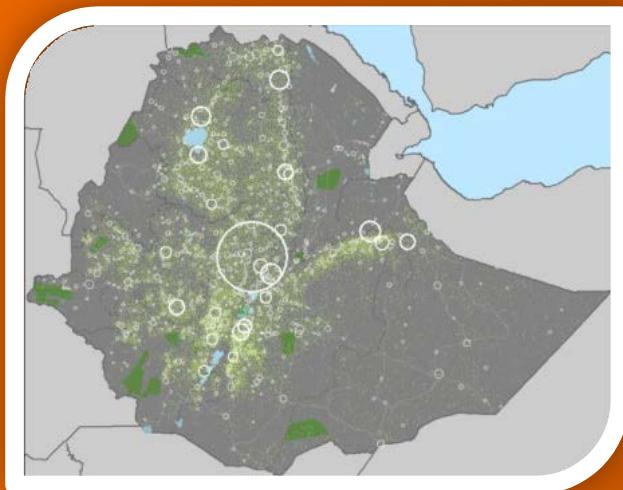


National Urban Development Spatial Plan

WORLD BANK
IDA CREDIT No: 4994-ET



ETHIOPIA

Ministry of Urban Development &
Housing



National Urban Systems Study Final Report

March 2016



Federal Democratic Republic of Ethiopia

MINISTRY OF URBAN DEVELOPMENT & HOUSING

Sudan Road, RasAbebeAregay Street, Legehar Area, Addis Ababa

Tel: 0115-531688 Fax 0115541268 Web-site: <http://www.mwud.gov.et>

National Urban System Study - Final Report

Prepared by: Egis International in association with IAU-IdF&Urba Lyon March 2016

Head Office: Place des frères Montgolfier, 78286 Guyancourt, France - Tel.: +33 130 124 800, Fax: +33 130 121 0 95

Table of Contents

Acronyms and Abbreviations **vii**

Glossary **ix**

Forward **x**

Executive Summary **xi**

PART I. ETHIOPIA'S URBAN DEVELOPMENT VISION 2035 **2**

Preface **2**

Chapter 1. The Urban Situational Analysis **4**

1.1	Introduction	4
1.2	The urban sector and the development of Ethiopia	5
1.3	The policy environment.....	7
1.4	Urban and economic trends	9
1.5	The spatial organisation of the urban sector.....	19
1.6	Key drivers of urban development.....	24
1.7	Lessons for the NUDSP Vision from other countries.....	28

Chapter 2. The NUDSP Vision **33**

2.1	Introduction	33
2.2	Envisioning Ethiopia's Urban Future (2035)	33
2.3	Driving forces of the NUDSP Vision	37
2.4	The future Urban System.....	38
2.5	Urban Clusters and Oasis City Networks	42
2.6	The Pathway to the NUDSP Vision	74

PART II. IMPLEMENTING THE NUDSP VISION **80**

Preface **80**

Chapter 1. The Implementation Road-map **84**

Chapter 2. Institutional Strengthening **94**

2.1	Introduction	94
2.2	NUDSP Principals.....	94
2.3	Ensuring effective NUDSP Implementation	96
2.3.1	Short-term Institutional StrengtheningEstablishing Requirements	97
2.3.2	Longer-term Institutional Strengthening Suggestions.....	99
2.3.3.	Improved Planning Tools	100
2.4	Coordination Across Government and with Donors	104
2.4.1	Consultative tools and bodies.....	104
2.4.2	Co-ordination with Donor-Driven Projects	107
2.4.3	The importance of autonomy for cities	109
2.5	Summary ofNUDSP Implementation Measures: Recommended Institutional Strengthening Measures	111

Chapter 3. Capacity Building for Implementation	116
3.1 Capacity building challenges	116
3.2 Needs, volume, and skills	118
3.3 Summary of HR Implementation and capacity building	121
Chapter 4. Financing Implementation	122
4.1 Urbanisation costs	122
4.2 National costs of urban infrastructure and utilities	125
4.3 Regional costs of urban infrastructure and utilities	126
4.4 Options for financing urbanisation	127
4.5 Financing priorities under the NUDSP Vision	131
4.6 Summary of Financing Implementation	137
Chapter 5. Conclusion	139
Appendix A. Benchmarks	142
A1 <i>Introduction</i>	142
A2 <i>Choosing countries with relevant experience</i>	142
A3 <i>Thematic issues</i>	144
A4 <i>Country case studies</i>	148
Evidence Box 1: China Wants Its People in the Cities to Grow its Economy	
156	
Appendix B. Existing Institutional Competencies	163
<i>Present Competencies</i>	163
Appendix C. The Proposed EUDIF and NUDOP	168
Structure of the EUDIF	168
Management of the EUDIF	169
The Public Manager of the NUDSP and NUDOP: The Managing Authority	172
Public Accountancy and Payment Body: the Paying Authority	173
The Monitoring Committee	174
Technical Assistance for the National Urban Development Programme	175
Appendix D. Transport Planning	181

LIST OF TABLES

Table 1: Current and expected functions of the key urban clusters	xxv
Table 2: MUDHo policies and NUDSP impacts	8
Table 3: Urban Population and MIC status for selected countries	9
Table 4: Urbanisation impacts of 'mega projects' and economic drivers	17
Table 5: Large secondary cities of more than 100,000 inhabitants	20
Table 6: The urban system in 2035	38
Table 7: List of major Urban Clusters and Oasis City Networks	42
Table 8: Current and expected functions of the key urban clusters	67
Table 9: Organisations responsible for planning, consultation, and implementation	106
Table 10: Financing competencies by Administrative Body	109
Table 11: Cost of urban infrastructure and services	122
Table 12: Urban infrastructure and service costs by urban size and time-period (ETB millions)	126
Table 13: Urban infrastructure costs by urban size and region 2015-2035 (ETB million) ...	127
Table 14: Large developing countries comparison	142
Table 15: Synthesis of devolution of some main competencies at each level	165
Table 16: Regional translations of federal definition of woredas' competencies	166
Table 17: Chartered cities and sub-cities' government responsibilities	167
Table 18: Management, payment, monitoring, control & evaluation of the NUDP	176
Table 19: Project Evaluation Steps	179
Table 20: Comparison of key characteristics among public transport systems	182

LIST OF FIGURES

Figure 1: Urbanisation in Ethiopia	xi
Figure 2: Ethiopia's main urbanisation challenges	xii
Figure 3: NUDSP as the urban framework for GTP success	xvii
Figure 4: The Pathway to the Consolidated Scenario the NUDSP Vision	xxi
Figure 5 Implementation Option 2: 'Equity and Inclusive Development'	xxii
Figure 6: Expected changes in the functions of key urban clusters	xxvi
Figure 7: Urbanisation cost (EBR) variation with changes in infrastructure standards	xxvii
Figure 8: Challenges and possibilities influencing the future of the urban sector	6
<i>Figure 9: Urban Population CSA projections</i>	10
<i>Figure 10: Relation between economic development and urbanisation</i>	12
<i>Figure 11: Sector growth rates in GDP (%)</i>	14
<i>Figure 12: Benchmarking with other developing countries (DGP 1995-2013)</i>	15
<i>Figure 13: Economic development forecasts</i>	16
Figure 14: The Importance of urban clusters in China	30
Figure 15: Urban population characteristics of the NUDSP Vision	39
Figure 16: Envisaged urban population growth, 2020-2035	40
Figure 17: Expected changes in the functions of key urban clusters	68
Figure 18: Addis Ababa Smart City (2050): Examples of today's benchmark cities	71
Figure 19: Pathway to the vision – a Polycentric 'Anchor'	75
Figure 20: Implementation Option 1: 'Economic Growth Focus'	84

Figure 21: Implementation Option 2: ‘Equity and Inclusive Development Focus’	85
Figure 22: Implementation timelines in relation to GTP planning periods	87
Figure 23: 2015-2020 Implementation Road-Map	89
Figure 24: 2020-2025 Implementation Road-Map	91
Figure 25: 2025-2035 Implementation Road-Map	93
Figure 26: ULGDP I Management Set-up	107
Figure 27: Urban utility costs and National Budget Capacities	123
Figure 28: The Six Economic Corridors in Indonesia	159
<i>Figure 29: Focus on sustainability in the national Urban Development Plan</i>	160
Figure 30: The Urban System in the Decentralisation Process	164
Figure 31: Proposed management structure of implementing organisation	172
Figure 32: Examples of key monitoring indicators.	188

LIST OF MAPS

Map 1: Distribution and Growth Rates of Current Urban Population	xiii
Map 2: Urban and Economic Clusters, 2015	xvi
Map 3: The Consolidated Scenario for 2035: urban clusters and development corridors	xix
Map 4: The Distribution of Urban Settlements within the Consolidated Scenario (2035)	xx
Map 5: Achieving the NUDSP vision: urban clusters and hinterland development (2035)	xxiv
Map 6: Major economic resources and potential	18
Map 7: Existing Urban System	21
Map 8: Existing Urban Clusters and their Hinterlands	22
Map 9: Existing accessibility to main cities	23
Map 10: Natural Hazard Constraints on Urbanisation	26
Map 11: Urbanisation Drivers in Ethiopia	29
Map 12: Urban population and transportation pattern under the Corridor Scenario	34
Map 13: Urban population and transportation pattern under the Dispersed Scenario	35
Map 14: Urban population and transportation pattern under the Polycentric Scenario	36
Map 15: Evolution of the urban system 2020-2035	44
Map 16: Urban Clusters in 2035	48
Map 17: Developing the potential of Urban Clusters and their rural hinterlands in 2035	49
Map 18: The Consolidated Urban Scenario – Transportation Links	73
Map 19: Clusters’ cities inside the ULGDP II and inside ULGDP I	108
Map 20: India’s Industrial Corridors	146
Map 21: Hanoi Regional Plan	151
Map 22: China Urbanisation	154

Acronyms and Abbreviations

AA	Addis Ababa
AASTU	Addis Ababa Science and Technology University
AfDB	African Development Bank
BAU	Business as Usual
BoFED	Bureau of Finance and Economic Development
BRT	Bus Rapid Transport
CA	City Administration
CBD	Central Business District
CRGE	Climate Resilient Green Economy
CSA	Central Statistical Authority
DMIC	Delhi-Mumbai development corridor
ECSPG	Ethiopian Cities Sustainable Prosperity Goals
EDRI	Ethiopian Development Research Institute
EiABC	The Ethiopian Institute of Architecture, Building Construction and City Development
EiTM	Ethiopian Institute of Technology at Mekelle
ESDR	Existing Situation and Diagnostic Report
EUDIF	Ethiopian Urban Development Investment Fund
EUPI	Ethiopian Urban Planning Institute
EMA	Ethiopian Mapping Agency
FDI	Foreign Direct Investment
FTA	Federal Transport Authority
FUDA	Federal Urban Development Agency
GDI	Gross Domestic Income
GDP	Gross Domestic Product
GTP	Growth and Transformation Plan
IMF	International Monetary Fund
IMT	Intermediate Means of Transport
INSA	Information Network Security Agency
IZ	Industrial Zone
LDP	Local Development Plan
LMI	Lower Middle Income
MDG	Millennium Development Goals
MIC	Middle Income Country
MIT	Middle Income Threshold
MoANR	Ministry of Agriculture and Natural Resources

MoCT	Ministry of Culture and Tourism
MoE	Ministry of Education
MoEFC	Ministry of Environment, Forests and Climate
MoFEC	Ministry of Finance and Economic Cooperation
MoH	Ministry of Health
MoMFNG	Ministry of Mines, Fuel and Natural Gas
MoT	Ministry of Transport
MoWIE	Ministry of Water, Irrigation and Electricity
MUDHo	Ministry of Urban Development and Housing
NDP	Neighbourhood Development Plan
NGO	Non-Governmental Organisation
NLUP	National Land Use Plan
NPC	National Planning Commission
NRNE	National Railway Network of Ethiopia
NUDOP	National Urban Development Operational Programme
NUDSP	National Urban Development Spatial Plan
NUDS	National Urban Development System
NUPI	National Urban Planning Institute
OECD	Organisation for Economic Co-operation and Development
PASDEP	Plan for Accelerated and Sustained Development to End Poverty
PPP	Public Private Partnership
SDPRP	Sustainable Development and Poverty Reduction Plan
SEZ	Special Economic Zone
TAC	Technical Advisory Committee
UDP	Urban Design Plan
UHDA	Urban Housing Development Authority
ULG	Urban Local Governments
ULGDP	Urban Local Government Development Project
USR	Urban Scenario Report
WUP	World Urbanisation Prospects

Glossary

Consolidated Scenario	This is the scenario of the urban system of Ethiopia for 2035 that has been taken as the National Urban Spatial Development Plan (NUDSP) Vision for the year
Economic Corridor	Economic corridors connect economic agents along a defined geography (using a major transportation route – road or rail). They provide important connections between economic nodes or hubs that are usually centred in urban landscapes.
Functional Economic Area	An area that functions as a homogenous economic area
Hukou	Hukou is a system of residency permits. A hukou is a record in the system of household registration required by law in China. The system was reformed in 2014 when the State Council removed the distinction between urban and rural residents, which is expected to help migrant workers to access services and social welfare.
National Urban Policy	A National Urban Policy is a coherent set of decisions derived through a deliberate government-led process of coordinating and rallying various actors for a common vision and goal that will promote more transformative, productive, inclusive and resilient urban development for the long term.
Urban System	A collection of urban areas linked by transport corridors and economic linkages
Urban Growth Pole	An urban area that functionally dominates a territory beyond its administrative boundaries and which drives the economy of that area.
Urban Cluster	A collection of urban areas, functionally linked, and often dominated by one larger town or city
Urbanisation Rate	The rate of urbanisation is the projected average rate of change of the size of the urban population over a given period of time

Forward

This is the final report of the National Urban Systems (NUS) Study, part of the National Urban Development Spatial Plan (NUDSP) project. This report is based on two previous reports, namely the Existing Situation and Diagnostic report (ESDR) and the Urban Scenario report (USR). The former documented in detail the current state of the urban sector in Ethiopia, and the latter presented three alternative scenarios of the spatial organisation, hierarchy and functioning of the urban sector in 2035. A consolidated scenario integrating elements of all three scenarios, with one dominant (called the 'anchor' scenario), was devised and represents the recommended vision for the urban sector in 2035 (called the National Urban Development Spatial Plan, NUDSP, Vision, 2035).

Part one of this report summarises the information, analysis and recommendations made in the ESDR and USR¹. Part Two focuses on the issue of implementation;- a road-map for the implementation of the NUDSP vision is presented, focusing on the planning, management and financing tools and mechanisms that are needed in order to be able to effectively and efficiently implement the NUDSP Vision (2035) over a 20 year period. Particular attention is given to estimating the costs involved in successfully implementing the NUDSP and how improved and new financing mechanisms will be required in order to cover these costs.

Ethiopia is rapidly urbanising. By 2035 some 40% of the population is likely to reside in urban areas. This change is necessary and desirable, as urbanisation is vital for economic growth. Indeed, global experience demonstrates that there is a clear link between urbanisation and economic development. Ethiopia needs to urbanise in order to reach Middle Income Country status by 2025, in line with the aims of GTP II. More specifically a modern industrialised economy requires service functions that generally are only created, sustained and developed in urban environments. These services 'unlock' the development of the broader economy and can facilitate inclusive development in both urban and rural areas.

But urbanisation needs to be actively planned and managed. In the absence of appropriate planning and management urban areas are often associated with serious infrastructure and service 'deficits', congestion, public health hazards, increasing homelessness and the creation of slums, urban unemployment and increased inequalities. The longer the delay in taking action to ensure that urban areas are well-planned and appropriately managed, the more costly it will be to address the problems and correct mistakes associated with inaction.

Indeed, the country faces a unique but time-bound window of opportunity to design and implement plan-led urbanisation that will accelerate growth, help achieve many of the development goals expressed in GTP I, and II, and improve the quality of life for the citizens of Ethiopia, while at the same time ensuring that the economy is managed in an environmentally sound manner. This report (and the NUDSP project) is an important contribution to achieving this aim.

¹ The reader is referred to the ESDR and USR for details. This NUDSP report is presented as a standalone document that can be read in isolation from the ESDR and USR. Hence important information presented in the ESDR and the USR is reproduced or summarised in this report.

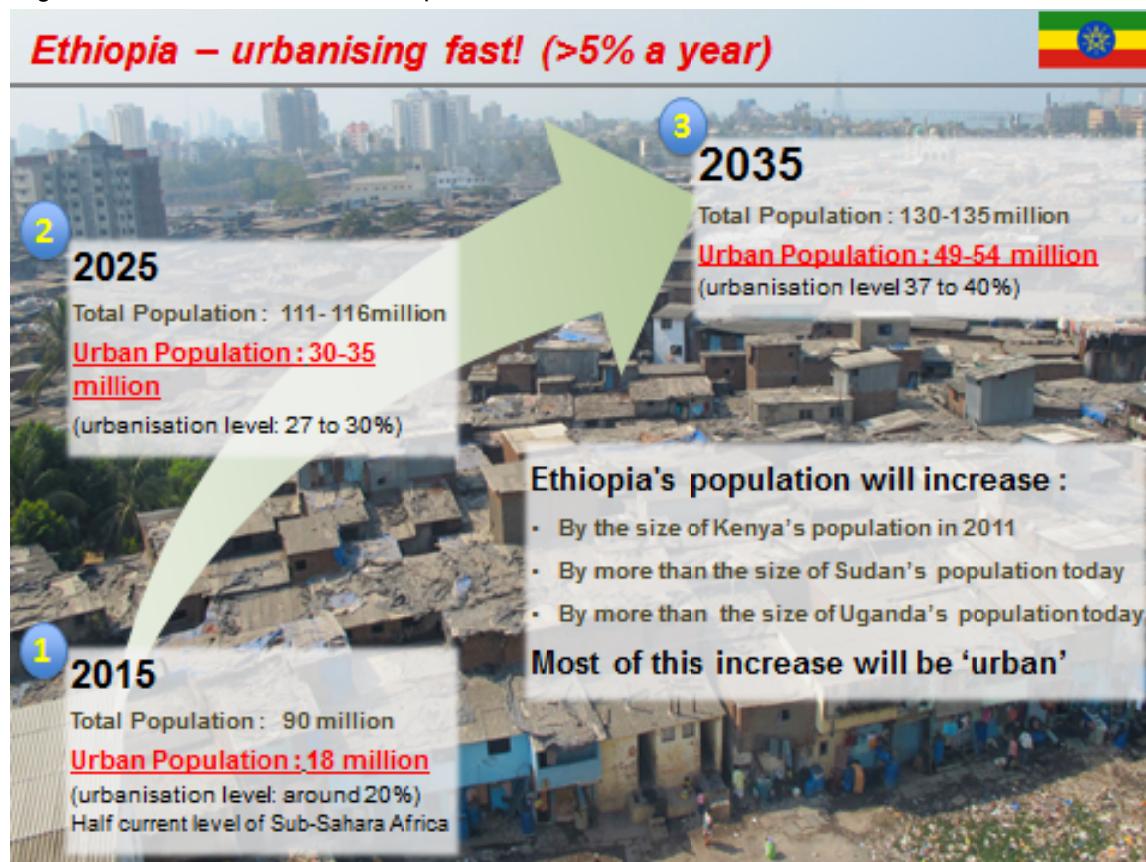
Executive Summary

Rapid and Dramatic Urbanisation

Ethiopia is undergoing rapid and dramatic urbanisation. The urban population is growing at over 5% a year, primarily driven by migration to urban areas, which is likely to accelerate as economic opportunities in cities continue to expand, and by the rise of new urban settlements. As elsewhere in emerging countries, migrants to urban areas are attracted by the prospect of securing paid employment and by expectations of improved health care, housing and education, which can be found in cities.

Of the total population of Ethiopia in 2015 (some 90 million), roughly 18 million, or 20%, are living in urban settlements. By 2025, this number is expected to reach between 30-35 million (roughly 27 to 30% of a total population; depending on whether a low or high population projection is used). By 2035 the urban population will be between 49 and 55 million (some 37% to 40% of the total population). This means that the urban population of Ethiopia will increase between 2015 and 2035 by as much as 37 million, and that the urban population expansion accounts for over 75% of the total population increase of over 50 million during this period. *Ethiopia is fast becoming an urbanised society* (see Figure 1).

Figure 1: Urbanisation in Ethiopia



Source: The Consultant

Rapid urbanisation brings with it a number of development challenges that the Government will have to address (see Figure 2). The scale of some of these challenges is daunting. Estimates indicate that due to the expected increase in the urban population, an additional 6 million urban jobs will be required between now and 2025, and over an additional 17 million between now and 2035. Furthermore, in order to accommodate the expanded urban population the existing housing stock will have to increase by around 5 million dwelling units from now to 2025, and expand by a total of 13 million units to 2035.

Figure 2: Ethiopia's main urbanisation challenges

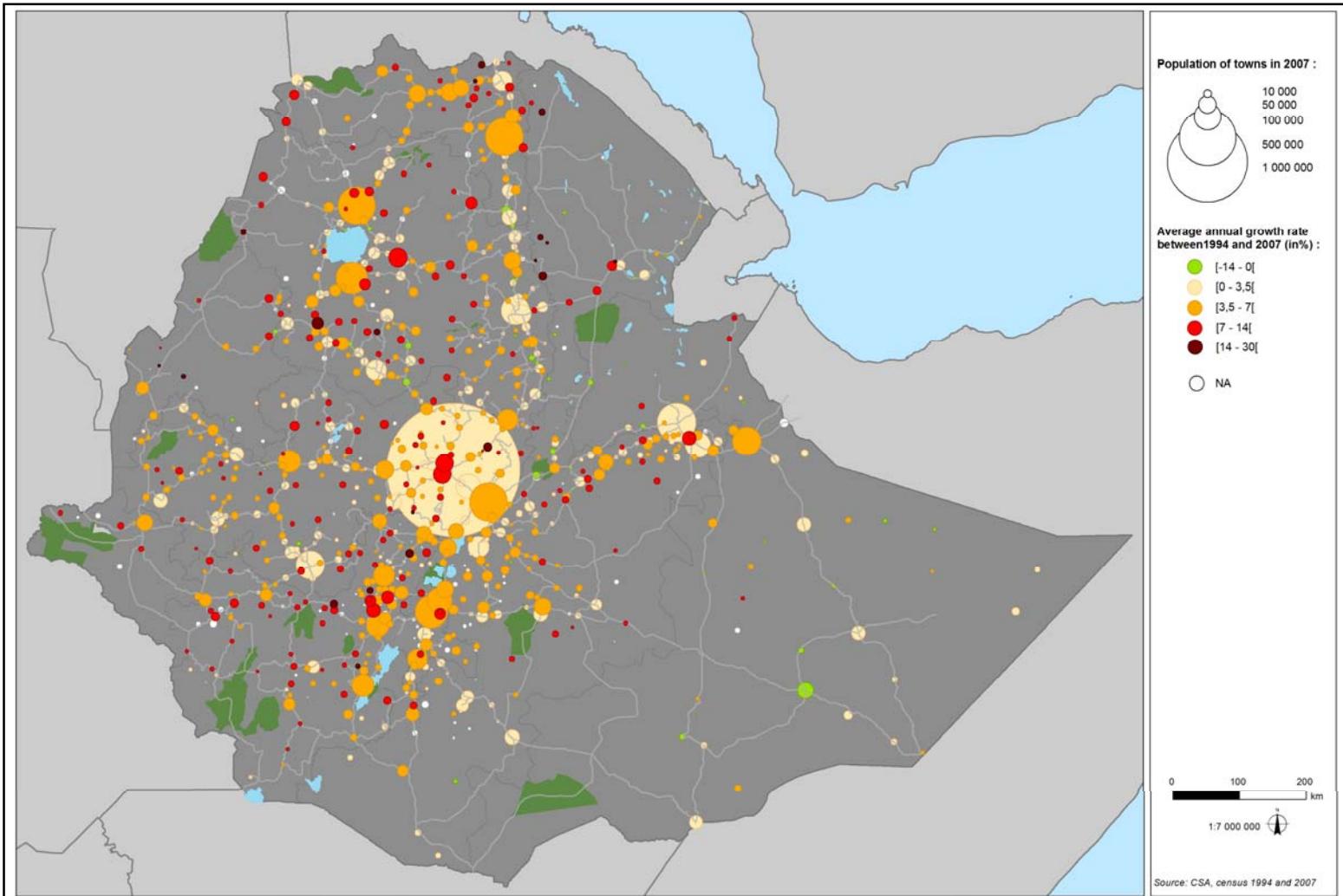
Urban Infrastructure Challenge	 Without adequate infrastructure urban areas don't work. How can we ensure provision at?
Urban Services Challenge	 Without adequate services urban areas don't work How can we ensure provision?
Urban Planning Challenge	 Without efficient planning, urban areas don't work. <i>How can we efficiently plan and manage urban areas?</i>
Land Development and Management challenge	 Without a functioning land development and management system, opportunities are lost. <i>How can urban land be more efficiently managed?</i>
Urban Economic Challenge	 Growth is needed for urban areas to prosper. We need jobs for the extra people. <i>How can we accelerate industrialisation?</i>
Urban Capacity Challenge	 An inability to manage urban growth may be 'overwhelming'. <i>Do we have the right institutions and skills to manage rapid urbanisation?</i>
Urban Financial Challenge	 Many resources will be required to provide urban infrastructure and services. <i>Do we have the financial resources?</i>
Urban Climate Change Challenge	 Climate change makes cities 'vulnerable'. <i>How do we make our cities more resilient?</i>

Source: The Consultant

Should these challenges not be addressed urbanisation is likely to be associated with the rise of significant agglomerations diseconomies including increased traffic congestion, major environmental and public health hazards, chaotic informal settlements and grossly inadequate housing. Urban unemployment, poverty, social distress, and possibly social unrest, may characterise many cities and towns if these challenges are not addressed and eventually overcome.

The situation is particularly serious in secondary and intermediate towns. These are the towns which today receive the majority of urban population growth (see Map1), and are expected to continue to do so to 2035. Moreover, these towns potentially are the economic 'motors' and rural-urban 'integrators' of their respective regions; the location of companies that drive agro-industrial and industrial value chains. As such the development of these towns is crucial for sustained and accelerated economic development and the equitable geographic spread of economic activities and social services across the country.

Map 1: Distribution and Growth Rates of Current Urban Population



Source: Consultant, based on CSA data

Urbanisation is vital to maintain the pace of economic development and improve the quality of life for both urban and rural populations. Ethiopia is a country with an agrarian economic base, as well as a dominantly rural population, and this will remain so for many years to come. Consequently, urban economic development must be geared towards improving economic performance and social well-being in rural areas as well as within towns. Urban policy must work towards enhanced integration between urban and rural areas. International experience (e.g. China, Indonesia, and Vietnam) confirms the direct and beneficial link between urban and rural development, particularly under the following circumstances:

- When the development of domestic value chains in agro-industry is promoted in a co-ordinated manner within agricultural, industrial and urban policies, and
- When sufficient industrial jobs are created in urban centres to absorb the population from areas with very high rural densities, but characterised by low productivity.

Experience from other countries indicates that these conditions can lead to increases in agricultural productivity of 2 to 5 fold, and thus can contribute to lifting many rural households out of poverty. Should urban agglomeration benefits be achieved, especially in secondary and intermediate towns, urban-based services can unlock the potential of the broader economy and ensure that urbanisation directly contributes to reaching GTP II goals and the country attaining middle-income status by the target date of 2025.

Making Urbanisation ‘work’ for Ethiopia

Making urbanisation ‘work’ for Ethiopia requires three fundamental preconditions:

- Ensuring that the growth of urban areas unlocks the economic potential of their respective hinterlands.
- Balancing growth between Addis Ababa, and secondary cities and urban clusters.
- Devising and implementing plan-led urbanisation.

Ensuring that urban growth unlocks the economic potential of the land

Work on the present project has led to the identification of 10 emerging urban economic clusters, which require strengthening (see Map 2). Each cluster is associated with emerging economic specialisations based on (a) local resources and economic potential, (b) existing or planned major investments (e.g. Renaissance dam, irrigation works, railways...etc.) and (c) existing commercial farming concessions (e.g., sugar plantations and factories...etc.)

Balancing growth between Addis Ababa, secondary cities and urban clusters:

Although the urban system remains dominated by Addis Ababa, a feature of recent years has been the growth of secondary cities. Underlying this change is the significant improvement in transport infrastructure and increasing investment in secondary cities. Furthermore, urban clusters (a grouping of large, medium-sized, and small cities and towns that are functionally interlinked) are beginning to form. The emergence of Addis Ababa and its hinterland as a dynamic metropolitan cluster is particularly evident. The city's urban network has expanded beyond its administrative borders, creating both spatial and functional links with cities such as Sebeta, Dukem, Bishoftu and Adama. At present, however, many of these emerging urban clusters are not internally integrated, both in terms of transport connections and economic ties, and are not characterised by distinctive and complementary economic specialisations and functions. Strengthening these urban clusters will be an important in order to achieve a balance between Addis Ababa and the regions.

Plan-led urbanisation:

Plan-led urbanisation is the process through which:

- Urbanisation is used to support and accelerate economic development
- Urbanisation is guided by a long term vision and associated national spatial plan
- A clear pathway for the co-ordinated development of the urban sector and the economy is mapped out, and
- Physical, economic and social infrastructure investments required to implement the vision are identified, and prioritised and sequenced in a national urban development investment plan (often, a 5 year rolling plan).

The experience of emerging countries that exhibit structural economic similarities to Ethiopia and which have achieved middle income status, supports the importance of plan-led urbanisation. China, India, Indonesia and Vietnam have significant rural populations and an agrarian base, but have realised and capitalised on the crucial economic importance of cities. They have planned urbanisation in order to achieve key national economic and social goals, including attaining MIC status.

These benchmark countries have the following in common:

- National economic growth that is facilitated and accelerated by urbanisation;
- A recognition of the increasingly important role of secondary cities which, with the strengthening of the industrial base and transport and communication links, become regional growth drivers and reduce the urban primacy of the capital;
- The realisation that a long term vision for the urban sector is required in order to steer and successfully manage the urbanisation process.
- Within this vision, the importance of shifting the focus of public investment as the urban sector and economy evolves (for instance in China, an initial emphasis was on the development of Special Economic Zones, later small and medium coastal cities and their transport linkages; and subsequently on national economic corridors and second-tier major cities of the interior).
- The understanding that good governance is *vital*, and includes effective spatial planning and urban management, and the efficient and effective provision of infrastructure and services

In summary, plan-led urbanisation means arriving at a shared policy understanding of:

- What needs to be done in terms of supporting urban-economic growth
- Where interventions need to take place;
- When these interventions need to occur;
- How much the interventions will cost, and
- How to finance the required urban investment projects.

In Ethiopia, plan-led urbanisation, embodied in the NUDSP, can and should be integrated into the GTP II and III process. The NUDSP represents the urban-spatial framework for GTP success (see Figure 3).

Map 2: Urban and Economic Clusters, 2015

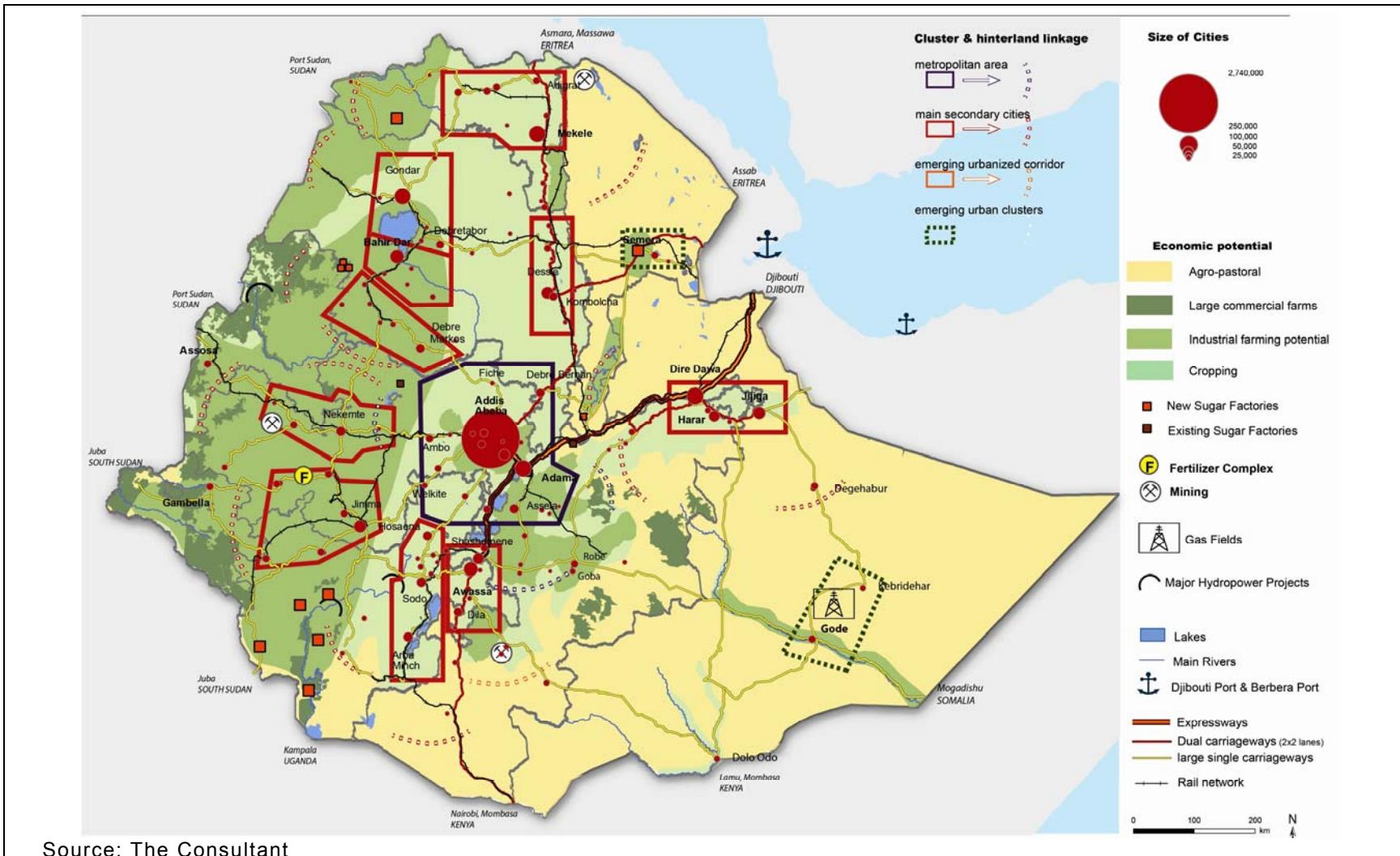
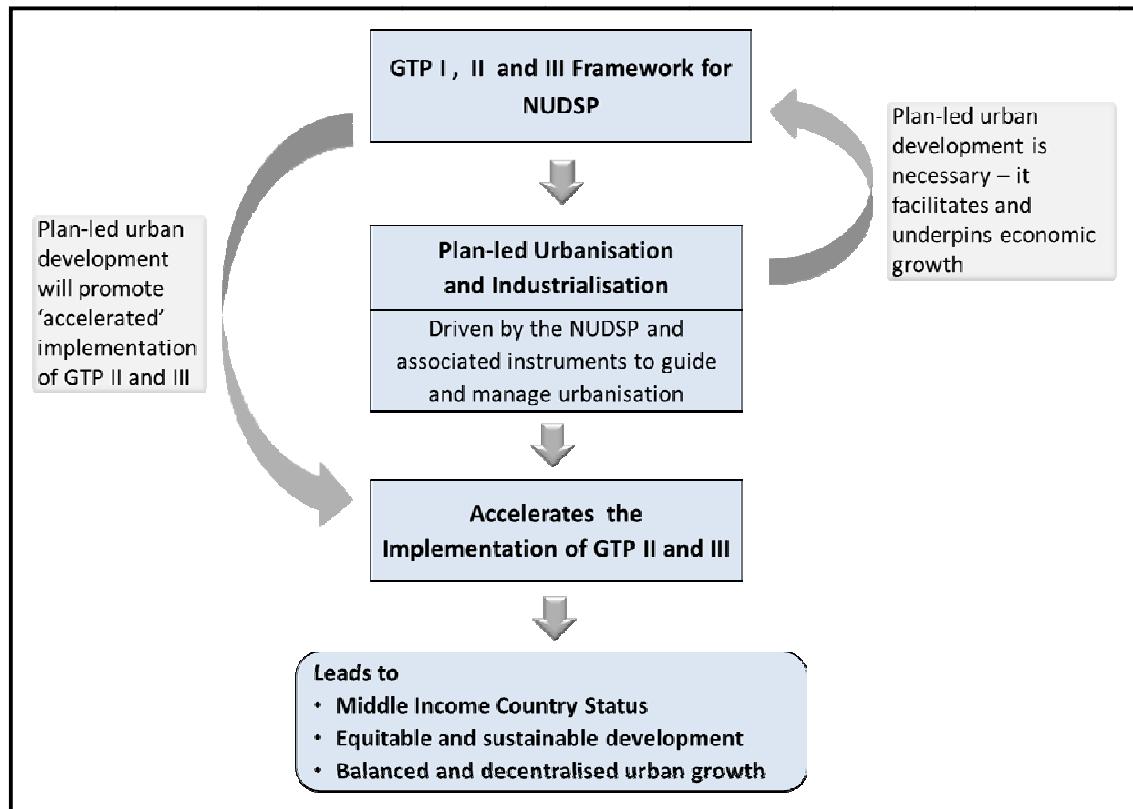


Figure 3: NUDSP as the urban framework for GTP success



Source: The Consultant

Envisioning Ethiopia's Urban Future (2035)

In order to devise the 2035 future vision for the urban sector the Consultant employed a scenario planning methodology, reported on in detail in the NUDSP Urban Scenario Report (April 2015). Three scenarios of the spatial organisation and functioning of the urban sector were devised taking into consideration the existing spatial organisation of the urban system of the country, demographic and economic trends, committed and planned projects, as well as the policy regime and targets of the Government:

- **Corridor development urban scenario:** that examines the outcomes of continuing and strengthening current trends and policies until 2035. It describes a pattern of urbanisation which will be concentrated along the major transport and communication corridors.
- **Dispersed urban scenario:** explores the path of 'small and medium-sized city development' as the primary mode of urbanisation in Ethiopia. This scenario assumes that the majority of the projected increase in population will occur in rural areas. Strengthening small and medium-sized cities so that they can accommodate the additional population growth and function as centres of employment and services, is thus crucial and the main reason for exploring this path of urbanisation.
- **Polycentric urban scenario:** describes a situation in which the urbanisation process is dominated by the growth of large secondary cities and the consolidation of urban clusters forming macro-urban regions. Under this scenario, secondary cities develop

a range of functions and services commensurate with their population levels. They are thus able to generate significant attraction effects (capital flow, investment, skills labour/in-migration) outside of the capital, while simultaneously redirecting economic development to lower ranked cities and their respective rural hinterland.

Based on consultation with Government Ministries and stakeholders (December 2014 to February 2015), a consolidated scenario was constructed, which integrates elements of the three scenarios, seeking to reach the best fit possible with the economic potential of the country, and with the Governments' policy objectives of balanced and equitable economic growth, reducing the primacy of Addis Ababa while ensuring the competitiveness of the city, and simultaneously promoting agricultural productivity, industrialisation and urbanisation.

The polycentric scenario is closest to achieving these aims. This scenario is a narrative of the future of the urban sector of Ethiopia that is most likely to be associated with equitable and balanced urban and regional development, and an urban hierarchy and functioning that is required for economic growth as envisaged through the GTP process. It provides services for rural areas and avoids excessive congestion along the main transportation and development corridors, and offers a platform on which to build balanced regional development. ***As such the polycentric scenario was used as the anchor of a consolidated scenario which is the NUDSP vision for 2035*** (see maps 3 and 4)

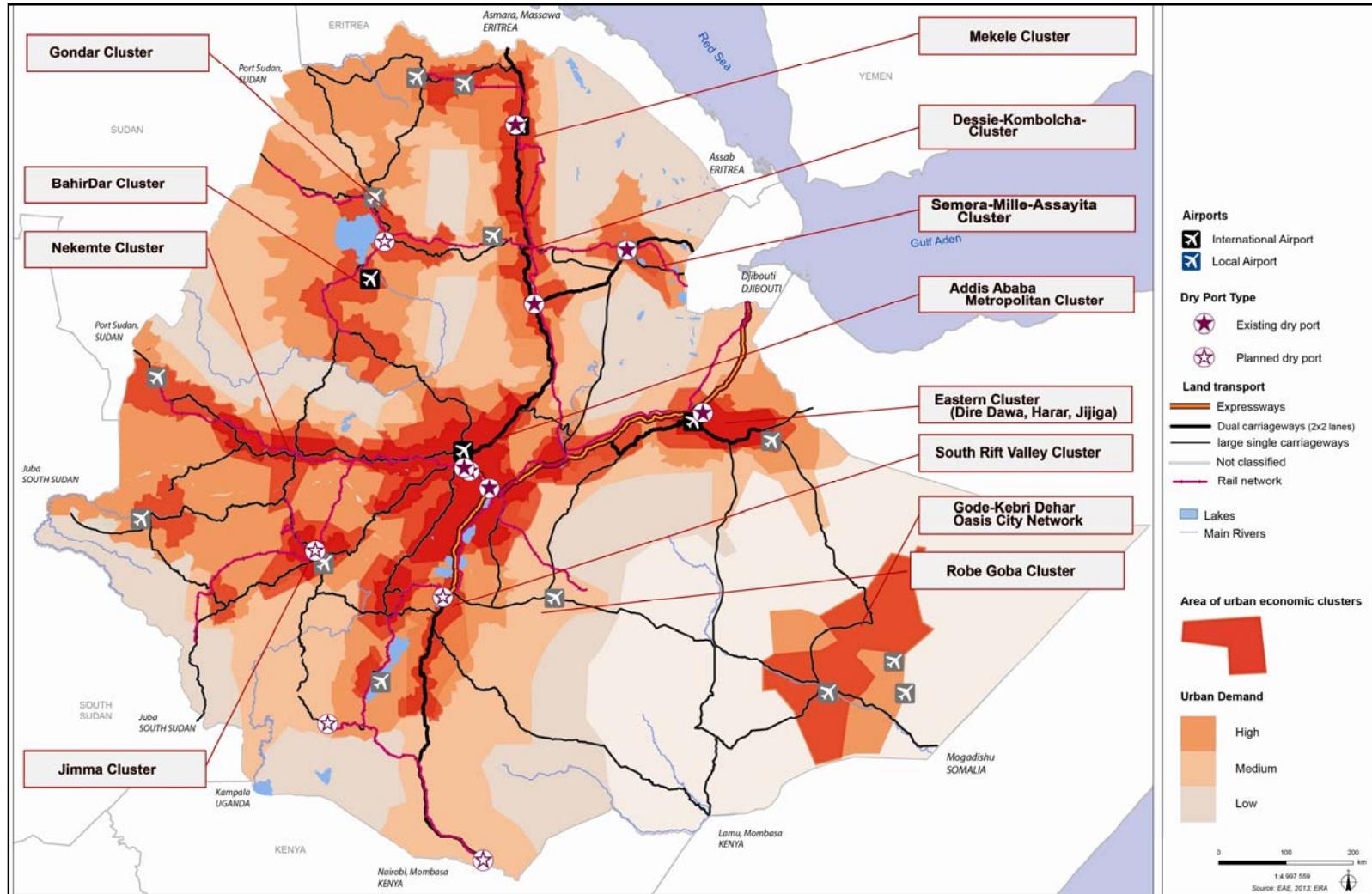
The NUDSP 2035 Vision

The NUDSP 2035 Vision envisages a high level of urbanisation in Ethiopia (40%). Population growth will be concentrated in a selected number of large cities which will be closely linked to each other, as well as to lower-ranking urban centres and rural settlements in their respective hinterlands. Many large cities will be at the apex of an 'urban cluster', which will consist of a group of variously sized cities and towns that are functionally interlinked.

A few cities of a million-plus inhabitants (in addition to Addis Ababa) will emerge as hubs of Ethiopia's most dynamic urban clusters. Large secondary cities and urban clusters will thus become more relevant in the national (urban and economic) landscape, acting as a counterbalance to the Addis Ababa Metropolitan region. The clustering of cities will be associated with strong agglomeration effects which are expected to underpin higher productivity growth and the improved competitiveness of the productive sector, so allowing Ethiopia to accelerate the process of reaching MIC status. Urbanisation as envisaged in the NUDSP is thus expected to become a major driver of Ethiopia's economic growth and transformation and the basis of more equitable and balanced development across the country.

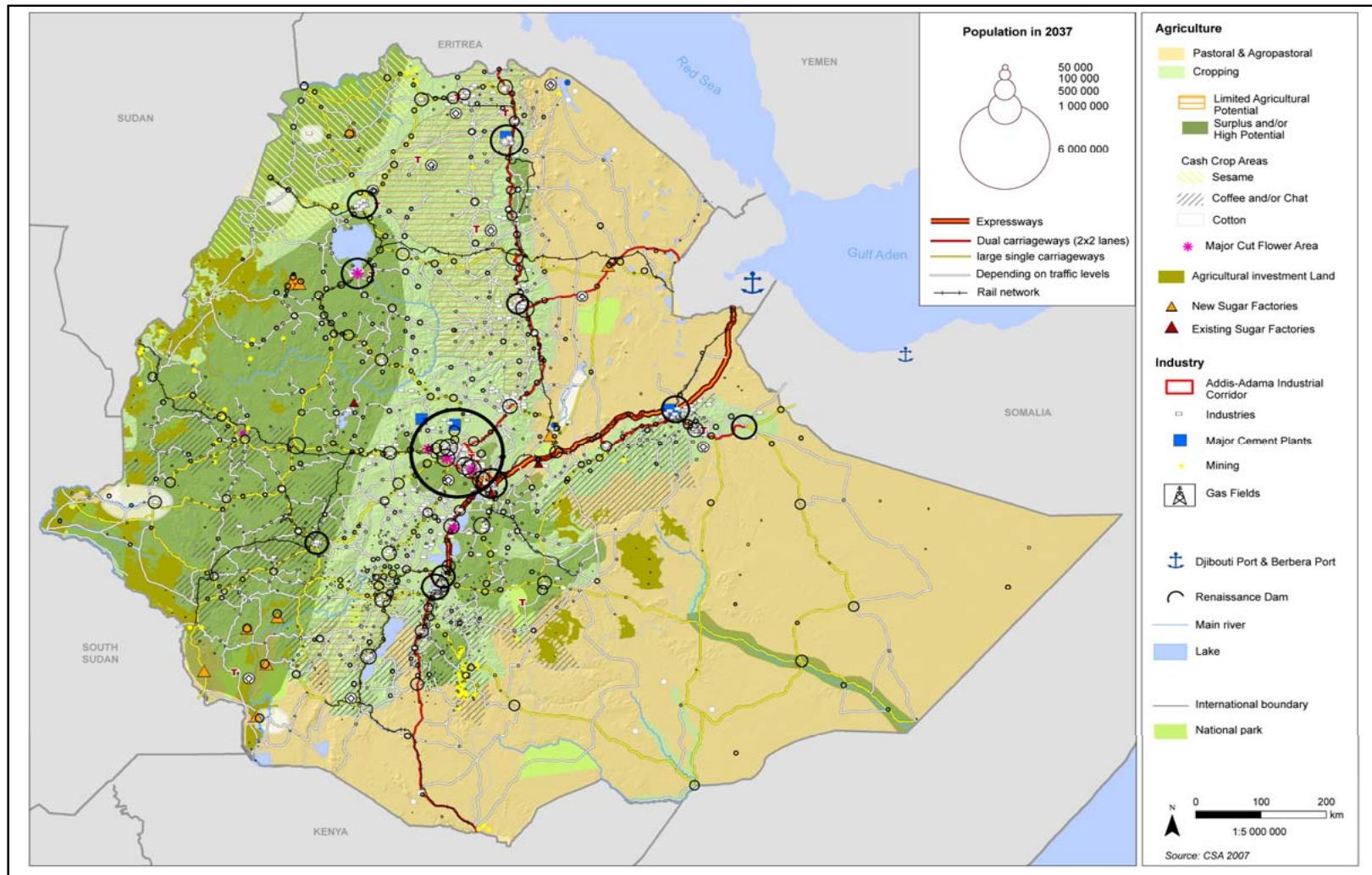
More specifically the NUDSP 2035 spatial framework highlights the importance of maintaining major economic corridors in the country and envisages significantly improved transport connectivity between secondary cities and their rural hinterlands, as well as the transformation of existing large rural settlements into towns and the formation of new urban settlements associated with large or 'mega' projects in the industrial, agriculture, mining and energy generation sectors. While development is to a large extent driven by secondary cities a fundamental principle of the NUDSP 2035 spatial framework is to ensure that development occurs in their rural hinterlands, with an emphasis on the balanced development of the urban hierarchy within each urban cluster.

Map 3: The Consolidated Scenario for 2035: urban clusters and development corridors



Source: the Consultants

Map 4: The Distribution of Urban Settlements within the Consolidated Scenario (2035)



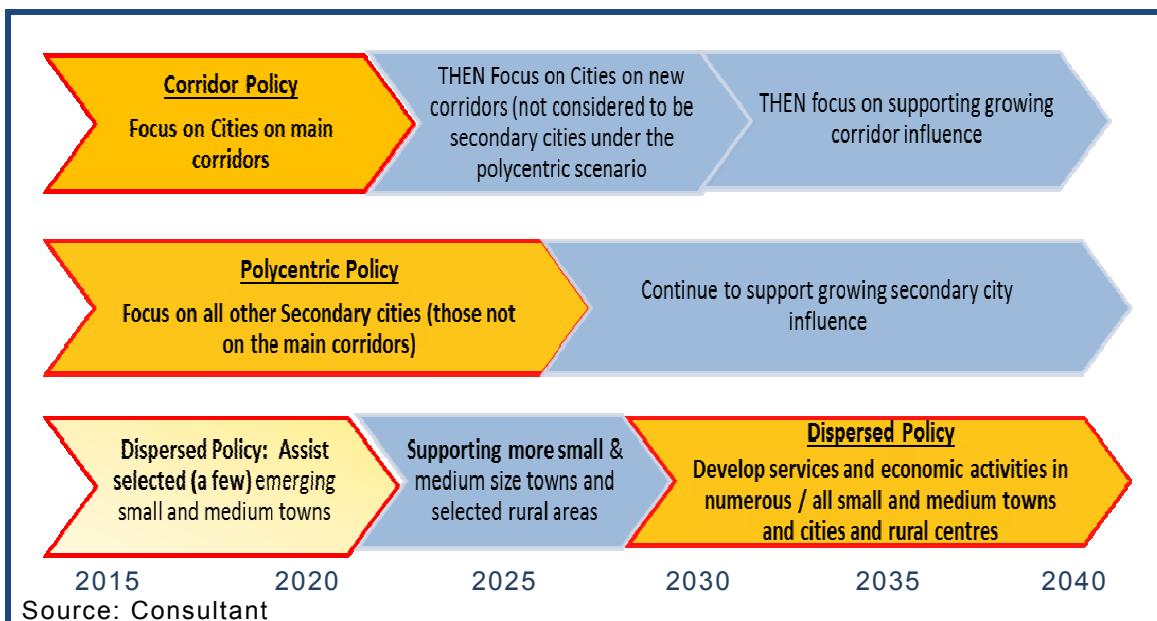
Source: The Consultant

The resulting 'shape' of urbanisation is represented in maps 3 and 4. It is based on balanced, integrated urban and rural development and increasing economic specialisation and diversification of 10 urban clusters. Out of 50 to 54 million urban population in 2035 the primacy of Addis Ababa is reduced. Both in absolute numbers and in proportion of the urban population, the tiers of small and intermediate urban centres are significantly increased, and the larger secondary towns are also strengthened, as more towns enter the category. Second and third tier towns are also better spread towards the Country's periphery and the agricultural hinterlands.

Implementing the NUDSP 2035 Vision

It is important to map out a pathway from today to the target vision for the urban sector. The NUDSP 2035 vision will not happen over-night; the urban sector will evolve *into* the 2035 vision. There will be a pathway from today to 2035. Along this pathways specific aspects of each of the three urban scenarios will be combined, but with the polycentric scenario acting as the anchor (or most important scenario). The consolidated scenario, which is the proposed NUDSP Vision, is the culmination of the combination of the three scenario over a 20 year period from 2015 to 2035, as illustrated in Figure 5.

Figure 4: The Pathway to the Consolidated Scenario the NUDSP Vision



The Implementation Road-map

Two main variants of the pathway to NUDSP implementation were discussed with MUDHo:

- 1. The Economic Growth Option:** The first option is driven by economic growth and efficiency concerns. This option involves concentrating development efforts during the early years of the implementation road-map on four to five of the most important urban cluster, and the related transport connectors and development corridors. This option is most likely to galvanize and accelerate urban economic growth, as demonstrated by international experience. Growth, however, during the initial years

of the implementation road-map is likely to be concentrated geographically and, perhaps, also socially.

2. **The Equity and Inclusive Development Option:** The second option is driven by equity concerns and the desire to establish a balanced regional and urban economy as quickly as possible. This option involves spreading development efforts across the majority of the urban clusters from the outset (see Figure 5). This option is most likely to be associated with equitable and inclusive development, but may lead to a reduced economic growth rates during the initial years of the implementation of the NUDSP Vision. It is also associated with higher costs from the outset of the NUDSP implementation

In consultation with the MUDHo it was decided that Option Two (Equity and Inclusive Development Option) should guide the implementation and achievement of the NUDSP Vision, as the Government has made a commitment to provide assistance to the urban sector *across the country*(see Figure 5)

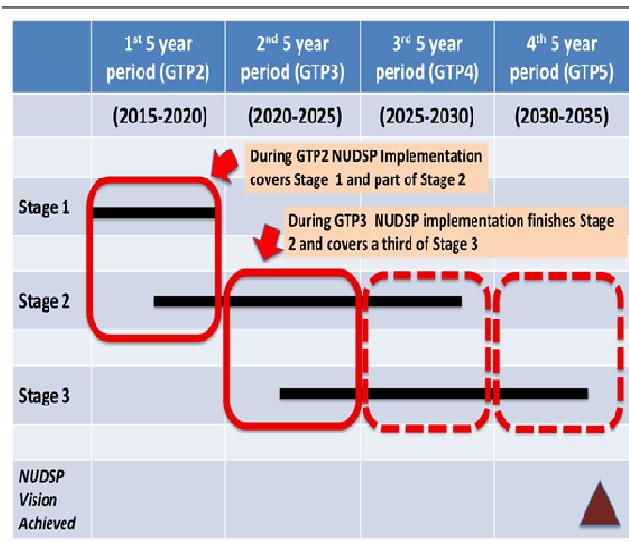
Figure 5 Implementation Option 2: 'Equity and Inclusive Development'

The Three Stages of the 'Equity and Inclusive Development' Pathway to the NUDSP Vision	Time period (and years for completion)
First: Accelerate the development of the Metropolitan capital region cluster and <u>all 8 secondary clusters</u> by providing core infrastructure and services and improving relevant transportation connectors and development corridors (an early stage but focused polycentric scenario).	Years 1-5 (5 years: 2015-2020)
Second: Accelerate the development of <u>the 4remaining urban clusters</u> by providing core infrastructure and services and improving relevant transport connectors and development corridors. PLUS Strengthen support to all the other clusters	Years 3-12 (9 years 2017-2029)
Third: Focus on the development of the hinterlands of all the clusters and networks, including improvements to small towns and rural centres and an increasingly dense network of transport connectors within and between the clusters and city networks. PLUS focus on the strengthening all the urban clusters/city networks and their inter-urban transport connectors	Years 9-19 (11 years: 2023-2034)
NUDSP Vision achieved (the outcome of undertaking and completing stages 1 to 3 as described above)	Year 20 (2035)

During each time period of option Two, the selected urban areas which are to be promoted, and the transport connectors and development corridors which are be built or upgraded, are identified. The urban areas selected for priority attention are to be promoted by providing them with *growth-enhancing urban infrastructure and services*, and by designing and implementing planning and policy initiatives that encourage their expansion and development over and above that which could be expected had NUDSP related assistance not been available. Furthermore, during each stage of the pathway to the NUDSP Vision, but particularly during the first stage, institutional strengthening and capacity building measures for local, regional and central governments are likely to be required related to the ability to design, construct, finance and subsequently manage infrastructure and service

interventions in each urban area, and prepare and implement complementary urban and regional development and transportation strategies, plans and policies

The implementation road-map is presented in 5 year time periods that correspond to the GTP 5 year investment programming process (2015-2020: GTP II; and 2020-2025; GTP III). It is necessary to present the road-map in this manner as the stages of the pathway overlap and local, regional and central government administration will require implementation guidance by year and by GTP time period. It should be stressed that interventions comprising the implementation road-map are described in outline only. More detailed work is required in the future to clearly define and dimension 'bankable' urban infrastructure investments by each of the time periods



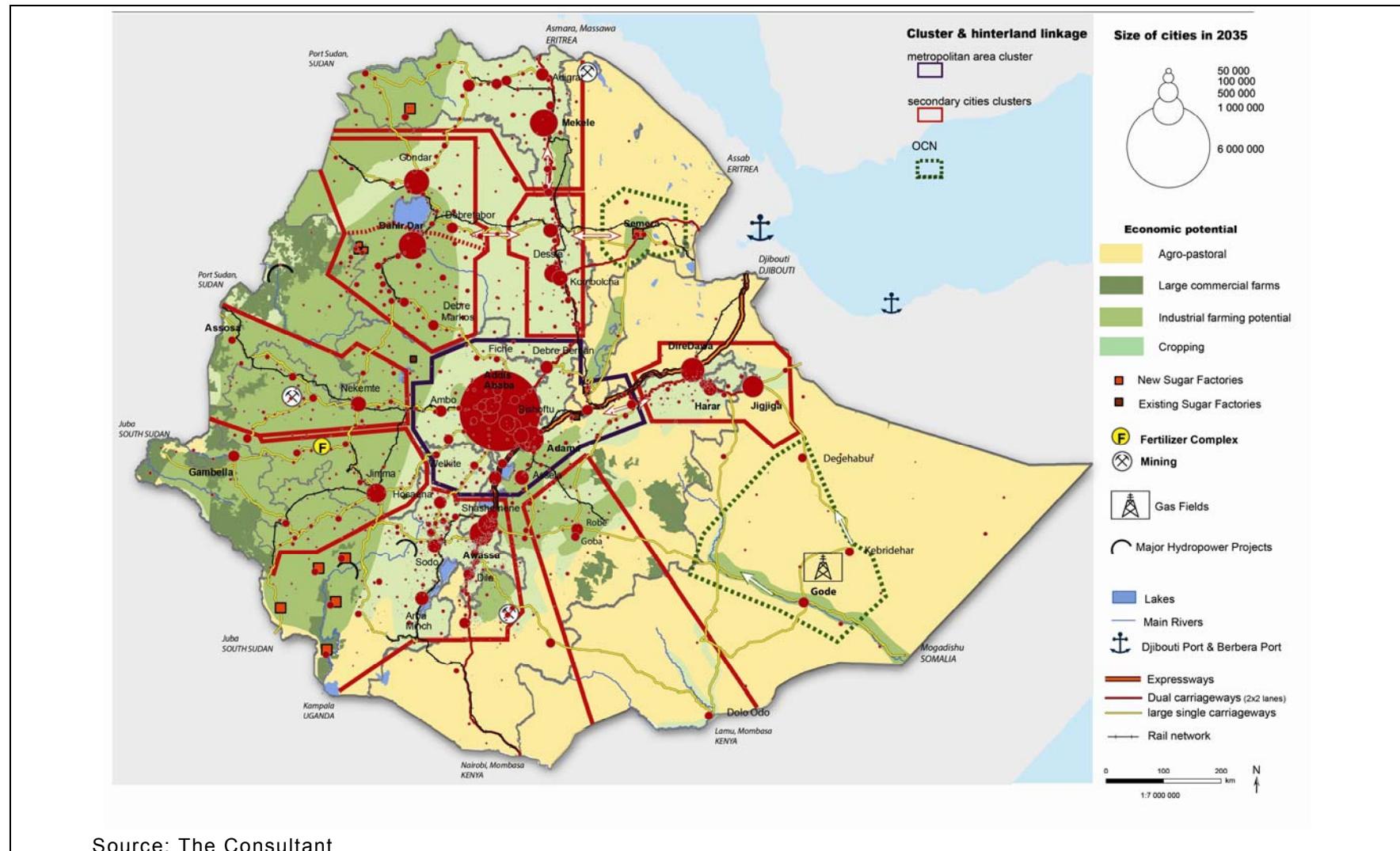
Urban Clusters and the NUDSP 2035 Vision

The result of implementing of the NUDSP Vision by 2035 will be an urban system characterised by and driven by 10 main urban clusters (see Map 5). These clusters will drive agro-industrial development in their hinterlands, and, in turn, increased agricultural and agro-industrial productivity will contribute to the economic diversification and specialisation in urban areas. The growth of secondary cities and towns, the heart of the urban clusters, will sustain the process of mutually re-inforcing development between the urban areas and their hinterlands in the 10 clusters.

Apart from their important role in supporting agro-industrial development in their hinterlands, the main secondary cities and towns will grow and diversify their industrial and commercial services base. Sustained specialisation and diversification is important for later stages of urbanisation (after 2025) when the policy emphasis gradually shifts from achieving LMI to escaping the Middle Income 'trap'. A diversified industrial and services base will be essential in the longer term to cater both for a growing internal market (for a country of over 130 million in 2035 – Africa's second most populous after Nigeria), and for increasing added value in export industries.

Achieving the NUDSP vision in 2035 involves promoting a polycentric pattern of 10 major urban clusters, and ensuring that these clusters drive development in their respective rural hinterlands (See Table 1 and Figure 5 which describe the current and future functions of each cluster). However, the clusters' area of influence will not cover the entirety of the country. In the absence of pro-active, pro-poor development, the most isolated rural areas would remain pockets of rural poverty and subsistence level agriculture. Economic growth generated in the 10 main clusters needs to buttress areas which would otherwise be left in the 'shadow' of economic development.

Map 5: Achieving the NUDSP vision: urban clusters and hinterland development (2035)



Source: The Consultant

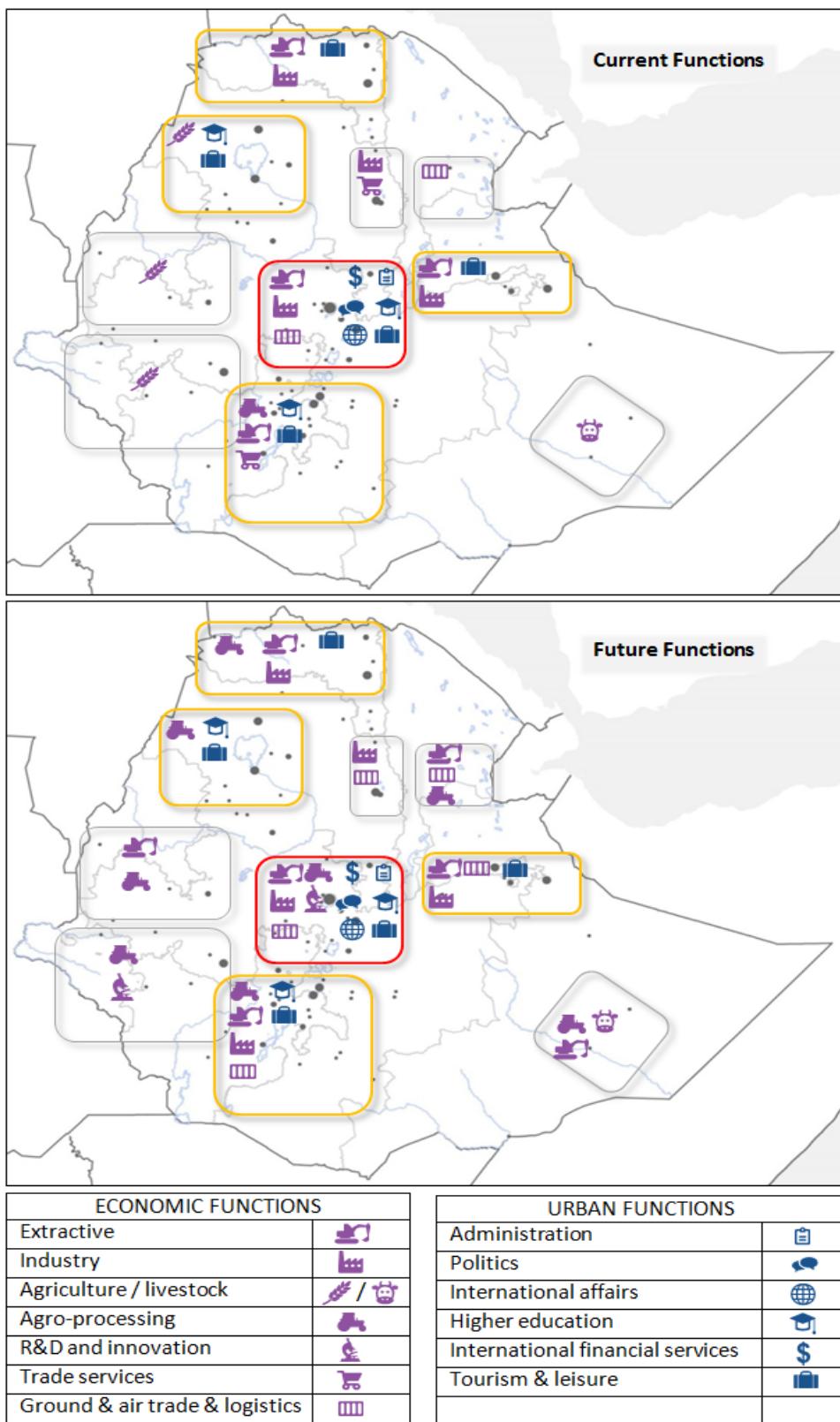
Table 1: Current and expected functions of the key urban clusters

Hierarchy of urban clusters	Cluster	Current Dominant Urban & Economic functions	Future Dominant Urban & Economic functions
Metropolitan cluster (contains all urban and economic functions)	Addis Ababa MC	Financial, business and professions services International Affairs Industry & extractive activities Trade & logistics Tourism & leisure Education & Health Administrative & political Health care	Financial, business and professional services International Affairs Industry & extractive activities Trade & logistics Tourism & leisure Education & Health R&D and innovation Administrative & political Health care
	Bahir Dar UC	Agriculture Tourism & leisure Education Services	Agro-processing Tourism & leisure Education International conferences R&D centre – textiles and agriculture Services
	Gondar-Metema	Agriculture Tourism & leisure Education Services	Trade & logistics Tourism & leisure International conferences Industry & extractive activities Agro-processing
	Eastern UC (Dire Dawa – Harar – Jigjiga)	Industry & extractive Activities Agriculture Tourism & leisure	Industry & extractive activities Agro-processing Trade & logistics Tourism & leisure International conferences
	South Rift Valley UC	Agro-processing Extractive activities Trade Tourism & leisure Education	Agro-processing R&D centre -agriculture Industry & extractive activities Trade & logistics Tourism & leisure Education
	Dessie-Kombolcha - Weldiya UC	Services Industry	Services Industry Trade & Logistics
	Jima UC	Agriculture Education	Agro-processing R&D centre for agriculture Education
	Mekele UC	Industry & extractive activities Tourism & leisure Services	Industry & extractive activities Tourism & leisure Services
	Nekemte UC	Agriculture	Agro-processing Some mining potential
	Semera -Assaita OC	Administrative Trade & Logistics	Trade & Logistics Extractive activities Agro-processing
	Gode-Kebri Dehar OC	Agriculture Livestock	Extractive activities Agro-processing Livestock
	Robe-GobaUC	Agriculture Livestock Tourism & leisure	Agro-processing Livestock Tourism & leisure

MC = metropolitan cluster UC = urban cluster OC = oasis city

Source: Consultant's assessment

Figure 6: Expected changes in the functions of key urban clusters

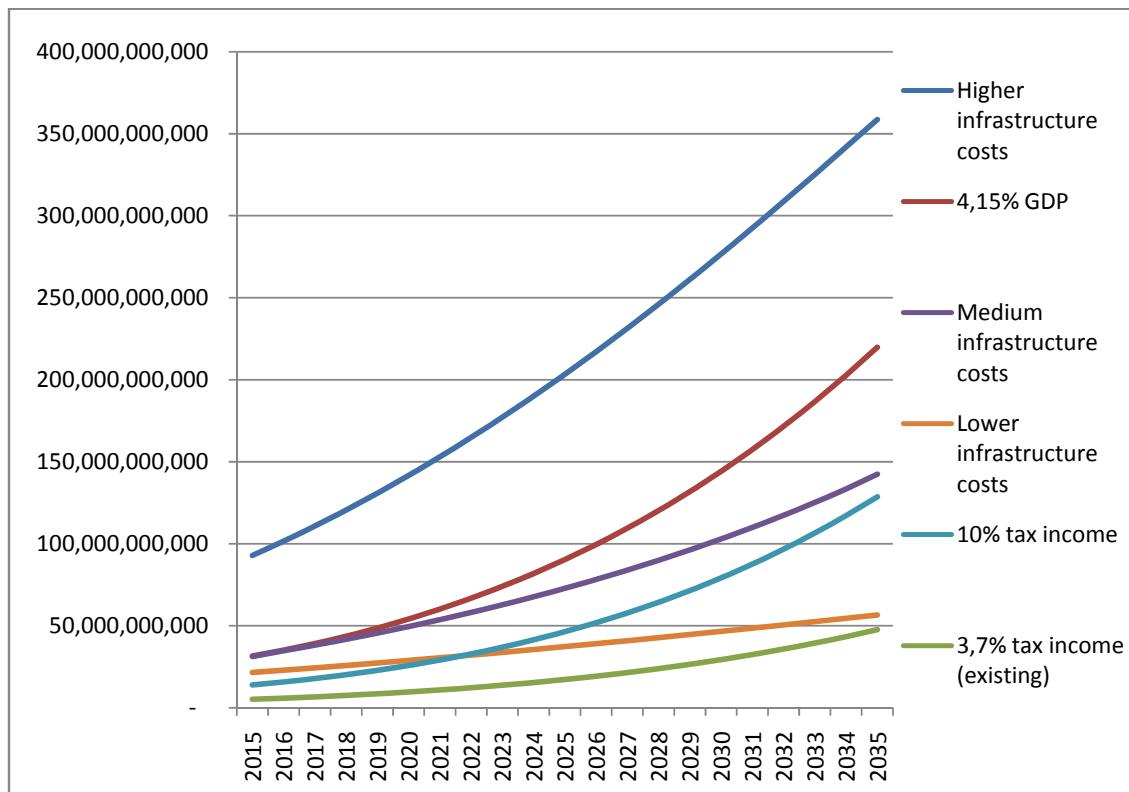


Source: Consultant's assessment

Financing the implementation of the NUDSP 2035 Vision

While it is clear that Ethiopia needs a robust public sector investment framework to implement the vision, it is not evident that the required investment is affordable, under present standards related to the provision of urban infrastructure and services, and current financing mechanisms. Today 3.7% of the National Budget is dedicated to the provision and maintenance of urban utilities. The corresponding figure related to the NUDSP vision of 2035 would be 22% of the National budget or 4.15% of the GDP. This level of public investment in urban areas may not be feasible or sustainable without significant adaptation.

Figure 7: Urbanisation cost (EBR) variation with changes in infrastructure standards



Source: the Consultant

In order to be able to finance the implementation of the NUDSP Vision a range of new financial modalities should be explored including:

- More efficient urban land-lease markets
- Tax generation related to value capture on development land in cities
- Moving over time to full cost recovery for urban services
- Ensuring full cost recovery on all urban renewal projects
- Benefit capture related to large economic development projects (industrial zones, special economic zones, business districts...).
- Mobilising urban dwellers through participation in the provision of services
- Mobilising the private sector to finance and operate large urban projects in areas of high land value, in partnership with the local public administration.
- Mobilising the private sector to finance and operate urban infrastructure and services

The Implementation Road-map Institutional Strengthening Measures

Action	Definition /Content	First 5 year period (GTP2)	Second 5 year time period (GTP3)	Later time period
1. Ensure National Spatial Policy Coordination	MUDHC sets up a coordinating body for national urban spatial planning (inter-ministerial and consultative)	<input checked="" type="checkbox"/>		
2. Establish EUDIF	EUDIF will be a dedicated fund to be used to finance the provision of urban infrastructure and services. The EUDIF will fund infrastructure and services that accelerate the development of selected urban clusters in line with the NUDSP implementation road-map.	<input checked="" type="checkbox"/>		
3. Establish NUDOP	The NUDOP is proposed in order to coordinate investment related to the implementation of the NUDSP, and specifically, to allocate monies associated with the EUDIF.	<input checked="" type="checkbox"/>		
4. Establish the EUPI	An institution is required to oversee the implementation of the NUDSP, and to capture and disseminate lessons learnt as implementation progress from today until the NUDSP vision is achieved in 2035.	<input checked="" type="checkbox"/>		
5. Establish Metropolitan Transport Authorities	As urban centres expand beyond their historical administrative boundaries, and public transport modes diversify (bus, LRT, regional rail services, etc) and become more complex, it may be necessary to establish a single purpose authority to plan, develop and operate public transport networks at the metropolitan-wide scale, i.e. MTAs.		<input checked="" type="checkbox"/>	
6. Establish Land Development Agency	At present urban land markets are inefficient and need improving.		<input checked="" type="checkbox"/>	
7. Establish Urban Development Agencies	UDAs have been established in a number of countries and should to galvanise PPP in the service of urban development.		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
8. Establish a Federal Urban Development Agency	A Federal Urban Development Agency (FUDA), could oversee the NUDSP implementation (and be responsible for the NUDOP and EUDIF).		<input checked="" type="checkbox"/>	
9. Urban Cluster Development Councils	UDAs for Urban clusters.		<input checked="" type="checkbox"/>	

The Implementation Road-map Spatial Planning Measures

Action	Definition / Content	First 5 year period	Second Five year period	Later Time Period
1. Prepare National Transport Plan	A National Transport Policy is needed in order to Integrate transport sector policies and planning with wider economic, social, environmental and spatial development policies.	<input checked="" type="checkbox"/>		
2. Prepare Regional Transport Plans	A RTA is a comprehensive statement strategies and projects aimed at addressing the regional transportation needs.	<input checked="" type="checkbox"/>		
3. Prepare Regional Spatial Development Plans	Defines the spatial framework for economic development and urbanization: growth poles, regional development corridors, SEZ and FTZ, new towns and/or satellite towns,	<input checked="" type="checkbox"/>		
4. Prepare Urban Cluster SDPs	Setting an operational level spatial development plan, mostly for cross-borders clusters and hinterlands, where regional, urban and local (woredas; zones;) authorities share a vision and build iterative and time-bound programmes and schemes for a coordinated territorial development inside federal schemes and programmes;	<input checked="" type="checkbox"/>		
5. Draft and approve Revised City Structure Plans & Strategic Plans,	City Structure Plans define both urban land use and major capital expenditures,	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
6. Formulate Comprehensive Mobility Plans	CMPs set out a long-term vision of desirable mobility patterns (both passenger and goods.		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

The Implementation Road-map for HR &Capacity Implementation

Action	Definition / Content	First 5 year period	Second Five year period	Later Time Period
1. Setup a federal knowledge and experience platform for urban development	<ul style="list-style-type: none"> Set up a “knowledge and experience sharing platform” FUDA and UDA affiliated 		<input checked="" type="checkbox"/>	
2. Reinforce the urban management curricula in each regional states' education offer	<ul style="list-style-type: none"> Start from a shared curricula adapted to regional state needs as well as federal urbanisation policy and guidelines Develop specialized career paths e.g., (i) spatial planning; (ii) land management; (iii) GIS; (iv) urban financial management; (v) utilities management; (vi) housing; (vii) urban projects audit . 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3. Strengthen and specialize municipal staff in urban management roles	<ul style="list-style-type: none"> Allow a give and take between regional and municipal authorities as regards municipal staffing needs and salary while reinforcing the audit system for municipal expenditure, and Developing municipal employee career plans which retain technical staff and skills continuity 	<input checked="" type="checkbox"/>		
4. Training municipal staff in private sector support	<ul style="list-style-type: none"> Training ULG staff in developing proper incentives packages for firms, in liaison with state regional chambers of commerce and with relevant federal ministries. Emphasis on practical applications in real projects for special economic zones, free trade zones, industrial and agro-industrial areas 	<input checked="" type="checkbox"/>		
5. Integrate an urban management oriented curricula in the educational offer of schools for public administration	<ul style="list-style-type: none"> With a shared curricula adapted to state and federal urbanisation needs, develop specialized tracks (career paths): (i) spatial planning; (ii) land management; (iii) GIS; (iv) urban financial management; (v) utilities management; (vi) urban projects audit . Continuous action, under the patronage of the EUPI 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

The implementation Road- map for Financial Management Measures

Action	Definition / Content	First 5 year period	Second Five year period	Later Time Period
1. More efficient urban land-lease markets	Simplifying lease conditions as well as regulations for auctions and increasing cost recovery in urban land allocation	<input checked="" type="checkbox"/>		
2. Increased tax generation related to value capture on development land in cities	Setup and development of GIS based urban land cadaster, at first regionally and for principal cities, and gradually for the smaller urban settlements – linked with increased municipal control over (i) rate setting for municipal rents; (ii) lease income from ULG administered land and (iii) licences, fees and other municipal charges	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
3. Moving over time to full cost recovery for urban services	Gradually pricing services closer to cost recovery: firstly maintenance and then construction costs; though adapted to affordability by households – linked with Increased municipal control over rate setting of service charges		<input checked="" type="checkbox"/>	
4. Ensuring full cost recovery on all urban renewal projects	Ensuring that cross subsidy solutions are experimented, adapted and disseminated, particularly for full cost recovery in urban renewal areas (first period) and, gradually, in urban expansion areas (second period)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
5. Benefit capture related to large economic development projects (industrial zones, special economic zones, business districts...).	Setting up 'one stop shops' for development approval and incentives packages for selected areas and urban regions (SEZ, free trade etc.) Streamlining legislation governing SEZs as well as Training ULG staff in developing proper incentives packages for firms, in liaison with state regional chambers of commerce and with relevant federal ministries.	<input checked="" type="checkbox"/>		
6. Mobilising urban dwellers through participation in the provision of services	Adapting participatory norms and developing practices, commensurate to local budgets, for all tiers of the urban hierarchy, within a flexible yet ordered federal framework. Including workforce participation, especially in smaller settlements and/or urban expansion areas		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

7. Mobilise the private sector to finance and operate large urban projects in areas of high land value, in partnership with the local public administration	<p>Developing and adapting legislation governing PPPs as well as fostering the requisite skill sets within local public administrations – through real projects and specialized career path training (see 9)</p>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
8. Increase private sector mobilisation to finance and operate urban infrastructure and services	<ul style="list-style-type: none"> Identify flagship investment projects with high impact Target and leverage large scale grants, donor funding, specific PPP configurations including contribution from EUDIF etc. Work out and detail positive impacts on local economy value chains Establish cross jurisdictional and interregional working groups and knowledge forum, under patronage of the EUPI 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

The NUDSP is a strategic planning document

The NUDSP is a national strategic spatial framework for the urban sector. Once approved, it serves as guide as to how to structure and manage urban growth across the country.

The NUDSP is expected to serve as an inspiration when devising regional plans, and a guide for organising urban development across Ethiopia, as adapted to specific local conditions.

The policy and investment emphasis will evolve from today to 2035 (as various aspects of the three scenarios are implemented and the consolidated scenario and vision for the urban sector is reached). As such the NUDSP spatial framework is applied in 5 and 10 year phases. Each phase will be characterised by a public sector urban investment framework which highlights the policy, programme and project interventions and investments that are needed to ensure that the scenarios and the transitioning process is effectively implemented for the 5 year time-period in question.

Implementing the NUDSP requires a national coordination framework for spatial planning and programming, and thus inter-cabinet consultation and co-ordination with relevant national policies. To optimise the operational impact of the NUDSP, it should be shared, discussed and negotiated at regional and lower administrative levels, as well as debated by key stakeholders representing the urban clusters. This implies setting up new management methods and systems characterised by horizontal (amongst cities) and vertically (between the various levels of government) collaboration, and which involve public authorities, private stakeholders and civil society.

Finally, as urban clusters will define and drive the implementation of the NUDSP Vision, comprehensive 'urban cluster plans' are required which are horizontally co-ordinated (ensuring that the development of the clusters is complementary), with specific planning documents highlighting the policies, programmes and projects needed to develop each cluster and its hinterland .

Conclusion: Act today to build a better tomorrow

Urbanisation is a vital component of economic growth: it is indispensable to the success of the GTP process, and for Ethiopia to attain Middle Income Status by the target date of 2025. But the benefits of urbanisation can only be realised if the urbanisation process is carefully planned and managed well. If plan-led urbanisation is not adopted a concentrated and unbalanced urban system can be expected, one increasingly characterised by congestion, over-crowded informal settlements, unemployment, and social distress and tensions. Moreover, the longer we delay implementing plan-led urbanisation, the more costly it will become to overcome the problems associated with inadequate planning and management.

This means implementing the NUDSP: Plan led urbanisation requires a vision (2035) and a clear understanding as to how the vision can be reached. The NUDSP provides the vision, the pathway and the new tools needed to manage and plan urbanisation. Implementing the vision does, however, may encounter a number of difficulties which must be gradually overcome. Chief amongst these are financing, coordination mechanisms, urban planning and management tools, and capacity building (see box below).

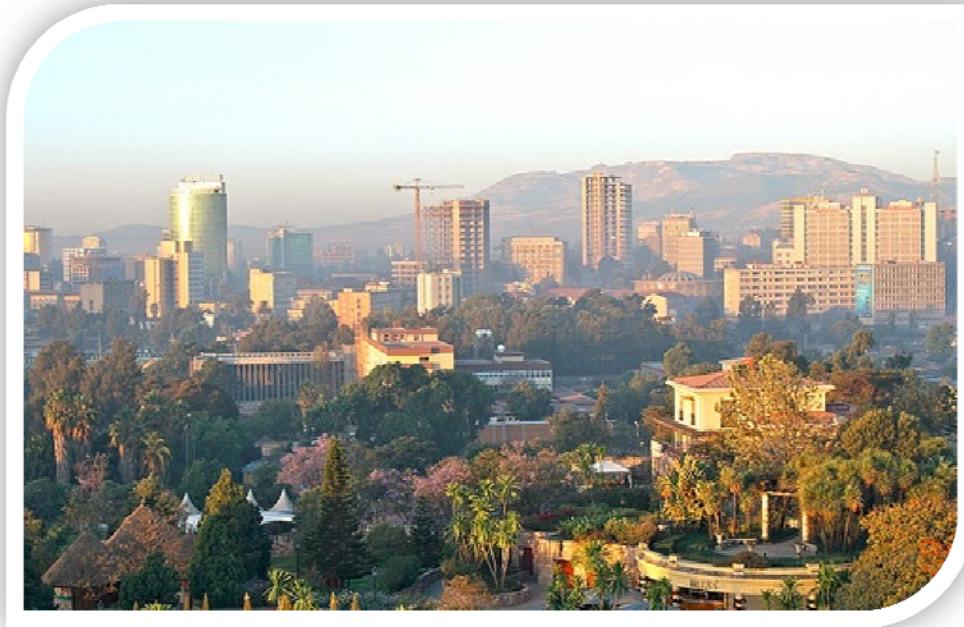
The difficulties of implementing the NUDSP Vision: It may be difficult to finance the implementation of the NUDSP Vision, as the costs of servicing urban expansion areas as well as funding urban renewal are high. A variety of non-traditional ways of mobilising financing need to be investigated including better leverage of land value, increased use of PPP arrangements, and public sector reform.

Furthermore, new coordination mechanisms are required to programme urban public investment and render it more efficient, both vertically (national to local), and horizontally (within regions, urban clusters, and inside cities). New urban planning tools are also needed to complement investment programming (e.g. Regional Spatial Plans, spatial planning for urban clusters, and revised structure plans).

Capacity building is indispensable for urbanisation to 'work'. There is a significant deficit in trained staff in the fields of municipal public administration, urban management, urban planning and design. An extensive training programme for municipal technical staff, local elected officials, and urban designers and planners is required. The emphasis of the training should be on:

- How to provide in a cost-effective manner urban infrastructure and services,
- How to support urban economic development and develop rural-urban linkages
- How to effectively use land use and building regulations to manage urban growth;

The training programme should focus on the needs Ethiopia's secondary cities (regional economic motors), and intermediate towns (key service providers for rural-urban integration), because these two categories will continue to be the receivers of the largest proportion of urban population growth, are insufficiently staffed at present, and have key coordinating role in spatial planning at subordinate levels.



Part I.

Ethiopia's Urban Development Vision 2035

Preface

Chapter 1. The Urban Situational Analysis

Chapter 2. The NUDSP 2035 Vision

PART I. ETHIOPIA'S URBAN DEVELOPMENT VISION 2035

Preface

Goal

The primary aim of the National Urban Development Spatial Plan (NUDSP) is to prepare a vision for the urban sector for 2035, and to provide an illustrative roadmap for its implementation. The vision and roadmap will support and underpin the implementation of the GTP process and the achievement of GTP goals, including the attainment of LMIC status by 2025.

In Part one of this report, the Consultant:

- Describes the methodology used to construct the NUDSP 2035 Vision
- Presents the NUDSP 2035 Vision of the urban sector in Ethiopia

In order to prepare the NUDSP Vision three urban development scenarios were constructed:

- A corridor development scenario
- A dispersed urban settlement scenario
- A polycentric urban development scenario.

The polycentric urban development scenario, offers the most efficient way to support the three main policies initiatives of the Government, namely:

- Industrial corridor development
- Rural development, and
- Urban development

A consolidated scenario was devised, anchored in the polycentric scenario, but including elements of the other two scenarios which are required in order to ensure that equitable and balanced urban and regional development is actively supported. The urban settlement pattern and hierarchy of the consolidated scenario is that most likely to ensure economic growth and equitable development as envisaged through the GTP process.

Methodology

The construction of the NUDSP Vision was based on an understanding of the aspirations and vision of the Government for the urban sector, and for the country as a whole. These aspirations are expressed in the following policy imperatives:

- Balanced development between regions;
- Effective mobilisation of the economic development potential of each region;
- Improved country-wide integration through improved urban-rural links;
- Better integration of remote areas into the national economy;

- Effective spatial organisation of the urban sector characterised by a clear hierarchy of urban areas;
- Good accessibility to public services for both urban and rural dwellers;
- Containment and reduction of adverse environmental impacts;
- Sound management of natural resources;
- Reduction of human vulnerability related to natural hazards and the possible adverse climate change effects.

Moreover, the Vision has been designed so that the future spatial organisation is directly linked to the policies which support the implementation of GTP II and GTP III. Key assumptions underpinning the Vision have been fixed as regards three important policies²:

- **Corridor development policy** that is supported by the MoFEC and documented in the National Framework and Strategy for the Identification, Establishment and Operation of Economic Growth Corridors in Ethiopia(Ernst & Young, 2011)
- **Polycentric development policy** that corresponds to the MUDHo Urban development policy, notably through the Urban Growth Pole strategy.
- **Dispersed development policy**, that relates to the policies of (a) the Ministry of Agriculture regarding support to agriculture sector, (b) the Ministry of Trade regarding small towns for market and basic services, and (c) the Ministry of Transport regarding rural roads.

Having taken into account the drivers of change and Government policy imperatives important benchmark countries were then reviewed. Selected countries that have made the transition to Middle Income Country (MIC) status offer insights and lessons as to how the urban sector in Ethiopia can be developed and managed so that the transition is achieved.

These insights and lessons are used to ‘calibrate’ the Vision and to highlight which implementation strategy is most likely to accelerate the process of achieving the goal of MIC status for Ethiopia in 2025. Insights from the benchmark countries have also been used when identifying and designing what urban investments and policies are required in order to ensure that the Vision is implemented by the target date. In summary, the benchmark countries provide information on what *urban development pathways* Ethiopia could follow in order to achieve the goals of the GTP process.

Arriving at the target 2035 Vision is likely to take place in incremental steps; more specifically by transitioning from one spatial organisation, from that which is most likely and feasible in the short-term, to another which is more appropriate for the medium term, and then finally in 2035 to the full implementation of the Vision. Once the Vision and the transitioning process have been agreed, an ‘implementation roadmap’ can be created. This roadmap is a plan for the delivery of the Vision and the preceding transitioning process, and consists of public sector investments, Government policy interventions and expected private sector investments.

²See the Existing Situation and Diagnostic Report for a discussion of Government policies.

Chapter 1. The Urban Situational Analysis

1.1 **Introduction**³

This chapter:

- summarises the importance of the urban sector for the development of Ethiopia;
- describes the prevailing policy environment;
- describes urban and economic trends;
- outlines the current spatial organisation of the urban sector; and
- Discusses the drivers of change affecting the urban sector.

Both the economy and the urban sector of Ethiopia are rapidly growing. The country faces a unique but time-bound window of opportunity to design and implement plan-led urbanisation that will accelerate growth, help achieve many of the development goals expressed in GTP 1, 2 and 3, and improve the quality of life for its citizens, while at the same time ensuring that the economy is managed in an environmentally sound manner. If plan-led urbanisation is not adopted a concentrated and unbalanced urban system increasingly characterised by congestion, over-crowded informal settlements, unemployment, and social distress and tensions, can be expected. As stated in the World Bank Urbanisation review of Ethiopia (2015): “*Only by making urbanization a national priority will Ethiopia reach middle-income status.....For Ethiopia to reach middle income status, an economically productive urban transformation will be necessary*”

Critical choices need to be made soon as regards, for example, how urbanisation is to be effectively managed, which urban centres (if any) are to receive special attention to boost their growth, and whether any new urban centres are to be built. Making choices such as these demands a vision for the urban sector, and a clear pathway to achieving that vision. This vision is a core component of the National Urban Development Spatial Plan. The implementation road-map associated with the vision 2035 will define the pathway required to achieve the vision.

In order to fix the Vision we need to determine how the drivers of change are most likely to impact upon the existing urban system. The differing possible ways in which these impacts can be manifested is the basis for creating different narratives as to how the urban sector can evolve. We need to understand what is happening to the economy and the urban sector (trends and forecasts), what are the policy imperatives of Government and how they are affecting the urban sector, both of which are the focus of this chapter. Once we understand how the urban system is most likely to evolve we can identify what public investments and policies will be required in order to move the expected future development trajectory of the urban system towards that represented by the chosen vision.

³This chapter should be read in conjunction with the Consultant’s preceding report, the Existing Situation and Diagnostic Report (ESDR). The ESDR contains a detailed analysis of the urban situation, and of the constraints on and opportunities for urban development in Ethiopia. The information and analysis presented in the ESDR is not replicated in detail in this report, but is referred to and summarised.

1.2 The urban sector and the development of Ethiopia

Although a relatively small percentage of the population of Ethiopia presently live in urban areas (less than 20%)⁴ the urban sector is expected to grow rapidly over the coming decades (the World Bank forecast of over 5% per year growth rate is one of the fastest in Sub-Saharan Africa). The urban sector is getting larger and larger by the year; by 2035 40% of the population is likely to reside in urban areas. This can be very beneficial for Ethiopia. Global experience indicates that urbanisation is a necessary condition for structural economic change and is nearly always associated with economic growth; indeed, the greater the proportion of a country's population that is urban the higher the GDP of that country. Urban agglomeration effects can increase the productivity of resources including land, labour and capital. Proximity generates external economies through specialisation and diversification, allowing the production of higher value added products and services. Furthermore urban areas can deliver housing more efficiently through cost-effective high-density construction⁵.

Urbanisation should be encouraged in Ethiopia – Urban areas can drive the implementation of national development strategies⁶; in Ethiopia they can underpin the success of the GTP process - *but only if pro-actively managed*. The task in Ethiopia is urgent as it is increasingly apparent that the urbanisation process needs to be more sustainable, efficient, resilient and inclusive in order to support the development of the country and accommodate the population in adequately serviced housing. Indeed, there are numerous challenges that need to be overcome before the urban sector can play a positive and catalytic role in national development.

Furthermore, the urban sector is not only growing fast (in terms of population) it is also changing (in terms of its hierarchical structure and function), and these changes need to be effectively managed so that they promote national development objectives rather than hinder their achievement. For example accompanying rapid urbanisation is the relative decline in the primacy of Addis Ababa as many secondary cities play a stronger role in the development of the country. Many of these cities, however, are performing similar functions and are not specialising. Their growth is largely driven by natural increase and by rural-urban migrations. Moreover, urban densities are increasing due to rapid population growth and the continuing inadequate provision of urban infrastructure and appropriate housing.

The spatial organisation and functioning of the urban sector is also changing in response to the policy imperatives of Government. The aim of the government is that Ethiopia becomes a Middle Income Country by 2025, by exploiting the opportunities related to urban and industrial agglomeration economies; emphasis has been placed on allowing and encouraging urban and industrial development. To maintain the present pace of the economic development, urban areas will have to optimise their potential, develop specialisms and co-operate with their hinterlands as regards economic development.

⁴ As given by CSA forecasts; see the Population, Housing and Social Services chapter of the ESDR.

⁵ These issues are discussed in detail in the ESDR to which the reader is referred.

⁶ See Chapter 5 (Benchmarked Country Analysis) for a description as to how other countries have 'used' the urban sector to implement national development strategies and achieve national goals (Such as transitioning to Middle Income Country status)

Figure 8: Challenges and possibilities influencing the future of the urban sector

<p>Strengths</p> <ul style="list-style-type: none"> • A large metropolis (Addis Ababa) acts as a major engine for development • Existing urban network evolving towards a polycentric system • The on-going development of a good quality road system connecting key cities and enhancing their connectivity and attractiveness • Political will from Federal Government to support the development of balanced urban development • Existing processes that go some way towards integrating informal settlements into the city in a participatory manner • Existing decentralised bodies (regional – city) and the process of financial decentralisation • Attention focused on small emerging cities to be planned from the beginning of the urbanisation process 	<p>Weaknesses</p> <ul style="list-style-type: none"> • The primacy of Addis Ababa – there are very few large urban centres beyond Addis Ababa • Poor integration of parts of the urban network due to incomplete transportation / communication network • The inadequate capacities of local bodies to support and manage urban development (capacity constraints – lack of financial resources – are common) • Rapid (and potentially overwhelming) urban population growth • Poor quality of urban utilities and amenities and their inadequate provision (especially outside Addis Ababa) • High rate of urban informal settlement growth • Administrative delimitation of urban areas without consideration of urban functional areas • Low level of coordination amongst cities
<p>Opportunities</p> <ul style="list-style-type: none"> • Larger and growing consumer market • Higher incomes leading to the development of domestic trade and commerce • Expanding East African market including the relocation of manufacturing from South-East Asia towards Eastern Africa • Extensive and unexploited resources (mining, agricultural land) to create revenue and add capacities for public and private capital investment in utilities and facilities for cities and towns. • On-going projects to established centres of commercial and transportation logistics, and industrial zones /special economic zones • Expansion of tourism - will encourage service development in cities and towns • New transportation corridors developed as support for urban growth poles developments • Border opening to Eritrea, South Sudan and Somalia to facilitate development of cities in peripheral regions • Larger urban population that increase city clustering and agglomeration effects • Expanded and improved education increasing the capacity and capability to develop innovation in the planning and management of cities (including the development of new urban management tools / establishing city planning agencies) 	<p>Threats</p> <ul style="list-style-type: none"> • Urbanisation becomes too rapid – becomes chaotic and a brake on economic development • Adverse climate change impacts (increase natural risks and environmental constraints on urbanisation) • Water resource scarcity due to climate change and higher demand associated with the economic development • Slow implementation of infrastructure investments (road, railway, airports, energy, water, telecommunication) required to support urban development • Difficulties in attracting foreign investment re the provision and maintenance of infrastructure (especially outside Addis Ababa) • High dependency on international trade, but widening trade gap • High cost of urbanisation; but inadequate self-generated revenues and few effective financial instruments to generate revenues • Inability to 'crowd-in' the private sector and establish effective PPPs (public-private partnerships) involved in urban infrastructure and service provision • Difficulties in maintaining the centralisation of the financial and human capacities in the Federal and Regional bodies • Continued lack of co-ordination amongst cities and between cities and their hinterlands.

1.3 The policy environment

National development policies

Government policies are driving the development of the country primarily through the Growth and Transformation Plan (GTP) process. An important aim of the GTP process is to ensure that Ethiopia becomes a Middle Income Country during the next decade (achieving Lower Middle Income County status by 2025). The impacts of GTP I and II are, and will continue to have a clear, distinctive and important impact on the spatial organisation and functioning of the urban sector. For example, the roads, railways and dry port projects to be undertaken as part of the GTP process are very likely to increase urbanisation within existing transportation corridors, and may lead to the establishment of new transportation corridors and associated urban settlements.

Urban areas along the main transportation corridors will benefit as their attractiveness for industrial investments will increase. Industries will be located in cities that have good linkages with their agricultural production suppliers in their hinterlands. Investments in mining and tourism will support urban development, some areas being in previously non-urbanised locations. Cities will be able to optimise their potential by providing a favourable environment for economic development and living conditions.

Furthermore, the rise of larger cities, and better connections between urban areas, will change the scale of the urbanisation. Sub-regional urban systems are likely to emerge and new coordination tools to be used by urban administration governments will become necessary. The cost of urbanisation could be supported if the economy is strong enough to allow the financing of urban utilities and facilities. Local administrations, however, except in Addis Ababa, are presently unable to adequately finance urban utilities and amenities, which seriously constrains their ability to drive economic development. New financial resources will be necessary at national, regional and local levels in order to support urbanisation. The decentralisation process will have to be deepened to ensure that relevant competencies can be found in urban administrations.

Urban specific policies

More specifically policies have been devised by the MUDHo which directly cover, *inter alia*, the urban economy and governance, urban planning and housing provision, land development and management, solid waste management, integrated urban infrastructure provision, urban green development, the urban construction industry, and small towns and rural-urban linkages. All these policies are coordinated in the Ministry's Urban Development Policy (described in the ESDR).

These policies provide a comprehensive framework and policy tools with which to manage towns and cities and are designed to create conditions which are favourable for urban economic development. The implementation of these policies individually and collectively impacts upon the current urban system and will have an important influence on the future trajectory of the urban sector. The expected impact of the policies thus must be taken into account when preparing the urban scenarios and devising the National Urban Development Spatial Plan, NUDSP (see Table 1 which briefly summarises the likely impacts of these policies on the urban sector and hence on the content of the NUDSP).

Table 2: *MUDHo policies and NUDSP impacts*

MUDHo policies	Urban impacts for NUDSP consideration
Urban planning	Promotes integrated urban development
SME's support	Increases economic attractiveness
Integrated infrastructures provision	Improves the efficiency of utilities and amenities
Climate change and green development	Improves the quality of urban environment and living
Solid waste handling and disposal	Promotes clean environment, improved health
Housing provision	Leads to affordable housing for workers
Construction policy	Supports the urbanisation boom, and job creation
Land development and management	Helps reduce informal settlements
Urban governance	Supports decentralisation

Source: Consultant's assessment

The impact of most of the policies of the MUDHo is primarily on the internal development and management of cities and towns. Two important policy initiatives, however, will have a determining influence on the spatial organisation of the urban sector, namely, city grading and the urban growth pole policy. The former fixes the urban hierarchy with an important objective of reducing the primacy of Addis Ababa, and the latter policy promotes secondary urban centres (urban growth poles) in a balanced manner, in all regions.

Seven urban growth poles, all with populations in excess of 150,000, have been identified by the MUDHo:

- 1 **Mekele** is the urban growth pole for Tigray cluster. Mekele is a region capital and the location of a number of large industries. It is located on the major Addis-Mekelle-Axum corridor, and will benefit from the development of the railway system and northern road improvements planned for the corridor.
- 2 **Bahir Dar** is the urban growth pole for Lake Tana urban cluster. Bahir Dar is a region capital, and a major existing population centre (with an estimated 200,000 inhabitants in 2013)
- 3 **Dessie-Kombolcha** urban growth pole. It is located on the Addis to Mekele corridor, has excellent links with Djibouti and will benefit from the development of the railway system and northern road improvements planned for the corridor
- 4 **Hawassa** is the urban growth pole of South-Eastern Rift urban cluster. Hawassa is a region capital, and is located on the railway connecting Addis Ababa to Kenya.
- 5 **Adama** is an urban growth pole inside the large metropolitan urban cluster of Addis Ababa. It is located on the railway and highway connecting Addis Ababa to Djibouti.
- 6 **Dire Dawa** is the urban growth pole of eastern urban cluster. Dire Dawa is a chartered city in an urban cluster spread on two other large cities, Harar and Jijiga and two other administrative regions: Harar and Ethiopia Somali. It is located on the railway and the future highway connecting Djibouti to Addis Ababa.
- 7 **Jimma** is the urban growth pole of the Western urban network cluster. Jimma is a Zonal capital and the main city in the Western part of the country.

Given their structuring role, the consultant recommends that the following towns be additionally considered as growth poles: **Gondar** a second important growth pole in the Northern part of the country, with the two cities of Gondar and **Metema** structuring the area, including along the axis towards Port Sudan, **Nekemte, Semera-Assayita, Gode-Kebri Dehar** and **Robe-Goba** in the western, north-eastern, south eastern and southern parts of the country, respectively.

1.4 Urban and economic trends

CSA population projections for Ethiopia in 2037 are as follows:

- 127 million in the Low Population Scenario (Low Fertility scenario);
- 136 million in the Medium Population Scenario (Medium Fertility scenario);
- 142 million in the High Population Scenario (High Fertility scenario).

The CSA population projections are taken into account in preparing the urban scenarios, but, as stated in the preceding chapter, they have been adapted taking into account the drivers of change and international experience from benchmark countries.

Urban Population Projections

The Consultant has formulated three urban population scenarios, based on three different assumptions about the future economic development of Ethiopia. Projections indicate that between 27% and 30% of the population of the country will reside in urban areas when Ethiopia first attains MIC status (expected to be in 2025). This is in line with or slightly below the corresponding figures for key international benchmark countries (see Table 4) indicating that the current urbanisation rate in Ethiopia is not excessive and, indeed, required in order for MIC status to be achieved.

Table 3: *Urban Population and MIC status for selected countries*

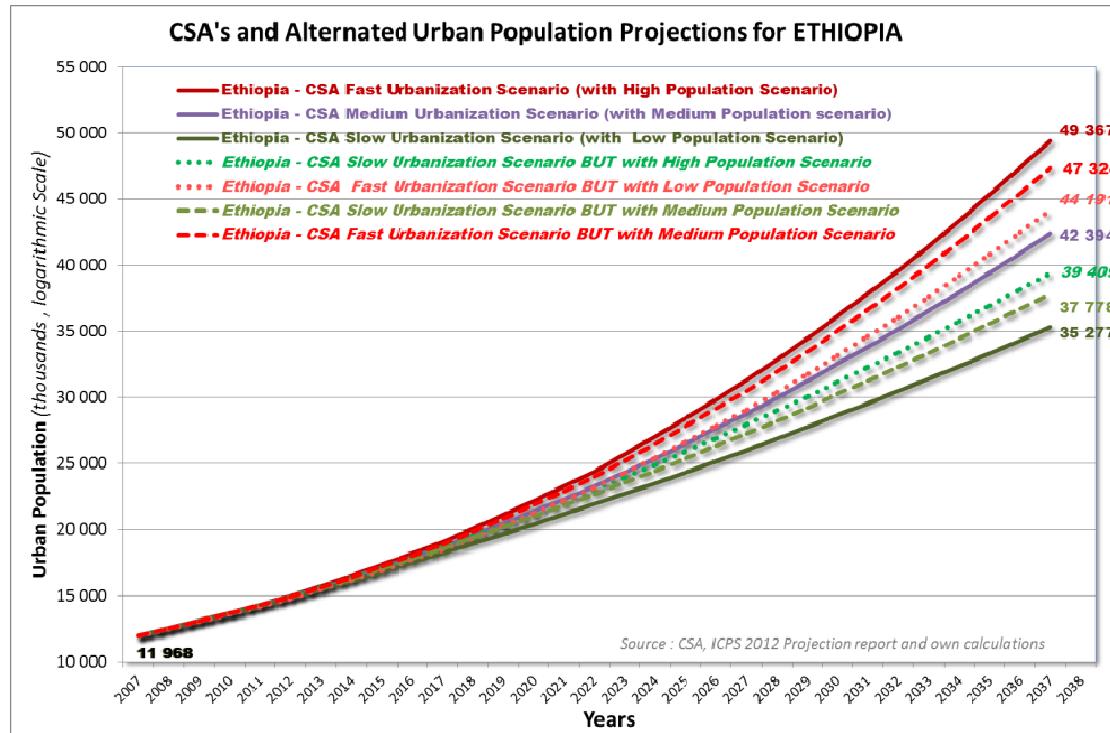
Country	% of population residing in urban areas when MIC status reached	Date when attained MIC status
India	30	2007
Vietnam	30	2009
China	34	1997
Indonesia	34	1993

Source: World Bank

If annual GDP growth rates remain robust after 2025 (around 7 to 8% per year) the urban population projections of the Consultant indicate that around 40% of the total population would reside in urban areas in 2035. This compares to a corresponding figure of 35% as given in the CSA fast urbanisation scenario (see Figure 8). The population scenarios show different urban population proportion ranges from 31%, 35% and 40% by 2035 at the national scale, and these scenarios are related to different economic assumptions and different visions of the rail and road networks. The higher the urban population proportion,

the higher the economic development and the slower the total population projections (see Figure 8).

Figure 9: Urban Population CSA projections



Source: CSA

The development of current urban centres

Demographically, scenarios for existing urban areas were built by first using the CSA medium and fast urbanisation forecasts as a baseline for all regions, except for Addis Ababa. Different methods were then used to estimate the future population of Addis Ababa (e.g., WUP 2014 for Capital Cities; Metropolization law of Moriconi-Ebrard⁷; information about the Master Plan for Addis Ababa and the surroundings area).

For the other regions, the CSA medium and fast urbanisation scenarios were used as a baseline in order to project the growth of existing towns. The size of the population of each town was also taken into account. The rate of growth of each town was taken to decline as its population increases; this is empirically correct in Ethiopia when we compare the rate of growth of the population of towns between 1994 and 2007 and their population size in 1994.

These baseline population projections were altered taking into account the following:

⁷ The Law of Metropolization of Moriconi-Ebrard⁷) and states that the size of a megapolis varies according to the total urban population, as follows: $P_m = 6.55 * P_u^{0.815}$; where P_m represents the metropolitan population and P_u the urban population in cities over 10,000 inhabitants.

- **The impact of the evolving rail and road networks:** Different buffer zones around each road and rail network were applied to each of the three urban population scenarios in order to estimate and calibrate the impact of the developing transportation networks on the existing towns.
- **The impact of specific policies and investments was also taken into account:** including mega projects (e.g. Renaissance Dam, etc.); new large industrial zones and commercial farms; new factories / industries (e.g. the new sugar factories – fertiliser plants, cement plants, etc.); the designated seven Growth Poles; the Government's desire to decentralise economic activity and administrative functions; and mining and tourism assets. An analysis of major opportunities for and constraints on the development of towns with over 50,000 inhabitants was used to calibrate these results.

The evolution of rural settlements into urban areas was estimated using two approaches:

- **A density approach:** in rural kebeles with a population density in 2037 that reaches the density of existing towns in the region, a part of the population growth of the kebele was concentrated in one village in order to structure services around an emerging new small urban core;
- **An absolute population number approach:** the population of rural kebeles in 2007 was divided by the number of villages in the kebele and a part of the future population growth of the kebele was concentrated in one village. If the population of one village appears to be over 2000 inhabitants in 2035, it is proposed to create an emerging new small urban core in order to structure services around this emerging new small urban core.

The three urban population scenarios can be summarised as follow:

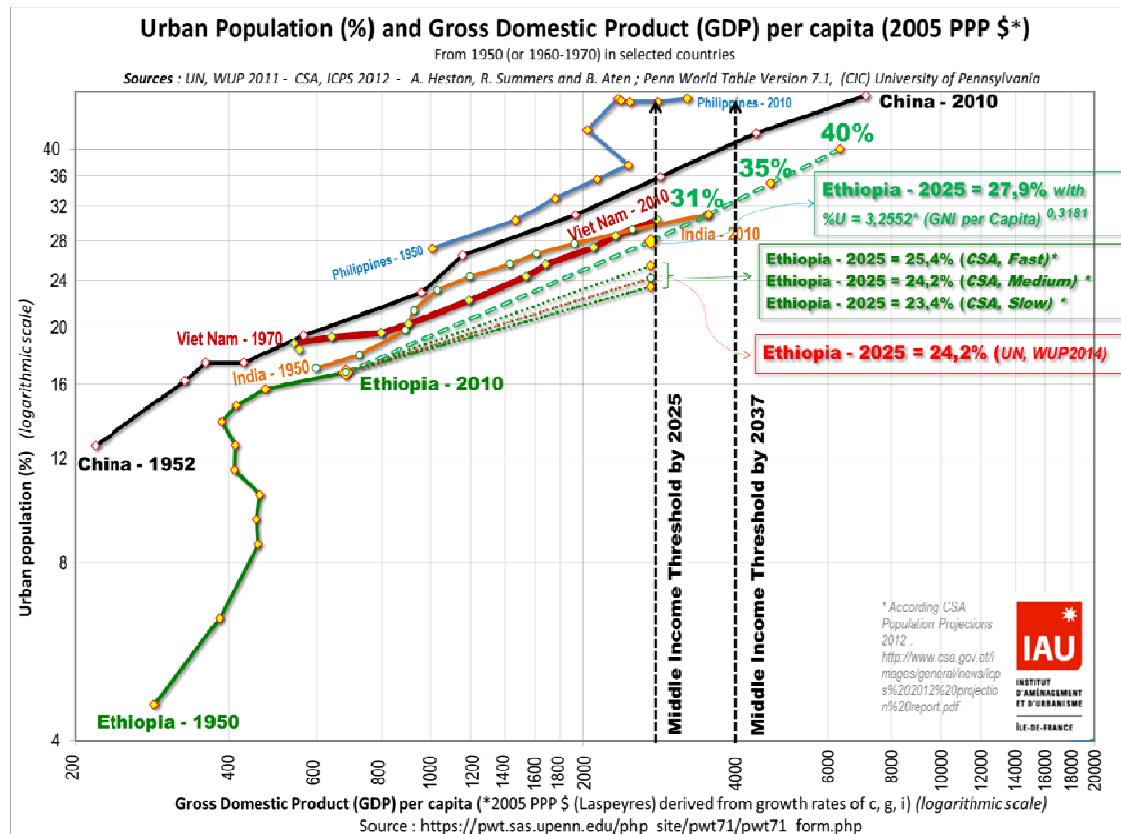
- **Corridor scenario leads to an urban proportion of 35% in 2035** (almost the CSA fast urbanisation scenario at national scale) and is associated with the medium population scenario. In this scenario, around 48 million Ethiopians live in urban areas in 2035, of which 6.7 are in Addis Ababa.
- **Dispersed scenario leads to an urban proportion of 31% in 2035** (almost the CSA medium urbanisation scenario at national scale) and is associated with the low population scenario. In this scenario, 44.5 million Ethiopians live in urban areas in 2035, of which 5.8 are in Addis Ababa.
- **The Polycentric scenario leads to an urban proportion of 40% in 2035** and is associated with the high population scenario. In this scenario, almost 51 million Ethiopians live in urban areas in 2035, of which 7.1 million are in Addis Ababa.

Economic development trends

There is a clear link between urbanisation and economic development (see Figure 9). Ethiopia needs to urbanise in order to reach Middle Income Country status by 2025, in line with the aims of GTP 2. More specifically, and as discussed in the *Existing Situation and Diagnostic report*, a modern industrialised economy requires service functions that generally are only created, sustained and developed in urban environments. These services 'unlock'

the development of the broader economy. But urbanisation needs to be managed. Rapid or 'excessive' urbanisation without economic development often is associated with rising unemployment, the creation of slums and increased inequalities. Furthermore, economic development cannot be sustainable without favourable conditions for higher productivity especially in industry and in the services sector.

Figure 10: Relation between economic development and urbanisation



To reach 40% of urbanisation in 2035, Ethiopia needs to maintain a relatively high level of economic development over the next two decades. There are ranges of factors, which will affect whether such a high level of development can be achieved. Some may be beyond the control of the Ethiopia Government (namely factors relating to the international context). Others are directly under the control of the Government (e.g. national and regional policies).

The urban scenarios have prioritised those factors that the Government can directly control or significantly influence. The scenarios present three varying but coherent and plausible visions of the development the economy and the urban sector. Facing the uncertainty of the future, it is necessary to explore different probable future and highlight the policy and programme interventions that can lead to the realisation of each future. The result of this scenario analysis will be a recommended 'future', and policy and programmes which can be implemented in order that the future becomes a reality.

During 2004/5-2012/13 the economy grew at an average annual rate of 10.7%; the result of

Government policy interventions (e.g., SDPRP, PASDEP, and GTP I) and a favourable international context for direct foreign investment⁸. The on-going GTP process defines the long-term vision of achieving middle income status by 2025 supported by an economic growth target of 10.4% per year in GTP I.

The government is intent on realising its development goals through proactive public policies with significant state involvement in infrastructure (73% of investment is public during 2010/11 to 2013/2014 period) and an emphasis on attracting industrial investment. Economic expansion is expected to be associated with increased labour supply due to population growth, rapid capital accumulation through the attraction of foreign and domestic investment, a structural economic shift towards more productive sectors, and increases in factor productivity through technology adoption and/or improvement in the technical efficiency with which inputs are used. The growth in the period 2004/5-2012/13 was driven primarily by the urban activities:

- **Services sector** (49% of GDP growth) mainly due to distributive services, including wholesale, retail trade, hotels and restaurants, transportation and communications that happened mainly inside cities.
- **Industry** grew at 12.8%/per year, resulting in a construction boom following the scale up in public investment. In 2010/11 to 2012/13, the construction subsector grew by an average of 22.7% while the industry sector as a whole grew by 18.1%.
- **The manufacturing sector** remained low with an average share of around 4% during 2004/5-12/13 but with a high growth rate at 11.5% per year.

Macro-economic forecasts for Ethiopia for 2014/15 to 2024/2025 prepared by the African Development Bank (Ethiopia: looking back, looking ahead, 2014⁹) shows that the export of goods and services account for 14% of GDP, but contribute only 10% of growth in the economy during the 2004/5-12/13 period. This growth is not strong enough to support the rising import demand (42% of the imports bill for 2004/05 – 2012/13). As such an important priority of the Government should be to provide infrastructure which will encourage the growth of export activities.

Growth has accelerated to over 8% per capita but it is driven mainly by domestic demand and has been financed through a rising current account deficit (public investments mainly in energy, telecommunication and transportation). The main challenge for the government is to invest today in a manner which will attract private investors tomorrow in order to expand export production at the rate targeted in the GTP, and mitigate rising import costs.

The present relatively high GDP growth rate is related to the openness of the Ethiopia economy, the inflow of direct foreign investment, and Government expenditure on

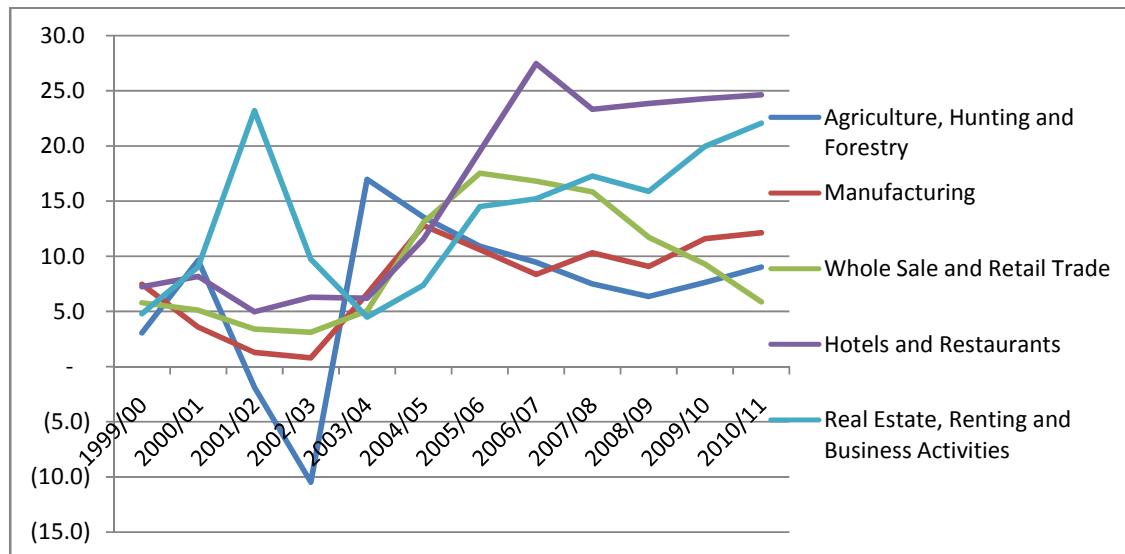
⁸ In the last 10 years or so, the international context has been challenging. The growth of the Ethiopia economy has been driven by direct foreign investment, but also by the domestic mobilisation of resources and consumption which is associated with the Government's investment in capital projects such as road, electricity, housing, education, health, etc. It seems clear that without increasing private sector investment the growth of the Ethiopia economy may approach flat-lining.

⁹The African Development Bank growth scenarios use a per capita GNI growth of 9% (baseline scenario) and 11% (high growth scenario), which corresponds to 11.2 to 13.2 real GNI growth rate.

infrastructure. There needs to be, however, a consensus as regards the economic vision and prospects for the country, particularly in relation to the role of the private sector. At present, the productive sector of the Ethiopian economy is driven primarily by agriculture-led industry. The focus of manufacturing is on the low cost production of consumer goods for exports (e.g. textiles and footwear).

The rapid growth of the economy, however, needs to be managed so that there is an equitable distribution of dividends. Furthermore, an international comparison of developing countries (those with more than 50 million inhabitants) shows that it is difficult to maintain growth rate higher than 10% for more than ten years and that the general trend is between 5 to 7% per year. China maintained such a rate for 10 years; India for only 5 years. The Consultant, however, fully appreciates that the Ethiopian Government is confident that double-digit growth will continue for the next decade, and that the goal of becoming a middle income society is based on this assumption.

Figure 11: Sector growth rates in GDP (%)



Source: National accounts, MoFEC

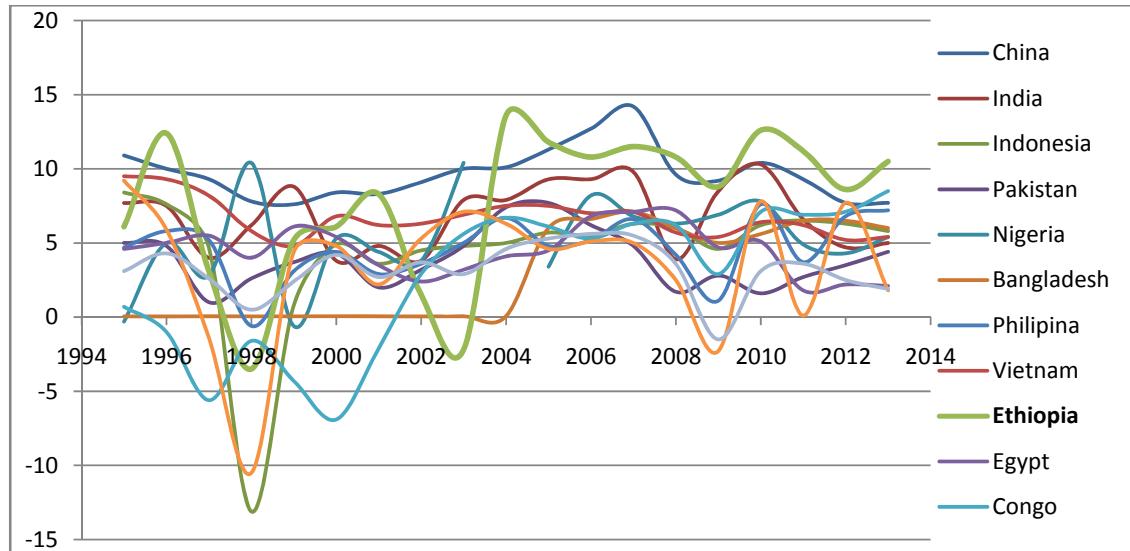
According to recent IMF forecasts, economic growth in Ethiopia could remain robust over the next few years, supported by a recovery in external demand and on-going supply-side efforts to improve productivity and broaden the export base of the country. A baseline scenario was prepared by ADB assuming the growth pattern observed during 2004/5 to 2010/11 could be sustained over the next fifteen years. This baseline scenario targets 11.4 % real GDP growth over the period 2013/14-2024/25. This will have a major impact on urban growth – especially on employment. The expected improvements in labour productivity and health should improve social equity, and sustain rapid growth and economic transformation.

Economic forecasts

The Consultant has used the IMF forecasted growth in GDP of 11.4% per year as a maximum growth rate until 2025. The Consultant expects that the period between 2025-2035 will experience a reduction of the GDP growth rate to around of 8% per annum. At the end this period, in 2035, GDP will have reached US \$ 275 billion (in 2005 constant price),

which is over 10 times the size of the existing GDP.

Figure 12: Benchmarking with other developing countries (DGP 1995-2013)



Source: World Bank Indicators

Two other economic development scenarios have been prepared by the Consultants to analyse the impact of a lower economic growth:

- **Medium growth forecast** taking into consideration a GDP growth of 10.36% in 2013 that will be reduced by 0.1% per year, reaching an annual growth of 8% in 2037 and a GDP of US\$ 221 billion (in 2005 constant price) which is over 8 times the size of the existing GDP.
- **Lower GDP growth forecast** also taking into consideration a GDP growth of 10.36% in 2013 that will be reduced by 0.2% per year during the period, reaching 7% in 2030 and then stabilised at this level until 2037. A GDP of US\$ 177 billion is produced within this forecast, which is 6.5 times the size of the existing GDP.

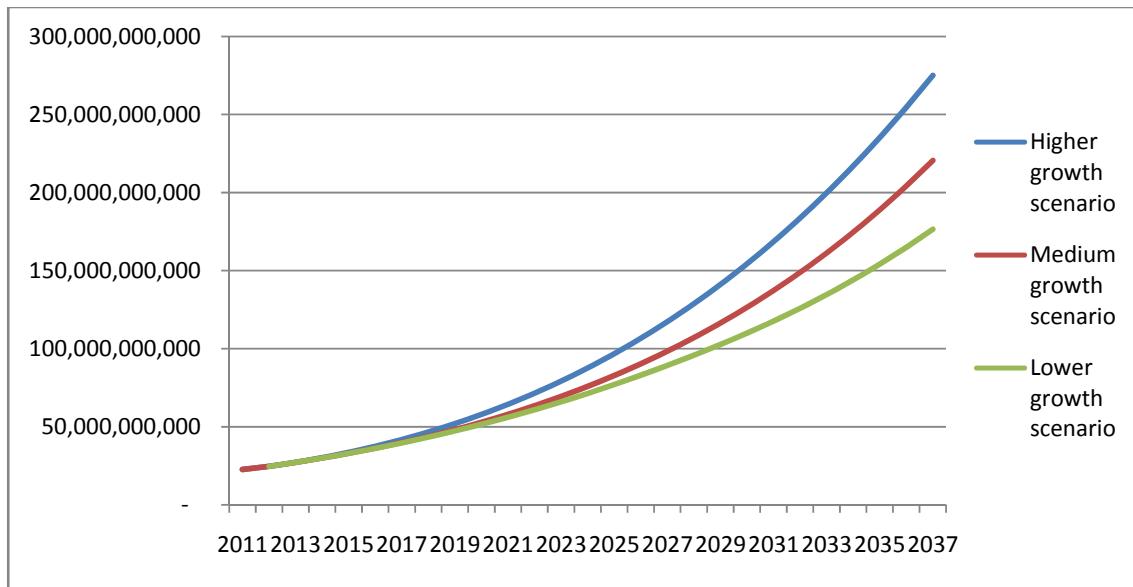
Reaching the Lower Middle Income Country threshold is achieved in 2028 in the higher scenario, in 2034 in the medium growth scenario and in 2045 in the lower growth scenario (see Figure 13). Each economic forecast could be applied to the three urban scenarios. It seems more reasonable, however, to apply the higher GDP growth forecast to the higher urbanisation rate, and the lower forecast to the urban scenario which is more agriculture oriented (though agriculture should be characterised by improved productivity over time [it is at present 20 times lower than that recorded in South African] and the expansion of the area of land under cultivation)

The economic forecasts given above do not differentiate growth rates by sub sectors. A broad sectoral break-down has been given, however, through work associated with the Ethiopia's Climate Resilient Green Economy. In 2025 it is expected that the sectoral share of GDP will be as follows:

- Agriculture accounts for 29%,
- Industry accounts for 32%,

- Service accounts for 39%.

Figure 13: Economic development forecasts



Source: Consultant's calculations (USD 2005 constant prices)

The assumption is that the importance of agriculture decreases in relation to that of the industrial sector. Recent trends do not indicate that such a dramatic structural change in the economy is on-going, but in the future committed and expected projects in the energy, manufacturing and mining sectors are likely to underpin such a structural transformation. The ADB proposes another sector break-down of GDP for 2025:

- Agriculture 34.5%
- Industry 16.2%,
- Services 49.5%.

The differences are important. The object of this study, however, is not to determine the economic prospects of key sectors, but to explore the future spatial organisation of the urban sector. Without official forecasts of GDP by sector over a 20 year period, the Consultant has focused on the regional (spatially based) economic potentials.

Impact of economic development on the spatial development of the urban sector

Economic growth will have a notable impact on the spatial organisation of the urban sector. The economic potential of the country was described in the ESDR (see Map 5). Most of the economic potential is located in the western part of the country. But here it may be difficult to create a significant number of jobs on small sized agricultural farms that are already over occupied, except where new irrigation projects are identified. The size of unused land in Ethiopia is significant but much is not easy to exploit because of physical constraints.

Mining will create jobs but an assessment of the numbers expected has not been undertaken. The capacity of the sector to create jobs is related to the size of investments, the nature of international demand for the product, and the pace of exploitation. Tourism will also create jobs related to the development of urban heritage sites (e.g. at Harar, Aksum,

Lalibella), on natural sites (such as the Simien mountains, Bale mountain, and the Rift lakes) and in ethnic destinations such as Omo River Basins of SNNPR State. Other forms of tourism such as ecotourism are likely to be encouraged. Assessments of the potential of community based tourism also have been made (e.g. in the EU-funded Project Fitche). This potential is considered to be significant; jobs will be created. However, the geographically dispersed nature and relatively small number of the jobs created will not be associated with a major impact on urbanisation. Furthermore, rural areas will need to create jobs. Urban areas will receive the major share of the growth of the population. But urbanisation is costly and requires economic development in order to create jobs and to finance urban services and infrastructure, and the majority of the total population resides in rural areas

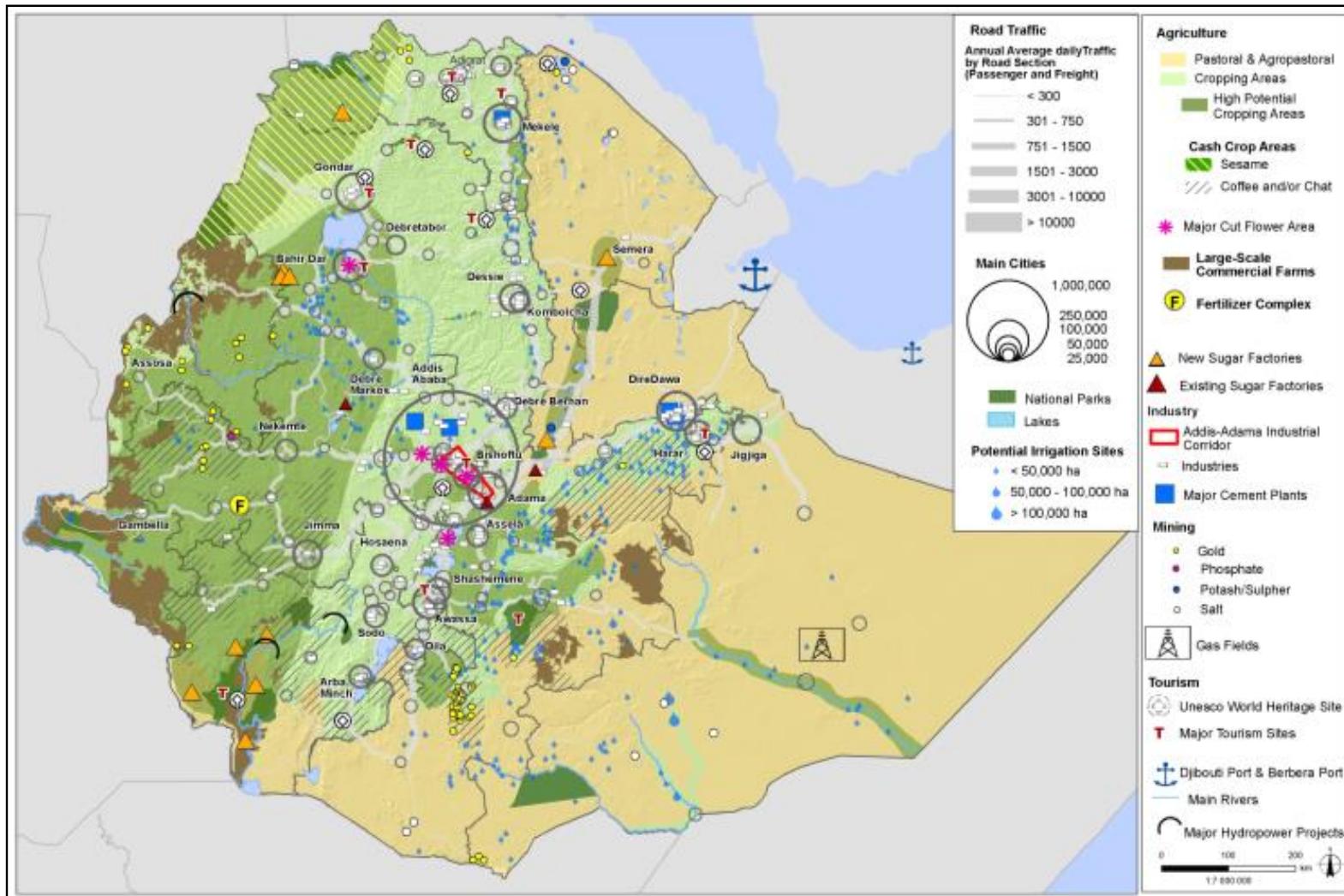
Several mega projects are proposed for the next decades. They will have important impacts on the investment attractiveness of the area in which they are located. More directly, these mega projects will create many jobs. The urban scenarios take into consideration the economic and spatial impacts of the following mega-projects (see Table 5).

- Railways projects, that can encourage industrial development in cities;
- Major road projects that create the conditions for transportation corridors;
- Dry ports and logistic centres as support for industrial development;
- Airports that support industrial development (e.g. export of cut-flowers) and tourism;
- Special Economic Zones and other Industrial zones that attract workers;
- Large urban facilities which strengthen the capacities of cities to provide services;
- Touristic assets that support job creation and emergence of new urban settlements;
- Irrigation projects that facilitate agriculture development;
- Large crop surplus areas that can accommodate more rural dwellers;
- Sugar plantations that can lead to the emergence of new urban settlements;
- Commercial farms that attract workers and facilitate the emergence of towns;
- Dams, including Renaissance Dam with its 400 permanent workers
- Mining that triggers mining cities;
- Fertilizer plants that can trigger the emergence of small towns
- Cement factories, which can also trigger the emergence of small towns;
- Border towns likely to expand as trade and economic relations with neighbouring countries continue to strengthen.

Table 4: Urbanisation impacts of 'mega projects' and economic drivers

Mega projects	Expected Impact on Urbanisation
Commercial farms	emerging towns due to densification and threshold effect
Sugar farms	emerging towns due to densification and threshold effect
Fertilizer plants	emerging towns due to non-agriculture activity if more than 300 workers
Cement plants	emerging towns due to non-agriculture activity
Mining activities	emerging towns due to non-agriculture activity
SEZs / industrial zones	included in city population growth
Tourism activities	included in city population growth
Dams / irrigation works	emerging towns due to non-agriculture activity if more than 400 workers
Surplus agricultural Production	The production of agricultural surplus will have an effect on urbanisation; especially, agricultural surplus besides mega dams and commercial farms will initiate settlements
Border towns	emerging towns due to strengthened intra-country trade

Map 6: Major economic resources and potential



Source: Consultant analysis

1.5 The spatial organisation of the urban sector

The present urban system (see Maps 7 and 8) is dominated by Addis Ababa, but its primacy is declining. The populations in secondary and medium sized cities are growing faster than the population in Addis Ababa. The improvement of the transportation network and other urban infrastructure facilitates economic development of other parts of the country creating new job opportunities. However, Addis Ababa remains an engine for development and receives more migrants and domestic and foreign investment than any other urban area in the country.

The majority of the population lives in the Highlands of Ethiopia, with the urban population and important administrative and service functions centred on Addis Ababa. Trade flows originating in the North Western and the Western parts of the country often go through Addis Ababa to the country's main sea outlet, the port of Djibouti. Traffic originating or destined to southern regions of Ethiopia would normally operate via the port of Kenya (Mombasa). However, the poor condition of the road corridor in this region forces much of the traffic to transit through central parts of the country (via Modjo, Adama) before being shipped via Djibouti.

The Lowlands are underutilised. This is largely due to the dry and hot climate of the eastern lowland region of the country (e.g., Somali, and Afar). The potential for development in the remote western and southern parts of the country have been recognised; for example, the potential to establish sugar plantations and factories, and large commercial farms.

There is plenty evidence that Ethiopia's secondary cities, particularly regional capitals, are growing rapidly and playing catch-up. Some are in the orbit of Addis Ababa (e.g., Bishoftu and Adama); others are linked to existing large and medium sized cities. These urban areas are changing the spatial structure of the urban sector of country, which is becoming more balanced. But Ethiopia's urban system is lacking large cities, which can provide a range of commercial and professional services, and encourage economic dynamism in their hinterlands (so called urbanisations spillover effects). However, with the appropriate policies, if the evolution of the urban sector of Ethiopia follows a trajectory similar to that of China or Vietnam, then the current under-urbanisation of the country will rapidly change.

Indeed inter-urban linkages are deepening and urban clusters (see map 8) are emerging due to a range of factors:

- Corridor effects are promoting the rise of various clusters (e.g. the Mekele cluster, and an emerging cluster around Debre Markos);
- Densely populated areas (e.g., Hawassa, Sodo-Hosana);
- Proximity to the main metropolis (Adama and Bishoftu);
- Proximity to several large cities (Dire Dawa-Harar-Jijiga tripolis; Gondar-Bahir Dar bipolaris);
- Proximity to medium sized cities (Dessie-Kombolcha);
- Network of well linked cities (Nekemte, Jimma).

These urban clusters can be clearly identified through the analysis of traffic flows and via origin and destination investigations. Each of these city clusters is providing services to their respective rural hinterlands. This current spatial structure of the urban sector is the basis on which the future urbanisation will be implemented.

Table 5: Large secondary cities of more than 100,000 inhabitants

Population Ranking	City	Region	Population 2013	2013 Employed Pop.	Employment Growth 2005-2013	Administrative Status	Cluster Dominant city	Main trade corridor	Future Railway station	Airport	Dry Port	Public University
1	Addis Ababa	AA	3,104,000	1,285,598	6%	Federal Capital Regional Capital Chartered City	x	Djibouti corridor (priority)	Hub	International	x	x
2	Mek'ele	TI	286,000	109,199	9%	Regional Capital	x	Tadjourah corridor (ongoing) Massawa corridor (future)	Medium term	International	x	x
3	Adama	OR	283,000	113,722	9%			Djibouti corridor (priority)	Priority			x
4	Dire Dawa	DD	269,100	101,564	4%	Chartered City	x	Djibouti corridor (priority)	Priority	International	x	x
5	Gondar	AM	265,000	121,158	13%			Port Sudan corridor (via Metena)	Long term	Domestic		x
6	Hawassa	SN	225,700	96,651	11%	Regional Capital	x	Cairo – Cape Town TAH; Lamu corridor (planned)	Long term	Domestic (under construction)		x
7	Bahir Dar	AM	198,900	110,313	9%	Regional Capital	x	Port Sudan corridor (via Metena)	Long term	International		x
8	Jimma	OR	155,400	68,277	8%		x	Corridor to South Sudan	Long term	Domestic		x
9	Dessie	AM	153,700	62,079	8%		x	Ndjamena-Djibouti TAH	Medium term			x
10	Jijiga	SO	152,700	38,068	8%	Regional Capital		Berbera corridor		Domestic		x
11	Shashemene	OR	129,100	49,456	12%			Mombasa corridor (ongoing)	Long term			
12	Bishoftu	OR	128,400	57,485	5%			Djibouti corridor	Priority			
13	Harar	HA	112,800	49,802	7%	Regional Capital		Berbera corridor				x
14	Sodo	SN	109,200	42,472	9%				Long term			x
15	Arba Minch	SN	107,500	40,477	7%				Long term	Domestic		x
16	Hosaena	SN	100,500	32,463	9%							x
17	Nekemte	OR	96,700	39,159	8%		x	Corridor to Sudan (via Kurmuk)	Long term			x

Sources: National accounts, CSA employment surveys, CSA population forecasts.

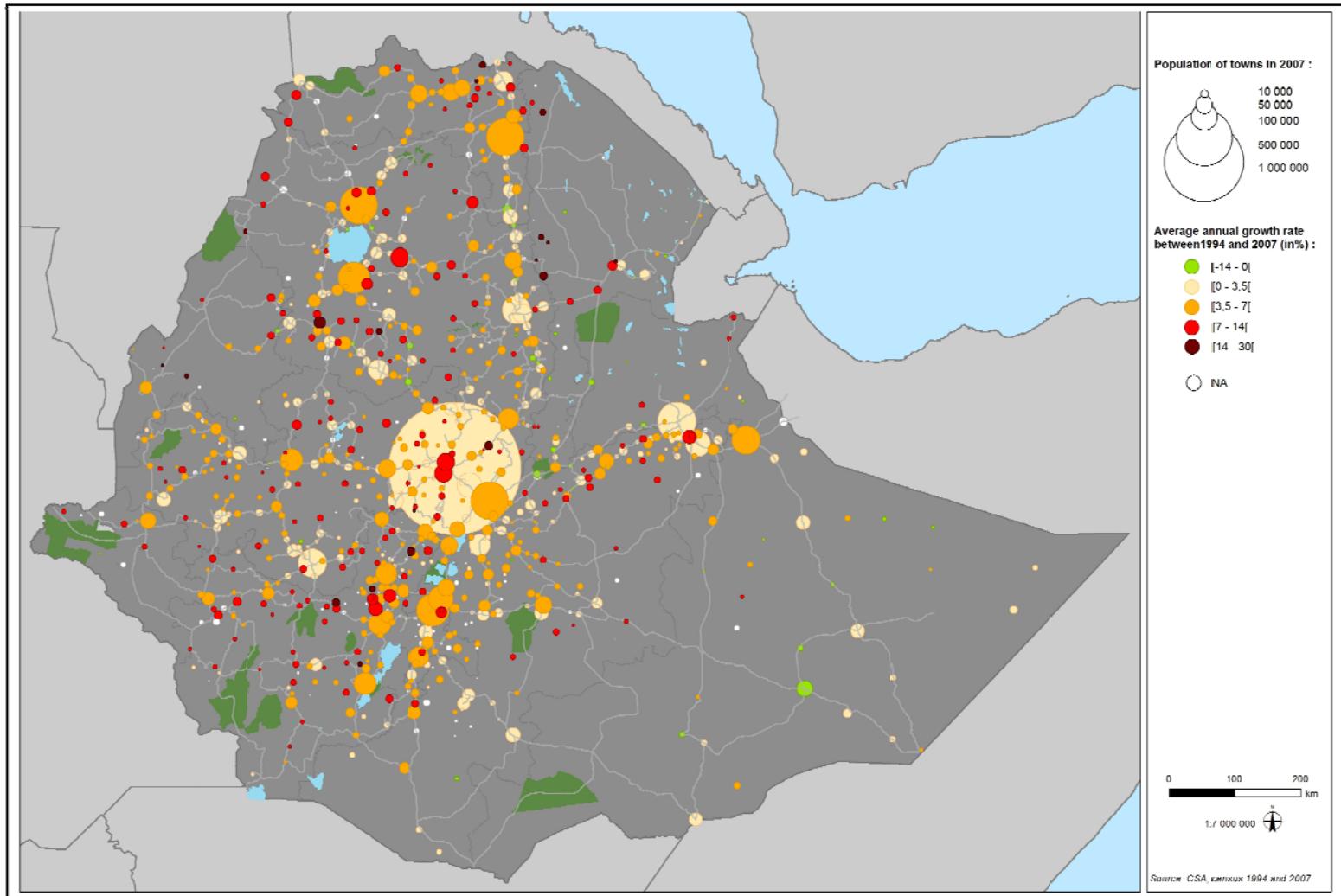
This current spatial structure of the urban sector is the basis on which the future urbanisation will be implemented. The Vision is based regarding trends, potentials and constraints related to the current spatial structure and functioning of the urban sector. More specifically, the vision takes into account the current and expected impacts of the following key policies:

- **Corridor development policy support** by the Ministry of Transport and MoFEC
- **Rural development policies** supported by MoA, The Ministry of Trade, the Ministry of Transport and Ministry of Science and Technology
- **Urban development policies** supported by MUDHo

The goals of these policies are similar, namely economic development for the country achieved through efficiency in the infrastructures, which will support industrialisation and enhance the country's trade competitiveness globally, reducing poverty in urban and rural areas, ensuring that cities function to support economic development, and that the structure and functioning of the economy promotes higher productivity and increased competitiveness

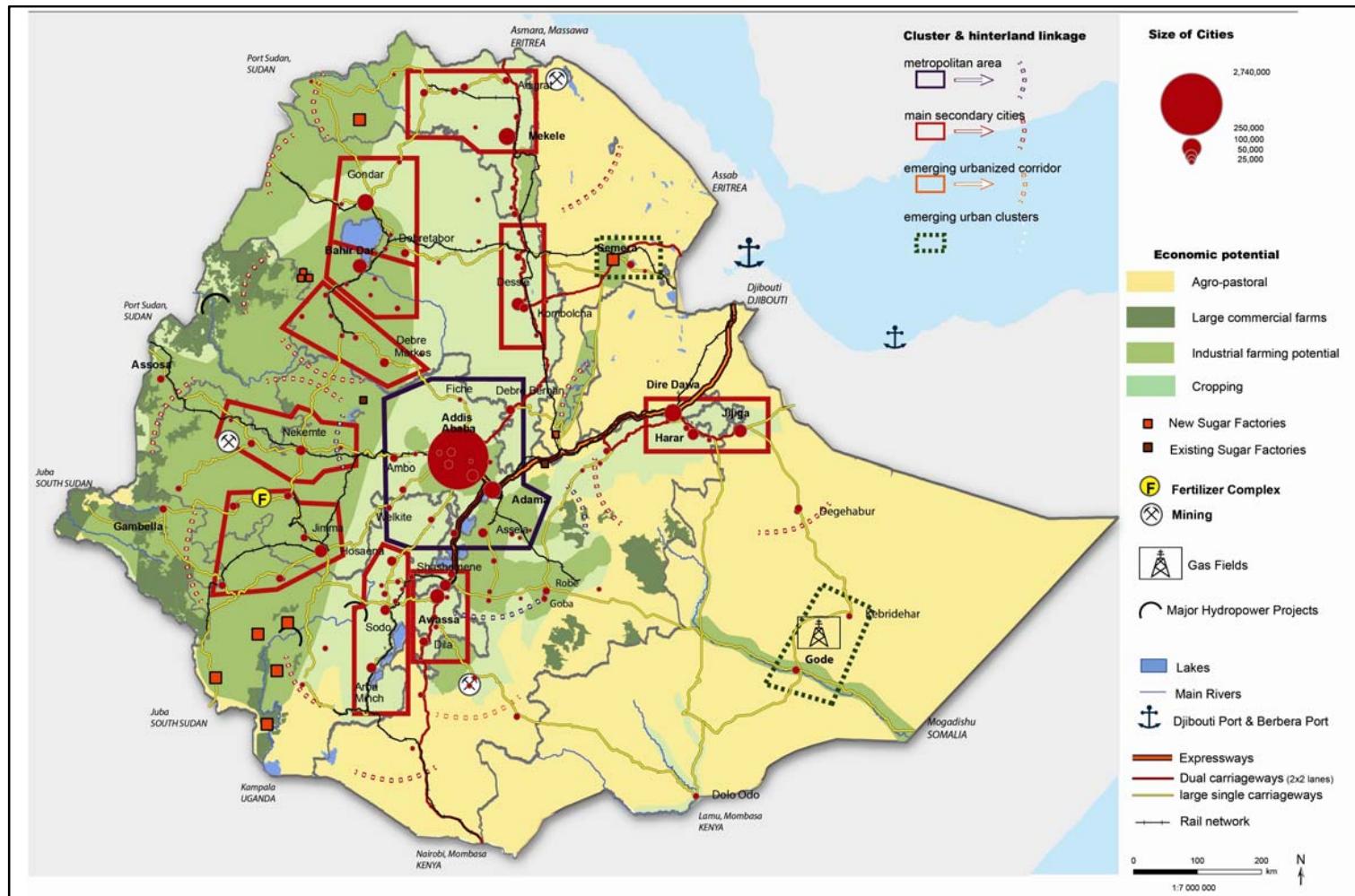
The goal of corridor development (MoFEC), rural development (MoA) and urban development (MUDHo) is economic development via: (a) efficient infrastructure, poverty reduction; (b) working on cities to support economic development, structure of the economy; and (c) promoting higher productivity and increased competitiveness.

Map 7: Existing Urban System



Source: CSA population census 1994 and 2007

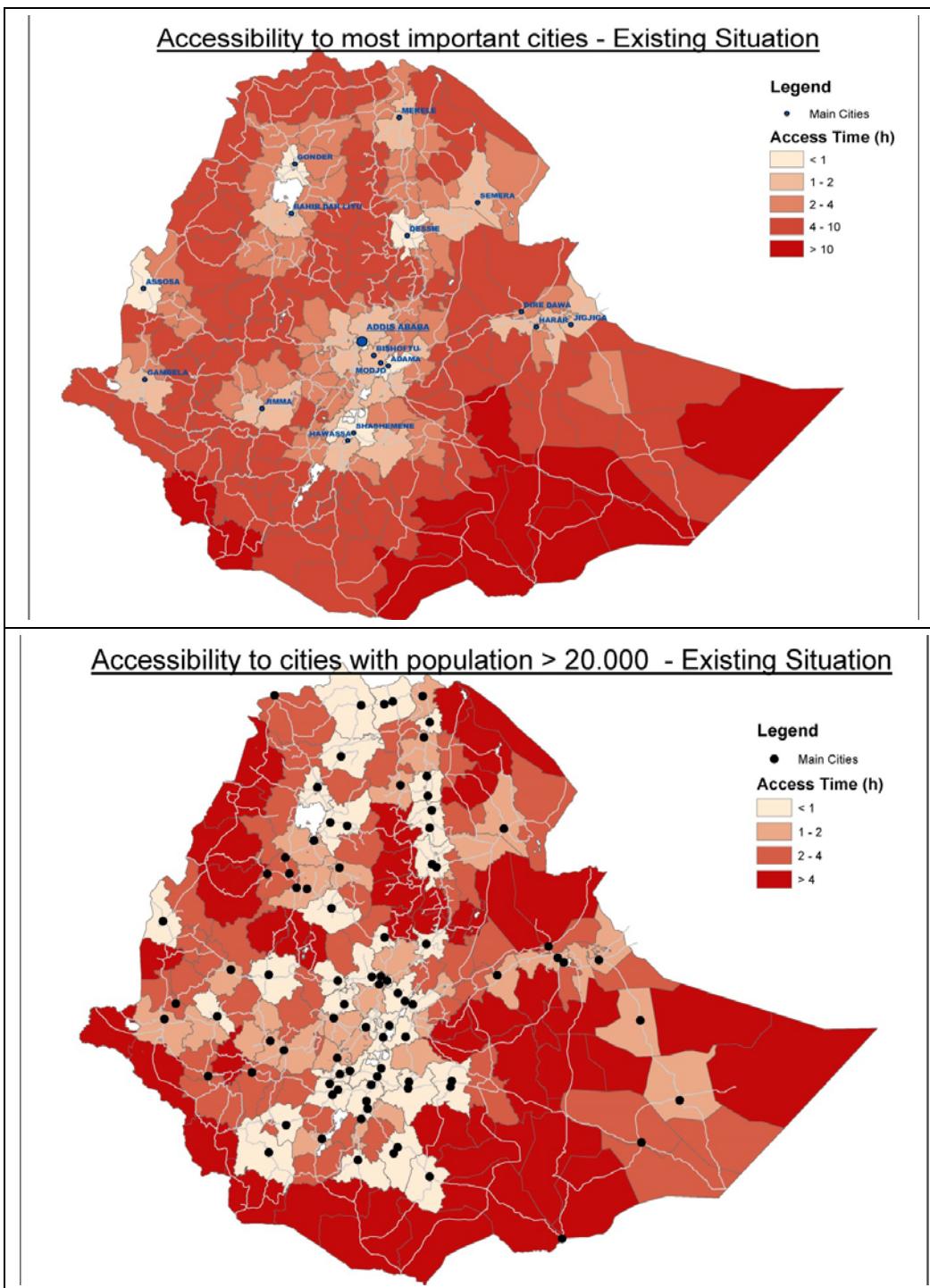
Map 8: Existing Urban Clusters and their Hinterlands



Source: Consultant analysis

Easy access to services is dependent on accessibility to the main towns and cities. Map 9 shows the accessibility to regional capital cities and cities of more than 20,000 inhabitants. It shows the location of remote areas requiring connection improvements to the main cities.

Map 9: Existing accessibility to main cities



Source: Consultant modelling

Border areas are relatively isolated; except for Gambella and Assosa. There is a corona of lower accessibility to cities surrounding Addis Ababa/Hawassa/Jimma clusters. The accessibility map for cities of more than 20,000 inhabitants shows the remoteness of the lowlands and border areas, and also the relative isolation of small areas of the Highlands at the borders of Amhara and Tigray regions. Population projection for these urban centres are useful to identify in which potential locations, cities with crucial economic value will emerge and support growth.

Balance development will be supported by services provided in cities and large towns. Towns of more than 20,000 inhabitants will play a major role in servicing rural areas. The population increase triggers the emergence of towns. Small towns will increase. The location of these towns will change the shape of the accessibility in the country. Accessibility maps have been produced by the Consultant for the Vision to shows how it is participating to a better support to rural areas through urban services.

1.6 Key drivers of urban development

The drivers of change are also constraints, which can reduce the attractiveness of some areas. Existing conditions (and constraints), of course, can change dramatically if large projects related to, for example, transportation, energy production, mining and commercial investments are implemented. Dramatic change can also be precipitated by reducing the impact of some natural hazards (i.e.: drought reduction with irrigation projects or flooding reduction thanks to dams and river management). These factors have been taken into account in the spatial modelling of population increases and the urban sector.

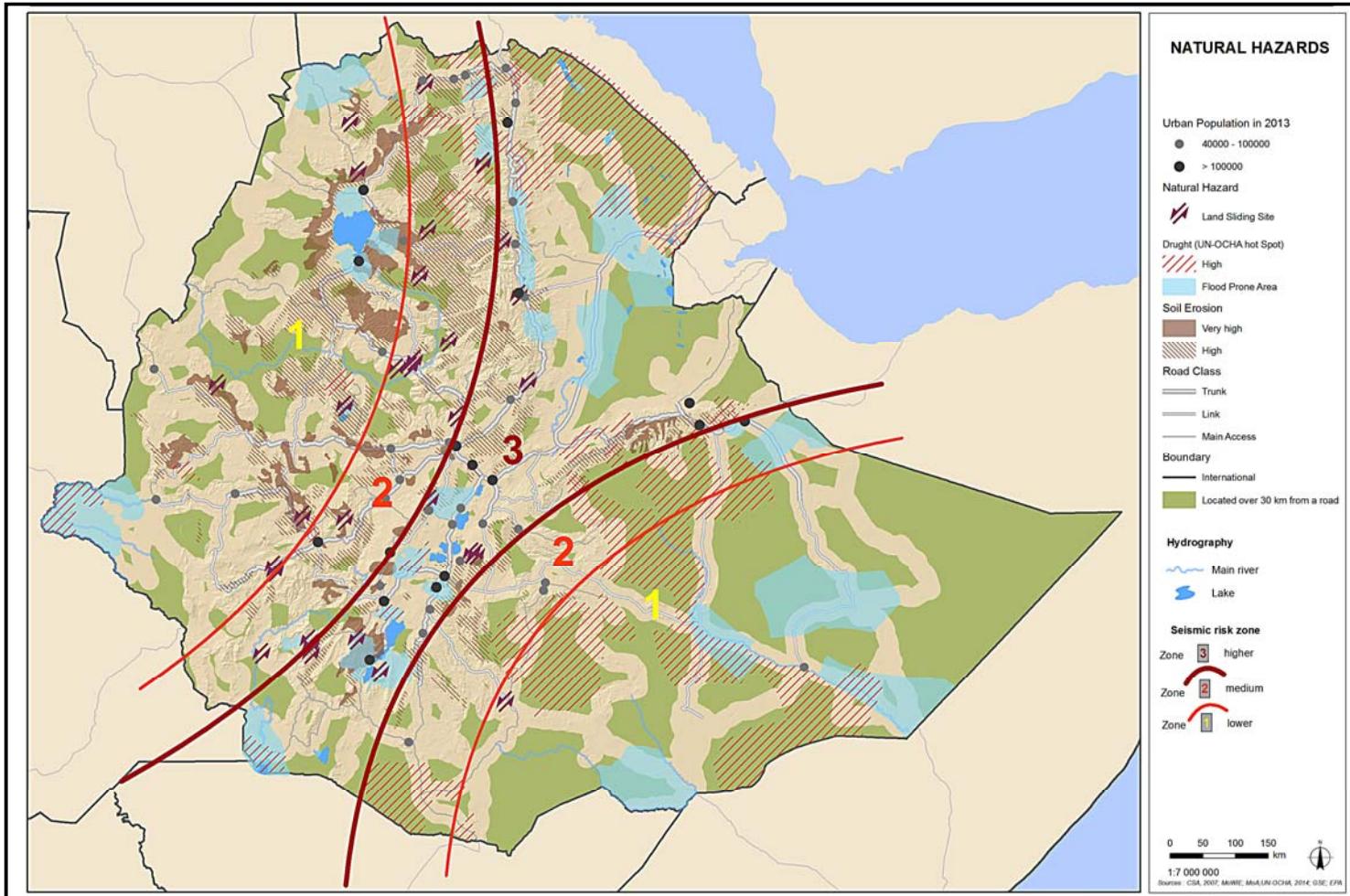
Existing Constraints on Urbanisation

There are four important types of constraints:

1. **Natural hazard constraints** (see Map 10) include flooding, landslides, seismic activity and various forms of environmental degradation and pollution (many of which are likely to be amplified due to adverse climate change impacts). The most important constraint is that related to water: its availability and/or scarcity (drought). Urban populations and water intensive industries generally require large quantities of water. Urban and industrial developments are likely to be limited in water scarce areas or require significant measures to overcome the scarcity. Map 10 also shows areas of high seismic vulnerability particularly in the Rift Valley. While general conditions of construction serve to prove a general framework for seismic safety, it is important that regional authorities assist municipalities in local zoning for risks are in order to delineate non-buildable areas where urbanisation should be either subject to special safety conditions or restricted. This is particularly important where a high seismic risk (Zone 3) is superposed with areas at high vulnerability for flooding and, on slopes, with landslide risks.
2. **Economic and social constraints** include the impact on urbanisation of the currently adopted growth model. Government-led, investment driven, export development based on low cost factors of production is generating remarkable growth rates. But the structural transformation of the economy is slow, the size of the export sector remains small, productivity increases are not dramatic, and the 'crowding-in' the private sector has not been as rapid as hoped. If the structural change is slow the urbanisation process is likely to slow down and associated with negative externalities. More

specifically, dysfunctional housing and land markets operate in urban areas (one consequence of which is the continuing lack of affordable housing and the expansion of the informal land market and settlements /slums). Poor levels of education, urban poverty, the limited affordability of transportation services for most of those living in urban areas and the poor business environment all constraint the development of the urban sector.

Map 10: Natural Hazard Constraints on Urbanisation.



Source: Consultant's analysis

3. **Urban governance, management and financial constraints** include the relative inability of many cities and towns to generate sufficient funds to provide adequate infrastructure and services, and the lack of capacities and capabilities to effectively plan and manage urban areas. The capacities and capabilities needed to manage; guide and finance urban development must be significantly improved, especially in cities outside of Addis Ababa, which are those urban areas that are expected to assume the bulk of the massive urban population increase over the coming 20-25 years.
4. **Accessibility constraints** include the remoteness of some areas, the low population density of many areas: (the probability of towns emerging in areas characterised by low population densities is relatively low); and distance from mega projects which will limit the attractiveness of an area for urban development;

Present Drivers of Urbanisation

Drivers for urbanisation are numerous (see Map 11) and can be summarised as follows:

- **Proximity to existing cities** (red and black circles on the map) **and main transportation corridors**: an important trigger of new urban development is the agglomeration and Metropolization effects of near-by existing cities and the presence of a main transportation corridor
- **High Population density and growth rate** (dark brown and light yellow on the map): Populous areas, especially those characterised by high population growth rates, facilitate the emergence of towns
- **Administrative status of the urban settlement**: whether a regional or zonal capital or a chartered city
- **High potential of natural and agriculture resources and surplus agriculture production** (light green on the map): which can attract workers and stimulate urbanisation
- **Presence of new and large commercial farms and agro-industries**: that attract new workers to the regions in which these farms and industries are located, and which could, over time, encourage the formation of urban settlements e.g. Flower greenhouses (red flower on the map)
- **Presence of non-agricultural economic assets**: such as minerals (and their extraction; mines are marked as red dots on the map) and industrial areas that attract job seekers and encourage urbanisation
- **Mega investment projects**: such as dams, sugar factories (orange triangle on the map), fertilizer factories, cement factories (blue squares on the map); etc....that concentrate workers in specific areas and so encourage urbanisation
- **Large infrastructure investments**: such as airports, major transportation investments (e.g. the highway to Djibouti and Hawassa), and dry ports all of which attract investment and create jobs
- **Major Universities** that create knowledge and train people, and potentially support entrepreneurial activity and innovation in their local economies

- **Tourism assets:** both natural, and cultural that offer opportunities of jobs in their surroundings (natural parks and heritage cities like Harar, Gondar, Axum); cultural assets such as UNESCO heritage sites are marked at T letters on the map and natural assets such as National parks are marked in dark green on the map.

It should be remembered that existing pattern of urban settlement, to a large extent, will determine the future pattern of urban settlements, particularly in the short to medium term. There is a '*path-dependency*' to urban development, namely what is likely to happen in the future is influenced and *constrained* by the present, but this dependency decreases over time. Indeed, it is within the current urban network that we can identify possible and potential growth nodes that are likely to drive the future expansion of the whole urban system.

The potential of many of these growth nodes will depend on their exact location. If they are located within areas with more or less favourable agricultural potential they are more likely to follow a "virtuous" urbanisation path based on food security, the development of agro-industries and agriculture-related services, and manageable levels of rural to urban migration.

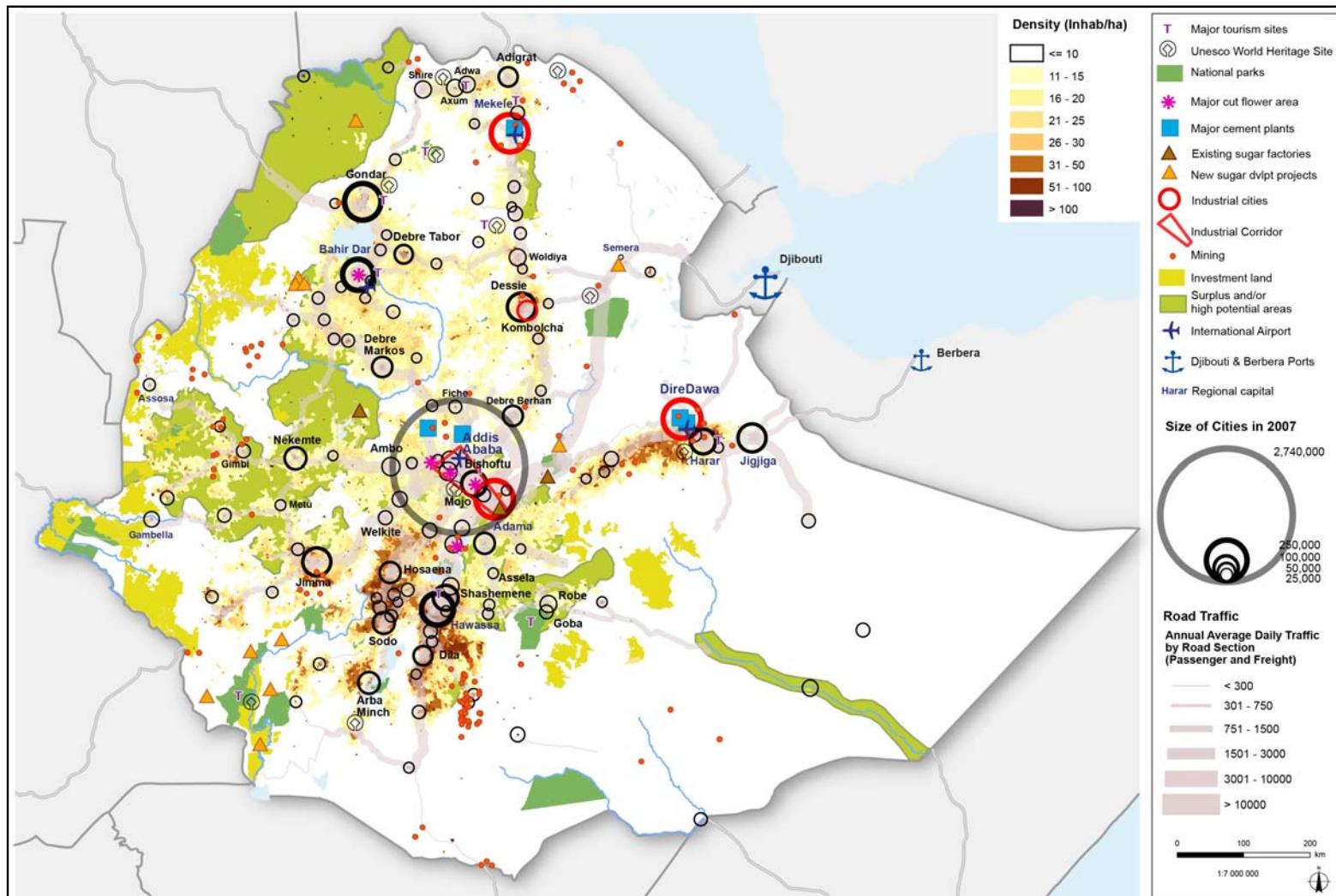
Conversely, potential growth nodes, which are located within less favourable rural hinterlands, are more likely to be threatened by issues of food insecurity or higher food supply and transportation costs, as well as by inflows of large numbers of rural migrants from poor rural areas. The potential of these nodes may be completely compromised and as a consequence their growth minimal. All these factors have been addressed in the Consultant's modelling undertaken to produce the urban scenarios

1.7 Lessons for the NUDSP Vision from other countries

The urbanisation experience of key benchmark countries provides important lessons for Ethiopia (see Appendix A for details):

- **In order to attain middle-income country status, a country needs to reduce the rate at which its population increases, and strengthen economic development.** Experience demonstrates that urbanisation is associated with a reduction in the fertility rate, and so limits total population growth. Moreover, higher added value can be obtained in industry if cities and towns are well managed, and become attractive locations for domestic and foreign investment.
- **A corridor development policy is used in many countries to trigger accelerated economic development.** The concentration of investment in major urban areas located along major transportation-cum-development corridors is economically efficient. For this strategy to work industrial areas need to be established and appropriately located in the designated corridors.
- **Industrial areas needs to be well planned** in order to attract investors, and to limit the impact of polluting and potentially disruptive activities. The concentration of activities is generally easier to control and manage. These industrial areas need adequate supplies of energy and water and excellent connectivity to reach international markets. Well planned industrial areas can accommodate only a part of the productive base of the country. Most of the urban jobs from SMEs will be located inside the urban areas, out of industrial areas or special economic zones.

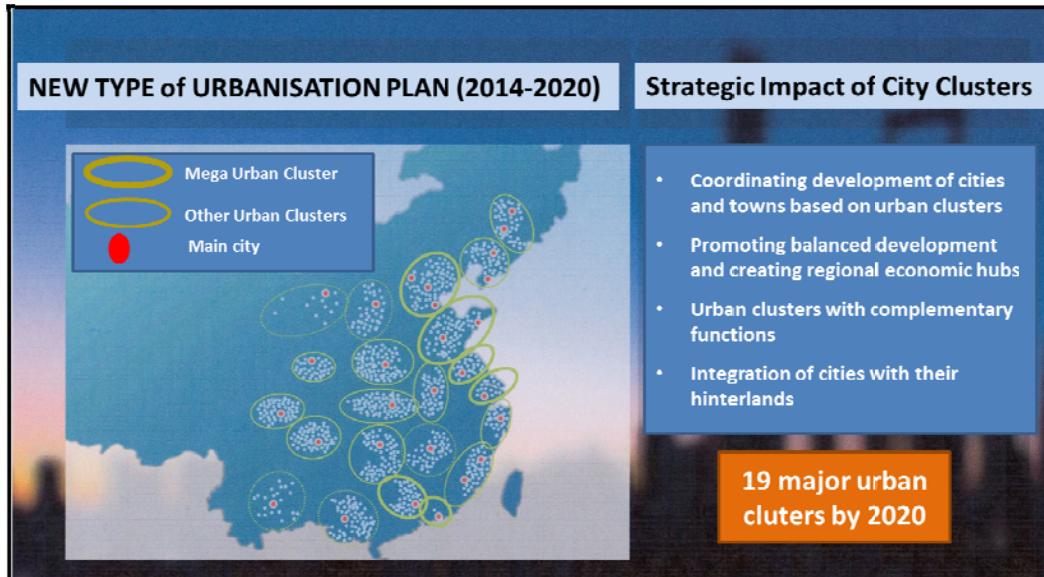
Map 11: Urbanisation Drivers in Ethiopia



Source: Consultant's assessment

- **A focus on urban clusters.** The promotion of urban or city clusters is an important feature of the national development plan of a number of countries (for example, China; see Appendix A and Figure 14). Many countries have sought to concentrate high-order functions in key cities and develop synergies between these cities and their surrounding towns and rural hinterlands (often through the creation and expansion of agro-industrial value chains)

Figure 14: The Importance of urban clusters in China



Source: Based on presentation made by Rd. Patrick C P HO, Deputy Chairman & Secretary General, China Energy Fund Committee. 9 April 2015.

- **Well balanced development is easier to implement in a decentralised system.** Urban services can be managed at the local level using participatory processes to define service needs and prepare appropriate projects. Devolving significant autonomy to urban areas with recognised practical and tested capacities (human, financial, material) often facilitates the management of these urban areas.
- **The efficient spatial organisation of the urban sector is a driver of domestic and foreign investment.** Experience indicates that the spatial organisation of the country has a direct effect upon the attractiveness of a country to domestic and foreign investment. Experience also indicates that designated transportation / communication / development corridors have a beneficial impact upon the long term attractiveness of territories to investment.
- **Significant financial resources are required for the provision and adequate maintenance of urban infrastructure, services, facilities and residential accommodation.** Three main resources are often mobilised to finance city development:
 - *Added value coming from industrial production and services.* Productivity gains associated with urban economic activities can lead to corporate and individual income gains which can underpin and revenue enhancement for city authorities.

- *Added value provided by land speculation.* Land values rise quickly when urban infrastructures and urban services are built. This added value can be captured by a city authority in order to finance urban expansion, development and the continuing provision and maintenance of urban infrastructure.
- *User charges.* Commercial services like water supply, electricity and telecommunication can be self-financing through user charges.

There are common challenges and difficulties that have been faced by the benchmark countries as they support the urbanisation process and seek to become MICs. These challenges and difficulties have been described in Appendix A. Most are the result of the inadequate provision of infrastructure and services (from roads to sewerage systems), a lack of urban and regional planning and management (a sub-set of a general lack of good governance) and only tenuous links made between urban and economic development.

The response of many countries has been to continue to focus on improving governance (and effective urban and regional planning and management), including the promotion of decentralisation, and city autonomy and responsibility. Often the underlying economic development philosophy relates to the belief in 'trickle-down', namely the promotion of growth in defined and concentrated areas will generate development dividends will be diffused down the urban hierarchy, and across the nation and society.

Specific spatial measures to organise and support the urban-industrial economy have included the identification and promotion of 'development corridors' (often geographically spread across a nation), urban growth centres or 'growth poles', and, in particular, support for the development and urban clusters. Within urban clusters functions characterising each level of the urban hierarchy are clarified and actions taken to ensure the identification and exploitation of synergies between urban areas in the hierarchy.

Urban corridor and urban cluster development are two of the most potent spatial configurations of the urban sector that promote growth, and both forms are likely to arise in Ethiopia. Indeed, there is a strong case to be made for planned development of urban clusters in Ethiopia:

- Currently, many secondary cities in the country are performing similar functions and are not specialising. One advantage of planned development of urban cluster is that it clarifies the functions of individual cities based on their economic strengths and comparative advantages (e.g. resource endowment, strategic location) and links them to each other in a way that creates a synergetic system.
- Another major advantage of the urban cluster approach is that it considers both urban and rural economic activities within a regional/subnational context. Urban clusters are thus an effective tool for integrating urban and rural economies and contribute to a more inclusive and balanced development.
- Neighbouring cities often compete for natural resources, investment, and funding for infrastructure investment. Such competition tends to result in overall less revenue for individual cities. Urban clusters reduce the risk of competition by creating a framework for joint revenue-raising mechanisms, thereby increasing the availability of financial resources for area-wide development. Urban clusters are also an instrument

through urban infrastructure and services can be provided to effectively serve a wider area rather than individual cities.

The message from an analysis of the benchmark countries is clear – rapid urbanisation has to be managed (spatially, economically and socially) for the process to effectively and efficiently underpin the transition to MIC status. Spatially, the urbanisation process is best organised using urban growth poles, development corridors and urban clusters. Economically, industrial cluster development mirroring urban cluster formations has been a feature of many successful national development plans. Socially efforts to ensure effective, transparent and accountable urban governance are important and measures to promote inclusive development vital.

It must be remembered; however, that experience also indicates that economic growth on its own will not lead to poverty reduction, unless serious efforts are made to enhance the capabilities of the poor to access emerging opportunities¹⁰. This requires the government to adopt pro-active measures

But sound urban development management will not happen on its own. It requires action from the Government and its development partners. Furthermore, if urban areas are not planned and managed correctly adverse effects are likely to compromise the transition to MIC status. More specifically we can be fairly certain that rapid urbanisation and economic growth, in the absence of sound urban management, will further damage the environment and lead to an increase in urban congestion, urban public health hazards, urban poverty, and the rise of a disaffected under-class.

¹⁰Experience indicates that while the market mechanism is one of the best ways to promote economic growth, it is often not adequate when it comes to ensuring economic and social equality. Indeed one common outcome of the unfettered use of the market is growing inequality.

Chapter 2. The NUDSP Vision

2.1 Introduction

The following section presents the 2035 Vision for the urban sector. The Vision addresses the location, size and function of key urban settlements across the country in 2035, how they are linked together, how they interact with their hinterlands, and more generally how the development and functioning of the urban sector can underpin the GTP process, and is a critical factor of Ethiopia achieving MIC status.

2.2 Envisioning Ethiopia's Urban Future (2035)

In order to devise the 2035 future vision for the urban sector the Consultant employed a scenario planning methodology, reported on in detail in the NUDSP Urban Scenario Report (April 2015). Three scenarios of the spatial organisation and functioning of the urban sector were devised (see maps 12, 13, and 14):

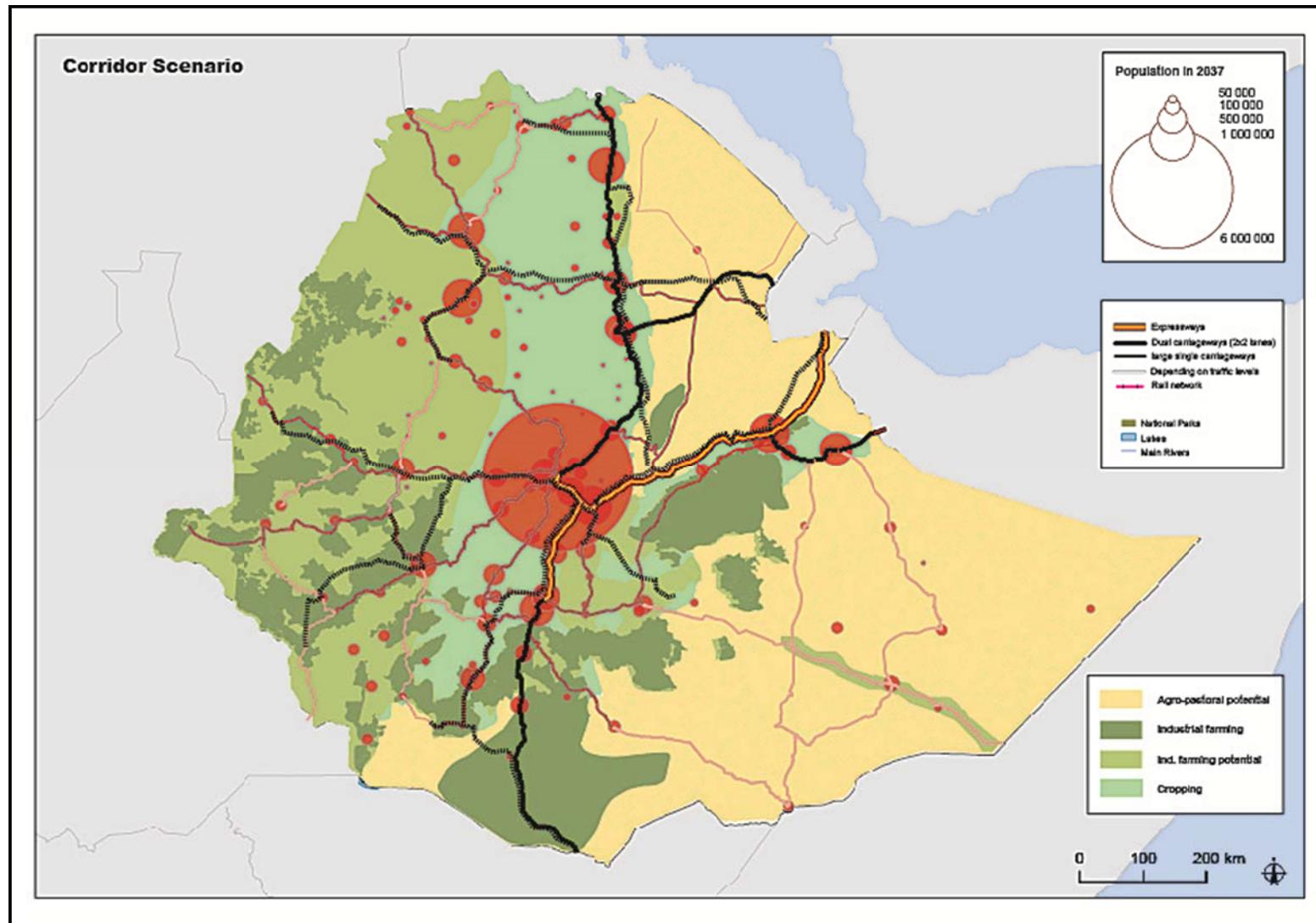
- **Corridor development urban scenario:** that examines the outcomes of continuing and strengthening current trends and policies until 2035. It describes a pattern of urbanisation which will be concentrated along the major transport corridors.
- **Dispersed urban scenario:** explores the path of 'small and medium-sized city development' as the primary mode of urbanisation in Ethiopia. This scenario is built on the assumption that the rural population is not going to decline.
- **Polycentric urban scenario:** describes a situation in which the urbanisation process is dominated by the growth of large secondary cities and the consolidation of urban clusters forming macro-urban regions.

Based on consultations with the MUDHo and other stakeholders, a **consolidated scenario** was constructed, which integrates elements of the three scenarios, seeking to reach the best fit possible with the economic potential of the country, and with the Governments' policy objectives of :

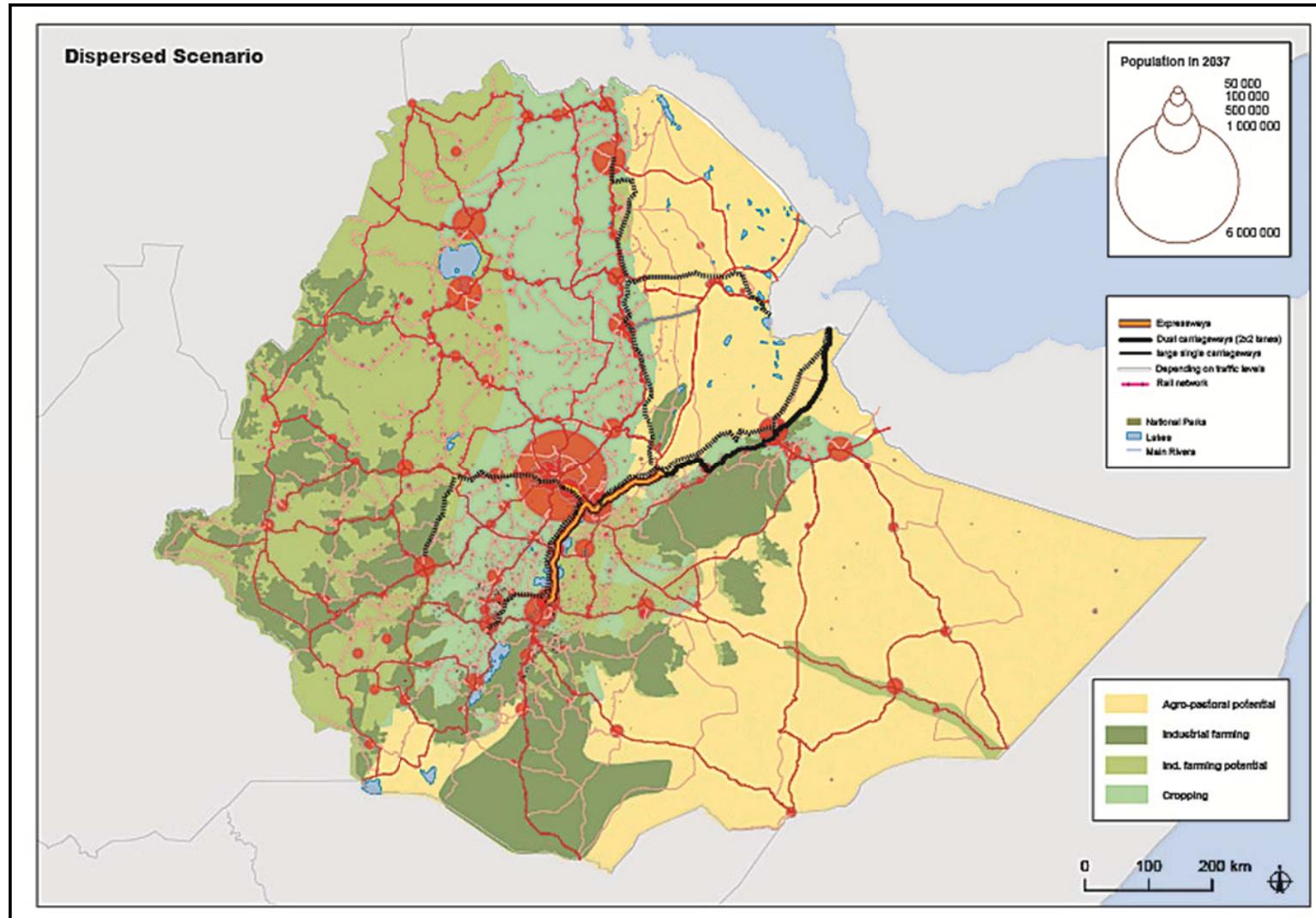
- balanced and equitable economic growth,
- reducing the primacy of Addis Ababa, and ensuring the city's competitiveness
- Achieving rapid agricultural productivity gains in conjunction with industrialisation and urbanisation.

The Polycentric scenario is closest to achieving these aims. This scenario is a narrative of the future of the urban sector of Ethiopia that is most likely to be associated with equitable and balanced urban and regional development and an urban hierarchy and functioning that is required for economic growth as envisaged through the GTP process. It provides the highest productivity gains and employment opportunities due to agglomeration effects. It provides services for rural areas and avoids excessive congestion along the main transportation and development corridors, and offers a platform on which to build balance regional development. It also offer the opportunity for more efficient resource management. All of the above make the polycentric scenario the most efficient, inclusive and sustainable path of urbanisation. **As such the Polycentric scenario was used as the anchor of a consolidated scenario, which is the basis of the NUDSP vision for 2035.**

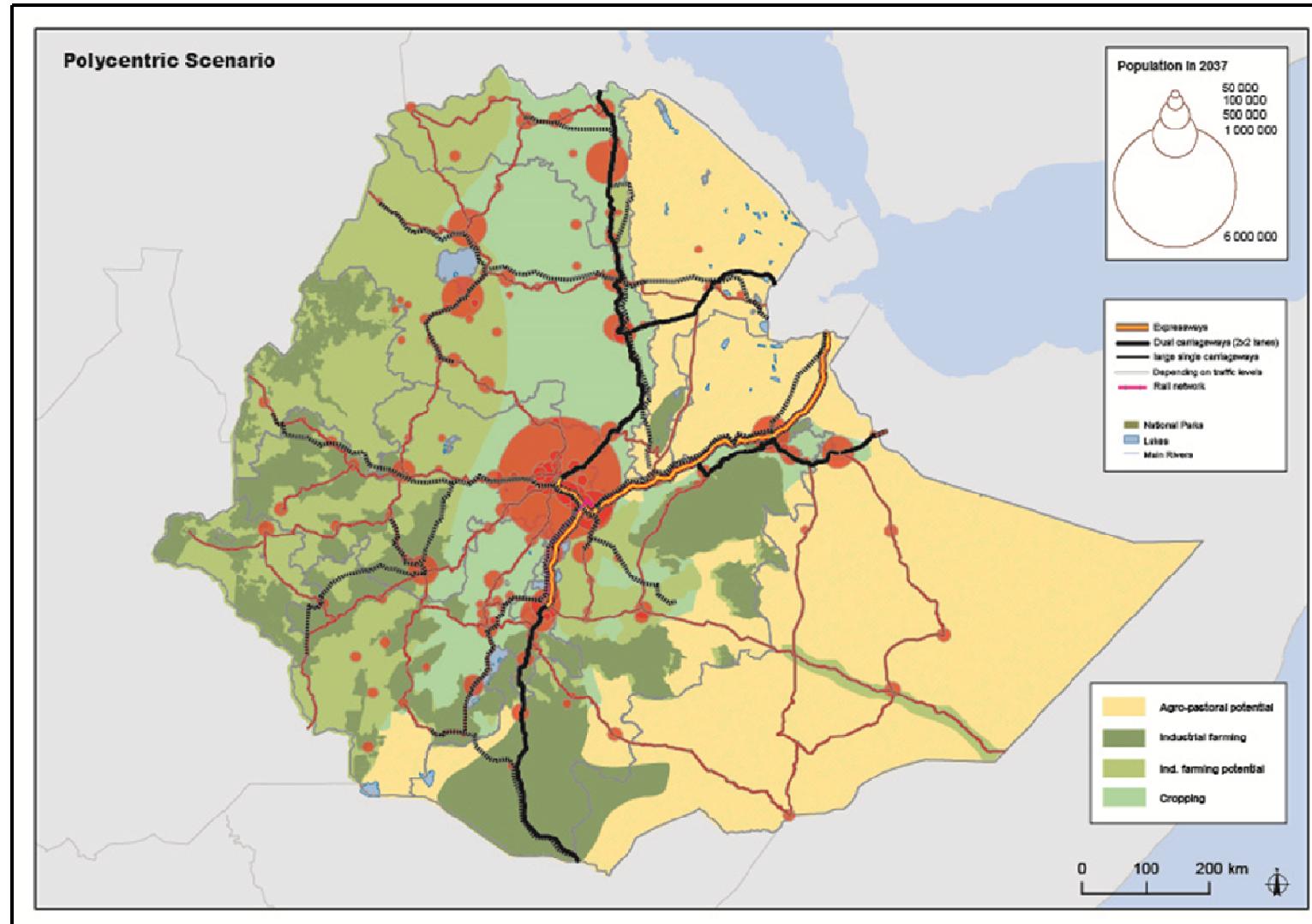
Map 12: Urban population and transportation pattern under the Corridor Scenario



Map 13: Urban population and transportation pattern under the Dispersed Scenario



Map 14: Urban population and transportation pattern under the Polycentric Scenario



2.3 Driving forces of the NUDSP Vision

As the polycentric scenario is the anchor of the consolidated scenario so the driving principle of the NUDSP Vision is the polycentric development principle, namely a selected number of urban centres, particularly **secondary cities**, ranging in population size from 500,000 to one million, and **urban clusters**, which will become the primary form of urbanisation under this scenario. More specifically, this principle assumes the following:

- **Large urban centres and key clusters of cities are the main engines of economic growth** and will be the locus of productivity improvements in both the industrial and service sectors. These cities will also be extremely important for agricultural development because industrial development in Ethiopia is likely to remain based on agricultural outputs for some time. An increase in value-added agro-industrial activities in and around these cities is expected.
- **Economic and employment opportunities will be dispersed from congested urban regions**, i.e. from Addis Ababa, to secondary cities, many of which will be the regional capitals, allowing for a more balanced development across the country and a reduction in the primacy of Addis Ababa.
- **The development of selected secondary cities supports the growth of job opportunities around the country**, and attracts domestic and foreign investments while simultaneously redirecting economic development to lower ranked urban centres, and rural areas in their respective regions.

The successful application of the principle, and thus the NUDSP Vision, is predicated upon the following:

- An open economy and robust economic growth (with a GDP growth rate of 11.4% p.a. until 2020 and 8% p.a. up to 2035)
- Government intervention to provide urban facilities and services in these cities;
- Effective connections amongst cities and towns and with the key ports but also between urban and rural areas;
- The development of hinterlands of the main cities and towns, through both agricultural and non-agricultural activities.

The NUDSP Vision takes into account important policy supporting on-going developments including:

- **Emphasis on urban development along important transport corridors** (roads, railways), in particular those corridors used for export and leading to key ports (e.g. Djibouti, Berbera and Port Sudan today, Tadjou

- Rah Port in the near future, Mombasa and the future port of Lamu around the years 2025-2030¹¹. Connections are likely to be via the Trans-African continental network, existing and planned expressways and the National Ethiopian Railway Network.
- **Emphasis on the urbanisation of rural areas** (small towns, and rural and market centres) and the modernisation of local economies (based on agriculture and livestock, agro-industry and non-farm rural activities) should be actively facilitated to mitigate disparities between rural and urban areas.
- **Emphasis on multi-nodal urban development** which should be promoted in order to rebalance urban and rural economic development across the country.

Furthermore, the NUDSP Vision assumes that most of the current strengths and development potential of each of the principal urban clusters with their hinterlands will be fully harnessed. The following driving forces underpin the Vision:

- **Demographic driving forces:** Lower fertility rate (i.e. 2.5) resulting in lower population growth; a very high urbanisation rate; a selected number of nationally significant and economically diversified centres, and lower primacy of Addis Ababa.
- **Economics factors of change:** continued integration in global markets; improved trade competitiveness; high overall economic growth, concentrated in large cities and urban clusters; a greater focus on manufacturing, services and knowledge-related economy; empowerment of the domestic private sector (without the private sector assuming an important role, sustained urban and economic development is unlikely)
- **Infrastructure factors of changes:** highly developed and well integrated transport infrastructure (both rail and road-based) that facilitates movement between and within urban clusters, and between urban clusters and the country's main sea outlets.

2.4 The future Urban System

By 2035, the total population of Ethiopia is expected to reach 135million inhabitants; with an urbanisation level of between 37 and 40% (see Figure 15). Around 51.6million people will reside in urban areas, out of which at least 5.0 million will live in small towns emerging from settlements classified as rural in 2007. The anticipated urban population is distributed amongst the various sizes of urban settlement is given in Table 6:

Table 6: The urban system in 2035

City-Town	Population characteristics
Addis Ababa	Expected to reach some 6.8million inhabitants. The capital city will continue to dominate the urban system, but its primacy over second ranked cities is expected to decline from a factor of 11 to 6, as most of the urban population growth is expected to occur in secondary cities.
9 cities	With a population ranging between 500,000 to 1,000,000 inhabitants including two cities with a population around 1 million inhabitants, (Bahir Dar and Mekele). Aggregate population of 7million for all secondary cities.

¹¹Also Eritrean Ports of Assab and Massawa, can be options in the future, as relations with these two countries will likely be improved.

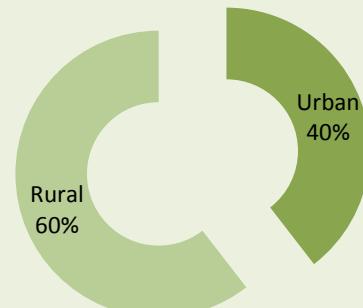
59 cities	With between 100,000 to 500,000 inhabitants, which provide an extensive network of large cities in the different regions.
79 intermediate cities	50,000 to 100,000 inhabitants
300large towns	20,000 to 50,000 inhabitants
1 727 small towns	With 2,000 to 20,000 inhabitants
Over 400emerging towns	With less than 2,000 inhabitants are expected to emerge within the next 25 years, which corresponds to 75 small towns emerging every year. This trend is significantly higher than that of previous period during which 15 to 20 small towns per year were emerging.

Figure 15: Urban population characteristics of the NUDSP Vision

Ethiopia's Urban Development Spatial Plan 2035

Based on CSA data
World bank Urbanisation Projection
Egis-IAU Spatial Development Scenario

Population 2035
Total: 132.6 million
Urban: 53 million



Urban Population by Size of cities in 2035

ADDIS ABABA CITY/ADMINISTRATION	6 820 180	DEBRE TABOR TOWN	219614
MEKELE TOWN SPECIAL ZONE	1 030 381	HAGERE MARIYAM TOW	215310
BAHIR DAR TOWN	972 050	DEBERE MARKOS TOW	206689
ADAMA TOWN	954 861	ADWA TOWN	194984
GONDER TOWN	850 145	AXUM TOWN	194838
DIRE DAWA-URBAN	809 240	GODE TOWN	183698
HAWASSA CITY ADMINISTRATION	798 969	WELISO TOWN	167168
JIJIJA TOWN	625 801	NEGELE TOWN	166388
JIMMA TOWN	581 110	ASOSA TOWN	166338
SHASHEMENE TOWN	576 932	MEKI TOWN	162865
DESSIE TOWN	498 441	HOLETA TOWN	157758
BISHOFTU TOWN	437 656	CHIRO TOWN	157212
SEBETA TOWN	381 112	CHANCHO TOWN	149180
BURAYU TOWN	368 778	FINOTE SELAM TOWN	148435
NEKEMTE TOWN	363 841	DEMBI DOLO TOWN	146357
KOMBOLCHA TOWN	357 673	GOBA TOWN	145312
MOJO TOWN	342 340	WUKRO TOWN	145199
DUKEM TOWN	333 000	DEGEHABUR TOWN	144101
ASELA TOWN	325 386	SENDABA TOWN	143663
WOLDIYA TOWN	323 183	KEBREDEHAR TOWN	140329
SODO TOWN	323 071	BUTAJIRA TOWN	138903
ARBA MINCH TOWN	318 097	AREKA TOWN	137994
MENAGESHA TOWN	316 527	HAROMAYA TOWN	131719
HARARI-URBAN	291 229	ALAMATA TOWN	130793
HOSAENA TOWN	285 257	YIRGA ALEM TOWN	127184
ADIGRAT TOWN	279 976	GIMBI TOWN	125292
ZEWAY/BATU TOWN	277 026	DOLO TOWN	121508
GAMBELA TOWN	264 405	TAPI TOWN	113914
DEBRE BREHAN TOWN	257 674	MIZAN TOWN	112020
DILA-TOWN	238 357	NEJO TOWN	109844
SHIRE ENIDASILASE TOWN	237 159	WELKITE TOWN	109543
ROBE TOWN	232 985	METU TOWN	108444
AMBO TOWN	231 872	DURAME TOWN	106324
ARSI NEGELE TOWN	224 810	MAYCHEW TOWN	102636
AWASH SEBAT KILO TOWN	224 067		

Cities population in 2035 (Millions)

TOTAL URBAN	53 067 540	No
Addis Ababa	6 820 180	1
>500 000 – 1 000 000	7 199 489	9
>100 000 – 500 000	12 765 479	59
>50 000 – 100 000	5 824 239	79
>20 000 -50 000	9 125 578	300
>2 000 - 20 000	10 912 717	1728
>=2000	419 859	>400

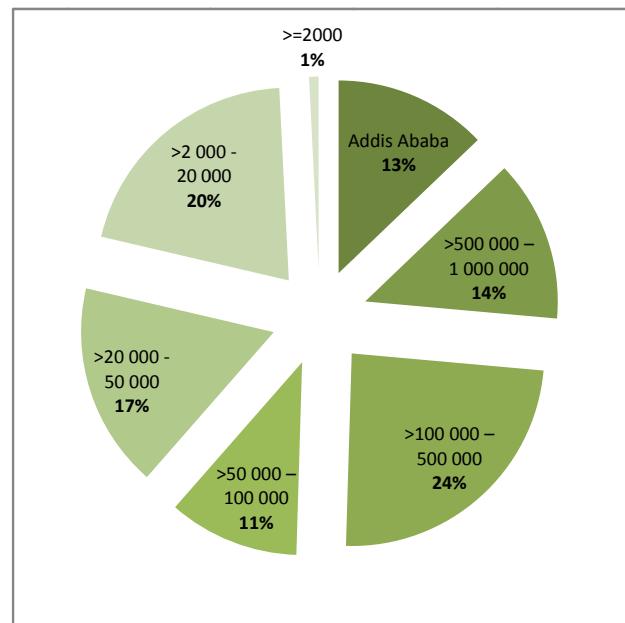
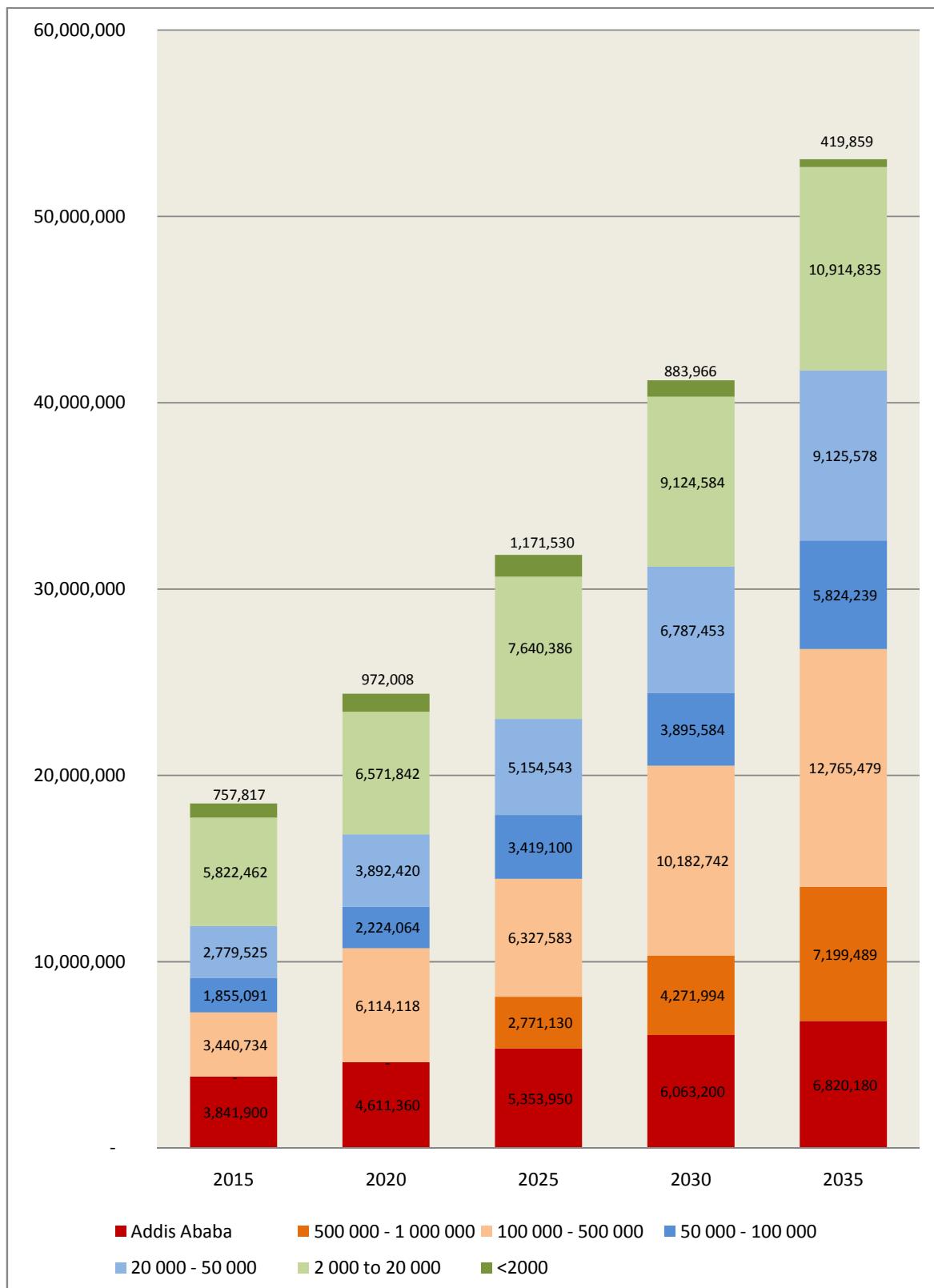


Figure 16: Envisaged urban population growth, 2020-2035



2.5 Urban Clusters and Oasis City Networks

One of the main features of the Vision is the emergence and consolidation of urban clusters and oasis city networks in different parts of the country. By 2035, urban clusters are expected to become the main form of urbanisation in the Ethiopia:

- **Existing urban clusters** are expected to grow in size, to diversify their economic functions and strengthen their networks, both intra and inter cluster.
- **Emerging clusters** are expected to grow into full-fledged urban clusters. Overall, cities will become functionally, structurally and spatially linked.

By 2035, eight major urban clusters and two ‘oasis city networks’ are expected to be the locus of economic growth and transformation in the country. Their growth will be associated with strengthened linkages (both urban-rural and urban-urban) and the development of their respective hinterland. The urban clusters and ‘oasis city’ networks that will characterise the urban system in 2035 are listed in Table 7:

Table 7: List of major Urban Clusters and Oasis City Networks

Major Urban Clusters	Oasis City Networks
<ol style="list-style-type: none"> 1. Addis Ababa Metropolitan Cluster 2. Eastern Urban Cluster 3. Bahir Dar Urban Cluster 4. Gondar – Metema Urban cluster 5. South Rift Valley Urban Cluster 6. Mekelle Urban Cluster 7. Dessie – Kombolcha Urban Cluster 8. Jima Urban Cluster 9. Nekemte Urban Cluster 10. Robe-Goba Urban Cluster 	<ol style="list-style-type: none"> 1. Gode – Kebri Dehar oasis city network 2. Semera – Mille – Asaita oasis city network <p><i>(Due to climatic constraints and resource scarcity in Afar and Somali regions, population growth is expected to be concentrated in key of ‘oasis’ cities)</i></p>

The expected hierarchy of urban clusters in 2035 is as follows (see Maps 13 and 14):

- **The Metropolitan cluster** which contains some of the country’s largest cities as well as all urban and economic functions (i.e. Addis Ababa Metropolitan cluster). This cluster will continue to dominate the urban system. The linkages between the towns in this cluster are growing and over the years it is expected to become a single functional economic area. At present and in the near-term the cluster could be divided into two, namely:
 - Addis Ababa and its surrounding towns, including Wolkite and Fiche and with a particular role for Adama, a dynamic and growing urban centre, and its

surrounding towns, which could be seen as an important secondary cluster in its own right.

- **Secondary city clusters**, which consist of:

- Bahir Dar Urban Cluster
- Gondar - Metema Urban Cluster
- South Rift Valley Urban Cluster
- Eastern Urban Cluster
- Mekelle Urban Cluster
- Jimma Urban Cluster
- Dessie Kombolcha Urban Cluster.
- Nekemte Urban Cluster
- Gode – Kebri Dar oasis city network
- Semera – Mille – Asaita oasis city network
- Robe-Goba Urban Cluster

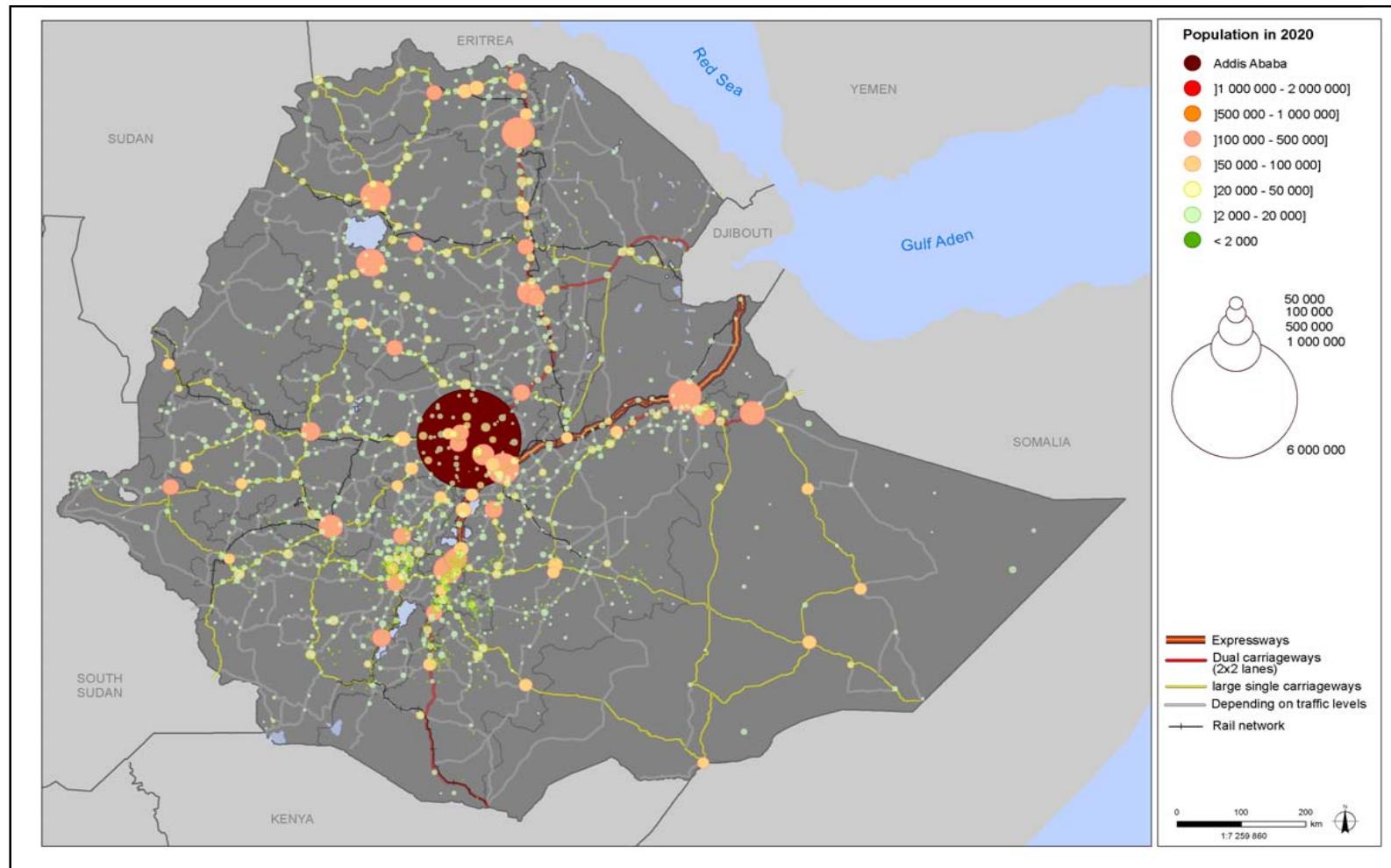
These secondary clusters are expected to become thriving growth centres endowed with a relatively broad range of urban and economic functions commensurate with their population size and status. They are expected to attract significant investment – both domestic and foreign – as well as in-migration from all parts of the country. Besides, taking on new economic roles, they are thus expected to reduce migratory pressure on the Addis Ababa Metropolitan Cluster and offer an excellent opportunity to counterbalance the growth of the latter.

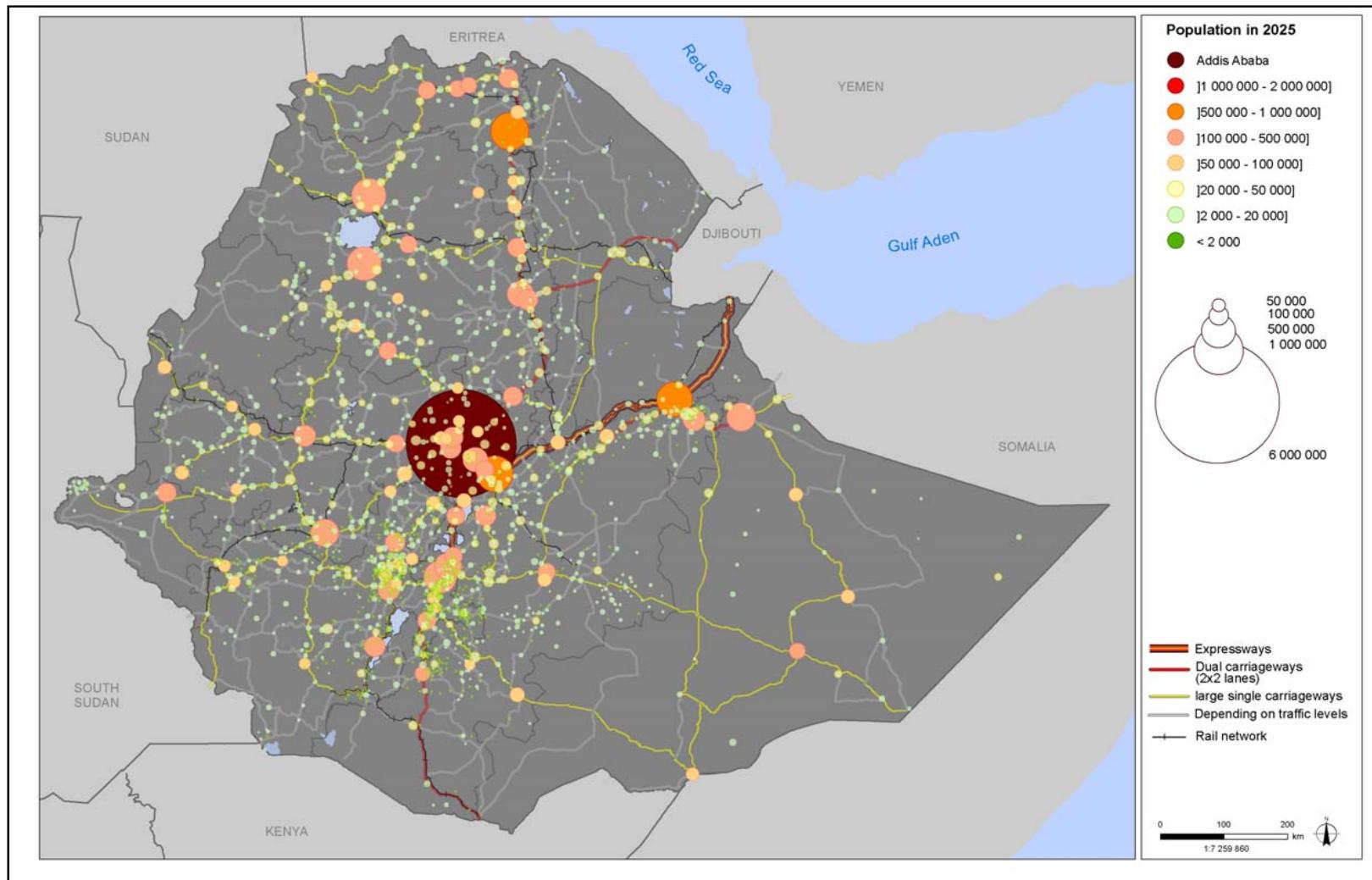
The large or dominant cities within each cluster are expected to be the main engines of growth at the cluster and regional scale. Within each cluster, urban-urban linkages will be further enhanced as cities and towns will be interconnected in a specific functional hierarchy. Within each cluster, different cities and towns are interconnected in a specific functional hierarchy.

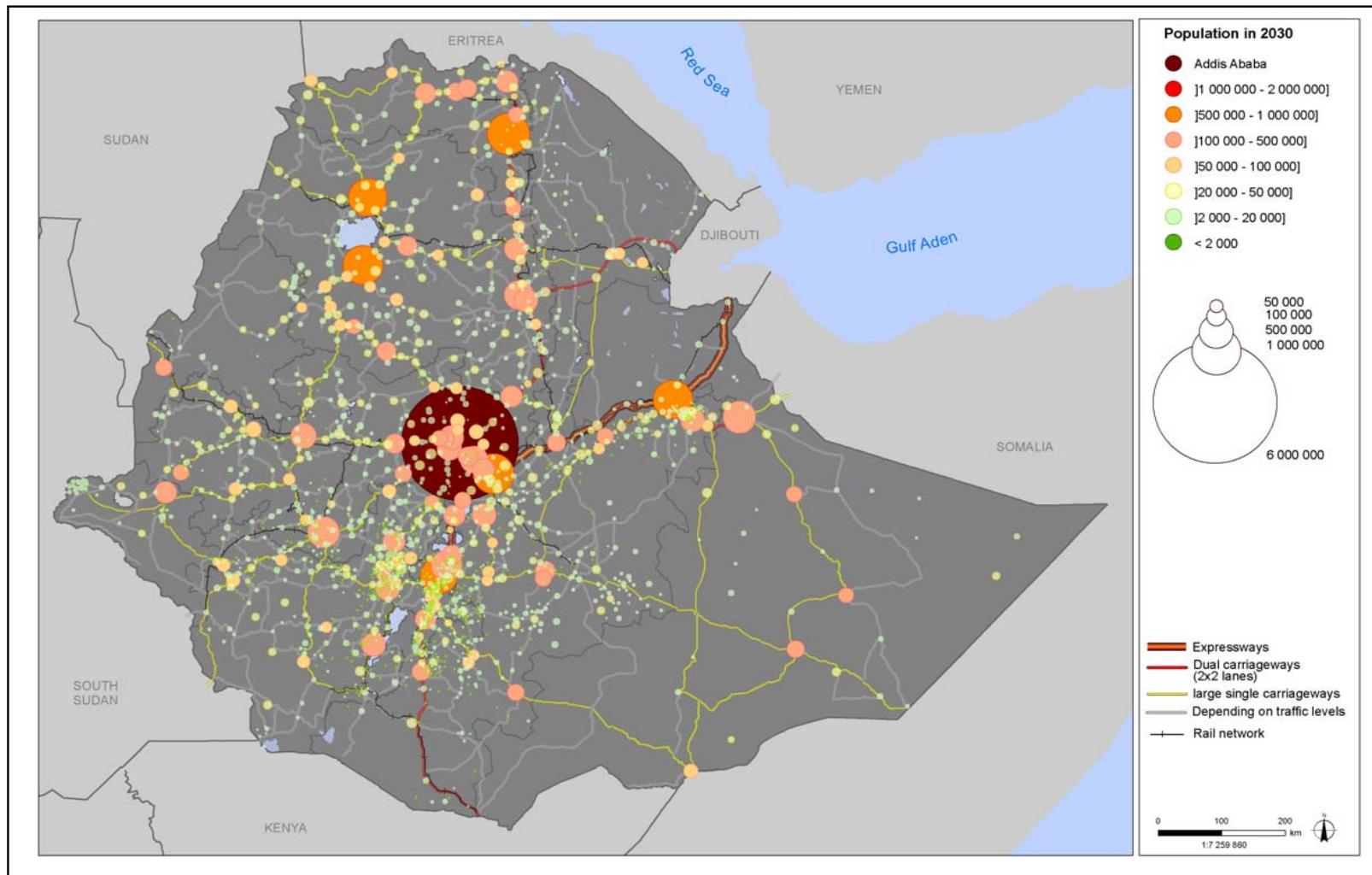
This functional distribution of industrial and other economic activities will conform to the cluster's overall potential (often based on its hinterland resources) and the specific characteristics and resources of each city. Small towns will play a key role in servicing rural areas, thus allowing for economic development to spread from the higher levels of the urban hierarchy to the rural hinterland.

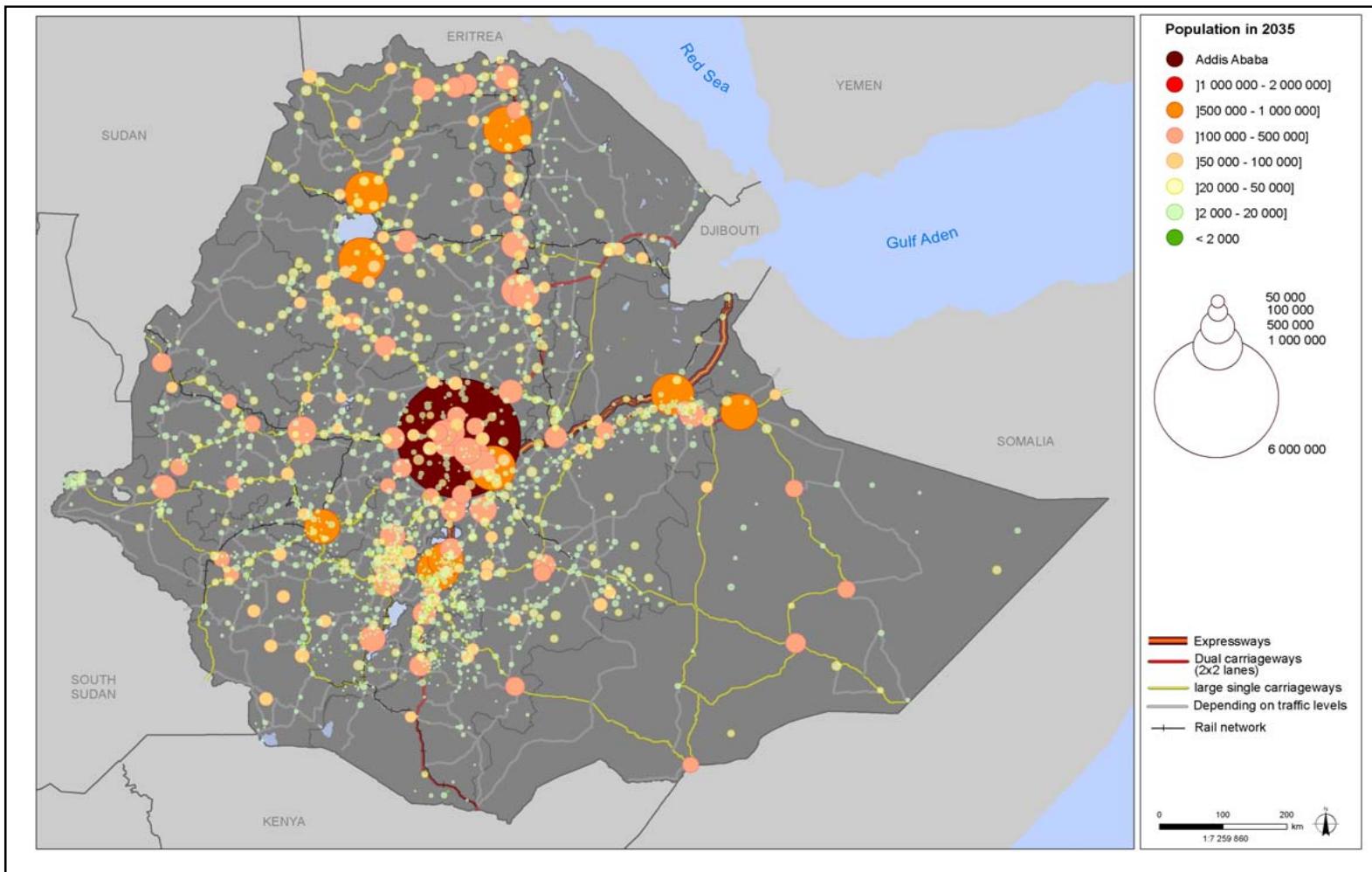
The distribution of urban and economic functions should also aim to strike a balance between export-oriented and domestic market activities. This is crucial to enhance living conditions in and foster endogenous growth within the clusters. The emergence of urban clusters with strong linkages to their rural hinterland in various parts of the country will provide an excellent opportunity to counterbalance the primacy of Addis Ababa.

Map 15: Evolution of the urban system 2020-2035

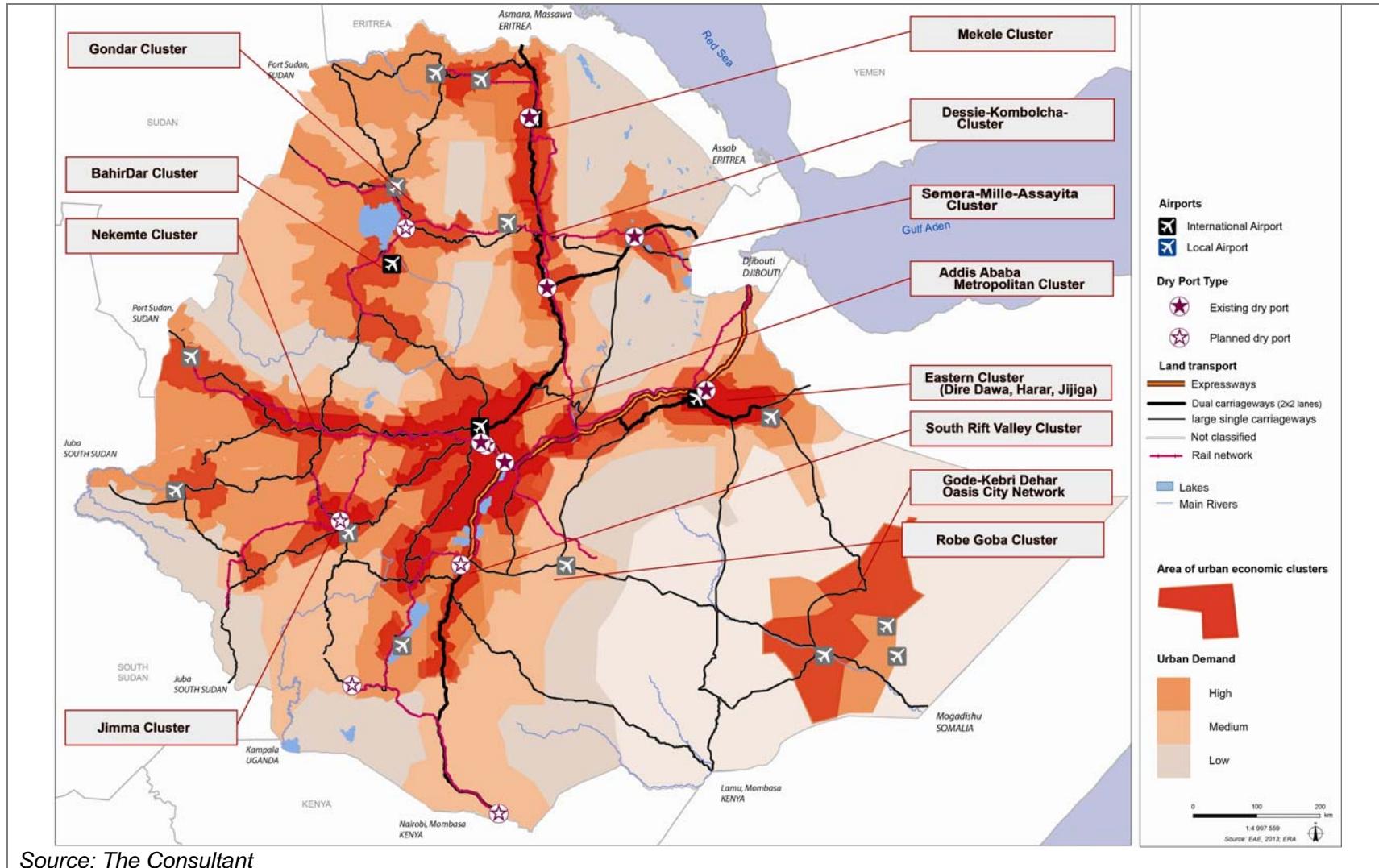






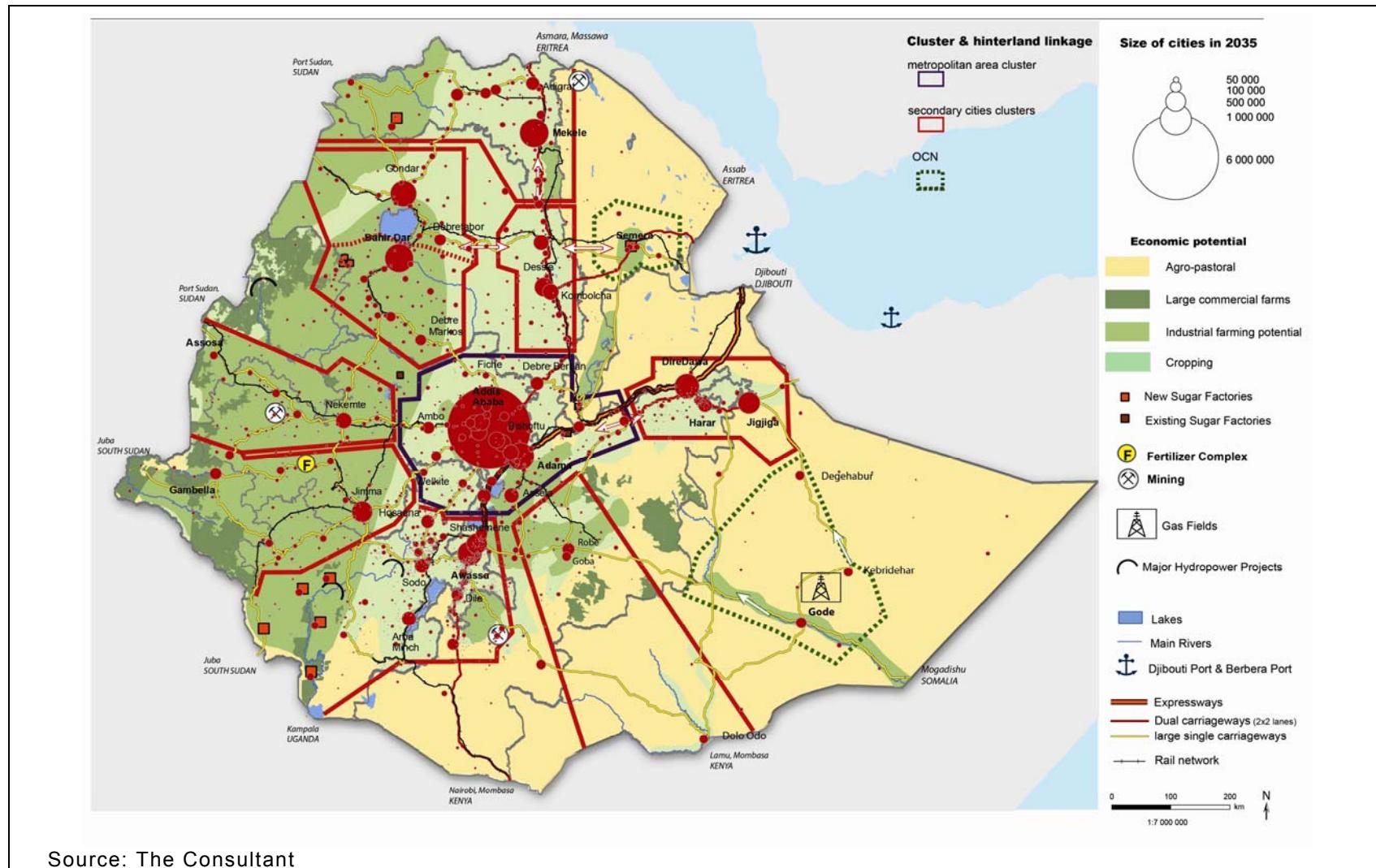


Map 16: Urban Clusters in 2035



Source: The Consultant

Map 17: Developing the potential of Urban Clusters and their rural hinterlands in 2035



The key characteristics and functions of each cluster in 2035 are briefly described below:

1. Addis Ababa Metropolitan cluster

Overview

The Addis Ababa Metropolitan cluster will continue to dominate the urban system and will contain some of the country's largest urban centres, i.e. Adama, Bishoftu, Sebeta, Dukem (ranked respectively 4th, 12th, 13th and 14th in terms of population size).

By 2035, it will further expand, encompassing surrounding cities such as Ambo, Debre Berhan, Fiche, Ziway, Welkite forming a dense network of large and medium-sized cities. These cities will become gateway cities within the cluster.

By 2035, Adama and its surrounding cities (Modjo, Ziway, Assela, Wonji, Wolenchiti) are likely to be in its sphere of influence. Indeed, these cities could be seen as forming a separate and important secondary urban cluster in the country. However, this cluster's functional distinctiveness is likely to be blended into the single functional economic area of the Metropolitan urban clusters over the years, mostly likely within 5 to 10 years. The cluster is already spatially and functionally linked to Addis Ababa through an expressway and will be drawn even closer once the commuter rail service becomes operational, which could be as early as 2016, thus making Adama the second largest city of the metropolitan cluster.

The Metropolitan Cluster will have the greatest range and extent of functions of all the urban clusters in Ethiopia (political, administrative, industry, trade and logistics, financial, health, higher education and research, cultural, tourism & leisure, among other). The cluster will continue to play a leading role in national and international affairs.

Economic profile

The Addis Ababa Metropolitan Cluster will continue to have the most complex and diversified economic profile among Ethiopia's urban clusters as its metropolization process unfolds. Major growth drivers of the cluster include:

- **Manufacturing:** the AAMC will continue to attract the majority of public and private investments in the key manufacturing sectors (textile and garment, leather & footwear, chemicals & pharmaceuticals, high-tech industries). Some of the country's largest Industrial Parks are being developed or planned within the AAMC. These include: Bole Lemi I & II, Kilinto IZ, Huajian IZ, Ethio-Turkish IZ, George Shoe IZ, Adama IP, Modjo Leather City, Debre Berhan IP.
- **Construction:** the sector has recently been a major contributor to the cluster's economy and is expected to remain important. The construction sector will benefit from the proximity to major cement producing areas north of Addis (Derba/Mugher, Dejen) where new cement plants are expected to enter production in the coming years.
- **Agro-processing:** The AAMC already has the country's highest concentration of medium and large food industries: Wonji/Shoa sugar factory, cut flower farms and agro-industries in Holeta, Sebeta, Bishoftu and Ziway. The agro-processing sector will continue to expand as the agricultural production potentials in the cluster's wider rural hinterland are better exploited. One of the country's four pilot Integrated Agro-Industrial Parks is planned in Ziway.
- **Service industry:** Addis Ababa will continue to concentrate a large fraction of the high value-added service sectors that are typical of a modern and globalized metropolitan economy: banking and finance activities, real estate, information & communication, logistics services, trade & export services, tourism and hospitality industries...

- **Trade, transport and logistics functions:** Owing to the success of the national flag carrier, Addis Ababa has become a regional air transport hub. The cluster is expected to further develop its trade and transport functions with the construction of a new airport city outside of Addis Ababa, rail freight stations and the modernization of dry ports.

Connectivity

Equipped with a new international passenger terminal outside of the Addis Ababa city boundary, several modernised dry ports and freight terminals (both rail and road based), this cluster will continue to be a major air transport hub in Africa and also a major trade and logistic hub for the country. It will be served by several expressways such as Addis-Adama, Addis-Debrebirhan, Addis-Wolkite, and railways connecting it to secondary city clusters and major ports in the region.

Key functions of selected cities

- The national capital, **Addis Ababa** will continue to act as the main command centre of the country, concentrating on political, administrative, educational, financial, business, trade and logistics function. It will continue to be the main destination for investment, particularly in industrial activities. Its economy will further diversify, with a selective concentration of international functions and knowledge-intensive, high-tech industrial and service activities. It will remain the country's major education and health hub.
- **Adama** will encompass urban and economic functions that match its status as the secondary city of the Metropolitan cluster. Its role as an important political, cultural, educational and tourism centre will be strengthened. The Adama Science and Technology University will complement Addis Ababa as an educational hub. Strategically located on the country's primary trade corridor, via Dire-Dawa, and with relatively easy access to the south, the city will grow into an important hub between the South Rift Valley and Eastern urban clusters.
- **Bishoftu**, a secondary city with administrative functions, will be boosted by its importance as a tourism and leisure centre. It also develops a relatively strong industrial base around manufacturing (mainly textile and garment), agro-processing (export abattoirs) and automotive industry.
- **Sebeta** will emerge as an important railway station with transport activities as well as an important agro-processing centre (particularly dairy processing activities). There is thus a need to establish a dry port and a warehouse in the town.
- With the expansion and modernisation of its dry port, **Mojo** is expected to transform into a modernised transport hub, employing a significant number of people in the service sector (e.g., trade and logistics), and other industrial activities (leather). This implies major improvements in urban infrastructure and amenities.
- Conveniently located along the multimodal transport corridor linking the Metropolitan cluster to the northern clusters, **Debre Berhan**, a gateway city within the Metropolitan cluster, provides an excellent opportunity to develop an industrial zone and industrial activities (particularly for textile and leather).
- **Asela**, a high-yield grain production centre located in the south-eastern periphery of the cluster, develops agro-processing functions and plays a vital role in providing inputs to the metropolitan cluster.
- **Ziway**, in the south of the cluster, will further develop agro-processing activities (cut flowers, fishery), tourism functions and play the role of an important gateway to the South Rift Valley Cluster.

Addis Ababa Metropolitan cluster		2015	2035
Urban hierarchy	2015		
Dominant city	Addis Ababa	3730000	6374000
2nd rank cities	Adama	319 228	892 393
3rd rank cities	Bishoftu	145 196	409 024
	Assela	100 014	304 099
	Debre Berhan	92 561	240 817
	Sebeta	81 735	356 180
	Burayu	80 539	344 652
	Ambo	71 539	216 702
	Ziway	69 118	258 903
	Woliso	55 134	156 232
	Modjo	53 767	319 944
	Welkite	44 345	109 543
	Holeta	37 440	147 438
	Fiche	36 750	78 462
	Dukem	17 017	311 215
	Chancho	17 392	139 421
	Sululta	12 154	83 049

2. Eastern Urban Cluster

Overview

Located in one of the country's most densely populated areas, this trans-regional cluster has three contiguous and complementary cities as its anchor:

- **Dire Dawa**, which is the second chartered city of the country and one of the country's largest urban centres.
- **Harar**, a historical trade and religious centre, also serving as the capital of the Harari region.
- **Jigjiga**, the capital of Somali region, is a growing secondary city.

This cluster offers significant potential for urban and economic growth. The key strengths and driving forces of this cluster are:

- It's proximity and direct links to the country's main sea outlets (Port of Djibouti, Berbera Port)
- The clear complementarity between the three cities both in terms of economic functions and social infrastructure.

Economic profile

- By 2035, the Eastern cluster is expected to emerge as a **major industrial hub** in the country. The cluster already has a strong industrial and manufacturing base mainly concentrated in Dire Dawa. The city is home to three of the country's major cement plants as well as Ethiopia's oldest textile factory. A Special Economic Zone will be built in Dire Dawa on 5,000 hectares of land. Some 675 hectares are already delimited for an Industrial Park dedicated to textiles and apparel, vehicles assembly and food processing. Capitalising on its locational advantages and improved connectivity, the cluster is identified as a priority locations for trade and logistics

activities.
<ul style="list-style-type: none"> • Agro-industries is an emerging sector which will mainly develop around Harar and based on the cluster's main agricultural resources: Harar Coffee, sorghum, beans, maize, and livestock. • Tourism is also expected to contribute to the cluster's dynamic.
Key functions of selected cities
<ul style="list-style-type: none"> • Dire Dawa will continue to play a key role as the main administrative, social and higher learning centre of eastern Ethiopia. Once a thriving railway town and commercial centre, the city has great potential to be revived as a major manufacturing (textile) and industrial hub in the country with the construction of one of the continent's biggest SEZ. By 2035, the city is likely to attract a large pool of skilled labour from all parts of the country and lower-ranked cities in the surrounding regions. The city already serves as gateway to nearby Harar and it likely to further enhance its communication and logistics functions due to its proximity to Djibouti and its various transport infrastructure (international airport, modernised dry port, railway and associated freight station). • Harar is presently serving mainly as a regional centre of public administration, education, health and social services. By 2035, the city of Harar is expected to broaden its range of urban functions. Indeed, the city has the potential to transform into an important trade centre for agricultural products by tapping into its hinterland's abundant resources (coffee, khat, sorghum). Tourism is also expected to largely contribute to the UNESCO heritage city's development. This entails increased efforts to preserve its rich yet fragile heritage. • Endowed with a domestic airport, a state-of-the-art stadium and various other urban amenities, Jigjiga, serves as an important health, education and cultural centre for the Somali region. Taking advantage of its proximity and direct links to Berbera port, the city is expected to transform into a major trade and logistics centre, particularly for livestock exports. This requires enhancing its connectivity to the surrounding hinterland, Kebri Dehar – Gode city network and wider Somali region.

Eastern Urban cluster		2015	2035
Urban hierarchy	2015		
Dominant city	Dire Dawa	347 000	756 299
	Jigjiga	193 397	584 861
	Harar	141 798	272 177
2nd rank cities	Haromaya	44 426	123 102
	Asebe Teferi (Chiro)	51 142	157 212
	Awash	28 937	209 409

3. South Rift Valley Urban Cluster

Overview

This is a large, densely populated urban cluster containing cities from both Oromia and SNNP regions. The cluster links in fact two urban corridors situated along the Rift Valley lakes: the **Hawassa-Shashemene-Dila** urban corridor in its eastern part - the anchor of the cluster - and the emerging **Hosana-Sodo-Arba Minch** urban corridor situated towards the west. The cluster is characterized by a more distribution of cities and towns. The cluster is

largely dominated by **Hawassa**, SNNP's regional capital. By 2035, numerous large and medium-sized cities (such as Dila, Sodo, YirgaAlem, Hagere Mariam) are expected to emerge and develop due to the high density of population in the area, abundant agricultural resources and natural amenities.

Economic profile

The South Rift Valley urban cluster exhibits significant growth potential. Indeed, the cluster is endowed with abundant natural and mineral resources which include various crops, livestock, fishery as well as minerals. Main economic growth drivers include:

- **Agriculture and agro-processing.** By 2035, the cluster is expected to play a vital role in providing various high-value agricultural inputs (Sidamo coffee, meat from Borena) to the export sector and the Metropolitan cluster. The cluster has the potential to emerge as a major agro-processing hub in the country by tapping into its direct links to productive agricultural areas. Fishery is also an import growth sector due to the various lakes found in the cluster (Ziway, Lake Langano, Arba Minch). Some of these sectors (cut flowers, vegetables) are already attracting increasing domestic and international investment. Moreover, one of the four pilot Integrated Agro-Industrial Parks will be established at WeynenataHidakaliti, Sidama. In order to support its emergence as one of the preferential cluster for agro-processing, efforts needs to make to enhance urban-rural linkages and develop local infrastructure (such as storage facilities).
- The **tourism and hospitality industry** is also expected to be one of the cluster's main economic engines. Indeed, the cluster boasts a unique and varied natural landscape which includes various lakes (Abiyata, Shalla, Hawassa, Langano), National Parks (NechiSar, Abiyata-Shalla) and Wildlife Sanctuaries (Yabelo). The development of certain industries could jeopardize the very environmental assets that make the cluster unique and attractive. Conservation of these natural assets is thus imperative if the cluster is to become a prime touristic destination.
- **Extractive industry** (Lega Dembi gold mine, Kenticha tantalum mine) constitutes another growth sector.
- **Trade and logistics:** the cluster is located along planned multimodal transport corridors linking Ethiopia to neighbouring Kenya and its ports. Leveraging on these locational advantages, it is expected to develop trade and logistics activities.
- The potential for geothermal energy (Corbetti, Abaya, TuluMoye) is significant and provides new opportunities to further diversify its economy.
- Education functions are also largely contributing to its development.

Connectivity

At present, the South Rift Valley is mainly accessible by road. There is one airport at Arba Minch. Major planned and ongoing infrastructure projects include the Modjo – Hawassa expressway, the construction of an airport in Hawassa and dry port development in Hawassa and Moyale. Railway development is also planned as part of the NRNE and the LAPSSET corridor, offering the cluster direct links to Kenyan ports (Mombasa and eventually Lamu), which have the southern region of Ethiopia as their natural catchment area via Moyale. The cluster will also see new opportunities for increased trade and economic integration with Kenya.

Key functions of selected cities

- In addition to its current administrative, educational, tourism and cultural functions, **Hawassa** is also playing a vital role in industry (particularly agro-processing), trade and transport. With the construction of an international airport, the city is likely to emerge as a major air cargo hub in the south of the country, directly exporting the

resources of its rural hinterland (coffee, livestock, fishery products, etc.) to global markets.

- Hawassa is supported by **Shashemene**, a nearby historical transport hub, which emerges as an important commercial and service centre specialising in road transport and logistics.
- **Arba Minch**, a major tourism and education centre, will broaden its functions with the development of some manufacturing activity (particularly textile & garment).
- **Dila** and **Sodo** are expected to grow into secondary commercial centres, combined with enhanced social, administrative and educational functions.
- **Hager Mariam** is expected to emerge as a potential “gateway” city to the southern hinterland, rich in both agricultural (livestock, grain) and mineral resources (gold and tantalum).
- The border town of **Moyale** is likely to develop into a secondary trade and logistics centre within the cluster.

South Rift Valley Urban Cluster		2015	2035
Urban hierarchy	2015		
Dominant city	Hawassa	252 700	746 700
2nd rank cities	Shashemene	155 404	539 189
	Sodo	116 770	301 936
	Arba Minch	114 972	297 286
	Hoesana	106 331	266 596
	Dila	89 595	222 763
3rd rank cities	Arsi Negele	70 030	210 103
	Negele	52 129	155 503
	Areka	48 645	128 967
	Yirga Alem	46 435	118 864
	Hager Mariam	10 631	25 957

4. Bahir Dar Urban Cluster

Overview

The Urban Cluster is structured around one of the country's largest cities:

- **Bahir Dar**, the capital city of the Amhara Regional State. By 2035, the city is expected to become the second largest city of the country with an estimated population of 900,000 inhabitants.

By 2035, the NUDSP envisions that the cluster will have expanded, incorporating cities such as Debre Tabor, as well as the emerging Debre Markos urban corridor.

Economic profile

The cluster is endowed with significant natural resources such as crops (sesame, cotton, cut flowers, fruit and vegetables), fishery, and livestock. Capitalizing on these high-value agricultural resources and on the irrigation potential around Lake Tana, the cluster is expected to develop a strong **agro-industrial sector** by 2035. Agro-processing is expected to become a growth driver in several urban locations of the cluster: meat export and cut flowers in Bahir Dar, sugar factories in Tana Beles, etc. One of the four pilot Integrated Agro-Industrial Parks will be established in Bure, West Gojam.

Manufacturing is another growth driver. The cluster is already home to major textile industries: textile factories in Bahir Dar. By 2017, Bahir Dar will be endowed with a 350 ha Industrial Park, which will further contribute to the cluster's potential in Textile & Apparel.

With three UNESCO World Heritage Sites and significant natural assets, the **tourism** and hospitality industry will continue to be an important growth engine for both Bahir Dar and its vicinity. Realizing the need to protect and reduce the pressure on Lake Tana's shore is crucial if the cluster is to emerge as a major tourism hub in the country.

Connectivity

The cluster is well connected by road. It has international airport at Bahir Dar. By 2035, the cluster will be well-connected to the country's multimodal transport corridors through the FenoteSelam – Bahir Dar – Wereta - Weldiya Railway, providing a direct link to the port of Tadjourah. It will also enhance its international connections, particularly with neighbouring Sudan and Djibouti, through the Cairo – Cape Town (TAH 4) and N'Djamena – Djibouti (TAH6) Trans-African Highway.

Key functions of selected cities

- By 2035, **Bahir Dar**, the cluster's main administrative, educational and cultural centre, will be home to a growing number of textile manufacturers, an Institute for Textile and Fashion Technology, etc. The city is attracting a substantial pool of skilled workers from around the region and beyond in these key sectors. It also development agro-processing activities, further contributing to the country's export sector, particularly perishables. The city has the potential to emerge as a secondary air cargo hub in the country, with Hawassa, Mekelle and Dire Dawa.
- **Wereta** has the potential to emerge as the main logistics hub of the cluster due to its strategically location along the future railway linking both Gondar and Bahir Dar to the Dessie-Kombolcha cluster in the east. The vision here is to develop transport, trade and service activities in and around the city's future dry port and both rail and road freight stations.
- Further south, **Debre Markos** is mainly an administrative and educational centre. It is also likely to develop agro-processing activities.
- **Bure** one of the four pilot Integrated Agro-Industrial Parks will be established in Bure, West Gojam.

Bahir Dar Urban Cluster		2015	2035
Urban hierarchy	2015		
Dominant cities	Bahir Dar	249 073	908 458
2nd rank	Debere Markos	84 607	193 167
	Bure	81 735	356 180
3rd rank cities	FinoteSelam	40 571	138 724
3rd rank cities	Wereta	28 679	65 108

5. Gondar Urban Cluster

Overview

The Urban Cluster is structured around one of the country's largest cities:

- **Gonder**, a former dynastic capital, currently serves as an important service and higher education centre. This city can be seen as a standalone secondary city.

By 2035, the NUDSP envisions that the cluster will have expanded, incorporating cities such as Debre Tabor, the border town of Metema as well as the emerging town of Debark.

Economic profile

The cluster is endowed with significant natural resources such as crops (sesame, cotton, cut flowers, fruit and vegetables), fishery, and livestock. Capitalizing on these high-value agricultural resources and on the irrigation potential around Lake Tana, the cluster is expected to develop a strong **agro-industrial sector** by 2035. Agro-processing is expected to become a growth driver in several urban locations of the cluster: sesame and cotton in Metema, etc.

Manufacturing is another growth driver. The cluster is already home to major textile industries: ginneries in Gondar and agri-industry throughout the area.

With three UNESCO World Heritage Sites and significant natural assets, the **tourism** and hospitality industry will continue to be an important growth engine. Realizing the need to protect and reduce the pressure on Lake Tana's shore is crucial if the cluster is to emerge as a major tourism hub in the country.

Connectivity

The cluster is well connected by road. It has one international airport at Bahir Dar and a domestic airport at Gondar. By 2035, the cluster will be well-connected to the country's multimodal transport corridors through the FenoteSelam – Bahir Dar – Wereta - Weldiya Railway, providing a direct link to the port of Tadjourah. It will also enhance its international connections, particularly with neighbouring Sudan and Djibouti, through the Cairo – Cape Town (TAH 4) and N'Djamena – Djibouti (TAH6) Trans-African Highway.

Key functions of selected cities

- **Gonder**, an ancient dynastic capital and touristic site, will continue to serve as an important service, higher education and tourism centre. It also develops some agro-processing and ginning industries, through its enhanced linkages with Metema.
- **Debre Tabor** is a growing intermediate city with a broad range of urban functions, particularly in trade, education and agricultural services.

Gondar Urban Cluster		2015	2035
Urban hierarchy	2015		
Dominant cities	Gondar	296 817	794 528
2nd rank	Debere Tabor	78 889	205 247
3 rd rank cities	Debark	30 981	76 050
3rd rank cities	Metema	15 154	45 149

6. Mekelle Urban Cluster

Overview

The Mekelle urban cluster is located in the northernmost region of the country. The cluster features a range of large (Mekelle), medium-sized (Adigrat, Aksum, Adwa, Wukro) and smaller cities and towns, within an overall dense and collaborative urban network. Mekelle, presently the largest city outside of Addis Ababa, serves as the region's administrative, educational and cultural centre. It is clearly the dominant city of the cluster. By 2035, the

cluster's area of influence is expected to further expand to the western part of the region, as linkages with Humera and its productive hinterland are enhanced.

Economic profile

Two main growth drivers are identified for this cluster:

- **Industry and manufacturing:** the cluster already has a strong industrial and manufacturing base. Indeed, its dominant city is home to one of Ethiopia's largest cement plants. Two of the country's largest export-oriented textile & garment factories are found in Mekele and Adwa. There is a modern tannery & footwear factory in Wukro and Ethiopia's largest pharmaceuticals factory is established in Adigrat. This manufacturing potential will further expand through the establishment of a 475 ha Industrial Park in Mekelle dedicated to textile & apparel and to food processing.
- **Tourism:** The cluster is endowed with unparalleled historical and archaeological assets (Axum UNESCO World Heritage site, rock-hewn churches of Northern Tigray) which could attract large numbers of tourists and turn it into a major tourism hub.

Emerging sectors include:

- **Agro-processing:** Agricultural potential in the highlands of central and northern Tigray will probably remain limited. However there is strong irrigation potential for commercial farming in Rayya Valley. The potential for agro-processing in Western Tigray is also great: the Humera area is an important cotton and sesame producer area and the Wolkayt sugar factory will be one of Ethiopia's major sugar factories. One of the four pilot Integrated Agro-Industrial Parks is also planned in Ba'eker, West Tigray.
- **Trade functions** could probably be developed (particularly in Adigrat) if the political situation with Eritrea evolves favourably.

Connectivity

- The cluster has a reasonably well developed infrastructure. It is endowed with an International Airport at Mekele and two domestic airports – one in Axum and a second one in Shire which is being upgraded. The cluster is also well-connected by road to adjacent urban clusters (i.e. Lake Tana and Dessie – Kombolcha urban clusters). There is one dry port at Mekelle which is currently being upgraded.
- Construction of a railway connecting Mekele to the future port of Tadjourah in Djibouti is underway. It is expected to further strengthen and integrate the cluster in the country's northern multimodal corridors. A second railway stretching between Mekelle and Shire is planned for a later phase and should enhance inter-urban linkages within the cluster.

Key functions of selected cities

- By 2035, **Mekele**, is expected to further develop its manufacturing base linked to its hinterland (extractive activities, textile, and construction). It is attracting skilled labour from the region and beyond. The city enhances its function as a leading educational centre in the country. It will also remain an important gateway to touristic sites in the region and in sites in Afar (Ert A Ale, Dallol), by providing key urban infrastructures as well as an international airport.
- Tourism plays a vital role in the economy of a range of nearby secondary and intermediate cities (such as **Aksum**, **Adigrat**, **Wukro**), in addition to other complementary functions (education and local airport in Axum, industry in Adwa, Adigrat and Shire). Aksum is endowed with unparalleled historical and archaeological assets both as an ancient dynastic capital and a major religious centre. Each of these intermediate cities has to improve its urban and hospitality infrastructure in order to reach their full potential as tourism centres.

- Leveraging on its high-value agricultural products, **Humera**, a smaller city near Eritrea and Sudan, has transformed into an important border town due to increasing cross-border trade. It also plays an important role in providing agricultural inputs to the cluster's nearby cities and to the Lake Tana cluster.

Mekele urban cluster		2015	2035
Urban hierarchy	2015		
Dominant city	Mekele	337 773	962 972
2nd rank cities	Adigrat	90 599	261 660
	Shire Ende Selassie	75 096	221 644
	Axum	67 976	182 091
	Adwa	63 527	182 228
	Wukro	47 362	135 700
	Humera	33 347	91 714

7. Dessie – Kombolcha urban cluster

Overview

Situated in the eastern part of the Amhara Region, this cluster is organized around the two large and highly complementary cities:

- **Dessie**, which is presently mainly serves as an administrative, education and service centre.
- **Kombolcha**, a medium-sized city with a strong industrial based.

The twin cities are supported by **Weldiya**, a market town located at the junction of major East-West and North-South road corridors.

Economic profile

Due to the lack of a large and resource-rich hinterland, the cluster is mainly expected to transform into a regional **transport and logistics hub**. Indeed, by 2035, the cluster will be strategically located at the cross-road of several routes of the planned national railway network. It will have direct links to major urban clusters and the port of Tadjourah in Djibouti, transforming it into an important nodal point in both the country's transport and urban system.

Moreover, its locational advantages and multiple connections enable it to become an attractive cluster for **industrial development**. There is already a strong industry base in Kombolcha (textile, steel, brewery), and it will further develop through the establishment of a 300 ha Industrial Park dedicated to textile & apparel but also food processing. Its emergence as an industrial hub will require significant investment to enhance the current level of services, education and cultural amenities, mainly in the cluster's large and intermediate cities.

Connectivity

The cluster is relatively well connected by trunk and link roads, some of which have benefited from recent upgrading works (i.e. Kombolcha – Bati – Mille road). There might be a need to upgrade the Weldiya and Mille road. As stated above, railway development is particularly important in this cluster. Three lines are planned:

- The Awash – Kombolcha – Weldiya/Hara Gebeya railway (375 km)
- Mekele – Weldiya/ Hara Gebeya railway (268 km)
- Weldiya – Mille – Semera – Tadjourah Port (272.8 km)

Other major infrastructure projects in Kombolcha include the expansion of dry port and construction of a new airport.

Key functions of selected cities

- **Dessie** mainly develops as an important commuter settlement and service centre.
- **Kombolcha** is expected to play a major role as a national centre for industry (steel) and manufacturing (textile and garment).
- Taking advantage of its important transport node status, **Woldiya** is expected to develop new transport, logistics and trade functions. There is need to enhance the existing infrastructure in Weldiya.

Dessie Kombolcha urban cluster		2015	2035
Urban hierarchy	2015		
Dominant cities	Dessie	172 657	465 833
	Kombolcha	93 382	334 274
2nd rank cities	Woldiya	76 190	302 040
	Alamata	49 017	122 237

8. Jimma Urban Cluster

Overview

This is a cluster dominated by one single large city, i.e. Jimma, which exerts its influence over a widely dispersed network of intermediate cities and towns. Its hinterland extends to sparsely-populated areas in south-western Ethiopia.

The NUDSP envisions that, by 2035, the cluster will be transformed into a full-fledged urban cluster rapidly developing and well connected to other clusters in the country. It will encompass cities situated in Oromia (Agaro), SNPP (Tepi, Dima, Mizan Teferi) and Gambella (Gambella) regions, which will be drawn closer to each other by their functional and spatial linkages.

Economic profile

Although agriculture (particularly coffee) is presently the main driver of the cluster's economy, the Jimma cluster has significant potential to diversify its economy. By 2035, the cluster will continue to largely rely on agricultural production and will develop **high-added value agro-processing** by tapping into its productive hinterland. Large commercial farms and major fertilizer projects (Yayu) are already planned in and around the cluster. It is thus expected to play a vital role in providing agricultural inputs to the Metropolitan Cluster and the country's export sector. For these reasons, the cluster is identified as an attractive location to develop R&D activities linked with agriculture.

Emerging sectors include:

- **Manufacturing**, which will develop through the planned establishment of a 350 ha Industrial Park in Jimma, dedicated to Textile & Garment and to Agro-processing.
- **Mining**: mineral resources have been identified nearby (Tulu Kapi gold mine).
- **Tourism and hospitality industry**: the eco-tourism potential of the cluster has also been recognised but efforts need to be made to enhance the cluster's overall level of services.

Connectivity

The cluster currently has one domestic airport located in Jimma. In order for the cluster to emerge as an important agro-processing hub, efforts need to be made to expand and upgrade the paved road network as road accessibility to urban and rural settlements

remains low. Major planned infrastructure projects include:

- The Sebeta - Ijaji - Jimma - Bedele railway (440 km), which will directly link it to the Metropolitan Urban cluster.
- The Jimma- Tepi - Dima (ultimately reaching Boma in South Sudan) railway, which will enhance intra-urban urban linkages within the cluster as well as its regional connections.

Key functions of selected cities

- **Jimma**, a zonal capital and prominent urban centre in the region, is presently serving as an important centre of administration, education and trade. According to our projections, the city will be one of the country's largest urban centres, with a population of over 0.5 million inhabitants in 2035 (ranked 8th). The city is well placed to become an important agro-processing hub due to its direct links to high-potential agricultural areas. It will also develop related trade and transport services. As the dominant urban centre of this cluster, it will need to improve its urban infrastructure (housing, education, basic services).
- **Gambela**, a regional capital, is likely to diversify its economy from the current administrative functions to an important cross-border trade centre in the west, combined with agro-processing functions in relation with the development of commercial farms.
- Lower-ranked cities such as **Bonga, Mizan Teferi and Tepi** are expected to participate to the cluster's dynamic, mainly through their linkages to nearby coffee production areas and facilities. In order for them to play a key role in servicing and structuring the rural hinterland, efforts will need to be made to enhance their overall service level as well as urban and connective infrastructure.

Jimma Urban Cluster		2015	2035
Urban hierarchy	2015		
Dominant cities	Jimma	179 556	543 093
2nd rank	Gambela	72 617	247 107
	Agaro	34 669	74 146
	Bedele	28 795	80 363
	Bonga	32 780	86 466
	Metu	40 389	101 349
	Tepi	38 886	106 462
	Mizan Teferi	36 750	104 691
	Dima	4 065	15 099

9. Nekemte Urban Cluster

Overview

A second urban cluster spreading across Oromia, Benishangul-Gumuz and Gambela regions is expected to emerge in western Ethiopia. It will encompass cities such as Nekemte – the predominant urban centre of the cluster – Dembi Dolo, Gimbi, Gambela and Assosa. By 2035, these cities are expected to grow and develop strong linkages with each other, their rural hinterland and other clusters across the country.

Economic profile

The cluster exhibits significant economic growth potential and is expected to play an important role as the gateway to the resource-rich regions of Benishangul-Gumaz and Gambela.

The main economic drivers of this cluster include:

- Agriculture and agro-processing: the cluster is expected to play a vital role in providing various high-value agricultural inputs for the Metropolitan Cluster and the export sector. The cluster can leverage its abundant agricultural resources found in its hinterland in order to develop **agro-processing activities**
- **Trade** is also expected to increase across the border with Sudan, through Kurmuk.
- **Mining** is another untapped potential of the cluster
- **Energy**: the cluster's power supply may benefit from being halfway through the electric power transmission line that will connect the Grand Ethiopian Renaissance Dam to Addis Ababa.

Connectivity

The cluster is mainly accessible by road and air transport, through Asossa.

The emergence and development of the cluster will need to be supported by an effective road network linking the cities together and with other clusters is crucial. The construction of rural roads will also need to be fast-tracked. Major planned infrastructure projects which will also contribute to its growth include:

- The Ijaji – Nekemte – Assosa – Kurmuk railway line, which connects the cluster to the Sudanese border.
- New airport development in Nekemte and DambiDollo

Key functions of selected cities

- As the dominant city of this urban cluster, **Nekemte** is expected to offer enhanced urban functions and services (administrative, educational, health). Due to its strategic location along the Ejaji – Kurmuk railway, the city is also expected to develop logistics and industrial functions as well as related services.
- **Assosa** is another strong urban centre in the cluster providing a level of functions greater than its size (administrative, educational, cultural and touristic functions) due to its regional capital status. The city has the potential to develop significant **trade functions** and related services because of its proximity to Sudan.
- Urban linkages between intermediate and smaller cities such as **Dembi Dolo, Gimbi and Metu** is expected to strength, allowing these cities to complement each other in terms of economic and urban functions. Because of their location and traditional relationship with the extensive rural hinterlands, these cities are likely to play a major role as market centres. This entails enhancing their urban infrastructure (housing, basic social services) and the development of an extensive all-weather road network connecting them to smaller towns and rural centres.

Nekemte urban cluster		2015	2035
Urban hierarchy	2015		
Dominant city	Nekemte	111 834	340 038
2nd rank cities	Dembi Dolo	44 058	136 783
	Gimbi	44 193	117 095
	Assosa	39 228	155 456

10. Robe –Goba Urban Cluster

Overview

Located in the central south-east part of the country, this cluster is within the Oromia region and is driven by two cities which are only 14km apart:

- **Robe and Goba**, presently mainly serve as administrative, education and service centres.

Other town and cities in the cluster include Dodola and Ginir.

Economic profile

The economy is mainly dominated and driven by Agriculture.

- **Agro-processing**: Owing to its diverse landscape this cluster is suited for the production of various crops including cereals, pulses, oilseeds, fruits, vegetables and spices. As such it is ideal as a centre for agro-processing.
- **Tourism**: the area is endowed with natural and cultural attractions. It has numerous mountain peaks, natural caves, religious pilgrimage, hot springs etc...Major tourist attraction include Sheikh Hussein (Tomb of the Saint - sacred place), the Bale Mountains National Park, and the Sof Omar Caves.

Connectivity

Robe and Goba both have a domestic airport and are well-connected to each other and other cities by road. However, the cluster has a low road accessibility level in the country. Developing the network of rural roads is thus imperative.

Key functions of selected cities

Urban linkages between intermediate and smaller cities such as **Robe, Goba, Dodola and Ginir** is expected to strengthen, allowing these cities to complement each other in terms of economic and urban functions. Because of their location and traditional relationship with the extensive rural hinterlands, these cities are likely to play a major role as market centres and also provide administrative, educational, cultural and touristic services. It is crucial to enhance their urban infrastructure (housing, basic social services) and the development of an extensive all-weather road network connecting them to smaller towns and rural centres.

Robe –Goba Urban Cluster		2015	2035
Urban hierarchy	2015		
Dominant cities	Robe	71 954	232 985
2nd rank	Goba	50 199	145 312

11. Gode – Kebri Dehar Oasis city Network

Overview

The arid and semi-arid region of Somali is characterized by a sensitive environment (rough climate conditions, water scarcity). Due to these constraints and in light of the existing settlement pattern, urban population growth is expected to be highly concentrated in a few “oasis” cities, e.g. Kebri Dehar and Gode. In 2035, these two medium-sized cities are

expected to grow and become well-connected larger cities, respectively reaching a population of over 170,000 and 130,000 inhabitants.

Economic profile

Livestock (cattle, goat, sheep, and camel) is the major resource of the region and livelihoods entirely depend on it. The sector, which is currently insufficiently exploited, offers significant potential to develop agro-processing activities, such as meat export and dairy production.

Other sectors are expected to develop in the cluster:

- Gas exploitation offers new opportunities for developing industrial activity within the cluster. The Calub and Hilala gas fields are expected to enter production by 2018.
- The irrigation potential along the Wabe Shebele River will allow the cluster to leverage its agricultural resources and develop agro-processing.

Connectivity

Gode and Kebri Dehar both have a domestic airport and are well-connected to each other and other cities by road. However, the region has one of the lowest road accessibility levels in the country. Developing the network of rural roads is thus imperative.

Key functions of selected cities

By 2035, medium-sized cities such as Gode and Kebri Dehar are expected to grow and become more functionally diversified and well-connected larger cities.

The exploitation of gas resources in its surrounding area offers the potential to transform **Kebri Dar** into a city with a strong industrial base. Agro-processing activities can also be developed around livestock production (namely dairy production, export of live animals and meat). This will require adequate infrastructure (such as storage facilities) and enhanced connections to Jigjiga, the gateway to the sea ports of Berbera and Djibouti.

DegeHabur is an important market town and services centre at a strategic crossroads at the gate of the Ogaden region. Improvements in infrastructure as well as increased investment in livestock farming are expected to decrease the isolation of the city.

Taking advantage of the potential for irrigation along the Wabe Shebele River, the city of **Gode** is likely to develop agro-processing activities.

Gode – Kebri Dehar Oasis city Network		2015	2035
Urban hierarchy	2015		
Dominant cities	KebriDehar	44 469	131 149
	Gode	63 472	171 680
	DegeHabur	45 664	134 674
2nd rank cities	Dolo	39 583	113 559

12. Semera – Mille – Asayita Oasis city

Overview

Due to even harsher climatic conditions than in Somali region, urban growth in Afar region is also expected to be concentrated in a few oasis cities: Semera, Asayita, and Mille.

Economic profile

The main economic drivers of the Semera – Mille – Assaita city network are:

- **Trade and logistics:** Capitalizing on locational advantages (proximity to Djibouti and the future port of Tadjourah but also the Dessie-Woldiya and Mekelle urban cluster), the Semera – Mille – Assaita city network is expected to develop important trade and logistics activities. A dry port already exists in Semera and enhanced logistics and distribution might be required to support this emerging sector.
- **Tourism:** Afar's unique landscape (Dallol, Erta Ale, Awash National Park, YangudiRassa National Park) offers a significant and untapped potential for tourism.
- **Extractive industry** (namely potash) is also expected to contribute to the cluster's dynamic.
- Potential for **agro-processing activities** has also been recognized, particularly along the lower Awash Valley. The planned Tendaho sugar farm will be one of Ethiopia's major sugar projects.
- **Manufacturing** is also expected to develop through the planned establishment of an Industrial Park in Asayta /Semara.

Connectivity

Semera is endowed with a dry port as well as a domestic airport, which is currently under expansion. The Weldiya – Mille – Semera – Tadjourah Port railway (272.8 km) will provide the cluster with a direct link to Djibouti and two of the northern urban clusters (Dessie-Kombolcha and Mekelle urban clusters).

Key functions of selected cities

By 2035, Semera and Asayita are expected to grow and diversify their economies from administration functions to trade and transport activities, agro-processing and tourism.

Semera is fully exploiting its locational advantage and emerges as an important transport and logistics hub. Its economy is also growing in relation with mining activities in northern Afar. **Assayitta**, while more isolated, has potential for tourism and is expected to remain a centre for services to its rural area.

Urban infrastructure and services will need to be enhanced to support their transformation into cities with more diversified economy.

Semera – Mille - Assayita Urban Cluster		2015	2035
Urban hierarchy	2015		
Dominant city	Semera	4 154	14 964
2nd rank cities	Assayita	23 706	67 578
	Mille	13 498	43 445
	Logiya	23 038	88 217
	Dubti	23 380	80 245

The national pattern of urban clusters sets the framework for a more balanced development, between the capital metropolis and the secondary cities, and between the growing urban areas and their rural hinterlands. Within each cluster, cities and towns will be interconnected in a specific functional hierarchy, differing according to the distinctive characteristics and

potential of each cluster, but overall operating in a complementary manner within the national urban network (Table 8 shows the existing and expected future functions of the clusters; also see Figure 17. Future functions are based on the above analysis of economic potential and expected changes in the economic structure of the cities and towns).

Small towns will play a key role in servicing rural areas and larger cities will be characterised by key-functions needed to serve development of the whole cluster. In the medium-term each part of Ethiopia will have the opportunity to drive its own distinctive economic and urban development, based on the specific potential of each region. The development of each region will, however, occur within and serve the national development framework.

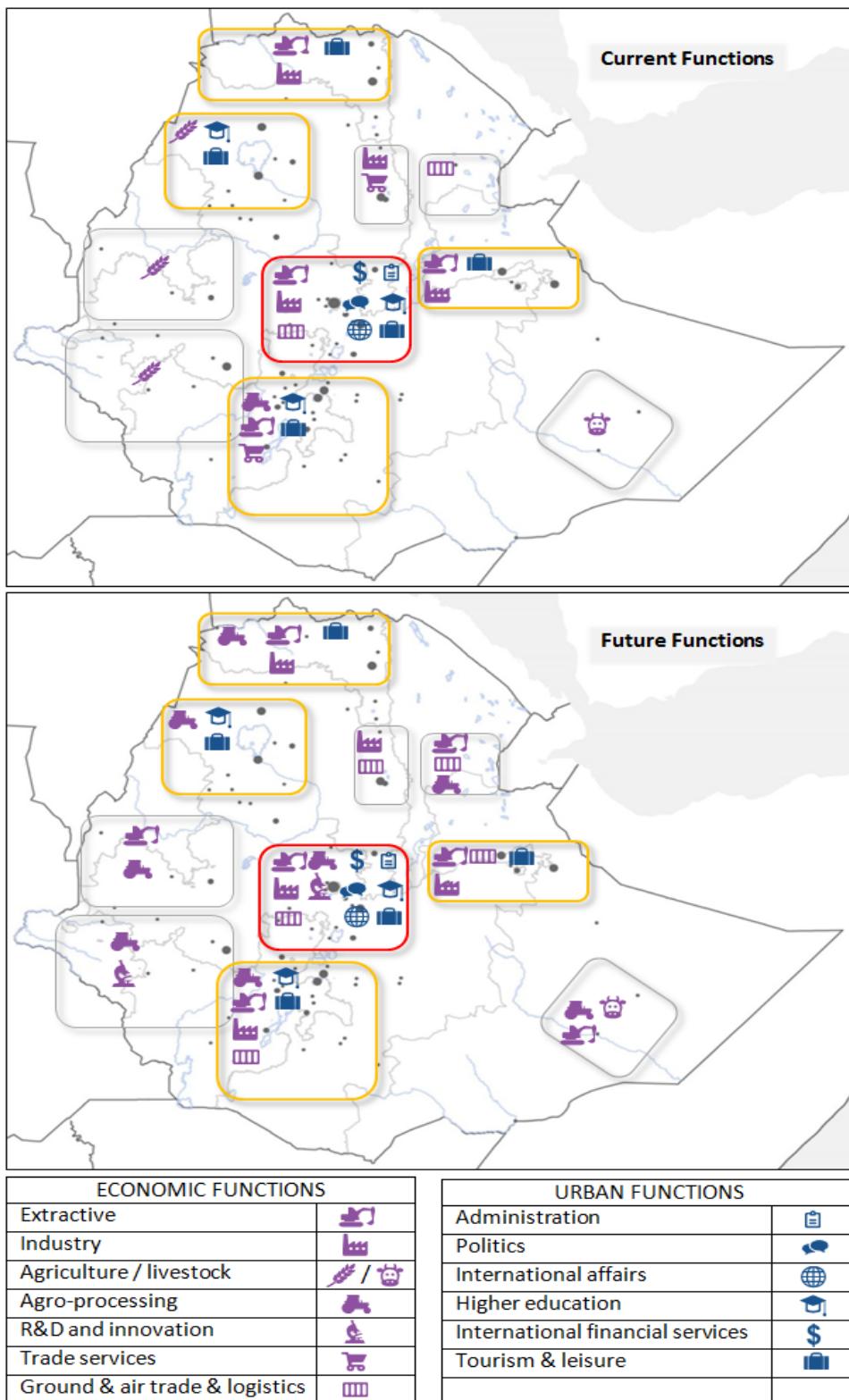
It is expected that Industrial and other economic activities will be distributed among urban centres according to the cluster's potential (often based on the hinterland's resources and potential, including the development of key sectors, export-oriented activities and the local rural economy). The enhancement of living conditions and standards will be based on endogenous territorial development. This sets a coherent national framework, and will be characterised by the mobilisation of local resources and the importance of cluster based collaborative development undertaken within a shared pragmatic development strategy.

Table 8: Current and expected functions of the key urban clusters

Hierarchy of urban clusters	Cluster	Current Dominant Urban & Economic functions	Future Dominant Urban & Economic functions
Metropolitan cluster (contains all urban and economic functions)	Addis Ababa MC	Financial, business and professions services International Affairs Industry & extractive activities Trade & logistics Tourism & leisure Education & Health Administrative & political Health care	Financial, business and professional services International Affairs Industry & extractive activities Trade & logistics Tourism & leisure Education & Health R&D and innovation Administrative & political Health care
	Bahir Dar UC	Agriculture Tourism & leisure Education Services	Agro-processing Tourism & leisure Education International conferences R&D centre – textiles and agriculture Services
	Gondar-Metema	Agriculture Tourism & leisure Education Services	Trade & logistics Tourism & leisure International conferences Industry & extractive activities Agro-processing
	Eastern UC (Dire Dawa – Harar – Jigjiga)	Industry & extractive Activities Agriculture Tourism & leisure	Industry & extractive activities Agro-processing Trade & logistics Tourism & leisure International conferences
	South Rift Valley UC	Agro-processing Extractive activities Trade Tourism & leisure Education	Agro-processing R&D centre -agriculture Industry & extractive activities Trade & logistics Tourism & leisure Education
	Dessie –Kombolcha - Weldiya UC	Services Industry	Services Industry Trade & Logistics
	Jima UC	Agriculture Education	Agro-processing R&D centre for agriculture Education
	Mekele UC	Industry & extractive activities Tourism & leisure Services	Industry & extractive activities Tourism & leisure Services
	Nekemte UC	Agriculture	Agro-processing Some mining potential
	Semera -Assaita OC	Administrative Trade & Logistics	Trade & Logistics Extractive activities Agro-processing
	Gode-Kebri Dehar OC	Agriculture Livestock	Extractive activities Agro-processing Livestock
	Robe-Goba UC	Agriculture Livestock	Tourism & leisure Agro-processing Livestock

MC = metropolitan cluster UC = urban cluster OC = oasis city
Source: Consultant's assessment

Figure 17: Expected changes in the functions of key urban clusters



Source: Consultant's assessment

It is expected that Industrial and other economic activities will be distributed among urban centres according to the cluster's potential (often based on the hinterland's resources and potential, including the development of key sectors, export-oriented activities and the local rural economy). The enhancement of living conditions and standards will be based on endogenous territorial development. This sets a coherent national framework, and will be characterised by the mobilisation of local resources and the importance of cluster based collaborative development undertaken within a shared pragmatic development strategy

The role of Addis Ababa

Given the current primacy of Addis Ababa its role in the future urban system requires further elaboration. As stated above, the Addis Ababa metropolitan cluster in 2035 will be *one of the most important economic motors in the country* and it will contain some of the country's largest secondary cities (e.g. Adama). The Consultants estimate that the city currently accounts for around 28% of national GDP (see the ESDR for details). Addis Ababa is the biggest urban consumer and job market in the country.

The majority of industrial operations and headquarters are located in or around the capital, and, in general, investors are choosing Addis Ababa over every other location in the country because of its connectivity (domestically and international), the availability of business and professional services, its large job market, and the availability of skilled workers. Furthermore, the quality of urban infrastructure and services is better than can be currently found in any other city in the country.

The NUDSP envisages Addis Ababa continuing to act as the main command centre of the country, concentrating on political, administrative, educational, financial, business, trade and logistic functions, and will continue to be a very important destination for investment. Its economy will further diversify, with a selective concentration of international functions and knowledge-intensive, high-tech industrial and service activities. Indeed, it is to be expected that the metropolitan cluster will be the first urban cluster in Ethiopia to be characterised by industrial and commercial activities producing high value added goods and services that find clear, defensible and, in time, leading positions in regional and global markets. These economic activities will spearhead the economy's escape from the Middle Income trap, and allow Ethiopia to chart a path beyond 2035 towards developed country status. It is of crucial importance that this role of the capital and the immediately surrounding urban centres is recognised, promoted and planned for.

The primacy of Addis Ababa will reduce over time to 2035, not because the capital city declines but because of the rise of the secondary cities (facilitated and actively promoted through the implementation of the NUDSP Vision). The metropolitan cluster, with Addis Ababa at its core, will continue to be the key gateway to the Ethiopian economy. But the cluster will play a role in 2035 generally not recognised in 2015; it will act as a dynamo energising the rest of the country (and this role will have been driven by policy over the coming 20 years; Addis Ababa will be the location for some of the most important and high technology enterprises in the country and the urban location where a number of innovative urban planning and management activities are piloted before dissemination across the country).

The capabilities of the cluster's modern professional business and professional services, for example, will be used to develop and establish agro-industrial and industrial activities and

value chains across the country. Addis will be a centre of research and development, and increasingly innovative entrepreneurial activity. A major business park and enterprise incubator can be expected to be located adjacent to the new airport; the incubator will attract entrepreneurs from around the Continent, and several modern dry ports and freight terminals (both rail and road based) will ensure that the metropolitan cluster continues to be a major air transport hub in Africa and the key trade and logistic hub for the country.

Entrepreneurial and innovative commercial activity will be mirrored by experiment and thought leadership as regards urban-economic management and planning. Addis is to be a leading global centre of knowledge and practice concerning how urban areas can be appropriately managed and planned to ensure sustainable and inclusive economic development; this knowledge and practice will find direct expression in the management of Ethiopia's secondary cities and urban clusters, and the implementation of the NUDSP Vision.

Indeed institutions in Addis Ababa should play a major role in devising and disseminating across the country knowledge, and practical tool-kits concerning the form of urban planning and management required to achieve the NUDSP Vision by 2035. The capital city could also be the site of experimentation – testing new ideas and tools – before widespread dissemination. New ways to manage land markets for example, could be piloted in the capital (and perhaps in a few selected secondary cities) and refined and strengthened before country-wide adoption (see Figure 18 Addis Ababa Ethiopia's first 'Smart City')

Several specific factors support the proposition that the Addis Ababa metropolitan cluster should be nurtured as a main engine for economic development that *can and should contribute to national development*.

- **The metropolization effect** is expanding the impact of economic development on a large region of some 150 km around Addis: Adama, Debre Birhan and Ambo are directly benefiting from this effect.
- **Transportation corridors from Addis to Djibouti** are creating favourable conditions for new investments along this corridor especially in Adama, Awash, and Dire Dawa.
- **Future high capacity connections from Addis to Kenya** will support the South Rift valley development.
- **Better communication between Addis and the secondary cities** will facilitate trade and production in these cities, and allow business and professional services of the Metropolitan cluster rapid access to (and hence impact on) the economic activities located in the secondary cities.

Furthermore, the role of Addis Ababa as a capital and diplomatic city, and an important centre for international organisations, such as the African Union, will contribute to the importance of this metropolitan cluster. Recent visibility in the international media has portrayed Addis Ababa as a city on the move; it is ranked 3rd (after Djakarta and Manila) in the list of the Emerging Cities outlook, positioned to advance over the next 10 or 20 years (Nairobi ranked 9th), and it is seen as a real success in terms of economic development (which has occurred without the country having access to oil reserves) and a major driver of the country's economic growth rate of more than 10% a year. Addis Ababa will be a major international city and dynamo energising the country's urban clusters.

Figure 18: Addis Ababa Smart City (2050): Examples of today's benchmark cities

Rio de Janeiro



BM have built a hi-tech nerve centre for Rio de Janeiro. What began as a tool to predict rain and manage flood response morphed into a high-precision control panel for the entire city. Rio's mayor, Eduardo Paes, says "The operations centre allows us to have people looking into every corner of the city, 24 hours a day, seven days a week."

Singapore



The city's plethora of human talent and its hospitable regulatory framework have cemented Singapore's status as one of the most innovative cities in existence. The city's diverse and highly skilled workforce, cultivated through exemplary educational institutes, has fostered a culture of innovation that spans a great many sectors and disciplines.

Taipei



New Taipei City (NTC), created in 2010 is developing a knowledge-based economy to power its future. The focus has been mainly on broadband: the household penetration rate is at 91% with 87% on 100 Mbps service. NTC has also connected more than 300 schools, put tablets and computers into classrooms and has facilitated the installation of more than 10,000 Wi-Fi hotspots in convenience stores.

Songdo in South Korea



A purpose-built SMART City. Its buildings have automatic climate control and computerised access; its roads and water, waste and electricity systems are dense with electronic sensors to enable the city's brain to track and respond to the movement of residents.



Addis 2050*

Smart City 2050

**Compact
Connected
Coordinated
Inclusive
Resilient
Prosperous
Sustainable**

**Leading the urban sector
of Ethiopia**

Source: The Consultant

Note: Addis Ababa could become Ethiopia's first 'Smart City' – an example of how the urban sector of the country can be planned and managed in such a way that urban sprawl and the attendant agglomeration diseconomies are avoided. Addis Ababa could be a test-bed for policies, programmes and projects that lead to a growth and development path being established that is very different from the one that drives the city today. This path is characterised by significant improvements in urban productivity directly due to the way in which the city is managed, and leads to a city economy that is prosperous, inclusive and resilient. Policies, programmes and projects that are successful in Addis Ababa can be disseminated across the country. The trajectory towards 'smart city status' could be marked by various milestones e.g. achieving basic service provision by 2020; ensuring that productive enterprise with lead technologies driving high value added commodity chains across the country are in place by 2030 etc. See Figure 29 (Appendix A) which shows the trajectory of development of Indonesia's urban sector (a possible model for Addis Ababa).

Required improvements and investments inside each cluster

The outline description of the development potential of each cluster presented above is the basis for an estimation of major investments required in order to realise this potential. With regard to urban infrastructure and services, a marked improvement will be required given their current inadequate provision in the vast majority (if not all) of the towns and cities. Major (public and private) investments will also be required in the housing and commercial sectors, as will be investments in transport infrastructure (including the local network inside clusters as well as between clusters) and logistic platforms.

Promoting economic development will be crucially important and will require significant efforts and an increase in the capacity and capabilities of the administrations of cities to manage urbanisation and support development. Of note is the provision of cultural facilities (e.g. entertainment facilities and events) and the upgrading of tourism attractions around or in cities, which can lead to increases in the overall urban attractiveness of a cluster. A university construction programme has been launched, which may be important and effective support for economic and urban development, providing those who wish to enter the labour force with the required skill-sets and training.

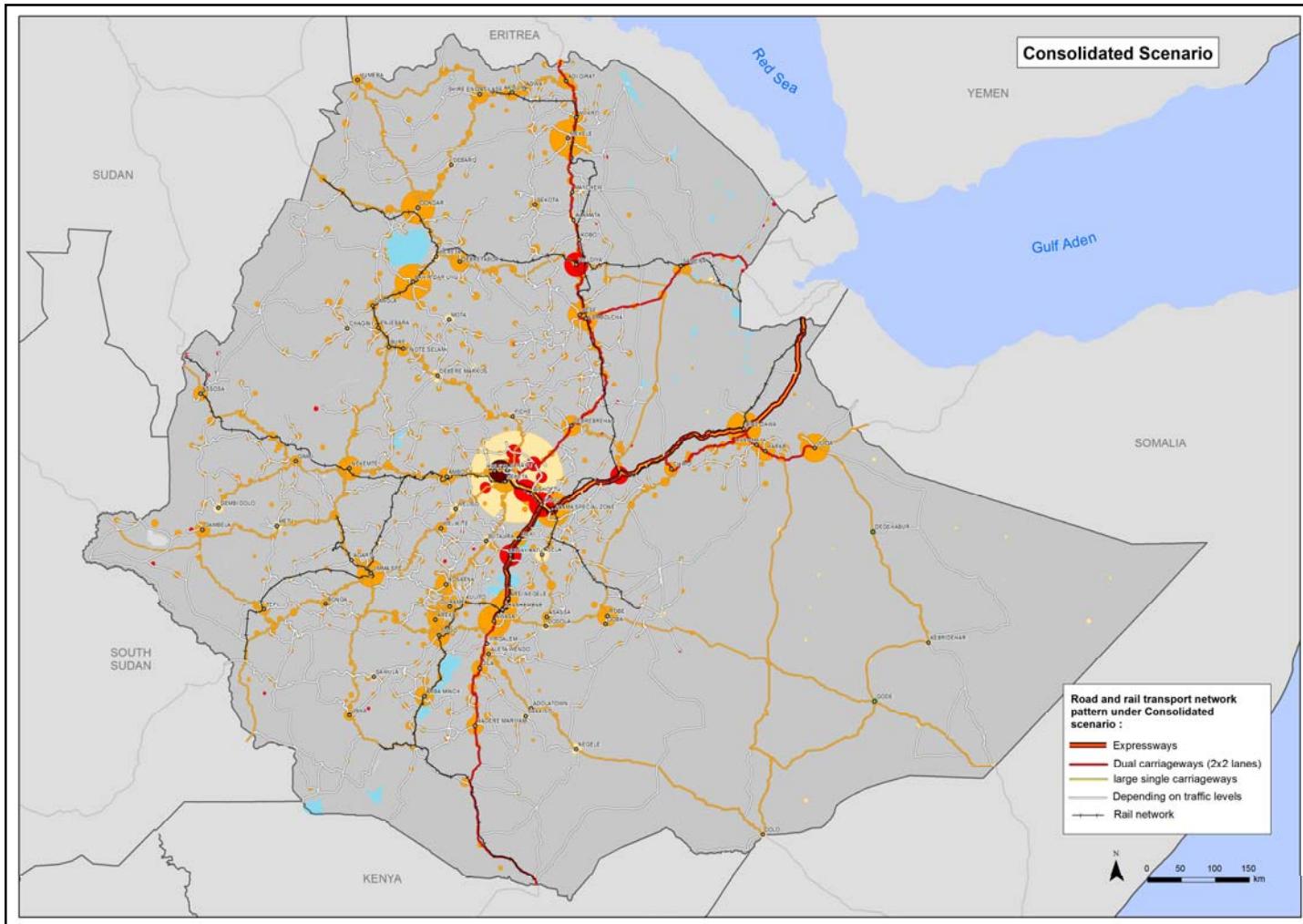
The pace of economic and urban development will strongly depend on the capacity of the country, and its regions and cities, to set relevant policies, construct appropriate infrastructure, deliver required services, and finance them and attract private investments. Most importantly the Government must set clear, technically credible and socially acceptable policy incentives to achieve the form of urban-economic development as envisaged under the NUDSP.

Transport infrastructure and services improvements

Without significant improvements in transport infrastructure so as to connect cities and urban clusters to one another and to global markets, this vision cannot be achieved. Achieving the vision will require (see Map 18):

- **Efficient multimodal transport corridors** (combining railway and expressways) providing effective access to **main ports in the region**.
- This network is supported by **complementary corridors that interconnect clusters** so as to encourage inter-region exchange of services and goods. These direct and enhanced connections between urban clusters through large ring roads offer the opportunity to avoid the congestion areas such as the Addis Ababa Metropolitan clusters, thus offering the condition to reduce its primacy.
- **Enhanced urban-rural road links** are also needed in order to capitalise on the natural and agricultural resources in the rural hinterlands, and trigger economic diversification in rural areas. Achieving the Vision will also require strengthening the **capacity and effectiveness of public transport network** in order to address increasing traffic congestion in large cities, and longer commuting journeys due to urban expansion. Priority will have to be given to **mass public transport solutions**.
- Developing rail-based commuter services is also recommended to connect functionally linked cities within each urban cluster. This will require substantial capital investment.

Map 18: The Consolidated Urban Scenario – Transportation Links



Source: Consultant modelling

- Moreover, polycentric urbanisation will require adopting a **new approach to freight transport and goods distribution** based on implementing effective urban logistics. In addition to the development of dry ports along the main trade corridors as fixed by the government (see Chapter 5 [Infrastructure] in the ESDR), the implementation of the vision will require developing urban logistics infrastructure since cities will be the centres of production and consumption.

2.6 The Pathway to the NUDSP Vision

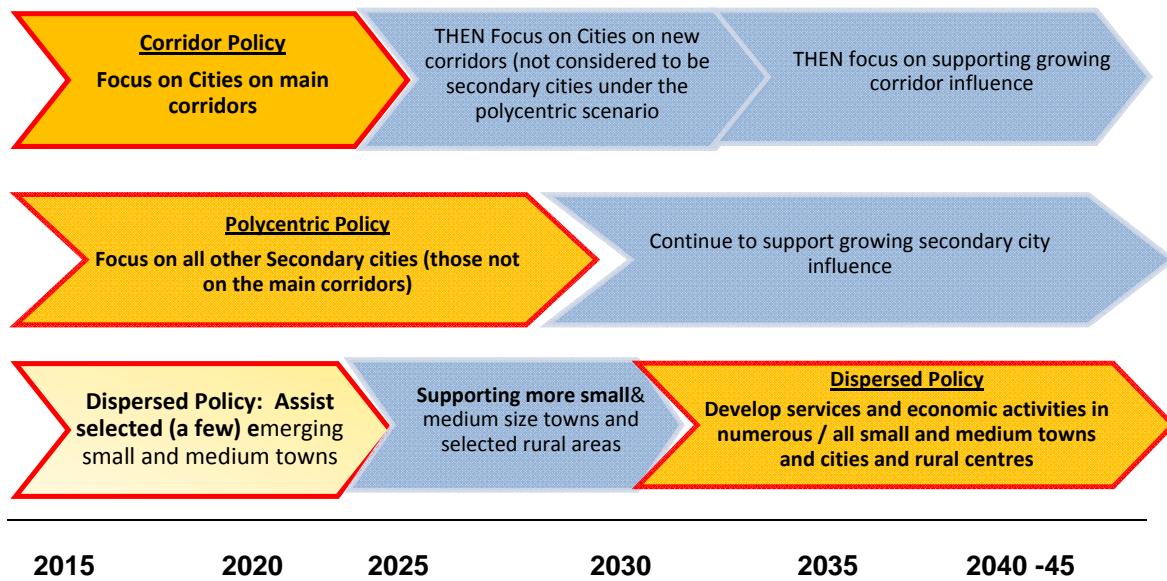
The Vision cannot be implemented over-night; the urban sector will evolve into the 2035 urban vision. There will be a pathway from today to the 2035 target vision for the urban sector, which will combine implementation of the three urban development scenarios and associated policies (e.g. corridor, polycentric, dispersed development), in accordance with successive stages of social and economic development and diversification (see Figure 19).

Creating a pathway, a series of transitions, from one urban pattern to another, is a very effective way of implementing the Vision and one adopted in many of the reviewed benchmarked countries.

Furthermore, the NUDSP Vision, while based on one of the three urbanisation patterns explored in the scenario exercise (i.e., the Polycentric development pattern) is most likely to retain aspects of the other urban scenarios and patterns (e.g., Corridor and Dispersed Development scenarios). This is so for a number of reasons including the following:

- **Poverty Reduction:** An important aim of the Government is to lift the general population out of poverty. The interventions required in order to achieve this goal are associated with both Dispersed and Polycentric Urban development; many of the characteristics of the dispersed urban development should be retained and integrated into the Polycentric Urban scenario so creating a consolidated scenario.
- **Economic Growth:** Efficiency and labour productivity will benefit from the global integration of the Ethiopian economy, improved competitiveness, enhanced ease of doing business and the transfer of technology into businesses. These processes are best encouraged through the Corridor urbanisation pattern which concentrates developments, promotes and benefits from agglomeration economies, and prioritises economic growth. The implementation of urban corridor policies are likely to enhance and invigorate the role of the private sector in the Ethiopian economy and by association strengthen the capacity of the government (via, for example, enhanced revenue generation associated with increased [and taxable] private sector activity).
- **Inclusive Development:** The government is aware of redistributive justice issues, and the potential for the participation of all citizens in the development process of the country. According the government policy objectives, doing this will enhance rapid socio-economic development and in the long-run underpin the sustainable development of market driven economy with specialized export products, which will ensure relative freedom for the Ethiopian economy. This important objective is only likely to be achieved if a mixture of all three spatial policies is pursued.

Figure 19: Pathway to the vision – a Polycentric ‘Anchor’



(Note: intensity of colour relates to intensity of effort required for implementation)

The pathway to the NUDSP Vision is described in more detail below:

FIRST - implement the core aspects of the corridor urban development strategy to secure and accelerate urban and economic development. This involves developing the principal cities and towns in the (6 to 7) of the 12 most important urban clusters and as necessary improving the development / transportation corridors connecting these cluster.

International experience clearly shows that the drivers of change will tend, in a first instance, to concentrate growth in the **existing, principal urban centres located along the main trade and transport corridors**. Indeed, the continued implementation of corridor development policies could be an initial stepping stone to the target consolidated scenario for 2035. It is likely that the intensity of corridor development policies will be particularly high in the very near future. Important stimuli leading to the implementation of the corridor development policies include the construction of railway lines and expressways towards all Djibouti Ports, as well as secondary ports (Berbera, Mombasa, Lamu), with North-South and Eastern corridors connecting the capital city (metropolitan cluster) and three major urban clusters (Eastern, Mekelle and South Rift urban cluster) to global markets.

SECOND - Strengthen the main urban settlements along the key transportation corridors (incipient / early stage polycentric development). This involves a focus on developing the secondary cities and towns (the remaining 5 to 6) of the 12 urban clusters and the their relevant transport and development corridor connectors .

The economic and social development of major cities and towns located along or immediately adjacent to the key transportation corridors will be enhanced (this outcome can be regarded as incipient or early stage polycentric urban development). In parallel, and partially as a consequence of the economic growth and diversification of the main cities and

towns along key trunk lines, the economic and social development of their hinterlands can be expected, driven by strengthened rural-urban links, improved production in the hinterlands related to agro-industry investments, and increased consumption related to rising incomes of those living in these hinterlands.

A significant population is likely to gravitate into the orbit of these cities and towns, and/or into sphere of influence of the new settlements linked to the establishment and expansion of industrialised large scale agro-industrial operations in the West and South (even if, for the latter, their short to medium term quantitative impact on urban population may be fairly small at national scale).

In order for this incipient or early stage polycentric urban development to be successful major and diverse investments will have to be made, spread, over time and related to (a) improving connections between the cities and towns, and within each of their hinterlands (e.g. rural road network improvements), (b) upgrading rural market centres, and (c) providing adequate urban infrastructure and services and logistic platforms within key cities and towns

This polycentric process is not exclusively trend driven. To a great extent it would be policy driven, requiring a **significant re-orientation of regional and metropolitan spatial planning and of investment planning, towards a medium-term implementation of policies specifically targeting economic intensification and diversification tailored to the potential of specific urban systems and their rural hinterlands**. If so supported, this trend can create the nuclei of incipient local-regional urban systems of settlements, the creation of local transport networks and of locally shared services.

THIRD - Strengthen and expand the polycentric pattern of urban development for selected urban systems (full implementation). This involves a focus on the strengthening all of the 12 urban clusters and their inter-urban transport connectors and development corridors.

A process of further emphasis on strengthening the polycentric urban pattern could then be promoted in the four urban clusters associated with the corridor towards Djibouti, focusing on urban and economic development near railway stations and logistic platforms (dry ports). All the urban clusters, including the emerging ones (e.g. Jimma and Nekemte urban clusters as well as Oasis city networks), will have to develop their own industrial and export economies, in line with the potential of their respective rural hinterlands, and structure and manage their growing large, medium sized and smaller cities.

Under this process, Nekemte and Jimma urban clusters will have an additional function - feeding the capital city - due to their close proximity to the metropolitan cluster. The South Rift urban cluster may play a more important role inside the international corridor when the railway line towards Mombasa and Lamu becomes operational (around 2030). Everywhere, a major challenge will be to focus on effective urban planning and management (involving the adequate provision of social services, infrastructure, urban transportation networks, and accommodation and the urban economy), in order to support the urban growth. Related public investments (and financing requirements) are likely to be considerable in the early years until self-generated revenues of the towns and cities and private sector investments increase.

FOURTH and lastly – Implement a dispersed urban pattern as the basis for integrated and inclusive urban and rural development in Ethiopia. This involves a focus on the development of the hinterlands of the 12 urban clusters, including improvements to small towns and rural centres and expanding an increasingly dense network of transport connectors within and between the 12 clusters

Gradually, all the major urban clusters would enhance the development of their respective rural hinterlands. This implies considerable further efforts in order to improve inter-urban road network, to develop production facilities and services for agriculture, services and housing in rural areas and markets centres and so to raise the standard of urban services and transportation networks.

The increased urban demand for food-stuffs will likely foster the modernisation of agriculture, while pro-poor rural development policies and broader MDG's related policies focused on inclusive development will certainly have to be continued for many years and would specifically target the most isolated / disadvantaged areas falling in the "shadow" of the urban hinterlands. This fourth, longer term process (partly after 2035), is one of fuller urban-rural social and economic integration. It implies the full implementation instead of polycentric development and is plausible only insofar as

- economic growth with diversification occurs earlier in the large cities along major transportation routes and trunk lines,
- part of this growth is effectively transferred to the small-town and rural areas in their close, and then in their extended hinterlands, and
- Improved interconnectivity between urban clusters is then gradually provided, in line with the growth of the economy and as trade intensity warrants it.

In other words, insofar as the previous stages have succeeded, emphasis can shift from alternately supporting:

- first, the major development corridors and associated key cities
- then secondary cities, towns and commercial hubs along trunk lines
- then the rural hinterlands, and finally,
- the broader urban system and extended hinterlands, concentrating on economic integration and inclusive development across the country.

This latter stage corresponds to the 'mature' implementation of the polycentric development policies and the commencement of the full implementation of the dispersed urbanisation policies.

In summary, the target Vision has polycentric development as an anchor, and the transitioning process is through Corridor development and by implementing the Polycentric urbanisation policies in an incremental manner. The Dispersed urbanisation policies are to be prioritised beyond 2035. Transitioning from one urban pattern to another, as the experience of the benchmark countries shows, is often an important, practical and economically efficient way to achieve a longer-term 20-30 year urban vision.

Moreover, the availability of public funds and private investments over the years to 2035 will largely determine the pace of change through decades, and the speed and ease with which the target Vision can be reached. The preparation of a public sector investment framework which highlights the policy, programme and project interventions and investments that are needed to ensure that these policies and the transitioning process is put into effect is thus required.



Part II. Implementation the NUDSP Vision

Preface

Chapter 1. The Implementation Road-map

Chapter 2. Institutional and Planning Strengthening

Chapter 3. Capacity Building Measures

Chapter 4. Urbanisation Costs and Financing Requirements

PART II. IMPLEMENTING THE NUDSP VISION

Preface

The Implementation Road-map

This part of the report focuses on the measures that need to be taken in order to implement the NUDSP Vision. An implementation 'roadmap' is presented in Chapter One. The recommendation is that the NUDSP Vision is implemented in three stages over a 20 year period:

- First - Accelerate the development of the Metropolitan and major secondary urban clusters
- Second - Accelerate the development of the remaining secondary urban clusters
- Third - Accelerate the development of the hinterlands of all the clusters

The first stage should take five years to complete, but the second around nine, and the third approximately eleven years. The stages are not sequential, as it is important to implement the Vision as quickly as possible. Hence, stage one and two will dominate the first five year time period which coincides with GTP II (2014/2015-2019/2020), and stage two and three will characterise the second five year time period which coincides with GTP III.

During each time period an outline is given of the suggested infrastructure and service investments, policy and planning initiatives, and the institutional strengthening and capacity building measures that are required to ensure that the urban system of Ethiopia is on track to achieving the NUDSP Vision.

It should be remembered, however, that is not the function of this report to present a comprehensive investment programme related to the implementation of the NUDSP Vision. Instead, this report identifies, lists and briefly describes the key urban clusters, transport connectors and development corridors, and policy, planning and institutional strengthening and capacity building measures that are required in the short and medium term (5-10 years), and covering GTP II and III, required to ensure the ultimate achievement for the NUDSP vision in 2035.

Plans required for Implementation

Comprehensive urban and regional plans are required in order to ensure that the NUDSP Vision is successfully implemented, and that urban development supports and underpins the implementation of GTP II, and beyond to GTP III. These plans will define the main development goals for key urban areas and their hinterlands, identify crucial urban land uses, and highlight the type of growth-enhancing infrastructure and public services and amenities that will be required for the expansion and development of urban areas to underpin the success of GTP II and III. More specifically, in order to achieve the NUDSP Vision by 2035 Ethiopia will need to prepare:

- 9 regional urban development spatial plans

- 12urban cluster spatial plans
- Over 65 structure plans for large cities of between 100,000 to 1,000,000 inhabitants (which should include comprehensive development plans and sector policies)
- Some 345 strategic plans for medium and small cities with 20,000 to 100,000 inhabitants (which should include simplified development plans and building regulations)
- Around 1560 basic plans for cities of 2,000 to 20,000 inhabitants
- Approximately 12,000 simplified development schemes (sketch plans) or plans for rural centres

The required plans, particularly those associated with the major secondary cities and towns, and urban clusters, must address the way in which the public sector can promote and accelerate economic development and provide adequate housing for the increasing number of urban inhabitants.

Accelerated economic growth Implement the NUDSP Vision

A continued focus is required on establishing industrial areas, business districts and special economic development zones within the 10 urban clusters. These areas for economic development must be well planned, served by good transportation and communications links, and provided with adequate energy and water supplies and telecommunications. It is envisaged that more than 250 hectares of industrial zones will be developed each year. As such Ethiopia should be able to attract foreign and domestic investment and provide employment for around one million workers. Large scale industrial development will complement and be linked to small-scale enterprises dispersed throughout urban and rural areas through various commodity supply chains.

The specialised economic development areas will create jobs required to absorb a significant proportion of the expected massive increase in urban labour markets. It is important that this outcome is achieved as *the Consultant's assessment indicates that the economy must generate 6 million new urban jobs over the next decade and 17 million more jobs over the period 2025-2035, if current levels of recorded unemployment are to be remained, and of course additional jobs if these levels of unemployment are to be reduced.*

Improved Housing to Implement to the NUDSP Vision

Providing adequate housing for the increased number of urban inhabitants is likely to be a major challenge for the Government. The existing stock of 5.6 million housing units needs to be upgraded. Furthermore, *the Consultant forecasts that 6 million more housing units will be required over the coming decade to 2015, and 13 million more housing units between 2025-2035.* It is very unlikely that the provision of such large numbers of units can be accommodated within the National Budget.

As such the government should focus on enabling the development of the capacities and capabilities of the private sector housing and construction industries and on creating the conditions necessary to produce housing at large scale to cope with the different needs and financial capacities of urban dwellers. Those with high incomes can secure housing through the private market. Middle and low-income groups, however, may require financial support

in order to access affordable housing. Access to land for self-build housing by low-income groups should be facilitated.

Institutional Strengthening and Capacity Building

Outside of Addis Ababa, urban local governments (ULGs) have very limited experience with planning, financing, implementing and maintaining large infrastructure works and urban services and amenities. In addition, local governments lack knowledge of best practices in integrated urban infrastructure design and operation. Building the capacity and capabilities of ULGs over the coming 5-10 is crucial if the NUDSP Vision is to be successfully implemented. Indeed, capacity constraints and weak institutions may be the most serious constraints on well planned and effectively managed urban development that underpins the GTP process.

The capacity of ULGs requires both significant reinforcement in terms of staff numbers and qualifications, and a shift from a role of urban caretakers to one of *entrepreneurial urban managers*. More specifically and as recently highlighted by the World Bank, effective land management is likely to be one key of the success for the implementation of the NUDSP. To this end the creation of robust and transparent urban land management systems is very important.

Financing the Implementation of the NUDSP Vision

The present financing arrangements will not be able to cope and generate sufficient funds to allow the implementation of the NUDSP. The way forward is to mobilise a variety of financing sources and mechanisms. Significant financial resources are required for the provision and adequate maintenance of urban infrastructure, services, facilities and residential accommodation. Three main resources are often mobilised to finance city development in emerging economies. And are also recommended in Ethiopia:

- ***Capturing added value related to industrial production and services.*** Productivity gains associated with urban economic activities can lead to corporate and individual income gains which can underpin and revenue enhancement for city authorities.
- ***Capturing increases in land values*** Land values rise quickly when urban infrastructure and urban services are built. This added value can be captured by a city authority in order to finance urban expansion, development and the continuing provision and maintenance of urban infrastructure and services.
- ***Introducing user charges.*** Commercial services like water supply, electricity and telecommunication can be self-financing through user charges.

Even with the funds generated in the manner indicated above, it is still going to be hard to finance the implementation of the NUDSP Vision, because, on the one hand the costs of servicing urban expansion areas as well as urban renewal are high, and on the other hand, tax reforms, incentives to the private sector and private sector mobilisation, the phasing of major infrastructure etc. must be balanced and carefully timed so that the array of measures produces 'virtuous cycles', and is self-reinforcing over long periods.

With a careful, step-by-step approach to implementation, a variety of non-traditional ways of mobilising finance are proposed in order to provide an adequate basic level of services in urban areas:

- More efficient urban land-lease markets
- Tax generation related to value capture on developed land in cities
- Moving over time to full cost recovery for urban services
- Ensuring full cost recovery on all urban renewal projects
- Benefit capture related to large economic development projects (industrial zones, special economic zones, business districts...).
- Mobilising urban dwellers through participation in the provision of services
- Mobilising the private sector to finance and operate large urban projects in areas of high land value, in partnership with the local public administration.
- Mobilising the private sector to finance and operate urban infrastructure and services
- And, overall, better leverage of land value, increased use of PPP arrangements, and public sector reform.

Chapter 1. The Implementation Road-map

In the NUDSP Vision for 2035 a metropolitan urban cluster and eleven secondary urban clusters, and their respective hinterlands, dominate the urban landscape and drive the urban-industrial economy of Ethiopia. The implementation road-map expresses how the development of the urban clusters can be prioritised and accelerated. There are two implementation options:

- 1. The Economic Growth Option:** The first option is driven by economic growth and efficiency concerns. This option involves concentrating development efforts during the early years of the implementation road-map on four to five of the most important urban cluster, and the related transport connectors and development corridors. This option is most likely to galvanize and accelerate urban economic growth, as demonstrated by international experience (see Annex A). Growth, however, during the initial years of the implementation road-map is likely to be concentrated geographically and, perhaps, also socially (see Figure 20).
- 2. The Equity and Inclusive Development Option:** The second option is driven by equity concerns and the desire to establish a balanced regional and urban economy as quickly as possible. This option involves spreading development efforts across the majority of the urban clusters from the outset. This option is most likely to be associated with equitable and inclusive development, but may lead to a reduced economic growth rates during the initial years of the implementation of the NUDSP Vision. It is also associated with higher costs from the outset of the NUDSP implementation (see Figure 21).

Figure 20: Implementation Option 1: ‘Economic Growth Focus’

The Four Stages of the ‘Economic Growth’ Pathway to the NUDSP Vision	Time period (and years for completion)
• First , concentrate on developing the Metropolitan cluster and selected secondary cities and towns in the 6 to 7 most important urban clusters/city networks located along the major trade and transport corridors. <i>(the core of the corridor scenario)</i>	Years 1-5 (5 years: 2015-2019)
• Second , focus on developing the secondary cities and towns in the remaining 5 to 6 urban clusters/ city networks and their relevant transport and development corridor connectors <i>(this stage combined with the first constitutes the early stage polycentric scenario)</i>	Years 3-11 (9 years 2017-2025)
• Third , focus on the strengthening all the urban clusters/city networks and their inter-urban transport connectors – amongst and between the clusters and networks <i>(this stage combined with the two previous stages is the full polycentric scenario)</i>	Years 6-15 (10 years: 2020-2029)
• Fourth , focus on the development of the hinterlands of all the clusters and networks, including improvements to small towns and rural centres and an increasingly dense network of transport connectors within and between the clusters and networks <i>(this stage represents the dispersed urban scenario)</i>	Years 10-19 (10 years: 2024-2034)
• NUDSP Vision achieved (the outcome of undertaking and completing stages 1 to 4 as described above)	Year 20 (2035)

Figure 21: Implementation Option 2: 'Equity and Inclusive Development Focus'

The Three Stages of the 'Equity and Inclusive Development' Pathway to the NUDSP Vision	Time period (and years for completion)
<p>First: Accelerate the development of the Metropolitan capital region clusters and all 8 secondary clusters by providing core infrastructure and services and improving relevant transportation connectors and development corridors (an early stage but focused polycentric scenario). Then prepare the remaining 4 urban clusters for support by providing technical assistance and institutional strengthening (<i>this stage combines the corridor scenario with the early stage polycentric scenario</i>)</p>	<p>Years 1-5 (5 years: 2015-2020)</p>
<p>Second: Accelerate the development of the 4 urban clusters by providing core infrastructure and services and improving relevant transport connectors and development corridors. PLUS Strengthen support to all the other clusters (<i>this stage represents the completed polycentric scenario</i>)</p>	<p>Years 3-12 (9 years 2017-2029)</p>
<p>Third: Focus on the development of the hinterlands of all the clusters and networks, including improvements to small towns and rural centres and an increasingly dense network of transport connectors within and between the clusters and city networks. PLUS focus on the strengthening all the urban clusters/city networks and their inter-urban transport connectors (<i>this stage adds the dispersed scenario</i>)</p>	<p>Years 9-19 (11 years: 2023-2034)</p>
<p>NUDSP Vision achieved (the outcome of undertaking and completing stages 1 to 3 as described above)</p>	<p>Year 20 (2035)</p>

Prioritising Development in the Selected Urban Clusters

In consultation with the MUDHo it was decided that Option Two (Equity and Inclusive Development) should guide the implementation and achievement of the NUDSP Vision, as the Government has made a commitment to provide assistance to the urban sector across *the country*. During each time period of Option Two, the selected urban areas which are to be promoted, and the transport connectors and development corridors which are to be built or upgraded, are identified. The time periods vary in length and overlap. The stages are not intended to be sequential, as it is important to implement the Vision as quickly as possible.

The urban areas selected for priority attention are to be promoted by providing them with *growth-enhancing urban infrastructure and services*, and by designing and implementing planning and policy initiatives that encourage their expansion and development over and above that which could be expected had NUDSP related assistance not been available.

Furthermore, during each stage of the pathway to the NUDSP Vision, but particularly during the first stage, institutional strengthening and capacity building measures for local, regional and central governments are likely to be required related to the ability to design, construct, finance and subsequently manage infrastructure and service interventions in each urban area, and prepare and implement complementary urban and regional development and transportation strategies, plans and policies. These institutional strengthening and capacity building measures must be implemented during Stage One if subsequent stages are to succeed.

The limitations of the Implementation road-map

The interventions comprising the implementation road-map are described in outline. It is not the function of this report to present a comprehensive investment programme for the country. It is beyond the scope of the project to prepare such a programme. More detailed work is required to define and detail-up 'bankable' urban infrastructure investments for each urban cluster and by each of the time periods¹². Furthermore, it is clearly difficult to be definitive about investments required beyond the immediate 5 to 10 years; circumstances change and course corrections concerning the nature and implementation modalities of the NUDSP Vision may be required. Hence, this report concentrates on describing those interventions required in the short and medium term (5 to 10 years) in order to ensure that Ethiopia is on track to successfully achieve the NUDSP by the target date of 2035.

The presentation of the Implementation road-map

The implementation road-map is presented in summary form in 5 year time periods between 2015 and 2025 (namely 2015 to 2020; 2020 to 2025), and for the last 10 years of implementation (2025-2035); see figures 20 to 23. More detailed assessments of the planning modalities, institutional strengthening and capacity building measures required during the early years of the implementation of the road-map and for the successful implementation of all four stages of the pathway, are given in separate chapters. This part of the report concludes with an analysis of the likely costs and financing requirements of implementing the NUDSP Vision. These costs are likely to be very considerable, and will be one of the major challenges facing the Government of Ethiopia. If the NUSDP Vision is to be fully implemented, indeed if the investment aspirations of the over-arching national development plan, the GTP process, are to be met, serious attention must be given to improving the current financial modalities associated with development investments.

Summary of the Implementation Road-map

For each time period of the pathway to the Vision the implementation road-map consists of.

- **A list of urban areas** to be actively promoted, on a priority basis
- **A list of transport connectors / development corridors** to be built or upgraded, on a priority basis
- **A brief description of how the urban clusters are to be promoted through:**
 - *the provision of growth-enhancing urban infrastructure and services* (e.g., through the development of water supply and sewerage; the provision of serviced land for industrial estates; and/or the construction of power distribution networks)
 - *plans and policies* that complement the infrastructure and service interventions and directly encourage the economic development of urban areas (e.g., the designation of expansion areas in urban plans; the creation of urban cluster development and transportation plans, and policies to increase the fiscal

¹²For the years 2015-2020 this detailed work should be part of the GTP 2 investment programme, and should involve the co-ordination of all investments plans and policies recommended to achieve the NUDSP vision with those of other Ministries and sectors (e.g. industrial development plans – and the Ministry of Industry).

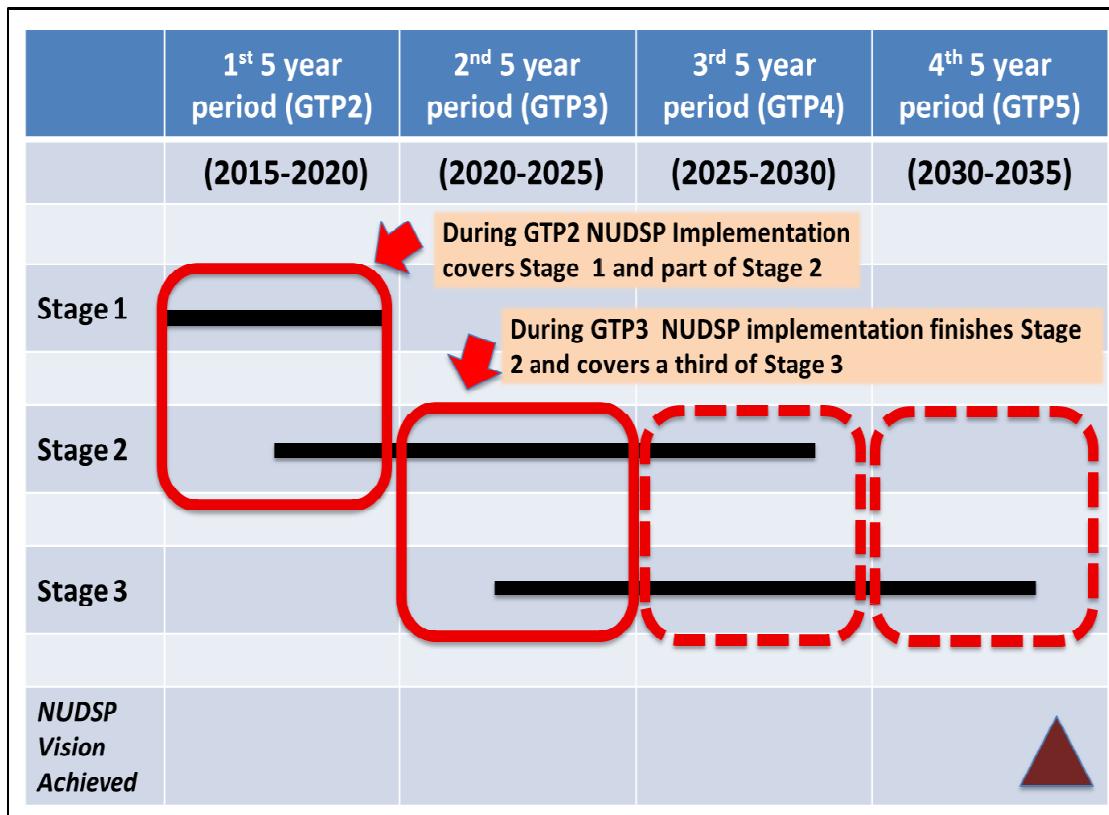
autonomy of cities)

- *institutional strengthening measures* (e.g. measures to improve the administration of investment plans and co-ordination between secondary cities and urban and rural centres within their hinterland)
- *capacity building measures for local, regional and national governments* that are likely to be required to ensure that infrastructure and services and plans and policies can be effectively and efficiently designed and implemented.

The implementation road-map is presented in 5 year time periods that correspond to the GTP 5 year investment programming process (2015-2020: GPT 2; and 2025-2030; GTP3); see figure 22. It is necessary to present the road-map in this manner as the stages of the pathway overlap and local, regional and central government administration will require implementation guidance by year and by GTP time period.

Lastly, it should be stressed that interventions comprising the implementation road-map are described in outline only. More detailed work is required in the future to clearly define and dimension ‘bankable’ urban infrastructure investments by each of the time periods (and to create a comprehensive, robust 5 year rolling investment programme for the MUDHo). The emphasis in this part of the report is on the short to medium term (namely the first 5-10 years of the pathway to achieving the NUDSP Vision in 2035). It is necessary to get the foundation years ‘right’, for implementation of subsequent years to be successful.

Figure 22: Implementation timelines in relation to GTP planning periods



Implementation road-map for the first Time Period (2015-2020); the GTP 2 period

This time period includes:

- **All of the First Stage** (Years 1-5, 2015-2020): Focus on accelerating the development of the Metropolitan capital region cluster and all 8 secondary clusters by providing core infrastructure and services and improving relevant transportation connectors and development corridor; and
- **The first two years of the Second Stage** (Years 3-12, 2017-2029): Focus on accelerating the development of the remaining 4 urban clusters

During the First Stage, one of Ethiopia's critical priorities will be to fast-track the construction of an effective network of expressways and railways interconnecting the country's largest cities and linking these with all major maritime ports in the region. Priority should be given to four multimodal corridors (relying on both rail and road), which will form the backbone of the country's transport network (see Figure 23):

- The Addis Ababa – Dire Dawa – Djibouti multimodal transport corridor
- The Awash – Adigrat/ Semera –Tadjourah multimodal transport corridor
- The Modjo – Hawassa – Moyale – Mombasa/Lamu multimodal transport corridor
- The Bahir Dar – Wereta – Tadjourah multimodal transport corridor

At the same time, the country should also push for the construction of oil and gas pipelines – which are currently lacking. A number of projects are already planned or underway such as the Horn of Africa fuel pipeline (550 km) connecting terminals in Djibouti to fuel depot in Awash, the LAPSSET pipeline project and possibly a gas pipeline linking gas production sites in Somali region to Djibouti.

Ethiopia will also have to build a full-fledged electric power transmission and distribution grid from the major hydroelectric power projects (The Renaissance Dam, Gilgel Gibe III, IV & V Dams...) to the major urban areas and industrial production centres.

Efforts will also need to be directed towards setting up a modern and efficient logistics system primarily serving international and national industries. This entails developing large logistics and distribution facilities dedicated to containerised traffic and import/export activities. Upgrading and expanding the existing dry port network is a first step in this direction. New and modernized rail and/or road freight stations should also be established at nodal points of the transport network and near key industrial areas.

Another priority will be to provide enhanced production and manufacturing facilities (such as Special Economic Zones, Industrial Parks, Integrated Agro-industrial Parks, High Tech Villages etc.), with built-in infrastructure (e.g. wastewater treatment plants) and adequate services (e.g. banking, customs) in major production areas and with proper connectivity to the high speed transport network. Construction of a new international air transport hub in the vicinity of Addis Ababa also needs to be undertaken. Valuable cargo storage, cold storage and other facilities should be upgraded at airports located in areas with high export activities (perishables, gold).

Ramping up the extension of LRT lines in Addis Ababa and connections with the NERN is a priority. In parallel, efforts should be made to establish and improve utility systems for all Tier

1 and 2 cities of the country, keeping in mind that provision of such urban infrastructure should be undertaken in an integrated approach. Key utility systems include:

- Power supply
- Water supply (e.g. residential piped water, water supply for industrial use)
- Sewerage system and sanitation facilities
- Solid waste management
- Drains and storm-water drainage system

At the same time, rural settlements adjacent to the major transport corridors and with abundant agricultural resources should be considered as priority areas for investment in rural roads, Intermediate Means of Transport (IMTs) and warehouse and other distribution facilities.

Figure 23: 2015-2020 Implementation Road-Map

Covers all of Stage One and the first part of Stage Two	
Urban clusters to receive priority support <ul style="list-style-type: none"> ➔ The Addis Ababa Metropolitan Cluster ➔ The Adama cluster ➔ The Dessie-Kombolcha cluster ➔ The Mekelle Cluster ➔ The Eastern Urban Cluster ➔ The Bahir Dar Urban Cluster ➔ South Rift Valley Urban Cluster ➔ Jima Urban Cluster ➔ The Gondar Urban Cluster 	Outline of nature of priority support (infrastructure investments) required to accelerate the development of these urban clusters <ul style="list-style-type: none"> ▪ Establish a high speed road and rail network connecting key clusters to each other and to major ports in the region ▪ Build fuel and gas pipelines and adequate storage terminals (number to be given in GTP 2) ▪ Expansion and modernisation of dry port network and freight stations situated along the multimodal corridors ▪ Install enhanced production and manufacturing facilities (e.g. SEZs, industrial parks) with built-in infrastructure and adequate services (e.g. banking, customs) ▪ Set up utility systems (power, water, sewerage, solid waste management) in key secondary cities ▪ Build a large-scale electric power transmission and distribution network from the major hydroelectric power projects (GERD, Gilgel Gibe III, IV & V Dams...) to the major urban areas & industrial production centres. ▪ Enhancing airport infrastructure (cold storage facilities, etc.) ▪ Expand cable, mobile phone & ICT networks in all secondary cities ▪ Expand conference and accommodation facilities in all secondary cities
Inter-urban connectors that need to be built or upgraded during the first 5 years (GTP 2)	
Road connectors: <ul style="list-style-type: none"> ▪ Adama – Awash – Djibouti Expressway ▪ Modjo - Hawassa Expressway Railways: <ul style="list-style-type: none"> ▪ Addis Ababa – Dire Dawa - Djibouti (656 km) ▪ Mojo – Shashemene – Arba Minch – Konso – Woyito Railway (587 km) ▪ Fenote Selam – Bahir Dar – Wereta – Weldiya (461 km) ▪ Mekelle – Weldiya – Semera – Tadjourah Railway (675 km) Airports: New airport development at Hawassa, Jinka, Shire and Robe Goba and construction of an airport city in the vicinity of Addis Ababa	
Key Institutional strengthening and planning improvements required for the first 5 years (GTP 2)	
<ul style="list-style-type: none"> • Set up a National Spatial Planning Co-ordination Committee 	

- **Establish the Ethiopian Urban Development Investment Fund.** The EUDIF will be a dedicated fund to be used to finance the provision of urban infrastructure and services. The EUDIF will fund infrastructure and services that accelerate the development of selected urban clusters in line with the NUDSP implementation road-map
- **Establish the Ethiopian Urban Planning Institute.** An institution is required to oversee the implementation of the NUDSP, and to capture and disseminate lessons learnt as implementation progress from today until the NUDSP vision is achieved in 2035.
- **Prepare and complete a National Transport Plan.** A National Transport Policy is needed in order to Integrate transport sector policies and planning with wider economic, social, environmental and spatial development policies. Within the policy, projections may also require detailed modelling via an updated National Transport Integrated Plan (of which the last version, made by COWI, dates from 2007-2008).
- **Begin to prepare Regional Transport Plans** RTPs are comprehensive strategies and projects aimed at addressing the regional transportation needs. Main purposes of an RAT is to help achieve the long-term transport vision contained in Regional Development Plans/ Regional Spatial Plans. During this stage complete as many RTAs as possible
- **Prepare and complete 10 Urban Cluster Plans.** These plans will provide the development framework for the ten urban clusters, and, in particular coordinate major infrastructure projects within and between
 - in each cluster. They should be devised and implemented cooperatively involving all relevant levels of governments, and key public and private sector stakeholder institutions
- **Start preparing Regional Urban Development Spatial Plans**
- **Start preparing all required city structure plans**

(NOTE: These proposed measures are described in detail in the next chapter, chapter 2)

Summary of key capacity building measures required to deliver the first 5 years (GTP 2)

- Reinforce the urban management curricula in each regional states' education offer and adapt to specialized career paths: (i) spatial planning; (ii) land management; (iii) GIS; (iv) urban financial management; (v) utilities management; (vi) housing; (vii) urban projects audit .
- Strengthen and specialize municipal staff in urban management roles viz. above career paths
- Train municipal staff in private sector support, particularly geared to industrial areas and large urban projects, including through 'on the job' pilot project experience in flagship areas in the fastest growing cities.

(NOTE: These proposed measures are described in detail in chapter 3)

Implementation road-map for the second Time Period (2020-2025); the GTP 3 period

This time period includes:

- **Continuing the implementation of the Second Stage** (Years 3-12, 2017-2029): Focus on accelerating the development of the secondary urban clusters
- **The firsttwo years of the Third Stage** (Years 9-19, 2023-2034): Focus is on the development of the hinterlands of all the clusters and networks, including improvements to small towns and rural centres and an increasingly dense network of transport connectors within and between the clusters and city networks. Strengthening all the urban clusters/city networks and their inter-urban transport connectors will also be achieved during this stage.

During the Second Stage, once all missing links along the major trade corridors are addressed, Ethiopia can deepen and expand investment to all urban clusters (Metropolitan, and Secondary); See Figure 24. The country should pursue the construction and extension of railway lines and should aim for full implementation of the NRNE. The construction and

expansion of paved roads interconnecting all urban clusters needs to be accelerated during this period (inter-cluster connectivity).

In parallel, efforts should be made to connectivity between cities of different rank within each cluster (intra-cluster connectivity) within each cluster. Feeder roads linking tier 2 cities to dominant cities within each clusters should be fast tracked and continued efforts must be made to expand the urban road coverage of all cities.

This phase is also the right time to move towards a mass transit-led system. Bus Rapid Transit (BRT) systems should be developed in cities with a population above 500,000. Intercity bus links should also be introduced amongst rank 1 and 2 cities of each cluster. Urban logistics and distribution facilities should be established in and around major cities. Continued efforts to upgrade and maintain the country's large network of domestic and international airports is required. Further expansion of utility system to all cities with a population above 50,000 should be prioritized.

Figure 24: 2020-2025 Implementation Road-Map

Covers the second part of Stage Two and the beginning of Stage Three	
Urban areas to receive priority support → Nekemte Urban Cluster → Robe- Goba Urban Cluster → Gode-Kebri Dehar Oasis network → Mille-Semera-Asayita Oasis Urban Cluster →	General nature of infrastructure investments required to accelerate the development of these urban areas <ul style="list-style-type: none"> Full implementation of the NRNE: extension of existing lines Maintenance of expressways and expansion of trunk roads connecting all urban clusters Enhancing feeder roads connecting cities within each cluster Expansion of urban road networks in Rank 1 and 2 cities of all urban clusters Extension of Addis Ababa LRT system and connection with the NERN Introduction of BRT systems in cities with a population of at least 500,000 inhabitants (cities below that number often do not exhibit the demand for BRT systems) Install urban logistics and distribution facilities for all secondary cities Strengthening of utilities systems in rank 1 and 2 cities of each cluster
List of Inter-urban connectors that need to be built or upgraded during the second 5 years (GTP3)	
Railways:	<ul style="list-style-type: none"> Mekele – Aksum – Shire line (201 km) Wereta – Azezo - Metema line (244 km) Ejaji – Nekemte – Assosa – Kurmuk line (248 km) Adama – Asela – Gasera line (248 km) Jima – Tepi – Dima line (300 km) Wereta – Azezo – Metema railway (244 km)
Key institutional strengthening and planning improvements required for the second 5 years (GTP3)	
<ul style="list-style-type: none"> Set up a Metropolitan Transport Authorities (MTA) in all cities with a population of over 500,000 inhabitants. As urban centres expand beyond their historical administrative boundaries, and public transport modes diversify (bus, LRT, regional rail services, etc) and become more complex, it may be necessary to establish a single purpose authority to plan, develop and operate public transport networks at the metropolitan-wide / city-wide scale. Finish preparing regional transportation plans. Finish preparing urban cluster plans 	

- **Prepare Comprehensive Mobility Plans:** CMPs set out a long-term vision of desirable mobility patterns (both passenger and goods) at the local level and provide orientations and strategies to deliver this vision. CMPs typically include short-range mobility enhancement objectives and interventions (5 to 10 years) and long-term targets (up to 20 years).

Summary of capacity building measures required to deliver the second 5 years (GTP3)

- Set up a “knowledge and experience sharing platform” FUDA and UDA affiliated
- Continue ‘career path’ training of urban managers, with continued specialization, and emphasis on fiscal mobilization, incentives packages to industry and commercial investors, and project auditing.

Implementation road-map for the third and fourth Time Periods (2025-2035); the period covering GTP 4 and 5

This time period includes:

- **Completion of Stage Two**(Years 9-19, 2023-2034): Focus is on the development of the hinterlands of all the clusters and networks, including improvements to small towns and rural centres and an increasingly dense network of transport connectors within and between the clusters and city networks. Strengthening all the urban clusters/city networks and their inter-urban transport connectors will also be achieved during this stage.
- **Undertake the majority of and then complete Stage Three** (Years 9-19, 2023-2034): Focus is on the development of the hinterlands of all the clusters and networks, including improvements to small towns and rural centres and an increasingly dense network of transport connectors within and between the clusters and city networks. Strengthening all the urban clusters/city networks and their inter-urban transport connectors will also be achieved during this stage.

During the **Third and final time period**, priority will be given to hinterland investment in all urban clusters and strengthening market towns. In terms of transportation, improving rural accessibility is a top priority. This entails expanding road and infrastructure for IMTs to all rural areas (full implementation of the URRAP), including in peripheral regions.

At the same time, investment during this phase should focus public transport services and facilities that connect small and medium-sized cities to traffic hubs within each cluster. At the end of this time period, the country should have a dense and far-reaching network of paved and all-weather roads, connecting all kebeles to higher ranked cities all the way to transport hubs of the country.

Efforts must be directed to the provision of basic urban infrastructure such as power and water supplies, sanitation and solid waste management to small and medium-sized cities. At the end of this time period, the country should aim for universalisation of basic urban infrastructure and services. Establishing warehouses and freight terminals in market towns and in selected rural centres so as to encourage some level of industrial transformation in lower ranks of the urban system and the rural hinterland should be prioritised.

Figure 25: 2025-2035 Implementation Road-Map

Completes Stages Three and the achievement of the NUDSP Vision.	
List of urban areas to receive priority support <ul style="list-style-type: none"> strengthening all the urban clusters/city networks and their inter-urban transport connectors – amongst and between the clusters and networks The hinterland development of all urban clusters/networks 	General nature of infrastructure investments required to accelerate the development of these urban areas <ul style="list-style-type: none"> Dense network of transport connectors within and between the clusters and city networks Full implementation of URRAP which will help connect kebeles to all-weather roads Transport services (both bus and freight) between market towns and transport hubs at the cluster/regional level Expansion of utility networks to small and medium-sized cities Network of warehouses and other storage/distribution facilities in market towns and selected rural settlements Connect all market towns and selected rural settlements to electric power transmission & distribution grid.
List of Inter-urban connectors that need to be built or upgraded during the third and fourth 5 year periods (GTP4 and 5) <p>These long term projections require input from a revised National Transport Policy, as part of GTP II and GTP III implementation (this is part of first 5 year measures proposed – see above).</p>	
Key institutional strengthening and planning improvements required during the third and fourth 5 year periods (GTP4 and 5) <p>While there are no specific planning documents targeted for periods 4 and 5, as the main new planning reinforcement was voluntarily pushed forward in periods 1 and 2; updating of urban and metropolitan structure plans will be important, especially in areas with highest growth.</p> <p>Smaller towns will have grown significantly, and economic diversification will have occurred. Thus, lessons learned in the preceding two stages are now to be applied, adapted and extended to the periphery of urban clusters and in more isolated areas. The emphasis will be on ensuring, as much as possible,</p> <ul style="list-style-type: none"> own financing for urban expansion and urban renewal and quality of life improvements and equity in education opportunities and health care accessibility. <p>Larger towns will have graduated to economic motors, with a diverse industrial fabric and services. This emphasis is on advanced urban management – innovative economy, innovative clusters solutions and not simple carry-ons from the preceding stages. Emphasis continues to be on:</p> <ul style="list-style-type: none"> Increase private sector mobilisation to finance and operate urban infrastructure and services Mobilise the private sector to finance and operate large urban projects in areas of high land value, in partnership with the local public administration. 	
Summary of capacity building measures required during the third and fourth 5 year periods (GTP4 and 5) <p>Continue 'career path' training of urban managers, with continued specialization, and emphasis on urban managers' role in developing innovation clusters and promoting 'industrial district' types of innovation and productivity gains.</p>	

The above Implementation road map should be considered as the basis of a Comprehensive Investment Plan containing a list of detailed Projects with full feasibility analyses completed.

Chapter 2. Institutional Strengthening

2.1 Introduction

This chapter outlines the way in which the urban areas and clusters prioritised for accelerated development can be supported and promoted through institutional strengthening measures (namely measures to improve [a] the administration and delivery of investment plans, and [b] co-ordination between secondary cities, and smaller towns and rural centres within their hinterlands). The structure of the chapter is as follows:

- It begins with a discussion of the principles of the NUDSP, highlighting the strategic and guiding nature of the Plan.
- Institutional strengthening measures required to ensure that Government can deliver the NUDSP are then described. These measures are categorised into those to be implemented within 1-3 years, and those that can be implemented at a later date.
- The chapter concludes by outlining the ways and means whereby the NUDSP can be co-ordinated at the Federal level, and by summarising the required institutional strengthening measures.

Adapting institutions to deal with the challenges of rapid urban population and economic growth, and, more specifically, able to effectively and efficiently implement the NUDSP Vision, is likely to require a battery of measures, the full complement of which are expected to be introduced over the 20 year period to 2035, when the Vision is fully realised. Not all the measures, however, can be introduced at the same time; this is precluded by the lack of both financial resources, and capacity and capabilities within government.

Moreover, some of the proposed measures depend on others, such as carrying out transport planning at regional scale, which is dependent on prior knowledge of national transport planning priorities. Thus, *only the most important institutional strengthening measures, essential for the implementation of the first two stages of the NUDSP Vision, are highlighted in this chapter*. Furthermore, it should be noted that the institutional strengthening measures are recommendations that must be fully discussed by the Government of Ethiopia, and then subsequently detailed-up (a task which is beyond the scope of this project).

2.2 NUDSP Principles

The NUDSP is a strategic guidance document

The NUDSP is a strategic urban spatial framework that provides a *national spatial planning framework* for strengthening both the urban sector and urban-rural linkages. It is recommended that the Plan is a *guidance document*, namely an overarching plan that guides the investment programmes of cities and regions. Once approved, the NUDSP will serve as a guide as how to promote and manage urban growth and development in order to achieve the NUDSP vision in 2035. More specifically, the NUDSP is expected to serve as directive guidance when developing regional and urban cluster plans, and as a common pragmatic basis to organise and guide urban development adapted to specific local conditions. This use of large-scale guidance plans is not unique to Ethiopia, and is widely used in many developing and developed countries as a basis for collective agreement

concerning the planning and development framework (see: The *Evolution of National Urban Policies*, UN-Habitat and Cities Alliance, 2014 which describes how such plans can lead to 2014 UN “a more enduring, collaborative and integrative approach to planning”).

The NUDSP is implemented within the current Institutional framework

The NUDSP is an integrated development plan which will guide urban growth up to 2035. The Plan will be implemented under the current institutional framework of Government of Ethiopia (see Appendix B). Radical institutional change is not required in order to implement the NUDSP. However, new planning tools and operating modalities are envisaged to address a range of challenges associated with the NUDSP including:

- *The need for financial programming integrated across cities and urban clusters* in order to effectively manage and optimise the developmental impact of investments undertaken jointly by two or more cities or urban clusters
- *New ways for consensus-building around negotiated territorial visions* (e.g. planning within urban-economic clusters, as regional or inter-regional functional areas fostering complementarities and synergies between cities and rural hinterland)
- *Broader participation, cooperation and contractual processes around urban and economic projects and strategies*, involving public institutions and bodies, private stakeholders and investors, experts, the civil society, etc.
- *Two important short term (first 5 year period) federal level decisions* must be made as regards the setup of an Ethiopian Urban Development Investment Fund (EUDIF) and of a an Ethiopian Urban Planning Institute (EUPI).

The NUDSP promotes inclusive development through rural-urban integration.

The prevailing pro-poor policies of Ethiopia focus on local service and infrastructure development, particularly in rural areas and small towns. This focus will continue as the NUDSP vision emphasises urban cluster development and the associated promotion of rural-urban linkages. Key to the successful implementation of the NUDSP will be:

- *An emphasis on strengthening rural-urban linkages*, including the promotion of urban-rural value chains (so important for the successful implementation of GTP 2). In order to improve value addition in agro-industries co-ordination is required between urban areas and their hinterlands as regards the siting and operation of commercial farms, industrial zones, trade and logistic facilities and growth corridors
- *A focus on strategic growth sectors* such as textiles, leather, agro-processing, mining, etc. and infrastructure such as transportation, energy, telecommunication, and roads. Here relevant competencies could be divided among higher and lower levels based on the complexity and trans-regional nature of the sector or infrastructure in question. Agro-processing and rural roads might be planned and implemented at lower administrative levels while complex projects should be implemented by higher-level bodies such as federal and regional institutions.
- *Concentration on the development of urban clusters*. The ten urban clusters in the NUDSP correspond to emerging economic specialisation, based on the agro-industrial potential of different regions of the country. Urban clusters are key components of the implementation of the NUDSP. They are also the vehicle or instrument for coordinating and integrating national urban policy with regional and local planning needs.

The NUDSP embodies the principle of subsidiarity

The NUDSP is a guidance document and provides a framework for local level planning. Many local urban authorities, however lack resources, and human capacity and capabilities. There appears to be a clear need to improve the capabilities of local authorities if they are to be expected to manage urban development in the future, effectively and efficiently. Combining regional level support (urban bureaus) and urban administrations capacity will be one way to improve technical and administrative skills at relevant administrative levels in order to address strategic urban development and management issues. An important condition enabling urban growth and the delivery of the NUDSP Vision may be to promote financial urban autonomy. In this regard it is a positive move that cities have recently gained their own taxes revenues and expenditure powers and assignments.

Co-ordination with Federal Policies and Programmes is important for the NUDSP

The NUDSP was devised taking into account all relevant national sector policies for industrial and agricultural development, transport and logistics (including dry ports), energy, major projects, tourism, culture and heritage etc. At present most of the national sector policies are implemented by the Federal and the Regional Governments through various proclamations. Successfully managing the urbanisation challenge may require special attention devoted to sectoral domains such as National Transport, Tourism and Heritage, Sustainable Development, and Housing. Thematic policies integrate major projects, are linked to regional requirements, and should be integrated into the NUDSP delivery but continue to have their own dedicated financing plans and timetables.

2.3 Ensuring effective NUDSP Implementation

The NUDSP is a strategic guidance plan that can be inserted into the existing planning framework of the country. The speed and efficiency of the implementation of NUDSP, however, is likely to be hampered if improvements to the existing institutional set-up and planning regime are not made. Five main improvements are recommended to be implemented over the coming 1-2 years:

1. Establish an *inter-ministerial coordinating body for Urban Spatial Planning* (the NUDSP inter-ministerial committee)
2. Set up the *Ethiopian Urban Development Investment Fund* (EUDIF)
3. Set up the *Ethiopian Urban Planning Institute* (EUPI)
4. Prepare and implement the following plans:
 - A National and Regional Transport Plans.
 - Regional Urban Development Spatial Plans.
 - Urban-Cluster Spatial Plans, and City Structure Plans
5. Expand *rural development programmes*

Longer-term improvements that could be considered include the establishment of (a) metropolitan transport authorities, (b) a land development corporation¹³, (c) urban development agencies, and(d) the implementation of comprehensive mobility plans.

¹³ At the time of writing a land development corporation was in the process of being established.

2.3.1 Short-term Institutional StrengtheningEstablishing Requirements

The NUDSP Inter-Ministerial Committee

The NUDSP is the key planning document guiding the development of the urban sector over the next 20 years. Given the importance of urbanisation to the economic development process of Ethiopia, it is crucial that the NUDSP is accorded priority within Government. It is thus recommended that MUDHo sets up a co-ordinating (inter-Ministerial and consultative) body to oversee the implementation of the NUDSP and ensure alignment with key economic panning initiative, particularly the GTP process.

The Ethiopian Urban Development Investment Fund (EUDIF)

It is recommended that the EUDIF is established with the aim of accelerating the development of selected urban clusters in line with the NUDSP implementation road-map. EUDIF will be a dedicated fund to be used to finance the provision of urban infrastructure and services. All local levels of governments will be eligible to apply to the fund. Financial support would be granted for urban development projects on a project-merit basis; all applications should be supported by a comprehensive strategic rationale and associated project cost-benefit analysis. Key aspects of the proposed Fund are as follows:

- **A significant portion of the funding should be for projects orprogrammes that are obligated to make a profit.** Such projects could include the establishment of economic zones, housing schemes for middle to upper income beneficiaries, and some public transport initiatives. The profit made through such projects can be used to cross-subsidise urban development projects that are unlikely to generate a revenue stream of any significant note (for example, sewerage systems).
- **Funding is to be allocated on a competitive basis,** above and beyond the central budget allocation for infrastructure and services. The EUDIF is a specific funding stream designed to implement the NUDSP via accelerating the development of target urban clusters. The funds available will be additional to that which will be made available through the national budget.
- **Public private partnership (PPP) arrangements associated with EUDIF financing should be promoted,** and co-funding by donors will be acceptable and indeed encouraged. The Fund can be used to encourage the private sector to provide key urban infrastructure so reducing the burden on the public purse. However, a clear and concise analysis of the benefits to the recipient urban area or cluster of providing infrastructure and services via a PPP should be required.

It is suggested that the EUDIF is administered by MoFEC. There may be a case for establishing a National Urban Development Operational Programme (NUDOP) to administer the EUDIF; this is a decision for the Government of Ethiopia to take in the future (Annex D outlines the structure and operating principles of both the EUDIF and of a possible NUDOP that the Government may wish to consider). Financing the EUDIFcould be undertaken by Government. Assistance from interested donor partners could be sought, as could funds on more commercial terms (depending on the type of urban infrastructure and service projects to be funded). Details of the administration and financing of the EUDIF are beyond the scope of this project, but should be addressed during the early years of the GTP 2 period.

The Ethiopia Urban Planning Institute (EUPI)

An institution is required to oversee the implementation of the NUDSP, and to capture and disseminate lessons learnt as implementation progress from today until the NUDSP vision is achieved in 2035. It is recommended that the Ethiopian Urban Planning Institute is established; it should become the technical arm of the inter-cabinet committee for spatial planning, chaired by a representative of the PM or the Finance Minister.

The EUPI will play a major role in ensuring the effective and efficient implementation of the NUDSP. As such it is recommended that the EUPI is attached to either to the PM's office or to MoFEC, and its main functions should include monitoring progress as regards the implementation of the NUDSP Vision, and ensuring the co-ordination of local, regional and national plans within the NUDSP framework, more specifically, EUPI's roles should be to:

- **Guide and unify spatial development policy and coordinate investment planning for projects across sectors**, in line with GTP 2, and in order to achieve economies of scale and concentrate investment
- **Centralise and reliably update data, and prepare future studies** of relevance to the implementation and achievement of the NUDSP Vision
- **Assist regions, urban clusters and principal cities** develop their structure plans / regional transport plans, or to prepare the plans on their behalf

Secondarily, but importantly, EUPI should contribute to curricula development and training of urban professionals in the regions, and be directly involved in capacity building in all of the urban clusters. Outside of Addis Ababa, urban local governments have very limited experience with planning, financing, implementing and maintaining large and rapidly growing infrastructure systems. In addition, they lack knowledge of best practices in integrated urban infrastructure design and operation. The EUPI should assist many urban local governments plan and operate cost effective, integrated urban infrastructure.

It is further recommended that Regional Urban Planning Institutes are established and work hand-in-hand with the EUPI so as to effectively carry out the task of plan preparation and implementation in the country.

A Land Development Agency or Corporation

Capturing the value of land in order to finance urban development will be an important instrument with which to implement the NUDSP. The prevailing land lease system, based on the principle of public and people owned land, is not currently delivering sufficient funds. Even in Addis Ababa the land lease system is not generating anywhere near enough funds to cover the provision of urban infrastructure and service, let alone their maintenance. The system needs to be reviewed and overhauled.

One improvement could be the increased use of auction sales to capture the true market value of land. Prior to the increase use of auction sales a comprehensive and robust urban cadastre needs to be put in place. These and other improvements could be managed by an Urban Land Development Agency (or Corporation). Such an agency has been established in

many other countries and has proved to be effective in enabling urban development and growth¹⁴. It is recommended that the proposed Land Development Agency or Corporation should initial focus its operations in Addis Ababa, Dire Dawa and in the four major regions

2.3.2 Longer-term Institutional Strengthening Suggestions

Metropolitan Transport Authorities (MTAs)

As urban centres grow and expand, it is increasingly important to establish mechanisms for the horizontal coordination between local authorities of a given metropolitan area. Global experience indicates that Metropolitan Transport Authorities (MTAs) can play an important role in transforming public transport systems at the scale of a conurbation. Indeed, establishing a single purpose agency to plan, implement and operate public transport schemes minimises the need for coordination across multiple agencies and provides the opportunity to achieve modal integration. These MTAs could also be set at urban cluster level with cities over 200 000 inhabitants, in order to integrate inter-city mobility. A key suggestion is thus to consider establishing a Metropolitan Transport Authorities (MTA) in all cities with a population of over 500,000 inhabitants. Typical responsibilities of MTAs include:

- Strategic planning of integrated public transport network
- Capital financing of projects
- Coordinating the different types of public transport
- Fare policy which includes fare-setting and handling the ticketing system
- Tendering and contracting with operators
- Monitoring of operations and maintenance
- Marketing and promotion of public transport and non-motorised modes of transport

Some MTAs such as Transport for London (TfL) and Singapore's Land Transport Authority (LTA) are responsible for both public transport and road network management. This provides the unique opportunity to manage public and private transport as a single system: revenues generated from private car users can be allocated for the development of the public transport network. MTAs may also have responsibilities over real estate management as illustrated in the case of LRT in Singapore and Hong Kong's MTR. In order to be effective, MTAs need to be appropriately mandated and resourced with sustainable funding to finance transportation investment and service management. Funding must be sustainable and predictable. Moreover, it is important that the established MTA comprises representatives of the municipalities found in its service area.

Urban Development Agencies

Urban development issues are likely to differ considerably according to the size and growth potential of the city or town in question. Large cities will need very efficient urban development tools to manage land use, land lease and urban development projects. Some programming and development tasks may be outsourced to local semi-public companies which can organise and manage the implementation of real estate and urban development

¹⁴ At the time of writing a land development corporation was in the process of being established.

programmes. This is one way to achieve public goals and set a rational framework for private real estate developers.

This model, largely used in Europe, involves setting up a project joining private (real estate or urban developers) and public (territorial authorities) interests. The real estate developer covers a share of the costs of public urban services (schools, public space, etc.) and infrastructure, which are borne inside a project and a programme approved by the local authority. This mechanism allows private sector contributions to support public and urban services and also helps economic development as private sectors companies are supported by the process. This mixed system (with a range of different status) may improve the urban services structure along with a private real estate project and also, more generally, create a business-friendly environment (Development Agencies). It may be set at a city level or even at larger scale (urban cluster, region), to concentrate competencies and partnerships.

2.3.3. Improved Planning Tools

At present a number of spatial planning tools required to implement the NUDSP are either missing or require updating. For instance, at the regional state level, while regional economic and social development plans exist, these are not translated into a regional spatial planning framework. Furthermore, the urban cluster approach will require a new kind of spatial planning to be adopted in Ethiopia. New operational tools will also be required, especially as regards land and transport management, and the management of special economic zones and other economic development areas. It is recommended that the following plans are prepared and implemented during the early years of the GTP 2 period:

National Transport Plan

A National Transport Plan update is needed in order to:

- Integrate transport sector policies and planning with wider economic, social, environmental and spatial development policies.
- Create a framework for better coordination and integration across the different modes and agencies intervening at all levels of governance
- Establish a clear legal, regulatory and institutional framework that defines the respective roles and responsibilities of the different levels of government and sets the framework for coordination with the private sector
- Encourage lower levels of government to adopt integrated approaches to urban transport planning, development, operations and management . This can be achieved by requiring the preparation and implementation of Comprehensive Mobility Plans (CMPs) at the level of metropolitan areas.

The plan must be aligned with and support GTP 2, with a comprehensive list of major projects (energy projects, major industrial development areas and agricultural projects) and is developed in step with planning for urban development in each cluster. Moreover, the plan should be very precise as to the content and statutory power of regional transport plans and of urban transport plans. A more detailed presentation of the need to adapt transport planning tools is given in Appendix D.

Regional Transport Plans (RTPs)

Embedded in the National Transport Plan should be corresponding regional transport Plans (RTPs). A RTP is a comprehensive statement of short and long-range strategies and projects aimed at addressing the regional transportation needs. The main purposes of an RTA is to:

- Help achieve the long-term transport vision contained in Regional Development Plans/ Regional Spatial Plans. They are thus an integral part for the latter.
- Create a framework for safeguarding future transport corridors from development at the regional-scale.
- Identify transport investment priorities to undertake over the time horizon of the plan. Efficiently allocate funding for capital investments, operations and maintenance according to clear transport priorities.

Recommended to start with the Addis Ababa Metropolitan Cluster, in line with new transport investment in the area (Addis Ababa – Adama expressway, Sebeta – Djibouti railway which is double track between Sebeta and Adama, various dry ports, future airport, etc)

Regional Urban Development Spatial Plans

The Regional Urban Development Spatial Plans (RUDSPs) are strategic spatial plans at the regional level. They are spatial translations of the economic and social development policies of each region. They assemble, at the regional scale, the various sector policies and projects improving the urban quality of life and ensuring urban growth in cities and also towns and rural centres (see evidence box on Chile's PRDU). They provide the regional regulatory and programming framework to be further implemented at cluster and at city level (as supported in particular by the ULGDP II), in line with regional budgets. RUDSP would also be a very useful basis / regional contribution toward structure plans for urban clusters.

Evidence Box: Chile, the Regional Plan for Urban Development (PRDU)

As part of the 2010-14 Government Programme on quality of life and cities, and following the decision to devise a National Urban Policy, a comprehensive urban planning system is being established in Chile. The system involves municipal, Inter-municipal and metropolitan plans and Regional Plans for Urban Development (PRDU). PRDU is a guiding instrument, not a statutory tool;- a non-binding framework for urban co-ordination across the regions. PRDU aims to coordinate urban development, setting out the roles of urban centres, their spatial and functional relationships, connectivity, and growth targets. PRDU will include an explanatory memorandum containing: the conceptual and technical aspects that justify the plan, its objectives, rationale and methodology; a regional diagnostic taking into consideration regional trends, strengths and weaknesses, degrees of occupancy of the territory, interactions between the region's different areas and population centres; the main planned investment projects of the public and private sector. It will also include guidelines for the allocation of national roads, highways, railways, airports, seaports and international borders; definition of settlements that may require priority treatment; the equipping and requirements of health infrastructure, energy, and telecommunications. The MINVU (Ministry of Housing and Urbanism) SEREMI (Ministerial Regional Secretariat, at regional level) are responsible for developing the PRDU which is then approved by the region's Intendent and the Regional Council. In principle, the contents of the PRDU should be integrated into the various municipal urban development plans, though in practice this is not always the case. In October 2012, 3 out of 15 regions had a PRDU in place, and an additional four were awaiting approval.

Source: OECD 2012, Working party on territorial policy in urban areas, the case of Chile

Urban Cluster Spatial Plans

These plans will provide the development framework for the ten urban clusters, and, in particular coordinate major infrastructure projects within and between each cluster. They should be devised and implemented cooperatively involving all relevant levels of governments, and key public and private sector stakeholder institutions. The plans should be managed in a negotiated way, maintaining consistency with the NUDSP – RUDSP, and involving a range of stakeholders at regional and local levels (ULGs, woredas and rural centres).

The plans are designed to provide a platform for the different local administrations to address and agree on shared issues in each city region (for example, where to locate the waste treatment plant, the sewage treatment plant, the power plant, cement factory etc.). The plans are an exercise in “consensus by doing”. It is suggested that these plans are managed via the Ethiopian Urban Planning Institute.

Development Councils at the scale of city-regions are a common way to mobilise stakeholders and investors around development challenges in large urban areas in Europe, North America, Australia or South Africa (see the 2009 OECD Report *“Organizing for local development, the role of local development agencies”*). They are often established with the following aims:

- To foster a long-term plan for their areas
- To build or support commercial markets within their territories,
- To facilitate practical coordination amongst stakeholders in order to implement major project, or set up a dedicated team for a major project implementation.

With regard to the NUDSP and the development scheme of each cluster, Development Councils could adopt wider functions including negotiating the implementation of major projects, and work with, for example, Ethiopia’s Investment Commission. These Councils could build consensus on the vision for their areas, which would involve public authorities (Regions, Ministries, main ULGs), planning bodies (FUDA, RBUD/UCPA) and representatives of civil society and the private sector.

Following agreement between the public authorities (federal state, regions, major cities) in each cluster (which could be managed by the UCPA), the Cluster Development Council could, with the UCPA support, involve public and private stakeholders in building operational partnerships in each urban cluster for its implementation and financing. An alternative could be to set them at regional level, given that they would also be called at cluster’s level to debate around cluster’s development strategies.

City Structure Plans

Present plans regulating city-wide spatial development are Structure plans (required for metropolis, regiopolis and category 1 cities) and City strategic plans (required for category 2 and category 3 medium cities). It is recommended to retain city structure plans, with a 10 year validity period, for all cities above 100,000 persons. Structure plans should be accompanied by a zoning plan, and a general urban building regulation (by laws), so as to allow respective city authorities issuance of building permits without waiting for NDPs to be approved. However, NDP should remain obligatory for all urban extension areas (e.g. greenfield residential extension), for heritage areas, for special economic zones, free trade

areas, industrial parks and similar. Beyond the obligatory categories, Municipal authorities can designate, within the structure plan, which additional areas must have approved structure plans before issuance of building permits.

Furthermore, it is recommended to retain City Strategic Plans, with a 7 to 10 year validity period, for all towns between 20,000 and 100,000 inhabitants. City Strategic plans like the city structure plans should be accompanied by a zoning plan, and a general urban building regulation (by laws), so as to allow city authorities to issue building permits without waiting for NDPs to be approved..

Rural development programmes

Successfully implementing stage One of the NUDSP is likely to leave the more isolated rural territories in the shadow of urban and industrial development. These rural areas are harder to access, relatively far from agro-processing centres and industrial zones, and many are without advantages of fertile land and a prosperous agricultural base. In line with the inclusive development philosophy of the Government these areas should be supported, with a number of important pilot development programmes prepared and implemented over the first 5 year period of the implementation of the NUDSP. As such it is suggested that rural area development programs, linked to earmarked funds, are set up, and so designed to attract co-financing from international donor partners.

The first rural development programmes should target specific regional morphologies (as regards type of crop, climate, specific social and economic problems) as well as the corresponding value chains- livestock and agro-pastoral areas in the arid lowlands; highland rain-fed agriculture for coffee and aromatics; cereal crop areas etc. All programmes should encompass a combination of projects aimed at productivity (value chains) and projects aimed at life quality (health, education, culture).

Comprehensive Mobility Plans (CMPs)

CMPs constitute an effective instrument for analysing the existing and future transport and mobility needs within a given area in a holistic and coherent way. A suggestion of this report is thus to encourage their preparation for cities with over 200,000 inhabitants to prepare a sound and effective Comprehensive Mobility Plan.

CMPs should plan for a time horizon of five to ten year and it is highly recommended that they take a broader and metropolitan approach (and not be confined to cities' administrative borders) CMPs should prioritise investment in public transit and non-motorised transport over private vehicle and, in order to be effective, should:

- Clearly define the long-term vision and high-level objectives for the transport system in the area
- Outline orientations and strategies that will deliver the transport vision
- Establish an implementation plan including an inventory of the different projects and initiatives to be developed in a phased manner, a well-defined framework of targets and performance indicators to monitor progress and achievement, indicate lead partners responsible for implementing each intervention and a sound financial plan.

CMPs should be consistent with the goals of the national transport policy and other higher-levels planning documents. They should also be adequately linked with other planning

instruments such as Urban Structure Plans and Neighbourhood Development Plans. Financial and technical assistance should also be provided from the national government in order to encourage the preparation of CMPs by cities. Once formulated, CMPs should be reviewed on a regular basis in order to measure its performance and reflect evolutions in the mobility needs as well as policy changes.

2.4 Coordination Across Government and with Donors

In order to address the urbanisation challenge and implement the NUDSP three main actions are recommended :

- *Ensure clear federal and regional level responsibilities* (and associated planning competencies) to foster urban development in each region accord with the distinctive potential of that region and the aspirations of its citizens
- *Increase local autonomy* so that cities and towns are financially and operationally able to manage urban growth and implement local economic development initiatives.
- *Devise development strategies at the level of urban clusters* (including their hinterlands) with a focus on urban-rural integration and extending urban services to the majority of the population living in and around each urban cluster.

The effective and efficient management of urban areas requires a multi-sector approach and framework. This framework must integrate policies and programmes devised and implemented at the Federal and Regional levels. It is proposed that integration is through the NUDSP, which will act as a guidance framework allowing flexibility in applying policies and programmes according to local circumstances. Indeed, national and international investments and all main federal policies can be integrated through the NUDSP.

The NUDSP, translated as it should be into regional spatial plans and urban cluster plans, and finally to statutory local plans, requires coordination to maximise the efficient use of resources. Existing or new bodies will have to design, monitor, implement, manage, control and assess spatial planning at Federal, regional and sub-regional levels. Due to on-going capacity building and management initiatives at each of these institutional levels, today's public bodies have significantly increased their efficiency, and should be able to implement the NUDSP. However, some of the recommended new methods, tools and processes may require new bodies, as outlined below.

2.4.1 Consultative tools and bodies

Proposed Development Council

Development Councils are often established at national and/or regional level and involve the participation of representatives of civil society and the private sector (for instance, the French CESE, Economic, Social and Environmental Council; See Evidence Box on French Development Councils). These Councils can act as consultative bodies and can provide an enlarged societal participation on debates concerning the national urban challenge and, subsequently, the Councils can prepare recommendations at regional or urban cluster level.

It is suggested that the Government considers establishing a ***Federal Urban Development Agency (FUDA)***, which oversee the NUDSP implementation (and be responsible for the NUDOP and EUDIF), FUDA also could provide an impetus for developing new approaches

and methods of urban planning and management and involve all relevant stakeholders in the new ‘urban deal’. FUDA could have a similar role to that of French former DATAR, which was responsible for the regional aspects of national economic plans and co-ordinated the regional spatial and planning efforts of other agencies.

Evidence Box: French Development Councils

In France, the 1999 act on regional planning that established the Urban and Agglomeration Communities provided the establishment of mandatory “development councils” representing the economic and social stakeholders (chambers of commerce, business associations, higher education institutions, etc.) and assisting the joint municipalities structures in the elaboration of their strategic projects and actions at metropolitan level. In line with the national and regional planning, economic and social councils (CES, CESR) are being regularly consulted by national and regional governments. This kind of development body has been established in many Western metropolises and large cities to foster the urban development. Some of them involve mainly public authorities and economic representatives around a geographic area, sometimes at municipal level or with regional and cities collaboration; others are engaged with drivers in labour and property markets. Sometimes a local participation of the population may be chaired by a member of the joint authority. Operating often on low budgets, they nevertheless contribute to strengthening relationships between private and public sector.

Source: consultant documents, 2009 OECD Report *Organizing for local development, the role of local development agencies*.

The EUPI should assist in the implementation of NUDSP, particularly by providing knowledge and intelligence as regards how local planning systems can be improved (often based on the more advanced Addis-Ababa experience).

Proposed Urban Cluster Development Councils

Development Councils at the scale of city-regions or urban clusters are a common way to mobilise stakeholders and investors around development challenges in large urban areas in Europe, North America, Australia or South Africa (see the 2009 OECD Report *“Organizing for local development, the role of local development agencies”*). They are often established with the following aims:

- To foster a long-term plan for their areas
- To build or support commercial markets within their territories,
- To facilitate practical coordination amongst stakeholders in order to implement major project, or set up a dedicated team for a major project implementation.

With regard to the NUDSP and the development scheme of each urban cluster, Development Councils could adopt wider functions including negotiating the implementation of major projects, and work with, for example, Ethiopia’s Investment Commission. These Councils could build consensus on the vision for their areas, which would involve public authorities (Regions, Ministries, main ULGs), planning bodies (FUDA, RBUD/UCPA) and representatives of civil society and the private sector (see table 9 for a list of organisations involved in planning in Ethiopia).

Following agreement between the public authorities (federal state, regions, major cities) in each cluster (which could be managed by the UCPA), the Urban Cluster Development Council could, with the UCPA support, involve public and private stakeholders in building

operational partnerships in each urban cluster for its implementation and financing. An alternative could be to set them at regional level, given that they would also be called at cluster's level to debate around cluster's development strategies.

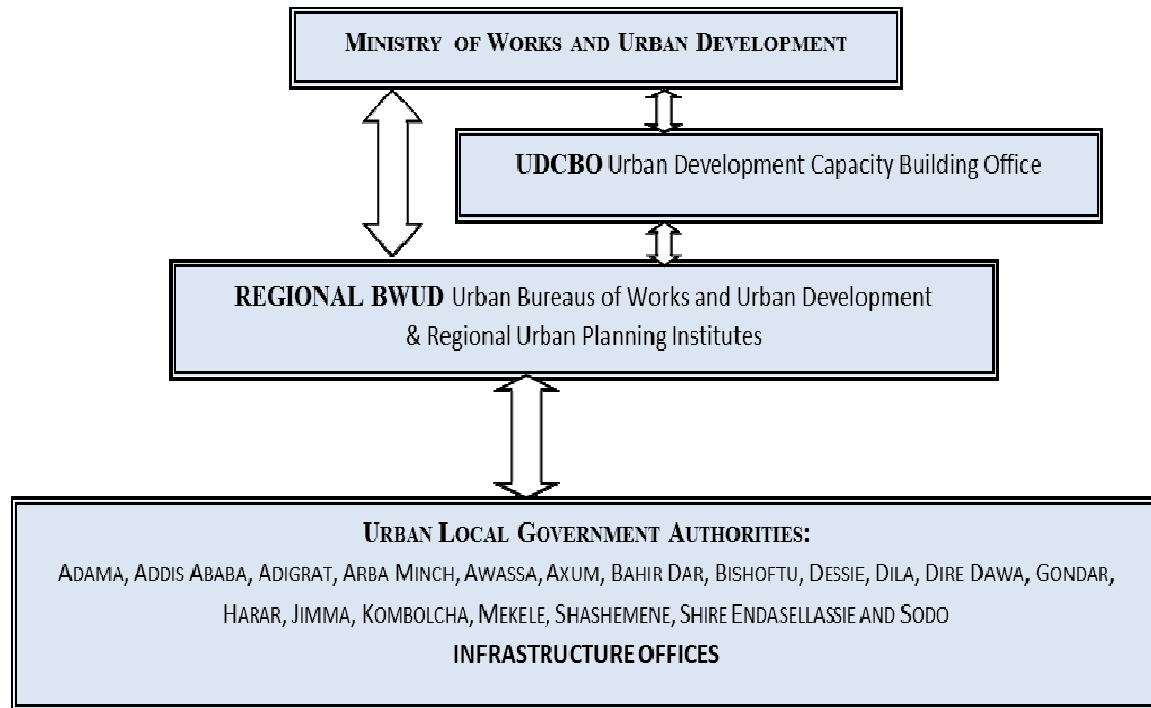
Table 9: Organisations responsible for planning, consultation, and implementation

	Types of territorial planning	Accountability	Bodies
1	National and Regional Integrated Database (IUDP)	MoFEC and MICT	CSA, FUDA, CDA, EMA INSA
2	NUDSP, strategic spatial vision implemented through a cluster-based scheme	MoFEC with MUDHo and EUPI	FUDA National planning Commission as support
2a	Urban Knowledge platform	MUDHo and NPC	FUDA AA-EiABC, etc.
2b	Consensus building around the national clusters vision	MUDHo and MoFEC	FDC Federal Development Council
3	RUDS , regional schemes with territorial key-projects	BoFED and regional councils	BOFED and Regional bureaus
4	Clusters' schemes at regional and inter-regional scales	MoFEC&MUDHo Regions, ULGs councils	RBUD-UCPA Urban Cluster Planning Agencies FUDA in support
4a	Consensus building around each cluster vision	Regions, representatives of civil society, investors	RBUD-UCPA
4b	Consulting for joint development	Regions, zones, concerned bodies	CDC Clusters' Development Councils Regions / Zones UCPA in support
5	National and regional Thematic Authorities	Each ministry, regions	National Transport Agency MTA
6	Local planning	Main ULGs, Urban Woredas (rural and market centres)	Urban Planning bureaus FUDA and RBUD support
6a	Land management	Cities	LDA Land development Agency
6b	Land Development	Cities	UDA Urban Development Agency

2.4.2 Co-ordination with Donor-Driven Projects

The NUDSP takes into account on-going Ministry projects, e.g., the ULGDP. The way in which the NUDSP will co-ordinate with such projects is described below.

Figure 26: ULGDP I Management Set-up



The 2008 ULGDP I covered Addis-Ababa and 18 cities while the 2014 ULGDP II covers 44 cities (43% of the urban population – of a total of 84 ULGs having a population over 20,000). The project fosters fiscal decentralisation and capacity building in ULGs in four regions and in two chartered cities.

ULGDP II is aligned with the GTP objectives of creating urban jobs and urban-based industrialisation and a stronger commercial and service sector (“to create economically productive, socially inclusive and environmentally sustainable cities by 2025”). The Consultant has mapped ULGDP I and II towns in relation to the NUDSP identified urban clusters (see Map 19).

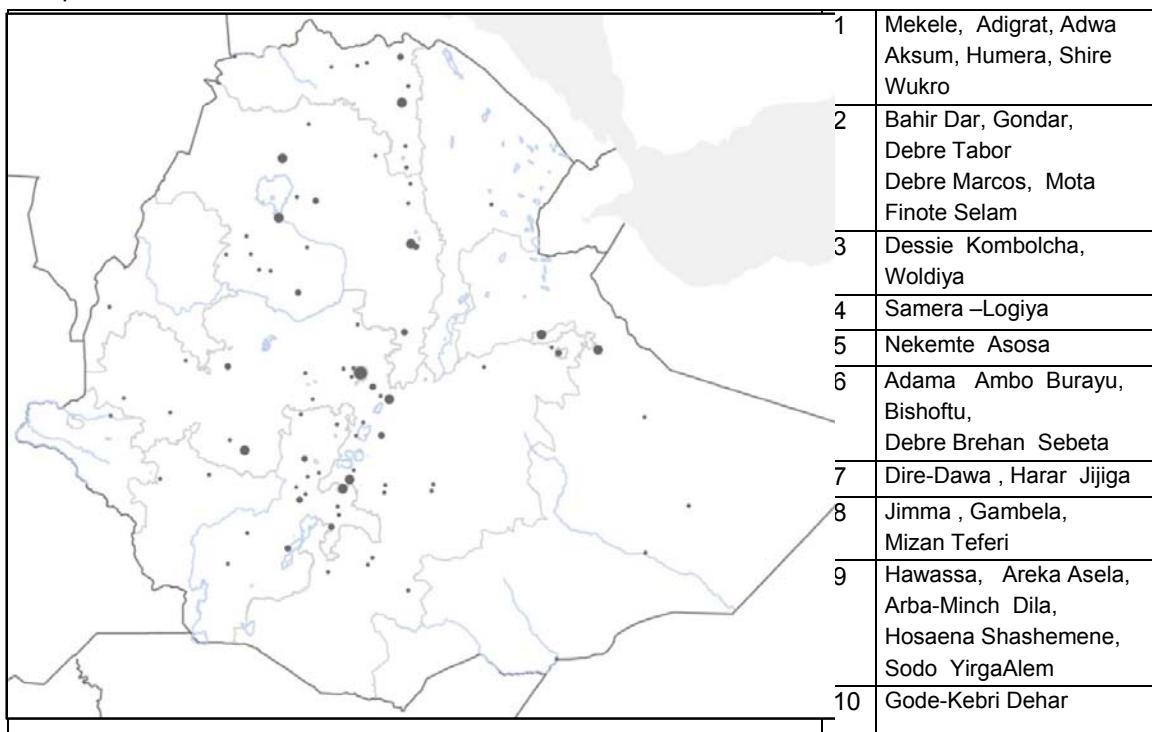
ULGDP II (launched in 2013-14) may have an important impact on the NUDSP, and, in turn, the implementation of the NUDSP is likely to strengthen ULGDP impacts:

- Urban infrastructure and services can be provided in a cost-effective manner at the appropriate territorial scale (i.e. urban cluster level), involving public and private stakeholders, and the preparation of integrated investment programming (at federal, regional, urban and cluster's level)
- The provision of services and housing can be combined with economic development initiatives (e.g. the promotion of the local construction industry.)

- Periodical assessments of urban and economic development in each cluster (interregional or regional) may provide MoFEC with an analysis of the combined effects of major investments and the need for needed adjustments to the development scheme of the cluster.

The ULGDP will also have a direct impact on cities' management skills, their means for implementation and their initiative to plan and on regions, as main monitoring and support to the cities (see the ULGDP II APA Guideline 2014).

Map 19: Clusters' cities inside the ULGDP II and inside ULGDP I



Source: The Consultant and from the ULGDP II

At the city level, the ULGDP II focuses on:

- Improving institutional performance (planning and budgeting; assets management; public financial management; procurement; own source revenue enhancement; accountability and transparency; environment and social safeguards; land management; and urban planning)
- Improving Service Delivery performance (Job Creation, Urban Infrastructure Target, Maintenance Performance, Quality of Infrastructure)

At the regional level, the performance of regional agencies will focus on:

- Capacity building and Service Delivery standards
- Timely Execution of ULG audits
- Timely Review of ULG Safeguard Compliance
- Support to ULG Municipal Revenue Enhancement

2.4.3 The importance of autonomy for cities

Through the on-going decentralisation process local authorities have been given responsibility for important state and municipal services (e.g., state services: education, health, justice and security, and municipal services: roads, drainage, sanitation, solid waste collection and disposal). The vast majority of local authorities, however, still lack their own financial resources, and powers, and as such remain unable to deliver and maintain many of services for which they have responsibility. The ECSPGs(Ethiopian Cities Sustainable Prosperity Goals) aims to improve this situation.

In order to be able to generate municipal revenues (and thus fund urban services and economic development projects), cities have been given a degree of autonomy to manage their own affairs and provide infrastructure, housing and urban services (as does Addis-Ababa). According to the World Bank 2015 Urbanization Review Report, the 18 larger cities may be given enhanced planning competencies, new financing and tax powers.

In addition, they should be able to effectively manage the land supply and the land lease process, crucial tools with which to guide urbanisation. For smaller ULGs involved in the ULGDP, fiscal autonomy would also help enhancing self-generated municipal revenues, in addition to a MoFEC financial leadership. Furthermore, it may be preferable that regional grants for state services and infrastructure are focused on projects rather than allocated as a block grant.

Table 10: Financing competencies by Administrative Body

Financing Schemes	New competencies		
	Municipality Larger ULGs	Regional & Zonal Administrations	Federal Government
Local Resource mobilisation (local incomes, etc.)	X		
Cost recovery for urban services	X		
Capital expenditures (subsidy, loans, grants)	X	X	X
Current expenditures	X	X	
Special funds (subsidy, loans, grants)	X	X	X

Source: The Consultant

Urban planning is already an important competence of ULGs, but it will be essential that improvements are made as regard their ability to manage the delivery of urban land to the market, create appropriate tools for managing the land lease (in the larger cities, on the Addis-Ababa model), and organise and manage development partnerships (including public-private partnerships). In accordance with ULGDP and ECSPG recommendations, regions should improve their management capacity. Federal level support will be necessary to

disseminate required skills and methods, with particular emphasis on expanding positive experiences outside ULGDP cities, including the small and medium sized cities.

2.5 Summary of NUDSP Implementation Measures: Recommended Institutional Strengthening Measures

Action	Definition /Content	First 5 year period (GTP2)	Second 5 year time period (GTP3)	Later time period	Comments
1. Ensure National Spatial Policy Coordination	MUDHC sets up a coordinating body for national urban spatial planning (inter-ministerial and consultative)	<input checked="" type="checkbox"/>			Should be functioning by mid-2016
2. Establish EUDIF	EUDIF will be a dedicated fund to be used to finance the provision of urban infrastructure and services. The EUDIF will fund infrastructure and services that accelerate the development of selected urban clusters in line with the NUDSP implementation road-map.	<input checked="" type="checkbox"/>			Should be functioning by late 2016
3. Establish NUDOP	The NUDOP is proposed in order to coordinate investment related to the implementation of the NUDSP, and specifically, to allocate monies associated with the EUDIF.	<input checked="" type="checkbox"/>			Not crucial to establish – its function could be performed by MUDHo or MoFEC, but if Government does decide to set up the NUDOP it should be done at the same time as the establishment of the EUDIF.
4. Establish the EUPI	An institution is required to oversee the implementation of the NUDSP, and to capture and disseminate lessons learnt as implementation progress from today until the NUDSP vision is achieved in 2035.	<input checked="" type="checkbox"/>			Should be functioning by early 2017
5. Establish Metropolitan Transport Authorities	As urban centres expand beyond their historical administrative boundaries, and public transport modes diversify (bus, LRT, regional rail services, etc.) and become more complex, it may be necessary to establish a single purpose authority to plan, develop and operate public transport networks at the		<input checked="" type="checkbox"/>		Should be functioning by early 2020

	metropolitan-wide scale, i.e. MTAs.				
6. Establish Land Development Agency/Corporation	At present urban land markets are inefficient and need improving. A Land Development Agency has been established in many other countries and has proved to be effective in enabling urban development and grow. Such an agency could be established in Ethiopia	<input checked="" type="checkbox"/>			Not crucial to establish during early years of NUDSP implementation – its function could be performed by MUDHo or MoFEC - but if Government does decide to set up a LDA it should be established during GTP3 period.
7. Establish Urban Development Agencies	UDAs have been established in a number of countries and should to galvanise PPP in the service of urban development. UDAs could be piloted in the larger cities in Ethiopia		<input checked="" type="checkbox"/>		Not crucial to establish during early years of NUDSP implementation but as cities develop and are given more powers through devolution, consideration should be given to establishing UDAs during the GTP3 period and later years.
8. Establish a Federal Urban Development Agency	A Federal Urban Development Agency (FUDA), could oversee the NUDSP implementation (and be responsible for the NUDOP and EUDIF). FUDA could have a similar role to that of French former DATAR, which was responsible for the regional aspects of national economic plans and co-ordinated the regional spatial and planning efforts of other agencies.		<input checked="" type="checkbox"/>		Not crucial to establish during early years of NUDSP implementation – its function could be performed by MUDHo or MoFEC - but if Government does is could be established during GTP 3
9. Urban Cluster Development Councils	UDAs for Urban clusters.		<input checked="" type="checkbox"/>		Not crucial to establish during early years of NUDSP implementation but as urban clusters develop consideration should be given to establishing UDAs during the GTP 3 period
<p>Measures 1, 2 and 4 are recommended for GTP period 2. Measure3 is a suggestion for debate by Government and Measures and 5 to 9 are suggestions only and for later time periods.</p>					

Recommended new Spatial Planning Tools

Action	Definition / Content	First 5 year period	Second Five year period	Later Time Period	Comments
1. Prepare National Transport Plan	<p>A National Transport Policy is needed in order to:</p> <ul style="list-style-type: none"> • Integrate transport sector policies and planning with wider economic, social, environmental and spatial development policies. • Creates a framework for better coordination and integration across the different modes and agencies intervening at all levels of governance • Establish a clear legal, regulatory and institutional framework that defines the respective roles and responsibilities of the different levels of government and sets the framework for coordination with the private sector • Encourage lower levels of government to adopt integrated approaches to urban transport planning, development, operations and management . 	<input checked="" type="checkbox"/>			Should be completed by late 2016
2. Prepare Regional Transport Plans	<p>A RTA is a comprehensive statement strategies and projects aimed at addressing the regional transportation needs. Main purposes of an RAT is to:</p> <ul style="list-style-type: none"> • Help achieve the long-term transport vision contained in Regional Development Plans/ Regional Spatial Plans. • Create a framework for safeguarding future transport corridors from development at the regional-scale. • Identify transport investment priorities to undertake over the time horizon of the plan. Efficiently allocate funding for capital investments, operations and maintenance according to clear transport priorities 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		Recommended to start with the Addis Ababa Metropolitan Cluster (by late 2016), in line with new transport investment in the area (Addis Ababa – Adama expressway, Sebeta – Djibouti railway which is double track between Sebeta and Adama, various dry ports, future airport, etc) Other RTAs can be completed before end of GTP 3 period

<p>3. Prepare Regional Spatial Development Plans</p>	<p>Defines the spatial framework for economic development and urbanization: growth poles, regional development corridors, SEZ and FTZ, new towns and/or satellite towns, the required major infrastructure and investments. Designates natural parks and other environmentally protected areas, and economically depressed areas. Typically these are isolated rural areas, left in the 'shadow' of the regional urban clusters, which require specific policy measures and separate - including Federal financing.</p>	<input checked="" type="checkbox"/>		<p>2015 to 2020 for completing all Regional Spatial Development Plans</p>
<p>4. Prepare Urban Cluster SDPs</p>	<p>Setting an operational level spatial development plan, mostly for cross-borders clusters and hinterlands, where regional, urban and local (woredas; zones;) authorities share a vision and build iterative and time-bound programmes and schemes for a coordinated territorial development inside federal schemes and programmes;</p>	<input checked="" type="checkbox"/>		<p>2016 to 2020 for completing all Urban clusters plans</p>
<p>5. Draft and approve Revised City Structure Plans & Strategic Plans, adapted to city size (20,000-50,000 / 50,000 to 100,000 / 100,000 to 500,000 / above 500,000)</p>	<p>City Structure Plans define both urban land use and major capital expenditures, They are developed in conjunction with a GIS-cadastral base - Spatial planning is adaptive to market needs and private sector requirements- Structure plans are accompanied by a general urban zoning code (by-laws). These (a) guide public urban planning offices and/or private firms in formulating Neighbourhood Development Plans for special areas (CBD, industrial areas & SEZ), and (b) serve directly as a basis for building permission where conditions are unexceptional.</p>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<p>Within next 3 to 4 years for majority – may need to finished in GTP 3 period</p>
<p>6. Formulate Comprehensive Mobility Plans (CMPS) for cities with 200,000 inhabitants or more</p>	<p>CMPS set out a long-term vision of desirable mobility patterns (both passenger and goods) at the local level and provide orientations and strategies to deliver this vision. CMPS typically include short-range mobility enhancement objectives and interventions (5 to 10 years) and long-term targets (up to 20 years). They should be revised on a 5 years basis in order to measure performance and reflect evolutions in the mobility needs as well as policy changes.</p> <p>City/metropolitan authorities should be responsible for the</p>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<p>Start with Addis Ababa as soon as LRT is completed – may need to finish during GTP 3 period</p>

	<p>preparation of CMPs. CMPs should be consistent with the goals of the national transport policy, Regional Transport Plans (RTAs) and other higher-levels planning documents. They should also be adequately linked with other planning instruments such as Urban Structure Plans and Basic Plans.</p> <p>Adequate stakeholder engagement in the preparation of CMPs, including public consultation with the wider community, is necessary to make sure that the plan addresses the needs of all users and is accepted.</p>					
--	--	--	--	--	--	--

Measure 1, 3 and 4 are the most urgent

Chapter 3. Capacity Building for Implementation

3.1 Capacity building challenges

Effective institutions are required in order to deliver the NUDSP. Governance will be particularly crucial in the secondary and smaller cities and towns where current levels of capacity and capabilities are often insufficient and, hence, hinder the successful implementation of urban infrastructure and services. Effective governance must include:

- **multi-level governance** (between the various levels of government from the Federal to the local level and between and amongst cities and urban clusters);
- **city leadership and management**, including strategic visioning and the sound financial management of the city; and
- **Transparency and accountability**.

Building effective governance, building capacities, capabilities and competences, will be a long-term task. There are, fortunately, numerous national and international programmes currently under way in Ethiopia, notably through the ULGDP and IUDP, at the federal as well as the regional and local levels that are attempting to build effective urban governance. However, further effort is required and could be complemented with new experimental systems where innovation, practical experience, technics and skills may be disseminated through consultative planning bodies. The capacity building challenge is both quantitative and qualitative:

Meeting the challenge – preparing plans

To meet the 2035 urbanisation challenge, Ethiopia will need to prepare:

- 9 regional urban development spatial plans. Taking into account the updating of these plans at the 7 to 10 year horizon, the task is at least doubled.
- 12 urban cluster spatial plans. Taking into account the updating of these plans at the 7 to 10 year horizon the task is at least doubled.
- Around 65 structure plans for large cities of between 100,000 to 1,000,000 inhabitants (which should include comprehensive development plans and sector policies). Taking into account the 10 year validity of these plans, the task is doubled.
- Some 345 strategic plans for medium and small cities with 20,000 to 100,000 inhabitants (which should include simplified development plans and building regulations). Taking into account the 10 year validity of these plans the task is doubled.
- About 1560 simplified basic plans for cities of 2,000 to 20,000 inhabitants. Taking into account the 5 year validity, the task is quadrupled.
- Approximately 12,000 sketch plans for rural centres. Taking into account the 5 year validity the task is quadrupled.

Meeting the challenge – building capacities and capabilities

Qualitatively, developing the national urban framework required *comprehensive urban and regional planning* in order to ensure that urban areas support economic development. Comprehensive planning defines the main development goals for the future, identifies crucial urban land uses, and highlights the type of public services and amenities required for cities to be able to meet the needs of their inhabitants and, more specifically, including those needed for urban areas to strengthen their climate change resilience.

Well planned urban areas are equally vital to secure economic investments and generate employment opportunities. Within the proposed NUDSP comprehensive planning requires (a) capacity reinforcement at city level, already addressed through ULGPII, (see below) (b) and adaptation at federal and regional levels, as well as adaptation for the planning of urban clusters through, in part, consultative planning entities.

City Level

At city level, the main effort will be supported inside the ULGDP II, with:

- i. Institutional performance (planning & budgeting, Assets Management, Public financial management, Procurement, Own source Revenue Enhancement, Accountability and Transparency, Environment and Social safeguards, Land management and Urban planning)
- ii. Service Delivery performance (Job Creation, Urban Infrastructure Target, Maintenance Performance, Quality of Infrastructure) at regional level, performance of regional Agencies will focus on:
 - Capacity building & Service Delivery standards
 - Timely Execution of ULG audits
 - Timely Review of ULG Safeguard Compliance
 - Support to ULG Municipal Revenue Enhancement.

Federal and Regional Level

At regional and federal level, the proposed FUDA (see preceding chapter) could function as a knowledge platform to manage capacity building and knowledge dissemination at regional and local level. A principal function of the Federal Urban Development Agency should be to foster and spread urban skills and innovation throughout the country, toward regions, Urban Cluster Planning Agencies (UCPA) and cities. The Federal Urban Development Agency should first help building methods for the first UCPA and disseminate this knowledge from one cluster to another, in line with the ULGDP II.

Then, it should set up a “knowledge and experience sharing platform” to foster urban innovation in many fields of the urban growth (housing, etc.) linked to national policies. It should involve the academic society (EiABC and AASTU in Addis Ababa, EiT in Mekele, Departments of architecture and urban planning at Bahir Dar polytechnic university and Arba Minch Institute of technology, etc.), firms and all professional national and international partnerships in local experiment, experience sharing, debate, etc.: as another path for urban capacity building.

Evidence Box: An existing network to involve in the platform. The AA-EiABC (Ethiopian Institute of Architecture, Building Construction and City Development) set in 2010 inside the AA University may be a contributor for this platform (another way for capacity building). An Urban Management Network (UMN) for Ethiopia has been launched in December 2013 between the EiABC, the Ministry of Urban Development, Housing and Construction (MUDHo), the Ethiopian Civil Service University (ECSU) and the Ethiopian Cities Association (ECA) to optimize urban governance and management and capacity development of civil services in Ethiopia. In addition to the EiABC international research network (ETH Zürich, DAAD Germany...), the platform could also involve local urban experience in Ethiopia, Africa and other international cities, with architects and architecture students, national and regional universities, public and private companies and eventual R&D departments in construction, energy, water, transport

3.2 Needs, volume, and skills

This covers recommended minimal staffing, excluding consultative bodies, so as to minimize the impact on the public budget, and excluding thematic authorities, such as MTAs or the NTA, under the control of sector Ministries.

Federal level

The concept of a Federal Urban Development Agency (FUDA) is topical. The MUDHo would be the regulatory authority. As the RUDC, the FUDA would act as a chartered company, which requires financial autonomy. The FUDA will report once a month to the Minister. Recommended minimal staffing is of 12 supervisors, with the profile of senior urban development specialist. Covering a multi-disciplinary senior experts profile, with specialisations starting from a profile in geography, economics, architecture, engineering, environmental sciences, agricultural sciences and sociology.

Regional level

The existing Regional Bureaus of Urban Development (RBUD) and Urban Planning Institutes should particularly be in charge of the RUDSP and would have, as per the ULGDP II and the ECSPGs, a reinforced administrative role. They would also be in charge of approving, and guiding the elaboration of structure plans and strategic plans in their regional states and may also mandated to elaborate urban and metropolitan plans themselves, for those urban agglomerations (clusters) and/or cities with the statutory population size, but not the local capacity. This would be done through subordinate Regional Urban Development Agencies distributed geographically – RUDA (see below).

The present comparatively weak capacity building in urban planning of the regional institutions must be reinforced. The assumption is (a) that several planning units or teams are required, in each region, to properly cover the projected need for urban structure plans and strategic plans. The assumption is, (b) further, that one unit is able to cover several urban settlements with an overall population of 1 million inhabitants. The individual running costs are adjusted in proportion to the population forecasted at the end of the SP validity period. Finally, (c) ten of these RUDA subordinate bodies would function as the UCPAs, Urban Cluster Planning Agencies. On this basis, 30 Regional Urban Development

Agencies (RUDA) are needed by 2025 and 40 by 2035, functioning under the RBUDs, and benefitting from technical support from the FUDA.

The yearly cost of one unit must remain moderate, suggested under 4M ETB / year. Each unit should consist of experts with a multi-disciplinary background:

- An economist-finance specialist, head of the team
- A urban planner / architect
- A socio-economist / demographer
- A municipal engineer
- Supporting staff (including functioning costs)
- Additional expertise, including environmental

Besides developing structure plans and strategic plans, the RUDCs would also carry out supervision of the work done by the professional firms on structure plans and strategic plans. In addition, RUDCs may assist city administrations in programming and developing specifications for urban extension areas and or other development areas such as central business districts, special economic zones, free trade zones or industrial areas, transit oriented development etc.

Local level

At the local level the needs are assessed and addressed at ULGDP II level. Additionally, at urban level, issues may differ quite a lot along the size and growth potential of cities. Main cities will need very efficient urban development tools to set and manage land use, land lease and then projects. Partly achieved inside the local public administration, programming and development tasks may be outsourced, as noted, to local semi-public companies (LSPs) to organize and manage the implementation of real estate development and urban programs.

Recourse to PPP structures will still require a key coordinating staff at municipal level, composed of at least a senior urban planner/manager, an experienced utilities engineer, and supporting GIS staff, as well as, on non-permanent basis, an environmental expert, a housing expert and specialized expertise on energy and heritage preservation, public transport or tourism.

Finally, it must be noted that there are only 90 urban planning offices in the country, which may not be able to cope with the workload of NDP/LDPs. Should NDPs/LDPs be required for the entirety of the area of urban renewal and urban extension to 2035, as per current regulation, this corresponds to the urban design of 400,000 ha, or, at 150 ha per NDP/LDP, to roughly 2700 NDPs. The task is at least doubled if we take into account updating requirements. This results in 270 plans per year, or three per each private planning office.

Private sector

The Government of Ethiopia maintains the importance of the private sector in driving growth in the future. At present the private sector operates within a highly state-dominated and regulated economy. Whether the realisation of the NUDSP Vision is possible without 'unlocking' the potential of not only urban clusters and secondary cities and towns but also the private sector is perhaps uncertain. Indeed, the success of the urban clusters and secondary cities and towns is perhaps directly linked to the future growth of the private

sector and domestic entrepreneurship. Policies to promote the private sector (and public-private partnerships) will directly contribute to the success of the NUDSP.

Involving the private sector involves, of necessity, a learning curve. City administrators will need information concerning best practices on how to target and attract investors, how to negotiate increased private sector involvement in improvements in urban infrastructure, how to structure and apply public-private partnership (PPP) arrangements and how to devise and apply incentives packages to attract industrial and commercial firms to there are and into key sectors (e.g. the construction and housing provision sectors) while at the same time securing public benefit.

In particular the staff of urban local governments need to shift from the role of caretakers to that of increasingly entrepreneurial urban managers. To achieve this shift it is strongly recommended to establish a University Bachelor's degree in public administration (which can and should be adapted to regional state needs) coherent with federal urbanisation policy and guidelines and emphasising:

- How to plan, fund and manage urban infrastructure and services,
- How to promote economic development
- How to undertake land use planning and devise and enforce building regulation¹⁵;

This Bachelor's degree programme should include a focus on the needs Ethiopia's urban cluster and secondary cities (regional economic motors), and intermediate towns (key service providers for rural-urban integration). From this base, an Masters level course should be added to develop specialized tracks (career paths) such as: (i) spatial planning; (ii) land management; (iii) GIS; (iv) urban financial management; (v) utilities management; (vi) housing; (vii) urban projects audit .

Finally advanced short courses should be developed for the senior technical and decision making staff of local administrations, geared towards preparing and negotiating incentives packages for large industrial estates, special economic zones, transit oriented development or large projects in urban renewal areas.

¹⁵ To note that the Ethiopian Civil services university is (October 2015) considering abandoning its urban planning curricula in Addis due to lack of student interest. At the same time, Mekelle University is developing such curricula.

3.3 Summary of HR Implementation and capacity building

Action	Definition / Content	First 5 year period	Second Five year period	Later Time Period	Comments
1. Setup a federal knowledge and experience platform for urban development	<ul style="list-style-type: none"> Set up a “knowledge and experience sharing platform” FUDA and UDA affiliated 		<input checked="" type="checkbox"/>		Involve the academic society, firms and all professional national and international partnerships
2. Reinforce the urban management curricula in each regional states' education offer	<ul style="list-style-type: none"> Start from a shared curricula adapted to regional state needs as well as federal urbanisation policy and guidelines Develop specialized career paths e.g., (i) spatial planning; (ii) land management; (iii) GIS; (iv) urban financial management; (v) utilities management; (vi) housing; (vii) urban projects audit . 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Continuous action, under the patronage of the EUPI &MUDHo with significant input from regional states (RBUD – RUDA - RUDC) and municipalities on evolving needs. Linkage with ULGDP obligatory.
3. Strengthen and specialize municipal staff in urban management roles	<ul style="list-style-type: none"> Allow a give and take between regional and municipal authorities as regards municipal staffing needs and salary while reinforcing the audit system for municipal expenditure, and Developing municipal employee career plans which retain technical staff and skills continuity 	<input checked="" type="checkbox"/>			In part covered by existing ULGDP program. Requires linkage with and support from regional bodies for planning and revenue
4. Training municipal staff in private sector support	<ul style="list-style-type: none"> Training ULG staff in developing proper incentives packages for firms, in liaison with state regional chambers of commerce and with relevant federal ministries. Emphasis on practical applications in real projects for special economic zones, free trade zones, industrial and agro-industrial areas 	<input checked="" type="checkbox"/>			Pilot projects should be started in several major cities by 2016, correlated with ULGDP program
5. Integrate an urban management oriented curricula in the educational offer of schools for public administration	<ul style="list-style-type: none"> With a shared curricula adapted to state and federal urbanisation needs, develop specialized tracks (career paths): (i) spatial planning; (ii) land management; (iii) GIS; (iv) urban financial management; (v) utilities management; (vi) urban projects audit . Continuous action, under the patronage of the EUPI 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

Measures 2,3 and 4 are the most urgent

Chapter 4. Financing Implementation

4.1 Urbanisation costs

Implementing the NUDSP Vision through the provision of urban infrastructure, services and amenities constitutes a very significant challenge for the public administration of Ethiopia. Our assessments show that at present urban areas cover some 1,600 km² of which roughly 1/3 needs to be upgraded and renewed over the next 20 years (considering an average urban density of 150 inhabitants per hectare). Furthermore, the expected expansion of the urban sector over the next 20 years has been estimated to cover some 2,500 km² (considering an average population density of 100 inhabitants per hectare). Financing the upgrading of the existing urban fabric as well as providing urban infrastructure and services for the new urban areas is likely to be extremely costly.

Most of the services and amenities to be provided in urban areas can also serve the rural population surrounding each town and city. Educational and sport facilities, cultural centres and activities, and postal and health services, although generally located in urban areas often serve a large rural population as well. So, public policy related to the provision and operation of important services and amenities must take into account the related needs of the urban and rural populations.

The provision of urban infrastructure and utilities is vital to support the urbanisation process. In order to ensure provision land must be acquired (for roads, sewerage, drainage, water supply, power, telecommunications, and public housing) and appropriate equipment purchased. These costs should be covered as much as possible *through revenues generated by the urbanisation process*, for example, through the capture of land value increases following and associated with urban development, and taxes and charges levied on economic activities. Estimated costs include both capital expenditure and recurrent O&M expenditure (see Table 11, below, showing the cost of providing urban infrastructure and services by standard levels).

Table 11: Cost of urban infrastructure and services

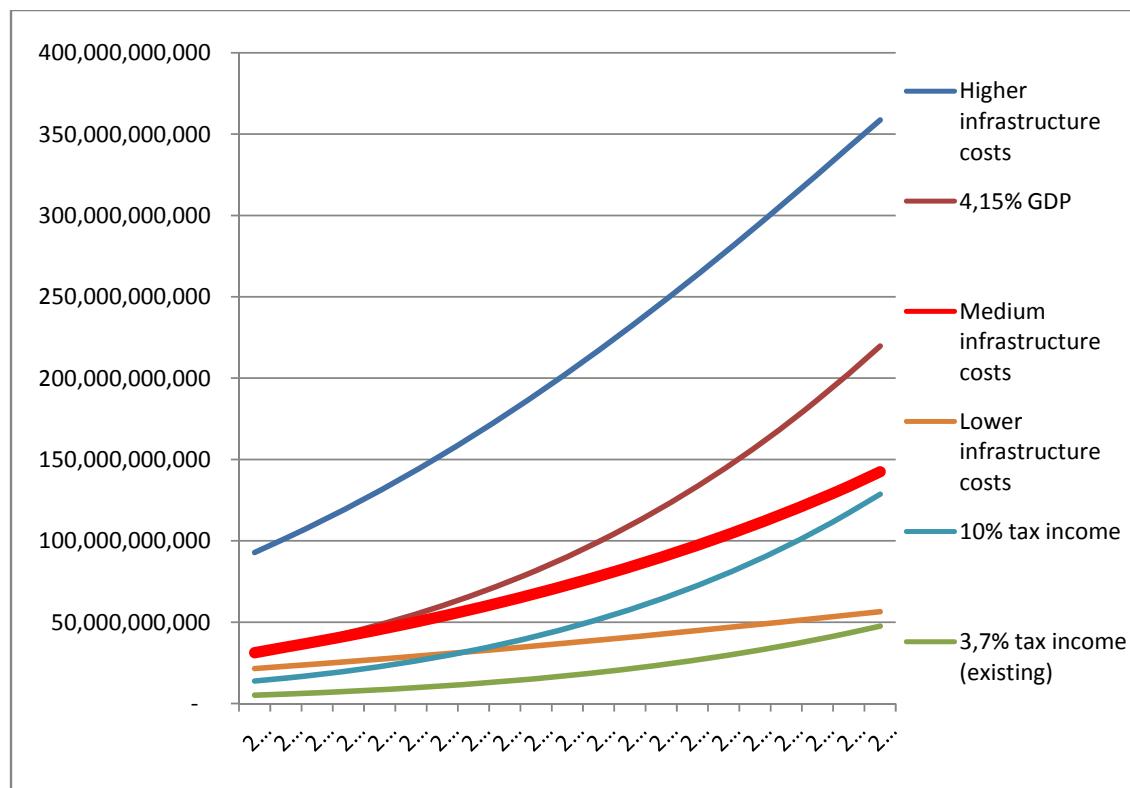
Standard Level	Road/ drainage ETB/m ²	Water Supply ETB/m ²	Sewerage ETB/m ²	Electricity ETB/m ²	Telecom ETB/m ²	TOTAL ETB/m ²
1 Highest	739	39	232	21	10	1 041
2 High	578	39	232	18	10	877
3 Medium	464	35	114	14	7	634
4 Medium	304	35	114	10	7	470
5 Medium	284	28	48	8	5	373
6 Medium	187	28	48	6	5	274
7 Low	82	28	48	5	5	168
8 Lowest	0	28	48	4	5	85

Source - Ethiopian Institute of Architecture Building & Construction

Cost estimates related to the provision of urban utilities and produced by the Ethiopian Institute of Architecture, Building and Construction have been used. These estimates vary according to the quality level and standards of infrastructure and utility provision. Eight categories are used by the Institute in Addis Ababa. Categories 1 and 2 relate to high quality infrastructure and utilities provided in densely populated prime locations; categories 3 and 4 relate to infrastructure of a moderate standard provided in areas of medium population density and in peri-urban locations; and categories 5 to 8 relate to infrastructure of a lower quality often found in areas of low population density and in urban suburbs.

Total capital cost estimates, for the next 20 years, including both urban renewal and urban extension needs, are given in Figure 27 in which medium costs are represented by the bold red line. These correspond to a medium average cost for urban utilities at 560 ETB/m² for urban renewal and 315 ETB/m² for urban extensions – cumulative O&M costs included¹⁶. These medium costs represent an acceptable standard for serviced plots (including roads, water supply, sewerage, electricity and telecom), but are at some distance from the highest standards used, which reach 1,040 ETB/m².

Figure 27: Urban utility costs and National Budget Capacities



Source: Consultant assessment

¹⁶ O&M have been estimated at 5% year – see also 1.2 and 1.3 below.

The higher cost, corresponding to the highest standards, is over three times greater than the medium cost and would require that 64% of the present National Budget be used for capital expenditure on urban infrastructure and services. The lower infrastructure standards correspond to costs which are roughly 40% lower than the medium costs, and are equivalent to 14% of the present National Budget being used on capital expenditure for urban infrastructure and services.

Presently, the Federal government, Regions and Local Governments mobilise only 3.7% of the National Budget to finance urban infrastructure and services¹⁷. Financing at the level of the standards currently used in the country, would require 22% of the National Budget or 4.15% of the GDP. This level of public expenditure, while not entirely unprecedented, may be unsustainable given other priorities (e.g. poverty reduction, support to rural development, defence, health, education, justice....etc.). Comparatively, other populous emerging nations which have supported fast urbanisation (Indonesia and China), have had corresponding expenditures from public budgets at the level of 6% of GDP¹⁸.

Over the next 20 years, the National Budget will increase. A higher GDP (seven times that of today) will be required for Ethiopia to achieve middle income status in the year 2025. We are assuming that, as this target is reached, a higher level of tax revenue accrues: from 18% of the GDP today to 24.5% in 2035.

However, should the proportion of the National Budget devoted to urban infrastructure remain the same (3.7%), the corresponding 20 year budgetary increase (expected to be nine times the size of today's budget) *will still not suffice to finance even the lower level of standards* for urban infrastructure and utilities (e.g., low density of utilities, non asphalted roads, low quality of the materials). **An increase in the share accorded to capital expenditure for urban infrastructure and services is required¹⁹.**

Funding urban infrastructure and services to a medium level of standards, in all the urban settlements of 2035, is estimated at roughly 12% of the National Budget. If this expenditure level cannot be sustained, cities and towns will only be able to provide urban infrastructure and services at a lower level of standards, or may not be able to ensure full coverage of new urbanisation. Mobilizing a variety sources, complementing public expenditure from the National Budget, is important in order to ensure that urban infrastructure of medium standard is provided for Ethiopia's cities.

Two tables (see overleaf Table 12 and Table 13) have been prepared by the Consultant indicating the cost of providing urban infrastructure and services by the size of urban settlement, nationally, and regionally. Both these costs estimates take into account the following:

¹⁷ as per Ethiopia's Urbanisation Review - World Bank – Cities Alliance, 2015

¹⁸ However this occurred over a period of sustained long term global growth. Under the current slowing down of emerging market growth rates in general, and with China facing rebalancing challenges, the external environment for emerging economies has changed (see Rodrik, Dani, "An African Growth Miracle?" – Richard H. Sabot Lecture, Centre for Global Development, Washington DC, April 24th 2014).

¹⁹ The same conclusion is supported by Ethiopia's Urbanization Review, World Bank – Cities Alliance 2015 and the State of Ethiopian Cities (SEC) Report, 2015.

- urban extension areas are in line with population size distribution by cities, with an average population density at 100 inhabitants / ha.
- Progressive densification of existing urban areas is factored in, from averages around 100 inhabitants/ ha today to an expected 150 inhabitants / ha in 2035.
- An urban renewal requirement for an average of 30% of existing urban areas, at densities of 150 inhabitants / ha.

Significantly, urban renewal during the period (2015-2035) constitutes roughly 30% of the total capital expenditure. Cost calculation has also taken into consideration the costs for operation and maintenance, which will become an increasing expenditure over time as new infrastructure is built. O & M costs are estimated at 5% of investment costs per year, applied cumulatively. The result is that, by 2035, O&M costs will reach 40% of the total costs for urban utilities.

The cost estimates have been made on the assumption that urban land compensation is recovered by land lease and thus does not constitute an additional cost for urbanisation²⁰. Furthermore, public amenities like health, education and cultural facilities are typically budgeted per sector, outside of local budgets, and as such were not here included²¹. All the costs are presented in constant 2011 prices.

4.2 National costs of urban infrastructure and utilities

The national matrix for urban infrastructure and utilities is presented by the size of cities and by 5 year periods. The increase of the capital expenditure during the period is due to several reasons:

- **The growth rate of the urban population increases progressively** during the period. This is in line with a progressive increase of rural to urban migration rates to take advantage of increasing rates of urban and industrial job creation and is in line with the expected efficiency improvements in the provision of serviced plots and/or housing assistance to the new urban population. It is, furthermore, an advantage to have a lower rate of increase during the beginning of the 20 year period, because national revenue will be higher at the end of the period, hence more able to finance urban development. To note that from the GTP 2 to the GTP 5 periods (2025-2035) costs increase threefold.
- **The cost of urban renewal is also introduced progressively** to avoid an unrealistically high cost at the beginning of the process – since not all urban renewal needs can or will be carried out in the early stages of urban expansion or in the first 5 year period. Overall urban renewal costs also increase threefold from 2035 with respect to 2015.

²⁰ The assumption is based on the recommendations made by the consultant in this report, as well as to similar recommendations of the SEC Report and the Ethiopia Urbanisation Review.

²¹ Non-inclusion of construction costs for public amenities such as health, education or culture corresponds to both current accounting practices, current budget structure as well as to expenditure analysis made by the World Bank in the Ethiopia Urbanisation review (2015).

- **The costs increase with the size of the city.** The matrix uses higher standards for larger cities. So the upgrading of standards follows automatically the increase in the size of cities between today and 2035.
- **Maintenance cost calculations following a cumulative process.** As noted above, each year new investments are added which also require maintenance.

Table 12: *Urban infrastructure and service costs by urban size and time-period (ETB millions)*

Size of urban area	2015-2020	2020-2025	2025-2030	2030-2035	Total	%
< =2000	5 438	7 917	10 446	12 529	36 330	2.4%
2 000 - 20 000	26 852	38 795	47 682	91 311	204 641	13.2%
20 000 - 50 000	26 964	56 605	57 430	98 405	239 404	15.5%
50 000 - 100 000	14 081	31 147	24 245	70 464	139 937	9.1%
100 000 - 500 000	87 990	55 885	112 903	124 626	381 404	24.7%
500 000 - 1 000 000	-	88 986	138 870	167 490	395 347	25.6%
Addis Ababa	29 959	38 588	34 022	45 548	148 117	9.6%
Total general	191 284	317 923	425 599	610 374	1 545 180	100%

Source: Consultant assessment

Per size category, more than half of the calculated capital expenditure will be needed for infrastructure and services in cities with between 20.000 to 500.000 inhabitants. This reflects the significant rebalancing of population and investments in favour of secondary cities, reducing the primacy of Addis Ababa. It is expected that Addis Ababa will represent less than 10% of the total expenditure in 2035. Small towns will represent a fairly small part of the total amount, due principally to a lower level of standards proposed for these towns.

Large cities of more than 500.000 inhabitants will be associated with 35.2% of the total capital expenditure. It is in these cities where the infrastructure and service investments will have the greatest potential to create added value in the economy. These towns will benefit from higher standards and higher densities that justify the higher costs of urbanisation. The local as well as regional and Federal institutions responsible for managing urban development need to plan investments in accord with this evolving and new context: large and secondary cities will be increasingly important for the economic growth of the nation and budgets will have to be adapted to their specific as well as localized needs.

4.3 Regional costs of urban infrastructure and utilities

Regional cost distribution during the 2015-2035 period shows important differences between regions, due mainly to variations in the size of existing urban areas and of areas to be renewed during the period. Oromia region will need 34.3% of the total capital expenditure to be spent on urban infrastructure and utilities, Amhara region 18.4%, SNNP 15%, Addis Ababa 9.6%, Tigray 8.6%, Somali 5.5%, Dire Dawa 2.9%, Afar 2.6%, Benishangul 1.2%, Gambella 1.3% and Harrari 0.6%. Overall,

Table 13: *Urban infrastructure costs by urban size and region 2015-2035 (ETB million)*

Region	< 2000	2 000 - 20 000	20 000 - 50 000	50 000 - 100 000	100 000 - 500 000	500 000 - 1 000 000	>1000 000	Total	%
Tigray	-	6 353	21 618	12 207	35 932	56 581	-	132 693	8.6
Afar	529	11 800	14 499	6 165	6 806	-	-	39 799	2.6
Amhara	1 200	29 299	58 905	33 959	61 106	100 062	-	284 531	18.4
Oromia	16 279	88 902	81 946	47 520	179 876	116 026	-	530 549	34.3
Somali	178	10 486	17 078	4 453	17 910	34 365	-	84 469	5.5
Benishang	-	4 674	7 100	1 479	5 053	-	-	18 305	1.2
SNNP	17 968	46 884	31 786	34 153	57 844	43 874	-	232 509	15.0
Gambella	-	5 893	6 027	-	8 031	-	-	19 951	1.3
Harrari	177	350	-	-	8 846	-	-	9 373	0.6
Addis	-	-	-	-	-	-	148 117	148 117	9.6
Dire Dawa	-	-	445	-	-	44 438	-	44 883	2.9
Total	36 330	204 641	239 404	139 937	381 404	395 347	148 117	1 545 180	100%

Source: Consultant assessment

Ethiopia is facing huge challenges related to financing the urbanisation process. Funds currently available from the National Budget are not sufficient to support the renewal of existing urban areas and the provision of urban infrastructure and services in expected urban expansion areas. The significant endeavours of the Government to accelerate economic development and achieve the transition to Middle Income Status require coherently planned urban areas with adequate services and efficient urban infrastructure. The existing financial capacities of the Government will increase over the coming decades but the current level of investment, currently 3.7% of the National Budget, will not be enough to reach even the lower standard of urban infrastructure and service provision.

To reach a medium level of standards, Ethiopia would need to spend 4.15% of the National GDP or 26% of the National budget. This represents a huge sum which the Government may find hard to allocate entirely from the national Budget, given the range of other pressing problems and calls on the public purse (e.g. poverty reduction, support to rural development, defence, health, education, justice....etc.). **A variety of sources for tools for financing urbanisation are necessary.**

4.4 Options for financing urbanisation

The Ethiopia Urbanisation Review (World Bank, 2015) shows that large cities in Ethiopia tend to be more productive than small towns, and that urban areas tend to have higher labour productivity than rural areas. In 2007 urban areas accounted for 38% of national GDP while only accounting for some 15% of the total population. As such, urban productivity/capita was 250% of the national productivity/capita. As the rural productivity/capita is 73% of national average productivity, urban productivity/capita is some 340% of rural productivity/capita.

Since urban areas are characterised by high productivity, they should be able, in principle, to generate sufficient resources to finance much if not all of their own development, and support some development costs in rural areas.

Over the next 20 years, it is expected that consumers and firms will see their average incomes increased by up to five fold. A principal source of financing urban development is thus via a local tax or charge on urban economic activities; with care taken not to overtax and thus create disincentives to development.

As aggregate city product and per capita product increase, increases in land values are expected, following upon and associated with urban functional diversification and increasing competition for urban land. Today the revenue generated by land value capture in Addis Ababa, where these conditions already exist, is higher than that generated by other towns and cities in the country, and Addis Ababa finances most of its infrastructure from own revenue, with some borrowing from the ECB, and some international donor funding.

Land presently at the periphery of cities is also another resource that can be used to finance urbanisation, as can auction of urban land leases controlled by local administrations or other public bodies. Land prices in urban areas are much higher than those in rural areas. The result of land auctions in Addis Ababa, Hawassa, Dire Dawa, Mekelle demonstrate this difference. Prices ranged from 2 ETB/m² in Dire Dawa suburbs to more than 50.000 birr/m² in the commercial areas of Bahir Dar. The 2014 average auction prices in secondary cities are very different from place to place:

- Hawassa between 1,000 ETB/m² to 8,000 ETB/m²,
- Bahir Dar average price between 2,800 ETB/m² to 4,000 ETB/m²,
- Dire Dawa average price between 20 to 80 ETB/m².

As noted earlier, present cost of providing urban infrastructure and utilities at a high standard has been estimated to be 1,040 ETB/m² by the Ethiopian Institute of Architecture, Building and Construction, and thus, we can consider urban land auctions as an important resource to finance urbanisation, though land prices will not cover costs in every location.

In suburban or periurban areas compensation to farmers is about 17 ETB/m², whereas auction prices can reach 50 or 100 times the level of this compensation. This clearly demonstrates the significant increase on the value of land when it becomes 'urban'.

Transparent land auctions, as often used in Ethiopia, are an excellent system to allocate land at a market-clearing price. Land auctions, however, are infrequently used in Ethiopia in order to allocate land (The World Bank estimates that only 3% of urban land is allocated via land auctions; see The Ethiopian Urbanisation Review, 2015). At present land auctions are insufficiently leveraged to support urban development. Nor are local public administrations equipped to correlate between such revenues and investment costs city wide, and thus cross subsidy opportunities or potential economies are lost.

Other significant existing and potential sources of municipal revenue are from licences, service fees and charges – which in many towns are the main source of present revenue²². The barrier to increased mobilisation of these resources is that most cities do not have control over setting these charges, which are established regionally through tariff proclamations²³.

Financing urban development requires a more stable income source than from land-lease auctions and/or leases on land administered by ULGs²⁴, such as taxation on already allocated land, coupled to the land's market value. An annual tax of 0,5% of the aggregate land value in Addis Ababa could provide upwards of 7.5 billion ETB/year (which is equal to about 6% of the present National Budget).

Economies in public investment can also be achieved through a more efficient management of urban infrastructure and services within special purpose areas such as economic areas, free trade zones, central business districts etc., including by bringing in the private sector within PPP arrangements. In Ethiopia, as elsewhere, sustaining urban economic growth requires not only an increase in capital investment for infrastructure, it requires targeting investment where it is needed. To help generate higher added value in cities and towns, it will be necessary for city administrations to learn how to target and attract investors, and this leads to developing incentives packages, while also mobilizing more private investment in infrastructure..

Consequently, financing for urban infrastructure can be leveraged in the following ways:

- **Users can pay for urban services** such as water supply, electricity, solid waste and telecommunication. To avoid very high costs levied on basic services, the initial investment can be supported by the National Budget and the costs of operation and maintenance of services covered by user charges. But there are some utilities that cannot be commercialised, except in very specific cases: roads (except toll roads), public parks, drainage and sewage. The investment costs of these utilities are often too high to be covered by user charges.
- **Urban renewal projects can generate revenue** to pay compensation for those whose land is required, and to fund infrastructure, utilities and amenities. The added value on land in urban renewal projects can be so large that, if captured, support from the national budget may not be required, except for covering the costs of relocation of and compensation for the existing inhabitants.
- **Local economic development areas can be managed at a profit** and generate enough funds to pay compensation and cover the costs of urban infrastructure, utilities and facilities located in these areas (e.g. industrial zones, central business districts; special economic zones).

²² see WB: EUR, 2015 p. 82

²³ Oromia region has recently loosened this restriction for first rate cities which can now set their own rates, taking into account local ability to pay, local service demand and existing local service costs – idem..

²⁴ Both EUR and SEC studies bear out that excessive dependence on land lease revenues is risky, as these will decline over time. This is especially so where land is auctioned via a first upfront payment, followed by a trail of installments which end long before the lease expires (EUR p. 81).

- **The private sector can be involved in the provision of urban infrastructure and services through public-private partnerships (PPPs)** in order to reduce the capital expenditure from the National Budget.
- **Housing markets can be liberalised** and provision for middle and upper income groups facilitated through commercial finance rather than via public subsidies.
- **Cultural, Health and some Educational, facilities** could be in part financially supported by the private sector. It is clear that these sectors, essential for the economic development of the country, continue to receive a large part of their financing from the public sector; however, involvement of private donors, social donors can be both permitted and incentivised.
- **Community participation** in the provision of infrastructure and services is often used in Ethiopia. A local community will provide labour in order to build and/or maintain infrastructure and services that are used in common. This is a non-monetarised way to create value uplift associated with land abutting or near to the provided or improved infrastructure and/or services. This uplift can then be captured, for example by higher business rates.

In conclusion

The analysis of the costs associated with the provision of urban infrastructure and services shows a progressive, threefold increase of the required investment costs from GTP2 to GTP5. This increase is less rapid than the expected growth of the GDP and its effect on the National Budget (where expected growth is nine fold over the same period). So, tomorrow will offer greater capacities to invest in urban utilities and create more favourable urban environments.

Ethiopia's larger cities can derive, from their own territory, many of the revenues required to finance their infrastructure and services. Capturing the economic added value of urbanisation however involves, on the one hand, a change in administrative practices, especially as regards more leeway for cities in setting rates, raising revenue, and subsequently adapting the use of their increased own sources to local needs and priorities. On the other hand, the skills, practices and outlook of urban managers need to be gradually adapted so as to build well-regulated partnerships with the private sector, as an important actor of local "growth coalitions".

The medium sized towns and small towns are the most underequipped and under staffed at present, and will continue to face very significant investment needs (both per/capita, and in aggregate – where they represent more than half of the urban investment needs).

In many instances, these needs cannot be covered by own source revenues. Thus continued and sustained investments in each region's medium and smaller towns will have to be in part financed from the regional budgets. This is indispensable to promote better balance across the country, but as, for the larger towns, the acceleration of the decentralisation process with greater financial autonomy for lower tier cities and towns remains crucial for urban development across the nation over the coming decades.

4.5 Financing priorities under the NUDSP Vision

Significant financial resources are required for the provision and adequate maintenance of urban infrastructure, services, facilities and residential accommodation. These cannot be expected from a single source, neither ULGs own sources, nor block transfers from regional and federal budgets. Instead, **the way forward is to mobilise a variety of financing sources and mechanisms**. Among these, three main resources, often mobilised to finance city development in emerging economies, are also recommended as priorities for Ethiopia:

- **Added value coming from industrial production and services.** Productivity gains associated with urban economic activities can lead to corporate and individual income gains which can underpin and revenue enhancement for city authorities.
- **Added value provided by land speculation.** Land values rise quickly when urban infrastructures and urban services are built. This added value can be captured by a city authority in order to finance urban expansion, development and the continuing provision and maintenance of urban infrastructure.
- **Gradually increased user charges.** Commercial services like water supply, electricity and telecommunication can be self-financing through user charges, as described in the preceding sub-section.

So, while it is going to be hard to finance the implementation of the NUDSP Vision, as the costs of servicing urban expansion areas as well as urban renewal are high, the revenue generating potential is also significant. A variety of non-traditional ways of mobilising finance need to be combined in order to provide an adequate basic level of services in urban areas.

More efficient urban land-lease markets

This involves two principal measures: (i) simplifying land lease conditions as well as regulations for auctions and (ii) increasing cost recovery in urban land allocation. Both should be carried out as soon as possible, within the first five year period, possibly in conjunction and co-funding with ULGDP II and other donor initiatives.

Increased tax generation related to value capture on development land in cities

The first measure is a facilitating measure and a tool: It involves the experimentation, benchmarking, setup and development of GIS based urban land cadaster. This should be carried out at first, in the form of a pilot and test application, for a selection of cities, to include both larger secondary cities, and medium or smaller cities. Once the system is streamlined and workable, it should be systematically expanded to all principal cities, and gradually for the medium and smaller urban settlements.

International experience suggests that generalising such a cadaster allows significant increases in recovered taxes. Because of this increase in tax base and volume recovered, it can accommodate some reductions in taxes to encourage economic activities, household consumption etc.

Increased tax generation should also be sought through granting increased municipal control over: (i) rate setting for municipal rents, as carried out in Oromia; (ii) increased control over lease income from ULG administered land and (iii) setting licences, fees and other municipal charges according to local needs. To note that the generalised cadaster is an important tool for this second set of measures targeting more flexible local tax regulation. Thus, while some

flexibility to adapt taxation to local conditions can be progressively granted to local authorities, this ideally corresponds to much better control over the overall taxable base. Generalising the cadaster while according municipal tax flexibility should be among the top priorities of the first (2015-2020) period.

Moving, over time, to full cost recovery for urban services

This measure is very important to the overall financial solvency of cities, especially as cities continue to grow in both size and population, and thus must provide, operate and maintain an ever growing, increasingly costly, and more technically complex set of utilities and services.

International experience suggests that in emerging economies the shift should be gradual, pricing services closer to cost recovery in stages: firstly targeting coverage of operation and maintenance costs and then of construction costs. Moreover, cost increases must be carefully adapted to affordability by households; including the lower household incomes of newcomers to the city.

It is expected that construction costs for utilities such as water, sanitation will continue to be subsidized for a time in the extension areas of cities with lower potential for revenue generation, but which are still drawing significant in-migration. In all tiers of cities the measure should be linked with increased municipal control over rate setting of service charges as described above.

Full cost recovery is to be targeted as a second period priority, with adaptations taking into account differentials in development growth rates and city incomes between regions and between city size categories.

Ensuring full cost recovery on all urban renewal projects

It is very important to ensure full cost recovery on all urban renewal projects, as soon as possible, and across all city sizes and all regions. This is possible by fostering experimentation and innovation with cross-subsidy solutions.

As for the urban GIS cadaster, such solutions should first be tested in significant pilot or sample cities, then adapted and disseminated nation-wide. It is strongly recommended to start with cities where there is a high rate of urban economic growth to leverage, but to include both smaller as well as large secondary cities.

Full cost recovery on all urban renewal projects is a first period priority. Gradually, full cost recovery should also be obligatory across urban expansion areas (second period priority), with allowances made for areas in the 'shadow' of main economic corridors and clusters, for which targeted subsidies may be required for longer periods.

Benefit capture related to large economic development projects (industrial zones, special economic zones, business districts...)

Benefit capture requires a set of measures to be carried out by regional and municipal authorities in close coordination with regional and federal regulating authorities and with regional and local chambers of commerce and industry:

- Setting up 'one stop shops' for development approval and incentives packages for selected areas and urban regions (SEZ, free trade etc.)
- Streamlining legislation governing SEZs and other special purpose economic development areas, as well as
- Training ULG staff in developing proper incentives packages for large firms seeking a foothold in these more extensive economic development projects (this is also a HR proposed measure – see preceding chapter)

In conjunction with these three measures, development financing (UN, DFID, EU, NGOs) should be acquired by federal authorities to specifically target the diversification, modernization and specialization of urban economic activities alongside the installation of larger firms (as suppliers, subcontractors etc.). Thus, aid should be sought particularly in developing and applying targeted finance regimes for national and local SMEs including the development of agro-industrial activities, textile and light manufacturing, packaging, and industrialization in construction. It is important, in this context, to carefully tailor programmes and micro-financing to economic and labour force characteristics and potential of respective urban clusters. This is perhaps one of the most important initial priorities.

Mobilising urban dwellers through participation in the provision of services

This measure consists of two interconnected components:

1. The first is administrative and requires adapting and possibly simplifying the existing participatory norms and practices (rendering them more commensurate to limited local budgets and tight time schedules) - for all tiers of the urban hierarchy, within a flexible yet clear federal framework. Thus the measure is a MUDHC priority and prerogative as regards the framework, with adaptations in consultation with regional and local authorities.
2. It is also important to increase direct participation by residents in the construction of urban infrastructure, especially in smaller settlements and some urban expansion areas. Successful experiences in developing context (such as Senegal, Madagascar) support the establishment of a specialised 'learning' organisation:
 - accepting international funding as well as federal funds,
 - with clear targets related to costs, profitability etc.
 - with regular internal and external auditing and, most importantly,
 - with a statutory obligation to produce spinoffs in the form of increased local skills and entrepreneurial activity, including the expansion of micro and small scale enterprise involved in construction.

Overall this is a measure expected to come to fruition over the medium term (second period), and to be generalised in the third period. However, administrative adaptations can be carried out as a first period priority, and must be accompanied by the set-up of the specialised organisation designed to carry out and/or facilitate successful projects in target settlements.

Mobilising the private sector to finance and operate large urban projects in areas of high land value, in partnership with the local public administration

Flagship projects, with the potential to generate acceptable investment returns and important economic and social impacts, can be identified with local support (if they are not already ongoing) in secondary cities. Where feasible, additional funding can be secured from EUDIF, grants etc. so constituting the public contribution.

The first administrative priority is adapting existing legislation governing PPPs to ensure their effective and efficient application in urban areas. In particular legislation and procedural practices should be streamlined and adapted for the profitable construction of (i) mixed use business and commercial districts in central locations, (ii) large commercial and retail developments at city edges or in polycentric metropolitan development, and (iii) linked to transit oriented development.

Various combinations of PPP are possible, ranging from simple design-build models (shorter term contracts, less complex) to more complex design-build-operate-maintain PPP models (longer term contracts and more complex). PPP schemes, however, are generally complex and multiple factors need to be carefully assessed when considering adopting such a contracting approach (for example, costs, risk transfer, technical capacity, efficiency, etc.). Agreements must be negotiated to ensure that there is a net benefit to the public, and that the project is not costing more than if it was if undertaken by the public authority. Therefore, in-house capacity to negotiate such contracts needs to be developed and comprehensive monitoring of performance should also be in place.

As regards PPP schemes for the development of large industrial areas the regulatory framework needs to be perfected in *conjunction with fostering the requisite skill sets within local public administrations*. This is best done within a 'learning by doing' system, namely through completing real projects. As mentioned in the preceding chapter, it is important to carry out specialised career path training for urban managers and insert the new alumni 'in the front lines' of flagship PPP projects.

Finally, those involved in establishing and running PPP schemes across the cities and regions should have the opportunity to meet and compare experiences and solutions to specific problems. These meetings can be financed by grants, under the ULGDP or similar programmes, and undertaken as part of initiatives to improve urban good governance. The process of disseminating good practice within the country should be undertaken under the patronage of the EUPI.

Mobilising the private sector to finance and operate urban infrastructure and services

The steps involved in mobilising private sector finance in industrial area developments and in large urban projects, are:

- Identify flagship investment projects with high impact
- Target and leverage grants, donor funding, including contribution from EUDIF etc.
- Develop / adapt specific PPP configurations
- Work out and detail positive impacts on local economy value chains

- Establish cross jurisdictional and interregional working groups and knowledge forum, under patronage of the EUPI.

Particular attention should be given to Public Private Partnerships which fund the construction, operation and maintenance of transport infrastructure and associated services. Under such schemes, a private sector entity assumes the responsibility for aspects of public transport projects delivery and operations which are traditionally carried out by the public sector. This has the impact of transferring risks to the private sector while retaining ownership of the transport system. In return, the private entity collects fees from users, receives a revenue stream from the public entity, or a mix of the two.

In the case of transport oriented development it is strongly recommended to use land-value capture to support the construction and operation of mass rapid systems. The main rationale is that building transit systems increases surrounding land values and thus provides additional property tax revenues which could be used for making payments on debt.

Although such mechanism has worked in specific contexts, land-value capture must be consciously considered for it is associated with various risks while also keeping in mind that it rarely covers the entire infrastructure investment. Hence, it should be combined with other more stable and predictable funding sources.

These measures are priorities for the second and third 5 year periods, with the possible exception of transport projects which should be a first period priority in fast growth secondary cities and are already a priority in Addis Ababa.

Linkage to Central budget allocation dedicated to urban development: The Ethiopian Urban Development Investment Fund (EUDIF)

As described in the Institutional chapter, is recommended that the EUDIF is established with the aim of accelerating the development of selected urban clusters in line with the NUDSP implementation road-map. The EUDIF as a dedicated fund, eligible to all ULGs, and working on a project-merit basis, would complement the above own-source streams, and act as a go-to resource for additional funding as well as an incentive for cities that exceed the minimal targets. It also serves three other main functions:

- As a laboratory and training ground in developing profitable projects by city administrations, including those involving the private sector, donors, civil society, etc.
- As fostering a positive competition between urban managers, functioning entrepreneurially - for the public interest.
- As a means for the Federal government, via the line ministry (or ministries) acting as fund managers, to exert oversight and control over strategic projects in the cities.

As noted in the preceding chapter, details of the administration and financing of the EUDIF are beyond the scope of this project, but should be addressed during the very early years of the GTP 2 period.

Additional measures

A number of additional measures have been put forward, principally in the WB urbanisation review, concerning greater support to urban expenditure in the intergovernmental fiscal architecture, and towards providing more incentive to local authorities in collecting state revenue (EUR pp. 77-79).

While these issues are best handled by the WB and Federal fiscal authorities, one aspect requires emphasis with respect to fostering urban development: salaries for urban administration, as well as the staff composition are set at regional level, with little or no leeway for local administrations in adapting salary levels, staffing numbers and post descriptions. This runs somewhat counter to the need to adapt city administrations practices to capture to local economic growth, and could be rendered more flexible, at least for the large and medium sized cities showing good growth numbers. Naturally such adaptations must always be results-based, and to be continued insofar as increases to public revenue and economic growth are sustained.

Some leeway in setting salary rates is also important in ensuring that city employees have the economic incentive to remain within the local public administration. Cases in emerging economies (China, Brazil) bear out that, in the absence of clear contractual constraints and reasonable economic incentives, urban employees may, once trained, tend to soon migrate to the private sector.

Finally, any incentives approach requires clear performance measurement and performance targets for administrators. If incentives and bonuses are exaggerated, and/or also exclusively or too tightly linked to quantitative infrastructure targets (km of roads, volumes of treated water, number of housing units etc.), wastage accumulates, with often not useful projects being pushed forward and unprofitable land developed.

To avoid such outcomes, the MUDHC has developed a set of nine pillars to ensure quality in urban development and coherence with GTP I and III goals. Developing city performance criteria for urbanisation, in connection to these pillars, can be pursued as a first period priority, in conjunction with the development of GIS tools to monitor 'urbanisation progress'.

4.6 Summary of Financing Implementation

Action	Definition / Content	First 5 year period	Second Five year period	Later Time Period	Comments
1. More efficient urban land-lease markets	Simplifying lease conditions as well as regulations for auctions and increasing cost recovery in urban land allocation	<input checked="" type="checkbox"/>			First priority 2015 to 2016
2. Increased tax generation related to value capture on development land in cities	Setup and development of GIS based urban land cadaster, at first regionally and for principal cities, and gradually for the smaller urban settlements – linked with increased municipal control over (i) rate setting for municipal rents; (ii) lease income from ULG administered land and (iii) licences, fees and other municipal charges	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		First priority 2015 to 2018, to be pursued in second period
3. Moving over time to full cost recovery for urban services	Gradually pricing services closer to cost recovery: firstly maintenance and then construction costs; adapted to affordability by households – linked with Increased municipal control over rate setting of service charges		<input checked="" type="checkbox"/>		Mainly in second period though rate setting by municipalities is a priority for first period
4. Ensuring full cost recovery on all urban renewal projects	Ensuring that cross subsidy solutions are experimented, adapted and disseminated, particularly for full cost recovery in urban renewal areas (first period) and, gradually, in urban expansion areas (second period)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		First period priority
5. Benefit capture related to large economic development projects (industrial zones, special economic zones, business districts...).	Setting up 'one stop shops' for development approval and incentives packages for selected areas and urban regions (SEZ, free trade etc.) Streamlining legislation governing SEZs as well as Training ULG staff in developing proper incentives packages for firms, in liaison with state regional chambers of commerce and with relevant federal ministries.	<input checked="" type="checkbox"/>			First priority 2015 to 2017

<p>6. Mobilising urban dwellers through participation in the provision of services</p>	<p>Adapting participatory norms and developing practices, commensurate to local budgets, for all tiers of the urban hierarchy, within a flexible yet ordered federal framework Including workforce participation, especially in smaller settlements and/or urban expansion areas</p>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<p>Requires setup of a dedicated agency and testing in pilot situations in the first period.</p>
<p>7. Mobilise the private sector to finance and operate large urban projects in areas of high land value, in partnership with the local public administration</p>	<p>Developing and adapting legislation governing PPPs as well as fostering the requisite skill sets within local public administrations – through real projects and specialized career path training.</p>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<p>Flagship projects in larger cities should be tested in the first period.</p>
<p>8. Increase private sector mobilisation to finance and operate urban infrastructure and services</p>	<p>Identify flagship investment projects with high impact Target and leverage large scale grants, donor funding, specific PPP configurations including contribution from EUDIF etc. Work out and detail positive impacts on local economy value chains Establish cross jurisdictional and interregional working groups and knowledge forum, under patronage of the EUPI</p>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<p>Can start with urban public transport in the first period, with emphasis moving towards water and waste management and other services in the second and third periods.</p>
<p>Measure 1, 2 and 5 and 7 are the most urgent</p>					

Chapter 5. Conclusion

Implementation: The NUDSP is a strategic guiding document

Because the policy and investment emphasis is expected to evolve, from 2015 to 2035 (in line with the differing development emphasis associated with the implementation of the consolidated scenario, 2015-2035), the NUDSP Vision is to be achieved in 5 and 10 year phases. Each phase corresponds to the preparation and approval of a public sector investment framework which highlights the policy, programme and project interventions that are needed to ensure that the transitioning process from 2015 to the NUDSP target vision for the urban sector is successfully implemented.

Applying and adapting the Vision requires a national coordination framework on spatial planning and programming, and thus inter-cabinet consultation and linkage to related national policies. To optimise its operational impact, the Vision may and should be shared, negotiated and adjusted with regard to principles and implementation requirements at federal, regional and lower administrative levels, as well as debated at the level of the urban clusters (the latter is a non-institutional purely functional area, where stakeholders have to collaborate).

The NUDSP thus implies setting up new management methods and systems which are, horizontally and vertically more collaborative, iterative and defragmented; and which involve both territorial public authorities, private stakeholders and the civil society.

Finally, the NUDSP requires a vertically hierachic, but horizontally integrated 'cluster of plans' to organize the urban growth at each institutional level, with guiding principles, a regulatory framework and specific planning documents linked to urban policies and programs (urban spatial planning, infrastructure, housing, urban services, environment, etc.).

Act today to build a better tomorrow

Urbanisation is a vital component to economic growth: it is indispensable to GTP success and to reaching Middle Income Status. But the urbanisation benefits can only be obtained and secured if urban areas are planned well: if plan-led urbanisation is not adopted a concentrated and unbalanced urban system can be expected, one increasingly characterised by congestion, over-crowded informal settlements, unemployment, and social distress and tensions. And the longer we delay taking actions to ensure that urban areas are indeed well-planned, the more costly it will be to address the problems and correct mistakes associated with un or badly planned urbanisation

The NUDSP is crucial in order to ensure that urban areas and the urban system as a whole is well-planned: Indeed, plan led urbanisation requires a vision (2035) and a clear understanding as to how the vision can be reached. The NUDSP provides the vision, the pathway and the new tools needed to manage and plan urbanisation. Implementing the vision does, however, present a number of difficulties which must be gradually overcome. Chief of these are financing, coordination mechanisms, urban planning tools, and capacity building.

Mobilise a variety of financing sources and mechanisms

It is going to be hard to finance the implementation of the Vision, as the costs of servicing urban expansion areas as well as urban renewal are high. A variety of non-traditional ways of mobilising financing need to be combined to provide an adequate basic level of services in urban areas: better leverage of land value, increased use of PPP arrangements, and public sector reform.

New urban planning tools and New coordination mechanisms

New coordination mechanisms are required to program urban public investment and render it more efficient, both vertically (National to local), and horizontally (within regions, urban clusters, and inside cities). Moreover, new urban planning tools are needed and are the complement to the investment programming. These are Regional Spatial Plans, Spatial planning for urban clusters, and Revised structure plans.

Quantitative and qualitative jumps in capacity

Capacity Building is indispensable for urbanisation to be efficiently and effectively managed.. There is a significant deficit in trained staff in the fields of municipal public administration, urban management, urban planning and design. An extensive training programme for municipal technical staff, local elected officials, and urban designers and planners is required. Its emphasis should be, in first stage, on:

- services provision,
- supporting economic development and
- land use planning and building regulation;

for Ethiopia's intermediate towns (key service providers for rural-urban integration) and the Country's secondary towns (regional economic motors), because these two categories will continue to be the receivers of the largest proportion of urban population growth, are insufficiently staffed at present, even though they have a key coordinating role in spatial planning at subordinate levels.

Gradually, as city economies grow and diversify, the capacity building emphasis shifts from basics of infrastructure and service provision towards specialized tracks geared to entrepreneurial urban management and fostering specialized, metropolitan and/or regional knowledge and innovation clusters.



Appendices

Appendix A. Benchmark Countries

Appendix B. Existing Institutional Competencies

Appendix C. The Proposed EUDIF and NUDOP

Appendix D: Transportation Planning

Appendix A. Benchmarks

A1 Introduction

This appendix

- describes how the benchmark countries were chosen;
- presents a review of each benchmark country;
- outlines important thematic issues related to urban development;
- summarises the lessons for Ethiopia; and
- discusses how these lessons were used to calibrate the urban scenarios for Ethiopia

The benchmark countries provide information on what *urban development pathways* Ethiopia could follow in order to achieve the goals of the GTP and the transition to Middle Income Status. The insights and lessons of the benchmark countries are used to alter the scenarios (nudged in directions that experience has demonstrates can and does work)²⁵.

A2 Choosing countries with relevant experience

The candidate benchmark countries are the 12 largest developing countries with more than 50 million inhabitants and with less than US\$10,000 per capital (see Table 5). Countries which are similar to Ethiopia and which have experienced rapid urbanisation in the recent past have been chosen.

Table 14: Large developing countries comparison

Country	Current Population (million)	Population growth 2005-2010	GDP/capita 2013	Tax revenue to GDP 2010	GDP growth 2013	Urban population 2013	Industry GDP % 2013	Number of cities > 1 million inh.
China	1373	0,48%	6807	na	7,70%	53%	44%	143
India	1251	1,46%	1499	12,90%	5,00%	32%	25%	57
Indonesia	254	1,16%	3475	na	5,80%	52%	46%	11
Pakistan	186	1,84%	1299	13,80%	6,10%	38%	22%	10
Nigeria	177	2,27%	3006	5,60%	5,40%	46%	22%	10
Bangladesh	153	1,67%	829	9,70%	6%	33%	29%	4
Philipina	100	1,72%	2765	13,40%	7,20%	45%	31%	2
Vietnam	88	1,32%	1911	na	5,40%	32%	38%	4
Ethiopia	87	2,51%	498	10,80%	10,40%	19%	11%	1
Egypt	86	1,76%	3314	24,80%	2,10%	43%	39%	2
Congo	77	3,22%	454	14,30%	8,50%	39%	na	1
Thailand	67	0,66%	5779	20,30%	1,80%	48%	43%	2
South Africa	53	0,55%	6618	28,90%	1,90%	64%	28%	7

Source: World Bank Indicators

²⁵This chapter is based on the review of benchmark countries presented in the ESDR to which the reader is referred.

Few large countries have experienced rapid economic and urban development in the last few decades: two of the best examples are

- **China** and
- **Indonesia**,

However these two countries are characterised by a very different population patterns and size to that of Ethiopia. In comparison with Ethiopia, most of large developing countries were more urbanised when they had had the same level of GDP as that of Ethiopia. The only exception was India during the 1950s. This indicates that Ethiopia is currently 'under-urbanised' in relation to the size of its GDP.

Another country which is an excellent benchmark candidate is **Vietnam** which is a good example of a country that seems to have 'mastered' the urbanisation process, avoiding excessive and uncontrolled urbanisation, which is often associated with the rise of slums and urban poverty.

Important characteristics of the economic development and urbanisation process of Vietnam finds strong resonance with Ethiopia, namely the progressive opening of its economy, the involvement of its large diaspora, and its policy aims of global integration and the use of urban development as a cornerstone of its national development policy.

In Africa, countries with a large population (roughly similar to that of Ethiopia) like Nigeria, Egypt, Congo or South Africa are more urbanised than Ethiopia and are not considered to be candidate benchmark countries:

- **Nigeria's** urbanisation is characterised by more than 7 cities with an excess of 1 million inhabitants. This outcome of the urbanisation process at present seems difficult for Ethiopia to achieve, at least in the medium term.
- **Congo** is facing political and security problems that affect its development and change the pattern of migrations towards cities (displaced population).
- **Egypt** has higher urbanisation and industrial levels due to its geography (95% of the country is desert) and the industrialisation process began many years ago.
- **South Africa** has developed an efficient and comprehensive urban planning system but many have argued that effective implementation is lacking.

In summary, the three-benchmark countries of most relevance to Ethiopia are **Vietnam**, **China** and **Indonesia**. These following topics are examined for each country (and the lessons for Ethiopia are highlighted):

- The urban transition during recent decades
- The current urban structure and spatial organisation
- The urban planning system and policy

A3 Thematic issues

Controlling urban primacy

Several countries are characterised by a high level of urban primacy including London, Paris, Cairo, Buenos Aires, and Santiago de Chile. Some countries have adopted policies designed to reduce urban primacy by supporting secondary cities. In France the policy of *Balanced Metropolis* was implemented to support the emergence of large secondary cities. The policy was implemented:

- By providing state funded infrastructure and services to increase the attractiveness of the towns and improve their accessibility / connectivity (e.g. universities, hospitals, cultural centres...highways, railways, airports.etc.);
- By relocating central administrative functions to the secondary towns;
- By providing fiscal advantages for private investment in secondary towns.

In Egypt, a New Towns policy has been implemented in order to attract investors and workers to large industrial areas. Dozens of new towns have been implemented around Alexandria, Ismailiyah, and Suez, Port Said for example. In a similar way, Algeria has planned several new towns in the highlands and desert in order to reduce the pressure on the coastal urban areas. In all cases there are also urban extensions and new towns planned around the primate city to support its urban development. Paris has five new towns, Cairo three new towns and 10 new settlements, and Algiers has planned five new towns.

A few countries chose to create a new capital city:

- New Dehli (India)
- Ankara (Turkey)
- Canberra (Australia)
- Brasilia (Brazil)
- Abuja (Nigeria)
- Astana (Kazakhstan)

One of the main reasons for building a new capital city is political. Ankara, for example, was a choice to support the Anatolian identity of the country facing the international and Islamic position of Istanbul (previous Sultan capital city of the Othman empire). Most of the new capital cities are located at the geographic centre of the country.

To create a new capital city needs significant financial resources, but its effect can be to reduce urban primacy and the associated disadvantages of concentrating services and economic activities in one city. The urban growth of Rio de Janeiro and Istanbul was curtailed following the construction of their respective new capitals. But their international position remains and the globalization process of the last two decades put these cities again in a strong economic development pace due to their position in the trade networks (ports).

Decentralisation and urbanisation

Decentralisation is experienced in a large number of countries but it is really only effective if there are sufficient capacities and capabilities (human resource, finance, materials) to support the development of secondary cities. Indeed, although decentralisation is frequently promoted, few developing countries are providing enough the means for local bodies to face and subsequently successfully address the challenge of managing the growth of secondary cities and towns.

The urban decentralisation experience of Colombia in South America could be considered as a successful largely because of the autonomy and important capacities devoted to local bodies (e.g., Medellin municipal budget is funded by local taxes and the management of telecommunication and energy sectors that are very lucrative).

The exceptional experience of this city, granted with many international awards, is due to this financial capacity, the human skill and relative autonomy in the decision making, despite of political concerns and divisions between the Municipality (leftist) and the region (rightist). The continuity of the municipal policies crossing through several municipal elections and governor changes to define and implement a strong social oriented policy has reduced violence thanks to a better integration of slums in the city (transportation projects, large social, educational and cultural facilities.etc). The result of effective decentralisation process, with an elected mayor and strong financial capacities has produced impressive results.

Corridor development and urbanisation

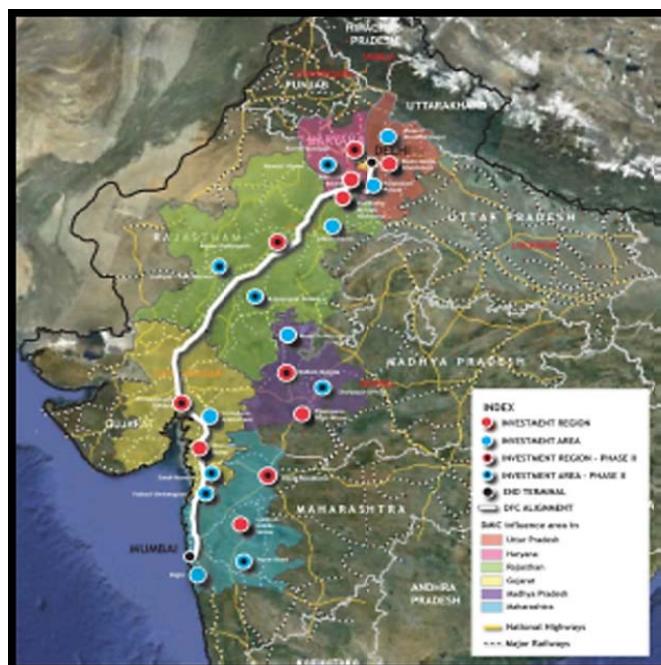
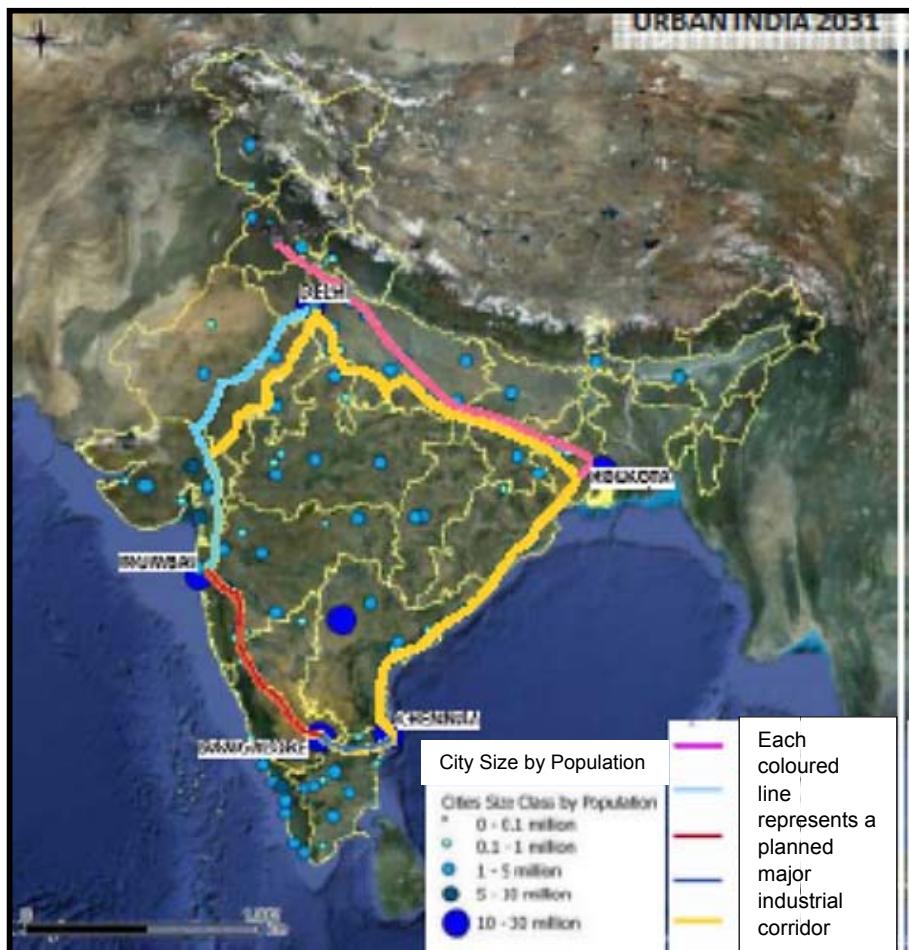
The Federal State of India is developing large scale industrial corridors. In the first phase 7 new industrial cities are being developed (see Map 12), for example, the first Dehli-Mumbai development corridor (DMIC), 1,483 km, in which 13 industrial cities and 11 new towns for 20 have been planned. The DMIC project is expected to promote the advancement of industry along the route of the corridor.

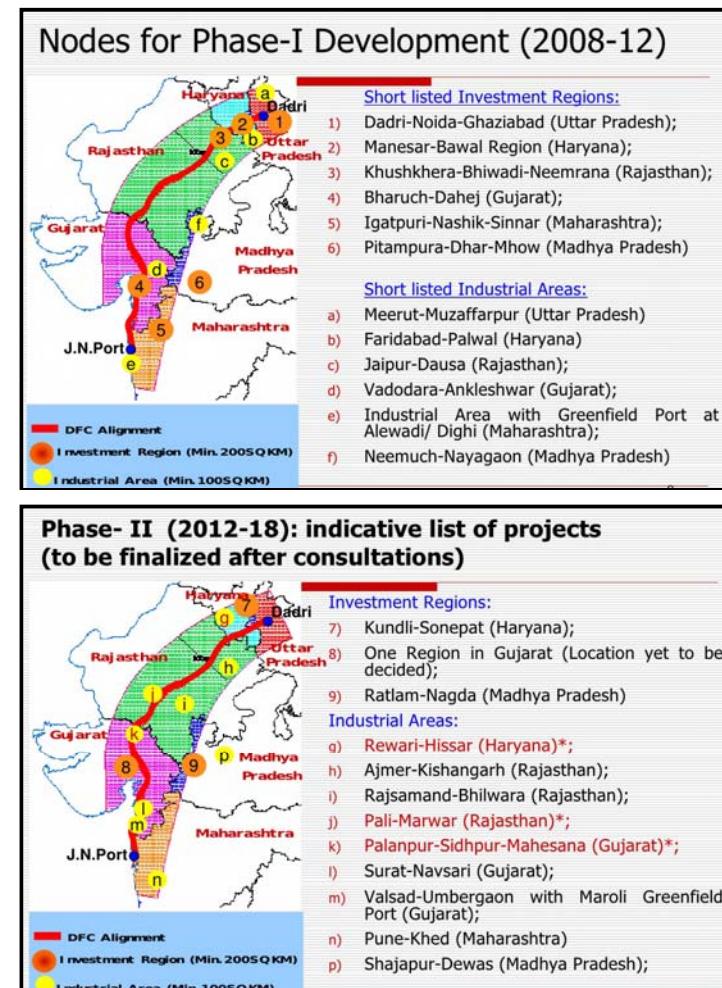
The DMIC vision is to become a Global Manufacturing and Trading Hub and the location of new industrial cities. It provides infrastructure for transportation, water supply, high-level logistics facilities associated with skill development program for workers. The goals are to

- double employment potential in 7 years,
- triple industrial output in 9 years and
- quadruple exports from the region in 8 years.

Presently India is preparing a second corridor between Bangalore and Mumbai, 1,000 km, crossing several states. Another corridor in preparation is that from Kolkata to Amritsar, in northern India, (1,850 km, crossing 6 States). Malaysia is another country which has implemented several corridors based on highways, railways, new international airport, new administrative capital city and technological hubs.

Map 20: *India's Industrial Corridors*





Source: www.dmicdc.com

A summary of key lessons re thematic areas is given below:

Key Features	Possible Lessons for Ethiopia
India has focused its development on large secondary cities. Near a quarter of the urban population lives in cities of more than 5 million inhabitants. It is the direct effect of the centralized policy	<ul style="list-style-type: none"> • Decentralisation (ensuring effective governance capacities and capabilities in secondary cities) can limit the primacy effects of larger cities.
India is shifting its development from rural oriented to urban oriented development. Until now the economy has been more oriented to service sector (though the Modi Administration aim for the country to be a globally significant manufacturing hub)	<ul style="list-style-type: none"> • Urban economy provides more productivity and higher GDP than rural development. The focus on urbanisation is a key to support industrial development.
India is trying to attract investors to develop industry that is a key for higher added value development. To implement this policy, India is	<ul style="list-style-type: none"> • A corridor development policy should be considered in Ethiopia. It is a fast and effective way to organise the transport, logistics and industrial potential of the

<p>investing in large infrastructure of communication to create economic development corridors. These corridors will be the support to industrial and then urban developments.</p>	<p>country to underpin the achievement of GTP 1,2 and 3 aims</p>
<p>Urban infrastructure is vital. The very low investment in urban infrastructure (around 0.5% of the GDP) limit attractivity to investors and reduce the productivity of the economy</p>	<ul style="list-style-type: none"> • Higher investment on urban infrastructure is necessary so that economic development is not limited or compromised.
<p>Education is vital. High level education of Indians, with high salaries to professors civil servants, creates good conditions for having skilled people.</p>	<ul style="list-style-type: none"> • Education is a key factor to reach higher added value. The establishment of universities, and ensuring education to all is crucial for successful and sustained economic development.

A4 Country case studies

Vietnam case study

Vietnam is an emerging country with a current per capita GDP of around US\$ 1,910. The proportion of the total population residing in urban areas has increased over the last 15 years from 22% to 32% and economic development is relatively robust (+5.40% GDP growth rate in 2013). Since the DoiMoi reforms of 1986, Vietnam has embarked on a path towards a market economy and integration into the global market. The country has seen unprecedented levels of industrialisation (from 22% to 38% in 15 years) driven largely by foreign investment and the expansion of residential land on the outskirts of urban areas. Poverty rates, however, remain relatively high in mountainous, remote and isolated areas.

The urban population forecasts are as follows:

- In 2015 around 35 million;
- in 2020, about 44 million
- in 2025, about 52 million

In early 2015 there were over 870 urban areas (urban municipalities). The number is expected to exceed 1,000 in 2025. The demand of land in urban areas consequentially is expected to continue to increase. In 2015, the demand was for 335,000 hectares (which represents some 1.06% of the total land areas of the nation, and average rate 95m²/head); in 2025, the respective figures are estimated to be 450,000 hectares, 1.4% and 85 m²/head.

The National Urban Development Program for the Period of 2012-2020 provides goals and targets for the development of the urban sector:

- **By 2015, the national urbanisation rate shall reach 38%;** the national urban system shall meet the socio-economic development requirements and the urban administrative management authorities shall be in place, in order to meet the development management requirements, in two special cities (Hanoi and Ho Chi Minh City), 195 large and medium size urban localities from Grade I to IV and more than 640 small urban localities of Grade V.

- **By 2020, the national urbanisation rate shall reach 45%;** the national urban system shall meet the socio-economic development requirements and the urban administrative management authorities shall be in place, in order to meet the development management requirements, in two special cities, 312 urban localities from Grade I to IV and more than 620 urban localities of Grade V.

Local Governments and the Spatial Planning System

Vietnam is administratively divided into three regions (northern, central, and southern) and six socio-economic sub-regions. These divisions are subject to be changed in the next regional planning reform in preparation. Vietnam has a three-tiered system of local government. According to the 1992 Constitution, Vietnam consists of provinces and centrally controlled cities. A province consists of prefectures, prefecture-level cities and towns, while a centrally controlled city consists of districts, prefectures and towns. A prefecture consists of townships and counties; a prefecture-level city or a town consists of wards and counties; and a district consists of wards.

According to the Law on Urban Planning, urban centres are classified into 6 Grades, including Special Grade and Grades I, II, III, IV and V:

- Centrally controlled cities must be an urban centre of Special Grade or Grade I.
- Prefecture-level cities must be an urban centre of Grade I, II or III.
- Towns must be an urban centre of Grade III or IV.
- Townships must be an urban centre of Grade IV or V.

There are two main programs related to national spatial policy: the Vietnam Socio-economic Development Plan, and the Spatial Plan. The two components of the centrally planned Vietnam Socio-economic Development Plan are the 10-year "Socio-economic Development Strategy" and the corresponding consecutive two "Five-year Socio-economic Development Plans". The stated objective of the current 10-year strategy is "*to accelerate national industrialization and modernization along the socialist line and to build the foundation for the country to basically become an industrialized nation by 2020.*"

Under the Vietnam Socio-economic Development Plan scheme, a bottom-up mechanism is employed whereby local governments issue proposals to the higher levels of government, which are then ultimately and eventually send to the Ministry of planning and Investment where they are incorporated into the country's overall spatial/land development policies.

The details of the spatial plans under the purview of the Ministry of Construction are conceived through four administrative mechanisms: the Master Plan Orientation for Viet Nam's Urban System Development (national plan), the regional plans, (Ministry of Construction / provinces), the master plans (cities / provinces), and detailed plans (districts, wards, industry zones, or development projects). The plans are prescriptive in character, laying out specific ways to use land in specific locations.

The Adjustment Master Plan Orientation for Vietnam's Urban System Development to 2025, approved in 2009, provides a Vision to 2050. From now to 2015, the key economic regions and large urban areas have put high priority on and the comprehensive economic zones play the role as a dominant growth pole at national level; from 2015 to 2025, the development of

basic urbanized area is put priority on to reduce the local and dispersed development; in the period from 2026 to 2050 the urban network will be generally implemented.

The Construction Law (2003) lays out regulations for "construction planning" (corresponding to master plans). It is a set of regulations for urban, regional and/or spatial plans. According to those regulations, "regional construction plans" fall under the category of regional plans. As such, it is possible to formulate broad-reaching plans that encompass provinces and centrally controlled cities ("multi-provincial plans" and "metropolitan area plans"), both of which form the largest regional administrative units. Based on this Construction Law, in recent years Vietnam has undertaken the creation of regional construction plans that divide the country into 6 socio-economic regions (multi-provincial areas).

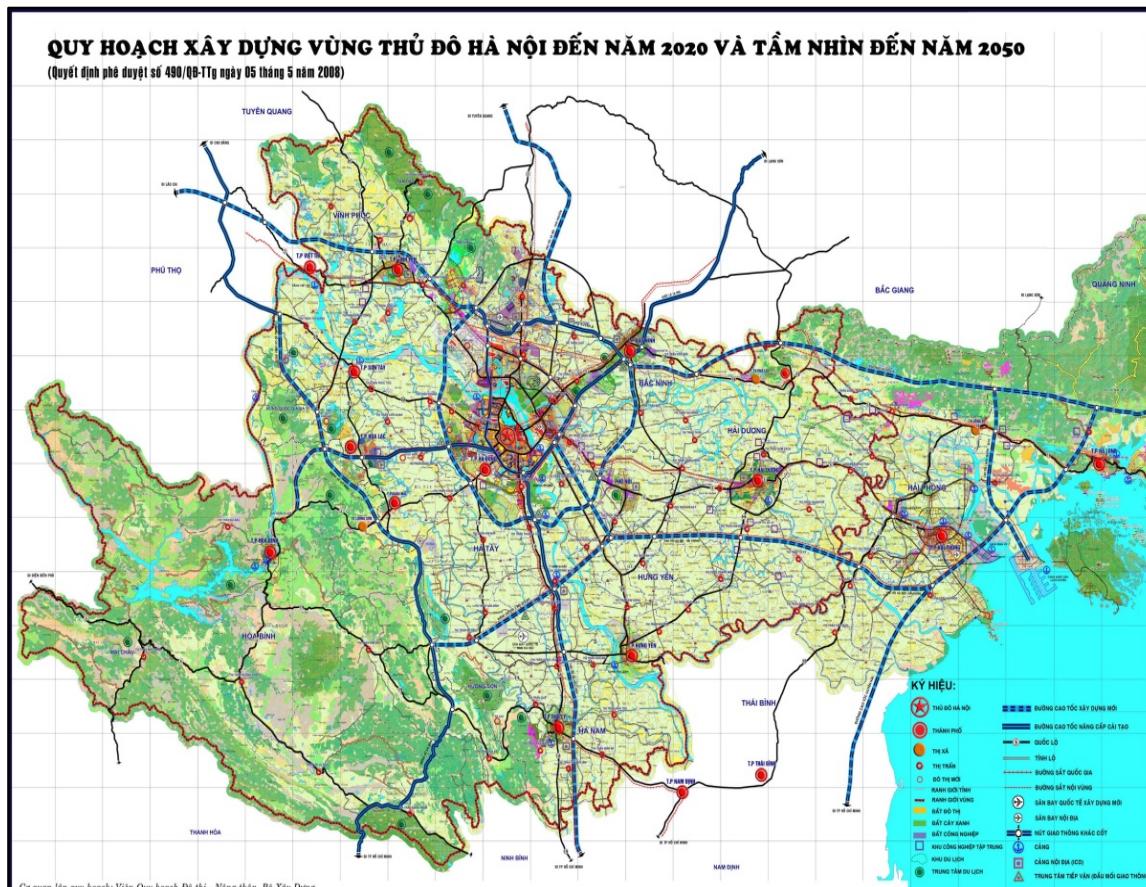
The Law on Urban Planning (2009) is applied on planning and urban development in urban areas. Regional planning and rural planning still comply with Construction Law. According to the Law on Construction, types of Construction Planning are classified into Regional Construction Planning, Urban Construction Planning, including master and detail planning, and Rural Construction Planning. According the Law on Urban Planning, there are 3 types of urban planning: General Planning, which is made for centrally-controlled cities, prefecture-level cities, towns, townships and new urban centres; Zoning Planning, which is made for areas within cities, towns and new urban centres; and Detailed Planning, which is made for the areas to meet urban development and management requirements or construction investment needs.

The Ministry of Construction is responsible for drawing up regional construction planning of the capital and other metropolitan areas and urban planning that involve more than 2 provinces. The Ministry then seeks the opinions of related agencies and their branches, other relevant ministries, and the centrally-controlled cities' people's committees, related provinces' people's committees after which the plans are submitted to the Prime Minister for approval. There are 3 metropolitan areas: Ha Noi, Da Nang and Ho Chi Minh. There are challenges to implement multi-provincial plans, because the Constitution does not define multi-provincial governments then there is no government to be in charge of implementing these plans. Therefore, they actually are not effective as expected.

The Planning of the Hanoi Capital Region (2008) emphasized that the Region is the area of multi-central poles in which Hanoi Capital is a core; prefecture-level cities are link poles for multi-directions of the development. The Hanoi regional plan is in revision with three additional provinces included in a new regional shape. Hanoi Capital Construction Master Planning to 2030 and Vision to 2050 was approved on 2011 by the Prime Minister. According to the Master Plan, the development model is a conurbation in which there are one Urban Core, 5 urban satellites, 3 eco-towns and some other townships.

In order to promote trade across national borders, Vietnam cooperates with neighbouring countries for the development of border areas. The country has set up free trade zones in towns that serve as gateways for crossing national borders. Vietnam shares with the partner countries the cost of building roads that link the inland area (inside the partner country) with harbours (inside Vietnam). It is also proceeding with bilateral talks related to power and other elements of infrastructure, human resource development, etc. As of January 2008, Vietnam had 23 Border Gate Economic Zones, the borders of which it shares with China, Laos and Cambodia.

Map 21: *Hanoi Regional Plan*



Key Feature

The Importance of integration into the global market-place: The fast pace of economic development in Vietnam (around 7% per year during the last decade) has facilitated rapid urban development. The openness of the economy was one of the main reasons for the observed structural change in the economy.

The importance of developing a long term vision: Vietnam has 'used' urbanisation to support economic development and has developed a long term visions (complete with a series of urban visions /scenarios) as a clear pathway for the symbiotic development of the urban sector and the economy. Furthermore, whilst recognising the importance of its two major cities Vietnam has devised and implemented policies to promote a more balanced urban sector.

Successfully managing rapid urbanisation requires effective planning and decentralisation: The

Possible Lessons for Ethiopia

- Ensure that the economy of Ethiopia remains open. Urban scenarios (and the NUDSP) should be based on this assumption
- Ethiopia should develop a long-term vision for its urban sector, and a clear pathway to achieving that vision. The pathway could consist of various urban scenarios, each one applicable to a particular stage of development (a transitioning from one scenario to another should be considered)
- Ethiopia needs to focus on specific mechanisms (policies and

coordination between the socio-economic, the regional, the sector planning and master planning is complex and slow in Vietnam but has been recognised as important.. The new planning reform in preparation will support more decentralisation and a more pragmatic tool with new governance mechanisms for the different levels of government (national to local, local to local), the different sectors to be coordinated. Specific technical new tools need to be implemented to prepare, implement and monitor territorial planning.

The difficulties associated with trying to halt 'primacy': Policy and Planning efforts to limit the primacy of Hanoi and Ho Chi Minh City have not succeeded. In fact, the expansion of secondary and small cities has slowed due to the heavy concentration of development on the two main cities.

The need to build capacity and capability is secondary cities and towns: Weak local capacities and autonomy and centralised government have hindered the implementation of balanced regional development

Co-ordination is important: Large cities are planned at the regional level to assess future urban expansion out of the limit of the existing agglomeration. Coordination between provinces is necessary to prepare integrated master plans of the main agglomerations

investments in urban infrastructure, services and facilities) in order to ensure that the vision can be implemented. Many visions have failed due to the lack of attention paid to implementation.

- Ethiopia may have to accept the continuing primacy of Addis Ababa (though its relative decline in comparison with secondary cities whose growth is to be fully supported through the Government public sector investment plan)
- Building capacity and capability particularly in urban areas targeted for growth will be extremely important to Ethiopia.
- Building the mechanisms / administrative procedures whereby co-ordination between a city and its hinterland and amongst cities is important.

China case study

Over the past three decades, China's urbanisation has experienced very high growth and rapid transformation of the economy (> 10%/year), allowing people to move from agriculture to more productive activities. In the process, 500 million people were lifted out of poverty. China's cities, with abundant and cheap labour, cheap land and good infrastructures attract industry and investments. Growing cities have become increasingly connected with each other and with the rest of the world.

China's experience of urbanisation shows a clear relation between the economic development and the urbanisation. Before the economic reform (1949-1979) only some 20% of the total population resided in urban areas. After the economic reform lead to the opening up of the economy and its integration into the global economy, the urbanisation pace increased to reach 50% in 2010. If we do not consider 300 million non-resident migrants (not registered with hukou), the urbanisation rate is 35%. The number of medium and large cities (>80,000 to 150,000 inhabitants) increases from 232 in 1982 to 654 in 2009 with 22 cities > 1 million inhabitants in 1982 to 88 cities in 2010.

Economic development has driven urbanisation. From 1982 to 2002, the major factors were the establishment of a market economy; the release of rural surplus labour; the policy of

prioritising the development of small cities and towns, the development of rural enterprises, and then emerging of small cities and towns. Small cities and towns increase from 2,678 to 20,601 in the year 2002. Since 2002 the objective was to transform urbanisation to coordinated development of towns and cities of various scales. It is due to the scale of the economy and market resulting from evolving of industrialization. Markets and towns developing from industrialization and economic reforms need to be integrated.

China has avoided some of the common ills of urbanisation, notably urban poverty and unemployment. However, China's growth has been driven by investment rather than productivity, more focus at city level. Urbanisation has relied excessively on land conversion and land financing, which is causing inefficient urban sprawl and, on occasion, ghost towns and wasteful real estate development. The large influx of migrants puts pressures on urban services. Rural-urban land conversion has been inequitable in the distribution of its gains, has added to wealth inequalities, and has fed social unrest among farmers whose land has been expropriated. Urbanisation is competing for scarce water resources and is adding to pollution that affects the quality of farm produce and food production capacity.

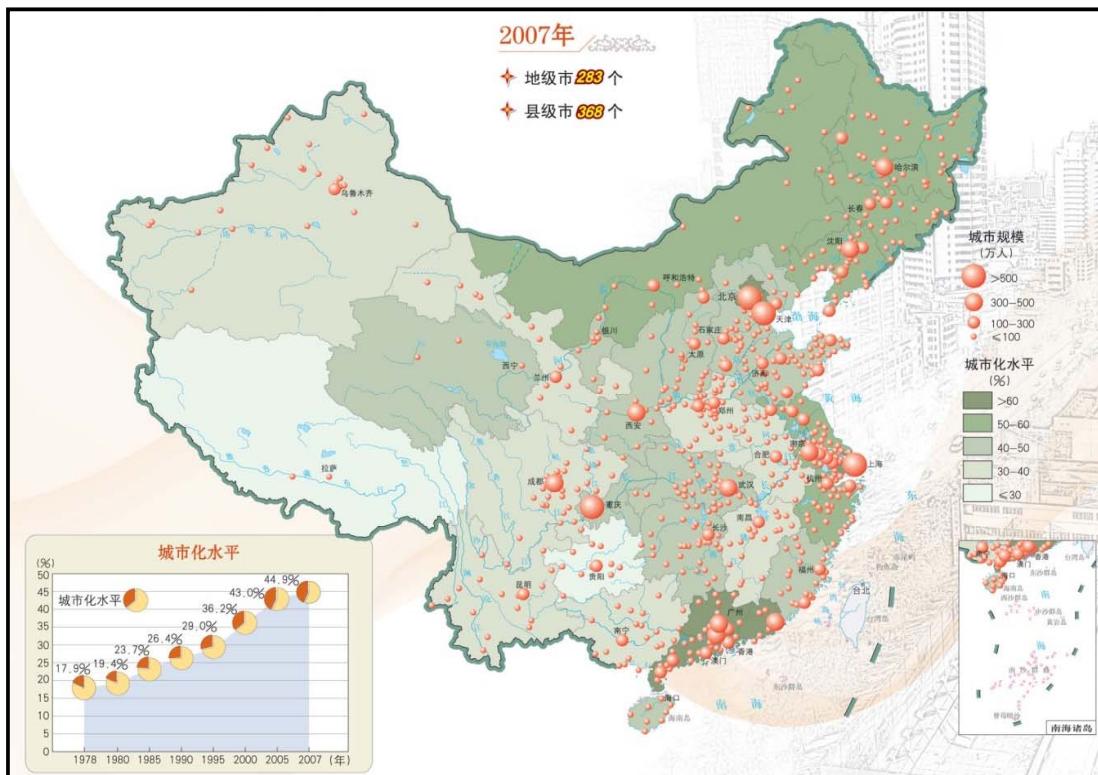
The main structure of the urban scheme remains similar for the major cities like Beijing, Shanghai or Guangzhou. But new large cities (new town of Shenzhen has 10 million inhabitants) emerged benefiting from the polarization/agglomeration effect of the economic model and support from the government in the industrialization policy. Coastal cities have increased quickly due to their proximity to the main transportation corridors leading to the key ports. Today, more than half of the urban population is living in coastal cities. Inland cities are growing fast in a second period thanks to large infrastructures. The country remains unbalanced, but the emerging small and medium cities are creating large city networks. Large cities tend to be more evenly distributed on both coastal areas and inland. Large city region and mega regions are growing.

The built up areas in the cities increase by 7.2% while the population in the urban areas increased only by 4% during 1999-2007 (source: national Development and Reform Commission. And China Urban Development report 2009). Population density decrease from 268 inhabitants./ha to 167 inh./ha (source: China statistical Yearbook of urban Construction) due to lower density standards that were introduced (:120m² per inhabitant in comparison with average of 82.4 m² for developed countries and 83.3m² per inhabitant in developing countries).

China's urban landscape is changing. The largest cities are becoming larger and strengthening their role as gateways to the world and centres of a diverse economy, moving increasingly into services, and knowledge-based activities. Secondary cities are likely to attract more land-intensive manufacturing.

China's large inland cities can compete with coastal cities as they are well connected to markets. Hinterland cities and rural towns focus on activities with firm-level scale economies and on providing the public services that allow people to move to opportunities elsewhere. Better allocation of land, labour, and capital accelerate the shift of industry to secondary cities, and as job opportunities open up in these areas, migration pressures in large cities are likely to moderate. As surplus labour diminishes with more rapid urbanisation, the wage share in gross domestic product rise and urban-rural disparities narrow. Consumption driven by a growing middle class may spur the development of a service-based urban economy.

Map 22: China Urbanisation



Source: Di Feng University

NOTE: Population size are shown by red circles (larger indicates more than 500.000 inhabitants; Density are shown by green colours; Urbanisation rates are described in the graphic on the left bottom of the map

Urban planning in China

The legislature in China is the National People's Congress and local people's congresses at all levels. The State Council of the People's Republic of China, i.e. the Central People's Government, is the highest executive organ of state power and the highest organ of state administration. Local people's governments at all levels are local executive organs of state power at all levels and local organs of state administration at all levels.

In accordance with the Constitution, the whole country is divided into provinces, autonomous regions and municipalities that under the direct administration of the central government. Provinces and autonomous regions are divided into autonomous prefectures, counties, autonomous counties and cities. Counties and autonomous counties are divided into townships, nationality townships and towns.

Municipalities and larger cities are divided into districts and counties. Autonomous prefectures are divided into counties, autonomous counties and cities. Autonomous regions, autonomous prefectures and autonomous counties are nationality autonomous areas. Provinces, municipalities, counties, cities, municipal districts, townships, nationality townships and towns set up people's congresses and people's governments, which are the local organs of state administration. At present, it is being changed to an administrative

system with four levels, i.e. central government, provincial governments, municipal and county governments, and township governments.

In 1984, “The City Planning Ordinance”, China’s first urban planning regulation, was promulgated and enacted, creating a legal framework for the implementation of urban planning and management and so a fundamental change of the absence of guidance of urban planning. At the end of 1989, the NPC Standing Committee adopted the City Planning Act of the People’s Republic of China, which entirely set out the guidelines for urban development, basic principles of urban planning, and schemes for the formulation and implementation of urban planning and legal liabilities, etc. The Act also established a set of basic systems regarding the modern urban planning and management in China.

The Amendment to the Constitution in 1988 permitted the transfer of urban lands with compensation, which promoted the prosperity of the real estate industry. The “real estate boom” and “development zone boom” that occurred nationwide at the beginning of the 1990s made the urban development out of macroscopic control and brought a huge challenge against the urban planning. The compilation and practice of regulatory detailed planning was implemented nationwide, so as to strengthen the regulation of urban real estate development. After the reform of taxation system in 1994, local governments had their own interests and demands significantly different from those of the central government.

In 1996, the State Council issued “Circular Regarding the Strengthening of Urban Planning”, which stated that *“the basic task of urban planning is to uniformly arrange the various lands and spaces in cities, comprehensively deploy the various construction projects and realize the sustainable economic and social development.”* This was the new positioning of urban planning by the central government under the conditions of market economy. Urban planning was no longer just an extension of the national economic plan, but the regulatory measures to guide and regulate the investment activities of different market players.

The “Real Property Law”, enacted in 2007 with the legal protection of private properties lawfully obtained with public properties, greatly stimulated the wishes of property owners to protect their own interests, and enhanced the policy’s nature of urban planning. To maintain public interest, protect urban safety, conserve resources and environment and promote the healthy development of urbanisation became the new historic mission of city planning. With the new “Urban and Rural Planning Act” enforced in 2008, the mission of technical urban planning was gradually shifted from overall planning as the main function to regulatory detailed planning. At the same time, public participation in urban planning became an important driving force in the transformation of planning. The state government emphasized the integrated urban and rural planning and restriction over the planning administrative power.

The New Urbanisation

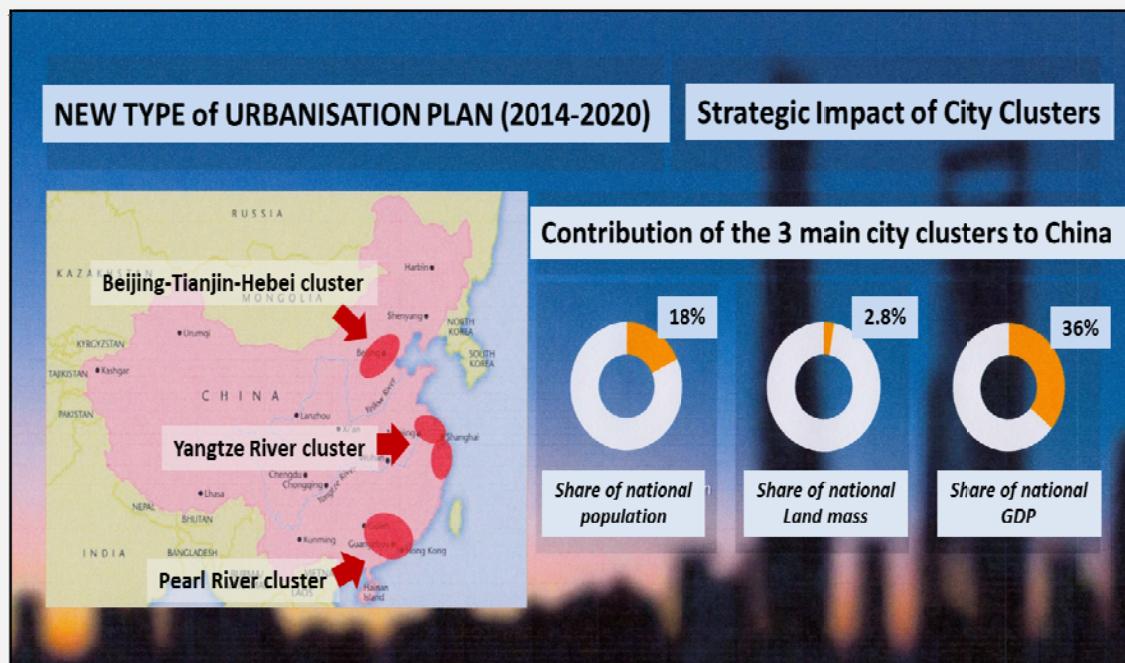
In 2014 the State Council introduced the ‘new urbanisation’ strategy and plan (see Evidence Boxes 1 and 2). Emphasis is placed on the promotion of urban clusters as the main form of urbanisation, rather than on the large individual cities., Important mechanisms of change and progress are to include improvements in the efficiency of urban land markets; the promotion of innovation and value added activities in the urban-industrial economy and an overarching concern with regional equity and environmental and economic sustainability.

Evidence Box 1: China Wants Its People in the Cities to Grow its Economy

Urbanisation has been designated a national priority. On March 16, 2014, the State Council and the central committee of the Communist Party released the "National New-type Urbanisation Plan (2014-2020)," which sets clear targets: By 2020 the country will have 60 percent of its people living in cities, up from 53.7 percent today.....To prepare for the new masses, China knows it must vastly expand urban infrastructure and services. The plan calls for ensuring that expressways and railways link all cities with more than 200,000 people by 2020; high-speed rail is expected to link cities with more than a half million by then. Civil aviation will expand to be available to 90 percent of the population. Access to affordable housing projects funded by the government is also expected to rise substantially.....China will map out city clusters across the country's central, western and north eastern regions and develop them into engines for growth as part of its urbanisation strategy, according to the nation's leadership. Source: <http://www.businessweek.com>

Evidence Box 2: The Importance of Urban Clusters in China.

China has unveiled a plan to develop city clusters along the middle reaches of the Yangtze River in a move to create a new economic growth engine and promote 'new urbanization'. The plan envisions urban clusters around Wuhan in Hubei province, the Changsha-Zhuzhou-Xiangtan city group in Hunan province and clusters around Poyang Lake in Jiangxi province..... The clusters are a pillar of the Yangtze River Economic Belt. They will also be key to implementing the Rise of Central China strategy, deepen reform and opening-up and promote a new type of urbanization, the State Council said in a statement on the government website. Priority will be given to coordinated development between urban and rural areas and connectivity of infrastructure, such as construction of important transportation, water conservation and energy projects.....The Rise of Central China strategy emerged in 2004 amid efforts to achieve more balanced development. Last year, the nation began creating an economic belt along the Yangtze to promote better coordination in industrial development and more efficient allocation of resources among provincial regions traversed by the Yangtze, China's longest river. Efforts will be made to make the most of each area's comparative industrial advantages, build competitive industry clusters, strengthen modern agricultural bases, promote industrial transfer among different areas, and speed up industrial upgrades, said the statement. Source: The China Daily 2015-04-06



Source: Based on presentation made by Dr. Patrick C P HO, Deputy Chairman & Secretary General, China Energy Fund Committee. 9 April 2015

Key Features	Possible Lessons for Ethiopia
<p>Large countries, such as China, can experience repaid economic development that triggers 'fast urbanisation': In China rapid economic development has triggered (and required) rapid urbanisation. The percentage of the total population that lives in urban areas has increased 1% each year during the last 30 years, as the economy has significantly grown and GDP risen.</p>	<ul style="list-style-type: none"> Urbanisation is crucial for economic development. For Ethiopia's GTP I, 2 and 3 to be successful, urbanisation is required
<p>China uses urbanisation as an instrument of economic development: Currently China is seeking to develop its internal market and move away from consumption-repressing investment-driven growth which has become increasingly reliant upon debt. One of the fastest ways to do this is to develop the urban sector and economy by encouraging the growth of domestic markets and the rise of entrepreneurial and innovative activities</p>	<ul style="list-style-type: none"> Urbanisation is crucial for economic development and the way in which urbanisation is planned and managed can have a direct influence on economic prospects and the evolution of the structure and functioning of the economy.
<p>China's rapid urbanisation began by focusing investment in a few (coastal) cities. China kick-started rapid urbanisation by encouraged urban development in selected cities. Once these cities had developed and fuelled the growth of the economy, policy attention turned to spreading urban and regional development across the nation.</p>	<ul style="list-style-type: none"> Focusing effort in a few selected cities or city regions in order to fuel and accelerate economic development may be the best way forward for Ethiopia to ensure rapid urbanisation and continuing economic growth
<p>China also uses urbanisation to implement balanced development: China defines city clusters across the country's central, western and north-eastern regions and is developing them into engines of growth.</p>	<ul style="list-style-type: none"> Selecting key urban growth poles or key urban clusters and supporting their development could be the most effective way to implement spatially balanced development in Ethiopia
<p>China has focused on urban infrastructure to attract investment: Good infrastructure (transportation, water, energy) and the provision of planned industrial and commercial areas (e.g., industrial zones) are key factors that attract foreign investors.</p>	<ul style="list-style-type: none"> Ethiopia needs to continue focusing efforts on providing infrastructure to connect ports and cities and on ensure that a favourable business environment characterises the cities.
<p>In China increased urbanisation means that more complex planning is required: Increased urbanisation (with the rise of e.g. mega regions, large metropolitan areas, and city and town networks in China) required more complex planning and urban management procedures. Furthermore large city clusters like Pearl River delta (from Hong Kong, Shenzhen to Guangzhou), Beijing-Tianjin-Hebei or Shanghai megapolis are emerging, as it will be the case between Addis Ababa to Hawassa. As such regional planning and coordination between local bodies and central bodies are also necessary.</p>	<ul style="list-style-type: none"> A focus on implementation is vital; – significant attention must be paid to how the vision for the urban sector of Ethiopia can be achieved, namely by detailing up the proposed road-map / pathway / public investment framework associated with the achievement of the vision. Furthermore, as urbanisation increases the need for more complex planning (including regional planning) will become apparent in Ethiopia.

<p>The Chinese experience has shown that detailed physical regional and urban planning is needed for successful socio-economic planning. The coordination between physical and socio-economic planning is a key for successful territorially based development</p>	<ul style="list-style-type: none">• The co-ordination between sector and area-based plans is important and must be addressed in Ethiopia
<p>Rapid and significant urbanisation in China has sometimes led to land and housing speculation: Urbanisation has produced in China 'ghost cities' and urban sprawl in part due to the lack of real estate regulation and housing demand assessments and continuing land speculation.</p>	<ul style="list-style-type: none">• Attention in Ethiopia must be given to avoiding over extensive / too rapid urbanisation . More specifically, attention must be given to effective management and regulation of land and housing markets.

Indonesia case study

Over the last three to four decades Indonesia has experienced rapid urbanisation. In 1950, 15% of Indonesia's population lived in urban areas. By 1971 the figure had only slightly increased to 17%. But in 1990, 40 years later, this number is doubled to 30%, and it only took only another 20 years to increase the urban population to 44% (2010). The present urbanisation rate is 2.5% per year, and according to the World Bank, urbanisation in Indonesia could reach around 67% in the year 2025²⁶. Indonesia is experiencing one of the fastest urbanisation processes in Asia (as such is an excellent benchmark for Ethiopia).

This urbanisation creates significant opportunities for Indonesia. Urbanisation can underpin and accelerate economic growth and create vibrant cities and metropolitan areas²⁷. Indeed, in the country urbanisation is seen as one very important route to achieving middle income country status²⁸. For this reason, it is interesting for Ethiopia to understand how this country is facing the urbanisation challenge: basic urban services, job creation, poverty reduction, planning and coordination between territories.

Indonesia's urban system is dominated by Jakarta, which, with more than 20 million inhabitants, is a primate city²⁹. To regulate its primacy and promote growth across the country, a Master Plan for the economic expansion of Indonesia (MP3EI) has been devised and adopted. The MP3EI identifies six growth centres, or economic corridors. Investments will be concentrated in these centres and along these corridors in order to accelerate

²⁶ See: Indonesia: The Rise of Metropolitan regions: Towards inclusive and sustainable regional development. World Bank

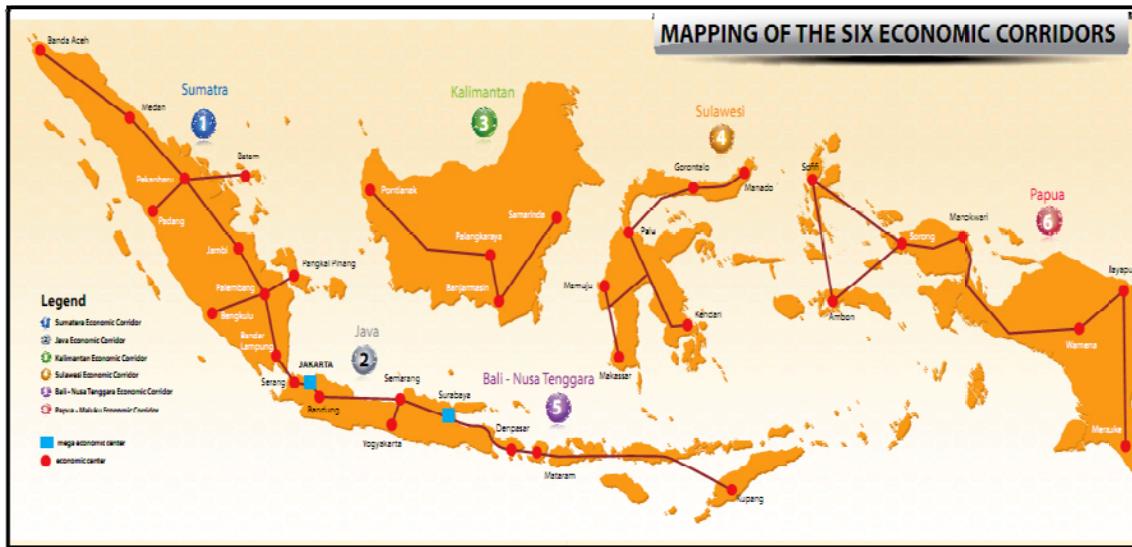
²⁷Urbanisation is considered as a positive factor for development. In South East Asia, an increase of urbanisation of 1%/year has impact on GDP increase between 2% to 8% per year.

²⁸ The World Bank 2011 study showed that every 1 percent of growth in Indonesia's urban population between 1970 and 2005 resulted in an average 2 percent increase in per capita gross domestic product (GDP). However, in Thailand and Vietnam, the figures were much higher, at 8 and 10 percent, respectively. For China and India, the figure was 6 percent.

²⁹The World Bank study states that small and intermediate urban centres, namely those with populations of between 100,000 and 1 million, could have an important role in creating balanced urban development if managed and planned properly, as they could become a necessary link between rural and urban development. According to the 2011 World Bank study, the intermediate cities, or those with populations ranging from half to 1 million, have better-performing agglomeration economies than cities in any other class.

economic development. The centres/corridors are Sumatra, Java, Kalimantan, Sulawesi, Bali — Nusa Tenggara and Papua – Maluku Islands (see Figure

Figure 28: The Six Economic Corridors in Indonesia



The plan guides investors to specific areas within the centres/corridors using the financial and regulatory support of the government. Special Economic Zones, Free Trade Zones, and Industrial Areas in the centres and along the corridors have been built in order to stimulate investment and attract major infrastructure projects. The MP3EI strategy aims to boost economic development by:

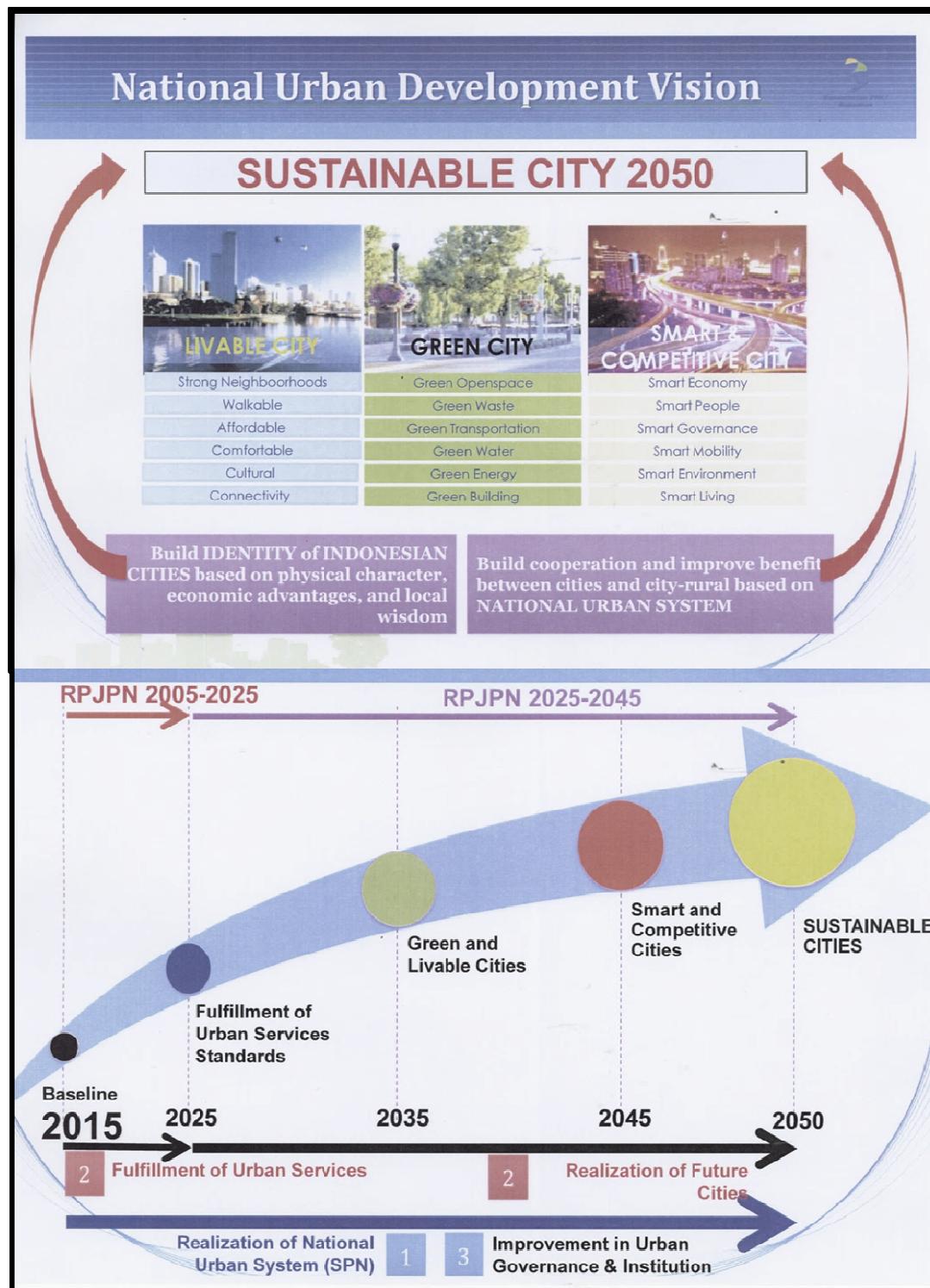
- Focusing on these six economic centres / corridors
- Strengthening national connectivity throughout the archipelago
- Building human resource capability, science and technology.

Connectivity between regions and efficient logistics are seen as key factors to facilitate regional integration, and the over-arching strategy also includes a focus on 'sustainable regional and urban development (see Figure 34).

The implementation of the Master Plan is coordinated by the National Economic Committee, or KEN and the National Innovation Committee, or KIN. Key actions taken to ensure successful implementation include bureaucratic reform, including the legislature and judiciary, tax reform and incentives, the creation of special economic zones in each of the corridors, improved shipping and airline capability (ports and airports) to promote connectivity, and increased high school and vocational training to improve human resources. The Master Plan recognises that Indonesia has to overcome a number of challenges (many of which will find resonance with circumstances in Ethiopia).

These challenges include: a failure to achieve value-added input in the agricultural and extractive industries; a developmental gap between western and eastern Indonesia; the lack of infrastructure support generally; a lack of connectivity between regions; inadequate quality of human resources; and the problems associated with rapid urbanisation.

Figure 29: Focus on sustainability in the national Urban Development Plan



Source: Presentation by ZaenalArifin Acting Deputy Director for Urban Affairs Ministry of National Development Planning/Bappenas on the National Urban Development Vision and Strategy of Indonesia, October 2013.

As regards urbanisation, challenges include rising urban poverty, increasing informal activities and settlements, the inability of urban labour markets to absorb all of the incomers (many of who are young³⁰) deleterious traffic and congestion, increasing pollution and inefficient resource use, and dysfunctional housing and land markets³¹

The economic crisis of 1997-2001 has limited public investments in cities. From 2007, public investment in infrastructure reached 4% of GDP, which is not enough to cover the needs. It needs at minimum 6% of the GDP to finance and to face the gap in urban infrastructures and the quick urbanisation pace. So today, water supply, energy, road, sewage system are weak and unbalanced between regions. For example, 78% of urban have access to safe water, but only 50% in rural areas. 25% of the population are living in very precarious housing condition despite a GDP of 5,200 USD.

Furthermore, it should also be noted that the prevailing administrative system is complex: 34 provinces divided in 370 districts (kabupaten) or 75 kota (special status for cities). At the local level there are municipalities (kelurahan) and villages (desa). Decentralization has devolved power but local governments generally do not have the capacity to design and effectively implement infrastructure projects. Furthermore, there appears to be little coordination between the various levels of government as regards planning; district planning can be in conflict with provincial plans or even with national laws or regulations, and local bodies are often unable to implement national decision because of the lack of implementation capacities and capabilities, and finance.

The World Bank has highlighted several weaknesses in the country's planning system:

- Urban plans quickly become obsolete: too many changes in public policies;
- Implementation is poor; incapacity to adopt operational plans³²;
- Lack of clarity concerning responsibilities shared between the actors in charge of urban planning;
- Weak regional coordination between district and provinces;
- Weak technical capacities, financial resources;
- Lack of programming for infrastructure projects;
- Inter district conflicts regarding land use;

³⁰The exit of many of the young from the rural area leaves behind a large number of the ageing population. Statistics from the Agricultural Ministry show that out of the 140 million farmers in the country, 80% of them are aged 45 and above. Another related problem is the fall in investments in rural infrastructure as emphasis was transferred to the urban sector.

³¹ These topics are frequently discussed in the media in Indonesia. Inefficiency in water resources utilisation, massive and uncontrolled land conversion, land subsidence due to heavy building construction and uncontrolled underground water pumping, solid waste and liquid waste management which is beyond the ability of most city and district governments and inadequate green open spaces are all frequently reviewed. – (See thejakartapost.com/news/2011/02/05/indonesia%E2%80%99s-urban-development)

³²The Indonesian government declared an official national spatial development plan (Rencana Tata Ruang Nasional) in the late 2000s to promote balanced urban development. However, it has not been effective enough to guide urban development because it has never been consistently integrated with investment and infrastructure plans. On the contrary, investment and infrastructure development has been increasingly concentrated in Java, most notably in Greater Jakarta, which in turn has widened the regional disparity between Jakarta and other cities in Indonesia.

- Lack of coordination between district and local plan;
- Lack of enforcement of urban planning

Key Features	Possible Lessons for Ethiopia
<p>Indonesia has experienced rapid urbanisation: The percentage of the population residing in urban areas increased from 17% in 1971 to 44% in 2010 . The country has also experienced a reduction in rate of population increase rate</p>	<ul style="list-style-type: none"> • Very high pace of urbanisation has been experienced by populous countries like Indonesia, but with lower rate of population growth than Ethiopia. Urbanisation is associated with a reduction in the fertility rate and so is a factor to increase GDP/capita.
<p>A national urban development spatial plan has been devised, which fixes the main framework for a balanced regional development . Important elements of the plan include a focus on 6 economic development corridors, based on transportation corridors and large metropolitan areas are important tools to clarify location for public and private massive investments</p>	<ul style="list-style-type: none"> • The importance of a national urban development plan is recognised and a key characteristic of the plan is the focus on 6 'corridors of development'. The corridor developments can be applied in Ethiopia to make more accessible remote areas and integrated them into the national economy.
<p>The GDP growth of mid-sized cities and towns is growing faster than that of Jakarta</p>	<ul style="list-style-type: none"> • Measures must be taken to unlock and realise the potential of Ethiopia's secondary cities and towns
<p>Local capacity and capabilities are weak. Decentralization has devolved power but local governments generally do not have the capacity to implement infrastructure projects</p>	<ul style="list-style-type: none"> • Effective governance and decentralisation is vital to ensure that balanced urban and regional development can be successfully implemented.
<p>Indonesia is suffering an 'infrastructure investment deficit'. Weak investment in urban infrastructure (6%/year of GDP are needed) reduces the potential of the national economic development</p>	<ul style="list-style-type: none"> • Planned urbanisation (including the provision of infrastructure) is a necessary condition for the economic development. Ethiopia must devise a comprehensive public sector investment plan to support and ensure the implementation of its national urban development spatial plan.
<p>Indonesia is struggling as it attempts to ensure effective coordination between the various levels of government, but key stakeholders in the country realise that coordination between regions, districts and local governments is crucial to organise well balance development</p>	<ul style="list-style-type: none"> • Territorial coordination is necessary to expand development from large cities to others cities and surrounding hinterlands. Several urban clusters could be identified in Ethiopia to organized solidarity between cities regarding their owns capacities in a complementary manner.
<p>Decentralization needs inter territorial coordination mechanisms and heavy local capacities.</p>	<ul style="list-style-type: none"> • Decentralisation at city level is a key factor to face urban needs and reach high quality for urban development and management. It needs to give competencies and capacities at local level (finance, local tax, land management, material, human resources).

Appendix B. Existing Institutional Competencies

Present Competencies

The 1995 Constitution organizes the country into Nine National Federal Regions, Two Chartered Cities, Woredas-and-Kebeles³³. There are 68 administrative zones above woredas (generally without council except in SNNPR). Zones facilitate and support local administration. In terms of urban administration, there are three levels:

- Cities that are accountable to the Federal Government (Addis Ababa, & Dire Dawa);
- Cities that are accountable to the National Federal Regional Government (Regional Reform Cities under the Urban Management Program);
- Cities which are accountable to zonal administrations.

The competencies of cities are assumed in the framework of the local self-governance. Ethiopia a rural country (556 woredas and 15 000 kebeles are rural), and therefore do not have the adequate capacity (institutional and financial) to discharge their duties. Under the DLDP and UMP, fiscal powers were decentralized and regional grants were initiated to enhance the capacities of the local government – urban centres also benefitted from this initiative. However, the capacity (institutional and financial) is still desperately low; this means, assigning competencies need to take the capacity constraint into account.

Federal Government

The federal government has executive power lead by the Prime Minister with a Council of Ministers (currently 22), selected by the Prime Minister and approved by the House of People's Representatives. Federal competencies are distributed amongst a number of Ministries; those of direct relevance to the urban sector include the Ministry of Urban Development Housing and Construction (MUDHCO), the Ministry of Finance and Economic development (MOFEC) and the Ministries of the Transport, Education, Health, and Water Resources. MOFEC is the most powerful, with directories dedicated to strategic development planning and international relationships (external resources, financial cooperation, UN agencies, bilateral cooperation, EU national authorizing, Ethio-China development cooperation).

Regional Government

Regional government is an important instrument of decentralization level. Regional States are directly accountable to the people of each region, but they have the duty to respect the powers of the Federal Government. Likewise, the Federal Government has the duty to respect the powers of the States. Some competencies are shared between federal and regional levels. Regional competencies vary by region, being more or less defined in the various regional proclamations. Regional States define local competencies, at woreda and

³³Woredas include both rural and urban districts; their definition varies by regional state. Kebeles (rural and urban neighborhoods, with more than 5,000 inhabitants) are the lower unit of government administration in Ethiopia.

kebele levels, and control the distribution of dedicated grants to these lower levels of government (see Figure 29 and Tables below).

Figure 30: The Urban System in the Decentralisation Process

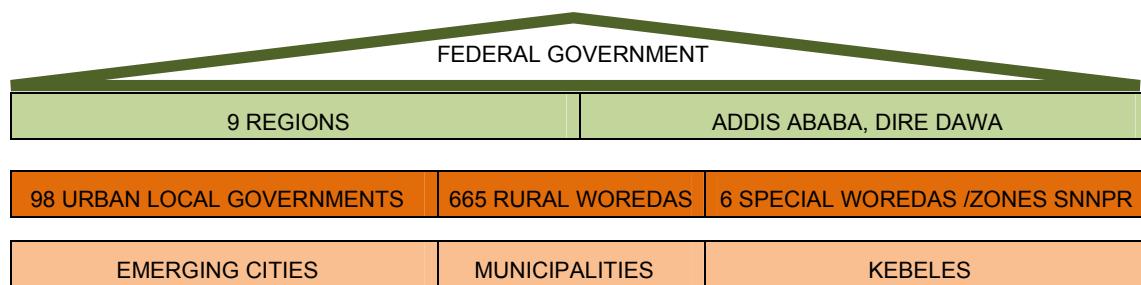


Table Main competencies at regional, zonal, woreda's and kebele's levels (From scenario report)

<p>Regional Government shall:</p> <ul style="list-style-type: none"> • Have all powers not given expressly to the Federal Government alone, or concurrently to the Federal Government and the States • Formulate and execute its economic, social and development policies, strategies and plans • Administer land and other natural resources in accordance with Federal laws • Levy and collect taxes and duties, rural land user fee, agricultural income tax... 	<p>Woreda shall:</p> <ul style="list-style-type: none"> • Examine and approve the draft economic development, social service, in line with administrative working plans and programs • Follow up the basic agricultural development activities consistent with the appropriate season, the development, conservation and care of natural development. • Properly handle and keep data concerning the land administration and use. • With details to be outlined by law, ensure that rural land users fee, agricultural income tax and other revenues are collected in due time and even imposes other service charges • Utilize any source of revenue which may have been outside the sum allocated and administered by regional state thereof 	<p>Kebele shall:</p> <ul style="list-style-type: none"> • With details to be outlined by law, ensures that rural land users fee, agricultural income tax and other revenues are collected in due time and even imposes other service charges • Considers / approves its own budget • Utilize any source of revenue of the woreda concerned, which may have been outside the sum allocated and administered by regional state thereof
<p>Regional Constitutions</p> <p>Regions shall:</p> <ul style="list-style-type: none"> • Set out the Regional economic and social development policy, strategy and plans • Enact the constitution and other laws of the Region • Administer land and natural resources in accordance with federal laws 		

Source: 1995 federal constitution, regional proclamations

Table 15: Synthesis of devolution of some main competencies at each level

Power	HPR	HoF	Ministers	Region	Spec. Zone	Woreda	Kebele
Economic & social development	X		X	X		X	
Laws / land & natural resources	X		X	X	X		
Transport, roads & telecom	X		X	X			
Water, rivers, lakes	X		X	X		X	
Taxes	X	X		X		collects	Collects
Budget	X		X	X	X	X	X
Loans	X		X				
Basic services			X	X		X	X
Urban planning			X	X		X cities	

Source: Consultant's data compilation from federal proclamations

Regional states have legislative and executive powers, and a judiciary organisation. The President of the region is also the head of the executive. Only the SNNPR State has two councils at regional level, the Regional Council (the law maker) and the Council of nationalities. In matters of education, the regional level has to establish and administrate the 2nd cycle of secondary education, special schools, technical and vocational schools, teacher training institutions and medium-level colleges.

The Sub-Regional Level

In order to “decentralize powers, enhance local democracy, governance and service delivery” in rural woredas and city administrations, reform was first introduced in Oromia, Amhara, Tigray and SNNPR through the 2001 District Level Decentralization Program (DLDP) and the Urban Management Program (UMP), which decentralized fiscal powers and made available regional grants. It has been then extended to all the regions and autonomous cities, and is now available for the 752 woredas and around 16 000 kebeles.

The zonal administrative level is another component of the efficient territorial administration. The zonal authorities had a controlling, checking and monitoring power over the activities of the woredas up to the 2001 reform, which aimed to enhance woredas' competencies required for better service delivery. Zonal administrations became oversight bodies for woredas; most of their employees have been transferred to woredas and zones became mainly oversight bodies on woredas.

Woredas have an elected council with representatives from kebeles, an executive organ and an independent judiciary body, along widely various situations, human and financial resources. Woredas competencies are defined by each regional constitution. Woredas and urban centres are mainly involved in local development, through basic services, but they also have to prepare and implement by themselves a development plan, with rather low and uncertain resources (skilled labour force, budget, technical tools). As regards education, for instance, they are in charge of primary, secondary and adult education, educational plans, new schools, hiring (and deploying) teachers and boarding schools for primary education (governmental and not governmental schools). Since 2001, the regions have assumed powers and responsibilities from woredas, while urban areas have gained a special status as

Urban Local Governments (ULG) with elected councils, self-generated tax revenues and control over expenditures

Kebeles (village, in Amharic, near from Idir, traditional rural community) have a council and an executive cabinet but no proper budget (needs partly financed by the woreda). In the four reform regions, kebeles have to “prepare an annual kebele development plan, ensure the collection of land and agriculture income tax, and organize local labour and in-kind contributions to develop activities, resolve conflicts within the community through social courts”. They are mainly focused on improving the public service local provision. Kebeles often lack of resources, The World Bank, in line with the 2001 reform, provides kebeles with a specific support through programs focused on basic services, capacity building and financial aid, as do many NGOs.

Table 16: Regional translations of federal definition of woredas' competencies

Federal framework	Amhara 102 Woredas	Oromia 199 Woredas
<ul style="list-style-type: none"> Prepare and approve the annual <i>woreda</i> development plans and budgets and monitor their implementation Set certain tax rates and collect local taxes and levies (principally land use tax, agriculture income tax, sales tax and users fees Administrate the fiscal resources available to the woreda Construct and maintain low-grade rural tracks, water points and woreda level administrative infrastructure (office, houses), Administrate primary schools, health institutions and veterinary facilities Manage agricultural development activities and protect natural resources 	<p>Woreda administration may facilitate:</p> <ul style="list-style-type: none"> Economic development and social service plans, implement regional policies, laws, regulations and directives. Draft economic development, social services, administrative woreda's working plans and programs Agriculture development activities, development, care and conservation of natural resources Public mobilization 	<ul style="list-style-type: none"> Urban and social services to residents (environment, construction, roads, sewage, water, parks, waste disposal, control of pollution, transport, education, health, housing, culture, statistics...) Economic and social development Urban land and houses administration and expropriation right Management of human resource Collection of taxes et services charges Various partnerships (residents, Region, urban-rural, private bodies, etc.) City plan

Source: *Federal proclamation, Amhara 2001 Proclamation, Oromia 2003 Proclamation*

The **chartered and other cities** of Addis-Ababa and Dire-Dawa (see table 17) are directly accountable to the federal Government. Their powers are defined by their charters, and Addis-Ababa and Dire-Dawa administrations have their own organs of government. For the other cities and urban woredas, the 1995 constitution did not recognize municipalities as independent entities. Some regional states early allowed establishing urban local governments (Oromia in 1993, Amhara in 1995, Tigray in 1997) to enhance socio-economic development, services and investment, along Addis-Ababa's long term experience in development and administrative management. In the 2001 second wave of decentralization, four regions (Tigray, Oromia, Amhara and SNNPR) enacted municipal proclamations and a Council Mayor system was developed. Cities may now issue laws and regulations.

Table 17: Chartered cities and sub-cities' government responsibilities

Chartered cities government	Addis-Ababa Sub-cities Dire-Dawakebeles	Other cities (urban woredas)
<ul style="list-style-type: none"> • City Council (members elected for a 5Y term) enacts law, master plan, etc., accountable to the federal government and city residents • Mayor, chief executive officer, accountable to the federal government and city council • City Cabinet, ensures implementation of legal and regulation aspects, policies • City manager, responsible for the execution of the municipal services 	<ul style="list-style-type: none"> • Council • Spokesperson • Secretary • Chief Executive • Standing Committee • Manager • Social Court • Other executive bodies 	<ul style="list-style-type: none"> • City council • Speaker of the Council • Mayor (being elected) • Mayor's committee • Manager of municipal services
<ul style="list-style-type: none"> • Issue and implement policies concerning the development of the City • Approve and implement economic and social development plans • Identify, determine and organize municipal services to be delivered at the level of the City • Administer, according to law, the land and the natural resources located within the bounds of the City • Prepare and approve the budget of the City, collect taxes and other incomes from revenues. 	<p>Addis-Ababa sub-cities</p> <ul style="list-style-type: none"> • Provide and locate municipality services • Administrate their area • Facilitate popular participation <p>Dire-Dawakebeles: +</p> <ul style="list-style-type: none"> • Facilitate micro- and small business enterprises local development, • Facilitate basic and primary education, primary health care service 	<ul style="list-style-type: none"> • Prepare budget proposals • Assess and collect allowable municipal revenues • Prepare and implement development plans • Provide internal roads and bridges, markets, laighter houses, terminals, public gardens, recreational areas and other public facilities • Regulate cleanliness and providing solid waste, water, sewage and drainage services • Deliver miscellaneous services (fire protection, libraries, public toilets, street lighting, nursery schools, ambulance services...).

Appendix C.The Proposed EUDIF and NUDOP

The implementation of the National Urban Development Spatial Plan (NUDSP) could be financed through the proposed that the Ethiopian Urban Development Investment Fund (EUDIF) and managed through a National Urban Development Operational Programme (NUDOP). In this appendix the suggested operating principles of both the EUDIF and NUDOP are presented. It is beyond the scope of this project to detail-up the investment and operating principles of the Fund and the management structure and procedures of the associated Programme. It is expected that Government will undertake such a task during the very early years of the NUDSP implementation

Investment Principles of the EUDIF

The EUDIF should support investments required to implement the NUDSP. Funds should be allocated for urban infrastructure and service that cannot be financed by the resources of line ministries. Financial support would be granted for urban development projects on a project-merit basis; all applications should be supported by a comprehensive strategic rationale and associated project cost-benefit analysis. Projects proposed for financing from the Fund should be evaluated taking the following into consideration:

- The need to promote balanced regional and urban development
- The need to promote the equitable distribution of economic activities
- The need to support 'fragile' territories (e.g. those lacking economic development / lying in the development shadow of an urban cluster);
- The sound environmental management of urban investments projects
- The need to improve the climate change resilience of cities and towns
- The importance of promoting rural-urban linkages.

The involvement of various stakeholders (e.g. different public actors, private actors, and/or partnerships between public and private actors) in projects would be governed by the investment principles of the "Fund" as given above.

Structure of the EUDIF

The EUDIF could comprise two funds: a general (country-wide) fund and a local (regional) fund. The EUDIF could be funded through contributions from line ministries as well as from donor partner organisations. The proposed implementing conditions for each of the two funds are discussed below:

The General 'Fund'

The general fund finances major urban infrastructure and service projects related to the implementation of the NUDSP, including related planning activities. The general fund could support major urban development interventions as forecasted by the State at national, regional and local levels. The decisions regarding the allocation of funds should be the responsibility of a Monitoring Committee acting as an inter-ministerial programming body, reviewing project proposals which have been technically assessed in line with the above listed evaluation criteria.

The following are likely areas of investment by the General Fund:

- **Urban projects of national relevance and importance** which comply with and constitute the implementation of the NUDSP;
- **Urban development programmes**, which are seen as experimental or innovative in nature, but which can be disseminated across the country if proved to be successfully implemented and generated the benefits as expected
- **Support to organisations** directly involved in promoting local urban development.
- **Urban projects of regional relevance and importance** which cannot be financed through local budget due to local resource constraints

The Local 'Fund'

The local component of the Fund represents the financial contribution of the State to regional urban projects. It is aimed at encouraging the formulation, programming and implementation of projects by urban local governments and the organisation of local project partnerships (including specific project of networks of cities). Financial contributions can be used to finance urban 'diagnosis and preparation' studies related to local urban development plans as well as urban infrastructure and service projects. The Local Fund should finance the installation and operation of projects in a manner which conforms to the investment principles of the Fund as discussed above.

Management of the EUDIF

Common rules of the two Funds

The two funding components of the EUDIF will finance the investment and operating costs of urban projects. Funding can be undertaken as loans or grants (depending on the circumstances of the project). The preference is for loan financing and to strongly encourage full cost recovery by the loan recipient. The application forms for granting a loan or grant should be ruled by a specific decree relating to the State grants for investments and the provisions taken for their application.

The financial assistance relating to project operating costs should not be renewed automatically, and should be the subject of an annual review. The EUDIF should cease funding recurrent operating costs of urban projects as soon as possible (and a defined time limit may be considered). Conditions for obtaining multi-annual financial support should be discussed and agreed between the EUDF and the recipient of the loan before the said loan is allocated.

Financial assistance obtained from the EUDF must be integrated into the budgets of the recipient authority, which should clearly identify the use of the financial contribution. The recipient authority must undertake regular and detailed monitoring and evaluation of the use of the EUDF contributions³⁴. It is also recommended that financial support from the EUDF be allowed as counterpart funds associated with the budget of line ministries.

³⁴ The EUDF should set up a MEL unit (Monitoring, Evaluation and Learning unit) which should be mirrored in the local authorities.

Eligibility

Support from the EUDIF to enterprises should be excluded. Exceptions may be admitted, for example, funding for tourism, trade and craft industry in fragile and depressed areas, and operations related to urban and peri-urban agriculture. EUDIF contributions to donor programmes and projects relevant to the NUDSP could also be considered. General eligibility principles must be determined by Government and could include the following:

- **General Fund: eligible actions** Investments could be eligible for support through the General Fund only if the projects for which funds are being requested exceeds 40 M ETB, and/or which relate to parts of the NUDP operational programme the cost of which exceeds 200 M ETB.
- **Local Fund: eligible actions** It is suggested that urban furniture (e.g. park benches), real estate development and private enterprise support is excluded from EUDF support, with the exception of projects with clear and direct environmental, economic development, and social welfare benefits. These and mainstream urban infrastructure and service projects will be submitted by the Regional Managing Authority, acting as an inter-institutional technical body, at the Inter-Institutional Committee for Urban development, acting as the decision-maker for programmes and projects. Financial support for operating costs could be established on a multi-annual basis.

Application Procedures

Applications for EUDIF support may be addressed to the Managing Authority of the EUDIF, which could be the Executive Board of the proposed National Urban Development Operational Programme.

The National Urban Development Operational Programme (NUDOP)

The NUDOP is proposed in order to coordinate investment related to the implementation of the NUDSP, and specifically, to allocate monies associated with the EUDIF. The NUDOP consists of a document (the National Urban Development Programme) and a body of professionals tasked with devising the Programme and overseeing the allocation of monies associated with the EUDIF

The NUDOP should specify, *inter alia*, development objectives and main spending targets based on the analysis of development trends in a particular urban area or cluster. The NUOP should contain information on (a) the ways to implement projects, (b) institutions responsible for performing specific tasks, and (c) the estimated cost of NUDOP implementation and (d) the source and breakdown of required funds. As such, the NUDOP should:

- Extract and, if necessary, update the diagnosis developed in the NUDSP in order to define, justify and quantify the main objectives to be reached through the programme during its first implementation period.
- Describe the overall framework for reaching these objectives. The programme should not impose implementing projects. It should guide and encourage potential project promoters in proposing, implementing and achieving their urban development project.
- Define the conditions under which projects can be financially supported

- Define the means for supporting in reaching objectives through: implementation mechanisms; finance; assistance to stakeholders and project promoters; information, communication and promotion
- Be based on the mobilisation of local and regional actors to develop projects
- Provide the framework (regional and local) in which projects can be proposed and supported
- Identification of main issues related to boosting the economic potential of regions
- Define the methods, actions, means and organisations for developing the projects.

The NUDOP document will present investment priorities that can be financed through the National Urban Development Fund as well as from other available financial resources such as the line ministries and donor partners. The suggested operating principles of the NUDOP as follows:

- Priority means one of the NUDSP strategy priorities, financially quantified with identified financial contributions, as well as the set of the defined objectives that are subdued to the priority.
- Programming Period is the period of validity of the NUDOP that constitutes the basis for applying for finance from the NUDOP.
- Implementation instruments are the set of measures, financial provisions and eligibility criteria that are necessary for reaching one or several objectives relevant to a priority of the NUDOP
- Measures relate to a standard profile and typology of a group of projects aimed at achieving the same objective. Measures set the main eligibility and selection criteria for these projects, as well as their implementation methods and mechanisms. The measure is an intermediary stage between the priority and the project.
- “Finance (provision)” means the indicative financial resource from public and/or private origin allocated to measures and priorities for the purpose of financing relevant projects. Public contributions can be from the line Ministries or from the National Urban Development Fund, as well as from donors partners
- Eligibility criteria represent a set of requirements applicable to expenditure incurred in connection with the project implementation or management and monitoring of the NUDOP, to be fulfilled where payment of such expenditure from the Fund is sought. Eligibility criteria are complemented by a set of formal and technical requirements defined under the Operational Programme to be met by projects seeking financing from the Programme funds.

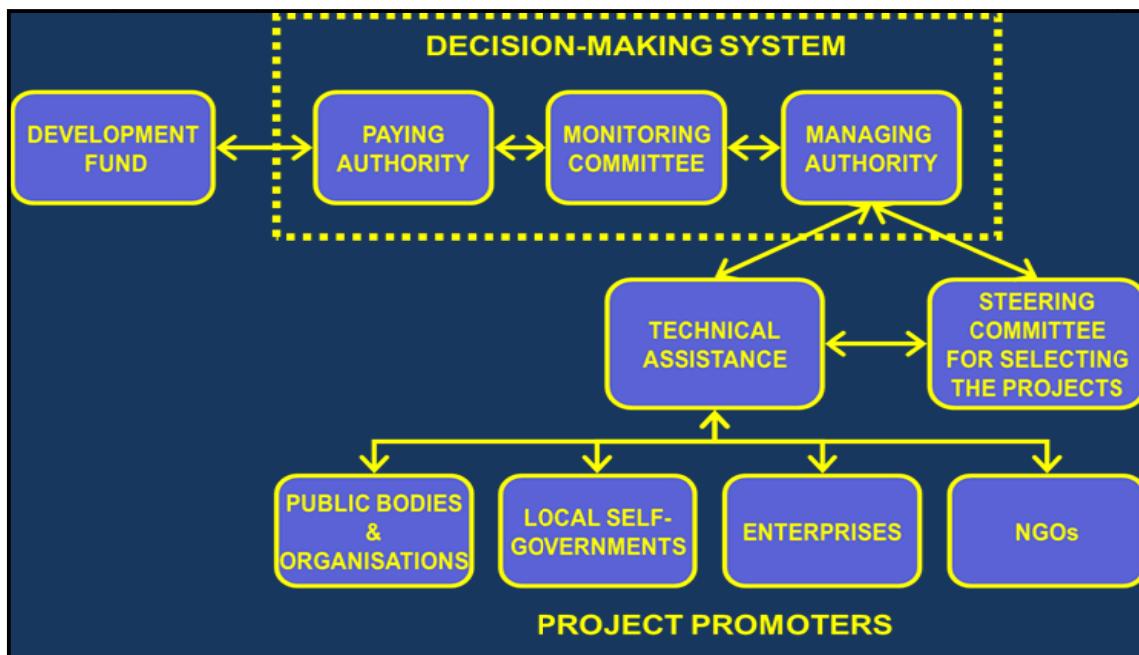
The NUDOP requires implementation structure and rules, including the following:

- *Decision-making and monitoring organisations* are to be established (the “Managing Authority” and the “Monitoring Committee”)
- *A dedicated financial resource is required*, which could be called “the Ethiopian fund for Urban Development” and would be managed by “the Paying Authority”.
- *An organisation tasked with preparing the programmes*, facilitating their day-to-day implementation and, as necessary, adapting the programmes to local contexts and challenges (the ‘Technical Assistance Organisation’)

A specific management structure should be set up in order to manage, co-ordinate and monitor the implementation of the National Urban Development Spatial Plan (see Figure 33). Together with the formulation of the Urban Development National Operational Programme and its specific funding, the management structure represents a crucial element for guaranteeing a sound implementation of urban policies in Ethiopia. The structure will comprise:

- A Public Programme Manager: the Managing Authority
- A Public Body in charge of Accountancy and Payment: the Paying Authority
- A Public entity in charge of the monitoring the NUDSP the Monitoring Committee;
- Regional Steering Committees;
- A Technical Assistance Organisation for the NUDSP;
- A network of Contact Points in Regions.

Figure 31: Proposed management structure of implementing organisation



The Public Manager of the NUDSP and NUDOP: The Managing Authority

The scale of the National Urban Development Spatial Plan, as well as the expected social, economic and environmental outcomes of the National Urban Development Operational Programme and its related projects call for an effective and efficient management. It is recommended that this management is carried out by a specific Public Programme Manager: the Managing Authority (MA).

The Managing Authority can be the state or any public or private body at national level. The MA will manage the implementation of the National Urban Development Spatial Plan, its relevant Operational Programmes, and all related finances. If the State designates a MA other than itself, it shall determine all the modalities of its relationship with the Managing Authority and of the latter's relationship with external organisations involved in the implementation of the NUDOP. If the State so decides, the Managing Authority may be the same body as the Paying Authority (combining implementation and financial management

responsibilities). This option appears to be very suitable for carrying out the NUDOP in Ethiopia. The Managing Authority shall employ the Technical Assistance Organisation. The Managing Authority will be responsible for efficient and correct management and implementation of the NUDOP. This task includes :

- the collection, processing and distribution of reliable financial and statistical information on the implementation of the programme Priority Objectives;
- the modification or the adaptation of NUDSP and NUDOP as circumstances require
- the preparation of an Annual Implementation Report, and the presentation of the Report to the Monitoring Committee for approval;
- the organisation of a Mid-Term Evaluation;
- installing a separate accounting system or adequate accounting code for all transactions relating to financing and the use of financial assistance;
- the correctness / legality of operational payments and Technical Assistance budget, including internal controls and corrective measures;
- compliance with national regulations and with international requirements regulating the use of funding from different sources;
- the promotion and representation of the Programme within and outside Ethiopia;
- information and publicity relating to Priority Objectives and their implementing provisions, formulated as implementation Measures;
- liaison with the implementing authorities and other interested parties, as appropriate.
- liaison with the international organisations involved, including annual meetings (examination of results for the previous years) and implementation of any recommendations for changes in monitoring and management procedures.

The Managing Authority is also responsible for the preparation of the decisions taken by the Monitoring Committee. Furthermore, the Manager is the instance of appeal against decisions taken on all stages of projects assessment. The Managing Authority will be assisted by the Technical Assistance in the implementation of its responsibilities and related tasks.

Public Accountancy and Payment Body: the Paying Authority

The Ministry of Finance of the Republic of Ethiopia should appoint a Public Accountant for the public financial participation in the National Urban Development Operational Programme: the Paying Authority. The Paying Authority will be responsible for all payments to be made in relation to the National Urban Development Operational Programme. In particular the Authority will be responsible for the following:

- Drawing up and submitting standard payment applications forms, and the collection of completed payment applications;
- The certification of the accuracy of declarations of expenditure presented to the relevant Ethiopian Public financing body;
- Receipt of payments from the organisations involved;
- Payments to final beneficiaries (contractors and sub-contractors);
- Ensuring that the Managing Authority exercises its financial responsibilities in a legal, regular and transparent manner .

A specific bank account should be opened to receive and issue all necessary payments. The Paying Authority should be the holder of this account.

The Monitoring Committee

The Monitoring Committee represents the State, and is in charge of the overall follow up of National Urban Development Spatial Plan and of its relevant Operational Programme. Working as an inter-ministerial body, the Monitoring Committee will draw up its own Rules of Procedure and agree them with the Managing Authority. The Rules of Procedure will be included in the National Urban Development Programme. The Monitoring Committee will supervise the effectiveness and quality of the implementation of the State financial assistance. It is responsible for the overall strategic management and monitoring of the programme. This includes in particular the following responsibilities:

- approval of the National Urban Development Spatial Plan Operational Programme, including the physical and financial indicators to be used to monitor the Programme;
- approval of adjustments to the Programme (on the Monitoring Committee's own initiative or on a proposal from the Managing Authority);
- approval of proposals to amend the programme;
- approval of the project selection procedure, including relevant selection criteria;
- annual review of progress made towards achieving the programme objectives;
- evaluation of implementation results, particularly the meeting of targets set for the Priority Objectives or the measures and the mid-term evaluation;
- approval of the Annual and Final Implementation Reports;
- decision on any work to follow-up the National Urban Development Spatial Plan Spatial Vision through the programme and to consider the results of any such work for the programme;
- approval of publicity strategy, including definition and monitoring of publicity and information procedures and Terms of Reference for Projects;
- approval of the Technical Assistance's work-plan;
- re-orientation of the project development process in order to ensure that the strategic objectives of the Programme are met;
- the use of Technical Assistance.

The Monitoring Committee will be made up of representatives of the National and Regional Authorities. Advisory Working Groups may also be formed around specific issues of relevance to the Programme.

Regional Steering Committees

Regional Steering Committees will be set up by the Monitoring Committee at its first meeting. Regional Steering Committees will draw up their own Rules of Procedure and agree them with the Monitoring Committee. The Rules of Procedure will be included in the Programme. The Steering Committees will take on the following tasks:

- Joint decision on selection of projects at Regional level;
- Co-ordinated monitoring of project implementation.
- Regional Steering Committees may also be responsible for:
- Adapting the National Urban Development Plan Spatial Vision to Regional specificities and to Set up the related studies.

Projects will be selected in compliance with a Selection Procedure and criteria set out in the Programme. Regional Steering Committees will be made up of representatives of the National and Regional Authorities, as well as of specific public and private organization participating in financing and in implementing projects relevant to the National Urban Development Plan Programme at Regional level. Advisory working groups may also be formed around specific issues of relevance to the Programme.

Technical Assistance for the National Urban Development Programme

A Programme Technical Assistance Organisation based in Addis Ababa, with decentralised units in the Regions, will assist the Managing Authority, the Monitoring Committee and the Steering Committee in the implementation of their tasks and responsibilities. The Technical Assistance Organisation will undertake the day-to-day implementation of the Programme. Its work-plan will be approved by the Monitoring Committee.

Acting as staff of National Urban Development Spatial Plan Managing Authority, the Technical Assistance Organisation will be entrusted with the proper execution of all tasks that are the responsibility of, and listed under heading, '*The Managing Authority*'. Other specific responsibilities of the Programme Technical Assistance Organisation include:

- implementation and follow-up of decisions made by the Monitoring and Steering Committees;
- preparation and provision of the information needed by the Programme Accountant in meeting its responsibilities;
- liaison with the Contact Points in Public Administrations in developing project ideas and promoting the Programme;
- facilitating and initiating the overall development of National Urban Development Operational Programme projects through a pro-active approach via the publicity strategy in close co-operation with the Regional Contact Points;
- assistance to applicants in the project development process, including guidance on technical and financial matters;
- creation of application forms, an applicant's manual and one or more models of convention between project partners;
- assistance to lead partners and project co-ordinators during the course of project implementation;
- implementation of the publicity strategy approved by the Monitoring Committee;
- implementation of Technical Assistance measures adopted by the Monitoring Committee;
- assistance in the development of National Urban Development Spatial Plan Vision.

Further tasks and responsibilities may be stipulated by the Monitoring Committee.

Table 18: Management, payment, monitoring, control & evaluation of the NUDP

FUNCTION	AIMS & TASKS	ORGANISATION	MEANS
MANAGEMENT	<ul style="list-style-type: none"> ► Within the institutional, legal and financial national systems, management is relating to the efficiency and correctness of implementation of the National Urban Development Plan and of its Operational Programme, through: <ul style="list-style-type: none"> ➔ Setting up the monitoring system ➔ Setting up the evaluation frameworks, systems and processes ➔ Adjusting the development programme(s) and implementation of the programme complement(s) ➔ Drawing up, and after approval by the Monitoring Committee, submitting the annual implementation report ➔ Ensuring that bodies taking part in the management and implementation of the assistance maintain a specific accounting system for all transactions relating to the assistance: <ul style="list-style-type: none"> • Ensuring the correctness of operation through internal controls • Ensuring compliance with other policies • Compliance with information and publicity 	<ul style="list-style-type: none"> ► Performed by a Managing Authority appointed by the State at National level ► It disposes of its own legal, administrative, financial and technical resource, organised by Departments and in charge of the coordination of all stakeholders ► At regional level, intermediate bodies are appointed by central managing authority for the implementation of regional programmes participating to implementing the regional strategy 	<ul style="list-style-type: none"> ► Sound management lays on strong, unified political will and technical assistance ► Managing authority is to coordinate the action of all bodies involved in urban development, including interventions of different Ministries
PAYMENT	<ul style="list-style-type: none"> ► Distinctive tasks from the ones carried out by the Manager of the National Urban Development Operational Programme ► Paying authority: means one or more national, regional or local authorities or bodies designated by the State for the purposes of ensuring the accountancy of the programme(s). The State determines all the modalities of its relationship with the paying authority ► Paying Authority is in charge of the financial implementation of the programme, under the form of payments on account, interim payments or payments of the final balance. 	<ul style="list-style-type: none"> ► Financing of the programmes is based on a system of budgetary commitments and payments. ► At national level a Public body is appointed as paying authority for the National Urban Development Plan and its Operational Programme (the Ministry of Finance) ► At regional level, intermediate bodies are appointed by central managing authority for paying expenses of projects participating to the 	<ul style="list-style-type: none"> ► Department of the Ministry of Finance or similar organisation, legally appointed by the State and the managing authority for ensuring sound payment of urban development fund(s)

	<ul style="list-style-type: none"> ▶ Interim payments and payments of the balance shall relate to expenditure actually paid out, which must correspond to payments effected by the final beneficiaries, supported by receipted invoices or accounting documents of equivalent probative value ▶ The paying authority shall ensure that final beneficiaries receive payment of their contribution from the financial assistance as quickly as possible and in full. 	implementation of regional programmes relevant to the national strategy of urban development	
MONITORING	<ul style="list-style-type: none"> ▶ Supervision of the National Urban Development Operational Programme by ensuring the quality and effectiveness of the implementation of financial assistance: <ul style="list-style-type: none"> ➔ Confirmation of the programme(s) complement(s) and any adjustment made to it by the managing authority; it may also request an adjustment. ➔ Approval of criteria for selecting the operations financed. ➔ Periodic assessment of the progress made towards achieving the specific objectives of the financial support. ➔ Examination of the results of implementation (including results of evaluation) ➔ Approval of the annual and final implementation reports ➔ Approval of any proposal to amend the contents of the decision on the contribution of the Financial support ➔ Suggestion to the managing authority of any adjustment it deems necessary to improve the management of financial assistance 	<ul style="list-style-type: none"> ▶ Together with the Manager of the National Urban Development Operational Programme, the State sets up a "Monitoring Committee" ▶ The monitoring committee is in close contact with the financial donors – which participate in its discussions in an advisory capacity ▶ It is composed of representatives of main stakeholders of urban development, including representatives of the civil society ▶ It meets at least quarterly for ensuring a regular follow-up of the implementation ▶ It is chaired by a representative of the managing authority ▶ It is set up at least 3 months after decision on finance and contents of the programme ▶ It draws up its own rules of procedures in compliance with institutional, legal, financial, national framework 	<ul style="list-style-type: none"> ▶ Monitoring carried out by reference to physical and financial indicators specified in the programme, the used methodology, & categorisation of fields of intervention ▶ Indicators show: <ul style="list-style-type: none"> ➔ the specific targets ➔ the stage reached in the assistance in terms of physical implementation, results & impact ➔ the progress of the financing plan ▶ Indicators are basis for the correction & adjustment of programmes through regular reports
FUNCTION	AIMS & TASKS	ORGANISATION	MEANS
TECHNICAL ASSISTANCE	<ul style="list-style-type: none"> ▶ To assist administrative structures to improve programming and secure the best possible results at its various stages ▶ To carry out preparatory measures and prior appraisal of programmes and projects (studies, expertise, analyses, 	<ul style="list-style-type: none"> ▶ At national level, technical assistance is under the authority of the managing authority ▶ It is composing a specific internal task force for preparing and implementing 	<ul style="list-style-type: none"> ▶ At both national and regional levels, multi-disciplinary teams, gathering all institutional, administrative, legal, financial and technical knowledge for the preparation & the implementation of programmes and projects

	<p>trainings)</p> <ul style="list-style-type: none"> ▶ To support monitoring, assessment and dissemination measures through: <ul style="list-style-type: none"> ➔ Development of monitoring arrangements ➔ Operation of the monitoring arrangements ➔ Monitoring and assessment of financial assistance ➔ Arrangements for checks ▶ To support other technical assistance measures (consultation processes) ▶ Support to planning and decision-making procedures 	<p>urban development policies</p> <ul style="list-style-type: none"> ▶ It is reinforced by external expertise ▶ It is permanent & sustainable all along the preparation & implementation process 	<ul style="list-style-type: none"> ▶ Financed through a specific percentage of the overall financial amount of programmes (2% to 4% of the total financial support)
CONTROL	<ul style="list-style-type: none"> ▶ Programme management requires improving management and control arrangements for allowing verification of the regularity and reality of expenditure at any time for: <ul style="list-style-type: none"> ➔ Ensuring proper use of funding ➔ Giving assurance that the expenditure made is legal and correct ➔ Enabling corrections in the event of irregularities. 	<ul style="list-style-type: none"> ▶ The system relies on the managing and paying authorities. It is for the State to ensure that the two authorities and all links in the management chain actually fulfil their responsibilities in this area by issuing guidance on effective financial systems and procedures ▶ To ensure that the systems are working, detailed checks are required on 5% of the expenditure of the National Urban Development Programme 	<ul style="list-style-type: none"> ▶ Checks can be carried out by internal audit departments or external auditors ▶ On completion of an assistance measure, a person or department independent of the managing authority and of the person or department within the paying authority responsible for certifying statements of expenditure must assess the validity of the final payment request.
EVALUATION	<ul style="list-style-type: none"> ▶ Appraising or trying measuring as objectively as possible the effects of the National Urban Development Plan, of its Operational Programme & relevant projects on the society ▶ Better understanding the process of implementation and of obtainment of effects ▶ Helping in decision-making through providing an appraisal on the value of the development policy that's implemented 	<ul style="list-style-type: none"> ▶ Specific Department of Managing Authority ▶ Part of the technical assistance staff in charge of setting up the evaluation system and the different evaluations (Ex-ante ; On-going & Mid-term ; Final ; Ex-post) ▶ Feeding the Monitoring process through evaluation tables & reports 	<ul style="list-style-type: none"> ▶ Dedicated permanent staff ▶ External support ▶ Financed under technical assistance financial part of the National Urban Development Programme(s)

Table 19: Project Evaluation Steps

STEPS	CONTENTS			
	TECHNICAL	LEGAL	ADMINISTRATIVE	FINANCIAL
-I- DEFINITION OF THE PROJECT	<p>Developing a project: Addressing local / regional needs & concerns, in line with the development programme, to be considered as a general guidance for interventions</p> <p>Leading to impacts for further development</p> <p>Able to be self-maintained once the implementation phase has been achieved (sustainability)</p>	<p>Assessing legal compliance of project with regulations</p> <p>Defining the range of legal obstacles for implementing the project (authorisations, certificates...)</p>	Assessing project idea relevance to the development programme	Checking the level of potential financial support provided by the development programme
-II- ASSEMBLING THE PARTNERSHIP	Seeking for partners able to increase the pertinence, efficiency & effectiveness of the project - multiplying impacts	<p>Checking the legality of contents and the legal capacity of partners to intervene</p> <p>Setting up the partnership agreement</p>	<p>Definition of the lead partner of the project and of roles and responsibilities of shareholders</p> <p>Establishment of the project team in charge of implementing the project:</p> <p>Technically, legally and administratively, financially, on information and communication</p>	Seeking for the necessary funding through financial contribution of partners (mutualisation of means & resources)
-III- STUDIES	<p>Setting up study programmes with the following goals:</p> <p>Defining the feasibility of all components of the project</p>	Formulating terms of reference for tender on studies, following public procurement legal rules	<p>Establishing project partnership as a team from the start through setting up a steering group for following up the project</p> <p>Applying for specific granting from the managing authority of the programme for financing studies</p>	<p>Defining partners contribution to the study programme relevant to the project</p> <p>Establishing and signing financial agreement with managing authority for financing the study programme</p>
-IV- DEFINING THE ACTION PLAN	<p>Developing project implementation action plan:</p> <p>Main stages and their contents</p> <p>Involvement of the project partnership in each stage and in the overall implementation process</p> <p>Expected results at the end of each stage</p> <p>Communication plan</p>	Defining the legal requirements for each stage of the action plan, including the duration of legal procedures which may have an impact on the duration of the project	<p>Defining the overall project engineering:</p> <p>Management and financial management</p> <p>Monitoring & reporting activities</p> <p>Coordination</p> <p>Evaluation</p>	<p>Integrating finance in the action plan (global objective cost, budget breakdown following the main stages of implementation phase, repartition of credits amongst the partners</p> <p>Setting up the financial management of the project</p>

-V- FINANCING THE PROJECT	Estimating financial costs/hypothesis & results of studies Adjusting project for fulfilling initial goals within a fixed objective cost		Checking eligibility of project expenditures for the programme Applying for specific granting from the Managing Authority of the development programme	Defining partners financial contribution to the project Establishing & signing financial agreement for the implementation of the project with Authorities in charge of managing the development programme in which project takes place
-VI- IMPLEMENTIN G THE PROJECT	Coordinating partners and operators Reporting on the status of the project Communicating on status of the project	Formulating the potential terms of reference for tender(s), following public procurement legal rules	Monitoring the implementation phase Proceeding to potential adjustments of the project	Calling for first financial contribution, following both financial agreement and project implementation action plan (invoices)
-VII- ACHIEVING & EVALUATING THE PROJECT	Defining if the main goals are reached by analysing results Analysing potential impacts Preparing potential projects based on obtained results	Proceeding to legal closure of contracts	Administrative closure of the project	Calling for last payments Closing specific accountancy set up for the project Proceeding to financial evaluation of the project (2nd phase of cost-benefit analysis) Potential financial audit

Appendix D. Transport Planning

Urban Transport Infrastructure

In order to address the current infrastructure backlog and keep pace with the rapid and substantial growth in transport demand fuelled by urbanisation and economic development, Ethiopian cities will have to make substantial investments in various transport infrastructure and services. Hierarchical road networks must be integrated with other modes, particularly mass transit systems.

Road infrastructure investment

Economic development, urban growth and the associate rise in mobility will call for continued investment in expanding the paved road. The planning, design, construction and maintenance of roads will have to consider the needs of all road users, and not just private vehicles. Enhanced integration between road infrastructure and the built environment is also required in order to make efficient use of land and infrastructure, improve quality of life and traffic safety.

It is important to note that building more roads, flyovers and elevated highways alone generally tends to lead to more and longer-distance trips due to “induced traffic” as evidenced by global experience. Although such investments are required in most cities, they can only constitute an ephemeral relief to traffic congestion and should be combined with investment in efficient public transport systems.

Investment in mass transit systems

In order to significantly improve urban mobility, infrastructure investment should be focused on high-capacity public transportation options such as metro systems, light rail transit (LRT) and bus rapid transit (BRT). Indeed, mass rapid transit is the most efficient mode of transportation in terms of space consumption per traveller and provides an environmentally sustainable alternative to private vehicles. Moreover, mass rapid transit can be a powerful catalyst for sustainable urban form. Each public transport system has its own specific use, capacity, operating speed, and associated costs described in the table 20.

Commuter or suburban rail stands at the top of public transport systems in terms of operating speed, system capacity and geographical reach. Commuter rail services typically link central agglomerations to suburban, low-density areas at the edges of a region.

Metro systems exhibit the highest passenger-carrying capacity (up to 30,000 passengers per hour per direction) and high frequency of service but require huge capital investments. Metro systems should thus only be considered as the preferred option of large metropolis where the demand justifies the high capital costs and more specifically for corridors above 15,000 passengers per hour per direction. LRT is a high frequency and medium-capacity (up to 15,000 passengers per hour per direction) rail-based solution. LRT systems typically operate at the surface level, on exclusive right-of-way lanes. Segregation is often introduced to increase speed and service reliability. LRT systems can constitute a highly cost-efficient system for medium to high-density transport corridors.

Table 20: Comparison of key characteristics among public transport systems

	Bus	Articulated bus	BRT	LRT	Metro/ Heavy Rail	Commuter rail
Service area	Regional/ urban	Regional/ Urban	Regional/ Urban	Regional/ interurban	Regional/ Urban	Suburban
Station spacing	300-500	300-500	500-800	500-800	800-2000	2000+
Operating speed (km/hr)	10-20	10-20	20-35	20-30	25-60	40-70
Service frequency (min)	3-10	3-10	3-10	5-15	5-10	15-30
System capacity (pass/hr /direction)	1,000-2,000	1,500-2,000	2,500-15,000	2,000-15,000	10,000-30,000	48,000
Cost (\$ million/km)	0.25-1	0.5-1.25	2.5-35	15-40	30-155	1.75-15
Right-of-way (ROW)	Mixed/bus lanes		Busways	Shared/ separated overhead wire	Separated	ROW

Source: Farr, 2008. Kottenboff, 2012

BRT is a bus-based solution also operating on exclusive right-of-way lanes. Although the term is used to refer to wide variety of bus-based services, the basic principles of BRT include: dedicated busways, attractive bus interchanges and stations, comfortable buses, off-board fare collection, etc. BRT systems present an interesting option for investment and should be preferred over rail-based solution, particularly in middle-sized cities with limited fiscal capacity.

Note that some BRT systems such as Bogota's BRT scheme known as the Transmilenio have similar capacity and service levels than metro systems, with a significantly lower initial cost. BRT systems can also constitute a sound alternative to rail-based solutions in metropolitan cities, for medium to high capacity corridors (5,000 to 15,000 passengers per hour per direction).

To sum up, there are various advantages and disadvantages associated with these different systems. It is thus highly recommendation to undertake a comprehensive evaluation investigating all significant benefits and costs of each transport option and the potential of the corridor prior to implementation. Each solutions should be considered as complementary to other modes rather than in opposition to them and significant efforts should be made to integrate physically but also through service timetables, fares, ticketing, etc.

Investment in non-motorized transport infrastructure - High quality pedestrian and bicycle infrastructure should be built to complement the mass transit corridor and provide last kilometre accessibility and feeder services in fixed-route transit lines.

Conclusion

Because mass transit systems and non-motorized transport cater to the vast majority of the urban population, particularly the urban poor, investment in these modes should be prioritized over the needs of private vehicles. This will not only make cities more liveable for citizens from all social background, it will make a city more attractive for visitors, and more environmentally sustainable.

Investments in expensive rail-based systems such as Metros and LRT need to include the poor as a target group, and to find innovative ways of making the system affordable for them without comprising the financial stability of the system.

In the medium run, supply-side intervention such as infrastructure investment should be complemented by transport demand-management measures (i.e. Access Restriction measures).

For longer-term mobility and urban-form benefits, transport must be integrated with land use planning, as investment in transport infrastructure alone will not deliver sustainable and effective transport outcomes.

National and regional Transport Plans

The need for a National Transport Policy prioritizing mass rapid systems and non-motorized transport

- At present, transport activities in Ethiopia are based on and led by different proclamations, regulations and directives issued by the Federal Government. The country lacks a sound and forward-looking National Transport Policy that sets out the long-term vision, goals, strategies and orientations for the various sub-sectors found in the country. Such a policy is urgently required in order to:
- Integrate transport sector policies and planning with wider economic, social, environmental and spatial development policies.
- Foster better coordination and integration across the different modes of transport and various agencies intervening in the sector at all levels of governance
- Encourage lower levels of government to set out strategies for meeting the transport needs through their perimeter.
- Based on international best practices, the main thrust of a National Transport Policy can encompass the following:
 - Define high-level objectives for transport policy-making and implementation.
 - Establish a clear legal, regulatory and institutional framework that:
 - Defines the respective roles and responsibilities of the different levels of government as well as institutional arrangements for their coordination;
 - Specifies the role of the private sector and creates the framework for coordination and partnership with public authorities;
 - Encourage lower levels of government to adopt integrated and holistic approaches to transport planning, development, operations and management. This can be achieved by requiring the preparation and implementation of Comprehensive Mobility Plans (CMPs) at the level of metropolitan areas or Regional Transport Plan or Strategies.

- Create the framework for the gradual rollout of efficient and sustainable urban transport systems. Most specifically, it can:
 - Establish mechanisms for providing capital loans and technical assistance for project planning and implementation
 - Provide guidelines and criteria on standard procedures for the technical and economic evaluation and monitoring of projects.

Regional Transport Plans

Regional Land Use and Urban Development Plans should incorporate a strong transport component. They should set out a long-term transport vision which helps achieve regional land use, development, housing and employment goals.

As for regional transport planning tools, e.g. Regional Transport Plans (RTAs), they should:

- Help achieve the long-term transport vision contained in Regional Development Plans;
- Identify transport investment priorities to undertake over the time horizon of the plan
- Create a framework for safeguarding future transport corridors from development.
- Efficiently allocate funding for capital investments, operations and maintenance according to clear transport priorities.

It is important to recognize that integrating land use and transport policies is not an even task but a complex endeavour that requires a robust institutional framework. Indeed, land use and transport policies are usually under the responsibility of different agencies with different funding streams. Integrated transport and land use planning implies that transport agencies have a stronger voice in land use planning, housing and regional development decisions, and vice-versa. Cities that have been able to successfully implement integrated land use and transport policies (e.g. Copenhagen, Singapore, Curitiba) have been able to do so through strong leadership, accompanied with evolved institutions, skilled technical staff and adequate levels of funding.

Comprehensive Mobility Plans

The issue of urban mobility is a complex one requiring a strategic and comprehensive approach. Global experience indicates that Comprehensive Mobility Plans (CMPs) constitute an effective instrument for analysing the existing and future transport and mobility needs within a given area in a holistic and coherent way. It is also a means by which cities can set out a long-term vision for their transport system and make that vision a reality.

A key recommendation of this report is thus to encourage cities with over 200,000 inhabitants to prepare a sound and effective Comprehensive Mobility Plan for a specific time horizon (generally five to ten years). Because transport systems are most efficiently planned and administered at the metropolitan level, it is highly recommended that CMPs are not confined to cities' administrative borders only but take a broader, metropolitan approach.

In terms of policy orientation, there is a general consensus that the focus of urban transport policies should be placed on accessibility rather than infrastructure. In other words, CMPs should primarily focus on moving people and not vehicles. This implies prioritizing investment in public transit and non-motorized transport over private vehicles.

In order to be effective, CMPs should:

- **Clearly define the long-term vision and high-level objectives for the transport system in the area** (*What do we want to do?*). CMPs generally include a vision statement of what the transport system would look like at the planning time horizon. In addition to the vision statement, CMPs should set both short-term mobility enhancement objectives (5-10 years) and long-term targets (beyond 10 years). This is important for the successful implementation of the vision as objectives provide a benchmark to measure actual achievement and impacts of the policy. CMPs should aim at striking a balance between various and sometimes competing objectives which could include elements such as the need for mobility and ease of access, safeguarding public health, environmental sustainability, economic viability and social equity. The objectives must be measurable and achievable. For instance, short to medium term goals may include the following: specified modal split, road accidents and fatalities or fleet vehicles conversion targets (for further details, cf. section X on Monitoring tools).
- **Outline orientations and strategies that will deliver the transport vision** (*how do we want to do it?*). CMPs should outline the short, medium and long-term transport interventions planned. The links to the high-level objectives and how these interventions will work together to deliver the transport vision should also be indicated. As with objectives, strategies should be measurable and achievable.
- **Establish an implementation plan.** International evidence indicates that in many cases CMPs tend to be a mere wish list of projects and a statement of good intentions because they lack a clear and effective implementation plan. An effective implementation plan should include:
 - An inventory of the different projects and initiatives to be developed in a phased manner
 - A well-defined framework of targets and performance indicators to monitor progress and measure achievements
 - Indicate which lead partners are responsible for implementing each intervention as well as key stakeholders that may be required to contribute to the implementation of the scheme
 - A financial plan that highlights estimated costs and potential funding sources.

Note that CMPs should be consistent with the goals of the national transport policy and other higher-levels planning documents. They should also be adequately linked with other planning instruments such as Urban Master Plans and Neighbourhood Development Plans

Adequate stakeholder engagement in the preparation of CMPs, including public consultation with the wider community, is necessary to make sure that the plan addresses the needs of all users and is accepted. Once formulated, CMPs should be reviewed on a regular basis in order to measure its performance and reflect evolutions in the mobility needs as well as policy changes. Financial and technical assistance should also be provided from the national government in order to encourage the preparation of CMPs by cities.

Urban transport governance

At present, various actors from different levels of government are involved in the planning, management, funding, regulation and monitoring of urban transport systems with very little synergy and coordination between them. This institutional fragmentation results in several issues such as:

- Lack of integration among transport modes and components at the metropolitan level, thus hampering inter- and multimodal transport management
- Failure to integrate transport, land use and the build environment
- Inefficient use of already scarce funding when agencies are found to be working against each other. A notable example is the destruction of transport or other urban infrastructure (drainage infrastructure) during the construction of transport infrastructure.

Vertical coordination between all levels of governance and agencies with sector-specific responsibilities (e.g. for each of the transport modes) is thus necessary to make sure to there is mutual support and that actors are not working against each other. Cross-agency committees constitute an effective tool for vertical coordination and should thus be promoted.

Horizontal coordination at different levels: as urban centres grow and expand beyond their historical administrative boundaries, it will also become increasingly important to establish mechanisms for horizontal coordination between local governments found in a given metropolitan conurbation.

Global experience indicates that **Metropolitan Transport Authorities (MTAs)** can play an important role in transforming public transport systems at the scale of a conurbation. Indeed, establishing a single purpose agency to plan, implement and operate public transport schemes minimizes the need for coordination across multiple agencies and provides the opportunity to achieve modal integration.

A key recommendation is thus to set up a Metropolitan Transport Authorities (MTA) in all cities with a population of over 500,000 inhabitants. Typical responsibilities of MTAs include:

- Strategic planning of integrated public transport network
- Capital financing of projects
- Coordinating the different types of public transport
- Fare policy which includes fare-setting and handling the ticketing system
- Tendering and contracting with operators
- Monitoring of operations and maintenance
- Marketing and promotion of public transport and non-motorized modes of transport

Some MTAs such as Transport for London (TfL) and Singapore's Land Transport Authority (LTA) are responsible for both public transport and road network management, with notable examples being Transport for London (TfL) and Singapore's Land Transport Authority (LTA). This provides the unique opportunity to manage public and private transport as a single system: revenues generated from private car users can be allocated for the development of the public transport network.

MTAs main also have responsibilities over real estate management as illustrated in the case of LRT in Singapore and Hong Kong's MTR. In order to be effective, MTAs need to be appropriately mandated and resourced with sustainable funding to finance transportation investment and service management. Funding must be sustainable and predictable. Moreover, it is important that the established MTA comprises representatives of the municipalities found in its service area.

Monitoring

Monitoring is essential to determine whether the performance of the transport system is improving or deteriorating and to measure the impacts of policies and investments. Monitoring is not only critical to inform decision-making processes, it is also instrumental to effectively communicate with stakeholders and the public at large on progress made and the need to orchestrate further strategies.

Serious note must be taken of the current lack of accurate, long-term and easily accessible data regarding transport networks and mobility trends in Ethiopia. Although transport data can be found at the national level, its scarcity at the regional and particularly the urban scale constitutes a major point of concern. For instance, a city such as Addis Ababa does not have regular traffic counts whereas such indicators already exist at the national level. Moreover, when data is available, it is the complexity of collecting it that constitutes a constraint.

Thus, another important institutional task to support effective and system-wide planning is to establish a sustained and standardized monitoring and data collection framework for the transport system. When developing such a framework, it is essential to gather stakeholders from transport and other sectors in order to discuss and agree on the following issues:

- What are the initial objectives of policy?
- What are the most important measures of progress? What are the relevant statistics and indicators that can be mobilized?
- Who collects them? Is there a need to establish a lead agency responsible for centralizing relevant transport data?
- How these performance indicators link to the strategies that are being deployed towards a sustainable transport development scenario?

The monitoring framework should focus on both passenger and freight transport.

Moreover, a lead agency responsible for the **systematic collection of relevant statistics and indicators could put designated**. With regards to relevant indicators, it must be noted that the way the mobility problem is conceptualized will highly influence the type of data collected and eventually have an impact on the justifications for different transport projects. In this regard, monitoring indicators should include more than the basic infrastructure supply indicators (i.e. kilometres of infrastructure, number of buses) or funding disbursement. Instead, the monitoring framework should have a clear user-focus and emphasis on citywide results and impacts of transport initiatives and investment. Simple indicators that can be monitored with data collected through low-cost surveys, simplified models as well as police and health records are recommended (see table below).

Figure 32: Examples of key monitoring indicators.

Mobility indicators <ul style="list-style-type: none">•Road traffic levels•Average travel time from origin to destination•Time lost to congestion•Mode share•People served	Accessibility indicators <ul style="list-style-type: none">•Percentage of population within X minutes of Y;	Economic development <ul style="list-style-type: none">•Economic cost of time lost to congestion•number of jobs created and new housing start in an area as a result of new transport facilities
Environment <ul style="list-style-type: none">•Number of days of poor air quality•CO2 emissions from transport	Road safety <ul style="list-style-type: none">•Number of fatalities, serious injuries, total casualties•Casualties per trip or per distance travelled	

Capacity building

Developing an efficient public transport system requires an empowered and capable public sector. At present, institutions and entities responsible for transport lack the technical skills to cope with the growing mobility challenges. There is a need to build and upgrade technical and managerial capacity in planning and operating various aspects of urban transport at all levels of government.

The lack of skilled manpower is particularly poignant in the newly revamped rail sub-sector and should thus be prioritized. Also lacking is the technical skill to plan and develop integrated urban and transport operations. The skill-sets required by the two professions are very different and employ different premises and logic. There is thus a need to oblige both urban and transport professions to employ more joined thinking for the successful implementation of transport-oriented development projects.

Significant opportunities exist to enhance technical and managerial capacity through training and professional development programs. The national level has a crucial role to play in providing professional training. Direct exchanges among peer institutions and benchmarking also offer significant opportunities. Key staffing required includes: traffic or transport engineer, urban planner, road engineer, railway engineer, transport economist, GIS officer, etc.

Financing

The construction, operation and maintenance of efficient urban transport systems in Ethiopia's rapidly growing cities will require substantial funding. In order to meet this funding challenge, the participation of all levels of government will be necessary. The State has an important role to play in the financing of infrastructure investment, particularly for mass transit systems, which generally require substantial funding. This could be achieved by establishing a National program of grants (as well as low-interest and flexible) loans for urban mass transit systems. International donors also contribute significantly to infrastructure investment.

Funding would also have to be drawn from the private sector through various mechanisms such as advertising and taxation. Contracting approaches such as Public-Partnership Partnership (PPP) can also play an important role in the funding of transport investment and operation. However, multiple factors, including cost, risk transfer, technical capacity, efficiency, and implementation timeline must be weighted when looking into PPP schemes. Agreements must be carefully negotiated to ensure that there is a net benefit to the public, while ensuring at the same time a reasonable return on private investment.

Other innovative funding sources such as land-value capture mechanisms could also be introduced to support the construction and operation of mass rapid systems. The main rationale behind land-value capture is that building transit systems increases the surrounding land value and thus provides additional property tax revenues which could be used to repay bondholders. Although such mechanisms have worked in specific contexts, it is important to note that various risks are associated. Real estate development takes time and revenue increase may come more slowly than anticipated, thus raising risk and interest rates. Moreover, real estate markets fluctuate and forecasted growth may happen more slowly than originally anticipated. Land-value capture must thus be consciously considered while keeping in mind that it rarely covers the entire infrastructure investment. It must be combined with other more stable and predictable funding sources.

In addition to infrastructure investment, significant amounts of funding will be required in order to operate and maintain adequate transport service levels. Agencies operating transport systems will need to be adequately sourced with stable and predictable funding streams.

Because transport is considered as a semi-public good, some level of subsidization will be required to operate transport services. Moreover, very few transit agencies in the world manage to cover their operating costs with only fare revenues, thus justifying the need for subsidies from local, sub regional, regional and even national levels.

Dedicated revenues from sale taxes could also be mobilized to fund operations. In the long run, as the Ethiopian economy develops, it might be necessary to include more and more user charge in order to fund transport systems. Funding for public transport and non-motorized over private vehicle needs.