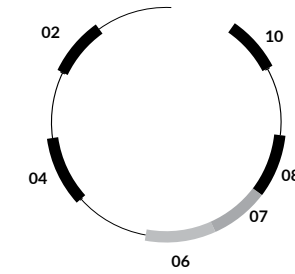




Figure 4.65 Waiting agricultural land



+ - ●●

32 WAITING AGRICULTURAL LAND

[m + f]

landowners, farmers, builders, government employees

Lack of infrastructure and rigid taxation hinders farmers from cultivating their land. Remaining agricultural land is therefore waiting land, in the process of being prepared for construction or left until ownership problems are resolved and the means become available to the owners. Owners intentionally transform their waiting agricultural land into urban voids by the means of destroying the soil and using the land as a garbage dump in order to tweak the law and be able to proceed with construction. Waiting agricultural land is often surrounded by urban voids, which were former agricultural land that did not survive.

larger patterns

the big city is a magnet, shortage in resources, laissez faire policy, loss of agricultural land, don't blame the farmer.

smaller patterns

agricultural land as a garbage farm, planting steel re-bars, construction on agricultural land, shared walls, cantilevered building typology, incompleteness, streets follow irrigation grid, street width, construction networks.

FORCES

- 02 self-generated interventions
- 04 temporal activities
- 06 economic forces
- 07 response to immediate needs
- 08 value engineering
- 10 ownership

[m + f]

32

M P S
A G O

POTENTIAL / PROBLEM

"A particular class of rituals and ceremonies has arisen around certain buildings and productive operations in which the technical act of building or production is integrated with the symbolic and social dimension of the culture. It is this class of ritual which appears to link and address acts of building and landscaping to the social and cultural life of the community"⁶⁷⁷ - Abdelhalim I. Abdelhalim

Therefore:

Transform passive waiting land into a communal hub that provides the residents with economic, socio-cultural, farming, energy-generating and educational activities. Re-build a farming community that serves as catalyst and prototype for other waiting plots. This is an alternative income-generating use of land for the owner that should substitute residential construction.



97,292 m²
MAP: WAITING AGRICULTURAL LAND

Figure 4.66 Occurrence of waiting agricultural land in Ard El Lewa



Figure 4.67 Waiting agricultural land at the formal [in]formal border

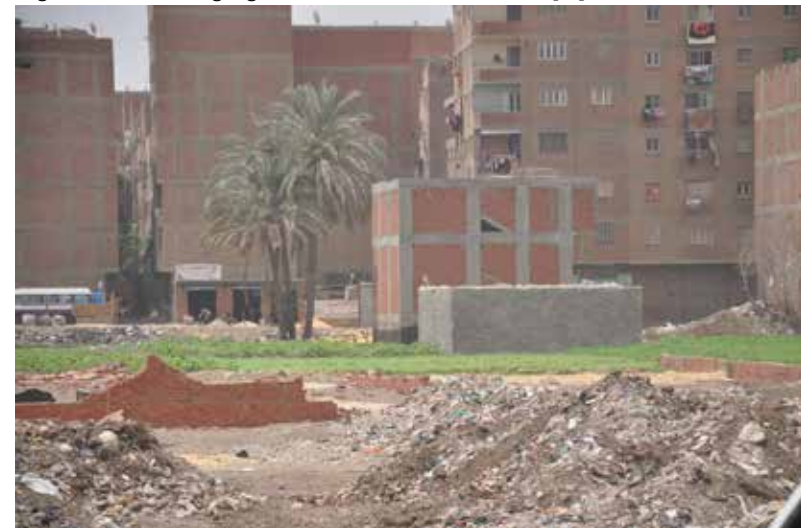


Figure 4.68 Preparing waiting agricultural land for construction



Figure 4.69 Land subdivision

DESIGN OBJECTIVES + OPTIMIZATION LAYER

..... Forces
- - - - - Design Objectives

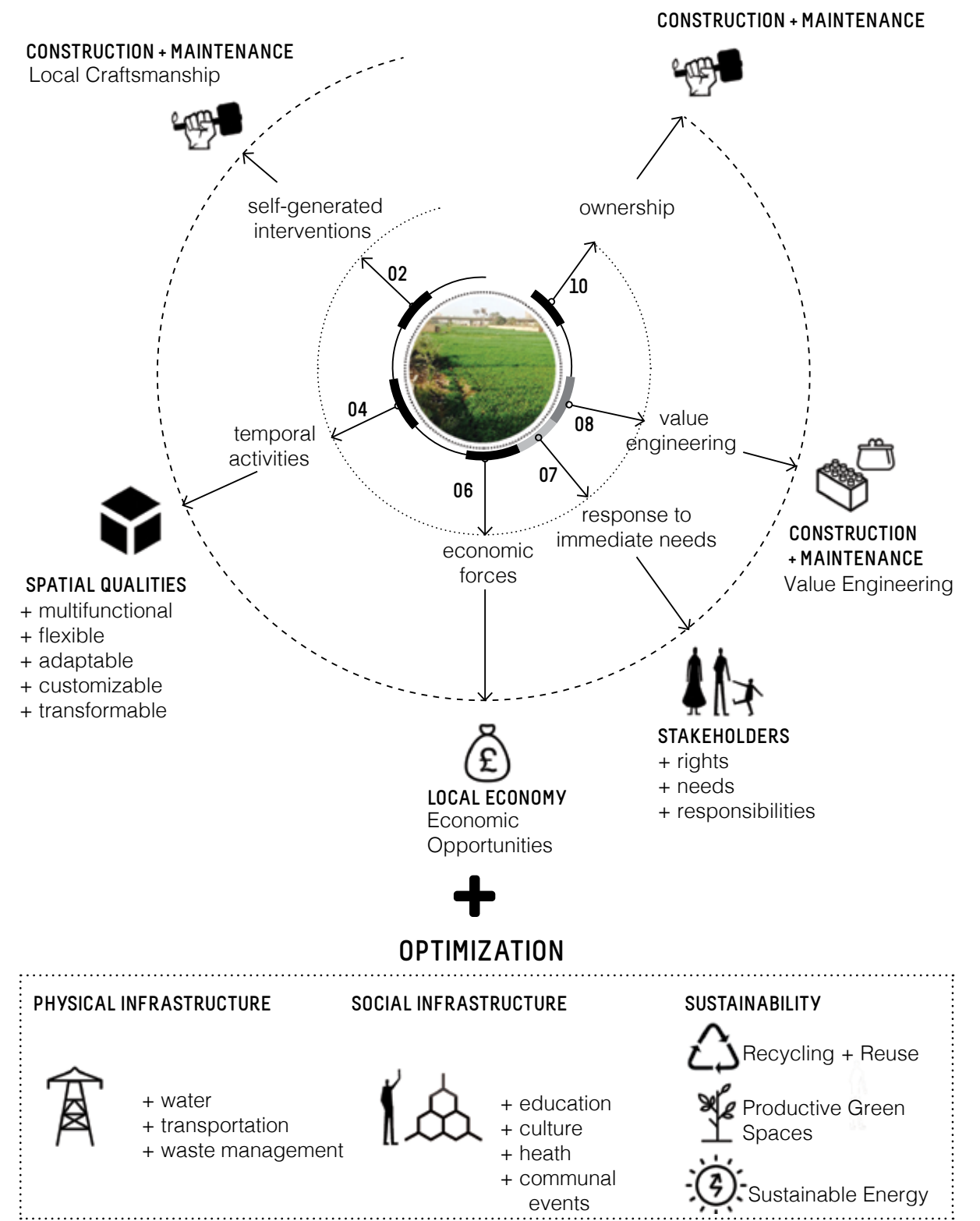


Figure 4.70 Pattern-Forces-Design Objectives Chart for waiting agricultural land

PROPOSED OPTIMIZATION / NEW DESIGN



SUSTAINABLE ENERGY
12 solar panels - Eco farms

PHYSICAL + SOCIAL INFRASTRUCTURE (COMMUNITY WALL)



05 waste management
06 classrooms kindergarten
07 communal dining cultural cafe
08 micro-economies



STRUCTURE
04 frame structure + operable partitions
09 open web steel joist
10 corrugated sheets
11 light-weight concrete slab + tensile shading



[+] GREEN SPACES
01 community farming communal park + flower garden
03 green walkways rooftop urban farms + hydroponic fences + pulley system
14

PARCELIZATION
01 [+] green spaces
03 green walkway
15 gathering space
16 pedestrian walkway
17 vending space
18 toktok lane for waste delivery + future informal sprawl

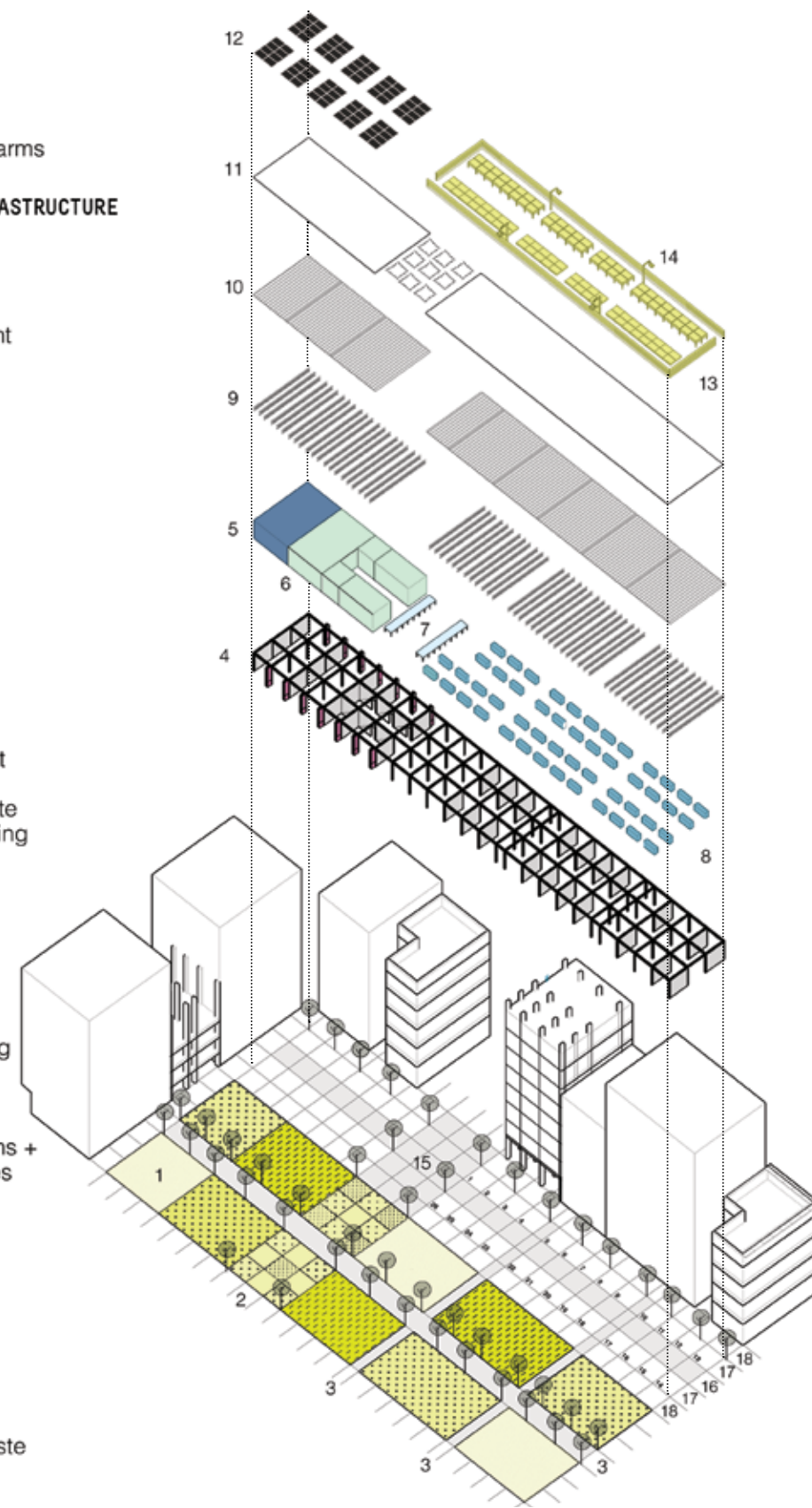
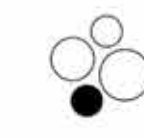
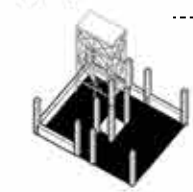


Figure 4.71 Optimized waiting agricultural land

[RE]APPROPRIATE + [RE]USE



PARCELIZATION
Module 3.2 x 3.2 m

COMMUNITY FARMING

Parcels and rooftop urban farms are rented by neighborhood residents (mainly women) as an additional source of income. Products are sold in the market or to the communal dining cafe.

LEGALIZE + SECURE

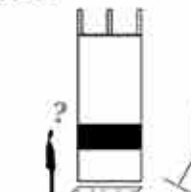


Figure 4.72 Improvitecture tools and operation of optimized waiting agricultural land

SUSTAINABLE ENERGY

Solar panels provide energy for waste management plant, classrooms and kindergarten

GREYWATER REUSE

Greywater is collected from households, recycled on site and reused for irrigation of the community park. Water is infiltrated into the ground to avoid contact with the plants,

CLASSROOMS

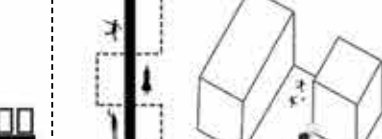
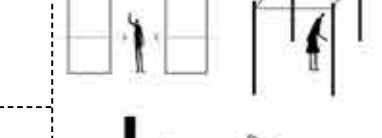
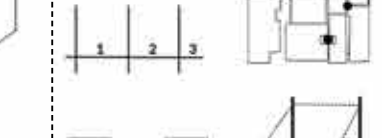
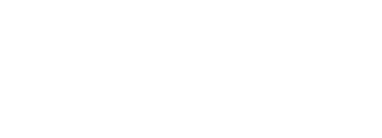
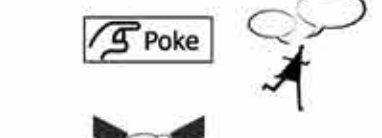
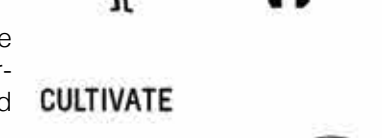
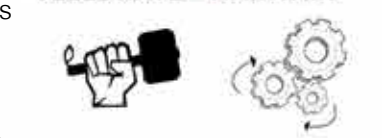
co-op students and volunteers educate community members on farming, help children with school work and teach adults skills.

COMMUNAL DINNING

Day: Communal Dining
Operated by women and provides dining and socializing opportunities for vendors, elderly and neighbourhood residents

Night: Cultural cafe
Operated by men (street cafe owners) and acts as a gathering space for local artists and neighborhood residents.

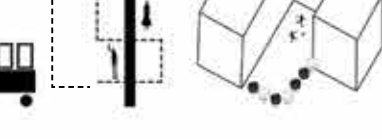
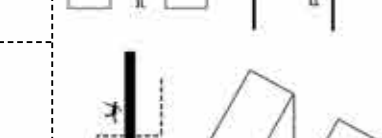
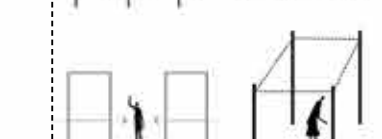
CELEBRATE + MAINTAIN



WASTE MANAGEMENT
organic waste
recyclable waste

Toktoks collect waste from vendors and buildings and bring it to the waste management plant on site

[RE]APPROPRIATE + [RE]USE



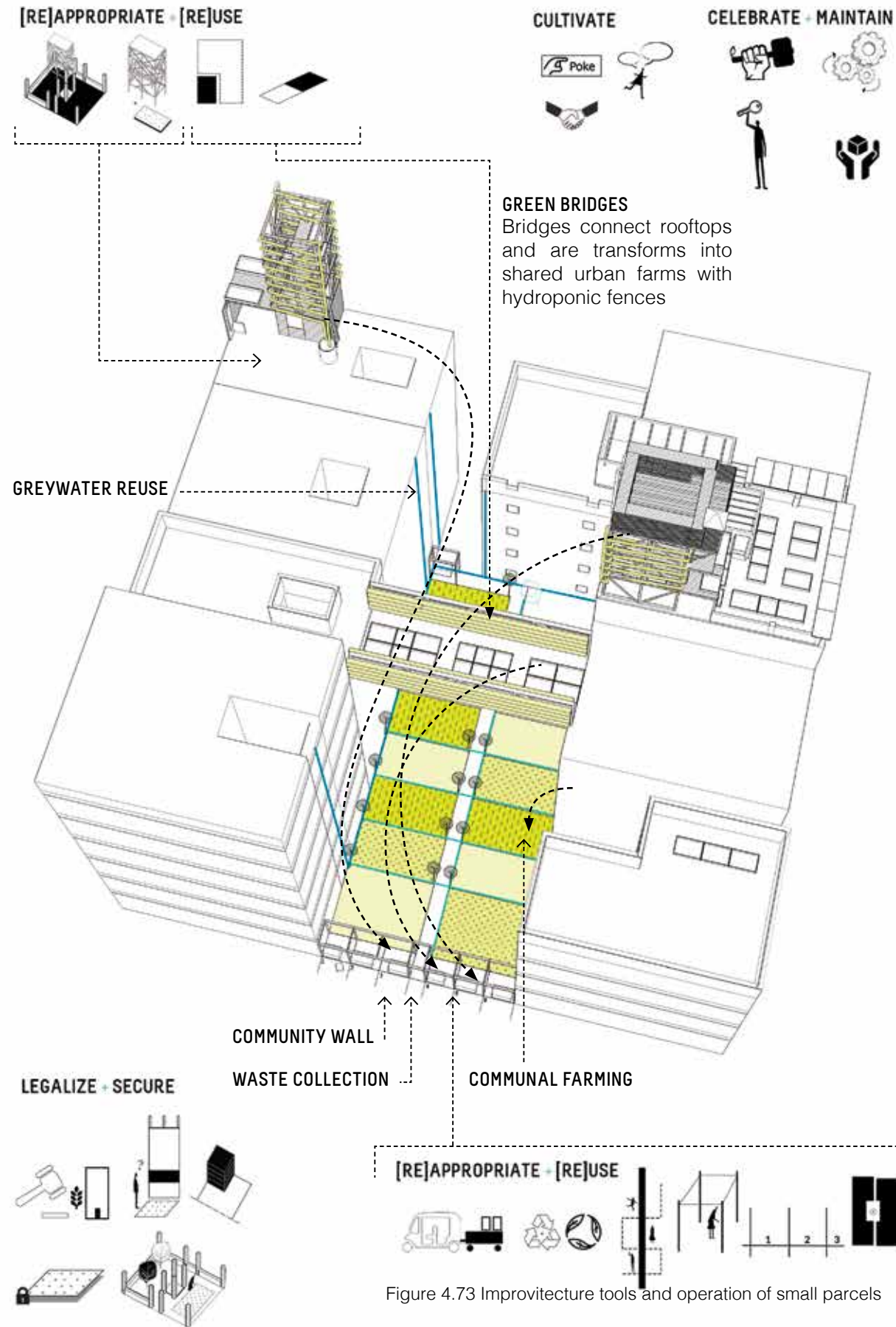


Figure 4.73 Improvitecture tools and operation of small parcels

IMPROVITECTURE TOOLS

LEGALIZE + SECURE

1.2
negotiate ownership + tenure right

*landowners
agents of change committee
government officials
farmers*

1.3
preserve existing vacant land

*government officials
agents of change committee
landowners*

1.4
secure an open space ratio

*builders
landowners
agents of change committee*

*landowners
agents of change committee
government officials
farmers*

*government officials
agents of change committee
landowners*

*builders
landowners
agents of change committee*

1.5
green roofs by law

*government officials
landowners
agents of change committee
building residents*

1.7
shared but separate electric meter

*government officials
landowners
agents of change committee
tenants: vendors, etc.*

1.5
green roofs by law

*government officials
landowners
agents of change committee
building residents*

1.7
shared but separate electric meter

*government officials
landowners
agents of change committee
tenants: vendors, etc.*

CULTIVATE

2.1
cultivate curiosity in the young first

*designers
agents of change committee
young adults + children*

2.2
reclaim vacant spaces with neighbours' needs

*designers
landowners
residents
tenants: vendors, etc.
agents of change committee*

2.3
cultivate partnerships first

*designers
landowners
agents of change committee
tenants: vendors, etc.*

*designers
agents of change committee
young adults + children*

*designers
landowners
residents
tenants: vendors, etc.
agents of change committee*

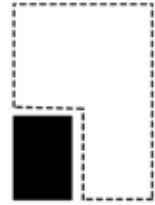
*designers
landowners
agents of change committee
tenants: vendors, etc.*

[RE]APPROPRIATE + [RE]USE



3.6
swap properties for public interest

*government officials
agents of change committee
landowners*



3.14
negotiate air rights

*building owners
land owners
agents of change committee
designers*



3.15
create [+] urban pockets

*designers
landowners
agents of change committee*



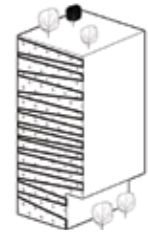
3.31
eco farms on rooftops

*landowners
agents of change committee
government officials
funding agencies
designers*



3.32
toktok for waste collection

*landowners
tenants: vendors, etc.
agents of change committee
toktok drivers
waste management*



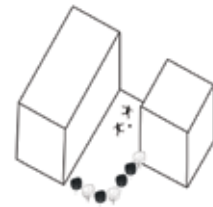
3.20
green walls + green roof + green streets

*designers
landowners
building owners
housewives
residents
builders*



3.22
boundaries are community walls

*designers
landowners
farmers
vendors
street cafe owners
housewives*



3.23
green edible fences

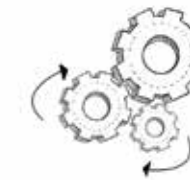
*designers
landowners
agents of change committee
farmers*

CELEBRATE + MAINTAIN



4.1
handmade increases ownership + collaboration

*designers
agents of change committee
landowners
local craftsmen
tenants: vendors, etc.
residents*



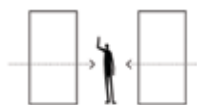
4.2
building ceremony

*agents of change committee
designers
land owners
tenants: vendors, street cafe owners, etc.
residents
farmers
artists
funding agencies*



4.3
own to protect

*landowners
tenants: vendors, etc.
farmers*



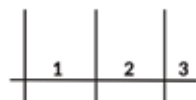
3.26
introverted market

*designers
landowners
agents of change committee*



3.28
reduce, reuse, recycle

*landowners
agents of change committee
waste management
residents
tenants: vendors + farmers
toktok drivers
designers*



3.30
reclaim your territory by numbers

*landowners
tenants: vendors + farmers
mobile vendors
designers*



4.4
micro-economies as a tool for social responsibility

*landowners
farmers
agents of change committee
unemployed residents
toktok drivers*