

Smart & Sustainable Cities: Smart Health, Waste & Water Management through Innovation

1st February 2018

Presentation by :

Col Prakash Tewari (Retd)

Executive Director - CSR



GLOBAL KEY CHALLENGES

Health

- Non-Communicable Diseases
- Safety and Health
- Environmental hazards

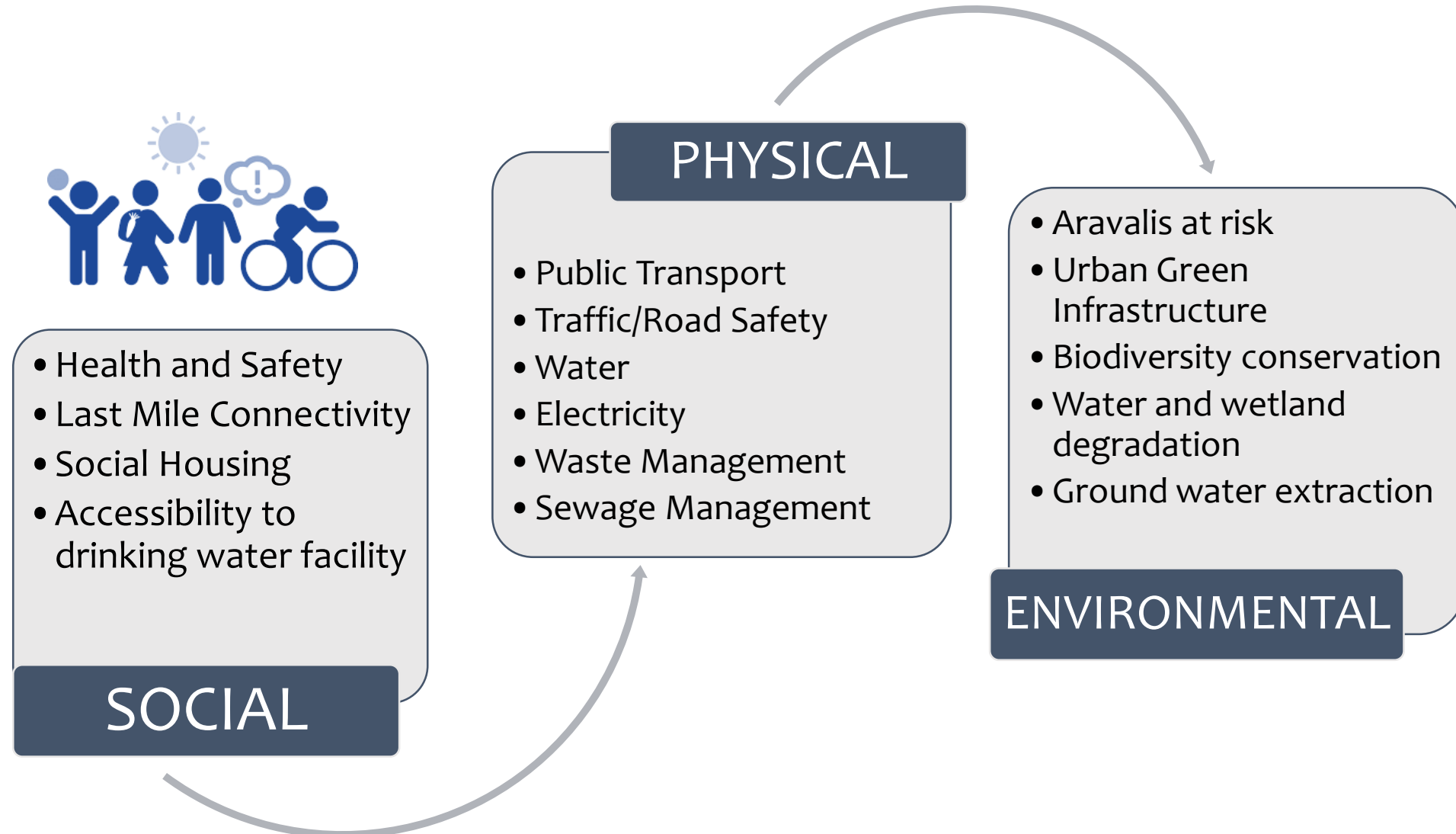
Waste

- Unsustainable urbanization
- Untreated waste disposal and management

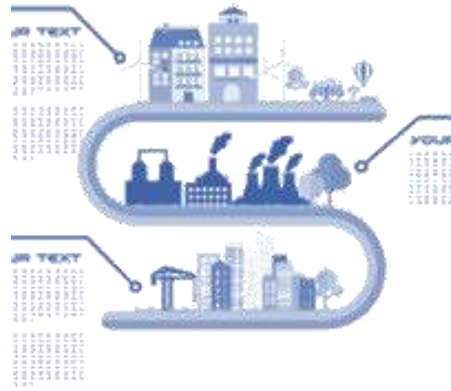
Water

- Lack of Fresh water
- Wetland and flood plains Depletion
- Lack of Ground water availability

KEY CHALLENGES IN GURUGRAM



KEY OPPORTUNITIES



- Social Housing
- Health and Safety
- Last Mile Connectivity
- Universal access to resources

SOCIAL

PHYSICAL

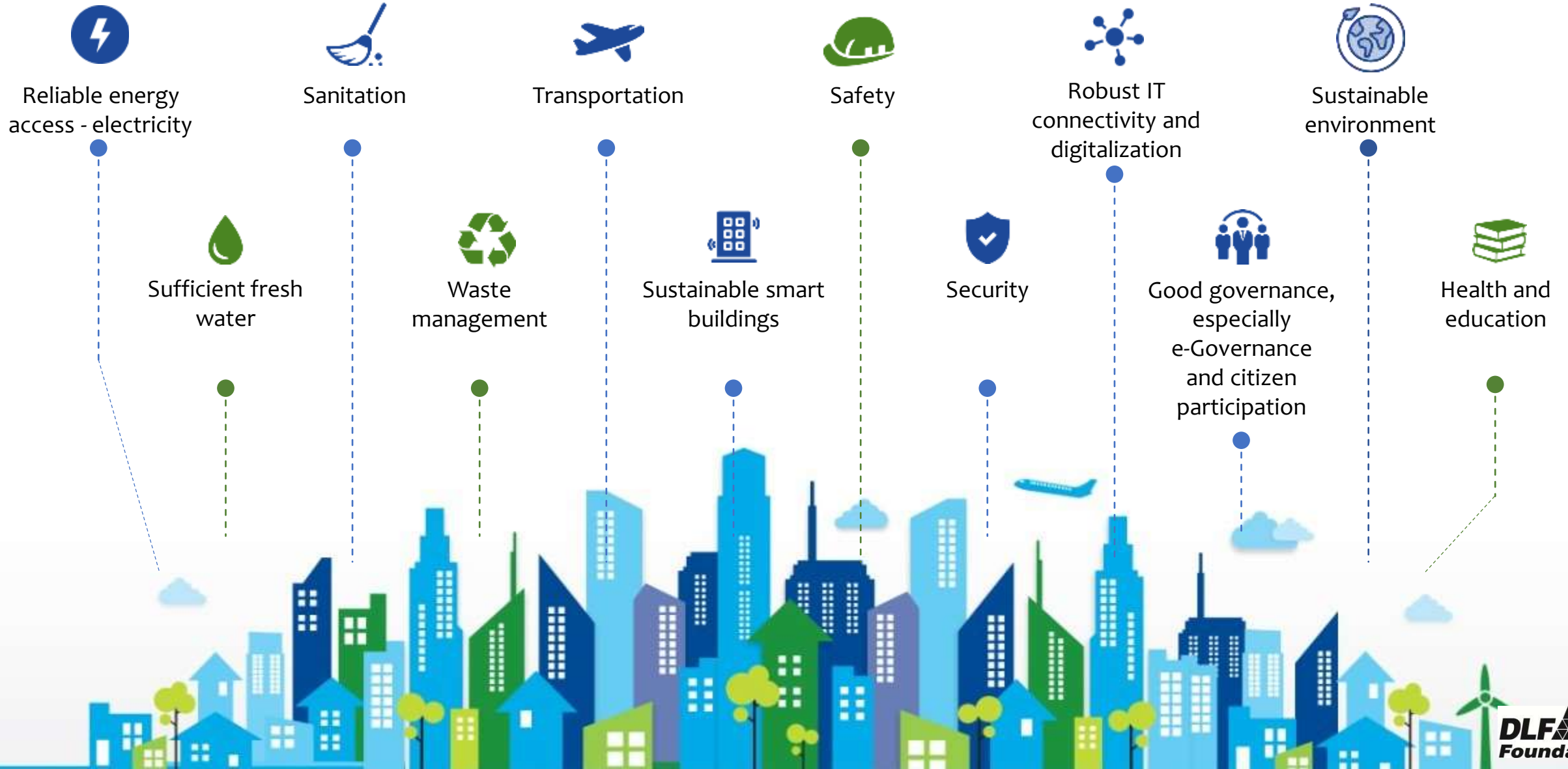
- Sustainable Mobility
- Soft Infrastructure
- Portable drinking water facilities
- Centralized and Decentralized Solid and Liquid Waste Management

- Afforestation
- Urban Green Infrastructure
- Biodiversity Conservation
- Water and Wetland Rejuvenation
- Ground Water Recharge

ENVIRONMENTAL



KEY LEARNINGS

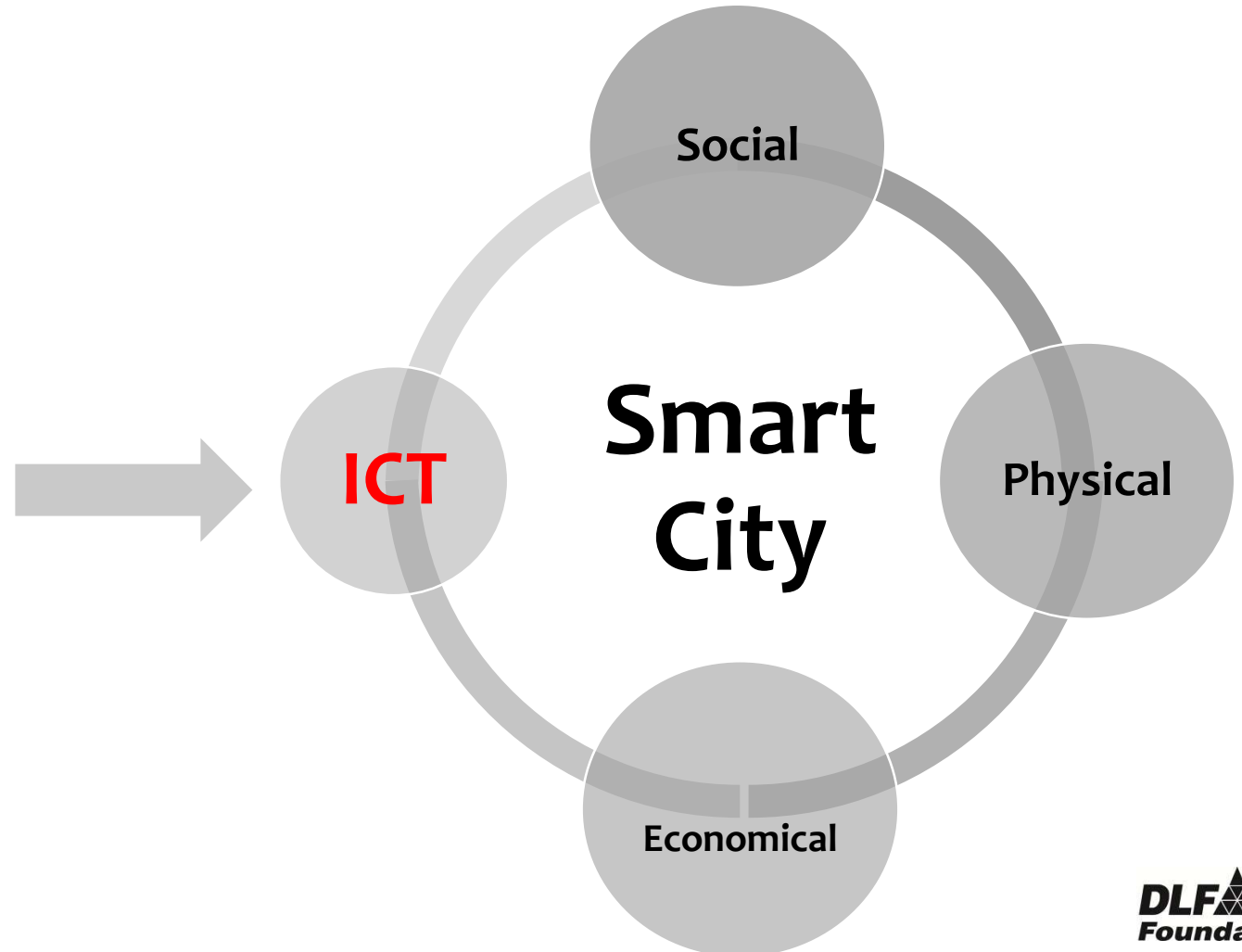


KEY LEARNINGS

Elements of Sustainability



Elements of 'Smart' City



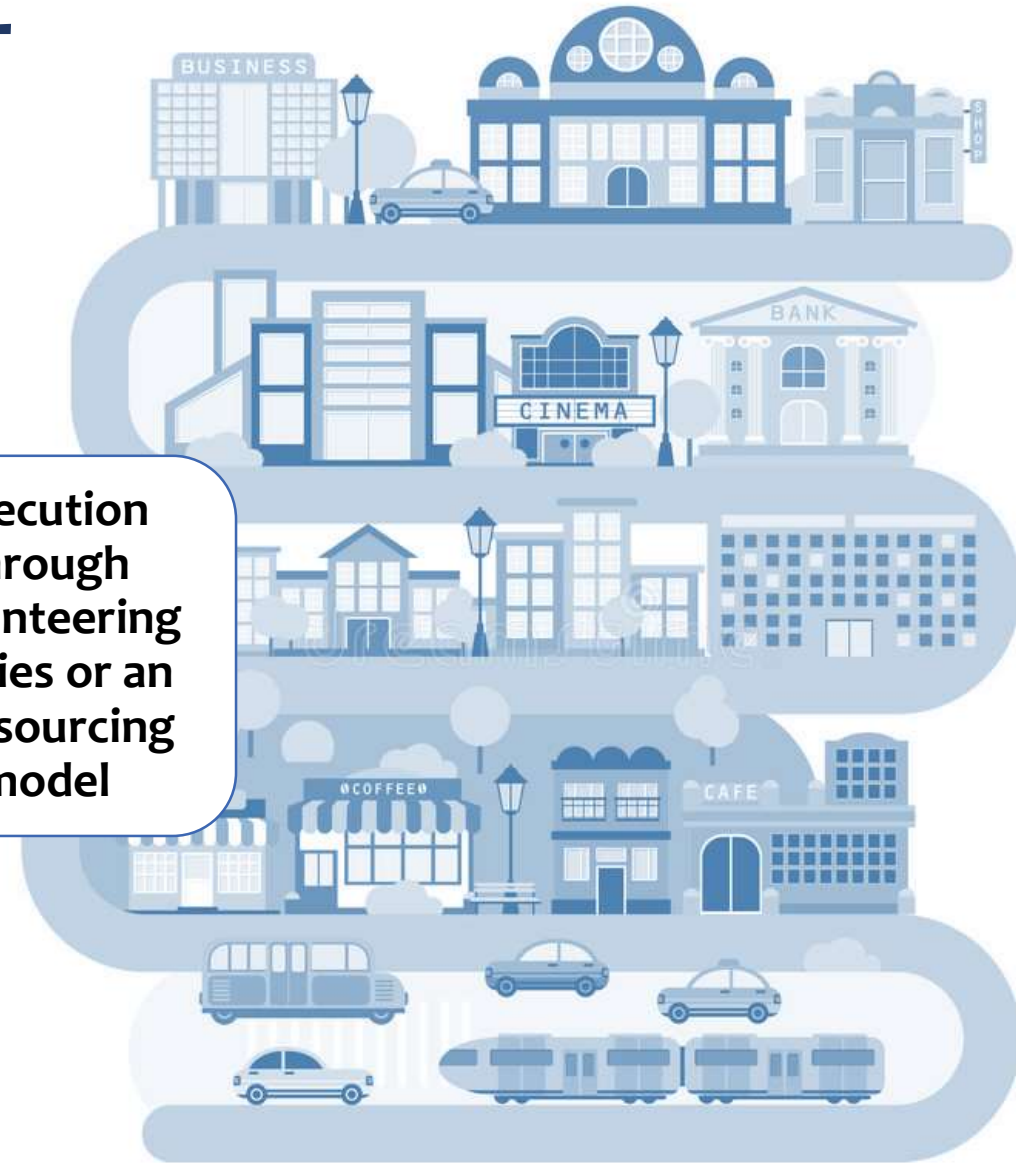
PROJECT PROPOSAL

Play lead role
in sensitizing
various
stakeholders

Laying down
Parameters of
Smart City

Focused
Approach by
Recommending
the
Organizational
set-up

Execution
through
Volunteering
bodies or an
Outsourcing
model



PLAN OF ACTION



APPROACH

Communication

Digital

Influencers

Advertising

Public Relations

Content Marketing

Financial

Partnership
with
Government

DLF
Foundation
Catalyst

MCG/HUDA
/Gov. Of
Haryana

Corporates
located in
Gurugram/
Cyber City

Impact Perspective

Water:

Transformation of Najafgarh Basin

Mobility:

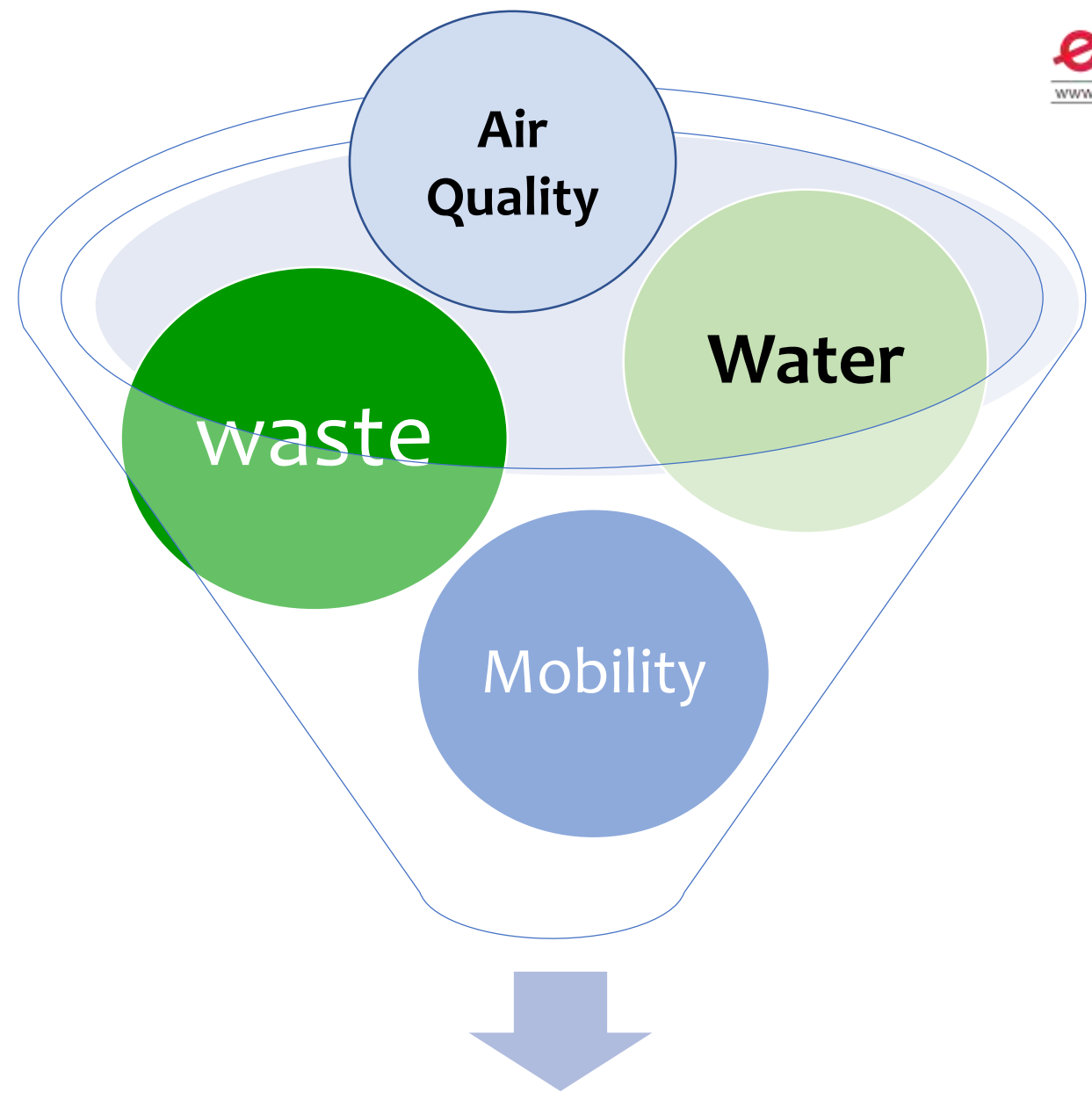
Soft Infrastructure and Road safety awareness programs

Waste Management:

Centralized and Decentralized Waste management Systems

Air Quality:

AQ Metering and data assessment



Gurugram Rejuvenation Project

MEETING THE CHALLENGES

Initiatives undertaken by DLF Foundation for transforming Gurugram into a ‘Smart City’



AIR QUALITY MONITORS

- Installed to assess the air quality of the city with further expansion plans.



HEALTHCARE

- Mobile Wellness Unit flagged off by CM of Haryana
- Static health clinics
- Working on Vector Borne Diseases (VBT)



WATER

- Najafgarh Basin Restoration Program
- Submitted White Paper to MCG
- Community water ATMs and STP plants

CASE 1: Transformation of Najafgarh Basin

A Game Changer For Gurgaon & Delhi

A white paper was launched in August 2017.

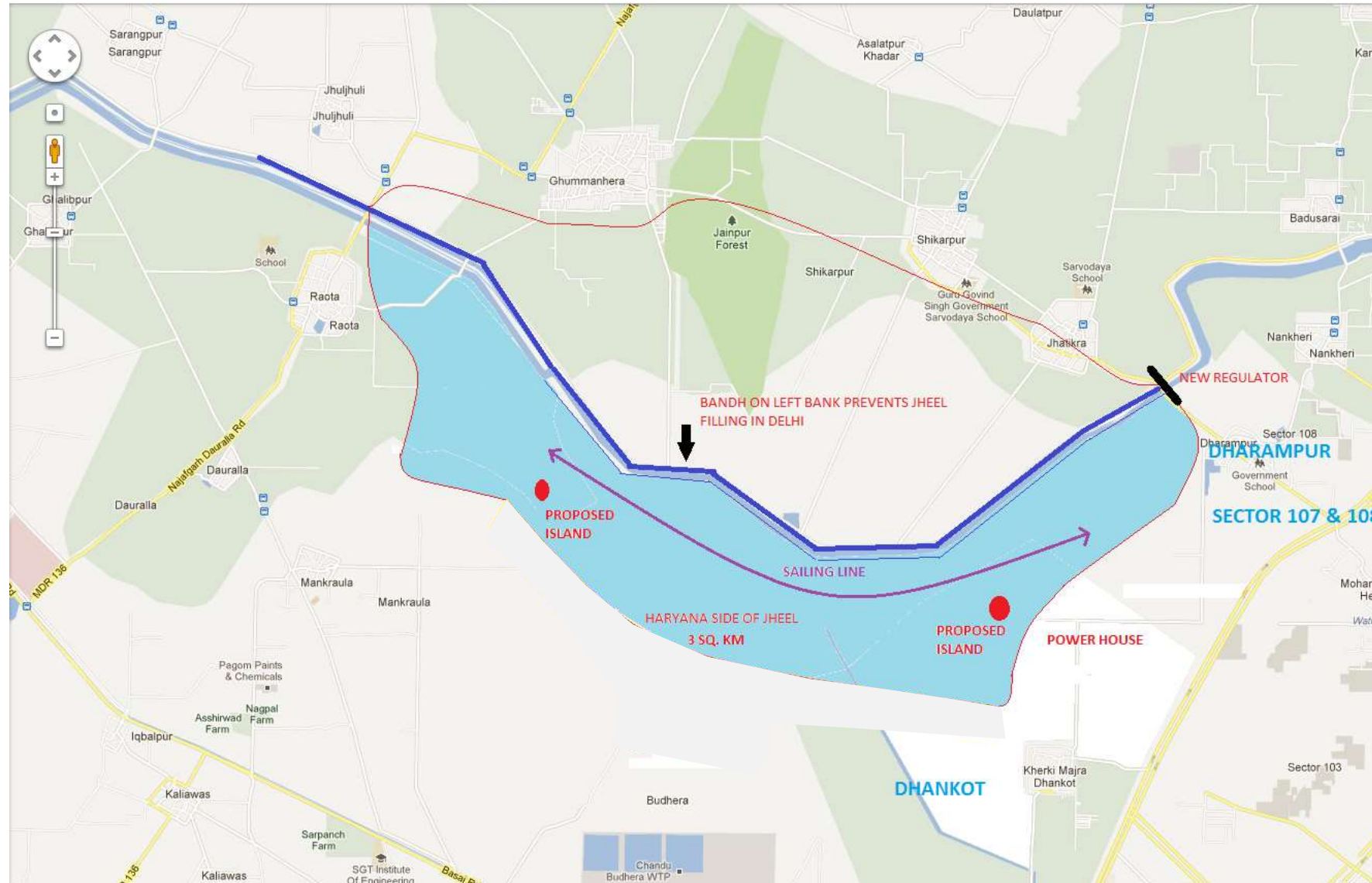
An Initiative of DLF Foundation



Need of the Revival of **Najafgarh Jheel**

- **Countering Severe Groundwater Depletion In Gurgaon**
- **Insuring Investments Of Gurgaon Against Water Scarcity**
- **Major Lake Upgrades Quality of Life**
- **Meeting Exploding Water Demand**
- **Creating A Major Biodiversity Habitat [Bird Sanctuary]**
- **A Recreational Water Zone With Islands**
- **80 Km Of Navigable Waterway To Yamuna**

How can it be Revived?



- Tertiary Treated Sewage of Gurugram STP
- Local Flood Waters
- Yamuna Waters If Required Via Haryana Canal System

Haryana Side of The Jheel [Phase I]



Badshapur Drain



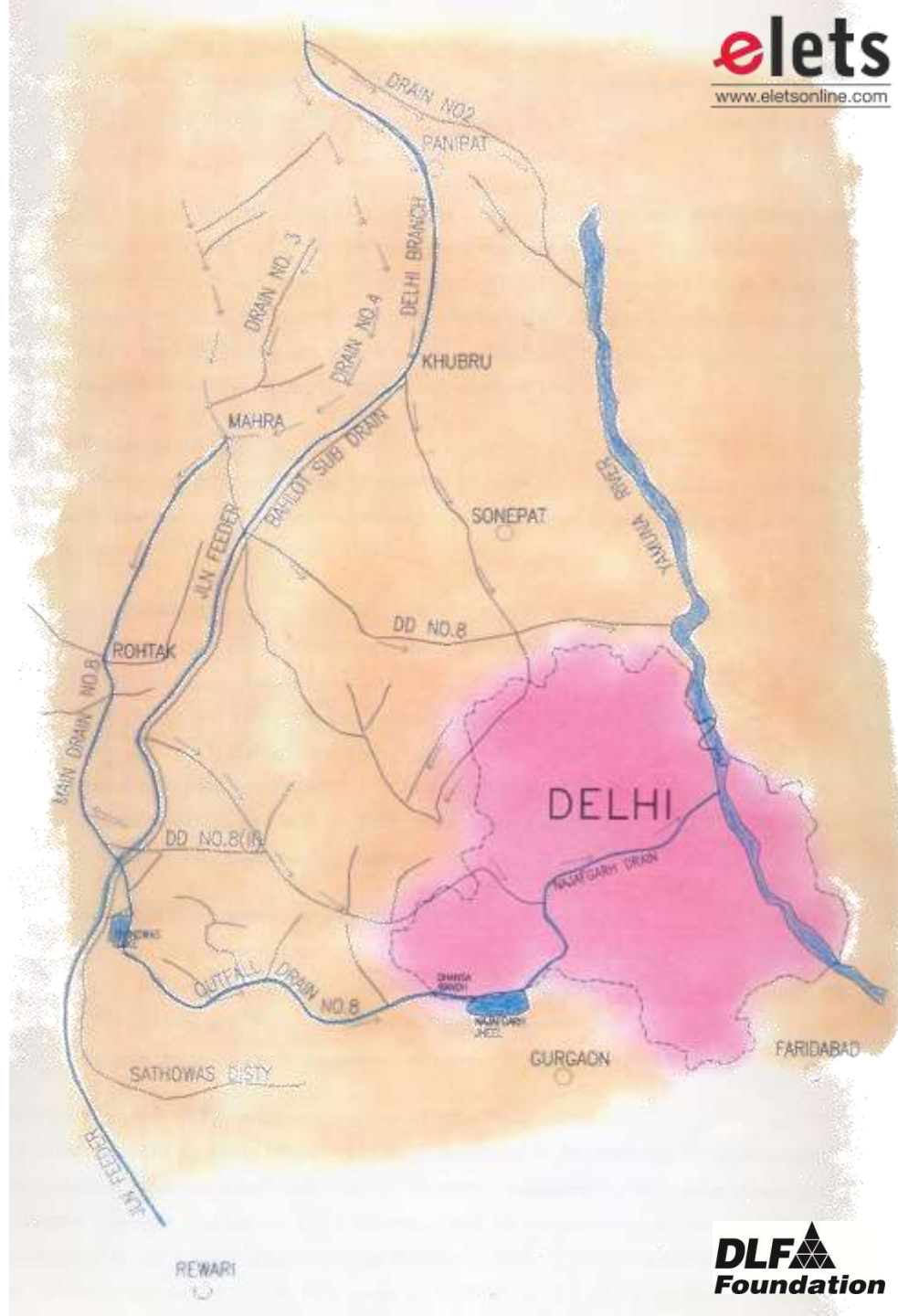
Gravity Flow Routes For Yamuna Water



- Mahara Head – Drain No.8 – Bhindawas Lake – Outfall Drain No.8 – Dhansa Head



- Tajewala – JLN Escape – Bhindawas Lake – Outfall Drain No.8 - Dhansa Head

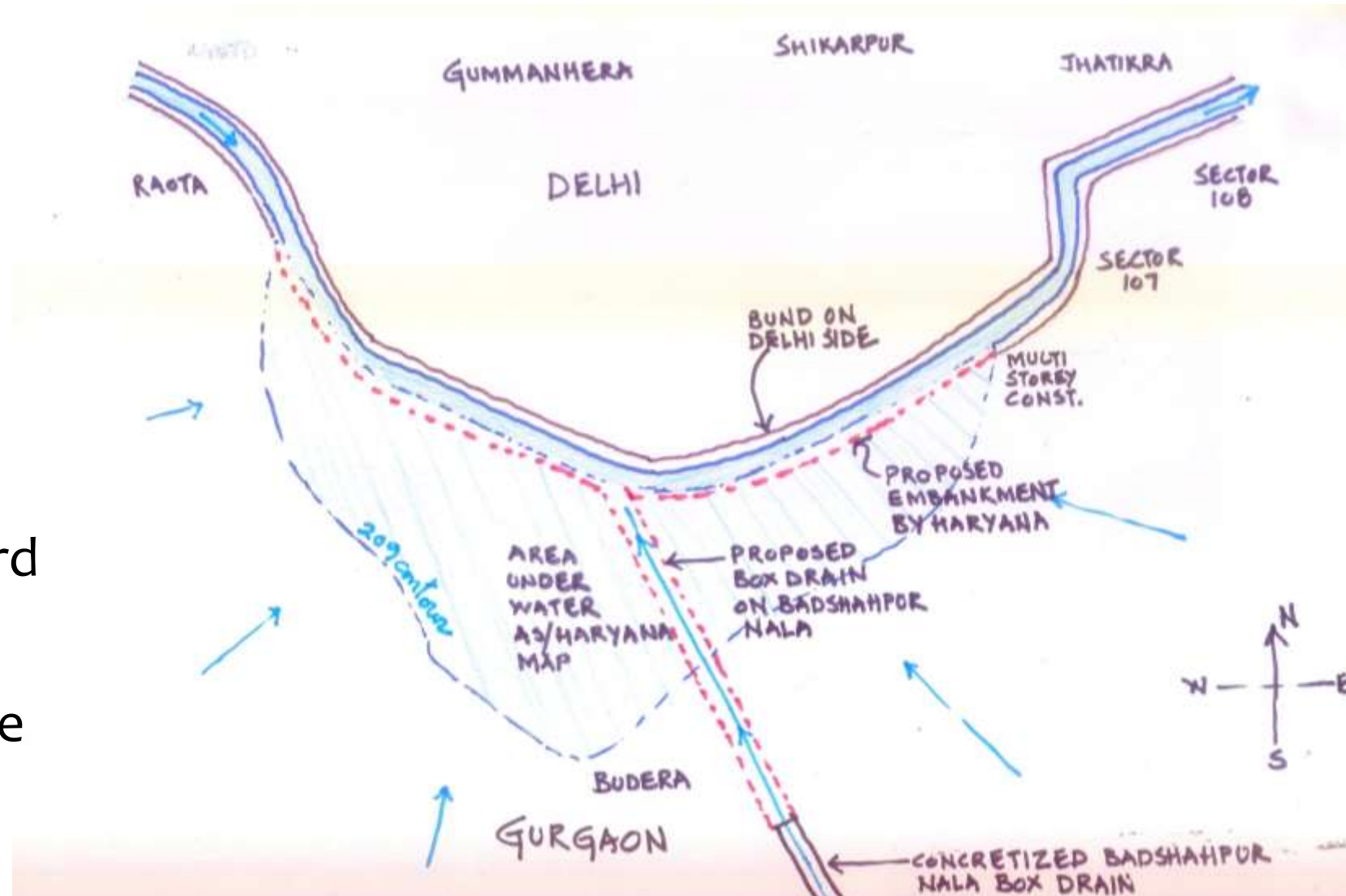


PROPOSED SOLUTION

- Multiple Stakeholders decision making process
- Declaration of a Eco-Sensitive Zones or natural conservation zone as per policy of NCRPB 2021 and notified as a wetland as per Wetland Rules , 2010 by both states
- Restriction of the Urban Development Activity within the HFL which may clearly be recorded as 212.5 mamsl based on the flood of 1977.
- That Ganga Notification of 7 October, 2016, which disallows any construction on any tributary floodplain may be implemented in this case as well [Sahibi Nadi] and requires the restoration of biodiversity, habitats and riparian vegetation.
- That the polluting discharge of Badshahpur Drain be treated adequately [to tertiary level] before discharge to the Jheel [and Yamuna] in order to prevent groundwater contamination as well as Yamuna pollution

Way Forward

- Prepare the ground with detailed presentation in citizen forums
- Follow Up With Haryana Govt with a detailed presentation
- Obtain approvals
- Bring Landholders Aboard
- Prepare DPR
- Implement in 2018 before monsoon 2019



“The greatest threat to our planet is the belief that someone else will save it.”

– Robert Swan



Thank You ☺