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22-26 April, Hanoi, Vietnam

"Geospatial Information for a Smarter Life and Environmental Resilience"



The Impact of Spatial Transformation driven by Large-Scale Land Development on Property Rights: Some Cases from New Town Development in Indonesia

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AIMS OF THE RESEARCH

To provide an evidence for the impact of spatial transformation driven by new town development on property rights of local people.

Ample attention will be given to different use: residential and cultivated.

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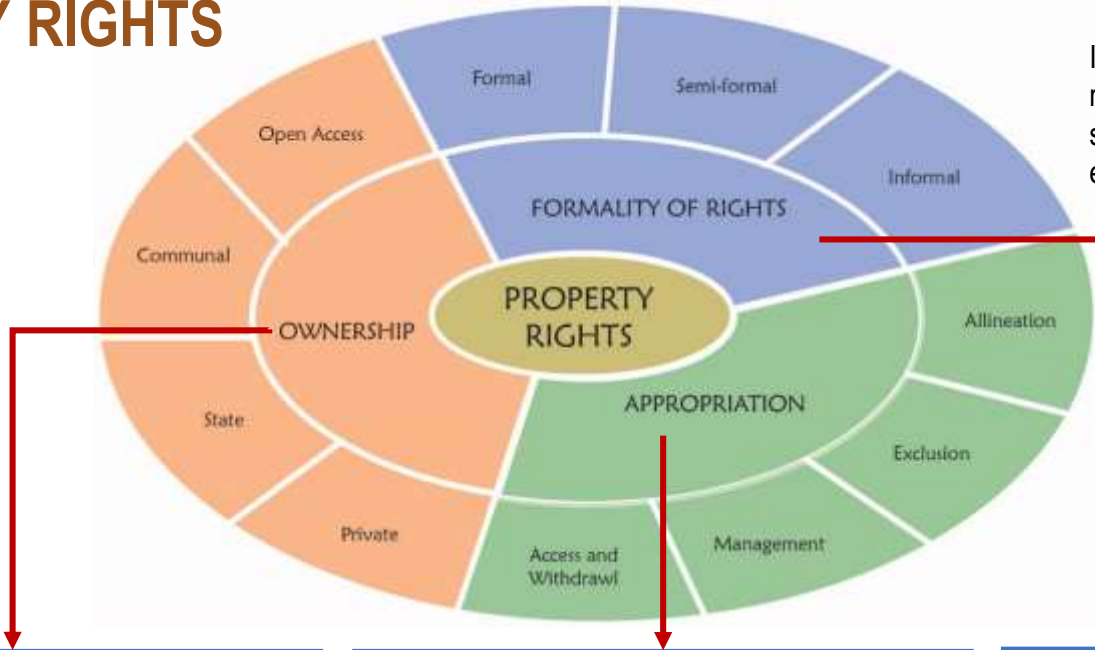
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PROPERTY RIGHTS

In terms of land development, property rights should be understood as a whole since all those rights are principally embedded to each property



OWNERSHIP

- Relates to the various rights and obligations in a property
- The rights attached to the property owned by its holder

APPROPRIATION

- Relates to use rights and collective-choice rights
- It guarantees the freedom of use and allocation of the property

FORMALITY OF RIGHTS

- The rights based on from institutional perspective on particular area
- It guarantee the security in property transaction and reduce insecurity in property values

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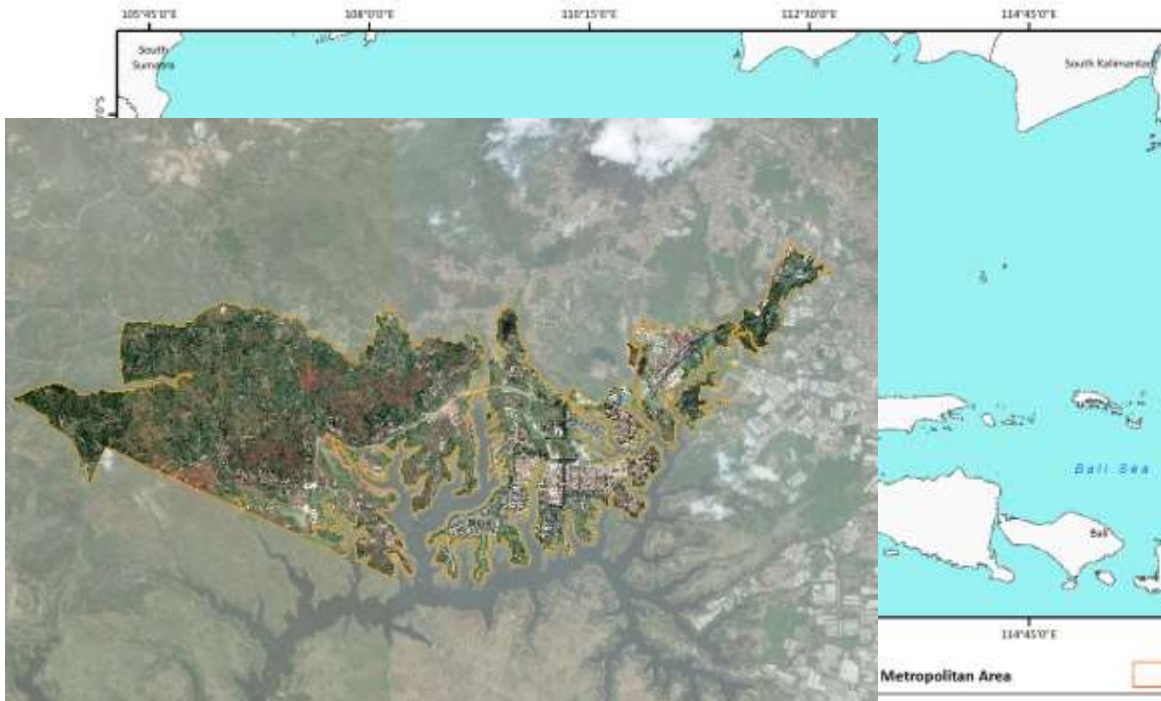
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RESEARCH LOCATIONS



A - Kota Baru Parahyangan (KBP), West Bandung



B - Metro Tanjung Bunga (MTB), Makassar

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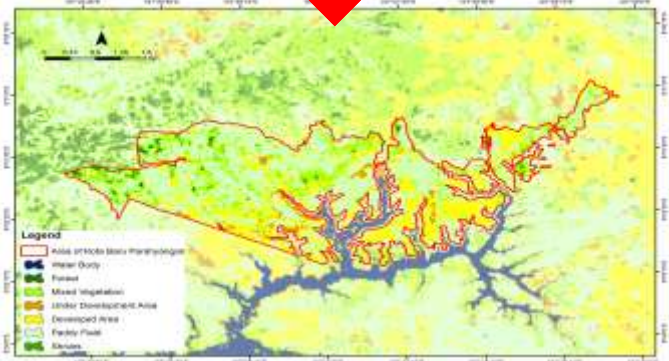
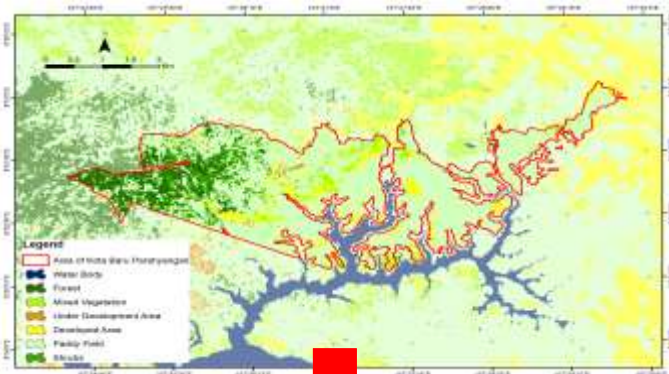
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RESULTS AND DISCUSSION



Spatial transformation of Kota Bandung

	Land use	Area (Ha)
Developed area	• Shrubs	5.70
	• Under development area	0.87
	• Forest	4.33
	• Mixed vegetation	4.14
	• Paddy fields	130.51
Under development area	• Forest	0.18
	• Mixed-vegetation	0.47
Forest	• Paddy fields	21.39
	• Shrubs	0.53
Total A		

Along with the development, the developed and under development area are expanded together by **168.11 Ha**. The development mostly convert the **agricultural lands: paddy field (90%)**

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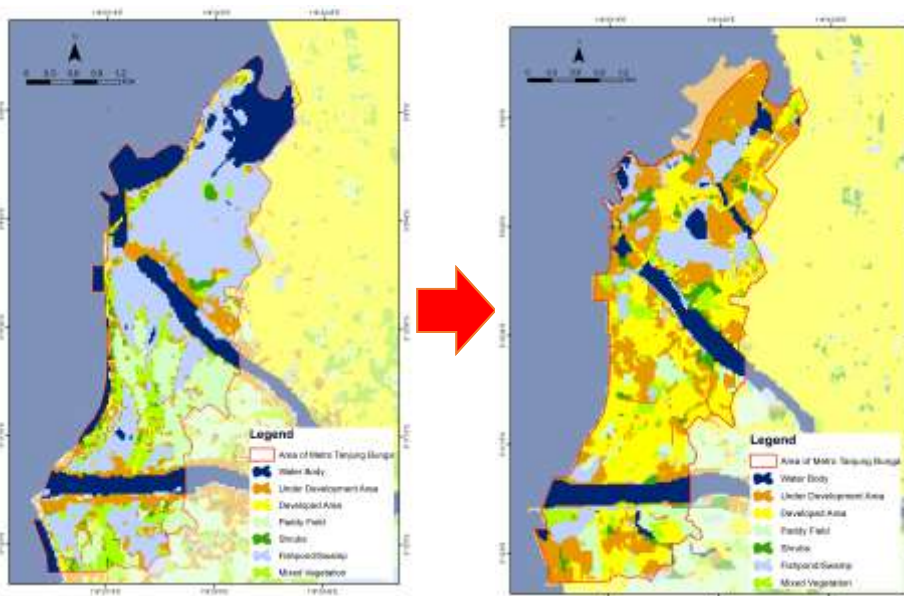
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RESULTS AND DISCUSSION



Spatial transformation of Metro Tanjung Bunga, Makassar

	Land use	Area (Ha)
	Developed area	329.06
	• Shrubs	6,37
	• Under development area	53,99
W	• Paddy fields	69,42
D	• Fishponds/swamp	145,54
P	• Mixed-vegetation	53,74
U	Under development area	201,99
M	• Shrubs	3.81
S	• Paddy fields	39.67
F	• Fishponds/swamp	140.12
T	• Mixed-vegetation	18.39

The increase of the developed area almost evenly sitting on all area of MTB reaching to **ten folds** or **531.05 Ha**. This development transformed **cultivated lands of local people: fishpond (54%) and paddy field (21%)**.

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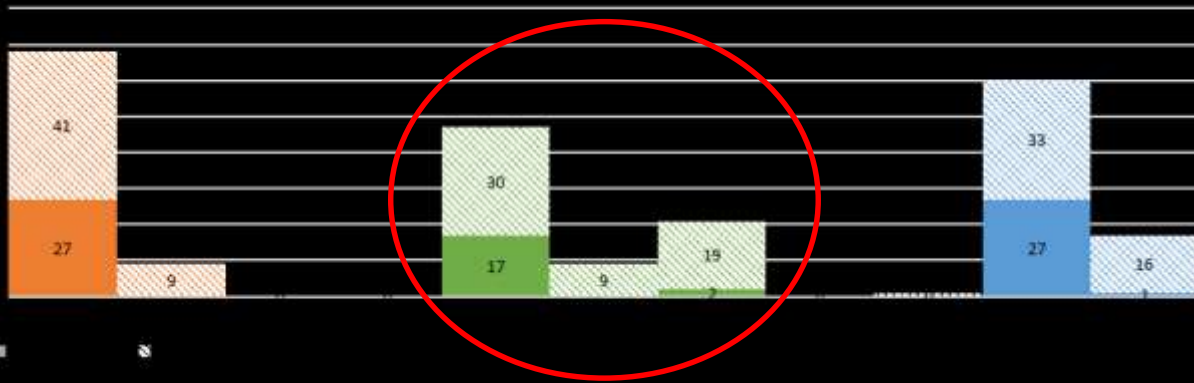
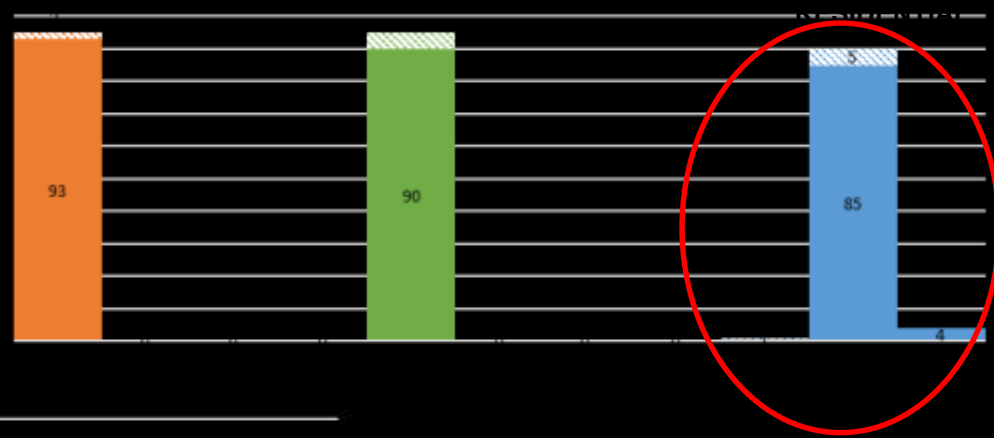
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RESULTS AND DISCUSSION

- Due to the development of KBP, the rights to **cultivated (158 out of 231 rights)** have undergone more transformation than residential (13 out of 285 rights).
- Transformation of cultivated mostly occurs on **appropriation rights (40%)**. It is different with residential since **formality of rights** has the highest transformation.

Transformation of property rights in Kota Baru Parahyangan, West Bandung



 Ownership
 Appropriation
 Formality of rights

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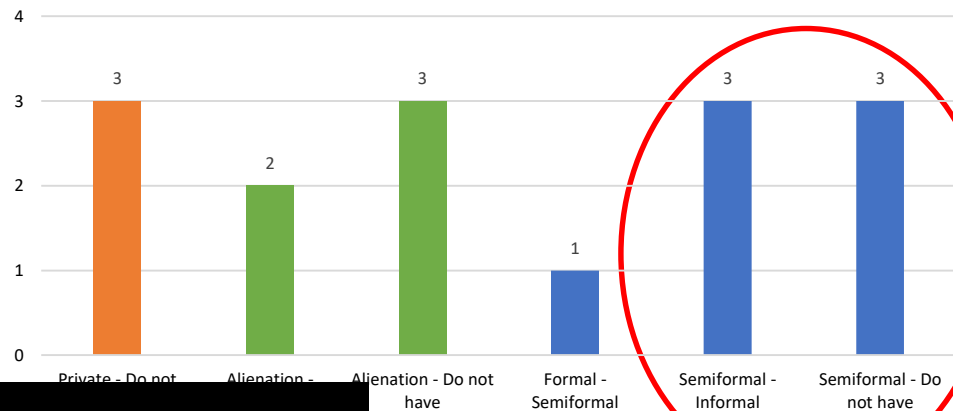


RESULTS AND DISCUSSION

- On residential, the major transformation of rights occurs on **formality of rights**. The number of local people who lost their semi-formal rights is 43%.
- Unlike residential, **most of local people lost their appropriation** of cultivated (40%), specifically from alienation (52%).

Transformation of property rights in Kota Baru Parahyangan, West Bandung

RESIDENTIAL



CULTIVATED

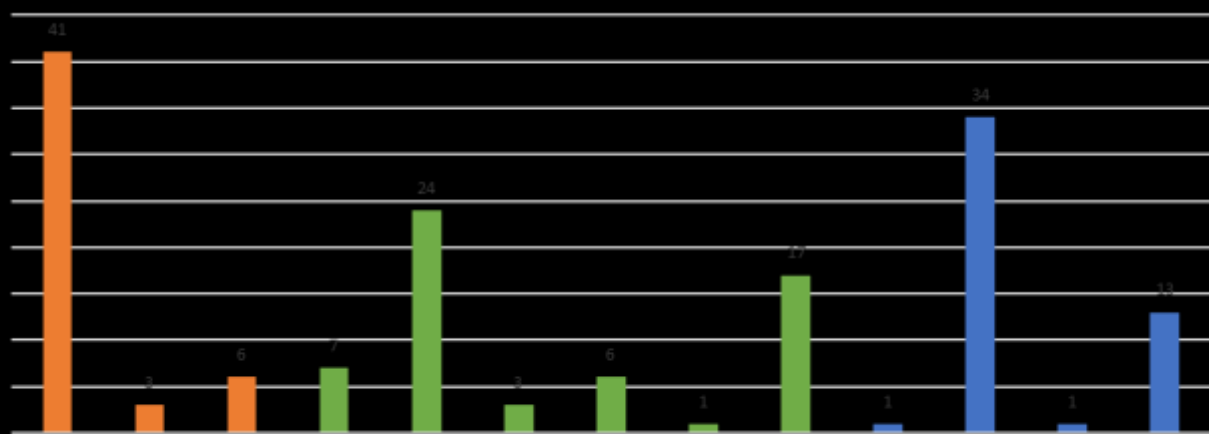




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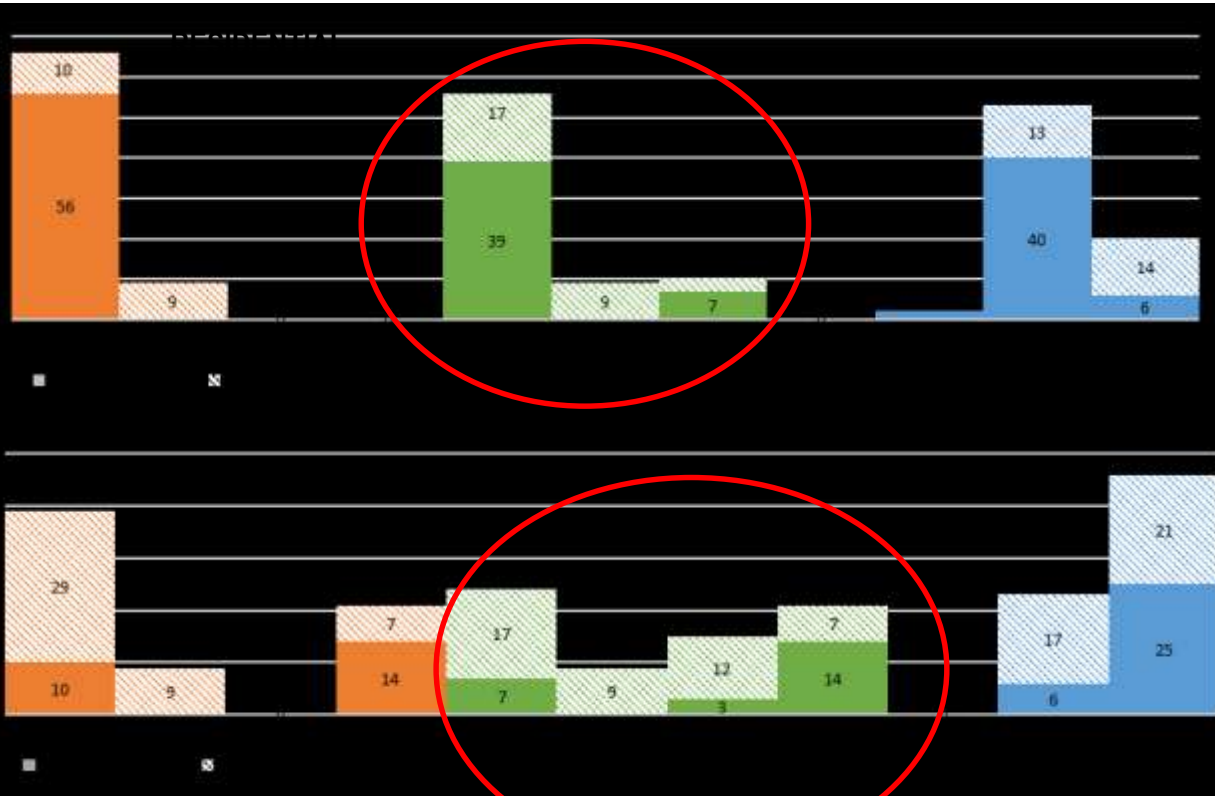
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RESULTS AND DISCUSSION

Transformation of property rights in Metro Tanjung Bunga, Makassar



- The number of transformations in property rights in **cultivated** was higher, **128 rights (62%)** compared to the residential which only represented 75 rights (33%).
- The highest transformation of rights have occurred on appropriation, both residential (37%) and cultivated (70%).

Ownership
Appropriation
Formality of rights

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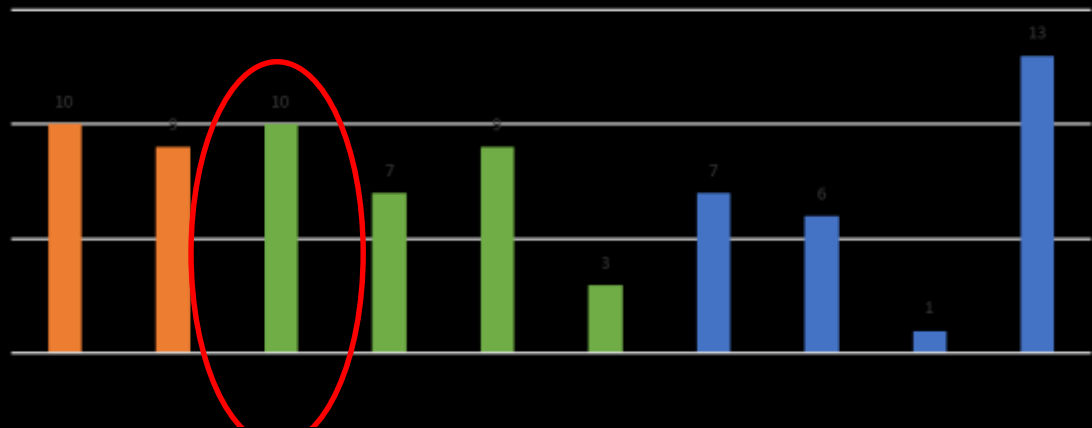
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RESULTS AND DISCUSSION

Transformation of property rights in Metro Tanjung Bunga, Makassar



- Transformation of appropriation of residential mostly occurs from alienation to management (35%).
- Similar to residential, most of local people in MTB lost their appropriation (40%), particularly their alienation (37%).
- The losses gives significant impacts on livelihood of local people since their property is very embedded to life.

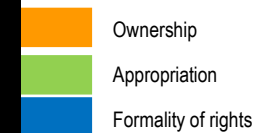
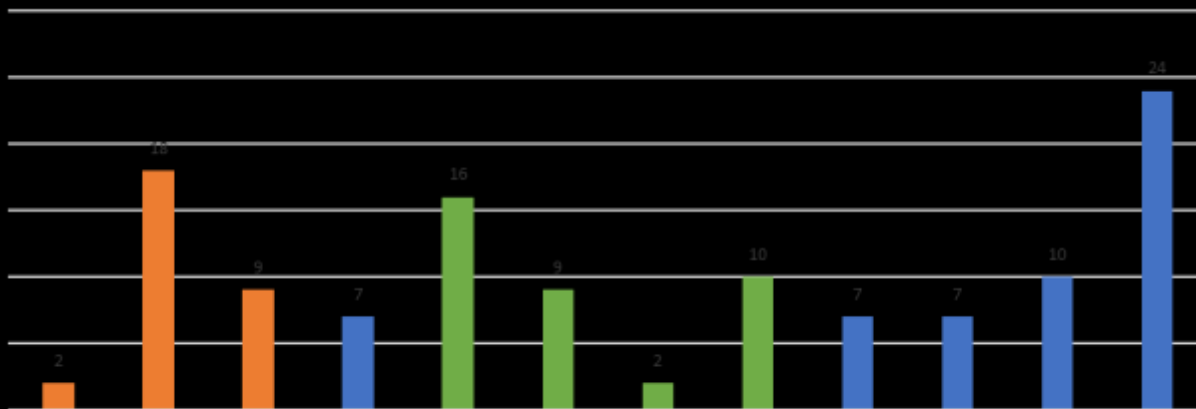




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CONCLUSION

- The new towns as large-scale development have experienced massive spatial transformation in **cultivated lands**: agricultural or fish farming lands, turning them into urbanized areas.
- The spatial transformation leads to **change of property rights** of local people, specifically on cultivated land.
- The major transformation of rights occurs on **appropriation** (rights to use and cultivate property).

NEXT STEP

- Measuring the property rights transformation in terms of their security level
- Measuring the impact of the transformation to the quality of life of local people.

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