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Urban Growth in Peri-urban Quito, Ecuador:
Challenges and Opportunities for
Comprehensive Land Use Management

by Brenna Vredeveld, MESc 2008

Introduction

Quito, Ecuador has been a cultural, economic, trading and population center for centuries. Recently, rapid urban expansion has shaped its region. Located at 2800 to 3200 meters above sea level, it now measures forty to fifty kilometers long and five to ten kilometers wide, unfolding along the trough-shaped inter-Andean valley in which it lies (Carrión 2005, Riaño 2001). From 1950 to 1990 the city grew six-fold in population and twenty-fold in area systematically incorporating minor urban areas on the periphery (Pitkin 1997, Riaño 2001) (Table 1). Unsuccessful attempts to regulate this growth have included urban growth boundaries and decentralization of management powers (Ramírez, pers. comm. July 2007). In particular, the valleys to the south and the plains to the east of Quito have experienced heightened impacts of urbanization given their greater capacity to provide livelihoods and jobs (Murray 1997). This growth has consumed fertile agricultural lands and natural areas, which in turn has prompted the agricultural frontier to expand outward into protected páramo (highland grassland) and native forests. The result has been an increasing strain upon disappearing natural resources (De Bievre et al. 2007a,b).

At the peri-urban interface, where land transitions from urban to rural, the composition of people and landscapes remains dynamic, metamorphosing as economies, populations and environments evolve (Adell 1999, Allen 2003, Douglas 2006). It is here that overlapping national, provincial and local land management institutions greatly influence the changing land uses of this region. And as the city grows into these areas, as infrastructure and populations solidify across municipal boundaries, opportunities for more synergistic approaches to urban growth management present themselves.

I came seeking to examine Quito’s peri-urban growth management at local, provincial and national levels. Through this multi-scale approach, I found that communities, municipalities and national ministries each play a significant role in influencing urban growth in this region. Yet, there remain many collaborative opportunities that these diverse actors can take advantage of in order to comprehensively manage the associated land transition processes.

Site description and history

I concentrated on land use management and planning in three peri-urban communities in two cantones (counties)—Mejía and Rumiñahui—to the south and southeast of Quito (Figure 1). These communities represent a gradient of urban development and were chosen to better understand their integration and participation in the urban growth management process. El Chaupi in Cantón Mejía is the farthest from Quito;
it has the slowest rate of population growth and expansion of urban infrastructure. It is the most rural in nature with an economy and population that depend on agriculture and cattle ranching. Cutuglagua, a fast-growing sector closest to Quito, is economically and infrastructurally merging with the city even though it lies within Cantón Mejía. Its population is largely composed of migrants from rural provinces who have come in search of employment, education and to benefit from its proximity to a large urban center. San Fernando, in Cantón Rumiñahui, is experiencing moderate growth due to its milder climate and lower population density, which attracts a mix of rural migrants and those wishing to leave Quito. Within each community, I focused on either a single water user group (El Chaupi and Cutuglagua) or a community association (San Fernando). These communities and cantones are located within important sub-watersheds, which supply water to Quito—those of the San Pedro and Pita Rivers.

Table 1. Population projections of Quito, Mejía and Rumiñahui and percent urban population.

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<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>Quito (urban)</td>
<td>1,856,555</td>
<td>2,180,000</td>
<td>2,828,363</td>
</tr>
<tr>
<td>Quito (rural)</td>
<td>315,713</td>
<td>384,077</td>
<td>593,766</td>
</tr>
<tr>
<td>Mejía</td>
<td>61,246</td>
<td>71,862</td>
<td>116,083</td>
</tr>
<tr>
<td>Rumiñahui</td>
<td>65,882</td>
<td>79,558</td>
<td>140,307</td>
</tr>
</tbody>
</table>

Sources: De la Torre 2004, De Bievre and Coello 2007a, Strategic Plan of Rumiñahui, Strategic Plan of Development of Mejía

Figure 1. The Quito region lies in the Pichincha Province of Ecuador, in the Andes Mountains. Urban expansion of the city has begun to extend into neighboring cantones (counties) of Mejía and Rumiñahui to the south and southeast. Specific study sites—Cutuglagua, El Chaupi and San Fernando—were chosen to represent a gradient of urban development.
Figure 2. Agencies at provincial and national levels influence both urban and rural land use management in the Quito region either through direct regulation or collaboration. At a provincial or cantonal level, collaboration between agencies is often unidirectional. At the national level they do not collaborate outside of projects at provincial or cantonal levels. Arrows indicate the direction of influence in relationships between agencies and the use and development of urban or rural land. Solid lines reflect existing relationships; dotted lines reflect those that exist only on paper or are anticipated in the future.

Methods

I conducted semi-structured interviews with organizations at three scales—local, provincial and national—to determine their roles in the land use planning process and the nature and extent of their collaboration with other institutions. At the local level I spoke with community leaders. At the provincial level, I concentrated on government agencies in charge of land use and natural resources planning and regulation such as the Departments of Planning and the Environment of the Metropolitan District of Quito (DMQ), Mejía and Rumiñahui and the Government of Pichincha. The national level included ministry programs for managing agriculture, natural resources, community development and housing. I completed a total of 23 interviews, conducted in Spanish with the help of an Ecuadorian assistant. I supplemented these with information from the Development Plans of relevant local and provincial governments and institutional documents from the ministries.

Results and discussion

Management agencies, local governments and communities recognize that urban growth in these peri-urban regions has been occurring at an uncontrolled pace. Most describe its negative impacts on water quality and availability, the unsatisfied needs for better infrastructure, the associated increases in population and traffic congestion and the decreasing number of green and natural spaces. Among the reasons they cite for these trends are rapid migration, lack of appropriate zoning in urbanizing areas, corruption of management officials and lack of economic resources. Not mentioned very often is the lack of meaningful collaboration among land management and planning institutions (Figure 2).
Participatory planning at the local level

Communities in El Chaupi, Cutuglagua and San Fernando participate in planning processes through community organizations and representative local government. They express their goals in terms of improvements in infrastructure, health, education and the economy, as opposed to specific land uses. Though, if government is slow to provide needed services, they often take the initiative themselves, regardless of the land use regulations, for which monitoring and enforcement are generally weak. Unlike El Chaupi and San Fernando, Cutuglagua’s constantly changing and expanding demographic makes broad community participation in such initiatives more challenging. In all three communities, specific household land uses are allowed to continue so long as they do not create conflicts with other community members.

In addition, separation of planning responsibilities between cantonal and provincial governments occurs throughout the region. Because Cutuglagua and San Fernando are classified as “urban”, their goals are incorporated into the Plans of Development of Cantón Mejía and Cantón Rumiñahui, respectively. El Chaupi, on the other hand, is considered rural and collaborates exclusively with the Provincial Government of Pichincha. This separation is reflected in Mejía’s Plan of Development, which focuses on its urban areas. Rumiñahui gives a more comprehensive (though not complete) treatment to its rural and urban areas most likely because it has more resources to train planners and land managers and to prepare comprehensive planning documents.

Collaboration among planning institutions: DMQ, Mejía, Rumiñahui and Pichincha

The management strategies that the DMQ adopts often dominate regional planning. Its creation in 1992 granted it more substantial legal authority to regulate its own growth and natural resources. Greater economic resources allow the District to employ a larger staff of trained personnel to use sophisticated technologies for such management. They have attempted to direct growth towards certain sectors by providing affordable housing and improved transportation corridors, but their weak enforcement of land use regulations (i.e., legalizing illegal settlements) has resulted in spontaneous growth to many areas, even onto lands designated as non-urbanizable or protected (Valdivieso 2005, Bermúdez, pers. comm. July 2007). Mejía and Rumiñahui, operating on smaller budgets and

Photograph 1. La minga, or “community service”, is a cornerstone in rural areas of Ecuador in which communities work together to construct sanitation systems, build houses, improve community green spaces, etc. In Barrio San Fernando—adjacent to a rapidly expanding urban area southeast of Quito—the community builds trails and cleans a small stream as part of an ecotourism project in an abandoned nearby valley.
with fewer staff, have been forced into reactive planning approaches as they are subject to the side-effects of population overflow from Quito.

For Mejía and Rumiñahui, external assistance with planning initiatives has been a great help in sharing costs and saving time. They have adopted convenios de mancomunidad or “community agreements”—informal contracts that maintain working relationships—with other institutions and municipalities in this region to facilitate information sharing and collaboration, in this case to direct growth that spans municipal borders and lend technical assistance. Mejía’s new Department of Planning has requested help from the DMQ’s Planning Department to create zoning plans to regulate growth in urban and urbanizing communities (Cajiao, pers. comm. August 2007). Rumiñahui, similarly, has turned to the Association of Ecuadorian Municipalities (AME) to help structure its Plan of Development and Zoning (Ramírez, pers. comm. July 2007).

Decentralization of land management powers to local authorities allows these three cantones to better respond to their community’s needs. While their Plans are also developed to comply with the new Plan of Development for the Pichincha Province, it has yet to be seen if they do so in practice. Collaboration among the municipalities remains on a level of lending technical assistance and resources rather than coordinating and complementing planning strategies. Integrating their planning policies could be particularly beneficial for managing watersheds and natural resources (e.g. native forests, páramo), which do not respect political boundaries. No mention of this kind of collaboration between Mejía and Rumiñahui was made in any of the interviews.

Collaboration among planning institutions and others

National organizations such as the Ministry of Agriculture (MAG), the Ministry of Urban Development and Housing (MIDUVI), the Association of Ecuadorian Municipalities (AME) and the Ministry of the Environment provide assistance to local and provincial governments for land use management only when requested to do so. The local government defines the roles and extent of the agency’s participation, which reinforces the separated treatment of urban and rural planning. Outside of providing assistance to the municipalities there is little collaboration among these national organizations to define long-term, comprehensive land use planning strategies.

Narrowly defined roles as normative regulators and “community agreement” facilitators also restrict these national agencies from participating directly in cantonal and provincial land management and urban growth plans. They are consultants rather than participants. This approach helps to maintain the integrity of projects in responding to local needs, but limits the creative planning capabilities that these agencies can apply to such projects. The combination of limited participation and resources has resulted in a lack of programs for those rural and natural areas that face increasing pressures of urbanization. The MAG, for example, has no robust programs to help farmers resist urban expansion pressures; it offers only limited technical assistance programs to small-scale agriculturalists. Its hopes for more direct participation count on only recent changes in agricultural policy (Velásquez, pers. comm. July 2007). Other than operating limited community development programs, the MIDUVI remains restricted to revising legal aspects of development projects. In the Pichincha province these Ministries work exclusively in the cantones outside of Quito, respecting the DMQ’s special legal authority to manage its own land and public services. Many of these national agencies hope that a new Ecuadorian constitution, currently being written, will empower them to participate beyond their normative capacities in order to better contribute to land management initiatives in their respective areas of expertise.
Conclusion

The multi-scale, urban-gradient approach of my research identified several challenges that hinder effective urban growth management. In general, there is a lack of effective and comprehensive collaboration across institutions at all scales. “Community agreements” are limited to technical assistance programs when the real need is for coordinating and complementing development plans across administrative boundaries. Similarly, there is an absence of coordination among institutions that work on both the urban and rural sides of the expanding peri-urban interface, including within cantonal planning departments. The separated treatment of urban and rural spaces often leads to favoring urban planning in these peri-urban areas, to the detriment of rural and natural areas. This entrenched rhetoric reinforces itself by dictating the participation of national institutions in planning processes. While these national institutions may have many hopes for more direct participation, their limited scope relegates them to waiting for appropriate political changes to make it possible. In addition, the centralization of planning resources in Quito allows it to dominate regional planning policy, forcing Mejía and Rumiñahui into reactive planning approaches. Organizations across all scales suffer from an inability to effectively enforce the regulations that they create. Keeping up with the pace of city expansion spreads their time, money and staff thin.

Confronting these challenges could be captured within a long-term, comprehensive land use plan that takes into consideration the flows of people, resources and markets between urban and rural spaces at the peri-urban interface. Such a plan could integrate resources and responsibilities across institutions at the various scales, regardless of political-administrative boundaries. This process also creates opportunities to engage local actors—the land use decision-makers that are expanding the peri-urban interface on a daily basis—through the established non-governmental and community organizations with which they work. While I
did not focus on them in this study, their presence in on-the-ground land use management in this region is very real. Their ability to be a collaborative intermediary between communities and planning institutions is promising, though depends on community strength and demographic turnover. With such foundations, next steps could include resource sharing that focuses on addressing urban growth processes such as rural to urban migration, low profitability of small-scale agriculture that makes it susceptible to urbanization pressures and poor quality of life in both urban and rural areas. Using these new targets to capitalize on creative planning capacities of more participatory national ministries could then become a goal. Overall, the relationships between these diverse groups and their willingness to collaborate are as important as the projects and plans they develop. Regulating the rapid growth of this “mancha urbana” (literally the “urban stain”) calls for them to take advantage of these collaborative opportunities, leaving behind the political, institutional and urban or rural biases that now separate them.

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References


De Bievre, B. and X. Coello. 2007b. Caracterización de la Oferta Hídrica: Manejo Integrado de los Recursos Hídricos en la Hoya de Quito. UICN-SUR, Quito, Ecuador.


