

Evolving Spatial Planning and Development in Nepal: Context and Issues

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(RUPSON)

Purpose

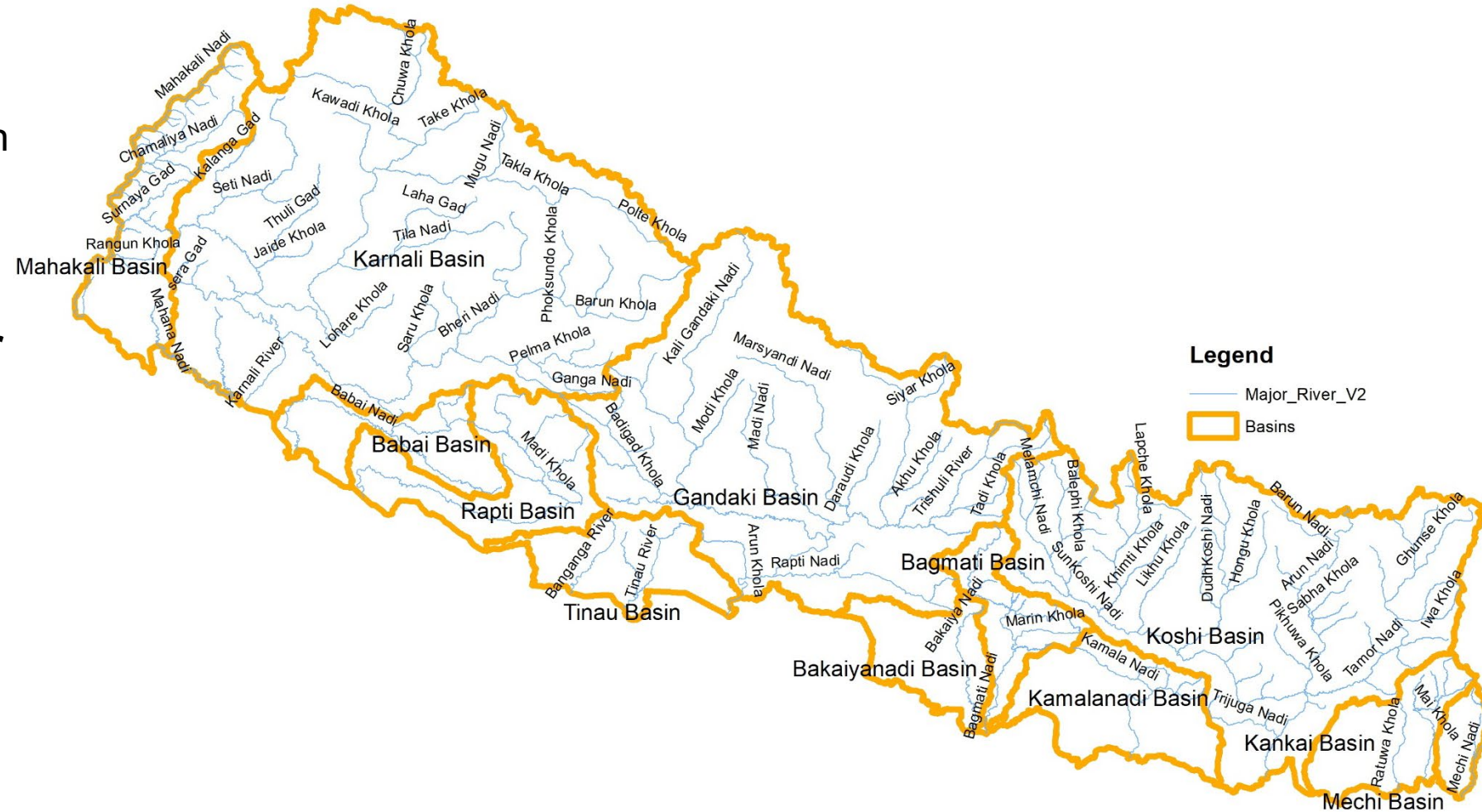
- The purpose of this presentation is to reveal the relevant **context** and pertinent **issues** concerning spatial planning and development in Nepal.
- The aim is to enable deliberation and solicit national and international experiences on these issues.
- The outcome is hoped to help MOUD in its current effort to review its national policies, strategies, and acts.

National Level

Third Plan (1965-1970) and Regional Planning

Functional region

- Early spatial planning effort at national scale was introduced in the decade of 1960s.
- Division of nation on **functional regions** was conceptualized—based on **topography** and **river system**.
- The river corridor following **Koshi, Gandaki-Bagmati**, and **Karnali** river systems found prominence.
- The river corridor is followed because it serves as source of power and eases road development.



Fourth Plan (1970-1975) and Regional Planning

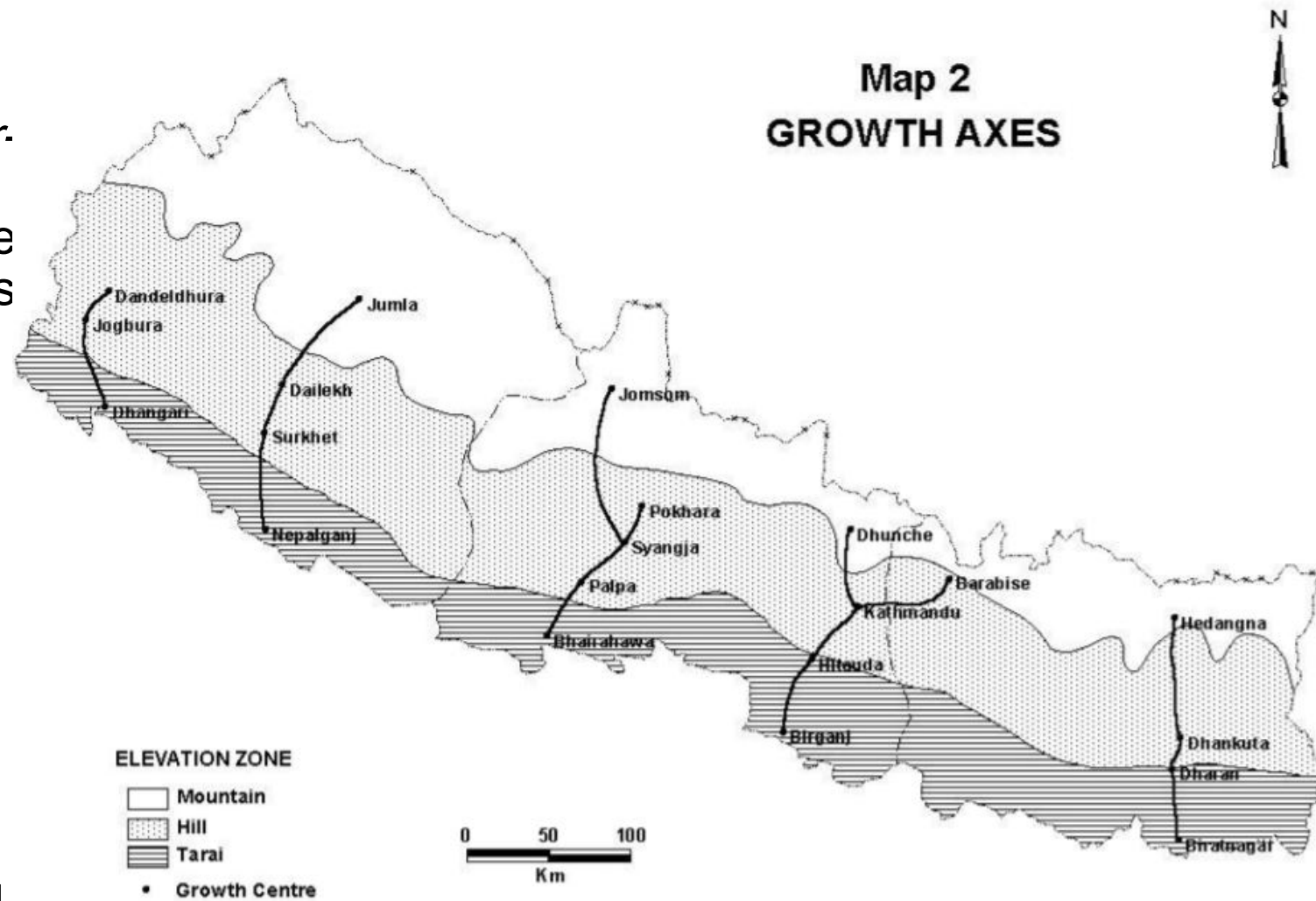
Growth Axis

The concept of the GA is to reduce *inter-regional disparity and integration of national economy*. Development activities to be promoted along major growth axes

- Koshi GA
- Kathmandu GA
- Gandaki GA
- Karnali GA
- Dhangadhi-Dadeldhura GA

These GAs are to serve as **ribs**, while East-West highway as **spinal chord**. East-West link was conceived for hill.

Four **Development Regions** conceived in 1972—that became five in late 1970s



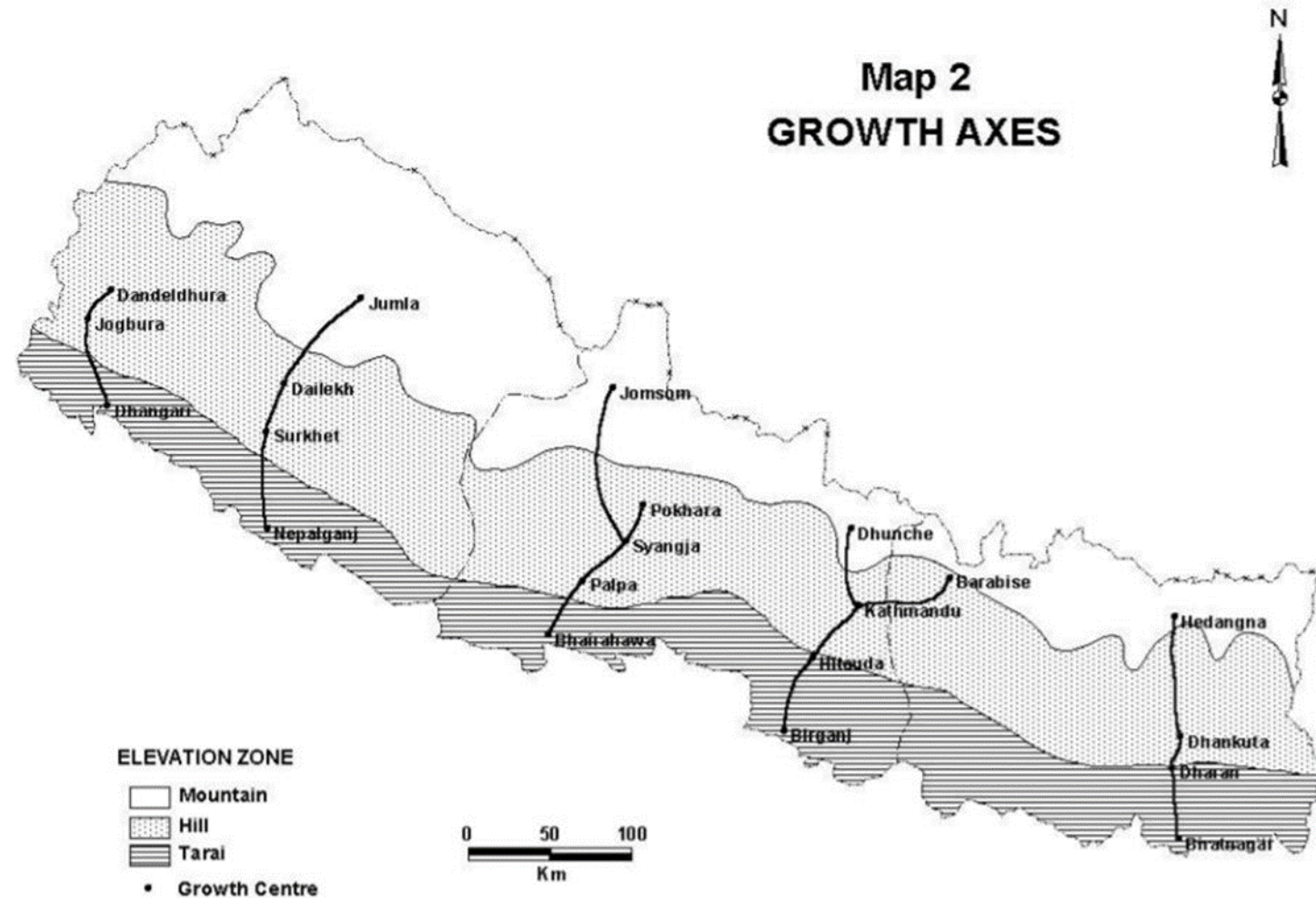
Source: Gurung, 1969

Fourth Plan (1970-75) and Regional Planning

Growth Centers

The objective is “*creation of poly-functional settlements to cater to the diverse needs of the hinterland.*”

- **Biratnagar, Birgunj, Bhairahawa** and **Nepalgunj**, examples of the Terai towns.
- **Dhankuta, Palung, Palpa, Syangja**, and **Dailekh**, models for hilly areas.
- **Hedangma, Dhunche, Jomsom** and **Jumla**, examples of remote areas in the Himalayan region.

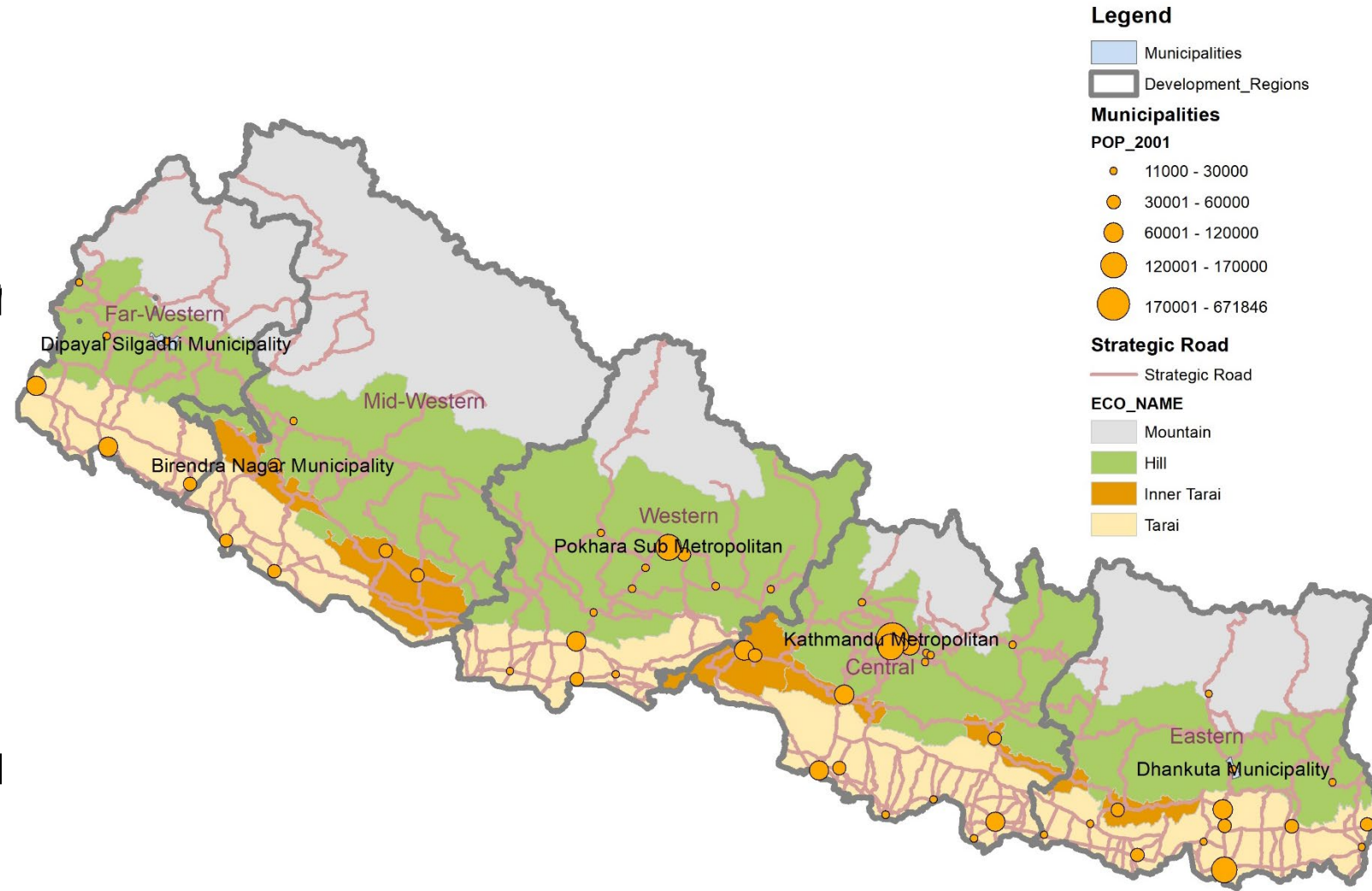


Source: Gurung, 1969

Fifth Plan (1975-80) and Regional Planning

Regional balance

- Aim is to remove disparity between ecological and development regions
- **Principle of disaggregation** at the national level and **aggregation** at the regional level for productive linkages
- **Regional policy** does not mean “scattering of limited resources” rather “it is to maximize national income through an investment pattern that mobilizes inherent resources of regions and societies”.

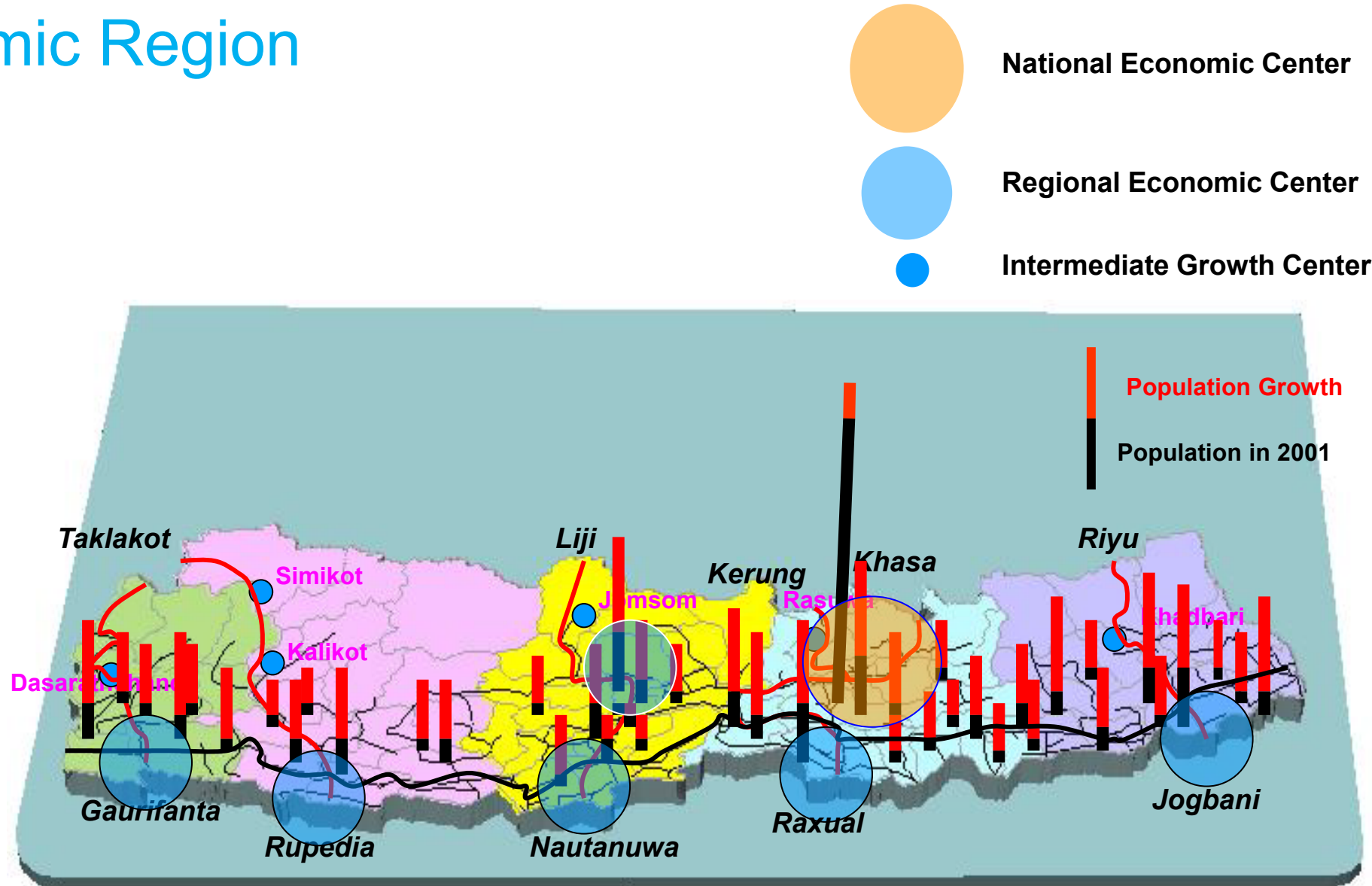


NUP (2007): Balanced National Urban System

Functional Economic Region

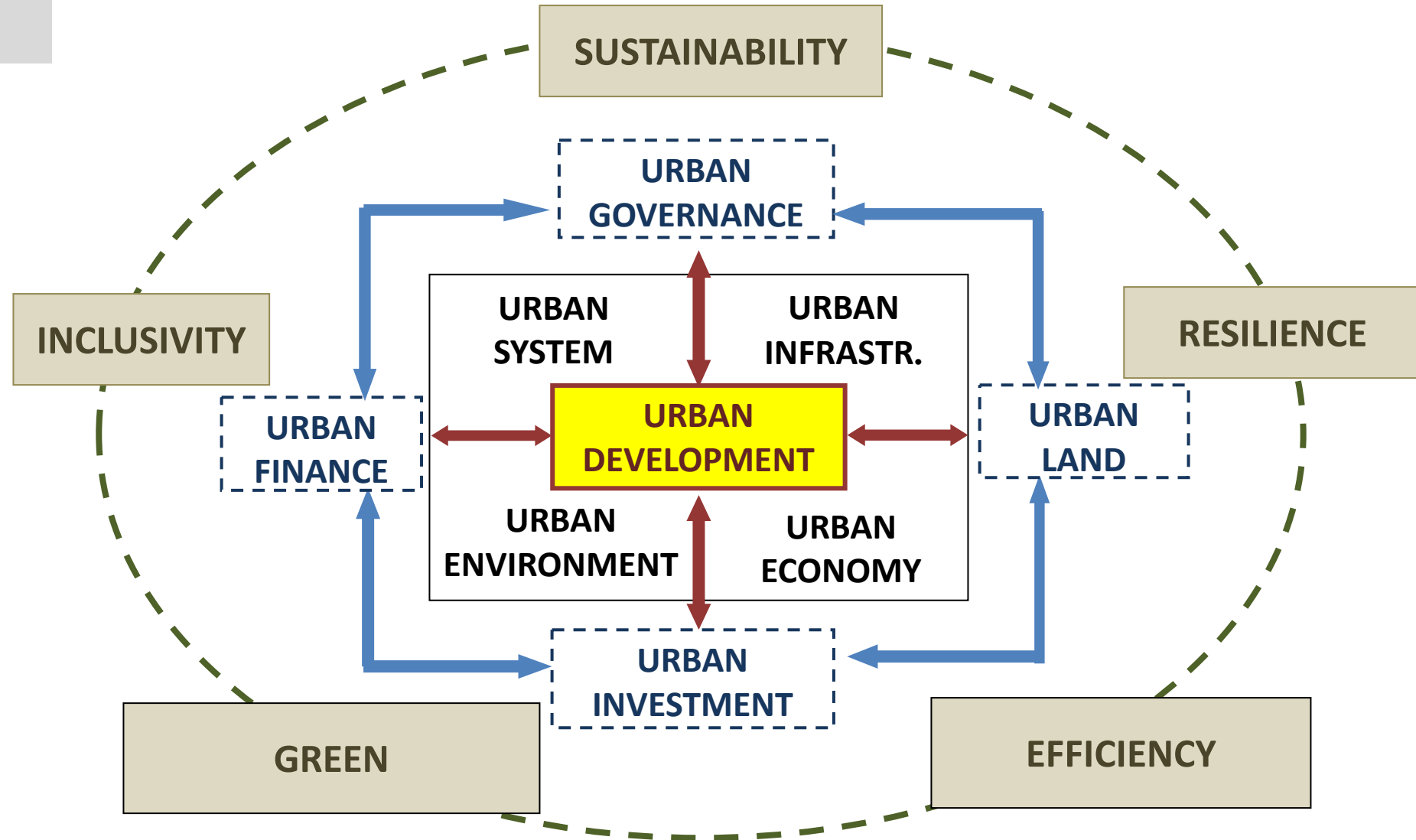
Transform **development region** into self-contained and self-reliant **economic region** through strengthened network of cities & towns of the NS Highway Corridor.

Network is to be built around the **first-order** gateway city at terai and interconnected **second-order** secondary towns at the Chure-foothill and **third-order** towns of **hill and mountain regions**—feeding to small towns and market centers of their catchment areas.



NUDS, 2017

Vision 2030:
Balanced and
prosperous
national urban
system



NUDS is not limited to physical development, but aspires to attain a qualitative vision for future cities that reflect highest value of a society.

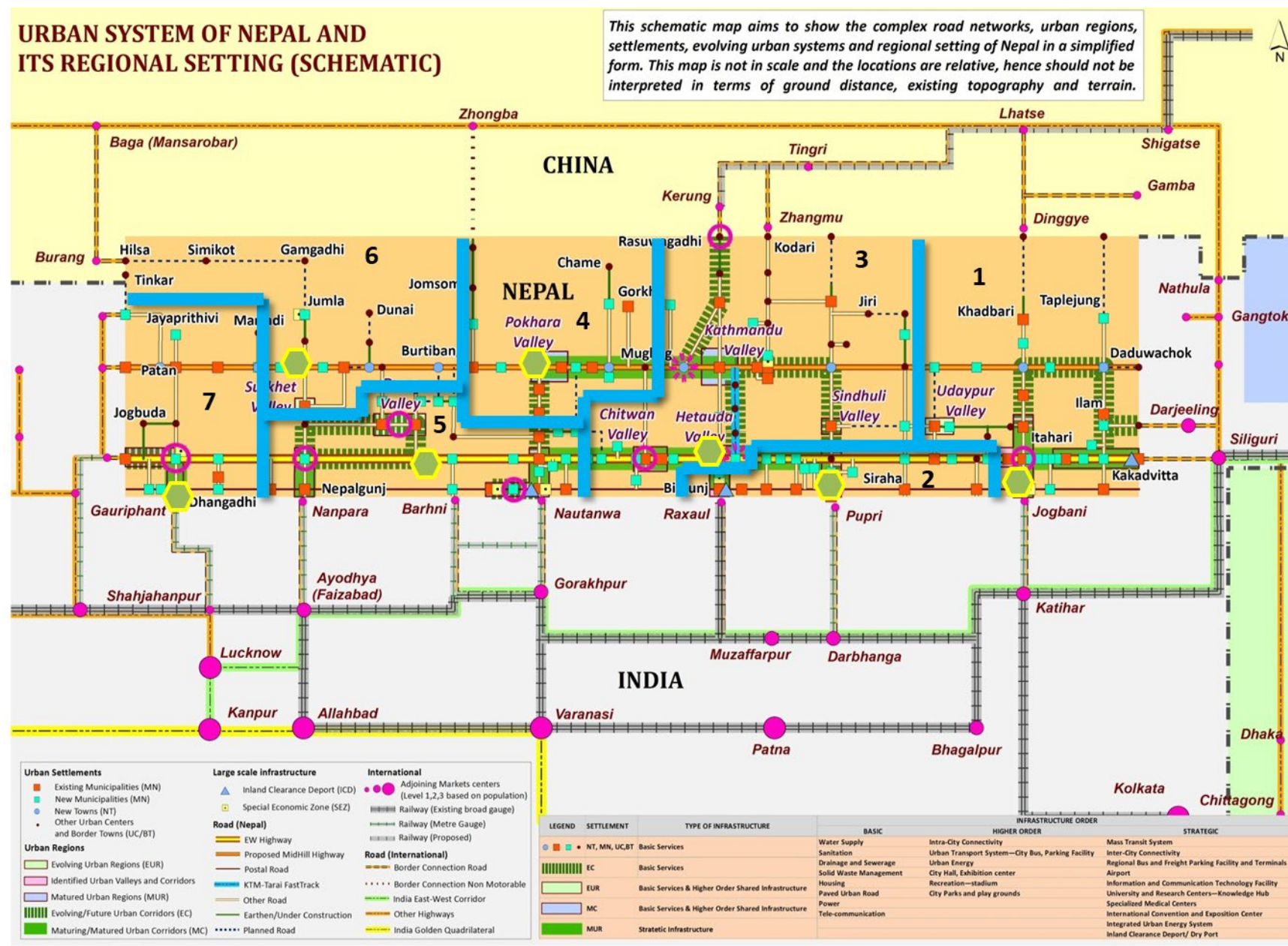
Urban System: Strategies

S1: Facilitate higher level functions and services in major regional urban centers and provincial capitals

S2: Improve connectivity standards

S3: Promote environment, heritage and tourism friendly economic functions in KV and deconcentrate incompatible functions outside the Valley

S4: Integrate provincial capitals with the development of (sub)national urban system

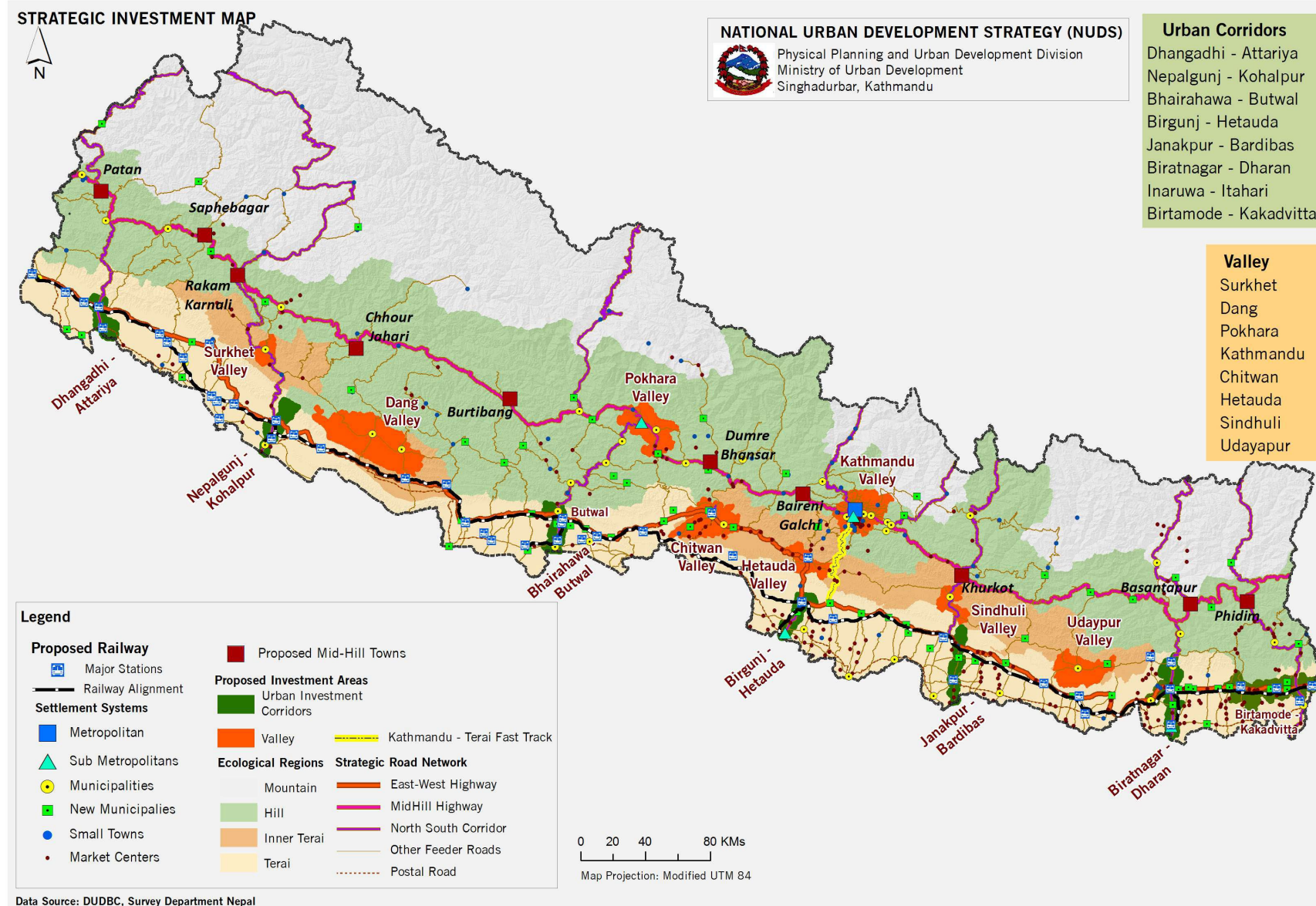


Urban infrastructure and Investment: Strategies

S13: Higher order/shared infrastructures in large urban region and corridor through **cluster city approach**

S80: Investment in urban areas of **mid and far-west** regions and in underdeveloped regions of **southern terai towns & inner Terai**.

S81: Prioritize investment in **strategic small towns, market centers, border towns, district/ administrative centers, and new towns**



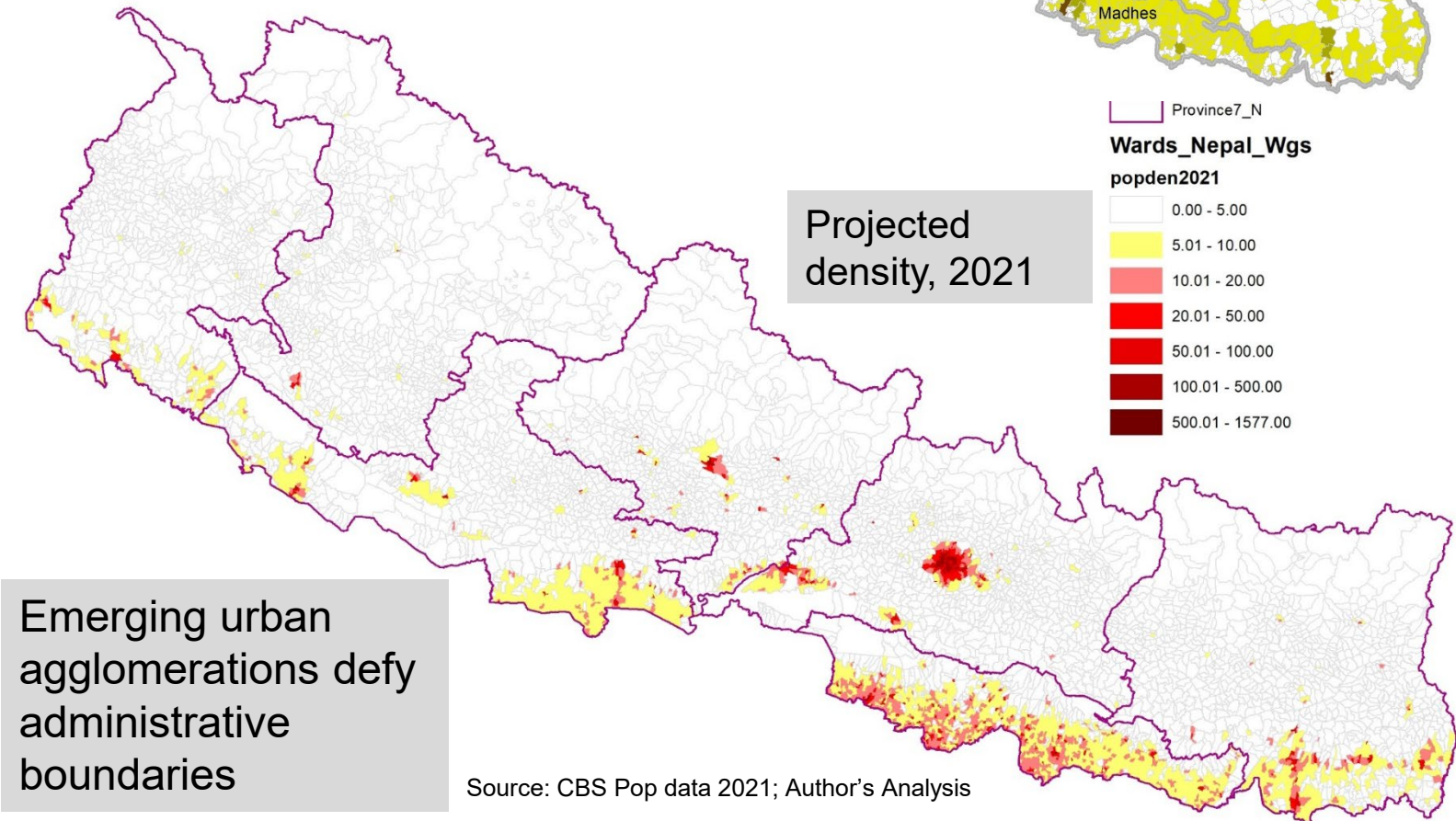
Urban Governance: Strategies

S89: Strengthen the role and capacity of MoUD to provide **sustained technical support and guidance** to provincial and local level on urban policies, planning, design and implementation of upscale urban sector projects.

S93: Make town plans basis for long term development of urban areas.

S94: Improve the legal basis for managing large **urban region and corridor**

| Administrative Area | Numbers |
|---------------------|---------|
| Provinces | 7 |
| Municipalities | 293 |
| Village Bodies | 460 |



Infrastructure Deficit

Infrastructure Deficit

Overall investment requirement for 293 municipalities for the next 15 years could be staggering at NPR 2,921 billion (USD 24.34 b). This amounts to NPR 195 billion per year (**USD 1.62 b**) for the next 15 years.

Source: Author's Estimate

Fund Allocation

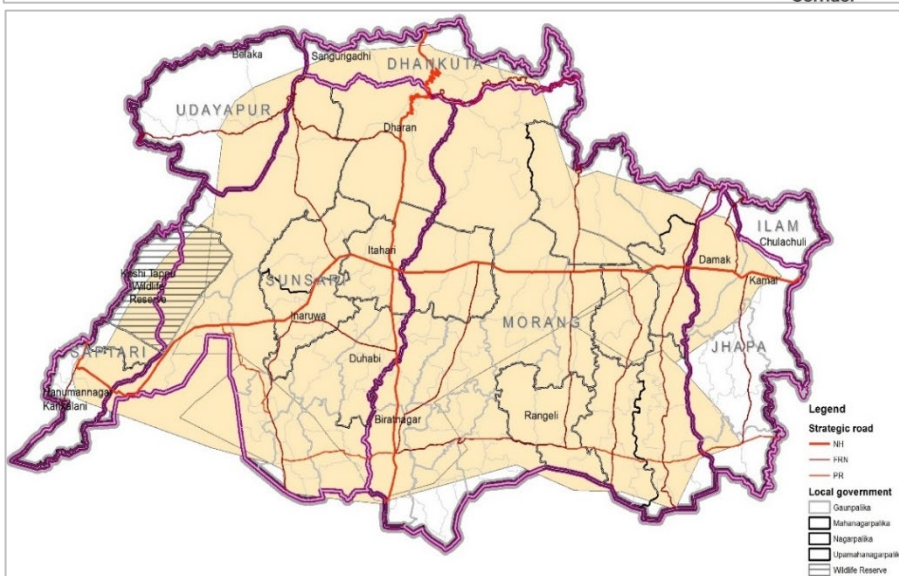
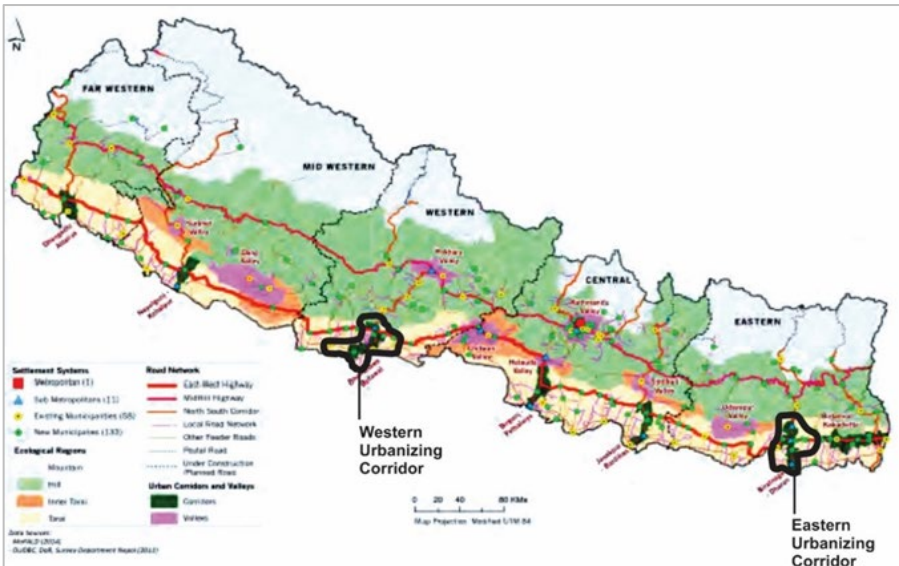
appraisal of the urban sector programs and budgets of all three tiers of governments reveals national urban development budget to be NPR 97.2 billion (**USD 810 m**) for FY 2020/2021. It is near **2.5 percent of national GDP** of NPR 3,914.7 billion (USD 33.66 billion) in 2019/2020. This share was 2.6 percent 2016/2017.

Source: Author's Estimate

Regional Level

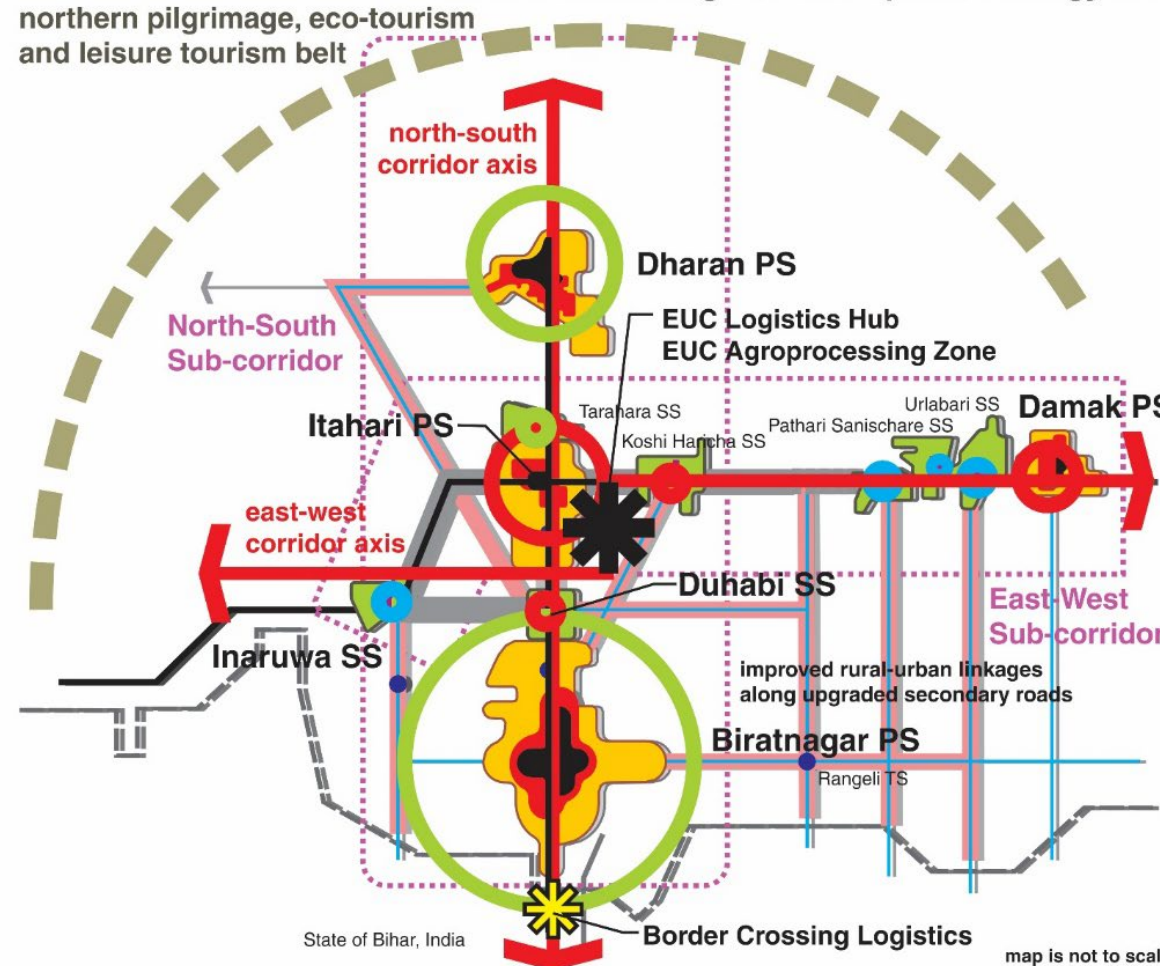
Urban Corridor Initiative

Urban Corridor Initiative: EUC: USD 1.2 b



Eastern Urbanizing Corridor Spatial Strategy to 2030/2050: Overall Concept

northern pilgrimage, eco-tourism
and leisure tourism belt



compound average annual population growth rate (%), 2017-2030

high: 2.4-2.6%

medium: 2.0-2.4%

low: 0.4-2.0%

circle size is proportional to total population in 2030

Major Functions

Dharan PS: 228,600 inh.

- core and outer urban area: EUC health and education services centre; tourism
- suburban area: manufacturing; education and health
- upstream flood management
- no growth beyond existing suburban boundary

Itahari PS: 182,400 inh.

- EUC Logistics Hub at crossroads
- EUC Agroprocessing Zone
- residential densification - no growth beyond existing suburban boundary

Damak PS: 92,800 inh.

- rapidly-expanding industrial and trading hub for eastern portion of the EUC; eco- and leisure tourism potentials north of Damak
- residential densification - no growth beyond existing suburban boundary

Duhabi SS: 41,100 inh.

- rapidly-expanding industrial suburb between Biratnagar and Itahari
- residential densification - no growth beyond existing suburban boundary

Biratnagar PS: 465,900

- core: EUC business services and advanced consumer services; business tourism
- outer urban area: high-density residential and retail/office mixed use; education and health services
- suburban area: manufacturing; education and health services; cross-border logistics operations; regional sports + recreation facility; residential densification - no growth beyond existing suburban boundary

Provincial Level

Provincial Level Spatial Planning

Province 1

Urbanization, Rural Development, and Settlement Management Strategies of P1G (Periodic Plan, 2020/21-2024/25):

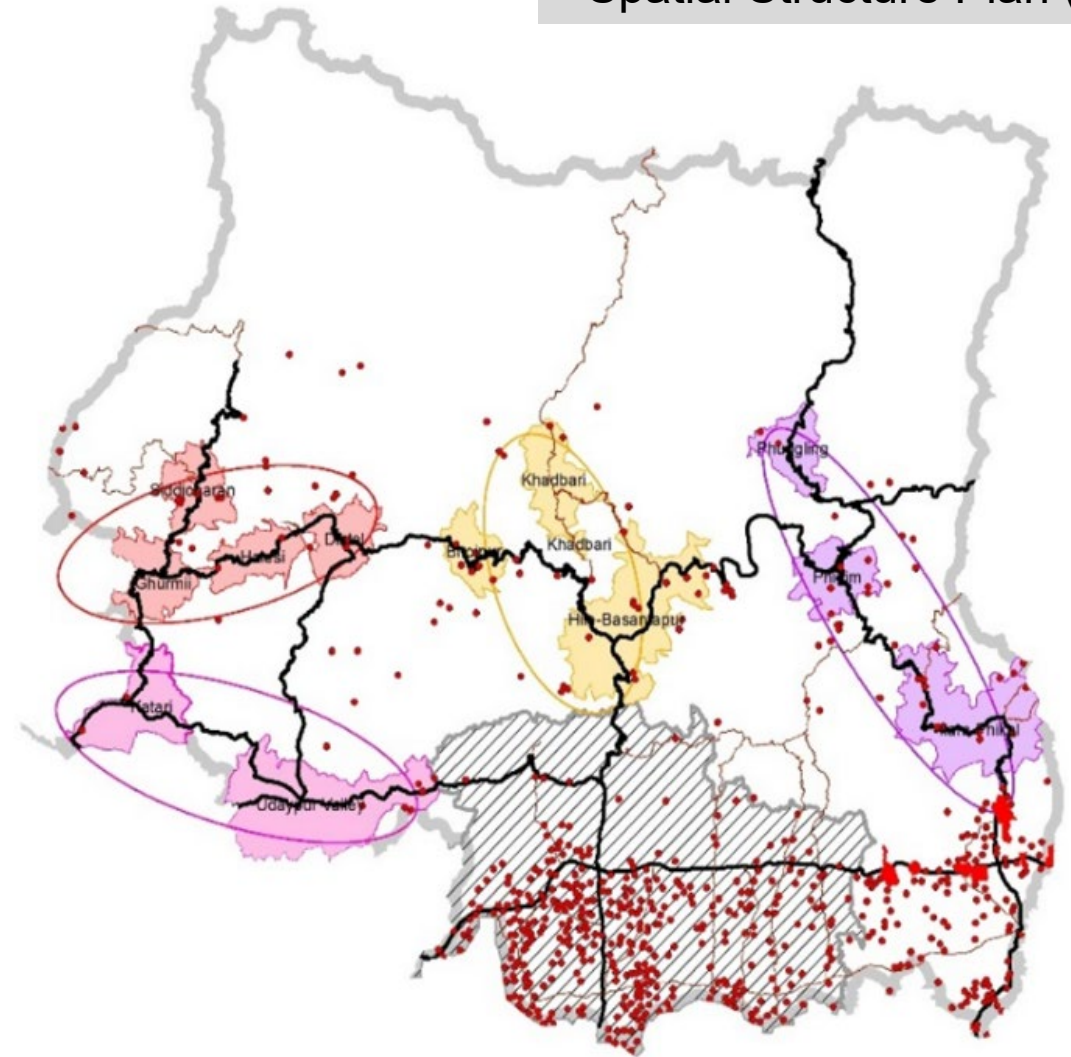
S1: Cluster small towns and market centers in the hills and mountain region and develop regional urban infrastructures—and integrating these clusters with the urban corridors.

S2: Transform large urban corridors into an planned economic region through coordinated development and management

S3: Promote integrated development of market centers of rural areas combining urban infrastructure provisions and livelihood opportunities.

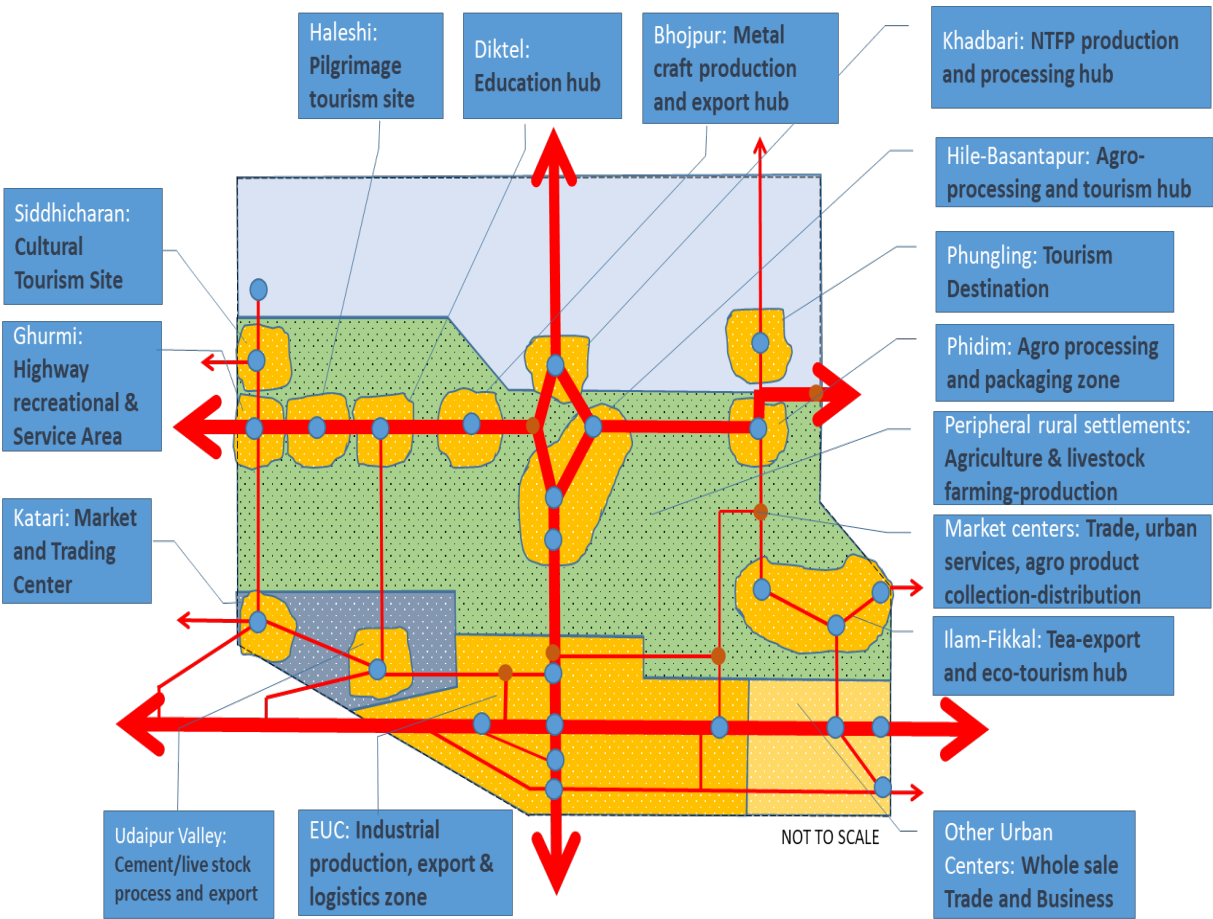
Periodic plan 2020/21-2024/25

Spatial Structure Plan (STP)



Provincial Level Spatial Planning

Schematic map of P1 STP revealing locational potentials



Proposed investment scenario

| Location/Cluster | Amount (USD M) | Central Gov Share | Provincial Gov Share | Local Gov Share |
|---|------------------|-------------------|----------------------|-----------------|
| Hille-Basantapur | 91.91 | 43% | 51% | 6% |
| Ilam-Fikkal | 101.30 | 43% | 51% | 6% |
| Bhojpur | 21.60 | 43% | 51% | 6% |
| Diktel | 25.38 | 43% | 51% | 6% |
| Haleshi | 16.10 | 43% | 51% | 6% |
| Ghurmi | 16.97 | 43% | 51% | 6% |
| Siddhicharan | 26.73 | 43% | 51% | 6% |
| Phungling | 37.88 | 43% | 51% | 6% |
| Phidim | 30.22 | 43% | 51% | 6% |
| Khadbari | 29.30 | 43% | 51% | 6% |
| Udaipur Valley | 120.27 | 43% | 51% | 6% |
| Katari | 37.18 | 43% | 51% | 6% |
| Hill, Mountain & Inner Valley Clusters | 554.84 | 43% | 51% | 6% |
| East Urban Corridor* (Biratnagar-Dharan-Itahari-Damak-Inaruwa) | 1,016.00* | 31% | 45% | 24% |
| Other Urban Centers | 108.56 | 31% | 45% | 24% |
| Peripheral Rural Settlements | 699.47 | 43% | 51% | 6% |
| Market Centers | 121.09 | 43% | 51% | 6% |
| Province | 2,499.96 | | | |

Provincial Spatial Strategies stress on locational potentials, and the investment be directed in a manner to unleash these potentials. It seeks collaborative investments.

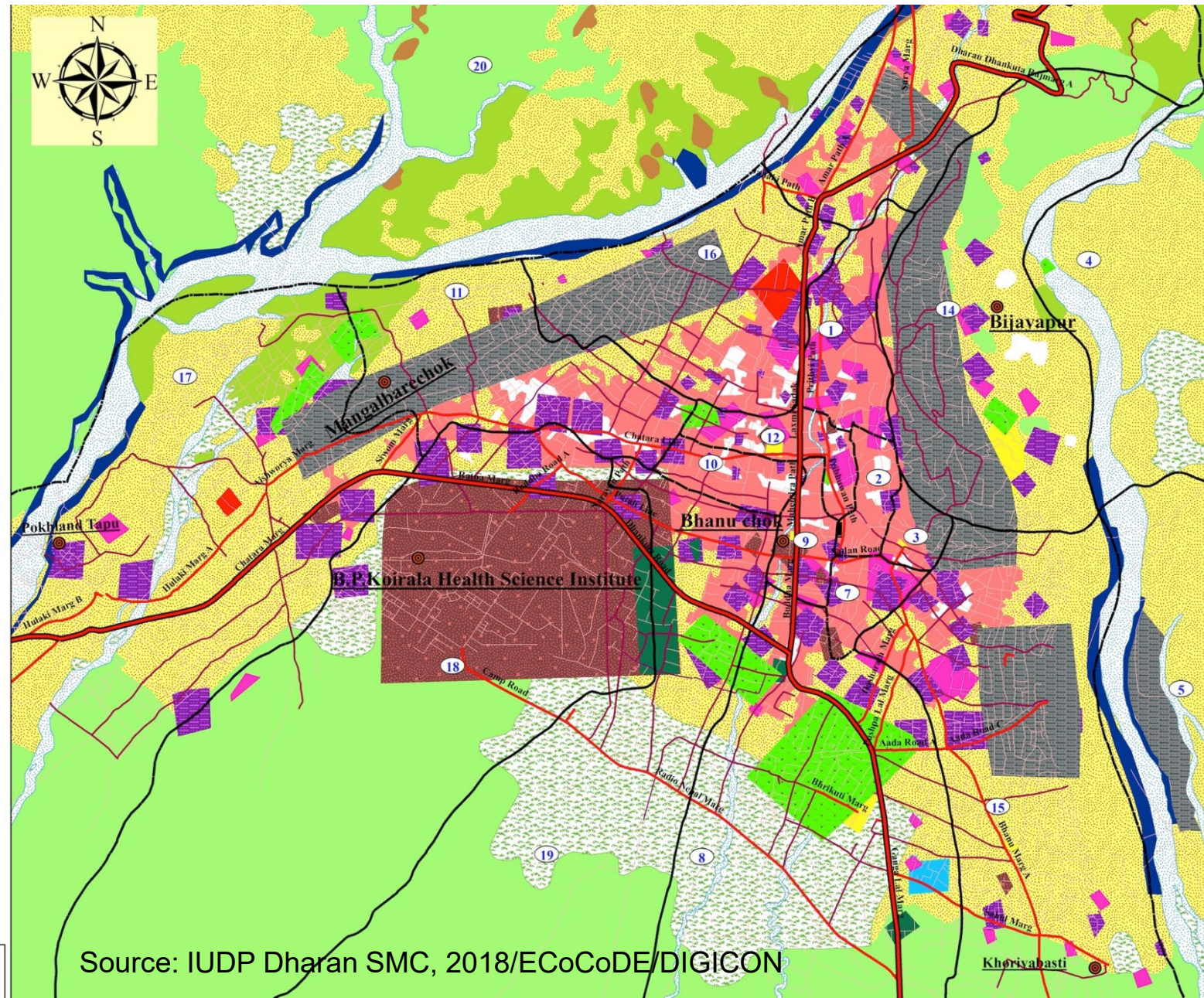
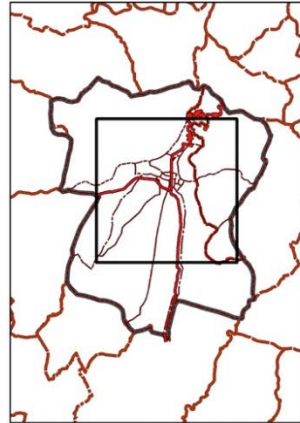
Local Level Planning

Local Planning: Green City Dharan (IUDP 2018)

Local planning with finer spatial grains

- 70% Forest Area
- Many Parks and community forest within city
- Conservation of green areas
- Waste segregation and recycling initiation- waste to energy concept
- Solar energy promotion
- Rain water harvesting

**EXISTING MAP
(Landuse Zoning)**
Dharan Sub-Metropolitan City
Sunsari



Source: IUDP Dharan SMC, 2018/ECOCODe/DIGICON

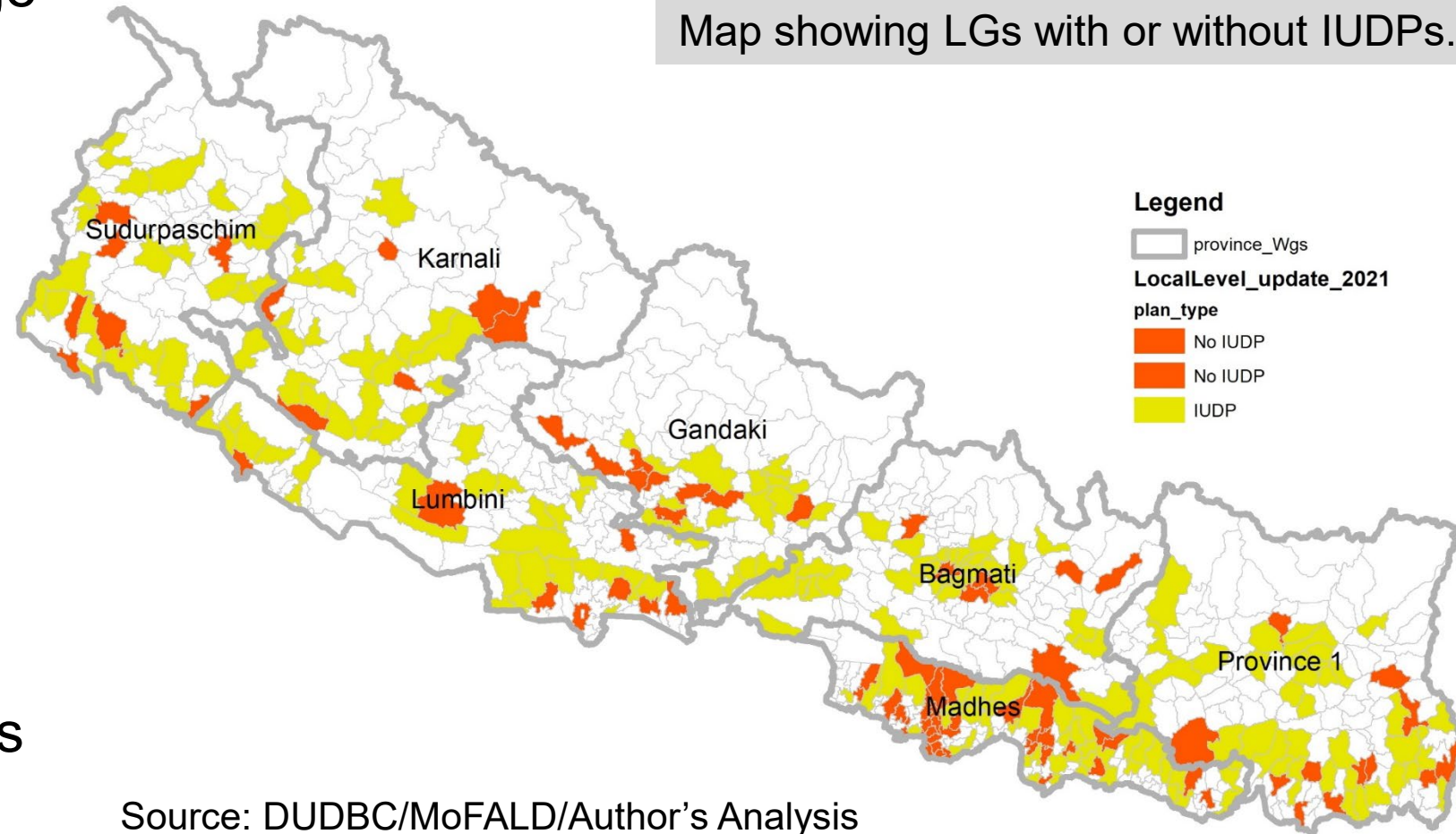
Municipalities with IUDPs prepared in 2017/2018

About one third of 293 municipalities and all 460 village bodies do not have integrated urban development plans (IUDPs).

Of the prepared, thematic plan period of five years has completed--requiring review & update of all IUDPs. Also, new political leadership has come.

The IUDPs suffer in implementation—due to various constraints. Different local planning initiatives are underway without integration to IUDPs.

Map showing LGs with or without IUDPs.



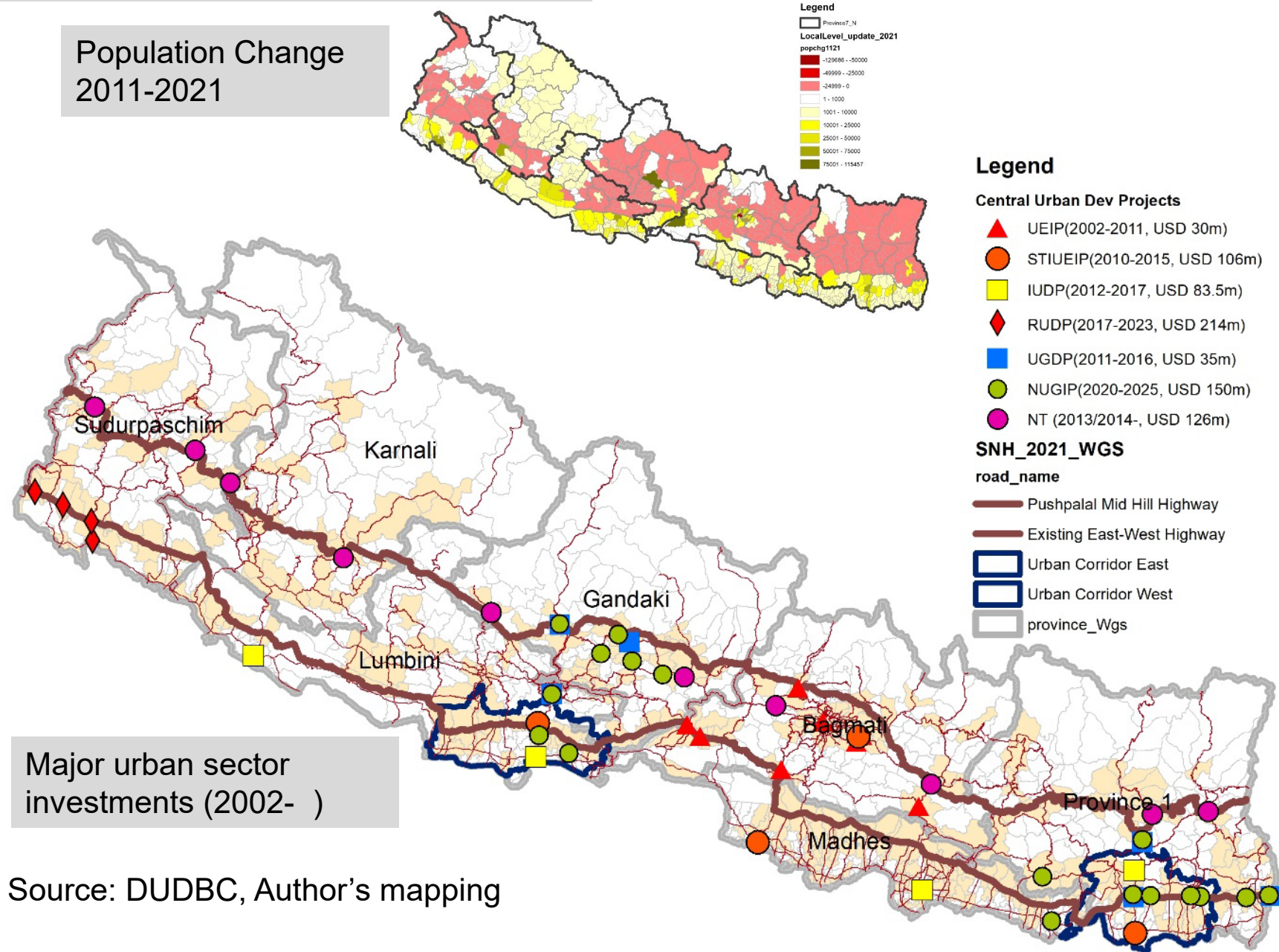
Source: DUDBC/MoFALD/Author's Analysis

Strategic Urban Sector Projects

Average annual spending (2002-2023) of the Centrally Executed Strategic Projects is about USD 29m.

It is inadequate than the assessed budget of USD 1.6 b required per annum to suffice existing deficit and new infrastructure demand for the period of 2017-2031.

The Terai and Valley focused investment efforts appear to be not helping to reduce the migration from the hills and mountains.



Selected photographs of UEIP interventions

Bharatpur Bus Park



Source: DUDBC/UEIP

Bharatpur Land Pooling, 40 ha



Source: DUDBC/UEIP

Selected photographs of STIUEIP interventions

Biratnagar Road Works



Source: ADB

Biratnagar sewer system



Issues affecting spatial planning and development

ISSUE 1: Inadequate **institution building** for spatial planning and development

- How can we build/strengthen necessary **organizational structure, capabilities, and mechanisms** to operationalize national policies and strategies?
- Do we have necessary **guidelines and manuals** to guide province and local level in urban policies, planning, and implementation?
- Do we have necessary **norms and standards** for periodic review and update of plans and policies?
- Do we have adequate **legislative provisions** to guide on spatial planning, approval, development, and growth management of the clustered city region?

Issues affecting spatial planning and development

ISSUE 2: Absence of or weak mechanism to forge coordination and collaboration between and at all three tiers of Governments

- What does a **workable coordination framework and mechanism** look like in the federated structure including Center, Province and Local Level—that enables programmatic information sharing, planning, and investment?
- How can a **horizontal coordination** among stakeholders be established and strengthened?

Issues affecting spatial planning and development

ISSUE 3: Difficulty in accessing to urban land

- How can **production of “serviced” urban land** be enhanced in a manner that optimizes an efficient utilization of land?
- How can the **role of private sector be organized** in the production of serviced land?
- What should be **the role of Government** in the production of serviced urban land?

Issues affecting spatial planning and development

ISSUE 4: **Scaling up** urban sector program and budget

- How to **scale up urban sector budget** at all tiers of governments and assure the **quality of impact** of investment? The urban sector budget tends to be inadequate, fragmented, overlapped or uncoordinated, lagging guidance by plans such as IUDPs/PPs, and is less prioritized at provincial level.
- How to **increase investment** for urban infrastructures? Specially how to attract private sector investment: where will their role be likely and beneficial?

Issues affecting spatial planning and development

ISSUE 5: Lack of IUDPs at local level, and its timely review and update. Thematic plans uncoordinated and unintegrated with IUDPs/PPs. The current land classification practices are unhelpful for preserving agricultural land and urban land management.

- **How to ensure spatial structure planning at province and IUDPs at local level mandatory?** Lack of IUDPs are failing National and Provincial level policies and strategies to cascade to local level.
- How to ensure that all local governments (LGs) have their **IUDPs prepared** and periodically **reviewed** and **updated**?
- How to ensure a **mechanism** whereby all thematic and strategic planning is coordinated and **integrated** with IUDPs of the LGs?

Thank you for your patience!

Organization of the session activities and time

| Activities | Time | Responsibilities/ Requirements |
|--|----------------|---|
| Presentation: Context setting and revealing issues | 20 m | Mahendra Subba, RUPSON |
| Query/Clarification/Guidance for breakout session | 10 m | Mahendra Subba, RUPSON |
| Conducting 5 breakout groups | 40 m | <p>RUPSON Executives (Arjun, Sanjay, Suman, Gyan, Barsha—Mahendra supports all) facilitate each breakout group</p> <p>Need a volunteer to support each facilitator</p> <p>Logistics: meta card (3 colors), color pens, 10 boards, brown roll papers, thumb pins</p> |
| Presentation by the 5 Group Leaders in the Plenary | 30 m | Each group selects its leader |
| Session closing | | |
| President RUPSON summarizes key recommendations | 5 m | |
| UN Habitat | 5 m | UN/Habitat expresses thoughts on the session |
| MoUD | 10 m | MoUD expresses thoughts on the session |
| | 2 hours | |