UNLOCKING PRIVATE INVESTMENT IN SUSTAINABLE INFRASTRUCTURE IN ASIA

1st OCTOBER 2020

TASHKENT, UZBEKISTAN

LAND POOLING- A PPP MODEL FOR SUSTAINABLE INFRASTRUCTURE INVESTMENTS IN DELHI, INDIA

(Key Findings of Research Paper)

GAURAV VERMA

(Architect – Urban Planner)

Urban Coordinator – IDC

CEPT University, Ahmedabad, India

AIM – To unlock the potential of land value capture strategies as a sustainable infrastructure investment model for developing TOD influence zones with land pooling via PPP

HOW EFFICIENT is Delhi's new Urban land management (land pooling policy) and **HOW WELL** the development based value capture tools are efficient in financing sustainable infrastructure investments for developing the TOD influence zones in Delhi?

The purpose of this research is **to articulate the contexts and mechanisms through which development based land value capture contributes to improve value capture as a sustainable financing model** for developing urban infrastructure in Delhi.

DELHI
LAND POOLING POLICY ANALYSIS

STATUTORY LAW

SPOTTED DEVELOPMENT

F.A.R GROUND REALITY

EXTERNAL DEVELOPMENT CHARGES

STATUTORY LAW

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The Gazette of India

EXTRAORDINARY
PART II—Section 1
PUBLISHED BY AUTHORITY

No. 48] NEW DELHI, SATURDAY, DECEMBER 28, 1957/PAUSA 7, 1879

MINISTRY OF LAW

New Delhi, the 28th December, 1957

The following Act of Parliament received the assent of the President on the 27th December, 1957, and is hereby published for general information:—

THE DELHI DEVELOPMENT ACT, 1957
No. 61 OF 1957
[27th December, 1957]

An Act to provide for the development of Delhi according to plan and for matters ancillary thereto.

BE it enacted by Parliament in the Eighth Year of the Republic of India as follows:—

CHAPTER V

ACQUISITION AND DISPOSAL OF LAND

Compulsory acquisition of land.

15. (1) If in the opinion of the Central Government any land is required for the purpose of development, or for any other purpose, under this Act, the Central Government may acquire such land by publishing in the Official Gazette a notice specifying the particular purpose for which such land is required and stating that the Central Government has decided to acquire the land in pursuance of this section.

(2) Before publishing a notice under sub-section (1), the Central Government shall by another notice call upon the owner of the land and any other person who in the opinion of the Central Government may be interested therein, to show cause within such time as may be specified in the notice, why the land should not be acquired.

(3) After considering the cause, if any, shown by the owner of the land and by any other person interested therein and after giving such owner and person an opportunity of being heard, the Central Government may pass such orders as it deems fit.

(4) When a notice under sub-section (1) is published in the Official Gazette, the land shall on and from the date of such publication, vest absolutely in the Central Government free from all encumbrances.

(5) Where any land is vested in the Central Government under sub-section (4), the Central Government may, by notice in writing, order any person who may be in possession of the land to surrender or deliver possession thereof to that Government or any person duly authorised by it in this behalf within thirty days of the service of the notice.

(6) If any person refuses or fails to comply with an order made under sub-section (5), the Central Government may take possession of the land and may for that purpose use such force as may be necessary.

THE LAND ACQUISITION ACT, 1894

[Act no. 1 of 1894, Dated 2nd February, 1894]

An Act to amend the law for the Acquisition of Land for public purposes and for the companies.

Whereas it is expedient to amend the law for the Acquisition of Land needed for public purposes and for companies and for determining the amount of compensation to be made on account of such acquisitions.

It is hereby enacted as follows:

PART I

PRELIMINARY

1. **Short title, Extent and Commencement**

(1) This Act may be called the Land Acquisition Act, 1894.

(2) It extends to the whole of India [1][except the State of Jammu and Kashmir].

(3) It shall come into force on the first day of March, 1894.

2. **Repeal and saving**

[Repealed in part by the Repealing and Amending Act, 1914 (X of 1914) section 3 and Schedule II, and later in part by the Repealing Act, 1938 (1 of 1938).]

3. **Definations**

In this Act, unless there is something repugnant in the subject or context,-

(a) the expression "land" includes benefits to arise out of land, and things attached to the earth or permanently fastened to anything attached to the earth.

[2][(aa) the expression "local authority" includes a town planning authority (by whatever name called) set up under any law for the time being force;]

(b) the expression "person interested" includes all persons claiming an interest in compensation to be made on account of the acquisition of land under this Act; and a person shall be deemed to be interested in land if he is interested in an easement affecting the land;

(c) the expression "Collector" means the Collector of a district, and includes a Deputy Commissioner and any officer specially appointed by the [3][appropriate government] to perform the functions of a Collector under this Act;

[1][(cc) the expression "corporation owned or controlled by the State" means any body corporate established by or under a Central, Provincial or State Act, and includes a government company as defined in section 617 of the Companies Act, 1956, a society registered under the Societies Registration Act, 1860, or under any corresponding law for the time being in force in a State, being a society established

" Delhi LPP is not a statutory law which is set down by a body of legislature, it's only in MPD 2021 so may delete in future as well"

MASTER PLAN FOR DELHI – 2021

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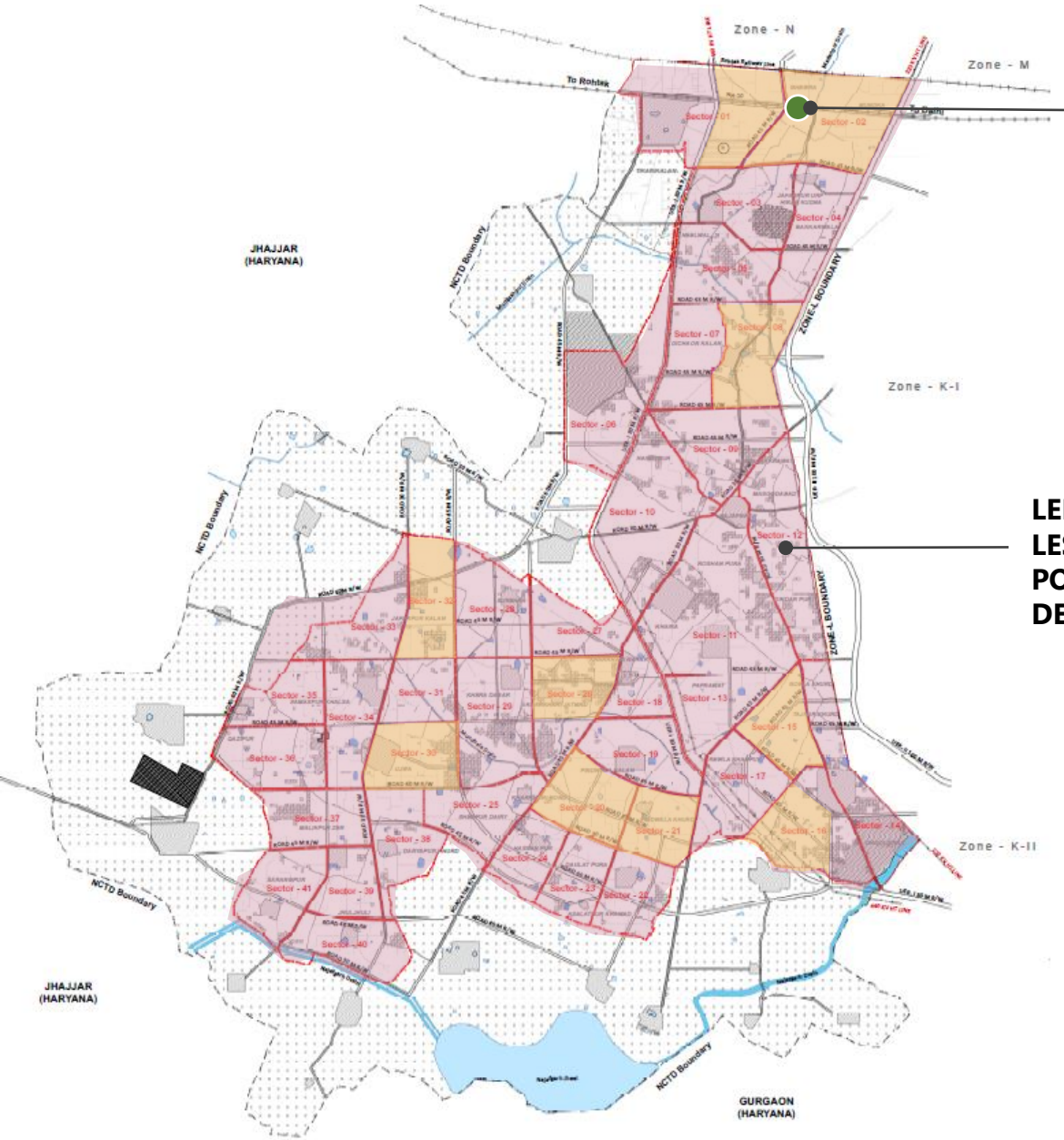
SPOTTED DEVELOPMENT

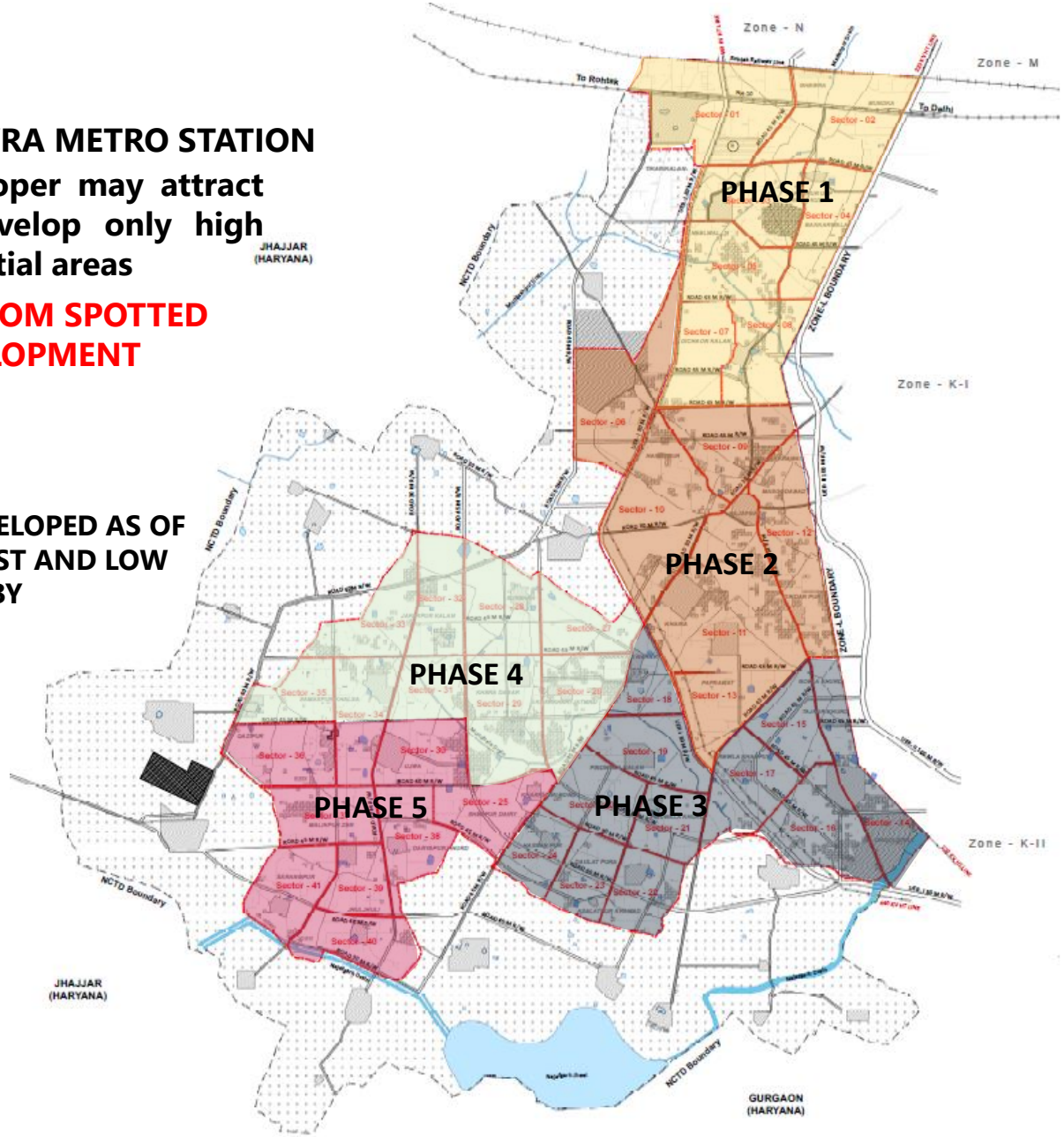


GHEVRA METRO STATION

Developer may attract to develop only high potential areas

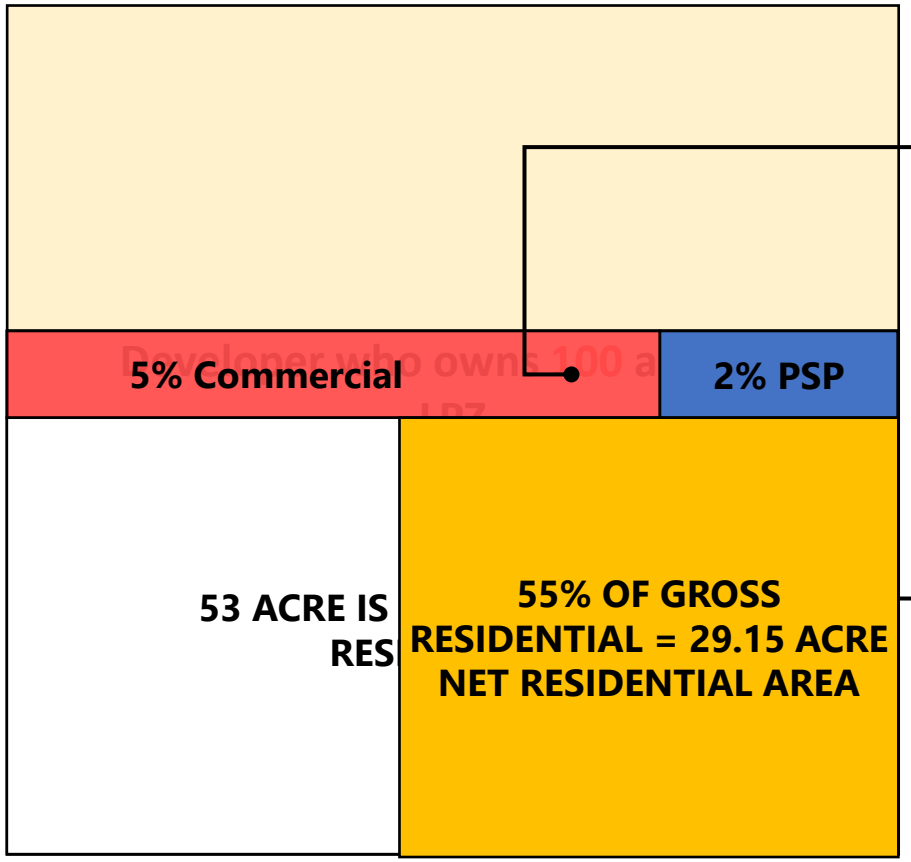
RANDOM SPOTTED DEVELOPMENT

LEFT UNDEVELOPED AS OF LESS INTEREST AND LOW POTENTIAL BY DEVELOPERS



F.A.R GROUND REALITY

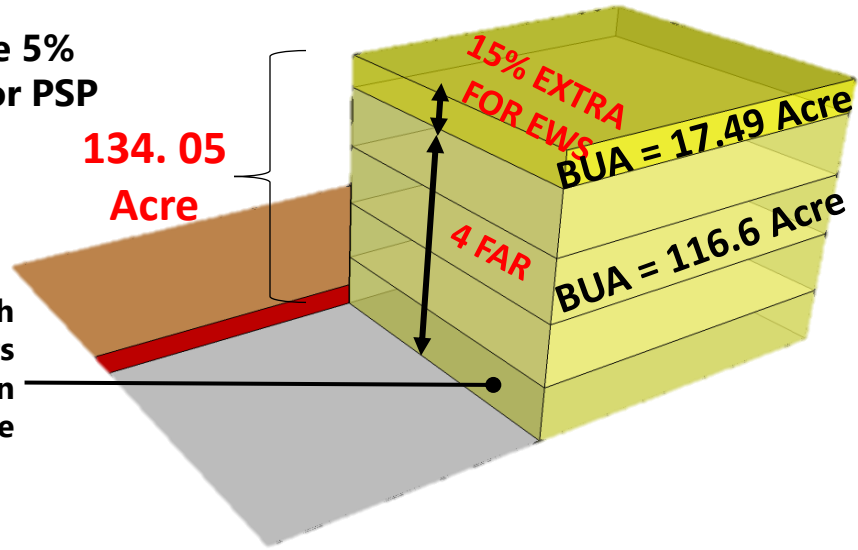
1) THE ACTUAL FAR THAT A DEVELOPER WILL GET IN A LAND POOLING ZONE – GROUP HOUSING



FOR 100 ACRES (40 HA) OF LAND –
CATEGORY 1, 60:40 RATIO IN POLICY

Developer has to set aside 5% for commercial and 2% for PSP

60 : 40 RATIO AS PER POLICY



The FAR 4 which DDA grants applicable on 29.15 Acre

SO, THE FAR A DEVELOPER ACTUALLY GETS IS ONLY

TOTAL BUILT-UP AREA = 134.05
TOTAL AREA= 100

FAR = 1.3405

A DEVELOPER CAN JUST BUILT

OVERALL USE OF LAND IN 100 ACRE INCLUDING PSP AND INDUSTRIAL IS JUST

Similarly for Category 2, 48:52 Ratio in policy

FAR = 0.7

36.15/ 60 ACRE
48.15/ 100 ACRE

WASTAGE OF LAND

2) NEGATIVE IMPACT OF DECLINE IN FAR

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Water scarcity may lead to a cut in floor area ratio for Delhi's residential areas

The Delhi Development Authority has proposed to reduce the floor area ratio for residential areas from 400 to 200 in its land-pooling policy that has been hanging fire for five years.

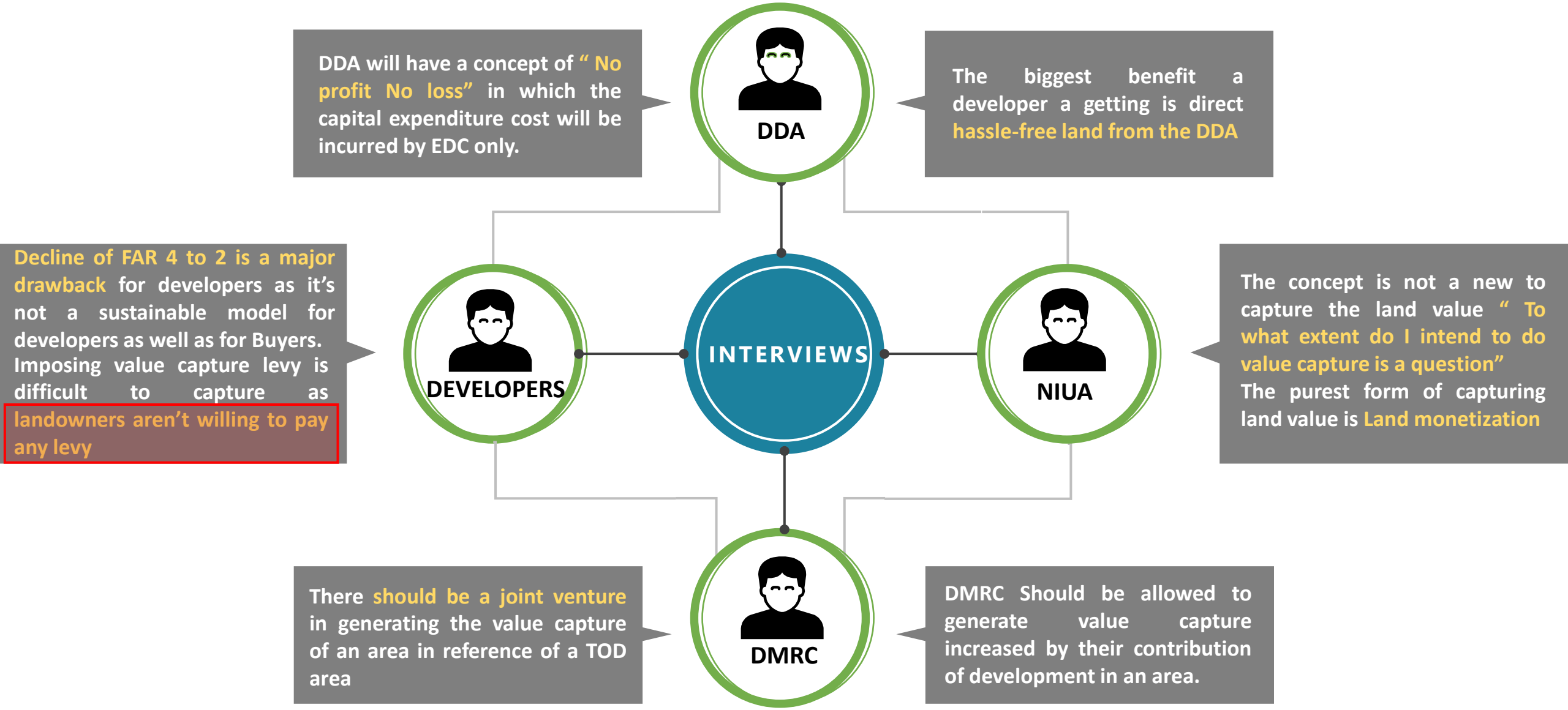
DELHI Updated: Sep 07, 2018 02:48 IST

Risha Chitlangia
Hindustan Times, New Delhi

Citing the scarcity of water, the Delhi Development Authority (DDA) has proposed to reduce the Floor Area Ratio (FAR) for residential areas from 400 — as approved in 2013 — to 200 in its land-pooling policy that has been hanging fire for five years.

- **Decline in FAR makes negative impact of model**
- **Reduction makes properties more expensive as it diminish the profit margin of developers**
- **It will defeat the purpose of providing housing to all in Delhi**

EXTERNAL DEVELOPMENT CHARGES (EDC)



INFERENCES FROM CRITICAL ANALYSIS OF LAND POOLING POLICY OF DIFFERENT CITIES OF INDIA

MAGARPATTA

- India's first successful land pooling structure
- To create long term wealth of the peasant for their land holding.
- Opportunity for the peasants to turn into entrepreneur.
- A source of long term annuity for the peasants.
- Strong share holder in the company with preferential and equity share.

AHMEDABAD

- TPS provides a robust process
- The financing strategy for TPS is built on the principle that the benefits of urban infrastructure investments are capitalized through land value capture.
- To maintain the development of each TPS it is done and mandated in phasing by government
- landowners are happy to pay the betterment levies because they benefit from a land value at least 10 times higher than their original undeveloped land parcel

AMRAVATI

- Amravati is one of the largest greenfield ventures in India
- The government made people partners in the development.
- The flexibility given to land owners.
- Farmers are equal partners with government and has a equal rights .
- Amravati took the positive aspects of Magarpatta in terms of benefits to landowners

DELHI

- Delhi LPP lacks to create long term wealth for their land holders
- Lacks the opportunity to make peasants turn in entrepreneur or share holders or permanent job in company
- No phasing of land pooling in sector is mentioned
- No flexibility of plot size and no flexible allotment of household sizes is given to attract land owners
- The capital expenditure will be incurred by EDC charges where people are not willing to pay any taxes

INFERENCE : Delhi land pooling policy seems to be a **WIN- NO-WIN** situation

RECOMMENDATIONS

APPROPRIATE DBVC TOOLS FOR DEVELOPMENT IN TOD AREAS OF DELHI'S LAND POOLING ZONES

1

Development Based Land Value Capture (DBLVC)

- LAND SALES
- LAND LEASE AGREEMENT
- LAND READJUSTMENT
- AIR RIGHTS SALES

The purest form of capturing land value is

LAND MONETIZATION

Tax Based Land Value Capture (TBLVC)

- LAND VALUE TAX
- VACANT LAND TAX
- PROPERTY TAX

VACANT TAX SHOULD BE SEGREGATED FROM PROPERTY TAX

The vacant land tax should be separated from the property tax and can be taxed at different variables

Arterial Road: RS 5/ sq.mt
Sub-Arterial : RS 4/ sq.mt
Local Road : RS 3/ sq.mt

Fee Based Land Value Capture

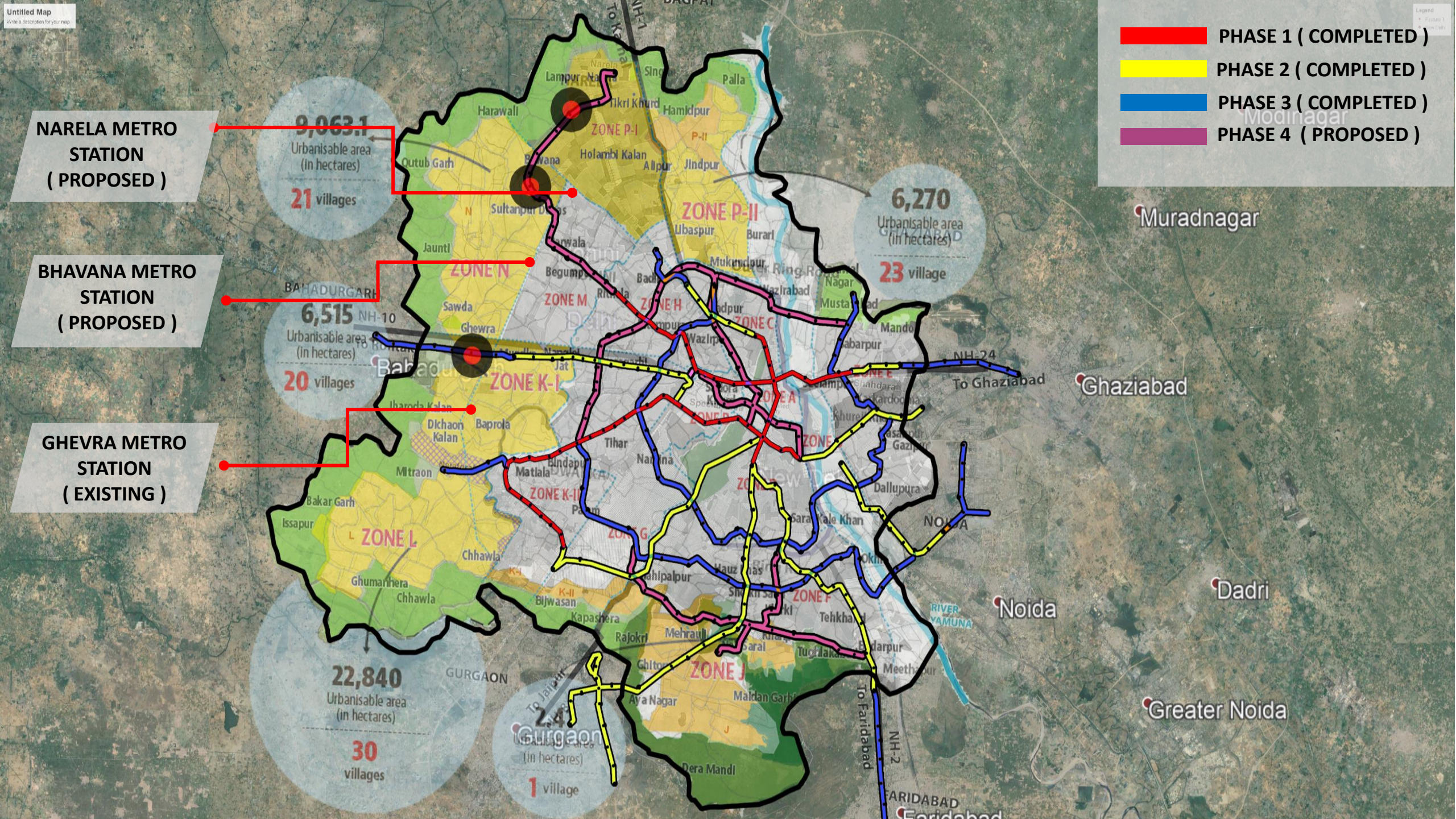
- IMPACT / DEVELOPMENT FEES
- BETTERMENT CHARGES
- EXTERNAL DEVELOPMENT CHARGES (EDC)

SHOULD BE MINIMUM SO THAT PEOPLE WILL BE WILLING TO PAY

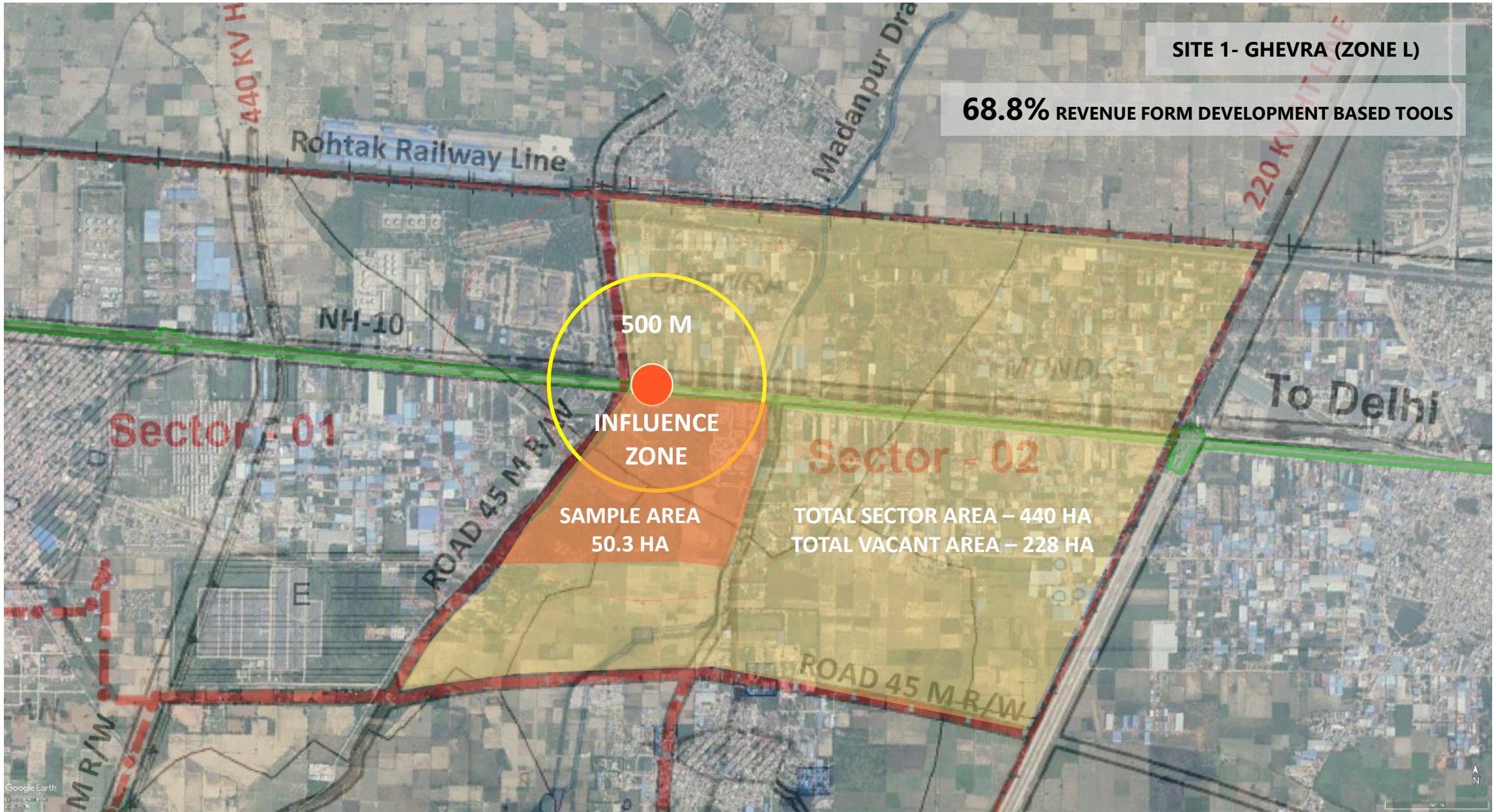
Proposed share mechanism for FAR band range

BAND	RANGE OF FAR	BETTERMENT LEVY
1	5-4	50%
2	4-3	40%
3	3-2	35%
4	2-1	25%

HOW MUCH BETTERMENT CHARGE A PERSON SHOULD GIVE AS PER RANGE OF TOD INFLUENCE AREA ?

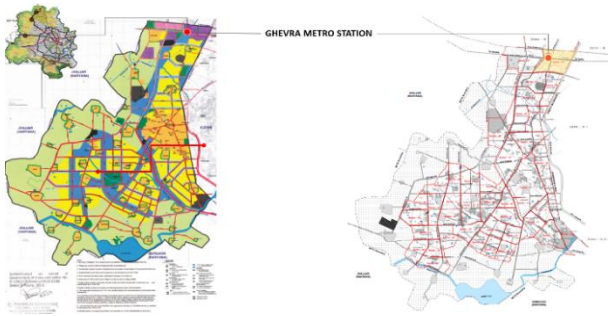

PHASE 1 (COMPLETED)
PHASE 2 (COMPLETED)
PHASE 3 (COMPLETED)
PHASE 4 (PROPOSED)
NARELA METRO STATION (PROPOSED)
BHAVANA METRO STATION (PROPOSED)
GHEVRA METRO STATION (EXISTING)
9,063.1
Urbanisable area (in hectares)
21 villages
6,515
Urbanisable area (in hectares)
20 villages
22,840
Urbanisable area (in hectares)
30 villages
6,270
Urbanisable area (in hectares)
23 village
1 village
ZONE P-I
ZONE P-II
ZONE N
ZONE M
ZONE H
ZONE C
ZONE A
ZONE K-I
ZONE K-II
ZONE L
ZONE G
ZONE F
ZONE J
Muradnagar
Ghaziabad
Noida
Dadri
Greater Noida
Gurgaon
GURGAON
FARIDABAD
Faridabad
To Ghaziabad
To Faridabad
NH-24
NH-10
NH-2
RIVER YAMUNA

Implementing Urban projects through Land Value Capture



Capital Expenditure (Ghevra site)

	Const. of Roads	Street Lighting	Sewerage Network	Storm water	Water Supply	Recreational	Cost of Publication	Manpower Cost
RATE (INR)	50,000/Sq.m.	70,000	2,601/ Rmt	10.9 CR/Km	2,516/ Rmt	1,1604/ Sq.m.	10 LAKHS	1 CR
AREA (HA)	27.36	27.36	27.36	27.36	27.36	36.48	27.36	27.36
COST (INR)	227 CR	12 CR	11 CR	497 CR	11 CR	426 CR	10 LAKHS	1 CR
CAPITAL EXPENDITURE FOR AREA 228 HA- 1,188 CR (ROADS- 12%, RECREATIONAL-16%)								
CAPITAL EXPENDITURE FOR SAMPLE AREA 50.3 HA- 442 CR (ROADS- 25 %, RECREATIONAL-16%)								
37.2 % of the total cost for developing TOD area on a sample area of the cost of sector area								



Value capture from selected LVC tools (Ghevra Site)

REVENUE FROM LVC TOOLS								
	DEVELOPMENT BASED TOOLS		TAX BASED TOOLS			FEE BASED TOOLS		
	LAND FOR SALE	AIR RIGHTS	LAND VALUE TAX	LAND VACANT TAX	PROPERTY TAX	IMPACT FEES	BETTERMENT CHARGES	EDC
REVENUE (INR)	280.75 CR	23.65 CR	38.02 CR	42.25 LAKHS	2.86 CR	84.33 LAKHS	15.55 CR	67.29 CR
68.8% REVENUE FORM DEVELOPMENT BASED TOOLS								

Source: Author

Note: The total cost is the multiplication of quantity with respect to its unit and rate in addition to 20% cost of infrastructure of adjoining schemes, 10% escalation rate for 3 years and 7% miscellaneous cost.

Capital Expenditure (Bhavana site)

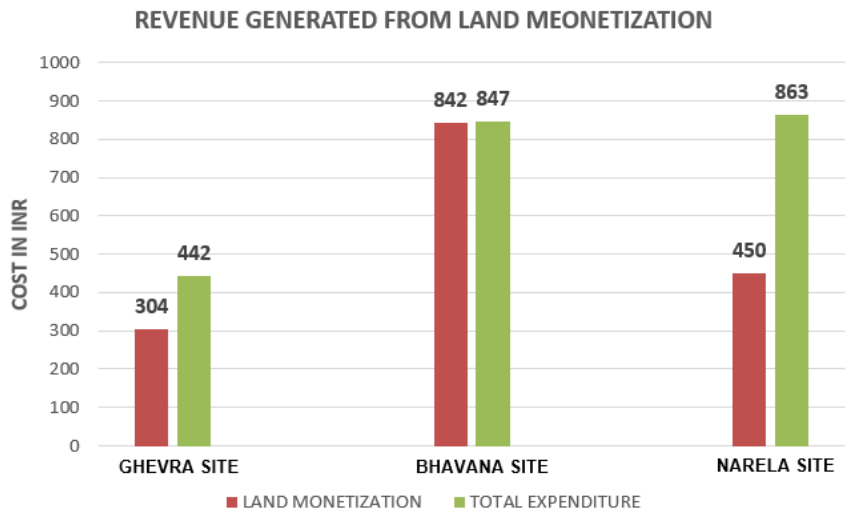
	Const. of Roads	Street Lighting	Sewerage Network	Storm water	Water Supply	Recreational	Cost of Publication	Manpower Cost
RATE (INR)	50,000/Sq. m.	70,000	2,601/ Rmt	10.9 CR/Km	2,516/ Rmt	1,1604/ Sq.m.	10 LAKHS	1 CR
AREA (HA)	22.56	22.56	22.56	22.56	22.56	30.08	22.56	22.56
COST (INR)	187 CR	10 CR	09 CR	408 CR	09 CR	351 CR	10 LAKHS	1 CR
CAPITAL EXPENDITURE FOR AREA 188 HA- 978 CR (ROADS- 12%, RECREATIONAL-16%)								
CAPITAL EXPENDITURE FOR SAMPLE AREA 72.9 HA- 847 CR (ROADS- 35 %, RECREATIONAL-16%)								
86.5% of the total cost for developing TOD area on a sample area of the cost of sector area								

Value capture from selected LVC tools (Narela Site)

REVENUE FROM LVC TOOLS								
	DEVELOPMENT BASED TOOLS		TAX BASED TOOLS			FEE BASED TOOLS		
	LAND FOR SALE	AIR RIGHTS	LAND VALUE TAX	LAND VACANT TAX	PROPERTY TAX	IMPACT FEES	BETTERMENT CHARGES	EDC
REVENUE (INR)	415.12 CR	34.89 CR	1019 CR	1.23 CR	4.23 CR	1.24 CR	22.94 CR	99.27 CR
52.1 % REVENUE FORM DEVELOPMENT BASED TOOLS								

Value capture from selected LVC tools (Bhavana Site)

REVENUE FROM LVC TOOLS								
	DEVELOPMENT BASED TOOLS		TAX BASED TOOLS			FEE BASED TOOLS		
	LAND FOR SALE	AIR RIGHTS	LAND VALUE TAX	LAND VACANT TAX	PROPERTY TAX	IMPACT FEES	BETTERMENT CHARGES	EDC
REVENUE (INR)	808.31 CR	34.29 CR	109 CR	109 CR	8.31 CR	1.22 CR	22.55 CR	99.29 CR
99.4 % REVENUE FORM DEVELOPMENT BASED TOOLS								



74.3 % REVENUE GENERATED FROM LAND MONETIZATION ONLY

THEREFORE, THE PUREST FORM OF CAPTURING LAND VALUE IN GREENFIELD SITE IS LAND MONETIZATION

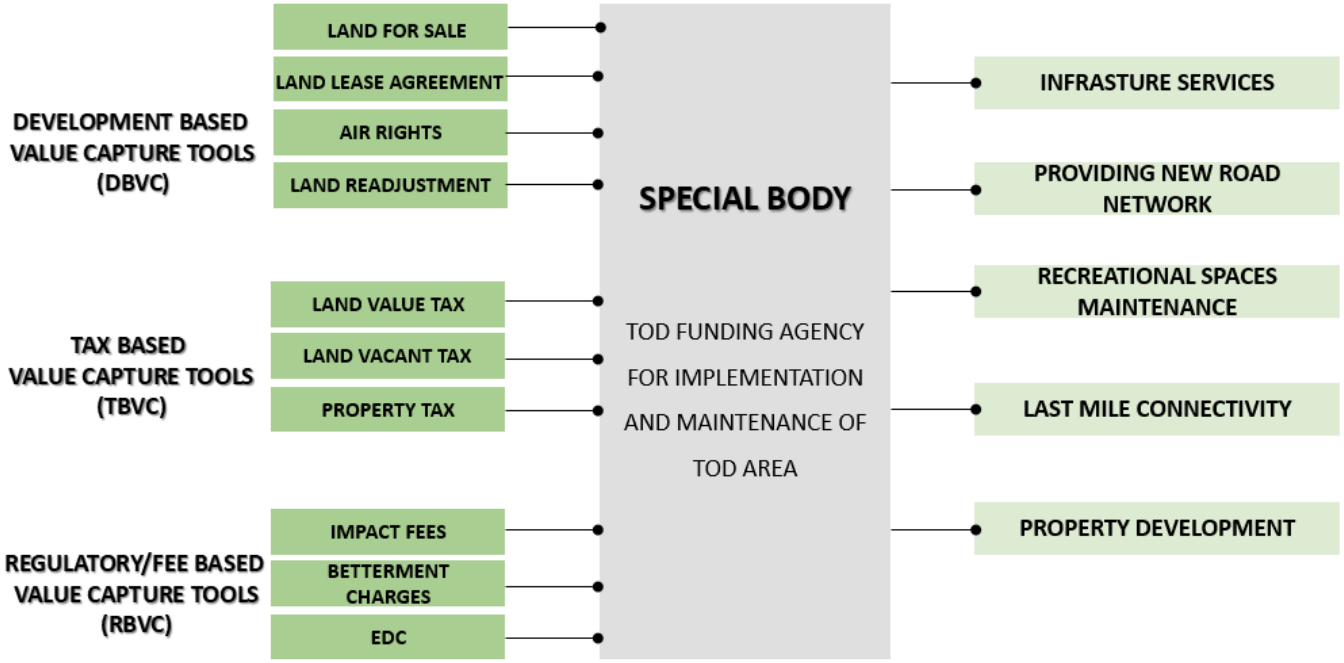
Capital Expenditure (Narela site)

	Const. of Roads	Street Lighting	Sewerage Network	Storm water	Water Supply	Recreational	Cost of Publication	Manpower Cost
RATE (INR)	50,000/Sq. m.	70,000	2,601/ Rmt	10.9 CR/Km	2,516/ Rmt	1,1604/ Sq.m.	10 LAKHS	1 CR
AREA (HA)	26.01	26.01	26.01	26.01	26.01	11.89	26.01	26.01
COST (INR)	216 CR	12.13 CR	11.24 CR	472 CR	10.87 CR	138 CR	10 LAKHS	1 CR
CAPITAL EXPENDITURE FOR AREA- SECTOR PLAN IS NOT PUBLISHED								
CAPITAL EXPENDITURE FOR SAMPLE AREA 74.3 HA- 863 CR (ROADS- 30 %, RECREATIONAL-16%)								
86.5% of the total cost for developing TOD area on a sample area of the cost of sector area								

Source: Author

Note: The total cost is the multiplication of quantity with respect to its unit and rate in addition to 20% cost of infrastructure of adjoining schemes, 10% escalation rate for 3 years and 7% miscellaneous cost.

NEW ADMINISTRATIVE FRAMEWORK – Simplified and direct Institutional framework (who collects and division of LVC tools must be subdivided) 2



Proposed share mechanism for monetization of public land

State Government	X %
Municipal Corporation	X %
DDA	X %
DMRC (Property dev.)	X %

TOD FUNDING AGENCY → USED ONLY FOR DEVELOPMENT IN TOD CONTEXT

STATUTORY LAW– Delhi Land Pooling policy should be included in DDA Act,1957 to be legally backup as Land Acquisition Act, 1984 3

PHASING – Phasing should be mandated and given by DDA to developers to avoid the spotted development in land pooling zones of Delhi 4

DECLARATION OF EDC CHARGES OR REVENUE SOURCES IN POLICY – There should be declaration of fees or charges for each tool where revenue is being generated 5

INCREASE THE FAR IN DELHI LAND POOLING POLICY– Capacity building of agencies like Delhi Jal Board and other agencies for improving infrastructure and making viable for developers as well 6