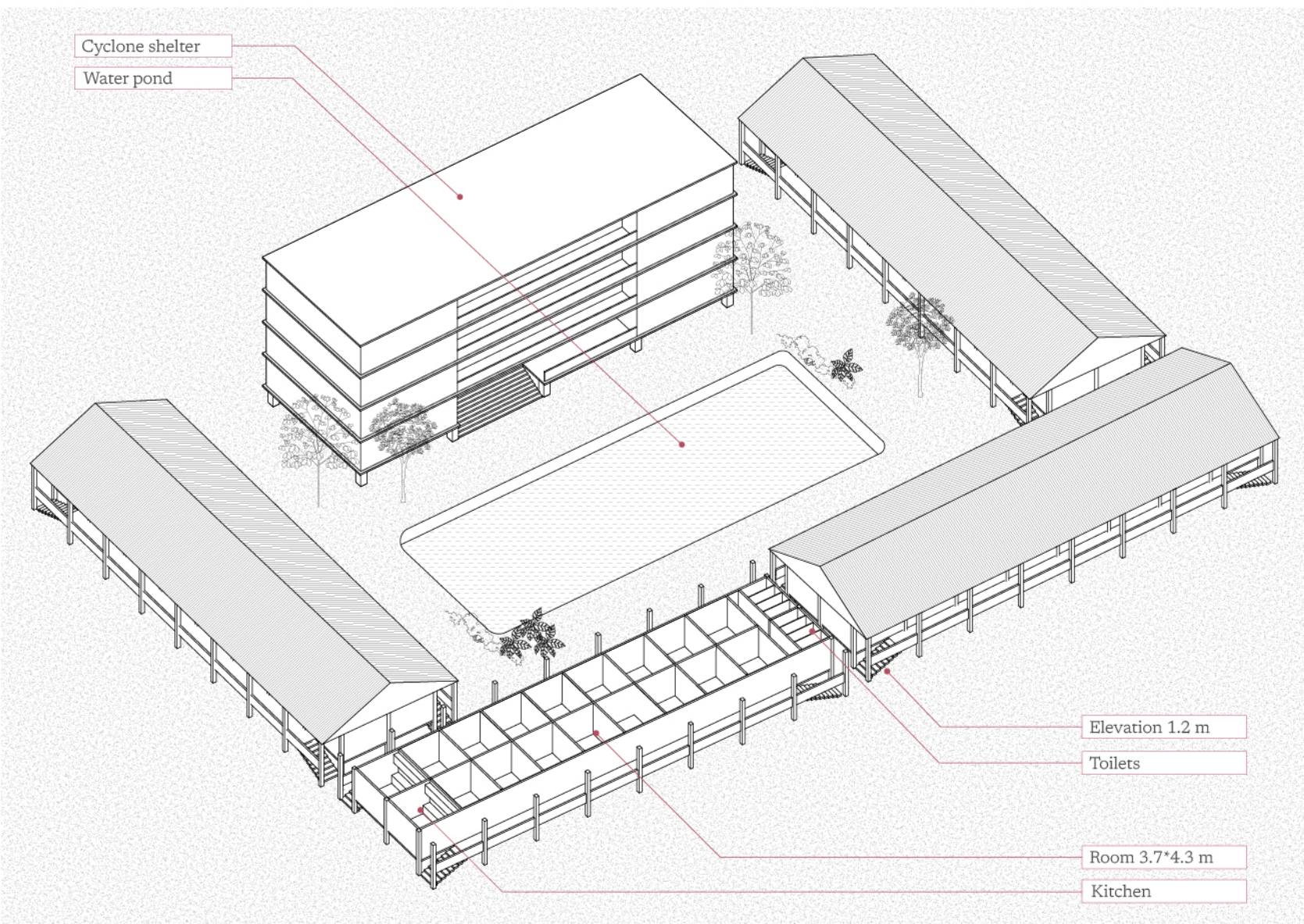
Compared to the traditional gradual inhabitation process of the islands, a whole settlement was built within 2 years to accommodate 100,000 people. Since the settlement is built from repetitive modules, it lacks diversity and it's rigid structures have a huge contrast with nature. Even though it has scope for providing basic services , it lacks livelihood support facilities.



Bhashan char
Building block

The settlement is built with repeating modules of three blocks, where each unit has 16 rooms with a shared kitchen and toilet facility. Moreover, Each module also has a multifunctional disaster shelter.

The settlement is part of the Ashrayan project of Bangladesh which was initiated to provide housing for the homeless people. Projects under this initiative are all similar in terms of planning, where some actually failed due to lack of livelihood support facilities.



Author: Shamsuddin Illius



Author: Shamsuddin Illius



Author: Shamsuddin Illius

Rural settlement pattern of
Bangladesh and Myanmar

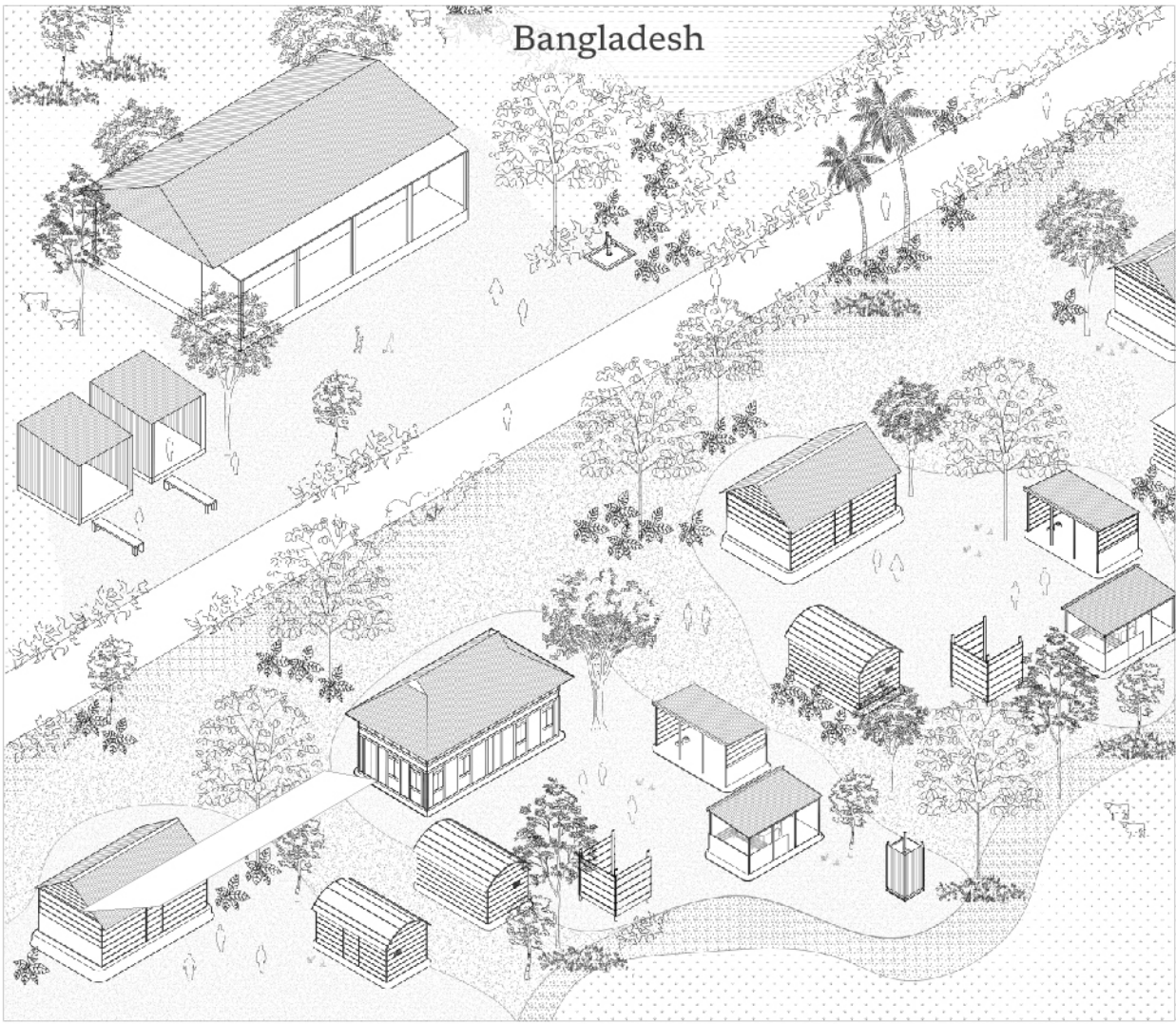
Bangladeshi and Rohingya rural settlements differ quite a lot, where settlements in Bangladesh usually have a community infrastructure, it's mostly absent in Rohingya villages.

Homesteads in Bangladesh are traditionally built around a courtyard on top of a raised mound. Whereas Rohingyas build their houses elevated from the ground where most things are carried out indoors due to a protective outlook towards women.

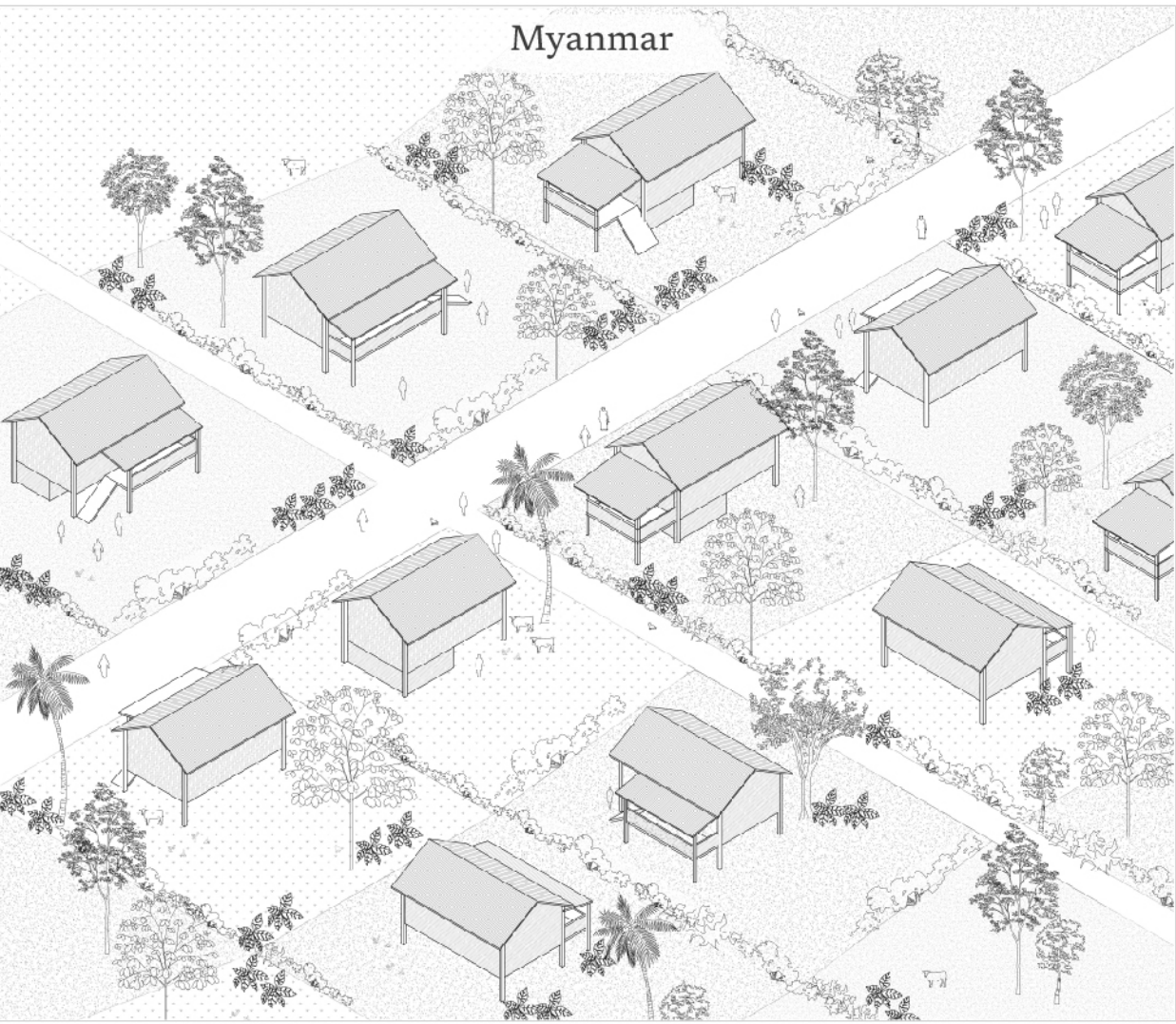
Dwelling in the delta

To address the challenges of the low-lying landscape, people practice floating agriculture or a model where forest trees, fish and vegetables are combinedly harvested for short and long term benefit.

To build coastal resilience, one of the recent policies is to plant diversified species of mangrove in the shoreline as locals highly depend on the mangrove for livelihood.



Built form Separate structures built around a courtyard, built on a raised mound by digging a pond	Occupation Seasonal occupational pattern, majority are farmers, fishermen or day labourer
Social structure Muslim majority. People are social and hospitable in general	Infrastructure Access to primary schools which doubles as a emergency shelter during disasters



Built form Houses raised from the ground middle of a plot, most activities are carried out inside maintaining privacy	Occupation Majority involved in agriculture and fishing. A smaller portion involved in trading
Social structure Majority of the population is Muslim and conservative towards women	Infrastructure Lacks formal infrastructure due to statelessness, Restriction in using permanent material

Floating agriculture
(Globally important agricultural heritage system)

Author: Zakir Hossain, 2020

Integrated & diversified livelihood practice
(Fish- forest- fruit- vegetable)

Source: UNDP, 2015

Mangrove restoration for coastal protection
(Diversified species plantation)

Source: UNDP, 2019

Home based income generation
(Using local resources)

Source: Asa.org

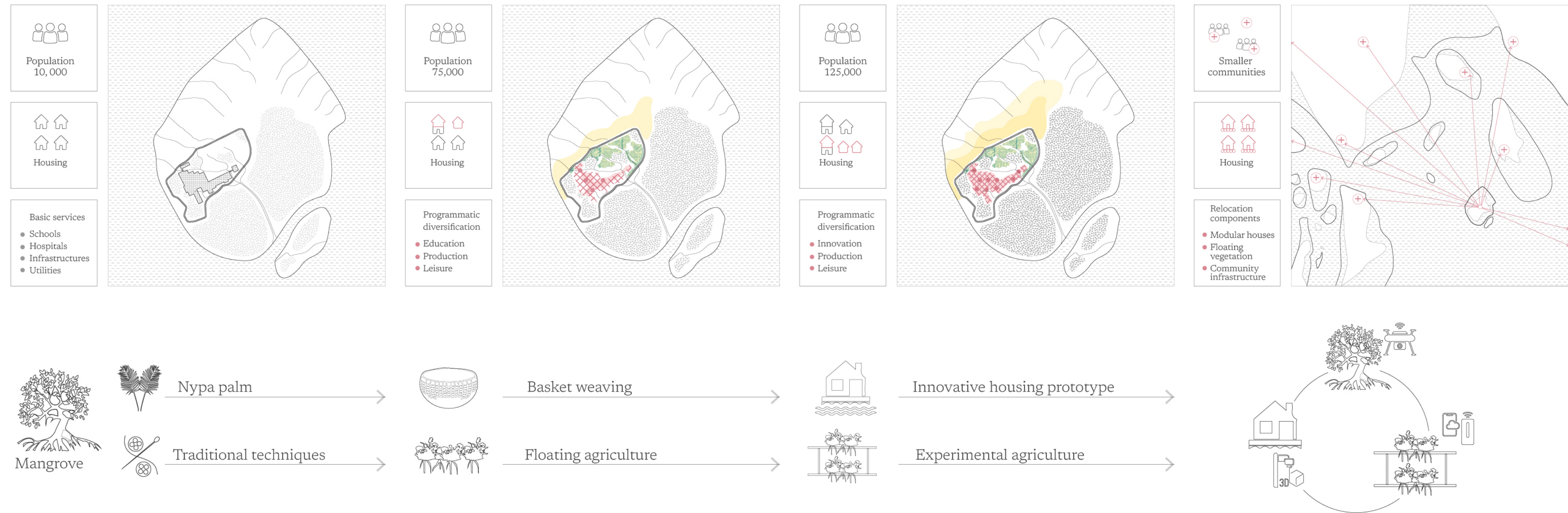
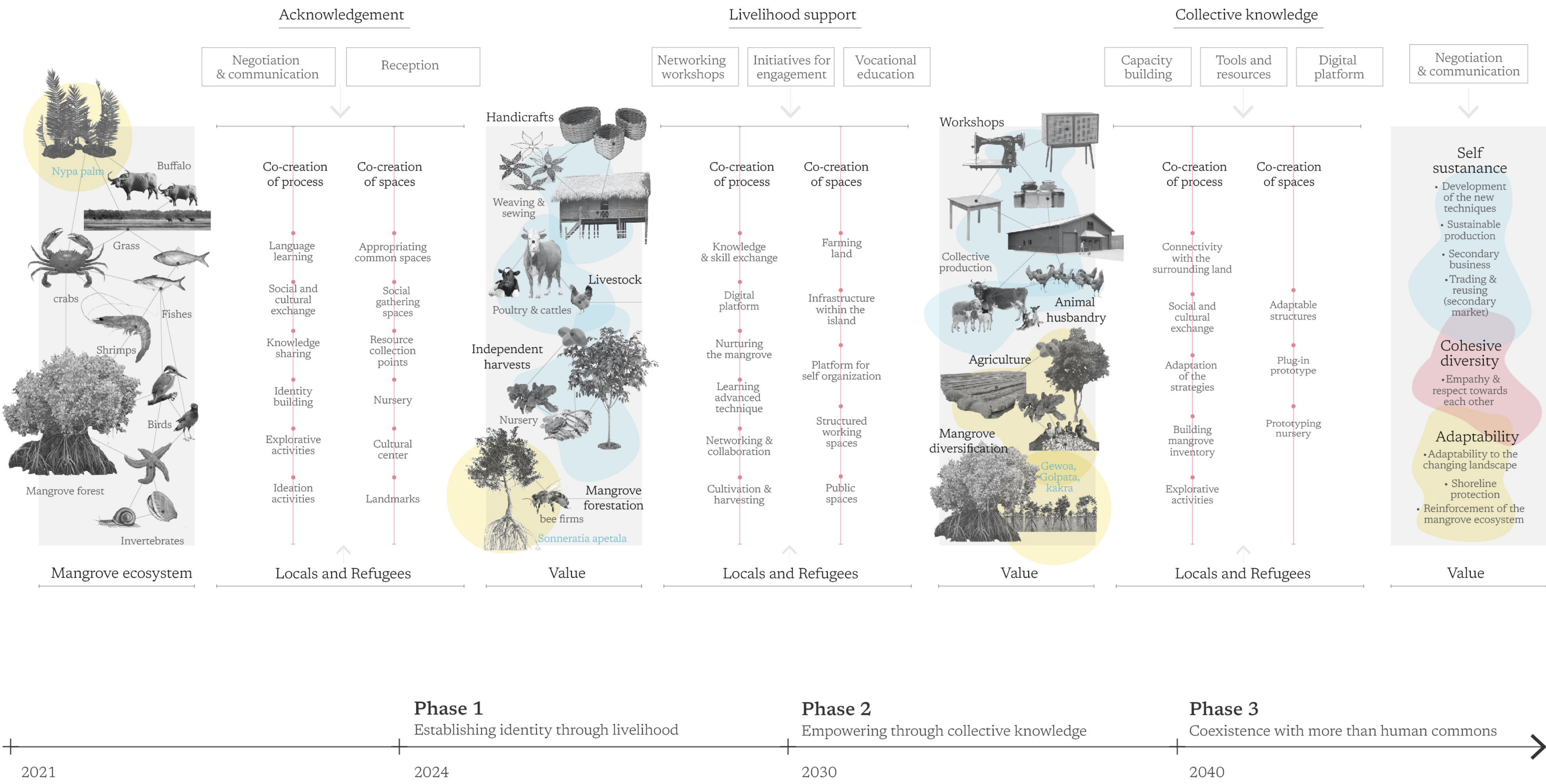
Phasing design

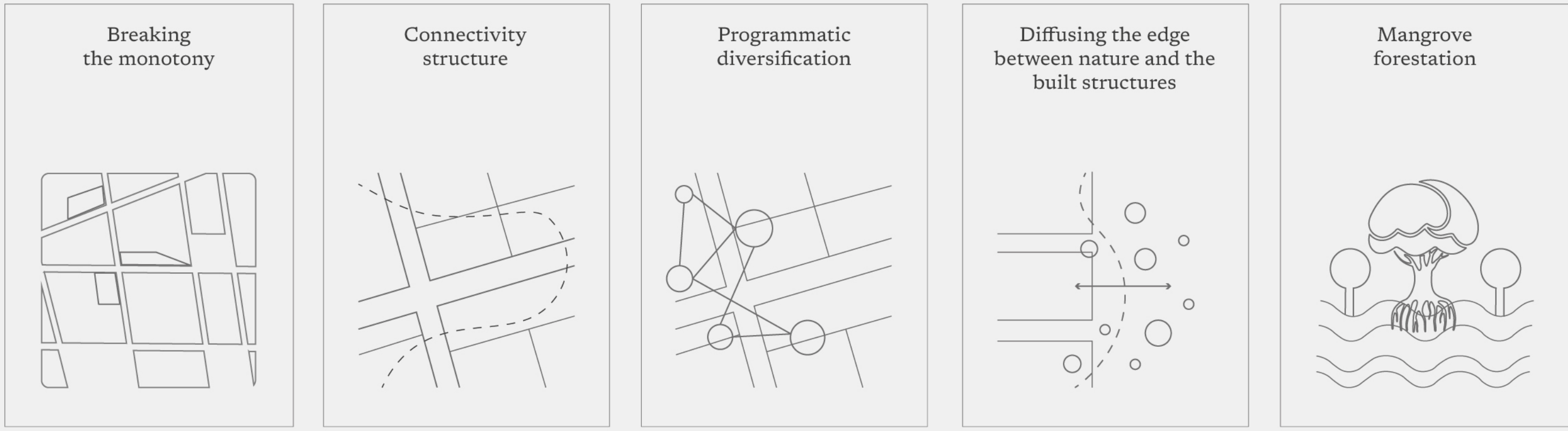
The aim of our project is to establish conditions of coexistence for the refugees and IDPs of Bangladesh where they can co-create resilient communities in connection with the local context and the changing environment.

And we are proposing that they would learn to coexist in harmony with nature in collaboration with the NGOs and government. Simultaneously, cohesive diversity, self-sustenance and adaptability will be enhanced through co-creation.

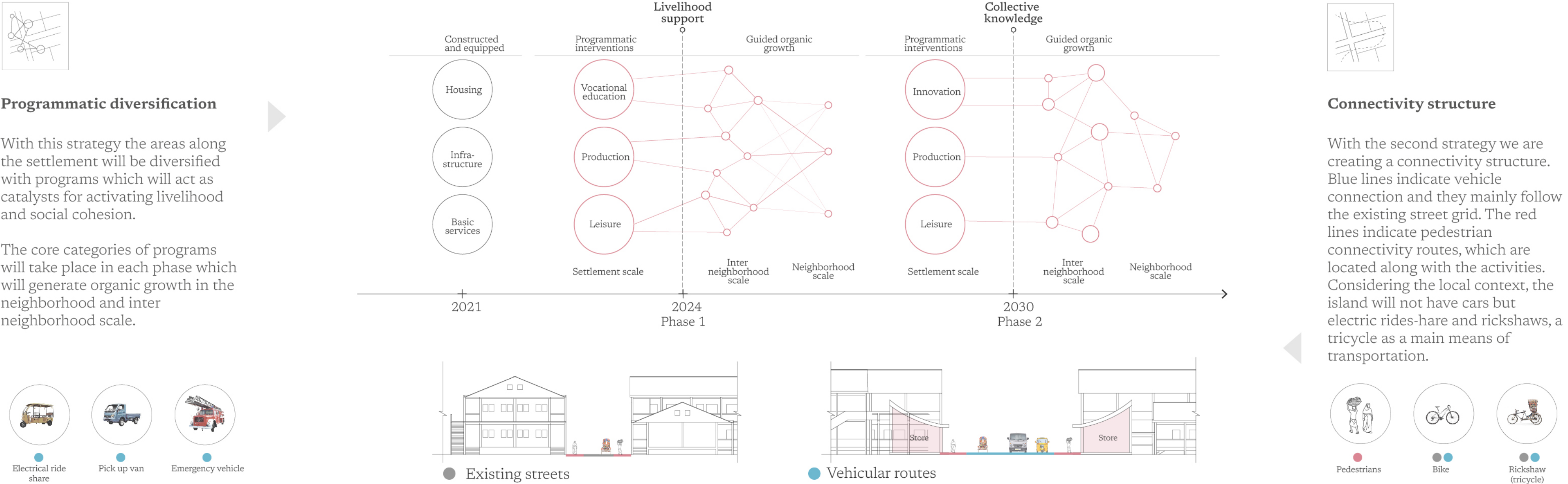
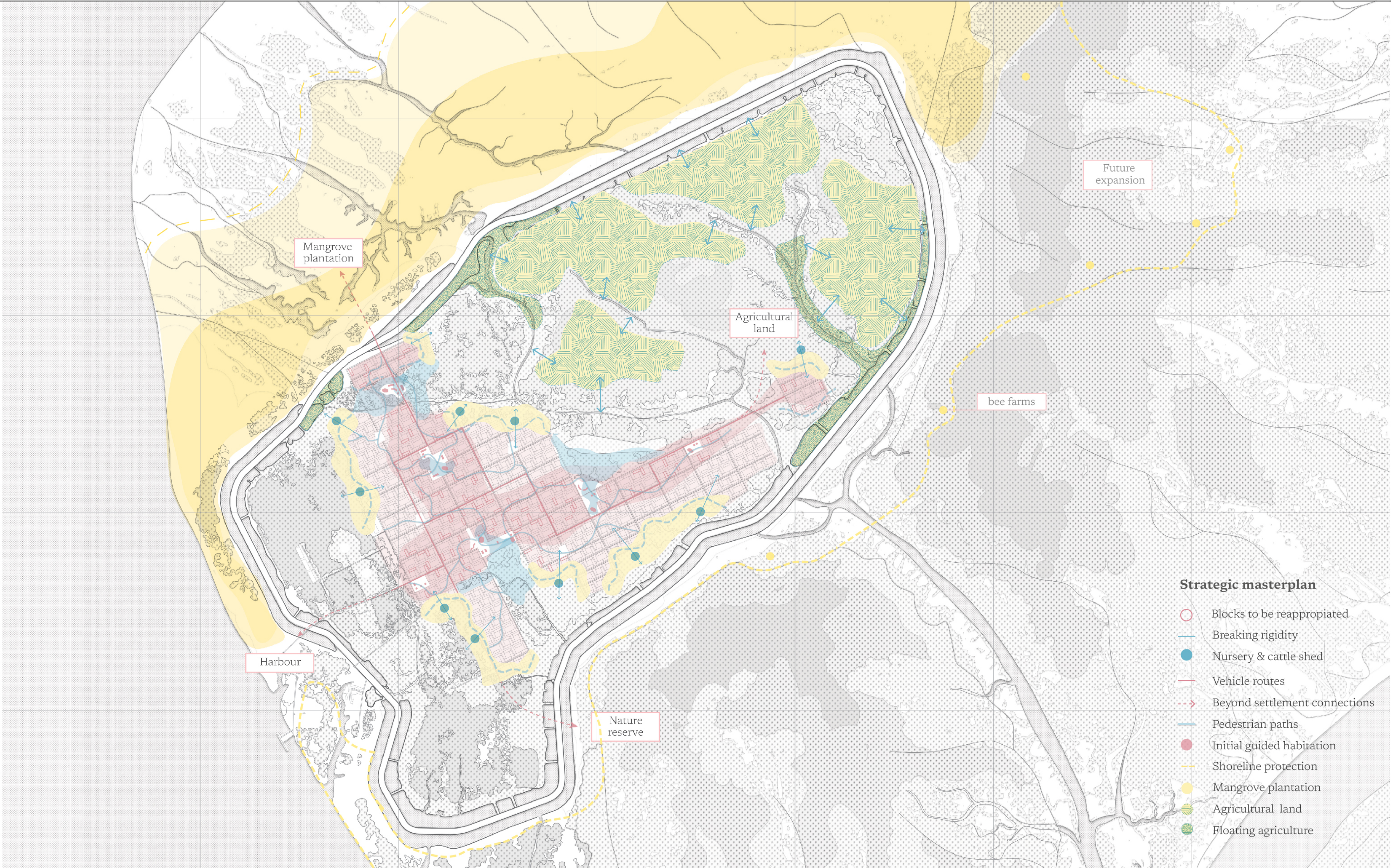


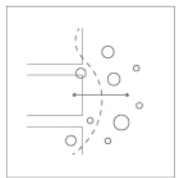
CHAPTER 3: THE FRAMEWORK OF CO-CREATING RESILIENT COMMUNITIES





CHAPTER 4: DESIGN APPROACH

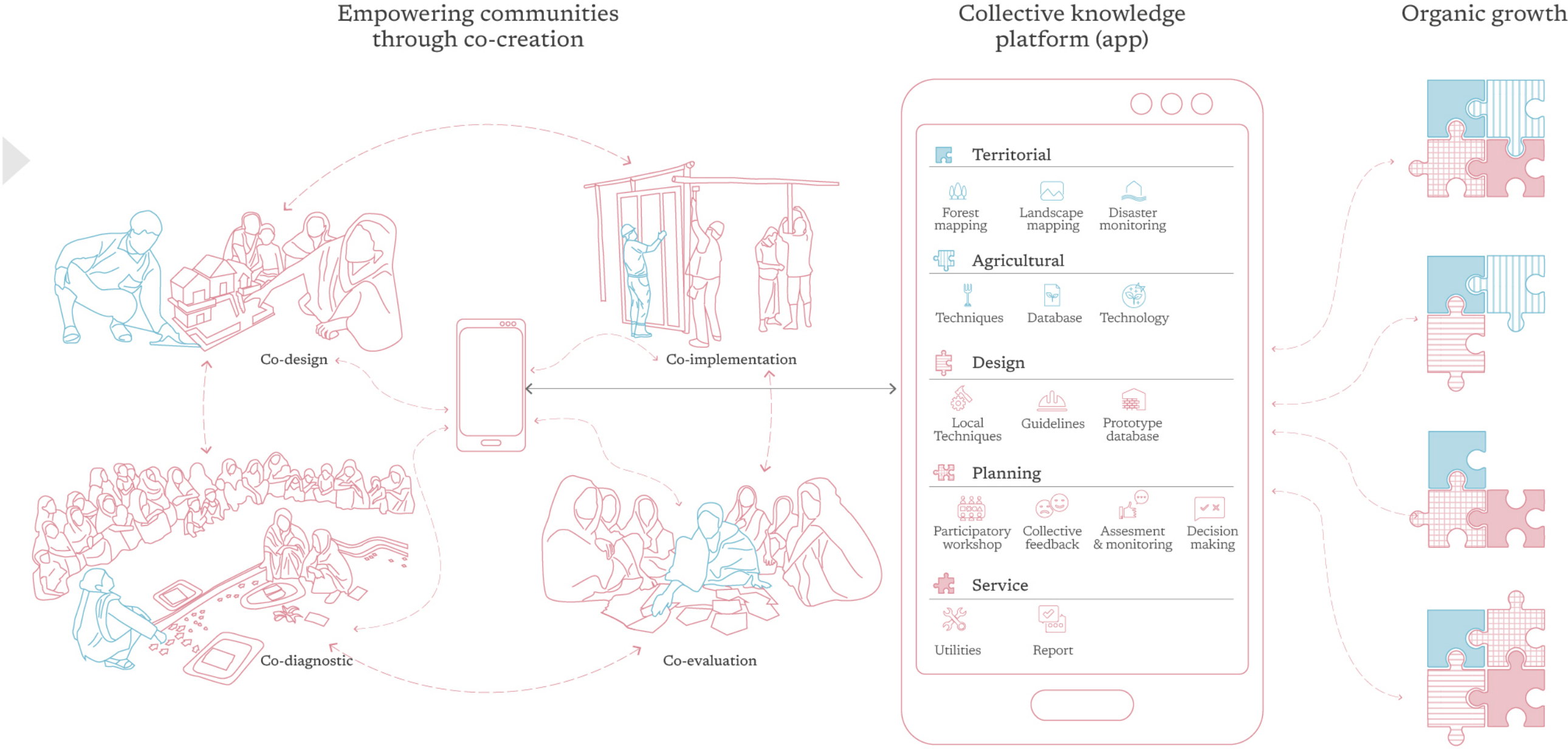




Diffusing the edge

One of our goals is to develop organic interrelations between nature and humans, thus this strategy aims to diffuse the rigid borders between the built and natural environment through organic growth.

We envision it to happen through principles of co-creation, where a shared collective knowledge platform will empower people to co-diagnose, co-design, co-implement, and co-evaluate, thus generating organic growth.

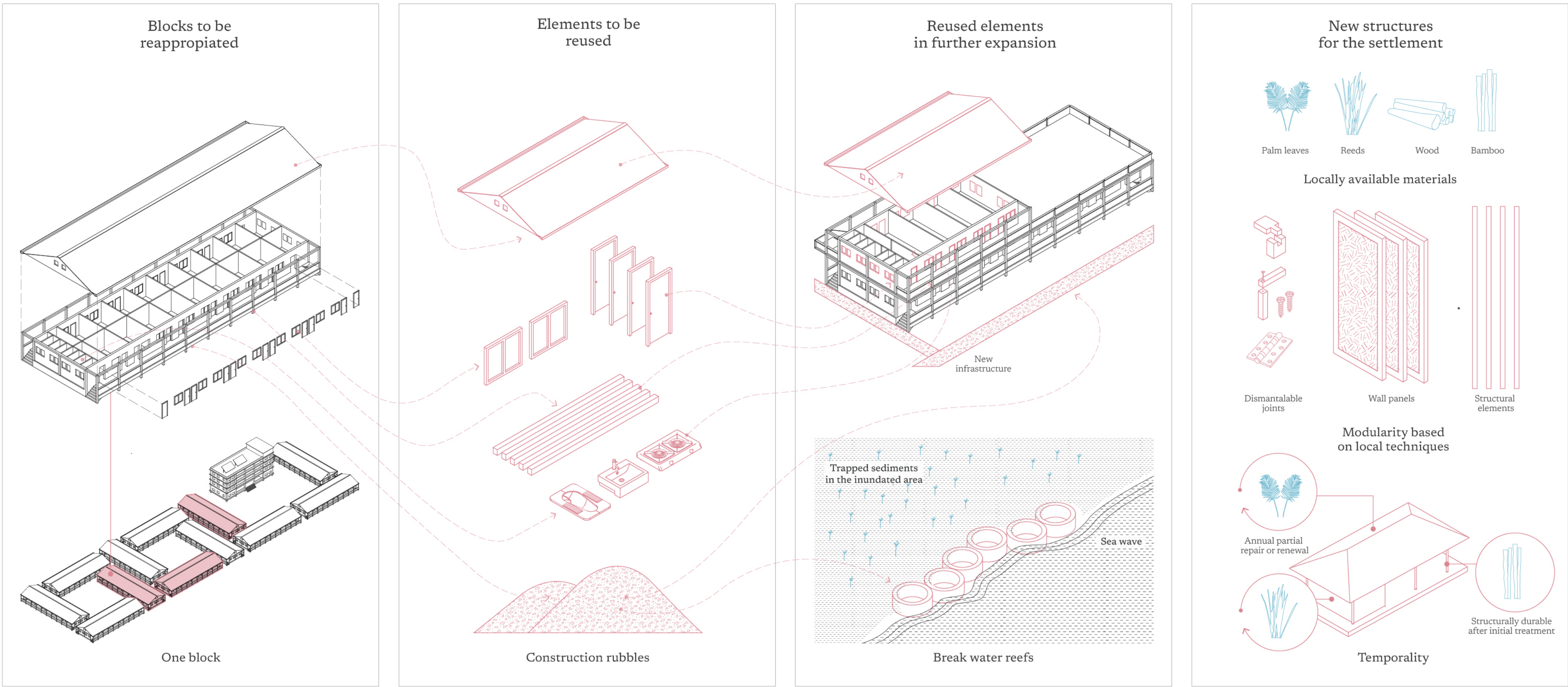


Breaking the monotony

With this strategy we intend to break the monotony of the settlement by creating voids. One building from each block will no longer be used as housing, but rather the community can decide how to re-purpose or reconstruct it.

The materials from the de-constructed buildings will be used for new constructions. The elements will be reused in the new extensions and the concrete rubbles can be used for building break water reefs and permeable pathways.

New structures will be built with local materials following the principles of modularity to address the challenges of future relocation

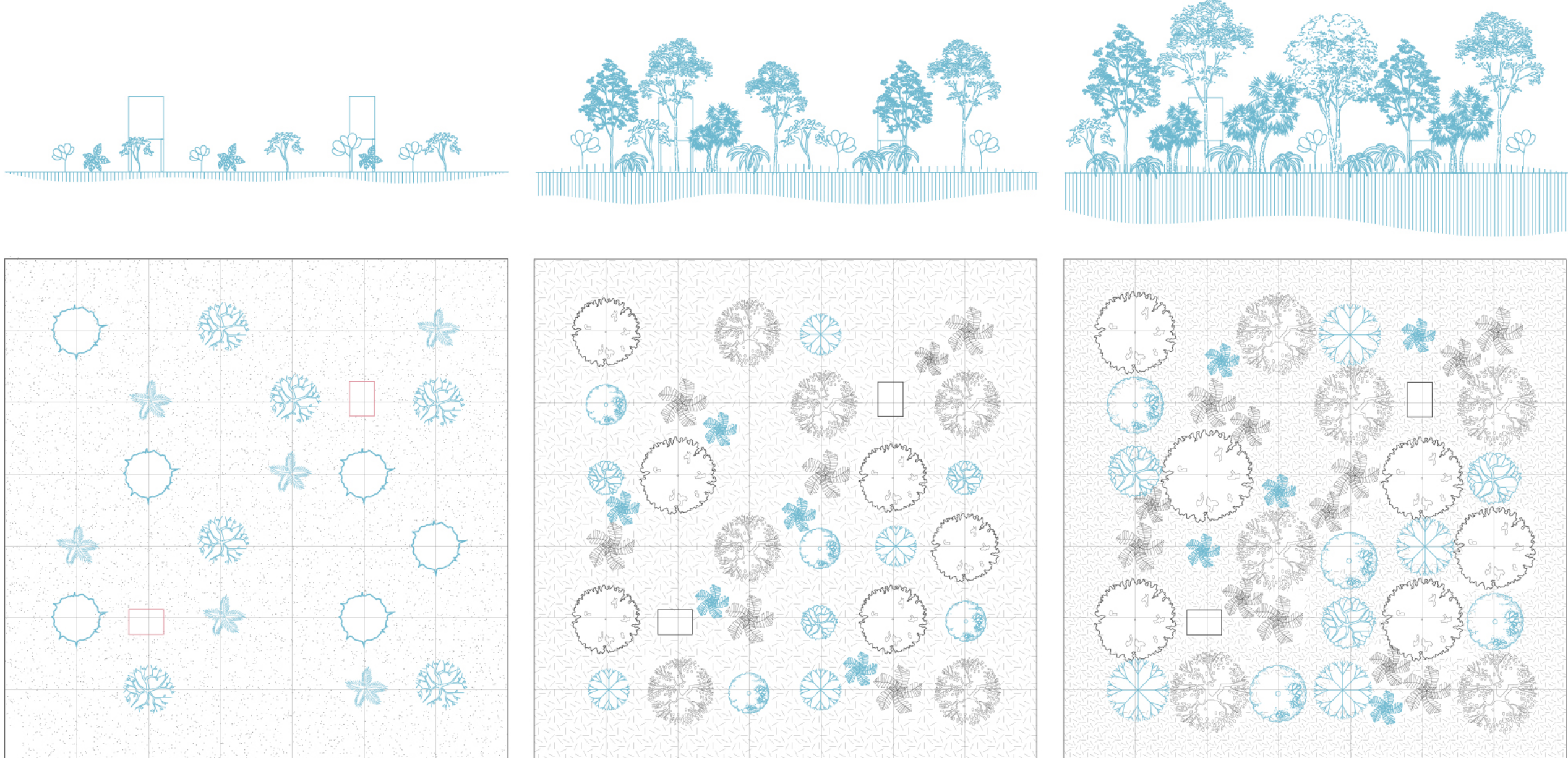


Fast growing trees

- Keora (*Sonneratia apetala*)
- Baen (*Avicenna officinalis*)
- Golpata (*Nypa fruticans*)

Diversified species

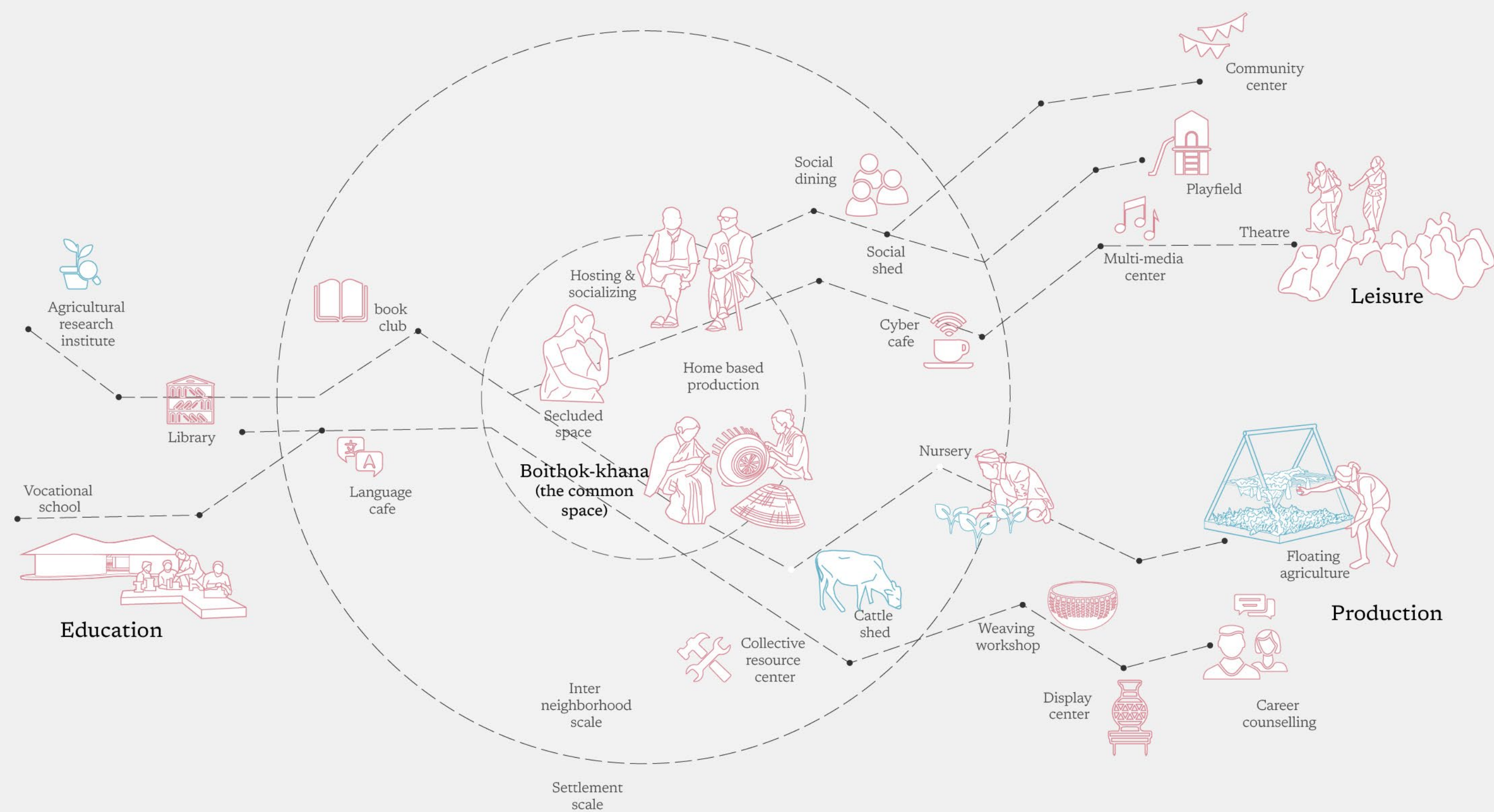
- Sundari (*Heritiera fomes*)
- Gewa (*Excoecaria agallocha*)
- Passur (*Xylocarpus mekongensis*)
- Bee farm



Mangrove forestation

As part of increasing the resilience of the settlement, we propose mangrove forestation in the northern part of the island along with break water reefs as shoreline protection.

The mangrove forestation process will take place by planting the fast growing trees and bee farming in the first phase and later diversifying with different species to generate an independent mangrove habitat.

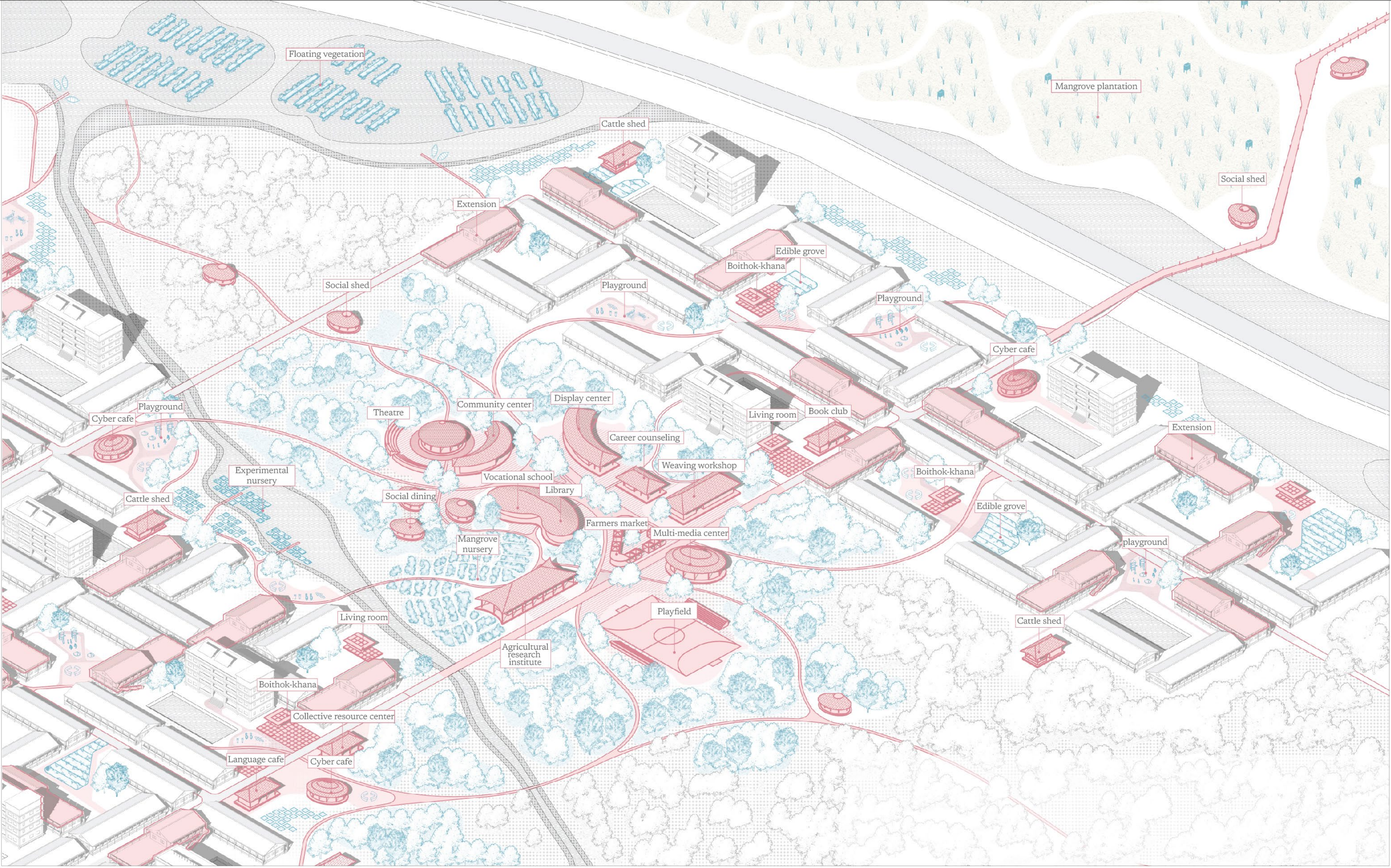


The aim of the first phase is to create identity through livelihood. Here we are emphasising on two of their traditional techniques, the weaving techniques with nypa palm leaves and floating vegetation. It will create possibilities for the communities' future development while building care and empathy towards nature and each other.

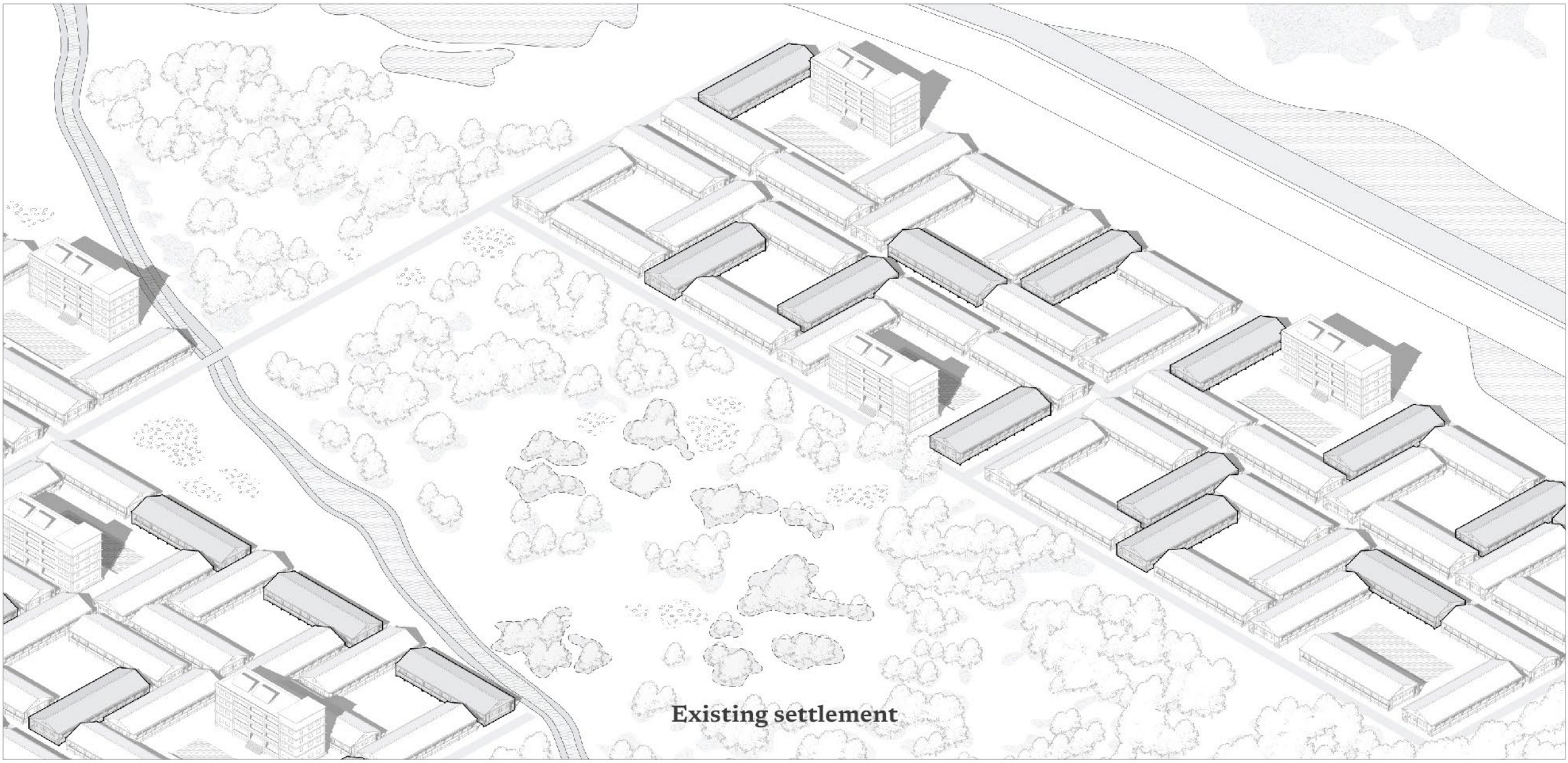
Three sets of programs, education, production and leisure are distributed in three different scales, neighborhood, inter neighbourhood and the settlement scale.

Whereas we imagine the Boithok-khana or the common space in the neighborhood to be appropriated by the residents but all the other programs will formulate an interdependent network engaging the communities.

CHAPTER 5: PHASE 1- ESTABLISHING IDENTITY THROUGH LIVELIHOOD



- Mangrove Plantation
- Bee farm
- New programs
- Plaza
- Modified tree cluster
- Existing tree cluster
- Floating vegetation
- Nursery
- New pathways
- Existing pathways
- Water
- Rubbles of construction
- Disassembled buildings

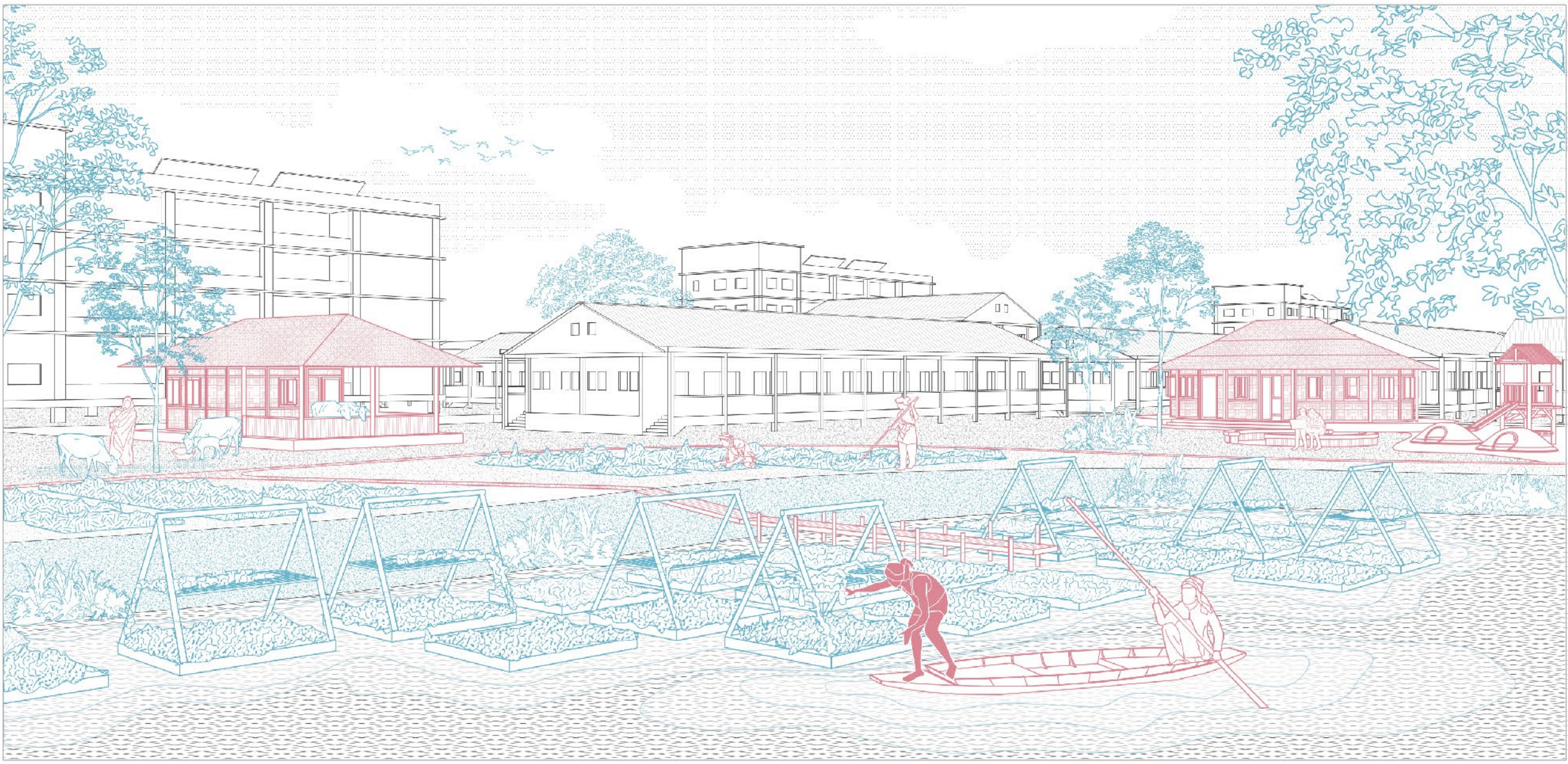
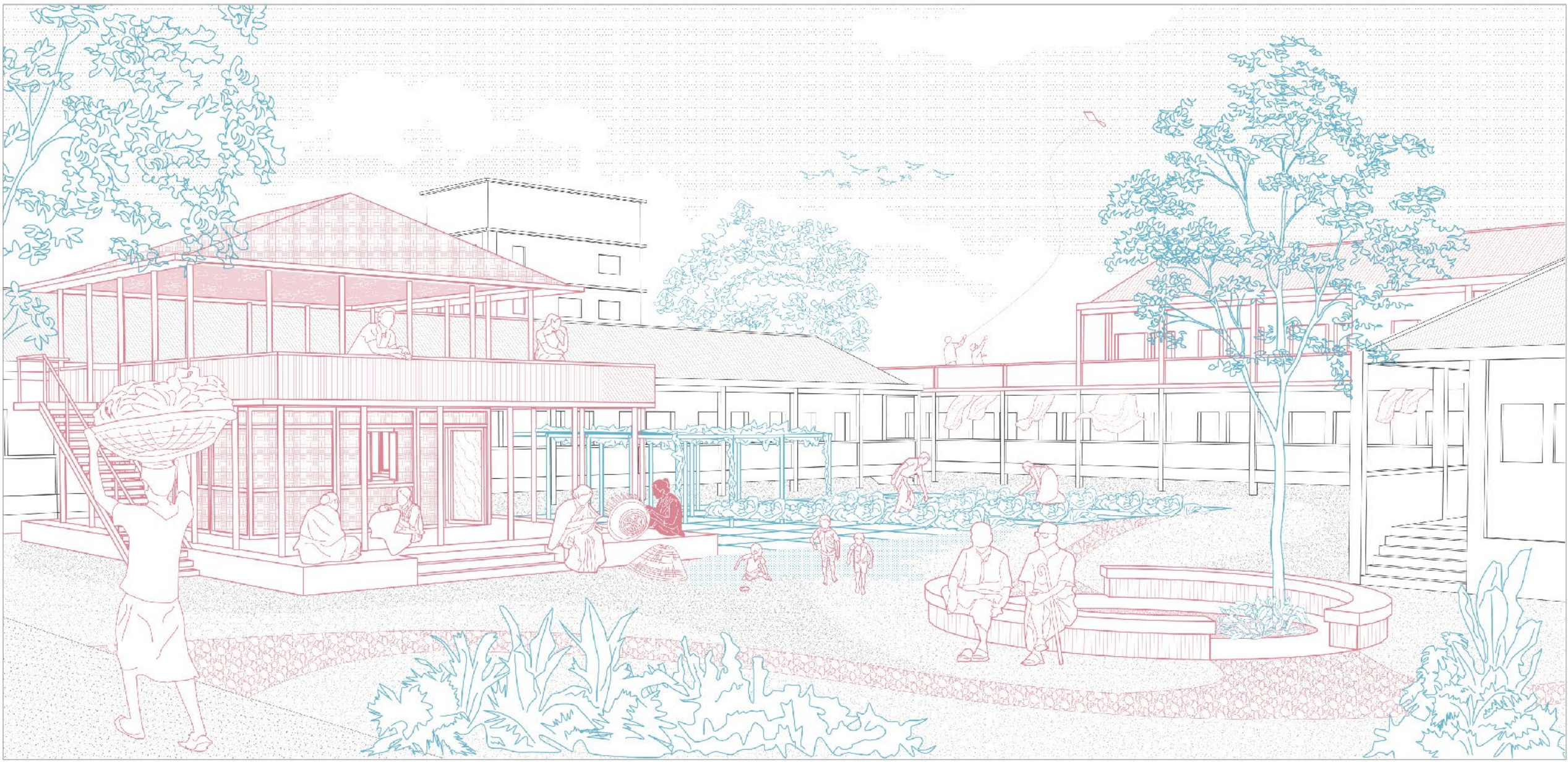


For the first phase we have selected the area located north of the island. The embankment is separating the settlement from the tidal flats in the north and there is a lake going in the middle.

In connection to our overall strategies, we have identified the buildings which will be disassembled.

Boithok-khana

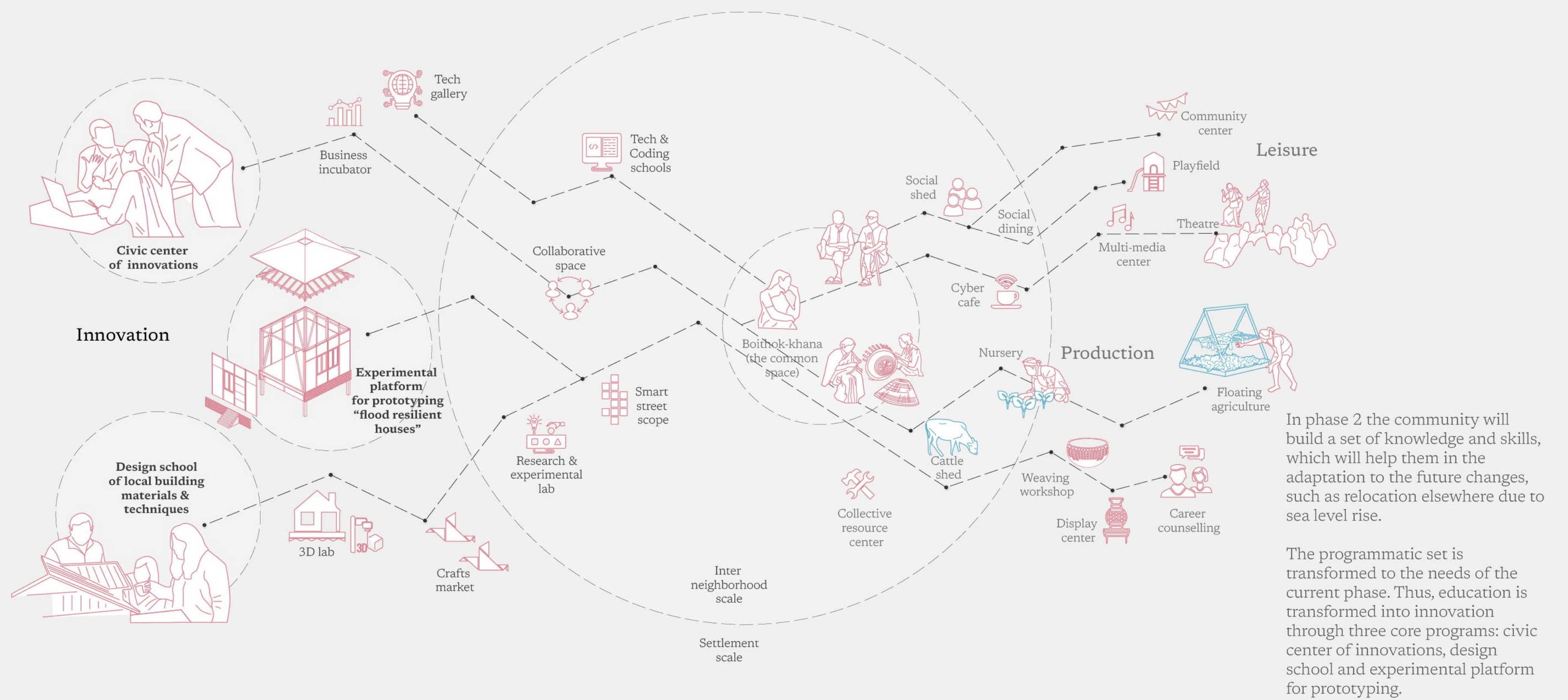
Fatema, a 15 years old girl is currently living in Bhashan char with her family. She helps her mother in her spare time to weave the baskets with nypa palm leaves, just like they used to do when they were living in Myanmar. It's one of the things that makes her feel connected to her roots. They have made this structure in their neighborhood which they call "boithok-khana" means the living room. Here, they spend their leisure time with other families and sometimes she just goes to the upper floor to get some quiet time on her own.



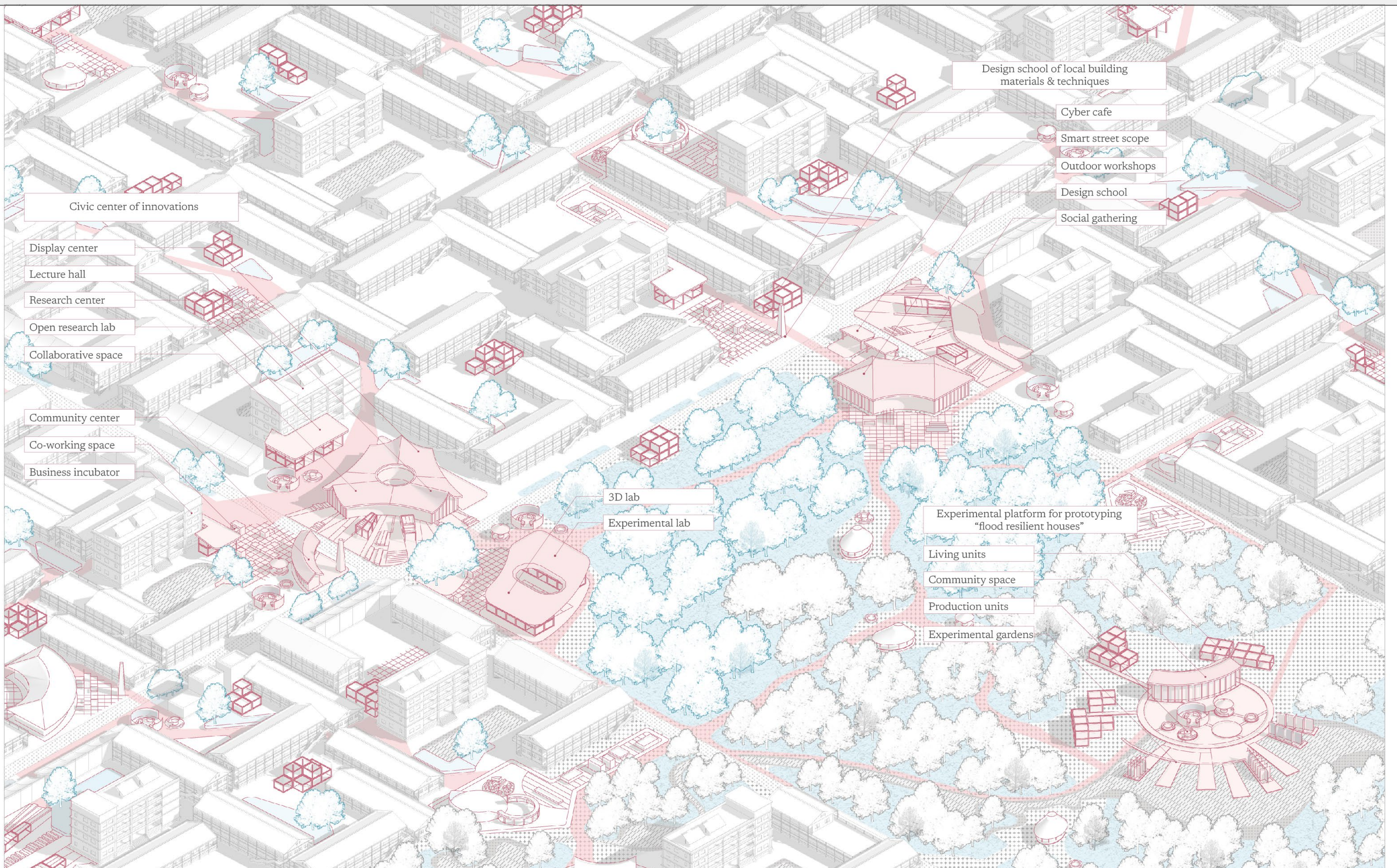
The in-between

Karim (age 28), an young adult, is currently associated with the experimental floating vegetation model in Bhashan Char. They are trying to figure out an adaptive approach for growing vegetables in the water. It has helped him learn new techniques and collaborate with other farmers. He really enjoys his work since it also gives him the scope to be creative. Now he is becoming more self reliant in his life and he is no longer dependent on the ration provided by the humanitarian organizations.

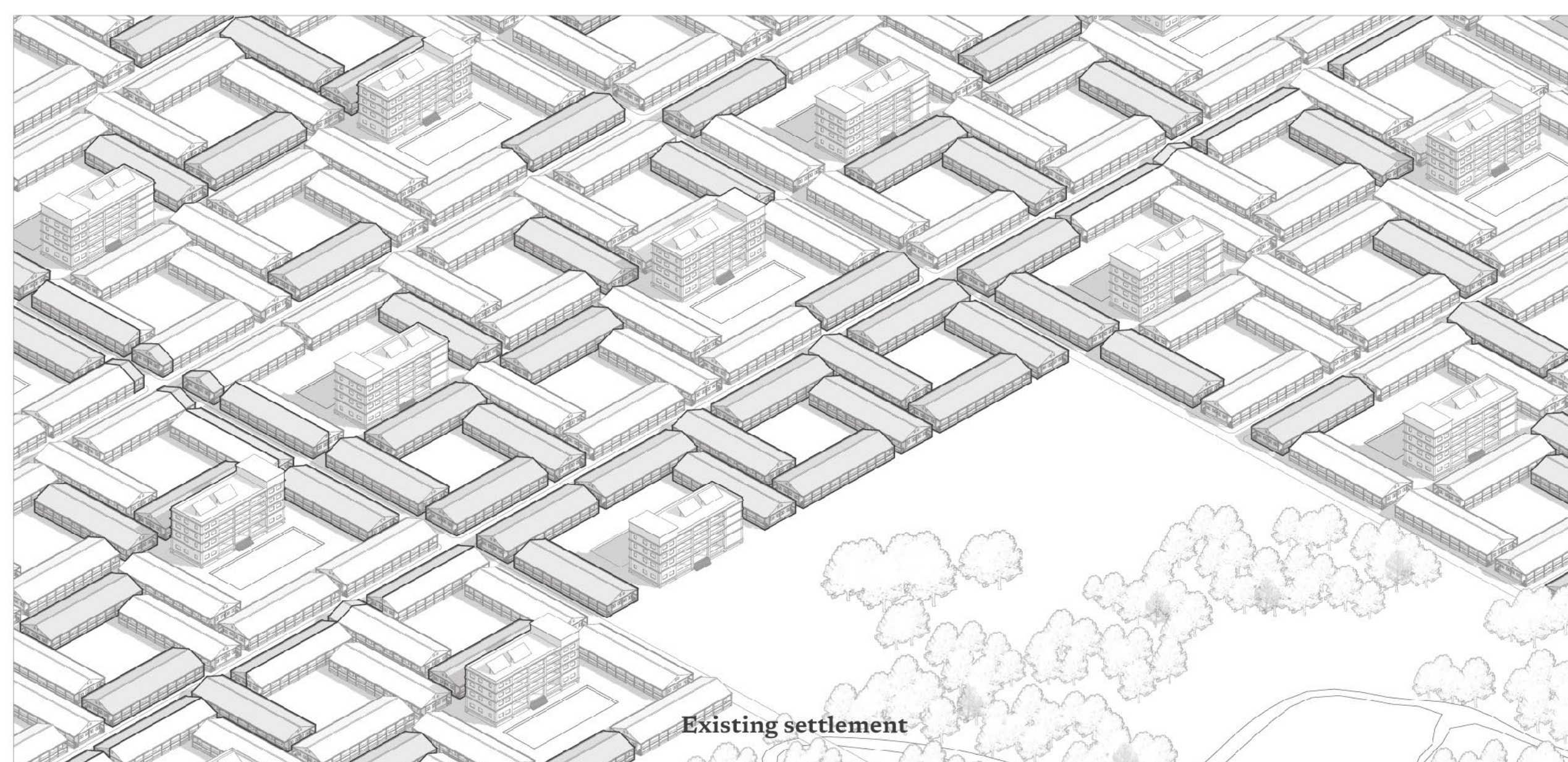




CHAPTER 6: PHASE 2 - EMPOWERING THROUGH COLLECTIVE KNOWLEDGE

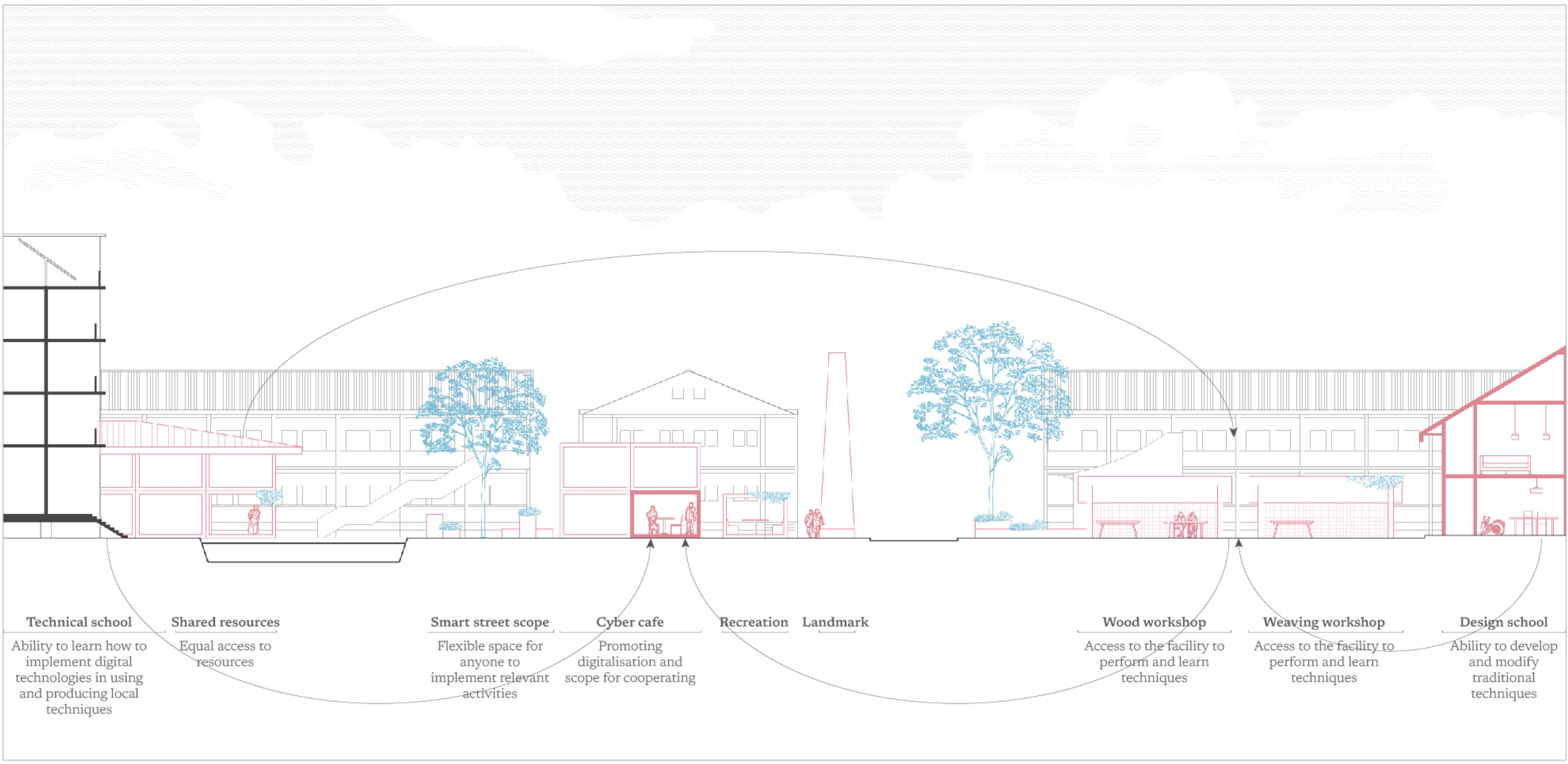
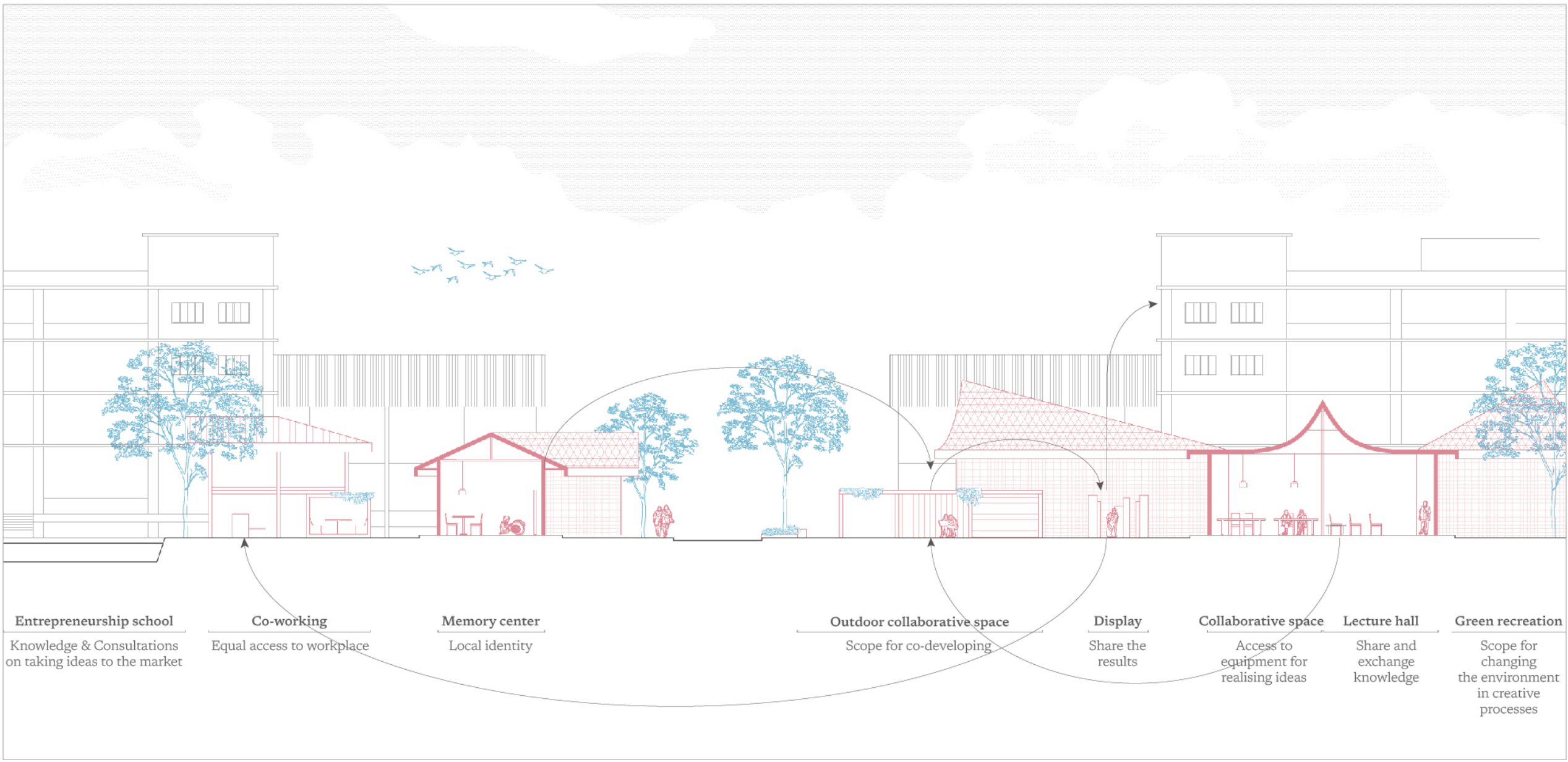


The zoom-in area in phase 2 is located in the central part of the settlement. The context is densified and diversified through additional floors and a set of programs (innovation, production, leisure). The three core programs innovation center, design school and experimental platform for prototyping are parts of the urban system.



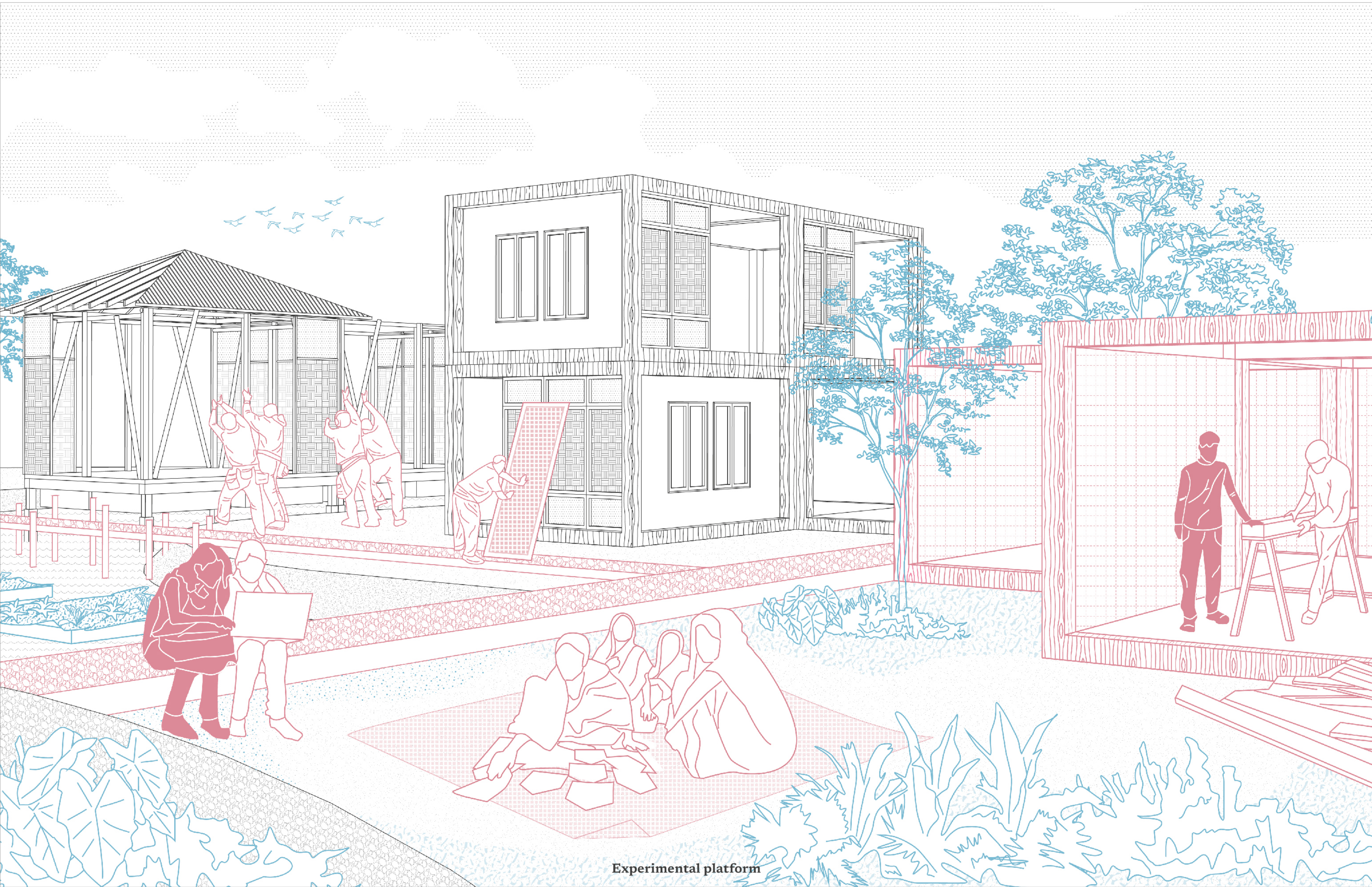
Civic center

Karim, who in the first phase was working with experimental floating vegetation, in the second phase is participating in a workshop in the civic center. Their ideas can then be exhibited in the outdoor display space. Additionally, they have the opportunity to get consultancy from business school and the research center on how to proceed with their project on vertical aquaculture units.



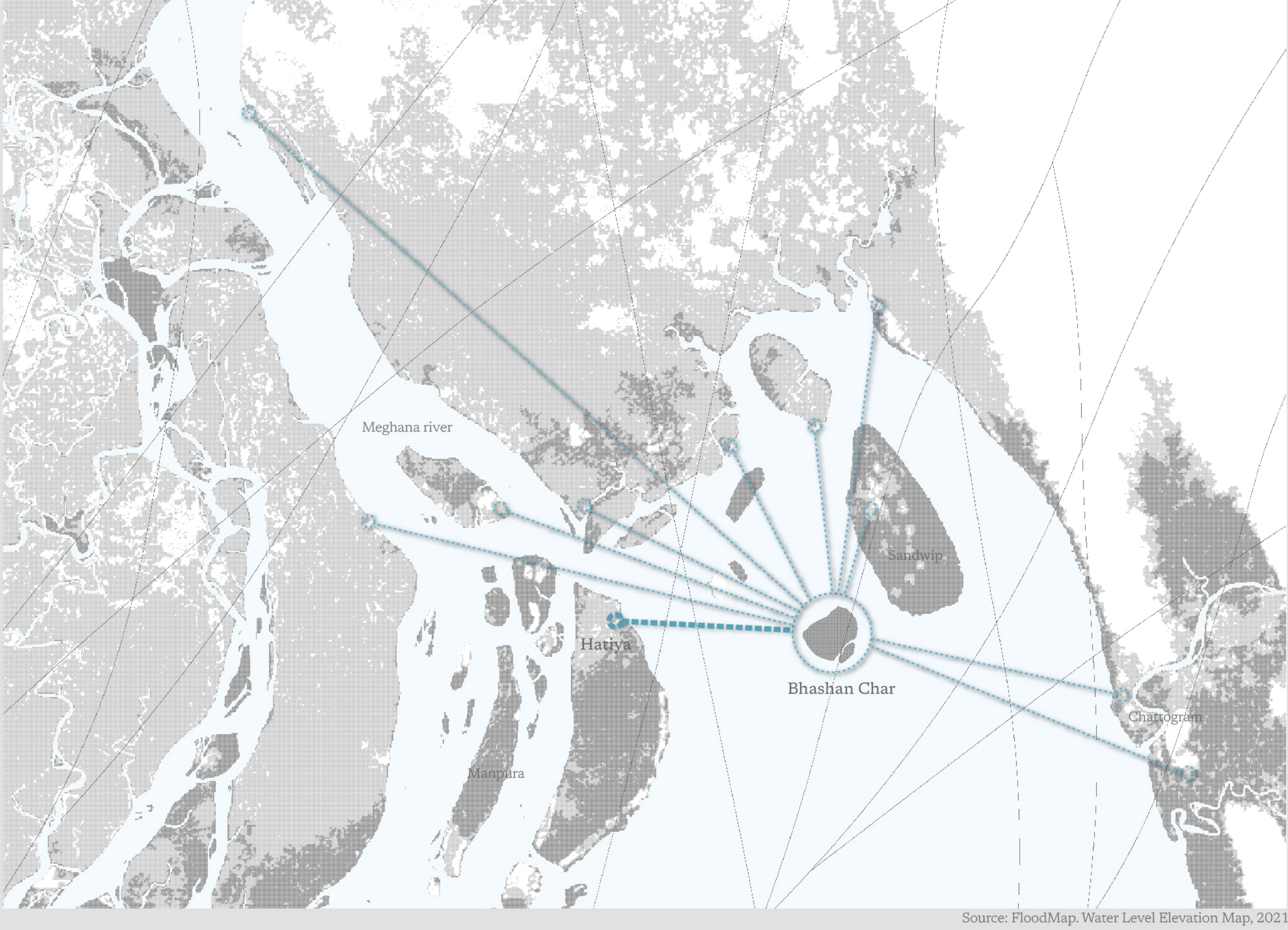
Design school

Fatema is studying in design school in phase 2. She is working in a weaving workshop in collaboration with some residents. They can go to the cyber cafe in order to develop a 3D model of their facade for a living unit whereas other students from the technical school would work on the platform with a guide for this new technique. Fatema can also use a 3D printer from the collective resource center to prototype the facade.



Experimental platform

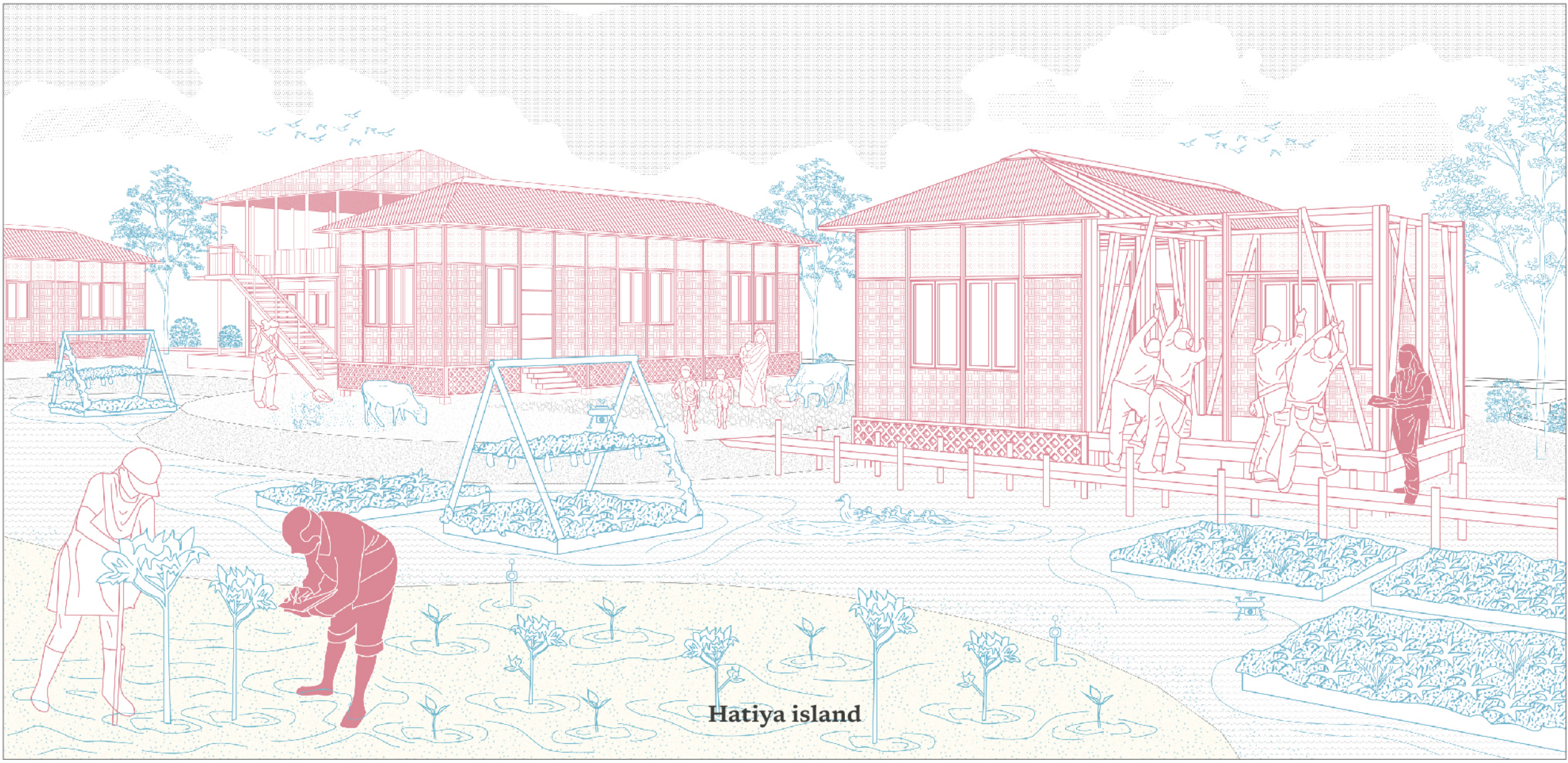
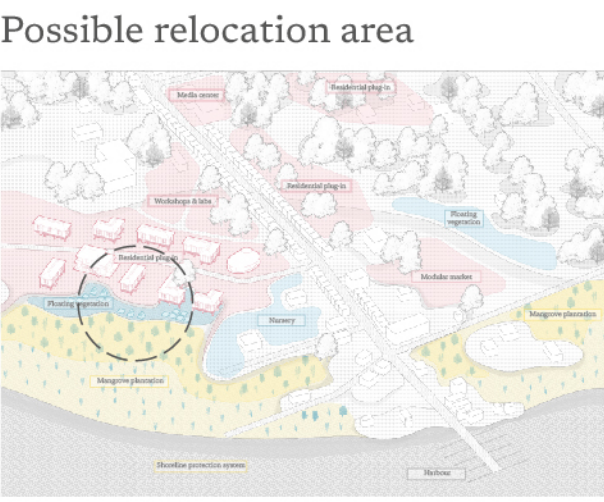
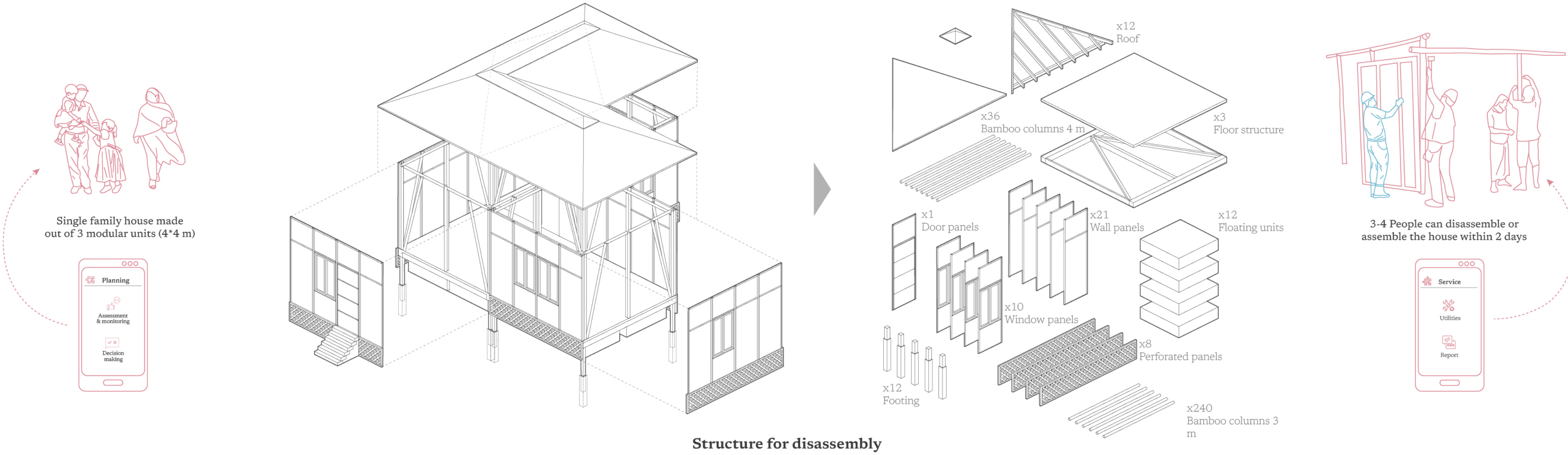
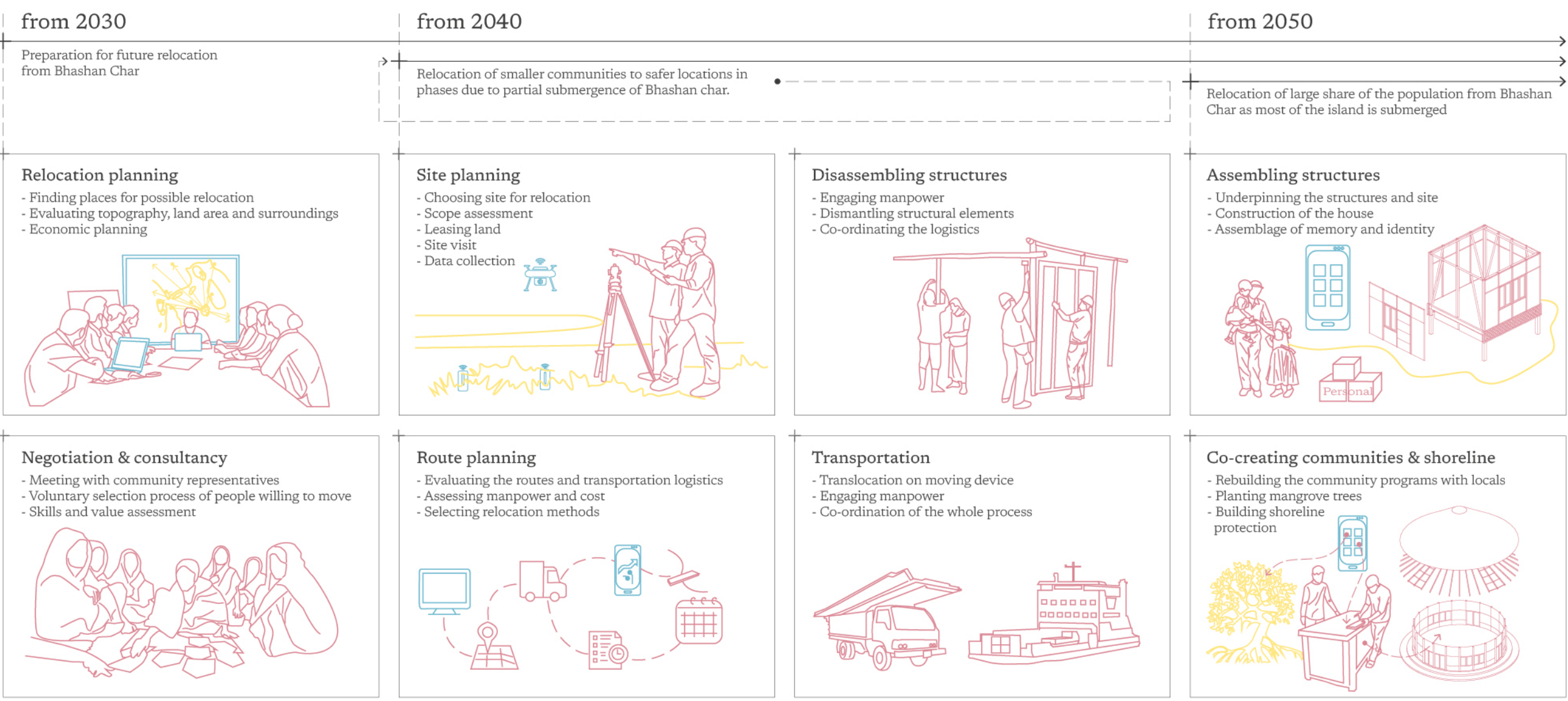
Large share of land area of Bangladesh might be affected by sea-level rise by 2050. Considering the high density of Bangladesh, land will be a scarcity and most of the mainland will be heavily saturated with people. So, here we assume that relocation from Bhashan Char will take place in multiple sites and we have identified one sample location, Hatiya island to further explore the relocation scenario considering its' proximity to Bhashan char.



- Cyclones
- Possible plug-in relocation
- Selected plug-in relocation scenario
- Annual flood risk areas by 2050
- Sea level rise affected areas by 2050

CHAPTER 7: PHASE 3 - COEXISTENCE WITH MORE THAN HUMAN COMMONS

One of the goals for the project is to increase preparedness. Hence, in this phase we considered the relocation process from the island before it gets entirely underwater with these cooperative steps which are distributed through the time.



Fatema and Karim along with many others are co-creating their community in the new place. Karim is teaching mangrove plantation techniques to a student, whereas Fatema is guiding the process of assembling modular floating houses.

APPENDIX

Booklet

CHALLENGE

Currently, there are around 7.8 billion people in the world, among them, 79.5 million people are displaced from their homes, 45.7 million people are internally displaced, and 26 million people are refugees (UNHCR, 2020). These numbers are just a mere reflection of the consequences of the increasing scale and frequency of natural disasters due to climate change and/ or rooted in conflicts such as warfare, violence, human rights violations, and so on. Among the numerous ongoing cases from all around the world, we have decided to focus on one, the ethnic minority group called the Rohingyas from Myanmar who are currently refugees in Bangladesh.

The Rohingya population has been migrating from Myanmar since 1977 due to the decades of systematic discrimination, statelessness, and targeted violence in the Rakhine State, Myanmar. Hence, they fled to Bangladesh due to the closeness of the borders of these two countries. However, in August 2017, the largest refugee influx took place, as their houses were burnt down, families were separated and killed and girls were gang-raped. As a result, an estimated 800,000 Rohingyas fled into Cox’s Bazar and they got shelter in 34 extremely congested camps in Bangladesh (OCHA, 2019).



Source: UNICEF/UN0286416/Akash



Author: Omar Munna



Author: Adam Dean for The New York Times

Bangladesh

1947 East Pakistan was formed as a part of the State of Pakistan following the end of British rule, combining current Bangladesh and Pakistan

1971 Bangladesh became independent

1974 In Bangladesh famine and flooding left an estimated 27,000 people dead this year

1982 Thirteen camps for the refugees were established. Repatriation took place due to economic and social burden

1987 - 88 Massive flood inundated three-quarters of the country, killed over 3,000 people. Half a million were left homeless and 1300 were killed after a cyclone hit Bangladesh

2004 Death toll rose above 1,500 due to flooding and stranded more than 30 million people

2007 Tropical Cyclone Sidr killed 4234 people and left millions homeless

2009 Cyclone Aila destroyed thousands of homes, stranded tens of thousands of people in flooded villages and killed at least 191

2016 Cyclone Roanu killed at least 11 100,000 people were displaced

2019 Cyclone Fani and Bulbul hit Bangladesh Severe flooding displaced 800,000 people and inundated a third of the country

2020 Bangladesh started relocating Rohingya refugees in a remote island, Bhashan char

Myanmar

1800 British allowed local autonomy. Burmese government considers the migration during this period illegal, and refuses citizenship to the Rohingya.

1948 After independence from British rule, Muslim rebellion erupts in Rakhine State, with people demanding equal rights and an autonomous area.

1962 Military rule begins in Burma.

1977 - 82 Among 135 national ethnic groups, Rohingyas were excluded and rendered them stateless. More than 200,000 Rohingya fled to Bangladesh.

1989 - 91 Burma was renamed Myanmar. Military crackdown, another 50,000 refugees flee to Bangladesh.

1992 - 94 The Myanmar and Bangladesh governments agree to repatriate refugees. Hundreds of thousands of people return to Myanmar over several years.

2014 Myanmar’s first census in 30 years, the Rohingyas are still not included as an ethnic group.

2017 Horrific violence and terror targeting the Rohingya community. More than 700,000 Rohingyas flee Myanmar.

2021 Myanmar’s military seized power after detaining Aung San Suu Kyi and other elected leaders.

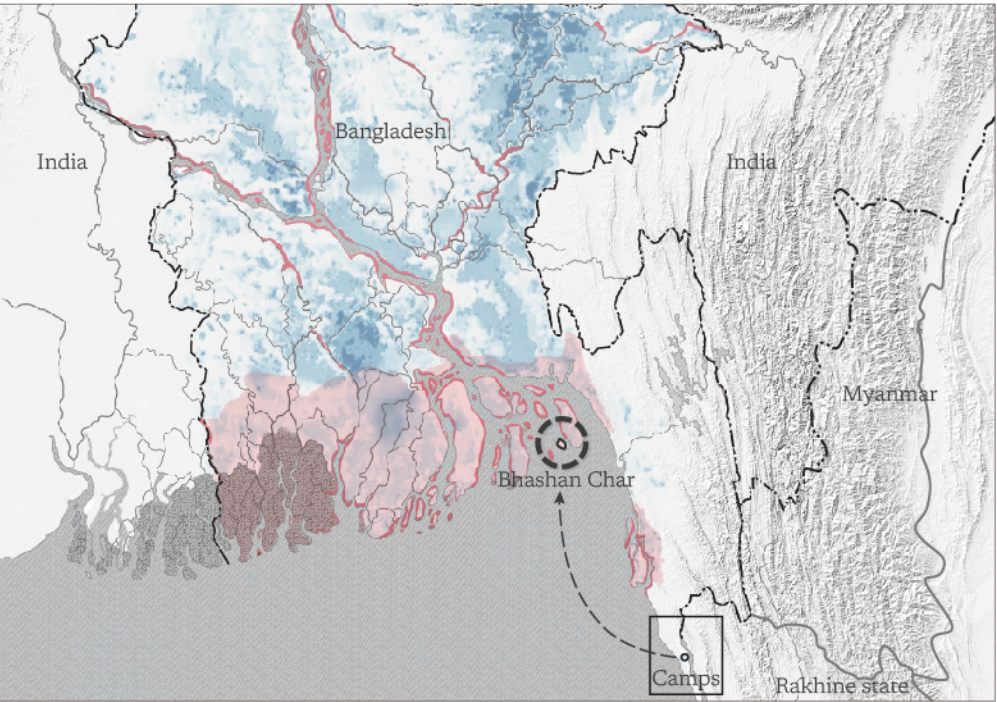


Source: Timelines, 2020 and World Vision, 2020

AREA

Bhashan Char

Bangladesh is the largest delta in the world with population of 161.4 m people. The country on itself does not have enough infrastructure and resources to support everyone. Moreover, due to its location, lands are extremely vulnerable to the sea level rise. Consequentially, by 2050 with 50 cm sea level rise Bangladesh might lose up to 11% of its already overpopulated land (Environmental Justice Foundation, 2020). It will affect approximately 15 million people directly. In this context, the area of focus for the Master’s Thesis will be the remote island Bhashan Char in Noakhali District, where Rohingya refugees are being relocated which we defined as “disappearing land”.



Remote site visit (refugee camp)

For the project we did a remote site visit to the camp-1 East in Cox’s Bazar with the help of architect Shimanto Goswami from Bangladesh, accompanied by Rizvi Hassan (IOM) and Khwaja Nuzhat Zerin Fatmi (ActionAid) who are currently working in the camps. It gave us better understanding of the living conditions and the lifestyle of the Rohingya refugees.



PROJECT

With our project, we are focusing on the Rohingya refugee issue. In 2017 thousands of people had to cross the borders of Myanmar due to mass genocide triggered by ethnic cleansing and around 800,000 of them flee to Bangladesh as refugees. Whereas, Bangladesh has 2 million informal settlers of its own known as internally displaced people (IDPs) who have been displaced due to extreme climatic conditions. So, we are dealing with the issue of how refugees can coexist in a country where there are already thousands homeless.

Currently, the government has built a settlement for 100,000 people on a newly emerged island, Bhashan Char in the Bay of Bengal. Thousands of Rohingya refugees are already being relocated there. However, with the predicted sea-level rise not only the island but the majority of the coastal area of Bangladesh might go underwater. Our project is an attempt to imagine a resilient community, where both refugees and Bangladeshi people will be able to coexist in Bhashan Char, build empathy for each other, and be connected with the surroundings. Simultaneously, be able to co-develop preparedness for future changes connected to sea-level rise using local potential.

Hence, the aim of our project is to establish conditions of co-existence for the refugees and IDPs of Bangladesh where they can co-create resilient communities in connection with the local context and the changing environment.



METHODS & TIMELINE

Research

- 1. Literature review**
 - . worldwide experience of refugee relocation
 - . understanding co-creating principles
- 2. Interviews**
 - . architects and urban planners from the current refugee camps
- 3. Desktop study**
 - . social structure
 - . settlement patterns
 - . local resources (building materials etc.)
 - . cultural conditions
 - . ecological conditions

Analysis

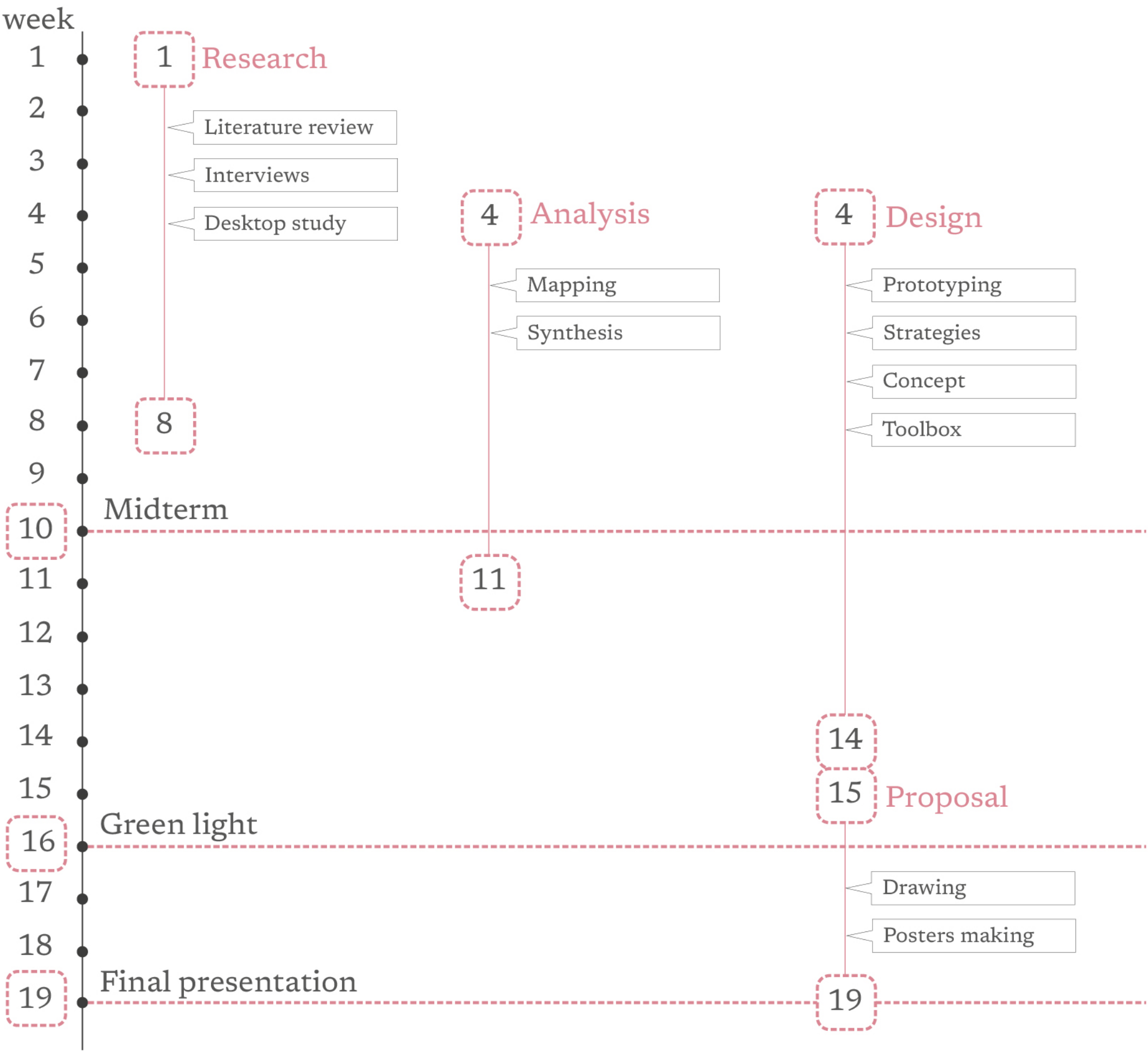
- 1. Mapping**
 - . topographical conditions
 - . density and social structure
 - . distribution of services
 - . location and distance to the surrounding land
- 2. Synthesis**
 - . systematization of the collected information
 - . conclusions

Design

- 1. Prototyping**
 - . testing different approaches to design
- 2. Strategies**
 - . defining main direction to approach the challenges
- 3. Concept**
 - . co-creation
 - . temporality
 - . designing for belonging
- 4. Toolbox**
 - . developing a system of design interventions

Proposal

- 1. Drawing**
 - . producing comprehensive graphical representation of the project
- 2. Posters making**
 - . presentation
 - . layout
 - . panels



REFERENCE LITERATURE

Critical care: Architecture and Urbanism for a Broken Planet

A. Fitz, E. Krasny and A. Wien

“Responding to the interconnectedness of economy, ecology and labor results in interdisciplinary ways of working that draw on situated knowledges and different ways of knowing, learning and sharing. These alliances around diverse strategies and knowledges enable transformative practices which counteract exploitative and extractive models of the Anthropocene Capitalocene condition.”



Author: Kurt Hoerbst

Diverse economies: performative practices for ‘other worlds’

J.K. Gibson-Graham

“The ‘formal’ economy, constituted through wage labour in capitalist enterprises is but the tip of a much larger iceberg, a plethora of alternative economies exist in the mostly submerged 90 per cent. The myriad of activities that are positioned as “other” to capitalism the direct provisioning of care and well-being in households, communities and associations; the non-monetized transactions of gift giving, reciprocity and sharing.”



Source: Community Economies Collective

The living room: Al-Madhafah

Sandi Hilal

“The living room dedicated to hospitality. It has the potential to subvert the role of guest and host and give a different socio-political meaning to the act of hospitality. It activates the right of temporary people to be a host and not to behave as eternal guests, the right to claim life in the new destination but without feeling obliged to revoke the desire to belong to the life back home.”



Source: Visible project

Co-Creation in Theory and Practice

C. Horvath and J. Carpenter

“Co-Creation, although it may pursue social justice and community engagement through different means, will always promote agency, collaboration between participants and alternative visions taking into account different perspectives rather than inertia, separation and status quo.”



Author: Naimul Haq/IPS

REFERENCE PROJECTS

Solidarity in action

Brazil



Strategy for dispersal

Tanzania



People’s friendship is people’s strength

The Republic of Belarus



The importance of partnerships

Sierra Leone



Solidarity is the tenderness of the people.

UNHCR / B. Heger 2004



Now we are a branch on a tree called Tanzania.

UNHCR / B.Bannon 2008



Not refugees, just people.

UNHCR / G.Kent 2010



‘Bode Seia’ - we’re all one family.

UNHCR / G.Kent 2010

REFERENCE PROJECTS

Arcadia education project

Location: Bangladesh
Architect: Saif Ul Haque

The project adapts to the flood prone landscape with its innovative approach, where the building is segmented into amphibious modules, which can be used both during dry periods and floods. It used recycled tires & different varieties of bamboos in the area. The site is flooded almost five months of the year, but conventional solutions like raising the land with sand or building on stilts were not compatible with its topography (Architexturez, 2016).



Source: Architexturez, 2016

Cyclone shelter

Architect: Kashef Mahboob
Location: Bangladesh

The prototype was designed in response to the devastating cyclone in 2007, to save lives during disasters and also to serve the community by contributing to its education, health & safety. The inner part is protected with an external spiral ramp which reduces the impact of cyclones and under normal weather, gives shade to the interior (Architectural review, 2019).



Source: Architectural review, 2019

Quinta Monroy social housing

Architect: Alejandro Aravena
Location: Iquique, Chile

Architect Aravena implemented the idea of “incremental housing”. In other words, instead of designing the whole house with a limited budget, he proposed to build half of each house providing minimal basic sanitary equipment. The rest of the houses were built and design by people, bringing a character to each of them (ArchDaily, 2008).



Source: ArchDaily, 2018

Aloon Lar Shay Pha la women center

Architects: Khwaja Fatmi, Abid Ibna A. Rahman
Location: Rohingya Refugee Camp , Ukhiya

“The display centre offers a platform for the Rohingya women to create, showcase and sell handmade products to the visitors. The process of the making of the centre was focused more on the participation of the users and the artisans than the usual top-down method” (ContextBD, 2020).



Source: ContextBD, 2019

BIBLIOGRAPHY

Interviews	Books & Papers	Websites	Websites
<p>1. Khawaja Nuzhat Zerin Fatmi (Architect, Product Designer at IOM - UN Migration) She is the architect for the project “Rohingya display and production center” which is located in the Rohingya Refugee Camp no – 11. At the time she was part of the team who were developing a website on the heritage, culture and lifestyle of Rohingya people. Most of the refugees want to go back to their homeland in a scenario where the violence and persecution has stopped.</p>	<p>Blanco, L., Galán, I., Carrasco, C., Llopis, A., & Verzier, M. (2016). After belonging. Lars Müller Publishers.</p> <p>Carpenter, J., & Horvath, C. (2020). Co-creation in theory and practice. [S.l.]: POLICY PRESS.</p> <p>Fitz, A., Krasny, E., & Wien, A. (Eds.). (2019). Critical care: Architecture and urbanism for a broken planet. MIT Press.</p> <p>Gibson-Graham, J. K. (2008). Diverse economies: performative practices for other worlds'. Progress in human geography, 32(5), 613-632.</p> <p>Madanipour, A. (2017). Cities in Time: Temporary Urbanism and the Future of the City. Bloomsbury Academic.</p> <p>Mallick, B., Rahaman, K. R., & Vogt, J. (2011). Coastal livelihood and physical infrastructure in Bangladesh after cyclone Aila. Mitigation and Adaptation Strategies for Global Change, 16(6), 629–648. https://doi.org/10.1007/s11027-011-9285-y</p> <p>Parekh, S. (2016). Refugees and the Ethics of Forced Displacement (Open Access) (Routledge Research in Applied Ethics). Taylor and Francis.</p> <p>Sanyal, R. (2014). Urbanizing Refuge: Interrogating Spaces of Displacement. International Journal of Urban and Regional Research, 38(2), 558-572.</p> <p>Ullah, A. A. (2011). Rohingya Refugees to Bangladesh: Historical Exclusions and Contemporary Marginalization. Journal of Immigrant & Refugee Studies, 9(2), 139-161.</p> <p>UNCHR Operational Solutions and Transition Section (OSTS). The Benefits of Belonging: Local integration options and opportunities for host countr (S. Malik, Y. Shimizu, & G. Kent, Eds.). UNCHR.</p>	<p>Archdaily. (2008). Quinta monroy / elemental. Retrieved 7 January 2021, from https://www.archdaily.com/10775/quinta-monroy-elemental</p> <p>Archdaily. (2015). CatalyticAction Designs Playgrounds for Refugee Children in Bar Elias, Lebanon. Retrieved 4 January 2021, from https://www.archdaily.com/778318/catalyticaction-designs-playgrounds-for-refugee-children-as-emergency-response-in-bar-elias-lebanon</p> <p>Architectural review. (2019). Retrospective: Kashef Mahboob / Urbana. Retrieved 6 January 2021, from https://www.architectural-review.com/essays/retrospective-kashef-chowdhury-urbana</p> <p>Architexturez. (2016). Arcadia Education Project. Retrieved 6 January 2021, from https://architexturez.net/doc/az-cf-193082</p> <p>BBC. (2020). Myanmar Rohingya: What you need to know about the crisis https://www.bbc.com/news/world-asia-41566561</p> <p>BBS. (2015). Census of slum areas and floating population 2014. Bangladesh Bureau of Statistics (BBS).</p> <p>Context. (2020). Aloon Lar Shay Pha la (Come and see us) : Display and production center for Rohingya women. Retrieved 7 January 2021, from https://contextbd.com/aloon-lar-shay-pha-la-come-see-us-display-production-center-rohingya-women/</p> <p>Context https://contextbd.com/?s=rohingya</p> <p>Environmental Justice Foundation. (2020). Climate Displacement in Bangladesh. Retrieved January 5, 2021, from https://ejfoundation.org/reports/climate-displacement-in-bangladesh</p>	<p>Flood Map: Water Level Elevation Map. (n.d.). FloodMap. Retrieved June 10, 2021, from https://www.floodmap.net/?fbclid=IwAR0IoPtgxwqklwHc1dJDTLZHV8MuHMFmnEzT-I3_J7NTP0Mq7muMNDYdtpI</p> <p>Irbid. (n.d.) Refugees in Towns https://www.refugeesintowns.org/irbid</p> <p>OCHA. (2019). Rohingya Refugee Crisis. Retrieved 6 January 2021, from https://www.unocha.org/rohingya-refugee-crisis#:~:text=The%20Rohingya%20people%20have%20faced,1992%2C%20and%20again%20in%202016.</p> <p>UNDP. (2020, September 15). Giving vulnerable Bangladeshis the resources to cope with climate change. Medium. https://undp.medium.com/giving-vulnerable-bangladeshis-the-resources-to-cope-with-climate-change-aeb9b58e4557?fbclid=IwAR0S7u-cKs6MykLMRyMDyYKJwXuu9Vnq-WbcXoRTvfqgG0zurpkowNRUTGs</p> <p>Reuters. (2018). A remote home for the Rohingya. Retrieved 6 January 2021, from http://fingfx.thomsonreuters.com/gfx/rngs/MYANMAR-ROHINGYA/010060Z21XP/index.html</p> <p>SEDACMaps. (2011, February 18). Bangladesh: Population Density and Low Elevation Coastal Zones [Illustration]. https://www.flickr.com/photos/54545503@N04/5457306385</p> <p>Tbsnews. (2019). An inside look at Bhashan Char – the new home for Rohingyas. Retrieved 7 January 2021, from https://tbsnews.net/rohingya-crisis/inside-look-bhashan-char-new-home-rohingyas</p> <p>The New Institute. (2020). What is a Sustainable Value-System for the 21st Century? Retrieved 7 January 2021, from https://thenew.institute/en/what/value-and-values</p>

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