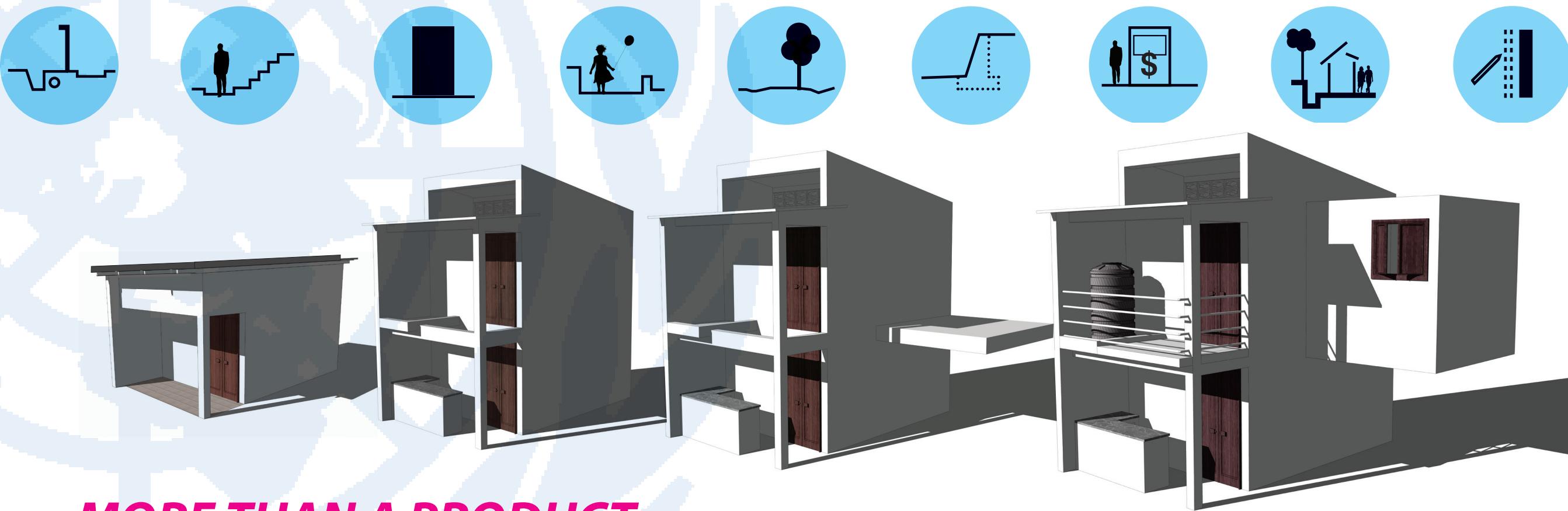




UNOPS :: *Housing + Habitat*



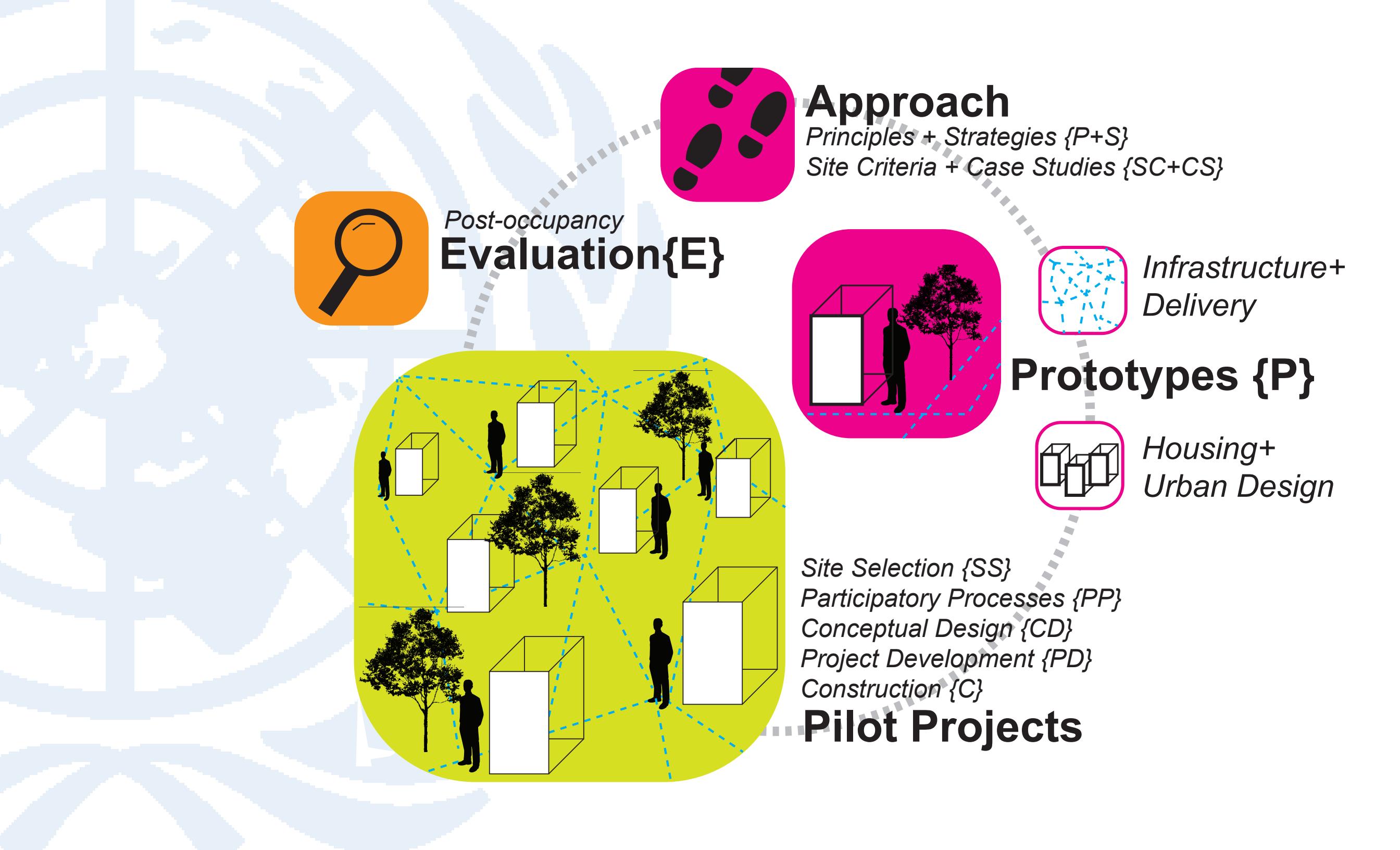
**MORE THAN A PRODUCT ::
AN INTEGRAL + SUSTAINABLE PROCESS**

HOUSING AS PROCESS NOT PRODUCT

Housing cannot be conceived as a sole product or shelter, but needs to be emphasized **as a process** involving multiple dynamics including **infrastructure, basic services, employment opportunities, mobility**, as well as other **urban amenities** such as public equipment (education, health, etc.) and public spaces.

HOUSING AS PROCESS NOT PRODUCT

} } Stepping away from the simple construction of a product, UNOPS' approach considers the construction of housing developments as an opportunity to **generate productive, self-sustainable environments and communities.**



APPROACH ::

} } The approach developed by UNOPS acknowledges
**'place,' environmental impacts, community values and
needs, as well as innovative technologies,
and interdisciplinary and participatory processes.**

PHYSICAL + SOCIO-CULTURAL + FINANCIAL + ENVIRONMENTAL

APPROACH ::

- [THINK] **INTEGRAL >> HARD + SOFT COMPONENTS**

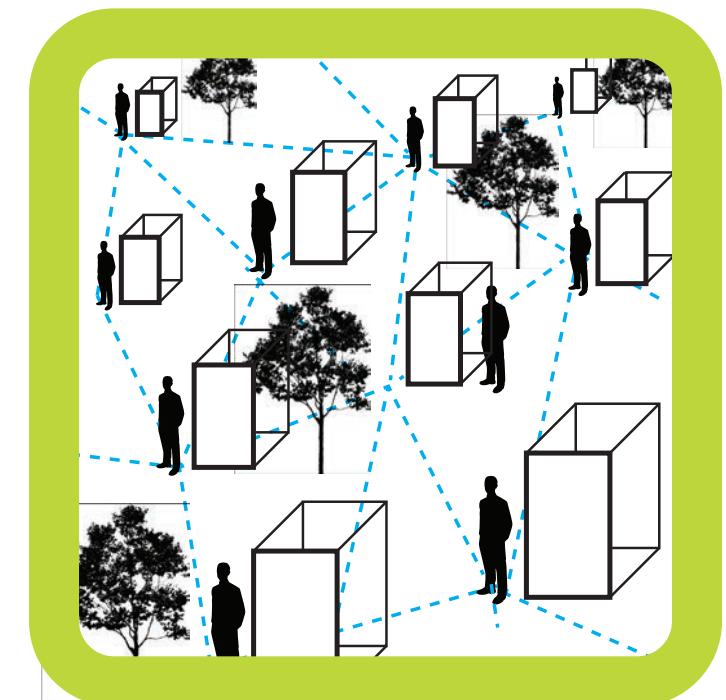
[DESIGN] PLACE

[RESPECT] ECOLOGY

[BRING] INNOVATION

[SEEK] APPROPRIATION

[CREATE] SUSTAINABILITY



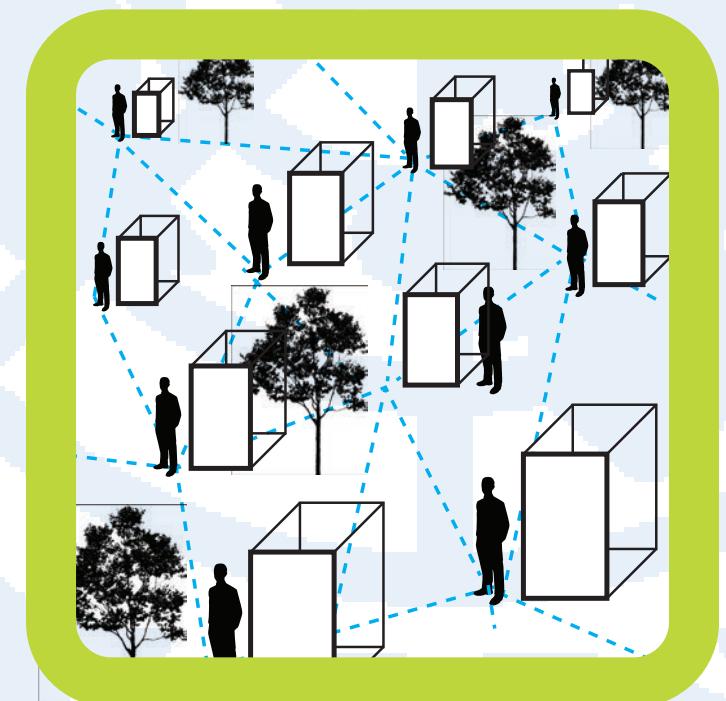


16/6



SEIZE QUARTIERS / SIX CAMPUS

-  **Assainissement + Services de base**
-  **Accès + Mobilité**
-  **Equipement publiques**
-  **Espaces Publics**
-  **Rehabilitation de l'environnement + Greening**
-  **Mitigation du risque**
-  **Emploi + Développement économique**
-  **Logement**
-  **Embellissements**
-  **Communication**
-  **Foncier**



APPROACH ::

[THINK] **INTEGRAL**

- [DESIGN] **PLACE**
 - >> **RESPOND TO THE CONTEXT**
(climate, topography, soil conditions)
 - >> **ACCESS + APPROPRIATENESS OF MATERIALS**
 - >> **ATTENTION TO SCALE**
 - >> **OPTIMIZE LOCAL RESSOURCES + SKILLS**

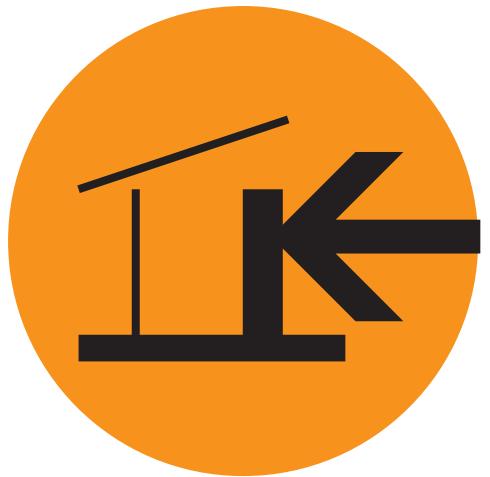
[RESPECT] **ECOLOGY**

[BRING] **INNOVATION**

[SEAK] **APPROPRIATION**

[CREATE] **SUSTAINABILITY**



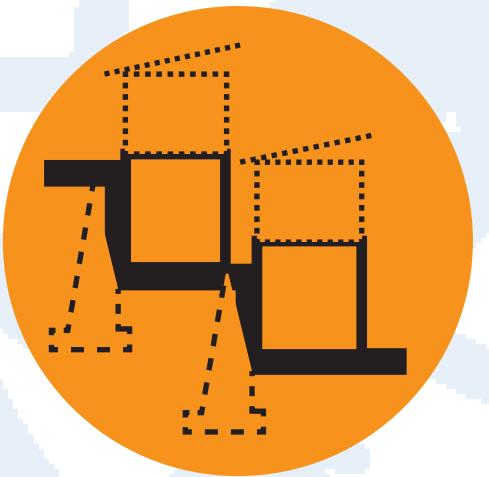


REhabilitation

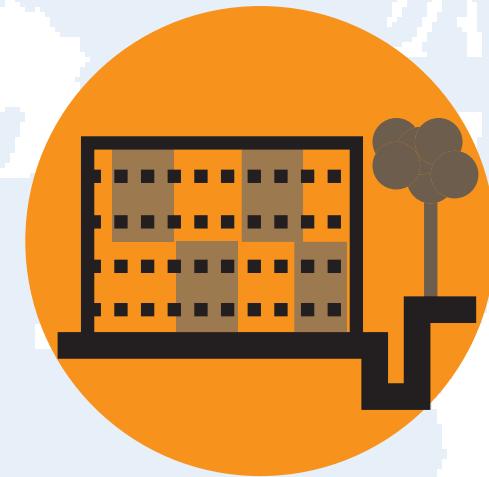


**REconstruction
[PUNCTUAL]**

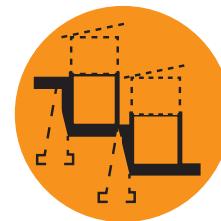
MODELS ::



**REconstruction
[COLLECTIVE]**



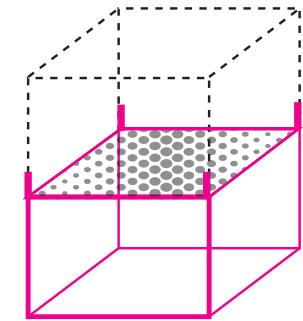
**Midrise/
Multifamily**



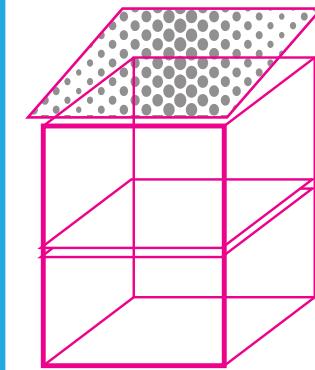
modules :: singuliers

modules :: systèmes partagés

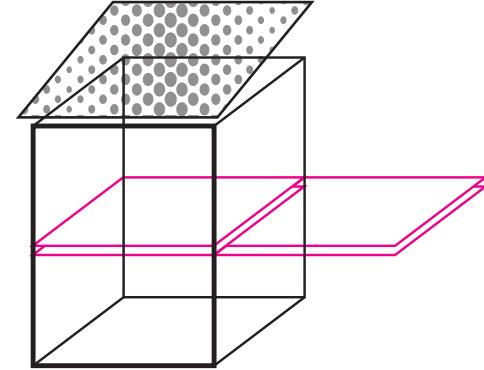
1.



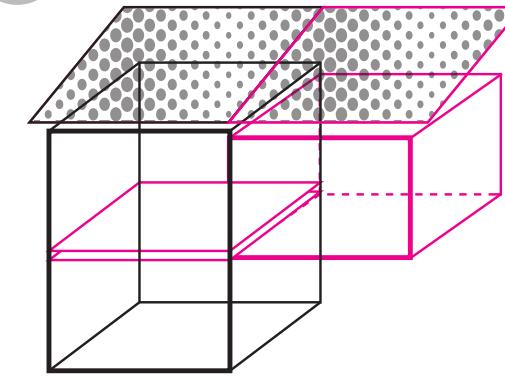
2.



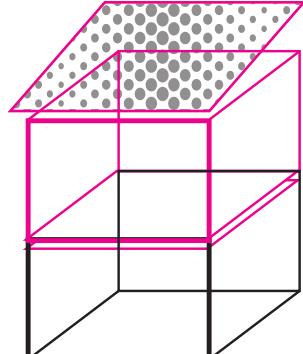
3.



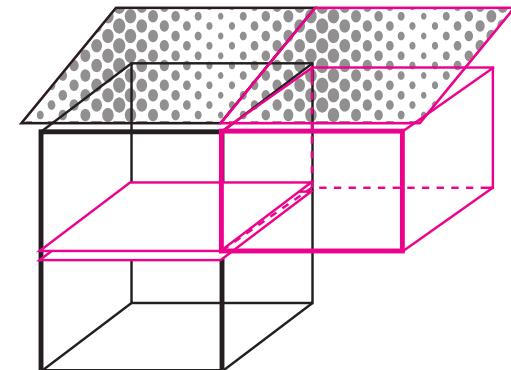
4.



. evolution



. evolution



**MODULES +
INCREMENTAL DESIGN**



**MODULES +
INCREMENTAL DESIGN**

APPROACH ::

[THINK] **INTEGRAL**

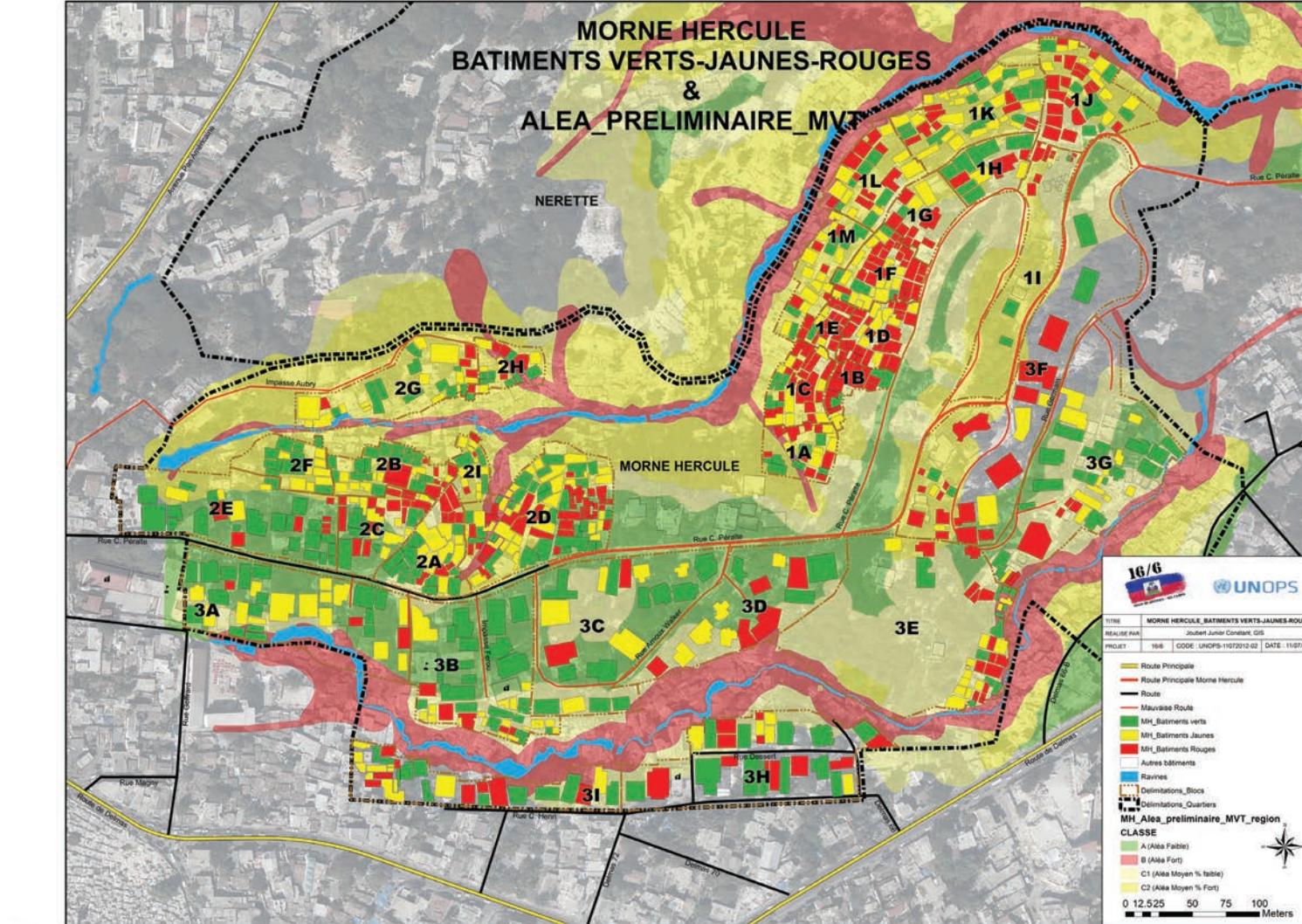
[DESIGN] **PLACE**

● [RESPECT] **ECOLOGY** >> CREATING MINIMAL ENVIRONMENTAL IMPACTS
>> OPTIMIZING NATURAL AND LOCAL RESOURCES
>> RISK MITIGATION + PREVENTION

[BRING] **INNOVATION**

[SEEK] **APPROPRIATION**

[CREATE] **SUSTAINABILITY**



RISK ASSESSMENT + SITE / BENEFICIARY SELECTION

Code	Date	NomProprietaire	PrenomProprietaire	PhoneProprietaire	NIFCIN	Departement	Commune
mhr-01a-0002	26-Jan-12	PIERRE	YANG		34179985	Ouest	Petion-Ville
Departement	Commune	MaisonNumber	AdresseBene	Zone	ZoneNum	Ilot	ZoneStatut
Ouest	Petion-Ville		24	Imp Flamboyant	Morne Hercule	1 a	
GPS	StatutBene	PersonneNumber	Camps	Tag	Niveau	Famille	Sexe
18.520662,-72.28	Proprietaire	6		1 Rouge	1	1	1
Commentaire1	C'est une maison rouge deruite et un petit shelter fabrique par le proprietaire mesure 4.40de long et 35m de large et merite ensuite un mur de soutainement au sud de cette petite maison merci						
Longueur	Largeur	Surface	Deblayer	jours	Hauteur	Surfaceausol	
4.4	3.5						

APPROACH ::

[THINK] **INTEGRAL**

[DESIGN] **PLACE**

[RESPECT] **ECOLOGY**

- [BRING] **INNOVATION** >> **ALTERNATIVE MATERIAL**
>> **EXPERIMENT :: TECHNOLOGIES**
- [SEAK] **APPROPRIATION** >> **APPLY + ADAPT BEST PRACTICES**
[NO BLUE PRINTS]

[CREATE] **SUSTAINABILITY**



APPROACH ::

[THINK] **INTEGRAL**

[DESIGN] **PLACE**

[RESPECT] **ECOLOGY**

[BRING] **INNOVATION**

● [SEAK] **APPROPRIATION**

[CREATE] **SUSTAINABILITY**

>> **STRONG PARTICIPATORY PROCESSES**
>> **FLEXIBILITY AND EVOLUTION ADJUSTING TO GROWTH + NEW REQUIREMENTS**
>> **RESPONDING TO CULTURAL NORMS, VALUES AND NEEDS**





HABITAT



FINANCES

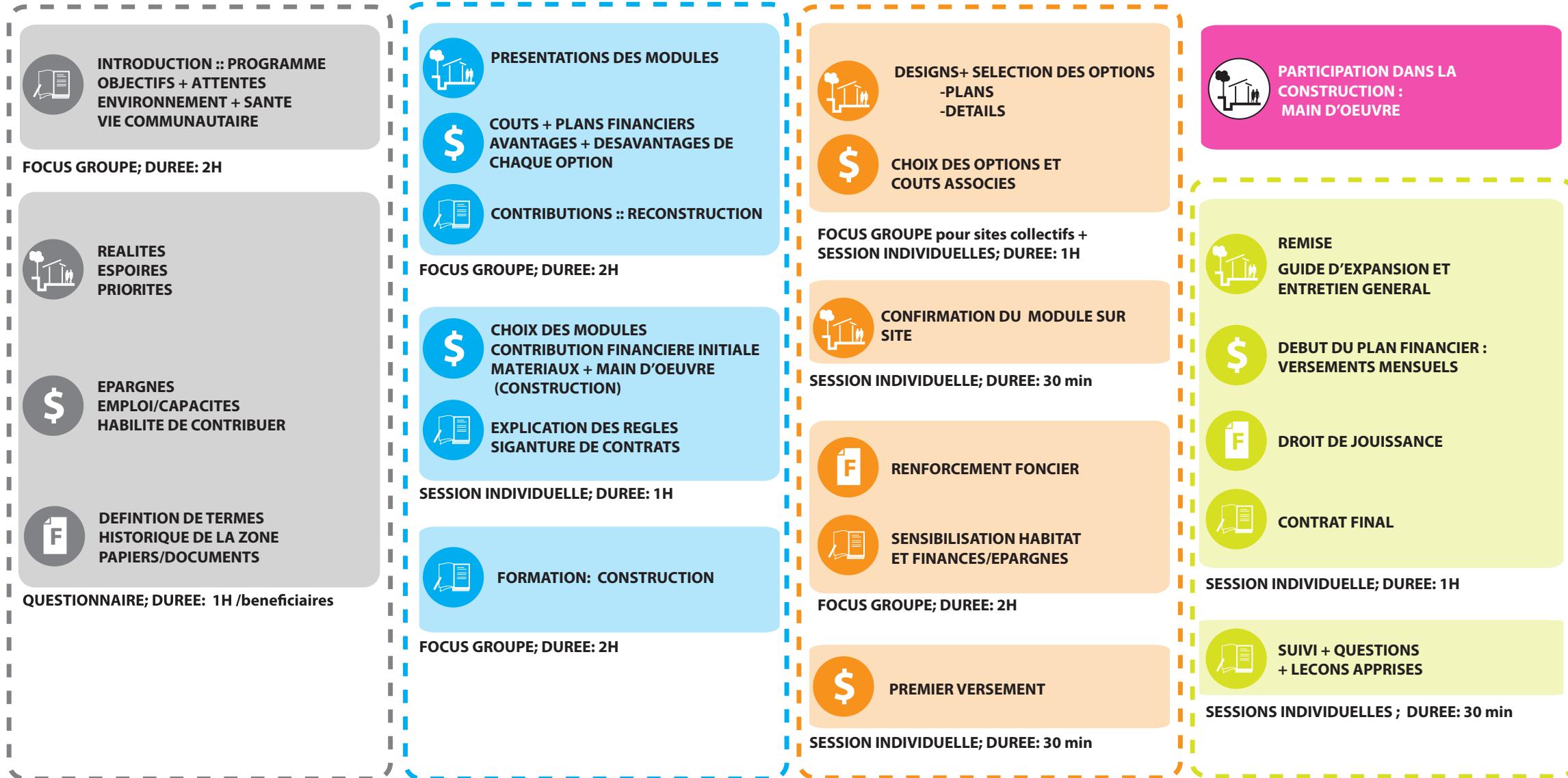


FONCIER



SENSIBILISATION

COMMUNITY PARTICIPATION



16/6
COMMUNAUTE



SEIZE QUARTIERS / SIX CAMPUS

APPROACH ::

[THINK] **INTEGRAL**

[DESIGN] **PLACE**

[RESPECT] **ECOLOGY**

[BRING] **INNOVATION**

[SEAK] **APPROPRIATION**

● [CREATE] **SUSTAINABILITY**

>> FINANCIAL ACCESSIBILITY
>> FACILITATING ISSUES OF MAINTENANCE
>> CREATE GENERATIVE + PRODUCTIVE
ENVIRONMENTS
>> AIMING FOR SELF-SUSTAINING **COMMUNITIES**

APPROACH ::

[THINK] **INTEGRAL**

[DESIGN] **CONTEXT**

[RESPECT] **ECOLOGY**

[BRING] **INNOVATION**

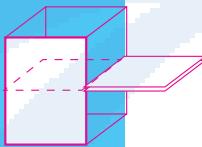
[SEEK] **APPROPRIATION**

[CREATE] **SUSTAINABILITY**



UNOPS

16 / 6



Port-au-Prince :: CONTEXT

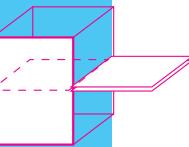
The characteristics of the targeted neighbourhoods makes this project a very challenging undertaking:

- >They have been **heavily damaged during the earthquake**,
- >They are a mixture of **slum type dwellings** and medium class populations,
- >They are **high density** settlements and there are large populated parts are located in ravines, **prone to landslides or flooding**,
- >They are neighborhoods with **little or no urban planning**,
- >There is **no existent basic infrastructure**.

Port-au-Prince :: CONTEXT

This has to be put into the larger context of wider issues facing the housing sector in Haiti:

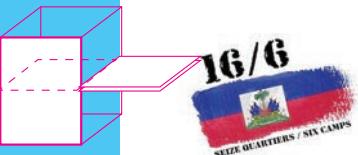
- >No public lands for new settlements,**
- >Out-dated and unsuitable legal framework in regards to ownership,**
- >No history of mortgage/credit,**
- >Bad construction practices.**



16/6 :: PARAMETERS + OBJECTIVES

The Rehabilitation of Sixteen Neighbourhoods and Closure of Six camps project (16/6), is the **first reconstruction project conceived by the Government of Haiti**. Within the 16/6, there are four UN agencies involved: UNDP focusing on economic development and community platforms, ILO coordinating the vocational training programs, IOM in charged of relocation, and **UNOPS** leading the coordination and implementation of infrastructure and housing reconstruction:

- > **the repair of damaged houses (yellow houses),**
- > **the reconstruction of the houses deemed unsafe for return (red houses),**
- > **the rehabilitation and implementation of basic community infrastructure for public services.**



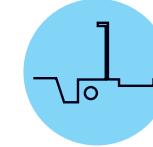
Community Infrastructure



Photographie prise par Claude André Nadon



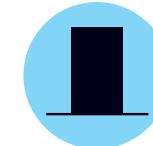
16/6
SEIZE QUARTERS / SIX CAMPS



**SANITATION +
BASIC SERVICES**



ACCESSS + MOBILITY



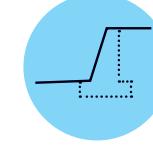
**COMMUNITY STRUCTURES ::
SUPPORT TO SCHOOLS**



PUBLIC SPACES

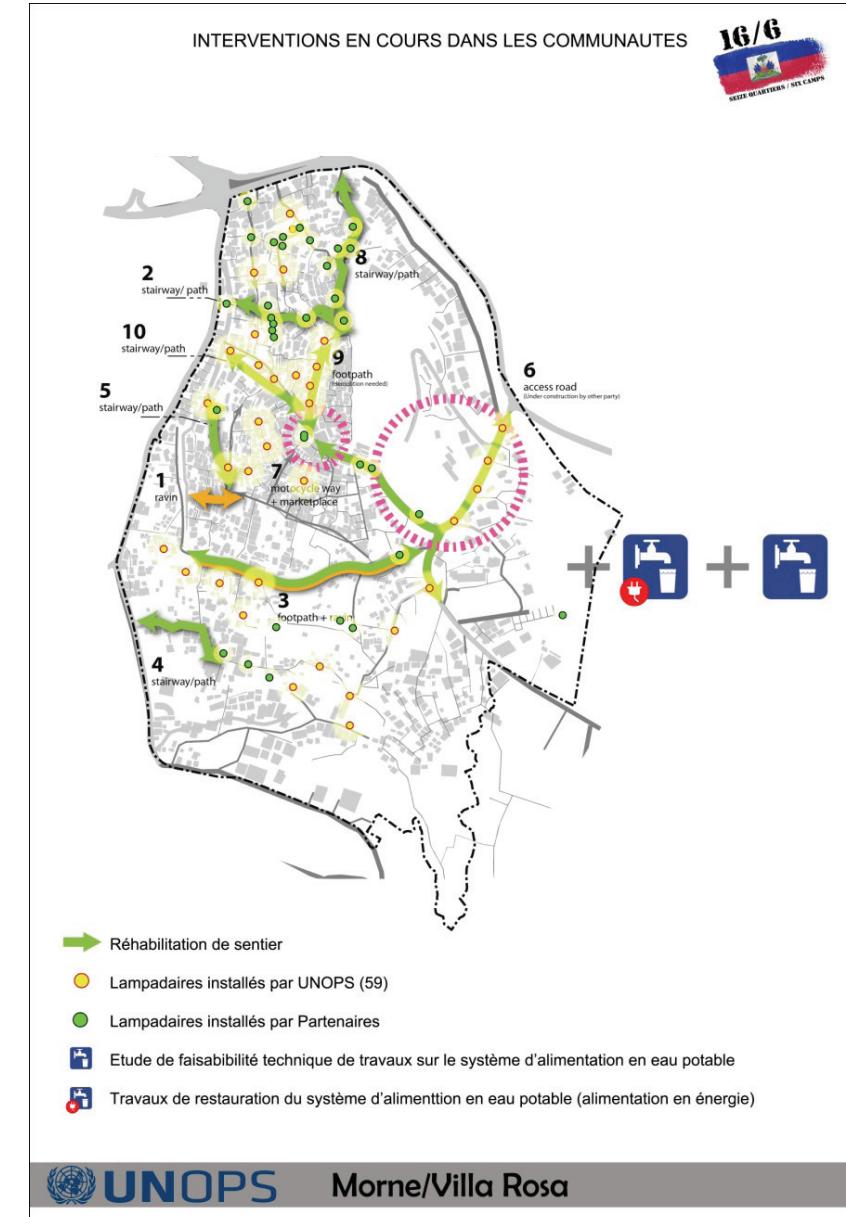
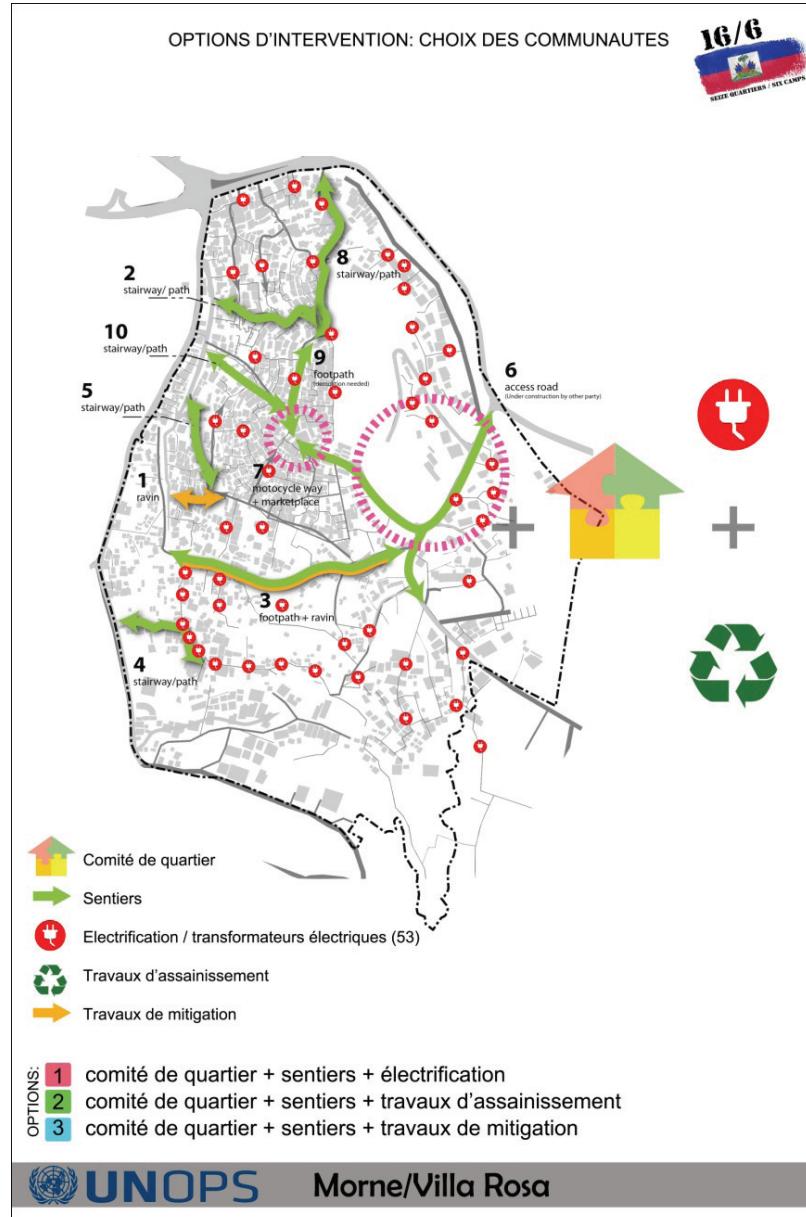


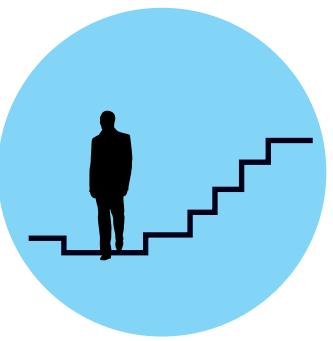
**REHABILITATION ::
ENVIRONMENT + GREENING**

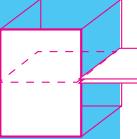


RISK MITIGATION

Community Planning



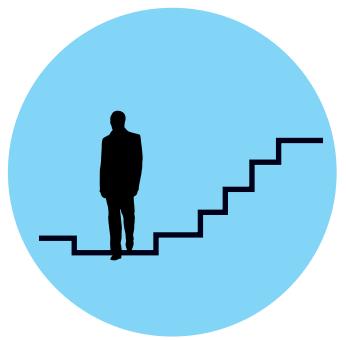




16/6



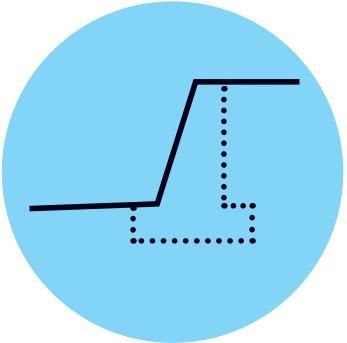
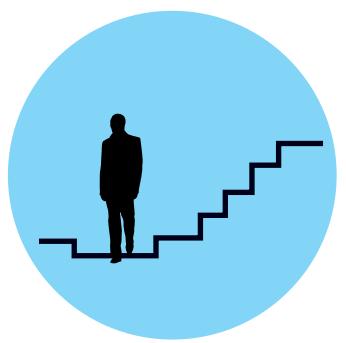
SEIZE QUARTERS / SIX CAMPS

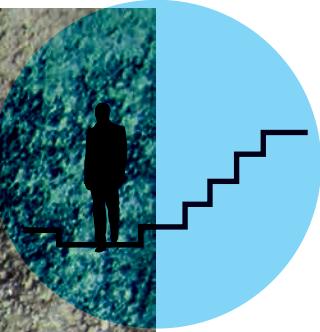


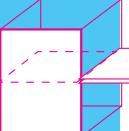
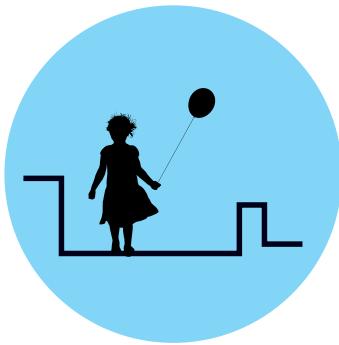
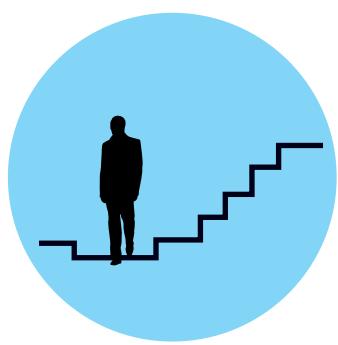
16/6

SEIZE QUARTIERS / SIX CAMPS



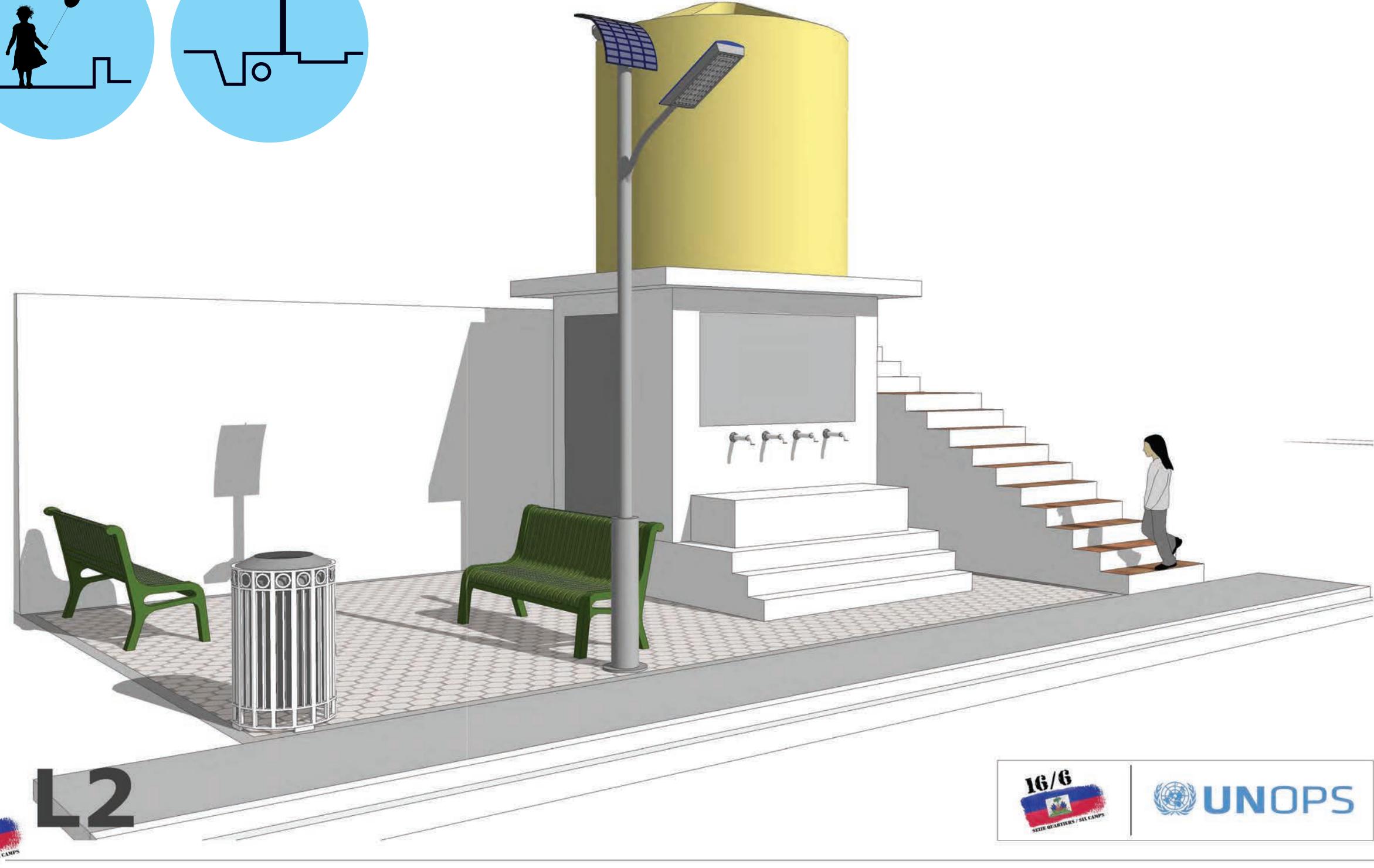
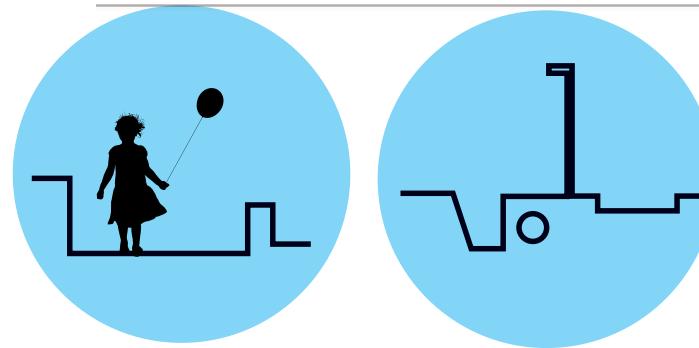






16/6

SEIZE QUARTERS / SIX CAMPS



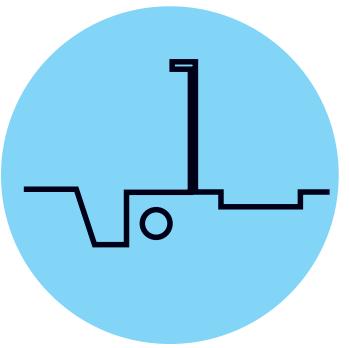
 **16/6**
SEIZE QUARTERS / SIX CAMPS

L2

 **16/6**
SEIZE QUARTERS / SIX CAMPS

 **UNOPS**

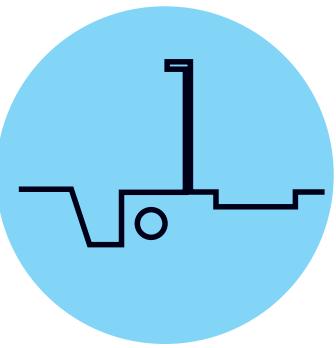
Solid waste + Recycling



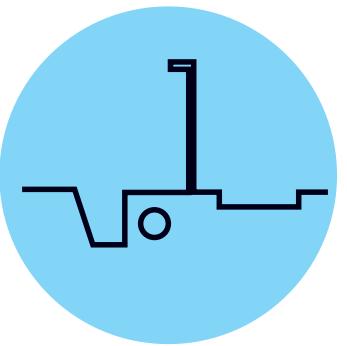


CODE	ELEVATION	POINT	DISTANCE
Point de raccordement			
U-001	353 m	U-001 To U-002	245.61 m
U-002	350 m	U-002 To U-003	223.36 m
U-003	319 m	U-002 To U-004	372.11 m
Borne Fontaine			
U-004	324.6 m	U-002 To U-004	238.45 m
U-005	316 m	U-003 To U-005	123.73 m
U-006	296 m	U-005 To U-006	244.49 m
U-007	313 m	U-005 To U-007	297.27 m
U-008	296	U-007 To U-008	111 m
U-009	271 m	U-008 To U-009	97.61 m

**POINTS D'EAU
NERETTE**



Potable Water



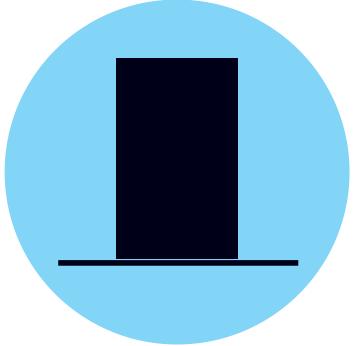
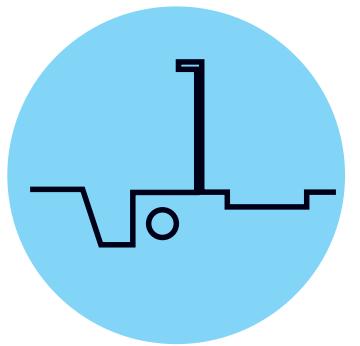
16/6

SEIZE QUARTERS / SIX CAMPS



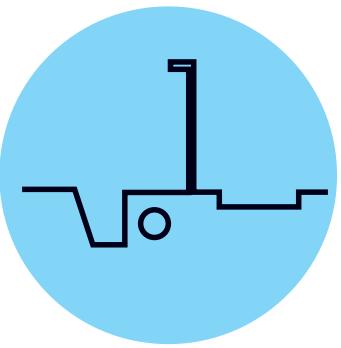
Water Filtering

SCHOOLS, HEALTH CENTERS AND PUBLIC SPACES



Product made by Aquuity





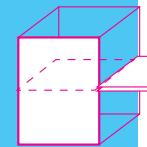
16/6

SEIZE QUARTERS / SIX CAMPS





Housing Repair :: Pedagogical Rehabilitation





16/6

SEIZE QUARTERS / SIX CAMPS







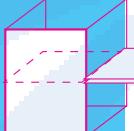
New Housing :: Incremental modules



16/6

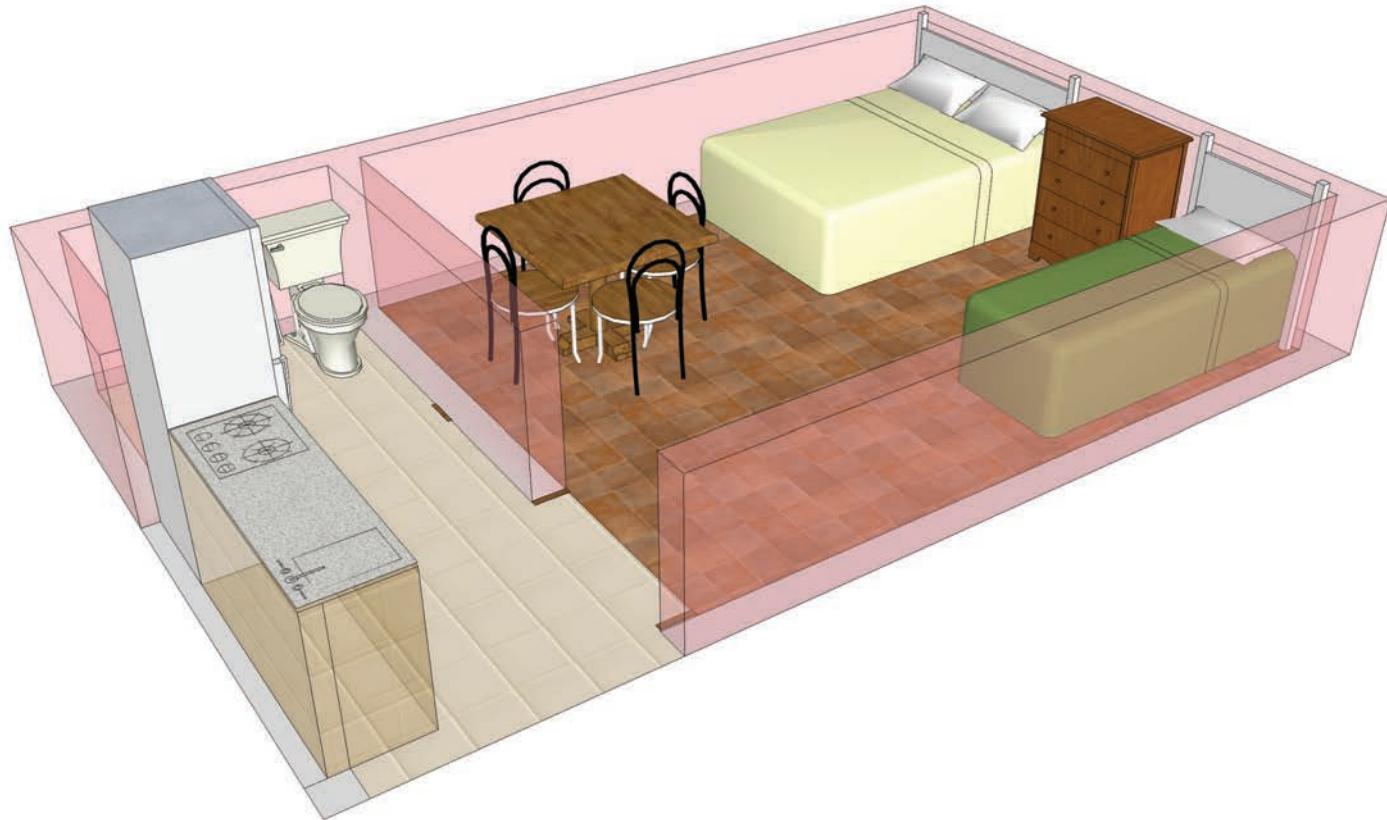


SEIZE QUARTERS / SIX CAMPS



Basic module [25 sqm constructed; 22 usable]





**MODULE 1 ::
TYPE B**

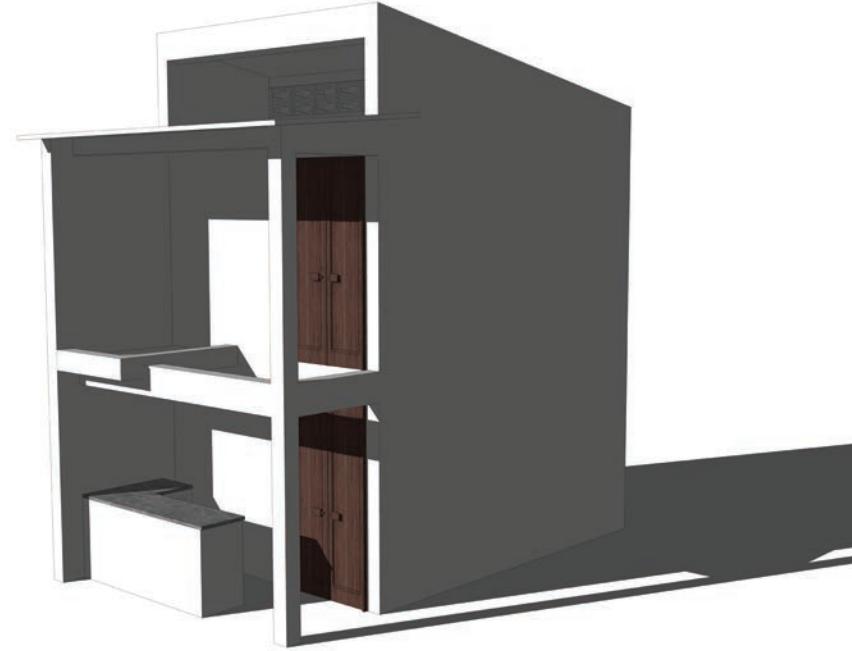
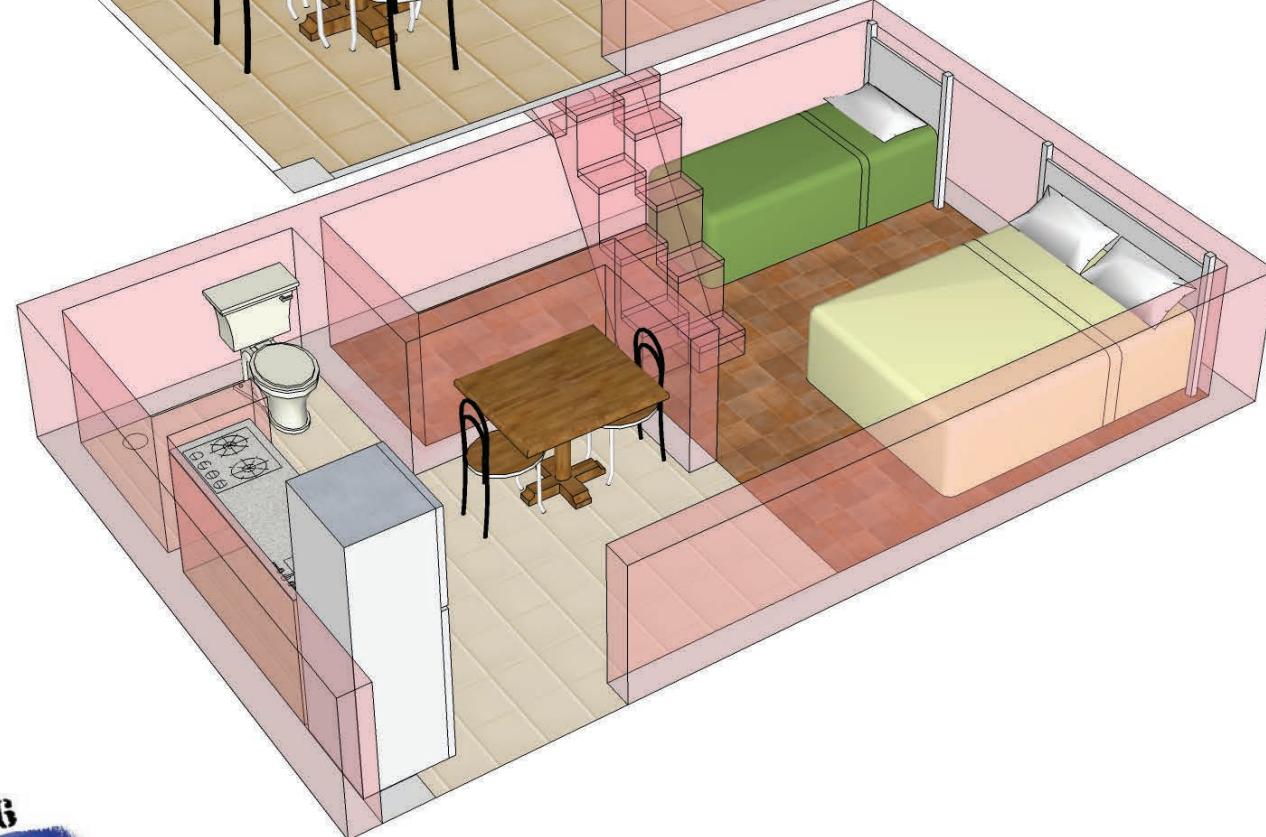


16/6

SEIZE QUARTERS / SIX CAMPS

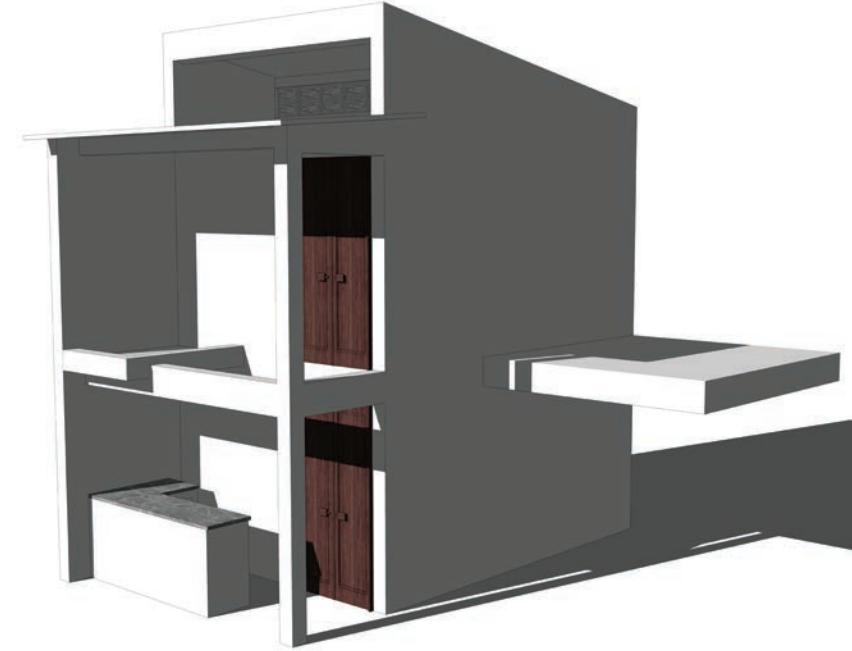
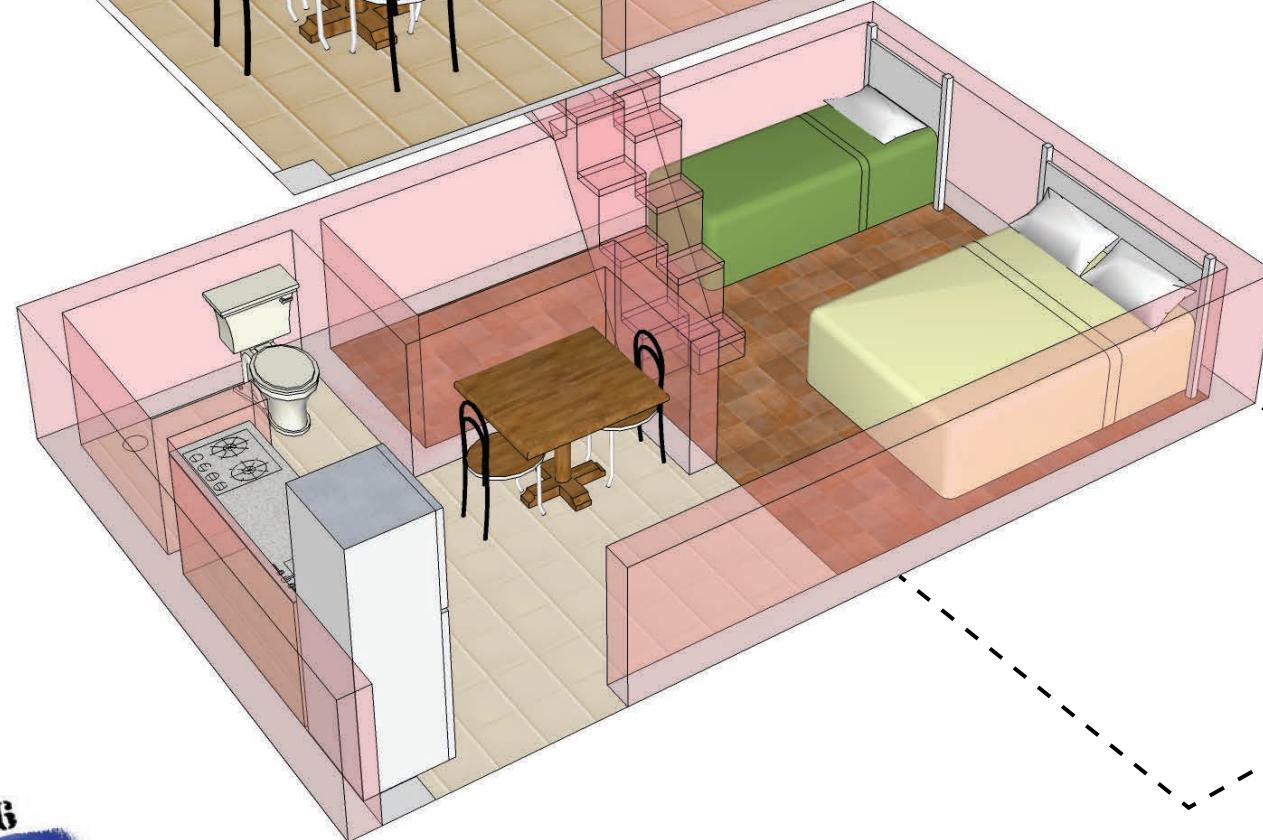


TECHNUE
FROM THE AMERICAN PEOPLE

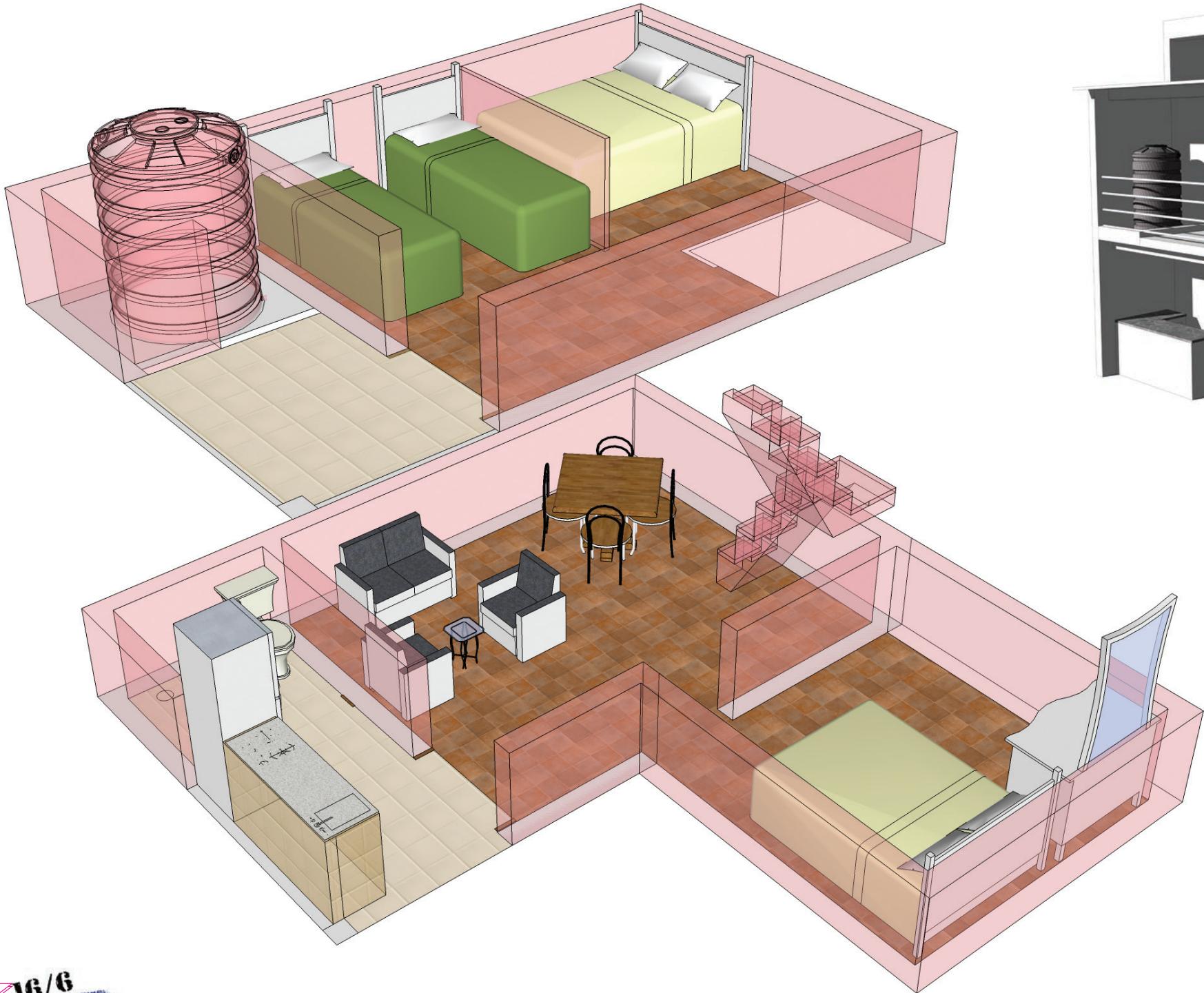


**MODULE 2 ::
TYPE A**

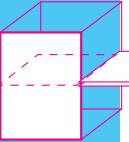


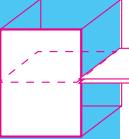


**MODULE 3 ::
TYPE A**

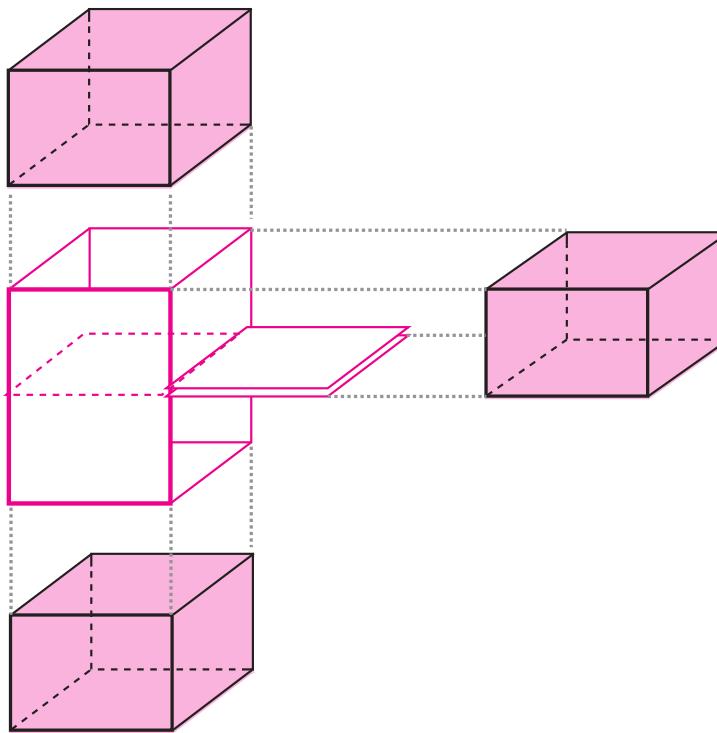


**MODULE 4 ::
TYPE B**





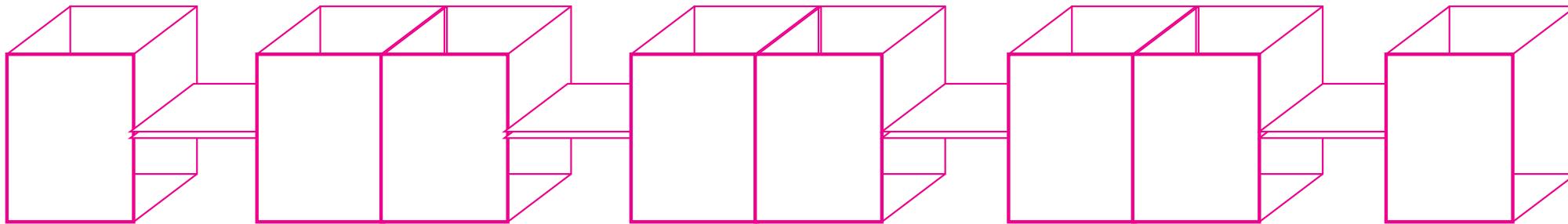
. espaces

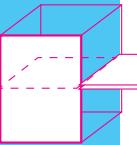


AGGLOMERATION

Optimize struture + infrastructure

. systèmes





16/6



SEIZE QUARTERS / SIX CAMPS

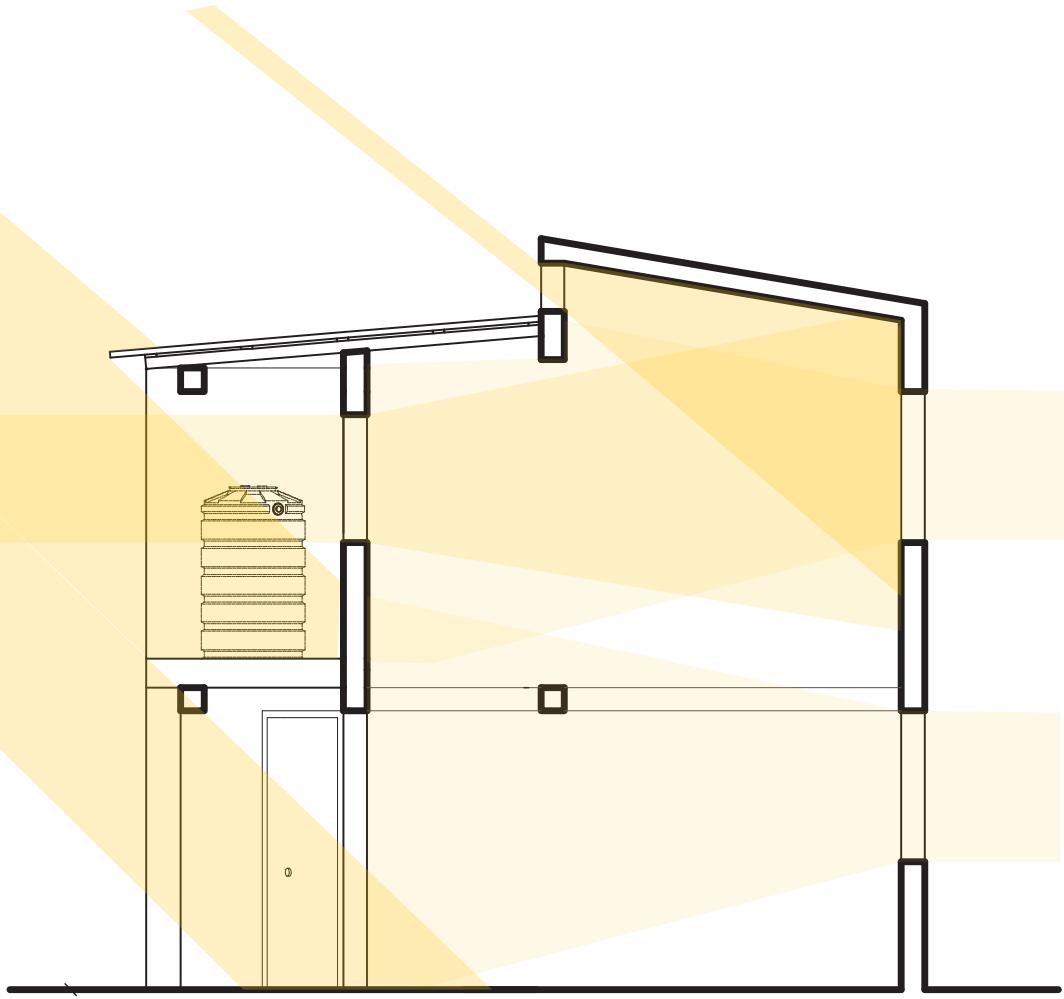
MINIMAL STANDARDS [services] ::

An intermediary base for a future formalization + Alternatives

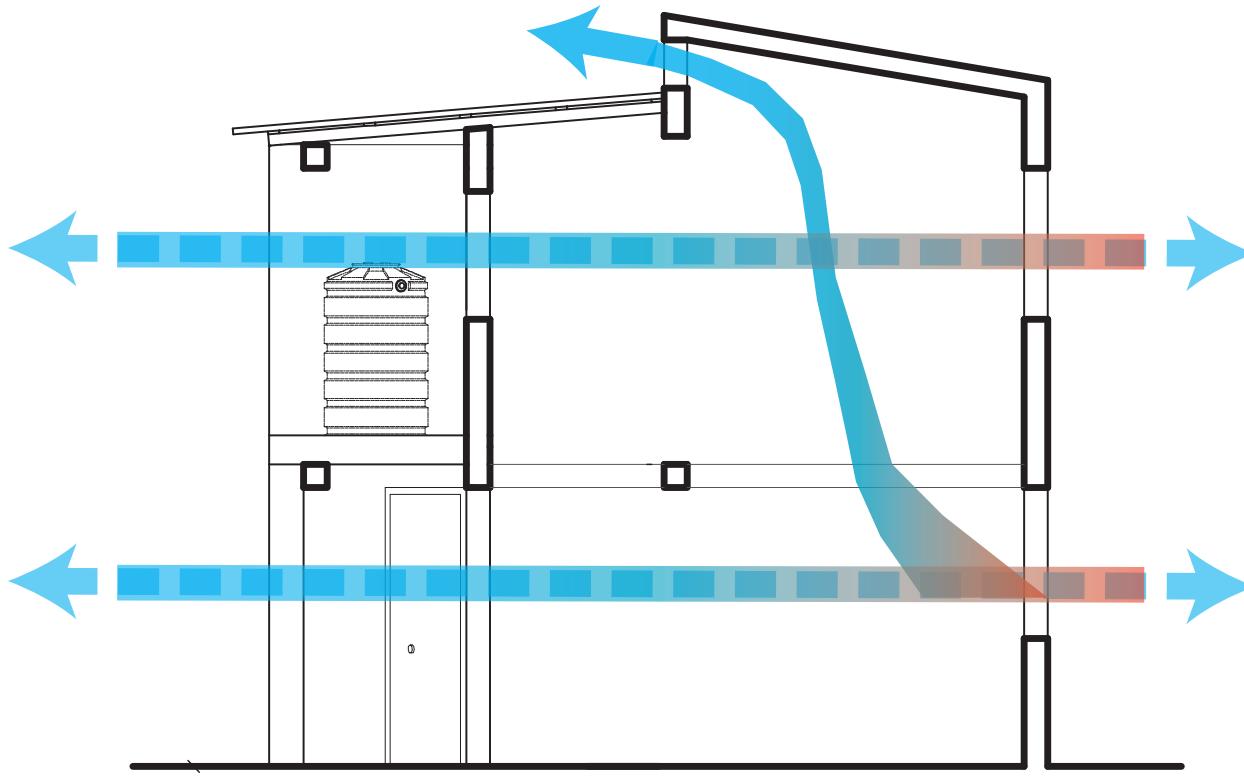
- Passive lighting and ventilation strategies,
- Water harvesting (cistern and necessary gutters),
- Necessary drainage for used water,
- Basic eclectic cabling (protected) and outlets- for future/optional connections to the EDH,
- A working faucet, and kitchen counter
- A toilet (shared septic tank between 3 to 4 houses), and shower space.

The priorities in infrastructure are determined through a community planning and evaluation process for each neighborhood. Some basic provisions include:

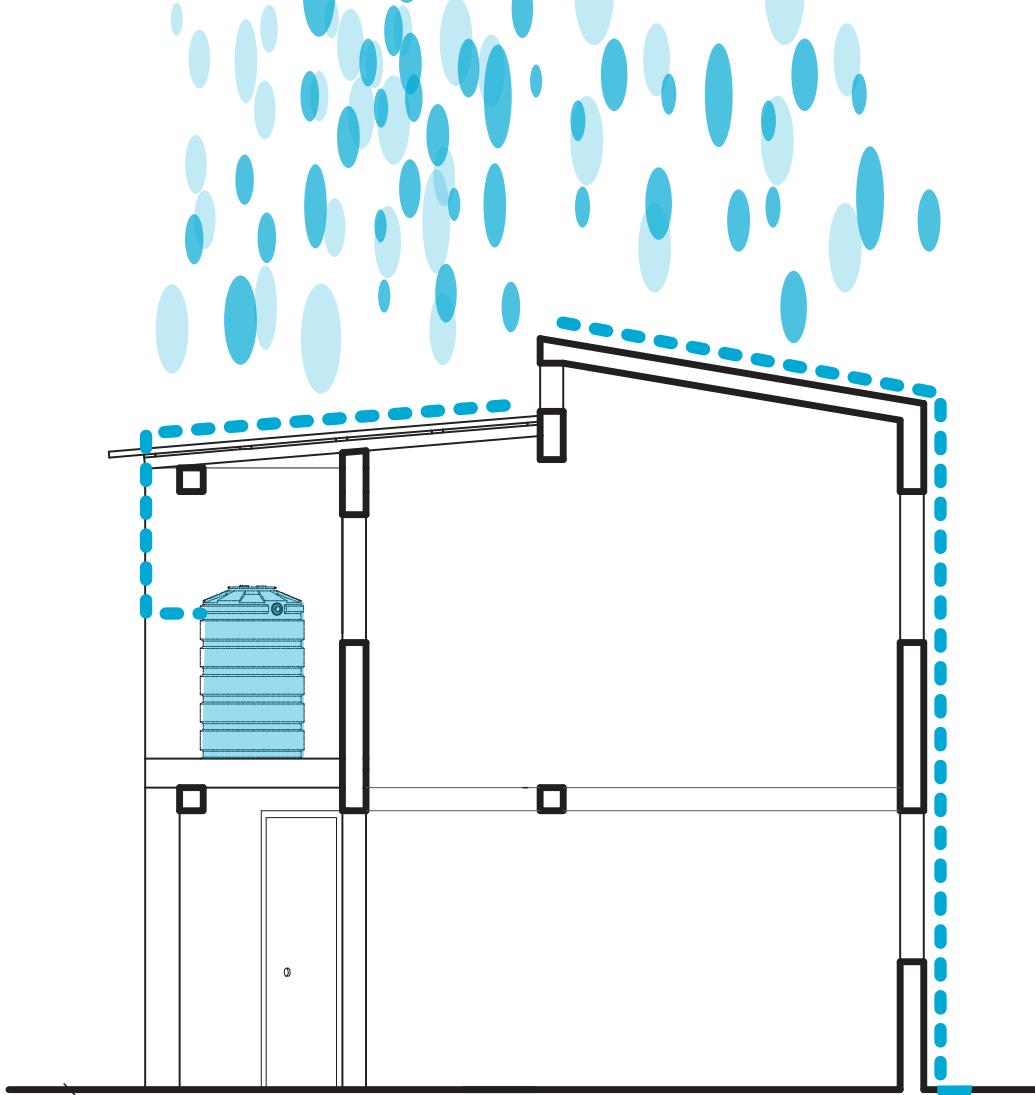
- Communal infrastructure (structural retaining walls, access paths, drainage, and lighting),
- Basic services for a collective scale: potable water access points, transformers for electricity, collective sanitation strategies
- Public space and public equipment



LIGHTING



VENTILATION



**RAIN WATER
HARVESTING**



TENURE :: right to use the land collaboration with local entities

ENUMERATION PROCESS



RECONSTRUCTION DE MAISONS

FICHE D'IDENTIFICATION

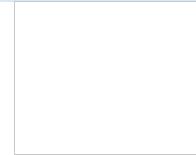


Code Individuel: mhr-01a-0006

Code Collectif: mhp-01a-0001

GPS:

Photo



INFORMATIONS GENERALES

Informations personnelles

Nom du bénéficiaire :	Paret Philippe
Prénom du bénéficiaire :	Claudy
Phone du bénéficiaire :	37427711
Autre numéro de phone:	
CIN / NIF:	01-02-99-1968-06-00002
Statut Matrimonial	Marie
Date de naissance:	8/4/1968
Numéro de la maison:	
Adresse:	Morne Hercule Imp Flamboyant
Zone	Morne Hercule
Nbre de Personne:	4
Nbre de Famille:	1

Habitat - Famille

Personne handicapée	Non
Type d'handicape:	aa
Nbre d'enfant:	
Age de l'ainé:	
Age du benjamin:	
Taille de la maison	Petite
	Nbre de pieces: 3
Espace locataire	
	Espace de cuisine
Emplacement de la cuisine	
Type de combustion	Bois (Charbon de bois)
Espace lessive	Non
Nbre de Chambre:	2
Espace commerce entreprise	Non

FINANCE

Tableau des revenus

Nbre de Personnes qui Travaillent:	
Profession / Activité / Métier du chef de ménage:	
Nbre de Jours de Travail / Mois:	
Revenue Mensuel de la Famille:	
Autre Propriété	
Localisation actuelle	

Dépenses totales

	par mois
Alimentation:	
Loyer:	
Ecolage:	
Santé:	
Transport:	
Telephone:	
Electricité:	
Eau:	

Tableau de capacite contributive des menages

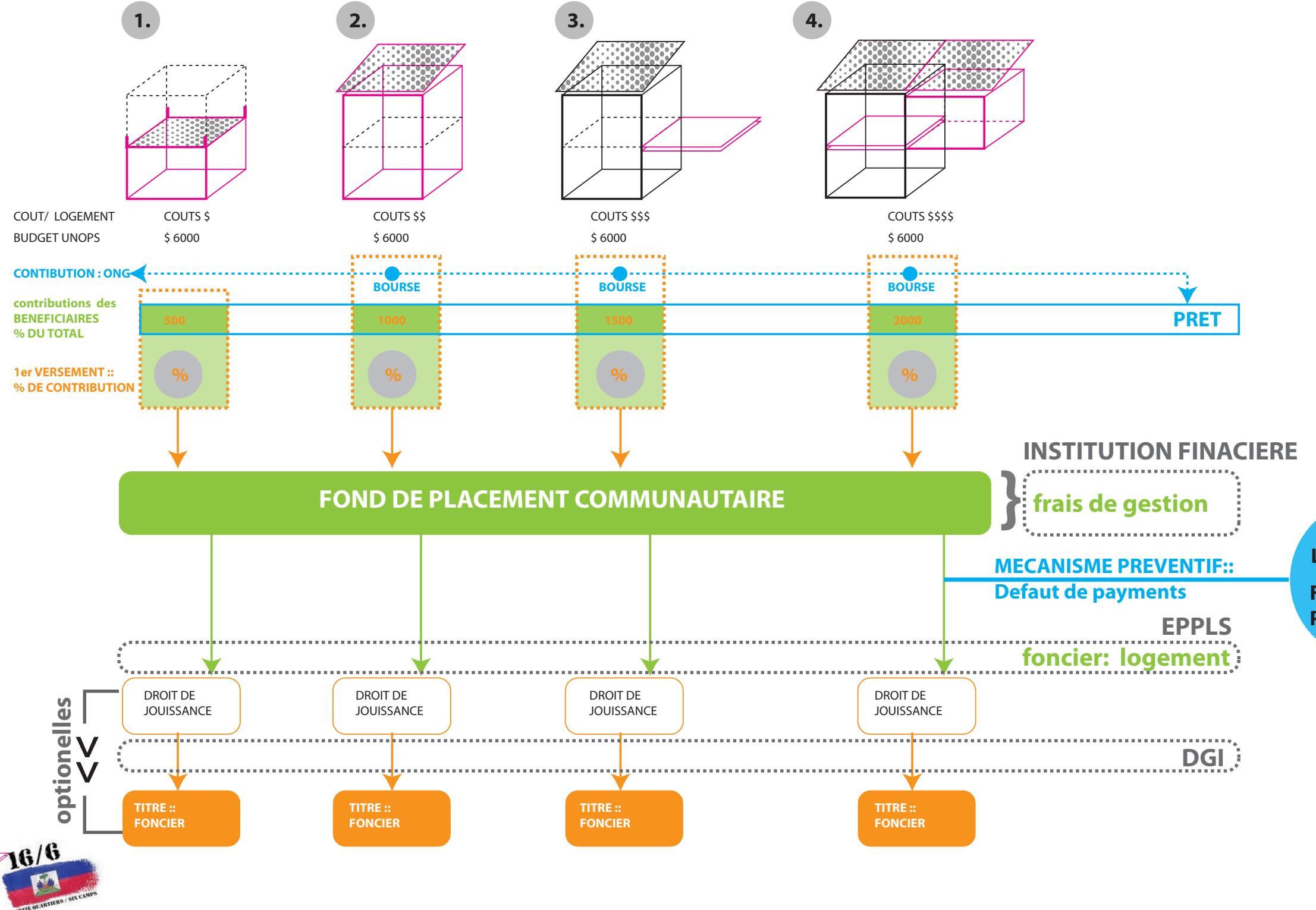
Pret a contribuer		Déja contracter de pret	
CapacitéContribution:		Type de Pret:	
Mode de Versement:		Filliere:	
Financement:		Raison:	
Nbre de Versement:		Propension a l'Epargne:	
1er Versement:		Date:	
		Transfert:	





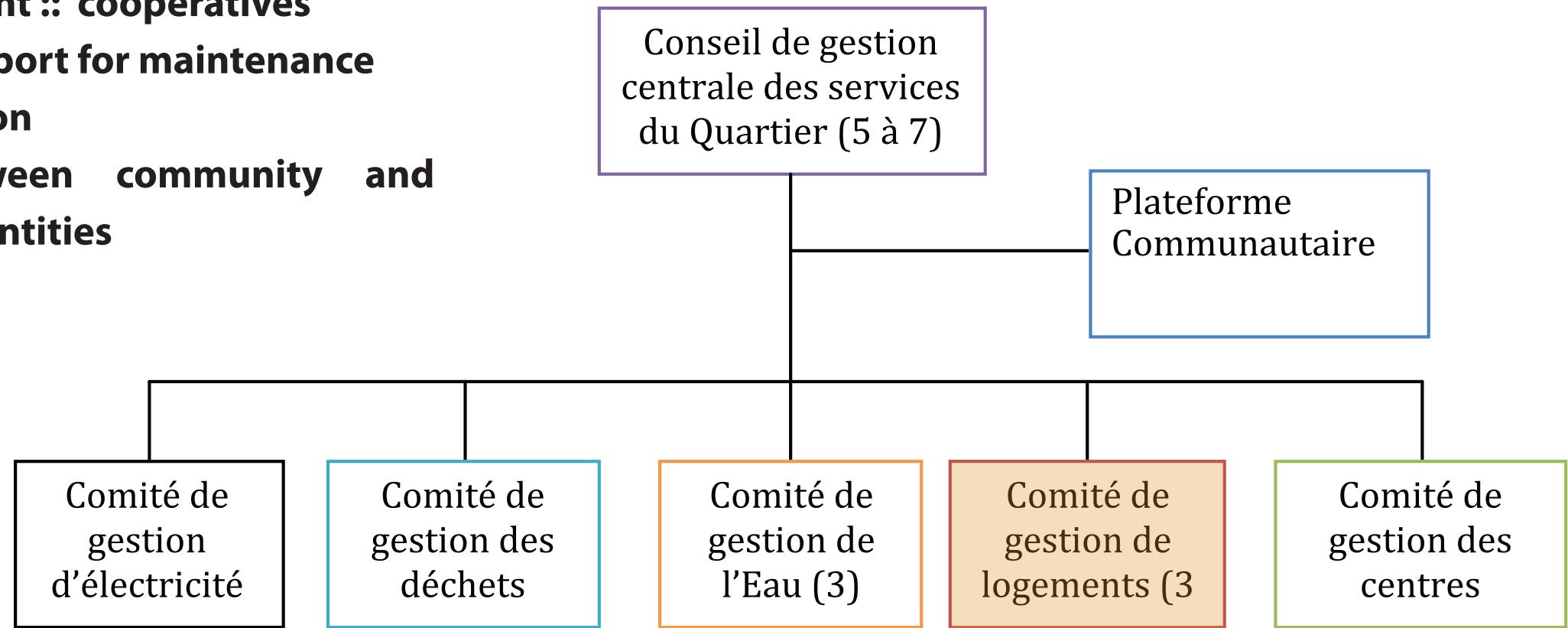
Couts logements	%	7400	11200	13000	14500
Contribution des propriétaires en %	20	Bourse- Gouvernement	2240	2600	2900
Versement initial : Ca represente 20% du contribution totale des bénéficiaires	20	fenetres et portes	448	520	580
Montant restant :	80		1792	2080	2320
Mensualité fixe sur 36 mois	36 mois		50	58	64
* % de revenu mensuel moyen (\$ 133 usd) consacré au logement(ref. fiche bénéficiaire, situation socio-économique)	133		37	43	48
avec un max. de 30% du salire pour depense sur le logement- les minimums revenues mensuels sont:	30		166	193	215

ATTENTION: All amounts listed are subject to change seeing the financial component of the project is currently under design.



COMMUNITY COMMITTEES :: CONTINUITY

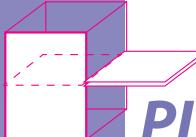
- **Social accompaniment + pedagogy**
- **Encouragement :: cooperatives**
- **Control + Support for maintenance**
- **Communication**
- **Liaison between community and government entities**







Location :: Morne Hercule, Pétion-Ville



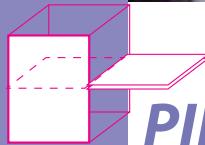
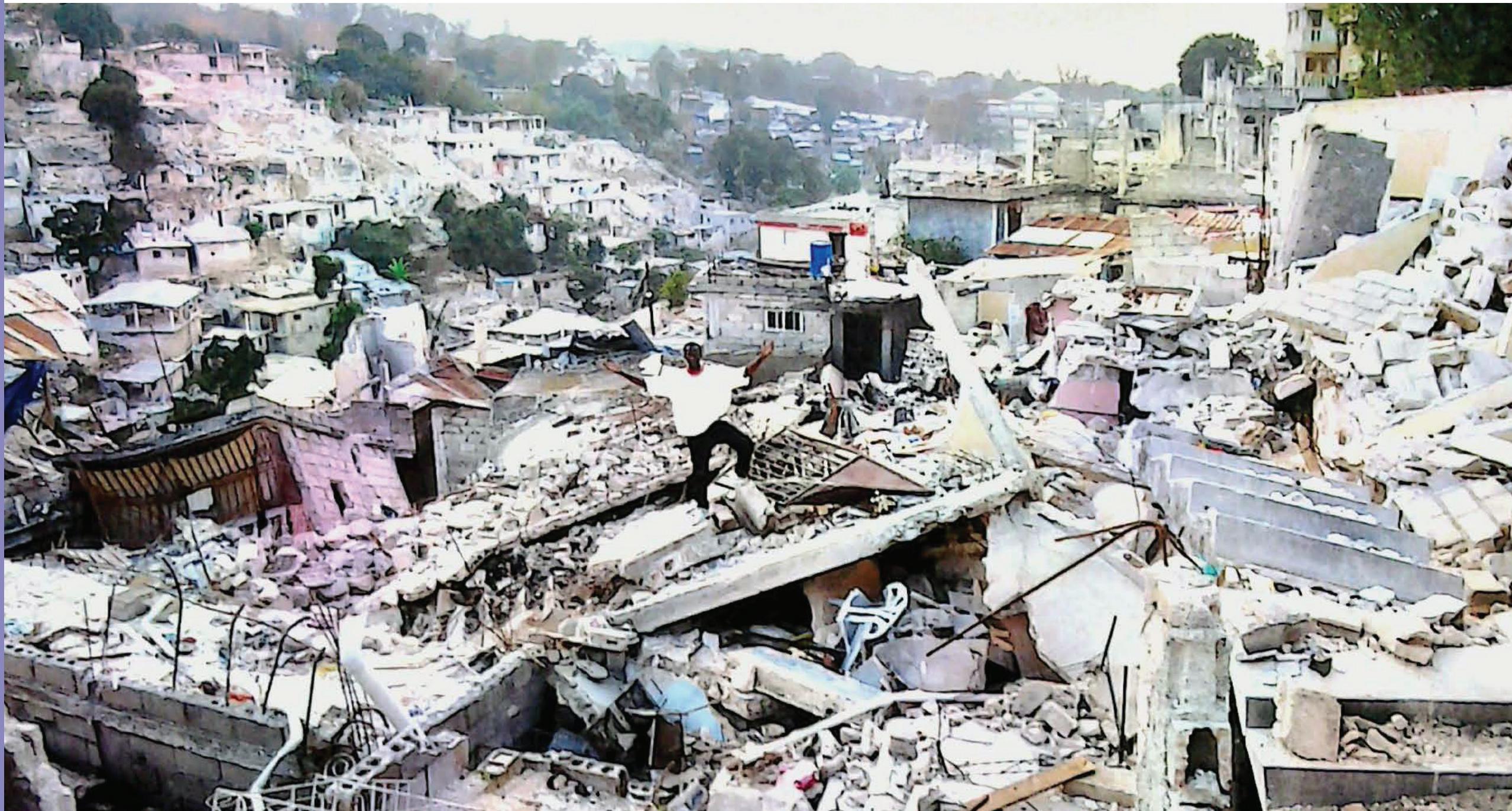
PILOT PROJECT



Plan, Design Urbain

PILOT PROJECT





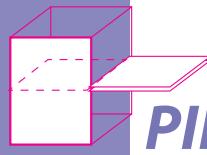




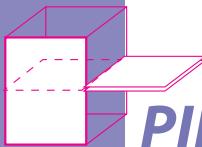
PILOT PROJECT

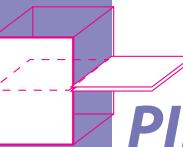


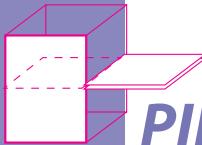




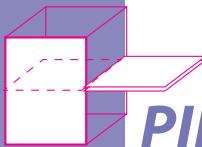


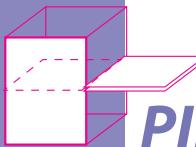




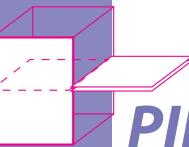


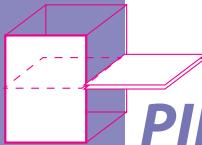
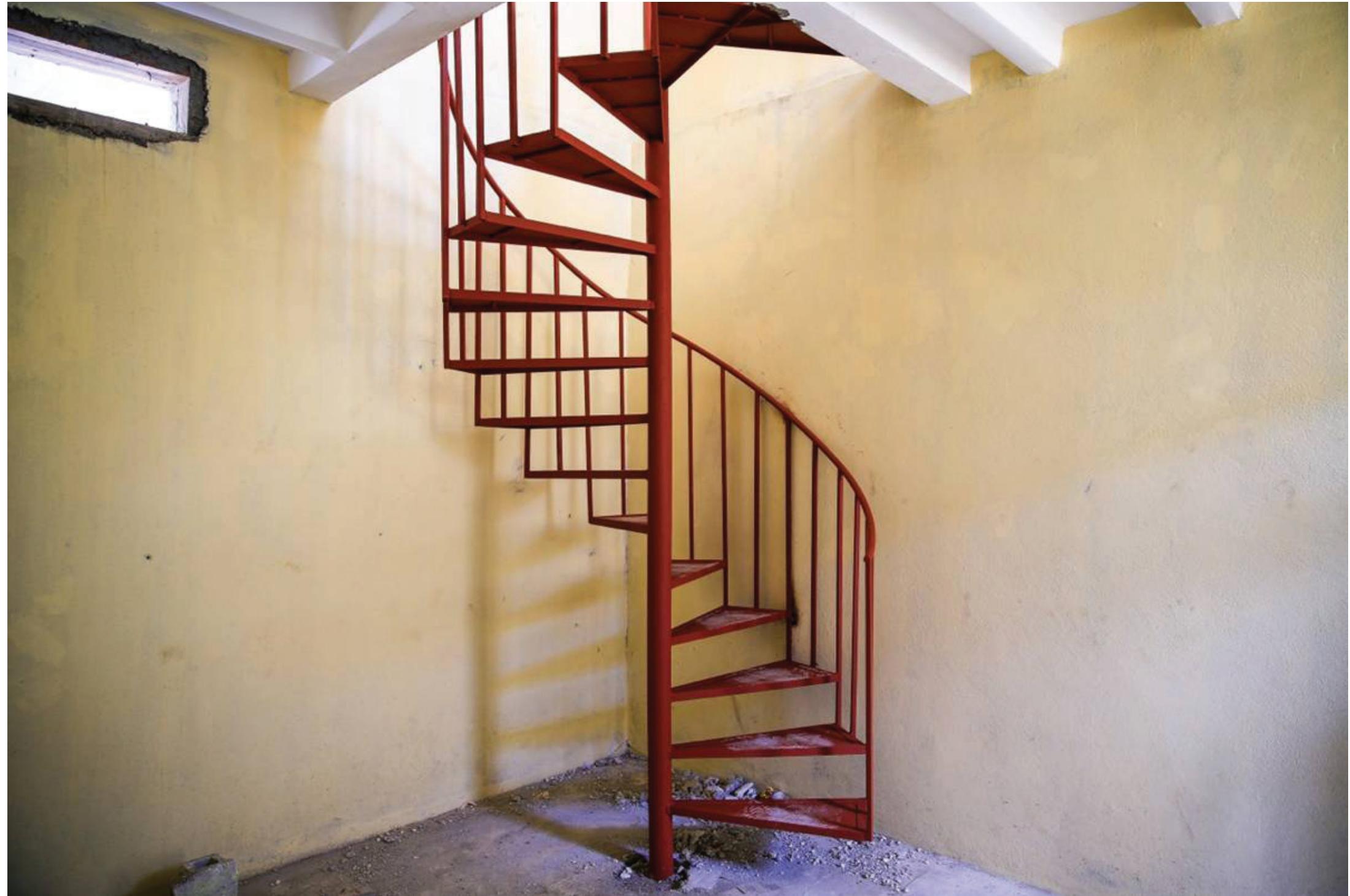






PILOT PROJECT









QUESTIONS ?

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