

# DIRECTIONS IN URBAN DEVELOPMENT

MAY 2015

## Urbanization Trends in Bolivia: Opportunities and Challenges

### Overview

Bolivia is a rapidly urbanizing country whose population is concentrated in large metropolitan areas. Although Bolivia's urbanization process started relatively late, the country has been rapidly approaching the urbanization levels of other Southern American countries. Between 1950 and 2012, its urban population grew at an annual rate of 3.7%, almost five times as fast as population growth in rural areas. While in 1990 just over half of the population lived in cities, in 2012 two thirds of Bolivians lived in an urban areas and according to UN estimates, nearly 75% of the population will be urban by 2025 (UN, 2012).<sup>1</sup> The urbanization process has been accompanied by the concentration of population, particularly in the three major metropolitan areas: nearly 50% of the country's population lives in the metropolitan areas of La Paz-El Alto, Cochabamba, and Santa Cruz that form the axis of urban development in Bolivia; another 12% live in one of the 33 cities with more than 20,000 inhabitants.<sup>2</sup>

As elsewhere, the urbanization process in Bolivia presents challenges and opportunities. Not only population but also economic activities are typically concentrated in cities. Cities provide a number of advantages that attract both businesses and workers to urban areas, such as commercial/trade links in the production chain, the size of the labor market, the concentration of skills and knowledge, innovation, and the stock of physical capital. At the same time, cities face multiple challenges associated with urban sprawl and density. With the expansion of urban areas resulting from natural population growth and migration from

rural areas, cities are experiencing increased pressure to meet increased demand for public services, a higher costs associated with congestion, increased crime or higher levels of pollutants in air and water.

This note is a summary of a report that considers urban areas as the complement to rural areas that will allow the Plurinational State of Bolivia to achieve the goals set forth in its Patriotic Agenda for the Bicentennial 2025. The report uses data available at the national level from censuses and household surveys from the National Statistics Institute (INE) and the Social and Economic Policy Analysis Unit of the Ministry of Development Planning (UDAPE) to provide a first approximation to: (i) identify opportunities that urban areas present to achieve the objectives of the Patriotic Agenda regarding

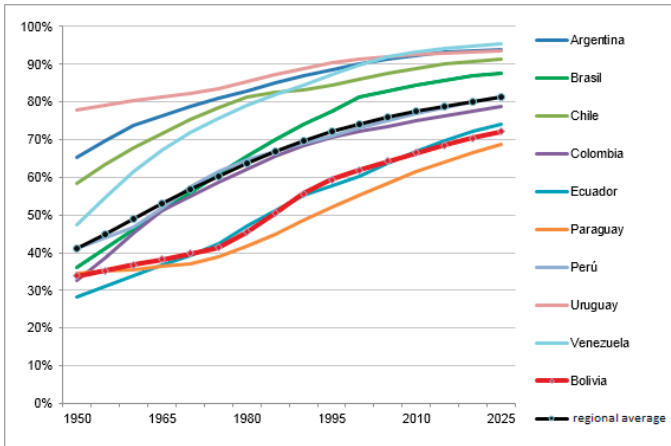


La Paz, Bolivia.

Credit: World Bank

This note was prepared by Zoe Elena Trohanis, Bontje Marie Zangerling and Javier Sanchez-Reaza. It is a summary of a longer technical paper, drafted in Spanish, which was prepared by a World Bank team led by Ms. Trohanis. The authors would like to express their appreciation to the Plurinational State of Bolivia's Ministry of Development Planning, Ministry of Autonomy, INEI and UDAPE.

**Figure 1. Percentage of urban population in regional comparison 1950-2025**



Source: Prepared using data from UN World Urbanization Prospects 2011.

the reduction of poverty and universal coverage of basic services; (ii) understand and overcome the challenges that the expansion of urban areas present, and understand the growth dynamics of different types of cities; (iii) review the institutional framework and planning tools currently available for urban development; and (iv) provide suggestions for future analysis. However, due to limitations of the available data, the report does not include an economic analysis of urban areas nor an in-depth analysis of issues at city level. It is expected that the results of the report can inform the projects that the Government of Bolivia is developing and implementing in cooperation with the World Bank and other partners, such as improving national data, urban labor markets, poverty and informality, and investment for infrastructure in cities.

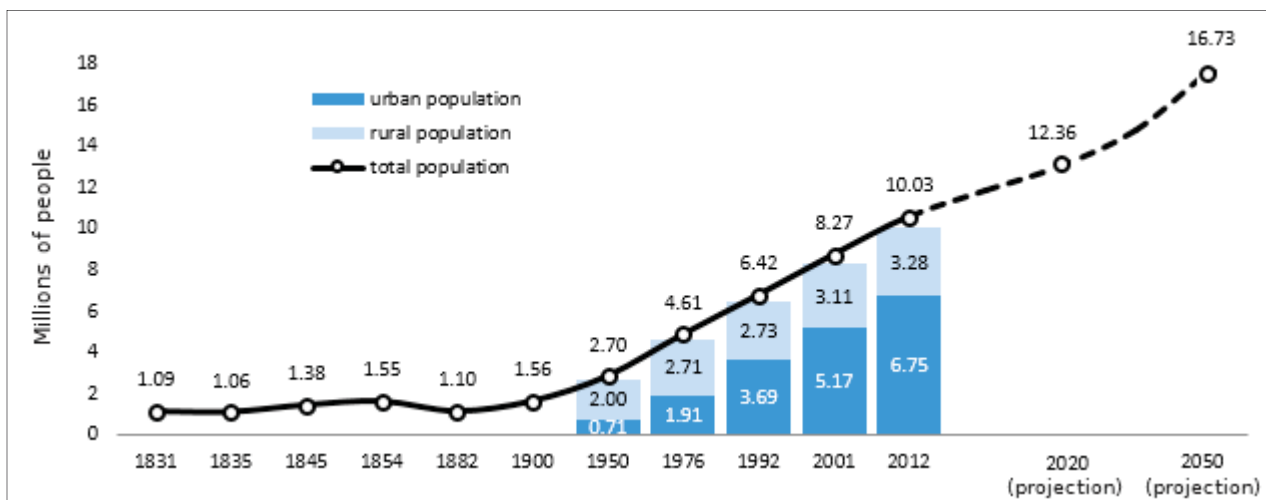
## Urban to supplement the 2025 Bicentennial Patriotic Agenda

Cities are emerging as an effective vehicle to achieve the objectives that the Patriotic Agenda for the Bicentennial 2025 proposes in terms of poverty reduction and universal provision of basic services. An important trend that the report identifies is the internal migration from rural to urban areas stimulated by the perception that cities represent opportunities for higher incomes and a better quality of life compared to rural areas. These shifts have led to a marked increase in the urban population. One third of Bolivia's total population (2.6 million people) has migrated to cities from 2006 to 2011, of which a third came from a rural environment.

The incentives for migrants are clear: higher incomes and access to basic services, precisely two of the pillars of the Patriotic Agenda for the Bicentennial 2025. The analysis shows that migrants have substantially improved their income levels. The overall increase in real income per capita between 2005 and 2011, especially among the poorest in urban areas, suggests the existence of an inclusive growth process that has benefited the poorest groups in Bolivia. In addition, this work also shows that the provision of basic services in urban areas has been improving as a result of the efforts and investments of municipal governments, notably in the last ten years. It is noted that the provision of services in urban areas with higher population density is typically more cost-effective for both provider companies and local governments than providing services to remote and sparsely populated areas.

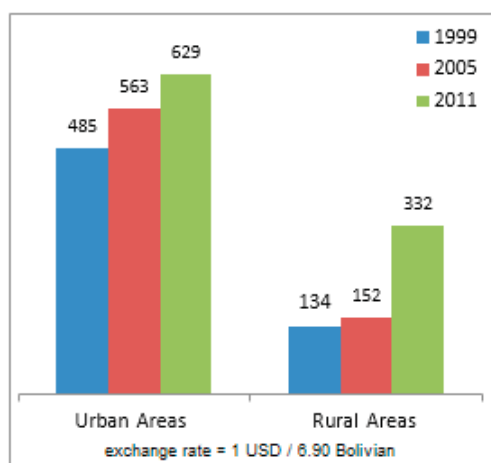
However, migration to cities also entails challenges in terms of informality in employment. The diagnosis

**Figure 2. Population growth and urbanization in Bolivia**



Source: Prepared using census data from INE.

**Figure 3. Average real income (in Bolivianos) in urban and rural areas, 1999-2011**



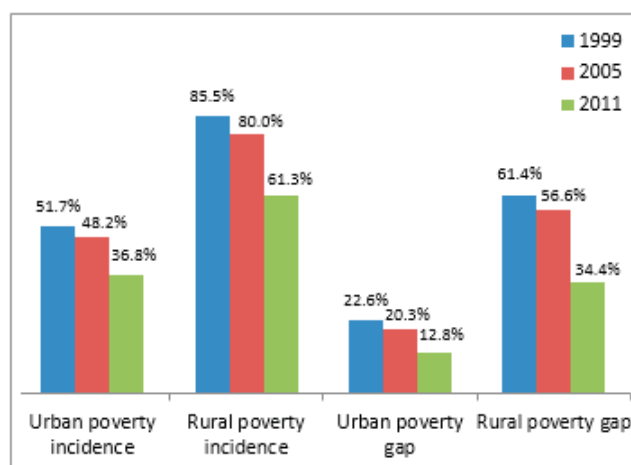
Source: Prepared based on Household Survey data from INE.

indicates that cities predominantly attract young people; one of the direct economic benefits for cities is that their labor markets grow more than their population, implying that urban areas could become more attractive for investment. However, this disproportionate growth of labor force also resulted in the growth of informal employment. This phenomenon could become a challenge in the future as young people continue to migrate to the cities and work informally.

### Urban expansion — challenges and opportunities of cities in transition

The growing expansion of urban areas—together with the recent decentralization process—has brought along challenges and opportunities for both national

**Figure 4. Poverty incidence and gap in urban and rural areas, 1999-2011**

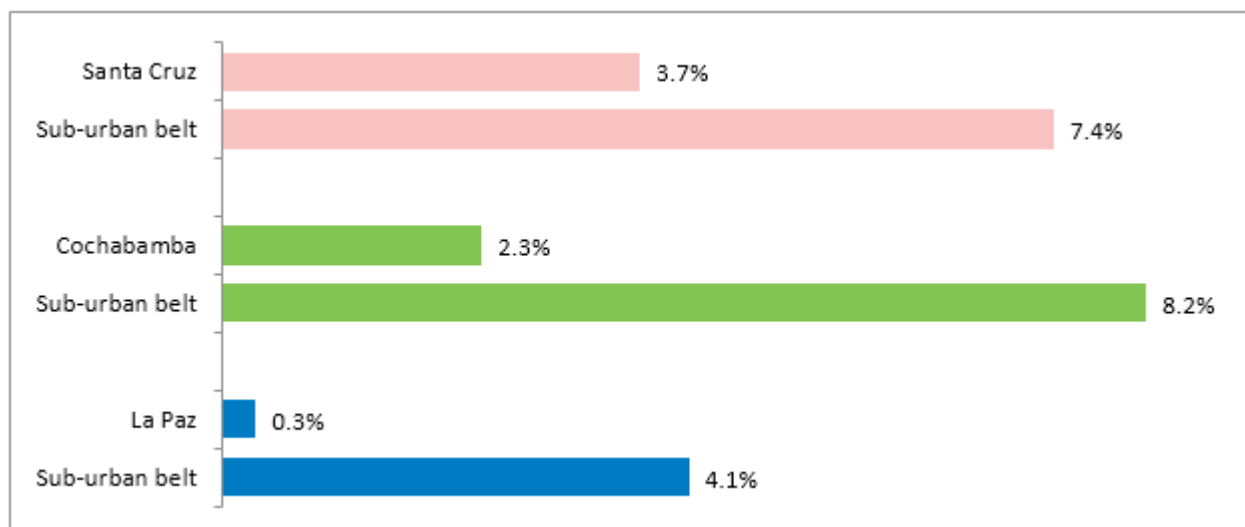


Source: Prepared based on Household Survey data from INE.

and municipal governments regarding: (a) land-use planning, (b) provision of basic services, and (c) governance and institutional capacity.

The growth of urban areas essentially reflects a process of suburbanization. Since 1990, smaller cities in Bolivia are growing faster than the big cities in terms of population and area. Particularly, the rapid population growth in small and medium cities close to Cochabamba and Santa Cruz stands out—over the last decade, these cities grew at an average rate of over 8% and 7% respectively. On the other hand, the population of major cities (La Paz, El Alto, Cochabamba, and Santa Cruz) grew two to three times more slowly, and their surface areas also grew more slowly, experiencing increasing population densities. These demographic and spatial dynamics

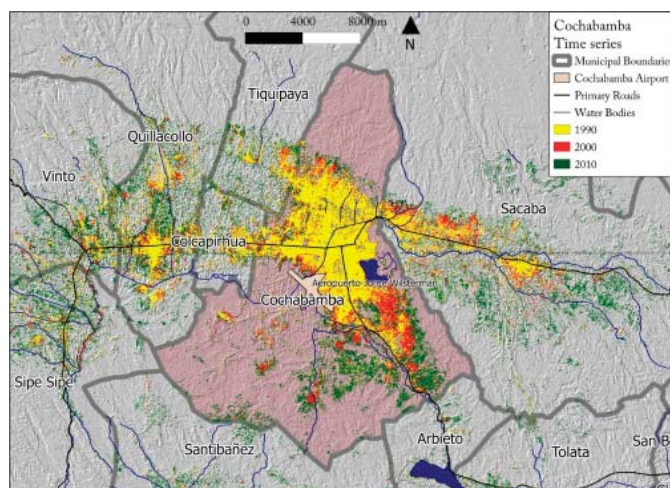
**Figure 5. Annual population growth in the three Metropolitan Areas between 1992 and 2012**



Source: Prepared based on census data from INE.

resulted in a process of suburbanization characterized by rapidly growing small cities on the outskirts of big cities that form new functional metropolitan areas. Secondary cities that are not located in the hinterland of these metropolitan areas, such as Sucre, Ribalta, and Tarija, have usually experienced low-density expansion as the population growth has started to slow during the last decade. As various types of cities in Bolivia have experienced different types of spatial expansion and population growth trends, different urban management strategies will be needed to ensure sustainable growth in the future.

**Figure 6. Conurbation in the Cochabamba Region, 1990 - 2010.**



Source: Own elaboration based on satellite data.

The expansion of cities into high-risk areas presents a challenge for public policy. Although disaster risks exist in both urban and rural areas, the expansion of cities into hazard prone areas increases the risk exposure of numerous urban dwellers. The inhabitants of many of these settlements are even more vulnerable to such disasters given their poverty and housing conditions. For instance, the expansion of La Paz in recent decades has been concentrated in areas with slopes greater than 20 degrees, which increases the risk exposure of its population to landslides and creates the need for major investments in mitigation measures and vulnerability reduction. This example also shows the importance of carrying out a more detailed analysis of natural hazards and potential impacts of climate change at the local level.

Urbanization presents an opportunity to provide basic services which Bolivia could address through better urban planning.

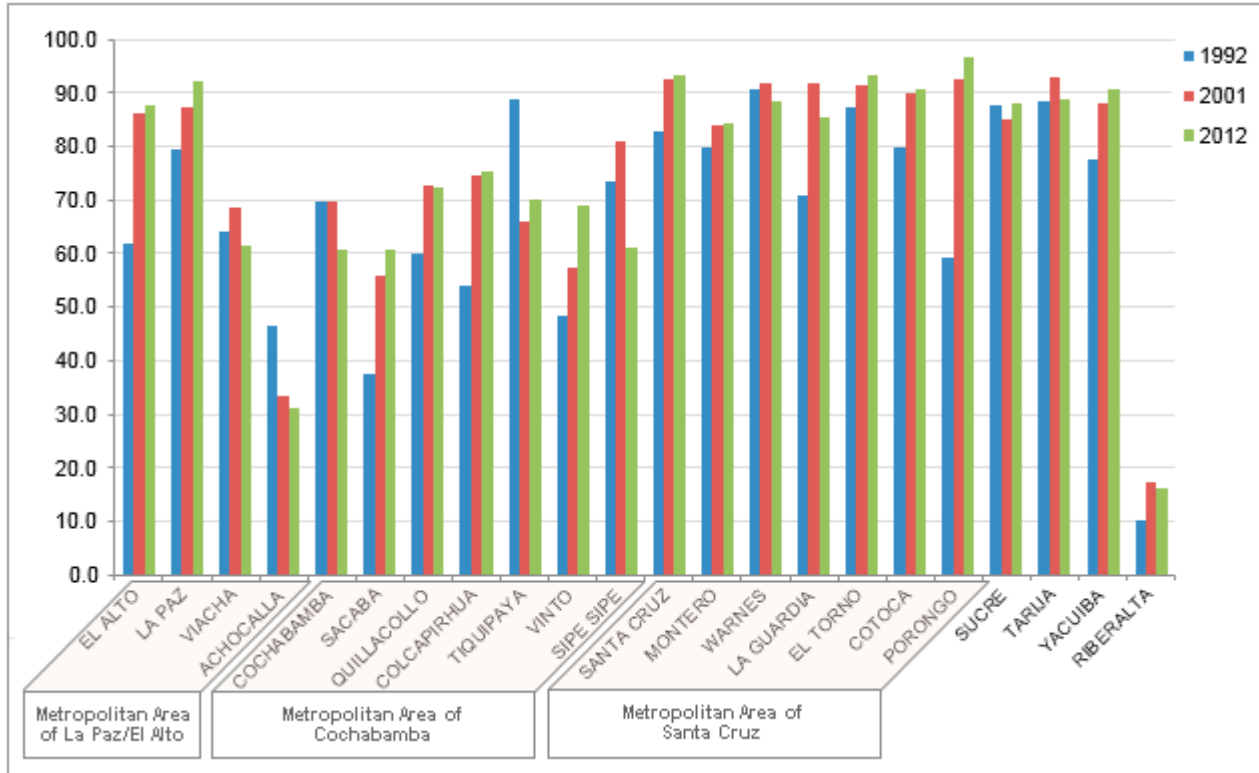
The rapid low-density expansion of urban areas can result in higher infrastructure costs for the delivery of basic services and affect environmental sustainability. Local governments face a potential degradation of urban environments as a result of insufficient sanitation coverage paired with a lack of wastewater treatment. In addition, the use of unregulated septic tanks could exacerbate the problem. Some of the consequences that Bolivia could face include pollution of surface and groundwater given the lack of solid waste collection or sewage treatment, as well as air pollution. The Government of Bolivia could consider fostering greater population densification through the use of fiscal instruments and urban planning to take advantage of economies of scale for service delivery.

### **Institutional framework and planning tools for urban development**

The challenges of urban planning, service delivery, and disaster risk management that cities face today could be addressed through institutional adjustments to improve governance and promote capacity building at the local level. The decentralization process at the local level is a relatively recent phenomenon that started in 1994 with the adoption of the Law of Popular Participation No. 1551 and was consolidated with the adoption of the Constitution of 2009 and the Framework Law of Autonomy and Decentralization "Andrés Ibañez" in 2010. This set of laws provides the decentralization framework that delegates the responsibility for provision and financing of public services and infrastructure to municipalities and stipulates citizen participation in service delivery decisions. The decentralization process resulted in an increase in the number of municipalities from 24 in 1994 to 339 in 2012. With this development emerged the institutional challenge of coordination between various levels of government and between local authorities in the same metropolitan area, as well as increasing technical and financial capacity of local governments for territorial planning and urban management. The following topics are of particular importance:

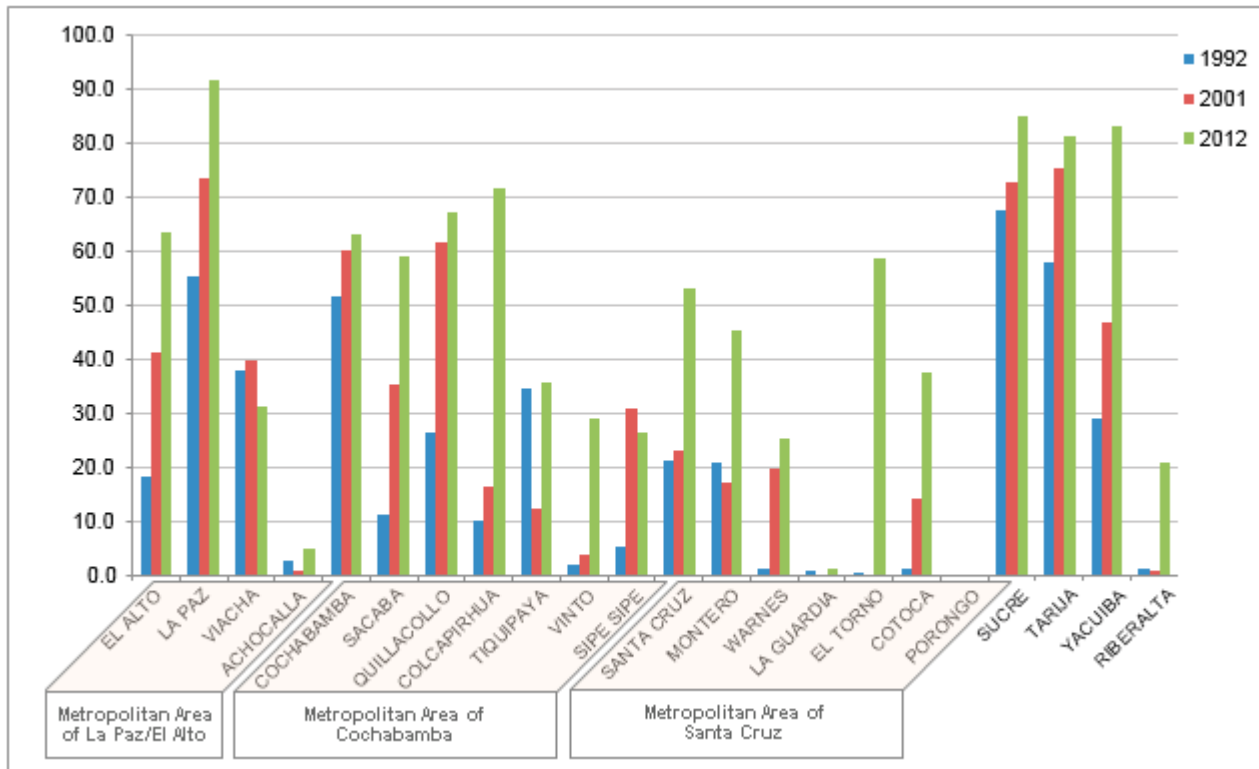
- There are some shared and concurrent powers between different levels of government that can lead to duplication of mandates and / or needs of coordination between actors at different levels.
- Often, the instruments of development planning and budgeting, such as land and housing cadasters, assessments of land and housing markets, and data collection at the local level, are not used effectively by municipalities. This often is a result of capacity constraints at the municipal level, lack of coordination between various instruments, local pressures, and community interests, amongst other things.

Figure 7. Coverage of potable water provided by public service utility in 22 cities (%).



Source: Prepared based on census data from INE.

Figure 8. Coverage of sanitary sewage in 22 cities (%).



Source: Prepared based on census data from INE.

Another opportunity is to deepen the discussion on how to operationalize municipal associations and consolidate metropolitan areas. Sub-national administrative divisions usually seek to consolidate a territorial order allowing governments to exercise control over a specific territory and agglomeration that present similar economic, cultural, ecological, and functional characteristics. Many challenges related to urbanization are not confined to administrative boundaries, such as water supply, urban transport, or environmental management. Therefore, it is imperative to consider functional urban areas and develop mechanisms for coordination between the various sub-national entities and institutionalize a degree of supra-municipal governance to promote strategic actions for functional areas. This is particularly important as the management and organization of these areas is becoming more complex over time as the relationships between conurbations or development poles are intensified through the exchange of goods and services or the mobility of its inhabitants.

### Some recommendations and suggestions for future analysis that emerge from the report

The Government of Bolivia could take steps to maximize the potential economic and social benefits of urbanization in order to promote poverty reduction, social inclusion and prosperity for all Bolivians. Considering the results of this diagnosis, the following strategic areas of actions and ideas for future work/analysis are presented as options for the consideration of the Government of Bolivia. Although all of these areas are important, it is suggested to sequence the actions the government could take in the short, medium and long term.

In the short term, the government may focus on:

- Creating databases at the city level. The types of data that could be included in these databases include the general characterization of the population, the growth and formation of gross domestic product, service provision coverage, infrastructure, transport, land use and cadaster, and data on vulnerability to natural hazards.
- Conducting assessments of land and housing markets in major cities such as La Paz, Santa Cruz and Cochabamba, where urban centers are densifying. These evaluations are needed to increase productivity and improve the efficiency of land use. Assessments can determine: (i) actual land use, (ii) mechanisms to provide housing and services for areas with less coverage, (iii) how to improve zoning and risk reduction, and (iv) plan land use at the municipal and metropolitan levels in the medium and long term.



La Paz, Bolivia.

Credit: World Bank

- Reviewing methods of operationalization of municipal associations and consolidation of metropolitan areas focusing on La Paz/El Alto, Santa Cruz, and/or Cochabamba. The Government could start with the coordination in metropolitan areas where municipalities could exploit economies of scale in infrastructure provision across administrative boundaries in key issues at the sectoral level, such as transportation and solid waste management. The activities should include all the municipalities involved as well as active participation of the regional government.
- Concentrating the financial support and capacity building efforts on small and medium-sized cities that are growing at a fast pace and face the challenge of achieving universal coverage of basic services for existing residents as well as new migrants in a more sustainable way for the environment; this could include the expansion of neighborhood improvement programs in Bolivian cities.

In the medium term, the actions described above could be complemented with the following:

- Reviewing planning and investment tools for cities to improve their implementation and use. The types of instruments include Land Use Plans, Annual Operating Plans, Municipal Development Plans, etc.
- Developing a strategic training plan to build institutional capacity and technical ability of city officials to implement the various laws, policies and regulations, enforce land use plans and other planning documents, and to oversee the infrastructure construction. The creation of networks of municipal officials and mayors, and provision of targeted training programs are key in this process.

In the long run, it is recommended to conduct urban sector analysis with an integrated view of how cities

are linked and are part of a system of cities in the country to better understand how cities' contribution to national development could be increased. Such a system could be structured from a set of settlements and urban areas, considering the characteristics of physical expansion, the coverage and quality of basic services, economic functions of cities according to the specialization of the region, and the systems that connect the territory (road systems, communication, and transportation). The interaction of these components is what represents the system of cities and, at the same time, is the subject of public policy intervention in the territory and private sector actions to incorporate urban centers in the development process.

As part of this analysis, one could investigate how cities contribute to economic growth in Bolivia and how all cities could be a vehicle for regional development and support to rural development. Both the cities of metropolitan areas as well as secondary cities that are not part of the axis of metropolitan areas represent a valuable opportunity to promote socio-economic development both at the national and regional level. In this context, one could analyze how urban areas serve as a market for agricultural goods from surrounding rural areas that in turn benefit from urban jobs as well as finished goods and services from cities. The links between rural and urban areas are reflected by the interdependence of commodities and natural resources on the one hand, and those essential services, such as education and health, that would be very expensive to provide in each rural settlement on the other. In addition, the analysis could further examine issues such as labor markets, poverty, competitiveness, innovation, and changes in demographics and social structure of cities when people are migrating from rural areas.

Given the speed with which urban areas are growing in Bolivia, political leaders have to respond in a more efficient, more innovative and more coordinated way to address citizens' problems and challenges. New

challenges demand quick action and invite not only governments but also the private sector and communities to actively participate in finding solutions that allow people to live in more sustainable territories, more competitive and innovative economies, and more inclusive and prosperous societies.

## End Notes

<sup>1</sup> United Nations, Department of Economic and Social Affairs, Population Division (2012). World Urbanization Prospects, the 2011 Revision, Final Report with Annex Tables. New York, USA.

<sup>2</sup> La Paz, El Alto, Santa Cruz, Cochabamba, Oruro, Sucre, Tarija, Potosí, Sacaba, Montero, Trinidad, Quillacollo, Yacuiba, Riberalta, Colcapirhua, Guayaramerin, Viacha, Villazon, Tiquipaya, Camiri, Bermejo, Tupiza, Cobija, Llallagua, Warnes, La Guardia, Vinto, El Palmar, El Torno, Villamontes, Cotoca, San Ignacio de Velasco and Huanuni (the full report includes details on the demographic development in these cities since 1976).