

Workshop on Tackling Urbanization and Climate Change Together
NEC Conference Room
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Urbanization: A Case of Man-Nature Coexistence

Khondaker M Ansar Hossain

Urban and Regional Planner
Former General Secretary,
Bangladesh Institute of Planners (BIP)

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Presentation Outline

- Urbanization Trend
- Present Actions and Consequences
- Way Forward



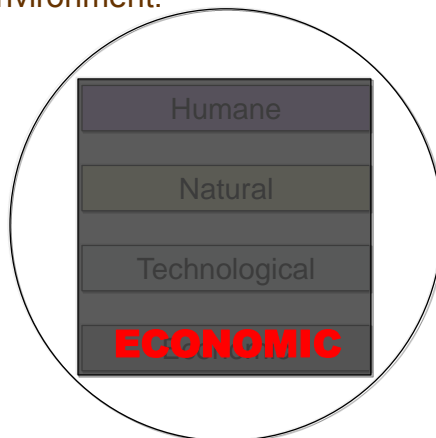
Urbanization Trend

Man-Nature Coexistence



Forces that Shape Man's Living Environment:

- Man's unrestrained greed for profit maximization using technology shatters nature and his own settlement.

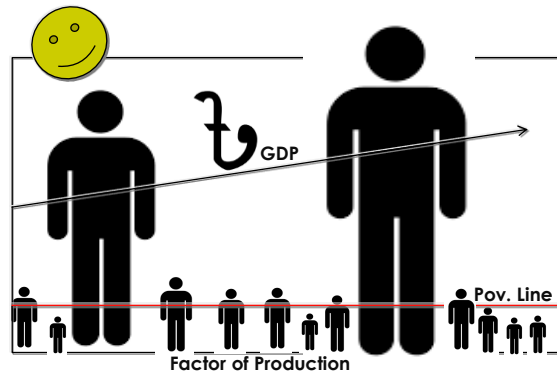


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GDP based Development Concept



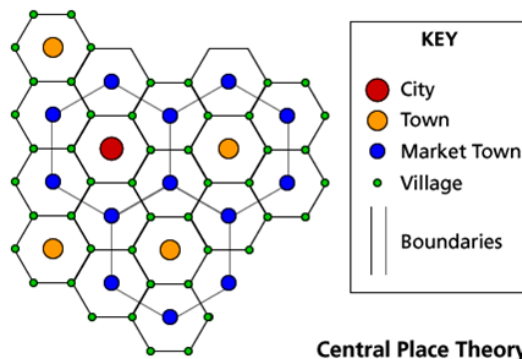
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Crystalline Model:

Correlation among different settlement types.



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Overpowering Man's Livelihood by Economy

- Historically 'Man-Nature Coexistence' formed the basis of development, man being always at the Centre.
- Today 'economy' has taken over and GDP assumes the central position where 'man' is mere a 'factor of production'.

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Factors shaped our urban evolution

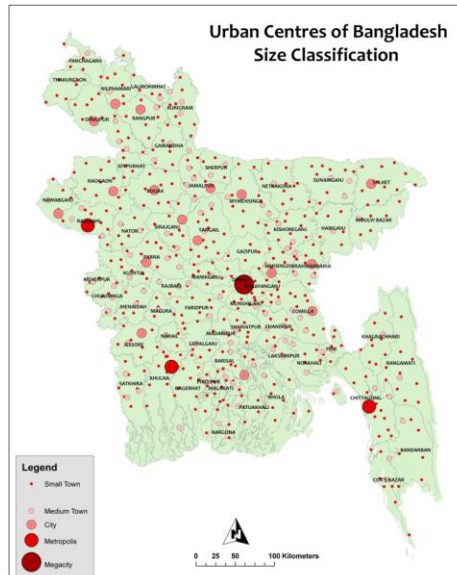
- Density and uniform distribution of population
- Flat topography of almost entire country
- Low technology: dependence on nature
- Social cohesiveness
- Above all, man had the right mindset and understanding of man-nature complementary relationship

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Hierarchy and distribution of our 'traditionally evolved' cities: A perfect manifestation of 'Man-Nature coexistence'.

Our 'sun tanned, unaware, illiterate' peasants knew (!) and applied 'Central Place' concept in this part of the world since several thousand years back from now!



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Present Actions and Consequences

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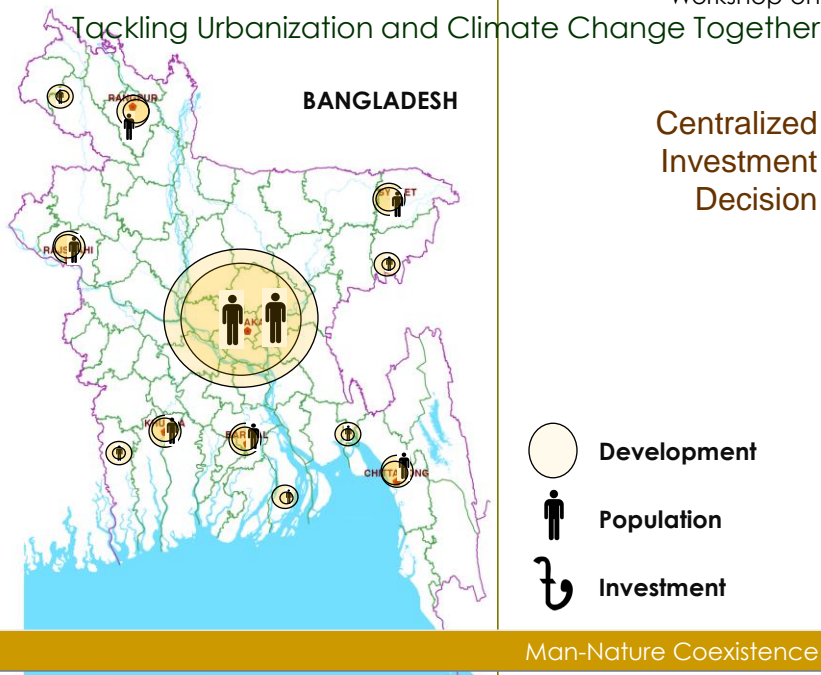
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Action:
Centralized Investment Decision

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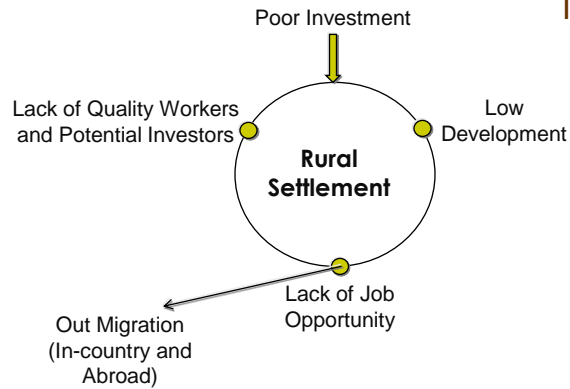


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Consequence: Rural Scenario

Centralized
Investment
Decision



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Consequence: Small Town Scenario

Centralized
Investment
Decision



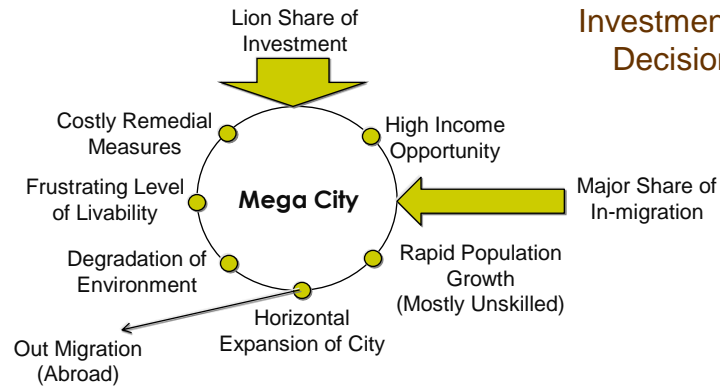
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Consequence: Mega city Scenario

Centralized
Investment
Decision



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Action:

**Arbitrary Definition,
Land Class Declaration and
Delineation of Urban Area Boundary**

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Urban Area has to fulfill the following:

- Have predominant non-agricultural / traditional occupation
- Provision of utility-services network (e.g., piped water, electricity supply etc.)
- Have any form of authority to manage the urban affairs.

Urban Area As per our Govt. provision:

- Any area within a municipality or city corporation jurisdiction as declared by the appropriate ministry.
- Entire jurisdiction is declared 'urban'.

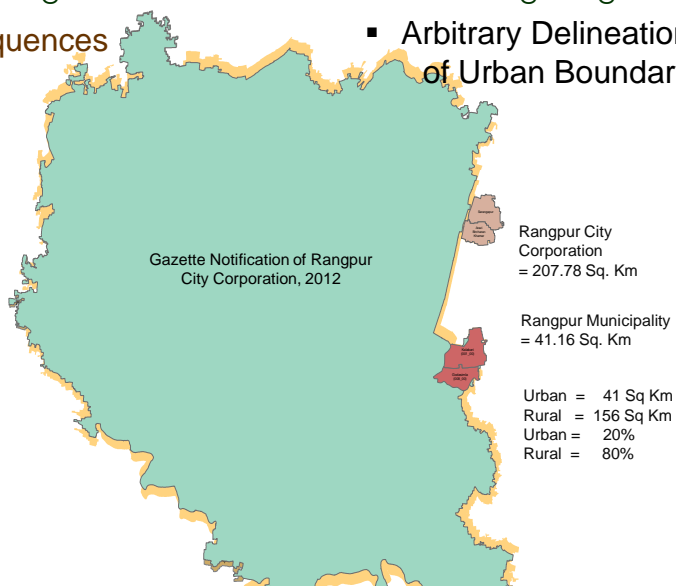
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Consequences

- Arbitrary Delineation of Urban Boundary

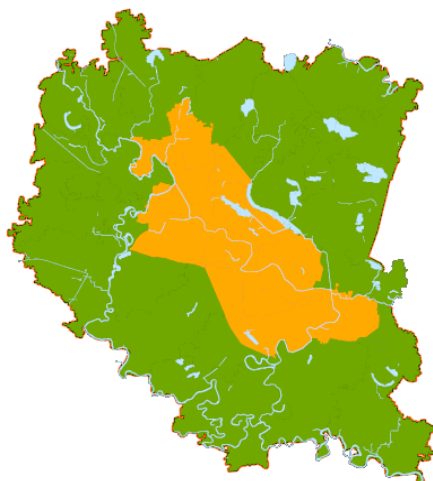


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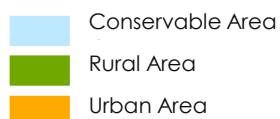
Consequences

Arbitrary Delineation of Urban Boundary



Projected Population

Year	Population		
	Urban	Rural	Total
2013	200358	400275	600633
2018	246942	457314	704256
2023	296530	516355	812885
2028	359643	571393	931036
2033	440788	628432	1069220



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Area under Land use Category



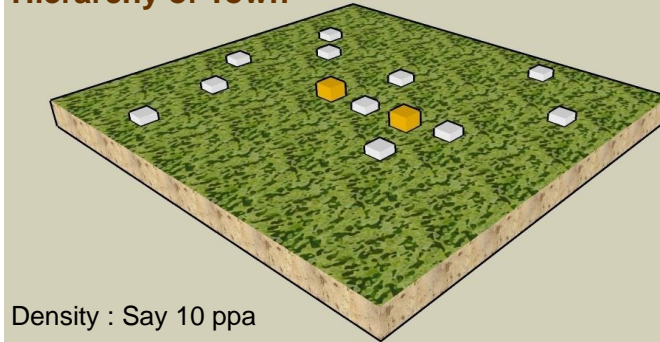
Land use Category	Area (Acre)	Area (Sq. Km)	% of Area
Administrative	241.26	0.98	0.47
Agriculture	31182.95	126.19	60.73
Commercial	411.65	1.67	0.80
Education	683.56	2.77	1.33
Graveyard	69.23	0.28	0.13
Health	29.96	0.12	0.06
Industrial	334.28	1.35	0.65
Miscellaneous	15.38	0.06	0.03
Mixed Use	109.44	0.44	0.21
Open Space	179.03	0.72	0.35
Places of Worship	132.99	0.54	0.26
Recreational	79.74	0.32	0.16
Residential	14174.42	57.36	27.61
Restricted Area	827.46	3.35	1.61
Transport & Communication	33.48	0.14	0.07
Transport & Communication (Road Network)	2278.172	9.22	--
Waterbody	2839.44	11.49	5.53
Grand Total	51344.25	207.79	100.00

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**Population Density based
Hierarchy of Town**



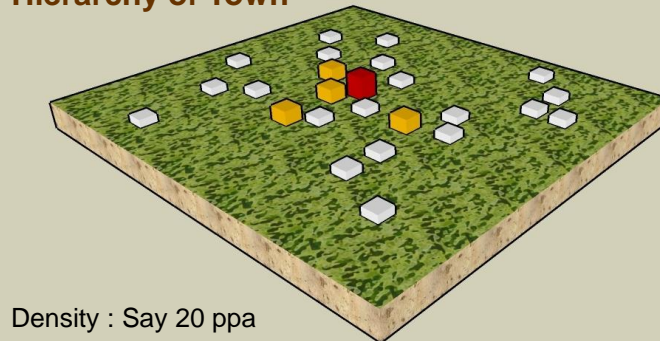
Small Town

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**Population Density based
Hierarchy of Town**



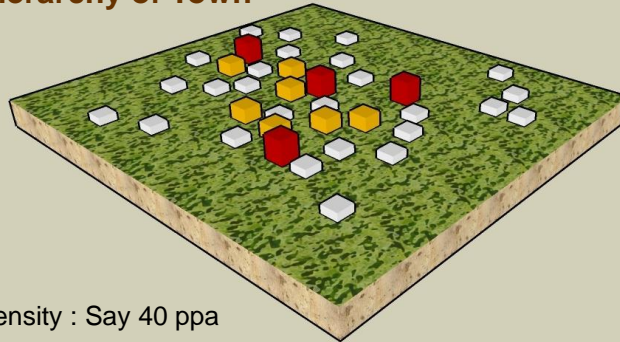
Upazilla Town

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**Population Density based
Hierarchy of Town**



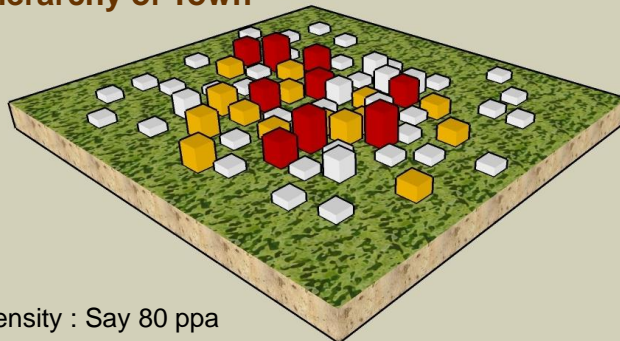
District Town

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**Population Density based
Hierarchy of Town**

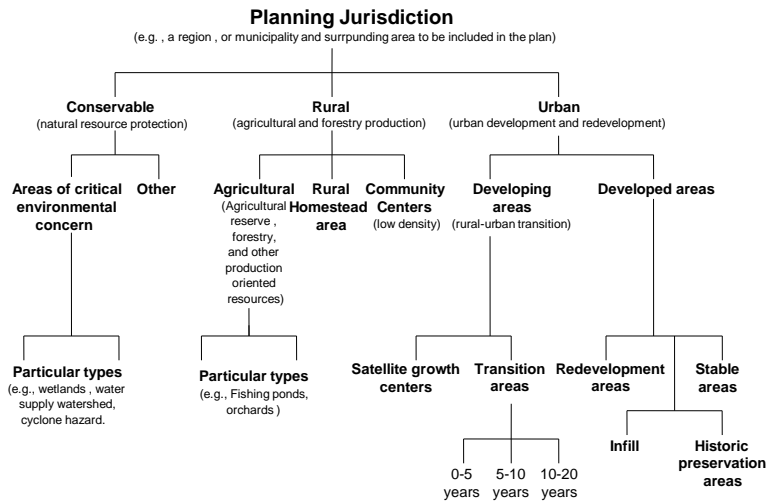


Divisional Town

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Broad Land Classification



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Action:

Filling in Water-body, Cropland and Water Retention Area

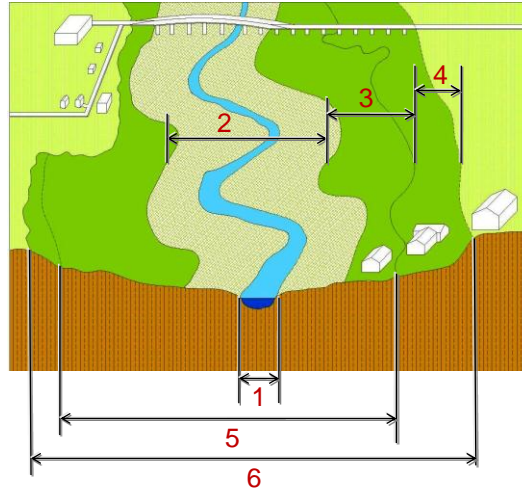
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Components of Natural
Flood Flow Channel
USA

- Channel 1
- Regulatory Floodway 2
- Regulatory Floodway Fringe 3
- Standard Project Flood Limit 4
- Regulatory Flood Plain 5
- Flood Plain (SPF) 6



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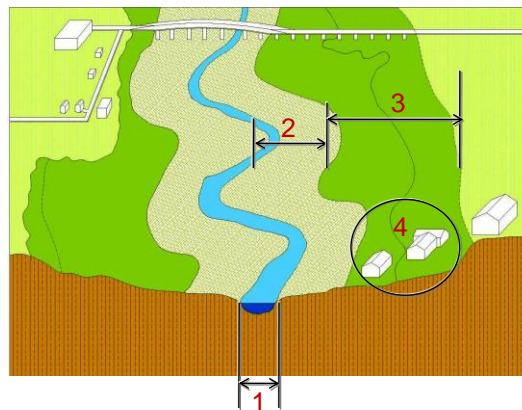
Components of Natural
Flood Flow Channel
DMDP

Structure Plan

- Water body 1
- Main Flood Flow Zone 2
- Sub Flood Flow Zone 3

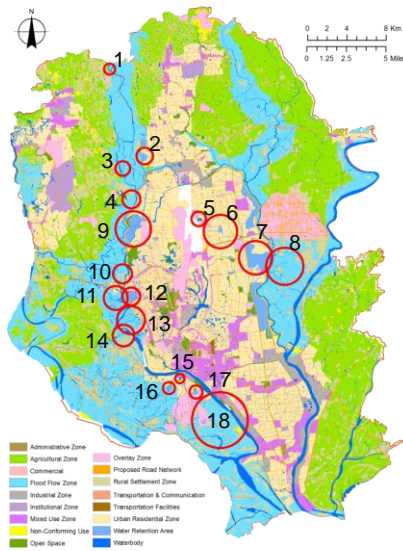
DAP

- Water body 1
- Flood Flow Zone 2+3
- + Rural Settlement Zone 4



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- 1 **Jarun, Kashimpur**
- 2 Gusulia, Tongi
- 3 Asulia, Savar
- 4 **Biralia, Savar**
- 5 Dakshin Khan (Airport)
- 6 Dakshin Khan (Basumati)
- 7 **Baraid, Gulshan (Basundhara)**
- 8 **Kayetpara, Rugganj (Jalshiri)**
- 9 Digun, Mirpur
- 10 Uttar Kaundia, Savar
- 11 Amin Bazaar, Savar
- 12 Choto Shayek, Mirpur
- 13 **Katasur, Mohammadpur (Basila)**
- 14 Taranagar, Keraniganj
- 15 Zinjira, Keraniganj
- 16 Kalindi, Keraniganj
- 17 Subhadya, Keraniganj
- 18 Konda, Keraniganj (River View)

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Govt. Pressure Projects	Land Use Zone				
	Main Flood Flow	Sub-Flood Flow	Retention Pond	Agricultural	Recreation
Uttara 3rd Phase					
Purbachal New Town					
Jhilmil					
Central Jail					
Pangaon Container Port					
Army Training Ground					

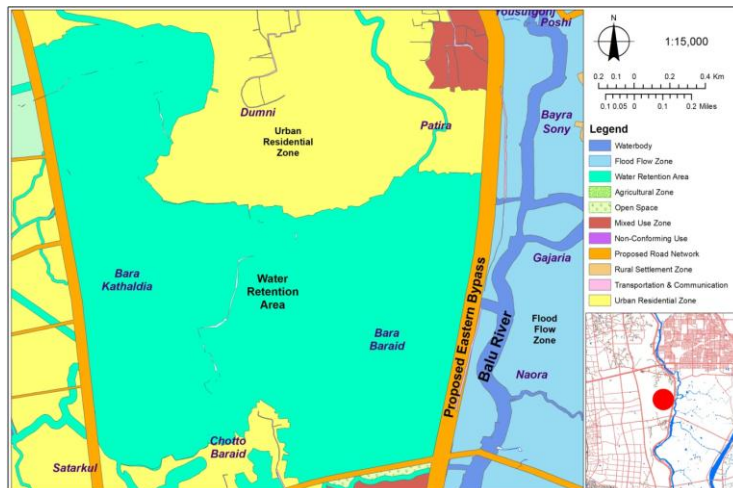
**Government Legalized Projects
Encroaching Conservable Areas of DMDP Structure Plan**

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Water Retention Area at Baraid, Gulshan

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Land Use and Location as per DAP Map: Baraid, Gulshan

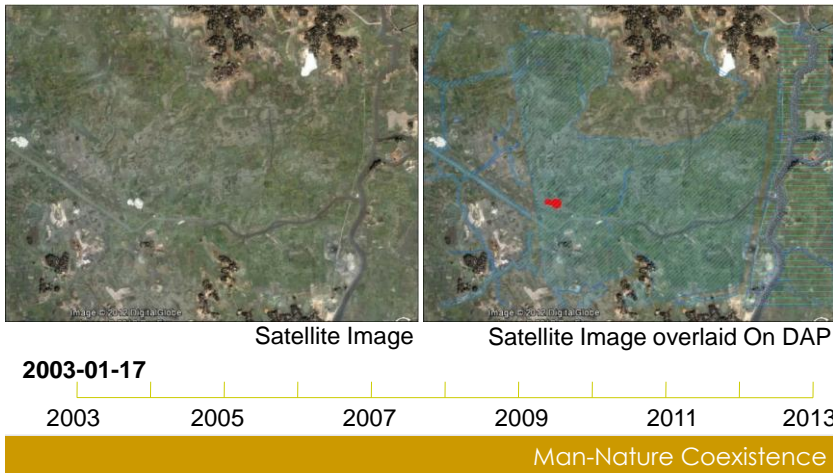
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Filling on Date = 2.66 Acre
Filling of Retention Pond Just Started

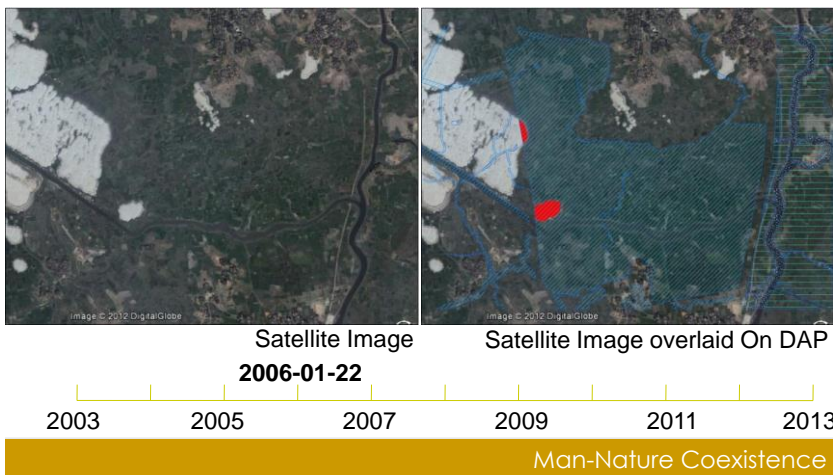


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Baraid, Gulshan

Filling on Date = 11.75 Acre
Filling Proceeds from North-West

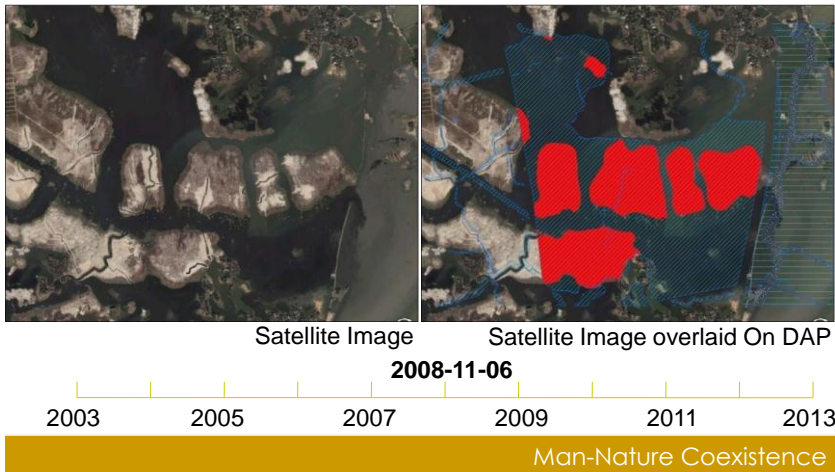


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Filling on Date = 386.95 Acre
Filling is vivid in the Monsoon

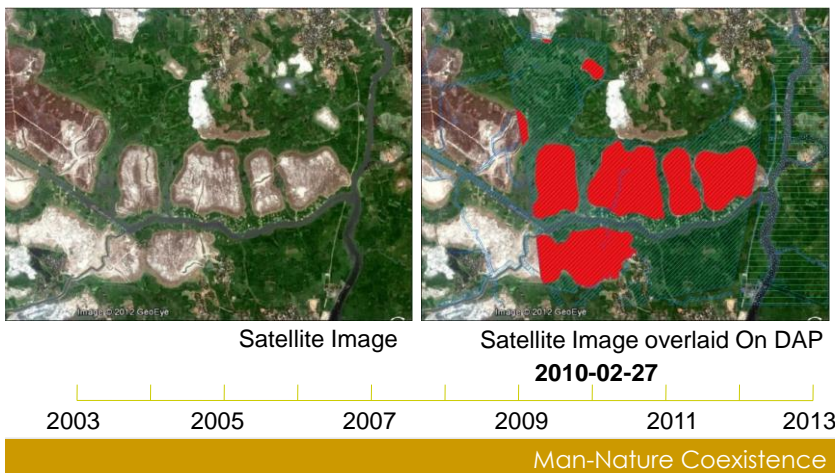


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Baraid, Gulshan

Filling on Date = 383.24 Acre
Filling remained stopped during DAP Review period

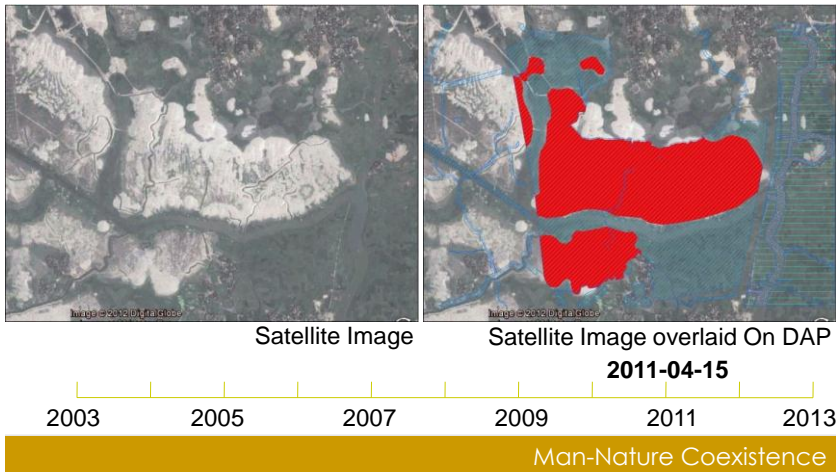


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Filling on Date = 542.94 Acre
After Gazette of DAP Filling started in full swing

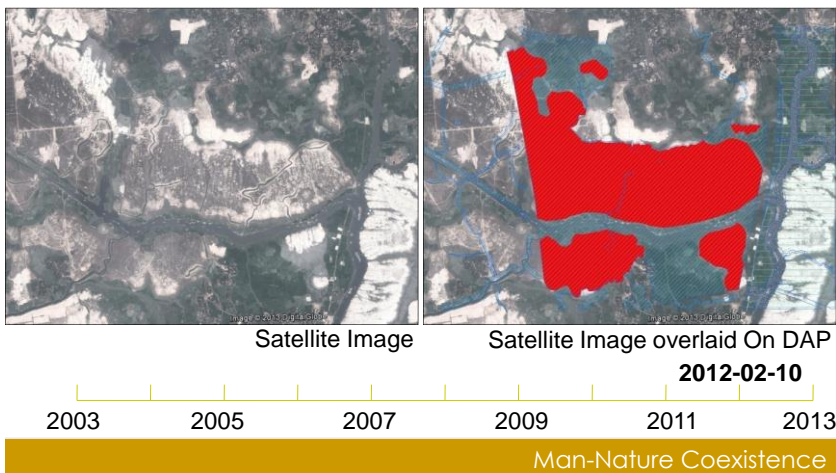


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Filling on Date = 646.06 Acre
68.93% area Filled in

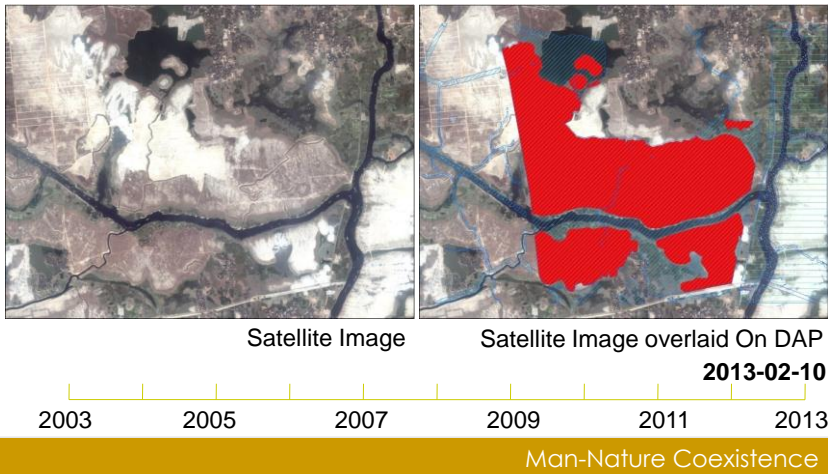


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Baraid, Gulshan

Filling on Date = 716.82 Acre

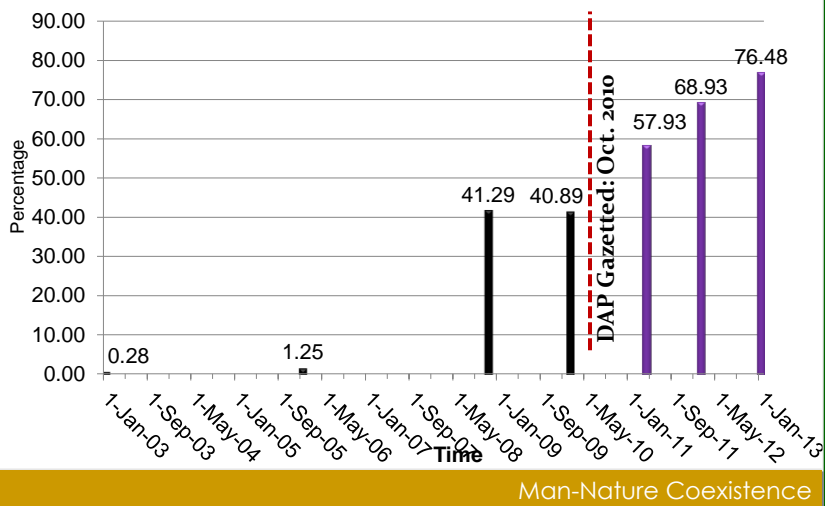
76.48% area Filled in



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About 333.58 acres Retention Area Filled in following Gazette of DAP



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Danger of Filling In Water body

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Danger of Filling out Water body:



Incremental Urban Flooding cause misery to Urban Life

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Danger of Filling out Water body:



Incremental Urban Flooding cause misery to Urban Life

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Danger of Filling out Water body:



Threat to Inhabitants of Buildings Built on Filled Earth

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Danger of Filling out Water body:



Damage to Infrastructure, especially roads

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Danger of Filling out Water body:



Further Depletion of Ground water table.

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Danger of Filling out Water body:



Destruction of Cropland and Wetland causing threat to Food Security

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Danger of Filling out Water body:



Eviction of sons of the soil from their age old Home and Community

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Danger of Filling out Water body:



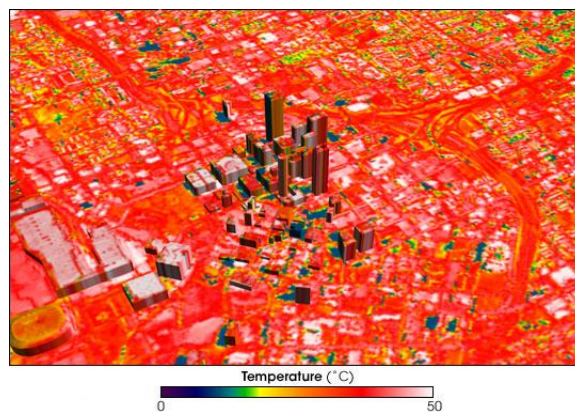
Inundation of surrounding Low lying areas on the Upstream due to raised Water level

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Danger of Filling out Water body:



Increased Heat Island Formation.

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Way Forward

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Broad Measure:

- Take up National Physical Plan to delineate Regions, their development strategies and approach.
- Develop Regional Plans to ensure their balanced and sustainable development.
- Raise major railway, highway and waterway networks up to international standard so as to allow vehicle to ply safely at the design speeds.
- Spread large city based industries and trading houses all over the country to augment country's balanced development.
- Develop cities and towns as per their comparative advantages.

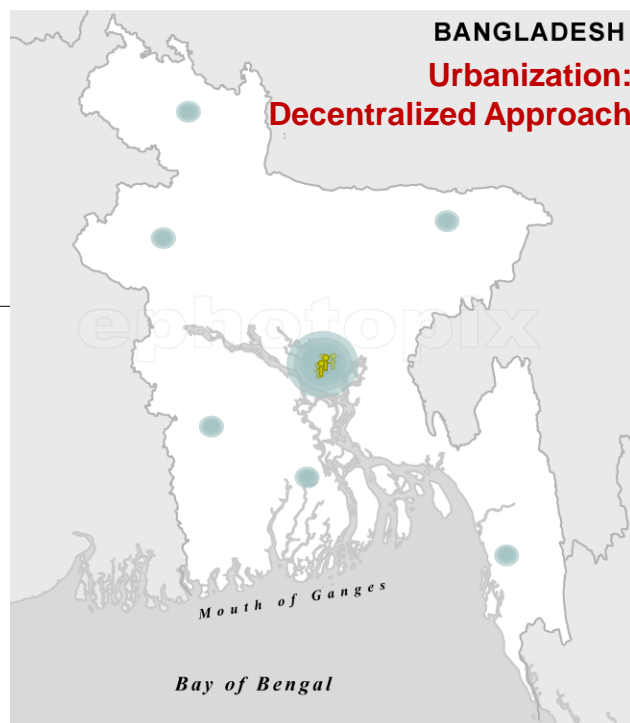
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Short Term Measure:

- Strictly follow City Development Plan recommendations
- Immediately liberate all forms of water bodies, flood flow zone and water retention areas.
- Ensure stern action against plan violators irrespective of their Status.
- Ensure local authority's role as true custodian of the Plan.
- Area determination and boundary delineation of the towns to be done by urban planner during urban planning not by the ministry.
- Revise area and boundary of towns as per Planning Considerations to protect Water body and agricultural.

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Thank you

