

# REGIONAL PLAN FOR GOA RPG -21

## Environment & Participation

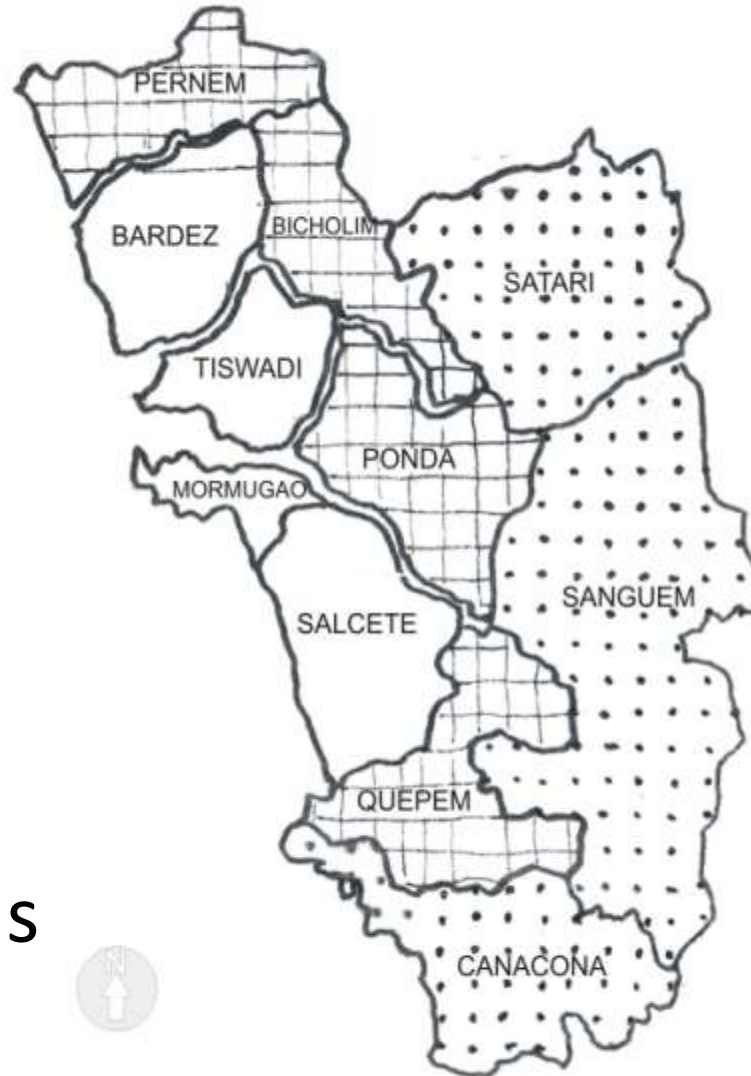
Malini Krishnankutty  
Urban Planner



# GOA

Area:	3702 sq kms
Population:	14.58 lakhs (Prov Census 2011) 60% live in Coastal zone
Floating Population:	Tourists 26.45 lakhs annually (2010) Migrants 1.7 lakhs
Density:	394 pp sq km
Urban	62.17% of Total Population
Administrative:	2 Districts : North Goa and South Goa 12 Talukas 1 Mun Corporation & 13 Municipalities 189 Village Panchayats

## THE TALUKAS OF GOA



### A. COASTAL

Bardez  
Tiswadi  
Mormugao  
Salcete

### B. MIDLANDS

Pernem  
Bicholim  
Ponda  
Quepem

### C. GHATS

Satari  
Sanguem  
Canacona

3 Topographical  
Zones

33% Forest Cover

Diverse Ecosystems

# 3 REGIONAL PLANS: GOA

- RPG 2001: First Regional Plan in India to Cover Entire State
- RPG 2011: First Regional Plan to be Scrapped
- RPG 2021: First Regional Plan to Introduce Bottom Up Planning

# BACKGROUND TO RPG-2021

- August 2006: The Final Regional Plan 2011 notified.
  - Total 50% increase in settlement area as compared to RP 2001. Unprecedented public mobilisation against Plan.
- January 2007: Goa government denotifies Regional Plan 2011 giving in to mounting public pressure.
- October 2007: CM's Task Force for RPG 2021 formed
  - Includes Charles Correa, Edgar Ribeiro (ex-CTP India) and representative members of the public
- September 2008: Draft RPG-2021 submitted  
(**181** days Public Process thereafter)
- November 2010: Final RPG-2021 notified in parts

# ISSUES

- Pressure on land fuelled by speculation changing character of Goa's settlements
- Agriculture lands converting to real estate
- Intra migration and lack of jobs to match skill sets of population
- Infrastructure needing upgradation
- Environmental degradation due to Goa's two major industries- tourism and mining

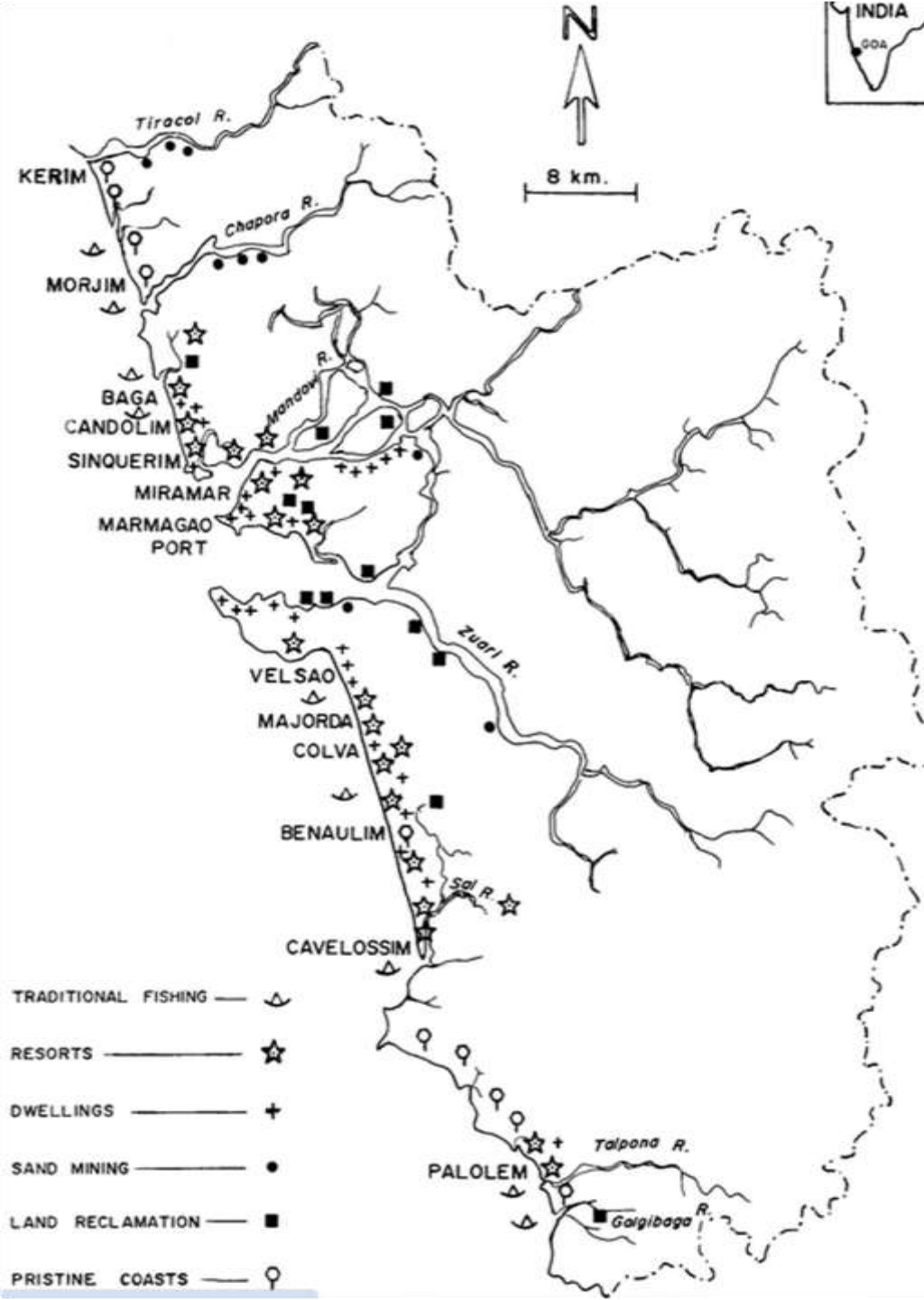
## Tourism

26.49 lakh annual tourists

## Increasing Real Estate Development

### Impacts:

- Increasing Deforestation
- Declining Agriculture
- Increasing Water Pollution
- Decreasing Water Table
- Salt water ingress
- Increasing Solid Waste
- Inadequate Sewage Disposal



## Open-cast Mining Impacts

- Large reject dumps prone to erosion during monsoon.
- Cause siltation / inundation and pollution of water bodies and agricultural lands.
- Deforestation
- Severe air pollution due to transportation of ore by open trucks



# OBJECTIVES

*“To create a more vibrant and prosperous Goa...to create a Goa that has greater economic prosperity... in a manner that does not endanger the fragile ecosystems that make Goa what it is. ..We believe this can be best done in honest and open collaboration with the people of Goa.”*

-Draft RPG 2021

# STRATEGIES

To ensure future balanced distribution of population and sustainable growth

- Creation of new growth centres in the midland talukas
- Enhanced public transportation networks
- Preserving Goa's fragile environment

# MAPPING

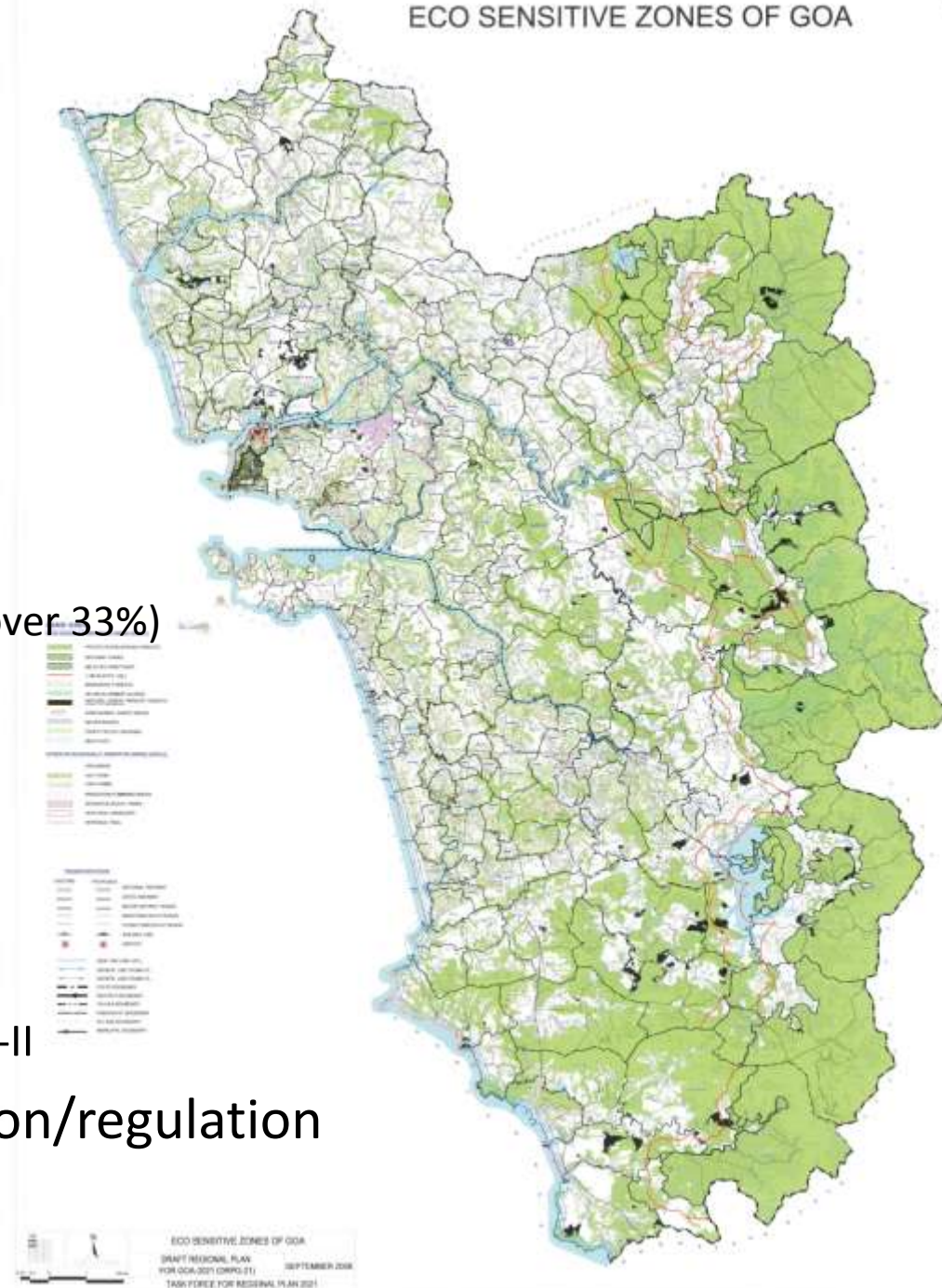
ECO-1 54.06%

- Forests (NP/Sanctuary/Protected/Reserved/private forests) 35.53%
- Mangroves 1.22%
- Water bodies 5.32 %
- Khazan lands/paddy fields 11.66%
- Non Developable Slopes (gradient over 33%)
- CRZ-I

ECO-2 26.29%

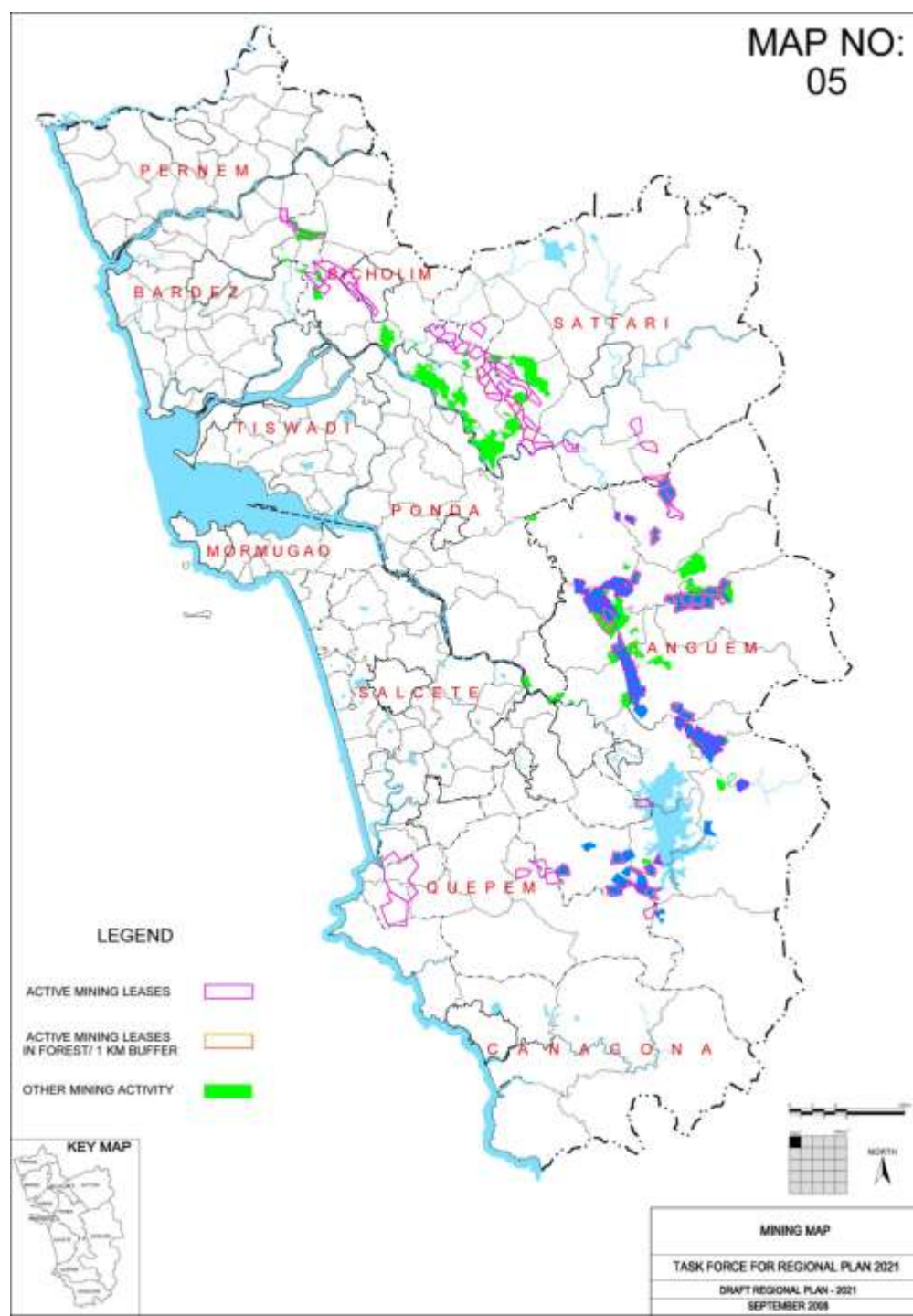
- Orchards 22.77%
- Cultivable lands 3.32 %
- Salt Pans 0.06 %
- Fish Farms/Mud Flats 0.13%, CRZ-II

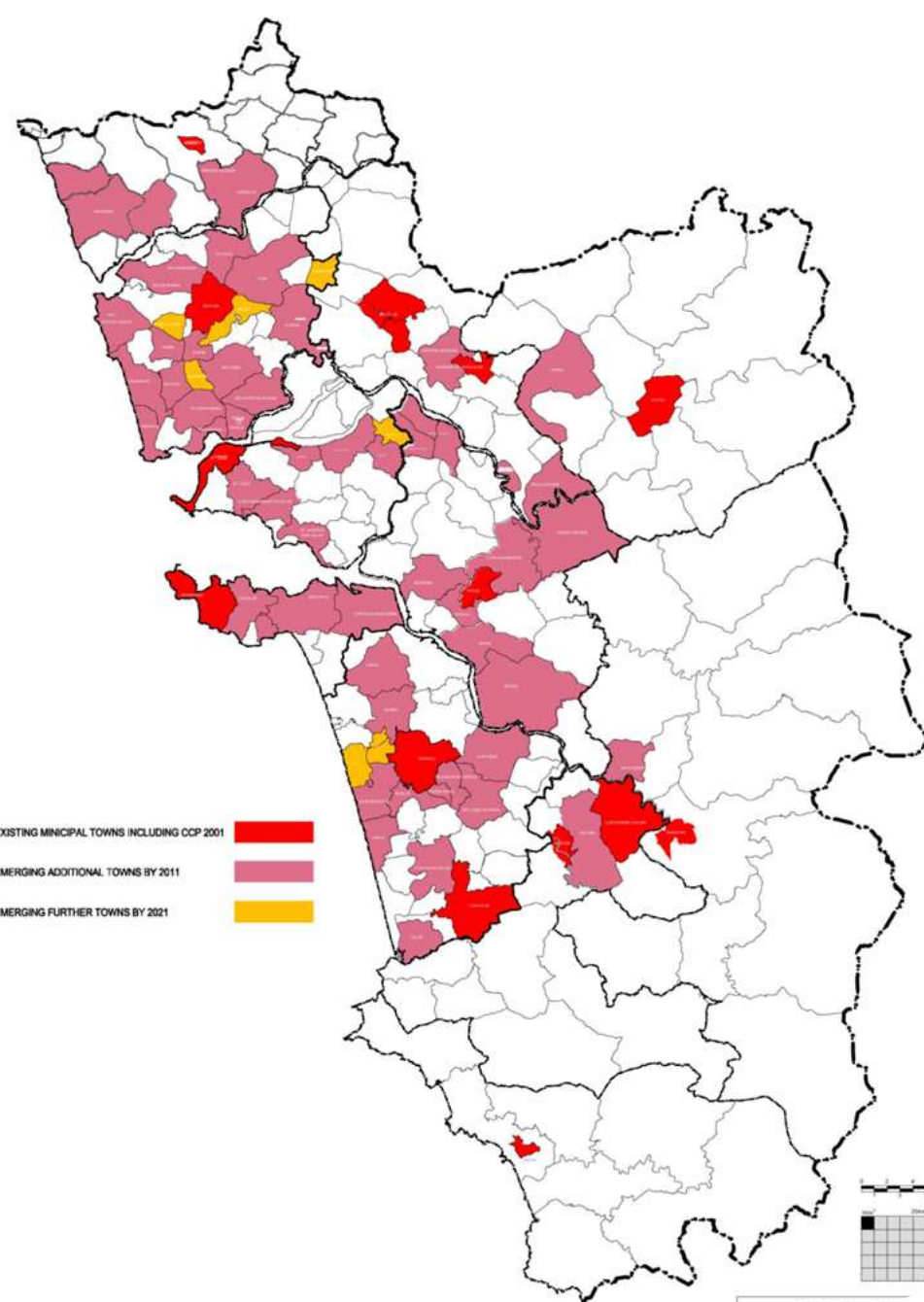
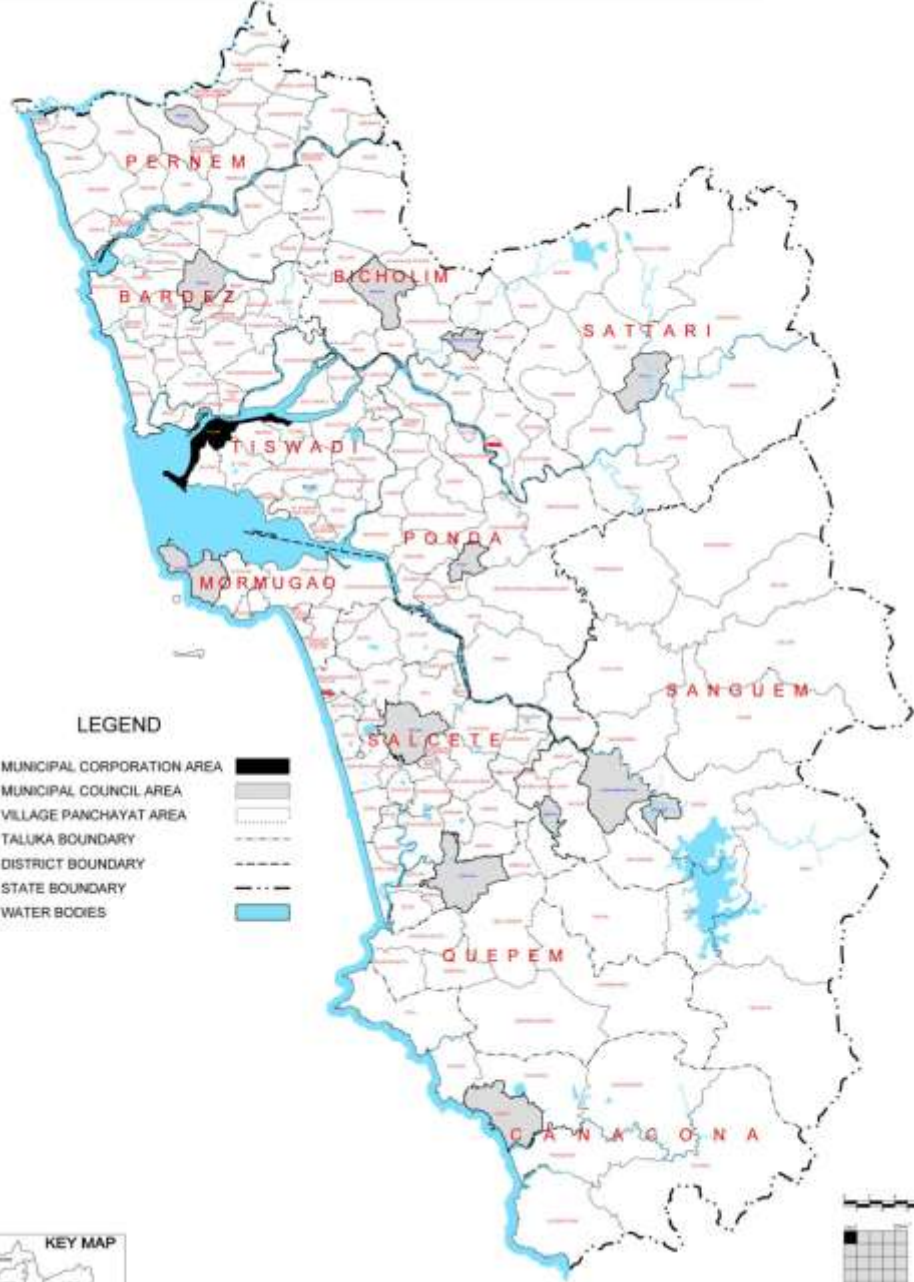
80% of land under conservation/regulation



# MAPPING OF MINES

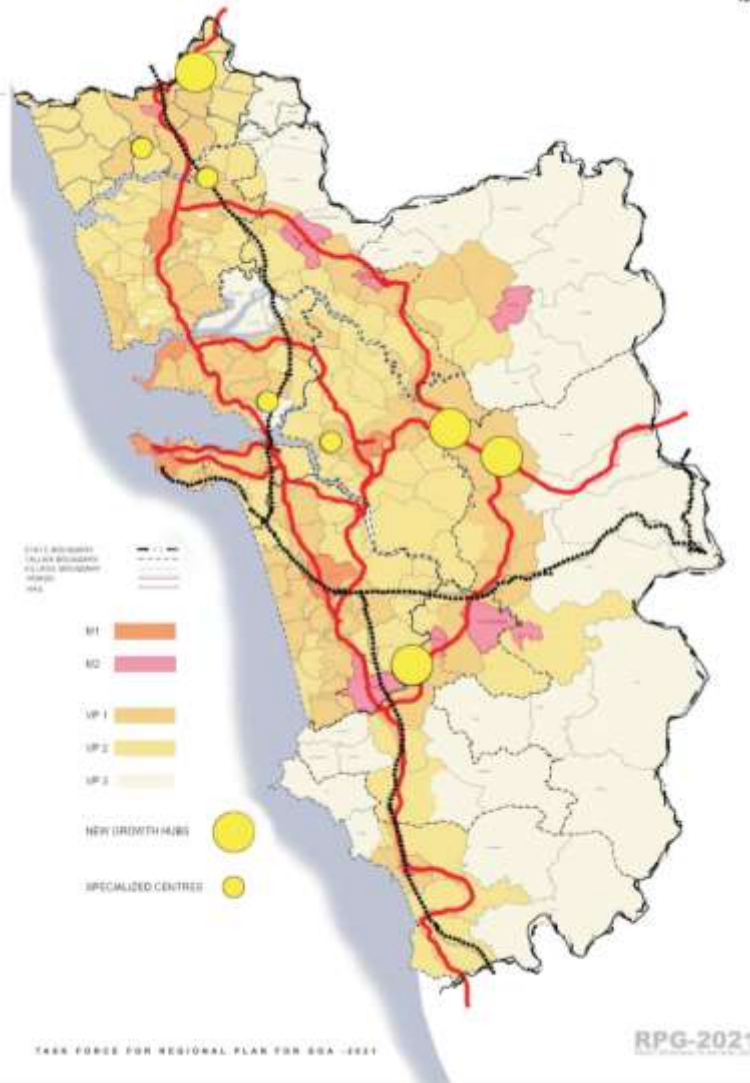
- 117 active Mines
- 700 mining leases
- RP Recommendations:
  - Closure of Mines within Forests
  - Phasing out of Mines within 1 km Forest Buffer and 1 km buffer of Water Sources



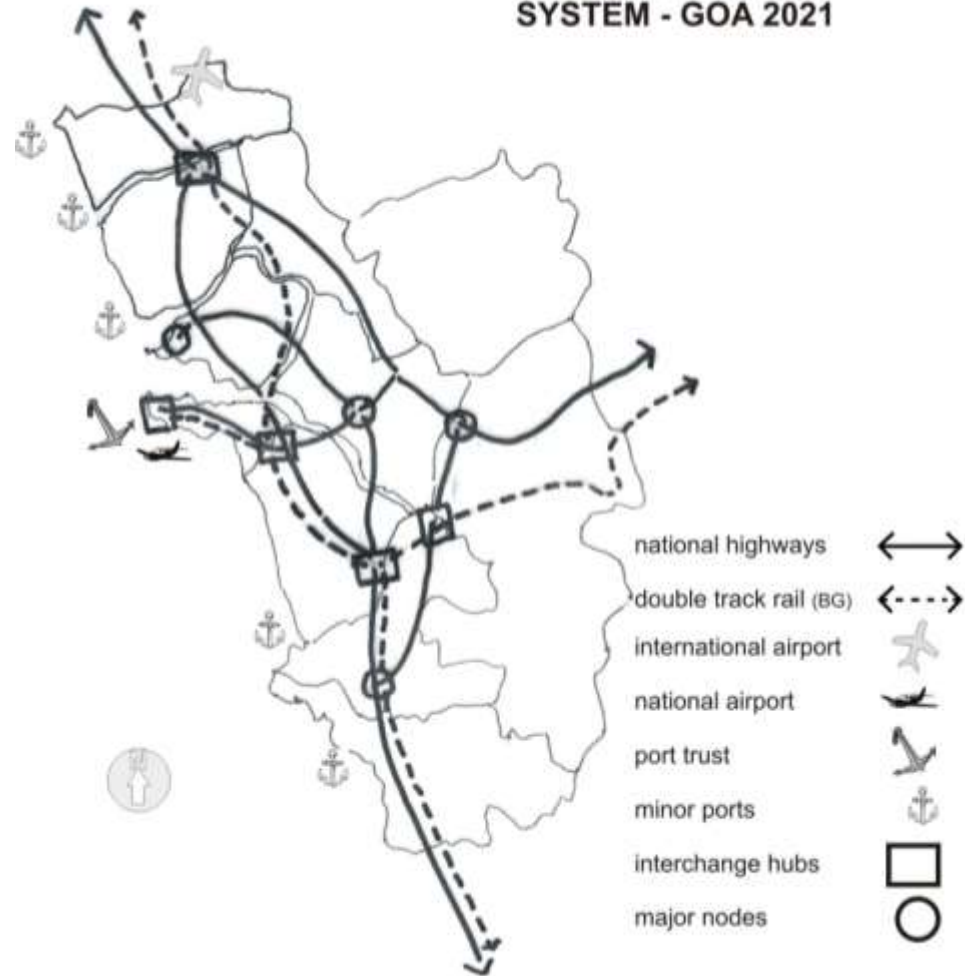


# SPATIAL STRATEGY

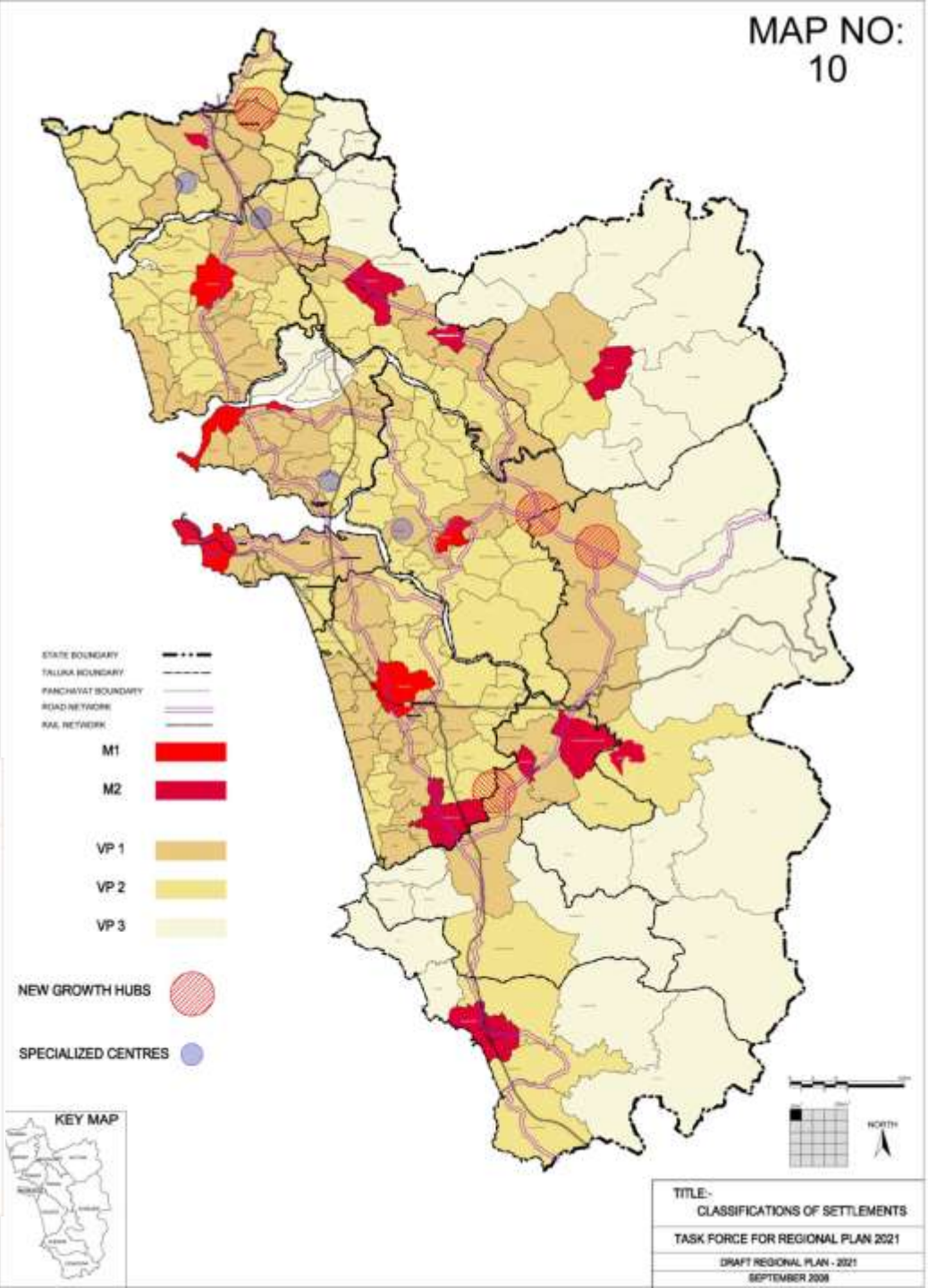
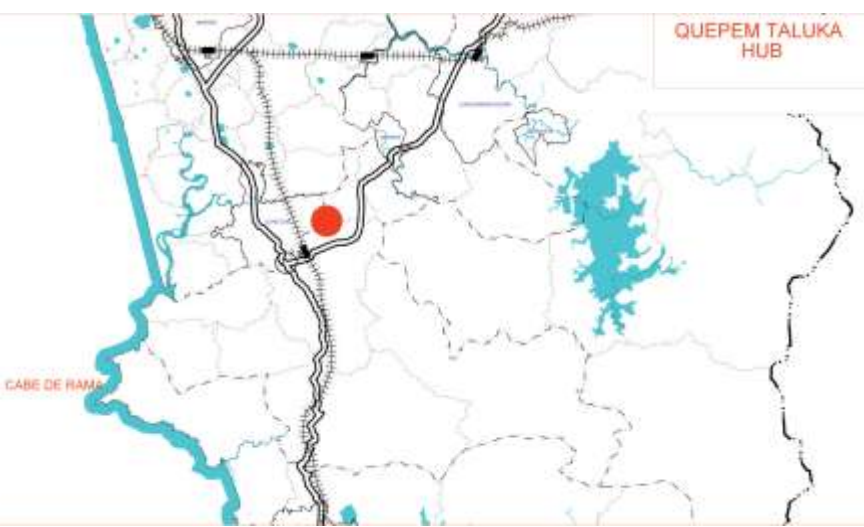
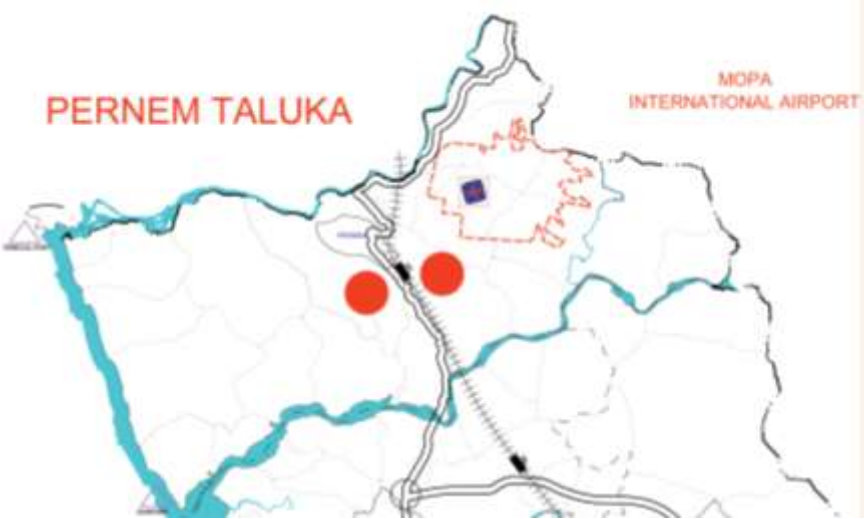
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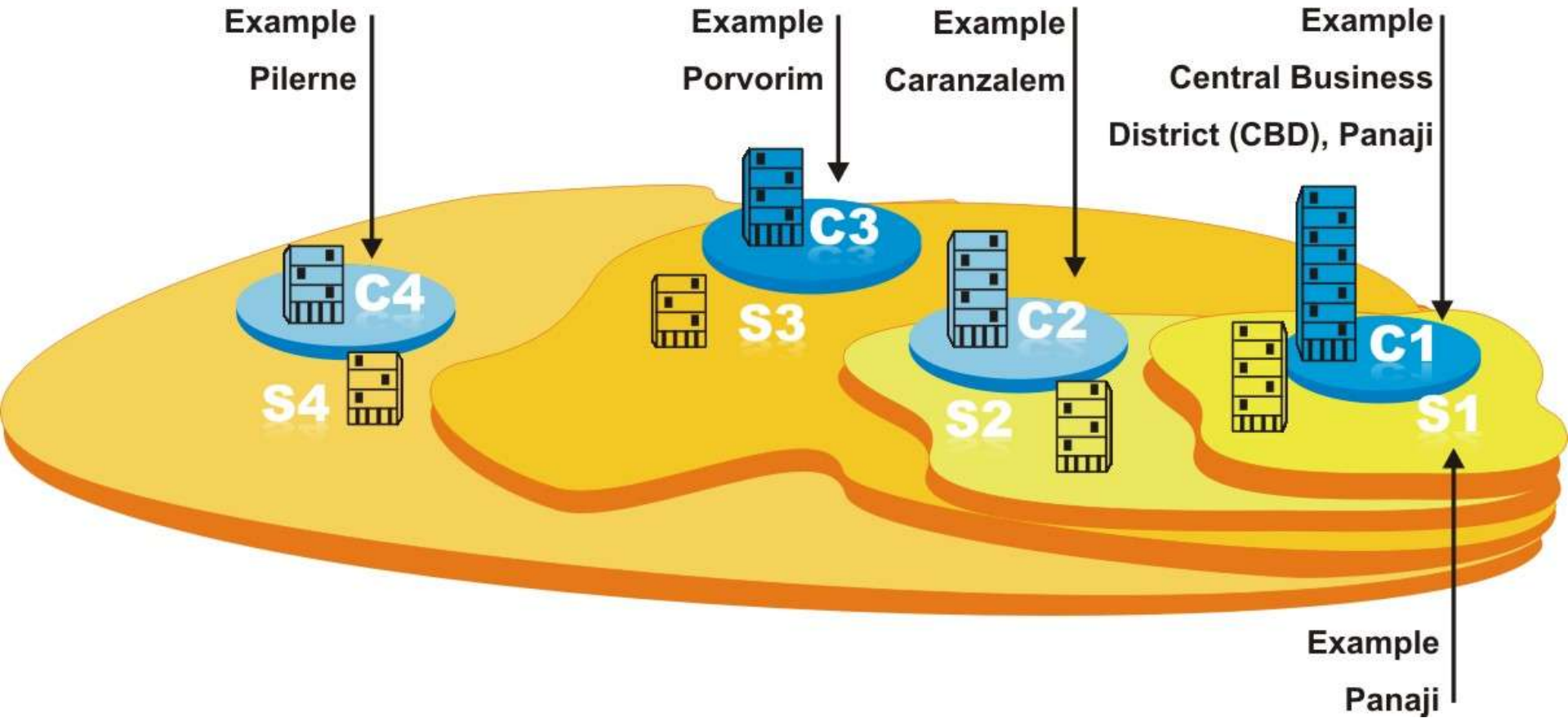
## TRANSPORTATION SYSTEM - GOA 2021



# NEW GROWTH HUBS



# SETTLEMENT CONTROLS







# **PARTICIPATORY PROCESS**

State Level Committee

Taluka Level Technical Committees

Village Panchayats

# Participatory Planning

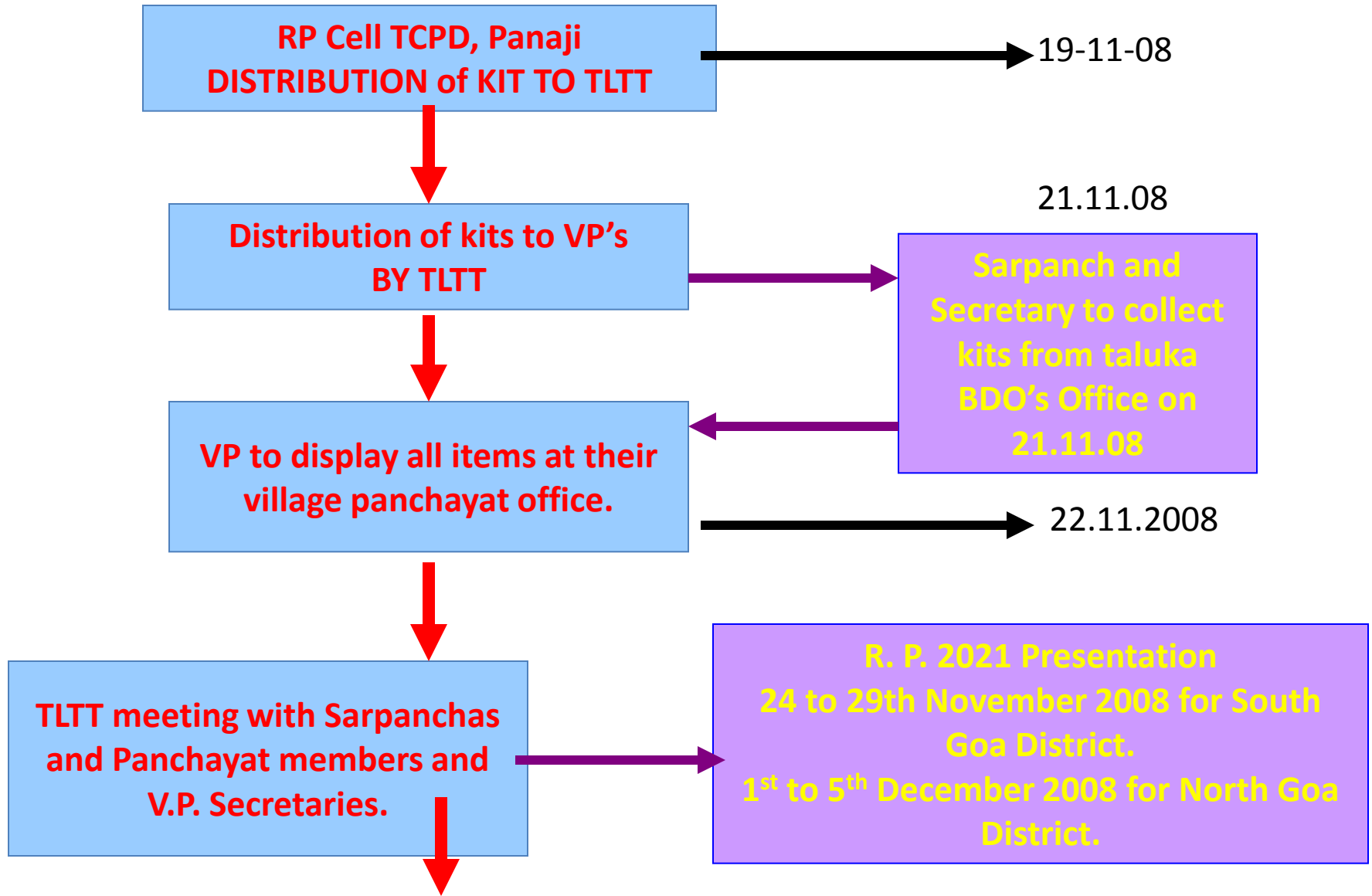
## **Function and Duties..... SLC**

- Oversee the process of Public participation,
- Co-ordinate with Taluka Level technical Team (TLTT) for better interaction with Village Panchayats and Municipalities.
- Explain the Revised Regional Plan for Goa-2021 and its features to TLTT.
- Prepare a questionnaire and a list of what parameters the Comments/Suggestions shall be sought.
- Issue necessary orders/directions from time to time as may be necessary.
- Collect the suggestions from TLTT and forward to the TCP Board.

# ROLE OF TLTT

- Distribute kits to the Panchayats.
- To provide technical assistance to the Village panchyats (through technical persons of TCP/PWD/Health , GIRDA representatives.)
- To explain the salient features of the plan.
- To attend meetings of the Panchayats.
- To assist in locating the proposals of the VP and Committee.

# PARTICIPATORY PROCESS



# Procedure to be followed



## **ROLE OF V.P. AND COMMITTEE WITH THE ASSISTANCE OF TLTT.**

- Mark all the roads in the villages up to 6 mtrs (Existing).
- Mark all proposed roads to link all areas/wards (proposed)
- Any other resources/services to be identified as detailed in the questionnaire.

# **ROLE OF V.P. AND COMMITTEE WITH THE ASSISTANCE OF TLTT**

- Mark any missing water bodies, Nalhas, Heritage sites.
- Mark any missing settlement areas, Industrial areas etc. existing on the ground or approvals granted as per Law.
- Mark existing tinto area of the village.
- Mark playgrounds, Schools, Hospitals, Bus Stand/Clinics/Colleges (Existing /Proposed), and Religious buildings, etc.
- Carve out the overlapping slopes on settlement areas after visiting the sites.
- Locate Garbage Disposal Sites.

# QUESTIONNAIRE

REGIONAL PLAN – 2021  
(SETTLEMENT LEVEL)

Part 'A' for official use only

Name of the village	Name of Village Panchayat	Taluka	District

- Part 'B'
- **What symbolizes/indicates the identity of this village?**
  - Place or specific character
  - Any festival (specific)
  - Any historical event
  - Any other socio economic aspect
  - Any other (please specify)

# QUESTIONNAIRE ...Cont.

- a) Are you satisfied with the classification of this village settlement done in the RP- 2021?  
.....
- b) Are you satisfied with the FAR suggested of this village in RP-2021?
- c) Do you agree with the RP-2021 population projection giving density of population by the year 2021?
- d) Are you satisfied with the fence of settlement of village?
- e) If you don't agree with the a), b), c) & d) done in the Regional Plan, if not give suggestion/comments with reason:-
- (a) .....
  - (b) .....
  - (c) .....
  - (Note:- The Regional Plan shows the settlement area based on Regional Plan 2001, settlement, survey maps 1971, changes carried out in Regional Plan 2001 and settlement area based on satellite photographs 2004).

- **Infrastructure status**

# QUESTIONNAIRE ...Cont.

<b>Is the village having the following please tick</b>	<b>Not available</b>	<b>Not satisfied</b>	<b>Just satisfied</b>	<b>Satisfied</b>	<b>Fully satisfied</b>
<b>a) Roads</b>					
<b>b) Water</b>					
<b>i) Potable/Drinking</b>					
<b>ii) Agricultural/         Irrigation water</b>					
<b>c) Power</b>					
<b>i) Domestic</b>					
<b>ii) Industrial</b>					
<b>d) Education</b>					
<b>i) Pre-primary</b>					
<b>ii) Primary</b>					
<b>iii) Middle</b>					
<b>iv) Secondary</b>					
<b>v) College level/         University level</b>					

# QUESTIONNAIRE ...Cont.

<b>e) Solid waste disposal</b>					
<b>f) Sports and recreation</b>					
<b>i) Village playground</b>					
<b>ii) Stadium</b>					
<b>iii) Any other specify</b>					
<b>g) Social welfare</b>					
<b>i) Women &amp; Child Welfare, Scheme/facility</b>					
<b>ii) Community development society</b>					
<b>iii) Any other scheme of Govt for welfare of people</b>					
<b>h) Health/Medical</b>					
<b>i) Primary Health Centre</b>					
<b>ii) Health Centre</b>					
<b>iii) Hospital/Medical College</b>					
<b>iv) Private Hospital/Doctor</b>					
<b>v) Any other specify</b>					

# QUESTIONNAIRE ...Cont.

4. Ecological, Heritage & Conservation zones/areas, specify:

I. Do you want to increase the eco sensitive zone or want to decrease the eco sensitive zone, please give reason;

.....

.....

II. Are you satisfied with the heritage landscape? If no give reason and area to be included or excluded.....

III. Do you like to suggest any other area at category five (please indicate the Survey No.).....

# QUESTIONNAIRE ...Cont.

- **Other available resources and activities of the village. Please indicate by tick mark in front of them.**

<b>i) Bunds for protecting agricultural land from saline water.</b>	<b>Not required</b>		<b>Required not available</b>	
<b>ii) Sluice gate for allowing the saline water in for pisciculture.</b>	<b>Not required</b>		<b>Required not available</b>	

# QUESTIONNAIRE ...Cont.

**iii) Any other important water bodies to be protected. Please specify with remarks:**

	<b>Existing</b>	<b>Not existing</b>	<b>Remarks</b>
<b>Lakes</b>			
<b>Ponds</b>			
<b>Springs</b>			
<b>Streams</b>			
<b>Any other specific</b>			

# QUESTIONNAIRE ...Cont.

## iv) Jetties

	Existing	Not existing	Remarks
<b>Fishing Jetty</b>			
<b>Barge Jetty</b>			
<b>Any other major vessel Jetty</b>			
<b>Sports Jetty</b>			
<b>Any other specific</b>			

## v) Open spaces

	Existing	Not existing	Remarks
<b>Open spaces</b>			
<b>Dairy farms</b>			

# QUESTIONNAIRE ...Cont.

## 6) Public Utilities

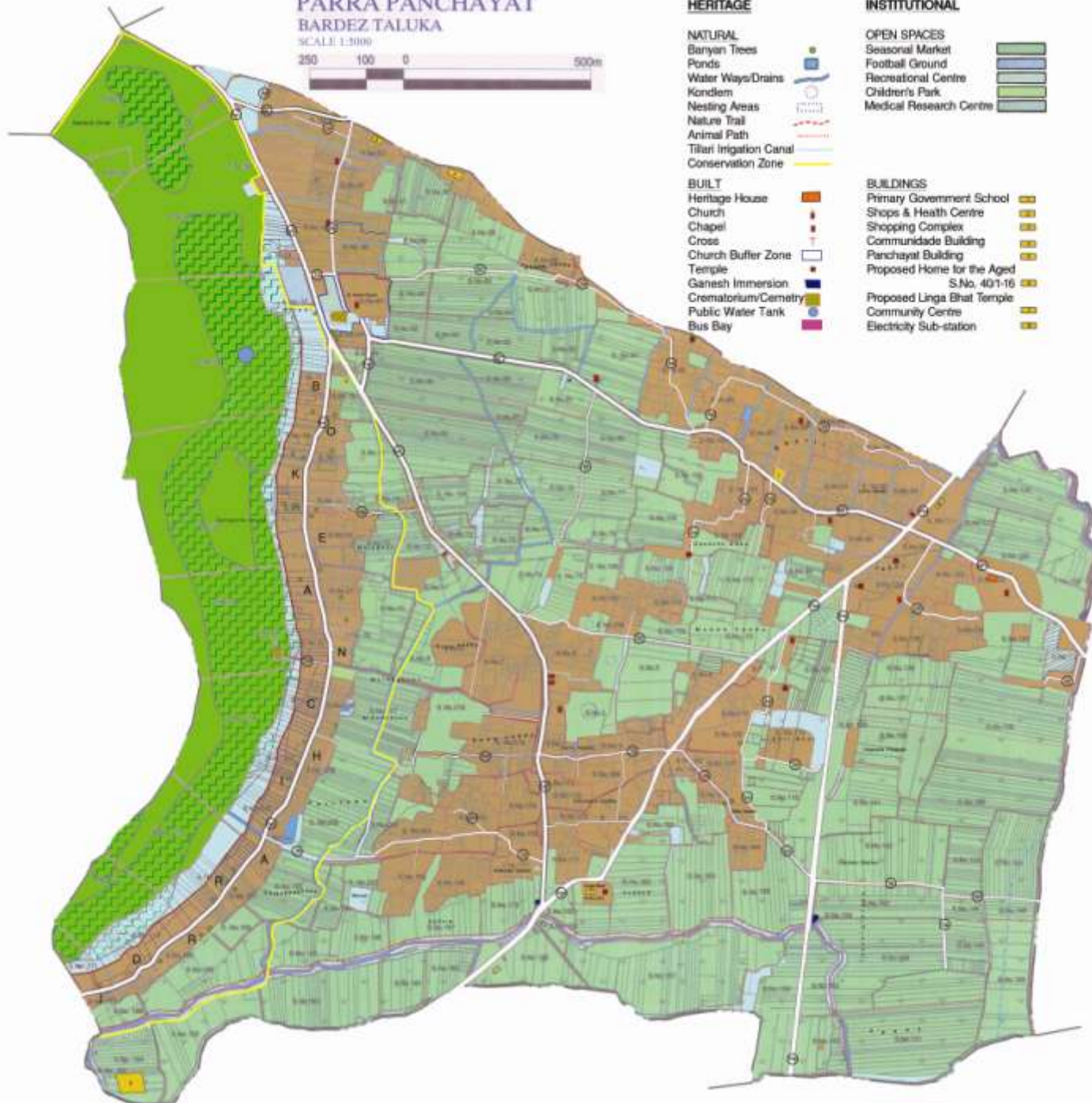
	Existing	Not existing	Remarks
<b>Crematorium</b>			
<b>Cemetery</b>			
<b>Grave yard</b>			
<b>Fire &amp; Emergency Services</b>			
<b>Ambulance facility</b>			
<b>Bus stop/Terminals</b>			
<b>Community water tap</b>			
<b>Street lights</b>			
<b>Sulab Souchalaya/ Community toilets</b>			

**7) Any other comments to improve the plan of your Village Panchayat area.**

# PARRA PANCHAYAT

BARDEZ TALUKA

SCALE 1:2000



## HERITAGE

- NATURAL
- Banyan Trees
- Ponds
- Water Ways/Drains
- Kondlem
- Nesting Areas
- Nature Trail
- Animal Path
- Tilari Irrigation Canal
- Conservation Zone

## BUILT

- Heritage House
- Church
- Chapel
- Cross
- Church Buffer Zone
- Temple
- Ganesh Immersion
- Crematorium/Cemetery
- Public Water Tank
- Bus Bay

## INSTITUTIONAL

- OPEN SPACES
- Seasonal Market
- Football Ground
- Recreational Centre
- Children's Park
- Medical Research Centre

## BUILDINGS

- Primary Government School
- Shops & Health Centre
- Shopping Complex
- Communitado Building
- Panchayat Building
- Proposed Home for the Aged S.No. 40/1-16
- Proposed Linga Bhat Temple
- Community Centre
- Electricity Sub-station

## LAND USE

- Settlements
- Existing structures
- Fields
- Orchards
- Forests
- Slopes
- Roads



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15°33'39.06" N 73°46'43.37" E elev 34 ft

# Why is RPG 2021 Significant?

- Foregrounds Participation & Sustainability
  - RPG-2021 as Broad Framework with DPs to be prepared by Local Bodies
  - 80% land under eco-protection and regulated development

# PLANNING FOR SUSTAINABILITY

- Vision
- Proposals
- Implementation

## Challenges

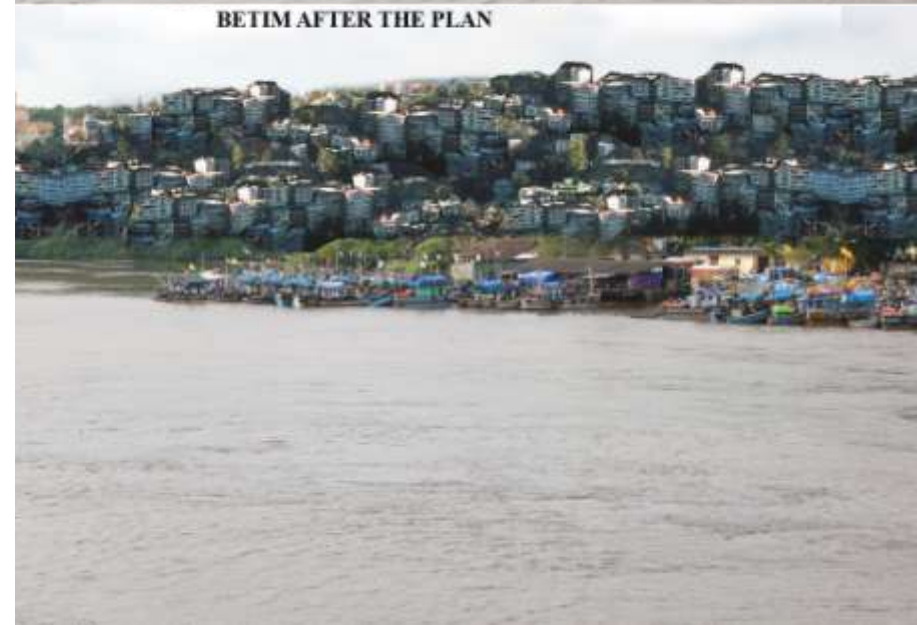
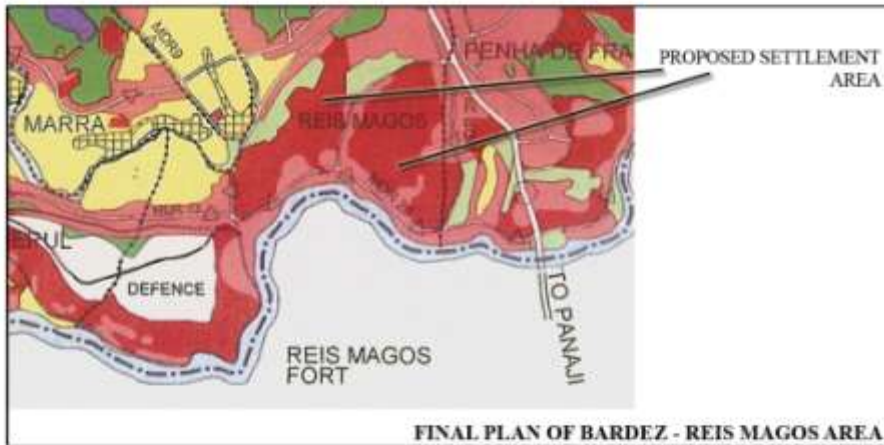
- Conflicting Goals
- Popular and Political Support
- Socially engaged expertise



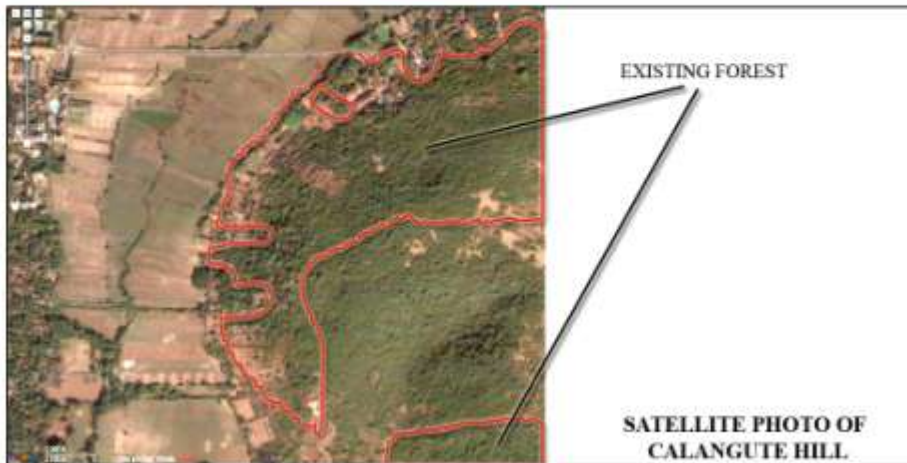
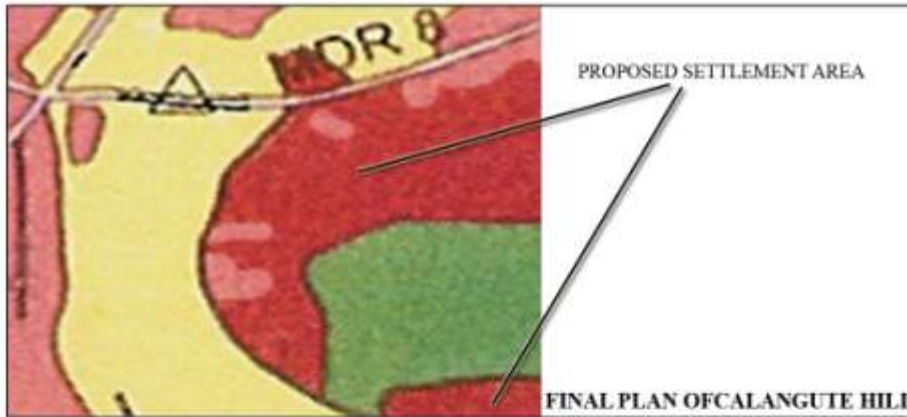
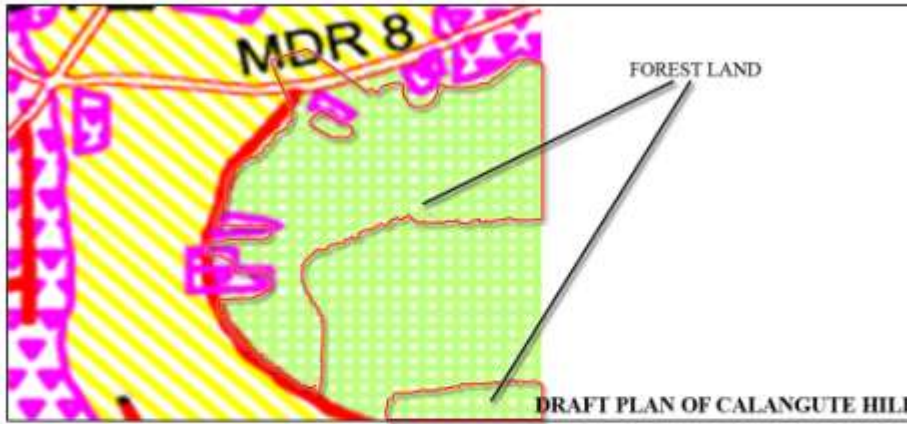




# REIS MAGOS & BETIM - FOREST VIOLATIONS



# CALANGUTE HILL - FOREST VIOLATIONS



## JUNGLE TODAY

CALANGUTE HILL BEFORE THE PLAN



## CALANGUTE HILL AFTER THE PLAN

