

An aerial photograph of a coastal region, likely a delta or wetland area, featuring a complex network of waterways and land parcels. A light blue grid is overlaid on the entire image. The water bodies are highlighted in a light blue color, contrasting with the brownish-green land. The text 'in-between land' is prominently displayed in the upper left, with the subtitle 'peri urban zones into sustainable ecosystems' below it.

in-between land

peri urban zones into sustainable ecosystems

thesis 2021
julia ocejo vivanco

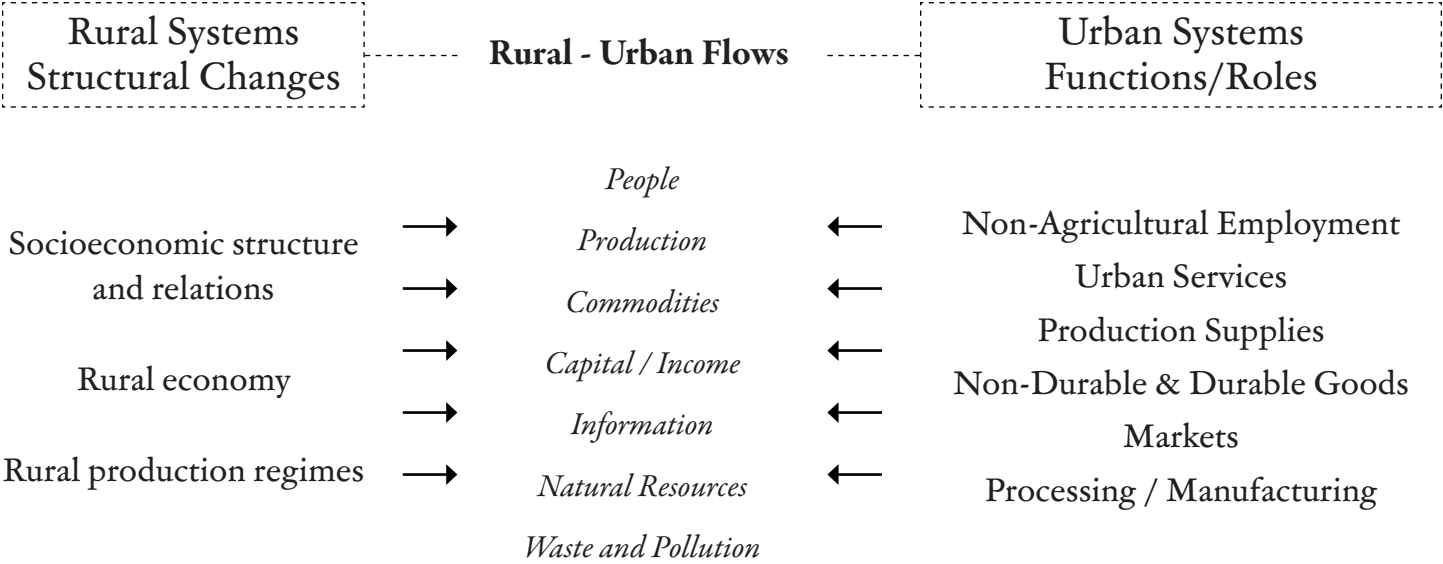
—This thesis aims to create a framework for the evolution of peri urban zones as self-sufficient ecosystems that celebrate site-specific infrastructural systems and are adaptive for future growth scenarios.



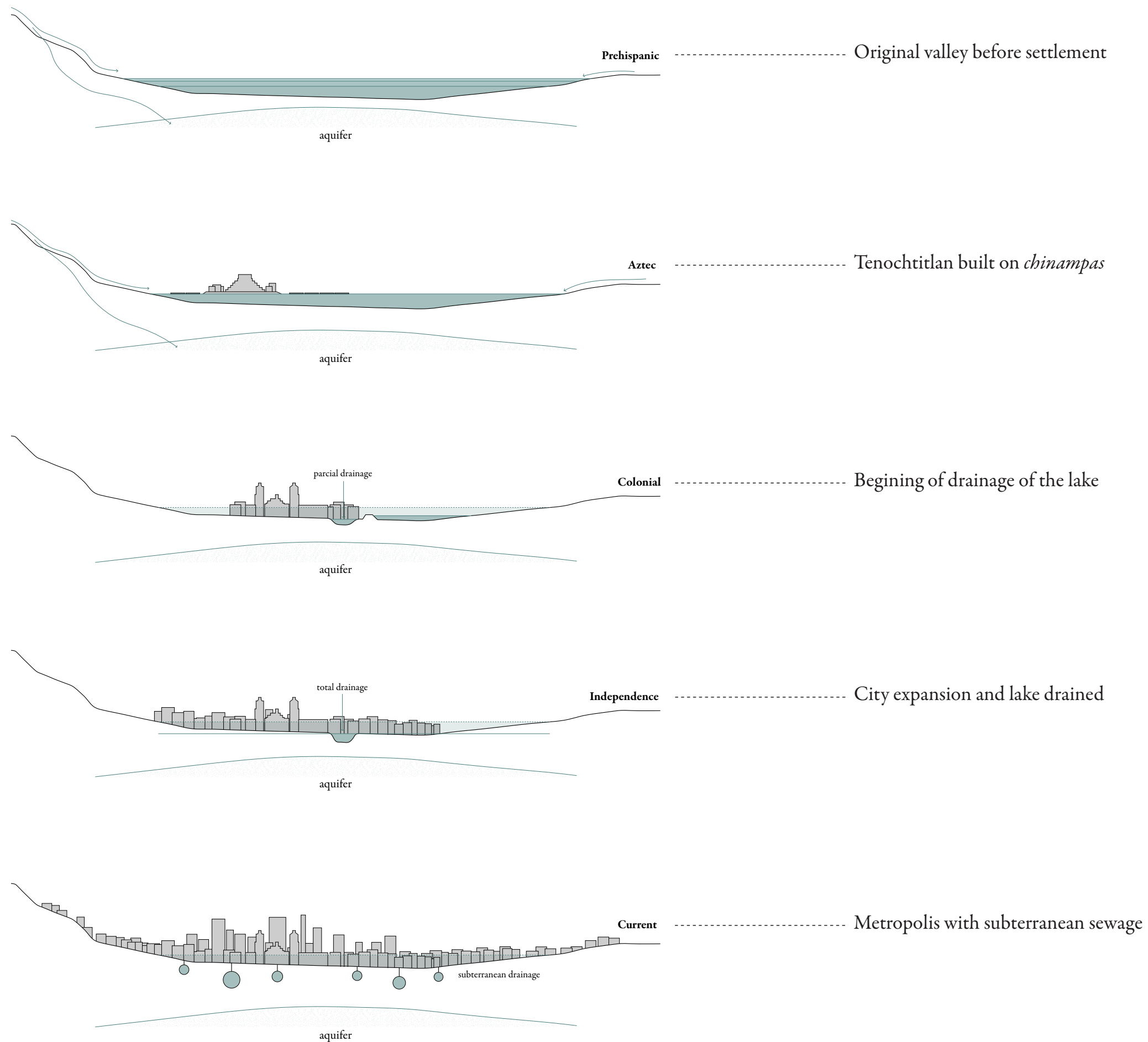
Peri-urban areas are undefined zones of transition between rural and urban, sites of much of the world’s current urban transformation with diverse characteristics that are subject to changes throughout time.

Peri-urban water systems play a crucial role in the supply of water for domestic use, agriculture, commerce, industry and the environment of cities.

This thesis aims to investigate the relationship between nature and water with architecture in peri-urban Mexico City, to analyze the effect on the ecological water crisis caused by the informal settlements and propose a network of intervention to enhance a sustainable ecosystem.



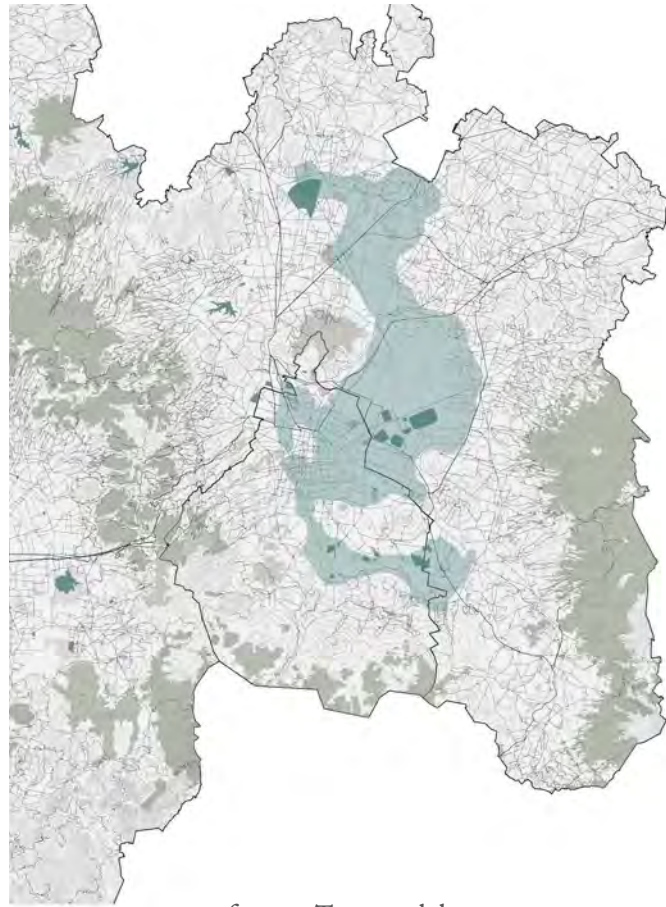
Douglass, Michael (1998), "A regional network strategy for reciprocal rural-urban linkages: an agenda for policy research with reference to Indonesia", Third World Planning Review Vol 20, No 1, pages 1-33



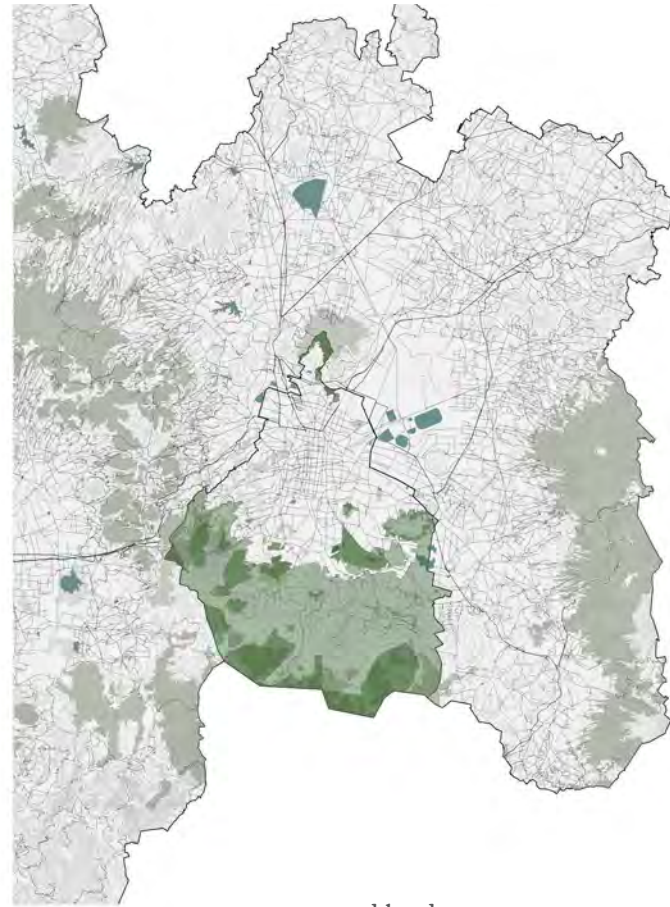
Mexico City is one of the world's largest metropolis, a multiplicity of urban forms often described as 'many cities within the city'. The metropolitan region is marked by processes of residential segregation and urban fragmentation that amplify socioeconomic and structural inequalities.

Its urban expansion has generated a polycentric urban form that incorporates some smaller towns and rural areas into a complex metropolitan structure that radiates outwards into major transport corridors into secondary cities nearby, a sprawling megacity with blurred boundaries.

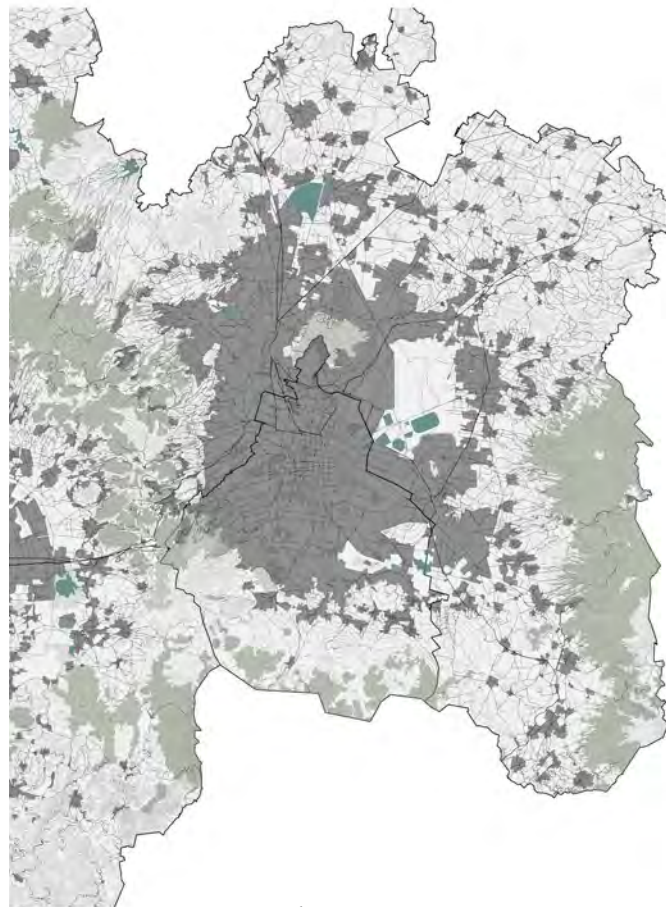
The city has undergone a rapid transformation as urban spaces adapt to the demands of the global economy and most of the growth has been in its peripheries. In the central zone of the city, the rate of growth has been slower and even negative, yet peripheral municipalities that have recently been settled by immigrants have population growth rates as three to five times higher than the average for the city as a whole.



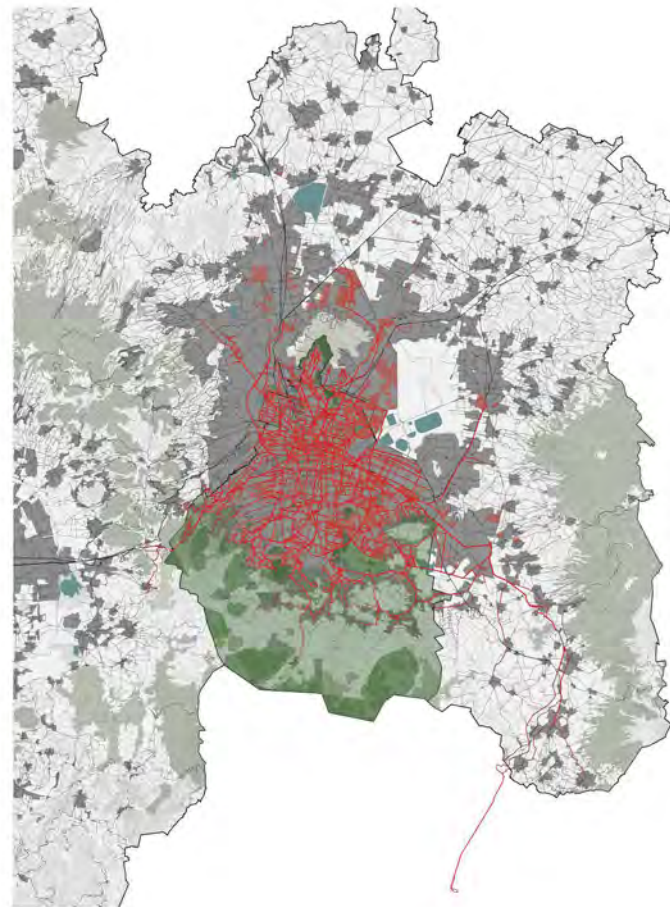
former Texcoco lake



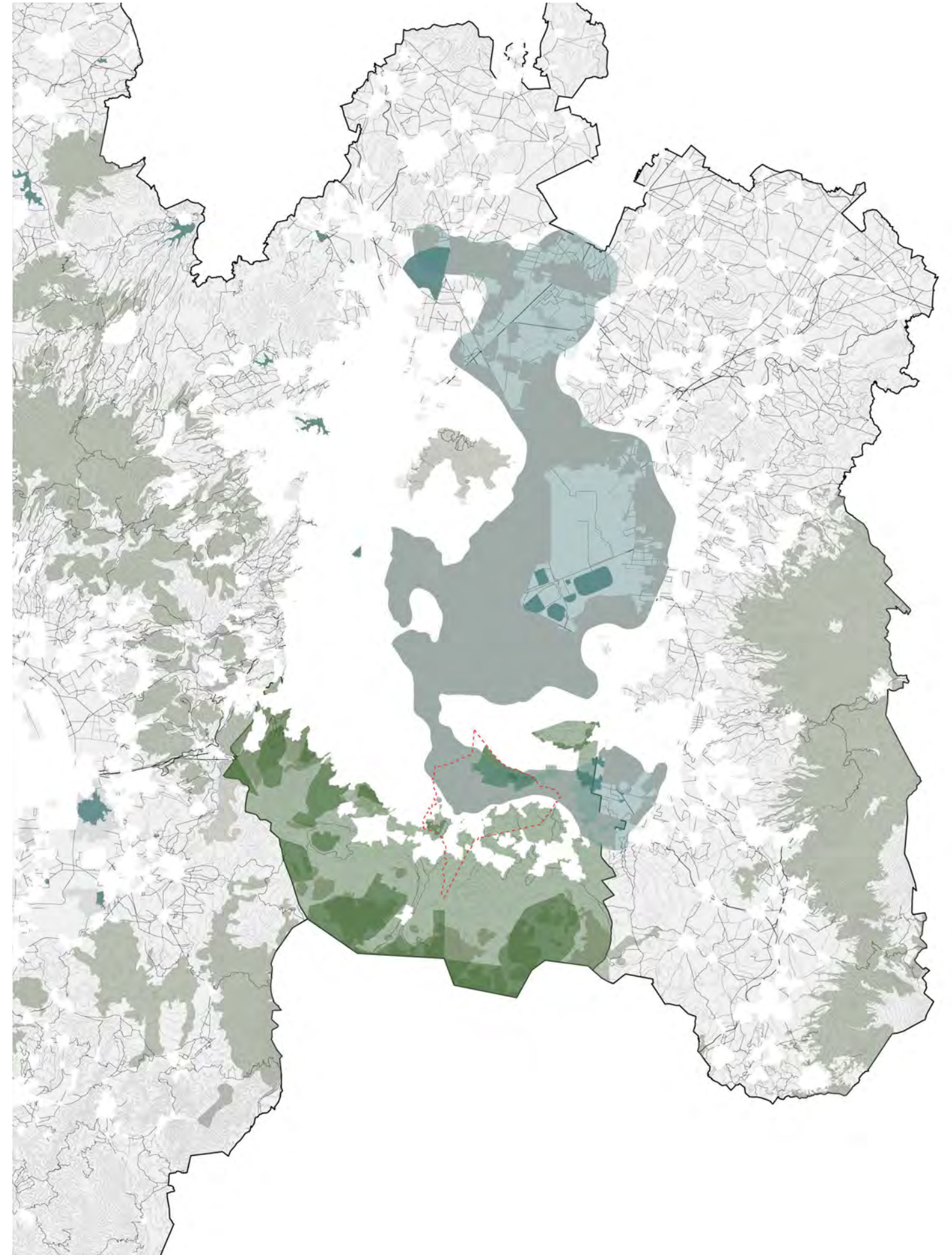
protected land



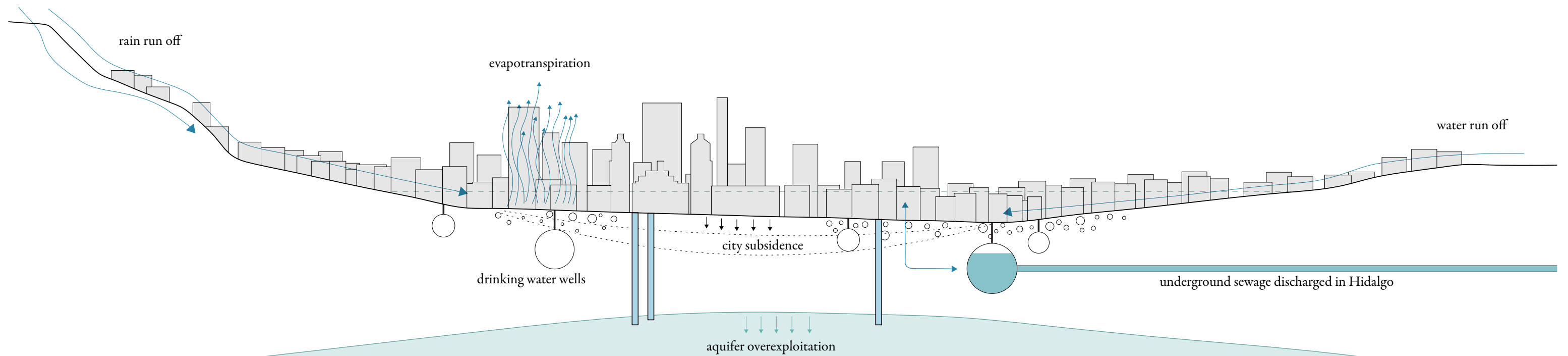
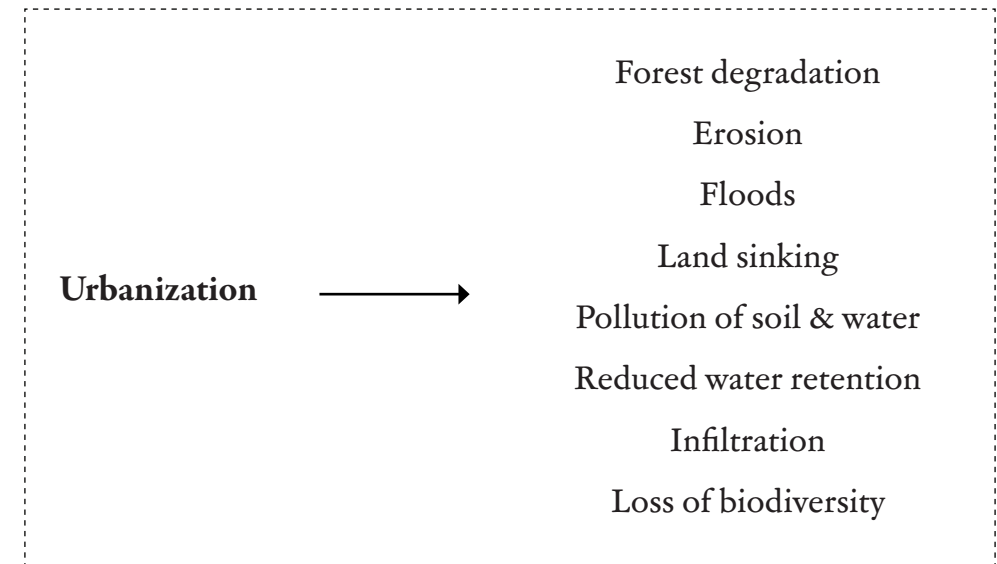
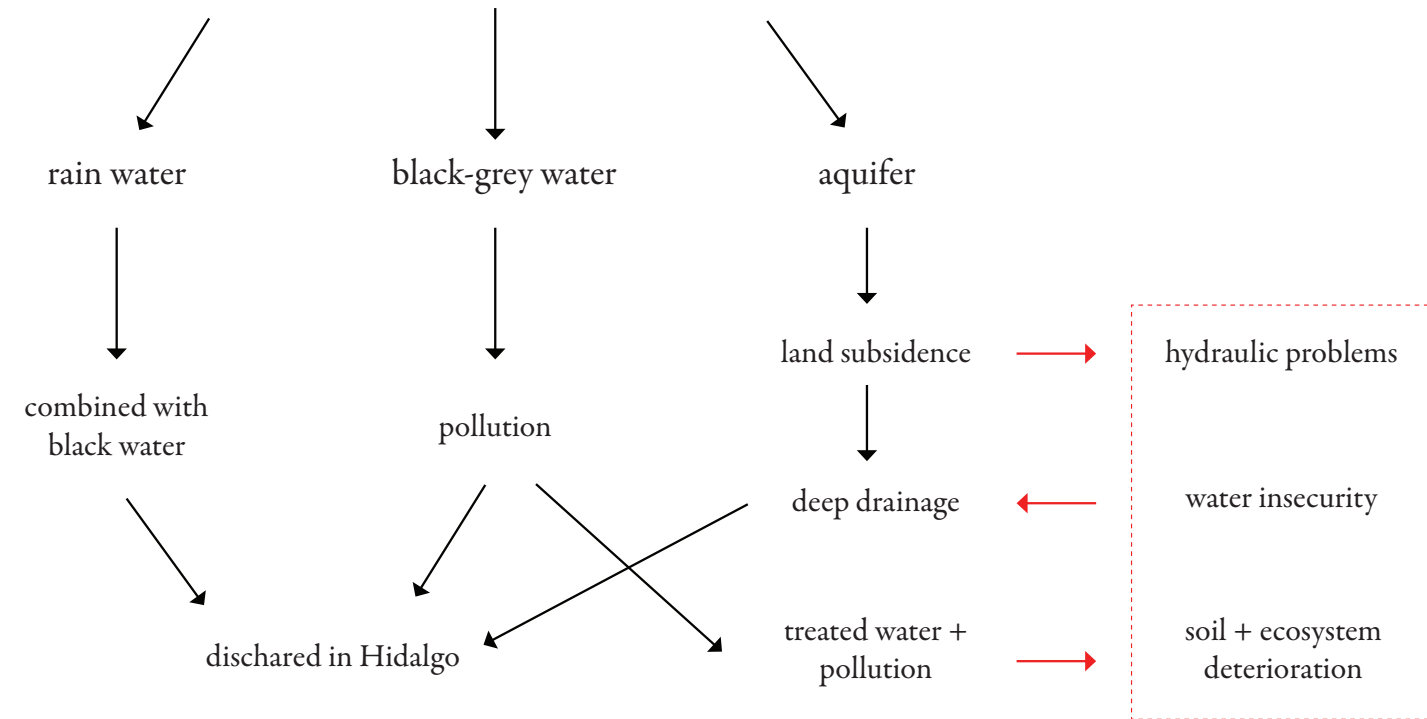
urbanization



transportation routes



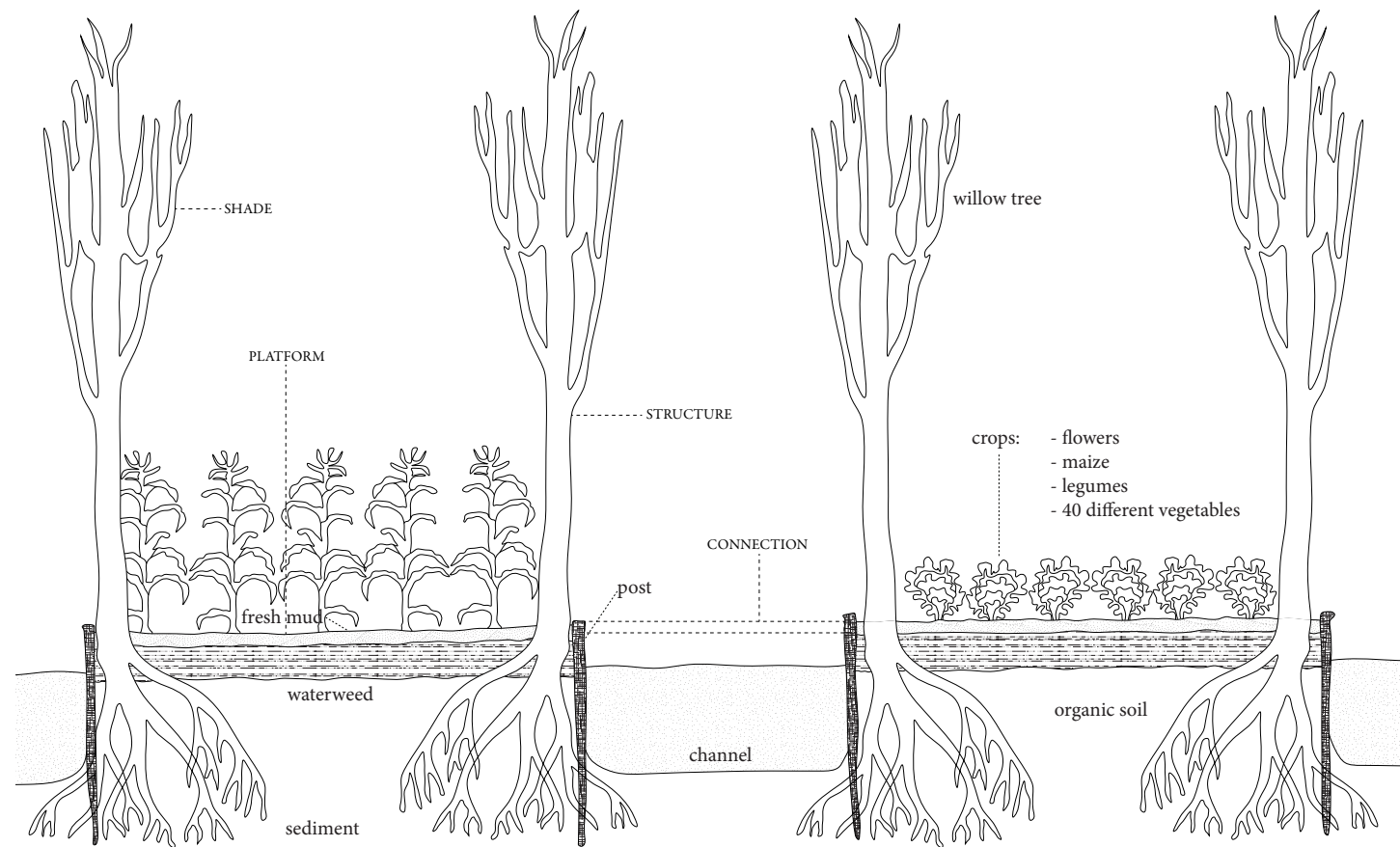
Water Management





Xochimilco is a remnant of a formerly extensive wetland region and one of the 16 boroughs within Mexico City. It is best known for its canals, which are left from what was an extensive lake and canal system that connected most of the settlements of the Valley of Mexico.

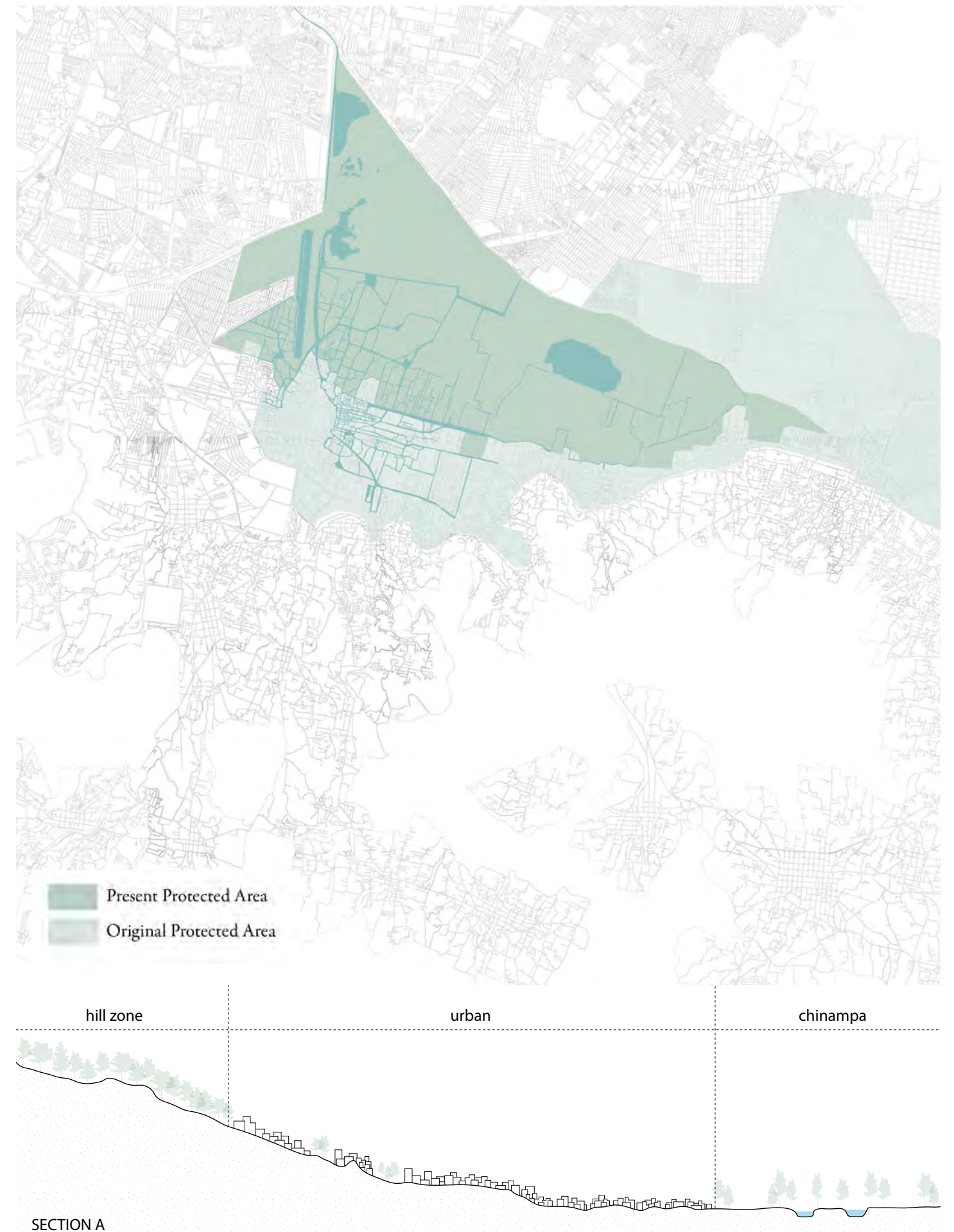


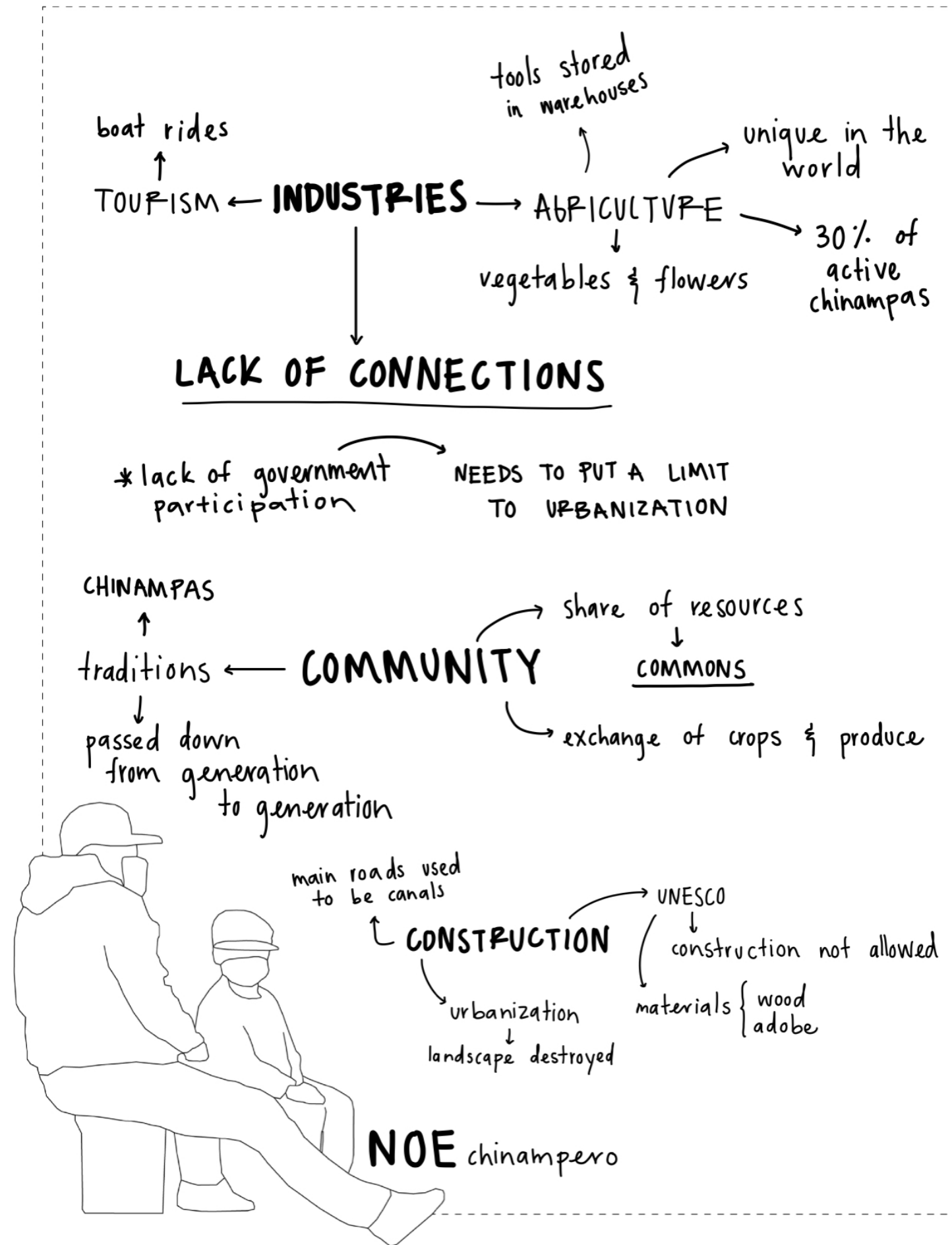


Chinampa is a raised field on a small artificial island on a freshwater lake surrounded by canals and ditches. Farmers use local vegetation and mud to construct chinampas. Fences made of a native willow which protect the chinampa from wind, pests, and erosion. Complex rotations and associations allow up to seven harvests per year.

Chinampas also provide ecosystem services, particularly greenhouse gas sequestration and biodiversity diversification, and they offer high recreational potential.

This protected patrimony is threatened by the quick growth of Mexico City and its urbanization, since chinampas have disappeared from most of the urban landscape. It is projected that by 2057, most current chinampa land will be converted to housing without an effort from its involved actors - farmers and local government.

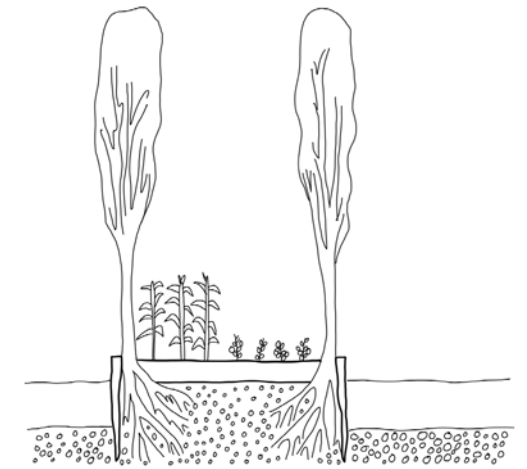




Entry Points

Agriculture - Chinampas

Sustainable and traditional practices



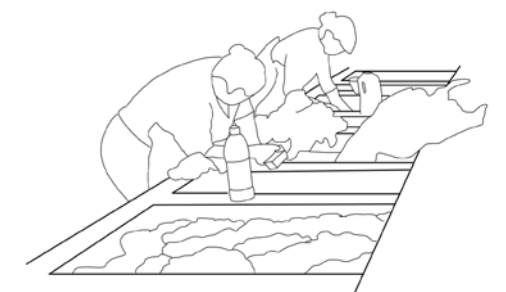
Potable water

Water scarcity



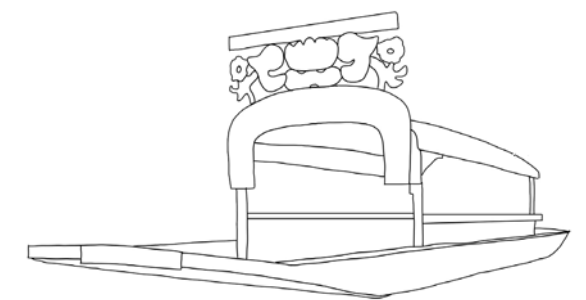
Public Laundry

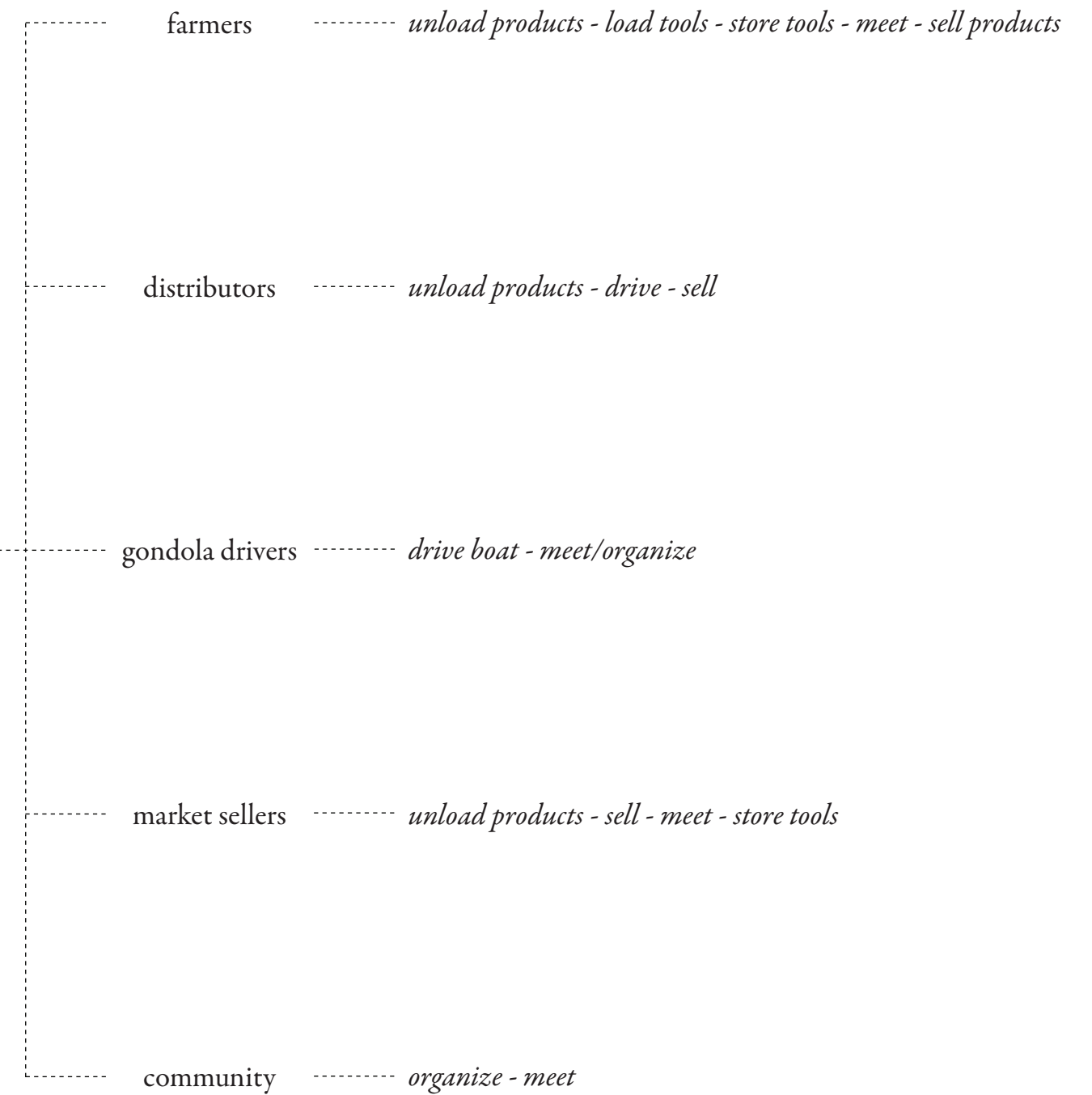
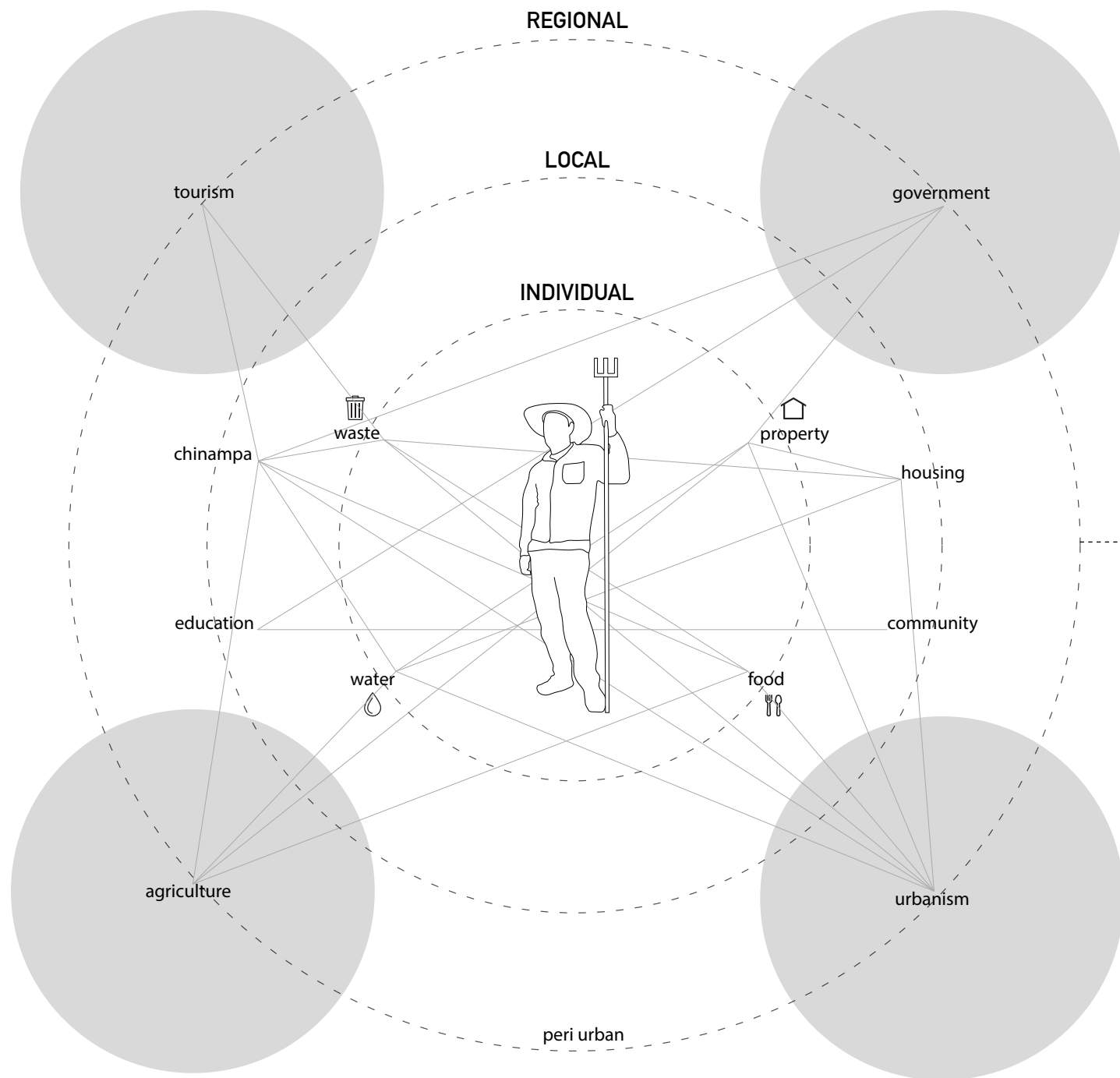
Community shared resources

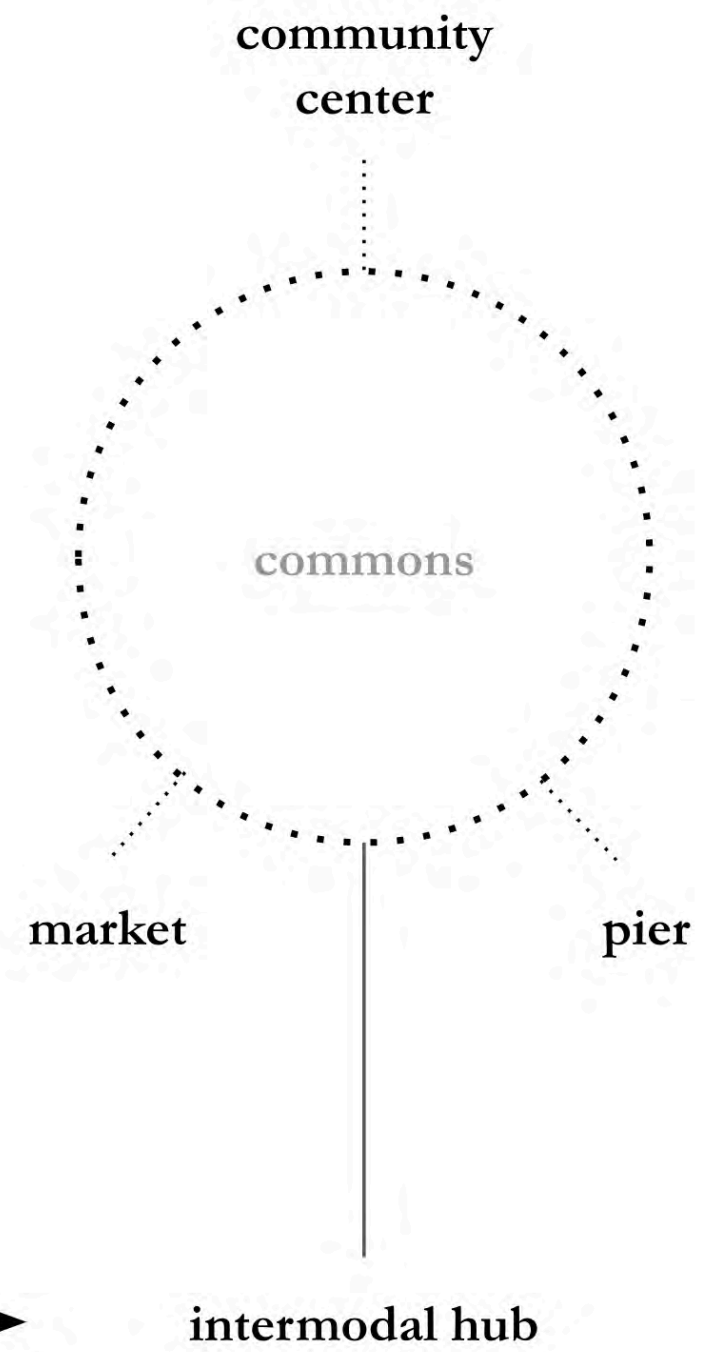
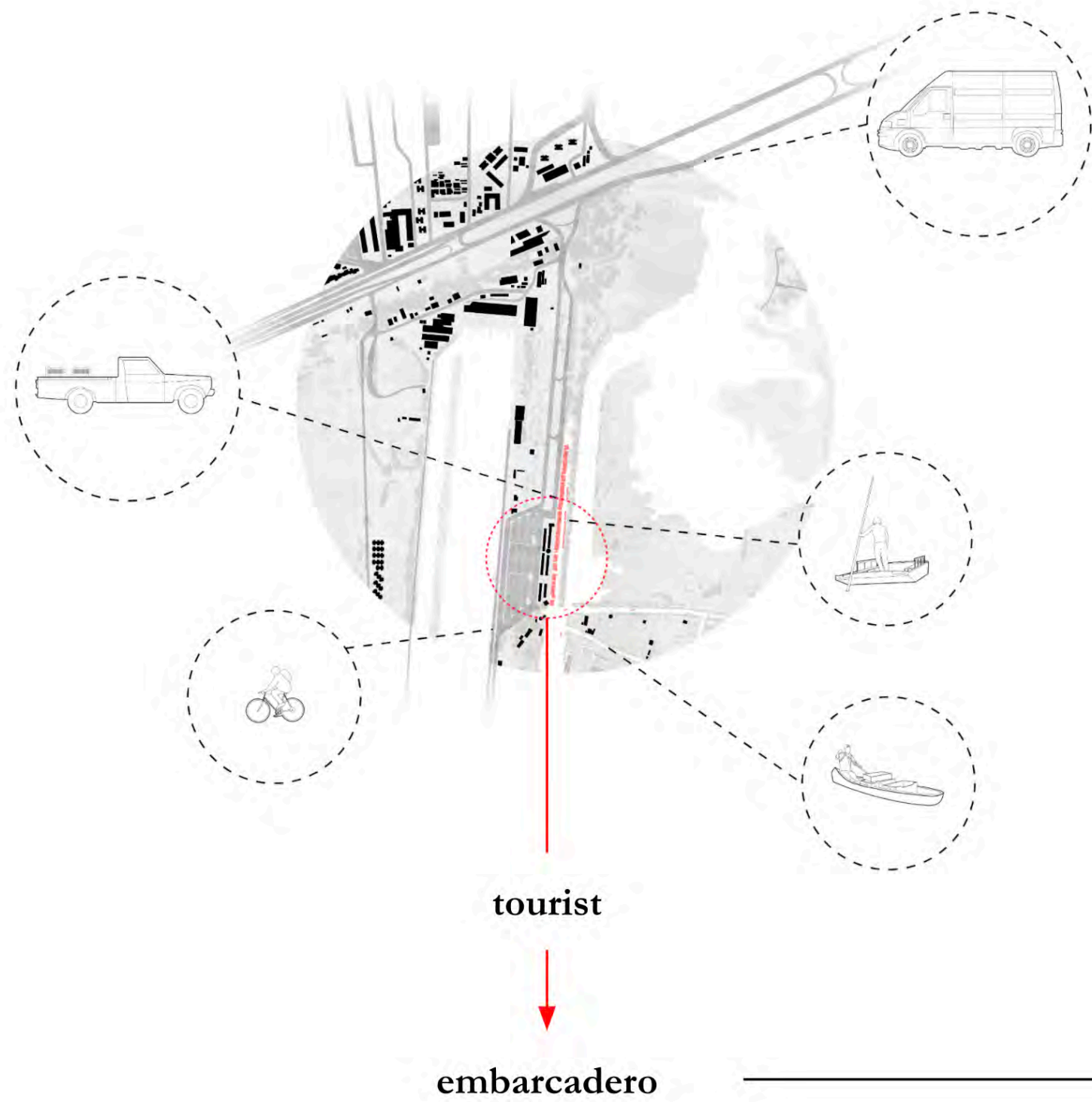


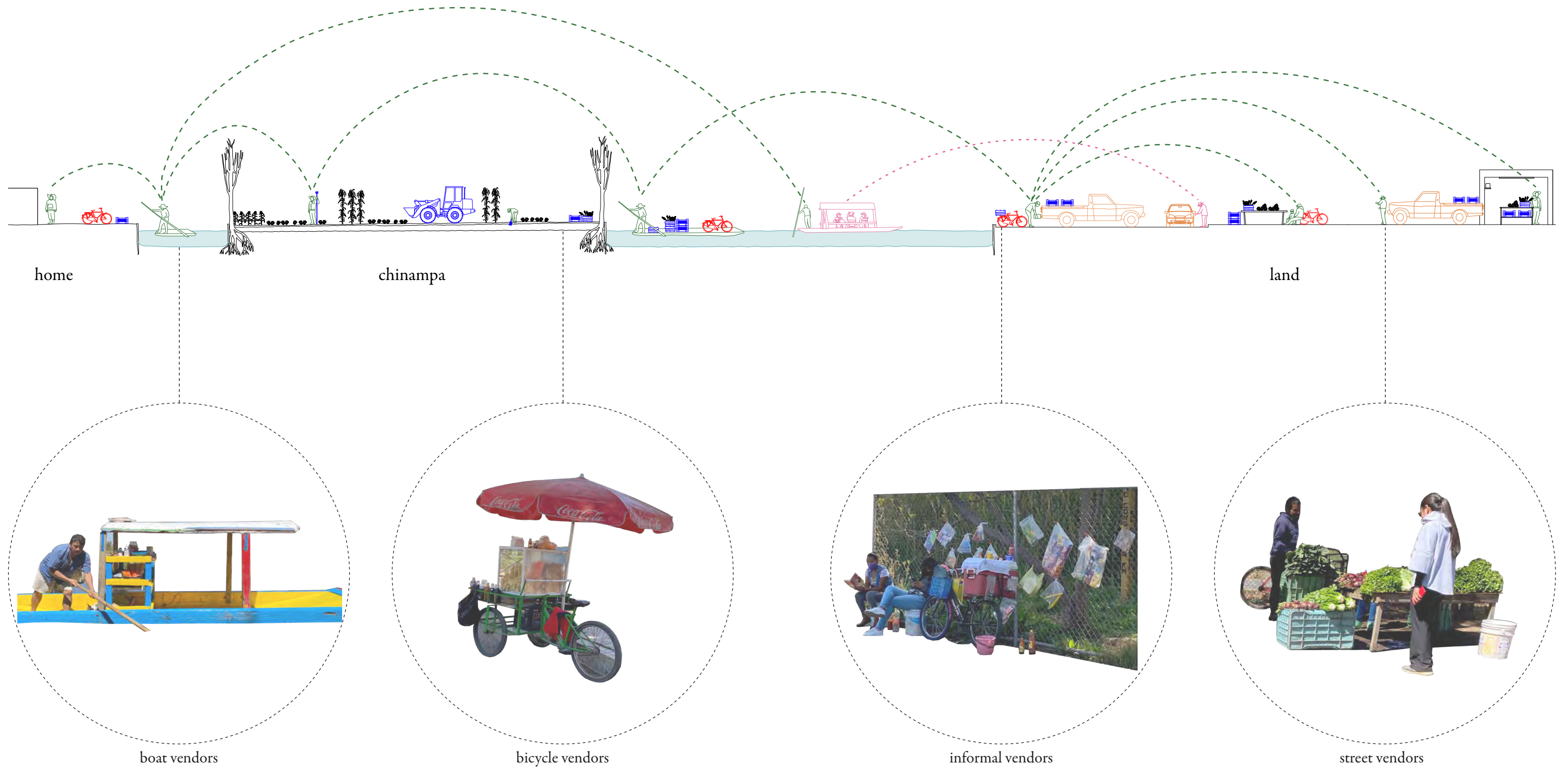
Turism - Trajineras

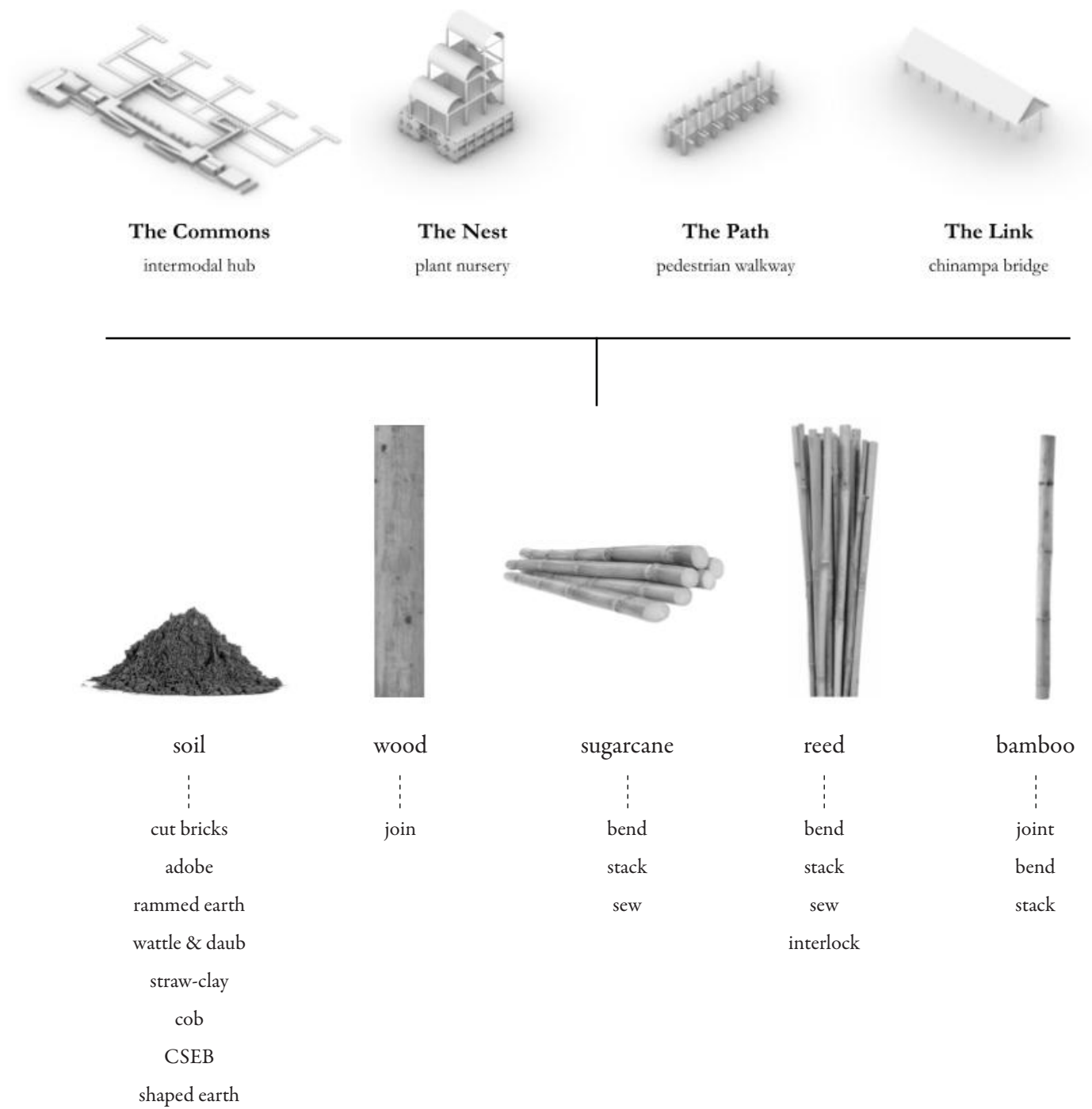
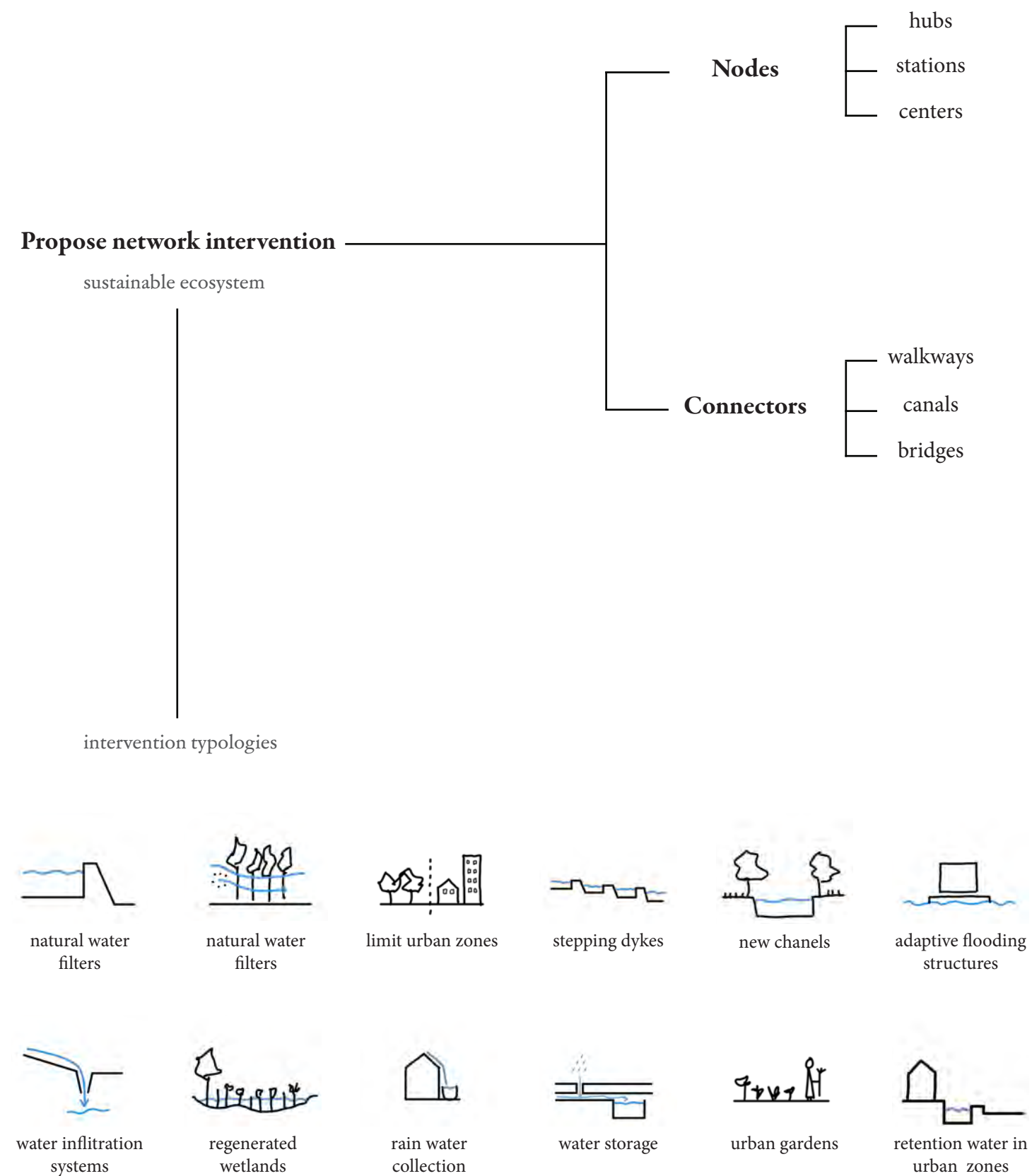
Tradition and economy

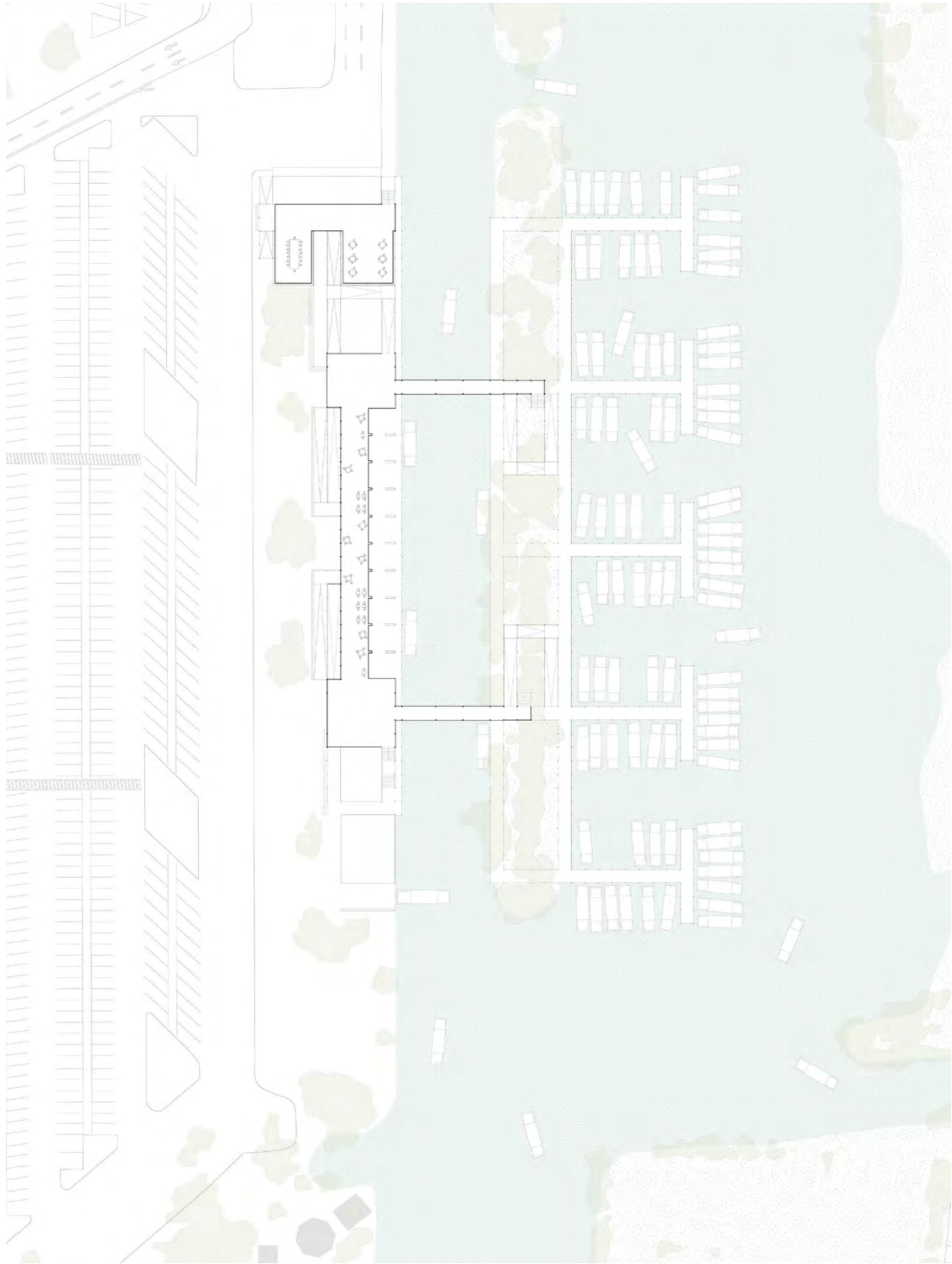
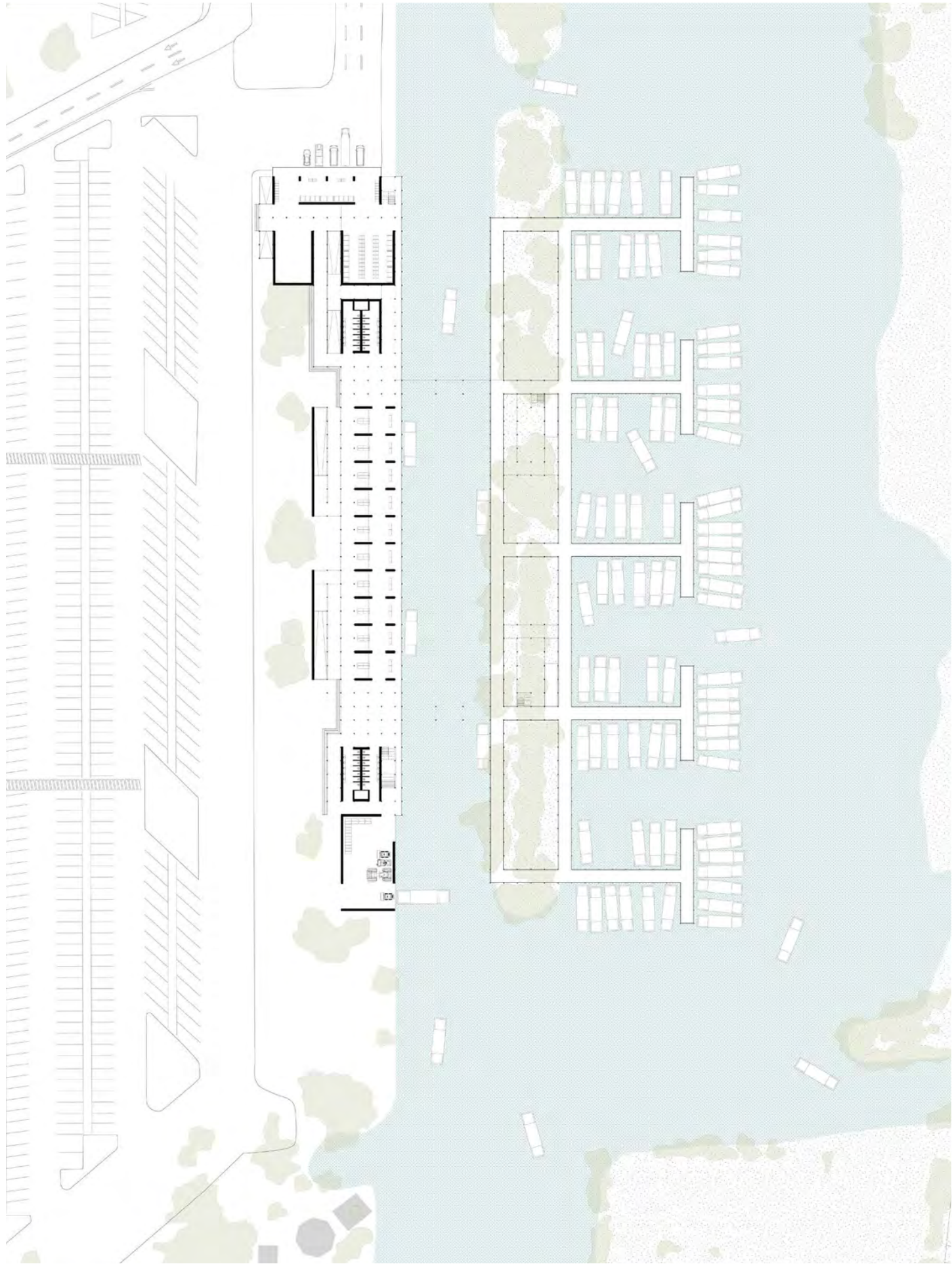


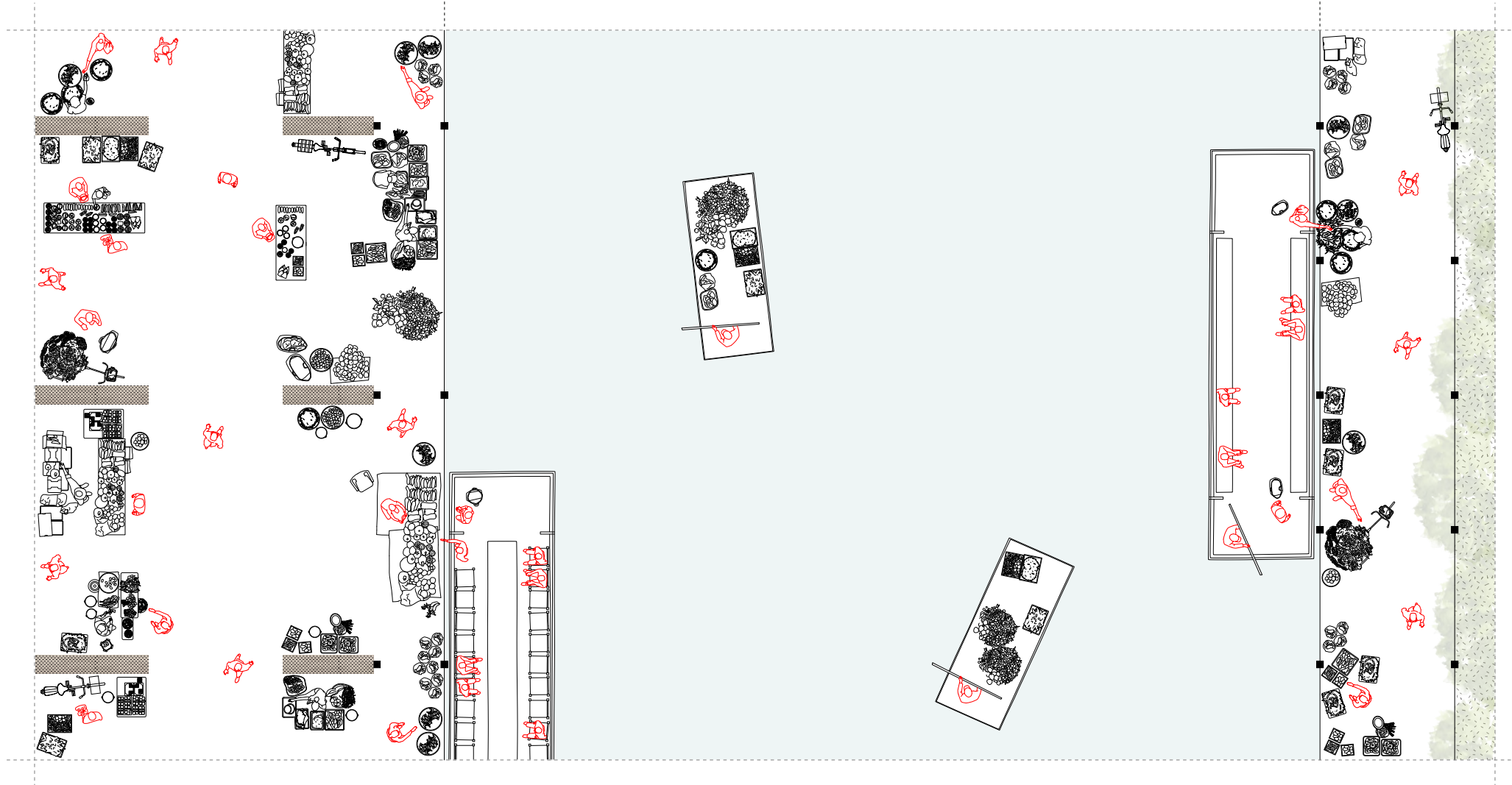


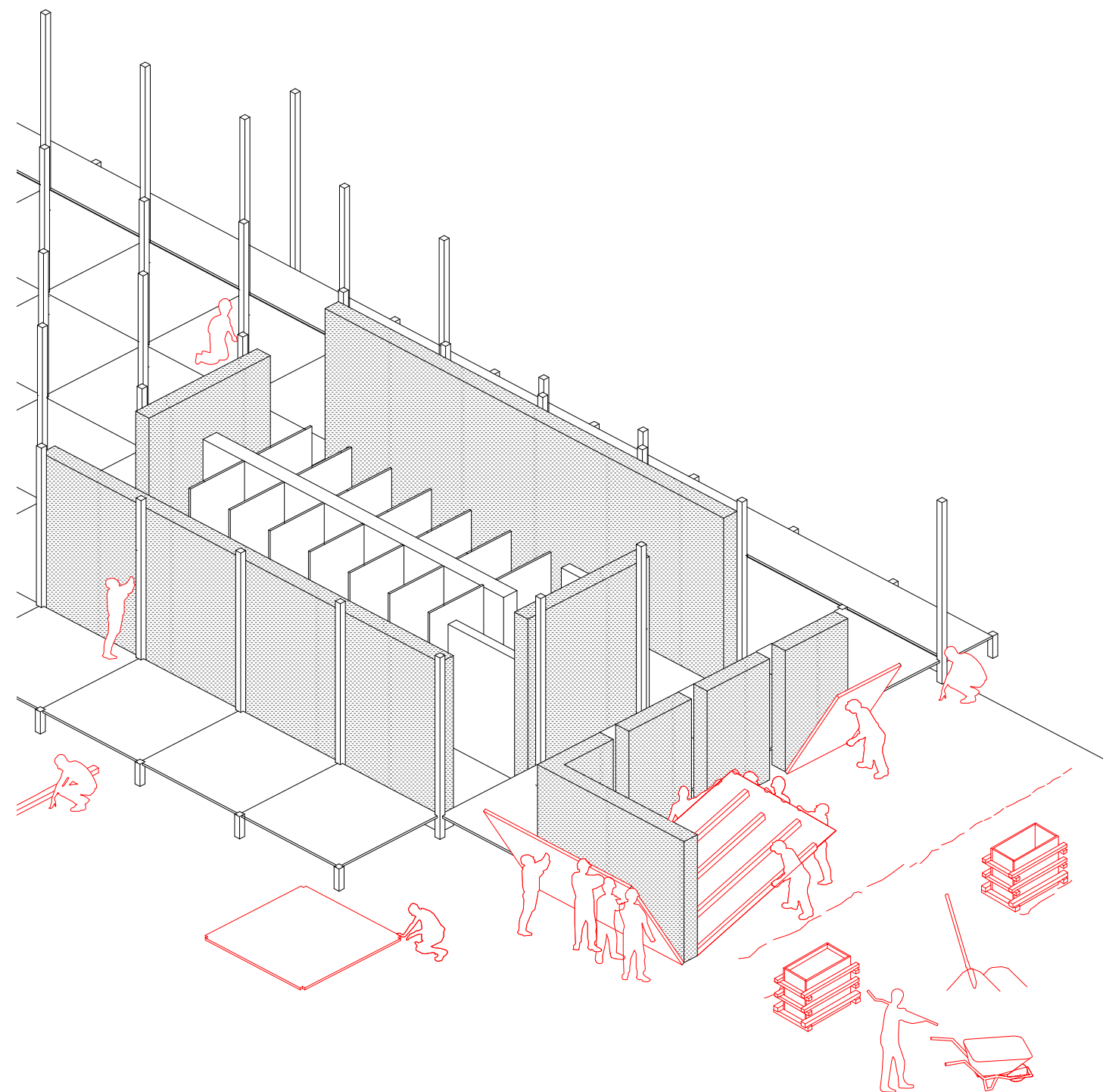
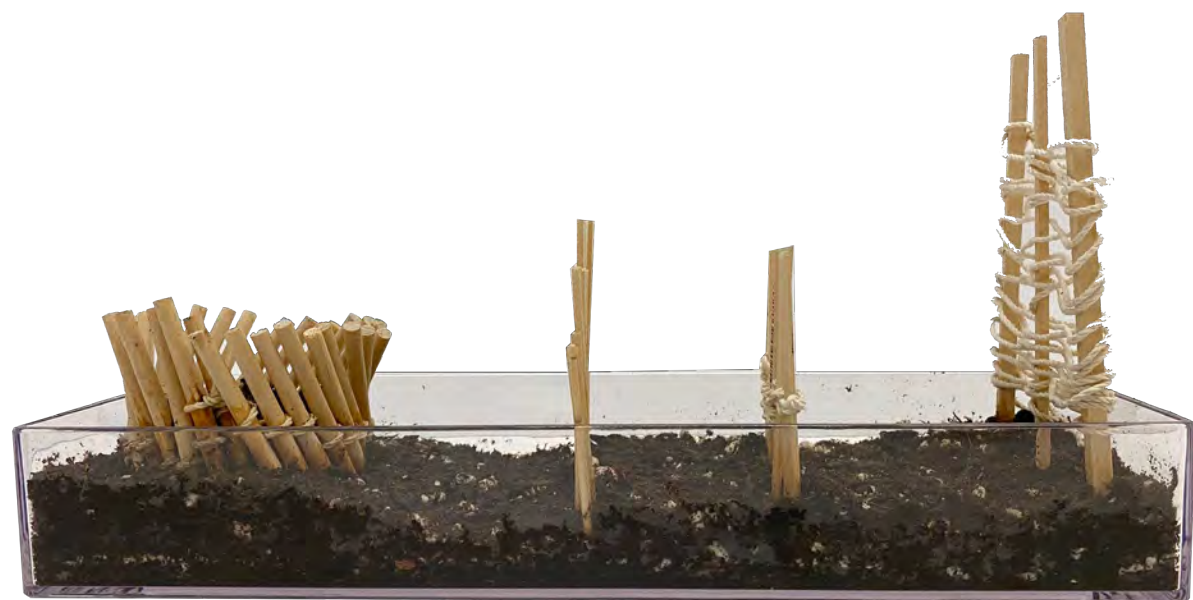
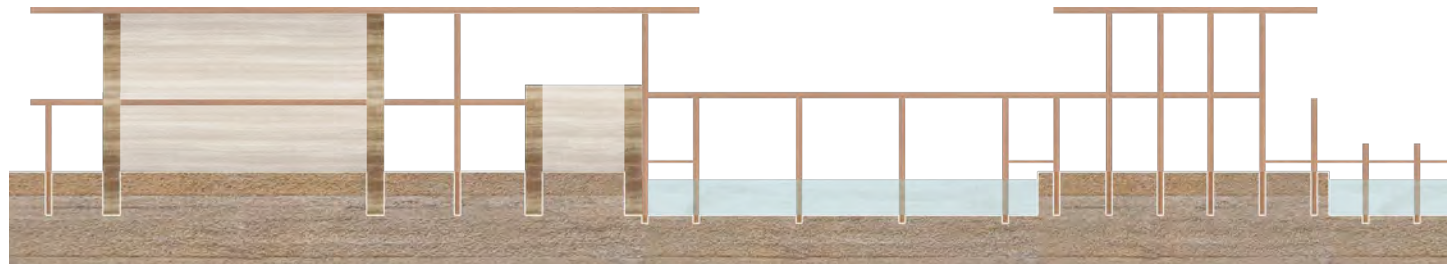




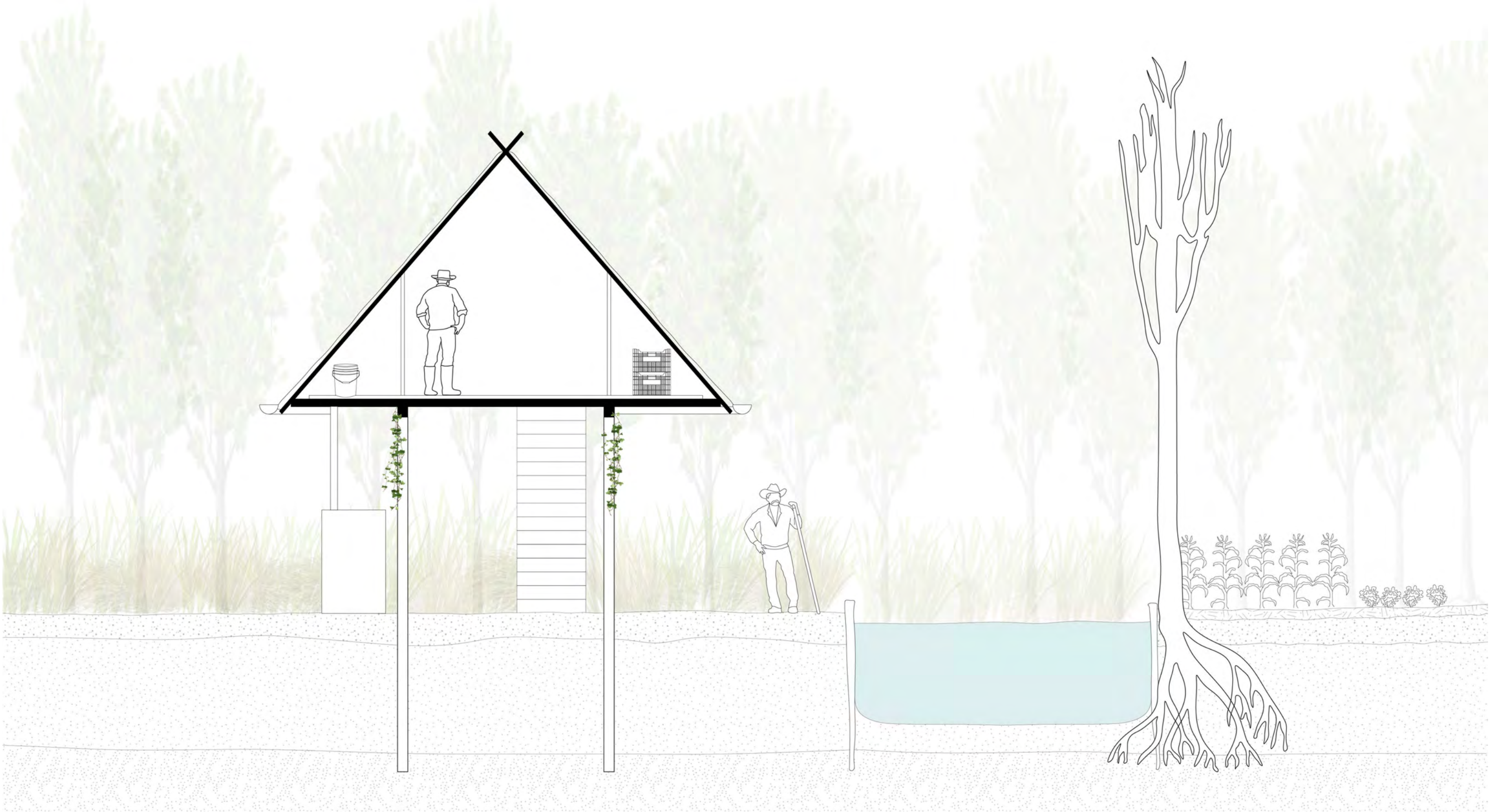








Multi-scalar interventions that fragment the water and agricultural cycles to create a communal space between urban and rural. Proposing the fostering of traditional agricultural practices while restoring and repairing the ecosystem.



A project about restoration, maintenance and access to knowledge. Seeking to provide a set of tools to re-think the relationship between urban and rural.

