



**Government of Uganda**  
Ministry of Water and Environment

## Up-scaling Town Sanitation Planning in Uganda

**Venue: 24<sup>th</sup> SuSanA meeting, Stockholm Environment Institute**

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## Issues with urban sanitation sector in Uganda

- **Instructional fragmentation** (national and local level)
- **Unclear mandates and weak coordination** between actors (LG, ministries, utility and private sector)
- Cost of toilets unreasonably high in small towns (range: **USD 500 to 1300**)
- low affordability for toilets as income levels very low (**60%- USD 0.50 to 1.25, 25% - USD 1.25 to 2.00**)
- Unlined pit latrines, a growing issue in small towns
- FSM market non-existing due to lack of emptiable sanitation systems

## Background of TSPs in Uganda

- USAID and GIZ co-funded project 'Capacity development of Town Councils to design and implement town sanitation plans'
- Project aimed at making use of TSPs as a **basis for planning, coordinating and prioritizing investments**
- **Six small and medium** size towns in Northern Uganda
- **LGs, ministry and local stakeholders** were involved in developing the TSPs
- Project started 2014 and will end in Sept 2017

# Strategy for upscaling the TSP Approach in Ugandan Towns

Up-scaling is based in two parts:

**Part A:** Up-scaling the development Town Sanitation Plans in Uganda

**Part B:** Financing the implementation of TSPs once they have been developed

## Part A: Operationalising the TSP approach

- **WSDFs** to institutionalise and spearhead the Town Sanitation Planning approach
- Make it mandatory for towns to have **TSPs to access investments** (in water and sanitation services)
- Build **internal capacities** of ministry to propagate TSP approach
- Build **external capacities** (town Council and local consultants) for TSP development

# TSP development process



## Part B: Considerations for financing strategy

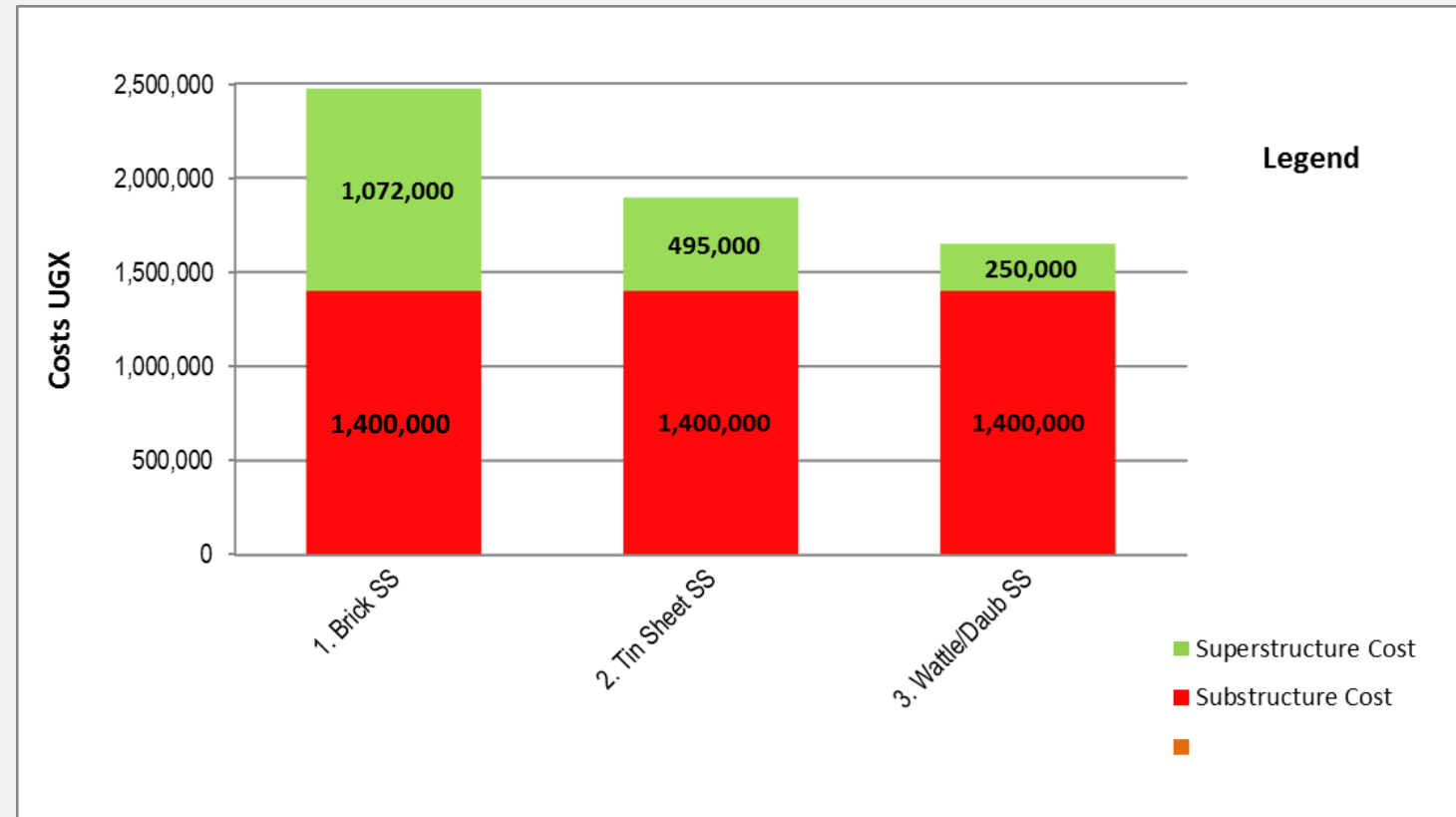
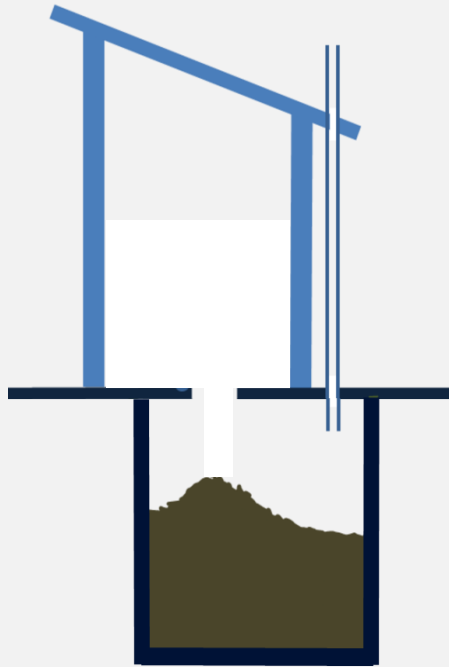
- Need to **promote lined pits** for safe containment of faecal sludge and support FSM
- **70%** of population in urban areas need the financial support to improve their situation
- Need for **subsidy** for meeting capex of construction of toilet sub-structure (lined pits)
- Funding required for emptying services and faecal sludge management facilities

## Part B: Financing strategy – households

- **HH to build** superstructure of toilets, either self financed or if possible via loans
- Superstructure to **vary according to financial affordability**. Cost can vary between USD 100 and 250
- At current market interest rate of 2% per month HH's take min **3** years to repay costs of superstructure
- Work closely with Local banks, MFIs and SACCOs to access loans for superstructure
- State to **subsidise** substructure costs of flat **UGX 1,475,000 (USD 415)**



# Assessing affordability of HH to repay loans



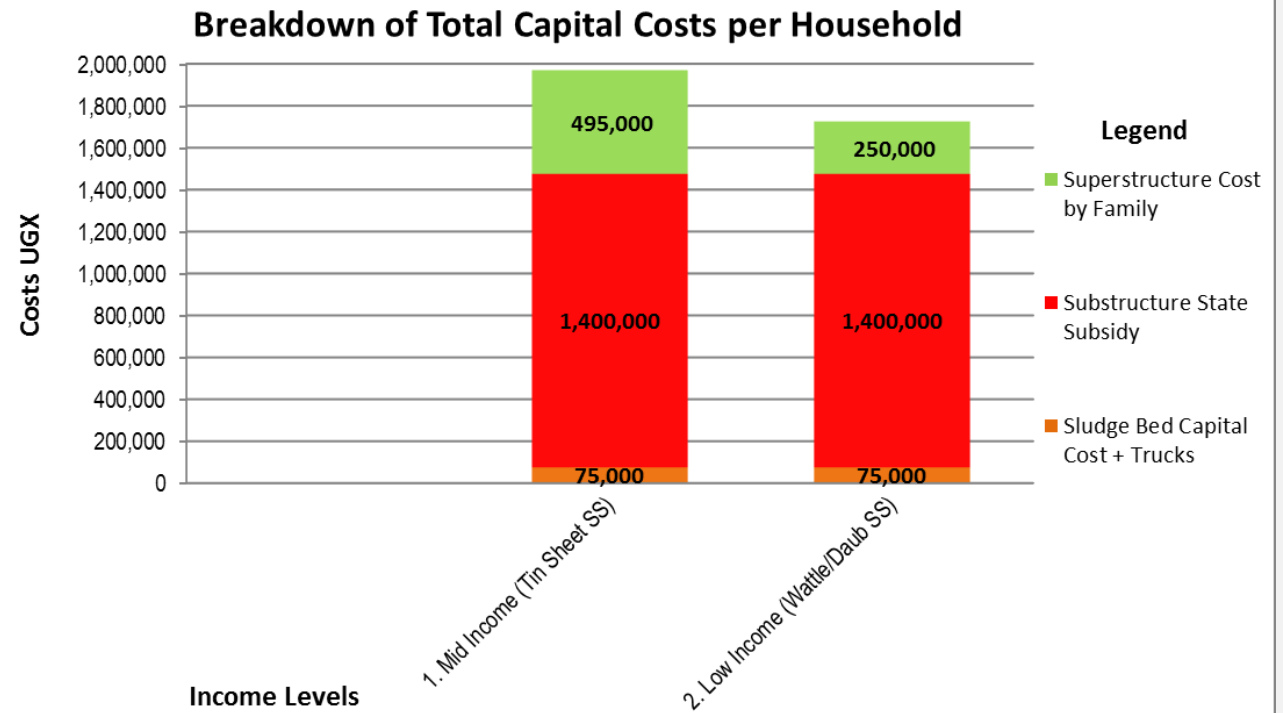
## Part B: Strategy for pit emptying services and sludge drying bed

- Sludge Drying Beds to cover cluster of **5 - 6 towns within 30 to 50 km** radius for economies of scale
- Capex for construction of sludge drying beds + cesspool trucks (3 nos x 4000 litres) + 2.6 Acre land ≈ **UGX 900,000,000 (USD 250,000)**
- Capex to be funded by Ministry/donors
- Per capita Capex (substructure subsidy, emptying and treatment services)≈ **USD 60**

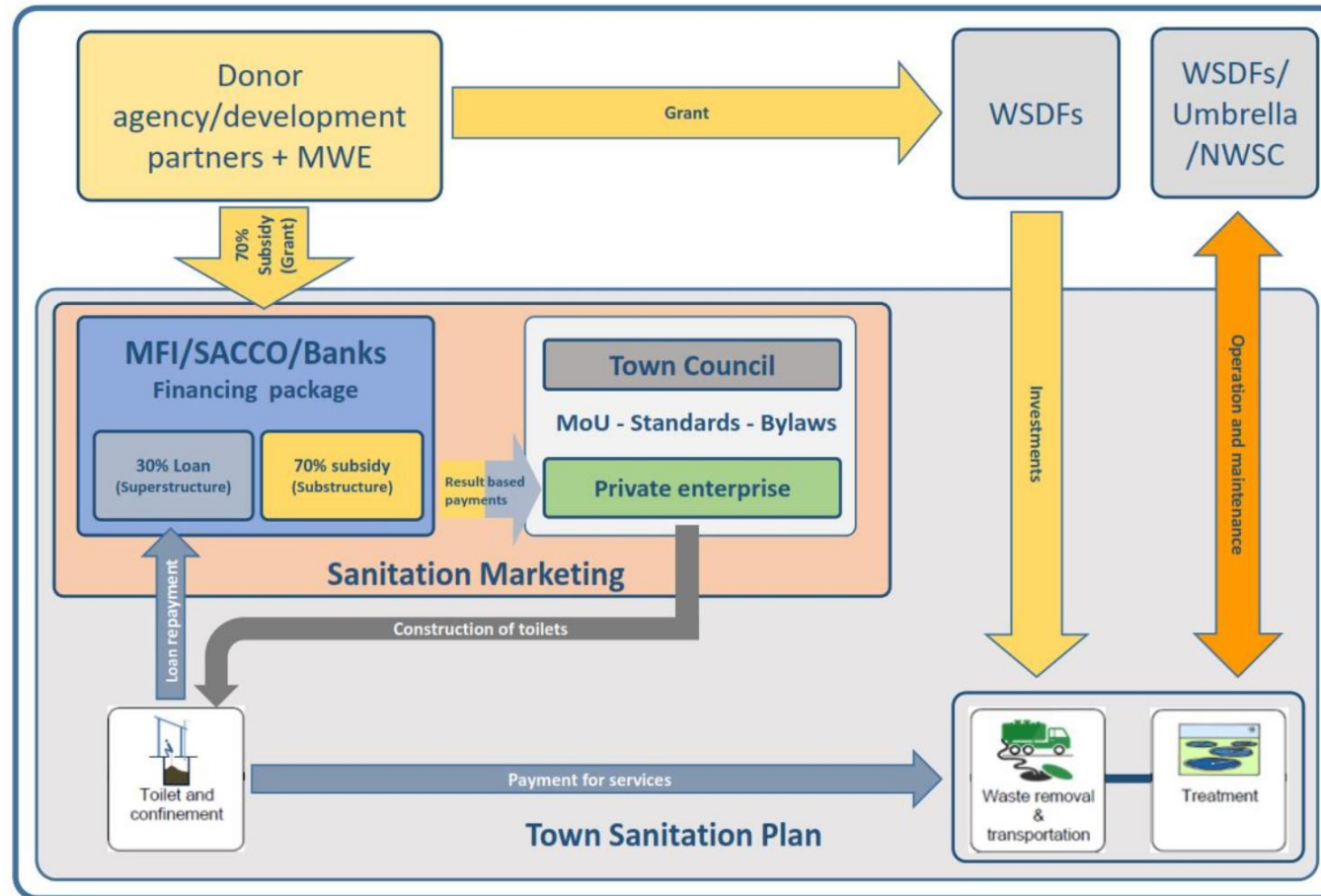
# Total Capex

Town	Households Year 2017	State Subsidy for substructure UGX
Kamdini	1,960	1,913,940,000
Aduku	1,660	1,620,990,000
Loro	2,720	2,656,080,000
Ibuje	220	214,830,000
Apac	3,160	3,085,740,000
Oyam	2,600	2,538,900,000
<b>Total</b>	<b>12,320</b>	<b>12,030,480,000</b>
<b>Capex sludge bed &amp; trucks</b>		<b>921,877,762</b>
<b>Total subsidy</b>		<b>12,952,357,762</b>
		<b>ie. US\$ 3,597,877</b>

Per capita Capex ≈ \$ 58.40



## Part B: Financing across the sanitation chain



## Part B: Opex for pit emptying services and sludge drying bed

- Current annual emptying charges for family by private operator  $\approx$  UGX. 50,000<  
**(USD 12<)**
- Proposal: Sludge emptying service and operations of sludge bed to be combined and run by **state agency** (WSDFs/ Umbrella) or National Water and Sewerage Services
- Annual opex for emptying services and treatment system  $\approx$  **USD 75,000**
- Annual emptying charges for family  $\approx$  **UGX.22, 000 (USD 5)**

## Challenges / weaknesses

- Strategy does not consider financial consideration for software intervention and will rely on LGs to support this
- Approaches for targeting subsidies to the deserving population is to be established
- Strategy relies on purely state run agencies
- Any more?

Any questions?



## Part A: Up-scaling the development TSPs for Ugandan Towns

Population	Number of Urban Centres	Total Population	Share of the Total Population	
More than 250,000	4	2,473,006	33.3	NWSC
100,000 – 250,000	7	926,831	12.5	
50,000 – 99,999	16	1,164,443	15.7	
25,000 – 49,999	24	851,015	11.5	WSDf
10,000 – 24,999	91	1,382,409	18.6	
Less than 10,000	117	628,160	8.5	
<b>Total</b>	<b>197</b>	<b>7,425,864</b>	<b>100</b>	

*Source: UBOS, 2016*



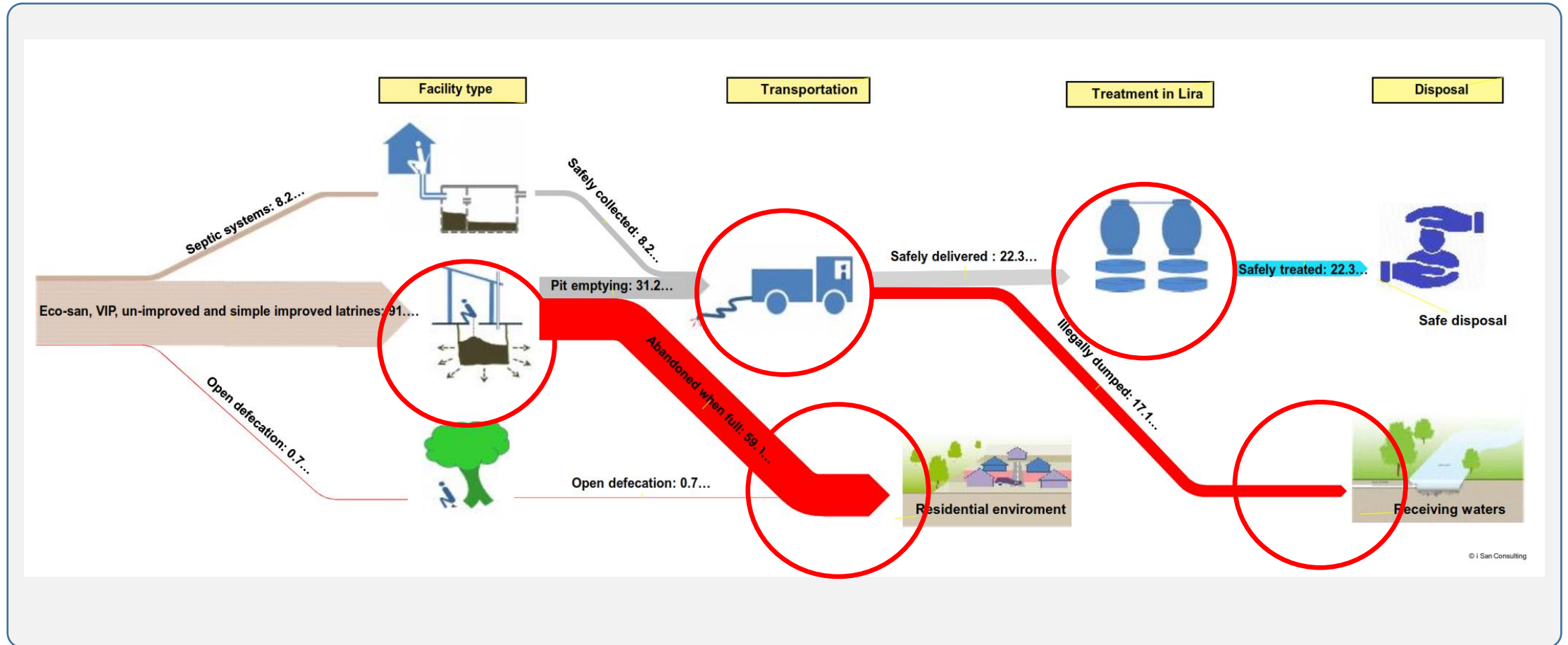
# Financing TSP development process

- Financing to be done by WSDFs and Municipals/ Town Councils (if cost sharing is applied)
- 24 TSPs under Phase 1 will cost circa UGX 1,032 million (US\$ 283,840), assuming a population of around 50,000 inhabitants per town
- Financing for TSPs in towns where water supply schemes are yet to be developed could be done along the appraisal activities of the water supply schemes
- For towns where water supply schemes are already operational, TSP process has to be funded either on a cost sharing basis or fully funded by WSDFs

## Capacity building for the TSP development process

- Strategy also proposes building internal capacity of staff from the four regional WSDFs and external consultants (to support WSDFs)
- Capacity building of WSDF staff and external consultants will incur a onetime cost circa UGX 70 million (US\$ 19,400)
- The cost of training and coaching activities for town council staff (max. 10 persons) is circa UGX 2 million (US\$ 3,300).

# Situation in Apac



# Demography in the six project towns

## Population

Town	District	Population Year 2014	Households Year 2014	Population Year 2017	Households Year 2017	
Kamdini	Oyam	8,980	1,568	9,800	1,960	
Aduku	Apac	7,639	1,700	8,300	1,660	
Loro	Oyam	12,441	2,383	13,600	2,720	
Ibuje	Apac	1,033	200	1,100	220	
Apac	Apac	14,503	2,937	15,800	3,160	
Oyam	Oyam	11,857	2,430	13,000	2,600	
<b>Total</b>		<b>56,453</b>	<b>11,218</b>	<b>61,600</b>	<b>12,320</b>	
					<b>Persons per family</b>	<b>5.0</b>

## Monthly household incomes (Assumptions)

% Population by Incomes	Income Level	Avg. Monthly Income	US\$/day/person (Source: WB 2014)			% without WC or Lined VIP	
<b>60%</b>	Low Income	<b>UGX 100,000</b>	=	<b>0.50</b>	to	<b>1.25</b>	<b>85%</b>
<b>25%</b>	Mid Income	<b>UGX 200,000</b>	=	<b>1.25</b>	to	<b>2.00</b>	<b>75%</b>
<b>15%</b>	High Income	<b>UGX 500,000</b>	=	<b>2.00</b>	to	<b>6.00</b>	<b>0%</b>

% of monthly income affordable to repay loan	=	<b>10.0%</b>
Commercial Bank loan interest rate on loans	=	<b>2.0%</b> per month
Population Growth Rate	=	<b>3.0%</b> per annum

# Assessing affordability of HH to repay loans at 2% interest rate

<b>Mid income Households:</b>	Substructure cost	1,400,000
	Superstructure cost	495,000
	<b>Total cost</b>	<b>1,895,000</b>
<b>Low Income Households:</b>	Substructure cost	1,400,000
	Superstructure cost	250,000
	<b>Total cost</b>	<b>1,650,000</b>

## LOAN REPAYMENT FOR SUB & SUPER STRUCTURE FOR MID INCOME LEVEL

Cost Ush	1,895,000	Mid Income pm.	Affordable pm.	
Bank int. pm	2.0%	UGX 200,000	UGX 20,000	
Repayment Months	Macro: Ctrl a Loan UGXh	Interest cost p.m. UGX	Repay p.m. UGX	Balance UGX
1	1,895,000	37,900	20,000	1,912,900
2	1,912,900	38,258	20,000	1,931,158
3	1,931,158	38,623	20,000	1,949,781

The interest costs are too high to repay loan.

## LOAN REPAYMENT FOR SUB & SUPER STRUCTURE FOR MID INCOME LEVEL

Cost Ush	1,650,000	Low Income pm.	Affordable pm.	
Bank int. pm	2.0%	UGX 100,000	UGX 10,000	
Repayment Months	Macro: Ctrl a Loan UGXh	Interest cost p.m. UGX	Repay p.m. UGX	Balance UGX
1	1,650,000	33,000	10,000	1,673,000
2	1,673,000	33,460	10,000	1,696,460
3	1,696,460	33,929	10,000	1,720,389

The interest costs are too high to repay loan.



Repayment keeps increasing due to low level of repayment



## Assessing affordability of HH to repay loans at 0.5% interest rate

<b>Mid income Households:</b>	Substructure cost	1,400,000
	Superstructure cost	495,000
	<b>Total cost</b>	<b>1,895,000</b>
<b>Low Income Households:</b>	Substructure cost	1,400,000
	Superstructure cost	250,000
	<b>Total cost</b>	<b>1,650,000</b>

<b>LOAN REPAYMENT FOR SUBSTRUCTURE FOR MID INCOME LEVEL</b>				
<b>Cost Ush</b>	<b>1,895,000</b>	<b>Mid Income pm.</b>	<b>Affordable pm.</b>	
<b>Bank int. pm</b>	<b>0.5%</b>	<b>UGX 200,000</b>	<b>UGX 20,000</b>	
<b>Repayment Months</b>	<b>Macro: Ctrl a Loan UGXh</b>	<b>Interest cost p.m. UGX</b>	<b>Repay p.m. UGX</b>	<b>Balance UGX</b>
1	1,895,000	9,475	20,000	1,884,475
129	14,269	Final Installment		

**(ie. loan repaid in 10.8 years)**

<b>LOAN REPAYMENT FOR SUBSTRUCTURE FOR LOW INCOME LEVEL</b>				
<b>Cost Ush</b>	<b>1,650,000</b>	<b>Low Income pm.</b>	<b>Affordable pm.</b>	
<b>Bank int. pm</b>	<b>0.5%</b>	<b>UGX 100,000</b>	<b>UGX 10,000</b>	
<b>Repayment Months</b>	<b>Macro: Ctrl a Loan UGX</b>	<b>Interest cost p.m. UGX</b>	<b>Repay p.m. UGX</b>	<b>Balance UGX</b>
1	1,650,000	8,250	10,000	1,648,250
350	4,629	Final Installment		

**(ie. loan repaid in 29.2 years)**

# Loan repayment periods for superstructure, with substructure subsidy

<b>Mid income Households:</b>	Substructure cost	1,400,000
	Superstructure cost	495,000
	Total cost	1,895,000
	Less government subsidy	-1,400,000
	Cost to family	<b>495,000</b>
<b>Low Income Households:</b>	Substructure cost	1,400,000
	Superstructure cost	250,000
	Total cost	1,650,000
	Less government subsidy	-1,400,000
	Cost to family	<b>250,000</b>

<b>LOAN REPAYMENT FOR SUBSTRUCTURE FOR MID INCOME LEVEL</b>				
Cost Ush	495,000	Mid Income pm.	Affordable pm.	
Bank int. pm	2.0%	UGX 200,000	UGX 20,000	
Repayment Months	Macro: Ctrl a Loan UGXh	Interest cost p.m. UGX	Repay p.m. UGX	Balance UGX
1	495,000	9,900	20,000	484,900
35	9,859	Final Installment		
<b>(ie. loan repaid in 2.9 years)</b>				

<b>LOAN REPAYMENT FOR SUBSTRUCTURE FOR LOW INCOME LEVEL</b>				
Cost Ush	250,000	Low Income pm.	Affordable pm.	
Bank int. pm	2.0%	UGX 100,000	UGX 10,000	
Repayment Months	Macro: Ctrl a Loan UGX	Interest cost p.m. UGX	Repay p.m. UGX	Balance UGX
1	250,000	5,000	10,000	245,000
36	28	Final Installment		
<b>(ie. loan repaid in 3.0 years)</b>				