وزارة الشؤون
البلدية و القروية
Ministry of Municipal & Rural Affairs

ABHA
City Profile

مستقبل المدن السعودية
FUTURE SAUDI CITIES

UN HABITAT
FOR A BETTER URBAN FUTURE

Future Saudi Cities Programme
City Profiles Series: **Abha**

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ABHA

METROPOLITAN AREA

FUTURE SAUDI CITIES PROGRAMME

CITY PROFILE

Urban form of Abha


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Contents

1 INTRODUCTION

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1.1 About the Future Saudi Cities Programme

The Future Saudi Cities Programme is a joint programme developed by the Saudi Ministry of Municipal and Rural Affairs (MoMRA) and UN-Habitat, implemented in close cooperation with the municipalities of 17 major Saudi cities. The cities have been selected based on their different population sizes, geographic distribution, and a range of criteria based on capacities and economic potential to create a more balanced regional development among the cities of Saudi Arabia. The chosen cities include Riyadh, Makkah, Jeddah, Taif, Madinah, Tabuk, Dammam, Qatif, Al-Ahsa, Abha, Najran, Jazan, Hael, Arar, Al Baha, Buraidah, and Skaka.

After undertaking city-level reviews in the 17 cities, five cities were chosen as a representative cross-section, for in-depth analysis. The city-level reviews considered the linkages between urban and territorial planning by examining the city within the relational context of its sub-region and exploring specific issues at the neighbourhood level. These reviews, when referenced with City Prosperity Index reports and validation processes in the Rapid Planning Studio workshops, were used to extrapolate strong, evidence-based conclusions that relate to the planning system as a whole.

Applied research, with a strong focus on action-oriented conclusions, was used to collect evidence to diagnose the strengths and weaknesses of the planning system and local planning practices in each city. The methodology utilised design tests and demonstration projects as avenues to apply and analyse potential solutions, before concluding on policy recommendations.

UN-Habitat's three-pronged approach considers spatial planning in relation to legal and institutional frameworks, in addition to financial mechanisms. In this way, success criteria for the sustainable implementation of a spatial plan should include flexible but enforceable rules and regulations, in addition to a financing strategy and projections.

As a pragmatic explication of this approach, three local demonstration projects, representing essential elements of a strengthened and improved planning system, have been developed. These were elaborated to include schematic designs and feasibility studies, that can later be transformed into implementation plans. Such implementation plans are projected to be undertaken by MoMRA, in collaboration with other partners in the Kingdom.

In order to facilitate this process, a joint "FSCP Urban Lab" was created as a vehicle to strengthen endogenous capacities and to develop tailored tools, and instruments. The Lab, composed of international expertise from the planning, legal and economy branches of UN-Habitat Nairobi office, has been working with Saudi-based staff in the UN-Habitat Riyadh office (selected by MoMRA), to enhance knowledge exchange and to apply a learning-by-doing method to the programme.

As such, all 17 cities have been simultaneously engaged in a capacity-building strategy that included foundational learning, and 'on the job' training, culminating in Saudi-specific advanced training. This training was based on the planning-system conclusions and recommendations, that the FSCP produced. Thus, the Urban Lab functions as a tool to generate evidence whilst additionally strengthening capacities through a process of learning-by-doing.

1.2 Saudi initiatives for sustainable urban development

The Saudi Government, along with the respective Ministries, and in line with a larger country-wide transformation process, has made several efforts aimed at the sustainable development of its growing cities. These contributions vary from plans at the national level, like the National Spatial Strategy (NSS), to strategies and plans at the regional level, cutting across various sectors towards realising Vision 2030. The FSCP recognises these efforts as positive, supporting Vision 2030 goals to realise a sustainable urban environment for the Kingdom of Saudi Arabia. The FSCP acknowledges and builds upon the current tools, plans, and strategies as part of a comprehensive assessment and suggests variations and improvements where appropriate.

1.3 Objectives of the City Profile Report

1.3.1 Scope of the city profile

The city-profile combines MoMRA's new strategy, with a review of existing studies, plans, and strategic documents, such as the review of the Kingdom of Saudi Arabia (KSA) National Spatial Strategy (NSS) to identify and address the root causes of problematic conditions outlined in the preliminary findings. The report acknowledged low uptake of the NSS by regions, utilities and ministries, as a key weakness. The issue of horizontal (sectors) and vertical (scales) integration is thus a key challenge that the FSCP aims to address going forward.

Policy recommendations for improving urban planning frameworks and practice shall be structured through a multi-scalar lens, considering the city as a continuum in the urban fabric, that should grow from the neighbourhood to the wider city-region, whilst influenced by dynamics and regulations at the national and supranational levels. This ensures that policy recommendations for these cities do not operate in isolation from the city's envisioned role in the administrative region and the national system of cities.

1.3.2 Objectives of the city profile

The City Profile Report brings together diagnostic urban analysis and aligns that analysis with the UN-Habitat sustainable development framework and the Saudi Vision

Panoramic view of Abha

2030. It performs as a thinking tool that constitutes together an assessment tool and guidance for the current and future planning of the city, whilst defining a clear strategy for sustainable development.

The definition of an ad-hoc strategy is rooted in an evidence-based approach to the issues, building upon both primary and secondary data collection and analysis. The profile, as well as the Programme as a whole, uses the data collected by the City Prosperity Initiative (CPI), to identify significant trends and challenges at the city level. This evidence is then combined with reviews of existing planning documents, and cross-referenced with multi-scalar GIS spatial analysis, to define the above-mentioned ad-hoc strategy.

1.4 City Profile Methodology

1.4.1 Evidence-based input approach

The evidence-based planning approach creates a deeper understanding of the spatial dynamics of the urban area, by combining and comparing urban datasets such as demographics, density, land use, natural features, and accessibility analysis.

The evidence (data) is reflected in the form of indicators that can be compared with best practice standards and benchmarks for sustainable urban development. Not only does this provide a clear perspective on the main developmental issues, but it also quantifies the projected effect of future development proposals on the indicators applied in the analysis.

The programme recognises that the methodology, on which policy recommendations guiding improvements and adjustments in the planning system are based, needs to be evidence-based. For this purpose, different methods were integrated to first provide the necessary body of evidence on which to build an understanding, and full assessment of issues before making recommendations for the respective cities.

The elements constituting the evidence-based approach are primarily constituted of the following:

- Reviews of existing policy documents and plans;
- CPI index;
- GIS spatial analysis.

All of these elements are utilised in a cross-scalar diagnostic methodology that incorporates quantitative and qualitative evidence. The method used to generate evidence-based policy recommendations, which develops capacities and engages stakeholders in all 17 cities, provides conclusions derived from both top-down and bottom-up approaches, cross-cutting all scales of planning.

View on the Green Mountain in Abha with cable car connection

By analysing how the structures of spatial, socio-environmental and economic issues interact at different scales of influence, the diagnostic methodology moves from the national to the neighbourhood scale, tracking the interdependencies within the city's physical development patterns, and seeking to decrypt the reasons behind them.

1.4.2 The reviews

Several reviews of existing policy documents and plans were undertaken with the purpose of a) extracting information useful to the understanding of the context, and the city itself, and b) assessing their contents based on three criteria: content relevance, process integration, and effectiveness. The reviews focused on assessing the:

- National Spatial Strategy;
- Regional Plan for Asir Region;
- Abha Metropolitan Sub-regional Plan;
- Abha Metropolitan Structural and Indicative Plan.

1.4.3 The City Prosperity Index assessment report

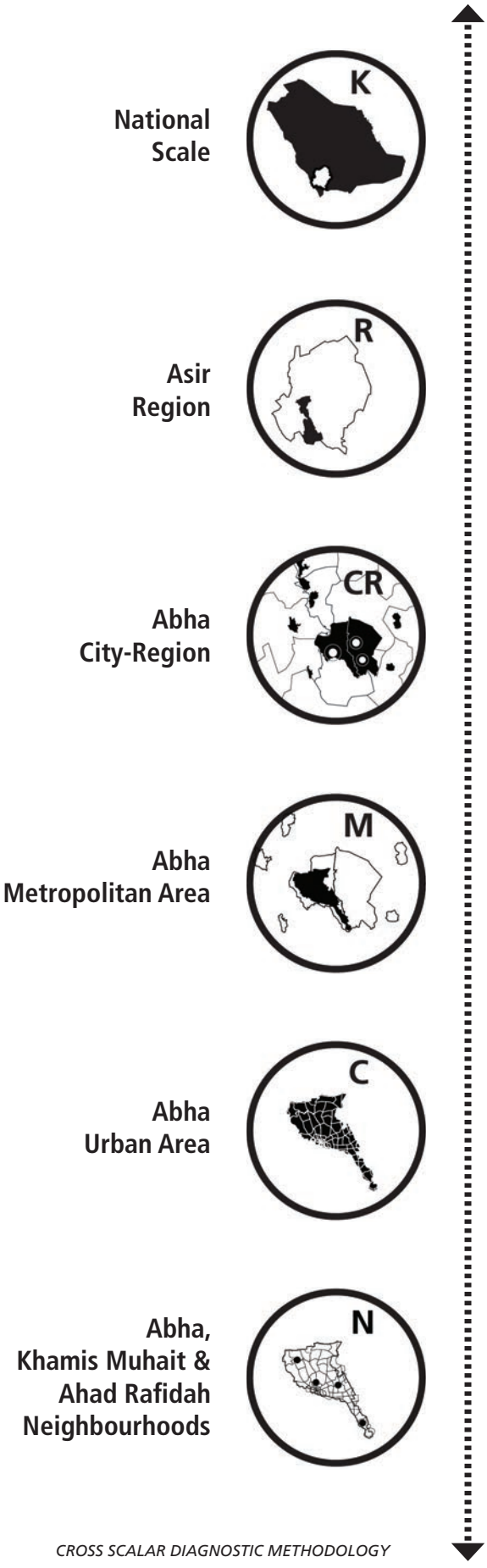
The City Prosperity Index is made up of six dimensions that serve to define targets and goals that can support the formulation of evidence-based policies. These include the definition of city-visions and long-term plans that are both ambitious and measurable. The six dimensions are:

- Productivity;
- Infrastructure;
- Quality of life;
- Equity and inclusion;
- Environmental sustainability;
- Governance and legislation.

These dimensions have been assumed as guiding principles in the spatial assessment of Abha. There are ten detailed spatial indicators at the FSCP city profile level that link into the 72 flexible indicators of the CPI assessment.

1.4.4 The GIS spatial analysis

The spatial reflection of the above indicators highlights detailed patterns of development and the interactions and dynamics associated with movement, densities, and land use within the urban system. This process enables a dynamic understanding of the physical expressions of weaknesses and strengths in the urban system and the main issues to be addressed. The effect of proposals for future development can also be assessed by use of the same indicators.



NATIONAL AND REGIONAL SPATIAL CONTEXT

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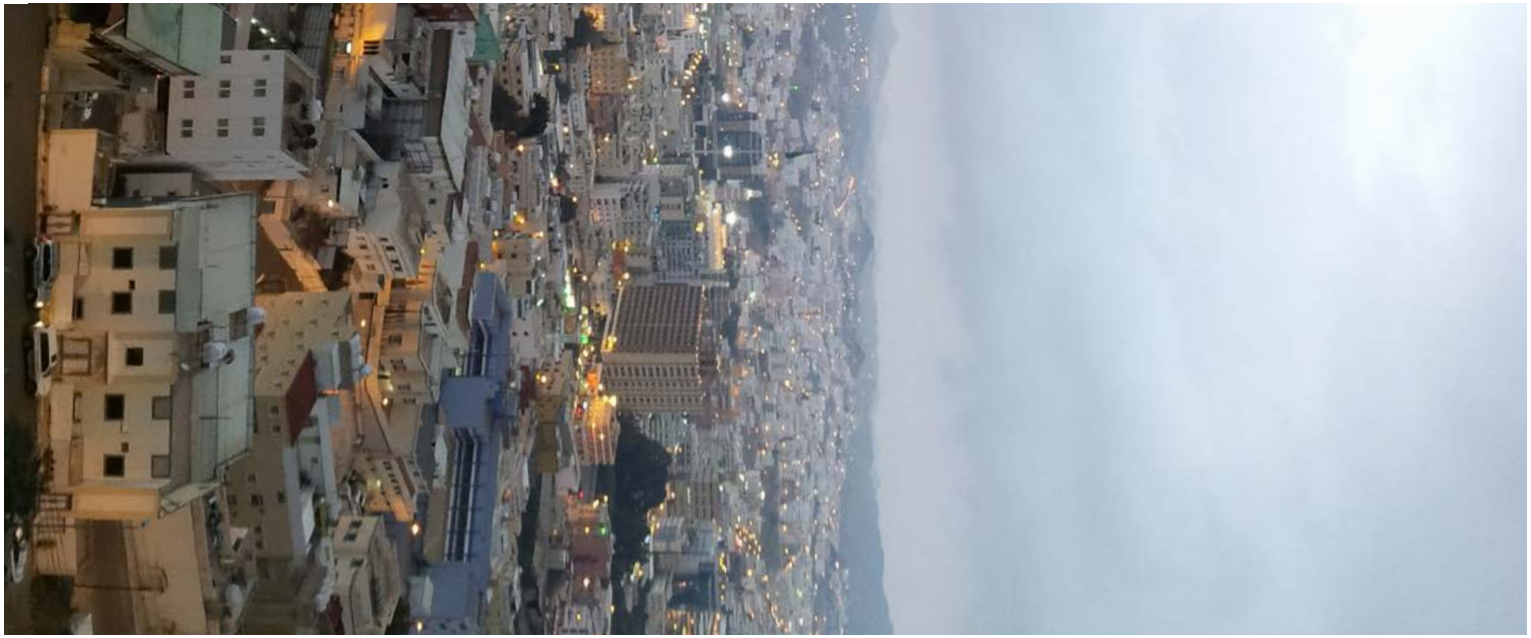

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2.1 The Region's Role in the Kingdom of Saudi Arabia

2.1.1 Historical background

Historically, the development of the Asir Region was mainly attributed to its geography and climate. Favourable weather conditions, such as the constant supply of rainwater, were an important asset for tribesmen in the early years as it laid the foundation to develop agricultural activities. The major settlements in the region grew around the primary wadis as the lands were suitable for farming.

2.1.2 Geography and location

The Asir Region is located in the Southwest of the country and covers an area of 81,000 square kilometres. It is part of the Arabian Highlands, and towards the South, it shares a short border with Yemen. Its capital, Abha, is situated in the Southern part of the region, and it is the headquarters of the regional governorate. The metropolitan area of Abha includes the cities of Khamis Mushait and Ahad Rafidah and lies 80 kilometres East of the Red Sea, and 850 kilometres Southwest of Riyadh, the capital.

Located at an altitude of 2,200 metres above sea level, surrounded by green pasture, the Abha Metropolitan Area (AMA) is characterised by a moderate climate, enjoying the highest amounts of rainfall than any other part of the Kingdom. The area West of Abha is uniquely characterised by numerous streams, gardens, forests, and green hills, and borders the Asir National Park, which is equipped with several recreational areas like campsites, hike trails, and picnic grounds. The park is spread over 2,000 hectares and was the first National Park to open in Saudi Arabia.

In the area surrounding Abha, the climate is relatively cold, with the lowest summer temperatures in the region. The mean annual rainfall is about 280mm, with peaks between February and April, followed by short rains in July and August. The temperature rarely rises above 35°C with an average temperature of 19°C maintained all year round.

2.1.3 Demographic background

As mentioned, Abha is a major urban centre in the Asir Region, forming a substantive metropolitan area with Khamis Mushait and Ahad Rafidah. Abha's population grew rapidly over the past four decades. In 1974, the total population was approximately 31,000, and it more than tripled in 1986

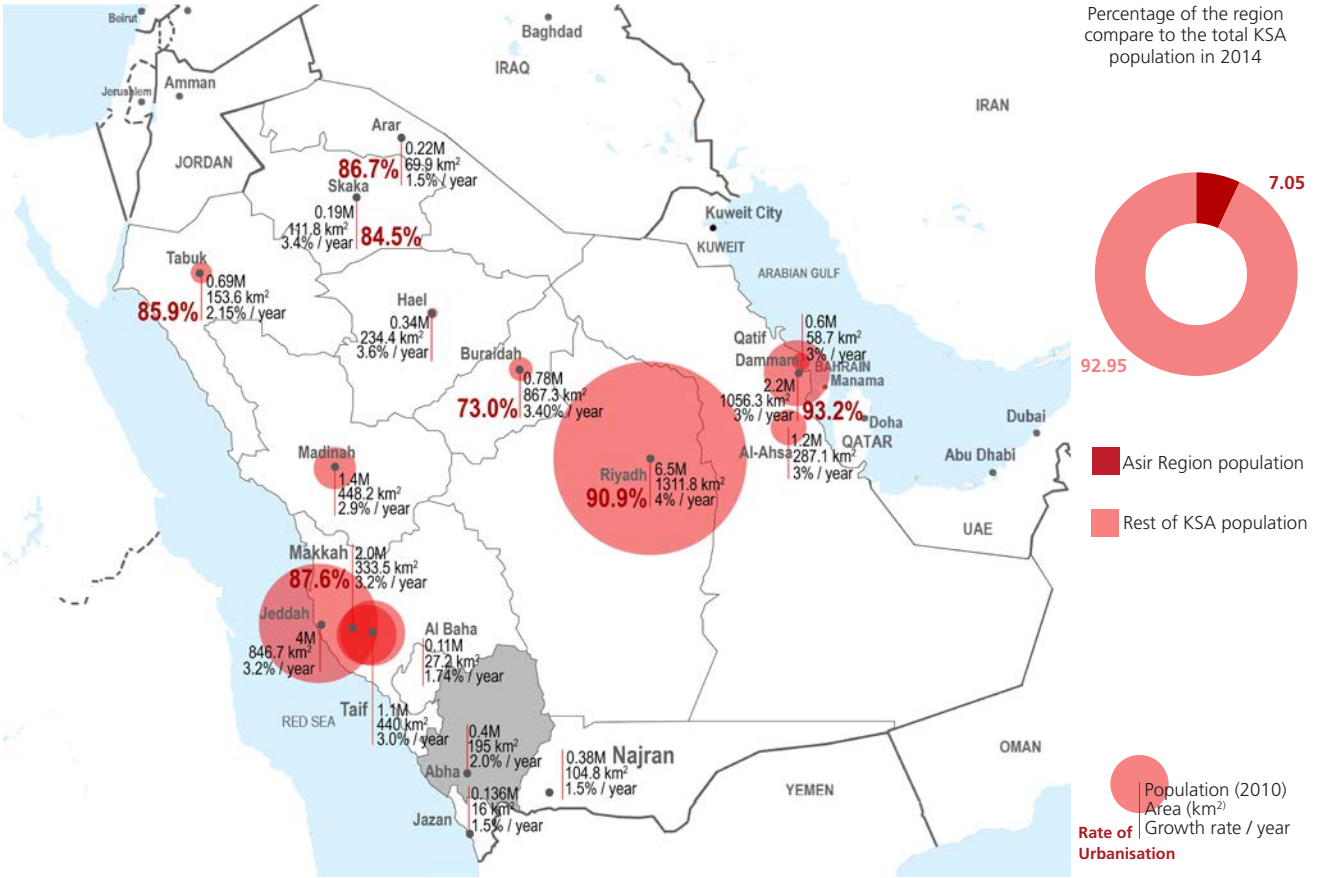


Fig. 1. Population distribution, growth rate and urban areas within the Kingdom of Saudi Arabia

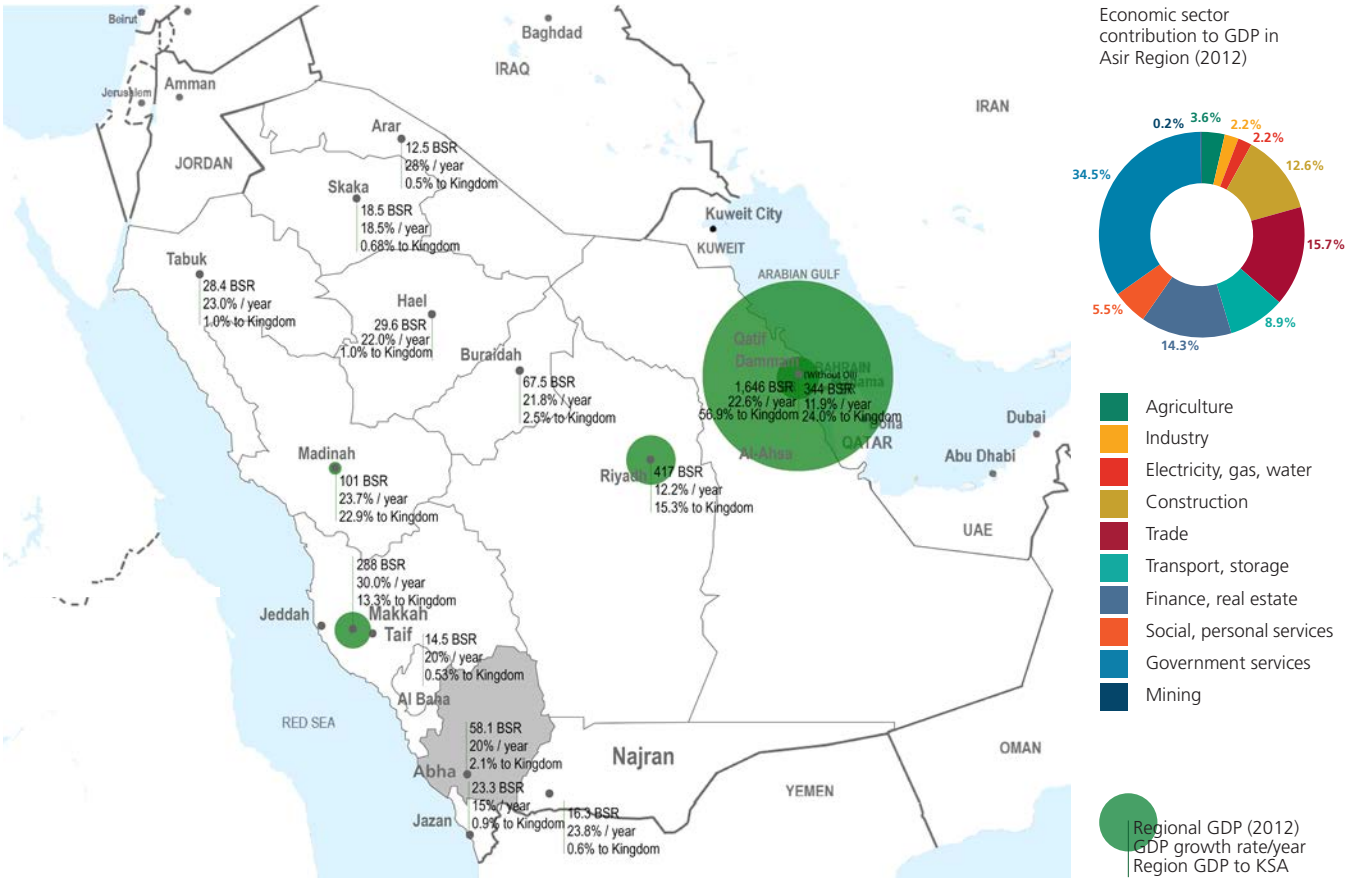


Fig. 2. Regional Gross Domestic Product and economic sector contribution

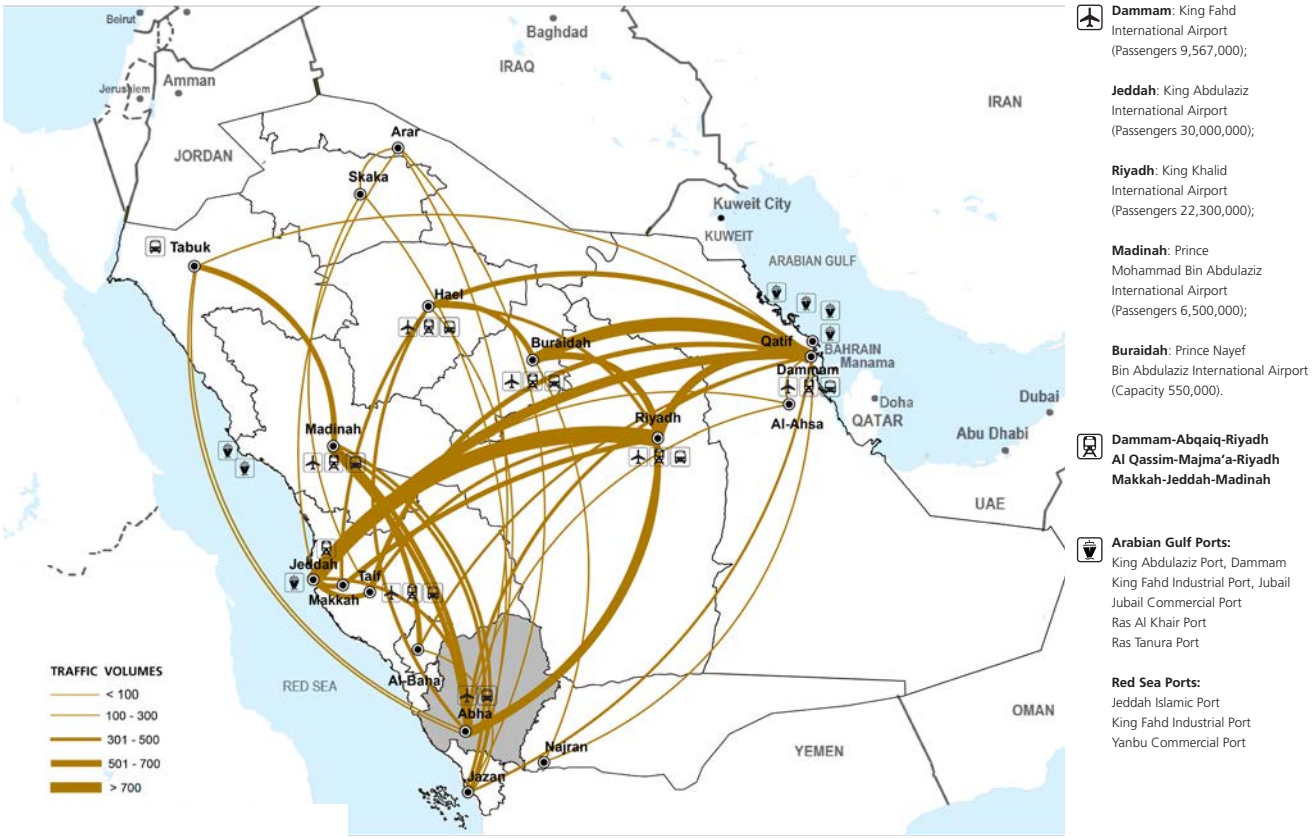


Fig. 3. Transport connectivity between Saudi cities

growing to 100,000, and 102,320 by 1992. This number doubled again in 2004, and by 2010 the population was over 240,000. The CPI report indicates that by the year 2016, the city had a population of 420,000 inhabitants, which is 21% of the total population for the Asir Region. However, this is second to Khamis Mushait, which hosts 25.3% of the total regional population. On average, each household is composed of five members and the majority of the population is made of the youth, with 46% below 24 years, 54% below 30 years, and only 4% of the population above 65 years.[1]

Population and Migration

Estimations from the Department of General Statistics and Information shows that, in 2014, the total population for the Asir Region was 2.15 million people. This constituted 7% of the total population in the Kingdom was 30.8 million people in 2014. According to the Census of 2004, the Asir Region had a population of about 1.69 million people, while in 2010 the number had risen to 1.98 million people. Between 2004 and 2014, the region experienced an average annual growth rate of about 2.07%, which was inferior to the average national growth rate.

2.1.4 Socio-economic background

The Abha Metropolitan Area (AMA) is a major tourist destination in the KSA, attracting large numbers of summer visitors because of its cool and pleasant climate. Cooler temperatures and milder climates, fertile soils, rainfall, and mountainous scenery make the region amongst the most renowned across the entire Arabian Peninsula and the Saudi government has been actively promoting tourism in this area.

Both Abha and Khamis Mushait are characterised by distinct traditional architecture, with vertical houses made of mud and stone, built on the hillsides or along the primary wadis so as to use natural elements and winds to regulate the temperature during hot days and cold nights. Amongst the most popular structures are the Shada Palace and Al Muftaha Village for Fine Art, both located within the city of Abha.

Abha hosts various events, like summer festivals, sports events, and traditional music performances, which attract visitors across the Kingdom, while Khamis Mushait is well known for its weekly market held every Thursday. Due to the high numbers of people and visitors, trade has become a major economic activity. The local markets sell fruits, vegetables, and handicrafts like ornate silver Bedouin jewelry, and hand-woven basketry are specialty items. According to the CPI report for the city of Abha, the unemployment rate in the city is moderately low at 4.47% in 2016 and household income is relatively high at USD (PPP) 34,835, about SAR 130000.

Gross Domestic Product

The Gross Domestic Product of the Asir Region in 2012 was 58.1 billion riyals, representing 2.1% of the total GDP of the Kingdom, and 4.1% without crude oil and gas. For the period between 2009 and 2012, the average growth rate of GDP was about 20%. The trade sector ranked first in terms of region's contribution to the GDP with 15.7%, followed by financial services and real estate sector with 14.3%, construction and building with 12.6%, transport, storage, and communications with 8.9%, collective and personal services with 5.5%, agriculture with 3.6%, and industry with 2.2%.[2] The Asir Region has diverse economic sectors whose high contributions saw an increase in GDP per capita from 18,000 riyals in 2009 to 28,000 riyals in 2012.

2.1.5 National connectivity

Air transport

The Asir Region has two major airports; Abha International Airport and Bisha Domestic Airport. These two airports provide transport services for passengers and goods within the region and link the region to the rest of the Kingdom. Abha International airport is the main international entry and exit point providing transport services to and from other cities in the Kingdom and areas beyond the Saudi borders.

Initially, the military airbase in Khamis Mushait called the King Khalid Air Base served local flights. The Economic Report of Asir emphasises air movement as one of the basic and vital pillars of present and future economic development in the region. The rapid development of infrastructure and direct flight connections to Riyadh, Jeddah, and Dhahran was facilitated by Abha's modern airport, developed over the last two decades and has increased access to the area.

Roads Network

The Asir Region is crossed by a major intercity highway, which was built between 1971 and 1975, to connect Taif Abha and Jazan, and is about 750 kilometres long. It is an important backbone of the Saudi transportation system. The AMA is connected to Riyadh through Bisha or Wadi Al Dawasir. A coastal road, completed in 1979, also connects Jeddah and Abha. The system of secondary roads provides good connectivity within the region, with some of the roads contouring to the dramatic and picturesque reliefs, which are a substantial part of the region's scenery.

Abha's natural landscape and vegetation

2.2 Regional Development Patterns and Dynamics

2.2.1 Regional organisation

Administrative boundaries

The Asir Region is located in the Southwestern part of Saudi Arabia, surrounded by five administrative regions; Riyadh in the Northeast, Najran to the East, Makkah and Baha Regions to the North, and Jazan region to the South. The region is administratively divided into the Principality of the Region, and fifteen governorates: Abha, Khamis Mushayt, Bisha, Al-Nammas, Maha'il, Sarat Ubaida, Tathlith, Rijal Alma', Ahud Rufaidah, Dhahran Al-Janoub, Balgern, Majardeh, Tanomah, Alberk, and Turaib. The region contains a long coastline, stretching over 140 kilometres along the Red Sea. Its location is one of the most important elements of the region's economic development, which relies on tourism and agriculture.

The Regional Plan for the Asir Region

In the Saudi context, sectors define a set of functions and economic focus areas for each of them based on their existing and potential strengths. The Regional Plan for Asir points out three key development sectors for the region; Hadaba, Jabali (includes the Abha Metropolitan Area, and Tohama sectors), Hadaba, (the Northern development sector of the region, and functionally strong in industrial, tourism, and services activities), and Jabali sector, (contains AMA, and mainly engages in mining, tourism, and agricultural activities). The AMA provides commercial services and is an industrial zone. The commercial areas distinctly define one of the core functions of Abha. Tohama sector contributes a quarter of the total area extent of the region, and is made of coastal areas, and extends inland to the West facing slopes of the mountain range. This area is rich in farming and livestock keeping, which is the main source of agricultural products and is favoured by the rainy conditions and low variation in temperatures. Traditionally, agriculture was the main economic activity for the locals, specialising in fruits, vegetables, and coffee production. Fishing is also a crucial economic activity in this sector, and it is practiced in the coastal centres, including Birk and Qahma.

The city of Abha is the central focus of major administrative functions in the region. Economically, it is one of the areas driving both the regional and national economy, as prescribed by the NSS, drawing most of its revenue from tourism and trade. Abha is ranked as a National Growth Centre and has a crucial role in spurring development in the Southwest of the Kingdom. The region's mountainous topography has led to the development of four scenic cable car paths linking several

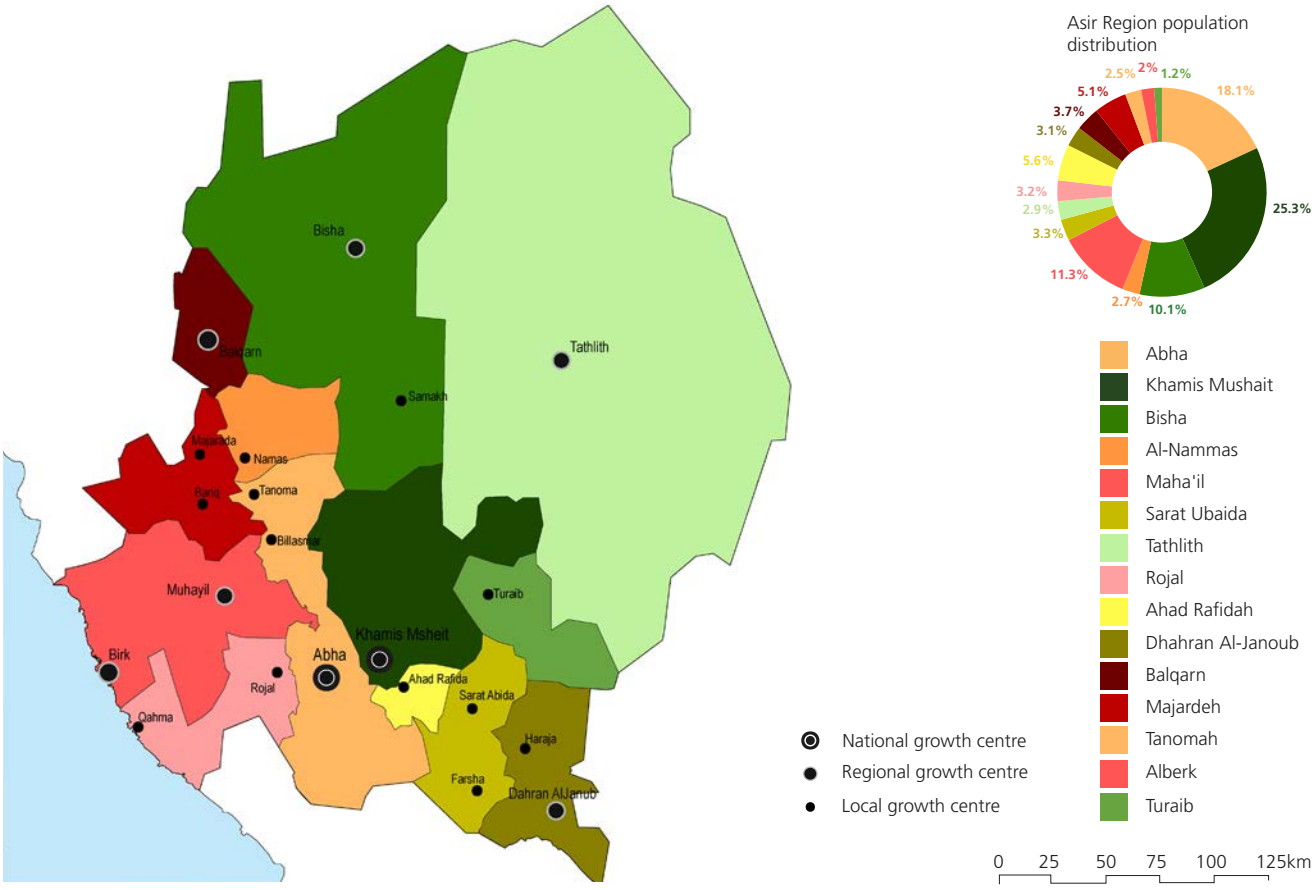


Fig. 4. Administrative boundaries and population distribution in the governorates

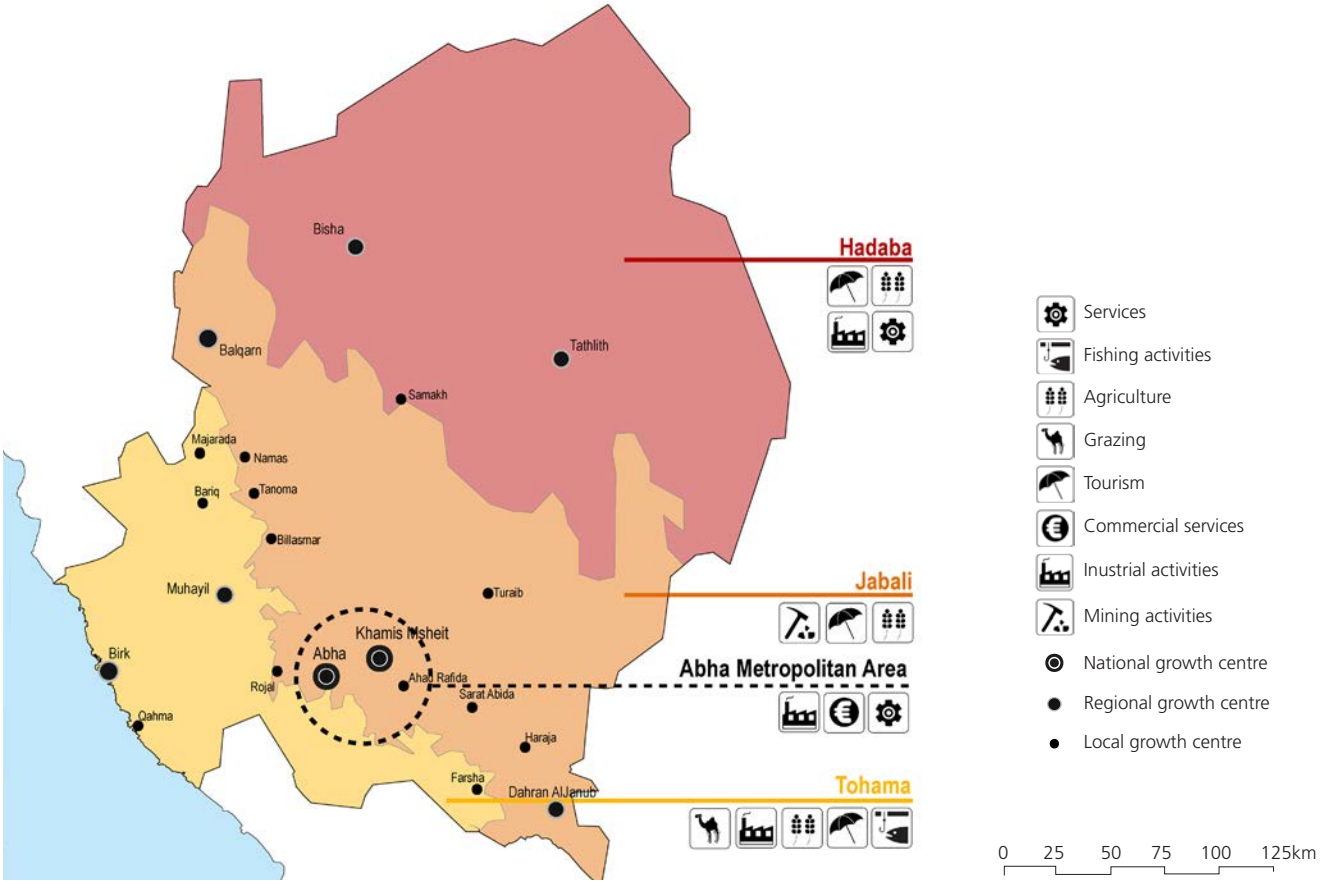


Fig. 5. Development sectors according to the Regional Plan for Asir Region by the Amanah

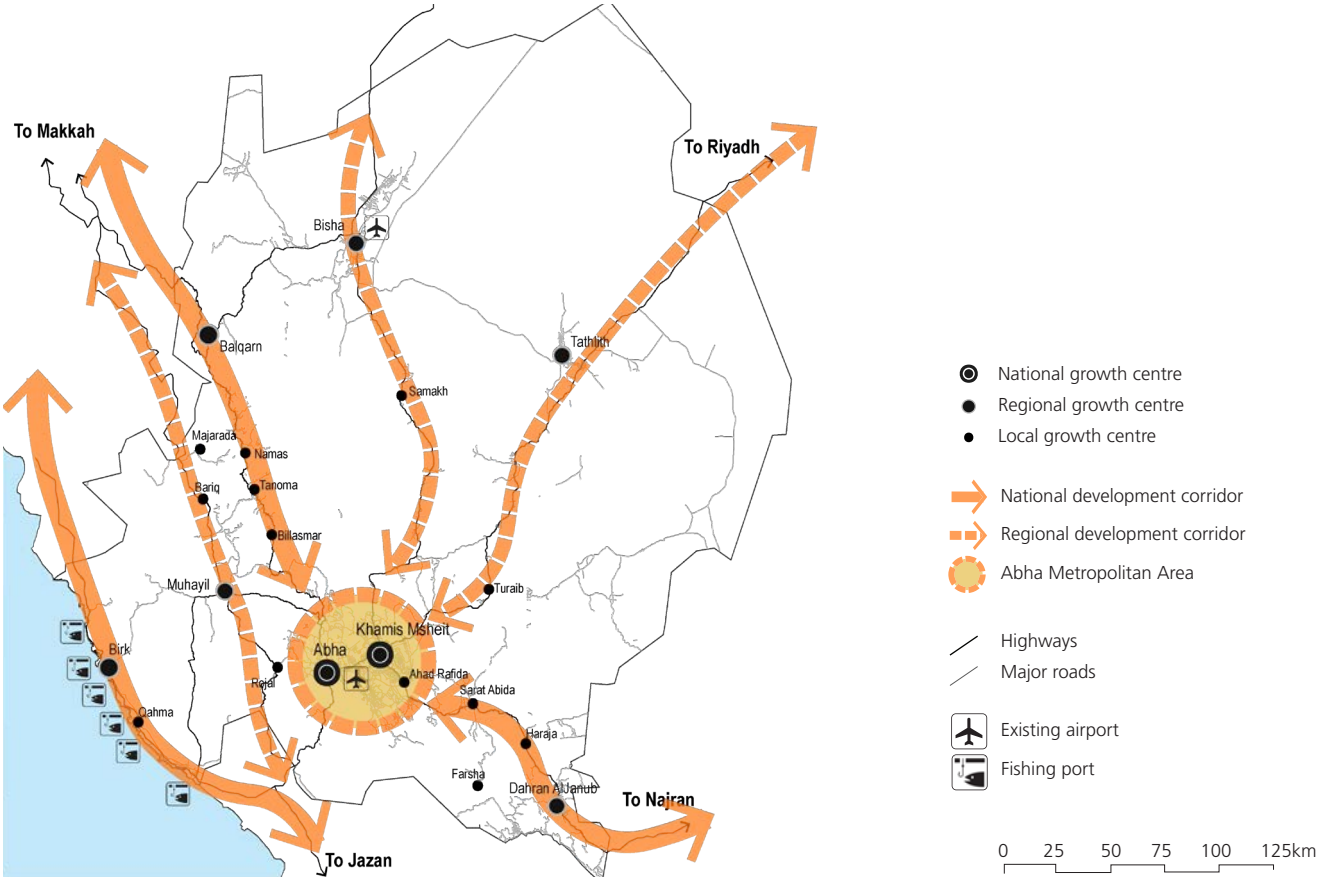


Fig. 6. Development corridors according to the Regional Plan for the Asir Region by the Amanah

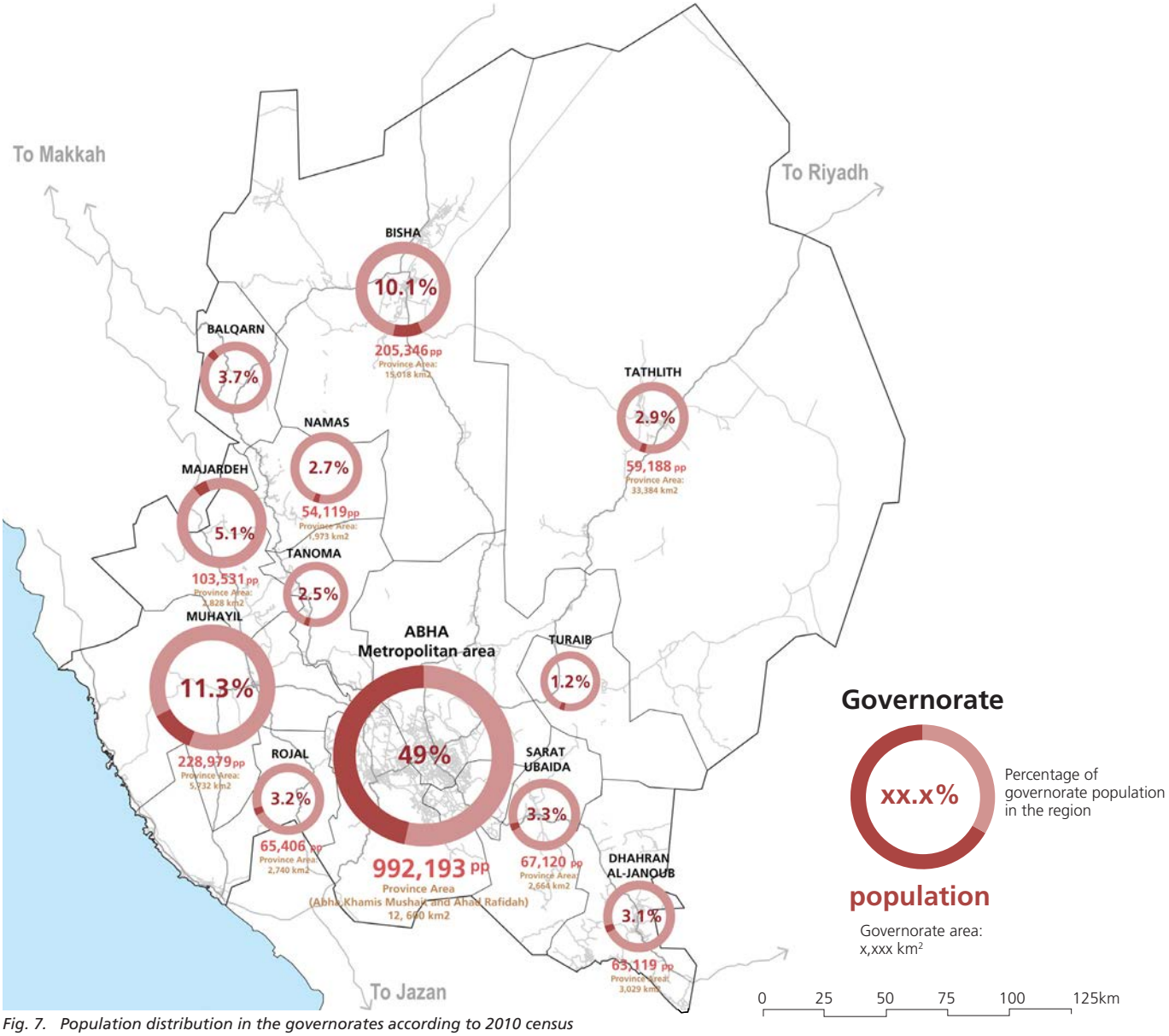


Fig. 7. Population distribution in the governorates according to 2010 census

resorts, including the cliff top rides at Al-Sooda and Al-Habala, the Lakeside, and the Thera Mountain located in New Abha. The cable car is an exciting way to tour the spectacular rugged terrain scenery, being a major attraction amongst both local and international tourists.

The Regional Plan for the Asir Region identifies two important development corridors, according to their scale of influence. The city plays a fundamental role in supporting the other urban and rural areas by providing commercial, and administrative support, and hosting major regional services. Abha, Khamis Mushait, and Ahad Rafidah form the Abha Metropolitan Area, which is the main urban area at the crossroad of national and regional corridors. A major national development corridor runs from the North to the South connecting the regional core to Makkah and Najran, in the North and South respectively. The regional development corridors supplement the national corridors, in addition to being the linkage between the cities and urbanising rural towns. Abha forms one of the nodes along the coastal logistic corridor linking the Northern nodes, like the future Neom City, King Abdullah Economic City, Jeddah, and Jazan Economic City in the South. It is worth noting that the Rijal Alma heritage site, located in Abha, is an important node along the historic pilgrimage road from Yemen, being part of a religious corridor that crosses the region.

2.2.2 Structures and resources

Movement infrastructure

An analysis of the regional accessibility shows that about 60% of the population can access the capital of the governorate within a 15-minute drive. This implies that, overall, the region has moderately good road connectivity, which is the main means for accessing goods and services in the core cities across the region. Public transport in Asir is partially developed. The major operational routes are the Abha-Riyadh highway via Khamis Mushait city, Abha, and Makkah. On these routes, a SAPTCO bus operates to Riyadh in the East, Najran to the

Built form of Abha

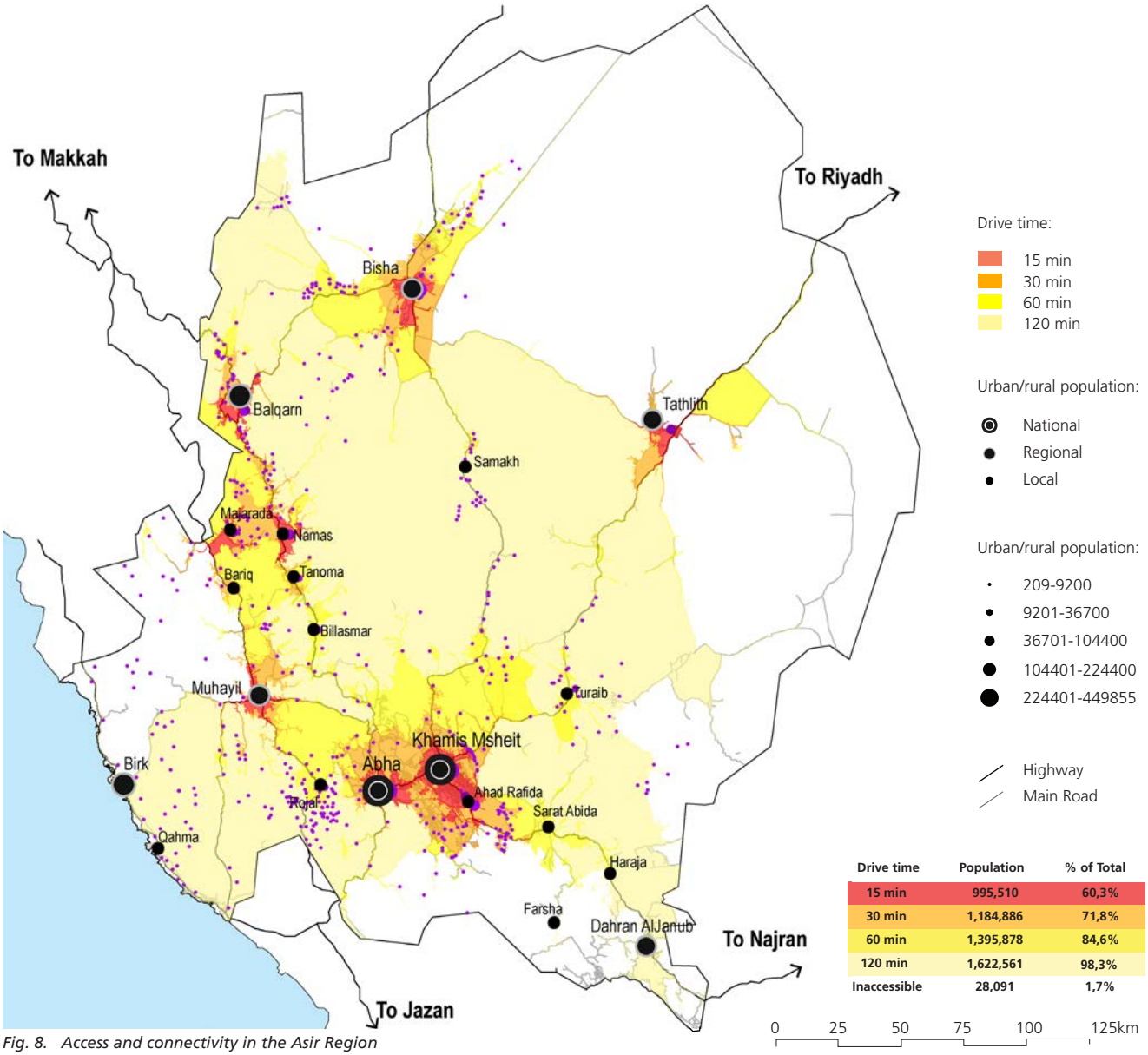


Fig. 8. Access and connectivity in the Asir Region

South, and Makkah through Al Baha to the North. This is a relatively efficient mode of public transport as it opens up the region towards other major cities across the Kingdom.

The total length of paved roads under the supervision of Municipalities in Asir, by the end of 2012, was approximately 15,605 kilometres, accounting for 17.1% of the total length; about 91,000 kilometres of the Municipal of Rural Affairs roads in the Kingdom. By the end of 2012, highways, dual, and single carriage roads operated by the Ministry of Transport amounted to about 16,000 linear kilometres, while the agricultural and dirt roads were 21,610 linear kilometres.

Economic resources

Besides the tourism sector, the mining and quarry industry is considered to be one of the most important and promising sectors in the Asir Region given its tremendous untapped potential, raw materials, and natural mineral resources characterised by their feasible economic sizes, large reserves, and ability to support industrial operations. Some of the minerals available are gold and silver in Alhajjar, limestone, and granite in Al Shahdan Mountains in Bisha and Feldspar in Bia Valley. There are also occurrences of unexploited mineral deposits in the mountains including nickel, copper, and zinc.

Environmental elements and urban clusters

About 40% of the total Asir Region land area is desert with sand dunes. This is the Northern part of the region where the two major cities of Tathlith and Bisha are located. The major land use in these areas are tourism and agriculture. The region is traversed by the Asir Mountain Range, separating the coastal fishing areas from the commercial, agricultural, and industrial towns inland. With a stretch of about 140 kilometres of coastline, the Red Sea coastal plains covers about 100,000 square kilometres. To the West of Abha City is Asir National Park, one of its kind in the Kingdom, and covers 2,000 hectares. Crops are mostly cultivated on the steep terraced mountainsides.

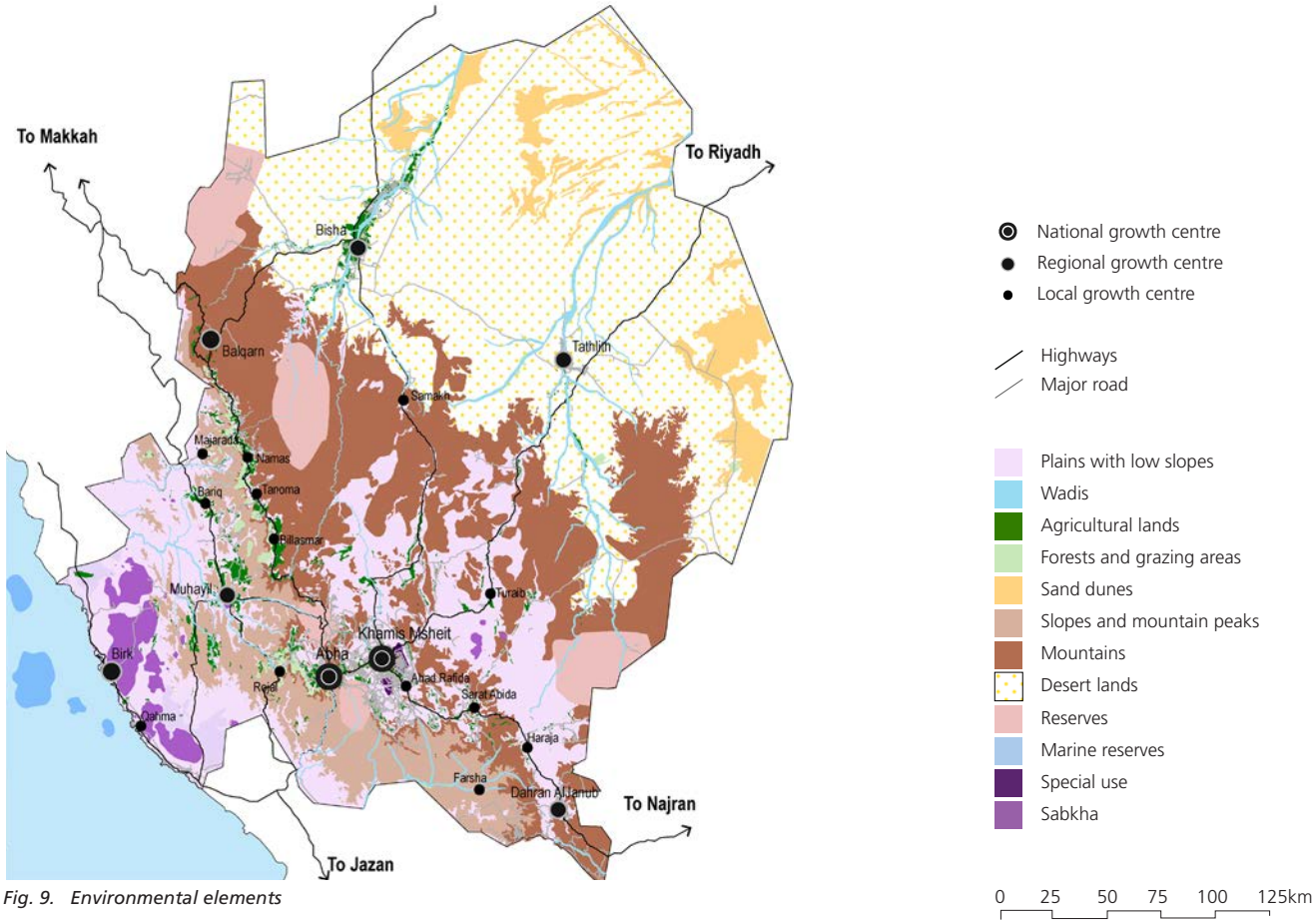


Fig. 9. Environmental elements

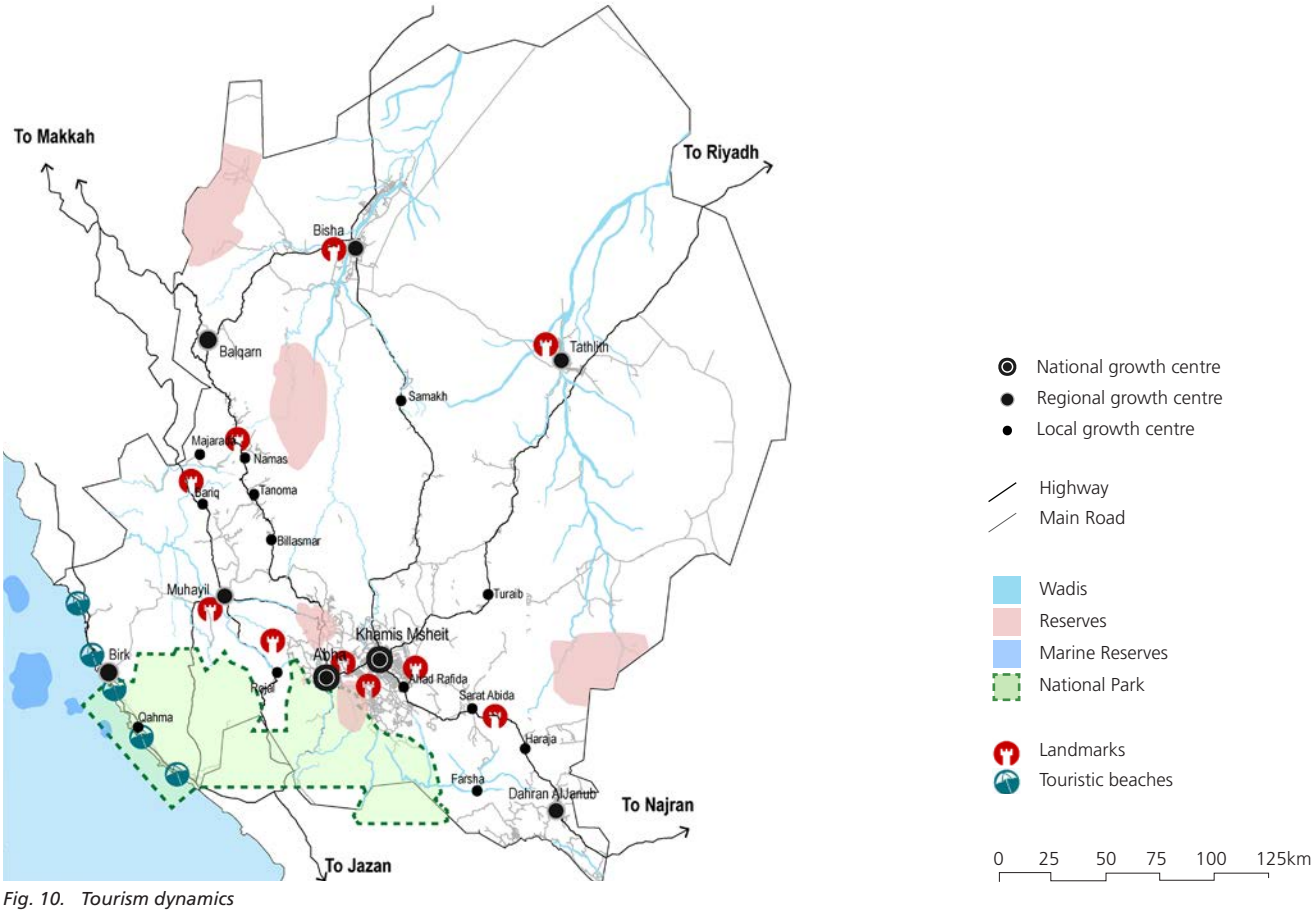


Fig. 10. Tourism dynamics

The growth and expansion of the two major cities in the region, Abha, and Khamis Mushait has spurred the emergence of other smaller urban centres neighbouring them. Clustering of urban centres is witnessed in areas within an approximate radius of 30 kilometres from Abha and Khamis Mushait where centres like Ahad Rafida, Al Wadeen, Tendaha, Ar Rashda, and other smaller centres have grown. Generally, the areas within the regional capital's sphere of influence, whose immediate influence is about 50 kilometres in radius Eastwards and Southwards, have been transformed into an urban setting forming urban clusters.

2.3 City-region Structure and Dynamics

2.3.1 Structural elements

The main urban core in the region is the Abha metropolitan, which is made up of Abha and Khamis Mushait cities including the town of Ahad Rafida. This multifunctional core remains the key focus in the economy of the whole region. The agglomeration pools together several urban functions with some sectors emerging due to the existence of compatible sectors. In between Abha and Khamis Mushait is the Abha international airport, which serves the city-region.

Abha is identified with a unique touristic and cultural functionality. Tourism has influenced a lot of land uses in Abha City leading to a number of noticeable developments including tourist accommodation and places or hotels, the establishment of agencies like travel and real estate, green public spaces like gardens and parks spread across the city. The city also has several economic activities like commercial and educational centres, which support its main economic functions. Within the extents of the metropolitan extent, North of Khamis Mushait, lies the Asir Industrial City, which hosts a number of manufacturing and processing activities. Khamis Mushait is a multifunctional node with commercial, industrial, and service functions. There is strong connectivity between Muhayil, an agricultural town, and the metropolitan area. Generally, the city-region has great potential likely to attract more domestic and foreign investment in various viable economic activities, such as like tourism and mining as highlighted by the Asir Economic Report of 2014.

2.3.2 Functional connectivity

Abha, Khamis Mushait, Ahad Rafidah, and the surrounding satellite cities share the same facilities of regional importance, connected in terms of population migration, trade, water provision and, thus, form a single city-region. As previously mentioned, they form the Abha Metropolitan Area (AMA), which is the main urban core in the city-region and is inhabited by 50% of Asir Region's total population. This metropolitan area stretches to the South, engulfing the town of Ahad Rafidah, and to the North of Khamis Mushait, including Asir Industrial City, making this area a multifunctional core. This main urban core works together with a more extensive system of cities, where Muhayil town is the main agricultural centre, and Bric and Al Shuqaiq are the main coastal nodes, located on the major connection axis between Abha and Jeddah. The major source of water supply for the Abha City-region is the water desalination plant situated in Al Shuqaiq, on the coast of Red Sea, about 125 kilometres West from the city of Abha.

A major coastal road connects Jeddah and Abha, and is a link to other cities to the North, was completed in 1979. A SAPTCO bus connects the city-region to Riyadh to the East, Najran to the South, Madinah to the North, and other major destinations within the kingdom.

The Abha International Airport is located between the two major cities of Abha and Khamis Mushait, and is the main airport in the region, with international connections to Yemen (Sana'a), Egypt (Cairo), Qatar (Doha), and the UAE (Dubai, Sharjah), as well as to other national destinations. The construction of the Dutch-designed Abha Airport began in mid-1975, and flights began in 1977. Before then, domestic flights were serviced by the King Khalid Military Airport, near Khamis Mushait.

2.3.3 City-region environmental elements

The Asir Region is popular for its moderate temperature and climate all year round, which in the summer is noticeably more comfortable than other areas of the country. Generally speaking, it has heavy rainfall, green pastures, and agricultural plateaus. The region enjoys the highest level of rainfall of any part of Saudi Arabia, becoming noticeably cooler during the "low-sun" season. On average the region receives 300-500 mm of rainfall annually with the wettest season being February to April while short rains follow in July and August. The highest rainfall is received in the highlands while the Eastern part of the region is generally hot. The city-region scores an average of 21°C in the summer and 15°C in the winter. This type of climate is influenced by the city's proximity to the mountain range.

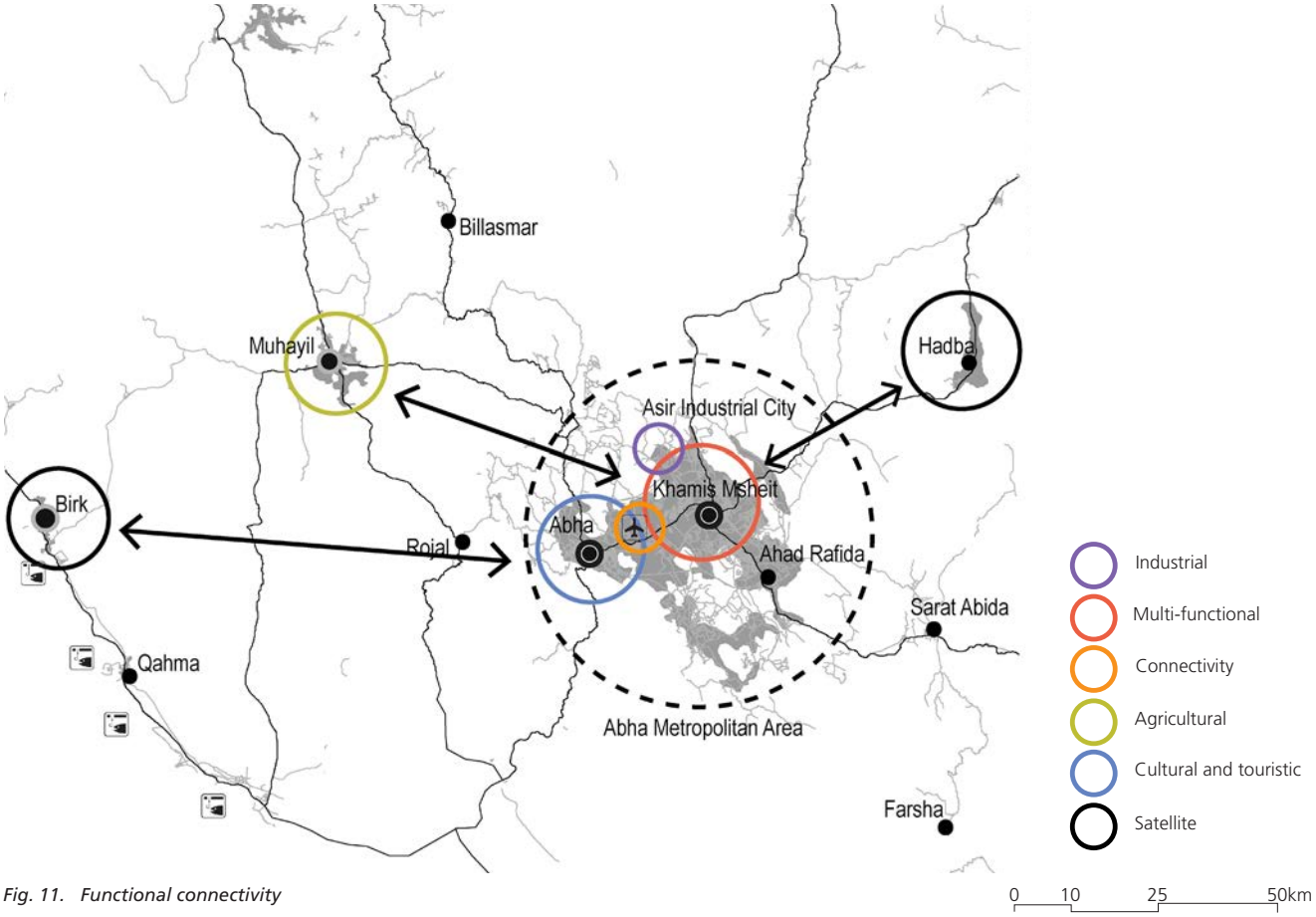


Fig. 11. Functional connectivity

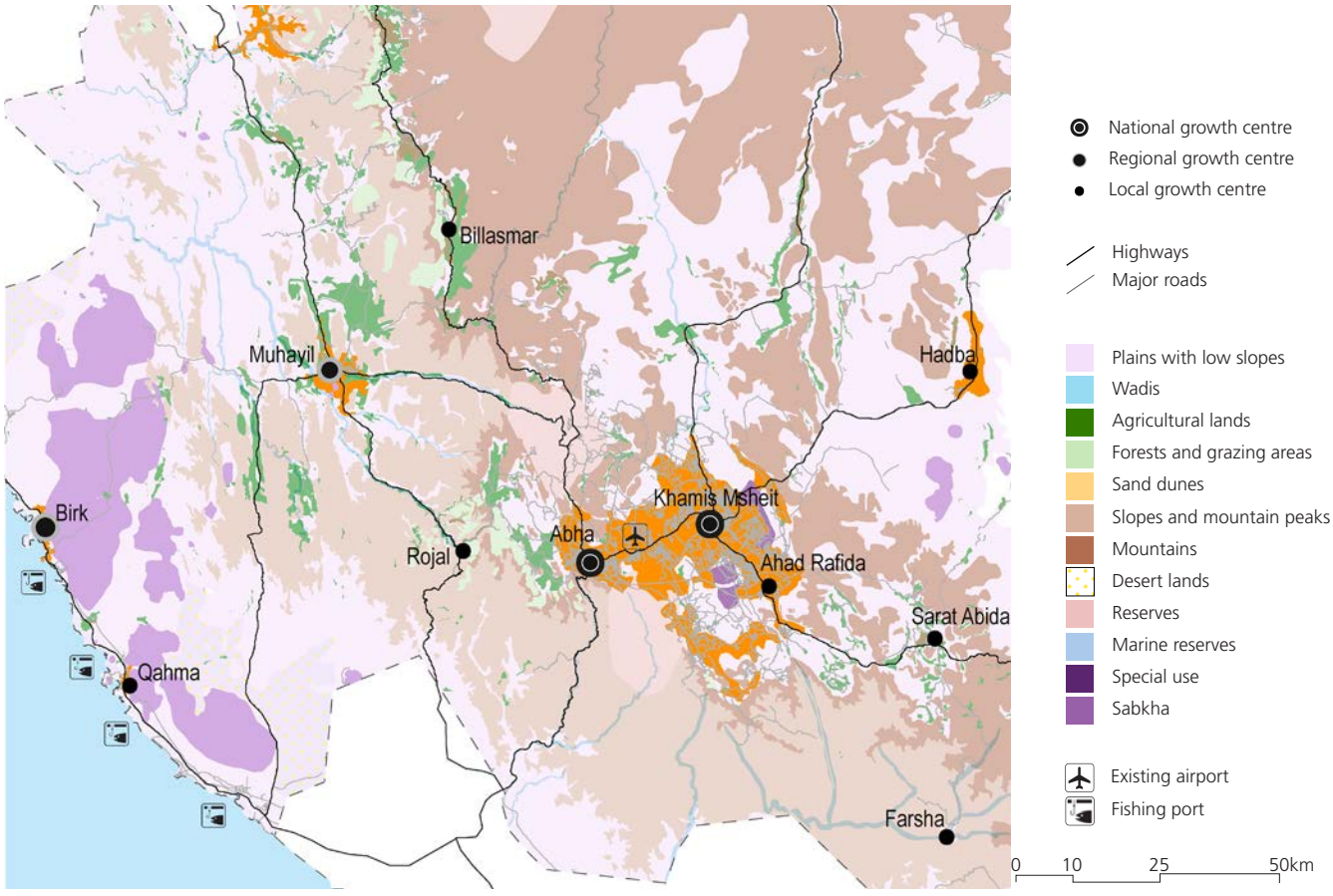
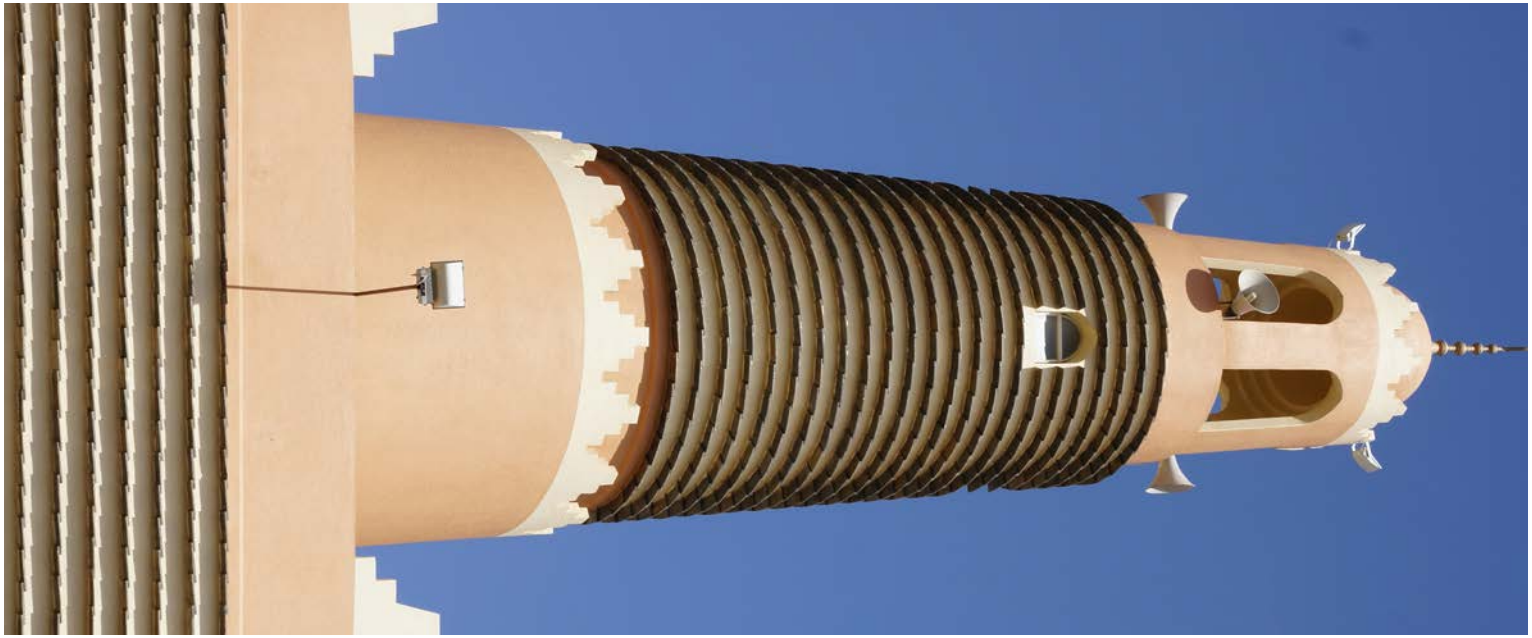


Fig. 12. Environmental elements in the city-region

GOVERNANCE AND FINANCIAL FRAMEWORKS

3



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3.1 Legal and Institutional Context

The legal planning framework of Abha Metropolitan Area (AMA)[2] is shaped by the Kingdom's legislative environment, which is based on Islamic Sharia Law. The law-making authority is vested in four entities, the King, the Shura Council, the Council of Ministers, and the Ministerial Departments. Consequently, there are five legislative instruments (Royal Order, Royal Decree, Supreme Order, Council of Ministers Resolution, and Ministerial Decree) that function in a hierarchical order, underpinning their authority and validity. Given this non-centralised law-making process, the Metropolitan of Abha is guided by over 500 existing urban planning related instruments with most of these having been promulgated at the lowest administrative level (Circulars)[3] lacking authoritative legal force.

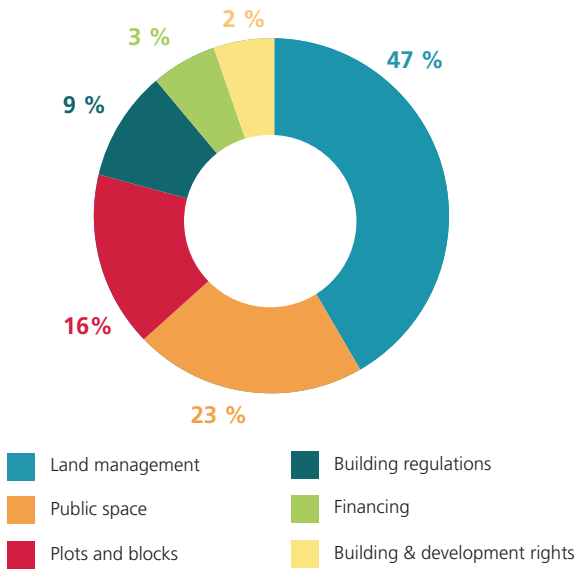


Fig. 13. Number of urban laws in KSA based on the Main Themes of Urban Planning Legislation (UN-Habitat)

The Ministry of Municipal and Rural Affairs (MoMRA) is legally entrusted with the task of conducting urban planning of the Kingdom's cities, including the permitting of all types of construction activity. It, therefore, plays a significant role in Abha's growth and development patterns. The Municipality of the Asir Region (Amanah), as the local level actor for Abha metropolitan, acts solely as an implementing arm for MoMRA. The institutional budgetary system is also centralised, meaning that Abha's development intervention is reliant on funding allocation from MoMRA, through the sole fiscal resource of an annual line-item budgeting.

The Kingdom's planning system, which follows a hierarchy of spatial levels and is predominantly top-down, influences the spatial system of Abha. The National Spatial Strategy (NSS) of 2001 is the guiding plan for the Kingdom and the Comprehensive Rural Development Strategy, which is part of the NSS, provides the national framework for the rural areas. The Comprehensive Asir Regional Development Strategy highlights the pivotal role that Abha, as the regional capital, can play as the economic engine of the Asir Region. The Sub-Regional Plans for the governorates of the Asir Region, (Abha Metropolitan Area, 2005-2030/1425H-1450H) provide a planning framework for their spatial development. The three phases of the Urban Growth Boundary 2014, 2019, and 2030 aim to prevent urban sprawl in the outskirts of cities without adequate urban infrastructure. The Land Subdivision Plans are the basic building blocks that guide the development of the AMA.

The zoning regulations of Abha Metropolitan have been considered ineffective to adequately guide spatial planning of the city, as they are not abreast with the dynamic urbanisation process. Also, the preparation and application of building regulations has been selective, for instance, there is a Local Plan for Central Areas that was prepared in 1988, but other areas of the city lack a similar framework. This has hampered the consistent and sustainable development of the AMA.

Apart from NSS, which is enshrined in law, the remaining planning instruments are defined by procedural manuals, (issued by MoMRA) which compromises their legitimacy. By their nature, these instruments cannot construct a system of legal accountability and transparency of the relevant actors. Moreover, there is evidence[4] to suggest that the absence of a local plan and land use plan have facilitated urban sprawl within the AMA.

In terms of reform, Abha Metropolitan would benefit from both fiscal and jurisdictional decentralisation to facilitate independent and innovative solutions to urban social problems at the Amanah level. This should entail:

- The transfer of local planning power, authority and function from MoMRA to the Amanah with provision for independent action without recourse to effectively address community needs. This is supported by the New Urban Agenda, which specifies that territorial urban design and planning processes should be led by sub-national and local governments, but their implementation will require coordination with all spheres of governments and participation from the civil society, the public sector, and other relevant stakeholders.

- Fiscal decentralisation, which gives autonomy to the Amanah to source funds to finance development activities. Revenue generation activities in cities may also include taxes and levies. Urban areas should be allowed to collect some form of property taxes to fund development activities. The recent White Lands Act that imposes fees on undeveloped plots in urban areas to tackle land speculation, housing shortage, and indiscriminate land development shows that regulatory mechanisms can be leveraged to generate revenue while fostering an efficient development framework.

- The opening of avenues for actors, including the private and voluntary sector, and the general community, to participate in decisions regarding projects that affect them.

The legal framework should enshrine an acceptable mode of public participation in public decision making, to foster equality and inclusion. The consolidation of the urban legislation would also give legitimacy to the plans that Abha Metropolitan relies on.

Revising the Urban Growth Boundary Law to include clear criteria on how it is set would enhance technical and vertical accountability. The law also needs to place more emphasis on establishing the Development Protection Boundary as a no-development zone not only to prevent haphazard development but to discourage the advantage taken by private interests from laxity in the legal text.

These initiatives will strengthen policy formulation designed to move the city towards a more sustainable, compact, and dense future. Primarily, post-legislative scrutiny of the UGB law should be undertaken to assess whether it has met its policy objectives. This could, in turn, inform the legal reform process as well as planning policy options.

3.2 Planning Instruments and Procedures

3.2.1 Hierarchy of plans – Abha Metropolitan

The planning system of Abha Metropolitan is derived from the de facto planning hierarchy of the Kingdom. In this framework, there are different levels of spatial plans: national, regional, sub-regional, and district. Figure 14 highlights the planning instruments in force in Abha Metropolitan.

3.2.2 National Spatial Strategy

The National Spatial Strategy (NSS) of 2001 is the guiding plan for the Kingdom. However, the NSS has been partially applied. For example, the designed industrial city in Abha's metropolitan area contradicts the NSS because of the intervention by the Authority of Industrial Cities.[5]

3.2.3 Regional Plan for Asir Region

The Regional Development Strategy represents the second-tier of spatial planning in the KSA, which aims to address the natural, urban, social, and economic regional development aspects.

The Asir Regional Plan of 2005 was prepared and approved by the Regional Council for the Asir Region. However, regional development appears to contradict the objectives of the

Mountains of Asir Region

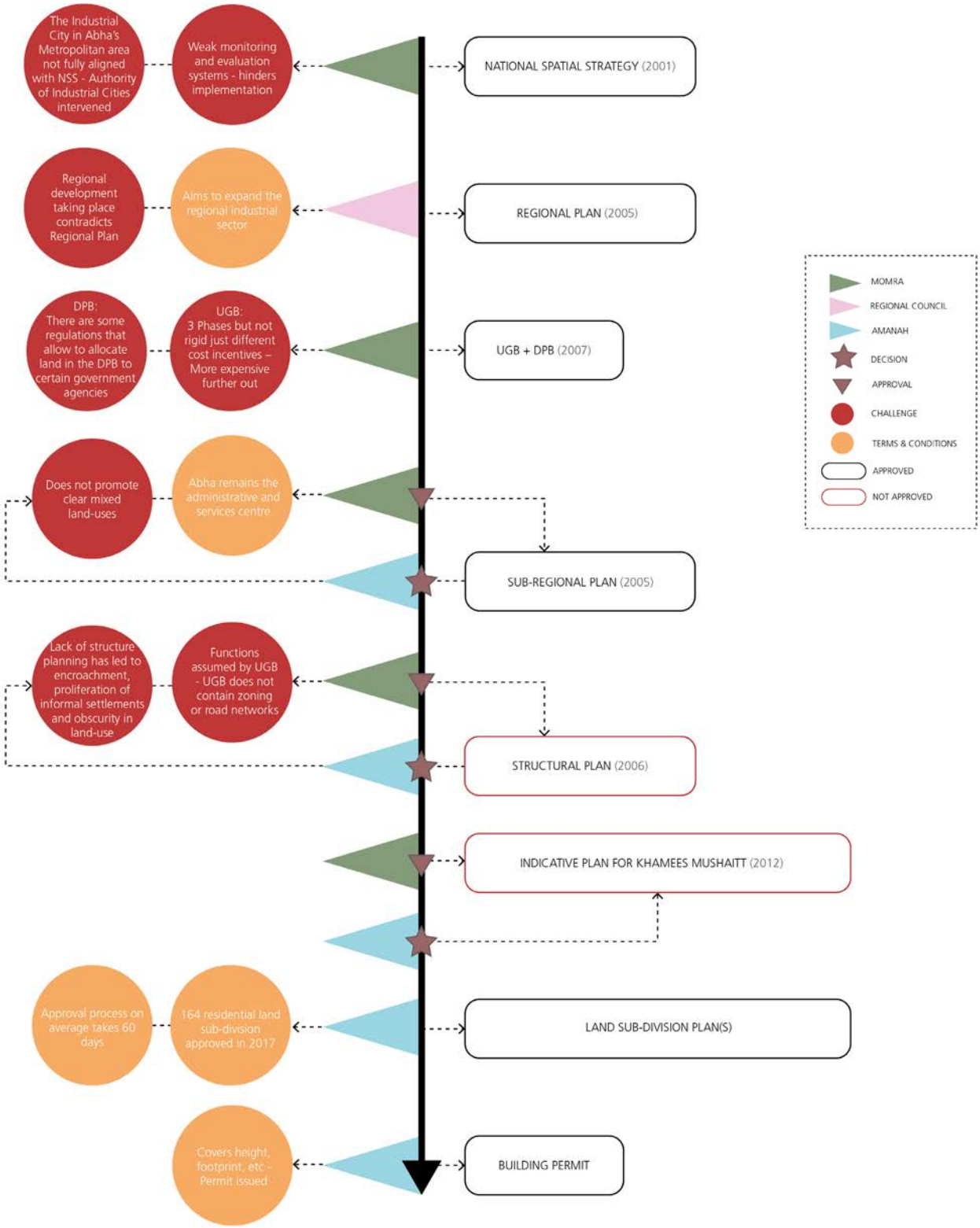


Fig. 14. FSCP simplified representation of hierarchy of plans and the planning instruments for the city of Abha

Comprehensive Regional Development Strategy.[6] The plan aims to:

- Take advantage of the region's strategic location especially for tourism;
- Enhance the contribution of the region's non-petroleum resources in national development to achieve balanced growth;
- Exert expansion in projects in diverse industries, which are particularly dependent on the region's non-petroleum resources;
- Enhance the participation of the private sector in the provision of education and training across the region;
- Address the developmental concentration to achieve balanced urban development in the region; and
- Support a balanced pattern of cities in the region that confirms the hierarchy of functions and population sizes.

3.2.4 The Sub-regional Plan of Abha Metropolitan

The Abha Metropolitan Sub-Regional Plan (2005-2030) was prepared by the Amanah and approved by MoMRA. This plan, in line with the NSS and Regional Plan, highlights various objectives for the different cities that are located within the metropolitan area. For instance, the city of Abha remains the administrative and services centre with an improved future focusing on strengthening tourism. This Sub-regional plan is 70% compliant with the NSS.

In terms of land use, this plan identifies strategic land use and infrastructure networks within the metropolitan area of the 1450 Urban Growth Boundary. This plan does not promote a clear mixed land use strategy as it encourages a mono land use typology instead. Mixed land use, (commercial and residential) are only proposed along the major corridors.

3.2.5 Structural Plan

The Structural Plan for Abha Metropolitan Area was prepared in 2006 by the Amanah, but MoMRA has not approved it. The Urban Growth Boundaries have assumed the functions of this plan, but it is not considered effective as it does not include land use, road networks, or zoning regulations, unlike a spatial plan.[7] The AMA is not guided by either a Structural, Local, or Master Plan; hence projects precede spatial planning. Additionally, the absence of detailed local plans showing land use and zoning regulations at the city level has led to:

- encroachment on land;
- proliferation of informal settlements;
- unbalanced development; and
- obscurity in spatial planning and land use rights.

3.2.6 Indicative Plan

An Indicative Plan was prepared for Khamis Mushayt City in 2012, but it was not approved by the Amanah despite MoMRA's consent. However, there is a Local Plan for the Central Area prepared in 1988.

Mountainous area on the way to Al Soudah

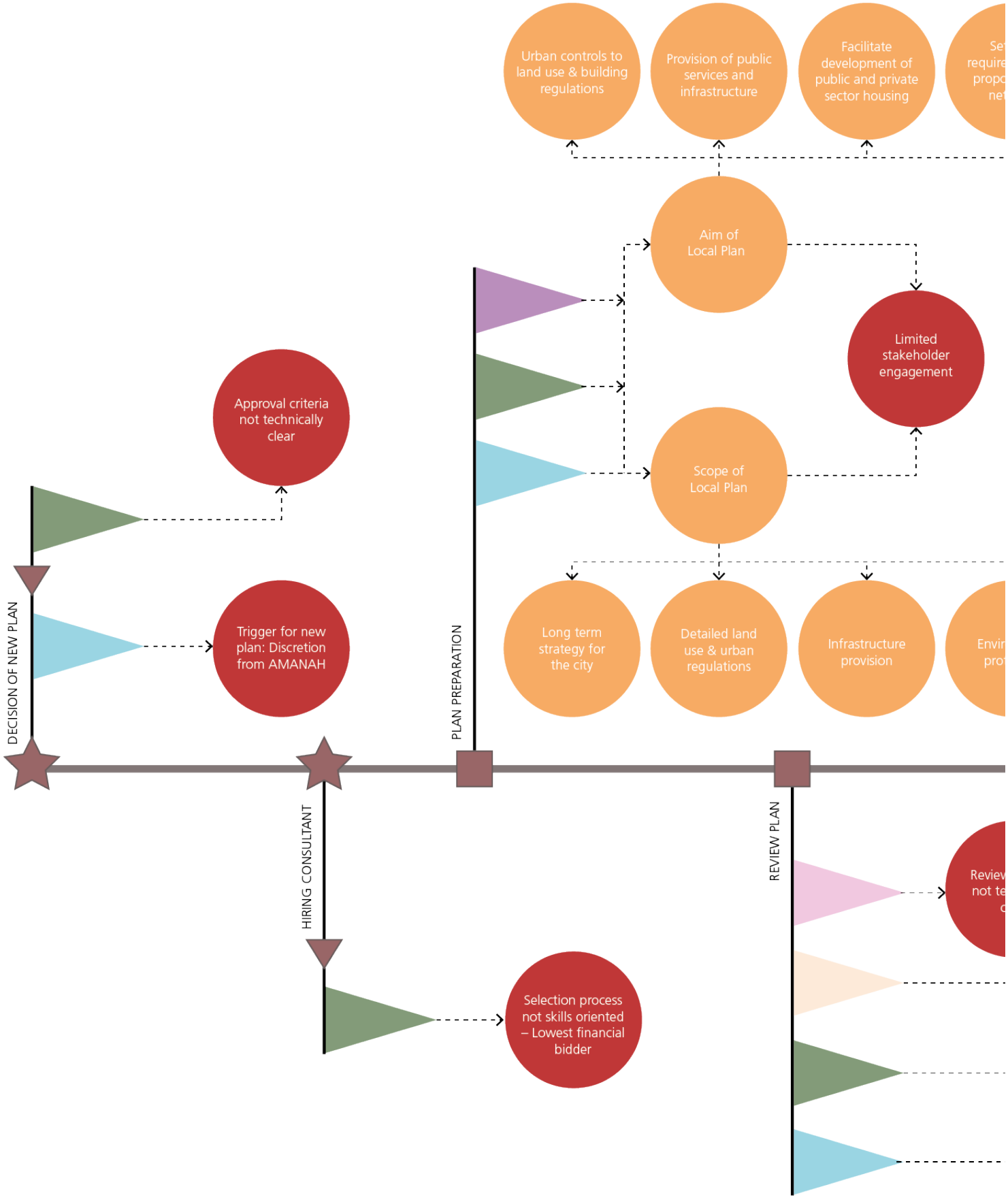
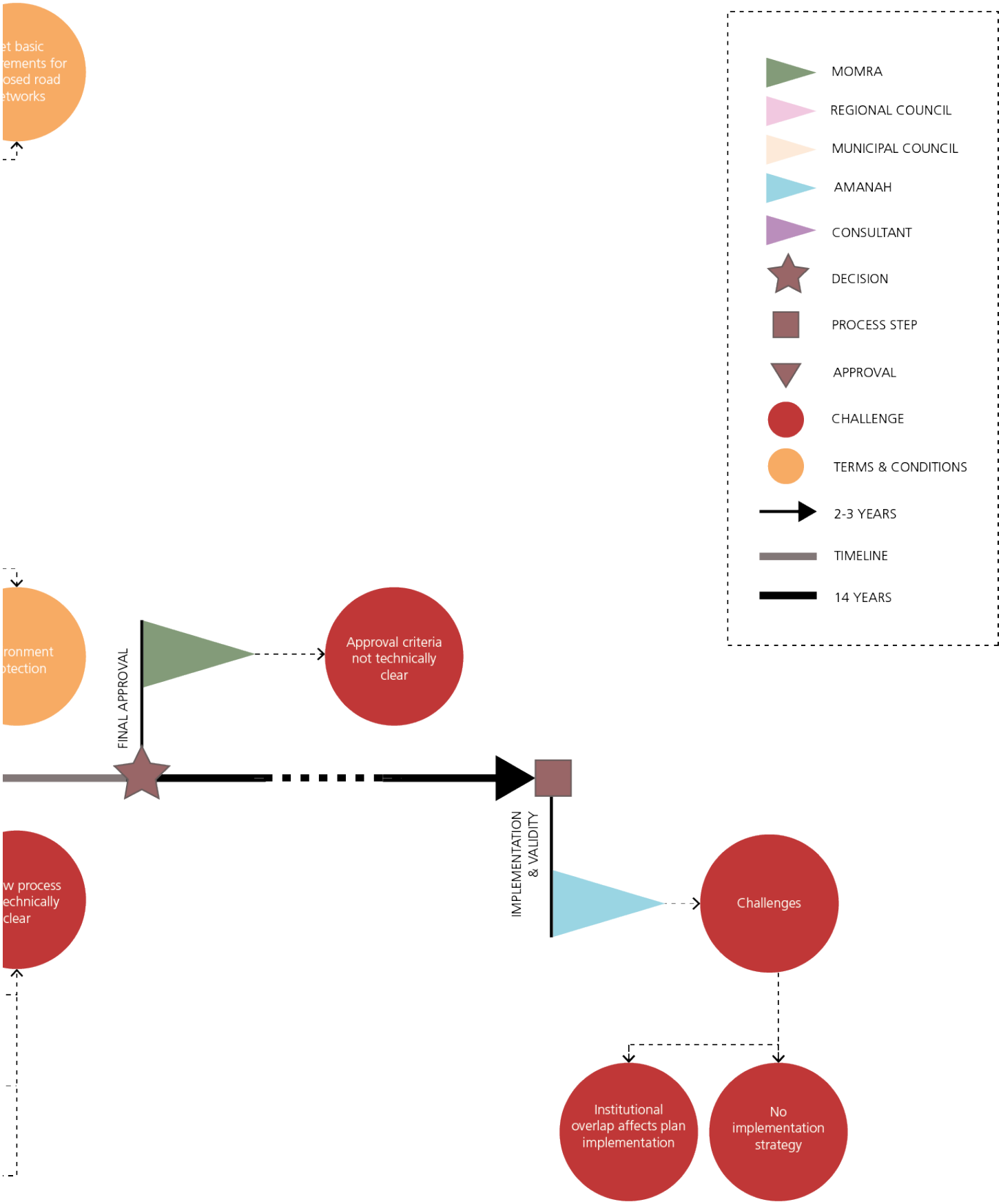


Fig. 15. FSCP simplified representation of Planning Process and Actors involved in the preparation of the Abha Sub-regional Plan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AMANAH
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2-3 YEARS
TIMELINE
14 YEARS
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otection
FINAL APPROVAL
Approval criteria not technically clear
w process
echnically
clear
IMPLEMENTATION & VALIDITY
Challenges
Institutional overlap affects plan implementation
No implementation strategy

3.2.7 The Abha Urban Growth and Development Protection Boundaries

Legal Framework

In 2008, the Prime Minister issued Decree No. 157, which sets the overall regulations of the Urban Growth Boundary (until 2030) and the Development Protection Boundary. The executive regulations were issued in 2010 by the MoMRA Ministerial Decree No. 11769 followed by the current revision, (MoMRA Ministerial Decree No. 66000) which was enacted in 2014. The UGB is meant to control urban expansion, whereas the DPB is meant to prevent urban sprawl in the outskirts of cities without adequate infrastructure, by demarcating a no-development zone. This boundary has the function of preserving land for future urban development beyond the 2030 Urban Growth Boundary while supporting the role of the UGB in preventing sprawl. The 2014 Decree stipulates several general development principles including:

- Strategic development projects that are part of the spatial strategies, including major road and railway networks passing through private land should be prioritised over any other development projects;
- Development projects outside of the boundary are only permitted with the approval of MoMRA; and
- Large-scale development projects should follow specified detailed standards.

The law also defines infrastructural standards that a developer is obliged to follow based on the size of the proposed lot and the city's categorisation as either a national, regional, or local centre, (see figure 16). Legally, the area between the Development Protection Boundary and the 1450 (2030) Urban Growth Boundary is protected and not earmarked for development; however, the law does outline exceptional mechanisms for building mega or national-regional economic projects therein.

Moreover, given the law, certain agencies have rights to land situated in protected areas between the two boundaries. Approval of development projects in such cases is routinely controlled by set of regulations in this regard. Additionally, given the legal flexibility surrounding the definition of "mega" or "strategic" projects, private residential developments have been approved outside the 2030 UGB. These factors have undermined the functional effectiveness of the regulations, the rule of law, and the compact development of urban areas.

Setting the Boundary

The UGB for Abha Metropolitan, along with other cities, was set simultaneously by MoMRA through a Committee under the Unit of Coordination and Projects. The composition of the Committee is not clear but, for instance, it did not involve the municipality of Asir Region which is responsible for planning at the city level. There is an understanding that the calculations were based on some factors, such as historical growth and

URBAN BOUNDARY CLASSIFICATION OF LAND SUBDIVISION APPROVALS AND THE URBAN BOUNDARY PHASES

EXECUTIVE REGULATION ISSUED BY THE MINISTERIAL DECREE NO 66,000 IN 20/12/2014

1ST PHASE (2014-2018)	2ND PHASE (2019-2024)	3RD PHASE (2025-2030)
NATIONAL GROWTH CENTRES (HAEL, TABUK, BURAYDAH, ONAIZA, ARAR, NAJRAN, JAZAN, AL BAHA, SAKAKA, ABHA, TAIF AND AL AHSA)		
MORE THAN 500,000 SQM		
- Tarmacking of internal roads - Sanitation and electricity - Water if available - Storm water infrastructure	- Tarmacking of internal roads - Sanitation and electricity - Water if available - Storm water infrastructure - Connect to closest main road - Percentage of residential area completed not less than 50% - Provide land for social services (schools, kindergartens, hospitals, etc.)	- Tarmacking of internal roads - Sanitation and electricity - Water if available - Storm water infrastructure - Connect to closest main road - Percentage of residential area completed not less than 50% - Provide land for social services (schools, kindergartens, hospitals, etc.)
- Tarmacking of internal roads - Sanitation and electricity - Provide land for social services (schools, kindergartens, hospitals)	-	-

Fig. 16. Matrix showing the development options within the phases of the Urban Boundary in the National Growth Centres (including Abha)

expected population growth in the city; however, there are no accurate criteria published on how the size of the boundary was calculated.

Challenges
As the growth boundary is not a spatial plan per se it does not address significant development rights such as land use, road networks, or building regulations. In addition, it is believed that the size of the growth boundary is large and has been expanded due to the presence of mountainous areas, which undermines sustainable urban development.

Permitting
Development within the UGB is closely linked to permitting and development control. The process is as follows:

- A developer submits a Land Subdivision Plan with detailed implementation plans for the installment of the requisite infrastructure to the Amanah (the Asir Region);
- The Amanah assesses the application in accordance with the provisions of the UGB law; except those cases defined by MoMRA Ministerial Decree No 17777. This decree delegates certain roles for the mayors for approving land subdivision solely in relation to the size of residential projects. The Mayor of the Asir Region is an approval authority under this law;
- Application sent to MoMRA for review in accordance with development standards and applicable building codes;
- A building permit is either refused or granted by MoMRA;
- A developer whose permit has been refused has two options of appeal: a) recourse to the Amanah and MoMRA calling for them to re-study the application; and b) file the case in the relevant jurisdictional administrative court; and
- The decision in the above appeal processes is final and binding on all the parties.

White Lands Act – Abha Metropolitan
Undeveloped land ("white lands") in Abha Metropolitan is 12,021 hectares within the 2030/1450 UGB. The existence of white lands has been a major contributor to a growing housing shortage particularly for the youth and the growing population as owners choose to hoard property to maximise value rather than develop it. The government recently issued the White Lands Tax Law[8] that imposes an annual land tax of 2.5% of its value on 'white land,' which is defined as vacant land located in 'populated areas,' zoned for residential or for dual residential and commercial use. The Law aims to: a) increase the supply of developed land to better address housing shortages; b) make residential land available at reasonable prices, and c) combat monopolistic practices. The Ministry of Housing[9], which is the implementing authority will enforce the Law in phases, (see figure 17).

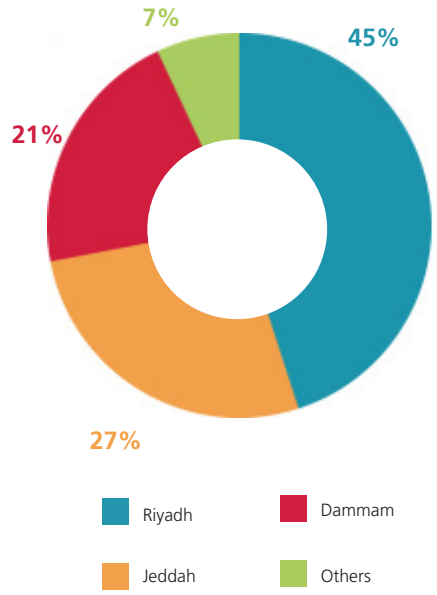


Fig. 17. Percentage of white lands – First phase of implementation of the White Lands Law

3.2.8 Land Subdivision Plans

The Land Subdivision Plans are the basic building blocks for the KSA cities' growth and development. The Mayor of the Asir Region has the power to approve land subdivision in accordance with the following criteria, (Ministerial Decree No. 17777 of 2010):

- The land must be within the approved urban boundaries;
- The land-use specified for the land is consistent with the instructions and regulations governing it;
- The subdivision will not result in the cancellation or modification of an approved regulation, planning, or authorised land use; and
- All necessary planning procedures have been completed, and the Deputy Ministry for Town Planning (DMTP) has been issued with a certified copy of the plan after its approval.

In 2018, the Amanah has approved 164 residential land subdivisions, (147 land subdivisions in Abha[10], 12 land subdivisions in Khamis Mushait,[11] and five public land subdivisions in Ohud Rufaidah).[12] In addition, land that is less than 10,000 m^2 does not need a hydrological study, and it has been noted that the approval process takes on average 60 days.[13] Due to rapid urbanisation and flexible planning regulations, most of the agricultural land has been converted to residential use.

3.3 The Institutional Context

3.3.1 Urban institutions in KSA

Abha Metropolitan's growth and development pattern is impacted by the centralised planning institutional framework of the KSA, under the Ministry of Municipal and Rural Affairs (MoMRA). MoMRA is entrusted with the task of conducting urban planning of the Kingdom's cities, including providing the necessary roads and fixtures, maintenance, and cleanliness of the environment, and are in charge of licensing all types of construction activity.[14]

The Deputy Ministry of Town Planning under MoMRA, and its departments such as Local Planning, Studies & Research, Projects Coordination, and Urban Planning & Design, is mandated to coordinate with "concerned bodies" in charge of planning to achieve comprehensive urban development.[15]

In practice, there is little coordination between these departments and the Amanah, and this affects service delivery and project implementation. Additionally, the planning process of Abha is compromised by the lack of coordination of public sector agencies, such as the Ministry of the Interior, Ministry of Education, and Ministry of Health with regards to the functional administrative scope of each entity.[16]

3.3.2 Regional context: Asir Region

According to the Ministry of Interior administrative classification, the Asir Region is divided into 15 governorates, 37 centres (class A) and 65 centres (class B). Abha, being the regional capital, is not included in this classification but is governed through a "municipality" (Amanah) headed by a Mayor.

This delineation is provided for by MoMRA with Abha Metropolitan's actual status being a 2nd class Amanah. Given this structure, the Amanah is allocated funds by MoMRA for development activities and municipal services through an annual line item budgeting[17] which is the sole fiscal means available to the Asir Region.[18]

There are additional institutions in the Asir Region that manage and regulate the development process. The newly establsihed Asir Regional Development Authority (ARDA) and the Amarah of the region, headed by the Regional Prince who, pursuant to the Regional Law[19], reports to the Ministry of Interior. The Regional Council[20] is required to:[21]

- Identify the needs of the region and propose their inclusion in the National Development Plan;
- Identify beneficial projects for the region and submit these as activities requiring funding. These requests are vetted, and viable projects are selected for funding. Funding is provided as part of the National Development Plans and a yearly budget of the country which is the sole means available to municipalities
- Study the organisational arrangement of the regional administrative centres, and follow up on the implementation of any modifications; and
- Implement the provisions of the development and budget plan and carry out the needed coordination.

However, the Council has no executive powers as this is vested in MoMRA, by the Regional Prince, and the Regional Council, therefore, it does not have the capacity to follow up on its recommendations directly. In the Asir Region, there are the Regional and Local Councils. The latter is responsible for studying all services for the governorates and obtain the approvals from the Regional Council.

The Municipal Council, also located in the Amanah, with two-thirds of its members elected by citizen's votes while the rest are appointed by MoMRA, supervises the activities of the Amanah and municipalities to make sure that they conform to the Local Plan and meet the current needs of the region. It approves:

- The municipal budget sourced from the cash allocation from the national government. This is continuously subject to revision as it is based on the agreed priorities between the Council and the Mayor;
- Examines the residential plans focusing on whether any procedural violation occurred;
- The scope of municipal services; and
- Expropriation projects based on the priorities of the Mayor.

The Municipal Council of Abha plays an active role in the planning process.[22] The Asir Region Development Authority (ARDA) has been recently established, and once active, will provide an autonomous regulatory tool for effective participation in the regional development process, as it will have separate powers and budget from the Amarah, and all other government departments in the region.

3.3.3 Local context: Abha Metropolitan

The Asir Region is composed of several cities including Abha, which is the capital. As earlier mentioned, the city is managed by the Amanah which is headed by a Mayor. The Mayor is appointed by the Minister of MoMRA and the rest of the Amanah's executive members are appointed by the Civil Service Bureau based on their professional qualifications.

The Amanah of the Asir Region consists of four deputies, which are the a) Land and Survey Deputy responsible for urban planning and implementing the Regional Plan; b) Deputy of Services who is responsible for environmental health, city beautification, and maintenance of parks and open spaces; c) Deputy of Construction and Projects who is concerned with the expropriation of properties and strategic projects and planning the urbanisation of Abha

Metropolitan; and d) Municipal Affairs Deputy who is concerned with urban design. The Amanah has 17 professional staff, (10 urban planners and 7 technicians).

There is limited horizontal coordination between the various Amanah departments. For example, the Regional Planning Department of the Amanah rarely coordinates with the Deputy of Land and Survey on regional planning initiatives.

There is also external influence by tribal leaders, (Sheikhs) during the spatial planning process, which negatively impacts the technical development process. Moreover, the bureaucratic procedures within these institutions impede the speed of project delivery and implementation. There is limited continuity of existing planning projects because of institutional changes and varying priorities set by each office bearer, which is detrimental to the interests of the city inhabitants.

The Amanah established a Local Urban Observatory in 2010, which is monitored by the National Urban Observatory,[23] (MoMRA Ministerial Decree No. 1280 of 2007). This observatory supports the Deputy of Land and Survey by measuring, every three years, the progress of:

- Achieving Vision 2030;
- Achieving Goal 11 of the SDGs; and
- City Prosperity Index indicators and other contextualised urban indicators.

The Local Planning Department under MoMRA is responsible for the implementation of two initiatives related to the National Transformation Programme: a) the preparation of the Local Plan; b) technical support to the drafting process of the Planning Act; and c) undertaking studies on roads and parking spaces.

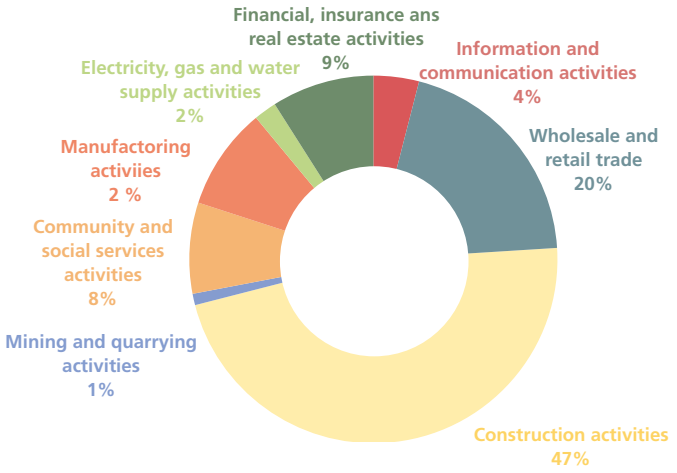
3.3.4 Legal and institutional implications for Abha

Most technical decisions and approvals passed in the local governance (Amanah), including planning decisions, are made on a discretionary basis according to the priorities set for the city. This affects the system's technical accountability, predictability, and practical clarity. Coherence cannot improve until measures are taken to instill legal mechanisms that harmonise and guide the planning system.

Al Meftaha Museum Palace

3.4 Financial Context

The Asir Region is home to a vibrant environment and cultural heritage. As the capital, Abha is both an administrative and economic centre hosting most of the economical activities including agriculture, which is a large part of the economy. Public administration, defense, education, wholesale, and retail are the main economic sectors in the region and employ most of the region's workforce. Construction, wholesale, and retail trade are Abha's two biggest economic sectors and employ majority of the workforce.



Source: General Organization for Social Insurance (2016)

Fig. 18. Employment by economic sector, 2016

In order to foster local industrial development, job creation, and innovation in Abha, the government is working to identify strategic economic sectors. Economic diversification in this part of the Kingdom is key to achieving both the regional and the national economic goals of Vision 2030. Consequently, the development and enhancement of infrastructure, (i.e., transportation) and public facilities serving key economic sectors, (e.g., industry, agriculture, livestock, tourism) is a priority for the government. This pertains to its effort to incentivise local entrepreneurship, spur competition, and harness productive capacity of Abha, and its contribution to the region and national economy.[24]

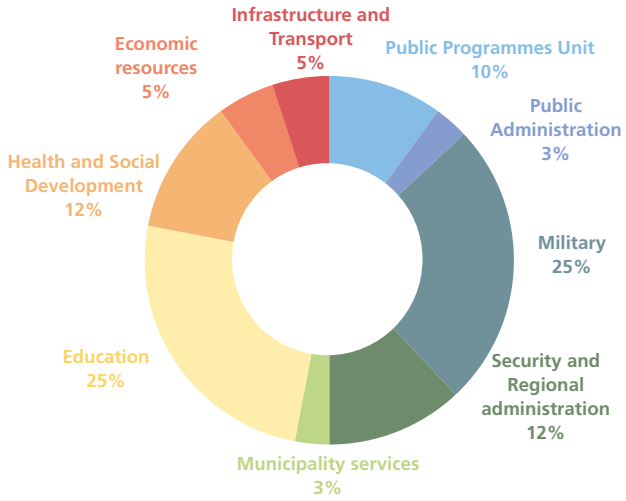
Although local economy is polarised around traditional labour-intensive sectors, the government is working to foster development and innovation, and are identifying economic leverages focusing on food processing, manufacturing, and tourism, (see figure 21). Part of the government's strategy to reach its economic goals includes a renewed commitment to strengthen the feedback loop among (1) regional and local needs, (2) education and training, and (3) the economic landscape. The government aims to foster growth in human capital, better market conditions, and regulations that are likely to develop research, innovation, and economic diversification.[25]

Al Meftaha Museum Palace

3.4.1 Financial system

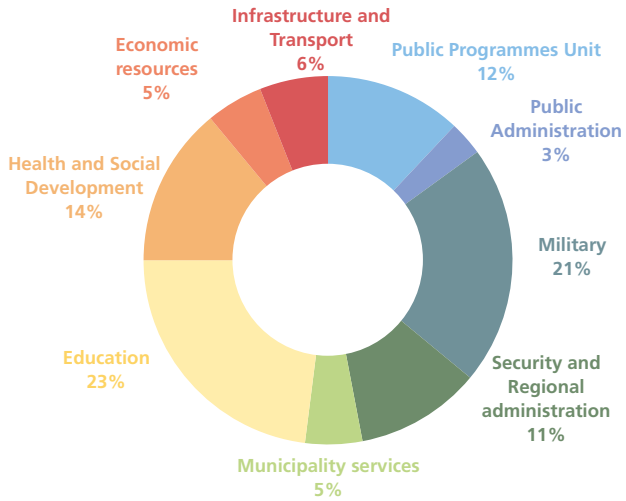
Sustainable urban and local economic development requires a stable and resilient municipal public finance management system. Currently, the National Development Plan leads Abha's public finance system. This system is highly centralised and depends on intergovernmental transfers to fund local development activities and projects. In 2017, the central government allocated 5% of the total budget to municipal services, which also covered projects and programmes managed by the Ministry of Municipal and Rural Affairs (MoMRA), (see figure 21).

MoMRA, via the Amanahs[26] , is responsible for financing activities categorised as "municipal services", such as urban planning, building licensing, sanitation, and road maintenance. In addition to MoMRA, several other government ministries and entities, such as the emir and regional councils, fund and implement projects at the local level, (e.g., the Ministry of Education provides direct funding for city schools).



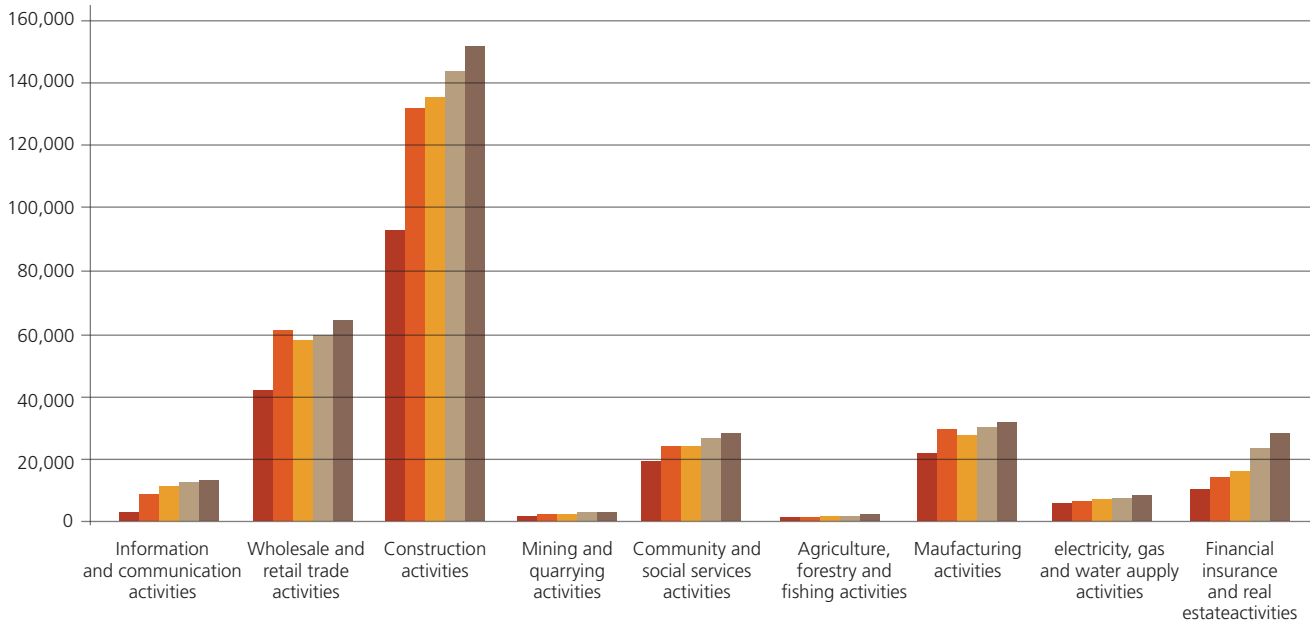
Source: Bhatia, R. (2017). Saudi Arabia Budget 2017. The Gulf's International Bank

Fig. 19. Saudi Arabia national expenditure by sector, 2016



Source: Bhatia, R. (2017). Saudi Arabia Budget 2017. The Gulf's International Bank.

Fig. 20. Saudi Arabia national expenditure by sector, 2017



Source: General Organization for Social Insurance (2012-2016)

Fig. 21. Employment trends by sector, 2012-2016

3.4.2 Municipal revenue

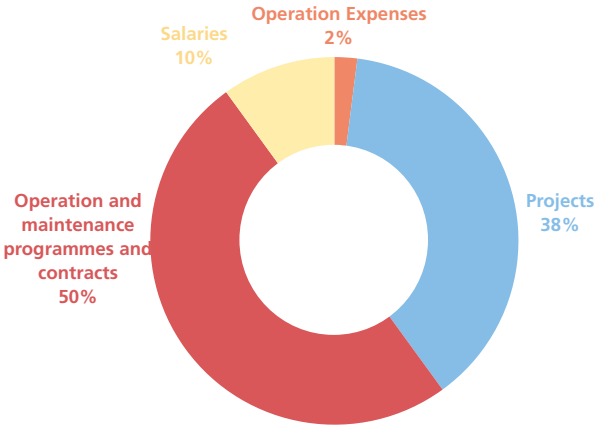
Currently, the local government has few sources of revenue and limited authority to collect fees. Although MoMRA introduced municipal fees, which expanded the own-source revenue base, local revenues continue to be insufficient. Consequently, the local finance system continues to be reliant on support from the central budget.

Intergovernmental transfers from the MoF are based on yearly budget proposals submitted by the various ministries. Within MoMRA, the budget drafting process tends to be influenced by local needs and priorities. Municipal governments submit project proposals for the next budgetary cycle, which are then submitted to MoMRA's leadership for final approval. The projects approved are included in the MoF's budget review and submitted for approval to receive funding.

3.4.3 Financing municipal operating costs

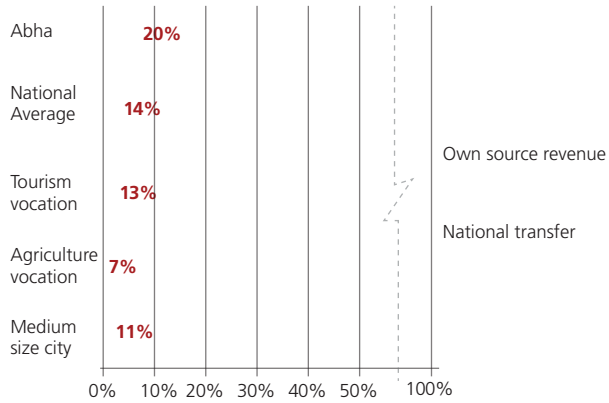
In 2016, Abha collected SAR 274.6 million in own-source revenue, corresponding to 20% of the city's budget.[27] This achievement puts Abha above the national average in terms of own-source revenue generated by middle-sized cities with economies based primarily in agriculture, and vocation cities in the country. In an effort to improve municipal finance management and reduce the dependency from the central government, the National Transformation Programme 2020 (NTP) directs the local government to establish sound fiscal policies through the introduction of new financing instruments.

Budget Category	SAR (thousands)
Salaries	113,944
Operation Expenses	18,612
Operation and Maintenance Programmes and Contracts	549,100
Projects	419,800
Total Budget	1,101,456



Source: Ministry of Finance, Saudi Arabia (2016)

Fig. 22. Distribution of jobs by economic activity, 2015



Abha city centre

4

THE CURRENT CITY

© Torsten Matzak

4.1 Urbanisation Patterns

4.1.1 The city's development patterns

As previously mentioned, the Abha Metropolitan Area (AMA) is formed by the city of Abha, the capital of the Asir Region, and the two gravitating cities of Khamis Mushait and Ahad Rafidah. Due to both the topographic constraints and the distribution of various services across the three cities tend to form a whole, articulated urban conglomeration. In terms of population distribution, Abha city accounts for 18.1% of the total Saudi population in the region, whereas Khamis Mushait is hosting 25.3%, (the largest portion of the population), and Ahad Rafidah is represented by 5.6% of the region.

The metropolitan area is situated at an elevation of 2,270 metres above sea level, hence it enjoys a moderate climate with the highest rainfall levels in the entire Kingdom of Saudi Arabia. The topographic features play a key role in shaping the urbanisation of the whole metropolitan area as the surrounding mountains are constraining development growth, especially to the West of the Arabian Peninsula, crossed by the range of the Hejaz Mountains.

Traditionally, in the Asir Region, the wadis were the main drivers of urbanisation processes, providing people with fertile land and water. The most important amongst the wadis is Wadi Bisha, on which the city of Khamis Mushait is dependent, while the city of Abha is located along one of its tributaries. Traditional agricultural and trading activities shaped the urban layout of these two cities. Agricultural patterns connected with the system of wadis cross all the three cities of Abha, Khamis Mushait, and Ahad Rafidah, structuring opportunities for better integration of the natural features into the urban form. The city of Abha presents a well-consolidated urban structure and is characterised by significant environmental assets. The city expands to the East along Wadi Abha, towards Khamis Mushait, forming an urbanisation continuum along the major axis. Ahad Rafidah is located towards the Southeast of Khamis Mushait, and is mainly formed by fragmented residential neighbourhoods. Being the site of administrative and institutional headquarters, educational institutions, together with its tourist attractiveness, facilitated the development of Abha as the main core of the metropolitan urban system.

While the evolution from rural settlements to urban took place in the 1940's, AMA only reached a substantial and rapid urban growth in the last two decades of the twentieth century. In 1984, the AMA extended over 7,034 hectares, and by 1994 the area had grown by 1.5 times, with a population of about 359,594 people. In 2004, the area of AMA was 25,199 hectares with a population of 630,699. The metropolitan area has continuously grown since, and its built-up area has increased by nearly eight times, also due to the proliferation of scattered rural settlements, growing up to 87,838 hectares. Considering only the urban area, the extension is decreased to 43,225 hectares, which is still almost double of what it was in 2004. The population has grown by nearly 216% in the same period of time, reaching 778,599 inhabitants over the three cities.

POPULATION

778,599

POPULATION DENSITY on built-up area

18 p/ha

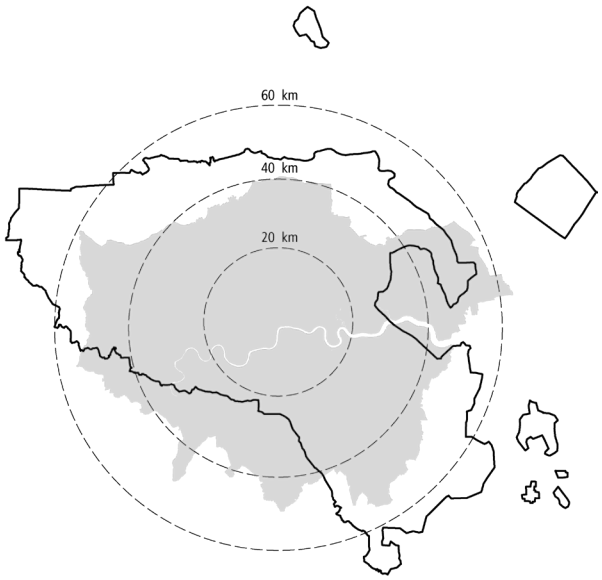
AGE PROFILE

54% < 30

POPULATION GROWTH RATE

2 %

965, 500 Expected population by 2030



AMA COMPARED TO **GREATER LONDON**

Population: 8,5 Million
Area: 1,572 km^2
Density: 50.51 p/ha

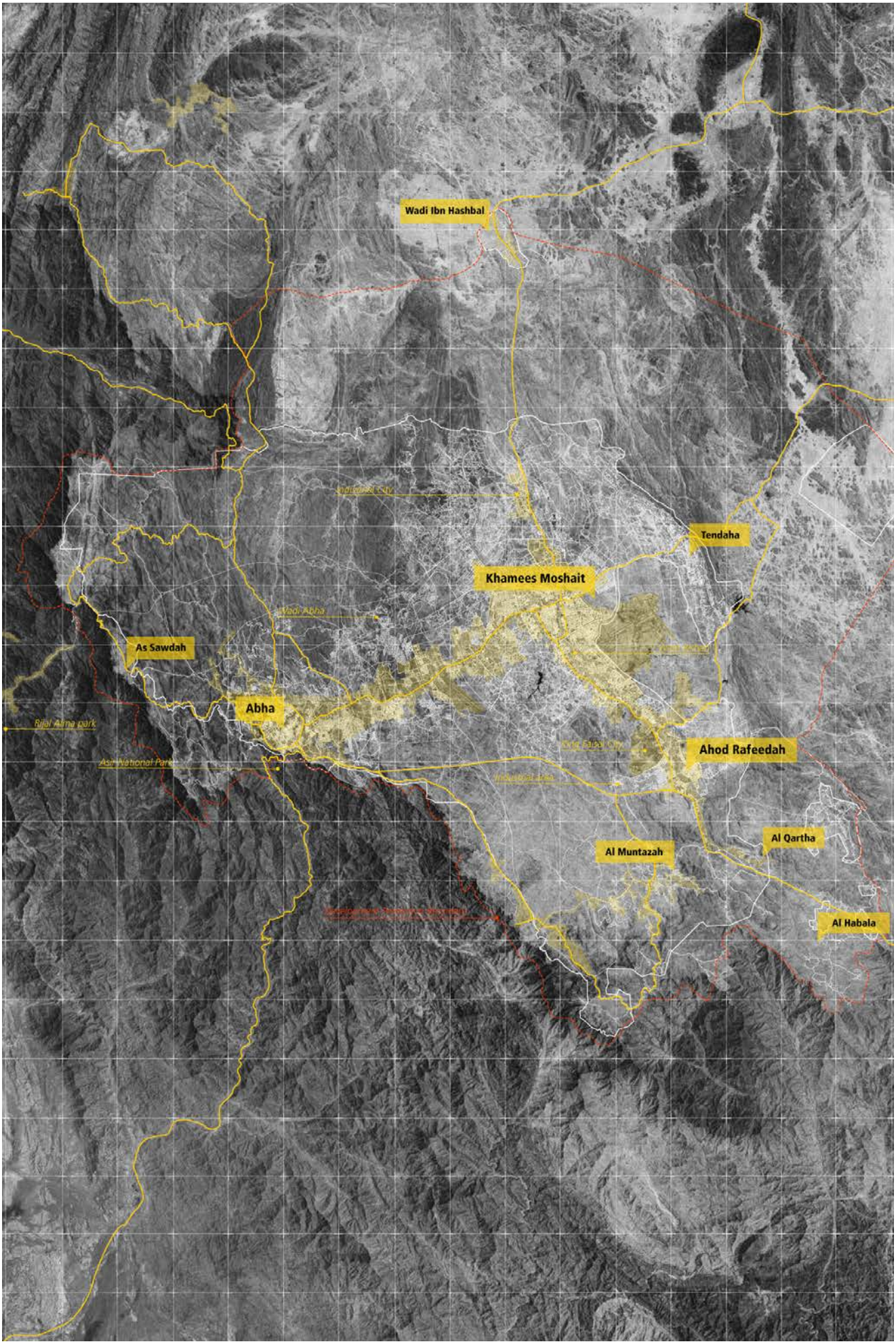
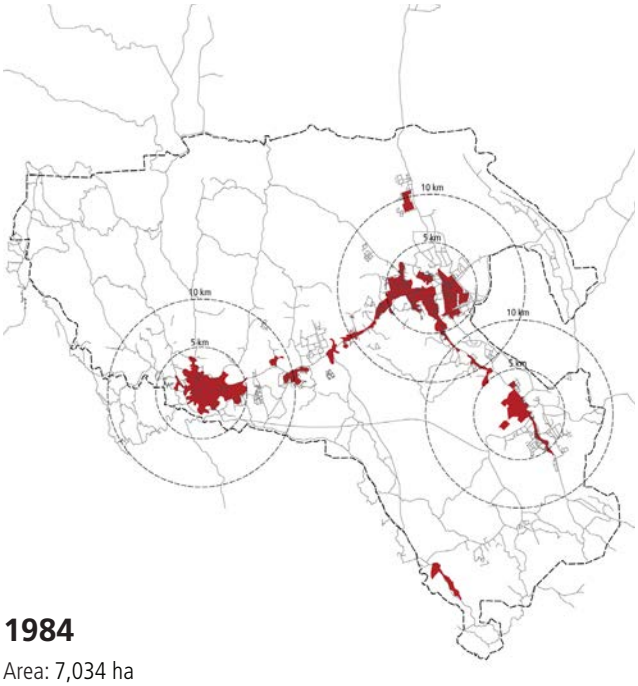
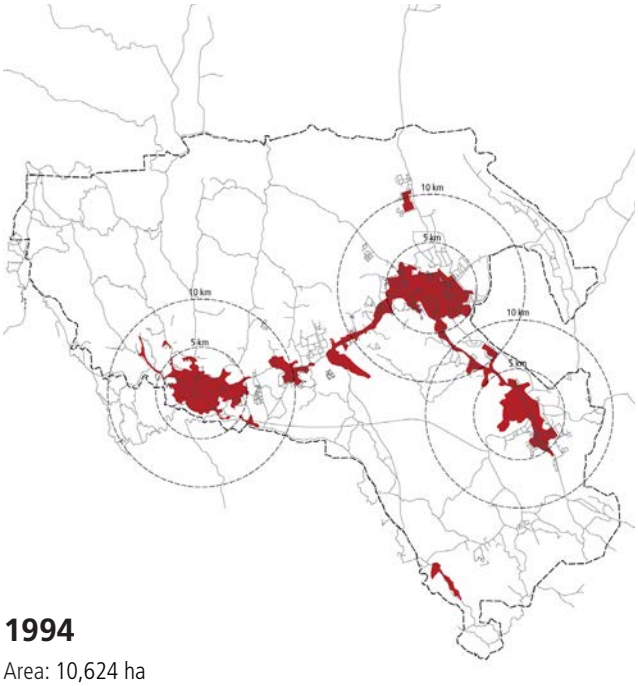


Fig. 23. Boundaries, neighbourhoods and key infrastructure



1984

Area: 7,034 ha



1994

Area: 10,624 ha
Population: 359 594

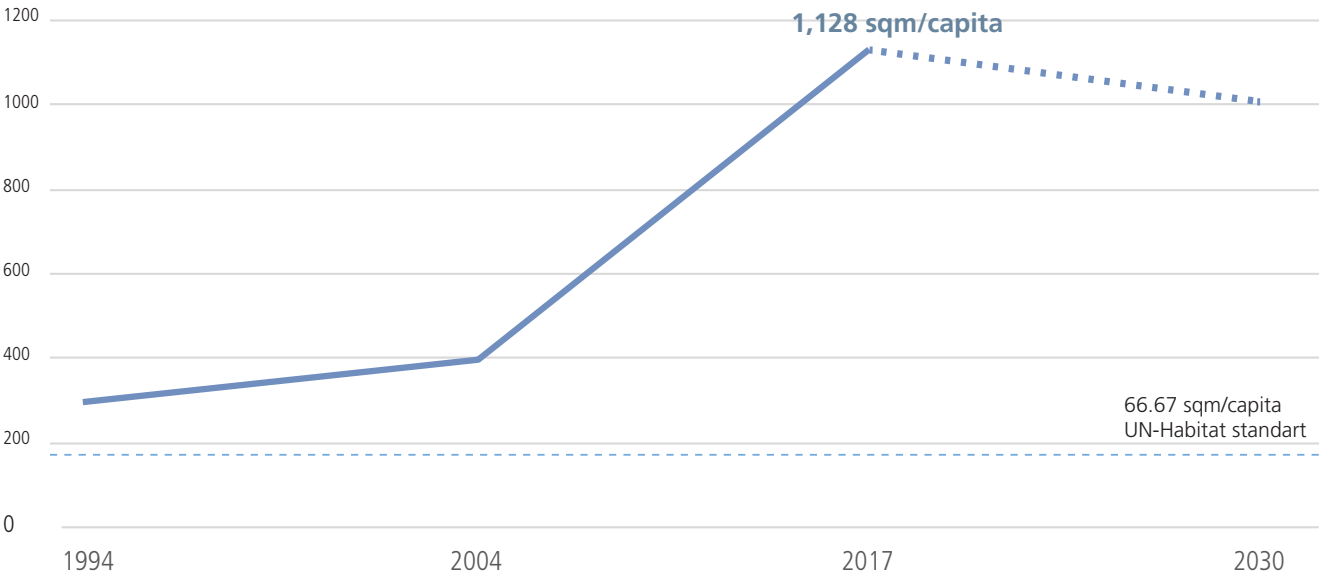
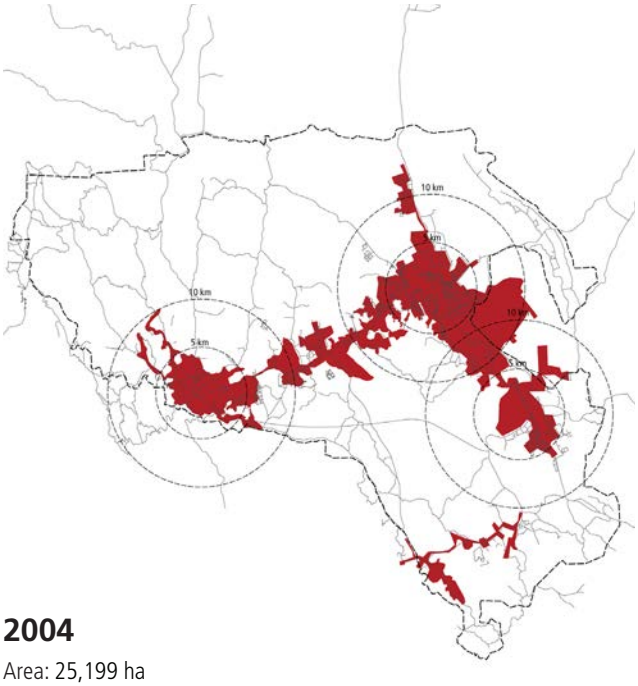
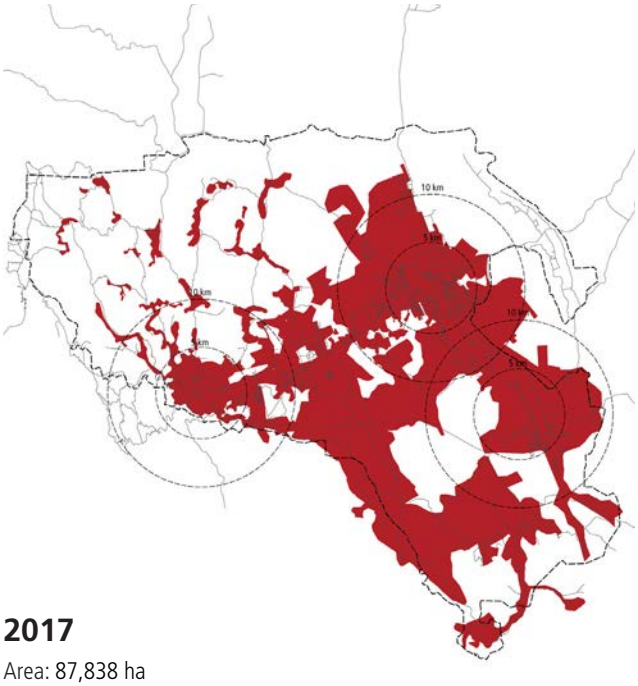


Fig. 24. Land allocated per capita



2004

Area: 25,199 ha
Population: 630 699



2017

Area: 87,838 ha
Population: 778 599

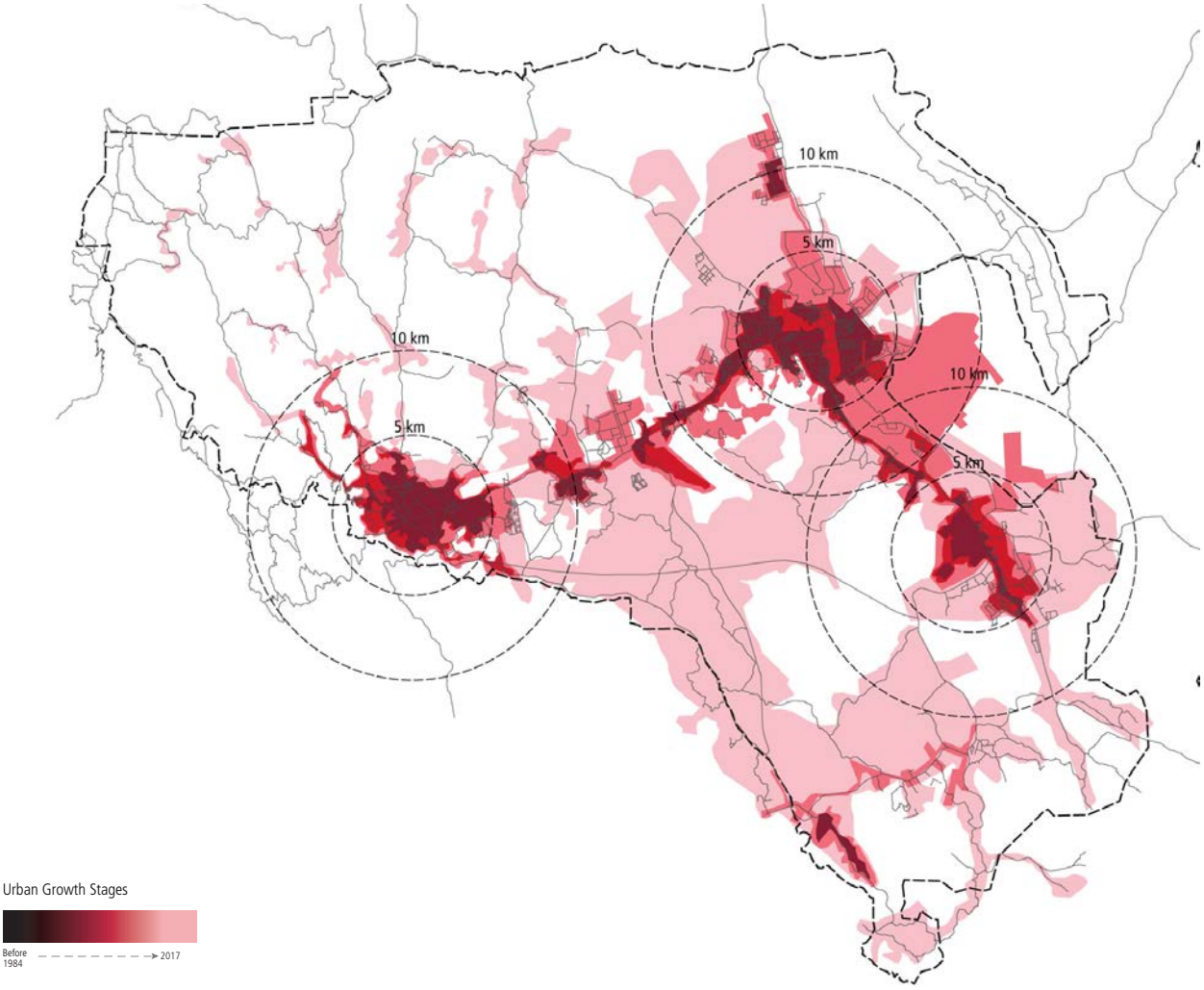


Fig. 25. Urban growth stages

Currently, the major urban expansion is happening along the main axis of King Fahd Road and King Khalid Road, forming a linear urban structure connecting the three cities, which, over time, will eventually merge completely into one, consolidated urban form. According to the recent estimations Abha metropolitan area was covering an area of 25,199 hectares in 2004 with a population of 630,699. Since then The built-up area of the metropolitan area increased by nearly 8 times including the scattered rural settlements and amounts 87,838 hectares, though the urban area is represented by 43,225 ha. The population of 778,599 has grown by nearly 216% in the same period of time.

4.1.2 Administrative boundaries

The Asir Region is characterised by a mountainous area, which represents nearly 50% of the whole region. The particular geographic location has influenced the character of the administrative boundaries, which are less extensive in comparison to other Saudi cities.

The cities of Abha, Khamis Mushait, and Ahad Rafidah share one standard set of boundaries, which are the 1435 and 1450 UGBs that define the area available for urban expansion up to a certain period of time. On the other hand, the DPB works as a limit to city expansions. The UGBs also identify the jurisdiction of the municipality over the neighbouring rural areas and supporting satellite developments. The area delimited by the Abha Metropolitan Area 1450 UGB is characterised by a unique landscape made of mountains, agricultural fields, and terraced farming hillsides typical of this region, the rich wadi system, and the numerous heritage sites. These landscapes are rich in healthy and functional ecosystems and are critical components of the regional identity. As such, they should be preserved from indiscriminate urban expansion and environmental degradation phenomena.

Though the 1450 UGB was set to limit the city expansion, it exceeds the current urban footprint by nearly four times, where the UGB extends over an area of 1,814 square kilometres, and the footprint over 432.25 square kilometres. To fill-up the available area between the urban footprint and the 1450 UGB at the UN-Habitat recommended density of 150 p/ha and considering the current growth rate, it would take more than 174 years to develop it. While the 1435 UGB has an area of 1517.16 square kilometres, it will take more than 170 years to fill it at the recommended UN-Habitat densities.

Interestingly, within the 1450 UGB, whose function should be to contain the city's expansions up to the year 2030 (1450H), the potentially developable vacant land, excluding farmlands and natural assets, amounts to 120 square kilometres. This means that by applying the same principles to the available vacant land within the 1450 UGB, the AMA would have the capacity to accommodate double the amount of the current population at UN-Habitat recommended densities.

Residential area on the hillsides of Abha

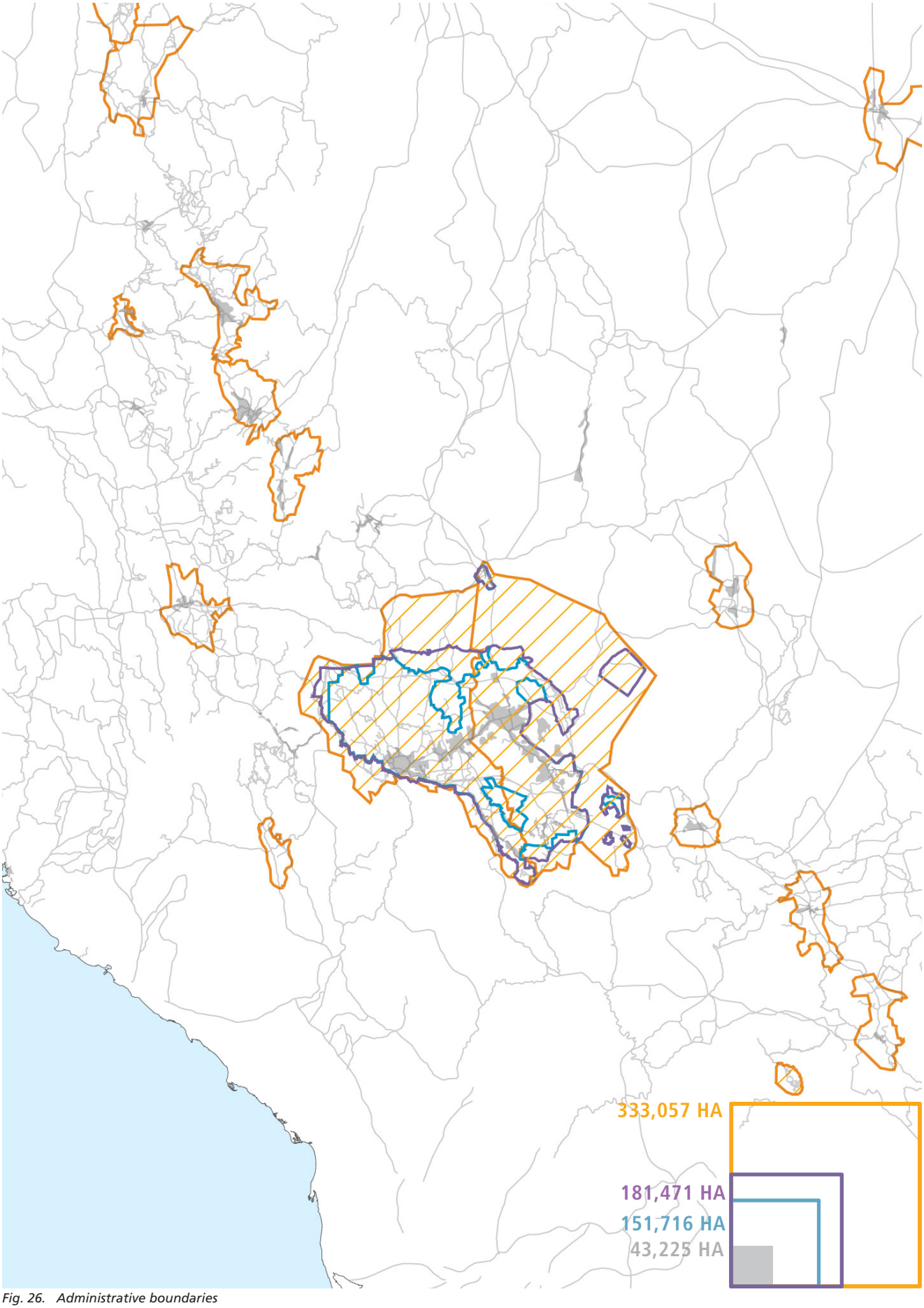


Fig. 26. Administrative boundaries

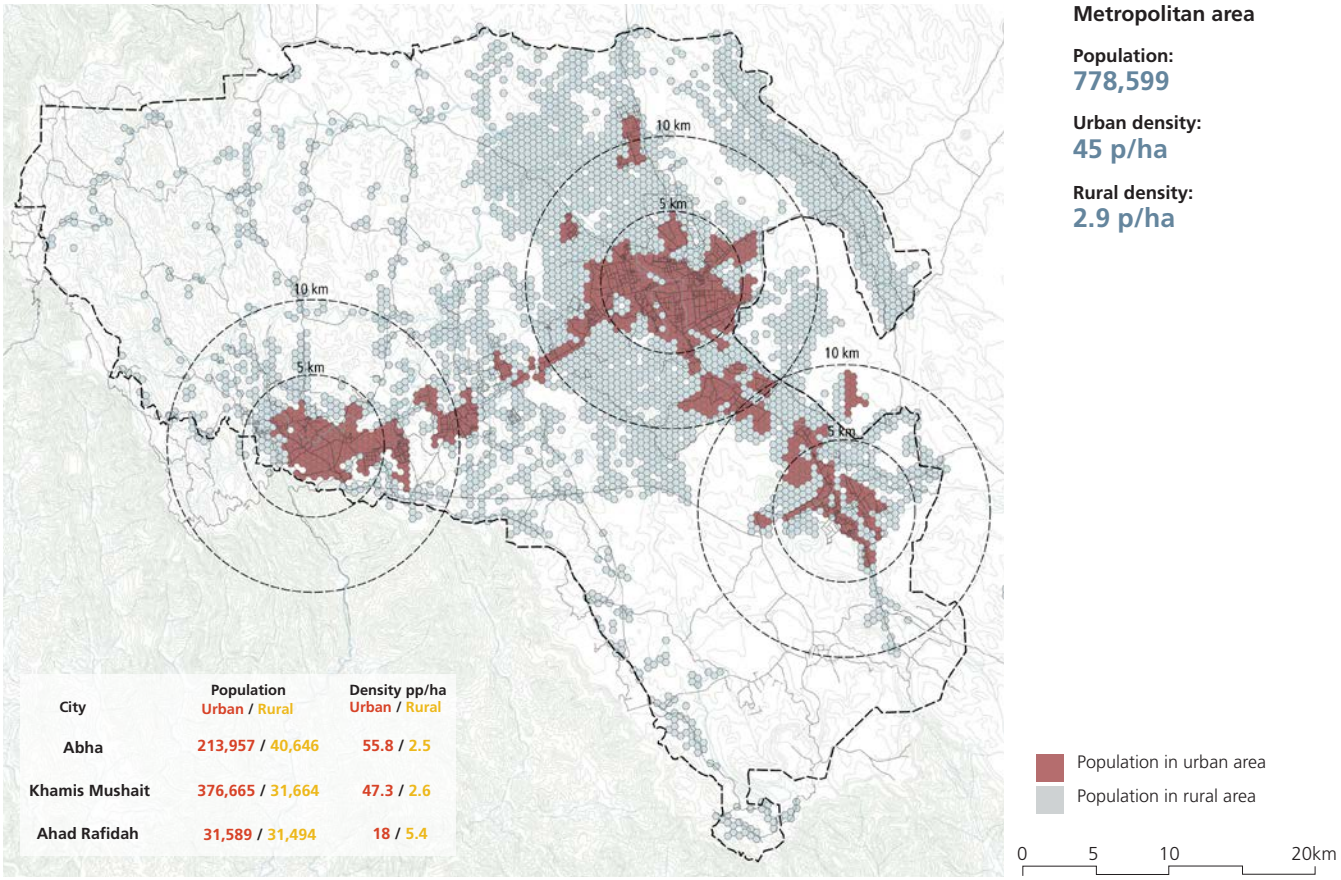
4.1.3 Urban density

The Abha Metropolitan Area (AMA) has a current population of 778,599 people on a built-up area of 43,225 hectares, including both urban and rural areas. The total amount of population includes the population in Abha, Khamis Mushait, and Ahad Rafidah. The most populated city within the AMA is Khamis Mushait with a population of 463,326, which is 59.5% of the total number for the metropolitan area. The city of Abha has a population of 254,290, representing 32.6% of the population, and Ahad Rafidah hosts 60,983 people, which is 7.9% of the population. The urban area of AMA extends over 13,542 hectares, hosting a population of 622,211 inhabitants. Considering the average density across the three urban areas, and excluding the rural settlements, this amounts to 45.0 p/ha. The rural settlements occupy 53,340 hectares and accommodate 156,398 people, presenting an average density of 2.9 p/ha. A considerable difference in density distribution across urban/rural areas exists across the three cities:

- The urban area of Abha occupies 3,832.1 hectares and hosts 213,957 people, with an average density of 55.8 p/ha. Rural settlements in Abha extend over 15,880 hectares, hosting 40,646 people, with an average density of 2.5 p/ha,
- The urban area of Khamis Mushait extends over 7,956.6 hectares and hosts 376,665 people with an average density of 47.3 p/ha. Rural settlements extend over 31,664 hectares, hosting 84,258 people, with an average density of 2.6 p/ha,
- The urban area of Ahad Rafidah occupies 1753.7 hectares and hosts 31,589 people, with an average density of 18 p/ha. Rural settlements are more consistent in extension, covering 5,796 hectares and hosting 31,494 people, with an average density of 5.4 p/ha.

Urban density parameters vary in each city, with the highest average density per urban areas being equal to 55.8 people/ha in Abha. The highest average density for rural settlements is represented by Ahad Rafidah, with 5.4 p/ha. Ahad Rafidah also showcases the lowest average in urban density, with 18 p/ha, while the lowest density across the rural settlements can be observed in Abha. However, the overall average density across the entire AMA urban area is 45 p/ha, which is significantly lower than the recommended UN-Habitat density of 150 p/ha.

Figure 27 shows that the two areas with the highest, densely concentrated population are the central urban cores of Abha and Khamis Mushait, with an average density ranging from 100 to 149 p/ha, and from 150 to 225 p/ha respectively. These two areas occupy 1,089 ha, which is 8% of the total built-up area of the AMA footprint, accommodating 161,881 people, or 26 % of the total population. These central areas in both the cities present a vernacular urban layout, showing how this dense pattern performs better than the rest of the metropolitan area in terms of land efficiency, as for instance, once the public transportation system is established, they will have better accessibility.



City	Population Urban / Rural	Density pp/ha Urban / Rural
Abha	213,957 / 40,646	55.8 / 2.5
Khamis Mushait	376,665 / 31,664	47.3 / 2.6
Ahad Rafidah	31,589 / 31,494	18 / 5.4

Fig. 27. Population in urban and rural areas

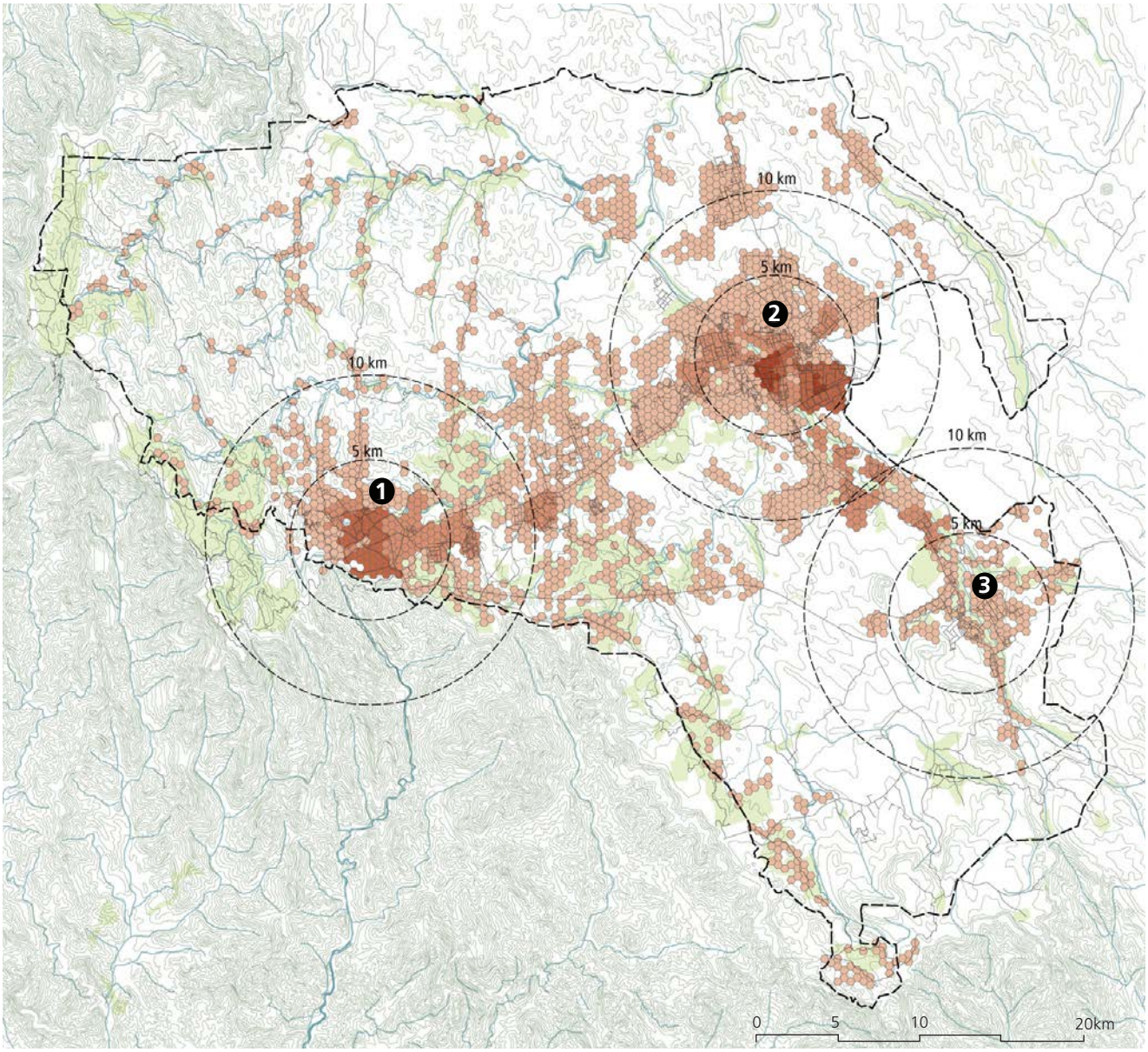
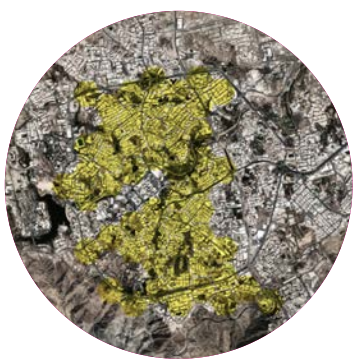
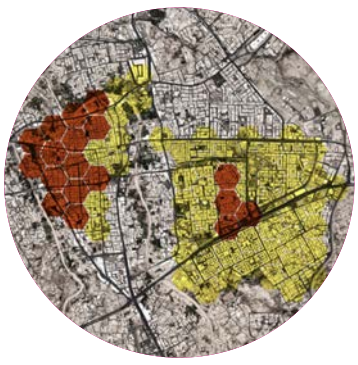


Fig. 28. Current distribution of population density



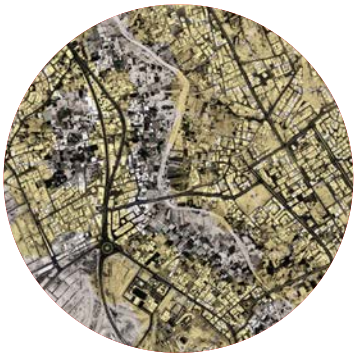
1.

Abha city centre



2.

Khamis Mushait city centre



3.

Dispersed area of Ahad Rafidah

While Abha and Khamis Mushait showcase well-consolidated cores, Ahad Rafidah is mostly formed by fragmented, low-density, monofunctional residential suburbs scattered on the outskirts of the other two cities and along the major transportation axises.

4.1.4 Land use

By observing the land use distribution across the Abha Metropolitan Area, a significant amount of land reserved for military uses has been noticed, which corresponds to 47.9%, of the total AMA area. The AMA also showcases a significant amount of agricultural land for a metropolitan area of this size, being 14.9% of the total, which is an indicator of the AMA's economic structure and dynamics. Agricultural fields and related activities are a particularly significant asset for the cities of Abha and Khamis Mushait, whose unique identity and microclimate has traditionally been linked to their agricultural character.

Residential land use represents 22.8% of the total, while the mixed-use areas only cover 4.1%, and concentrate mostly over the urban cores and along the major transport connections, such as King Fahd Road and King Khalid Road. The concentration of commercial uses along the main axes is a good pre-condition to support public transport connectivity and for progressive densification of a linear, mixed-use urban spine.

Abha, as the seat of Asir Governorate, hosts several government departments. It has extensive medical and educational facilities including King Khalid University and Prince Sultan College for Hotel Management. There are several kinds of educational facilities, the most significant of which are branches of public universities, which attract students from all over the Asir Region. However, some of the public facilities occupy oversized, monofunctional parcels, detached from the main urban fabric and scattered across the 1450 UGB. Tourism has also significantly influenced the city's land use distribution patterns, as different types of tourist facilities, such as hotels, furnished flats, camping sites, and rental homes are distributed across the city. Accessory tourism services, such as restaurants, car rentals, travel agencies, etc,. are readily available for visitors.

The AMA industrial land use area constitutes 1.8% of the total, and it is formed by small parcels along the major roads between the cities, and by separate industrial clusters located a few kilometres outside the urban areas. Amongst them are the Asir Industrial City and New Asir Industrial Zone, located to the North of Khamis Mushait.

Though the amount of open spaces represents only 0.4% of the total land use, many types of green areas, such as farms, naturally vegetated areas along the wadis, and public gardens are widely distributed across the AMA's territory, forming a unique landscape along with the mountainous terrain. The proposed land use according to the Abha Plan, indicates a considerable increase in residential development, which is nearly double the current amount, and a parallel decrease in agricultural land by 3%, highlighting the danger of encroachment on these areas.

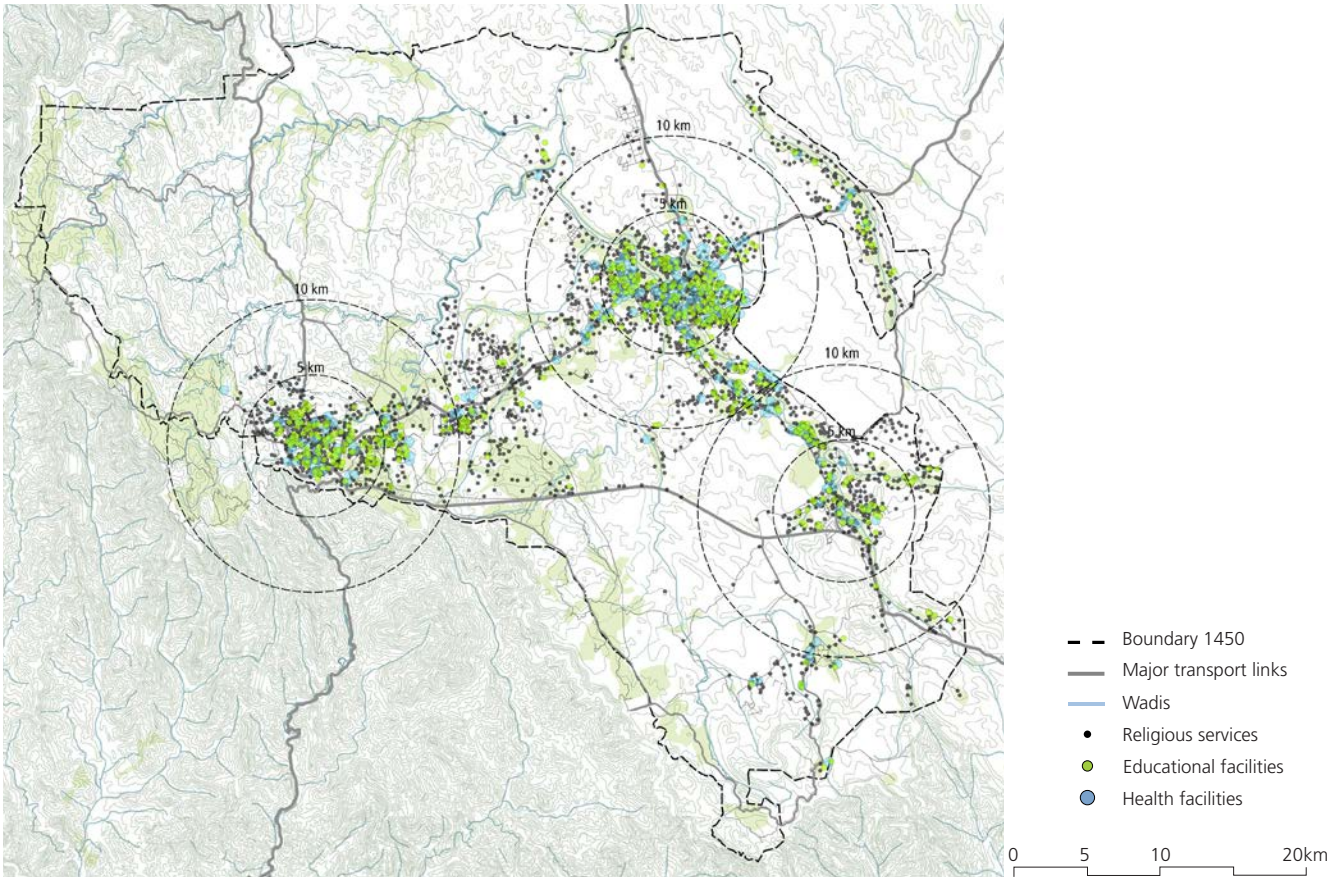


Fig. 29. Distribution of public facilities

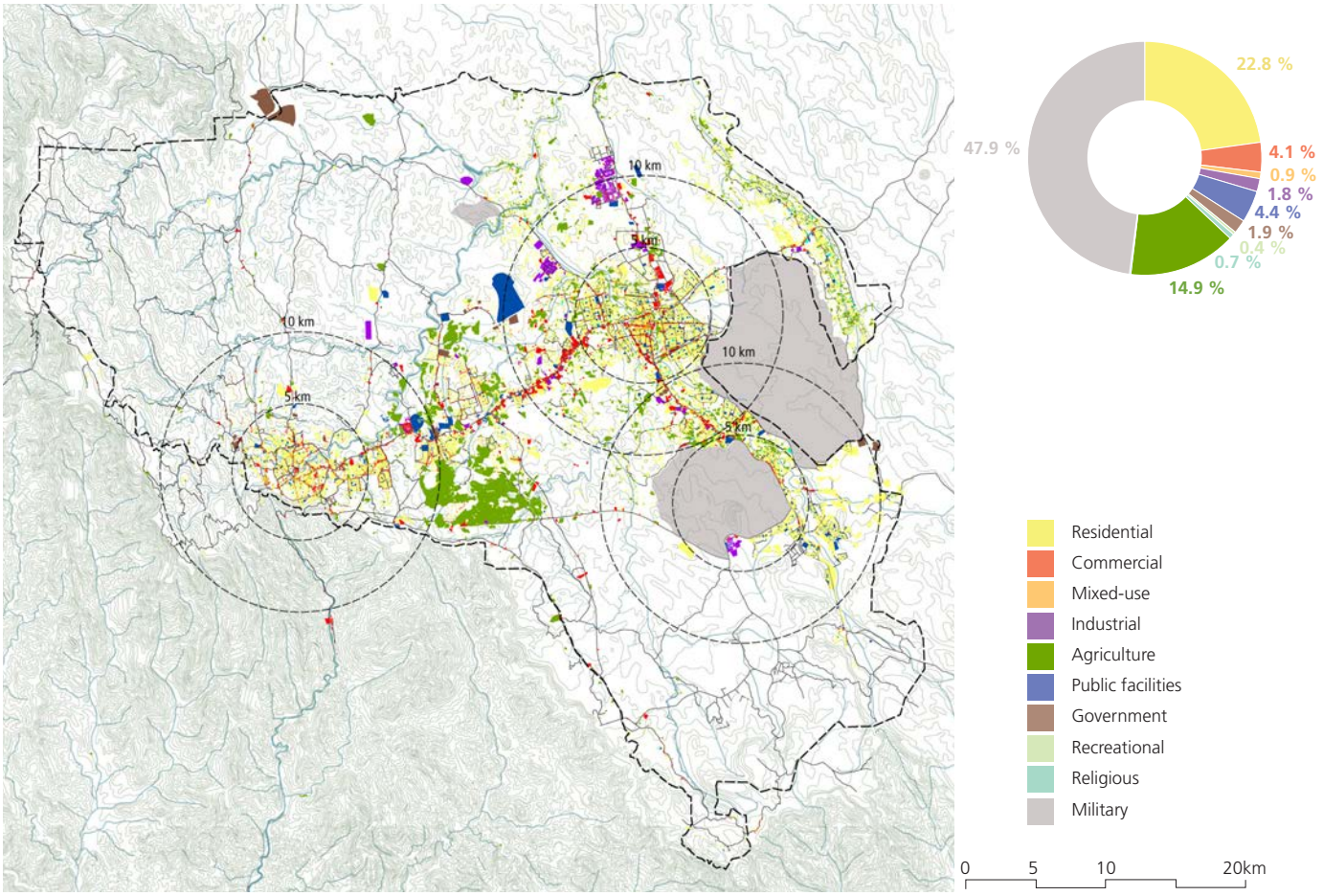


Fig. 30. Existing land use

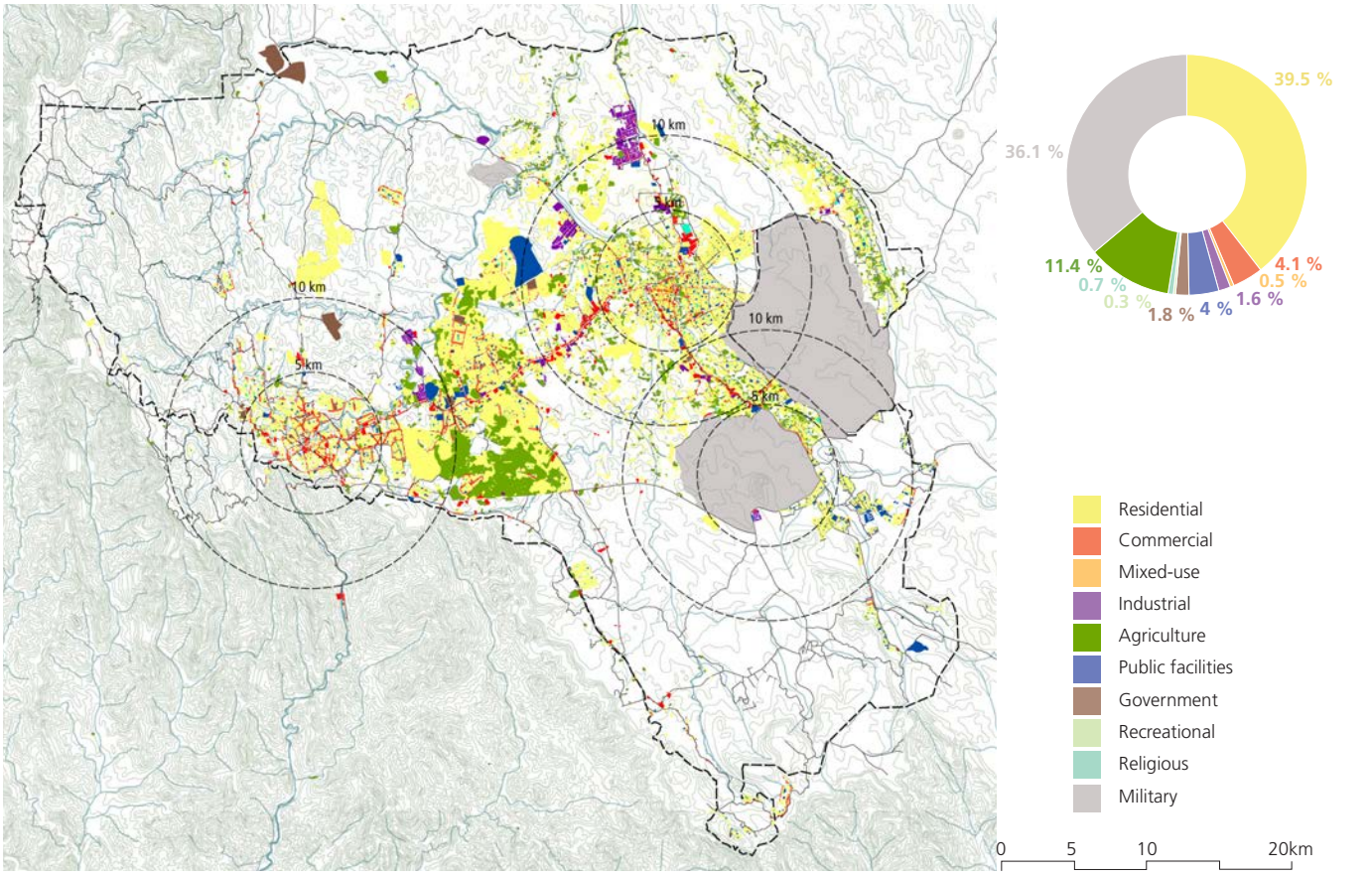


Fig. 31. Proposed land use according to the Abha Plan by the Amanah

4.1.5 Vacant land

The Abha Metropolitan Area has a large portion of undeveloped land, which is free from any constraints and suitable for development and is classified as "vacant" within the current land use plan. The current amount of vacant land within the 1450 UGB is 120 square kilometres, or 7% of the total area delimited by the same boundary. Considering only the built-up area, the vacant land represents 15% of the total urban footprint and amounts to 66.3 square kilometres. This residual and developable land can be an opportunity to accommodate the future population growth, counteracting the current sprawling trend.

According to the land use proposed in the Abha Plan, the vacant land is mostly planned for residential use as monofunctional clusters of condominiums and low-density suburbs, rather than high-density, mixed-use areas. These proliferating types of development generate urban sprawl and polarisation of the urban form, making it difficult to provide reasonable access to services and facilities, as well as to job opportunities, thus, increasing the car dependency of eventual residents.

UN-Habitat's Five Principles for Sustainable Neighbourhood Planning, state that compact cities should aim at developing the recommended density of 150 p/ha. According to this parameter, if UN-Habitat's recommended density is applied to the present conditions of available urban space, the current amount of vacant land within the built-up area can accommodate 994,200 people, which is one and a half times the current population for the Abha Metropolitan Area.

This indicates that the amount of residual vacant land within the urban footprint would be sufficient to accommodate the future growth for at least the next 12 years without expanding the city's area. This is without considering possible densification of existing built-up areas, which could potentially provide the consistent capacity to accommodate further growth. As a first step, though, the available vacant land could be developed as high-density mixed-use, as public space, or additional services and facilities, improving the overall efficiency of the city. This would prevent and counteract the unsustainable sprawling trend, the encroachment of agricultural areas, and the proliferation of monofunctional satellite developments and suburbs. In parallel, the DPB should be better enforced, preserving the area contained between the 1450 UGB and the DPB from any development, with the exception of agricultural uses.

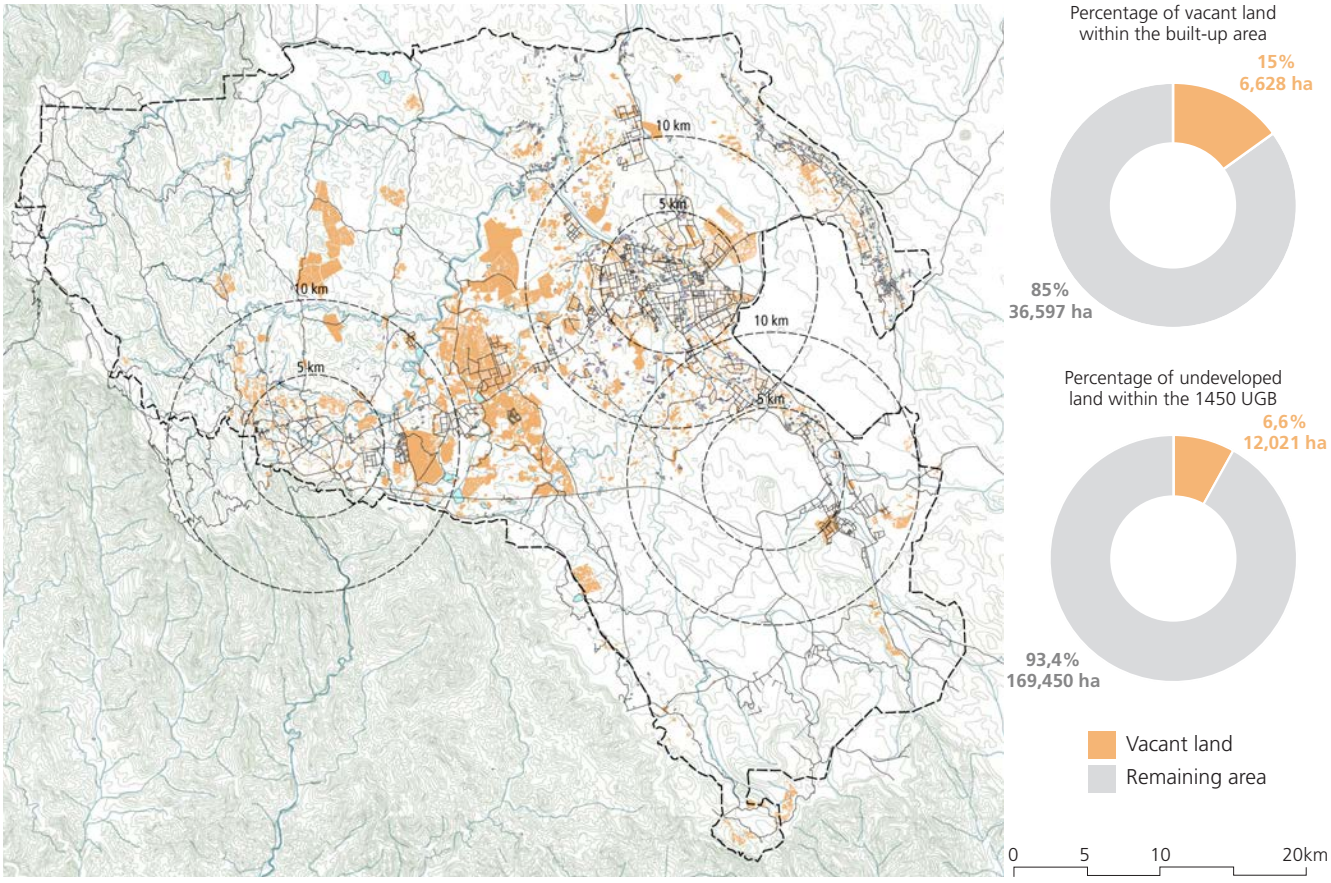


Fig. 32. Vacant land and undeveloped area

Vacant land within the urban footprint

4.2 Structuring Elements

4.2.1 Major infrastructure and economic nodes

The Abha Metropolitan Area hosts a wide range of functions, some of which are located outside the main urban centres, scattered within the 1450 UGB. As shown in figure 34, the main economic nodes are located within the central areas of Abha and Khamis Mushait, and the various educational, social, and public facilities are scattered across the major nodes. The main industrial cores are located between Abha and Khamis Mushait and represented by the Asir Industrial City and the New Asir Industrial Zone.

While the consolidated linear urban structure along King Fahd Road presents an increase in commercial and mixed-use functions, a significant part of the Ahad Rafidah area is dedicated to military use, which impacts the character of the residential development by promoting a rigid urban structure, made of gated compounds for military personnel.

Major agricultural activities are concentrated along the mountain range, represented by a unique layout of terraced surfaces. Another concentration of agricultural uses is located between the cities of Abha and Khamis Mushait on a relatively flat plateau, showcasing lush farmlands, and small agricultural villages.

Over the last decades, the AMA has become increasingly accessible, thanks to the rapid development of infrastructure. Nowadays, the area is well connected to the major Saudi cities by the extended air and road networks.

Currently, the AMA hosts two airports, the Abha International Airport and a military airport near Khamis Mushait. Abha International Airport began to function in 1977, and before then, domestic flights were supported by the military airport near Khamis Mushait. Nowadays, Abha International Airport has connections to several domestic airports within the Kingdom, with direct flights linking Abha with Jeddah, Riyadh, Dammam, Madinah, Tabuk, and Taif, and also offers some international flights to Egypt, United Arab Emirates, and Yemen.

Concerning road connectivity, the AMA enjoys an extensive network of roads, with Abha, Khamis Mushait, and Ahad Rafidah connected to each other by the three main road connections within the metropolitan area: King Fahd Road, connecting the city of Abha to Khamis Mushait, and King Khalid Road, which connects Khamis Mushait to Ahad Rafidah. The King Abdullah Road also links Abja with Ahad Rafidah.

Urban core of Abha

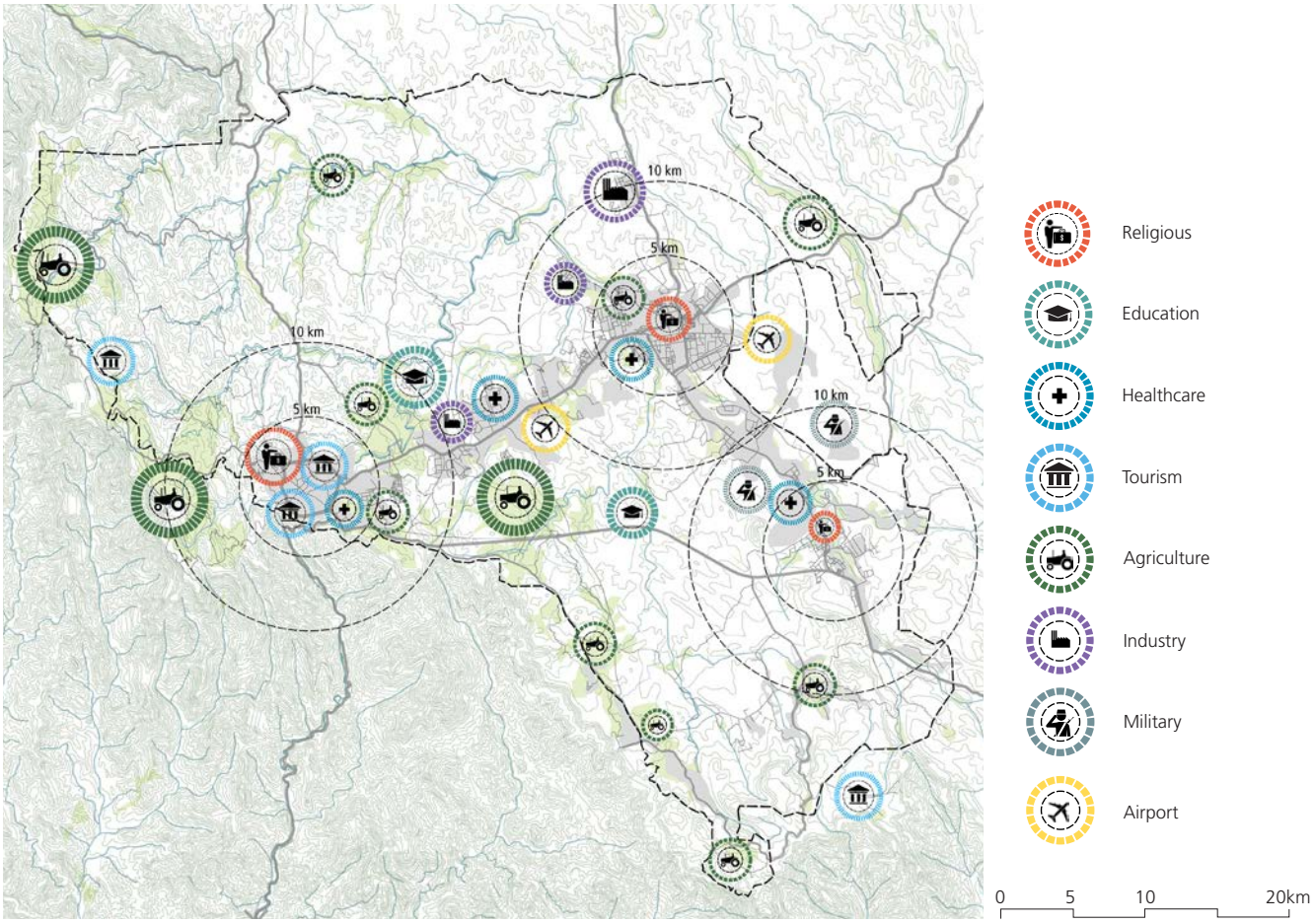


Fig. 33. Economic nodes and network

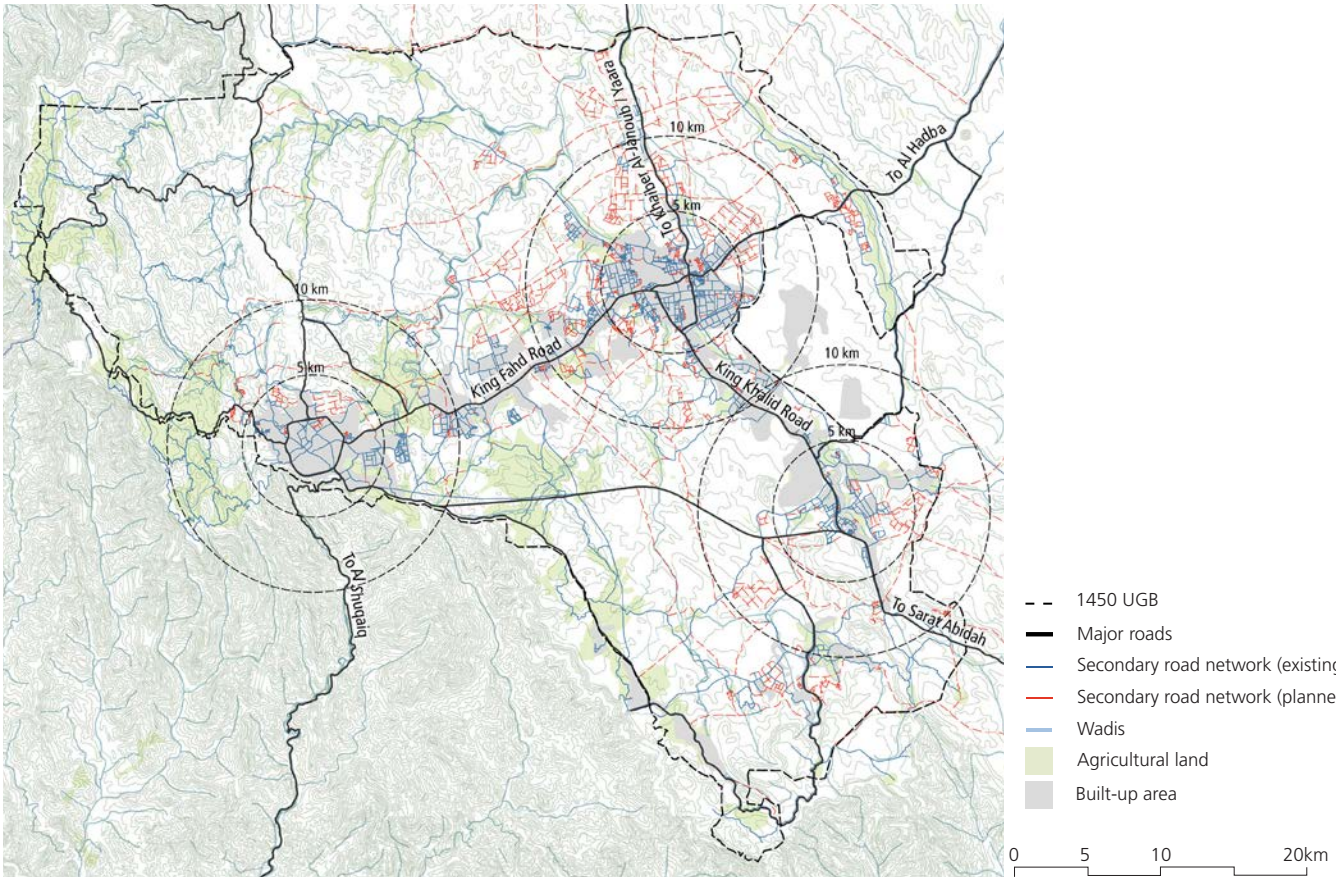


Fig. 34. Major movement infrastructure

4.2.2 Environmental and topographic elements

The AMA geographic location and environment have significantly influenced its economic development and urbanisation patterns.

Topography
The Asir Region is situated on a high plateau, which gifts it with more rainfall than the rest of the Kingdom of Saudi Arabia, also showcasing the highest peaks in the Kingdom. One of the highest peaks is Mount Soudah which is 3,000 metres high and located near the city of Abha.

The Abha Metropolitan Area (AMA) is situated on plain terrain, at approximately 2,000 metres above sea level. Several kilometres to the West of the AMA lies a ridge of an escarpment and from there, the terrain dramatically falls towards the lowlands of Tihama.[28] The Al Soudah road runs up to the North into the Sawdah Mountains, with Mount Sawda (Jabal Sawda) being the highest peak.

The climatic conditions of the region, together with its unique topography, which helps to collect water from the substantial rains, made it possible to develop "mountain farming" by organising terraced slopes across the AMA's territory. The rich topography, with its farming-terraced hillsides, generates a unique scenery, and its beauty attracts tourists from all over the kingdom. Four cable car systems, linking various heritage sites, allow access to a beautiful viewpoint of this dramatic landscape to both residents and visitors.

The wadi system
Historically, and together with the other topographic elements, the wadi system played an important role in the development of the AMA as the first settlements emerged next to the major wadis. As such, the major population centres, Abha, Khamis Mushait, and Ahad Rafidah are all located along the most important wadis, which are Wadi Abha and Wadi Bishah. In addition, nearly 300 small villages scattered across the region are located along Wadi Tindaha. Wadis Abha, Bishah, and Tindaha are considered important geomorphologic elements, receiving relatively high amounts of water from the surrounding hills. The fertile soil in the areas of the wadis is critical for agricultural activities, both for the AMA and the for the whole region.

The verge of Al Habala Valley

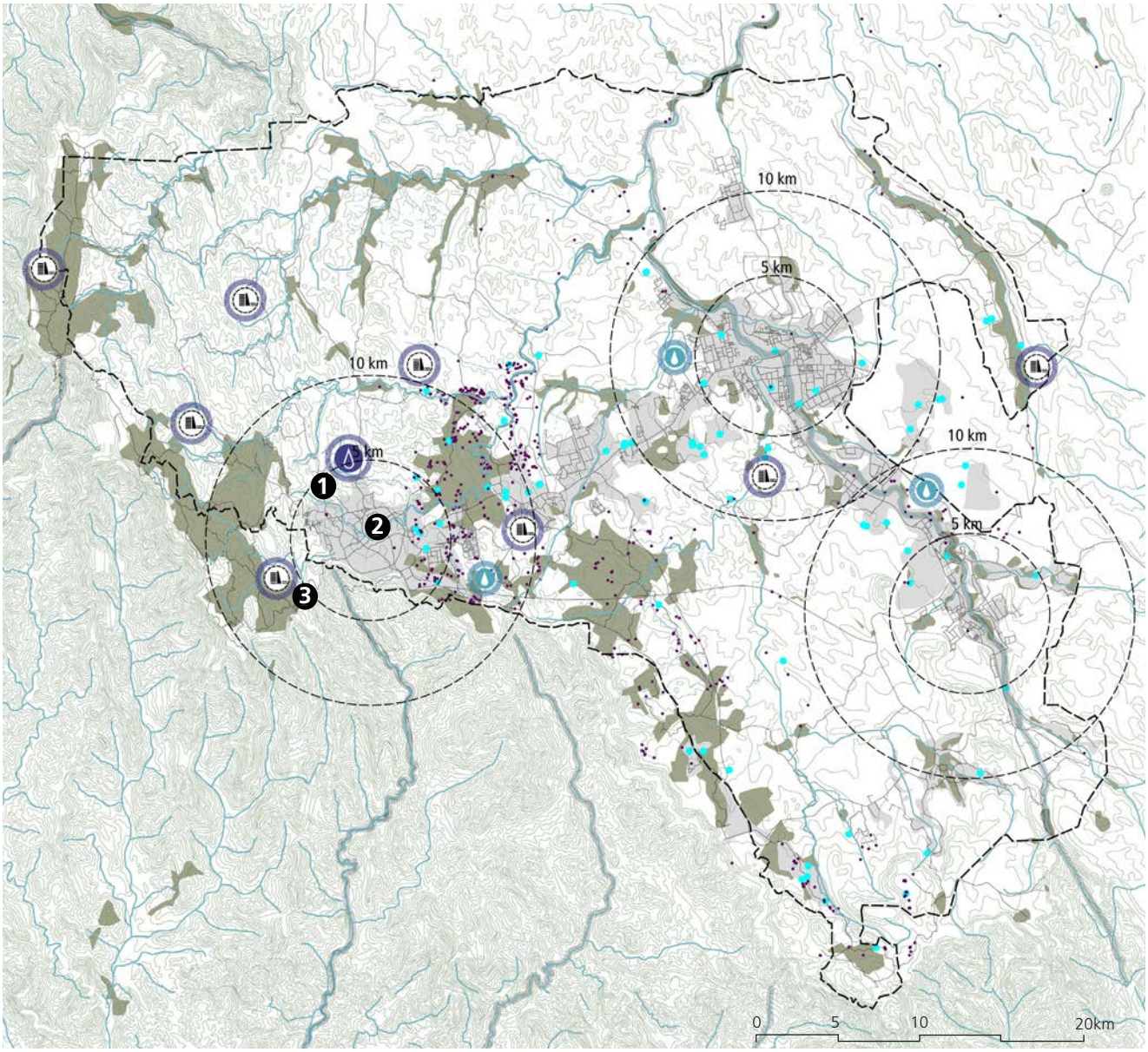


Fig. 35. Blue and green networks

- Development Protection Boundary
- 1450 UGB
- Wadis
- Agricultural land
- Built-up area
- Dam
- Desalinated water distribution station
- Water services
- Water reservoir
- Water tower

1.
Water systems

2.
Vernacular urban patterns

3.
Unique topography and agriculture

4.2.3 Historical sites and landmarks in Abha

The AMA's vernacular architecture is influenced by its dramatic topography and climate. Historically, locally available materials suitable for construction were mostly stone and mud, while a specific type of tall grass, growing along and within some of the wadis, was used as common roofing material.

The houses along the wadi were usually built with the mud extracted from nearby places, while buildings on the mountainous areas were built out of stone. Several old stone and mud houses, some of which are over 300 years old, are still present in the region and are considered to be important historical landmarks. Several watchtowers were historically used to monitor possible invaders, and these still stand on some of the hills.

One of the most significant historical sites in the AMA is the Shada Palace, an archaeological building situated in the heart of the city of Abha. The palace was built in 1250H (1927 AD), serving as a residence for King Abdul Aziz's governors, and it is currently a museum containing numerous archaeological artifacts.

Another prominent site is the old mountainous village Al-Habala, also known as the ***Hanging Village***, attracting visitors to access it by cable car and to explore this unique testimony of Saudi history while enjoying breathtaking views of the mountains and the surrounding desert. The Al-Habala village was built on a cliffside long before the construction of the cable car system and is only accessible by rope ladders.

The Abha Mountains, with their picturesque views can be observed from cable cars, and with a number of scattered villages distributed across the tops of the hills can also be considered a historical and cultural landscape. Mount Al Akhdar (or the Green Mountain), is also worth mentioning as it is a significant landmark, located in the centre of Abha, and from which the whole city can be observed. There is also a direct cable-car line connecting Mountain Soudah to another significant landmark, the Rijal Al Ma'a mud-brick village, also known as the ***Heritage Village***, which contains a library and a museum offering insights on Saudi's history.

The Asir National Park, part of the natural heritage of the region, offers visitors the possibility of experiencing a wild and unique environment. The park opened in 1401H (1981) and it covers a total extension of 600 square kilometres, starting from the mountains to the West of Abha, moving through the Tehama plains, and reaching the Red Sea coast.

The various heritage sites scattered along the mountainous landscape are connected through the previously mentioned cable-cars system, which makes it the most significant infrastructural element dedicated to disclosing the territory to visitors. The four cable-car routes in the region are:

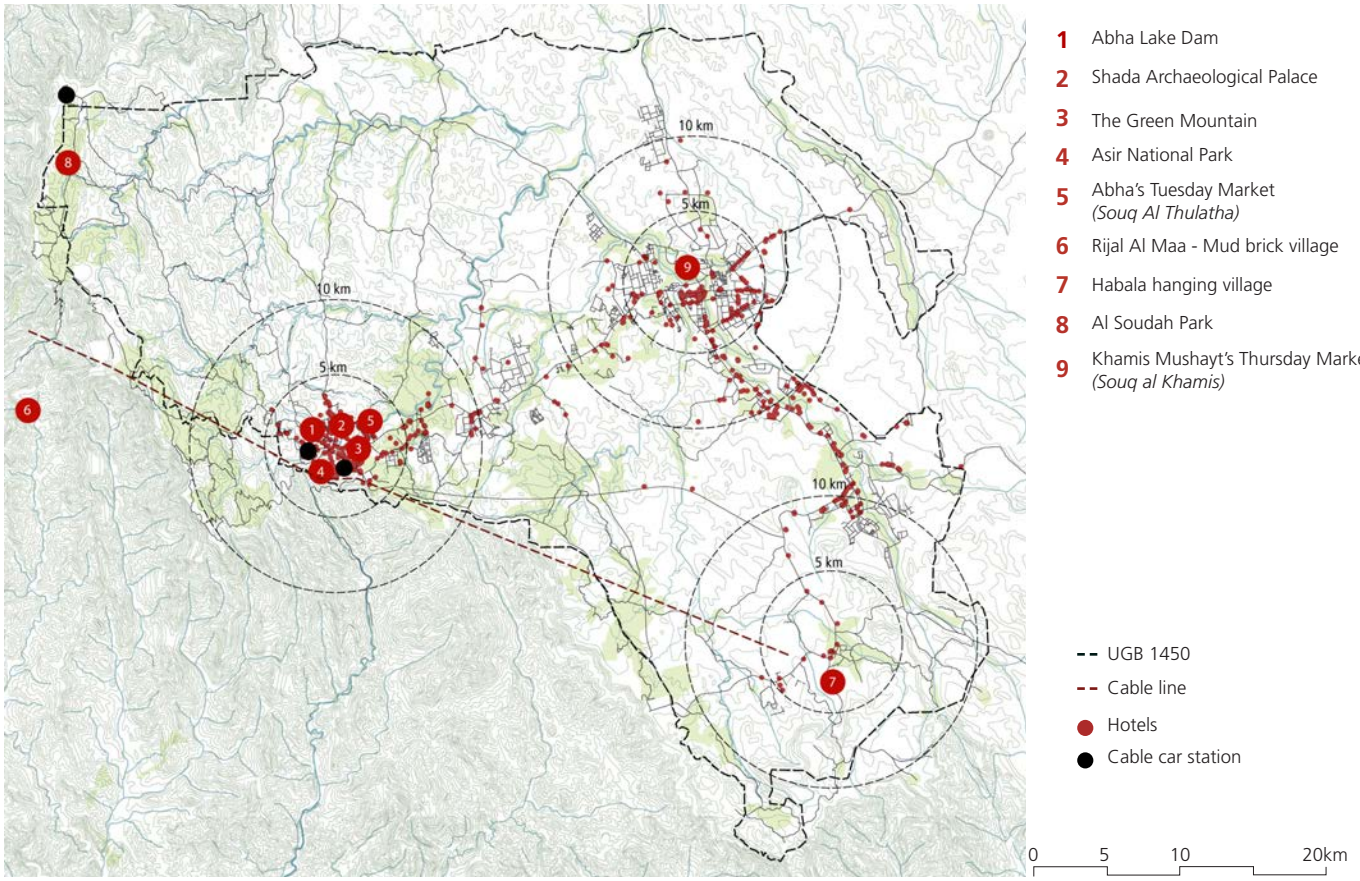


Fig. 36. Historical sites and landmarks

Rijal Alma'a heritage village

- The one linking the city cable-car station in central Abha to the Green Mountain, connecting Abu Khayal to Mount Al Akhdar (Green Mountain),
- The one linking the city cable-car station to New Abha,
- The one linking Al Soudah cable-car station to Rijal Al Ma'a village (Heritage Village), and
- The one linking the city cable-car station to Al-Habala village.

Overall, the cable-cars system can transport over 600 passengers per hour, while the total amount of tourists using the cable service has a maximum capacity of 30,000 users in the summer season.

4.2.4 Abha tourist dynamics

In 1996, the first-ever conference on domestic tourism was held in Abha, under the patronage of the Late Prince Sultan bin Abdul Aziz. As a result of the conference the decision to establish a tourism authority was taken, which resulted in the Saudi Commission and National Heritage (SCTH). In 2017, the Arab Tourism Organisation (ATO) awarded Abha the title of Capital of Arab Tourism for the year, which was supposed to impact the development of the whole region positively.[29]

Investment opportunities were offered by the Asir Municipality to attract investors in order to revitalise and diversify the economy in the region, aiming at enabling a sustainable regional development in line with Vision 2030. Where it depends on five major factors that influenced the recognition of Abha as the Capital of Arab Tourism for 2017, as follows:[30]

- Climate;
- Scenic natural landscapes;
- Historical heritage;
- Social heritage and dynamics, especially various festivals; and
- Unique agricultural environment.

Indeed, Abha area has considerable potential for tourism development, not only due to environmental factors and historical identity but also because of the number of festivals and events held in Abha, especially with the summer programs, which are greatly anticipated by domestic tourists. Festivals include a wide range of programs, cultural events, and sports activities in order to attract various segments of society.

Abha Art Gallery

4.2.5 Structural and Land Use Plan

The 2010 Structural and Land Use Plan For The Metropolitan Area of Abha, determines future trends in spatial development for the three cities of Abha, Khamis Mushait, and Ahad Rafidah that make up one urban area, sharing several social, and public facilities. As such, the plan's strategic zoning reserves the territories adjacent to the mountains for recreational and cultural purposes. Reserving these areas, as well as the buffer zones along the wadis is a positive move, as it will protect the natural assets from urbanisation and encroachment.

According to the current Land Use Plan, the agricultural land amounts to 14.9% of the total land use, playing a significant role in the structural organisation of the territory. Similarly to the wadis and mountains, agricultural land should be protected as a critical asset, contributing to the identity of the area, and be better integrated into the urban form. While the preservation of the unique landscape, with its scenic topographic conditions, wadi, and peculiar farmlands should be a priority before any further development, unfortunately, the Future Land Use Plan fails to do so.

Future residential expansions are mostly planned along the main transportation connection between Abha, Khamis Mushait, and Ahad Rafidah structuring the opportunity for developing an efficient public transportation system. However, although the urban cores of Abha, Khamis Mushait, and Ahad Rafidah have strong connections to each other and with their surroundings, the proposed road network indicates a considerable road expansion to the Northeast, beyond the 1450 UGB, expanding the urban footprint beyond the effective needs.

As such, the Future Land Use Plan indicates the development of a new residential area, labeled in the Structural Plan as Mixed-use, Agricultural/Residential, infilling the whole 1450 UGB area. These territories are distant from the urban cores of AMA's three cities, showcasing a kind of development that encourages sprawl and puts additional pressure on the municipality to provide sufficient services and infrastructure for these new, low-density developments.

This development approach puts AMA's urban areas at risk of unsustainable development and encroachment of environmental assets, such as hillsides and agricultural land. The existing road infrastructure should be upgraded and complemented to better serve a consolidated urban form, with pedestrian-friendly and lively streetscapes supporting the activity of small businesses, positively influencing the local economy. Similarly, available vacant land should be used to compact and densify the AMA urban structure, leveraging public transport and maximising urban efficiency.

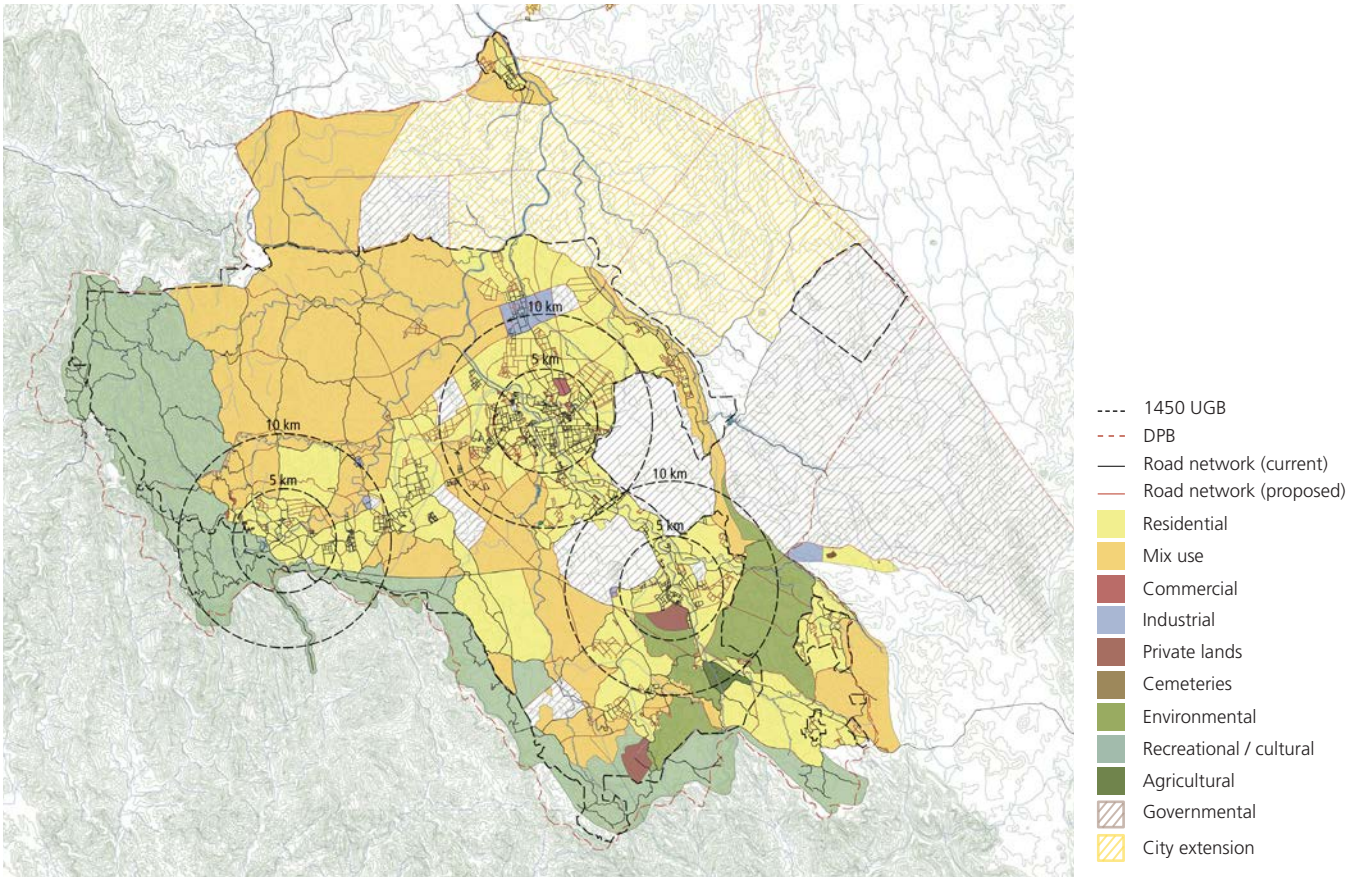


Fig. 37. Structural and Land Use Plan for the AMA

4.2.6 Movement and accessibility

The AMA is well connected to other major Saudi cities, such as Jazan to the South, Riyadh to the Northeast, and the Holy city of Makkah to the North, through Taif. Additionally, Abha has access to Jeddah via the coastal road. At the metropolitan scale, the cities of Abha, Khamis Mushait, and Ahad Rafidah are well connected to each other by road, although there is no public transport system serving the AMA.

The 2016 City Prosperity Index (CPI) report for Abha ranks the Urban Mobility as 'weak' and suggests addressing the issues of a missing public transport system. Road safety is marked as strong and the Average Daily Travel Time is 21.9 minutes, which is a good average. Similarly, the indicators for the CPI Street Connectivity Study indicate good connectivity and street-coverage for the entire AMA. Amongst the three cities, Abha has a higher intersection density value, with 123 intersections per square kilometre, and presents a relatively low value for land allocated to streets (11.20%), while also showcasing a high value for street density (63.30%). Though some critical dimensions of the study result as weak, the overall connectivity in Abha can be considered strong, which highlights a significant potential for creating an efficient public transport system.

To understand the movement pattern of the population, a GIS model has been applied to test the accessibility to commercial centres of the AMA. Both motorised (walkability) and non-motorised (drivability) accessibility have been analysed.

Drivability

The result of the accessibility analysis shows that access to the three mixed-use urban cores by private car in the entire AMA urban area is covered within a 15-minute drive. Within the 1450 UGB, the entire area, including the rural settlements, is accessible with a 30-minute drive. This means that overall, the AMA presents good vehicular access to the main urban cores.

Walkability

Currently, the higher concentration of mixed land use is found in the central areas of Abha, Khamis Mushait, and Ahad Rafidah, and in some areas along the major roads between the cities, which rapid growth and clustering of commercial activities are characterised as secondary urban cores. For performing the walkability analysis, nine different urban cores were identified following the parameter of selecting areas with a higher concentration of commercial and mixed land use, and calculating the number of residents that are able to reach them within a 5 and a 10-minute walking distance:

- *The central area of Abha within the King Abdulaziz Road.* The analysis shows that 61,607 people have access to this area within a 5-minute walking distance, which is equal to 7.9% of the total population. The same area is accessible to 97,123 people within a 10-minute walk, equal to 12.5% of the population.
- *The Area of Mansak and Al Marooj neighbourhoods, along the King Fahd Road, next to Abha central area.*

The way to the Soudah Mountain

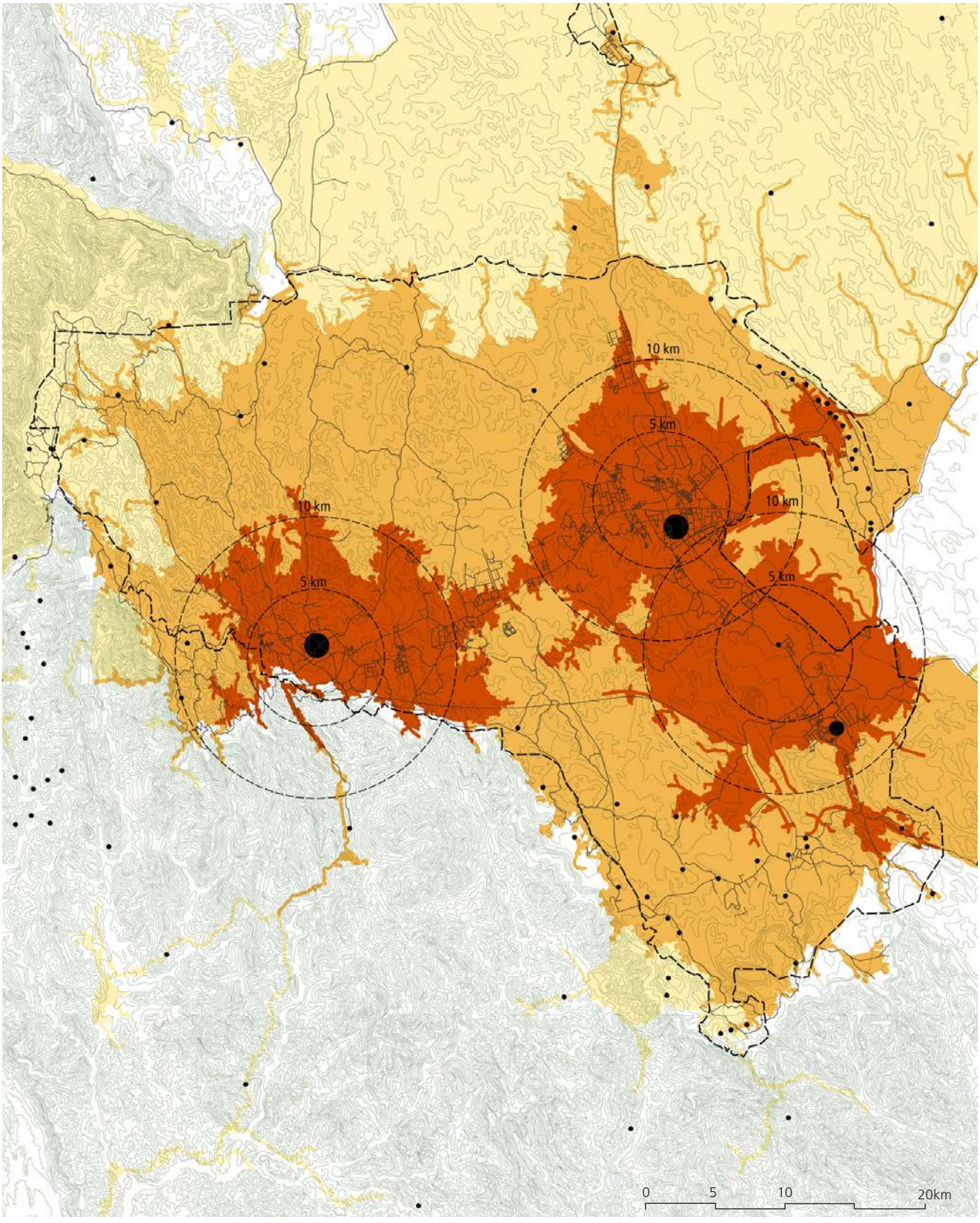


Fig. 38. Accessibility to the city centres of Abha, Khamis Mushait and Ahad Rafidah

The analysis shows that 11,344 people have access to this area within a 5-minute walking distance, which is equal to 1.5% of the total population. The same area is accessible to 21,030 people within a 10-minute walk, equal to 2.7% of the population.

- *The mixed-use area along King Fahd Road, next to the Saudi Electricity company.*
  The analysis shows that 1,047 people have access to this area within a 5-minute walking distance, which is equal to 0.13% of the total population. The same area is accessible to 1,483 people within a 10-minute walk, equal to 0.19% of the population.
- *The Al-Mozvin neighbourhood, along the King Fahd Road.*
  The analysis shows that 11,344 people have access to this area within a 5-minute walking distance, which is equal to 1.5% of the total population. The same area is accessible to 15,184 people within a 10-minute walk, equal to 2% of the population.
- *The area between Abha and Khamis Mushait along King Fahd Road, next to Abha International Airport.*
  The analysis shows that 873 people have access to this area within a 5-minute walking distance, which is equal to 0.11% of the total population. The same area is accessible to 1,449 people within a 10-minute walk, equal to 0.19% of the population.
- *The mix use area next to the Al Tahliyah neighbourhood along the King Fahd Road, approximately 5 kilometres from the central area of Khamis Mushait.*
  The analysis shows that 10,252 people have access to this area within a 5-minute walking distance, which is equal to 1.3% of the total population. The same area is accessible to 17,752 people within a 10-minute walk, equal to 2.3% of the population.
- *The central area of the city of Khamis Mushait.*
  The analysis shows that 112,685 people have access to this area within a 5-minute walking distance, which is equal to 14.5% of the total population. The same area is accessible to 136,624 people within a 10-minute walk, equal to 17.5% of the population.
- *The mixed-use area along the King Khalid Road, next to the central area of Ahad Rafidah.*
  The analysis shows that 25,350 people have access to this area within a 5-minute walking distance, which is equal to 3.3% of the total population. The same area is accessible to 34,769 people within a 10-minute walk, equal to 4.5% of the population.
- *The mixed-use area of Ahad Rafidah, along the King Khalid Road next to the Abha military base.*
  The analysis shows that 2,367 people have access to this area within a 5-minute walking distance, which is equal to 1.3% of the total population. The same area is accessible to 6,479 people within a 10-minute walk, equal to 0,8 of the population.

Overall, the analysis highlights how the pedestrian domain is more developed within the central urban areas of Abha and Khamis Mushait due to higher density and better-structured system of pedestrian connections, while other urban cores should be more integrated with the rest of the city as emerging nodes.

Tuesday Souq in Abha

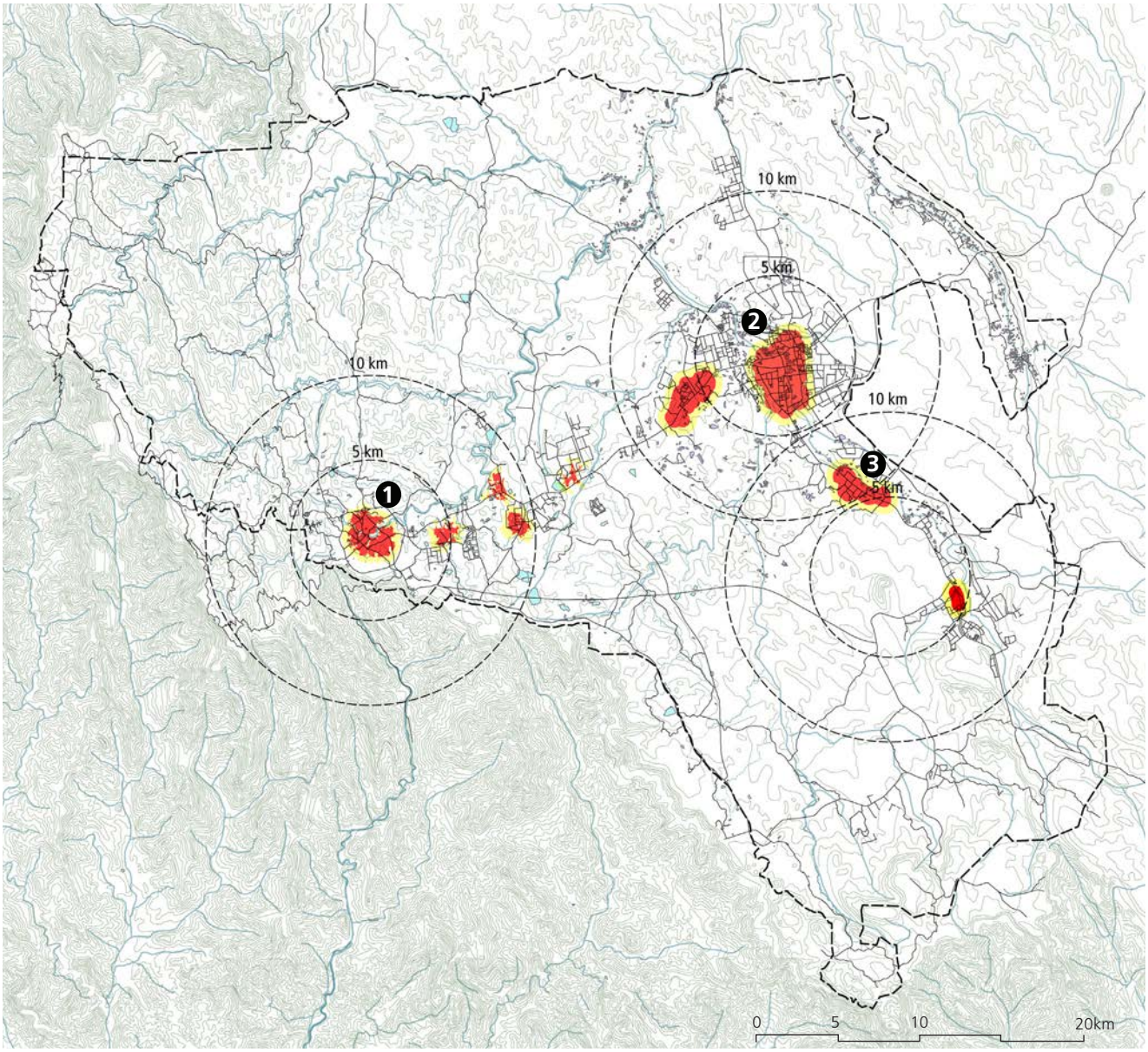
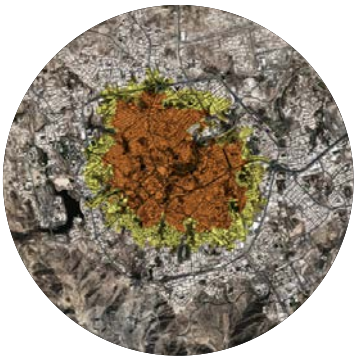


Fig. 39. Walkability to the city centres



1.
Abha city centre

2.
Khamis Mushait city centre

3.
Ahad Rafidah city centre

4.2.7 Urban density scenarios

Crosscutting the diagnosis of the current urban conditions and the approved/submitted projects proposals, FSCP operated a scenario-analysis for increased urban density, according to various choices. The scenarios depict three conditions: the current situation, the situation developed in line with the approved planning instruments, and a situation where density distribution is allocated following the City Profile's recommendations, and based on the UN-Habitat standards.

The UN-Habitat scenario is based on the *Five Principles for Sustainable Neighbourhood Planning*, which are as follows:

- Adequate space for streets and an efficient street network: The street network should occupy at least 30% of the land and at least 18 kilometres of street length per square kilometres,
- High density: At least 15,000 p/km², that is 150 p/ha or 61 p/acre,
- Mixed land use: At least 40% of floor space should be allocated for economical use in any neighbourhood,
- Social mix: The availability of houses in different price ranges and tenures in any given neighbourhood to accommodate different incomes; 20% to 50% of the residential floor area should be for low-cost housing, and each tenure type should be not more than 50% of the total,
- Limited land use specialisation: This is to limit single function blocks or neighbourhoods; single function blocks should cover less than 10% of any neighbourhood.

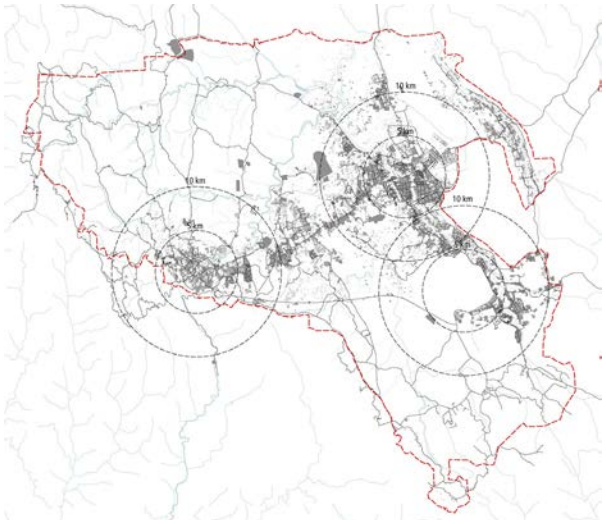
Current Condition
The current population of the Abha Metropolitan Area is 778,599 people, occupying a built-up area of 43,225 hectares. This generates a population density of 18 p/ha, which is considerably low when compared to the UN-Habitat recommended density of 150 p/ha, being low in comparison to other Saudi cities of similar size.

Scenario 1: The AMA Plan
According to the trends documented by the AMA Plan, the planned built-up area is supposed to increase to 52,671 hectares, hosting a foreseen population of 965,500 people by the year 2030. Even with the substantial increase of population, the expansion area appears overdimensioned, and it will keep the same low-density, with an average of 18.3 p/ha, showing how this development scenario will increase sprawled low-density development.

Scenario 2: UN-Habitat Recommendations
The UN-Habitat scenario supports sustainable neighbourhood planning for the whole metropolitan area, starting from promoting an increased density, in line with the average UN-Habitat density of 150 p/ha. Considering the current growth rate, and a consequently increased population of 965,500 by 2030, the additional built-up area needed to fulfill the city's future growth would only be 6,236 hectares, which is only one-eighth of the proposed built-up area considered in Scenario 1.

Abha cityscape

CURRENT CONDITION

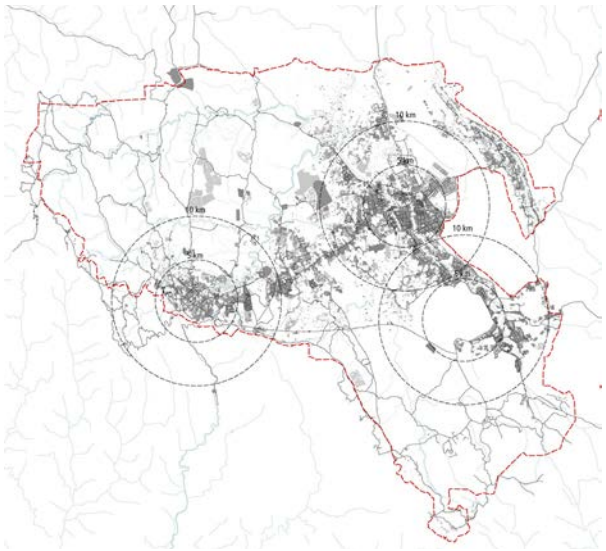


population **778,599**

built-up area **43,225 ha**

average density on built-up area **18 p/ha**

SCENARIO 1: THE AMA PLAN

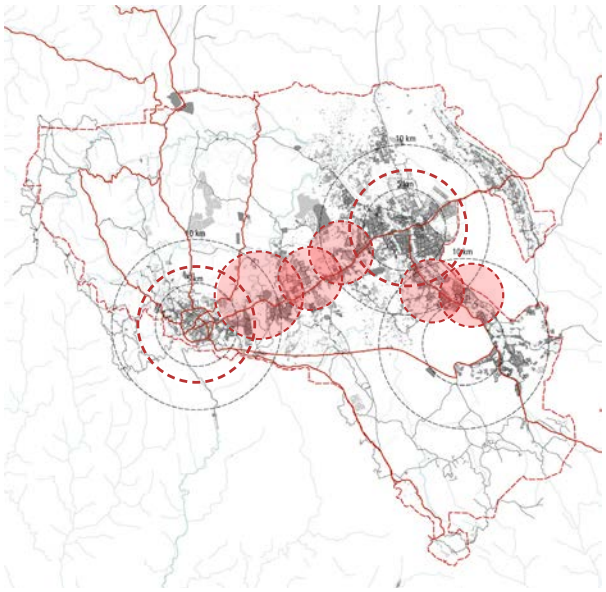


population **965,500**

planned built-up area **52,671 ha**

average density on planned built-up area **18.3 p/ha**

SCENARIO 2: UN-HABITAT RECOMMENDATIONS



population **965,500**

built-up area needed according to UN-Habitat recommendations **6,236 ha***

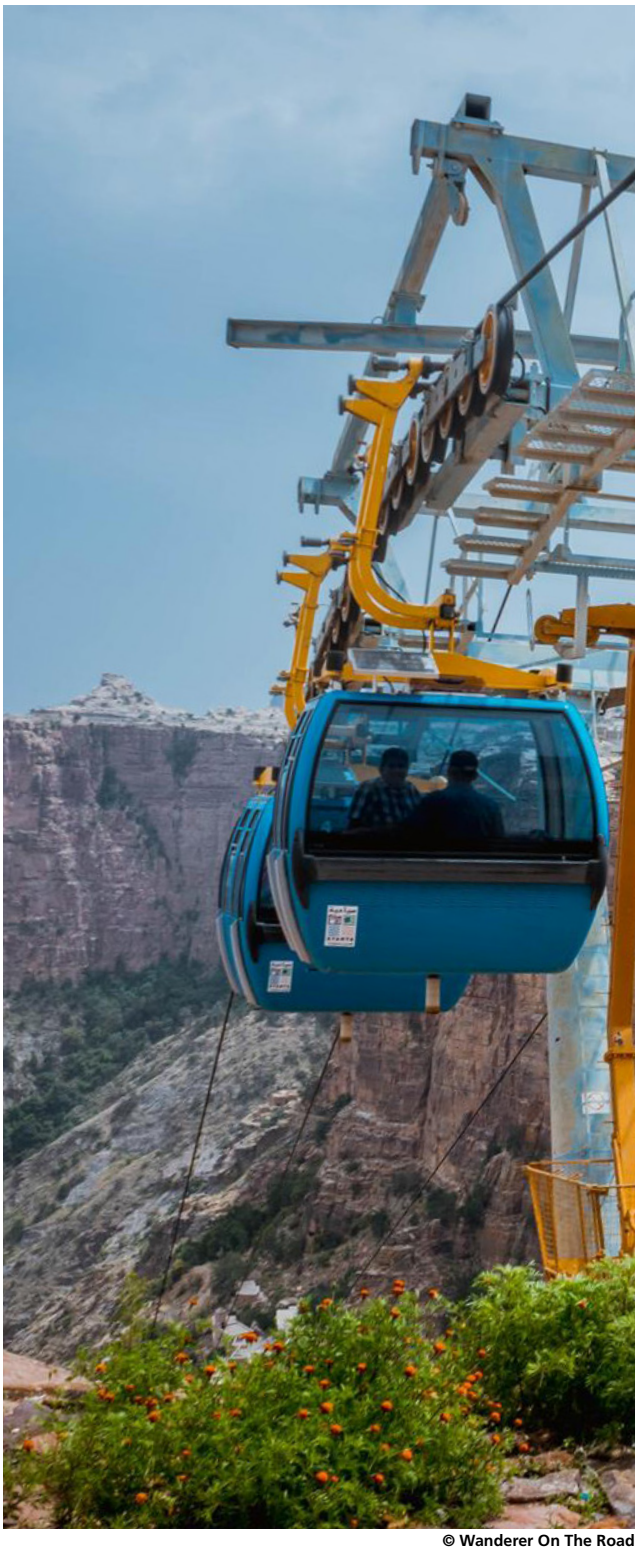
vacant land needed to accommodate population growth **1,246 ha**

average UN-Habitat recommended density **150 p/ha**

* 1/8 of the built-up area proposed by the AMA Plan

5

STRATEGIC DIAGNOSIS



© Wanderer On The Road

5.1 Identifying and Defining Main Strategic Issues

During the evidence-based and cross-scalar analysis, three main issues affecting sustainable urban development in Abha Metropolitan Area were identified. These issues represent the strategic framing of a complex diagnosis, synthesised through three conceptual lenses. These lenses are firstly defined in their conceptual nature, and later contextualised by an examination of their spatial manifestation in Abha, Khamis Mushait, and Ahad Rafidah, at different scales.

5.1.1 Unbalanced growth and development patterns

This often happens when a city grows rapidly, presenting a widespread sprawl phenomenon that manifests in inharmoniously balanced developments across its territorial extension. Dysfunctionalities in urban management, both institutionally and experientially, are brought to light. In this scenario, the city demonstrates low-density and does not perform effectively, its services and facilities are not well-balanced in distribution and accessibility, which results in an inequitable citizenry experience. This condition makes the provision and maintenance of basic services, and transport infrastructure costly and challenging.

[SPRAWL]

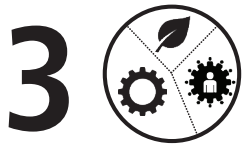
5.1.2 Divisions and lack of cohesion in city structure

In cases of unbalanced growth, sprawl, and inharmonious development, forms of non-contiguous and non-cohesive city structures tend to co-exist, without integration. Pockets of leapfrog development are widespread. Undeveloped land, overdimensioned infrastructures and/or large extensions of monofunctional developments hinder the continuity of the city's fabric, and therefore, its social, economic, and ecological performance. As in cases of sprawl, this renders the equal provision of infrastructure and services to the entire city difficult and costly. The fragmentation phenomenon also spatially affects the social dimension of sustainability, creating urban inequalities and segregation in areas that lie at a distance to the largest hubs and become isolated by a discontinuous urban landscape.

[FRAGMENTATION]

5.1.3 Socio-ecological and economic imbalance

Each city is formed by complex social, economic, and ecological systems. In a sustainable city, the balance between these three interrelated systems is maintained and enhanced over time. If any one system is given continued preference over the others, over time, a structural imbalance will emerge that alters the sustainable trajectory of the city's growth and development. This misalignment generates an issue in terms of water provision and food security, and heavily impacts other socio-spatial aspects of the city's health. Segregation between agricultural lands and the urban fabric is a good example of this condition. The city does not interact with green space and is disconnected from farmlands by a strong boundary. A resilient city would integrate its natural and built elements, ensuring their balanced coexistence.



[LACK OF RESILIENCE]

Roads leading to Al Soudah Mountain peak (the highest peak in Saudi Arabia)

5.2 Analysing AMA's Three Issues in Depth

5.2.1 AMA's unbalanced growth and development patterns

The Abha Metropolitan Area, like most of the urban areas in Saudi Arabia, is experiencing rapid population growth and the subsequent creation of new facilities, new economic centres, new transport nodes, and corridors. Though the central areas of Abha and Khamis Mushait have a relatively high urban density, a well-defined urban structure with various green spaces integrated into the urban fabric, the more recent and foreseen expansion patterns are emerging as sprawl, resulting in unbalanced development for the AMA.

The urban fabric in the central areas of Abha, Khamis Mushait, and Ahad Rafidah presents a relatively compact structure, which is well-suited to support sustainable urban densification, whilst easing the management costs for the city. However, while the AMA's urban footprint has significantly grown in the past few decades, and despite the environmental constraints, this happened without a proportionate increase in population, which led to an overall decrease in urban density.

In addition, while the linear mixed-use urban structure exists, there emerged and consolidated a positive kind of development pattern along the main transport axis between the three cities. The emerging sprawl trends endanger this. Amongst these trends, the new high-level facilities, such as the King Khalid University campus, together with the possibility of the emergence of a 4th city to the South of the AMA's current three cities, are placing strong economic pressure on the Municipality to provide and maintain the necessary basic infrastructure. Overall, new developments keep emerging towards the outskirts of the urban area, to the North of King Fahd Road and the South, towards the main concentration of agricultural farmland, which are also facing a risk of encroachment.

Such urban growth patterns can seriously hinder the sustainability of the city's resources, especially agricultural assets, a large percentage of which have already been lost over the recent years as a result of emerging new residential development and due to the expansion of the road network.

However, AMA has an opportunity to control the expansion and redirect its future development patterns toward a more sustainable trajectory. By strategically densifying within the existing footprint, consolidating the fabric along the major transportation corridors, like King Fahd Road and King Khalid Road, the overall metropolitan urban structure could be incrementally consolidated around well-identified cores, with a high concentration of commercial and mixed-use , services, and people. This would also support the effectiveness of investment on public transport by maximising the catchment area because of high-density residential areas along the main transport axis.

1.

New residential areas in Abha

2.

Residential expansion in Khamis Mushait

3.

New infrastructure in Ahad Rafidah

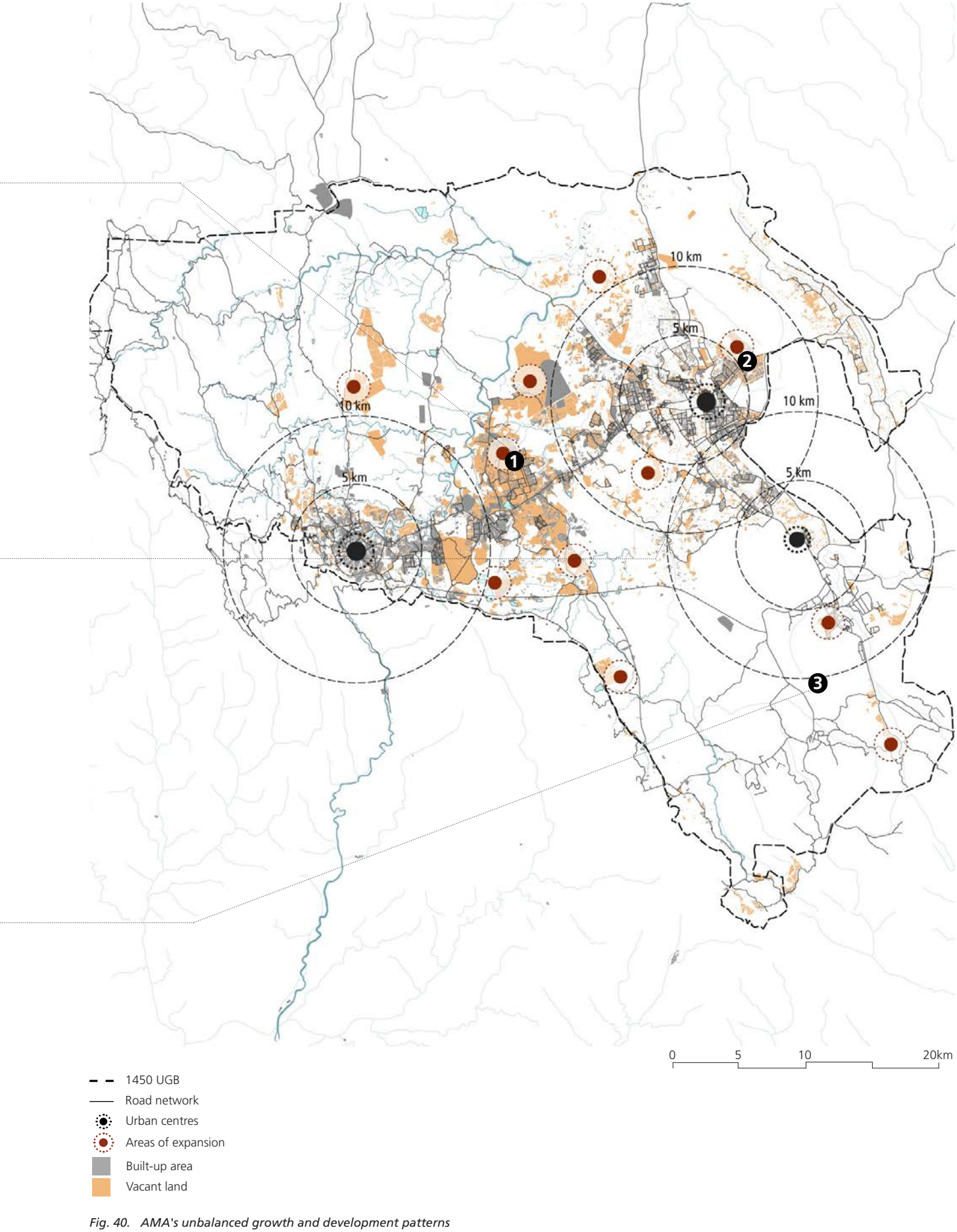


Fig. 40. AMA's unbalanced growth and development patterns

5.2.2 Divisions and lack of cohesion in AMA's urban structure

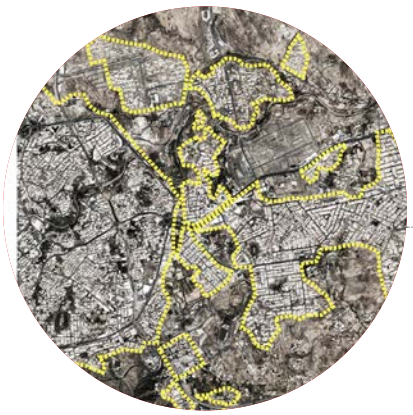
As previously mentioned, the entirety of the AMA's urban structure is formed by the three cities of Abha, Khamis Mushait, and Ahad Rafidah and a number of scattered residential developments and villages spread over the 1450 UGB area. The three cities and the neighbouring settlements have emerged along the wadis and are connected by roads. Farmland is mostly concentrated in the central part of the Metropolitan area, between Abha and Khamis Mushait, also cross-cutting their urban fabric, and is an important structural element for these two cities.

Although the three cities evolved in a way that could eventually consolidate them into a whole linear urban structure along the main transportation links, the overall structure of the metropolitan area is highly fragmented, with proliferation of scattered residential parcels formed by low-rise condominiums, villages, and facilities, distant from any of the three main urban cores. If this trend persists, it could possibly lead to high polarisation in service distribution, therefore to unequal access to services and facilities across the AMA. The new King Khalid University, located about 27 kilometres away from the centre of Abha is a perfect example of this kind of spatial isolation and fabric fragmentation, which increases car-dependency and puts pressure on infrastructure delivery and maintenance. The proposed fourth city around this area, to the North of Abha, would further outstretch and fragment the AMA's urban structure, causing unreasonable sprawl.

There is, however, an opportunity to re-stitch the urban fabric by consolidating development around the emerging urban cores between Abha, Khamis Mushait, and Ahad Rafidah, and by re-addressing future development strategies toward compaction by using the existing vacant land within the existing footprint. The proposed amenities as well as further developments should be relocated on available vacant land within the three cities and/or along the main transportation links.

The well-structured road network grants relatively good connectivity across AMA's main urban areas, and offers the potential for compacting the urban form along the main transportation corridors. They form a dense and sustainable environment that resembles central parts of Abha and Khamis Mushait. This kind of development pattern would also help to protect the agricultural land in between the three cities, which are currently at risk of encroachment by the emerging residential clusters.

1.



Fragmented development in Abha

2.

Fragmented development in Khamis Mushait

3.

Fragmented development in Ahad Rafidah

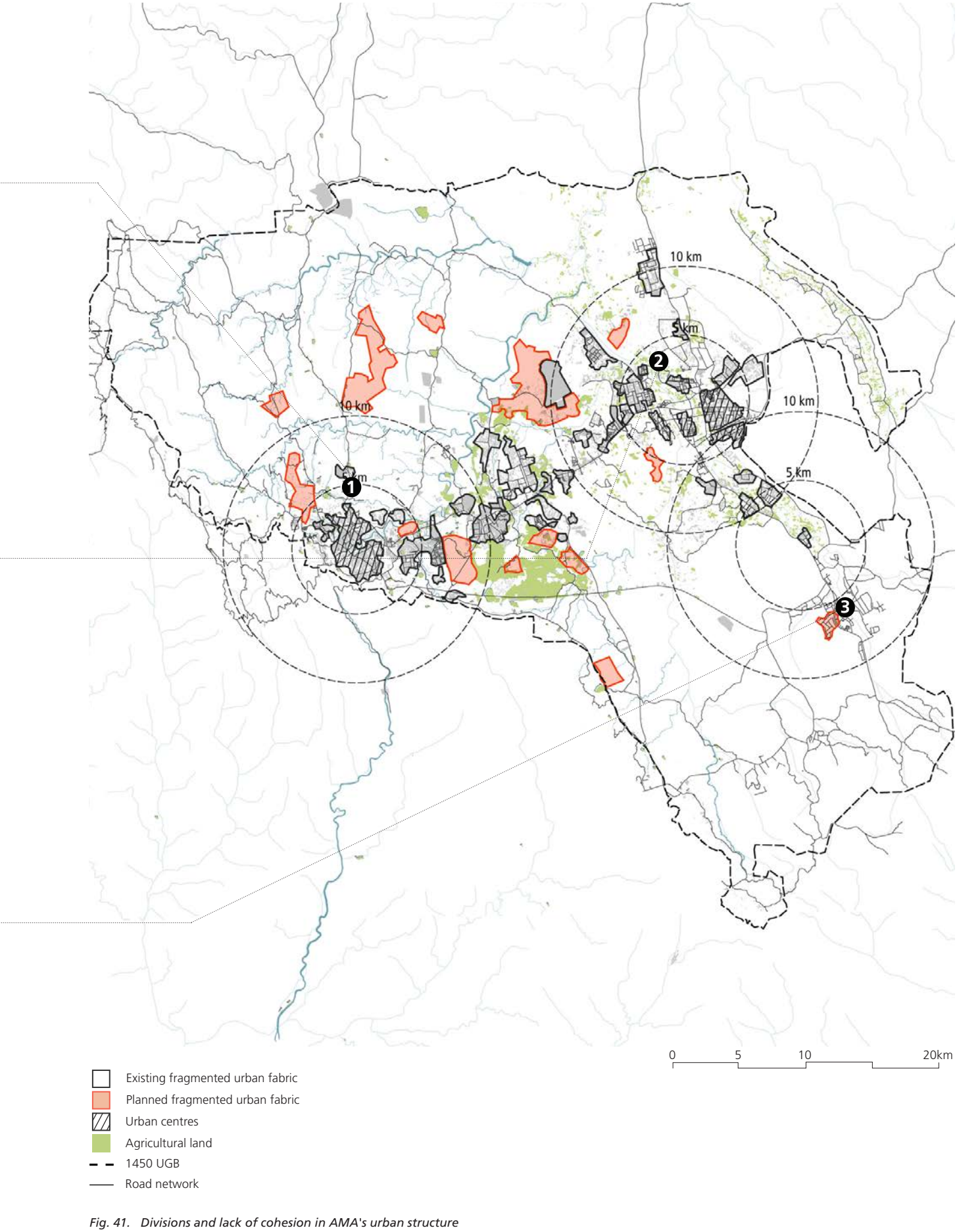


Fig. 41. Divisions and lack of cohesion in AMA's urban structure

5.2.3 Socio-ecological and economic imbalance in AMA

The Abha Metropolitan Area has a considerable amount of agricultural land, which historically influenced the city's identity and economic development. First settlements represented traditional mud houses that emerged along the major wadis, as the soil and climate were suitable for agriculture. Agricultural patterns along the wadis still interweave within the urban fabric of Abha and Khamis Mushait, defining a unique physiography.

According to the current Land Use Plan, the agricultural land amounts to 14.9% of the total land use, while the proposed scenario by the Future Land Use Plan in the Abha Plan indicates a decrease of 3.5% in agricultural land use. This is because of the considerable residential expansions planned beyond the current built-up area. This trend puts agricultural land at risk of encroachment, which has begun to happen over the last few decades.

It is critical to protect agricultural land, in order to preserve both the history and the unique ecology of the whole region. As mentioned in paragraph 5.2.1, AMA has plenty of opportunities for densification along the major transportation links, by consolidating a system of new urban cores along them. This would prevent future sprawl caused by residential expansion, and thus, encroachment.

One of the main characteristics of the AMA is its dramatic topography, which allows visitors to experience picturesque views from the hills. However, analysing the urban patterns in relation to the natural topography, it can be seen that development encroachment is also occurring happening on the hillsides.

The system of wadis is another major structuring element for Abha and Khamis Mushait, forming a longitudinal axis with green areas of farmlands that cross the urban fabric in both cities. Unfortunately, as shown in the zooms, some of the elements composing this rich and well-linked blue and green network system were encroached by new developments due to the lack of appropriate regulations. If this is not appropriately addressed soon, unprotected agricultural land may rapidly succumb to development pressure, as this land is usually located on a relatively flat terrain, which is easier, cheaper, and faster to develop.

In addition to the above, the proposed new infrastructure is often not appropriately aligned with the topography of the area. Though the encroachment of the hillsides is not a major trend yet, protecting the hills is important to preserve the city's natural, historic, and socio-cultural elements as a priority as they not only define the natural characters and the identity of the valley, but they also contribute to the unique microclimate. Any urbanisation into the fringe areas, such as hillsides, agricultural land, and wadis can fragment and interrupt natural and ecological corridors, threatening the rich but fragile ecosystems of both the AMA and region.

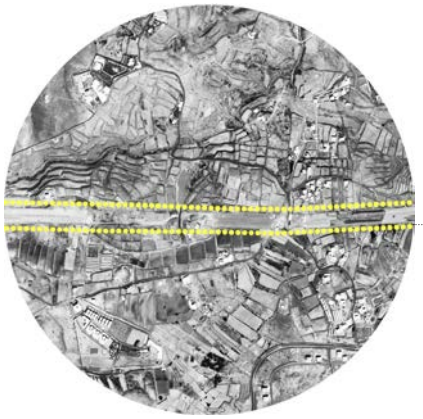
1.

Encroachment of wadis

2.

Encroachment of agricultural lands

3.



Infrastructure over agricultural lands and hillsides

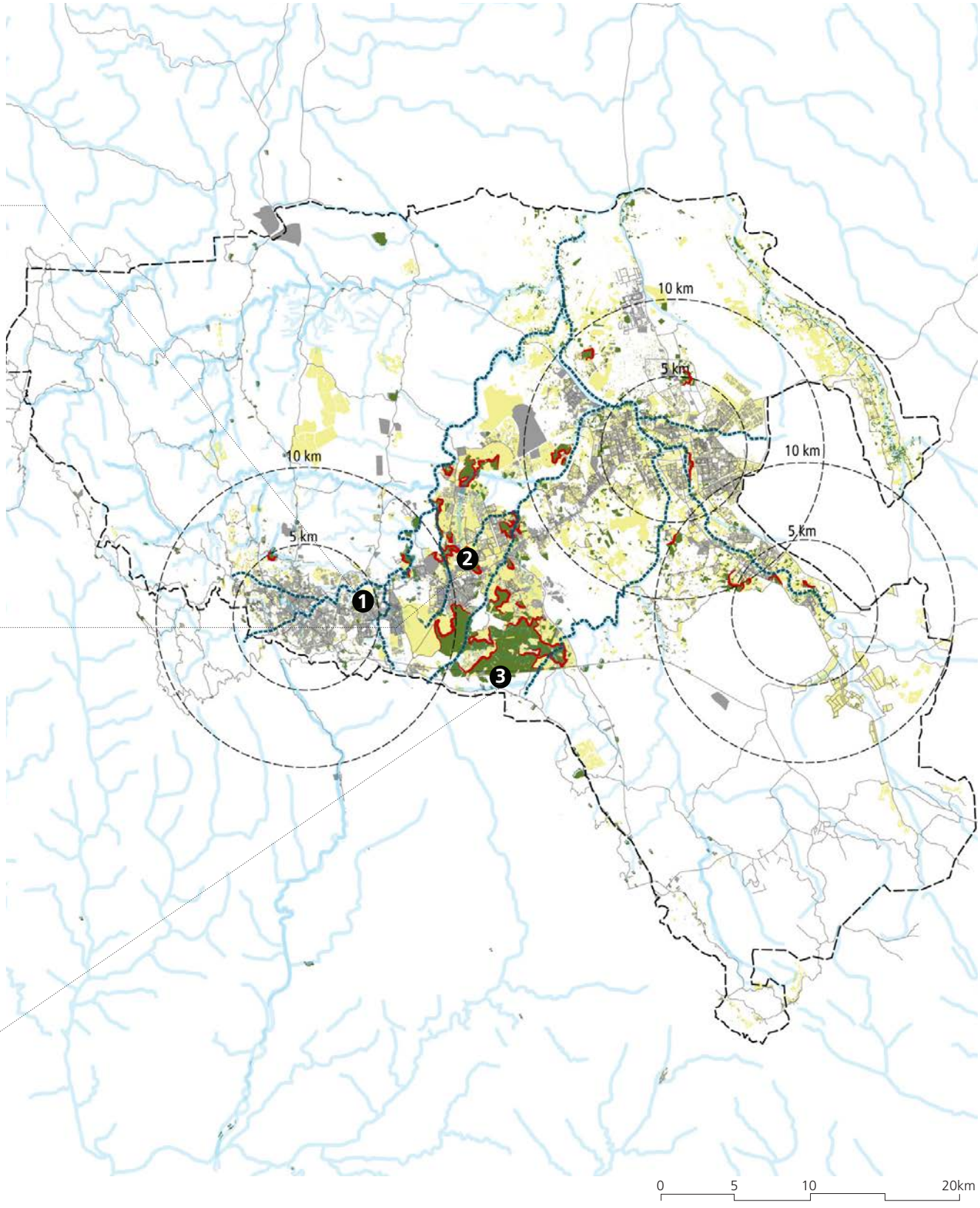


Fig. 42. Socio-ecological and economic imbalance in AMA

6

THE FUTURE CITY

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6.1 Strategic Responses

After performing a strategic diagnosis, and identifying three main issues affecting the urban development of the Abha Metropolitan Area, three strategic recommendations were identified in response. Akin to the three strategic issues, the above-mentioned three strategic recommendations define the conceptual framing for a systemic and strategic level of solutions. Once defined in their conceptual nature, they are developed into a more detailed description, spatially interpreted and contextualised in Abha, Khamis Mushait, and Ahad Rafidah, at the various scales. This is followed by a roadmap to implementation, in the form of an articulated Action Plan.

6.1.1 The Compact City

According to UN-Habitat principles, cities need to encourage spatial development strategies that take into account the need to guide urban extension, prioritising well-connected infrastructure and services. A Compact City is envisioned as a high-density urban settlement, characterised by mixed-use development, dense, and vibrant urban areas, well-distributed services and facilities, (such as hospitals, parks, and schools). Establishing spatial and legal mechanisms to consolidate a Compact City can increase accessibility and walkability, therefore increasing the use of public transport and public space, reducing congestion, boosting the local economy, and increasing interactions across society. Policies to promote urban compaction involve the promotion of urban regeneration, the revitalisation of town centres, restraint on development in rural and peripheral areas, promotion of higher densities and mixed-use development, and the concentration of urban development around public transport nodes.

[CONSOLIDATE]

6.1.2 The Connected City

The Connected City is envisaged as a continuous, well connected, and well-balanced network of neighbourhoods, each with its own parks and public spaces, and accommodating a diversity of overlapping private and public activities, shaping a healthy and vital urban environment. Most importantly, these neighbourhoods create opportunities and conveniently accessible facilities which, in turn, reduces the need for private vehicles. In large cities, mass transit systems can provide high-speed, cross-town travel by linking one neighbourhood centre with another, leaving local distribution to local systems and foot traffic. This reduces the volume and impact of traffic, which can be calmed and controlled, particularly around the public cores of neighbourhoods. Local trains, light railway systems, and electric buses become more effective, and as a result, cycling and walking become more pleasant. Moreover, congestion and pollution are drastically reduced, and a sense of security and conviviality in public spaces is increased.

[RE-STITCH]

6.1.3 The Resilient City

A Resilient City takes into consideration appropriate built form, and physical infrastructure to increase resilience to the physical, social, and economic challenges that arise from depleting carbon-based fuels, and climate change. A Resilient City can be defined as "*a sustainable network of physical systems and communities.*"[31] These physical systems consist of both the constructed and natural environmental components of the city. They include roads, buildings, physical infrastructure, communications facilities, soils, topography, physical features, geology, waterways, population density, etc. In sum, the physical systems act as the body of the city, its bones, arteries, and muscles. Resilient cities are cities that are capable of withstanding severe shock and stress without either immediate chaos/damage or permanent deformation or rupture. Rebalancing the urban system, to consider stress conditions, is therefore key for the Abha Metropolitan Area.

[PROTECT & IMPROVE]

View of Abha from the surrounding mountains

6.2 Appropriate Models for Urban Development of the AMA

6.2.1 The Compact City: Consolidating development by creating and densifying new centres in AMA

The three cities of Abha, Khamis Mushait, and Ahad Rafidah, as well as the several fragmented developments in between these cities, and the scattered new development and villages within the 1450 UGB form the AMA's built fabric. The urban cores of Abha and Khamis Mushait have relatively high-density with a good concentration of commercial and mixed-use areas. The significant number of green areas and the overall well-integrated blue and green networks create a vibrant and pleasant urban environment, attractive both for residents and visitors of the Asir Region. However, the recent and emerging developments, along King Fahd Road and King Khalid Road do not follow the same structural organisation as the central areas.

As such, the first strategy prioritises the increase of density along the main transport axis connecting the three cities, where the phenomenon has already started. This would create the preconditions for structuring a public transport system, in line the Transit Oriented Development principles, (TOD). The new areas along the main axis should, therefore, be redeveloped and densified, using the capacity of the vacant land to accommodate growth, and to provide high-density and mixed-use typologies, while including considerations for factors respecting the topography and need for integration with the blue and green networks.

To achieve more compactness over the entire AMA, further areas for strategic densification will need to be identified along the major transport corridors, considering environmental constraints, availability of vacant land and existing concentration patterns of commercial and mixed-use areas. These identified areas will become new urban cores/ centralities linked to each other and the centres of Abha, Khamis Mushait, and Ahad Rafidah by public transport.

This strategy aims to improve the overall AMA density distribution around compactness, rather than to encourage scattered and sprawled development and eroding the agricultural land, transforming the whole metropolitan area into an interlinked and dense, linear urban structure, consolidated along transport axes, with good accessibility and equal distribution of services.

1.

The central area of Abha

2.

Vacant land within the urban foorprint of Abha

3.

Central road in the city of Abha

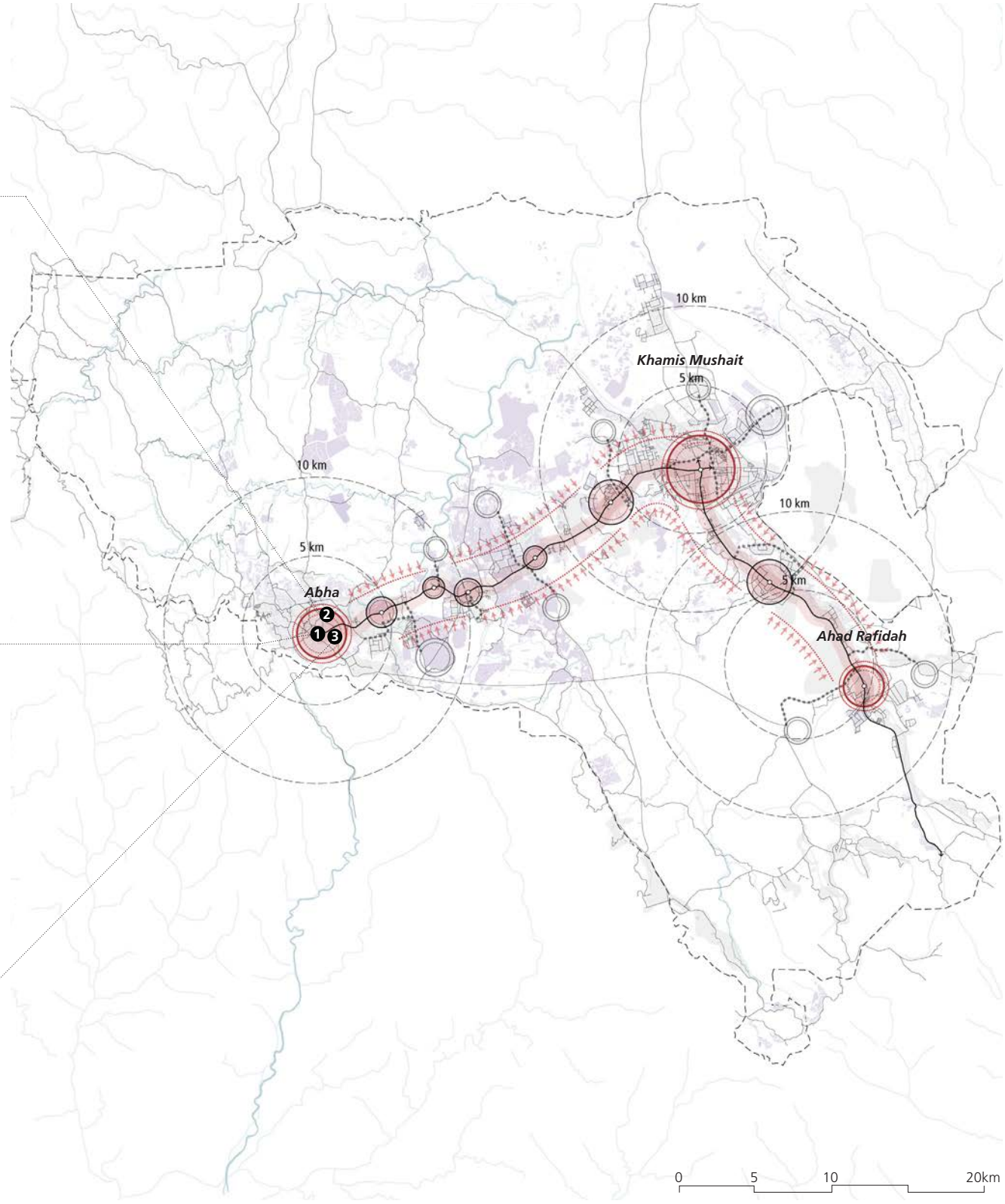


Fig. 43. The Compact City: Consolidating development by creating and densifying new centres in AMA

6.2.2 The Connected City: Linking AMA through public transport

Traditionally, Abha, Khamis Mushait, and Ahad Rafidah were connected to each other and share many services. On the other hand, recent developments, rural settlements, and villages are scattered across. However, while the overall urban structure of the AMA appears quite fragmented, there is considerable potential to consolidate the urban form, to re-stitch fragmented urban areas through an efficient public transport system. But, whilst the existing planning documents cover the whole AMA, there is no unified vision to coordinate the three cities as one, whole urban structure.

The implementation of a strong public transport backbone, following the densification along the main transport corridors would link the three main cores with the currently scattered residential areas formed along major roads, increasing the efficiency of the AMA's overall urban structure. The low-density residential clusters and villages would require the strengthening of their connectivity to the main cores to benefit from the rich and articulated Metropolitan Area. Therefore, the main public transport backbone should be developed together with a secondary system of transversal connections, linking the proposed backbone with the existing development, and taking into account the topographic features of the area.

The linkage of the three cities and their connection with the in between fragments would build on the previously depicted strategic densification along the main axes, and provide good conditions for future densification of these areas. This will significantly limit residential expansions at the expense of agricultural land, and it will preserve the AMA's natural assets from further encroachment. In addition, as the city of Abha is an important tourist attraction for both local and international visitors, it would greatly benefit from a strong and unified urban structure, with well-developed public transportation linking it to the rest of the AMA.

The public transport system would also help to better direct future development by connecting the new densified centralities and establish a hierarchy amongst them in relation to their role in the transport system. Accordingly, areas of future growth and areas for redevelopment will be selected, and their development prioritised according to their accessibility to the public transport system. As such, implementing a public transportation system that links the main urban area, the emerging linear developments, and the villages prevent unreasonable urban growth to sprawl and detach from the main transport corridor, and should be set as a development priority.

1.

Fragmented new development and vacant land between Abha and Khamis Mushait

2.

Road infrastructure in Abha

3.

King Abdullah Road in Abha

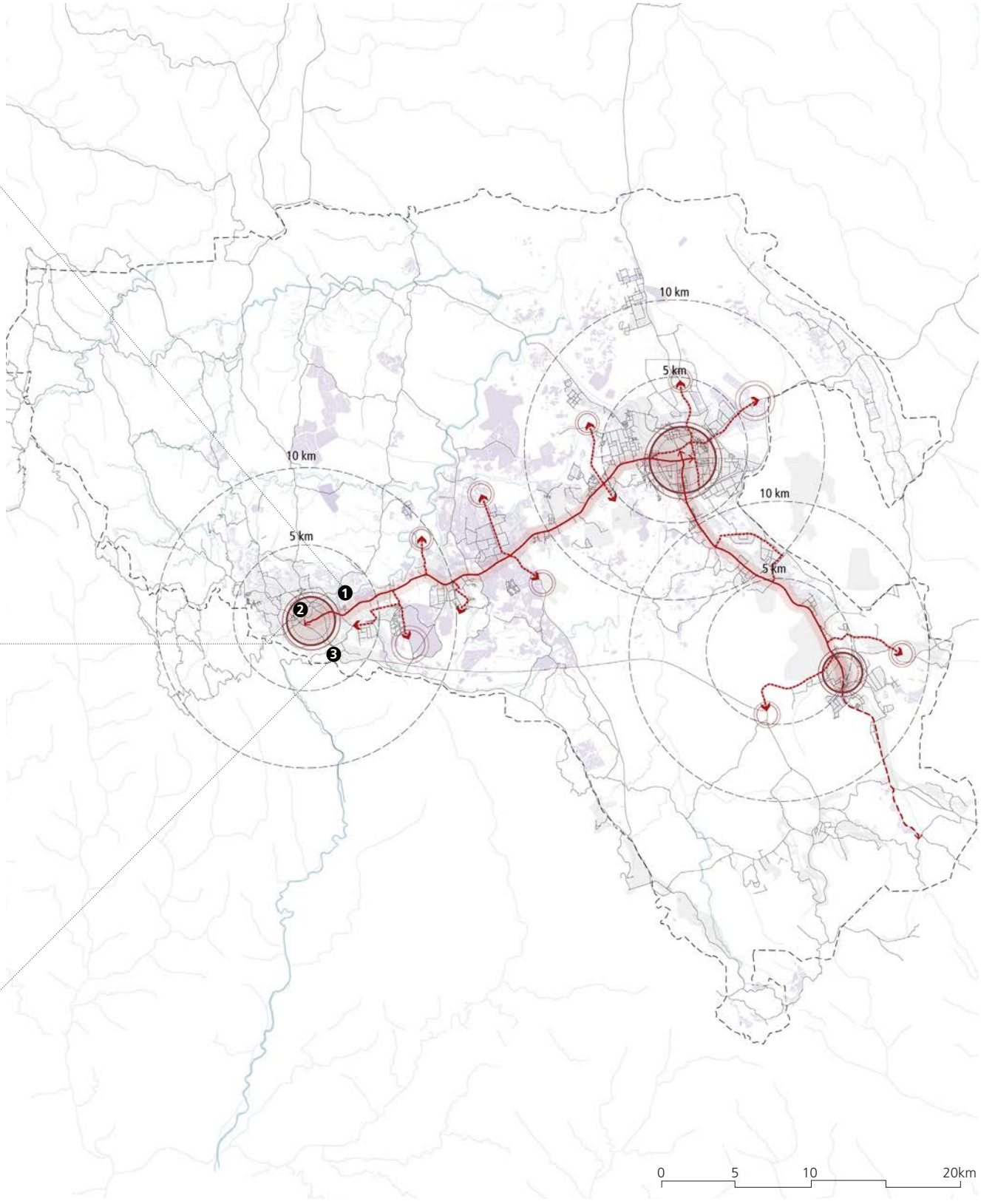


Fig. 44. The Connected City: Linking AMA through public transport

6.2.3 The Resilient City: Rebalancing AMA's socio-ecological and economic systems

The third strategy aims to promote the development of urban spatial frameworks that support the sustainable use and management of natural resources and land, backed by the appropriate compactness and density, polycentrism, and mixed-use from the previously illustrated strategies. The strategy aims to rebalance how the city functions and align it with its natural features, how it intends to strengthen urban resilience, enhance resource efficiency, and environmental sustainability while triggering economies of scale and agglomeration by fostering risk reduction, food, and water security.

As envisaged by the first strategic recommendation, the AMA requires a strategic vision that respects the unique topography, with the valleys, the hillsides, the wadis, and the agricultural land, which are the essential elements for its identity. However, the agricultural land, the valleys, and the wadis are at risk of encroachment, because of their topography, which makes such flat land suitable for residential development. The majority of agricultural fields are concentrated between the cities of Abha and Khamis Mushait, forming the main area of farmlands. Unfortunately, new infrastructure is being built over these agricultural land, and fragmenting the fields. In addition, the proposal of an emerging fourth city next to the New King Khalid University would also negatively impact the largest agricultural areas, by enclosing them with new road infrastructure and disrupting the continuity of the green network.

Against this background, this strategy proposes the preservation of these areas as a unified, and continuous green infrastructure. Agricultural land currently crosses the built fabric of Abha and Khamis Mushait and should be preserved from encroachment, and better integrated with the city by complementing and linking the overall green network through a system of public spaces. The centres of Abha and Khamis Mushait have structured and relatively well-linked blue and green networks, composed by the wadi system, the traditional farms, large agricultural fields, public gardens, and parks. The new residential areas emerging along the major transportation corridors entirely lack these elements. These areas should include more open, green public spaces, which are accessible, inclusive, and equitably distributed across the city, and link to the overall green network at the AMA scale.

Lastly, the primary wadis, which carry the main water flow toward the city and have the capacity to replenish underground water tables will have to be protected from encroachment, reopened, and re-naturalised where possible, (together with their subsidiary channels network). This will provide opportunities for the establishment of new linear parks across the city, and for the development of a comprehensive pedestrian system, integrated with the blue and green networks.

1.

Green public space in the central area of Abha

2.

Water systems in the centre

3.

Agricultural pattern within the urban fabric

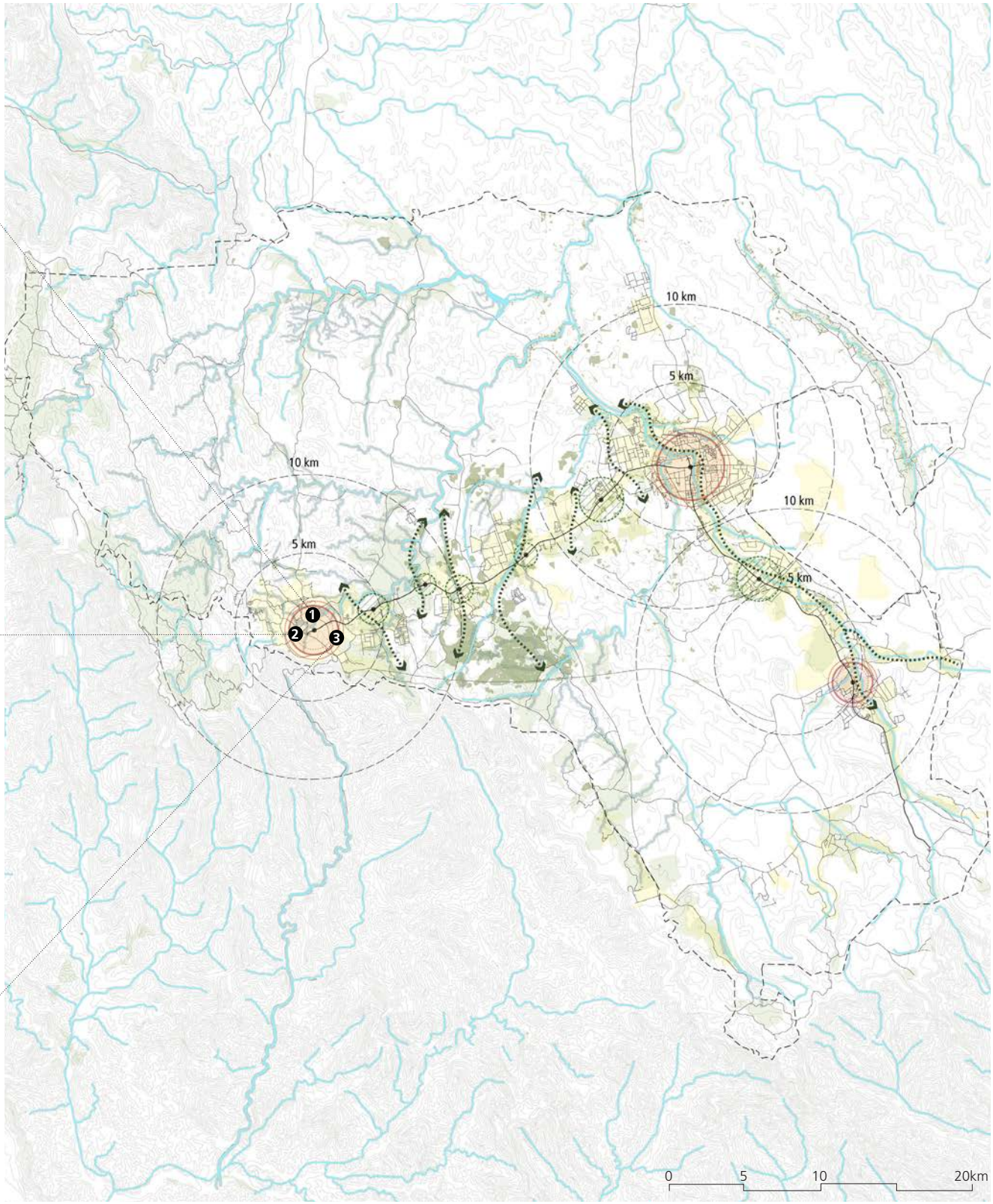


Fig. 45. The Resilient City: Rebalancing AMA's socio-ecological and economic systems

6.3 An Action Plan for AMA

Transforming conceptual recommendations into concrete and implementable strategies requires detailed systemic actions that can incrementally trigger the envisaged spatial, economic, and social transformation. As such, an Action Plan that is rooted in three strategic recommendations and grounded in a series of systematic and incremental interventions for the Abha Metropolitan Area serves as a guide in prioritising and detailing the subsequent actions needed for building a compact, integrated, and resilient city. In essence, the Action Plan outlines three actions, explicitly envisaged for the Abha Metropolitan Area, operating systemically and incrementally:

- **ACTION 1: Implement a well-structured and efficient public transport system to create a backbone for development;**
- **ACTION 2: Promote strategic densification and create new centralities (TOD);**
- **ACTION 3: Protect, revitalise and link ecological networks and heritage areas.**

Actions 1 and 2 address the need for a system of distributed interventions that address the issue of sprawl, fragmentation, and lack of connectivity across AMA. Action 1 acts at the AMA scale, structuring the preconditions for reconsidering the three cities as one, whole, compact, and linear urban structure articulated around a system of primary and secondary urban centralities, supported and connected by public transport spines.

Action 2 builds on Action 1 by promoting strategic densification within the current footprint in line with TOD principles. Therefore, strategic densification should happen around the main transport nodes, in order to define a system of secondary centralities, and along the public transport spines connecting the three cities, in order to consolidate the overall AMA's urban structure.

Action 3 complements the overall structural transformation of the city by promoting preservation and enhancement of existing green and blue networks, promoting socio-ecological rehabilitation of natural elements, and increasing the integration of blue and green, and blue networks to the overall AMA's urban fabric.

Overall, the Action Plan creates impact at three scales: the territorial, the urban, and the neighbourhood ones. At the territorial scale, it promotes preservation, enhancing linkages of the natural and urban systems, while protecting agricultural land from encroachment. At the urban scale, with the three cities considered as a whole urban area, it increases connectivity through a new public transport system, creating the necessary conditions for a dense, mixed-use and polycentric, linear urban structure. Lastly, at the neighbourhood scale, the Action Plan supports the strategic re-development and activation of existing vacant and underdeveloped land, with the goal of consolidating the urban fabric and increasing the quality of life of residents by providing public and green spaces, as well as accessible sub-centralities with high-quality public facilities and services.

New development over the hillsides

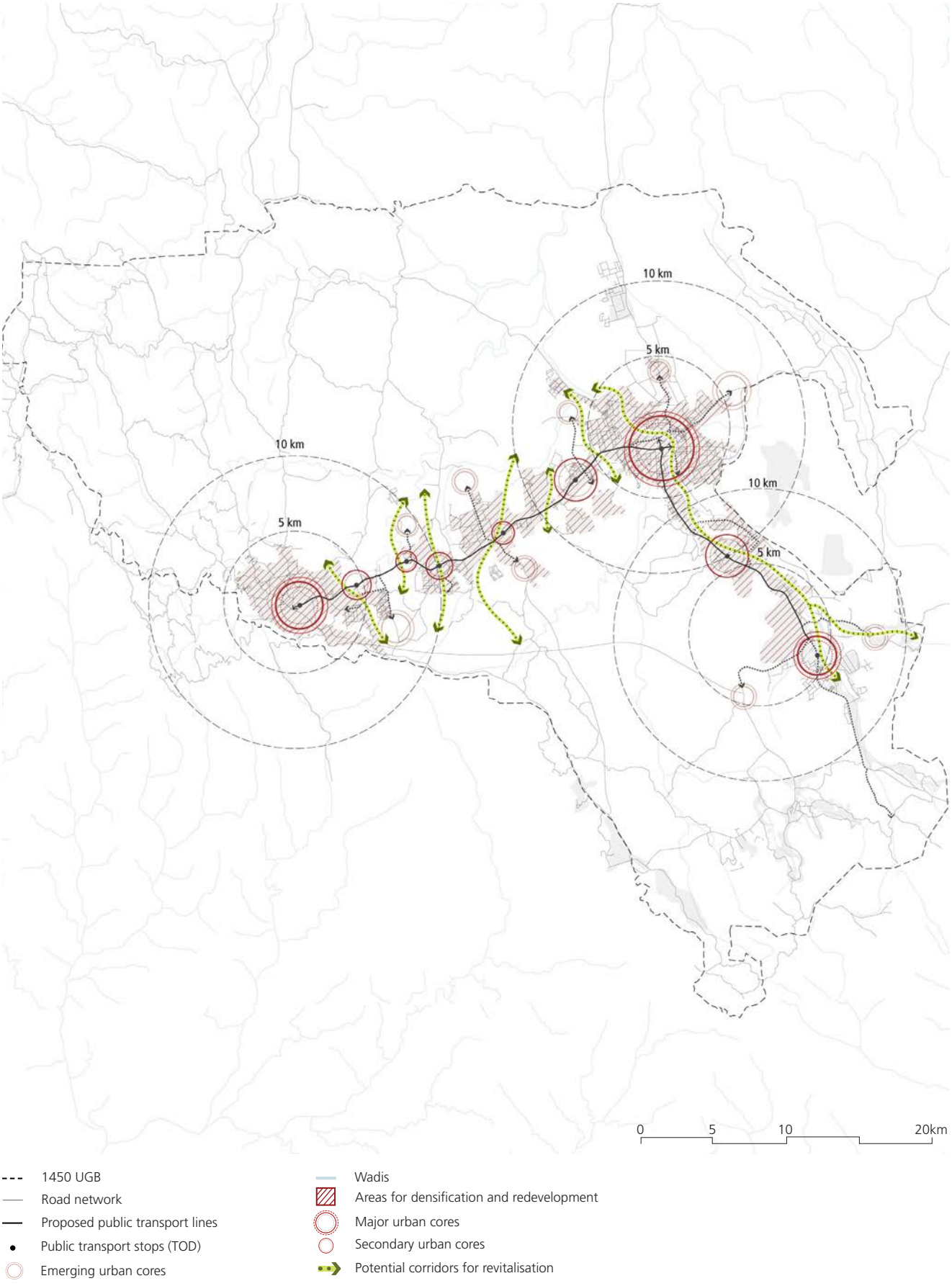


Fig. 46. Strategic recommendations for Abha

6.4 Three Systemic Actions for Structural Change

6.4.1 Action 1: Implement a well-structured and efficient public transport system to create a backbone for development

The first action addresses the need for restructuring the city starting from its mobility patterns. As such, Action 1 proposes a new intermodal public transport system, to enhance and take advantage of the linear urban structure that is already emerging between the three cities. The new public transport network will need to be efficiently planned, integrated, and multi-modal setting the conditions for Transit Oriented Development and densification, as envisaged in Action 2. This way, Action 1 will help to transform the current fragmented structure of the urban areas adjacent to major roads into a solid, interconnected, and more navigable urban structure for the entire AMA. As such, the establishment of a public transport backbone will provide better integration and connectivity between Abha, Khamis Mushait, and Ahad Rafidah supporting the creation of secondary, mixed-use centralities along the main transport corridors. Action 1 can be summarised in the following steps:

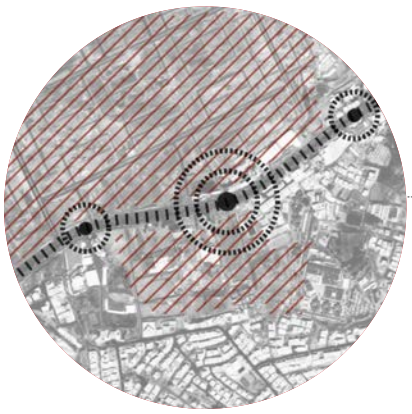
1.1 Establish a linear public transport system along the main transport axis

The first step concerns the setup of a main public transport spine, connecting Abha and Khamis Mushait along the King Fahd Road and the King Khaled Road, and linking Khamis Mushait and Ahad Rafidah along King Abdullah Road by a high-efficiency and long-distance kind of public transport lines (e.g., BRT). These lines will run through the main urban centres of the three cities, reconnecting the fragmented residential development pockets, institutional and educational facilities located along the proposed spine, defining dense and compact, mixed-use urban corridors.

1.2 Create intermodal transversal connections (feeder-bus system) linked to residential development and facilities

Once the main public transport spine has been developed, connecting the linear developments with the main urban cores along the King Fahd Road and King Khaled Road, a system of transversal connections will need to be established. These transversal links will need to be served by a secondary public transport system, (e.g., feeder-bus system) promoting capillarity and intermodality. Creating well-linked transversal connections to the major transport corridors will help to re-stitch the overall urban system, defining critical linkages between the residential neighbourhoods and the commercial and service centres, while promoting compactness and reducing car-dependency.

1.



Strategic densification around public transport stops (TOD)

2.

Transversal connections with the surrounding context

3.

Linking neighbourhoods by the linear public transport system

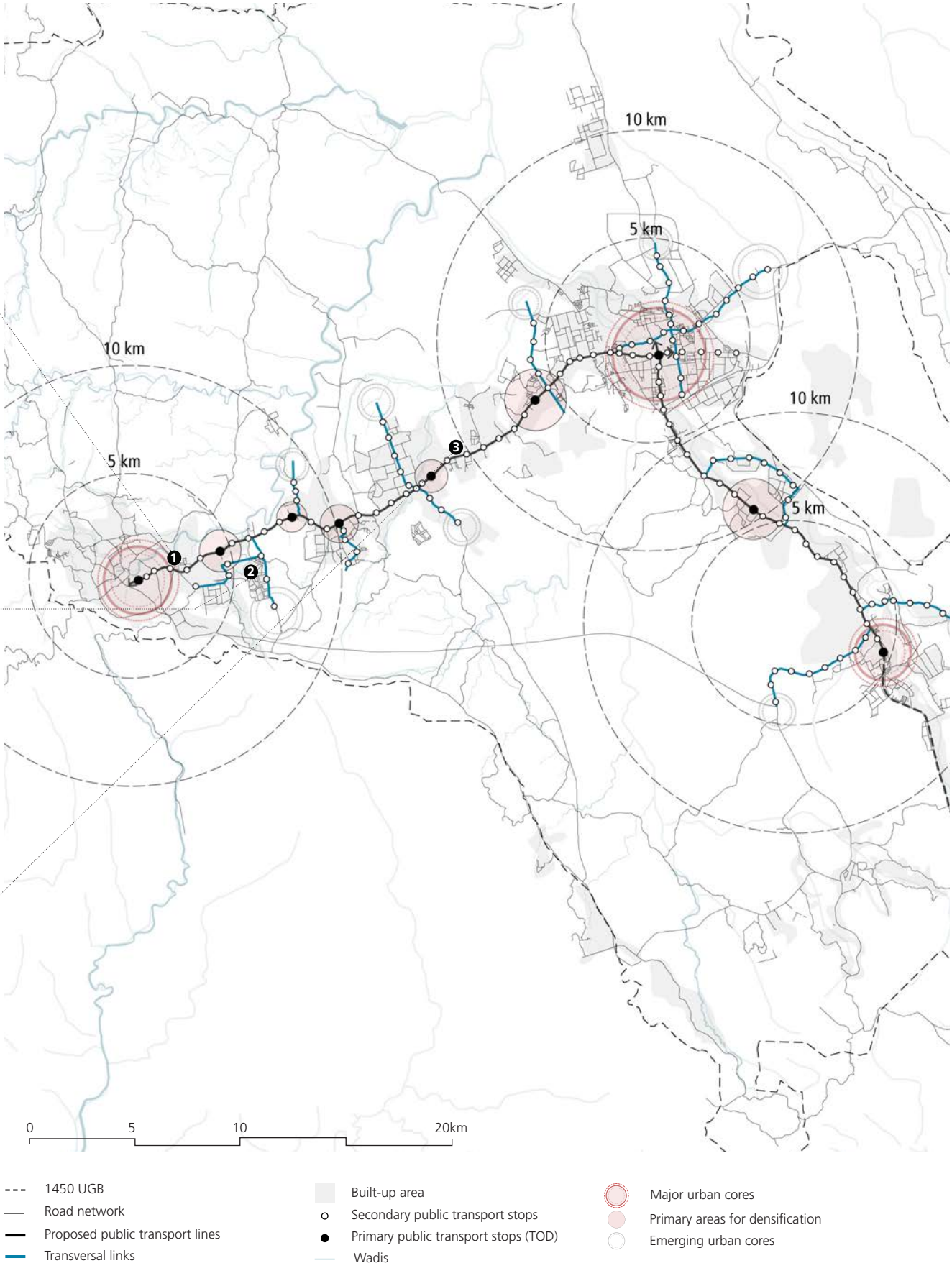


Fig. 47. Action 1: Implement a well-structured and efficient public transport system to create a backbone for development

6.4.2 Action 2: Promote strategic densification and create new centralities (TOD)

Following the implementation of the public transport network, the AMA should begin actively promoting transit-oriented development (TOD), and to incentivise densification in the areas within walkable distance to public transport. Strategic densification should be applied to selected major nodes in order to consolidate emerging, mixed-use, urban centralities and define new ones by promoting the concentration of services and facilities around main transport nodes. Lastly, strategic densification should be promoted within the existing urban footprint by prioritising the development of vacant land within the existing urban fabric and along the transport spines. As such, Action 2 can be summarised in the following steps:

2.1 Densify existing centralities along the main transportation spine

Once the major axes of public transportation are established, urban development can be restructured around it. The existing neighbourhoods and commercial nodes adjacent to major corridors will become more accessible and better linked to the main urban centres, attracting more residents and businesses to relocate in close proximity to public transport. Supporting this spontaneous tendency, a densification process should be strategically operated to consolidate and densify these existing nodes. This should happen by utilising the available vacant land within the current built-up areas, and by increasing the density of underdeveloped land in the proximity of the main public transport corridors. Densification should be carefully articulated to be contextually responsive to the topographic and natural features of the area.

2.2 Strategically identify and develop new secondary urban centres

Following the establishment of the public transport, as a suitable precondition for a dense and mixed-use urban structure, and the densification of the existing centralities, the next step focuses on strategically selecting some of the main public transportation nodes between the cities of Abha, Khamis Mushait, and Ahad Rafidah to become new secondary centralities. These sub-centralities should be developed as high-density and mixed-use cores along main public transport spines, reinforcing the linear structure between the cities while preventing unreasonable sprawled development, scattered and disconnected from the main centres. New public, educational, and social facilities should be located around these sub-centralities to redistribute access to services and opportunities, attracting more population to these areas. The secondary urban cores should be well integrated with the existing blue and green networks, and be developed with attention to the unique topographic features.

2.3 Promote dense and mixed-use development along the public transport system

To re-address the current tendency to sprawl and fragmentation of the urban form in the AMA, and once the public transport and its associated new system of centralities and sub-centralities have been developed, the main corridors along King Fahd and King Khaled Road, should be further consolidated and densified. Increasing urban density along the main transport spines will increase the number of people serviced by public transport, increasing efficiency in the connection amongst the three cities, and reduce car-dependency overall. The density within the consolidated linear structure will start to homogeneously rise towards 150 p/ha, focusing development efforts on the structuring of a more sustainable, compact, and efficient urban form articulated along an efficient public transport and hierarchical polycentric urban system.

1.

Capacity of vacant land within the current urban footprint

2.

Densification around public transport stops (TOD)

3.

Dense and mix use development along the public transport lines

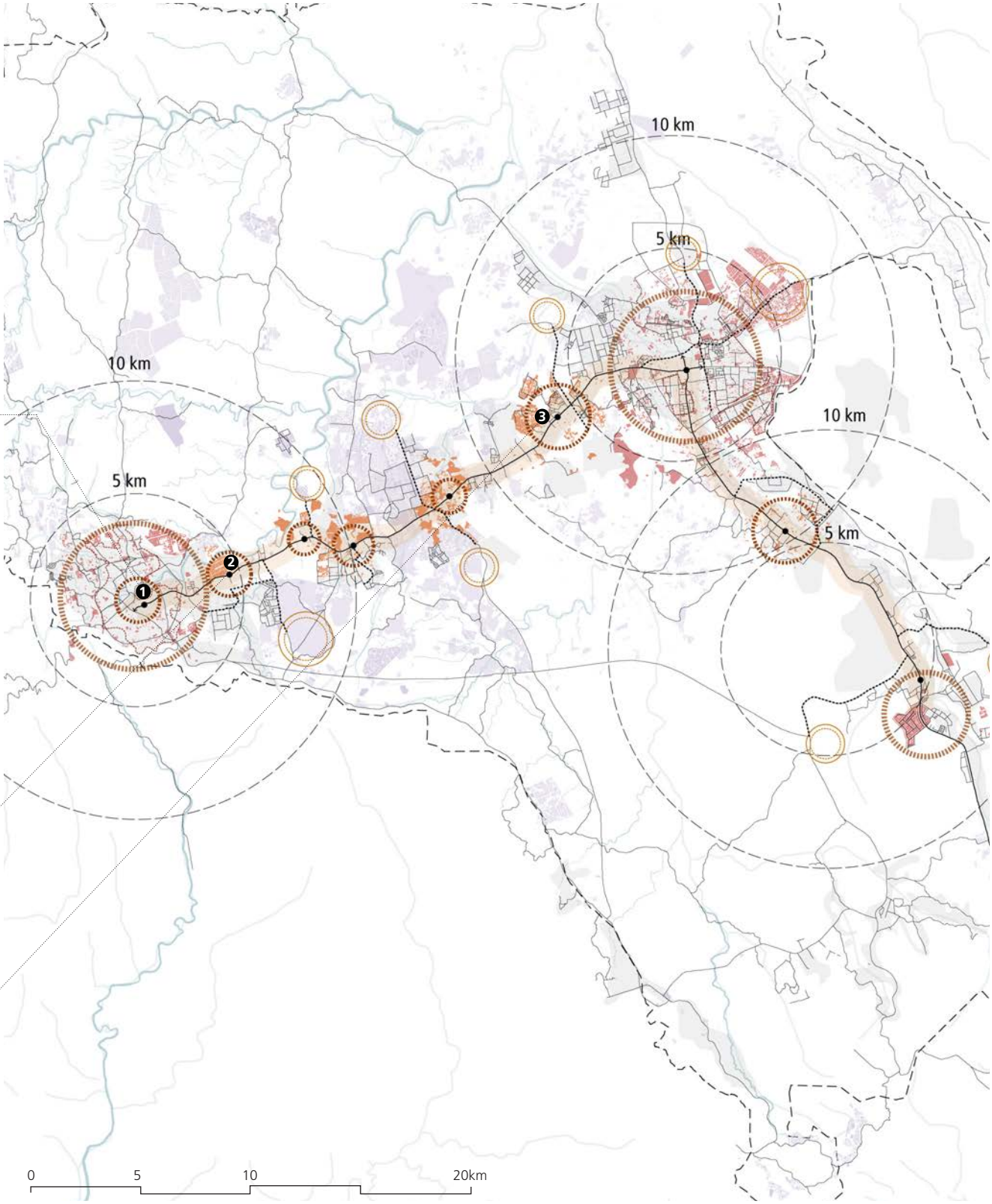


Fig. 48. Action 2: Promote strategic densification and create new centralities (TOD)

6.4.3 Action 3: Protect, Revitalise and link ecological networks and heritage areas

Action 3 aims to make the city more resilient, more sustainable, and enjoyable for its residents. As such, and in parallel to the establishment of the public transport system and the subsequent strategic densification process, Action 3 proposes the protection and enhancement of agricultural land, hillsides, and wadis, together with their improved integration with the overall AMA's fabric.

In order to integrate existing farmland and wadis into the urban fabric, a complementary and capillary system of public, green spaces should be established, particularly within the areas subjected to densification. In parallel, heritage areas, including historically and culturally significant landscapes should also be protected, enhanced, and linked to the wider green and blue networks, defining a robust socio-ecological and cultural system connecting the rich history of Abha to its natural and cultural landscapes strengthening accessibility and connectivity of this complex urban system. Action 3 is composed of the following steps:

3.1 Preserve, revitalise and integrate agricultural patterns into the urban fabric

The main agricultural field, which is located in between the three cities of Abha, Khamis Mushait, and Ahad Rafidah should be carefully preserved from encroachment and linked to the comprehensive blue and green networks system. The traditional farmlands, with the remaining mud houses should become part of the AMA's cultural landscape constituting its heritage. This will preserve the rich identity of Abha and Khamis, and their unique structure built along the wadis. In the newly formed areas and the areas targeted by strategic densification, agricultural land should be revitalised and integrated into the urban fabric creating a connected system of green, public spaces.

3.2 Protect and revitalise natural hydrological system across the cities, restoring and preserving wadis and transforming parts of them into linear parks

Primary and secondary wadis will have to be protected from development encroachment as they are elements of important ecological infrastructure. Where natural wadi beds have been artificially reshaped, they will need to be rehabilitated and re-naturalised to the extent possible, together with the adjacent abandoned farmlands that contribute to the structuring of urban life along them. The ecological restoration of natural and man-made ecosystems, the transformation of parts of the wadis into linear parks, and their integration with the urban fabric through additional green spaces, especially in areas subjected to strategic densification, will support the relinking of green and blue networks at the metropolitan scale. In addition, urban and peri-urban agriculture should be promoted and incentivised where possible, facilitating the process of relinking blue and green systems at the wider scales.

3.3 Preserve and connect heritage areas with culturally and historically significant natural areas and ecological networks

The AMA has a unique topography, which contributes to the city's identity. Topographic features, such as wadis and traditional farmlands and hillsides should be preserved as natural heritage and considered as critical elements to be protected and enhanced while re-structuring the city, and densifying the new urban cores. As such, traditional farms, (including traditional knowledge associated with them) should be connected to the various heritage buildings and historical sites, aiming to build elements of ecotourism that can improve the local economy.

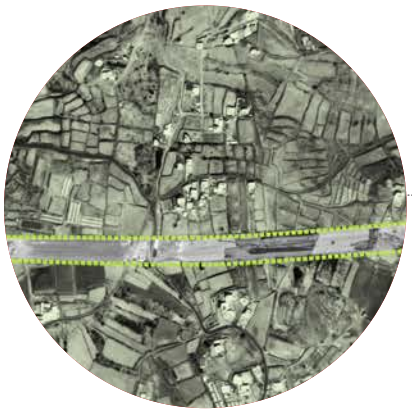
1.

Protection of wadis and integration with the urban pattern

2.

Revitalisation of agricultural land and establishing a comprehensive green system

3.



Protection of agricultural land from any kind of encroachment

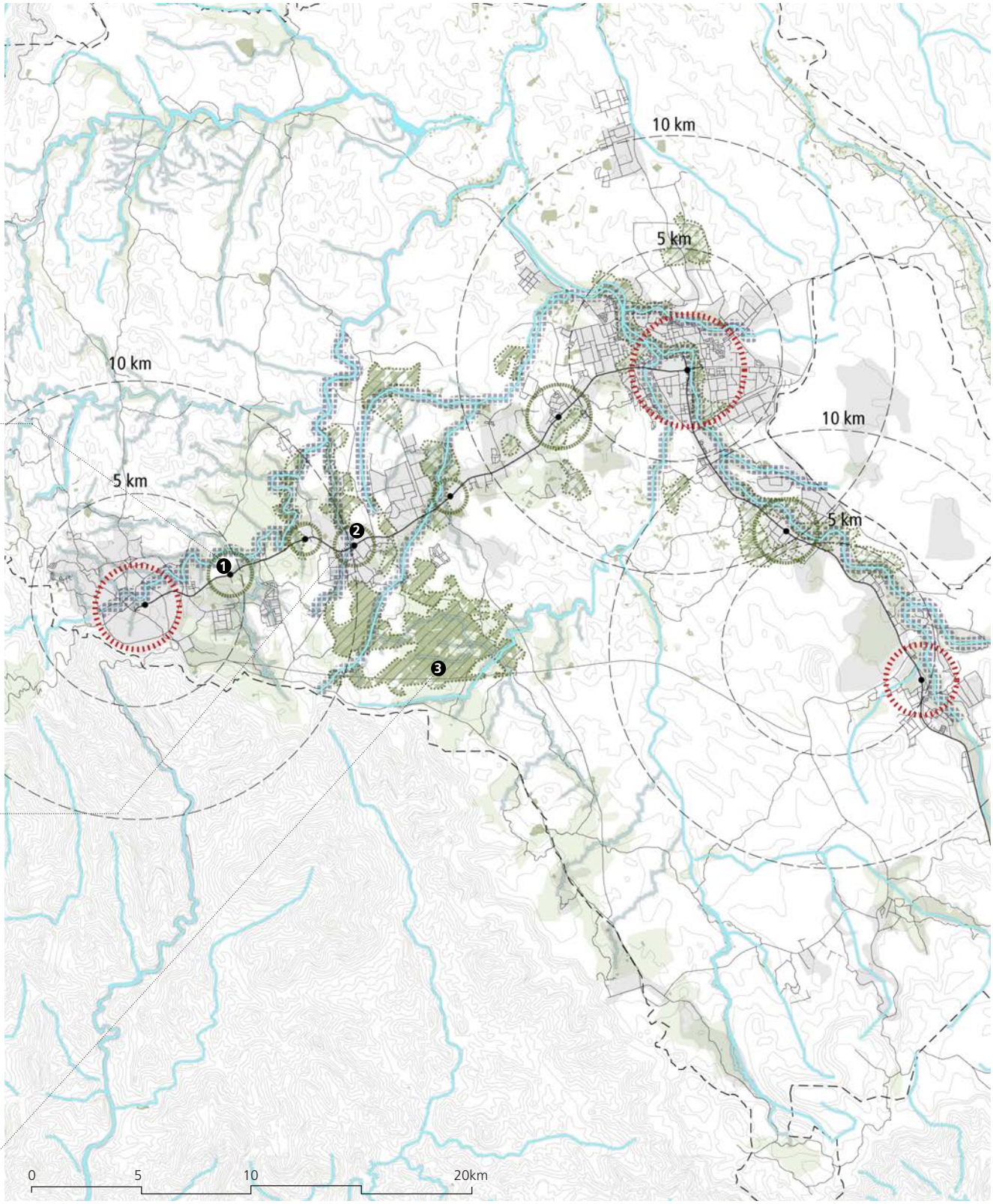


Fig. 49. Action 3: Protect, revitalise and link ecological networks and heritage areas

FINAL RECOMMENDATIONS: THE THREE-PRONGED APPROACH

7

7.1 Spatial Recommendations

7.1.1 A strategic view of the Asir Region

The three functional sectors Hadaba, Jabali, and Tohama that make up the Asir Region provide a multitude of development opportunities, but these differ from sector to sector. The Tohama sector along the coastline with its fishery, maritime, and tourism potential in the West and mountains in the East provides different opportunities than the Jabali sector with its mountains, many cities, commercial services, and industrial activities. Hadaba sector being to these provides its large share of deserts and sand dunes.

The Asir Region hosts four major economic sectors, namely agriculture, tourism, industry, and mining, which have substantial comparative advantages, and whose potential are likely to attract local and foreign investments. Strengthening some of these sectors could lead to better opportunities and development in the region.

Most of the agricultural activities in the region are practiced in the Western and Southern parts of the region with major crop production evident along the wadis. Wadi al Dawasir, whose water catchment is in the Eastern parts of the Asir Region supports agriculture in the Southern parts of Riyadh; the Al Dawasir Valley. The Asir Region should follow suit and establish more small-scale agricultural activities in the villages around Tathlith town. This could increase the total crop production area, which was about 1.8%1 of the total Kingdom crop area in 2014. The statistics show that agricultural production was declining in the Asir Region, and the proposal to promote agriculture in Tathlith and the neighbouring areas could reverse the trend and increase livelihood opportunities and raise the regional GDP. The same agricultural concept could be replicated to supplement the existing agriculture in Bisha, Muhayl, and Almajardah, which would also promote balanced regional development. It is worth noting that this type of green development would have a positive ecological significance to the region.

The industry sector represents 3.3% of the total number of producing factories in the Kingdom, and produces food, chemicals, plastics, and building materials. Through promoting agriculture, the industrial base could be strengthened through the establishment of processing, logistics, and other related industries in Tathlith. This development could create an interregional link/spine connecting the main agricultural area of Riyadh via the Tathlith-Al Dawasir Road, (Saudi Highway number 10) which is the main linkage between the two regions. In addition to this Eastern interregional transport corridor, focus has to be given to the North-South corridor emanating from Abha City to the upcoming national economic hub, Jazan Economic City (JEC), which is a phenomenal development in the Southern parts of the Kingdom. This transport route will maximise accessibility of the economic city and increase the direct benefits of the opportunities created by JEC.

In addition to the overall promotion of the integral regional economic sectors, targeted sub-regional development strategies should address the specific challenges and opportunities linked to the diverse areas of the region, namely the coast, mountains, their cities, and the deserts. For instance, the transport system between Balqam in the North, and Dahran Al Janub in the South of the Jabali sector, and their intersections with the East-West transport links should receive special attention. In contrast, the cities in the Hadaba sector are isolated, and it will be important for their development to be well connected. For example, Bisha connects well to Balqam, and Bisha and Tathlith are both well connected by road with the entire AMA region.

7.1.2 Towards AMA, An Eco-historic and Polycentric Urban System

The strategic vision for the AMA, together with the three actions described in Chapter 6, aims to promote the development of urban spatial frameworks that support sustainable urbanisation by creating a more compact urban form structured around polycentrism along public transport lines.

According to the vision for the AMA, a public transport backbone supporting appropriate, strategic densification, together with a well-linked and hierarchical system of urban centralities will support more efficient use of resources and land, while fostering connectivity across the metropolitan area and preventing unsustainable sprawl and the encroachment of natural elements. As such, the Action Plan translates the strategy into a sequence of systemic actions, which, if implemented, will enable the strategic vision to become a reality, making the AMA:

- **Compact,**
- **Connected,** and
- **Resilient.**

AMA Compact Urban System is envisioned as a well-structured, well-balanced, and solid linear urban form, where an efficient public transport backbone supports sustainable and strategic densification, defining an accessible and vibrant environment. The strategy envisages the AMA as one connected and integrated urban system with good connectivity, and equitable distribution of public, social, and educational facilities.

Thus, AMA Connected Urban System focuses on the structuring of an efficient and intermodal public transport system, consisting of major linear spines hosting fast, long-distance transportation modes, (e.g., BRT) at the metropolitan/urban scale, and a transversal connections system, (e.g.,

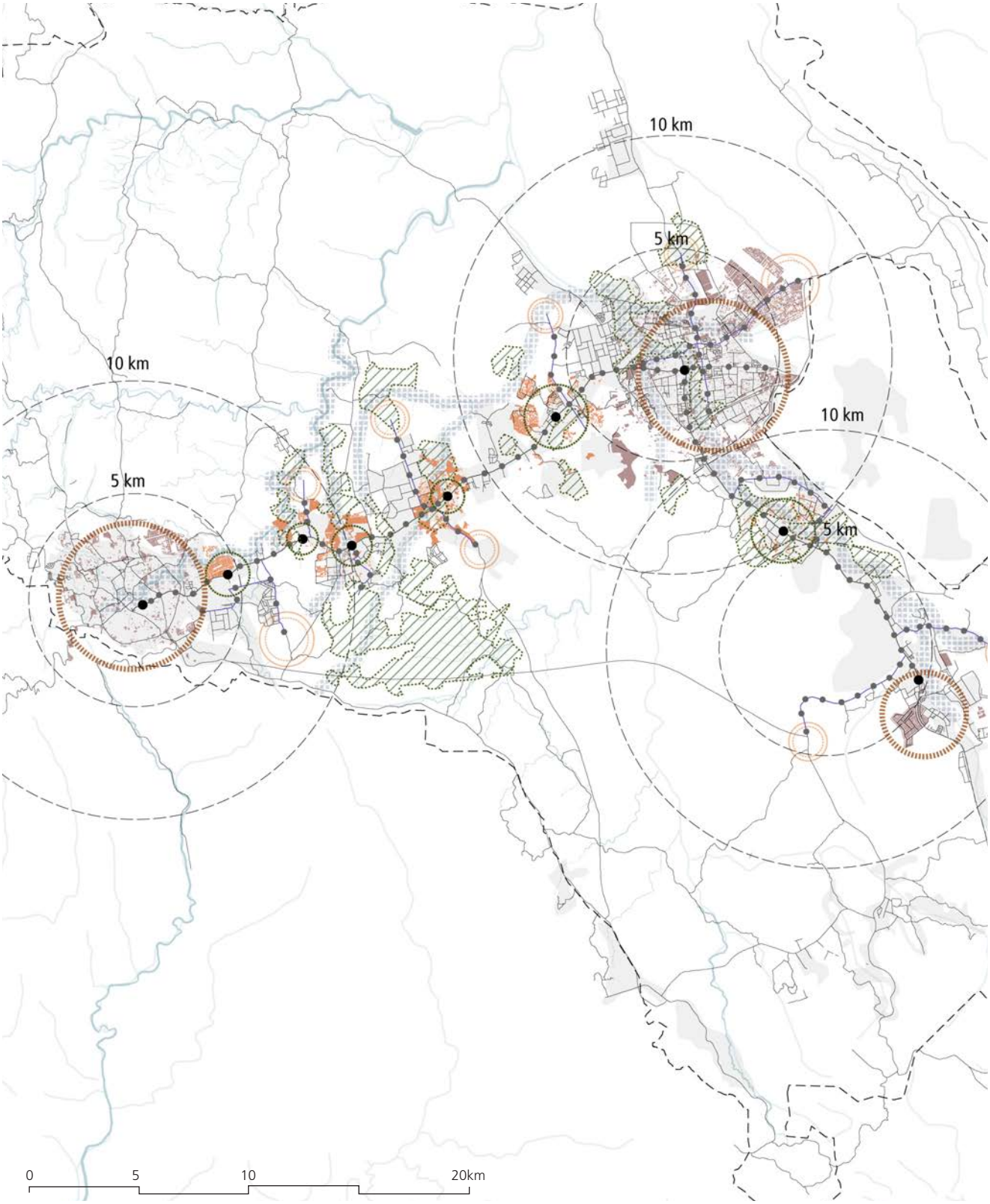


Fig. 50. Action Plan for the Abha Metropolitan Area

feeder-bus system) distributing capillary accessibility at the neighbourhood scale. This will serve both, the residents of the whole metropolitan area and the numerous visitors, thus reducing car dependency. The public transport system, combined with the extensive and pedestrian-friendly road network, and a capillary and well-distributed system of green public spaces will increase the quality of life on the newly formed urban centres, shaping a more integrated, connected, and inclusive environment by linking polarised neighbourhoods and supporting the system of secondary, mixed-use urban centres along the main corridors.

Lastly, the strategy for the AMA Resilient Urban System protects and enhances blue and green networks, together with the surrounding and unique topographical and historical features, prioritising the preservation of agricultural land, wadis, valleys, and hillsides. It fosters the linkage amongst these elements, and with the urban fabric by establishing a well-designed system of public, green spaces that provide a healthy environment, which supports the city's functionality and improves the overall quality of life for its residents.

The strategic vision for the AMA focuses on creating a dense and connected urban structure while preserving and integrating the natural and man-made environment, becoming more attractive both for residents and visitors by rebalancing social, ecological, and economic dimensions. As such, the AMA Eco-Historic and Polycentric Urban System is envisioned to be a connected, linear urban structure where agricultural landscape, resilient ecosystems, and cultural heritage come together to form an integrated, sustainable, and well-balanced socio-ecological infrastructure.

7.2 Institutional and Legal Recommendations

Abha Metropolitan would benefit from both fiscal and jurisdictional decentralisation to facilitate independent and innovative solutions to urban social problems at the Amanah level. This should entail:

- The transfer of local planning power, authority, and function from MoMRA to the Amanah with provision for independent action without recourse to effectively address community needs. This is supported by the New Urban Agenda, which specifies that territorial urban design and planning processes should be led by sub-national and local governments, but their implementation will require coordination with all spheres of governments, and the participation of civil society, the public sector, and other relevant stakeholders.
- Re-defining the roles of both the administrative leadership, (represented by the Emirate) and the technical leadership, (the Amanah) as well as clarifying the administrative scope for services provided by different public sectors. Addressing these issues will improve the quality and timely delivery of urban projects.
- Fiscal decentralisation gives autonomy to the Amanah to source funds to finance development activities. Revenue generation activities in cities may include taxes and levies. Urban areas should be allowed to collect some form of property taxes to fund development activities. The recent White Lands Act that imposes fees on undeveloped plots in urban areas to tackle land speculation, housing shortage and indiscriminate land development shows that regulatory mechanisms can be leveraged to generate revenue while fostering an efficient development framework.
- Opening avenues for actors, including the private and voluntary sector, and the general community to participate in decisions regarding projects that affect them.

Consolidation of the legal planning instruments would also support development interventions in Abha Metropolitan, along with the review, update, and modernisation of these laws to make them relevant to the current development situation. This should also entail re-thinking the lawmaking process to limit the number of actors. The mere existence of the laws in the KSA will not guarantee sustainable urban development as they must be functionally effective, i.e., precise in achieving their intended results, clear, consistent and simple to understand. There is a need for a functionally effective urban planning law that, inter alia:

- Clarifies the system of land tenure and land use rights especially for mountainous areas, ("Al-Muhajirah") to systemise the land titling process;
- Is sensitive to participatory city-wide slum upgrading particularly to manage the 60 unplanned settlements/ slums districts in Khamis Mushait;
- Streamlines the conversion of agricultural land based on legitimate demand for urban land use;
- Introduces incentives/requirements that will enable more compact city growth;
- Defines clear institutional roles and responsibilities at each level;
- Enforces linkage between all levels of plans (national-regional-local);
- Provides effective coordination and monitoring mechanisms; and
- Increases meaningful public participation and engagement in planning.

The legal framework also needs to enshrine an acceptable mode of public participation in public decision making to foster equality and inclusion. The Abha Metropolitan urgently requires detailed, local, and structural plans that define land use, road networks, and applicable zoning standards, which will curtail the emergence of new unplanned settlements.

Revising the Urban Growth Boundary Law to include clear criteria on how it is set would enhance technical and vertical accountability. The law also needs to place more emphasis

on establishing the Development Protection Boundary as a no-development zone not only to prevent haphazard development but to also discourage the advantage taken by private interests from laxity in the legal text. These initiatives will strengthen policy formulation designed to move the city towards a more sustainable, compact, and dense future. Primarily, post-legislative scrutiny of the UGB law should be undertaken to assess whether it has met its policy objectives. This could, in turn, inform the legal reform process as well as planning policy options.

7.3 Financial Recommendations

In 2015, the KSA began implementing reforms aimed at creating sustainable local public finance. The central government continues to promote strategies to increase own-source revenue at the local level through better tax administration and economic diversification.

Abha's public finance priorities are closely aligned with Saudi Arabia's larger national development goals, which include supporting SMEs in key sectors like agriculture, livestock, tourism, and manufacturing. Therefore, expanding the public sector's capacity to finance essential local infrastructure and projects supporting development in these areas is imperative for the city.

International experience within own-source tax mechanisms represents the optimal set of financing tools needed to expand local revenues supporting sound fiscal policy[32] (specifically, through the taxation of the real estate value capture mechanisms). Although some cities of the Kingdom have been experiencing new property taxes, such as the White Lands Tax, exploring other tax instruments will be a priority for Abha in order to generate a diverse portfolio of income stream.[33]

Land taxes are a good option since they establish a stable and reliable own-source revenue stream for local governments. Moreover, the benefits associated with development projects, (e.g., public transportation and social infrastructure) are increased substantially by their multiplier effect, (directing a portion of land value increases back into the government revenue stream).[34]

UN-Habitat suggests that Abha makes use of land-based tax mechanisms, (i.e., betterment levies) in public and development projects.

Public infrastructure, such as transportation systems can spur adjacent residential and commercial development, enhance mixed land use, create jobs, and reduce environmental impact, (see figure 52). Local development driven by public projects can also appreciate land value and indirectly engender a number of other community benefits.[35]

Source: United Nations Human Settlements Programme (2018)

Fig. 51. Components of mixed land use

THE IMPACT OF INFRASTRUCTURE DEVELOPMENT ON LAND VALUE

Case Examples	Key Findings
Bogotá, Colombia	Research suggests that for every additional 5 minutes of walking time to a public transportation station, rental prices fall by 6.8 - 9.3%
Dubai, UAE; Cairo, Egypt	• Urban development that included retail facilities resulted in a price premium of 15 – 20% • Schools increased residential land prices by approximately 13% • Walkability within a residential community increases home values by up to 9%

Source: Colliers International (2017); Rodríguez and Targa (2004)

Fig. 52. The impact of infrastructure development on land value

While betterment levies are well suited for infrastructure projects, fiscal instruments such as waste management fees, parking fees, and congestion fees are useful tools in the process of mobilising local revenue, reducing vehicle dependency, and increasing pedestrian traffic, especially in commercial and leisure areas located in Abha's downtown.

Several finance tools are available to local governments interested in expanding own-source revenue. Municipal governments can maximise the benefits of these instruments by:

- Coordinating and collaborating with different levels of government to connect national strategies to local priorities. For example, establishing a local liaison office, or a local PPP unit linked to the National Centre for Privatization in charge of proposing, implementing, and monitoring PPP projects;
- Using a holistic approach, PPPs should be focused on linking infrastructure investment and land development, thus maximising benefits that correspond with mixed land use;
- Investing in capacity building and improving tax administration;[36]
- Fostering participatory process in order to involve the community and build up a sense of trust to local reforms; and
- Tailoring fiscal monitoring instruments according to local needs, (e.g., fiscal cadaster in Bogotá, Colombia).[37]

Lastly, coordinating among planning, legal/regulatory frameworks, and local finance is crucial to creating the necessary local conditions for sustainable and equitable development, as outlined in the New Urban Agenda.[38]

CASE STUDIES AND BEST PRACTICES

WASTE MANAGEMENT

In the Tamil Nadu State of India, a waste management project proposed the central government (35%) and the state government (15%) share 50% of the total project costs. A private entity (via a PPP) would provide the remaining 50% of project funding. The private concessionaire would be responsible for planning, designing, building, financing, operating, and maintaining the municipal solid waste management facility for the concession period. Land would be provided by the municipality through an annual lease as specified by the Government of Tamil Nadu.

PARKING FEES

Chicago leased 34,500 curb side parking metres to the bank Morgan Stanley for 75 years, trading metre revenues for an upfront payment of nearly USD $1.16 billion. This type of PPP contract includes a fixed schedule of metre rate increases, which raised rates two to four-fold by 2013. As a result, Chicago had the highest curb side metre rates in the United States. Metres were netting USD $20 million annually while Morgan Stanley managed pricing and maintenance of the metres.

CONGESTION FEES

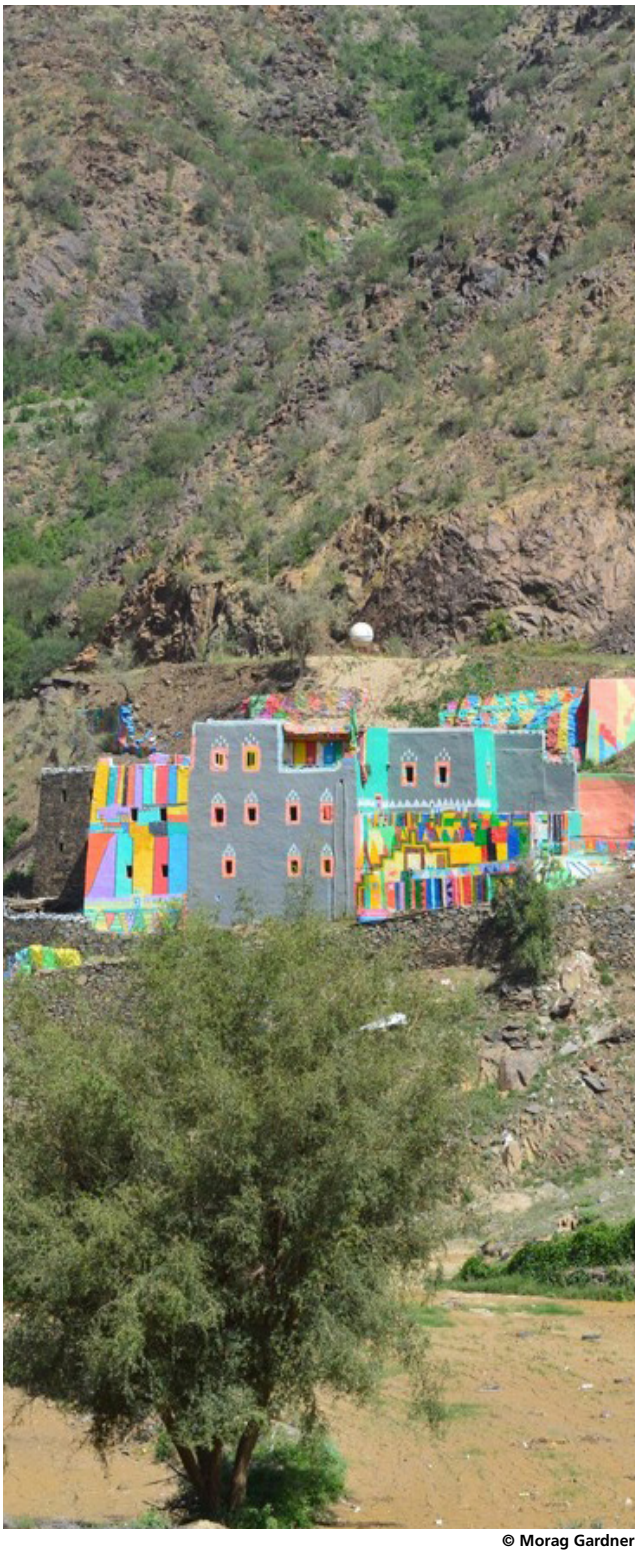
In 2007, Stockholm introduced a cordon pricing-based scheme to reduce congestion, local pollution, and generate local revenue. Following the introduction of the cordon, traffic decreased by 19% in the first year in addition to generating € 59 million annually. In Singapore, the implementation of an Area Licensing System (ALS) reduced traffic from 12,400 vehicles in May 1995 to 7,300 vehicles in August 1995 during restricted hours. Moreover, revenue from the sale of area licenses amounted to US$ 47 million with capital costs were US $ 6.6 million in 1975 with an additional US $17 million from ALS revisions in 1989.

Source: Ernst and Young Pvt Ltd., Ministry of Urban Development of the Government of India, & the Confederation of Indian Industry. Compendium on public private partnerships in urban Infrastructure: case studies. (2017). World Bank. Washington, DC.; Weinberger, R., Kaehny, J., & Rugo, M. (2010). U.S. parking policies: an overview of management strategies. Institute for Transportation and Development Policy. New York, NY.; Croci, E. (2016). Urban Road Pricing: A Comparative Study on the Experiences of London, Stockholm and Milan. Transportation Research Procedia 14, 253-262.; Phang, S., & Toh, R.S. (2004). Road Congestion Pricing in Singapore: 1975-2003. Transportation Journal, 43(2), 16-25.

Cable car line

8

ANNEX



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8.1 Picture Credits

8.2 List of Figures

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8.3 Notes and References

1 Abha CPI Report 2016

2 The Metropolitan area includes; Abha, Khamis Mushait and Ahad Rafidah

3 Represent the instructions issued by a Minister, his representative or any official of the Ministry to announce new regulations and updates regarding any intent or action to be undertakenundertaken

4 FSCP workshop in Abha 2018

5 FSCP workshop in Abha 2018

6 Ibid

7 FSCP Workshop, Abha 2018

8 Royal Decree No M/4 dated 24 November 2015 (the "Law") and Council of Ministers Decision No. 377 dated 13 June 2016 (the "Regulations").

9 In the FSCP workshop in Abha, the participants from the Municipality requested that the function of dealing with land grants be reinstated to the Amanahs because eventually it is the municipalities who will provide urban services to these new housing developments.

10 These include approvals for 7 government land and 140 privately owned land

11 These include approvals for public land (4) and private land (8)

12 FSCP Workshop in Abha, 2018

13 Ibid

14 Royal Decree of 1975.

15 See Royal Decree No. (1663) of 1976

16 FSCP workshop in Abha, 2018.

17 A line-item budget lists, in vertical columns, each of the city's revenue sources and each of the types of items such as capital outlays, contractual services, personal services etc. the city will purchase during the fiscal year.

18 Chapter 5 of the State of Saudi Cities Report, "Managing Urban Transformation in Saudi Arabia - The Role of Urban Governance (2018)" pg. 16.

19 See Article 5 of the Law of Regions to Royal Order No. A/92 (1993)

20 It consists of a) the Prince/Governor of the Region as president; b) Deputy Governor of the region as the vice president; c) Deputy Mayor of the Emirate/AMARAH; d) Heads of government authorities in the Region who are determined pursuant to a decision issued by the Prime Minister according to the directives of the Minister of Interior; and e) Ten citizens who are scholars, experts and specialists and are appointed by order of

the Prime Minister based on the nomination of the Prince of the Region and the approval of the Minister of the Interior, for a renewable four year term.

21 See ibid n.15, Article 23

22 FSCP Workshop in Abha, 2018

23 The National Urban Observatory is situated in the Department of Urban Studies, MoMRA.

24 The contribution of Asir Region to national GDP is 4.1 percent. Saudi Arabian General Investment Authority. (2014). Makkah Region Economic Report 2014. The Kingdom of Saudi Arabia.

25 Agriculture and livestock development, tourism, food processing and education are priorities for local economic development and were important key topics discussed during the Rapid Planning Studio workshop held in Abha (October 2018).

26 Each of the13 regions is divided into governorates and the region capital. The capital of the region is governed by an Amanah (municipality), which is headed by a mayor.

27 Approved 2016 Budget for Abha Amanah, Ministry of Finance, The Kingdom of Saudi Arabia.

28 Environment and design notes on the vernacular architecture of the Asir

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32 Potential revenue contribution through immovable property taxation is 2.1% of GDP in high-income countries, while in middle-income countries it contributes an additional 0.6% to GDP. Norregaard, J. (2013). Taxing immovable property revenue and implementation challenges. (No. 13-129). International Monetary Fund. Washington, DC.; Walters, L. (2016). Leveraging land: land-based finance for local governments. United Nations Human Settlements Programme. Nairobi, Kenya.

33 Under the new law approved in 2015, owners of empty plots of urban land designated for residential or commercial use in towns and cities will have to pay an annual tax of 2.5% of land value. The land tax applies to a plot size equal to or greater than 10,000 square metres. It has been adopted in the cities of Riyadh, Jeddah and Dammam; United Nations Human Settlements Programme. (2016). Finance for City Leaders Handbook, Nairobi, Kenya: United Nations Human Settlements Programme.

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