CENTRE FOR DEVELOPMENT STUDIES AND ACTIVITIES

CONTENTS

CENTRE FOR DEVELOPMENT STUDIES AND ACTIVITIES (CDSA)

INTRODUCTION

CDSA is an autonomous research and teaching institution permanently recognised by and affiliated to the University of Pune.

At the national level it is a recognised research institute of the Indian Council for Social Science Research (ICSSR) and the University Grants Commission (UGC).

CDSA was founded in 1976

Institutions under CDSA

Institute for Sustainable Development (ISD)
School of Development Planing (SDP)
Barbara Ward Library and Documentation Centre (BWLDC)
Executive Training Centre and Hostel (ETCH)
Wasteland Development Demonstration Farm (WDDF)

PHILOSOPHY

Rational planning constitutes an essential tool for reconciling any conflict between the needs of development and the need to protect and improve the environment. To ensure objectivity in decision making it is essential to design generic methodologies. The goal of CDSA is to address the goals of poverty alleviation, equity, participatory decision making and sustainable development, and to integrate these issues into development strategies.

BOARD OF TRUSTEES

PRESIDENT

PROF. CHRISTOPHER C. BENNINGER

TREASURER

MS. GURINDAR KAUR

MEMBER SECRETARY &EXECUTIVE DIRECTOR

PROF. ANEETA GOKHALE BENNINGER

MEMBERS

PROF. K.R. DIKSHIT

DR. PRAMOD KALE

DR. ADITI PANT

MR. R. SUDARSHAN

DR. ATUL GOKHALE

INSTITUTE FOR SUSTAINABLE DEVELOPMENT (ISD)

ISD was created by merging Institute for Rural Development (IRD), Institute for Habitat and Environment (IHE) and Institute for Community Development (ICD). It conducts commissioned and sponsored projects including research and action research in areas of urban and rural development.

OVER 150 PROJECTS

SHORT-TERM TRAINING PROGRAMMES ON DEMAND BASIS

SEMINARS, WORKSHOPS & DIALOGUES FOR NGOs AND GOVERNMENT AGENCIES.

CORE COMPETENCIES

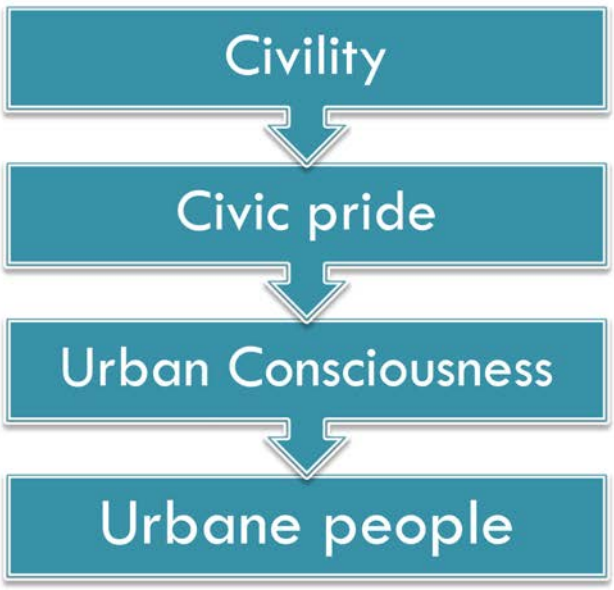
- CLIMATE CHANGE MITIGATION
- DECENTRALISED PLANNING
- URBAN PLANNING
- RURAL PLANNING
- SUSTAINABLE DEVELOPMENT
- CAPACITY BUILDING
- CREATING GENERIC METHODOLOGIES
- EVALUATION
- IMPACT ASSESSMENT

The best description of an urbanized place is a settlement where Public Spirit, Togetherness and Enterprise are reasons for which people have come together and are living in close proximity. These are places which are civilized and they disseminate knowledge, enterprise and societal values which makes us civilized. One must not lose sight of the fact that the process of urbanization is a subset of the process of civilization.

Legend

Major Roads

Manifestations of Civility - Qualitative changes in thought process



Societal manifestation	•Public spirit and togetherness •Enterprise and economic prosperity •Evolution of local leadership •Political Organization •Communication system
Scientific Temper and Technological manifestation	•Creation of knowledge, intellectual products, and technological innovation for improved quality of life. •Reduction of drudgery. •Improvement in health, etc.
Physical manifestation	•Organisation of cities and provision of amenities and facilities to ensure better quality of life i.e. City /town planning, urban design & architecture. • Regulation and control of use of land.

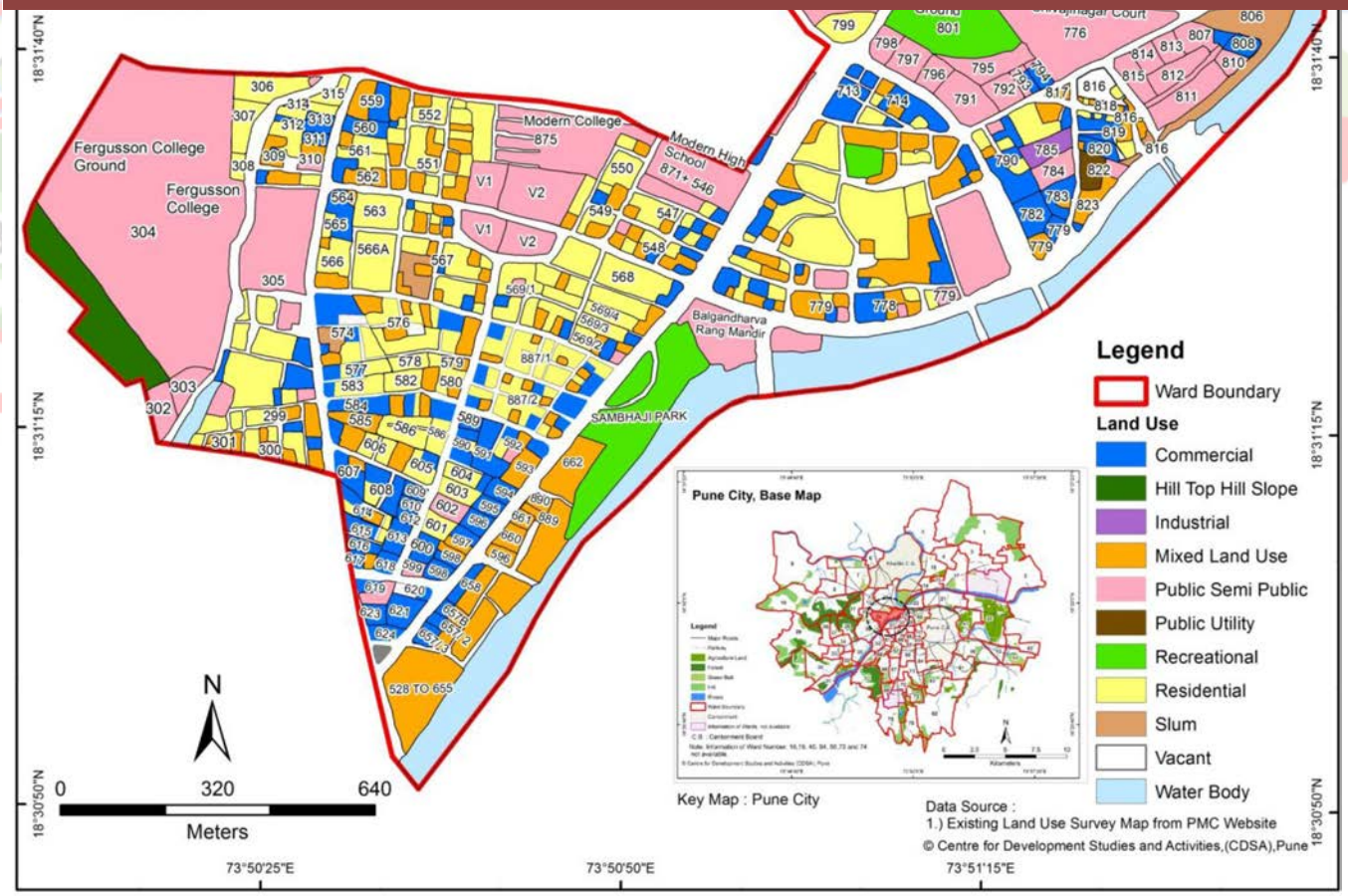
Note: Information of Ward Number: 18,19, 45, 54, 55,73

MEASURABLE INDICATORS OF QUALITATIVE ASPECTS OF URBANISATION

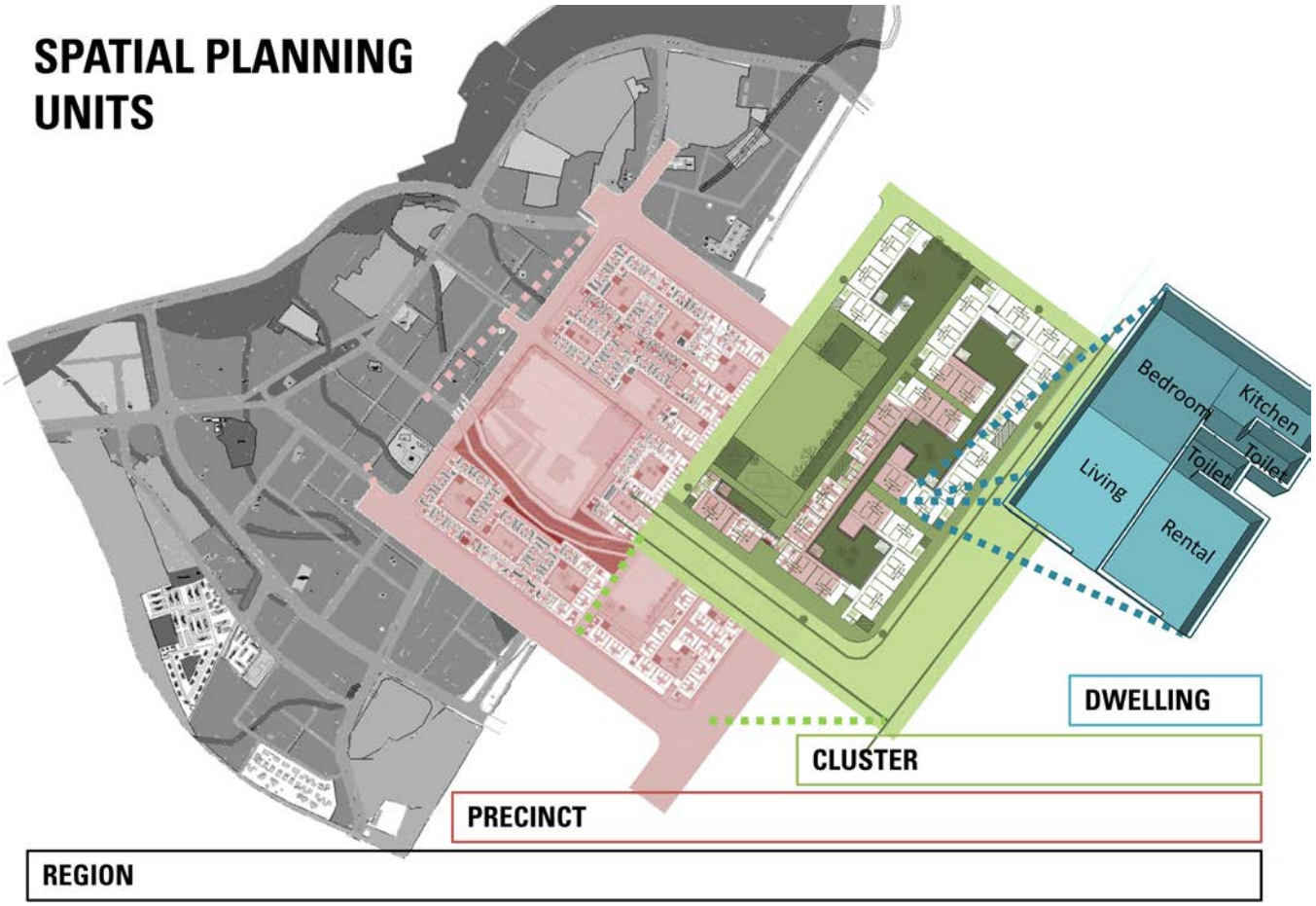
- Population Density
- Ratio of build space to open space (60-40)
- Housing and slum rehabilitation
- Circulation
- Public transport
- Sewage and solid waste management
- Environmental Integrity
- Participatory governance

DP Demystification

The DP demystification cell helps thousands of citizens of Pune to know the details of the Draft Development Plan (2007-27) for Pune city.



CDSA - ISD



DHARAVI REINVENTION

CDSA™

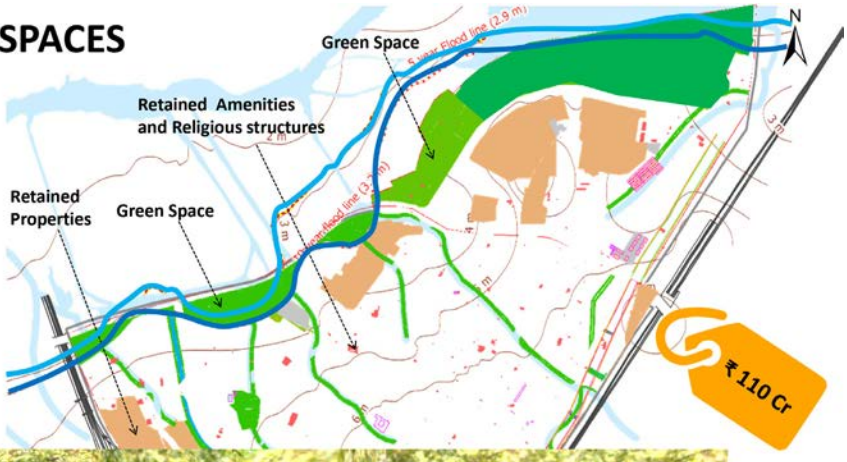
PROPOSED GREEN SPACES

- Retained Properties
- Retained Amenities, Religious Structures
- Proposed Green Spaces
- Mahim Nature Park

Protect Natural Water Drainage

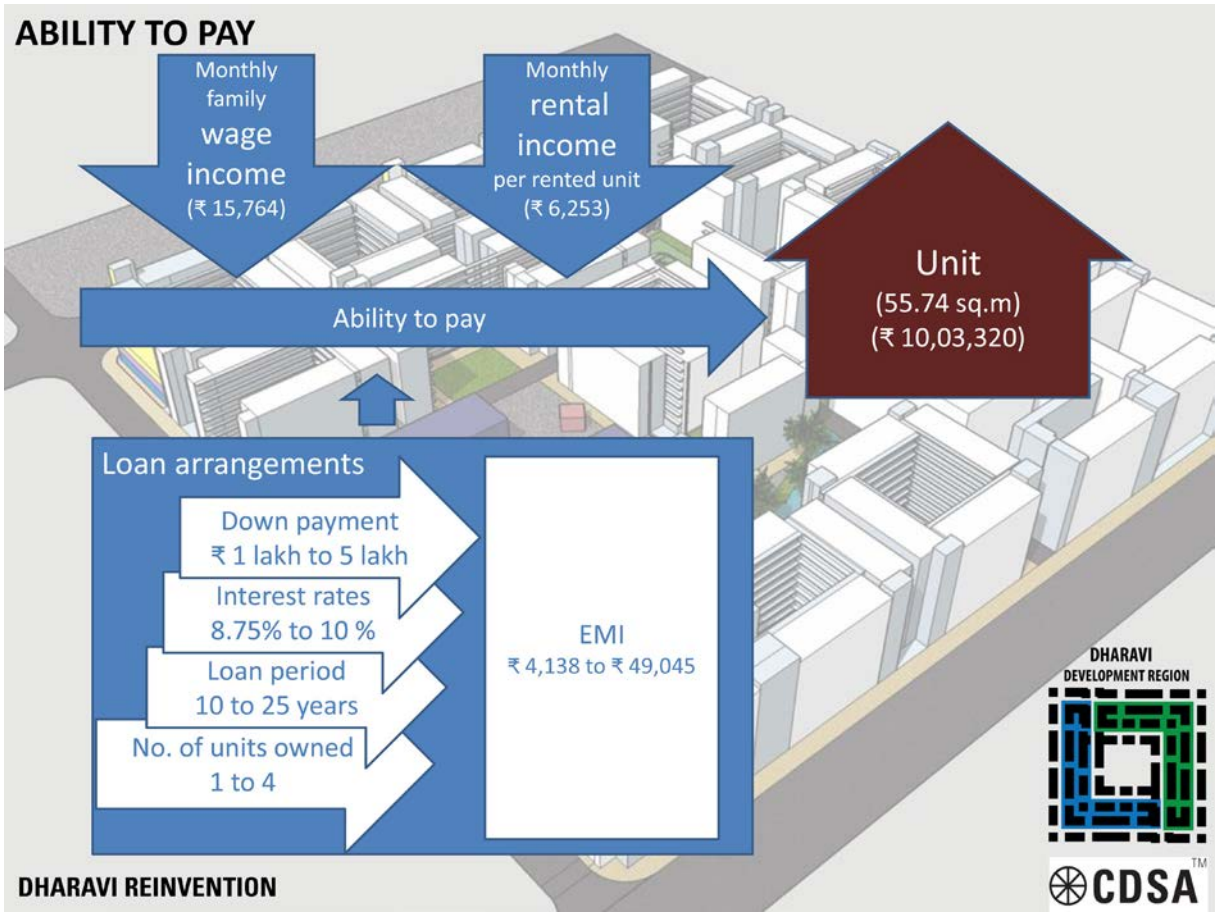
Provide Necessary Open Space

Protection from Flooding



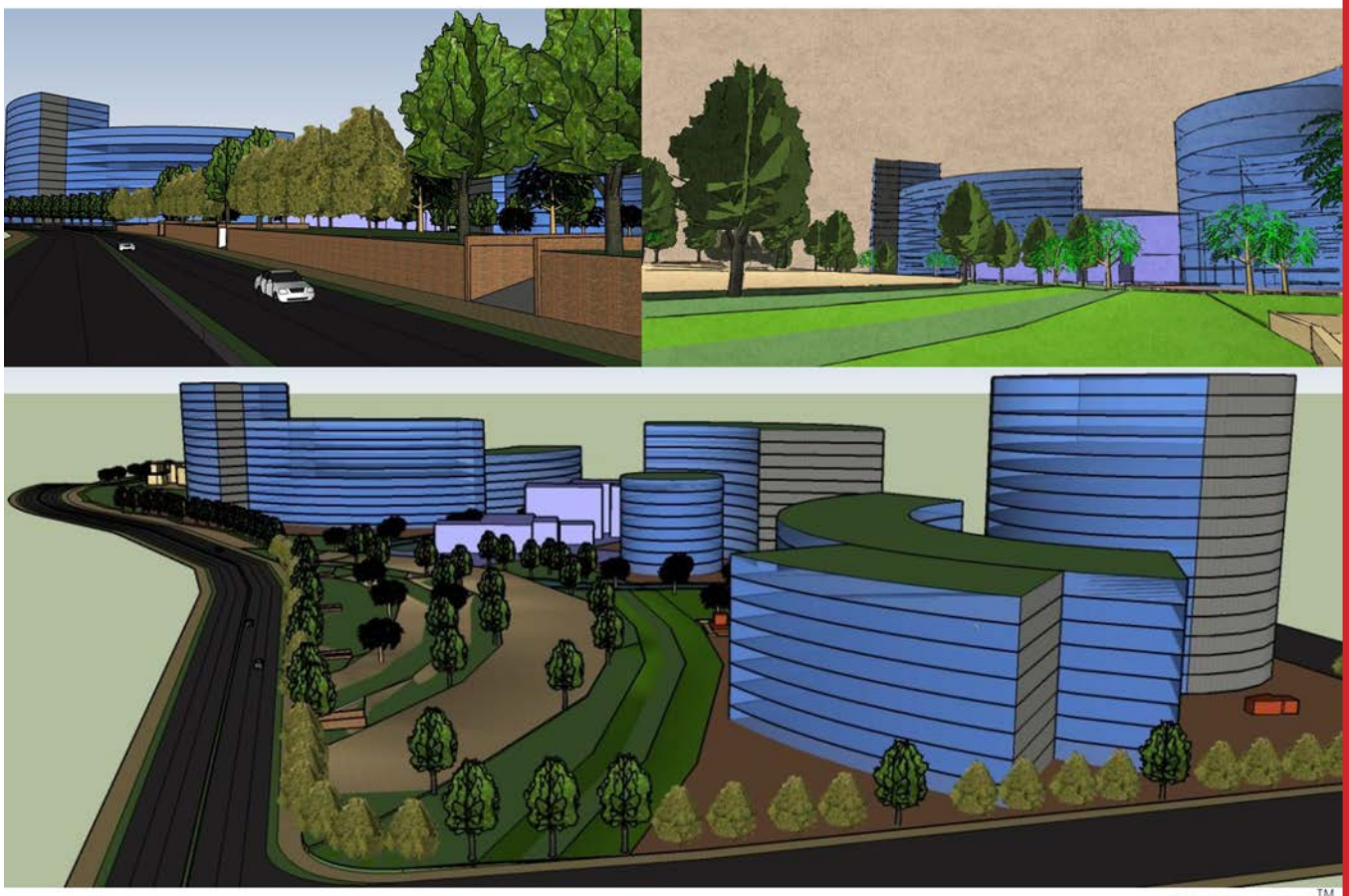
NORMATIVE IMPROVEMENT

Sr. No	Crowding Indexes	Current Dharavi	Proposed – Habitation Precinct	Proposed - Dharavi
1	Total Living Space	15 sq. m	37 sq.m	37 sq.m
2	Total Multipurpose Space	30 sq. m	55.74 sq. m	55.74 sq. m
2	Per Capita Multipurpose Space	2.7 sq. m	10.13 sq. m	10.13 sq. m
3	Sanitation	1400 persons / toilet	3-5 persons/ toilet	3-5 persons/ toilet
4	Water Supply	13. 63 L/person/day	67 L/person/day	67 L/person/day
5	Per Capita Open Space	0.08 sq. m	3.65 sq. m	1.22 sq. m
6	Per Capita Road Space	0.81 sq. m	0.28 sq. m	1.33 sq. m
7	Per Capita Amenity Space	0.31 sq. m	0.5 sq. m	0.35 sq. m
8	Per Capita Parking Space		0.31 sq. m	0.31 sq. m
9	Gross Density	1963/ Ha	1758/ Ha	1663/ Ha
10	Net Density	3089/ Ha	4922/ Ha	3721/ Ha



FINANCING REINVENTION

PROPOSED COMMERCIAL COMPLEX FOR FUNDING THE REINVENTION



DHARAVI REINVENTION

CDSA™

Industrial construction cost	₹ 60
Commercial construction cost	₹ 180
Roads and utilities	₹ 277
Public Transport System	₹ 30
Total cost	₹ 2,596
Sale revenue	₹ 16,500
Profit	**₹ 13,904**

Cost of utilities

	Crores
Roads	₹ 40
Street utilities	₹ 5
Renewable energy systems	₹ 122
Landscaping	₹ 110
Total Cost	**₹ 277**

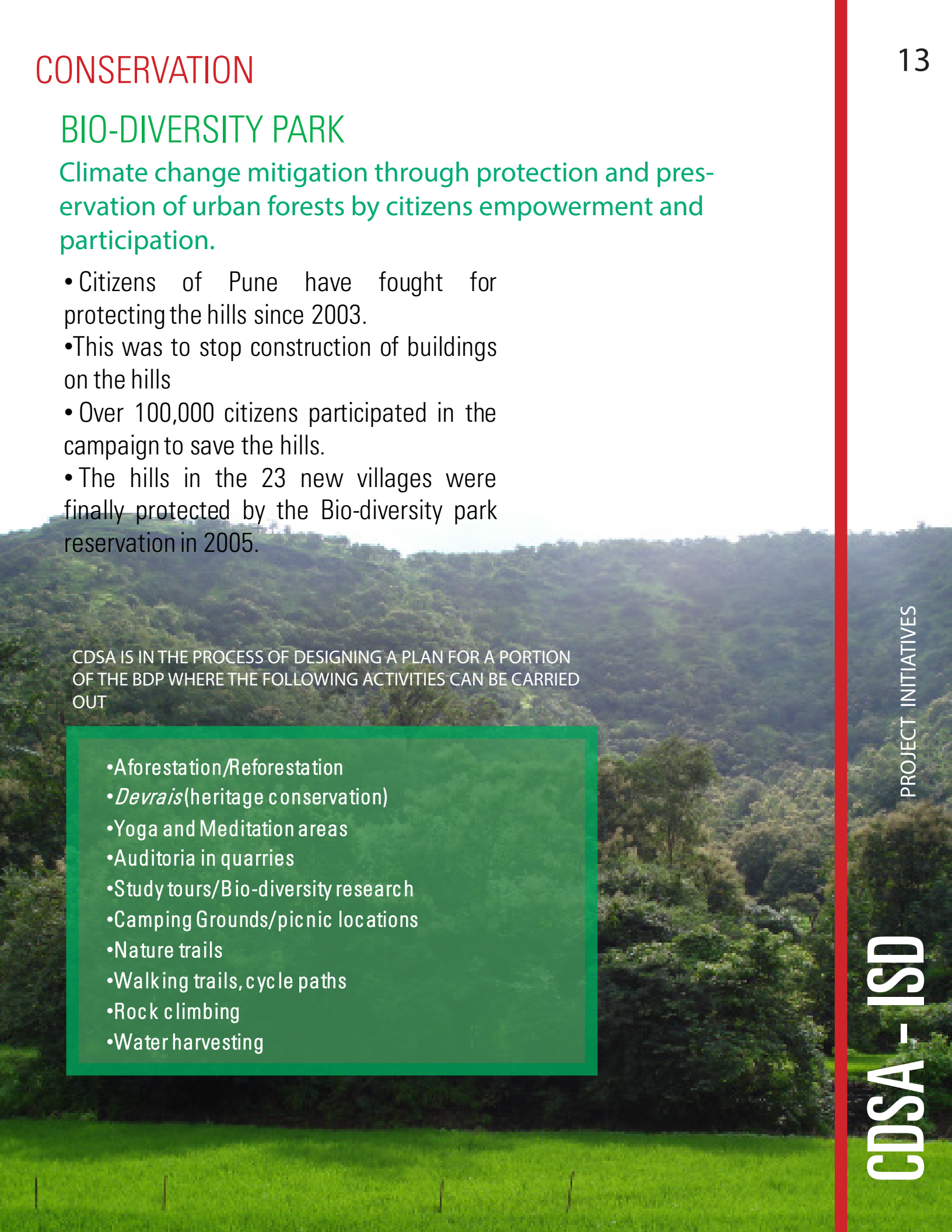
The profit would be utilized as the corpus fund for the proposed Dharavi Development Authority which would also be responsible for future maintenance and management of Dharavi.

CONSERVATION

BIO-DIVERSITY PARK

Climate change mitigation through protection and preservation of urban forests by citizens empowerment and participation.

- Citizens of Pune have fought for protecting the hills since 2003.
- This was to stop construction of buildings on the hills
- Over 100,000 citizens participated in the campaign to save the hills.
- The hills in the 23 new villages were finally protected by the Bio-diversity park reservation in 2005.



CDSA IS IN THE PROCESS OF DESIGNING A PLAN FOR A PORTION OF THE BDP WHERE THE FOLLOWING ACTIVITIES CAN BE CARRIED OUT

- Aforestation/Reforestation
- *Devrais* (heritage conservation)
- Yoga and Meditation areas
- Auditoria in quarries
- Study tours/Bio-diversity research
- Camping Grounds/picnic locations
- Nature trails
- Walking trails, cycle paths
- Rock climbing
- Water harvesting

PARTICIPATORY GOVERNANCE

F E E D

FORUM FOR EXCHANGE AND EXCELLENCE IN DESIGN

STUDENTS / ARCHITECTS / PROFESSIONALS / ENVIRONMENTALISTS

&

CONCERNED CITIZENS

SAVE PUNE

COME

JOIN THE MASS MOVEMENT

TO SAVE THE HILLS AROUND PUNE CITY

THE 'LUNGS' OF OUR CITY

ARE ON THE VERGE OF BEING

DESTROYED

BY OUR OWN PUNE MUNICIPAL CORPORATION

ARE YOU GOING TO BE A SILENT SPECTATOR ?

JOIN THE HUMAN CHAIN

(FROM ALAKA CHOWK TO CITY POST CHOWK)

TO PROTEST AGAINST ALLOWING CONSTRUCTIONS ON OUR HILLS

ON

SUNDAY, 23RD FEBRUARY, 9.30 A.M. AT ALAKA TALKIES

AND

LODGE YOUR OBJECTION

TO THE DISASTROUS DEVELOPMENT PLAN

BEFORE 28TH FEBRUARY, 2003

Pushkar Kanvinde 565 3462 · Prof. Aneeta Gokhale-Benninger (CDSA) · Prasanna Desai 565 1031

Abhijit Nate (BKPS) 545 0450 · Aparna Dixit (MMCA) 422 4931 · Shubhada Kamalapurkar (BNCA) 426 1843 · Ashwini Pethe (BVP) 567 8157

Nilesh Alhat (FVP) 743 2358 · Sagar Pawar (ACOA) 553 5516 · Prajakta Sane (SCOA) 435 1565 · Dhananjay Chandhari (DVP) 746 5914

13, PRANITI APRTMENTS, BANER ROAD, AUNDH, PUNE - 411 007. PH 565 1031 (telefax) 567 7073

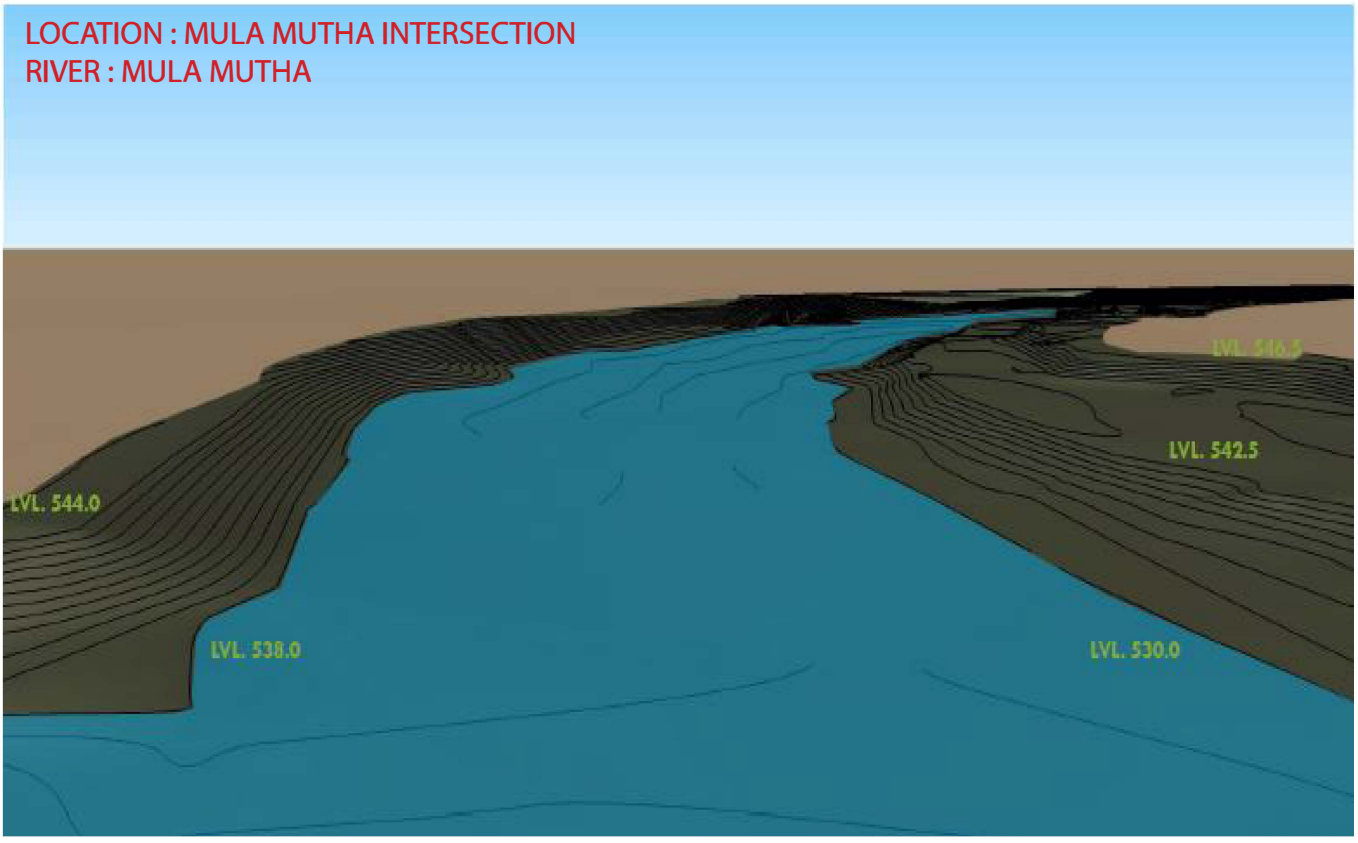
CDSA - ISD

PUNE RIVERFRONT DEVELOPMENT

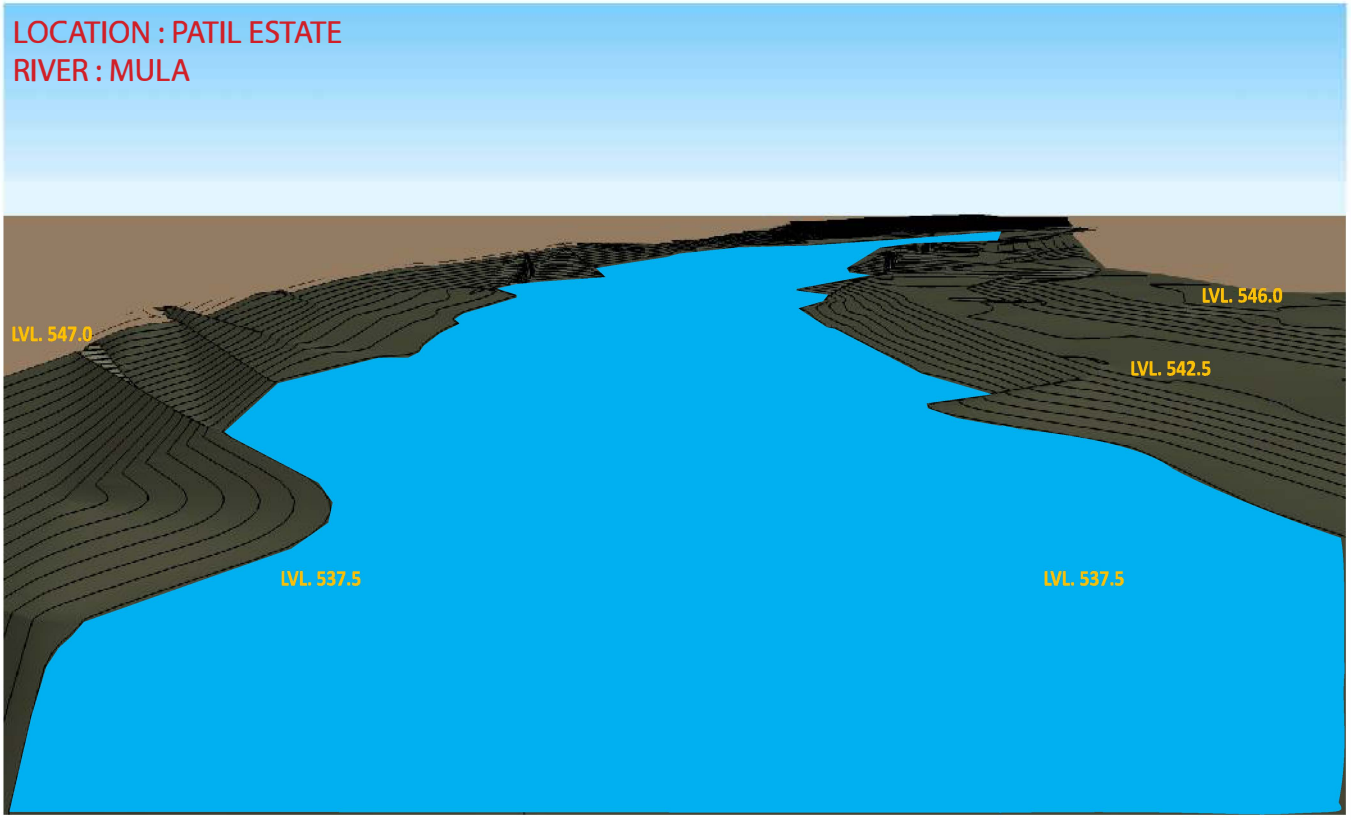
CDSA is working with HCPDPM, Ahmedabad on the Pune River Development plan as a local partner. In this project "Master Plan for the River Development" has to be prepared along with the feasibility studies.

DEFINING THE RIVER BANKS

Through its entire course the river flows within its banks. The banks are the sides of the channel, between which the flow of water is confined. Banks are naturally formed due to the erosion and deposition by the river. Hence the amount of water that a river carries within the banks is the existing natural carrying capacity of the river. Rivers "wax" or get fuller during the rainy season or in some cases when snow/ ice melts and " wane " in the non rainy season. This is the minimum amount of water that must flow through the river to protect and conserve the ecosystem.



View showing the existing natural banks of the river



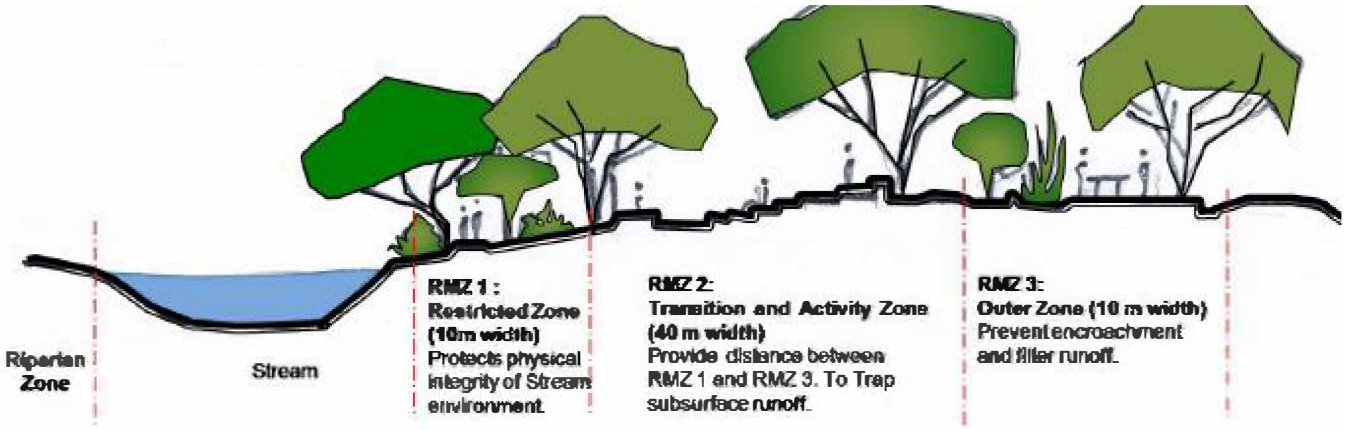
View showing the existing natural banks of the river

DEFINING THE FLOOD

Flooding is an overflow of water from a river in which the water breaks its natural banks, and spreads out, i.e the flow escapes its usual boundaries. Floods can only occur in rivers when the flow rate exceeds the capacity of the river channel.

Flood lines are the hazard lines drawn to show the probable area which will get inundated when the river flows over the banks. (25 year flood line and 100 year flood line is the red line.) Hence flood lines are statutory required to be outside the river banks.

URBAN RIVER MANAGEMENT ZONE



RIVER MANAGEMENT ZONE GUIDELINES FOR URBAN AREA

Characteristics	River Management Zone Guidelines for Urban Area		
	RMZ 1(Streamside Zone)	RMZ 2(Middle Zone)	RMZ 3(Outer Zone)
Function	Protect the Physical Integrity of the stream eco-system.	Provide distance between upland development and streamside zone	Prevent encroachment and filter runoff
	Stabilize soil and reduce bank erosion	Slow water runoff and enhance infiltration.	Slow water runoff and enhance infiltration.
		Trap pollutants in surface and subsurface runoff.	Trap pollutants in surface runoff.
Width	Minimum 8m to 10 m	Minimum 30m to 40 m	Minimum 8m to 10 m
Vegetative Target	Undisturbed, dense and native vegetation. (Shrubs and Trees)	Managed native vegetation(shrubs, trees, groundcover)	Grasslands and treecover
Allowable Uses	Restricted Zone	Permissible	Permissible
	Flood control, footpaths.	Recreational uses, storm water best management practices, parks, gardens, jogging tracks, cultural uses as cultural programs. Amenities as crematorium and temples.	Cycle tracks, temporary convenience shopping for particular duration daily, dustbins, street furniture.
Allowable uses		Provision of water tank and water purification system for washing clothes(Dhobi Ghat) if the activity is already existing on the river bank	
	Riverbed cultivation of cucurbits in summer(December - March)	Riverbed cultivation of cucurbits in summer(December - March)	
	Activities not mentioned here are prohibited	Activities not mentioned here are prohibited	Activities not mentioned here are prohibited
Material	Material used for pathways should be pervious (allow water percolation)	Material used for pathways should be impervious(allow water percolation)	Material used for pathways should be impervious(allow water percolation)

QUANTIFIED CITIES MOVEMENT

QCM™

The importance of documentation of knowledge and information generated through work carried out in various fields cannot be underestimated. All over the world there are individuals studying, working and generally creating new knowledge. Every minute we are asking questions and answering them. This exciting process, a function of our curiosity and the need to make sense of what the world is all about, is being carried out in various ways all over the globe. In order to properly plan, implement and monitor a city or for that matter any space, we require relevant, accurate and timely data. Some of this data is being collected by the government authorities but, is it relevant? There is a need for more information about our city in order to plan it better and monitor its development? How do we create transparency in this process of planning? The citizens need to be involved in the process. How do we ensure that the authorities in charge are held accountable when they plan for our city and in turn affect our lives?
To answer these questions we have created the Quantified Cities Movement (QCM).

The purpose of the QCM is to

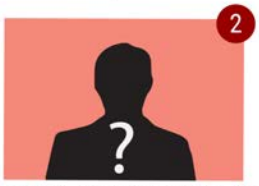
- Identify the data that is required.
- Provide technical assistance and training to Institutions and Individuals for collection of the required data.
- Create an online and real time repository for this data and give direction too, example.: www. punedata.org.
- Analyze the data, identify problems and their solutions and advocate for better planning, implementation and monitoring of the process.

Norms/ Standards

1. Ideal Habitable temperature range 20-30°C
2. Acceptable Habitable temperature range 15-35°C
3. Slightly uncomfortable Habitable temperature range is 10°C to 5°C and 35°C to 40°C
4. Uncomfortable Habitable temperature range less than 10°Cand more than 40°C

Methodology

Make sure you have all the apparatus ready for carrying out the survey. Please use the field sheet provided. Read all the instructions thoroughly.



Mention your name in the space provided and note down the time.

Identify and mark your location on the map in the field sheet from where you are going to take the readings.

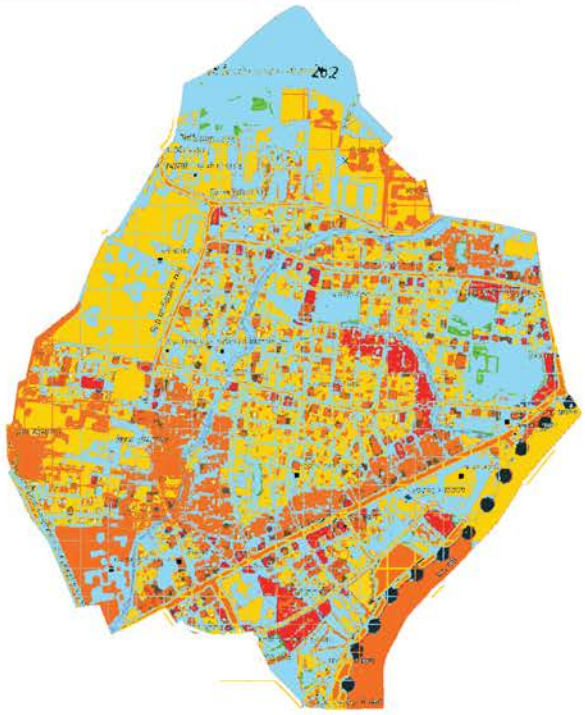
Use the calibrated application from your mobile phone or the instrument required to collect the readings.

Note down the time. Make sure the thermometer sensor /bulb is not in contact with your body. Do not keep the thermometer in sunlight for too long. Note down the readings in the table on the sheet provided.

Fill up the field sheet with the data and the readings collected.

QUANTIFYING AMBIENT ENVIRONMENT

Outcome



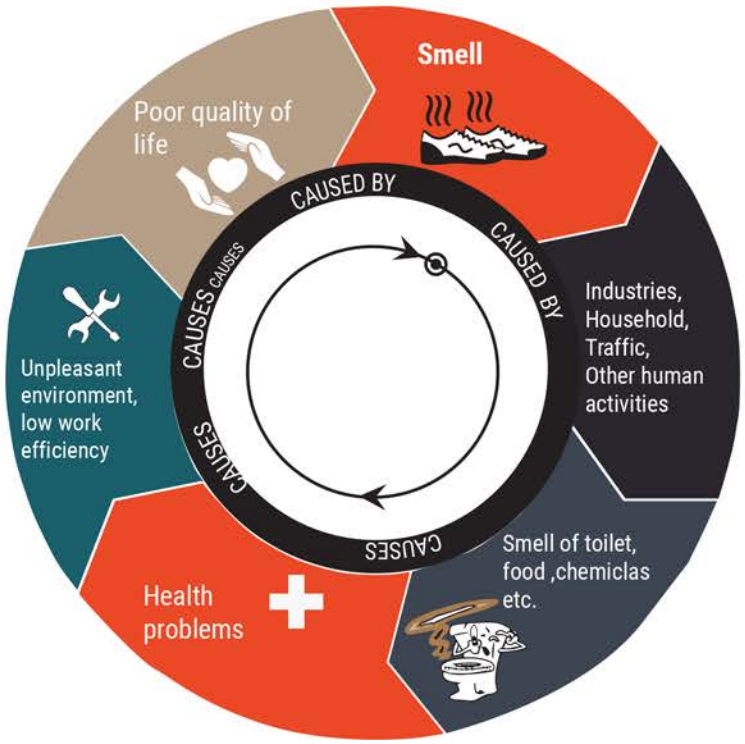
Map 3. : Heat map generated for smell in a ward.

Results

Smells in an area have a part in deciding our physical comfort level. Fragrances (in moderation) generally contribute towards increasing the comfort level while foul odours work exactly the opposite way like garbage, sewage etc. negate. Identifying the smells in an area can give pointers if any activities need to be prohibited or shifted downwind to increase the comfort of residents and in turn improve their quality of life. The purpose of the study is to identify smell related words on geo-referenced map of individual ward maps. The next stage is to create a structure for a large and apparently unrelated dataset of smell words through a system of classification.

Stresses

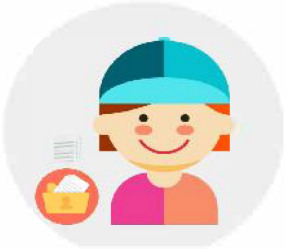
Unpleasant odours can arise from specific industrial processes, adversely affecting workers and even residents. The most common sources of odour arise from sewage treatment plants, animal rendering factories, chemicals etc in the neighbourhood. Unpleasant smell can affect one's mood, can lead to frustration, and non-productivity.



QUANTIFIED CITIES MOVEMENT FOR DISASTER RISK REDUCTION

QCM™-DRR

A PLATFORM FOR ADOLESCENTS TO CONTRIBUTE IN THE PROCESS OF PARTICIPATORY URBAN PLANNING, LEARNING AND ACTION IN PUNE CITY.



The QCM-DRR approach and methodology is created and implemented by CDSA, Pune with support from the UNICEF disaster risk reduction section.

The QCM-DRR programme for schools enables school children to participate in collection, organization, analysis and interpretation of data collected on safety, security, solid waste management, air and water quality as well as disaster risk and resilience indicators. The data is used to make local area risk reports that will be shared with elected representatives, the administration and civil society organizations for formulating relevant and integrated local area development plans.

EMPOWERING CHILDREN TO ARTICULATE THEIR NEEDS FOR IMPROVING THEIR QUALITY OF LIFE

THE PROCESS OF MAKING YOUNG CITIZENS EMPOWERED

Urban resilience, sustainability and quality of life, all hinge on the capacity of citizens to identify and agree upon minimum standards of quality for indicators such as safety, cleanliness, walkability, access to utilities and services, etc. The QCM-DRR project provides children with the opportunity to create quality standards based on their needs and then identify gaps, stresses and risks based on the standards they have created.

QUANTIFIED CITIES MOVEMENT FOR DISASTER RISK REDUCTION

QCM™ – DRR

QCM - DRR HIGHLIGHTS

Children are given the opportunity to learn about their sense of perception and how they can gather information and create knowledge from the world around them.

Having learned the basics of observation and awareness, children are introduced to indicators of quality of life, hygiene and sanitation, safety and hazards as well as urban resilience.

This framework creates an environment in which children can identify and map risks and stresses in their classrooms, schools and neighborhoods.

Children along with their parents and their communities monitor whether amenities, utilities and services linked to child safety, health and sanitation are accessible and adequate.

Children along with their parents and their communities identify and recommend solutions for the identified risks and stresses. They also compile local area risk reports which would be presented to elected representatives.

QUANTIFIED CITIES MOVEMENT FOR DISASTER RISK REDUCTION

QCM™-DRR

HERE IS HOW ADOLESCENTS MAKE IT ALL HAPPEN

By engaging citizens, schools and children in collecting information and providing feedback on various aspects of their local area, the QCM framework ensures transparency and accountability in urban governance.

1 Training

Who do we train ?
Children, Adults, Civil Society Organisations(CSO), Non-Government Organisations (NGOs), Government bodies, duty bearers and local elected representatives.

2 Data Collection

Collect data on various Quality of Life and Risk indicators through Urban Pulse Points + Citizen participation

3 Analyse Data and Identify Stresses

All the data collected will be published online along with the respective standards and norms.

4 Publish Ward Level Reports

Child Centered Ward Level Reports The key outcome of the QCM framework is the publication of Ward Risk Reports created with a focus on Child Protection, Safety, Children's health, hygiene and sanitation. The reports will be presented to elected representatives and their assembly. Through this mechanism a child friendly development plan can be made for the city.

5 Propose solutions

POSSIBLE SOLUTIONS FOR RISK AREAS FOR CHILDREN e.g. safety on street.

1. Adding new footpaths where they are not present.
2. Regulating the placement of street furniture and utilities.
3. Widening footpaths according to norms.
4. Moving dangerous utilities away from the footpath.
5. Functional street lighting.

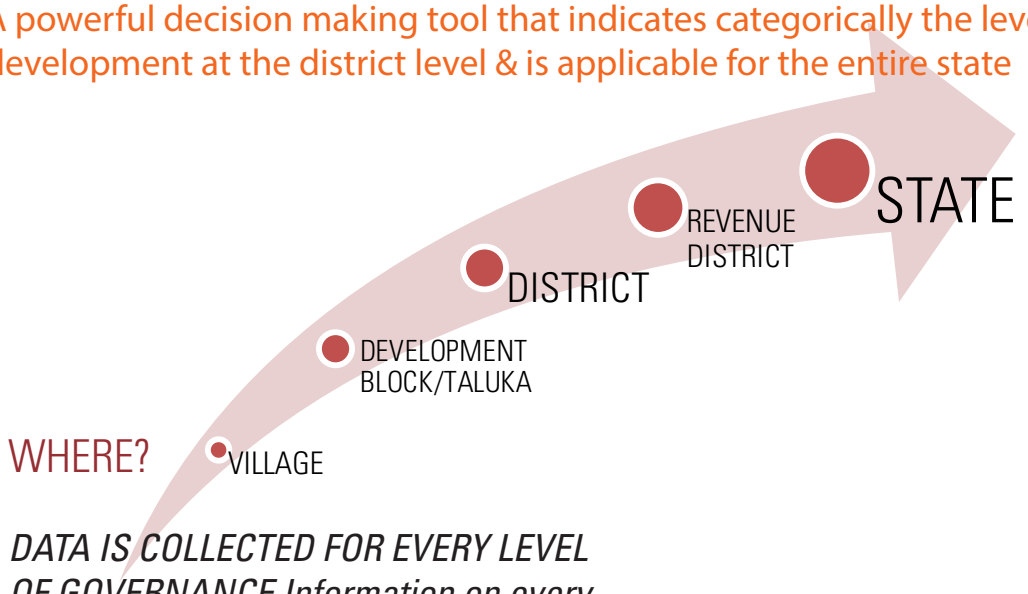
We enable thematic, temporal and spatial convergences in data collected. Stakeholders can identify solutions related to stresses identified to ensure quality standards are upheld.

Once crystallized in Pune city, the QCM framework will be available for other cities.

PERSPECTIVE PLANNING: VILLAGE TO DISTRICT

Poverty reduction, equity , empowerment & sustainable development

A powerful decision making tool that indicates categorically the level of development at the district level & is applicable for the entire state



WHERE?

DATA IS COLLECTED FOR EVERY LEVEL OF GOVERNANCE Information on every pre defined development indicator is available for every scale.

HOW? It is formulated through the convergence of four variables by assessing the level of deprivation/poverty in terms of:

1. INCOME/LIVELIHOOD
2. ACCESS TO AMENITIES, FACILITIES & SERVICES
3. SOCIAL STATUS
4. NATURAL RESOURCES

WHY?

ENABLES & EMPOWERS DECISION MAKERS

- A systematic analytical profile of each village by its various levels of Deprivations.
- Efficiently effectively prioritizes distribution of scarce resources on the basis of needs.
- Provides a Toolkit to "Objectivise" the decision making process.

METHODOLOGY CREATED BY CDSA & USED IN ANDHRA PRADESH (1998), ORISSA (1998)

Vawad Cluster

Block Nandurbar,
District Nandurbar, Maharashtra
A level 1 cluster has population between 7,500 and 13,000.

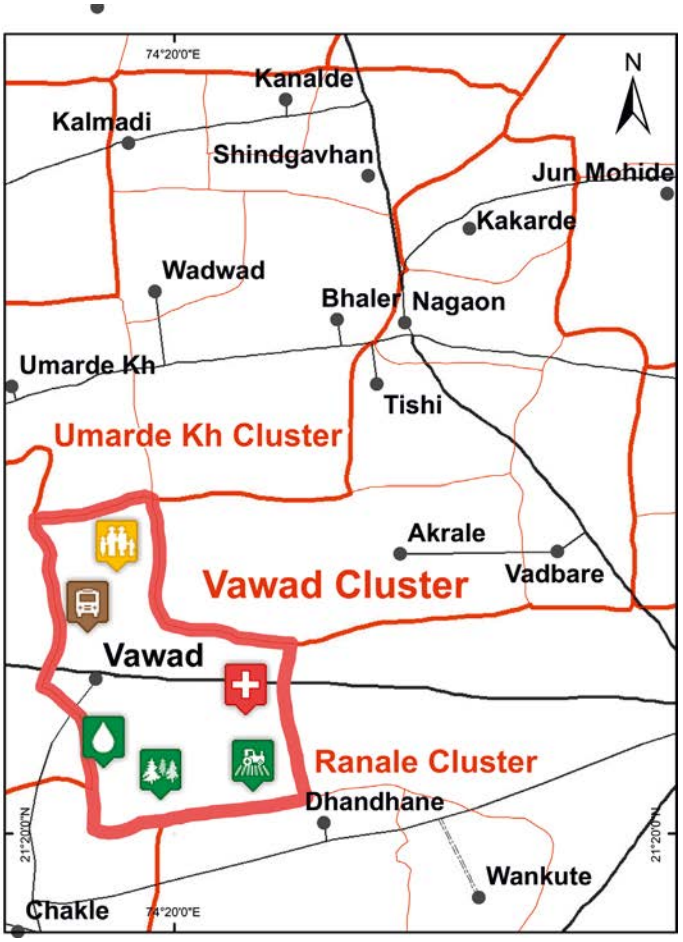
0 0.5 1 2 3 4 5
Kilometers

Medical and Public health
Connectivity and Transport
Crop Husbandry and horticulture
Water supply and sanitation
Family and livelihood security
Forestry and wildlife

Legend

- Uninhabitated Villages
- Villages
- Taluka Boundary
- Cluster Boundary
- State highway
- Metalled road
- Unmetalled road

1) Village boundaries are not available in 2001 census maps, therefore those villages have been shown by location points.
2) Data source: Census of India 2001, DRDA Nandurbar

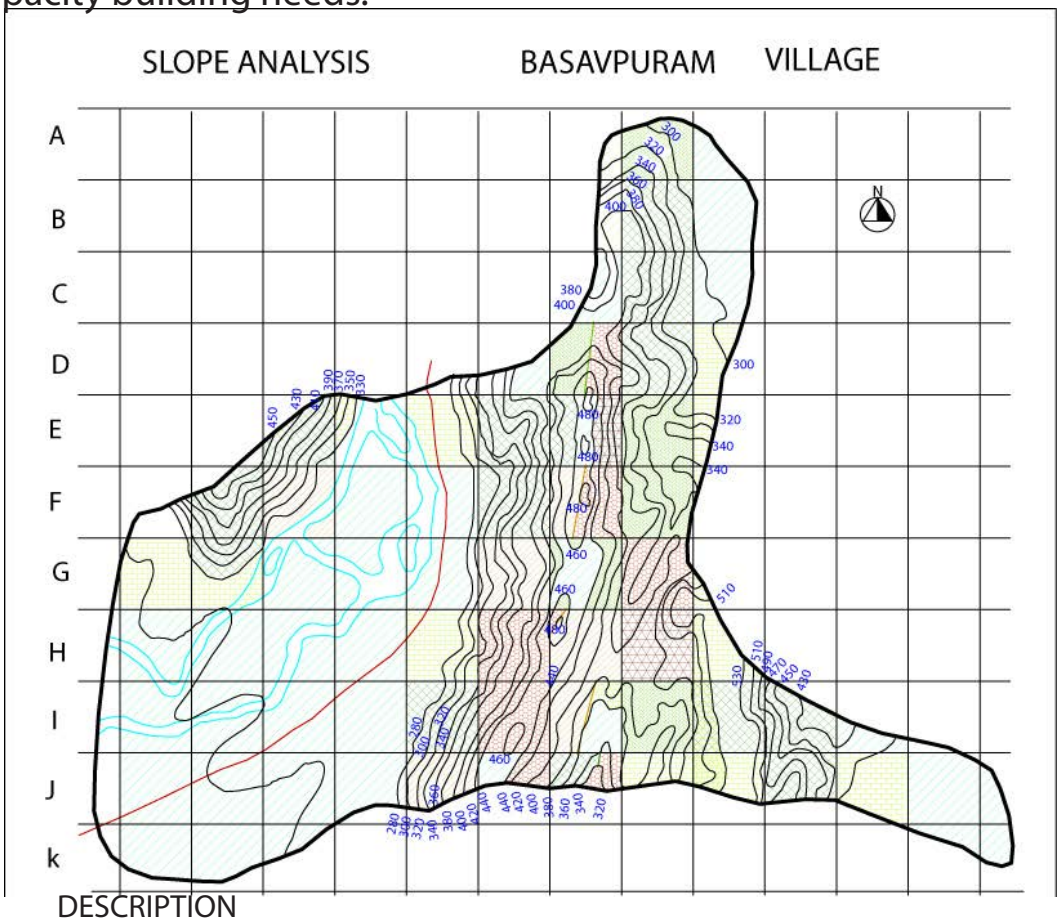


Vawad (Vawad cluster)				
Village Code	746	**Population**	2310	**Households** 462
Year in Plan Period	**Inputs**	**Scheme**	**Action Area**	**Cost in Lakhs**
1	Distribution of Candle Water Purifiers	Medical and Public Health	Hygiene & Sanitation	23.1
3	Programmes to promote organic farming practices	Crop Husbandry	Family viability and Sustainable Livelihood Security	2
3	Local ecosystem rejuvenation awareness programmes	Forestry and Wildlife	Environment conservation	2
3	Consruction of a Primary health Sub Center	Medical and Public Health	Health	15
3	Distribution of Candle Water Purifiers	Medical and Public Health	Hygiene & Sanitation	30.56
3	Public Hygiene & Sanitation programme for all	Medical and Public Health	Hygiene & Sanitation	2
3	Communicable disease awareness programme	Medical and Public Health	Prevention of communicable diseases (water-borne, vector-borne)	2
3	Malaria Prevention awareness programme	Medical and Public Health	Prevention of communicable diseases (water-borne, vector-borne)	2
3	Distribution of 46 public dustbins	Other Programs of Rural Development	Hygiene & Sanitation	2.3
3	Awareness programme for Solid Waste Management	Other Programs of Rural Development	Hygiene & Sanitation	2
3	Provision 8 public handpumps	Other Programs of Rural Development	Water Supply & Security	0.8
3	Provision of 4 public taps	Other Programs of Rural Development	Water Supply & Security	0.12
3	Awareness programme for modernizing local agricultural practices	RKVY	Family viability and Sustainable Livelihood Security	2
3	Sanitation awareness programme for school children	Water Supply and Sanitation	Hygiene & Sanitation	2
3	Construction of rain water harvest tank of 50,000 litre capacity	Water Supply and Sanitation	Water Supply & Security	0.5
4	Allocation of public transport vehicle under NDPTL Pilot Project (1 x 8-Seater)	BRGF	Connectivity & Transport	8
5	Allocation of public transport vehicle under NDPTL Pilot Project (1 x 24-Seater)	BRGF	Connectivity & Transport	12
5	Distribution of Candle Water Purifiers	Medical and Public Health	Hygiene & Sanitation	26.57

VILLAGE ECO-DEVELOPMENT

Climate change mitigation through economic & ecological development at micro level. Where micro watersheds are units of planning.

- Eco-Development at village level.
- Programmatic approach which allows for process monitoring and impact accountability.
- Basic criteria for the planning framework – natural resource typologies.
- Plan includes action dimensions, participants & their roles & responsibilities, institutional dimensions, temporal dimensions, financial dimensions and capacity building needs.



DESCRIPTION

Generic methodology for creating micro land typologies to design appropriate land regeneration and utilisation strategies/ plans.

PERSPECTIVE PLANNING: DISTRICT

Outcomes

Reduce Infant Mortality from 98/1000 to the State average of 25/1000

Increase literacy from71.6% to 85%

Reduce poverty from 40.8% to 20%

Increase and restore Forest (Tree) cover from 28 % to 33% and restore rivers to their natural form to ensure sustainability of water resources

Reduce inter taluka development disparities

Enhanced livelihood security and food security

Creation of informed and empowered communities and participatory institutions

Goals

Achieve Human Development with Environmental Sustainability

Mitigate Regional Imbalances

Ensure Sustainable Livelihood Security

Ensure Participatory Decision Making by Empowered local institutions

Strategy

Use "Village" as the basic unit of planning

Use Deprivation Typologies to identify homogenous regions where similar inputs are required to be delivered

Use hierarchy of "Central Place clusters" to ensure efficiency and sustainability of delivery of inputs

Identify sanctioned Resource envelope and the sectors and schemes from which it is called forward.

Identify "critical gaps" in plan formulation and design programmes for them to ensure that inputs deliver results.

Actions

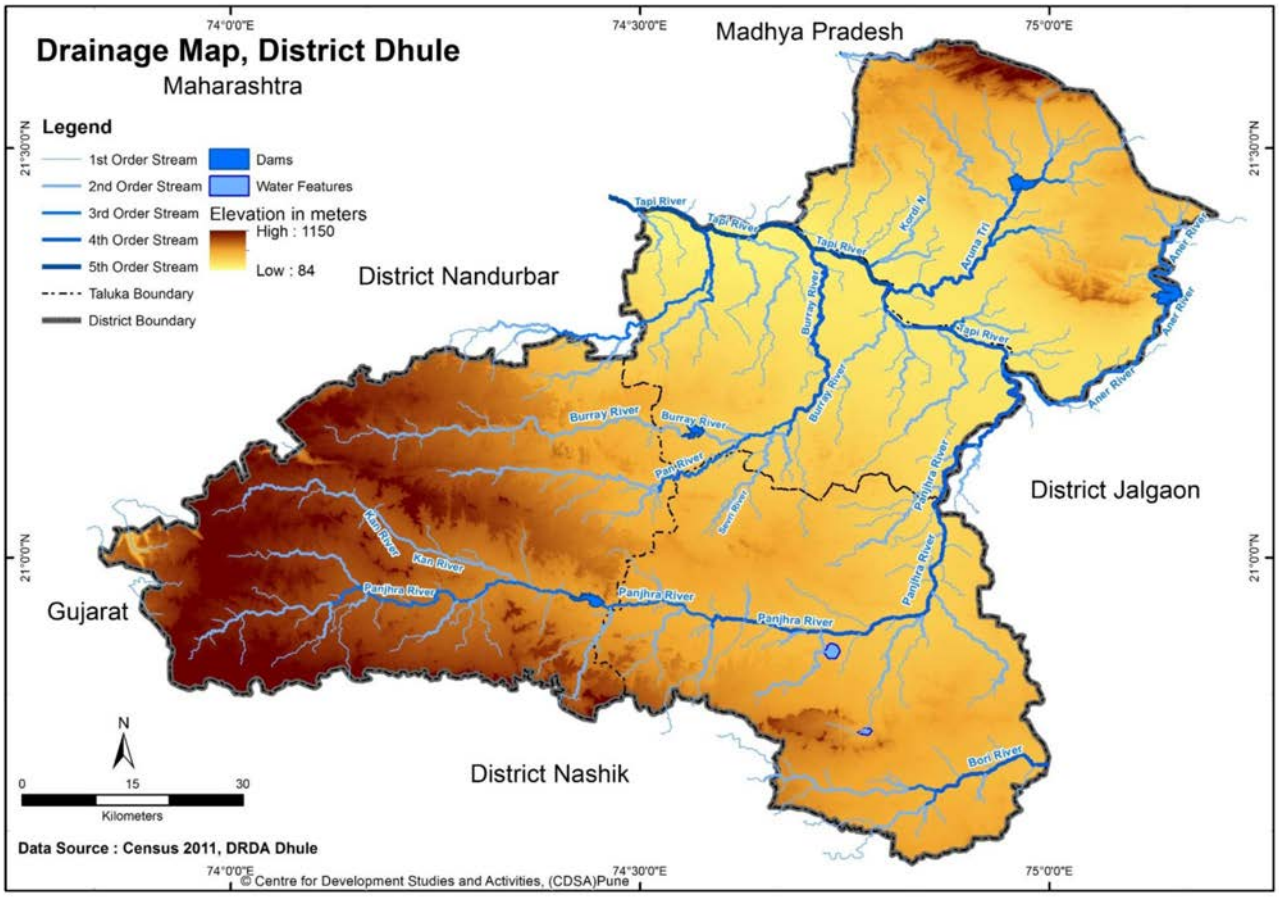
Introduction of Dhule District Public Transport Ltd to ensure mobility and connectivity between villages in L 1 cluster level and from L1 Cluster Central Place to L2, L3 and District Head Quarters to remove accessibility deprivation

Land Based Livelihood Protection Plan

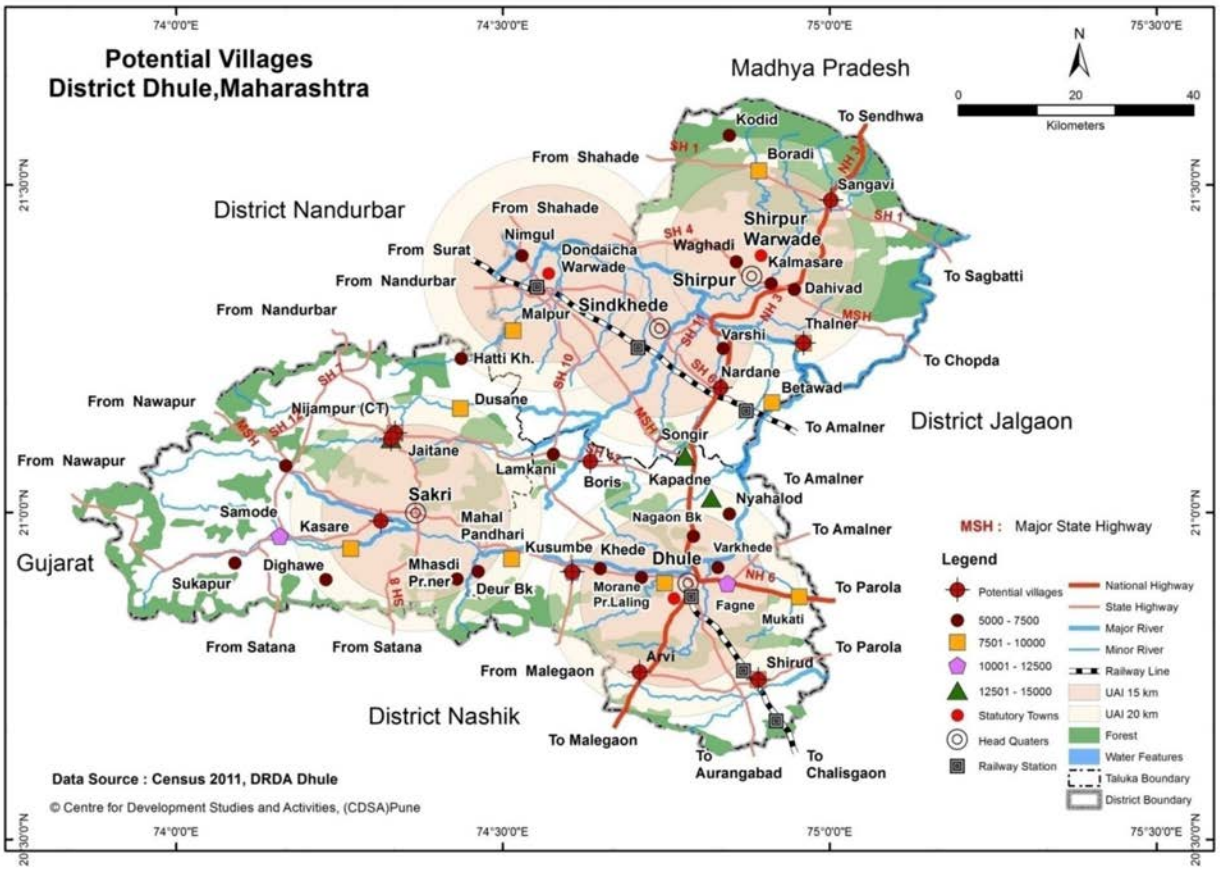
River Restoration, Watershed Development for rejuvenating water resources

Enhancement of solid waste and other waste management, linking waste management to energy generation and improvement of sanitation and hygiene to ensure reduction in diseases in morbidity and mortality levels

Awareness programmes for capacity building of people to ensure that they take advantage of the opportunities offered by the Delhi-Mumbai Industrial Corridor (DMIC)



PERSPECTIVE PLANNING: DISTRICT



Stress Linkage Matrix

Stress Linkage Matrix	Dependant Stress	Extreme Poverty	Indebtedness	Lack of Connectivity	High level of Landlessness & Small land holdings	Malnutrition & undernourishment	Inadequate skills	Low productivity	Contextually Inappropriate farming practices	Water Scarcity	De forestation	Low access to basic entitlements	Lack of promotion of local arts, artifacts and protection of heritage	Tribal conflicts	Lack of relevant Education	Total
Independent Stress																
Extreme Poverty			4	0	3	4	3	2	2	1	1	2	2	2	4	30
Indebtedness		4		0	3	2	2	1	2	0	1	1	2	2	3	23
Lack of Connectivity		5	4		0	0	3	3	2	3	0	5	3	0	4	32
High level of Landlessness & Small land holdings		5	4	0		2	3	5	1	1	1	1	0	3	1	27
Malnutrition & undernourishment		2	1	0	0		0	4	1	0	1	0	1	1	1	12
Inadequate skills		4	4	0	1	1		4	3	0	0	1	1	0	0	19
Low productivity		4	4	0	2	3	1		1	1	1	1	1	0	1	20
Contextually Inappropriate farming practices		3	2	0	1	1	0	4		1	3	0	0	0	1	16
Water Scarcity		4	4	0	2	2	0	4	2		4	1	0	2	1	26
Deforestation		3	3	0	0	0	0	1	0	5		0	1	2	0	15
Low access to basic entitlements		3	3	5	0	3	3	2	1	1	2		1	2	4	30
Lack of promotion of local arts, artifacts and protection of heritage		2	1	0	0	0	1	0	0	0	0	0		0	2	6
Tribal conflicts		2	1	0	2	1	1	2	0	3	2	1	1		2	18
Lack of relevant Education		4	3	0	3	2	5	3	3	2	2	2	3	3		35
Total		45	38	5	17	21	22	35	18	18	18	15	16	17	24	

SCHOOL OF DEVELOPMENT PLANNING

A unique two year multi-disciplinary postgraduate programme (Masters Degree) is the focus of the School of Development Planning (SDP) with an emphasis on creating a cadre of development professionals. The masters degree is awarded by the University of Pune.

CDSA TEACHES A FULL LENGTH MASTERS DEGREE COURSE IN URBAN, RURAL, AND REGIONAL DEVELOPMENT PLANNING SINCE 1978. ITS 400+ GRADUATES HAVE STARTED THEIR OWN NGOS AND ALSO WORK WITH A VARIETY OF ORGANISATIONS DELIVERING EXCELLENT PROFESSIONAL SERVICES SDPM PLACES A SPECIAL EMPHASIS ON EMPIRICAL RESEARCH AND EXPERIENTIAL LEARNING. STUDENTS CARRY OUT SIX MONTHS OF FIELD WORK AS PART OF THE CURRICULUM

ENVIRONMENTAL STATUS REPORT (ESR)

An evaluation of the status of the built and natural environment in a city.

FIELD VISITS

STUDY OF EXISTING SCENARIO

COMPARED EXISTING SCENARIO WITH NORMS

PRIORITIZE EXISTING STRESSES

SUGGEST INTERVENTIONS

PREPARED ENVIRONMENTAL STATUS REPORT

- The ESR is carried out at the electoral ward level
- Direct interaction between the elected representative & citizens
- Citizen participation as per the 74th CAA to identify ward level projects for environmental improvement
- Takes cognizance of both natural & built environment
- Leads to an actionable & bankable plans
- Leads to an annual city plan with a justified budget

RESULTS

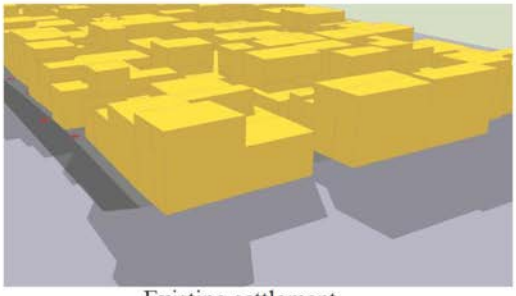
- INADEQUACIES IN CIVIC AMENITIES & FACILITIES.
- DISCREPANCIES IN LANDUSE.
- IMPROPER MANAGEMENT OF SOLID WASTE.
- POLLUTION OF WATERBODIES.
- HEALTH RISKS IN SLUM AREAS.

SLUM REHABILITATION - SHIROLE VASTI

Existing site plan

Proposed site plan

N



Existing settlement

Proposed scheme

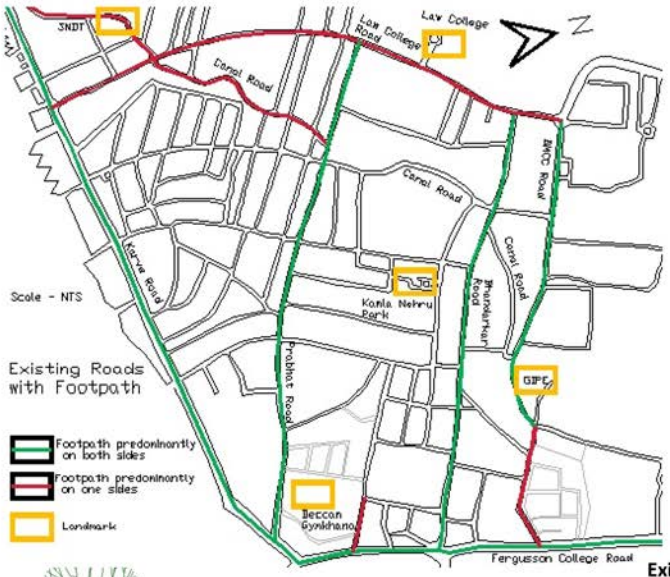
Sustainable Design in Slum Rehabilitation

Source: Students' Masters Degree Project, CDSA

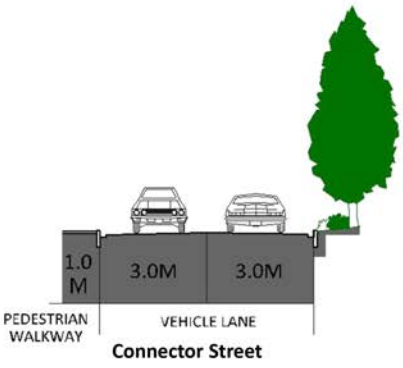
Particulars	
Average size of existing dwelling unit	17.22 sq.m (185.36 sq. Ft)
Area of a proposed dwelling unit	30.29 sq.m (326 sq.ft)
Cost of a proposed dwelling unit	2.76 lakhs
Number of proposed dwelling Units	330
Commercial area	328 sq.m (3531sq.ft)
Community Hall	190 sq.m (2054 sq.ft)
Total Built up Area	10588 sq.m (113969 sq.ft)
Total cost of Transit Housing	90 lakh
Total Project cost	1006 lakh
Total TDR accrued	26470 sq.m (284923 sq.ft)
Total value of TDR	114 crores
Project Duration	711 days

Source: Students' Masters Degree Project, CDSA

CIRCULATION

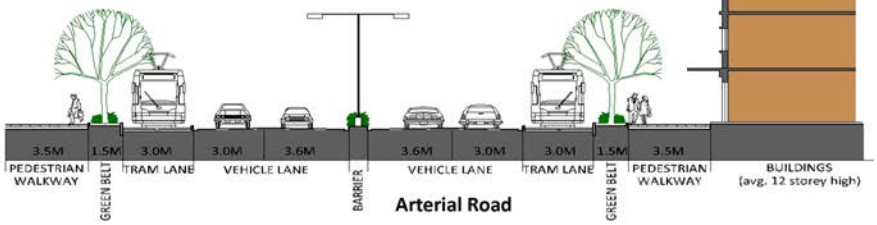


Existing Roads with footpaths, Deccan, Pune.



Connector Street

Sub -Arterial Road



Arterial Road

Public Transport

To disincentivise use of private vehicles, Heavy parking charges for roadside parking should be according to Land Values.

Fergusson College Road
-Parking charge for cars is **60 Rs/hr**
-Parking charge for cars **30 Rs/hr** for two wheelers

Reduction in expenditure on fuel

Interval	Fuel saved (lakh litre)	Expense avoided (cr Rs.)
1 day	11.57	8.33
1 month	347.08	249.90
1 year	4222.83	3040.44

Note: Cost estimate at 2012 prices (only for project area)

Reduction in Emissions per year (kg.)

Vehicle	Reduced Emissions per year (kg.)			
	CO	Nox	PM	CO2
Cars	135762.16	5412.45	2.076	135762.16
Autorickshaws	25432.47	12716.24	0.920	25432.47
Motorbikes	57093.30	57093.30	0.000*	120450.00
Total	**218287.93**	**75221.98**	**2.996**	**281644.63**

Source: Students' Masters Degree Project, CDSA

LAND VALUES (2009)

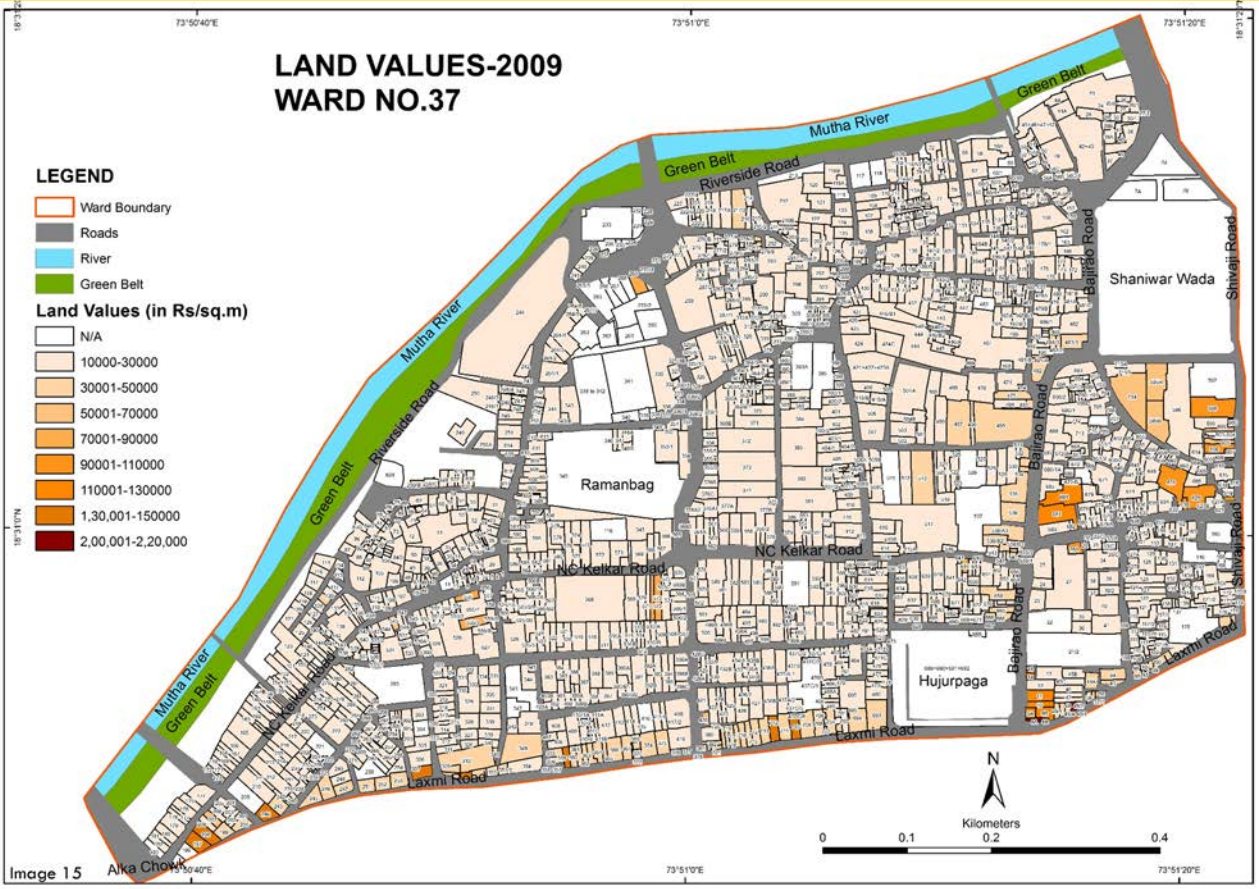


Image 15

Source-Image 15- CDSA/ SDP 2014-15

LAND VALUES (2014)

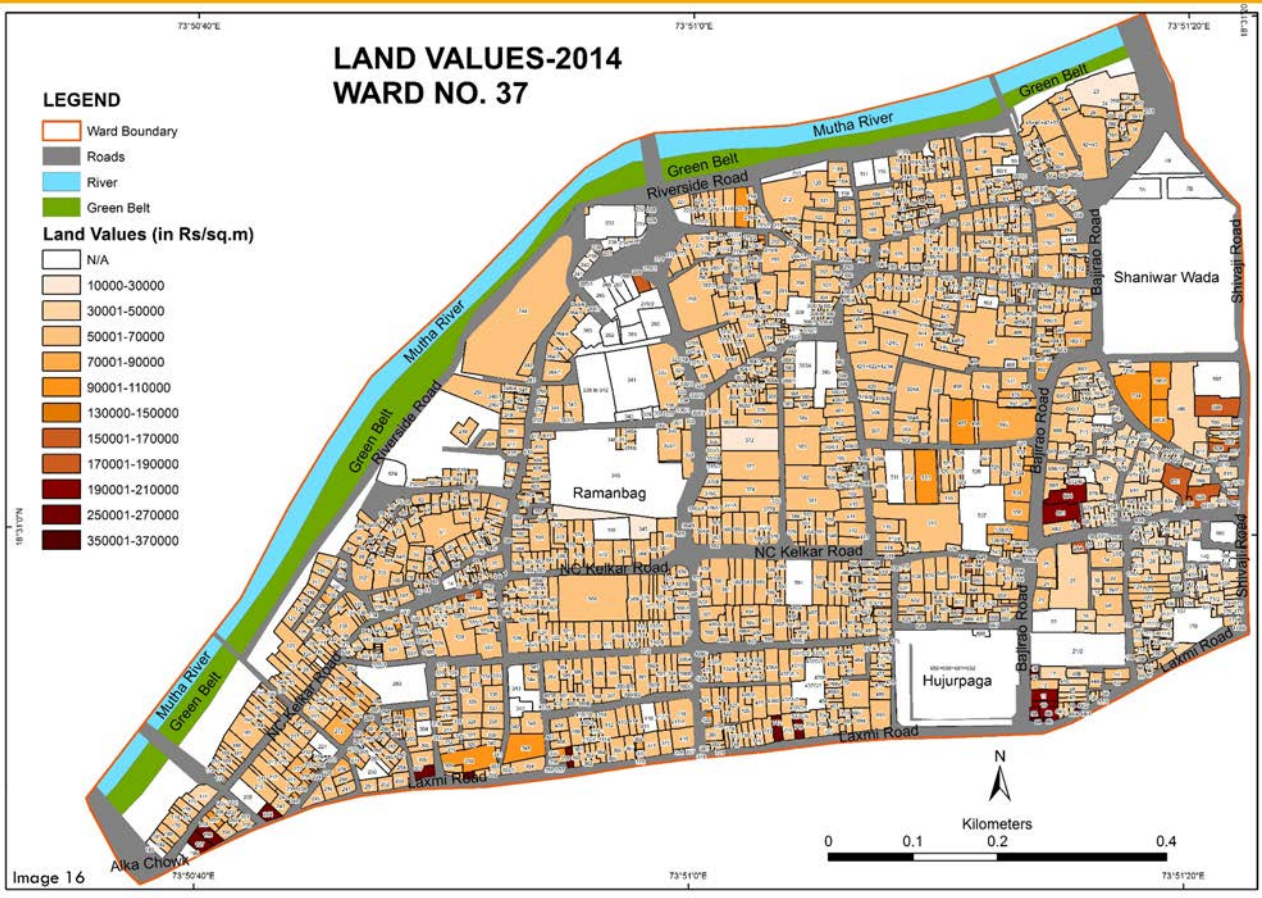


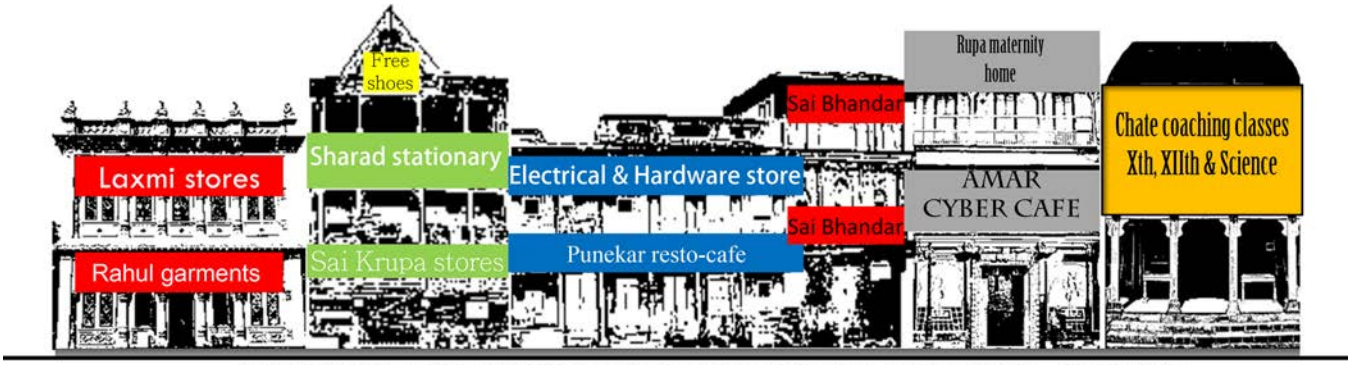
Image 16

Source-Image 16- CDSA/ SDP 2014-15

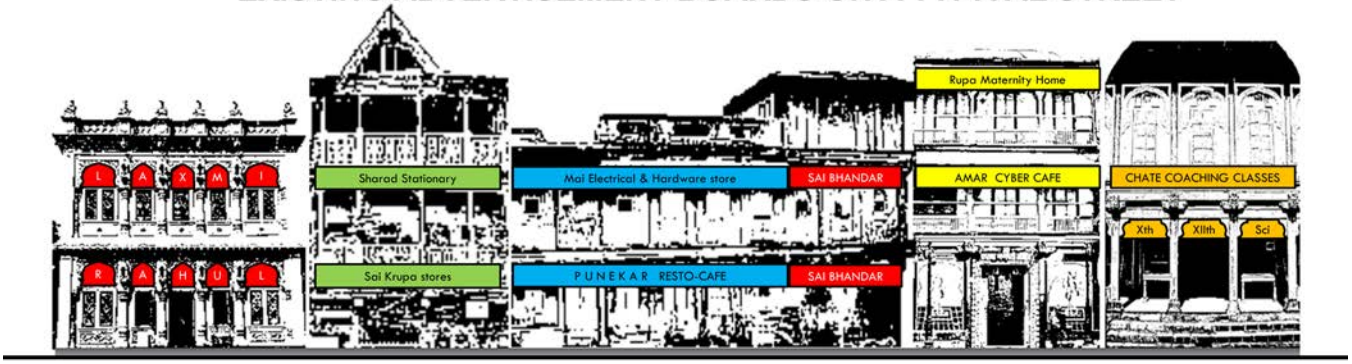
HERITAGE CONSERVATION

FAÇADE CONTROL

ADVERTISEMENT CONTROL



EXISTING ADVERTISEMENT BOARDS ON A TYPICAL STREET



PROPOSED ADVERTISEMENT BOARDS ON A TYPICAL STREET

POLLUTION FREE AND CONGESTION FREE ROADS

Restricting entry of private motorized vehicles in the ward

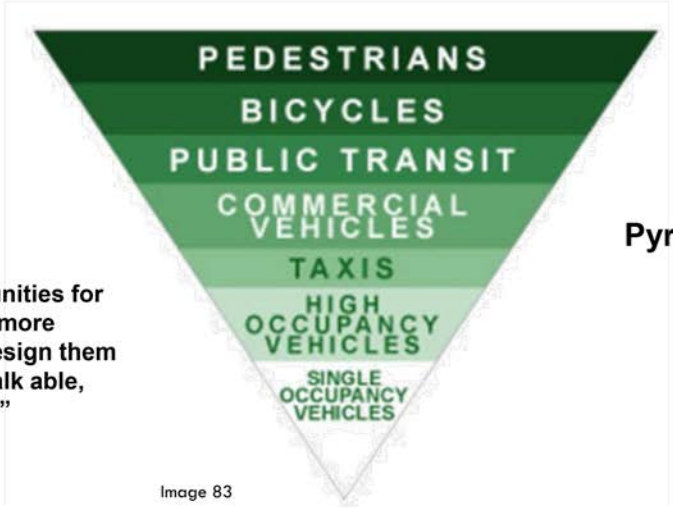


Image 83

Inverted Pyramid of Livability

"If you design communities for automobiles, you get more automobiles. If you design them for people, you get walk able, liveable communities."

- Parris Glendenning

The objective is to **discourage the use of private motorized vehicles** and to encourage the habit and trend of commuting by way of non motorized transport, be it **walking or cycling.**

The ward is spread across an area of 1.5 sq km radius which shall be well connected through the **tram service (public transit)**. Also, there will be dedicated heritage CNG rickshaws which will be plying around the ward.

Image 83- Guidelines for planning and implementation of pedestrian infrastructure, Govt. of Karnataka

POLLUTION FREE AND CONGESTION FREE ROADS

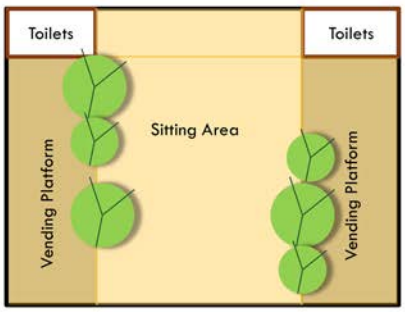
Restricting entry of private motorized vehicles in the ward

1. No entry shall be permitted to **private motorized vehicles coming from outside the ward.**
2. Non motorized transport **(bicycles)** from outside the ward are **permitted.**
3. **PMPML Buses, Service buses of schools and all emergency vehicles** and located inside the ward will be **permitted entry.**
4. Private vehicles of residents living inside the ward will be given **entry pass** in order for them to ply on Road.
5. **11 pm to 6 am – permitted hours of entry for stock vehicles** for people with commercial houses in the ward.

Non - Permissible Vehicles of Transport
Private Motorized Vehicles (Cars and Two Wheelers)
All other Auto Rickshaws

Permissible Vehicles of Transport
Bicycles
Trams
Heritage Auto Rickshaws
PMPML Buses, Buses of schools located inside the ward.
Emergency service vehicles (Ambulances, Fire Brigades)

PROVISION OF VENDING ZONES



VZ

Conceptual Plan of a Vending Zone

Conceptual Cross Section of a Vending Zone

VENDING FREE ZONES

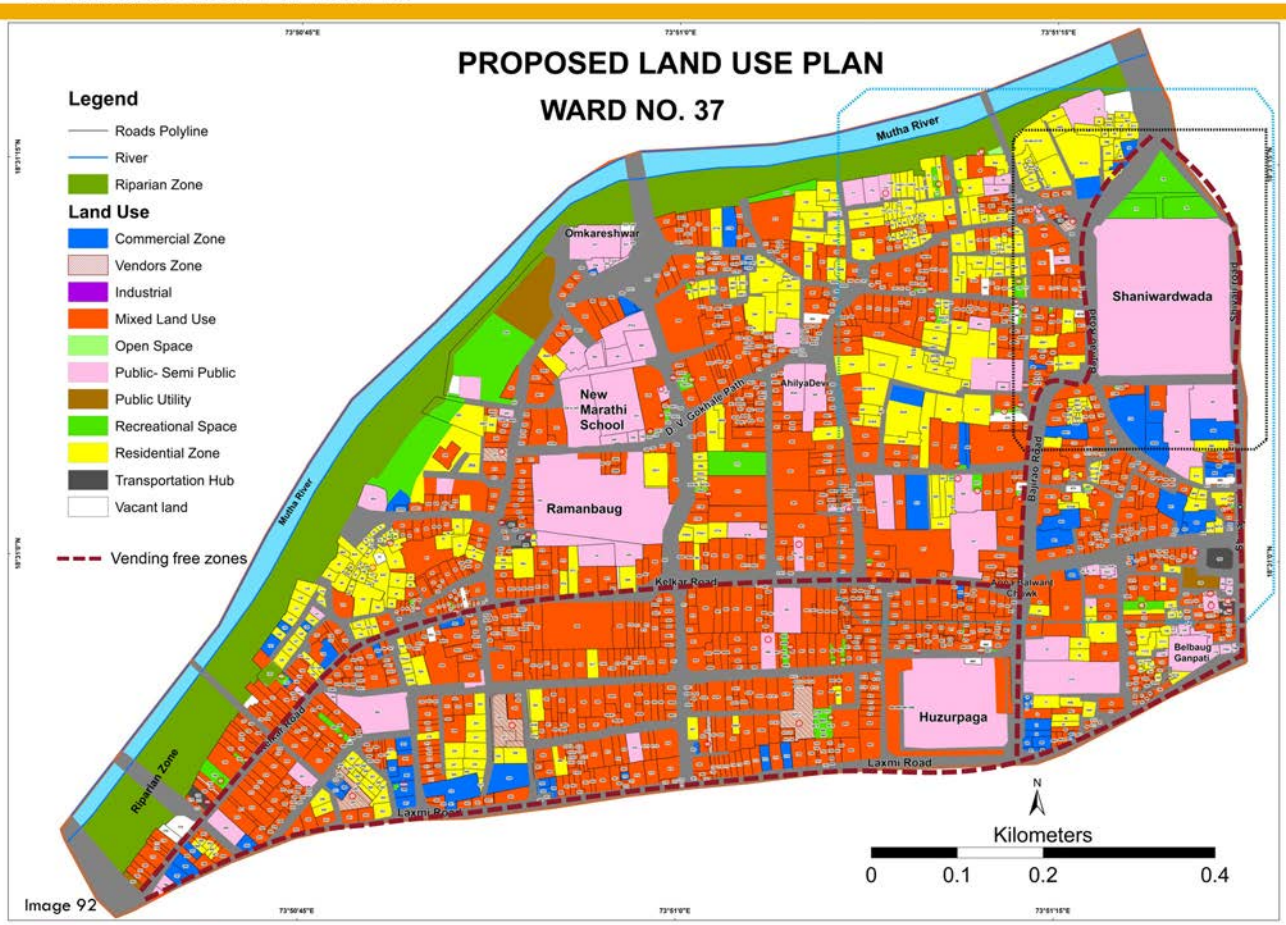
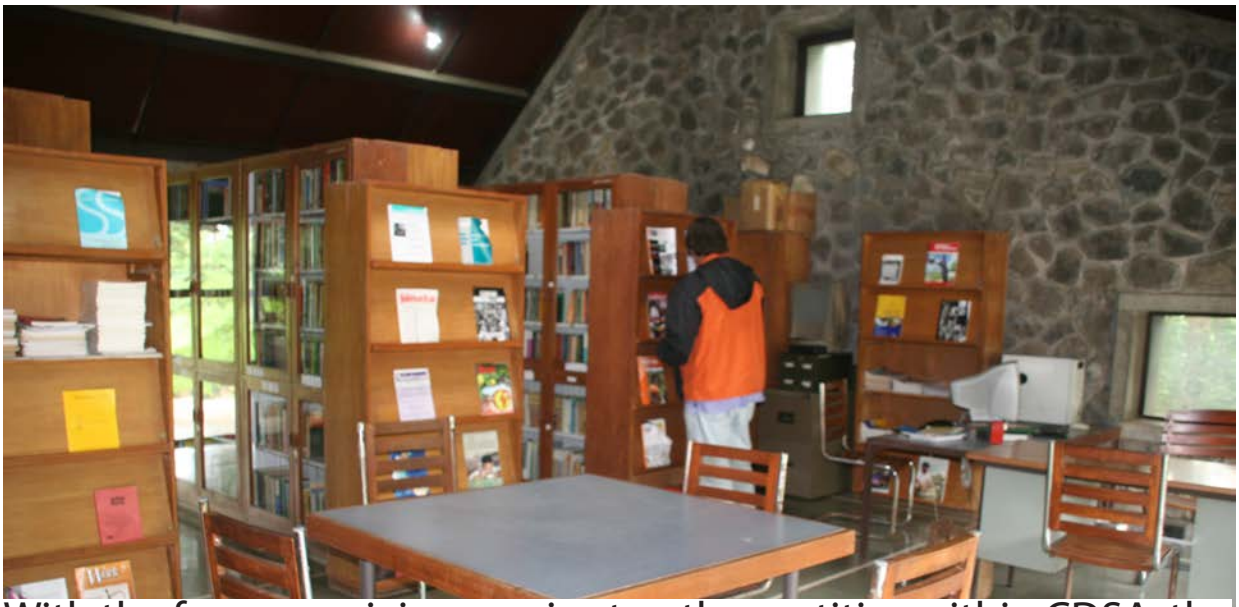


Image 92

Image 92- SDP/CDSA 2014-15

BARBARA WARD LIBRARY AND DOCUMENTATION CENTRE



With the focus on giving service to other entities within CDSA, the Barbara Ward Library and Documentation Centre (BWLDC) is the central repository of information with a collection of over 20,000 books and more than a hundred journals and periodicals.

EXECUTIVE TRAINING CENTRE AND HOSTEL

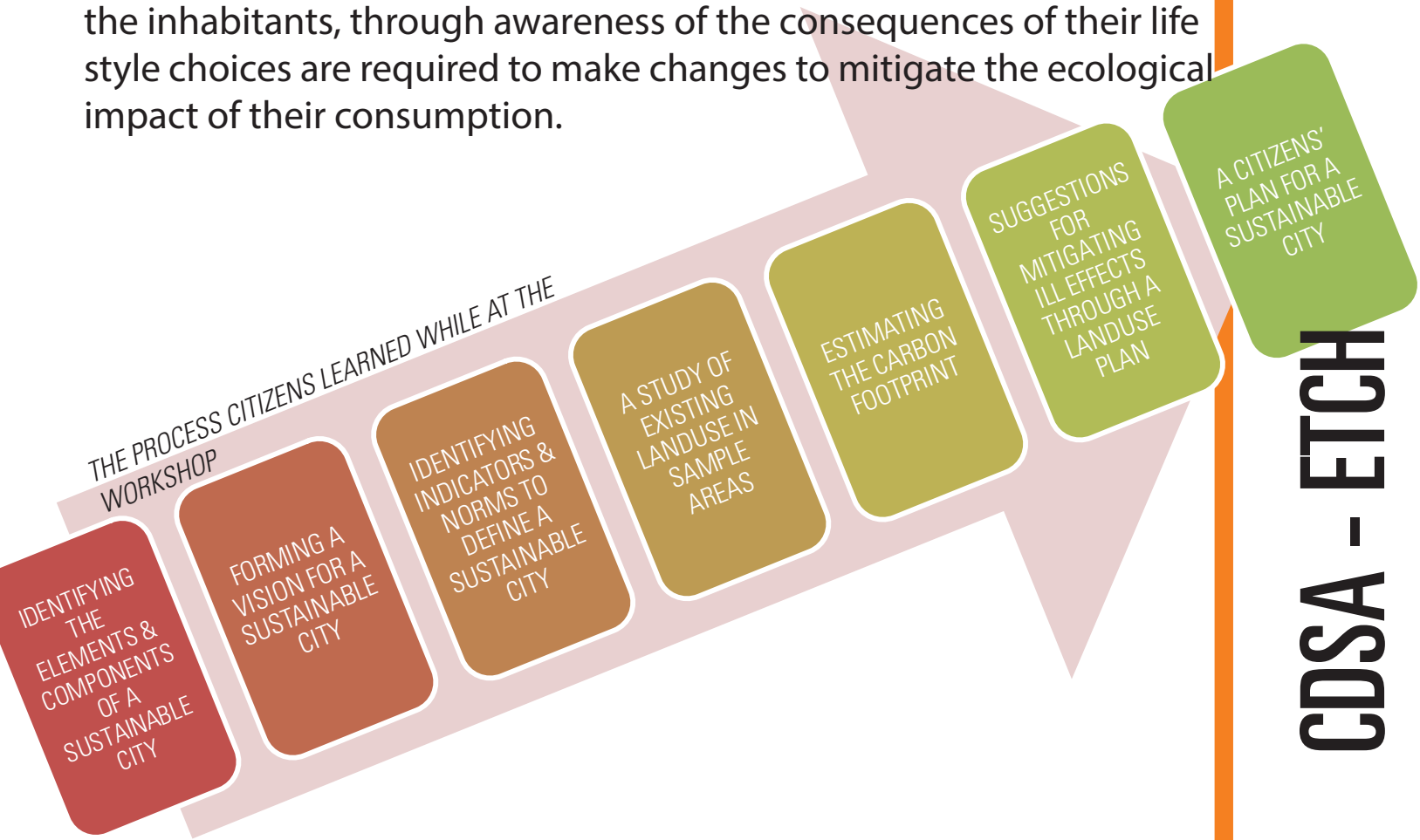
The Executive Training Centre and Hostel (ETCH) provides high quality infrastructure for workshops, seminars, short courses, conferences and training programmes on the CDSA campus.

A CAPACITY FOR 50 PEOPLE WITH 4 DORMETORIES, 12 SINGLE/DOUBLE ROOMS AND 2 SUITS

2 SEMINAR HALLS WITH A CAPACITY FOR MORE THAN 100 PEOPLE

CITIZENS EMPOWERMENT WORKSHOPS

The theme of the workshop was to create a Sustainable City where the inhabitants, through awareness of the consequences of their life style choices are required to make changes to mitigate the ecological impact of their consumption.



THE DEVELOPMENT NETWORK

CDSA's QUARTERLY PUBLICATION WITH A MEMBERSHIP OF OVER 1200 NGOs

- *Dissemination of information.*
- *Establishment of linkages among development organisations and individuals in order to share their views, ideas and experiences.*
- *Promotion of mutual co-operation among development agencies.*
- *Facilitation of development partners' access to information source, institutional establishment, resource mobilization.*
- *Enhancement in the spread of development approaches and strategies.*

THE WASTELAND DEVELOPMENT DEMONSTRATION FARM

CDSA's FARM THAT WAS CREATED ON 11 ACRES OF ORIGINALLY BARREN LAND

- *Upgradation of Land through various conservation and regeneration practices.*
- *Water conservation and harvesting by using innovative and traditional methods.*
- *Tree plantation for improving land/water conservation to provide fodder, fuel and income.*
- *Developing and understanding of the terms-of-trade for marketing of vegetables and fruits through the regulated market at Pune as well as street-corner retailing. Preparation and testing of training modules on wasteland regeneration through land, water and vegetation management.*

CENTRE FOR DEVELOPMENT STUDIES AND ACTIVITIES (CDSA)

CDSA CAMPUS
SURVEY NO. 58 & 49/4
PAUD ROAD, BAVDHAN KHURD
PUNE 411021 INDIA

DELHI OFFICE
INDIA HABITAT CENTRE
CORE 6-A 3RD FLOOR, LODHI ROAD
NEW DELHI 110003 INDIA

www.cdsaindia.org
office@cdsaindia.org
TEL: +91 20 64730010

SDP: admissions@cdsaindia.org
ETCH: etch@cdsaindia.org
BWLDC: bwldc@cdsaindia.org

CDSA - CONTACT INFORMATION