Study sketches

The lessons learned from case study of Piranesi’s drawings are applied into the design of the farm institution.

Sectional studies of transitional spaces between farmers and prisoners
Diagram showing in-between spaces of the farming institution

Ground floor

First floor
Architectural elements of the Farming Institution

- bridge
- police guarding gates
- temporary housing
- fishing point
- in-between wall
- circulation
- farmer farming labs
- food distribution point
- prisoner farming labs

61
Perspective - Two groups of users at work - new farming technology using less land

Section through the farm institution and Hoa Lo prison
5.5 Intervention 2: Adaptive Livestock Factory + Greenhouses + Farmer Market

The productive landscape in the investigated peri-urban zone in Hanoi is polluted seriously by surrounding industrial activities. Due to the expansion of Hoa Lac highway to become the main connection between Hanoi center and Hoa Lac satellite city, existing industrial factories alongside Hoa Lac highway will be displaced to Hai Duong city which is 60 km away from Hanoi. Around Mieu Nha village, there is farmland reserved for urban development which remains vacant for an average period of 2 to 10 years without any agricultural activities. This is a waste of resources and it affects the livelihood of farmers because they do not have land to work on. The project starts with thinking about this time gap of 2-10 years and proposing temporary uses of agricultural production on these farmland and industrial areas. The result is a combination of an adaptive livestock factory, greenhouses and farmers markets as well as purifying contaminated water infrastructure and farmlands. The project creates a hybrid condition of food production and distribution as well as environmental contribution to future urban development.
the displaced factory re-adapted to become a breeding livestock factory

organic farming greenhouse

Sunday farmer market

fruit garden

contaminated landscape purified
Floor plan

Existing polluted water infrastructure
Perspective - contaminated landscape is purified and maintained by local farmers

Section through the livestock factory and the purified landscape
5.6 Intervention 3: Agricultural Village Museum + Village Market

The Mieu Nha village has a central village market where people buy food and exchange agricultural products. The village market is always special for local people because it is the public domain where we can see very clearly the local culture and a sense of community. It creates an opportunity to create an agricultural museum to educate the public about the history of agriculture and new urban farming technologies which use less resources and increase productivity while local people and tourists can have access to local food and exchange of farming products. This is also a cross-programming intervention into the existing fabric of the village. The museum can link its activities with other surrounding educational institutions such as the local primary school and universities. It helps to attract people outside into the village and raise public awareness about the importance of agriculture in the region.
Diagram showing the agricultural museum could become part of an educational network on agriculture and food production.
Axonometric view of the agricultural museum which has the first two floors for agricultural exhibitions and the roof top for the organic farming laboratory.
Perspective - Village market is located next to the agricultural museum, with easy access to education and information on new farming technology

Section through the agricultural museum and village market
5.7 Reflection

In the second project, the research focused on the Hanoi peri-urban zone through the theme of farms as workplaces. The expansion of Hanoi due to urbanisation and industrialisation process has resulted in the loss of vast agricultural lands affecting the livelihood of existing inhabitants and threatening the food supply for the city and country’s food exportation. The farming industry has been forced to transform to deal with changes such as insufficient productive lands and environmental contamination. The notion of boundary and peri-urban interface are in constant redefinition. The result of the second project is a network of speculative projects providing laboratories which offer transitional strategies for farming adaptation in production land waiting for urban and industrial development. The intervention could be temporary as in the case of adaptive breeding livestock factory or more permanent in the case of the farming institution and agricultural museum. The design strategies of time phasing, edge intervention and cross-programming as well as network are explored further in Hanoi context and create a range of new typologies. The research in Hanoi contributes to the understanding of Hanoi peri-urban landscape and creates new opportunities for urban architectural innovation.