THE IMPORTANCE OF RRR IN CADASTRAL SYSTEM

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Background

(RRR-Right, Restriction and Responsibility)
Background

(RRR-Right, Restriction and Responsibility)

These components can be described as follows:

- What the RRR is in law?
- Who (or which organization) holds the RRR or is subject to it?,
- When the RRR came into effect? or when it ceased to apply?
- Where the land or real property is that it applies to, including its extent (Gogolou, 2013).
RRR and Cadastral system

Interests in relation to land can be characterized as identifying,
a) things that you can do (rights),
b) things that you can’t do (restrictions), and
c) things that you have to do (responsibilities)

-(Grant, 2014).

A cadastral system can be suitably defined as a parcel-based and up-to-date land information system containing a record of interests in land e.g. RRRs (Williamson, Enemark, Wallace, & Rajabifard, 2010).
Case study area

- Banepa Municipality, Kavre District in Nepal
Case study Themes

1. Araniko Highway,
2. Punyamata River,
3. Chandeshwori Stream and
4. High-tension (power line)
   - which belongs to cadastral map sheet of 157-1324,
   located in Banepa Municipality, Kavre District in Nepal
Case Area-1: Araniko Highway
Case Area-2, 3 : Punyamata River and Chandeshwori Stream
Case Area-4 : High-tension (power line)
# Norms/ Rules of Nepal

<table>
<thead>
<tr>
<th>S. N.</th>
<th>Case Issues</th>
<th>Norms/ Rules</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Araniko Highway</td>
<td>Local Government: 22.86 Meters/ 75 feet</td>
<td>National Standard: 25 Meters / 82 feet</td>
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<td>2</td>
<td>Punyamata River</td>
<td>15 Meters</td>
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<td>3</td>
<td>Chandeshori Stream</td>
<td>7 Meters</td>
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<td>4</td>
<td>High-tension (Power line) 132kv.</td>
<td>-</td>
<td>9 Meters/ 30 feet</td>
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</table>
Case Area-1: Araniko Highway
Map of Case study area and Themes

Land Use Restriction Map by Highway and High tension Line

Banepa Municipality

Legend
- High tension Line
- 75 feet road buffer line
- 60 feet road buffer line
- Parcel
- Sheet Border

Land Use Restriction Map by River and Stream

Banepa Municipality

Legend
- Stream
- Choked Stream affected Parcel
- Purvmandi River affected Parcel
- Parcel
- Sheet Border
Restrictions Maps: Araniko Highway and High tension line

Land Use Restriction Map
(Affected by 82° Araniko Highway)
Banepa Municipality
1:50000

Legend
- Street Border
- 82° Parcell Full right
- Parcel

Land Use Restriction Map
(Affected by 15° Hightension Line)
Banepa Municipality
1:50000

Legend
- Street Border
- Hightension Parcell Full right
- Parcel
Restrictions Maps: River, Stream and Highway

Land Use Restriction Map
(Affected by Stream and River)

Banepa Municipality

Legend

- Chondelon: Parcel Full right
- Purvottal: Parcel Full right
- Stream
- Parcel
- Sheet Border

1:50000

Land Use Restriction Map
(Affected by 75 feet Highway)

Banepa Municipality

Legend

- Sheet Border
- 75' Parcel Full right
- 75' Highway affected Parcel

1:10000
<table>
<thead>
<tr>
<th>Parcel FID</th>
<th>Parcel Area (Certificate)</th>
<th>Parcel Area (Corrected)</th>
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<td>30.75</td>
<td>627</td>
<td>87.61</td>
<td>31.76</td>
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</table>
Findings: Reality vs Documents

- Actual Land to Land Certificate
- Assigned RRR to Real RRR

- Owner have full right on parcel in authorized official certificate and map/documents.
- But actually the certificate and parcel map may differ or wrong with actual situation in case of RRR.
- The provision offered by land certificate of these areas surely variation in area and value.
Findings:

Unclear RRR is creating,

• land disputes, controversy and confusion, which directly affects in land value, land use, land ownership, land taxation and even in land development process.

• That variation on certificate and ground situation is badly governing to right, restriction and responsibility issues.
Discussion:
Party-RRR- Spatial Unit: Linkage based on LADM

- Party
  - Individual person
  - Joint person
  - Other stakeholders
  - Communal
  - Organization
  - Government

- RRR
  - Right (1): 1.1, 1.2, 1.3....1.n
  - Restriction (2): 2.1, 2.2, 2.3....2.n
  - Responsibility (3): 3.1, 3.2, 3.3....3.n

- Spatial Unit
  - Parcel Id
  - Spatial hierarchy related to Parcel
## Discussion: Party-RRR- Spatial Unit

<table>
<thead>
<tr>
<th>Party</th>
<th>Right</th>
<th>RRR</th>
<th>Responsibilities</th>
<th>Spatial Unit</th>
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</thead>
<tbody>
<tr>
<td>Individual person</td>
<td>R1.1 Occupy</td>
<td>R2.1 Exclude</td>
<td>R3.1 Environmental requisition</td>
<td>Parcel ID</td>
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<tr>
<td>Joint person</td>
<td>R1.2 Use</td>
<td>R2.2 Land use type</td>
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<td>Area</td>
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<td>Other stakeholders</td>
<td>R1.3 Sell</td>
<td>R2.3 ROW</td>
<td>R3.2 Pollution control</td>
<td>Value</td>
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<td>Communal</td>
<td>R1.4 Transfer</td>
<td>R2.4 Rule of NEA</td>
<td>R3.3 Disturbance</td>
<td>Use</td>
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<td>Organization</td>
<td>R1.5 Mortgage</td>
<td>R2.5 Local act</td>
<td>R3.4 Structures for access</td>
<td>Spatial hierarchy related to parcel</td>
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<td>Government</td>
<td>R1.6 Compensation</td>
<td>R2.6 Land use zone</td>
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<td>R2.7 Subdivision regulations</td>
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<tr>
<td></td>
<td>R1.n......</td>
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</tbody>
</table>

Land Certificate
Conclusion

- Clear identification and assigning RRR in land certificate through cadastral system will support to better relation with party to parcel/spatial object.
- Being cadastral system is the foundation of the land administration system, the clear identification, allocation and assignation of RRR can reduce conflict and rise positive aspect.
- It will be the base for sustainable land administration system of country.
Thank You for attention.

- Please for your suggestions, comments and questions.