



Slum Free City Planning – Context, Approaches and Methodology

Darshini Mahadevia

(Director)

Centre for Urban Equity

BinUComm Meet

Krems, March 3, 2017

Contents

- Processes of slum formation – Key issue is land
- Summarising slum formation processes
- Lessons learnt from public housing efforts
- Step by step methodology of slum development/ redevelopment

Processes of forming informal settlements

1. Squatting on public lands

Example: Chhotunagar, Rajkot



Squatting on railway lands

Rukhadiyapara, Rajkot (Railway land)





Nizarapara, Birubari

Squatting and Appropriation (*Dakhal*) of Forest Lands in Hillsides ,
Guwahati

Squatting supported through political patronage

- ‘Clientalist’ politics - squatter settlements are formed by encroaching on public by the local powerful lords, who generally are politically connected or are local representatives of a political party.
- The residents are enrolled as voters by the local politicians.
- Most of such settlements have no rights on the land they are established on, yet the residents perceive a sense of security on account of the political patronage they enjoy.
- The political support may ensure that the slum is not evicted, as the local politician might lose his/her vote bank.

2. Informal settlements on social/ religious lands

- The state or the local government often gives lands to religious organisations for the use of the latter.
- Such lands are then given by the latter to their benefactors for the purpose of housing.
- Often such lands are then sub-divided and sold multiple times in the informal market and also encroached upon leading to development of an informal settlement.
- The religious organisations are generally unable to reclaim their lands back from the encroachers.
- The state or the local government, which is the original owner of the land, is also unable to claim back the land. Such settlements tend to remain informal as no agency is able to intervene in its development.

Example: Ganj Shahid Tekra in Ahmedabad



- Ganj sahid ni tekra is located on AMC land with its extension on some part of kabristan trust land.
- An area of 100,000 Sq. Mt. AMC land was sold to people by local politician 30yrs back.
- The Kabristan trust to earn revenue permitted people to build house on lease basis.
- The Lease expired for all lease holders and now they are there as occupier.
- Allahnagar slum has come up on the trust land.
- Trust does not allow any development.
- 2002 riot affected have further encroached on the lands of the kabristan.



3. Squatter settlements on former industrial lands

- Informal developments/ encroachments in the chawls



Copy right: Centre for Urban Equity

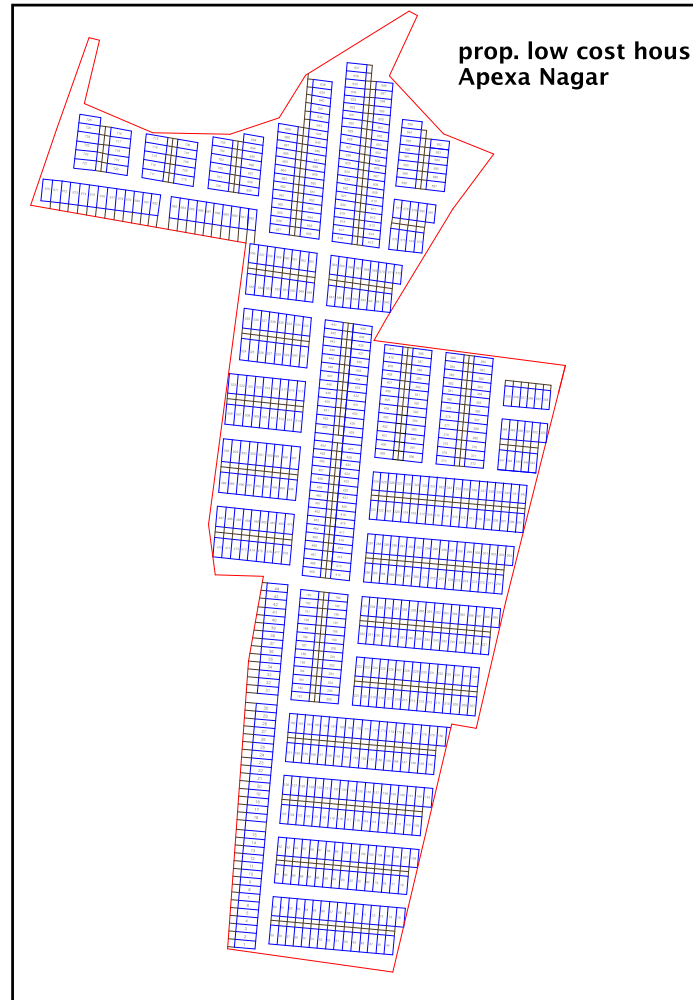
Narayandas ni Chali, Ahmedabad

- Narayandas Ni Chali is a slum built on a private flat land about 8176 Sq. Ft. in area.
- Comprises of 450 households making up a population of about 2700
- Narayandas was the owner of this land
- The owner started to give this land as the rental accommodation to the workers of calico mill.
- The Dwelling Units were transferred to the renters and then to other renters illegally or on the bases of stamp papers and power of attorney.
- Overtime, the government started to take taxes and gave them all the basic services.
- This is the private slum which is now out of control of original owner and also there is no any owner for this land

4. Commercial sub-division of agricultural land

- Urban peripheral lands, in situation of high population growth rates results in commercial subdivisions of agricultural lands without taking necessary permissions.
- For land use change from agricultural to non-agricultural, NA (non-agricultural) permission is required. This process is cumbersome and costly and 'informal developers' bypass that.
- The land parcel available is cheap and clients go for incremental housing.
- After many years of existence, the local authorities extend basic services to these settlements. The former may also undertake a process to legalise such land parcels and bring them in the ambit of the property tax

Planned Informal Settlement -Apekshanagar, Surat



સુરત મ્યુનિસિપલ કોર્પોરેશન નોટીસ કોપી

શ્રી બાલુભાઈ કાંજિભાઈ પટેલ મ્યુનિસિપલ કોર્પોરેશન નોંડેડ ૧૦૨૦ના ફીટચુલ પ્રકારના ૮ ના કાનુન ૩૦ પ્રમાણે તેના ગુણવત્તા શોધ સંસ્કરણ આજીવન સેસ નોંડેડ ૧૦૪૨ મુજબ

જન સંબંધને પ્રથમ પાસ વગર વ્યક્તિનું નામ અને સંબંધનું

BALUBHAI KANJIBHAI PATEL ETC POSS SADHURAM HARDEV MISTRI		વર્ષ (બુલેટ)	
GOKALKABAS TA KANDELA DIST SIKAR RAJASTHAN		01-04-88 TO 31-03-89	
સંબંધ આરંભનારનું નામ		વોલ નંબર 31A	
SELF		બોલ નંબર 4944	
નોંડ નંબર/રેસ નંબર/ સ્. પ્લોટ નંબર/ટી.પી. નંબર		ડિવિઝન નંબર	
0155/2 PAIKI PL NO 35		31A-21-0341-0-001-L	
આકારણી	વિભાગ વસતિ	પેટ આકારણી	ઉપરોક્તનો પ્રકાર
360		324	OPEN PLOT
કચ્છો વિસ્તાર		આકારણી વિસ્તાર	
સામાન્ય વેગ		પાટણી	ચાલુ
77.76	38.88	77.76	38.88
વોલર ટેકા		વ્યાજ સંબંધી તારીખ	
		તારીખ	માસ
		16	02
વોલર ચાર્જ		બોલની તારીખ	
		17	02
કોન્ટ્રોલની ટેકા		બોલ અરપાઈ કરવાની છેલ્લી તા.	
		03	03
નોટીસ ફી		એક દિવસના વ્યાજની રકમ	ચાલુ ફૂલ
		0.038	0.019
વોલર ફી			
વ્યાજ		કચ્છો વિસ્તાર શિક્ષણ ઉપકર	પાટણી બાબી
14.89		19.50	ચાલુ રકમ
ફૂલ		શિ. ટી. ટી. (૧૬)૧	
ફૂલ દિવસના વેગ		ફૂલ શિ. ઉપકર	ફૂલ રકમ
92.65	38.88	19.50	9.75
અન્યથાની અલેલ રકમ		અન્યથાની અલેલ રકમ	
અન્યથાના રકમ		ફૂલ વેગ	ચાલુ નોટીસ ફી
131.53	29.25	160.00	050
		નોટીસ ફી સંબંધી રકમ	
		160-57	

આ બોલની તારીખથી ૧૫ દિવસમાં દિવસના વેગની રકમ અરપાઈ ન થયા તો તે રકમ બીજા નોટીસ આપવા વિના બી.પી.એમ.સી. કોડેડ ૧૦૨૦ની કલમ ૧૪૧ (બે) અનુચિતની જોગવાઈ અનુસાર ૧૮ ટકાના સાદા વ્યાજ સહાયે વસુલ લેવાને પાત્ર રહેશે.

ROUNDING-OFF C/F 0.78

(જનુ ગુપ્તતા માટે પાસના કુખી)

સુરત મ્યુનિસિપલ કોર્પોરેશન

Apekshanagar, Surat



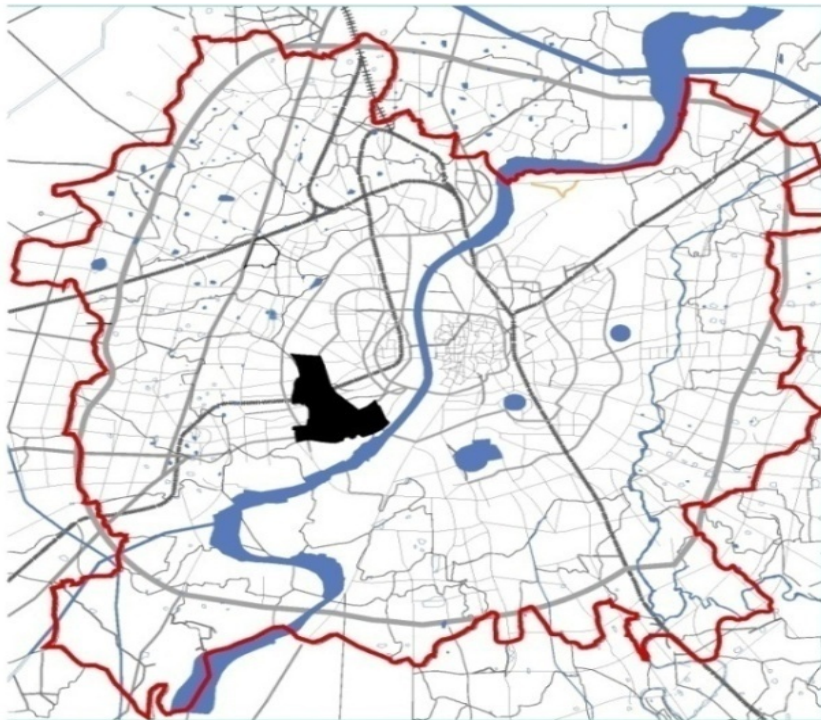
Shreenathji Society, Rajkot



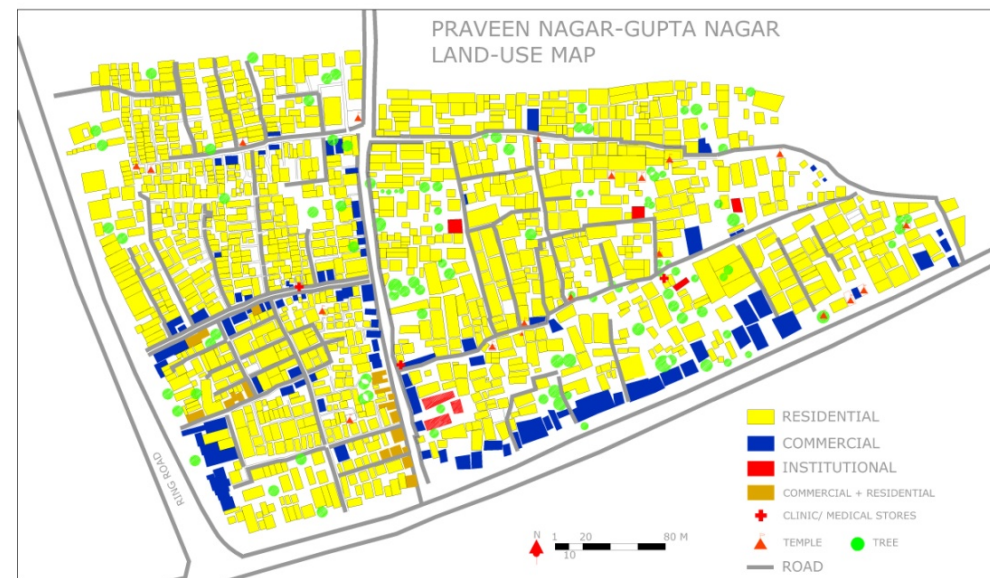
5. Commercial sub-division of land reserved for public purposes or to be acquired

- When lands reserved for public purposes such as green belt, for educational and health purposes, for even low-income housing, are notified for acquisition, these are immediately sub-divided and sold by the original land owner or are given away to 'informal developers' to subdivide and sell.
- Similarly, the lands declared as in excess under the Urban Land Ceiling and Regulation Act (ULCRA), 1976 and notified for acquisition, also were informally sub-divided and sold.
- The insecurity arising from the government notification of acquisition of land keeps the land prices low, making them affordable to the low-income households

Pravingnagar-Guptanagar on Greenbelt land



Location and Land Use



Community mapping - PG



- | | | | |
|---|---|---|---|
|  Kathiyavadi |  Vaghri |  Vanjhara |  Marwadi |
|  Rabari |  Harijan |  Bhil |  Mixed Community |



PG Before SNP



PG After SNP

6. Illegal extension of public sector housing

- This can be seen in numerous cases in Delhi Development Authority's (DDA) flats in Delhi.
- This is observed also in employee housing provided by public and government agencies

Encroachments in government housing, Guwahati



BSUP housing at Fatashil for GMC workers who lived on this land (in rental units in a GMC colony, which was demolished to build BSUP housing) have been temporarily resettled along a nearby road since 3-4 years.



Railway Quarters (rental housing) at Bamunimaidan with informal housing emerging around the quarters



GMC's Punjabi Colony at Fatashil, Guwahati

Government-supplied housing (rental) quarters and emergence/expansion of housing informalities at these sites (through sub-letting as well as the construction of new structures in inbetween spaces)

These stories tell us the following:

1. Public agencies being dysfunctional and private land markets being aggressive, access to housing for the new low-income migrant to a city is through such informal commercial markets.
2. If the new migrants have squatted on public lands, reserved for other uses, then, there is high threat of evictions.

3. The dwellers consolidate gradually, through increasing the quality of housing and then accessing basic services informally. Sometimes, some collective efforts of accessing basic services can be observed.
4. In the situation of 'left to their own devices' or inaction on the part of the state, or a lack of ability by the state to access such land, poor communities gain *de facto* shelter security and build their lives and assets through such processes.
5. A local politician helps the settlement to access municipal services. This is the case of Surat settlement, Apekshanagar.

6. In parallel, municipal authorities, in their efforts to increase collection of local taxes, start sending out property tax bills to the dwellers.
7. A deviant of this is when an NGO intervenes as a facilitator. In that case the progression is faster and sense of tenure security is higher. Case of PG illustrates this.
8. In PG case, the local state was a willing partner to share the responsibility of slum development as well as work with the NGO.

9. The interesting story of these settlements is when the local state, that is the municipal authority decided to intervene, termed as 'external shock-motivated upgradation' (Hansen and Williams 1987).
10. The route of incremental housing, through pro-active local state is the most feasible option for 'inclusive urbanization' in India.
11. However, of late, we see, market-led evictions under the guise of Public-Private-Partnership (PPP), using a Slum Redevelopment Scheme approach coming from Mumbai.
12. If the debate on slums is constructed in the legal language, then, the chances of state-led and/or market led evictions increase.

Learnings from the Past

- Poor have made substantial investments in their own housing
- Task of a planner is to respect these
- Additional government funding into infrastructure is leveraged by the poor to improve their living conditions
- Subsidies given for housing that does not recognise the need as well as their affordability will be wasted. There is gentrification
- In many BSUP projects these have happened
- Large subsidy to a small group creates incentives for selling off and malpractices
- Large subsidy to a small group excludes majority from access to housing finance
- Community participation from the beginning ensures that post-project management systems are put in place
- **In any housing project, which is total redevelopment, who is included and who is excluded is a big point of tension in the communities.**
- **Housing is not a technical issue but a social issue and has to be addressed socially**

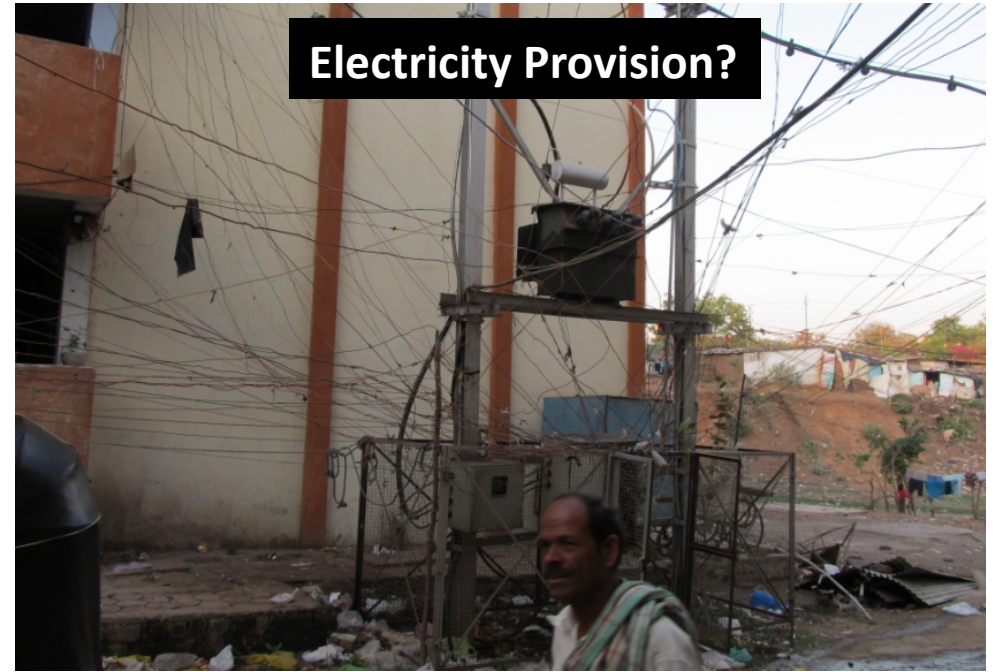
Outpourings on the streets in India is indicating that top down approaches would not work

BSUP housing, Bhopal

Solid Waste Mis-management



Electricity Provision?



House cannot hold household items



Walls giving way within a year



In-situ VAMBAY and BSUP housing, Pune



Some Cross checking on our real world

Informal Housing , Rajkot (study of 19 settlements)

Settlement: Chamundanagar



- On private land notified for acquisition under ULC, area of 2.37 ha
- Established in 1991
- Non notified slum (called suchit society by RMC)
- All services available
- Affordability to pay per month on housing about Rs.800/month by 52% HH

Physical parameters

- Open area: 59%
- FSI: 0.62
- 47% built up structures are G+1
- Dwelling unit Density:72HH/Ha
- In-situ redevelopment



Informal Housing , Rajkot



Settlement: Vaghrivas

- Established on railway land; about 6.7 acres;
- Insecure tenure, demolished 4 times in last 20 years
- Substandard kutcha houses with no basic services – 78% earn less than Rs.8000
- 50% of the surveyed households can afford to pay less than F gradation



Physical parameters:

- Built Up: 18%
- Open area: 82%
- Net FSI: 0.18
- Open space per capita: 29.41 sqm
- Dwelling unit Density: 51 HH/Ha

Informal Housing , Bhuj (study of 10 settlements)

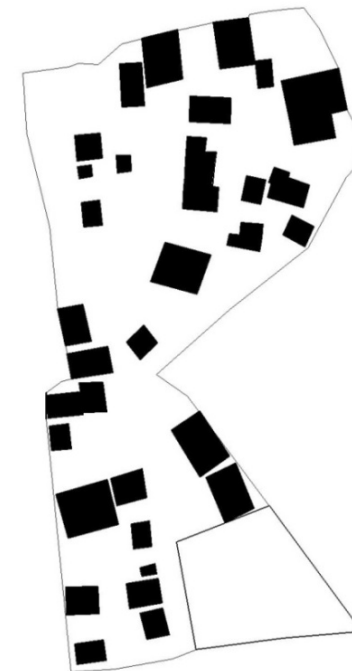
Settlement: Bhimrao Nagar



- Established on government waste land; on an area of 0.47 ha – application for land tenure to the Bhuj Municipality in process
- 48% as daily wagers; 68% with less than Rs.5000 income per month
- Affordability to pay per month on housing Rs.500-600/month by 68% HH

Physical parameters

- Built-up area: 991.51 sqm
- Open area: 27%
- FSI: 0.35 (permissible FSI is 1.2)
- Dwelling unit Density: 25 HH/Ha (permissible is 225HH/Ha)
- Average plot size: 67 sqm



APPROACH

Approach

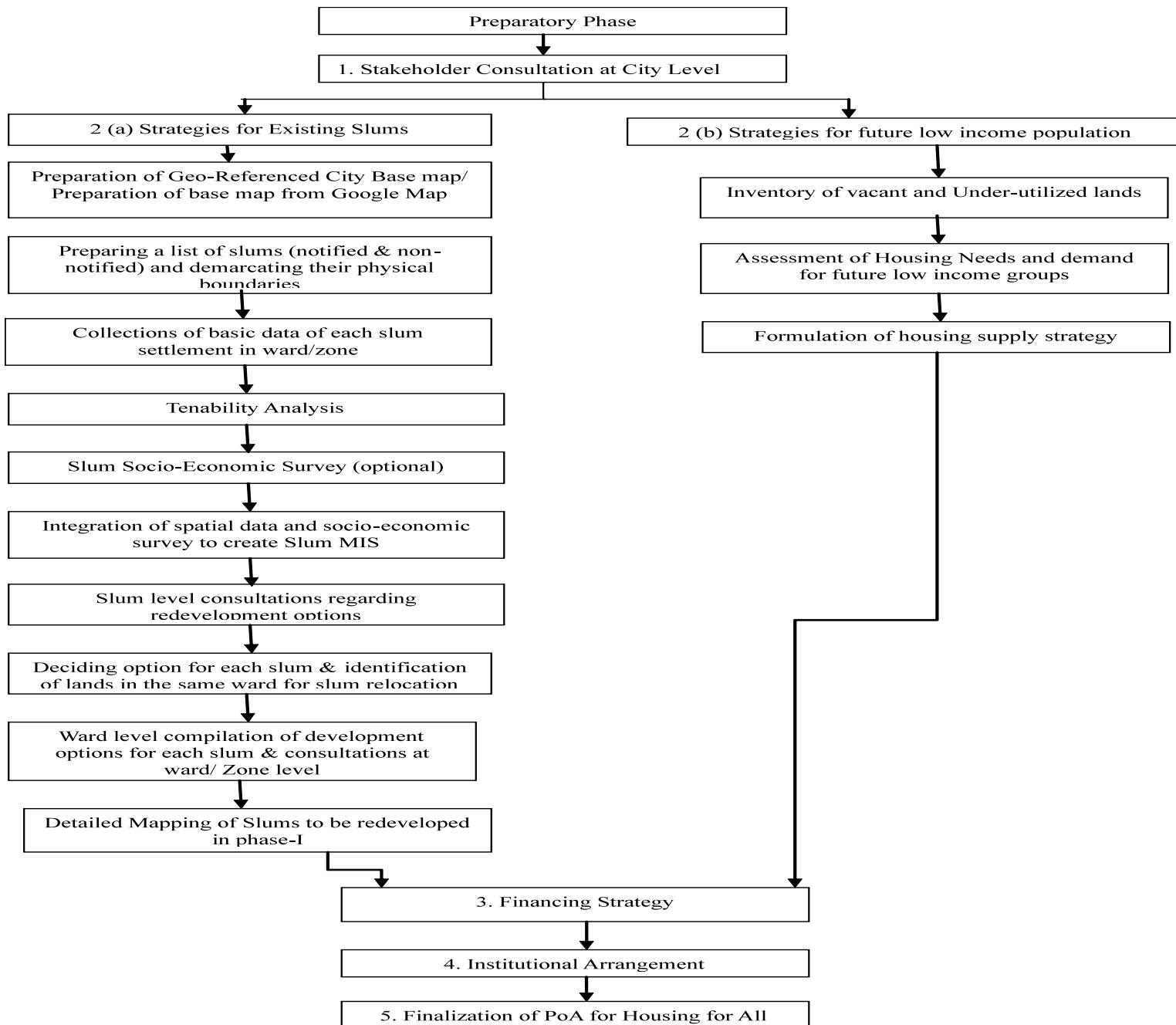
- Ward level approach to minimize displacements
- For slums & informal settlements on reserved lands, solution could be found through ULB notifications
- Except large 8 metros, slum and informal settlements' densities are very low
- The dwellers prefer in-situ upgradation or redevelopment

Principles

- **No-eviction guarantee**
- **Universal access of four basic services,**
- **In-situ ungradation – respecting the efforts by the local government and the planning authorities**
- **Supporting CBO formation and their accreditation with the ULB**
- **Property rights to the slum dwellers should be construed as a continuum of rights with minimum no eviction guarantee**
- **In case of need to rehabilitate of untenable slums, it should be within the same ward**
- **Preparing ward by ward and zone by zone SFCP**
- **Inclusion of spaces for livelihoods**
- **Inclusion of rental housing within the new housing options selected**

Step by Step Methodology

- Presenting the methodology in a simplified version
- After that more complex details can be gone into
- This methodology has evolved through Planning Groups' Consultations, Consultations with the NGOs and CUE's Own exercise in Rajkot and Bhuj
- We were presented with two different situations, one where there was TSS (Rajkot) and Slum survey (Bhuj)
- Bhuj had community processes well done in two wards
- Rajkot had TSS in few ward



Methodology for slum-free city planning

Preparatory Stage

Inception meeting

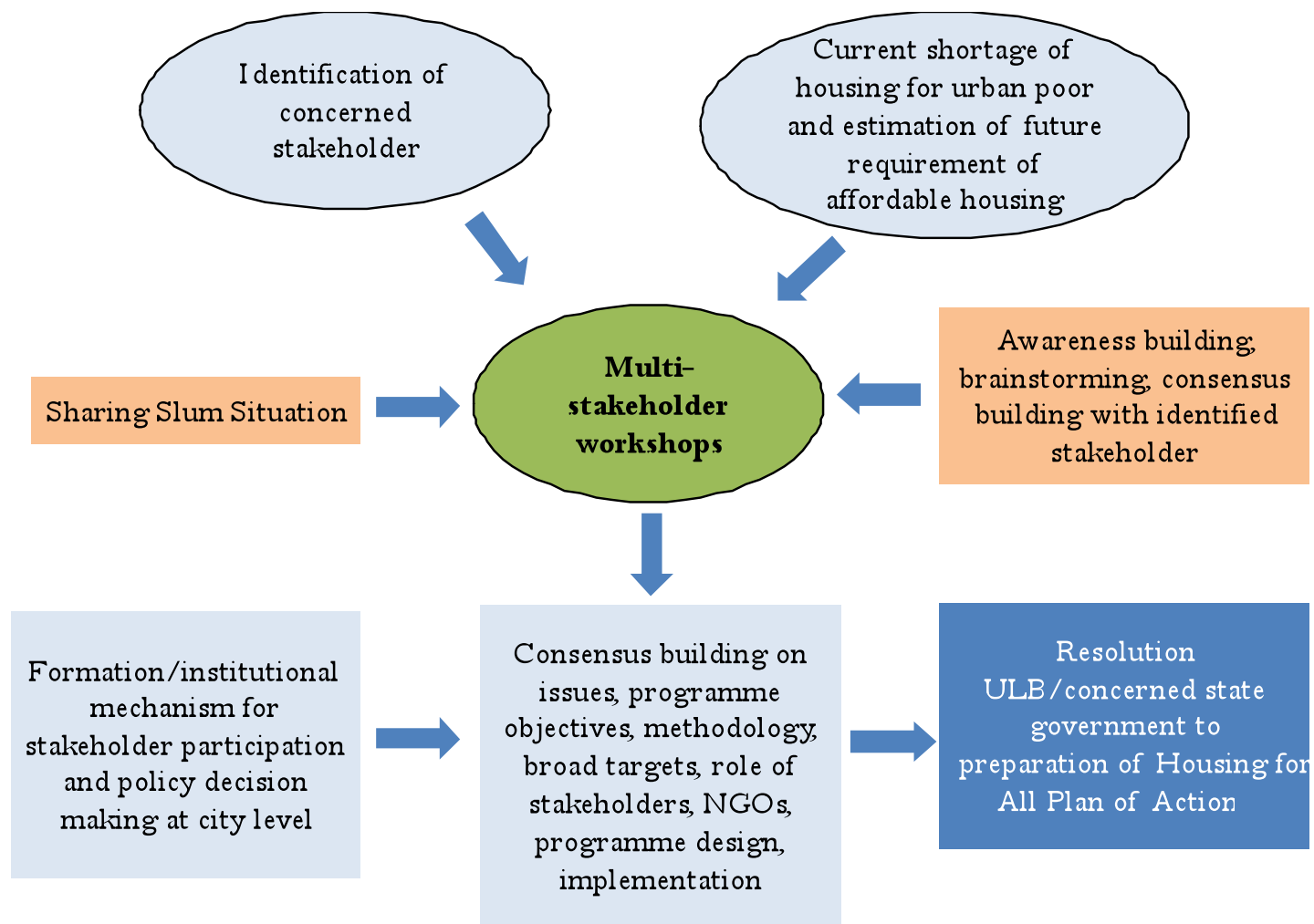
- i. Meeting with ULB officials in Bhuj, April 2010 wherein elected representatives, key citizens, community leaders, NGO Abhiyan's office bearers & CUE members were present

Stakeholder's Consultation

- ii. Meeting with ULB officials in Rajkot, September 2010, wherein the Municipal Commissioner, slum development team, GUDM official & CUE members were present

Primary Data base

- i. Assess available data with the ULB
- ii. Household data collected by Abhiyan in Bhuj
- iii. GIS, Total Station Survey of few wards by RMC



Outputs

1. Introductory Report on RAY identifying the need and approach of RAY
2. Assessment of housing need and demand based on affordability
3. Awareness and consensus building
4. Establish institutional mechanisms for stakeholder participation
5. Resolution by the ULB to prepare SFP

Two stages

Addressing Improvement/
Redevelopment of Existing Slum

Curative Strategy

Housing/ Shelter supply for future low
income population

Preventive Strategy

Steps for Existing Slums

Step 1

Preparation of Geo-Referenced City Base map

Or

/Preparation of base map from Google Map

We used Google maps

**TSS was not ready in
Rajkot and not all slums
were covered**

For Existing Slums

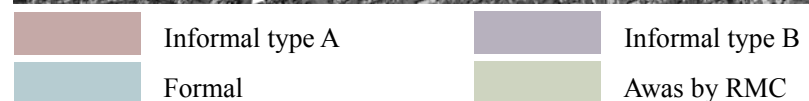
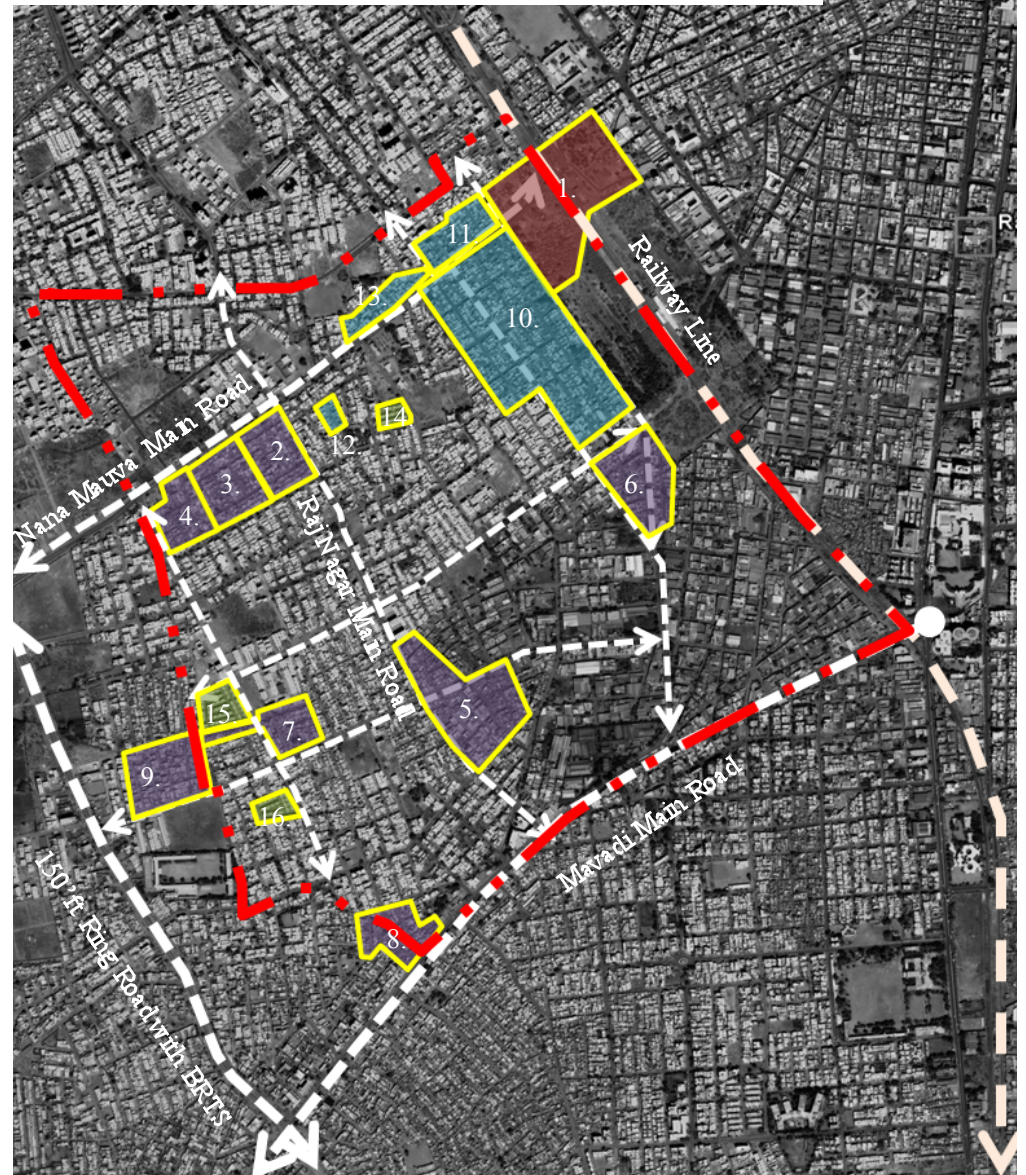
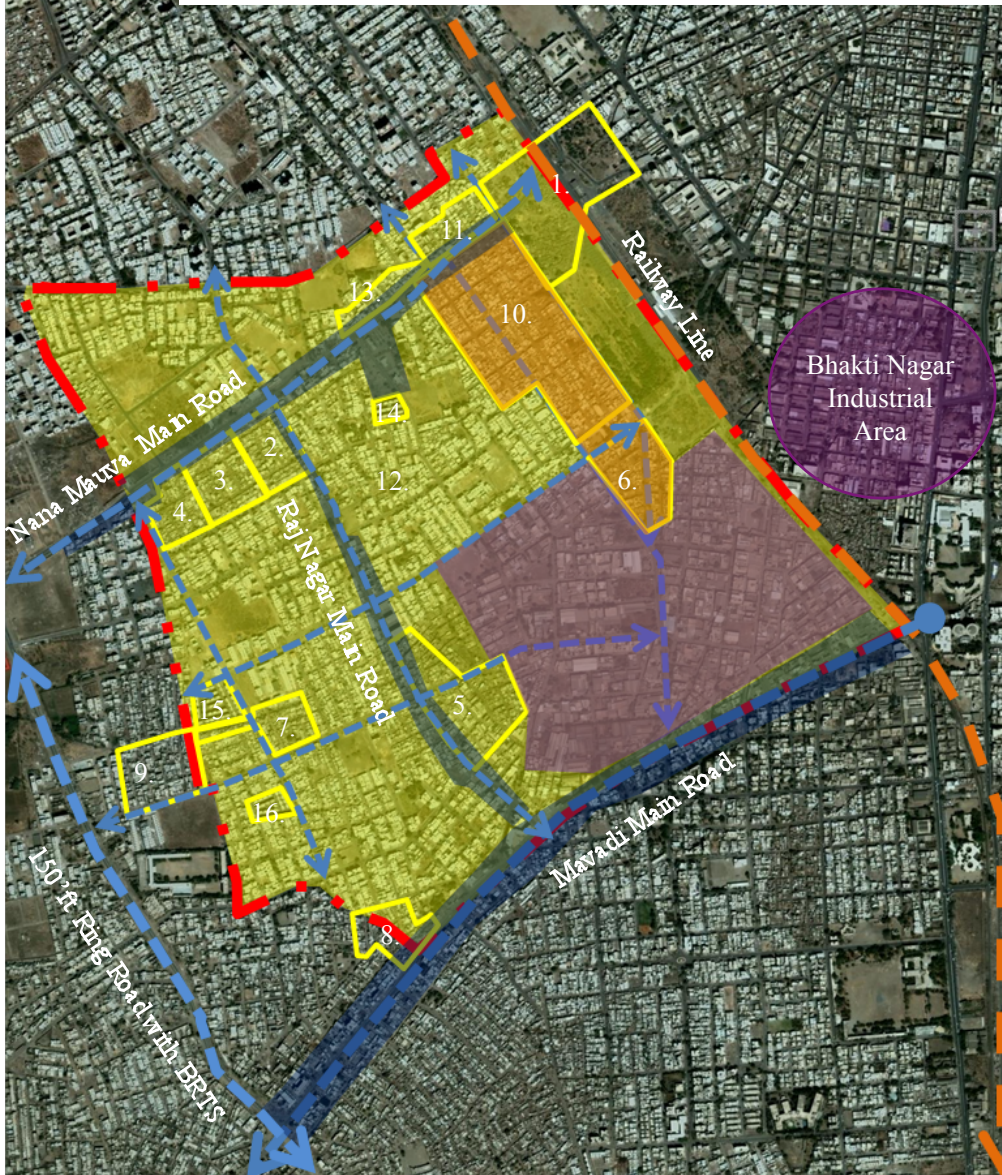
Step 1 – Prepare a map with City boundaries, which will be the base map

- Take a map (google or any other) and mark the city boundary with the help of local government officials
- Mark the ward boundaries on them

Step 2 - Prepare ward wise maps with slum boundaries (we took help of social development officers of the city)

- Prepare a list of slums (Notified and non-notified)
- Visit the site and identify them
- Enlarge the map of each ward to the scale so that additional data (particularly site location and approximate spread of the slum pockets) can be marked on the map (Preferably with the help of local NGOs/CBOs)
- After identification of each slum pocket, form survey teams to go to each of these sites after training them to read maps and mark details on the map.
- The survey teams go with a GPS with an enlarged map (showing the slum pocket and its surrounding areas)
- Using google map as a base, mark the boundary of the slum on the map and also put the GPS locates as exact identification marks to arrive at the area/spread of the slum.

- **Ward Boundary (Ward 14, Rajkot) demarcation on Google map**
- **Detailing in-terms of Land-use and Slum Boundary within ward**



For Existing slums

Step 3 - Collection of basic data of each slum settlement in each ward.

- Data required is:

i) Area of slum

ii) No. Of hhs, calculate density

iii) General employment profile

iv) Land ownership

v) Land use in the master plan/ development plan

vi) Extent of economic activities in the slums

vii) Level of facilities

viii) Extent of investments by the households in slums & housing conditions

ix) Income, affordability and savings

- Can be done with the help of NGO

- Can also be community animators, etc.

Main Methodology

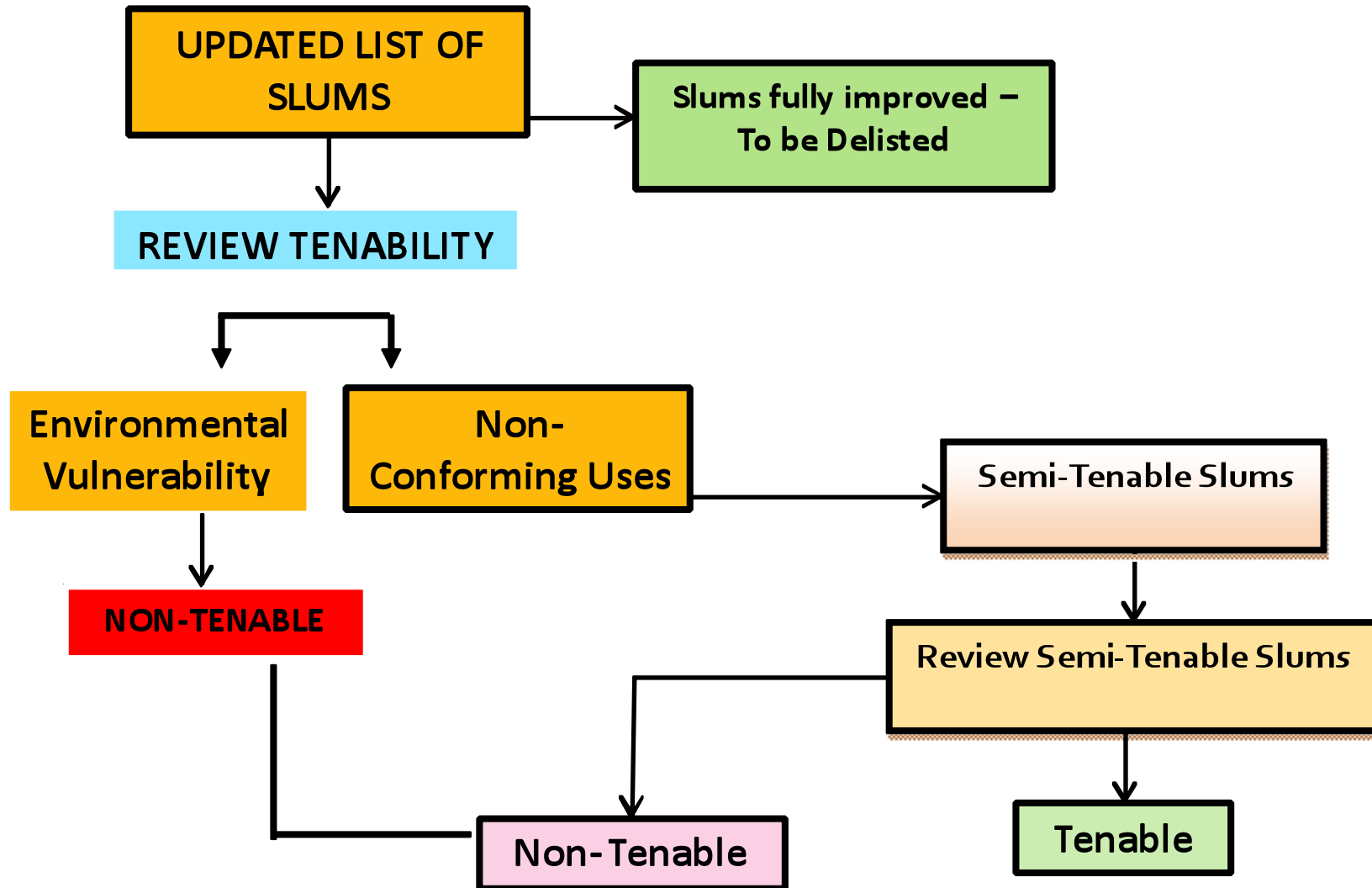
Step 3 – Socio economic data of the slum (if MIS data not available)

We conducted FGDs with slum dwellers –

Output – A Table with data on each slum by wards for the earlier mentioned parameters to be used for deciding development option for each slum



For Existing Slums



On Tenability

Untenable Slums

- hazardous site (prone to environmental & health hazards like water logging, waste dumps, landslides),
- reservation for key urban infrastructure such as roads, school, health facility, transport facility, etc and
- environmentally sensitive areas like coastal zones, mangroves, forest areas, etc,. In order to avoid large scale displacements, while formulating the list of sites earmarked for relocation care should be taken that the list includes only those conditions mentioned above.

On Tenability

- *Semi-Tenable Slums* are those slums which are located on land zoned for non-residential uses, land proposed for public and semi-public uses, industrial land, etc., as prescribed by the Master Plan. Often land proposed under the Master Plan for specific purposes do not get developed for many years and in these cases there may be a review of the land use with the following possibilities:-.
- Change of present use to residential use
- Swapping of land uses for the same area of land in the same zone of the city The ULB may pass a Standing Committee order to change land use reservation.

Output

- List of slums to be developed in-situ
- Decision about lands whose landuse could be changed to accommodate in-situ redevelopment
- List of slums to be rehabilitated

For Existing Slum

Step 5 – Detailed Socio-economic Survey (Optional in the beginning)

- Can carry out this exercise for only slums whose DPRs are to be prepared

Outputs

Data in MIS

Step -6 Integration of spatial data & Socio-economic (including bio-metric) information at slum/city level to create slum MIS (Option and only if the detailed Total Station Survey for GIS and detailed survey as per NBO format carried out)

For Existing Slums

Step 7 – Slum level consultations on redevelopment options for slums tenable for in-situ redevelopment.:

- i) This process should be facilitated by a CBO, which is registered and accredited with the ULB.
- ii) The criteria to be used for the purpose of deciding redevelopment options of tenable slums are:
 - a) investments in housing by the current dwellers and the ULB,
 - b) density,
 - c) extent of economic activities within slums,
 - d) housing affordability of households and
 - e) land values

Output

Development option for each slum pocket for the ward

Existing methodology

Step 8- Deciding Development Options for Each Untenable Slum/ Squatter Settlement to be rehabilitated

- i. There should be consultation on options with the dwellers.
- ii. Identification of lands in the same ward/ zone for case of relocating untenable slums

Outputs

Rehabilitation Plan for the dwellers of untenable slums.

Ward 14 Options - Rajkot

Name	Total HH	Density (pph)	Existing FSI	Issues	Land Prices	Affordability (Rs. pm)	Options
Ambedkar nagar	1432	286	0.41	<ul style="list-style-type: none"> In secure tenure 30% rented houses 	*R: 15000 O: 27000 S:60000	<500	In situ up gradation through tenure regularization + partial redevelopment
Khodiyar nagar	1071	252	0.36	<ul style="list-style-type: none"> In secure tenure 44% have unsteady income 	R:15000 O: 27000 S:60000	<500	In situ up gradation through tenure regularization + partial redevelopment
Bhavani nagar	175	490	0.44	Services and infrastructure very poor	R:25000 O:35000 S:75000	<500	In situ partial up gradation
Saraswati nagar	186	520	0.43	<ul style="list-style-type: none"> In secure tenure High future land value 	R:25000 O: 35000 S:75000	<200-500	PPP or Relocation

* Residential-R
Office- O
Shops- S

Ward 14 Options - Rajkot

Name	Total HH	Density	Existing FSI	Issues	Land Prices	Affordability (Rs. pm)	Options
Laxminagar-vagrivas	773	283.15	0.18	-Land conflicts -Eviction threats		200-500	Relocation
Meghmaya nagar	143	389.86	0.62	75% of land belongs to pvt owner	R-32000 O-42000 S-80000	500-800	Tenure regularisation on R.M.C land
Shyamnagar	137	351.36	0.51	-pvt land ownership	R-32000 O-42000 C-80000	200-500	Redevelopment

Name	Total HH	Density (pph)	Existing FSI	Issues	Land Prices	Affordability (Rs. p,m)	Options
Bharat nagar	461	860	0.37	Services and infrastructure	R:2500 O: 35000 S:75000	<500-800	In situ partial up gradation
Jalaram society	140	392	0.62	Services and infrastructure	R:1500 O:27000 S:60000	<500-800	In situ partial up gradation
Shrinathji society	323	602	1.14	Services and infrastructure	R:15000 O:27000 S: 60000	200-500	In situ partial up gradation

Ward 1 Options - Bhuj

Name	H.H. No.	Density (person per ha.)	Existing F.S.I.	Issues	Land price (persqft)	Affordability (Rs. per month)	Options
Sanjog Nagar	1385	250	0.71	Tenure Security, Road, & drainage	Res. – 8000 Com. – 12000 Office - 10000	500	Up gradation through tenure regularization
Node Faliya	42	416	0.1	Tenure Security, water, Road & drainage	Res. – 4000 Com. – 6000 Office - 6000	500	In-situ redevelopment through giving tenure rights with funding
Aman Nagar	187	255	0.14	Tenure Security, Road & drainage	Res. – 5000 Com. – 12000 Office- 10000	500	Full redevelopment & private developer
Bakali Colony	115	394	0.18	Tenure Security, Livelihood condition	Res. – 5000 Com. – 12000 Office - 10000	750	In-situ partial upgradation through tenure security

Ward 1 Options - Bhuj

Name	H.H. No.	Density (person per ha.)	Existing F.S.I.	Issues	Land price (persqft)	Affordability (Rs. per month)	Options
Bhimrav nagar	37	314	0.35	Tenure Security, Road, & drainage	Res. – 8000 Com. – 12000 Office - 10000	600	In-situ redevelopment through tenure regularization
Kolivaas	33	146	0.32	Tenure security & water	Res. – 6000 Com. – 12000 Office - 10000	600	In-situ partial upgradation through tenure security
Maldhari vaas	36	160	0.12	Tenure Security, Water	Res. – 5000 Com. – 12000 Office- 9000	500	In-situ upgradation through tenure regularization
Malinivadi	21	392	0.35	Tenure Security, Electricity, House condition	Res. – 8000 Com. – 11000 Office – 10000	500	In-situ redevelopment through tenure regularization

For Existing Slums

Step 9 – Ward Level / Zone Level Consultation for the Ward/ Zone level Proposal for all the slums within the Ward/ Zone

- Putting together development options for each slum pocket, including proposals for re-densification, if need be, to accommodate slum dwellers evicted from nearby pockets
- Ward level consultations on the ward proposals with the elected representatives, ward committee members, etc.

Outputs

- i. Final approval of the ward/ zone level plan for existing slums
- ii. Selecting slums for phase I implementation using prioritisation criteria, the most important being willingness of the CBO to participate
- iii. Deciding modalities and roles and responsibilities of actors in implementation

For Existing Slums

Step 10 – Identify slums for implementation in the first stage,(Prioritisation for Implementation in Stage 1)

- Can apply the method of matrix (two by two or three by three)
- Can depend upon the willingness and ability of the community to go forward with the project
- Where local NGO is working or there is a strong CBO to take forward the process

For Existing Slum

Step 11 – Preparation of a DPR for slum prioritised as above)

This would include the following activities:

- i. Detailed mapping of slums to be redeveloped in phase-I
- ii) Detailed household survey (MIS)
- iii) Integrating GIS and MIS
- iv) Through consultation, decide on redevelopment approach
- v) Redevelopment option for each existing dwelling unit based on physical condition and financial option decided by the slum dwellers
- vi) Process of getting consent for each existing dwelling unit.

At this stage Total station /preparation of GIS maps and household surveys can be carried out.

DPR to be prepared through community level consultations. **Community consultation should be with maximum 50 households.**

In case of large slums, the slum needs to be divided into **smaller pockets identified through community mapping**. Consultations at the each of the slum pockets- beginning with neighbourhood groups- need to be undertaken while preparing the DPR.

DPR Process – Case of Bhuj Settlement: Bhimrao Nagar

Selection of settlement for DPR

Criteria we used in Bhuj

- Community preparedness
- NGO priority
- Local government interest
- Settlement need urgent attention as partly falling within a TP road

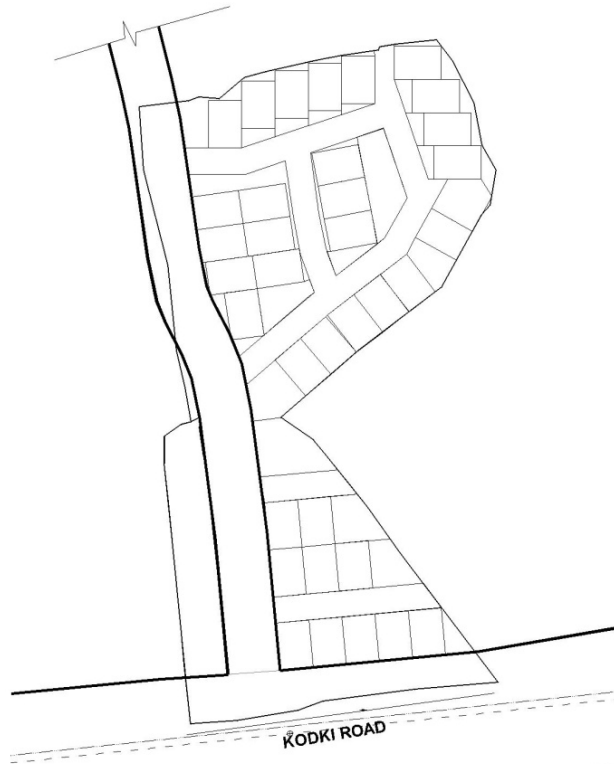
DPR Preparation: Options for Bhimrao Nagar

Row Housing	Group Housing
Individual plot has to follow the setback rules	Combined setback rules could be followed
Total built up area allowed is 70%	Total built up area allowed is 60%
F.S.I. allowed is 1.2	F.S.I. allowed is 1.2
Minimum plot size should be 24 sqm as setbacks are applicable on plot	Minimum plot size should be 18sqm as setbacks are applicable on group housing.
Front & rear margins should be 1.5m	Combined setback from road should be 3m

Group housing (*selected by community during consultation*) will give maximum advantage as individual plot will not have to leave margins and they will get more space to utilize.

Source : Development Control Regulation, Bhuj

Row Housing and Only Plot Options of 47 sqm



People's contribution: Rs.250
Ground Coverage: 27 sqm

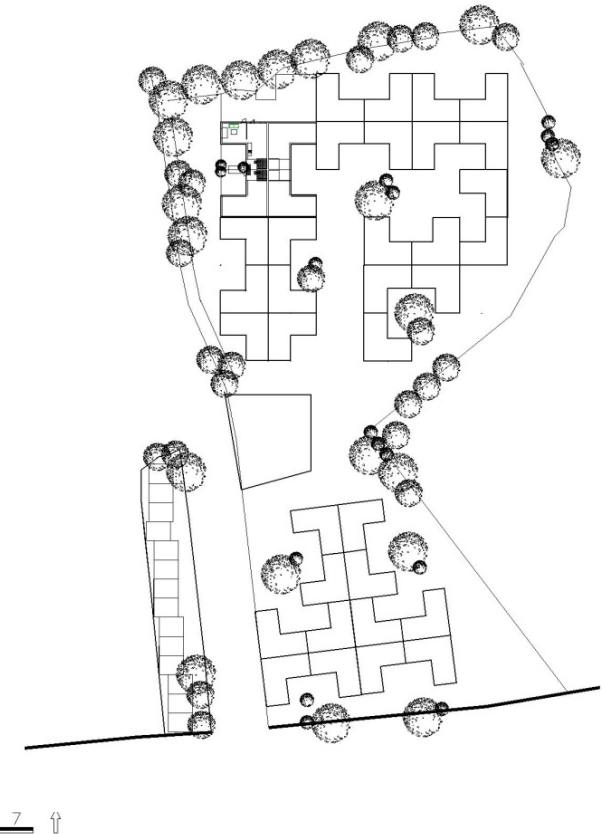
Community Housing with 48sqm plot area



Rs.325
33 sqm

[Video](#)

Community Housing with 70sqm plot area



Rs.625
55 sqm

DP Road: 9 m
Existing FSI: Less than 1
Affordability: About Rs. 650/month

Preferred by Community:
As group housing they have to leave less set-backs

**For preventing future slums
(Addressing Low Income Housing/
Shelter requirements in future)**

For Future Low Cost Housing

Step 1 – Inventory of Vacant and underutilised Lands

The inventory should be done for each Ward/ Zone of the city. The following lands should be identified:

- i) Lands reserved for EWS and LIG housing in the Ward/ Zone in the Master / Development Plan
- ii) 25% lands earmarked for EWS and LIG housing in the new private/public plotted development or new housing
- iii) Vacant public lands which can be diverted for the use of EWS/ LIG housing

It should include information on:

- i) Area
- ii) Current use if any
- iii) Marking on the map

For Future Low Cost Housing

Step 2 – Assessment of housing needs and demand - Existing and Future

This should include:

- i) Estimation of future population as per the Master Plan projections.
- ii) Estimating demand for different income groups for ownership housing and rental housing through analysing current demand and extrapolating for future

For Future Low Cost Housing

Step 3 – Formulation of Housing Supply Strategy

This should include:

- i) Strategy for the development of built houses as per the demand
- ii) Strategy for promoting self-built housing through either sites and services or making only serviced lands available for the new migrants to come and construct their own housing
- iii) Strategy for creating employee housing by employers such as construction firms, industrial units, etc.
- iv) Strategy for creating rental housing for seasonal migrants
- v) Strategy for rental housing for recent migrants

Financing Strategy

This should be prepared for both, existing slums and future low cost housing requirements

The financing strategy should be:

- i) For existing slums based on partnerships between the CBOs, ULBs and the private sector.
- ii) For the future development also with regards to contributions from the low income households, employers, ULB, governments at different levels and the private sector.
- iii) Financing strategies to be linked to the housing redevelopment options for the existing slums. A strategy based on main contributions by the existing slum dwellers would reduce subsidy requirements from the national and state government.
- iv) Similar strategy for future requirements wherein the focus to be on mobilisation of funds from the future low income population
- v) Financing strategy for employer housing.

Institutional Arrangements

- i) In existing slum redevelopment, partnerships between the CBOs, ULBs, and private sector.
- ii) In future developments, to decide on the partnerships between the private, people (CBO) and public