#### **Abstract:**

This paper unpacks the factors shaping
Niamey's urban development. Starting
with population growth, the author
examines the causes and nature of
Niamey's spatial, economic, social and
political development. The term
"environmentally induced economic
migration" is employed to explain



Market in Niamey, Niger Source: http://en.loadtr.com/21\_Niamey\_Niger-423880.htm

Niamey's astounding population growth.

In contrast to other cases of urbanization and development examined in Beijing, Moscow and Mumbai, Niamey's remarkable population has not correlated with significant economic, infrastructural or political development.

After living in Niamey, I have become personally invested in better understanding, elucidating and sharing the alarming and dangerous ways in which this city is being forced to expand despite a total lack of physical, economic and institutional infrastructure. As the global economy and climate change continue to perpetuate cycles of inequality, Niamey may prove to be a prototype, as opposed to an outlier, in the issues it faces.

#### Introduction

The 2010 State of African Cities report predicted that Niamey will be the second fastest growing

large cities in Africa this decade

("State of African Cities, 2010,"

2010). Yet little attention is being paid to planning for Niamey's growth. Caused primarily by push factors fueling urbanization, dubbed "environmentally induced economic migration" by Afifi (2011) and others, Niamey's



growth has not been coupled with economic gains.

Basemap Source: google.com/maps

Niamey stands in sharp contrast to other cases of urbanization and development we examined in large cities of the developing world: Beijing, Mumbai and Moscow. Niamey's challenges are amplified by the fact that its population growth is not connected to economic growth through globalization, which typically supports the pull of additional population and labor resources into a city. Instead, climate change and other environmental factors continue to force an everincreasing proportion of the Nigerien population, 86% of whom still live in rural areas, to Niamey ("State of African Cities, 2010," 2010).

#### **Background**

Niamey is the capital of Niger, situated in the Sahel in West Africa. In the context of urbanization and development, Niamey provides an important case that offers unique insights into the effects of development on urbanization in the poorest parts of the world. Niger ranks 186 of 187 countries according to the 2011 UNDP Human Development Index (UN Human Development Index: 2011

Country Profile: Niger, n.d.).



Satellite Image of Niamey, a city formed along the Niger River.

1http://upload.wikimedia.org/wikipedia/commons/3/39/
Niamey\_SPOT\_1101.jpg

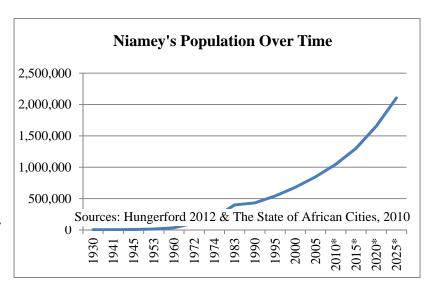
Niamey was founded sometime in the 18th century. The French developed it as a colonial post in the 1890s and eventually moved the French colonial capital from Zinder in the East to Niamey in 1926. The modern phenomena of the drought and famine cycle in Niger began in 1906 with the monetization of Niger's economy in response to French colonialism (Afifi, 2011). Prior to this economic shift, rural Nigeriens relied on barter and food reserve community survival during droughts. After 1906, farmers began selling off their excess crops for coins to pay taxes instead of contributing them to community reserves. By the drought of 1913, almost no food reserves were left, which resulted in widespread famine. Then, in the early 1930s, a severe drought and famine caused the first massive influx of rural temporary migration to Niamey – over 3,000 people per day flocked in during the worst of the drought (Hungerford, 2012).

#### **Demographics: Rates & Trends of Urbanization**

This case examined demographic trends to shed light on who lives in the city, how long they have been there, how quickly population size and makeup is changing, where city dwellers are

coming from, and issues of urban form and services related to density and migrant populations.

Niamey was originally founded in the 18<sup>th</sup> century. The French developed it into a colonial post in the 1890s; the city grew quickly in economic importance



but remained small. By the early 1930s, about 4,000 people lived in Niamey. As the economy transitioned from barter to monetary-based, Niger began to experience food crises, forcing thousands to flee their villages for Niamey (Afifi, 2011).

Since around 1930, Niamey has experienced significant population growth that has been strongly correlated with drought and famine years. From about 4,000 people in 1930 to a projected population of 2.1 million in 2025, Niamey will have experienced a 525% growth rate in less than 100 years.

Niamey's growth rate has been between 4.22 and 4.55 since 1990 and its urbanization growth rate is projected to increase to 4.96% annual average growth between 2020-2025 ("State of African Cities, 2010," 2010). 83% of Niger's 16 million people live in rural areas (Rural Poverty Portal, n.d.), which is far higher than the global average. As climate change continues to worsen conditions in rural Niger, Niamey will likely continue to absorb large portions of the population for decades to come.

Proportion of Population Comprised of International Migrants (2005)	
World Cities	3.0%
African Cities	1.9%
Niamey, Niger	0.9%

Adapted from Data in "State of African Cities, 2010" vast majority of population growth in

Compared to other African and global cities, Niger's population has a very small proportion of international migrants. The vast majority of population growth in

Niamey is from rural Niger. In 2005, 3% of people living in cities across the globe were international migrants. In African cities, 1.9% of the urban population was comprised of international migrants, and in Niger, 0.9% of its urban population in 2005 was made up of international migrants ("State of African Cities, 2010," 2010).

Niamey's population growth, from a small village of 4,000 in 1930 to a projected 2.1 million by 2025, is staggering. This growth has been strongly correlated with periods of drought and famine in Niger. Since less than 1% of Niamey's population are international migrants, it is safe to posit that domestic changes are fueling this growth. Afifi (2011) and others have explained this population growth through the term "environmentally induced economic migration."

### The Economics of Urbanization and Development

This case set out to examine employment structure, primary-secondary-tertiary sector makeup, GDP per capita, and economic growth indicators like energy consumption per capita and R&D investment. Economic indicators help us better understand what kind of industry and economic development is driving growth in each city. Conversely, indicators that examine distribution and energy consumption suggest how sustainable a city's

economy will be. The table "Economic Snapshot for Niger" highlights Niger's low GDP, high levels of poverty and reliance on agriculture.

Economic data at the city level for Niamey proved lacking. This is likely due to the fluidity of its population and the lack of governmental resources to track such data. Niger's economy centers largely on subsistence crops and livestock. Niger's uranium deposits provide another, smaller source of income.

Economic Snapshot for Niger:		
2011 GDP	\$6.017 billion	
2011 GDP per Capita	\$374	
GDP by Sector:		
Agriculture	39.60%	
Industry	17.10%	
Services	43.20%	
2011 UN Human Development Index		
(HDI) Summary:		
Country Ranking on	186 of 187 coun-	
HDI	tries	
% Population living in		
poverty	92%	

Sources: Table compiled by author using CIA World Factbook, UNDP Human Development Index 2011 & World Bank national accounts data

% Population living on

less than \$1.25/day

Although Niamey is growing exponentially in terms of

population, Niger's economic state remains weak at best. Given Niger's economic reliance on agriculture, why is Niamey growing so rapidly? It is through this lens that we begin to understand the push factors precipitating "environmentally induced economic migration" in Niamey and Niger.

### **Environmental conditions: A Dismal and Worsening Picture**

Urbanization and development produce, and are shaped by, environmental impacts. Cities across the globe face a myriad of environmental issues, including air quality, public space, land use changes, issues connected to climate change and food insecurity. Many cities face environmental challenges they themselves created through participation in the global economy, such as poor



Serious & increasing food shortages are caused by drought in Niger Photo credit: © Julien Goldstein/IFRC:http://blogs.redcross.org.uk/tag/niger/

air quality due to carbon emissions. For Niamey, as with an ever-increasing number of cities in the developing world, the most pressing environmental issues stem from climate change, an externality of global economic growth. As opposed to cities that are paying for the environmental impacts of their own growth, Niamey suffers because of growth in other parts of the world.

Since 90% of Niger's population earns its livelihood through agriculture, Nigeriens are utterly dependent on the quality of land (Central Intelligence Agency, n.d.). Several of the environmental issues plaguing Niger have been exacerbated by climate change, including droughts, soil degradation, deforestation and the dramatic shrinking of Lake Chad on Niger's eastern border. As of 2009, only 11.8% of Niger's land is arable, and that percentage continues to shrink (Rural Poverty Portal, n.d.). 65% of Niger's territory is bounded by the Sahara desert, and desertification threatens to take over more of Niger's precious arable land.

Starting with the 1913 drought, rural Nigeriens have coped with drought and famine through temporary urban migration, such as to Niamey. Some have confused this with the historic traditions and practices of seasonal migration in Niger, but the patterns have distinctly shifted from seasonal to climate-reactionary. As droughts have become more frequent and severe, migration has become more permanent. Fieldwork conducted by Afifi in Niger through the Environmental Change and Forced Migration Scenarios (EACH-FOR) research project, (co-financed by the European Commission) examines how environmental deterioration in Niger has impacted migration. Through expert interviews and migrant and non-migrant questionnaires,

Afifi's body of research shows that rural Nigeriens migrate because of economic problems, which are strongly linked to environmental degradation (Afifi, 2011).

### **Key Findings: Rationale for Rural Nigerien Migration**

Of Nigerien migrants interviewed:

- 90% migrated in part to some environmental consideration
- 80% would return to their homes if environmental conditions were to improve
- 70% expected future environmental problems to impact them
- 50% are currently planning to leave their homes for environmental reasons

Source: Afifi, 2011, p.115

#### **Political Context**

Niamey houses the national government of Niger in addition to the regional "Niamey Urban Community" government made up of five "Urban Communes," which are subdivided by "districts" and "quartiers." Political and regime instability, including several coup d'etats throughout the 1990s, in 2002, an again in 2010 ("BBC News Africa: Niger Country Profile. 2013.," n.d.), have contributed to a rocky political climate in which the Nigerien government has

had little power and has paid almost no attention to planning issues. The legal system is a mix of civil law (based on the French system), Islamic law and customary law. The most recent Constitution in Niger was adopted in October 2010 (Central Intelligence Agency, n.d). Resistance by the Tuareg nomads of northern Niger, in large part a response to worsening environmental conditions ruining their nomadic livelihood, has added to the turmoil.



Women in Niamey walk for hours each day in search of water. Government's inability to address the basic needs of residents and worsening environmental conditions further undermines already weak state political institutions (Photo credit: WFP/Vigno Hounkanli)

Foreign donors play an important role in Niamey.

A lack of local and national political stability has translated into a relative power vacuum of governance in terms of urban issues. In contrast to the historically volatile local and state actors, International Governmental Organizations (IGOs) have been a powerful presence in Niamey and Niger for decades. Nearly half of the Niger government's budget is derived from foreign donor resources (Central Intelligence Agency, n.d.). These agencies, including the United Nations (UN), International Monetary Fund (IMF) and World Bank, hold the most institutional and political power of any political actor in Niamey.

Niamey and the Niger government's lack of political power relative to that of donor nations has led to urban development based on IGO agendas such as the UN's Millennium Development Goals. Initiatives and resources are chosen and prioritized by the foreign donor community.

**Author: Alison Spindler** 

Title: Urbanization and Development in Niamey, Niger

The effects of these resource and policy decisions are evident in its urban form and development.

**Infrastructure: Unable to Serve Basic Needs** 

This case reviewed data on road and transportation systems, municipal and sanitary

services. Infrastructural makeup and capacity can shed light onto how well cities are able to

serve their current populations and how quickly cities will grow because it is assumed that cities

with strong infrastructure will develop more quickly and successfully. Niamey has had marked

growth despite lacking basic infrastructural capacity. This case focused analysis on the key

components of transportation, access to safe water and sanitation, and housing.

Niamey's transportation infrastructure is very limited. There are no railways, no formal public

transportation system and relatively few paved roads ("Doing Business in NIGER: 2012 Country

Commercial Guide for U.S. Companies," 2010). There is no nearby port, and one small airport

provides service to the public. Most people get around by walking, shared bus systems, or taxi

(Author's observation, 2004-2005). It is not surprising that a city with few resources has been

unable to keep up with the staggering pace of population growth, which demands infrastructure

systems.

Access to safe water, a priority of the UN, has dramatically improved in Niamey over the past

two decades. From 1992 to 2006, Niamey went from 52.8% to 94.7% of residents having access

to improved water. However, the World Bank predicts 30% growth in quantity of water

demanded by urban areas in Niger, posing a serious question of allocation in the future

10

(Domínguez-Torres & Foster, 2011). Access to improved sanitation has decreased, from 78.5% of the population in 1992 to only 65.7% in 2006, which is extremely low by global comparison ("State of African Cities, 2010," 2010). The UN has also poured an enormous amount of resources into educational attainment in Niamey through its Millennium Development Goals. Through these efforts, enrollment rates in primary schools have increased dramatically since the 1990s, although they still remain low compared to most global cities ("State of African Cities, 2010," 2010).

Housing quality in Niamey is a serious concern. The majority of the population lives in semi-permanent, non-formal housing, similar to the structures pictured right. According to the UN, 82% of the urban population in Niger live in a slum area ("State of African Cities, 2010," 2010). Although urban growth is typically fueled by the existence of good infrastructure, Niamey represents an important case of forced, "push" growth in which there is little economic means to develop infrastructure in response to urban growth, much less in anticipation of it.



Makeshift toilets (top) and Informal housing (bottom) typical for residents in Niamey (Photo source: blog.worldvision.org)

Conclusion: Push versus Pull Urbanization and Development

Research by Ed Glaeser and others frame cities as catalysts of growth in the developing world (Glaeser, 2011). The relationship between urbanization and development is not the same in every city, however. Niamey exemplifies an unusual yet growing trend that can be explained by the contrast between push versus pull urbanization and development in response to the global economy. Environmentally induced economic migration, the primary push factor contributing to Niamey's growth, provides no economic support for the necessary political, economic and social investments that are made as most cities grow. Essentially, Niamey's challenges are amplified because population growth is not connected to economic growth for the city.

This case analysis on urbanization and development in Niamey has important implications for other cities in the developing world. Although Niamey's issues are unique compared to the largest cities in the developing world, such as Beijing and Mumbai, this case sheds light on the issues facing Least Developed Countries (LDCs), especially in sub-Saharan Africa. Population growth, uncorrelated with economic growth to support its development, is caused by environmentally induced economic migration due to modernization and westernization, global economic structure, and climate change. As the global economy continues to develop and deepen inequality across space, it is likely we will see more examples of push urbanization that cause unplanned, unsupported, and largely unregulated urban development.

This is of utmost importance to the global community and particularly planners, as the spatial distribution of poverty, underdevelopment, and food insecurity continue to have increased spillover effects as such recent crises in Mali, Libya and Algeria illustrate. Planners will play a critical role in building and rebuilding urban and rural forms and communities in the coming

decades as the war-torn, impoverished former French colonies continue to move through the development processes set forth by the international community. Some will move successfully through these development processes while others may continue to teeter on failed state status. The planning and development communities must understand the complex political, economic, structural and spatial reasons behind these issues to have hope of addressing them in the future.

### **Bibliography:**

- Afifi, T. (2011). Economic or Environmental Migration? The Push Factors in Niger. *International Migration*, 49, e95–e124. doi:10.1111/j.1468-2435.2010.00644.x
- BBC News Africa: Niger Country Profile. 2013. (n.d.). *BBC News Africa*. Retrieved from http://www.bbc.co.uk/news/world-africa-13944995
- Central Intelligence Agency. (n.d.). *The World Factbook*. Retrieved from https://www.cia.gov/library/publications/the-world-factbook/geos/ng.html
- Doing Business in NIGER: 2012 Country Commercial Guide for U.S. Companies. (2010). US Commercial Service. Retrieved from http://www.buyusainfo.net
- Domínguez-Torres, C., & Foster, V. (2011). Niger's Infrastructure A Continental Perspective. *The World Bank Africa Region Sustainable Development Department, June 2011*.

  Retrieved from http://econ.worldbank.org
- Glaeser, Edward. Triumph of the city: How our greatest invention makes US richer, smarter, greener, healthier and happier. Macmillan, 2011
- Hungerford, H. (2012, April 9). Water, Cities, and Bodies: A Relational Understanding of Niamey, Niger. Submitted to the graduate degree program in Geography and the Graduate Faculty of the University of Kansas in partial fulfillment of the requirements for the degree of Doctor of Philosophy.
- Rural Poverty Portal. (n.d.). *Rural Poverty Portal Report: Niger Statistics*. Retrieved from http://www.ruralpovertyportal.org/country/statistics/tags/niger
- State of African Cities, 2010: Governance, Inequality and Urban Land MarketsNov. 2010. (2010).
- The World Bank. (n.d.). *World Development Indicators Country Report: Niger*. Retrieved from http://data.worldbank.org/country/niger#cp\_wdi
- *UN Human Development Index 2011 Country Profile: Niger.* (n.d.). Retrieved from http://hdrstats.undp.org/en/countries/profiles/NER.html