



Resistance in the Atlantic Forest

Denise Braz del Giglio

Mentors:
Taneha Kuzniecowa Bacchin
Denise Piccinini

1. Context

- Landing - historical layer
- Landing - Morphological layer

2. Research

- Research Hypothesis
- Theoretical framework
- Fieldtrip

3. Proposal

1. Context

glossary

Quilombo

Quilombos are communities organized by fugitive slaves in colonial Brazil. Quilombos were located in inaccessible hidden areas.

Quilombola

People who are born and live in a Quilombo

Pau Brasil

Tree that has red pigment inside - first Brazilian commodity

Aldeia indígena

Indigenous community settlement

Mata Atlântica

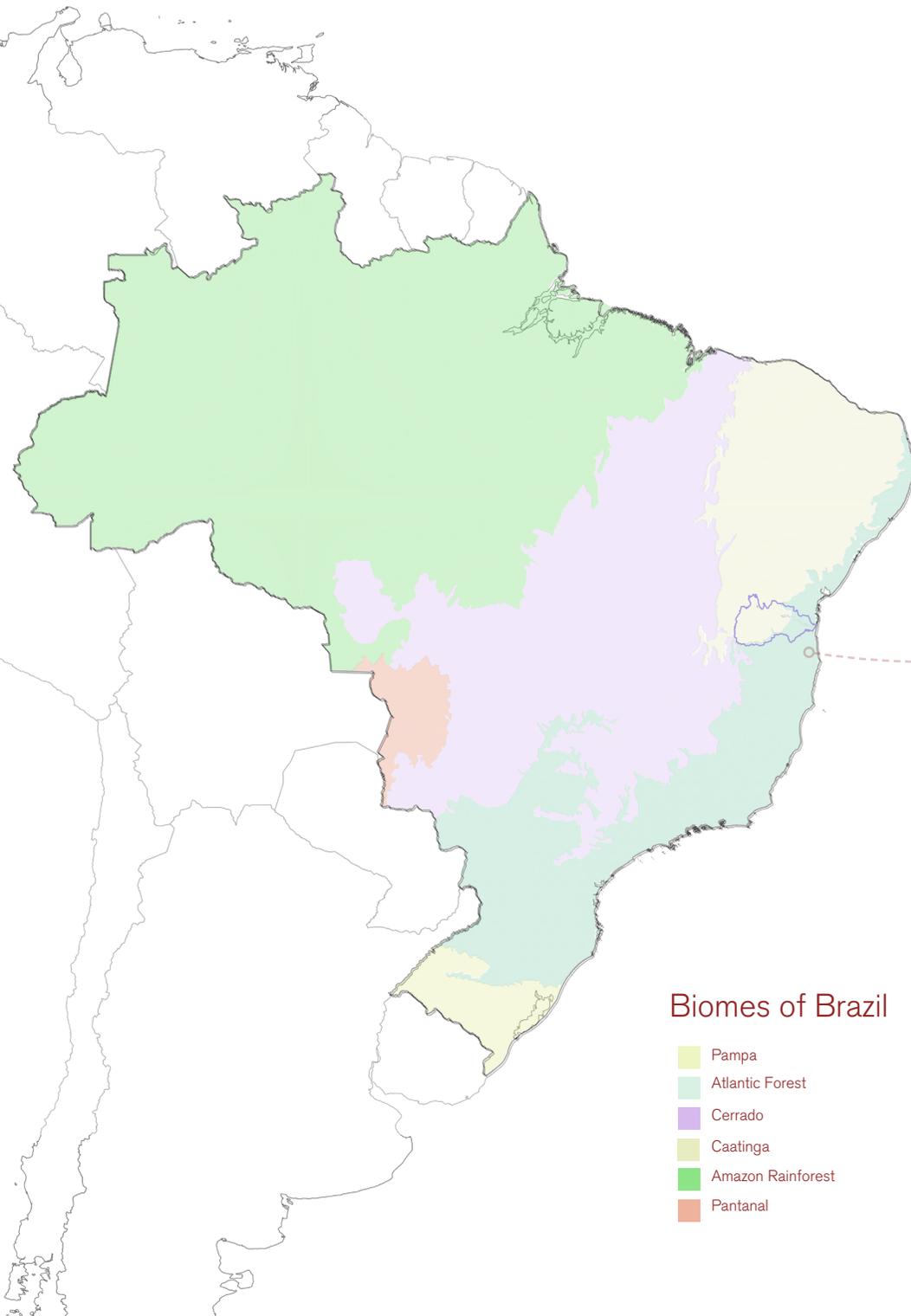
Brazilian biome of tropical forest

Settlements

Previously unproductive or uninhabited rural territories that peasants or landless workers live permanently practicing rural subsistence

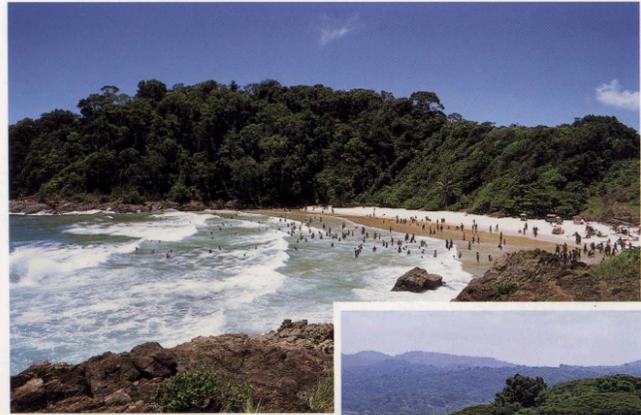
Cosmocentric

A vision of reality that places the highest importance or emphasis in the universe or nature, as opposite to an anthropocentric vision, which strongly focuses on humankind as the most important element of existence.



Biomes of Brazil

-  Pampa
-  Atlantic Forest
-  Cerrado
-  Caatinga
-  Amazon Rainforest
-  Pantanal



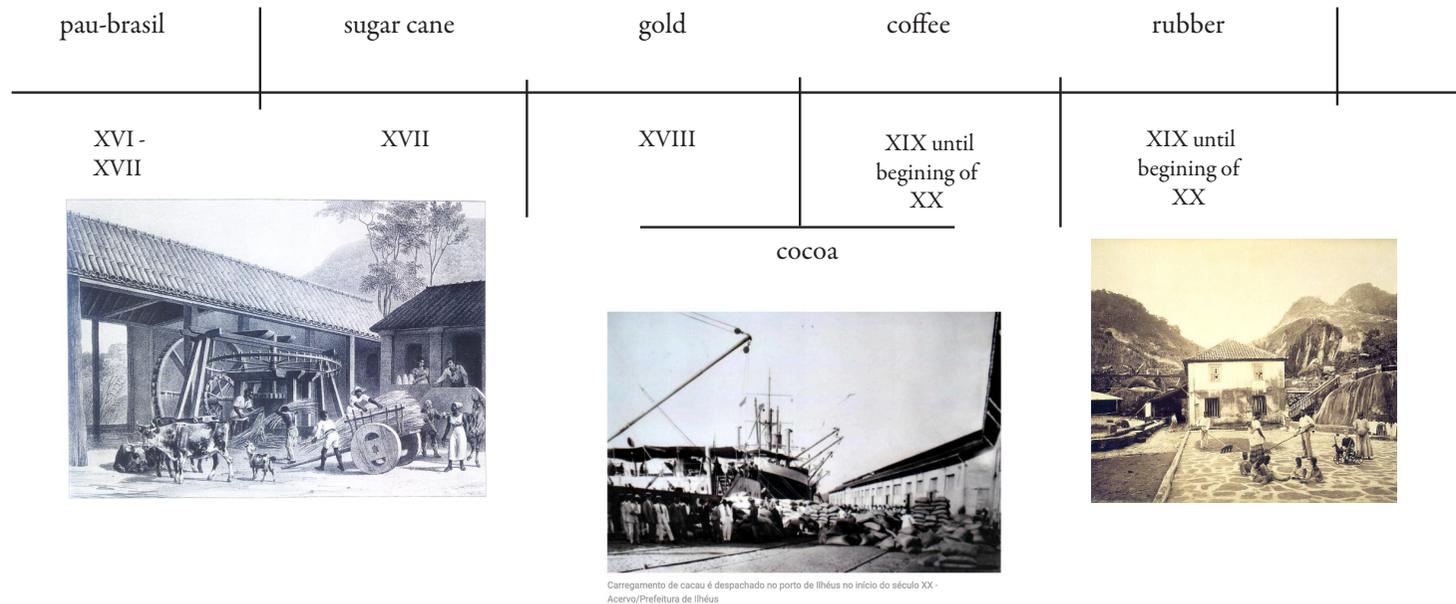
Aspecto geral da APA de Itacaré/Serra Grande

04

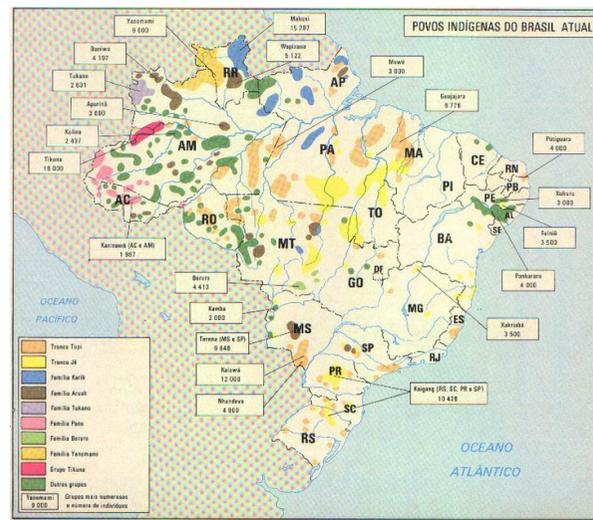
endemism



land and extraction

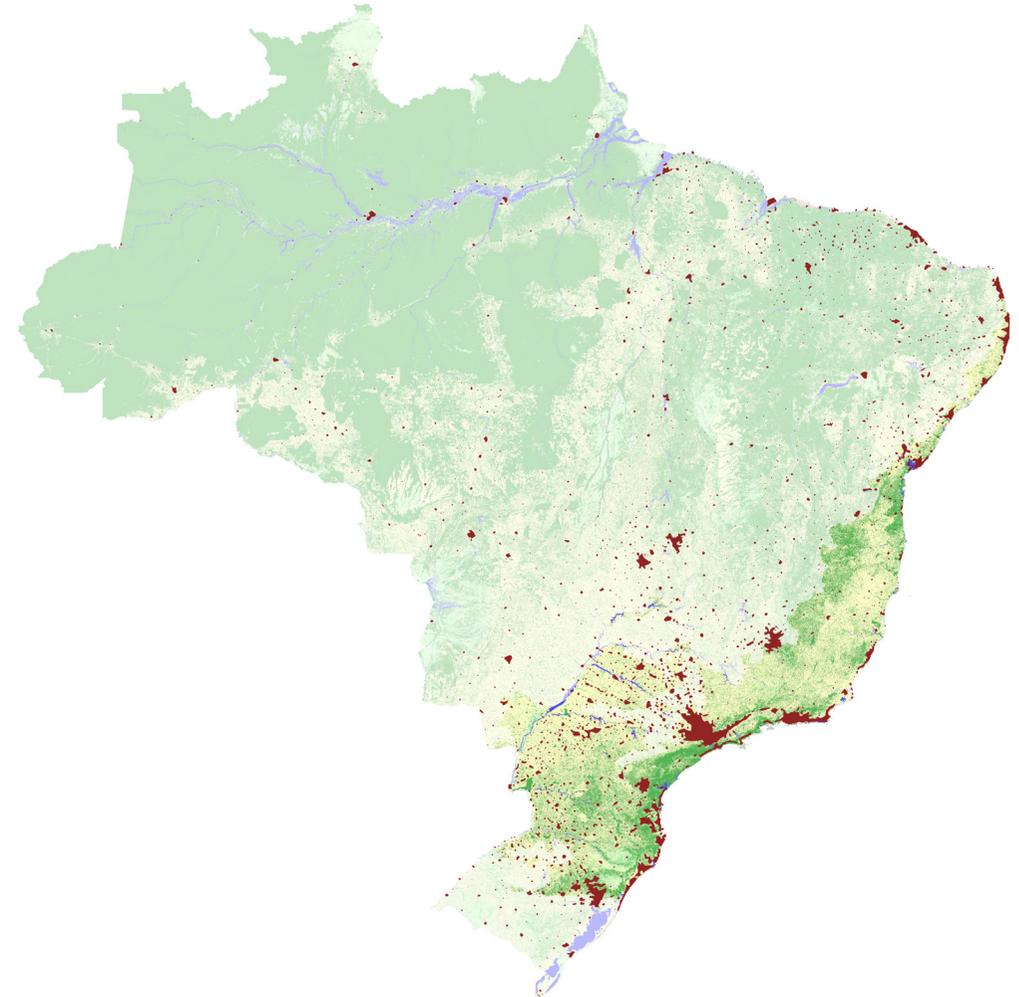
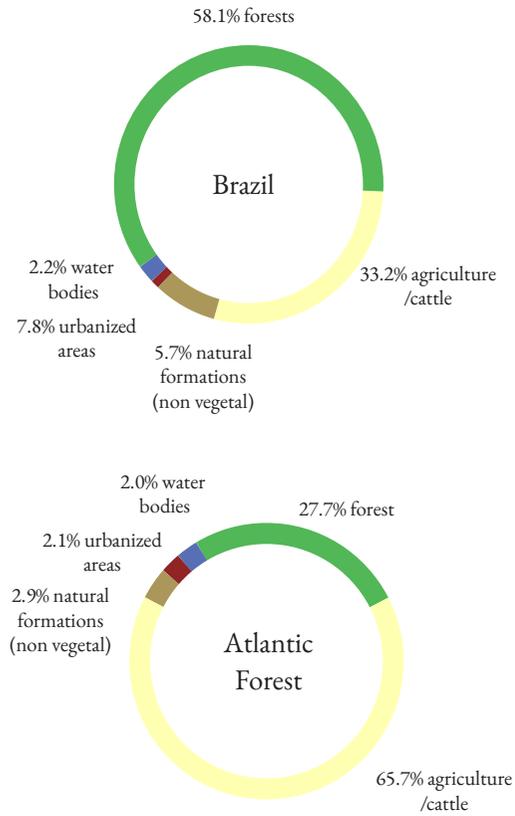


a history of colonization

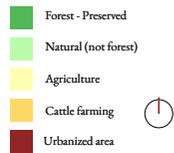


urban forest

How did we get here?



Land Use + Mata Atlântica



infrastructured forest



Alterations/ Interactions Mata Atlântica - urbanized forest

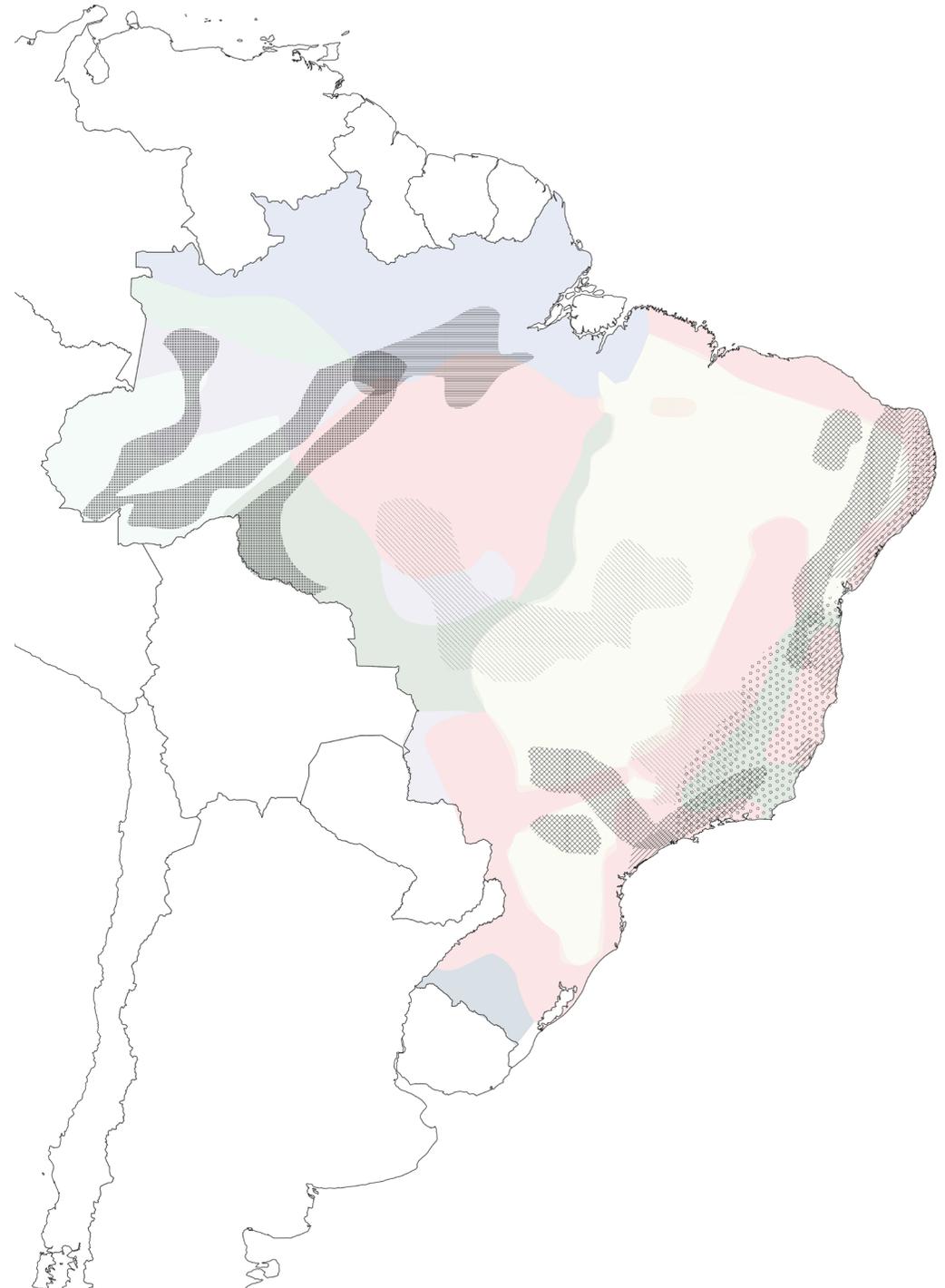
In this map we can see how the farming and infrastructure took over the Atlantic forest. It is clear how this forest has always been the main starting point to all infrastructure that slowly spread inland.

- Farming
- Threatened forest
- Preserved forest
- train line
- main roads
- infrastructured waterways
- port

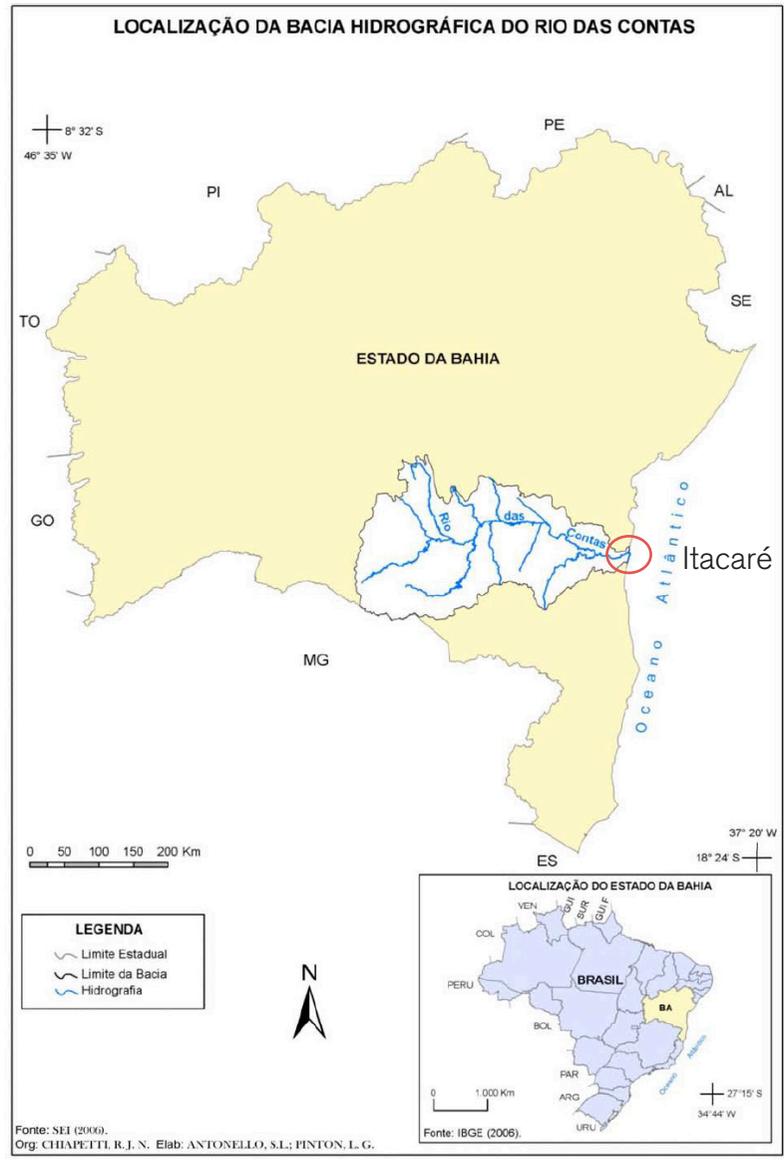
palimpsest

What are the local scars these external economic cycles leave on the territory?

Palimpsest
Economic cycles and
indigenous tribes occupation
1500

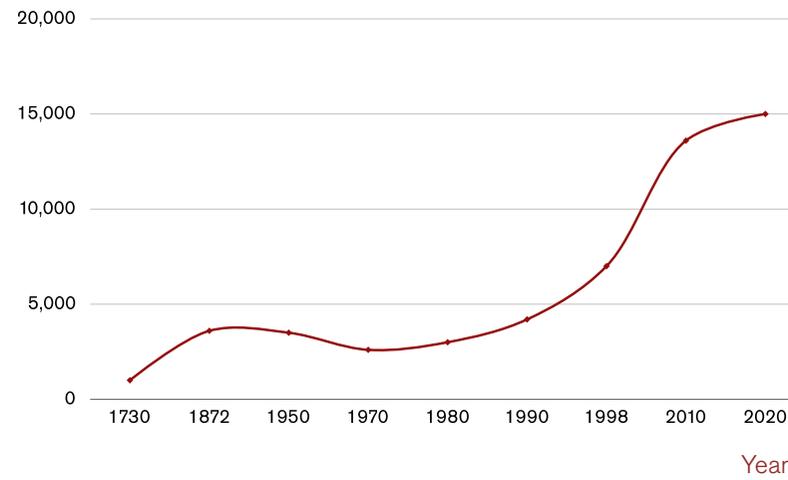


Landing





Population
of Itacaré



Historical context

— growth
 - - - - - stagnation

10000 BC

Indigenous existences transition from hunt and harvesting systems to agriculture

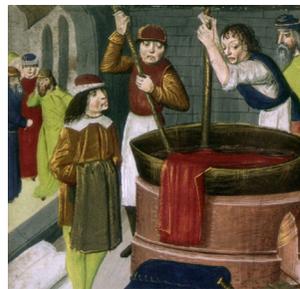
1000 BC



Map of the Capitánias Hereditárias land division scheme from 1574

1500

Portuguese arrive in Brazil - Pau Brasil economic cycle



Indigenous existences remaining show that they were altering the forest through a social system of Hunt and Harvesting

They had demographic growth control because of their subsistence practices promoting a balanced relationship with the environment

HUMAN ACTIVITY
 ↑
 ↓
 NATURAL SPACE

1555

Jesuits and Pau Brasil

The Sesmaria owner near Itacaré (near Rio das Contas and Baía de Camamu) donates land to the Jesuits to educate local indigenous people.

For instance, in Bahia, Jesuits founded 12 villages between 1550 and 1560, housing a combined population of 40,000 indigenous people. Epidemics of smallpox and measles from 1560 to 1563 resulted in significant casualties, leaving only three villages with 4,000 inhabitants by 1590.

Start of Iberic Union period where the Spanish Crown controls the Portuguese and the Dutch territories. The Dutch fought for their independence in the northeast of Brazil.

1563

Capitania of Ilhéus was sold to Almirante Dom João de Castro
 Rio das contas waterways were already known for its capacity for ships of 150 ton of Pau Brasil adding significant value to this Capitania

1580

Sugar Cane and War

1626

Iberic Union

1640

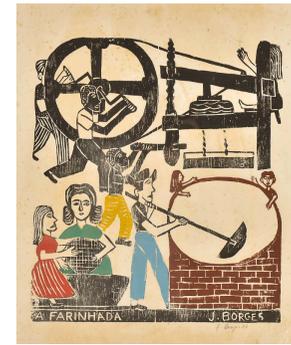
The Iberian union ended in 1640 after the Portuguese Restoration War when the Portuguese army defeated Spain.



Map of Salvador 1624, before the dutch invasion <https://www.bahia.ws/historia-da-bahia/>

1647

The colonial government **banned establishment of sugarcane, tobacco and cattle production in the southern region of Bahia, in order to force them to produce cassava to support crop production export in the capital.** This was not a capitalist economy, but rather an imperial and mercantile, shaped by personal and patriarchal power relations.



Cassava flour production - J. BORGES (Pernambuco, 1935).

Cassava production

1670

Until 1670 Itacaré is forced to produce Cassava flour for the troupes fighting against the Dutch in Morro de São Paulo

— growth
 - - - - - stagnation

Establishment of the Pelourinho - date understood as the foundation of Itacaré named as Vila de São Miguel da Barra do Rio de Contas

The importance of the Pelourinho in the implementation of small city emphasizes the role of public squares as spaces for the exercise of public power and violence in the process of colonization.



Gold extraction in Chapada Diamantina source: <https://ferdinandodesousa.com/2018/11/27/uma-breve-historia-da-ocupacao-humana-na-chapada-diamantina/>

First time Gold is found in Brazil, in Minas Gerais region

1698

1718

1732

1752

1759

1763

With the rise of the Gold extraction administrative capital of the country is moved from Salvador to Rio de Janeiro.

Quilombo do Oitzeiro was dissolved in 1806 by a militia of 50 Cariri Indians, formed by the government for this purpose.

1806

1808

An estimated 5.9 million Africans were brought to Brazil as slaves, about 40% of all slaves brought to America. In 1819, about 1/3 of the settlers in Brazil were slaves, although this percentage decreased gradually over time as more Europeans immigrated to Brazil.

1819

1836

Large ports are forbidden to commercialize slaves - Itacaré continues with the activity because its considered a small port.

1850

1877

Implementation of Lei Aurea - end of slavery

1888



Port of Ilhéus, sec XX. Source: municipality of Ilhéus



Port of Itacaré, sec XX. Source: municipality of Ilhéus

Gold and Diamonds

Cacao

The central São Miguel church is constructed



Jesuits bring the first cacao plants from the amazon to the south of Bahia

Jesuits are expelled from Brazil by Marquês de Pombal who tried to re-center the power over Brazil on the hands of the Portuguese crown.

Their lands are sold or auctioned - occupied by rich families.

It also becomes forbidden to enslave indigenous people. Miscigenation (indigenous and european marriage) is encouraged.

Colonial occupation is forbidden around the coast of south of Bahia to avoid gold smuggling. Period of dense forest preservation while indigenous groups are fostered to prevent foreigners from the gold digging areas inland.

Start of cacao cultivation in the south of Bahia



Urban growth of Itacaré, sec XX. Source: itacare.com.br/itacare/portal

Big drought event brings a lot of agricultural workers from inland towards the cacao plantations close to the shore

Cacao Production

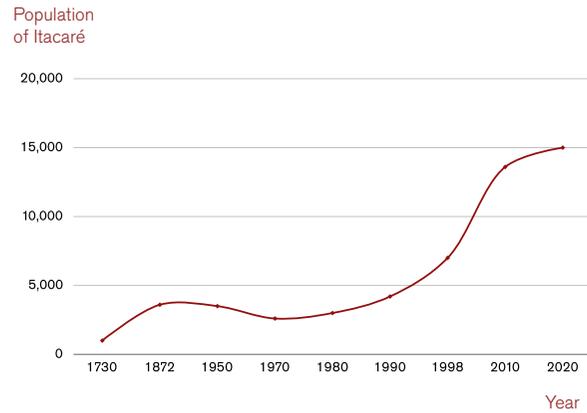






Itacaré today - tourism

Environmental challenges



	number of hotels	number of rooms
1992	19	266
2001	40	835

source: Ferreira, Paula Fabyanne Marques. Diagnóstico dos impactos socioambientais urbanos em Itacaré (BA)



- Urban expansion post 1964
- São Miguel Church
- Bus Station
- Municipality
- Main unpaved paths
- Public building
- Forest remainings
- Commercial
- Water and beach
- Residential
- Services
- Vacant

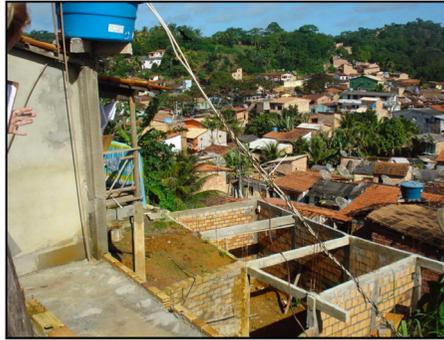


Figura 3.13 - Vista do Bairro do Porto de Trás (MATIAS, 2010).

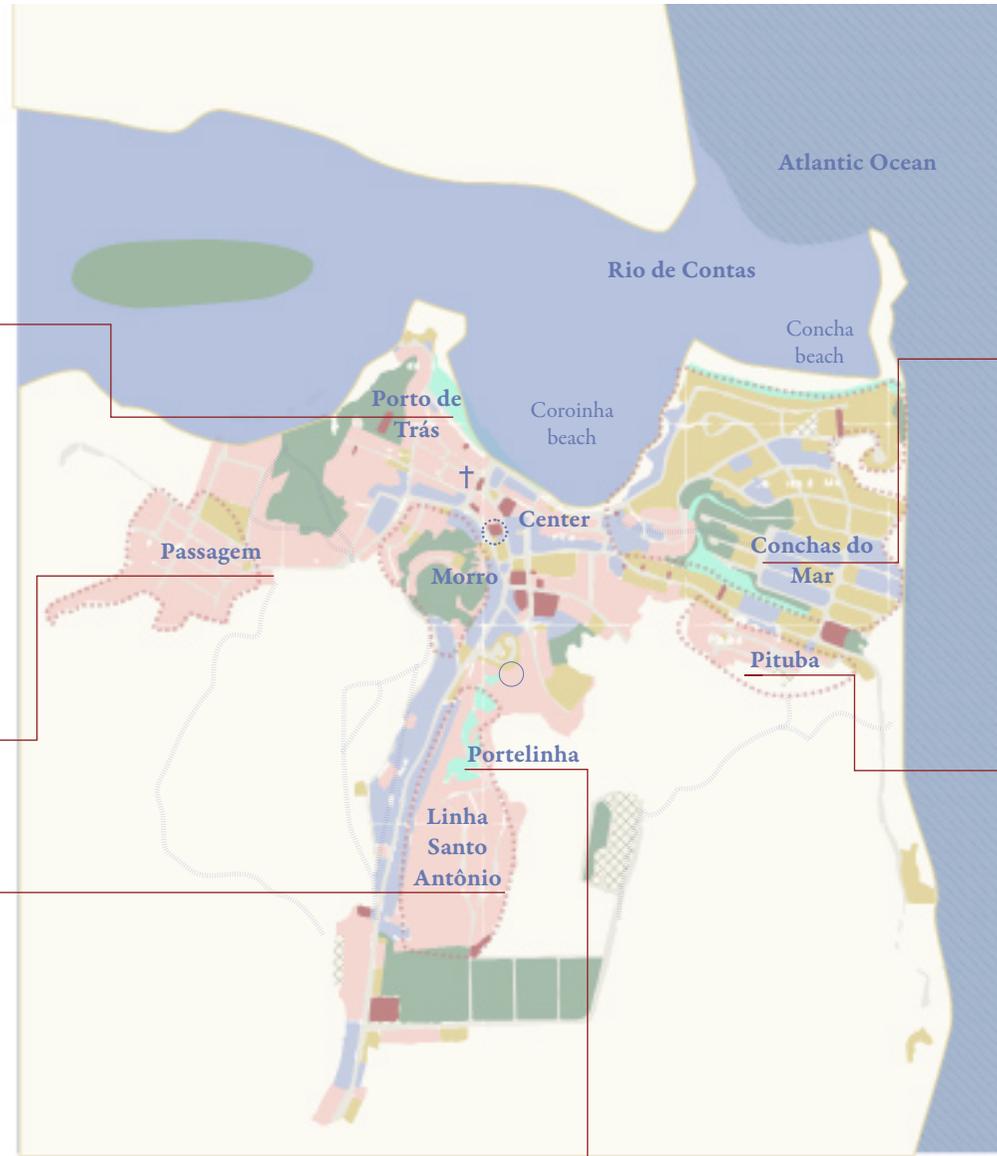


Figura 3.9 - Vista da Pituba III (MATIAS, 2010).



Figura 3.11 - Bairro da Passagem (FERREIRA, 2010).



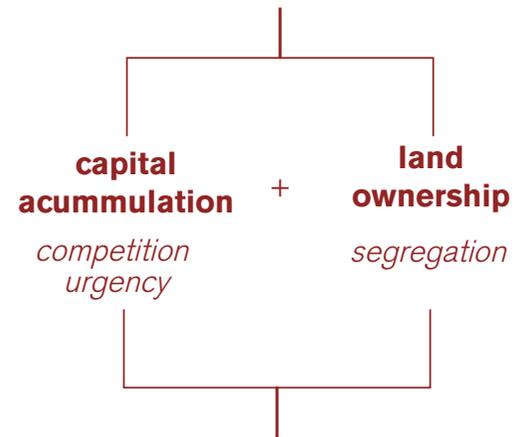
Figura 3.14 - Vista do Bairro Santo Antônio (Bairro Novo) na entrada de Itacaré (MATIAS, 2010).



Figura 3.15 - Favela da Portelinha (MATIAS, 2009).

EXTERNAL ORIENTED
URBANIZATION

capitalism



**demographic
pressure**

=

FAST, UNPLANNED
URBAN SPRAW

morphological layer

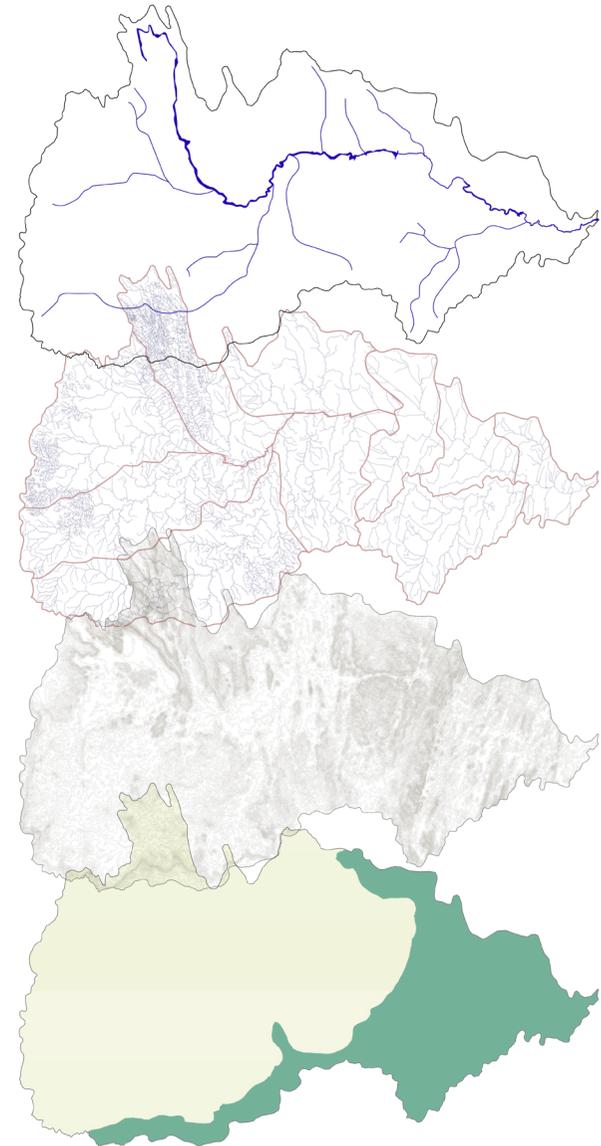


Rio das Contas
and main
tributaries

Rivers and
subbasins
network that affect all
practices

Topography
from the shore to Chapada
Diamantina

Biomes
from Mata Atlântica to
Caatinga
most tropical - to driest





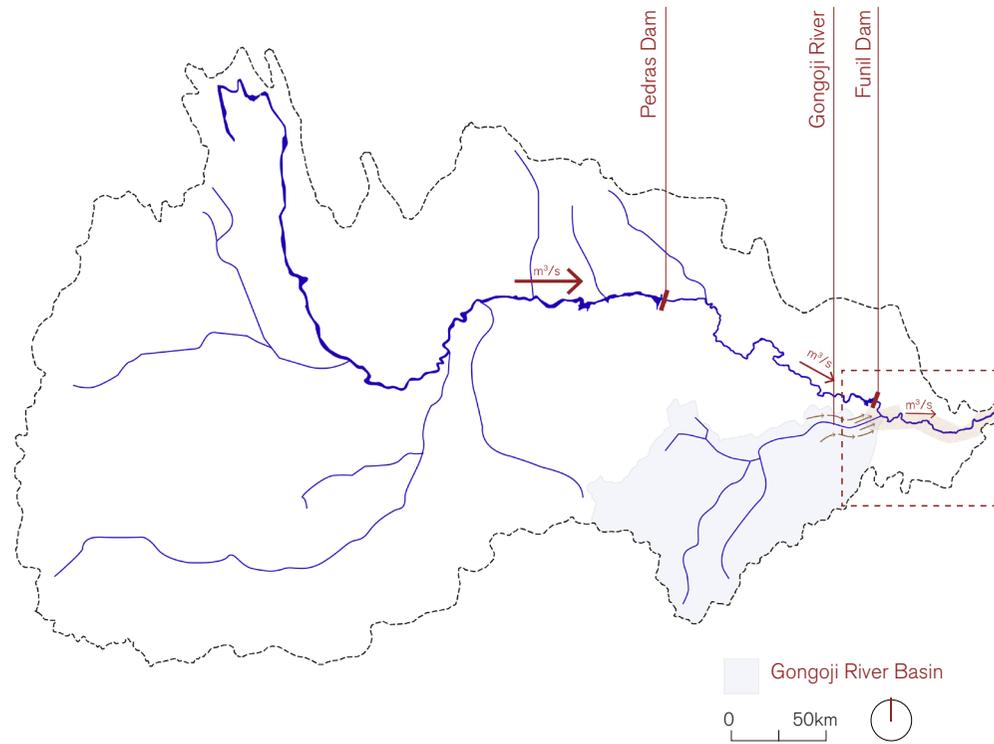
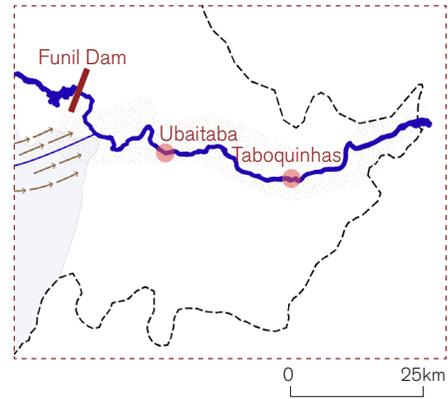


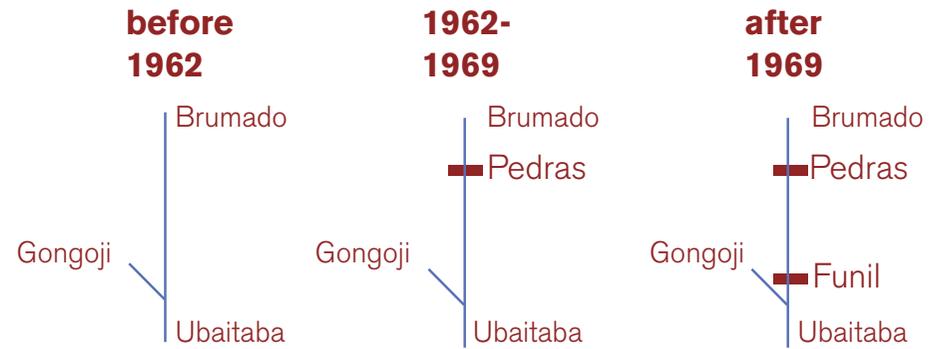
Composition
Landuse South of Bahia State

- remaining Atlantic forest
- farming
- urbanized areas
- rivers
- Itacaré

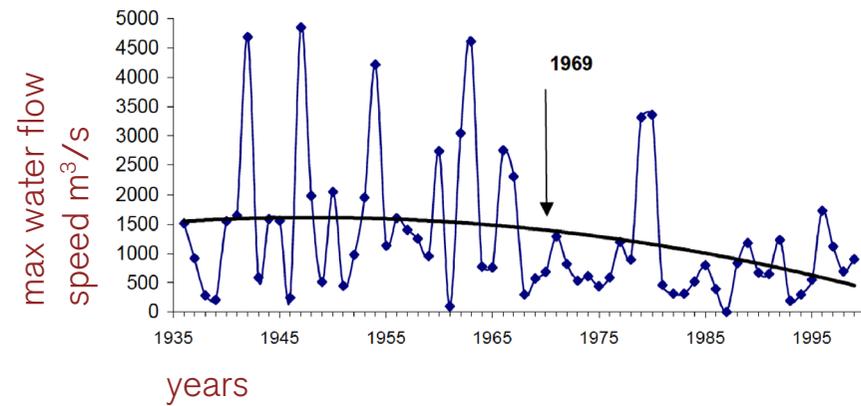




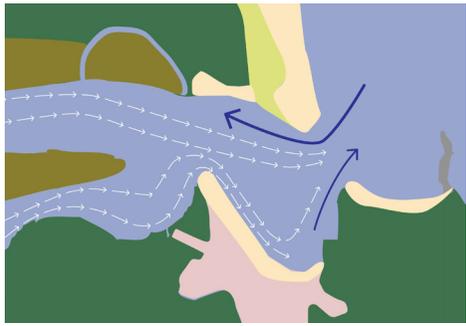




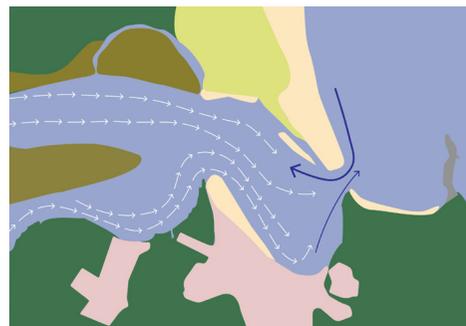
Ubaitaba measuring station



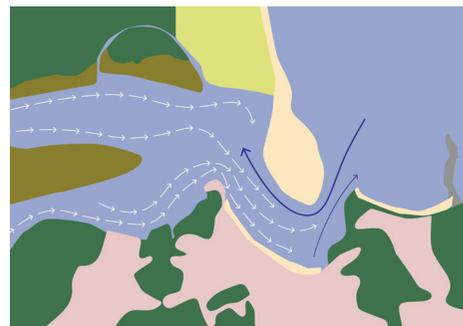
source: Campos, 2002



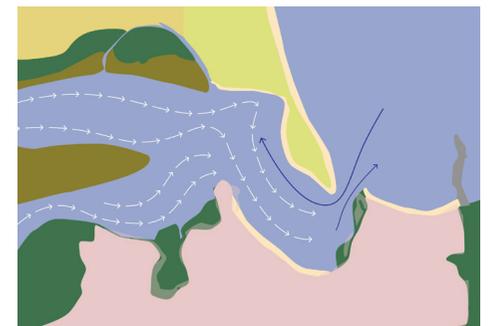
1985



2001

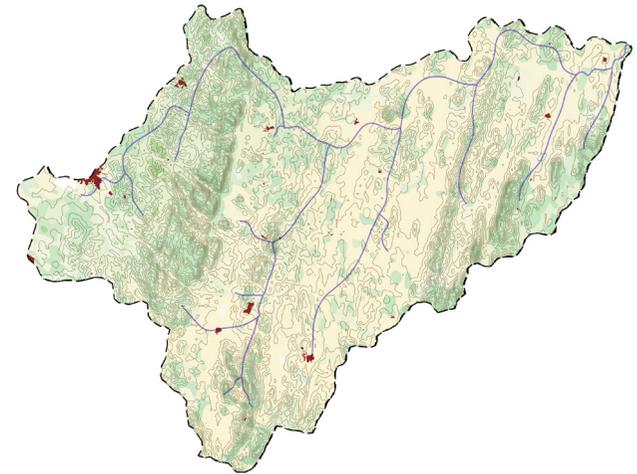
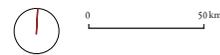
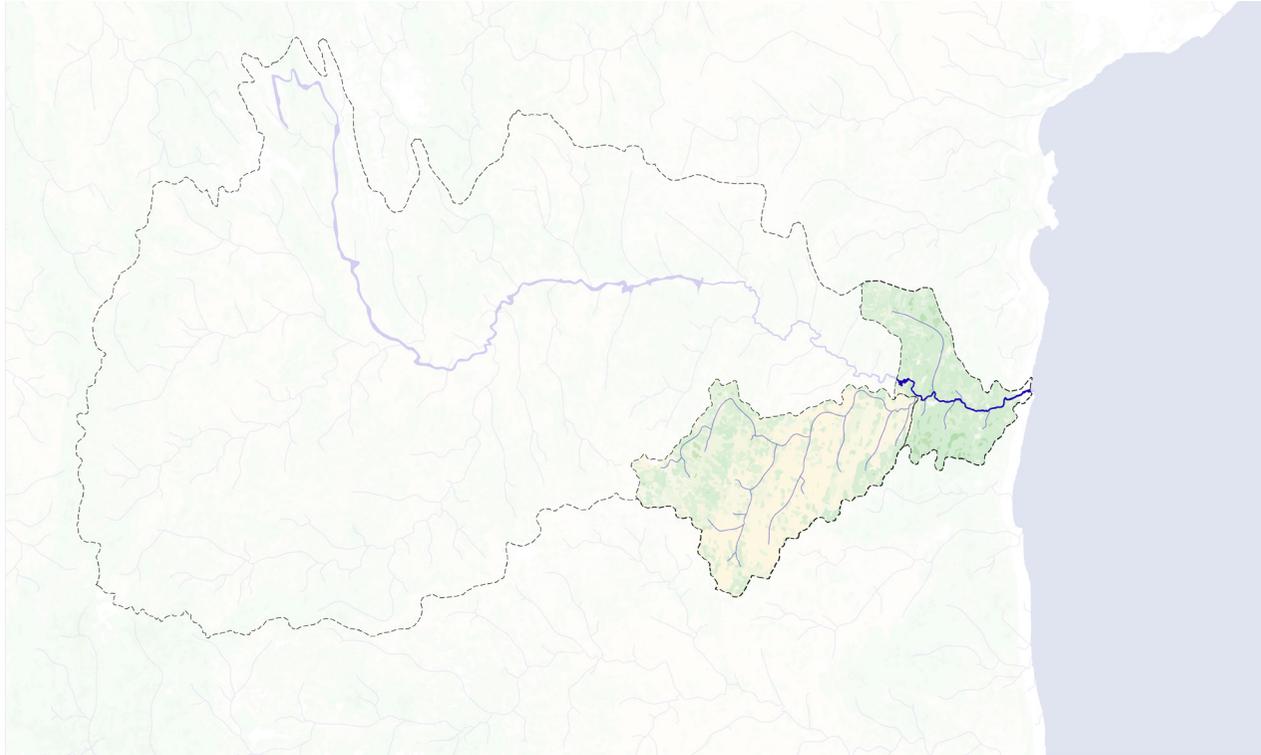


2013



2020





- remaining Atlantic forest
- farming
- urbanized areas
- rivers



Forms of Resistance

endemism in the forest

forms of resistance

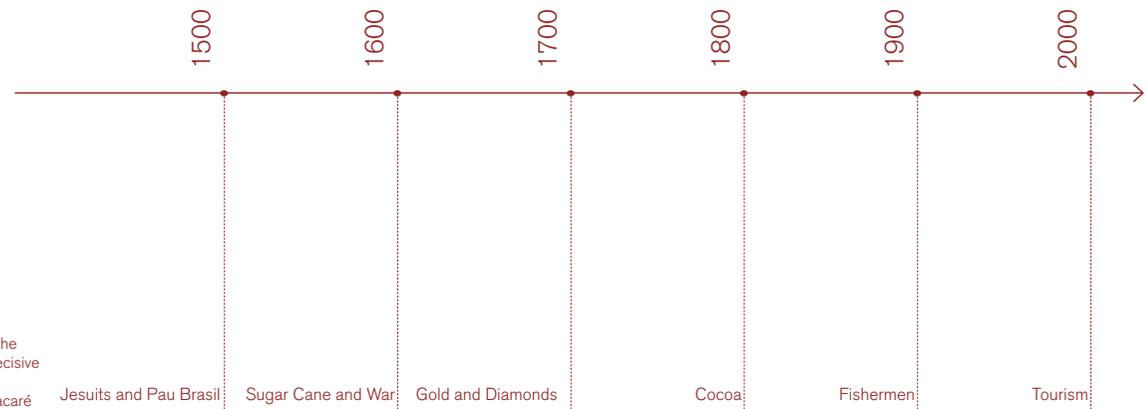
Cocoa production and consumption
In thousand tonnes, 2017-18



International Cocoa Organization/Fountain, A.C. and Hitz-Adams, F. (2018) Cocoa Barometer 2018
world production and consumption of Cocoa 2017



Resistance Practices



○ moment when the activity has a decisive role on the landscape of Itacaré

Quilombos Settlements

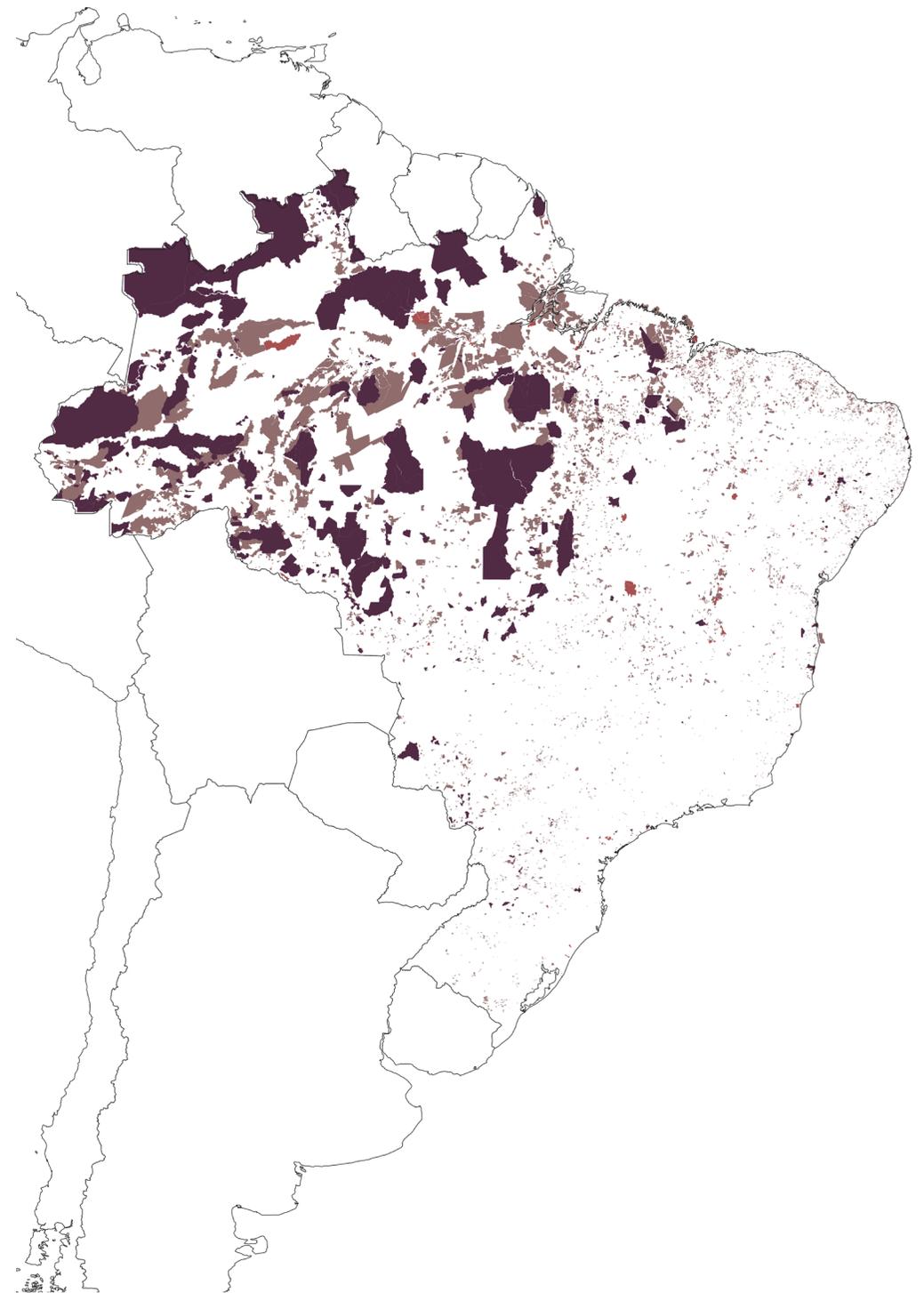
Estado	Comunidade(s) certificada(s)	Comunidade(s) titulada(s)
AL	69	0
AM	8	0
AP	40	0
BA	543	1
CE	37	0
ES	27	0
GO	23	0
MA	463	1
MG	13	0
MS	22	2
MT	70	0
PA	11	0
PB	7	0
PE	3	0
PI	5	0
PR	36	0
RJ	43	3
RN	33	0

Amount of Quilombos by state in Brazil. Highlighted Bahia State.

source: <https://kn.org.br/atlasquilombola/estatistica>

Territories of traditional communities in Brasil

■ Settlement
■ Quilombo
■ Indigenous Territory





screenshots of the documentary Biatatá produced by Llibre Obert Barcelona, immersive video-filmed in the Porto de Trás Quilombo in 2001 available at: <https://www.youtube.com/watch?v=1Jk-3r4pSFg&t=5s>







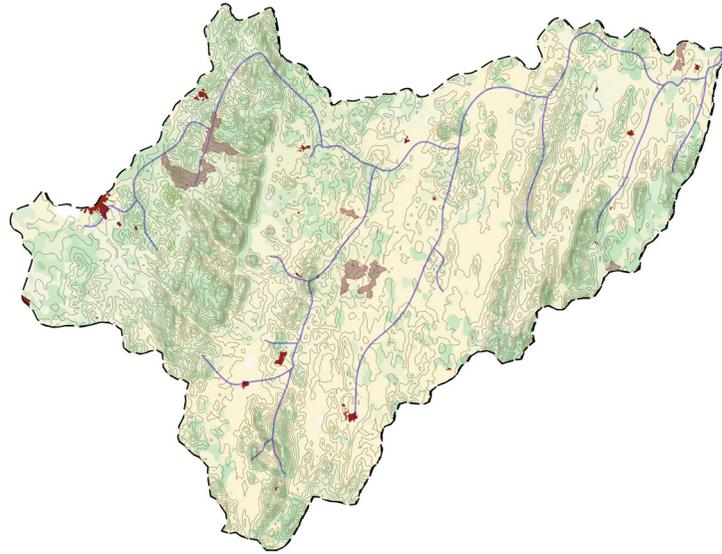
Social Territorialization and Infrastructure

- Itacaré city
- Urbanized areas
- Settlement
- Quilombo
- Indigenous Territory
- Rio das Contas Basin
- Main Highways
- ++ Train Rails

zoom in



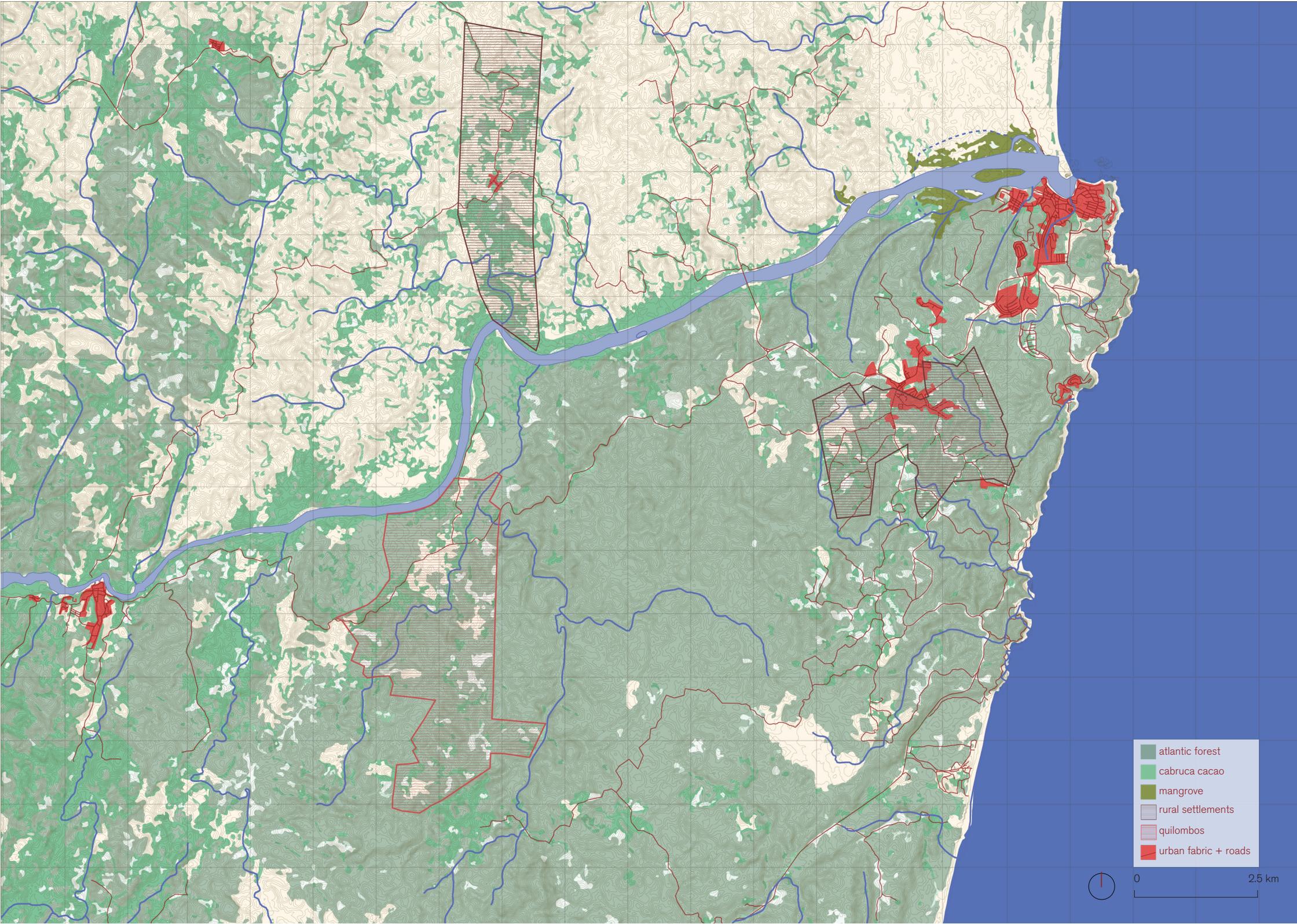
0 50 km



Territories of traditional communities in Brasil
Comparison between Gongoji and Coastal Subbasins, it is possible to notice the largest amount of these communities on the Coastal subbasin

- Settlement
- Quilombo
- Indigenous Territory

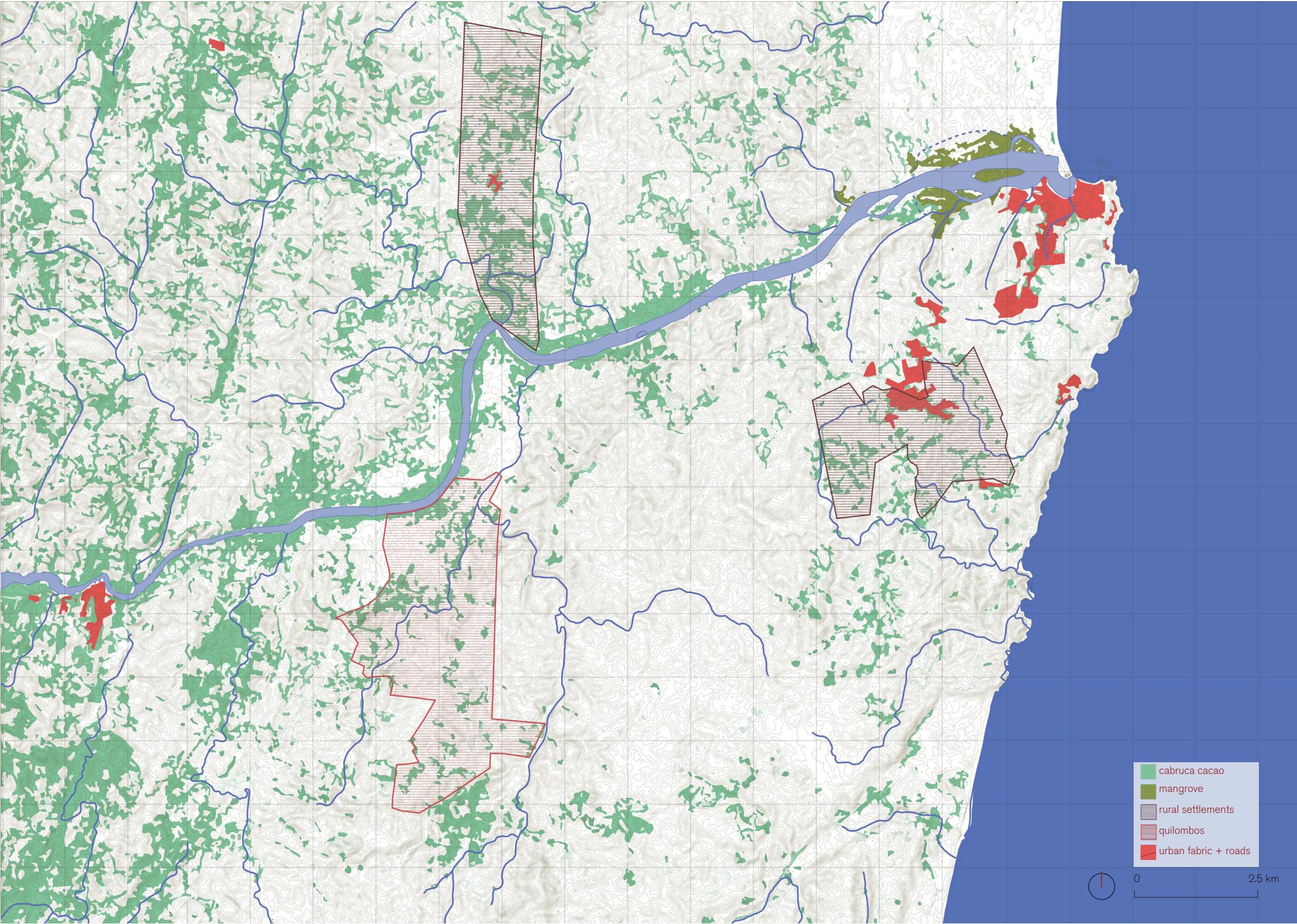




- atlantic forest
- cabruca cacao
- mangrove
- rural settlements
- quilombos
- urban fabric + roads



0 2.5 km



- cabruca cacao
- mangrove
- rural settlements
- quilombos
- urban fabric + roads



0 2.5 km

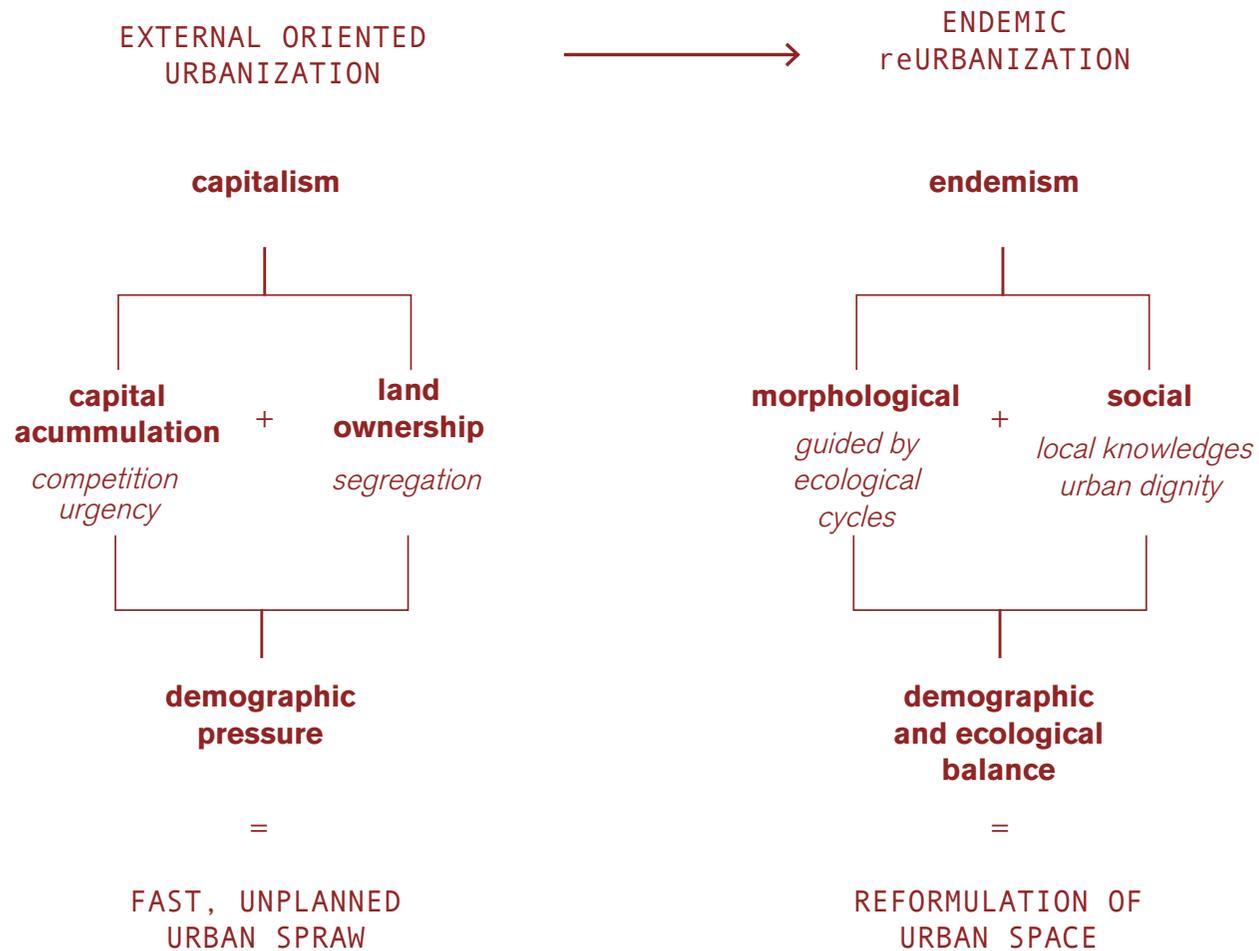
“I have no doubt that confluence is the energy moving us towards sharing, recognition, and respect. A river does not cease to be a river because it converges with another river; on the contrary, it becomes itself and other rivers, it becomes stronger. When we confluence, we do not cease to be ourselves; we become ourselves and others – we thrive. Confluence is a force that thrives, that increases, that expands. That is the measure.”

Antonio Bispo, 'A terra dá a terra quer' p.18



2. Research

research hypothesis



bioeconomy





Eritrina



Açaí



Banana



Photos: Oportunidades da bioeconomia no território litoral Sul da Bahia: cadeias de valor e seu potencial estruturante / Artur Sgambatti Monteiro ... [et al.], - Ilhéus, BA : PCTSB, 2023.136 p. : il.

"The rivers, these beings that have always inhabited the worlds in different forms, are the ones who suggest to me that, if there is a future to be considered, this future is ancestral, because it was already here."

Ailton Krenak, Futuro Ancestral p.11

theoretical framework

Necessity to access the precedent trajectory of all things to comprehend their current state

If trajectories and cultural ancestry are always accessed as the core of social organization, they will resist colonization attempts. The act of naming usually implies controlling and colonizing.

Actions should always be from local to global
traditional practices should be the key to local action

Contra-colonialism
actively contrapose colonialism (applicable to those who have not 'inherited' colonized roots - ex: quilombolas)

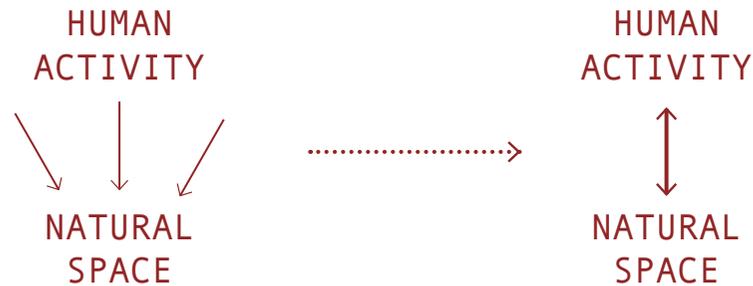
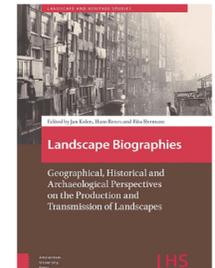
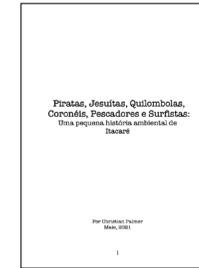
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Decolonialism
The process of undoing colonialism (applicable to those who have been colonized)

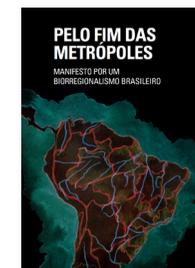
contra - colonialism
how can the growth of Itacaré shift from global to local oriented?



Atlantic Forest fragmentation
how did we reach this point?



possible futures
how can concepts become spatial?



“We arrive as inhabitants in any environment, and we gradually transform into sharers. In the quilombo, we are sharers, whether we were born here or have a sense of belonging. And when I talk about a sense of belonging to the quilombo, I mean a relationship with the environment as a whole, with the animals and plants.”

Antonio Bispo, 'A terra dá a terra quer' p.38

“The presence of other beings not only adds to the landscape I inhabit but also changes the world. This power of perceiving oneself as belonging to a whole and being able to change the world could be a good idea for education.”

Ailton Krenak, Futuro Ancestral p.103

“I have no doubt that confluence is the energy moving us towards sharing, recognition, and respect. A river does not cease to be a river because it converges with another river; on the contrary, it becomes itself and other rivers, it becomes stronger. When we confluence, we do not cease to be ourselves; we become ourselves and others – we thrive. Confluence is a force that thrives, that increases, that expands. That is the measure.”

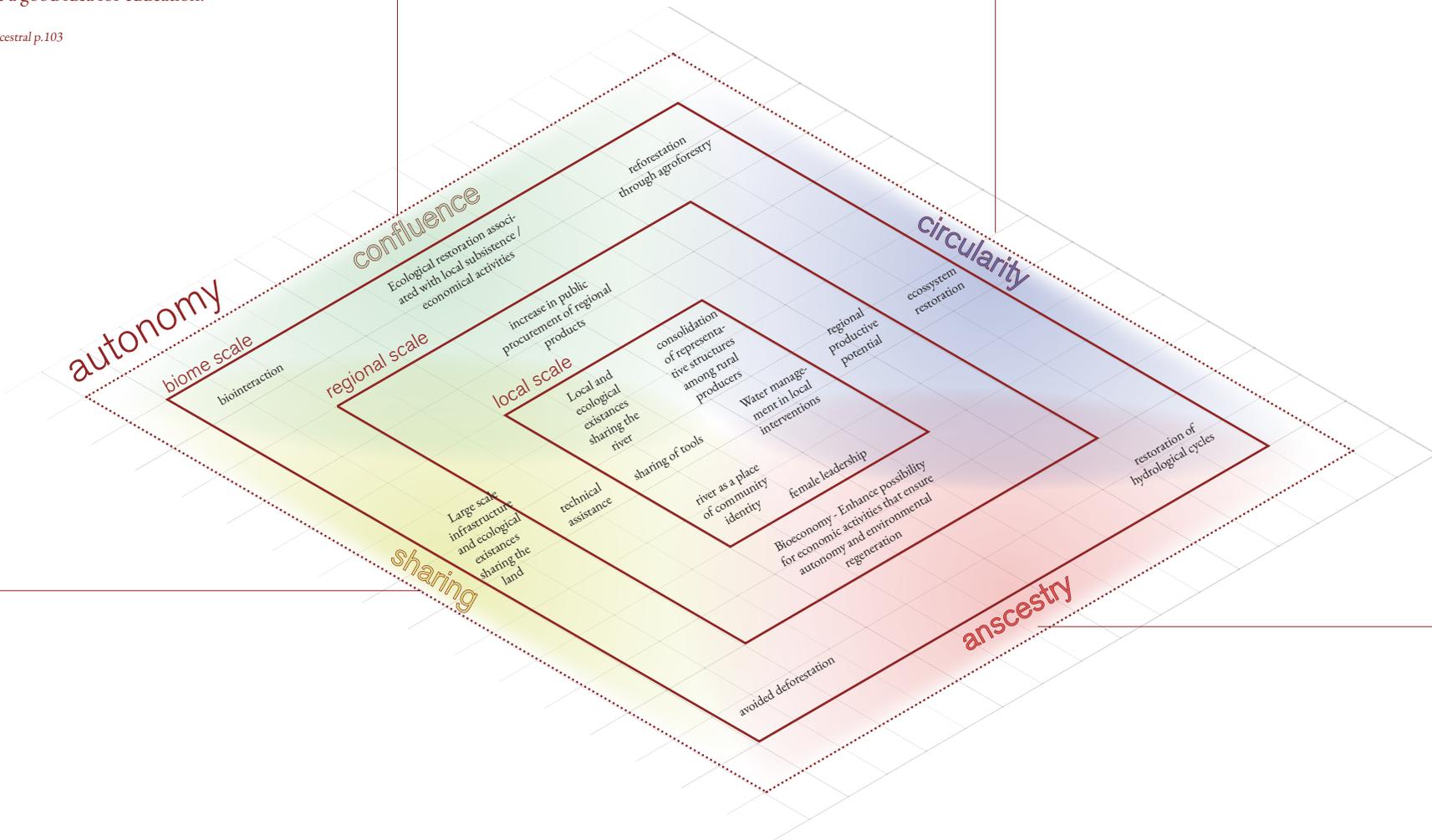
Antonio Bispo, 'A terra dá a terra quer' p.18

“We are people of trajectory, not people of theory. We belong to circularity: beginning, middle, and beginning. Our lives have no end. The grandparent generation is the beginning, the parent generation is the middle, and the grandchild generation is the beginning again.”

Antonio Bispo, 'A terra dá a terra quer' p.102

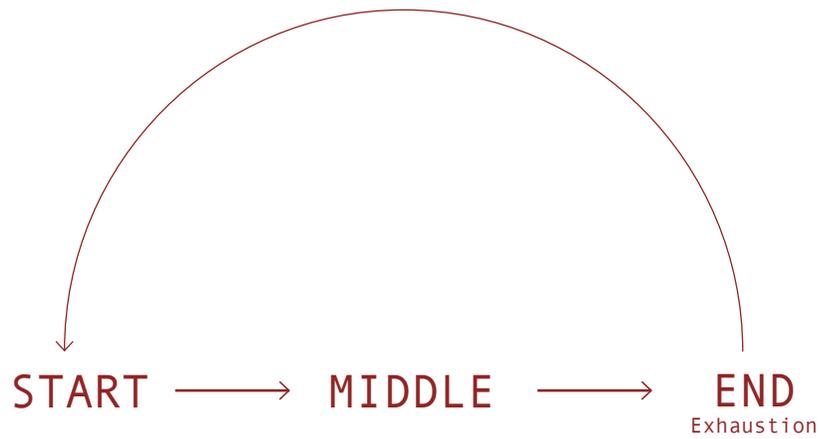
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Ailton Krenak, Futuro Ancestral p.11



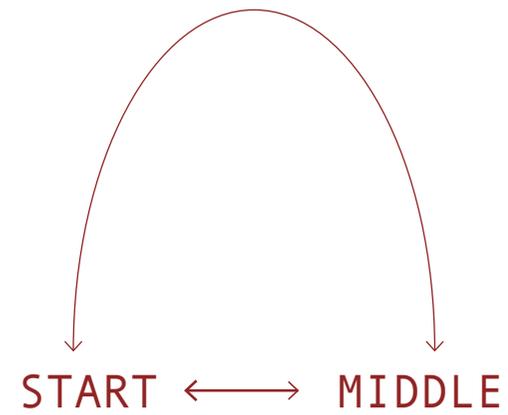
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Antropocentric cycle

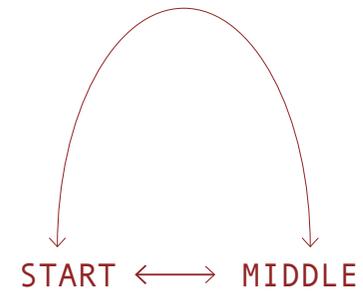
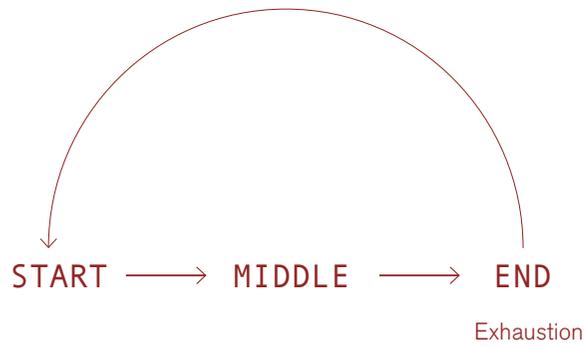
dance between moments of rapid, informal growth and periods of stagnation



Cosmocentric cycle

demographic and environmental balance

Diagram of the Concept of circularity from Antônio Bispo

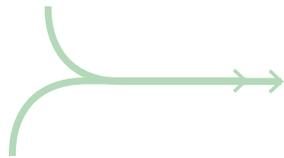


Comparison between the three cultivation systems: 1. full sun, 2. cabruca and 3. consortium (agroforestry).

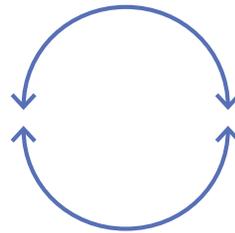
How to envision the future of Itacaré
through a counter-colonizing approach
that aims the restoration of ecological
integrity of the Atlantic Forest?



sharing



confluence

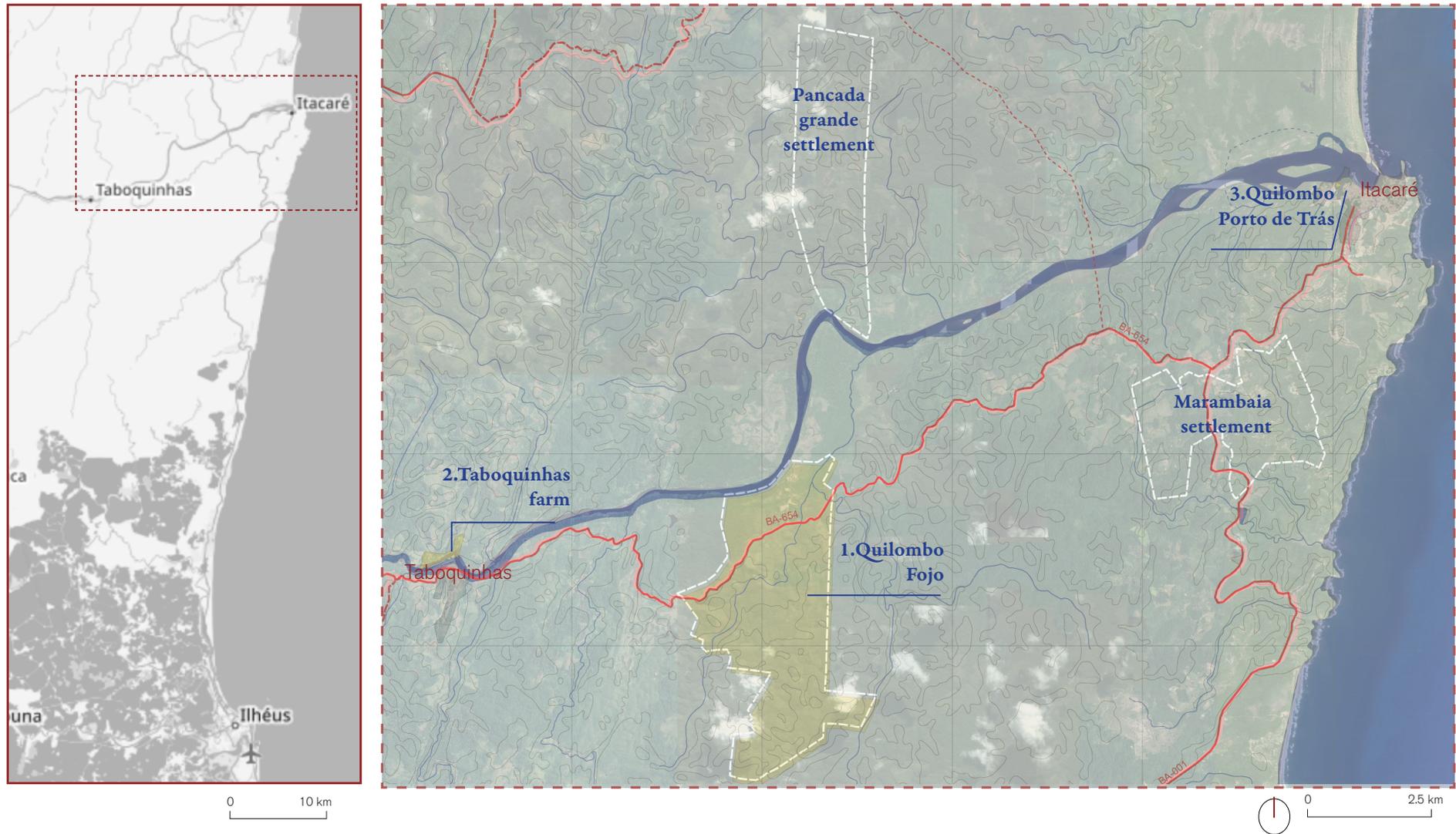


circularity



ancestry

Fieldwork



Interview / Place 01

Miguel and Biro

Residents in Quilombo do Fojo

Biro is a city counselor









KJZ3180

(27) 99922-8790 - 99988-7400













Interview / Place 02

Oswaldo

Cacao agroecological farmer











WELCOME TO LILO





















I Encontro Ampliado

Rede de Agroecologia
Povos da Mata

Alegria de viver em rede

AGROECOLOGIA - CULTURA - O
FEIÇA DE SABORES E SA
09 E 10 DE NO
LOCAL ESP...

Taboá







Interview / Place 03

Darlan

Quilombo Porto de Trás resident and leadership







BUTLER

22









BUTLER
22

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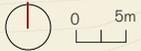
“We arrive as inhabitants in any environment, and we gradually transform into sharers. In the quilombo, we are sharers, whether we were born here or have a sense of belonging. And when I talk about a sense of belonging to the quilombo, I mean a relationship with the environment as a whole, with the animals and plants.”

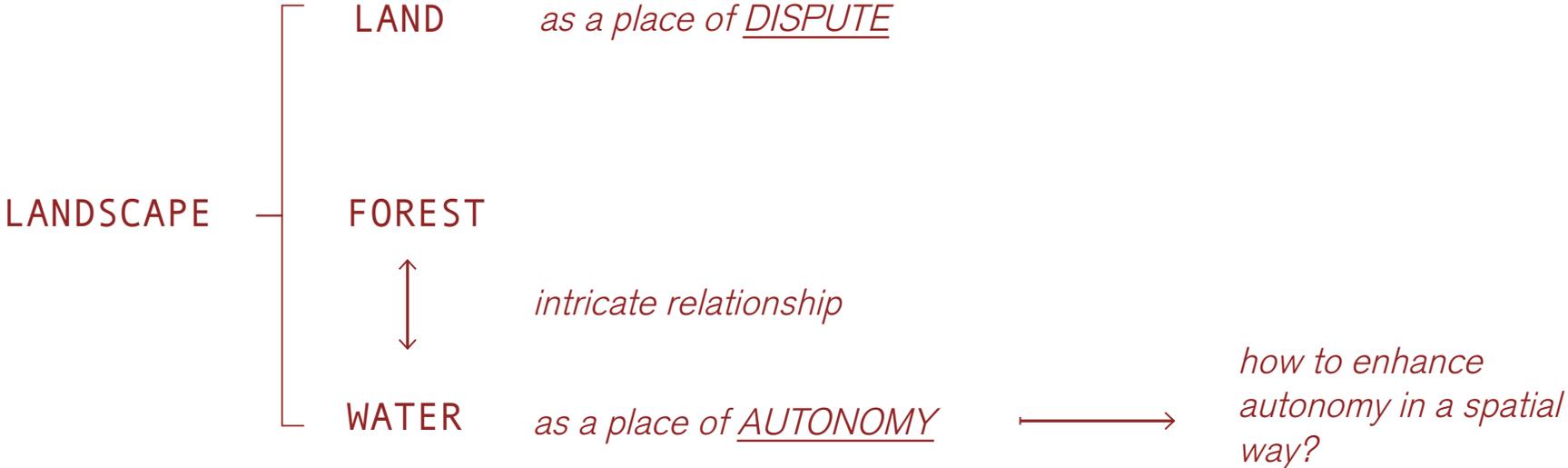
Antonio Bispo, 'A terra dá a terra quer' p.38

3. Proposal



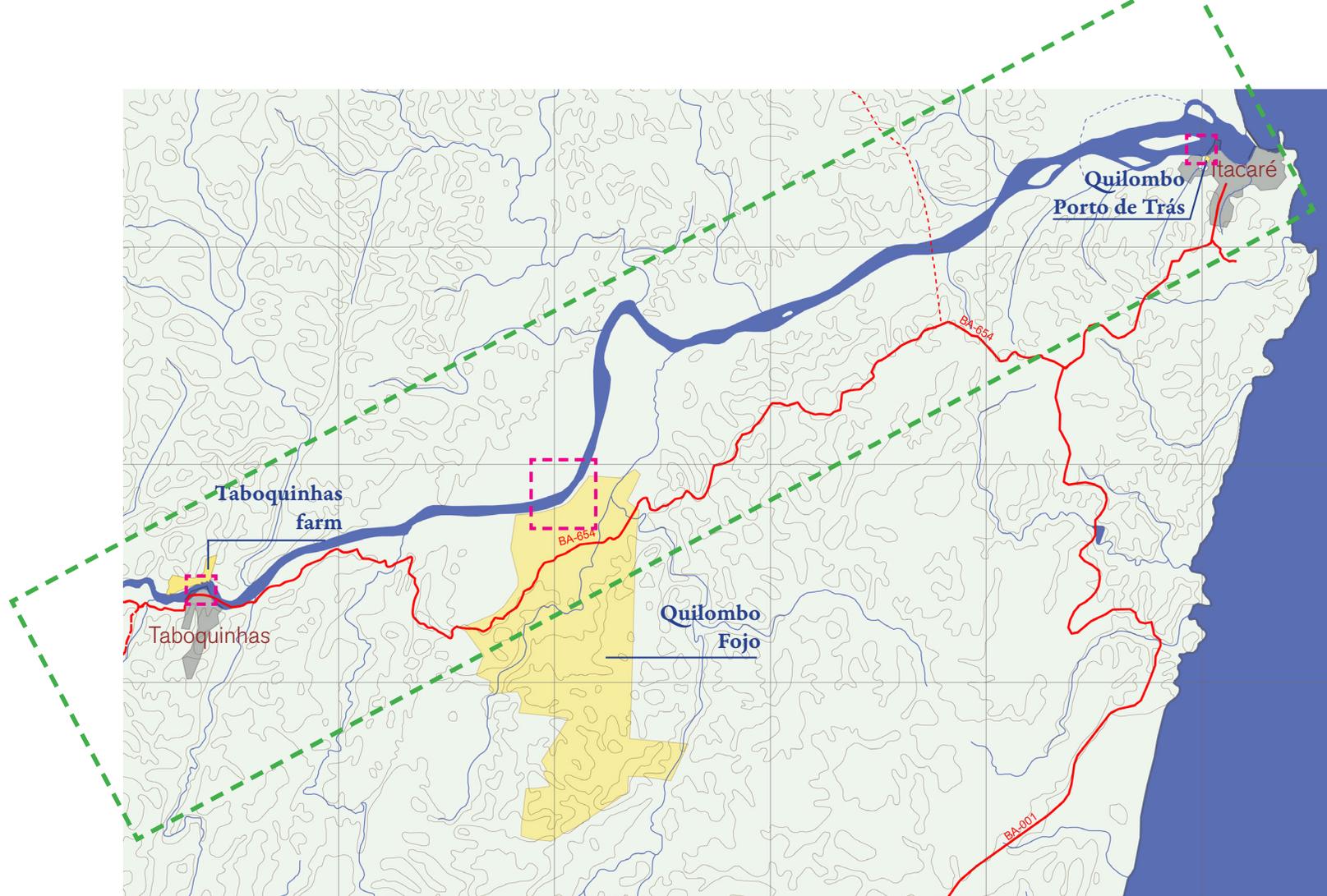
- 1 - Existing cultural center
- 2 - Existing seafood association
- 3 - Existing small stage for events
- 4 - Existing community space





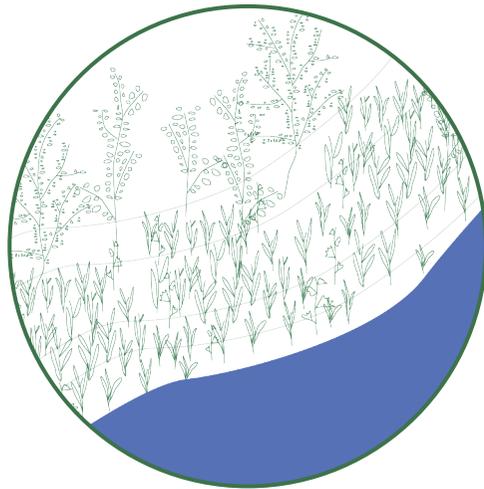
“Any government of a colonialist state will be a colonialist government. It is necessary to counter-colonize the organizational structure.”

Antonio Bispo, 'A terra dá a terra quer' p.102



- AUTONOMY RIVER SCALE
- RESTAURATION OF CULTURAL / SOCIAL IDENTITY LOCAL SCALE
- RESTAURATION OF LANDSCAPE IDENTITY ecological process scale

Design Principles



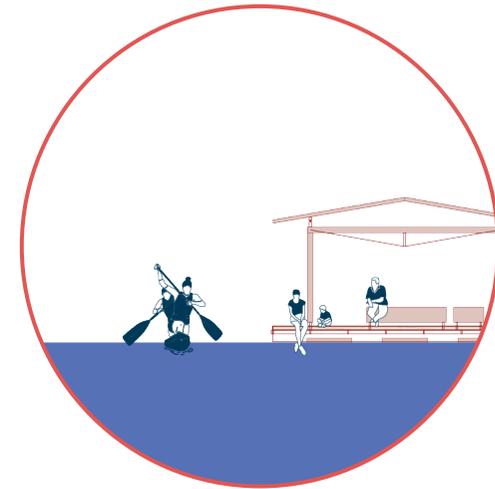
ECOSSYSTEM RESTAURATION

Mangroves / Riparian forests
/ Atlantic forest



BIOECONOMY

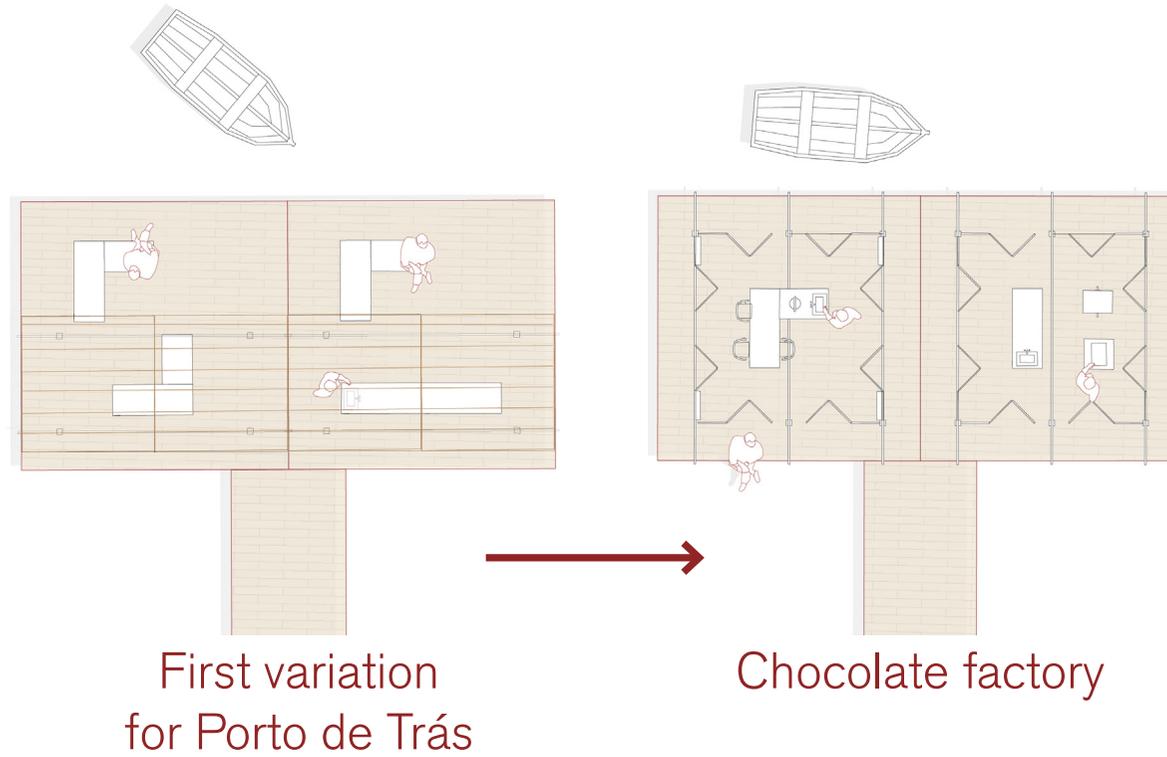
Enhance possibility for
economic activities that
ensure autonomy and en-
vironmental regeneration



RIVER AS A PLACE OF IDENTITY

Enhance cultural practices
and leisure, restoration of
the cultural identity of this
landscape

autonomy





1. Harvesting

Ripe cacao pods are harvested by hand, typically using machetes. The harvested pods are split open to reveal the cacao beans inside, surrounded by a sweet, white pulp.



2. Fermentation

Beans and pulp are scooped out of the pods and placed in shallow containers, often lined with banana leaves. The beans are left to ferment for several days (usually 5-7), during which the pulp liquefies and drains away. This process is crucial for developing the beans' flavor.



3. Drying

Fermented beans are spread out on drying racks or on barçaças. They are left to dry in the sun for several days to a week, reducing their moisture content from about 60% to around 7%.



4. Roasting

The dried beans are roasted at varying temperatures (typically between 120-175°C) for 30 minutes to 2 hours. Roasting further develops flavor and facilitates the removal of the shell. Roasted beans are cooled quickly to halt the roasting process.



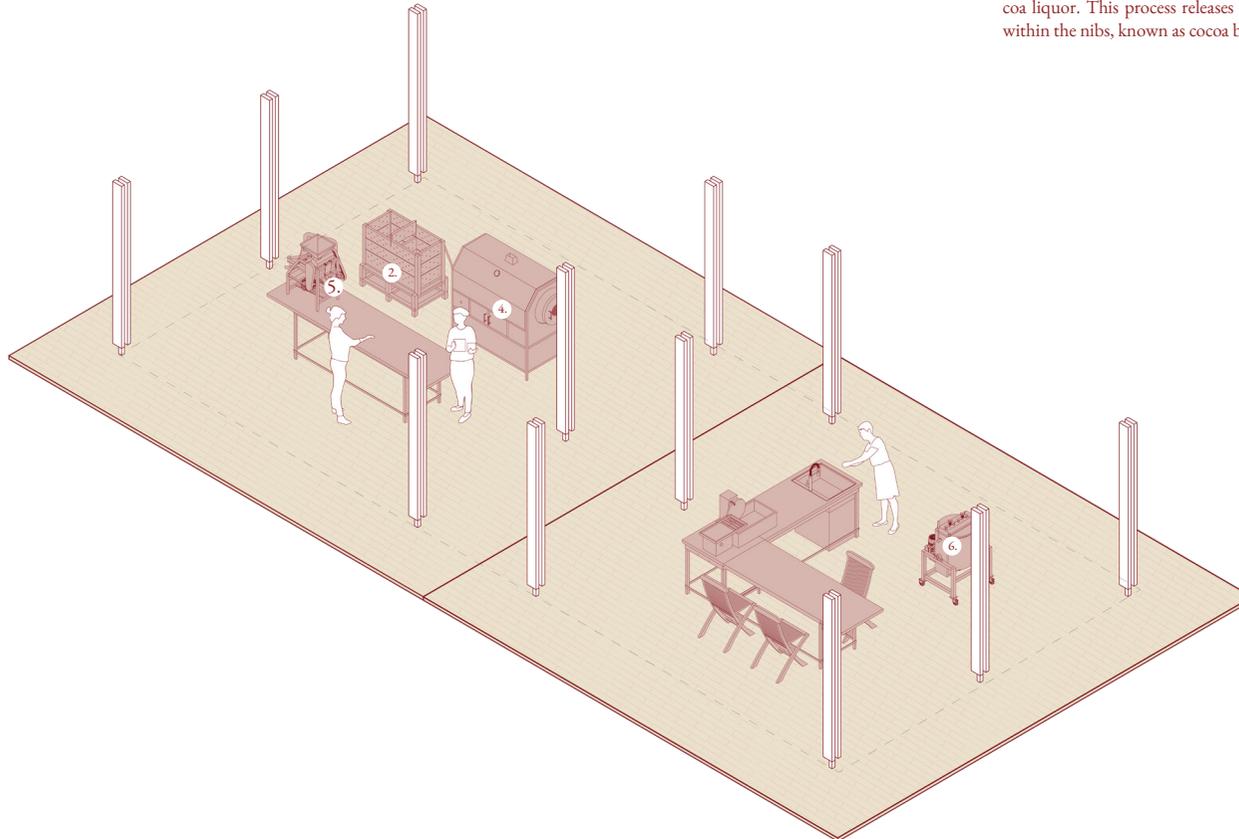
5. Cracking and Grinding

The cooled beans are cracked to break the shell and release the nibs (the edible part of the bean). The cracked mixture is winnowed, usually by a fan or machine, to separate the lighter shells from the heavier nibs. The nibs are ground into a thick paste known as cocoa mass or cocoa liquor. This process releases the fat within the nibs, known as cocoa butter.

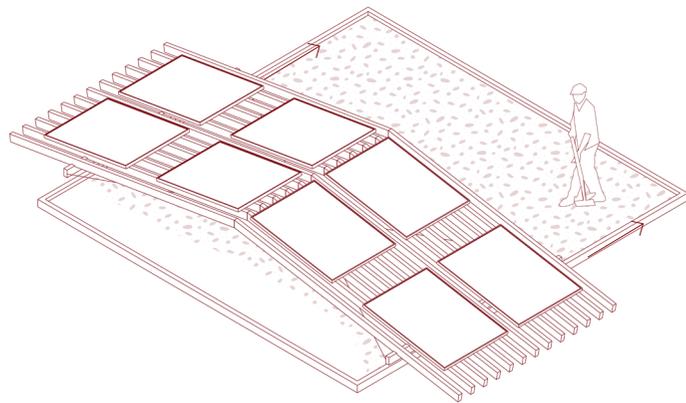


6. Conching

The refined chocolate mass is kneaded and aerated in a process called conching. This can last from several hours to several days, improving the flavor and texture. During conching, additional ingredients like sugar, milk powder (for milk chocolate), and more cocoa butter can be added. After this point the chocolate can be molded and cooled.







Solar panels

Wooden structure

Wooden roof lining

Wooden structure tensioned by iron cables

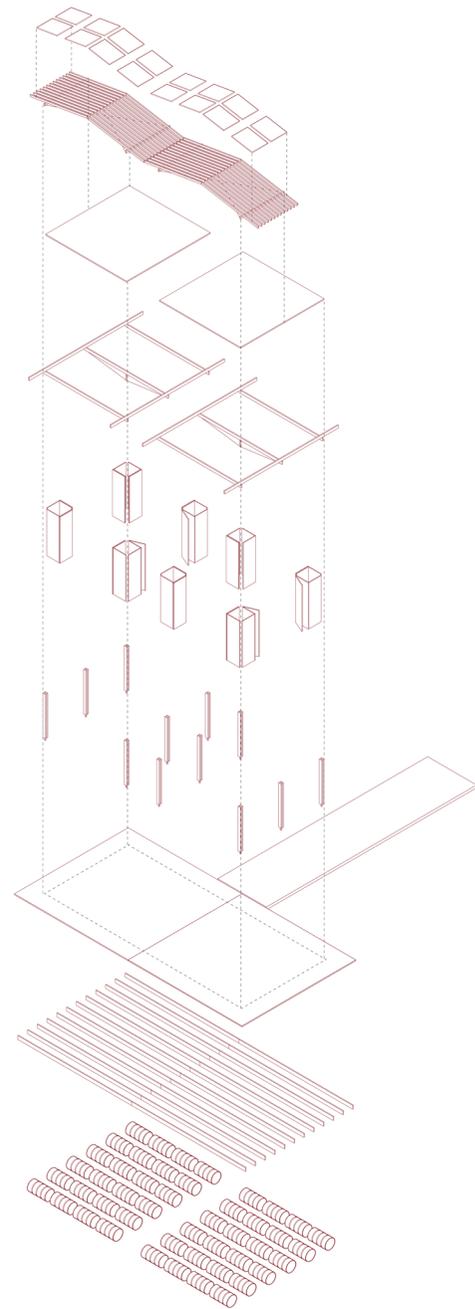
Folding wood doors

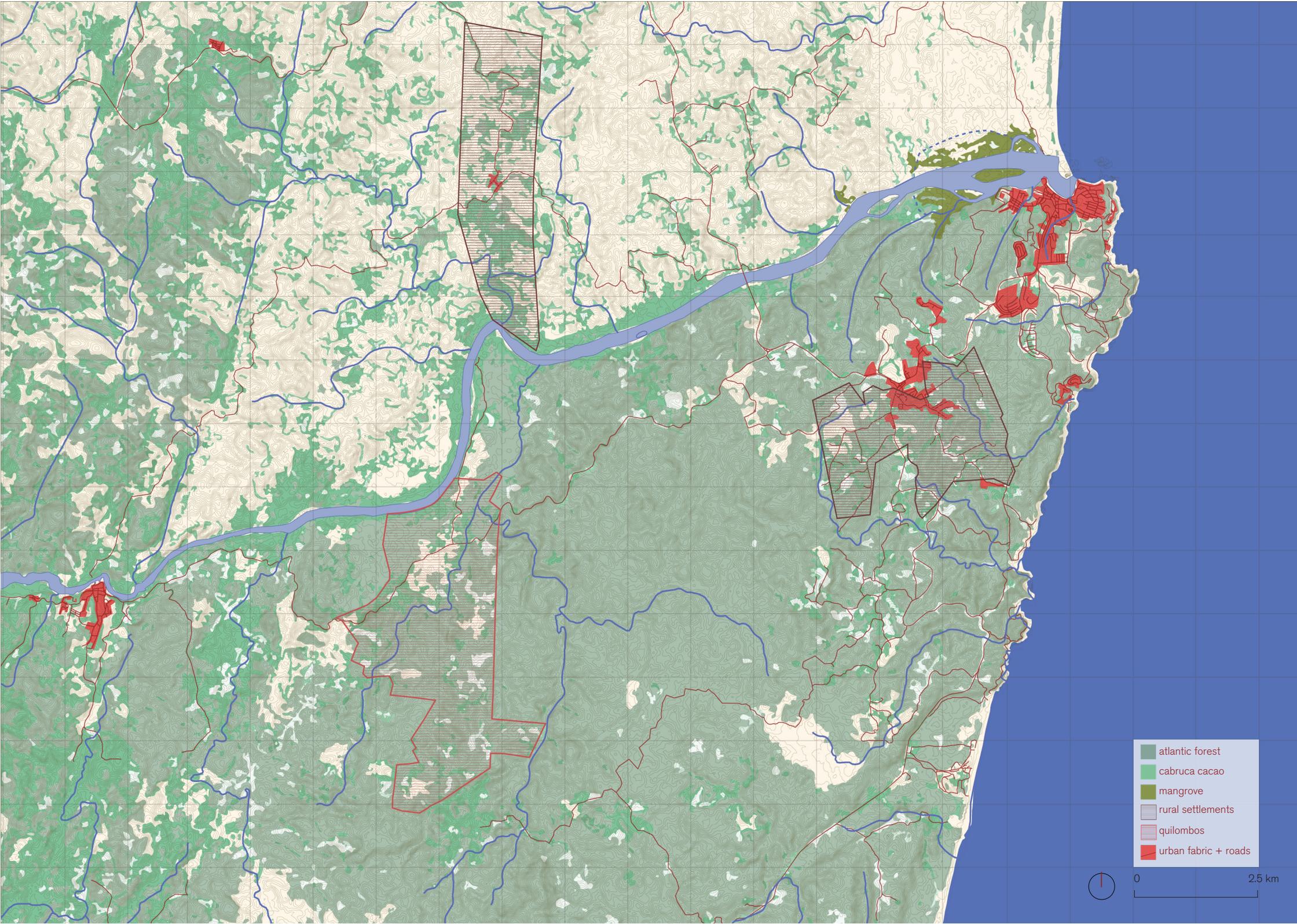
Wooden columns

Wooden floor

Wooden structure

Water drums

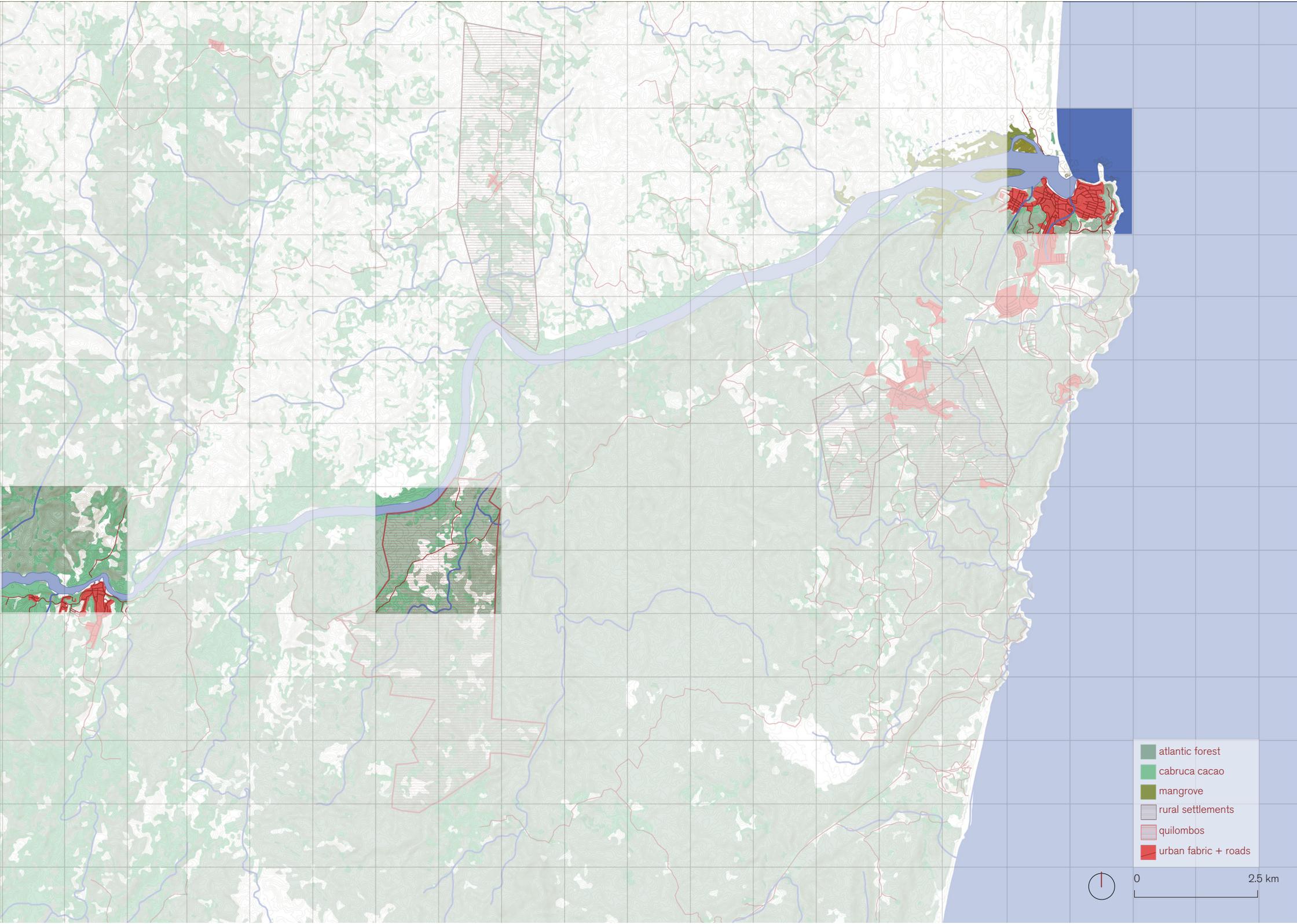




- atlantic forest
- cabruca cacao
- mangrove
- rural settlements
- quilombos
- urban fabric + roads



0 2.5 km



- atlantic forest
- cabruca cacao
- mangrove
- rural settlements
- quilombos
- urban fabric + roads



0 2.5 km

Fojo Quilombo

Taboquinhas

Itacaré - Porto de Trás Quilombo

human occupation

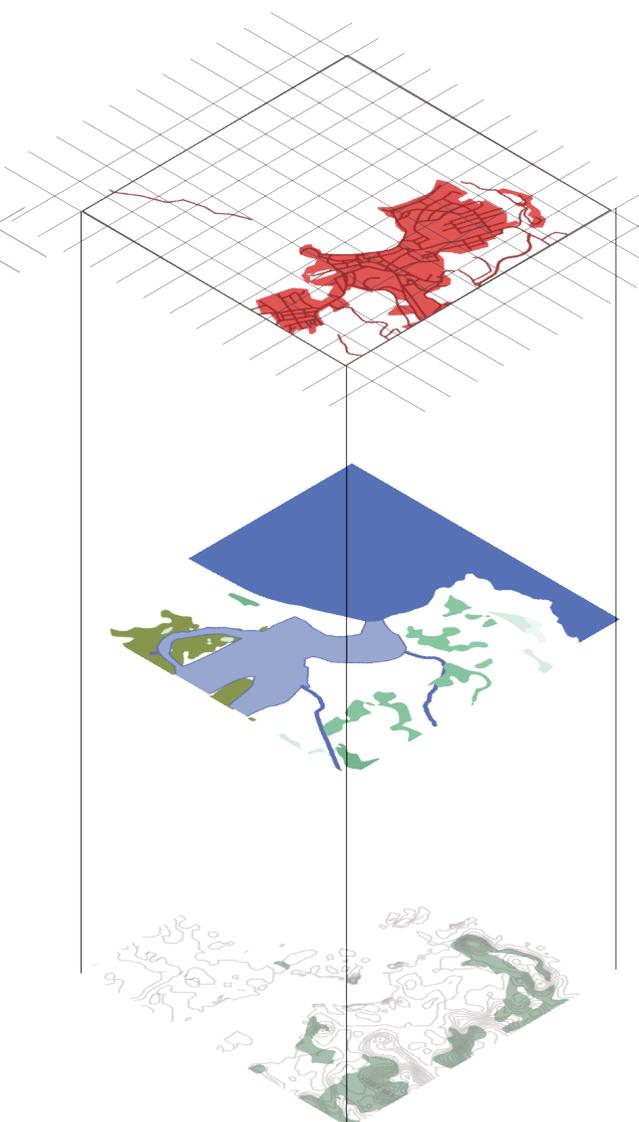
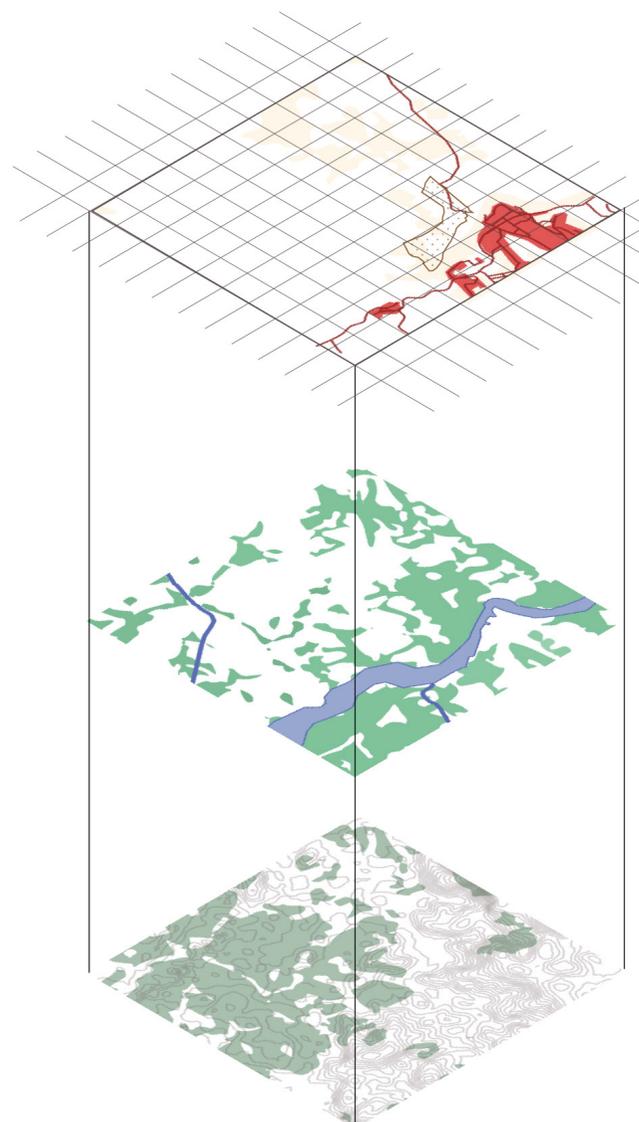
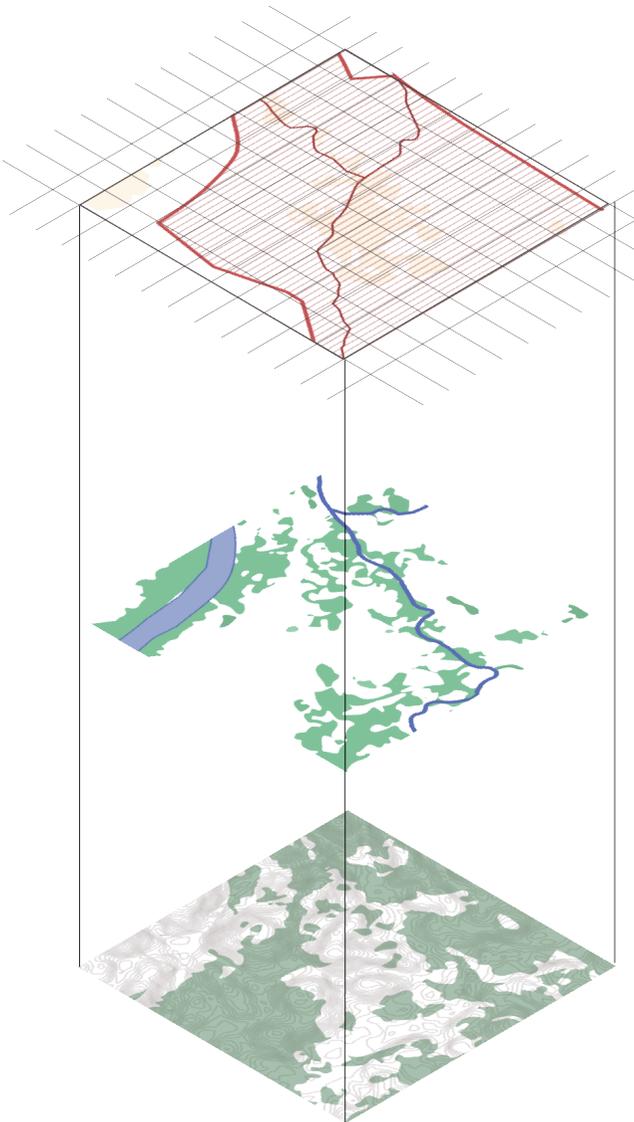
- deforested area
- quilombos
- urban fabric + roads
- taboquinhas farm

altered nature

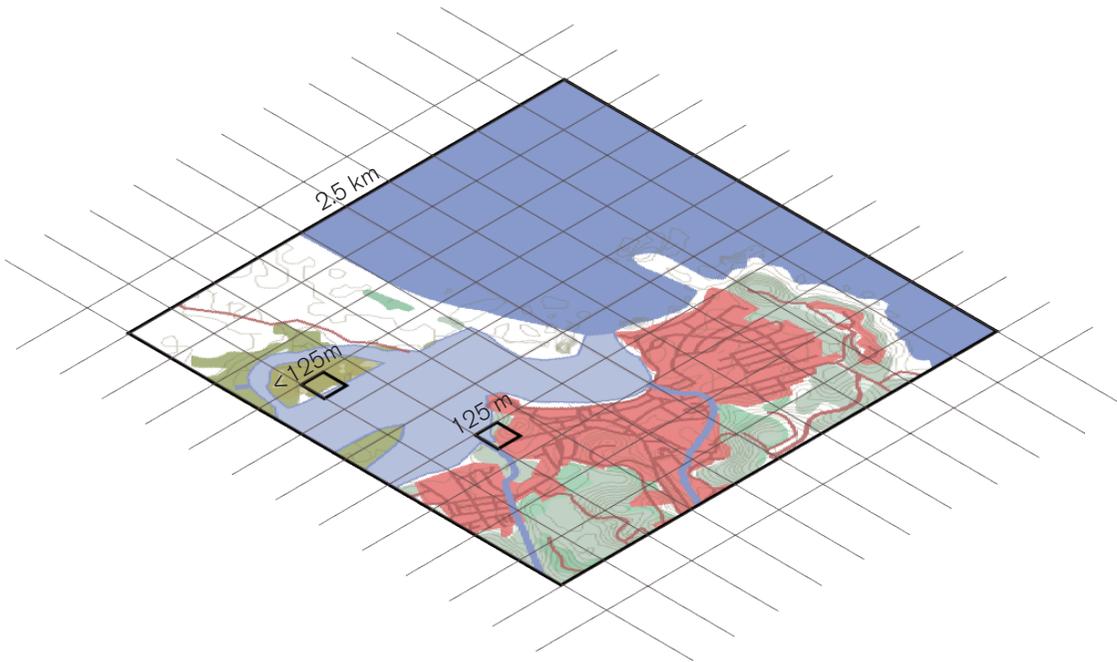
- water bodies
- cabruca cacao
- mangrove

ancestral nature

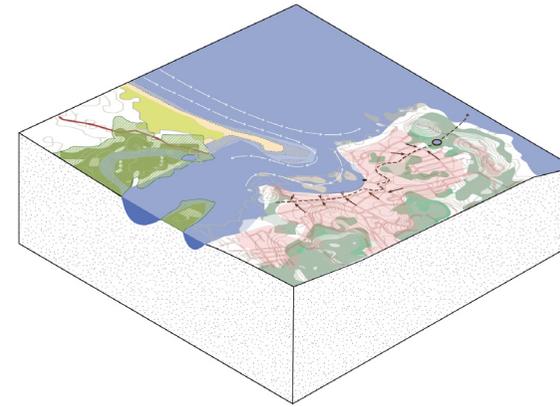
- atlantic forest



Porto de Trás

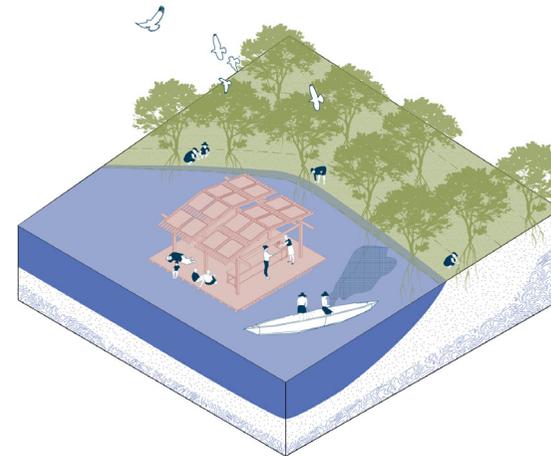


- atlantic forest
- cabruca cacao
- mangrove
- rural settlements
- quilombos
- urban fabric + roads

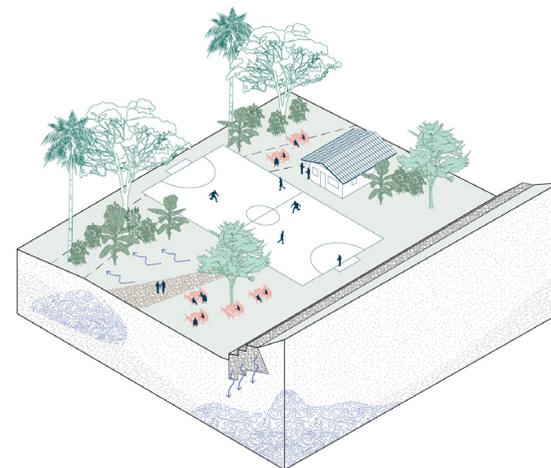


In this local scale, the aim is to restore the mangrove ecosystem, ensuring its balance and seafood production. By reforesting the riparian forest along the riverbeds in the lower part of the basin, especially in the Gongoji subbasin, and better managing the river flow speed and variations caused by the Funil Dam, we can observe a slow restoration of the estuary. The sandspit is beginning to regress, allowing saline water to better enter the estuary, which helps balance the mangrove ecosystem. Another crucial local intervention is to treat and redirect the sewage release, preventing water contamination.

- current untreated sewage release
- sewage treatment station
- sewage collection
- restored and expanded mangrove



In this local scale, fishing and seafood collecting activities are supported by the floating module. The module, in this case, aims to provide shade for the shellfish cleaning procedure and a resting spot for the workers, thus improving their daily working conditions.

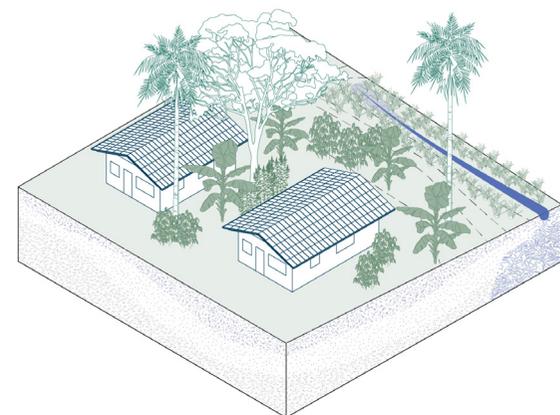


This local scale, an intervention was designed based on an interview with Darlan, a leader from Porto de Trás. He requested the design of a football field with an annex for a changing room and a space for barbecues and community gatherings. After visiting the site, it became clear that the grandstand had to perform a structural role in addition to its seating function due to the extreme instability of the terrain and the high risk of landslides. This was achieved by designing a gabion grandstand. Water management was a leading concept in the design of this local intervention.

Fojo Quilombo



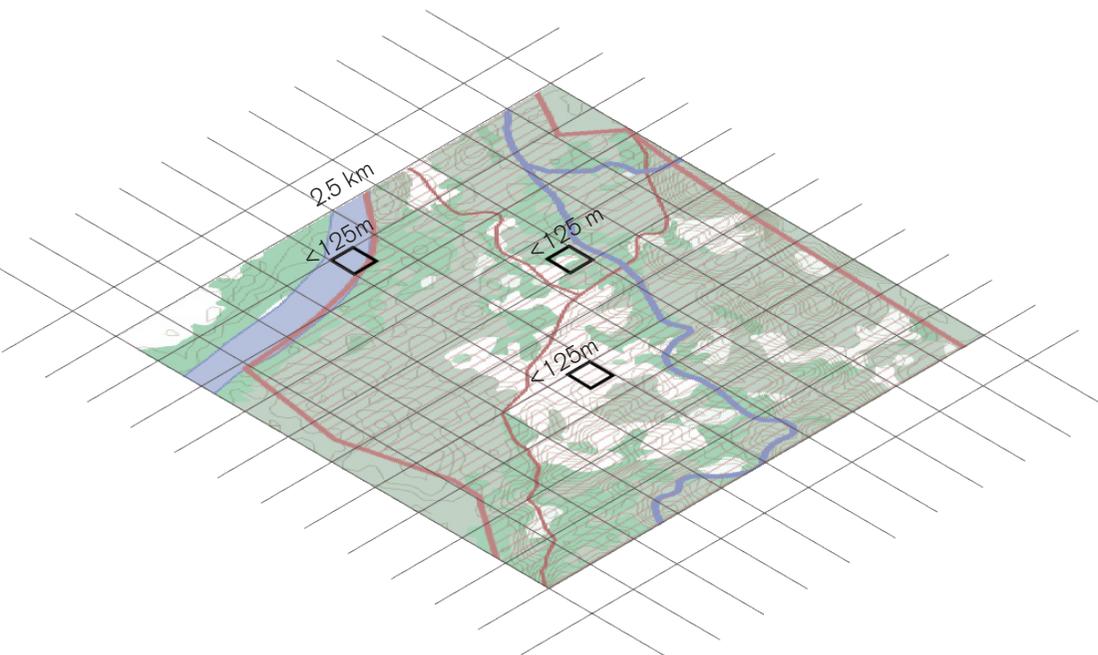
In this local scale the aim is to restore current deforested areas turned into pastures or monoculture fields into agroforestry managed by the Quilombo's community. The local species contemplated were: cacao, eucalyptus, gliricidia, corn, brazilwood, fuzzy ipê, massai grass and plantain (based on the research of Nascimento, Eduardo d'Ávila, 2022)



In this local scale we perceive that Fojo's Quilombo community already is occupying the land in a restorative system, each family has a small agroforestry on their backyard caring for soil quality and regeneration while reassuring a protection bufferzone to the riversprings.

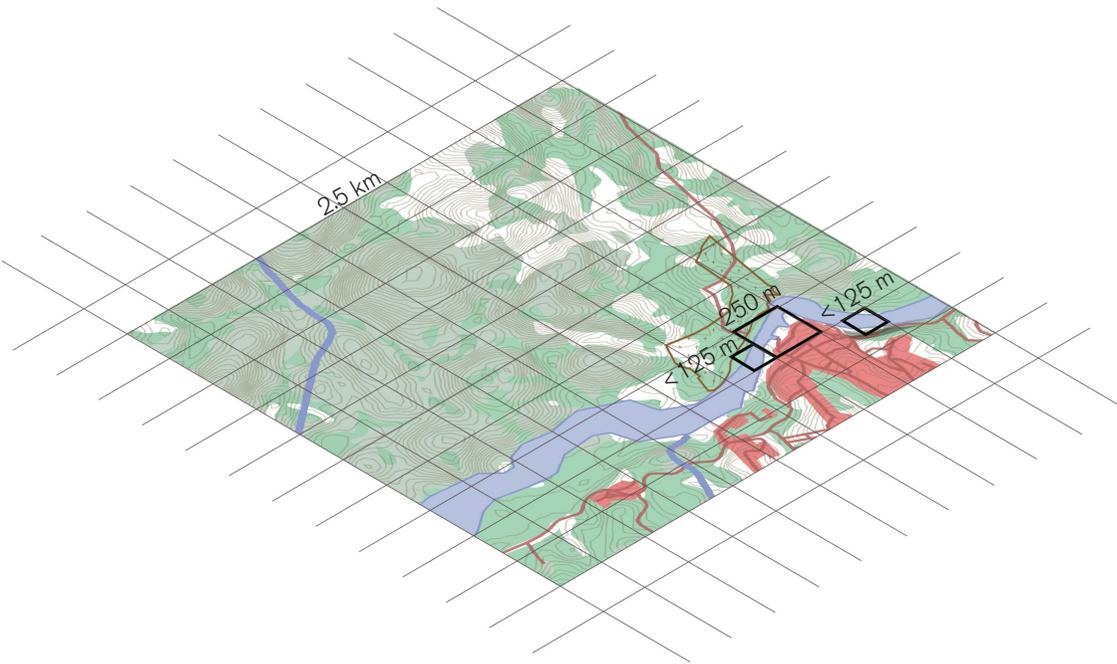


In this local scale, the module plays an important role in the economical autonomy of Fojo's rural community. This module was designed to be a small chocolate factory, providing the means for the rural community to process their products and benefit from the integrity of their value. The idea is that this modules can travel the Das Contas River in a tool sharing scheme where all communities benefit from this small scale infrastructure.

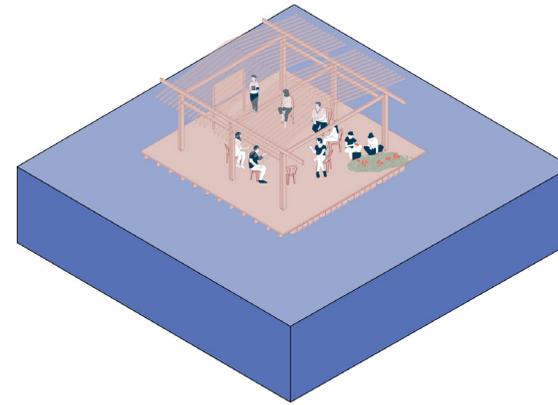


- atlantic forest
- cabruca cacao
- mangrove
- rural settlements
- quilombos
- urban fabric + roads

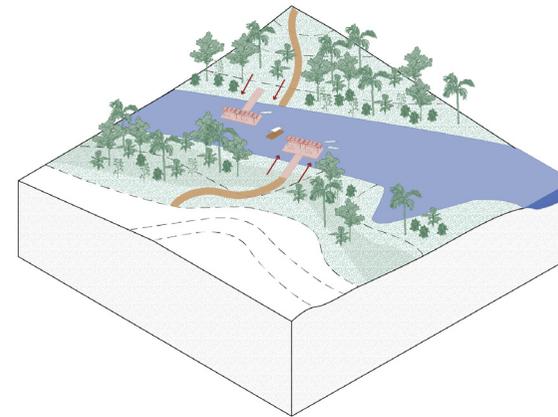
Taboquinhas



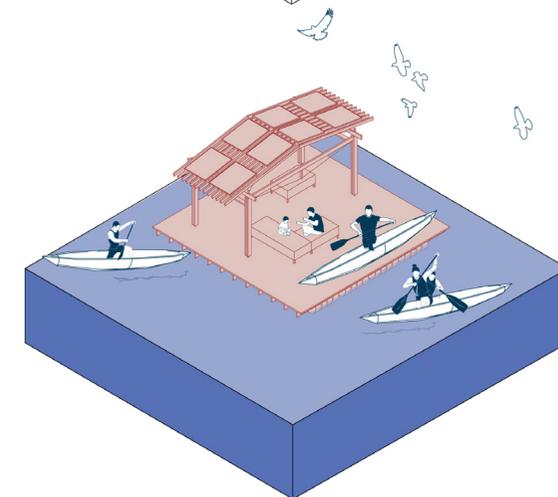
- atlantic forest
- cabruca cacao
- mangrove
- rural settlements
- quilombos
- urban fabric + roads
- taboquinhas farm



In this local scale the module works as a floating platform for knowledge sharing and local capacitation. People like Mr Oswaldo can share their expertise and teach locals and tourists about the sustainable practices such as the cabruca cacao production and the organic chocolate process.

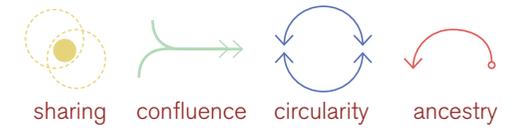


In this local scale the aim is to uncover current impermeabilized riverbeds and restore the riparian forests. The use of the piers and modules is to shift human occupation from the riverbeds to inside the river, providing space for the ongoing activities such as the small landing points for the local public ferry. These floating pocket squares can also be attractive spots for tourists to visit Taboquinhas farm and other relevant sites of the cacao landscape.

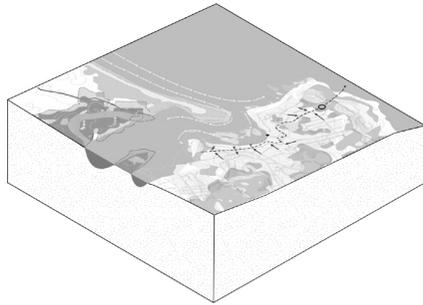


In this local scale, the module supports the very typical canoeing activity. Providing the athletes a place to rest and fresh water to drink, this modules can reinforce water's leisure potential, and ensure the river as a place of identity for the local community.

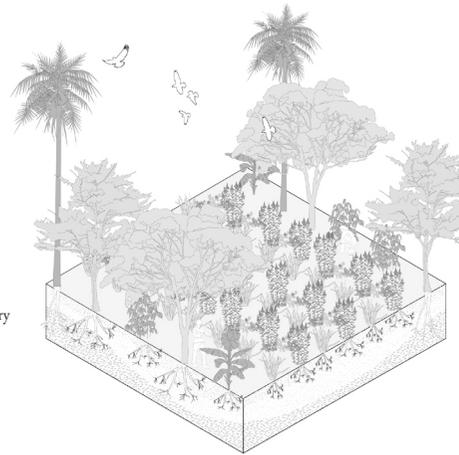
local autonomy



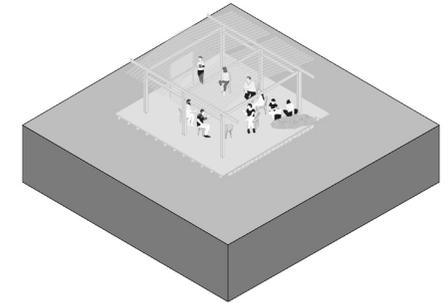
Restoration of hydrological cycles



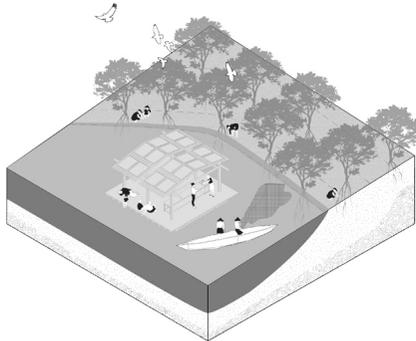
Soil regeneration through agroforestry practices



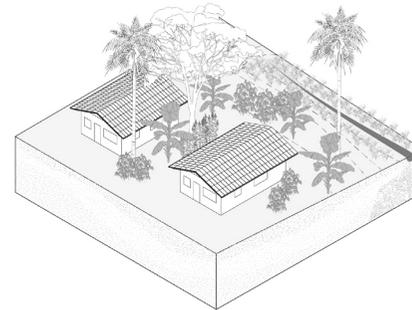
Local knowledge is transmitted orally through lived experiences



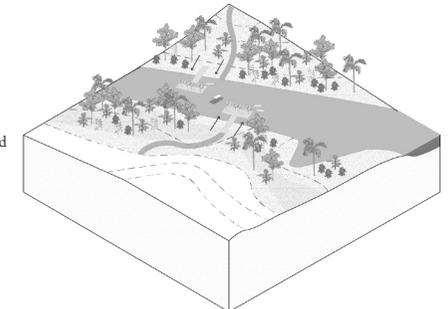
Ecological restoration associated with local subsistence



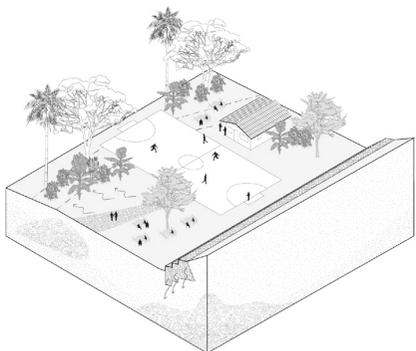
Local and ecological existences sharing the land



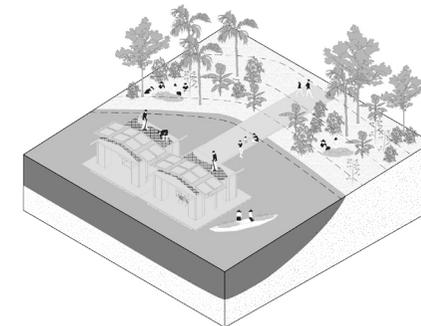
Local infrastructure and ecological existences sharing the river



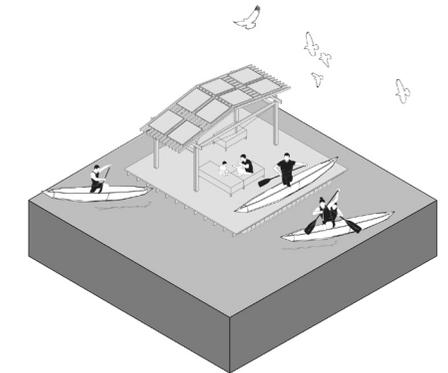
Water management in local interventions ensures aquifer recharge and resilience during flooding events.



Ecological restoration associated with local subsistence



Local and ecological existences sharing the river









“How can we break through the walls of cities? What possible implications could exist between human communities living in the forest and those enclosed in metropolises? Because if we can ensure that forests continue to exist in the world, there will be communities within them.”

Ailton Krenak, Futuro Ancestral p.64