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Maldives: Sustainable Urbanization in a Small Island Developing Country

The Maldives are an island nation, and their geography has permanently shaped their social development. Lush tropical atolls certainly make for a good vacation destination, but increasing population growth and migration have placed an extreme stress on the economic opportunities in the Maldives. For over 50 years, the Maldives have seen increasing urbanization as they built up the infrastructure in the island capital of Malé and provided new services to their urban population. Today, however, it is painfully ironic that, in a city with near universal access to preventative health care and primary public education, the urban poor continue to struggle to gain access to basic nutrition. Malé, nation's only major city, has been growing at a 3.5% annual average, the rural population of the atolls has fallen by 0.7% as more and more of the population immigrates to the city (UNdata). Built on an island, Malé cannot expand in land area to provide more housing for the continually increasing population, and many families are forced to choose between shelter and food. Unlike many developing cities which have slums grow up around the city core, in Malé the urban poor have instead been forced to squeeze into smaller and smaller living spaces, and since supply cannot keep up with demand housing costs have continually increased. The only city in the Maldives, the republic's government invested heavily in infrastructure development to modernize the city. Now, migrants from across the archipelago flow daily into Malé because it is the only place for them to receive medical treatment, get advanced education, or find employment. These disparities in social and economic opportunities have created massive overpopulation that brings with it its own set of social problems now facing the Maldives.

To understand the problems facing the Maldives, it's important first to understand the islands geography. The Maldives are a series of 26 coral atolls sprinkled in a north-south chain off the southwest coast of India. In an earlier geologic age, a mountain range stood above the water off the western coast of India. Large coral reefs grew up around the mountains, and as the mountain range sunk below the waterline the reefs were covered by sand to become circular chains of islands around a central lagoon. The islands in an atoll are only separated by narrow straits, so water transportation within an atoll is common. In contrast, transportation routes between atolls cross open ocean, and make transportation much more difficult. Most of the islands in an atoll are small and uninhabited, and only the largest atolls support towns. The majority of the Maldives rural population either on resort islands working for resort hotels or on agriculture islands growing breadfruit, taro or coconuts and fishing. In the center of the island chain is the capital island of Malé, which was once a natural island but is now built mostly on landfill. The island is devoted totally to urban development, and there is little to no green space left over for public parks or cultivation.

In the words of 1970 Nobel Peace Prize Laureate Norman Borlaug, "the first essential component of social justice is adequate food for all mankind". Despite consistent efforts to advance education, provide basic health services to the poor, and promote gender equality by the government of the Maldives, significant social problems remain because Malé's urban poor cannot afford enough food to live comfortably. Urbanization has so greatly increased the cost of living in Malé that it has outpaced increases in health and education to actually decrease quality of life and food security for the urban poor.

Increasing urbanization has created new challenges for the island nation's urban poor. The average poor urban family living in Malé are immigrants, mostly from the Maldives' other atolls. As such, they often lack social support that can help them out in tough times. The average family size in the Malé is 7.4 persons per household, but this estimate is misleading because families are often forced to share housing

due to high rents. Because Malé is built on an atoll, there is extreme competition for space between government facilities, commercial activities and housing. For the average household in Malé, housing consumes 50-80% of their yearly income, leaving little else to spend on other necessities like food ("The Livable Wage"). As the population increases, prices for services such as water are also increasing as the city outgrows its available resources. These price increases also take away money that could be spent on food. The major employment opportunities for the urban poor in Malé are in the tourism sector, which makes up 90% of government revenue. For most resort workers, wages are low, on average \$2,400 a year. However, the majority of their salary goes to provide housing. During the initial expansion of the tourism industry in the early 1970's, most resorts were built on the islands directly surrounding Malé to take advantage of the transportation facilities in the capital. Since tourism is a major employer in the Maldives, many of the nation's unemployed are forced to migrate to Malé to find work, further increasing rent for the urban poor. Most poor adults living in Malé are uneducated, as education in the Maldives used to be restricted to the capital and most of the urban poor are from the atolls. Their children, by contrast, usually attend public school in Malé and can expect to receive at least a secondary education. The Maldivian government made access to healthcare a priority in the 1980's, and today even Malé's urban poor have access to low-cost healthcare. The high priority given to healthcare has nearly doubles the Maldives life expectancy from 45.5 to 70 since 1977 (Ministry of Planning and National Development 10). Staples in Maldivian Cuisine include fish (especially tunas), coconut, and starches, normally taro and rice. Prices for fish are affordable, because fishing is a major industry in rural regions and they are sold locally. However, most other foods need to be imported, because the low land area of the islands of the atolls cannot support the population of Malé. Prices continue to rise for these essential foods, the only sources of carbohydrates in most Maldivians' diets, as the urban population imports more and more food.

Unfortunately, the conditions facing the urban poor in Malé are getting worse. Demographically, the Maldives have been getting steadily more urbanized for over 50 years. Currently, the rural population is decreasing by 0.67%, while the population of Malé is increasing by 5.59% (Faisel 4). As time goes on, the crowding within Malé will only be exacerbated, and as rent increases the urban poor will have even less money available for food. In addition, the population of Malé is overwhelmingly young: in 2007, over 75% of the city was under the age of 35. With incredible advances made in access to medical care and education for the urban poor recently, the population of the city will balloon as it ages, causing further pressure on the urban poor to find affordable housing and services. Similarly to the population explosions seen in much of sub-Saharan Africa with the introduction of limited medical treatment and basic social services during the independence era, Malé's population may double or triple in the next 20-30 years, pushing the struggle many poor face to provide food into a full-blown humanitarian crisis.

Women have been especially hard-hit by the economic challenges caused by rapid urbanization. As an Islamic nation, the Maldives traditionally had restrictions position of women in society. There were severe restriction on the types of jobs women could hold, or the protections afforded to them by the law. However, there has recently been a serious effort in the Maldives to empower girls in society. Today the educational opportunities afforded to women in schools are nearly equal to men, and over 95% of girls are enrolled in school (Ministry of Education 2). Yet, advances in improving the opportunities of girls have not helped working-aged women. Unfortunately, there remains quite a bit of gender discrimination in the tourism industry in the Maldives, as over 70% of all employees are males. This gender discrimination makes food insecurity particularly pressing for women, who oftentimes have trouble finding jobs at all. In addition, men are far more likely to be promoted to managerial level jobs than women are, so women's salaries are normally much lower than men's. The breakdown of established communities in the atolls as individual families immigrate to Malé has hurt women socially as well. There are no laws to prevent domestic abuse in the Maldives, because they were largely seen as unnecessary because of the community support women could expect on their island. As these women leave their homes and support networks, the social system breaks down. Today, over 1/3 of the nation's girls have been abused, normally by a close relative or husband (UNWomen in Maldives). Marriages for women living Malé are also fragile as

the stress of being unable to provide for their families prompts many men to leave. Unfortunately, 1 in every 2.3 marriages ends in divorce (Fiasel 6). A divorced woman often has no family or community in Malé to look to for support, and her, and sometimes her children, are forced to resort to begging to try to support themselves. There is absolutely work to be done to empower adult women in the Maldives, and ending the overpopulation of Malé will not end the gender discrimination many women face. However, the economic stress caused by overcrowding has greatly exacerbated the underlying social pressures in Maldivian society, and many women have actually seen their quality of life decrease while the government focused on empowering girls.

The basic drive behind the internal migration from the atolls into Malé has been the unequal distribution of social services within the Maldives. As of 2006, Malé contained only 35% of the nation's population, but it is the only place within the Maldives that contains a large enough population to support medical facilities and k-12 education. Many of the atolls, in contrast, contain significantly smaller population (for instance, a majority of the atolls contain less than 100 eligible students), and have that population spread out across 30-40 islands. Historically, the republic's government has only focused on providing services to populations large enough to support them, but that approach has denied the atolls many basic services. Services taken for granted here in the US, such as post-secondary education or surgical hospitals, are not available for the population in the atolls. This forces anyone who wants to use these services to migrate to Malé.

The overurbanization occurring in Malé is not happening in a vacuum, however. Urbanization is also affecting pollution and resource shortages for the urban poor. Because Malé is situated on a small island, there aren't many natural resources locally available for the city to use. Throughout the 1980's and 1990's, Malé suffered from lack of potable water for its increasing population. In 1988, the city was forced to begin using desalinated seawater to provide enough water to its residents, which is costly and hard for poorer families to afford. However, because the population of Malé has outgrown the carrying capacity of the island there is no other option for providing clean water (Ibrahim, Bari, and Miles 2). Sewage management has also become problematic as the population of Malé increased. Septic tanks often release sewage into the small amount of groundwater available in the city, so in the 1990's the republic decided to start pumping untreated sewage into the deep ocean off the coast of Malé. The pollution being caused to oceanic habitats that many rural fisherman in the atolls depend on cannot be stated. If fish yields continue to decrease because of pollution, those fisherman will be forced to try to find work in Malé, further exacerbating the population problems faced by the city.

Solving the problem of overurbanization in Malé is not a simple task. To succeed in improving the living wages of the urban poor in Malé, the government needs to take a two-pronged attack. They need to both reduce the residents of the city, and improve the living conditions of those who remain.

Because Malé is such a small island, it cannot support the population it currently contains in any social or economic climate. The government needs to find a way to limit immigration into Malé while simultaneously improving quality of life for the migrants. To understand how any such approach could function, it's critical to look at the reasons behind the current migration into the city. At the most basic level, people are immigrating into Malé because they require some economic or social service they can only get in the capital, be it chemotherapy, college, or employment. As such, the Maldives needs to improve access to these services in the rural atolls in order to stem the flow of immigrants into the city. In term of health and education services, the Maldives have already begun to expand access. Since 1990, the Maldives have begun setting up Atoll Education Centers (AECs), which provide both instruction for children and other education based functions like literacy promotion and teacher training (Maldives Ministry of Education 2). The AECs provide full 1st through 5th grade education, and since their inception full primary education availability has been achieved. By combining these services into one building, the government has been able to provide education more cost effectively than traditional schooling measures. The success of advancing primary education through the AEC model gives the Maldives the ability to

expand the program to also provide secondary education. A similar model can be used to provide medical care to the populace.

The Maldives also need to address immigration into Malé due to employment opportunities. To end migration due to employment, the Maldives need to focus on building new resorts away from the capital to provide jobs in rural areas. The main reason resorts are located around Malé is the lack of efficient transportation between the outer atolls and the airport in the city. A transportation network would need to be based around water transport, because the Maldives don't have enough resources to support a full-fledged air transit system. A ferry system is an affordable alternative that can be easily constructed by the Maldivian government. To afford building up the infrastructure of the transportation system, the Maldives will require funding from outside sources, and could certainly look to the International Monetary Fund and World Bank for funding. However, the Maldives will need to prove that the system can be run sustainably with local funds before resorts will invest in building outside of the capital, so the Maldives cannot rely on international institutions for help. By building up transportation, the Maldives will encourage new resorts to build in outer islands that are more removed from the city, helping create jobs in rural areas instead of only in Malé.

The Maldives also need to focus on promoting social justice for the urban poor in Malé to create true food security. The discrimination women face in employment and society is unacceptable, and has led to increased food insecurity for them and their children. A focus on empowering adult women has already been adopted by a number of international treaties, including the Beijing Platform for Action and the Convention on the Elimination of All Forms of Discrimination against Women (UNWomen). In addition, outcome 15 of the United Nations Development Assistance Action Plan 2011-2015 focuses explicitly on women's empowerment. In pursuing this goal,, the Maldives can benefit from cooperation with international agencies devoted to empowering women, especially the UN entity for Gender Equality and Women's Empowerment (UNWomen). UNWomen has already established a working group for the nation and has as its goal "improving the national capacities to advocate for...improvement in the lives of women: (UNWomen). By working with international agencies to improve its own legal system to tackle gender inequality, the Maldives would be moving to a more sustainable economic and social situation.

To the average tourist, the Maldives bring to mind white sand beaches and luxurious hotels and resorts, but to the average resident of Malé hunger and fear are all they experience. The Maldives made its people's empowerment a priority, and in a cruel irony created new crises for its people in the process. Competition for land and scarce resources has driven the cost of living in the city through the roof, and as it in the city increases, the cost of Living for the urban poor will continually increase. Money for basic necessities and even food is becoming harder and harder to come by, creating stress that drives many families apart. As urbanization continues, the situation for the urban poor will only become worse as prices continue to rise. Women are being specifically impacted, prevent the Maldives from advancing socially. This crises threatens Millennium Development Goal #3, the promotion of gender equality and women's empowerment. To truly make a change and address the challenges urbanization has had on the Maldives, it will take consistent effort and cooperation between the national government and international organizations like the World Bank. The Maldives need to improve the social services given to rural areas to end the disparity between Malé and the atolls. Employment, health, education and transportation infrastructure needs to be built up to counteract continued migration. Organizations like the World Bank and IMF need to assist in initial development, but the national government needs ultimate responsible over these programs. Work with international agencies will be essential in empowering women, as certain deep-seated prejudices in Maldivian society will need to be curbed. Together, these actions will improve the living wages of the urban poor, putting food security in their grasp for the first time. The challenges currently facing the Maldives are numerous, but the will and the resources necessary to fix them exist, and for this sunny island nation the future looks bright.

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