# **Theoretical Approaches to Shrinking Cities in Mexico**

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## Abstract

The study and research on shrinking cities is a new field in Mexico. Research in the topic of shrinking cities in México is often criticized for lacking theoretical foundations or for insufficient reference to theory to explain the findings from empirical studies. This paper is aimed to address this criticism.

## Keywords: Mexico, Shrinkage, theoretical Approaches

## 1. Introduction

The issue of shrinking and decline in population and economic prowess provokes always reactions due to political sensitivity. In general terms, shrinkage is only one side of the coin, being growth the other one. Mexican researchers and academics are more worried on the fast growing rate of population and its spatial and territorial implications. While the more advanced and post industrial economies of the world are thinking in how to turn around city shrinkage into a steady growth, less developed economies are worrying in the implications of the urban fast growing rate of population and its territorial redistribution to stabilize development. Maybe it is necessary to develop shrinkage typology to better characterize the phenomena. One point is important to stress here. While in the advanced countries are talking about the shrinkage process as the result of post industrial, post modern development, here in México where the industrialization process is still initiating, the process is taking place due to other causes, such as the most urgent drive of people for survival.

In general terms, the situation of shrinking cities in México does not follow the same patterns of well developed countries, where an increase in shrinking cities occurs since the middle of the 1950s (Oswalt, 2005) and the use of incentives in some localities to attract economic growth have had modest success to turn around the shrinking process The concept of urban development is the way to analyze relationships between society, nature and progress and their representations in socioeconomic and political terms. The idea of progress is basic to understand and assess the different elements of contemporary society through different theories of development, from lineal development of Rostow to theories of Zero growth.

There are a variation of conceptual and theoretical proposals to analyze the decline and shrinking of human settlements: flows, decisions, phases, stages and composition of migration (Tuirán et al., 2000:31; Brown, 1991) sometimes inserted in evolutionist schemas, theories about the phases of economic development or social modernization that leads to an urban transition and mobility models based on a pioneering trajectory. Of course, these evolutionary schemes do not have a general applicability because in some cases are related only to determined movements such as exchanges between regions, urban and rural zones, intra urban, between center and periphery in metropolitan areas, etc. The study of tendencies in economic and environmental shrinkage is tide to the expressions of substantive changes in the complexity of determinant contexts of internal and migration flows. Population mobility is the strategic rational response of survival in an instable economic, social and political environment.

At the same time, it is important to analyze the tendencies according to the economic changes using the theories and models and no to fall down victim of simplistic projections and conjectures or resound theories based more in speculation than in facts. Over all, the determinant factors of shrinkage are suffering mutations as the result of the new economics and the emergence of new forms of population mobility. The base of these changes in Mexico is the economic liberalization and structural adjustment programs, the increasing capital mobility, major requests and demands from the labor market, advances in telecommunications and transport, productivity conversion, increasing of export activities, comparative advantages and relocation of industrial activities. An approximation to the most classic analysis of shrinkage and its coverage allows that any theory can operate under its logic. The clue is the fact that factors can be attributes of the spatial areas which are interpreted over a common base by the agents. Although originally were close the gravitational approaches which depended of migration flows of distance and population of localities and communities, rapidly the attraction and expulsion factors widen and start to include economic, social, environmental and political factors.

#### 2. Urbanization Process and Rural Shrinkage

By its gravitation in the growth of urban population, rural – urban movements have been singular in the last 50 years in Mexico. Before 1940, México counted on larger rural population than urban population. In 1940 the urban population was only 35.1 considered who lived in localities larger than 2 500 inhabitants. The accelerated process of urbanization starting the 1940s was paralleled with a strong population growth and migration movements from the rural areas to the large cities. Peasants abandoned the country side lured by the employment offered by the promising industrialization by import substitution model of development. During the period 1940-1970, Mexico City, Guadalajara and Monterrey become greater metropolitan areas.

The development model of Industrialization by import substitution, from 1940 to 1982, had profound demographic, territorial and economic impact derived from its economic, political and sociocultural urban locus. It disentangled urbanization, rural exodus and population concentration in large cities which offered better opportunities than in the rest of the territory. The exhaustion of the substitutive strategy and the accumulation of numerous problems in large cities led to a catastrophic vision of the future and generated incentives and pressures to relocate population. People started to displace from large cities to small localities around the large cities. Among other reasons to explain why inhabitants of Mexican rural areas abandoned their towns and villages and migrate to the large cities, is the demographic growth in the countryside and the socioeconomic dynamism in the cities and consolidation of higher life levels in urban areas. The ten largest metropolitan areas in Mexico, accounts for one third of the country's population and generate 62 per cent of national value added. There are numerous empirical studies based on gravitational models with an economic component that provide evidences to support this finding.

#### 3. Evidences of a New Rural: Low Growth and Depopulation

Transition from a situation of predominant demographic growth by the mid XX Century to a new stage of large increase in urban population at the beginning of the XXI Century, is the most characteristic expression of spatial and territorial redistribution. Rural communities have achieved low rate of population growth and even depopulation. Empirical evidences suggest that the advance of urbanization is a general tendency linked to rural depopulation. However, some analysts have concluded that the notion of depopulation in rural areas has not empirical evidence because population is stable since the 70s. This assertion may be truth when considering the national level but when looking at specific rural communities, easily can be found that some of them are already depopulated and even had disappeared, such as some localities in the state of Zacatecas, Jalisco, Michoacán, etc.

The differential of demographic growth between the rural and urban areas can be attributed to the population mobilization, transfer and migration of people from the rural areas to the cities. Starting the decade of the 1960s the relation rural – urban population changes until nowadays when the population is predominantly urban while the rural communities have been shrinking. Until the 1970s the demographic increment of Mexican cities was due to the internal migration process. Internal migration is one of the components of population change, a variable of the compensation equation at local scale and as a force modeling the territorial distribution of population, metropolitan concentration, urbanization, regional shrinkage, etc. As important as the direct impact on population growth are the consequences for the characteristics of population, in particular the structure of gender and age. The exchange dynamics of rural – urban population explains the fast growing of some cities in Mexico (Rodríguez y Villa, 1998; Rodríguez y Villa, 1996).

By the mid 1970s an increasing level of urbanization is tied to an inter cities and intra urban movements more related with residence motivations in the suburban areas. Evidences indicate that during the 1980s with the economic crisis in México, the economic liberalization centered on the neoliberal economic policy of development, there were some pressure in survival for the poor rural and urban people to find better employments. Young people have more necessities and probabilities to migrate from the rural to urban areas to continue their studies, improve education and look for higher labor and economic perspectives in other places than their own localities. Depending of the diversification level of productive structures and labor demand linked to informal jobs and services offered in the cities, it has been detected a visible attraction for women and younger people coming from other rural or urban localities (CEPAL, 1995a; Lattes and Recchini, 1996).

The rate of rural poverty diminished 15 percent between 1970 and 1990 while the urban poverty increased in 30 percent. An explanation maybe that rural poor migrated to the urban areas searching for new employment opportunities. 80 percent of the poor people live in rural areas (Hoffman y Centeno, 2004). These data shows also that the rural areas are shrinking. Still nowadays, in a country like Mexico that has significant levels of rural areas, the movements from rural to urban areas continue having quantitative importance, leaving behind the countryside in a shrinkage and disaster. The renovated dynamism of intermediate cities was the attraction for internal immigrants canceling or attenuating the attraction of traditional large cities like Mexico City and Guadalajara after the 1985 earthquake.

Cities alongside the Mexican-United States of America border are receiving an important influx of migration from Mexican states with less economic growth. Agriculture development in the Northwest states of México, birth of the "green revolution" produced growing commercial and distribution centers. Important touristy cities and urban centers associated to oil exploitation became large. In 1970 only 4 cities had more than 500 thousand inhabitants and in 1990 the number of cities was 21, in 1995, were 28 out of which, 7 had more than one million inhabitants and 14 Mexican states counted with localities of more than 500 thousand inhabitants, and 108 cities had more than 100 inhabitants (INEGI, 1996). The export oriented strategy implemented in Mexico since 1982 based on an intensive use of raw materials and abundant and cheap labor, untied expectations for the revitalization of rural areas. Unfortunately the results have been negative due to the structural adjustment programs implemented and the lack of negotiations in the agricultural chapter of the North American Free Trade Agreement (NAFTA). However, masculine rural migration to the urban areas and to the United States of America has increased as a consequence of bad negotiations in the agriculture chapter of NAFTA.

Empirical studies linked to the process of migration give support to the hypothesis of rural declining but also some studies show a declining urban and metropolization processes. Constant population decline in rural areas is an effect of migration to the urban areas due to factors such as the increment of mono cultivation and the lack of competitive advantages for traditional crops after the introduction of North American Free Trade Agreement. The rural productive structures have a direct influence in minor masculine migration from the rural areas before 1994 when the North American Free Trade Agreement (NAFTA) began. NAFTA is adding more negative results to the dismantled agricultural activities, and thus, has created a segmented production: Those who have technology, capital and have inserted in the international commercial networks and the immense majority who even cannot produce at the level of self consumption because is more expensive to cultivate grains that to buy them in the import market. A massive migration from the countryside has been the result when the assumption was just the opposite: NAFTA would bring the needed employments.

The population living in rural areas changed from 41.3 percent in 1970, to 28.7 percent in 1990 and 25 percent in the year 2000. In 1970, the number of localities with less than 2, 500 inhabitants was 97.8 percent; for 1995 was 98. 6 percent and its participation in the total population had diminished from 41,3 percent to 26.3 percent. Most of the rural communities are shrinking. There is an inverse tendency between the proportion of number of rural localities and the proportion that live in there. The exceptions are the localities of less than 100 inhabitants maintaining 2.9 percent of total population. An explanation maybe the need to live nearby the cultivated land is related with the foundation of new micro settlements. This phenomenon of increasing small communities has important effects in biodiversity. Scholars reject the hypothesis that sustained the recovery of rural demographic growth although based on the assumption that there is a direct relationship between the movement of production and the movement of people. Although the Mexican agricultural economy has been transformed and liberalized, however this fact has not reverted the tendency of rural migration to the urban areas (Kay, 1999), and even to the USA.

Also, liberalization of agricultural economy has created a more segmented producers (Tejo y Nagel, 2002), incremented the mobility of more urban skilled workers who maintain double residence (David, 2001; Ahsley y Maxwell, 2001; Kay, 1999; Dirven, 2001). The economic development model leads to a major territorial concentration of agricultural land and therefore, to reduce the number of real estates (fincas) and to increase the number of small localities and communities. The marginalized rural communities also lack of acceptable conditions for human life such as infrastructure for utilities, household water supply, schooling, health services, etc. It is possible to consider the population without any grounding to the economic and political development of the country.

#### 4. New Rural and Urban Spatial Distribution

There is, however, a clear negative correlation between the urban percentage and rural percent of growth population. More precisely are the evidences for rural dispersion, instability and heterogeneity of population. for the case of Mexico in 1995 more than 10 million people lived in almost 185 thousand localities with less than 500 inhabitants (CONAPO, 1999: 91 y 93; Ruvalcaba, 2001: 8). They also concluded the instability of these localities which increased dramatically between 1990 and 1995 which can be associated to historical patterns of mobility for survival purposes. Nowadays, the tendency of rural – urban transference is changing; the intensity of transference of rural people to the large cities in México has an inverse relation to the urbanization levels. This means and in the near future, large cities, like Mexico City, Guadalajara, Monterrey, Puebla, León, etc., will have some shrinking areas, like is already occurring in the downtown and commercial oriented zones of these cities, due to changing of soil use.

Following the overall crisis of the Mexican economy in the early 1980s and mid 1990s and the restructuring and liberalization that ensued, a large number of smaller establishments were forced to close down as they could not keep up with foreign competitors. In parallel to these processes of de-industrialization, Mexico City has experienced uneven economic growth, stagnation and decline of formal economy, formal retail has shrunk in relative terms, and the counterpart to this growth at the top has been the spread of micro businesses and the unprecedented expansion of the informal sector (Potkin, 2002). Even though Mexico City still represents the largest concentration of industrial activities in Mexico, the significance of this sector in the local economy has decreased significantly over the past few decades, and the tertiary sector has become the driving force of the regional economy. The problematic transition of Mexico City has produced an increasingly fragmented metropolis, evident signs of special unevenness and territorial disjointedness. The majority of the inhabitants of Mexico City stay at home rather than use the city in their free time. However, the persistence gravitation of Mexico City, although it registers natural growth rate of population below the national average, is explained by sustainable immigration

A generalized and enduring economic crisis is marked by an absence of local alternatives of employment and conditions of limited economic options. Every year, around 1.2 million people need to be incorporated to the labor force. However, in recent years as a response to a new socioeconomic scenario, other new forms of population mobility have appeared differentiated from the traditional migration, such as temporal movements, cyclical, seasonal and periodical related to the rural component. Population movements directed toward the internal frontiers or colonization's fronts, attract young people and have been characterized in great proportion by being temporal. Some colonization areas suddenly experienced notable growth in rural population for a period of time, but suddenly shrunk (Reboratti, 1992 y 1990). People involved in these displacements moves from one front to a new one, always looking to improve living conditions and higher returns.

Most of these displacements are caused by the effects of the new economic activities, such as tourism and recreation, seasonal exports, mining and others, always in function of the labor flexibility that characterizes temporal agriculture activities. Some Mexican cities are considered artifacts of globalization linked to life styles and increasing global network of demographic and economic relationships, as it is the case of Cancun, Acapulco, Vallarta, Mazatlán, Los Cabos, etc. Cancún, in Quintana Roo registers important immigration associated to the tourism expansion. A similar situation is observed in large cities on the states near the United States border: Baja California, Sonora, Chihuahua, Coahuila, Tamaulipas y Nuevo León, already inserted in global economic and production processes. The ongoing economic globalization process is reinforcing the border economies of Mexico because their privileged position for commercial exchange. As a result, Tijuana is the fastest growing city in México.

Central and Southern Mexican states which have important concentrations of rural and indigenous populations; however they register small concentrations of young people. There is a tendency that will continue in the following years: Young people will have more relative representation in the urban than in rural environment in the future. However, the percentage of young urban population and the total urban population is almost close, probably as the product of major urbanization processes. Mexico city's development in the global economy is considerably vulnerable due to its lack of resilience to macroeconomic shifts and its dependent position within the international urban hierarchy. The globalized enclaves of Mexico City are functionally and territorially disconnected from the rest of the city, where the most alarming sign of urban change manifests itself, namely the enormous swelling of the informal economy.

#### 5. Analysis of Case Studies on Resource Based Firms related to Shrinking Cities

There are some case studies that analyze the relationships between resource based firms and the shrinking of cities, more specifically the so called "corporative city" and "Corporative town". One this case study is aimed to analyze the environmental economic development shrinkage of Atenquique after the industrial boom of the paper mill during the second half of the last Century (Vargas-Hernandez, 2007). The town of Atenquique was settled down and grew up in terms of population, social and economic development in the same proportion that the Industrial Company of Atenquique did during the period when the company was property owned by the Mexican State. After the Company has been privatized, the town started declining and shrinking in population, social and economic development, and the most disastrous is the environmental hazards. The turning point of this increasing regional development was a conflict between the Union and the new owners of the Company, which represents a struggle for the survival of the old project of development welfare State oriented and the new hegemonic project, the neoliberal model of development. The impact on the environmental and economic development has initiated the shrinking and declining of Atenquique but also of the surrounding cities and towns, while the new owners are increasing the levels pf productivity and profitability. Therefore in order to relate the findings to the core tenets of resource-based theory the focus of the analysis of the case study evidence should be contrasted where appropriate between the successful firm and the shrinkage of the town.

### 6. An Agenda for Future Research

Further research on shrinking cities should be done in México. Some of the important issues and problems to set an agenda for future research in Mexico are:

Research on economic territorial valuation, real estate markets and its dimensions on social sciences should be done using tools, such as the so called "new economic geography" (Fujita, Krugman y Venables, 2000, p. 3) to outline the dynamics of economic activities on a special distribution and in the context of local and global forces. This research would help to explain which cities can play a role as global cities. The results of this research suggest the feasibility sustainable economic concentration processes in opposition to the classical spatial economic analysis and concentration based on scenarios of relative territorial symmetry.

A simple hypothesis may be suggesting patterns of spatial redistribution of population. Supposing the existence of diseconomies of agglomeration and decreasing yield, it should be expected that the area of major growth should be the less populated. Research should determine the productive vocation of regions and cities. A multidisciplinary approach to differentiate winners and losers areas (Benko y Lipietz, 2000; Caravaca, 1998) associated to a diffuse localization of productive activities and territory should be assessed to reject the geographic determinism under the tendencies of creating the competitive advantage. Caravaca (1998) identifies urban regions inserted globally, innovation and development areas and industrial districts. (Sassen, 1998) identify global cities as winners with concentration. Also it is important to determine the losers because have been under process of deindustrialization and cannot convert their local economies, losers with rural economies of low productivity and scarce human capital not able to insert in a global economy. Territorial expressions of productive structure are relevant to understand patterns of spatial redistribution of population but they are not enough and not always oriented in the same direction. Research should provide conceptual frameworks for the analysis of relocation processes of economic activities in relation to the spatial redistribution of population to achieve more sustainable productive, economic and demographic dynamics through generation of employment. The military census of 1791 reported that the Jurisdiction of Pachuca had a population of 9 615 inhabitants out of which the 26.7% or 2567 persons forming 608 families belonged to Real del Monte, although the Census did not considered indigenous people, women and children under 16 years old. After 1824, Real del Monte changed its name to Mineral del Monte.

In 1858 the population of Mineral del Monte was around 6000 inhabitants and in the Census of 1854 registered 5 310. In 1865 a Census of men older than 18 years registered 1 005 hombres integrated to 700 families. Comparing the data of the Censuses of 1791 and 1865, the number of inhabitants was almost similar, which lead us to conclude that for around 7 decades the growth of population was almost null. Very good examples of these trends are Charcas, Real de Catorce, Guadalcazar y Cerro de San Pedro en San Luis Potosi, ghost towns that once were important mining cities. Nowhere in Mexico are the changing styles and fortunes of former gold and silver mining towns better displayed than in these four towns. Charcas was refounded in 1584 and had produced more than 3 million dollars worth of silver each year. Today only survive a few old buildings and large stoned houses. Real de Catorce had a grandeur past with gorgeous buildings, outstanding church and beautiful palenque. In Guadalcazar, the miners built two magnificent churches and a Casa de Moneda was founded. Cerro de San Pedro now is a ghost town where handful of old buildings has been restored reluctant to completely relinquish their hold over real estate. San Pedro, founded in 1592, was abandoned about fifty years ago.

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