Megacities In Developing World – Environmental Ethics In Urban Planning And Development

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Abstract— Cities are places of man's greatest impact on the environment. The high rate at which the megacities are developing will surely have huge impact on the present and next generations if no serious measure are taken to stop further expansion of cities. Social inclusion is one of the aspects of a good society, the economic well-being is widely shared between different class, ethnic and religious groups on a nation level. Besides economic development, it is the society's responsibility to take good care of the natural environment. The question arises on how we can possibly achieve sustainable development with growing economy and city expansion. Rapid urbanization trend in developing countries resulted with enormous pressure on local infrastructure. Waste and water management and infrastructure have significant importance for cities sustainable development. Comparing urban planning and development of the three megacities in the developing world, Shanghai, Mumbai and Lagos, this paper emphasizes the impact of these megacities on social development and sustainable development and how environmental ethics can offer better solution to combat with the rising urban development associated issues.

Index Terms— Environmental Ethics, Megacities Sustainability, Urbanization

1 INTRODUCTION

Cities of 10 million inhabitants or more are usually described as 'Megacities' (UNFPA, 2012 and PRB, 2013).Shanghai ,Mumbai and Lagos located in China, India and Nigeria respectively are between the biggest cities in developing world. High population growth rate is representing the financial and trade centers in these countries are common things for all of these cities. They definitely have a great economic impact both at the local and the regional level and therefore represent target for large number of migrants both domestic and foreign. In China over 100 million people left their villages and streamed into the cities due to economic reforms in the beginning of the 80's.India and Nigeria remained essentially rural countries until industrialization and the population began a trend toward greater urbanization. Several forces led to this rural to urban transformation. First the industrialization led to improvements in agriculture that require less farm labor and at the same time industrial jobs became available in the cities. Thus people migrated very fast from the villages to the cities looking for better life conditions. The average person was no longer farmer but rather a factory worker, shop keeper or clerk with a regular paycheck living in a tenement or tiny apartment near where she or he worked.

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This pattern of rural to urban migration already occurred in western countries during their industrialization. Megacities This pattern of rural to urban migration already occurred in the western countries during their industrialization .Megacities often grow in 'leapfrog' fashion, meaning that urban development occurs haphazardly across existing rural lands, giving way to 'amoebic' or 'disfigured' layouts (McGee and Robinson, 1995). These patterns and processes are intrinsically linked to a city's resource consumption, waste generation, infrastructure design, quality of life, and sustainable development. .High inequality in Megacities is a social problem that needs to be addressed. High inequality and unavailability of low cost housing are also a cause for homeless, probably the biggest problem in urban planning and development. The urban population in 2014 accounted for 54% of the total global population, up from 34% in 1960, and continues to grow. The urban population growth, in absolute numbers, is concentrated in the developing regions of the world. It is estimated that 9billion will inhabit the world by 2050 and 70% of them will be living in cities. Many migrate to the cities because they feel they will have greater access of social services and other benefits that are not available in rural areas including employment opportunities.

But the migration and urban population growth increases so rapidly that is very difficult for local governments to provide the services needed by the citizens, and jobs are not being created as fast as the urban population is growing because of the unavailability of inadequate safe drinking water and sewer services. Megacities serve not only as drivers of socioeconomic progress but urban ecosystem problems as well, reflecting the characteristics and effects of such problems (Su et al., 2012a).The growing demand for water, coupled with its scarcity, is putting pressure on the water resources, the capacity of the water supply system to deliver water in quantity and quality to all and the capacity to manage increasing volumes of wastewater and fecal sludge.

In addition, as a result of urban growth, the changing urban landscapes are affecting the local hydrological cycle and environment by reducing natural infiltration opportunities and producing rapid peak storm water flows (Jacobsen et al., 2013). Air pollution is also very common in such places where burning of wood, coal and other low quality fuels and inefficient stoves are used for heating and cooking inhabitants. Solid Waste Management (SWM) in the expanding cities is affected by all kinds of problems associated with a constant population influx from surrounding rural communities, uncontrolled sprawl dominated by illegal settlements, extensive slums in the central and other areas, and traffic and population congestion in and around all major access points to the city. At a global level, the concept of slums is described by the United Nations Human Settlement program (UN-Habitat, 2010) as the physical and spatial manifestation of urban poverty and intra-city inequality.

2 ENVIRONMENTAL PROBLEMS CAUSED BY UNPLANNED URBAN GROWTH

As the global population has increased dramatically over the past century many areas of the world are beginning to, or have already, passed sustainable environmental limits (Gleick, 1998)Cities are at different stages in their development, and many of them in developing world have problems with enormous growth rates and immigration. Kraas (2007) presented a balanced analysis of the disadvantages that burden megacities, as the origins, agents, and victims of risks, and of the advantages of mega-urban development. Poor planning of urban areas can result in a variety of social and environmental problems. Some of which are inequity, air and water pollution as well as climate change.

2.1 Inequity

Inequity and segregation seem to be common challenges to cities all over the world. Urban inequity and segregation are also an indication of global inequity. While more and more cities want to focus on services and hi-tech, the dirty work remains to be done in the poorest parts of the cities with the most meager conditions to develop. Mumbai contributes 40% of the State GDP, 5% of national GDP, and generates 40% of India's foreign trade (Bhagat and Jones, 2013), yet recent estimates suggest slum populations within Greater Mumbai Municipal Corporation's boundary accounts for more than half of its citizens and more than one-seventh (15.2%) of the total slum population in India. This situation has resulted in urban inequities that have persisted and are particularly apparent during or after natural hazards or when analyzing city health data. Wealth of the population is one of the factors that have supported urban development and this wealth is reflected in material possessions. About two thirds of the citizens have that level of wealth, live in the family owned homes and possess one or more passenger cars.

They consume a variety of resources and products and move beyond meeting basic needs to include luxury items and technological innovations to improve efficiency. Whereas a huge number of people still struggle to meet the minimal and basic life requirements. They do not have electricity, fresh water, sewage and shelter. Consumerism and consumption is the core of the most societies. The positive and negative impacts of consumerism are very important in all aspects of our lives. Social inequality measured by the Gini coefficient and the urban–rural income ratio also increased with urban development. The urban–rural income ratio was below 1.6 for most countries in 2005, but China was one of the only three countries with a value of larger than 2 (Pan & Wei, 2011).

2.2 Air and water pollution

Air pollution in megacities has been recognized as a serious problem (Gurjar and Lelieveld, 2005), and this recognition has provided a new direction for research. Reliance on the automobile as the primary method of transportation has resulted in significant air pollution problems in megacities. . Ongoing development marks a higher rate of car owners because people consider it as an indicator of status. Developing countries, people are often eager to buy vehicles before solving some other basic needs tending to relate to western countries lifestyle. Most of the population of cities in developing countries drive old and used cars mostly imported from developed countries. Engines release carbon monoxide, hydrocarbons and nitrogen oxides that interact to produce photo chemical smog which continues to degrade the air quality. Increasing the number of cars have a negative impact on water systems. When severe pollution and water scarcities within cities are coupled with rapid urbanization, lack of investment funds for infrastructure, inefficient resource-allocation, poor governance, and inadequate legal and regulatory regimes, resource management becomes a complex undertaking (Varis et al., 2006).The infrastructure needed to support traffic as streets and parking lots are impervious to water. Parking lots are usually four times larger than the space taken up by the building so all rainwater and snow melt cannot soak into the soil through concrete and cement. It is channeled into drainage system that which in turn pollutes the water used by the local community, the runoff from paved parking lots and streets carries pollutants from cars as oil, coolant and pieces of rubber into the local streams. As result urban centers with a large impervious surface area can experience flash floods following heavy rains. Thus megacities tend to be global risk areas and their inhabitants are vulnerable to air pollution induced adverse health impacts(Molina et al., 2004 and Gurjar et al., 2008).Modeling of human exposure to environmental pollutants is of central importance for the evaluation of public health risks (Vostal, 1994).

.From a water management perspective, megacities will need significant technical investment, institutional development and strong political will to manage water and related environmental challenge sustainably (Varis, 2006)

2.3 Climate change

Increased awareness about climate change in cities has led to a detailed analysis of the urban sources of greenhouse gas emissions and search for tools to reduce them. It is often assumed that saving energy is primarily a technological challenge. It is, however, highly dependent on human behavior which can be influenced by solutions regarding infrastructure and services. Reliable public transport and safe routes for non-motorized transport represent one of these solutions. India has the largest number of megacities (3 out of 25) in the world. Together, Delhi, Mumbai and Kolkata house approximately one-fifth of the total worldwide megacities population (UN, 2010). The Indian economy rise was marked in 1991,Increase in availability of markets triggered rapid urbanization. As a result of the economic growth, increase in use of private vehicles using limited road space, often leading to congestion and public health concern over the prolonged exposure to greater emissions from road vehicles (Nel, 2005; Patankar and Trivedi, 2011).A framework that recognizes an urban–rural overlap rather than an urban–rural dichotomy could help to identify key aspects of urbanization that are protective of or detrimental to health (Peng et al).Cities have been at the forefront of recognizing the extent of the climate challenge, and some of them as Shanghai, have set themselves ambitious targets for reducing GHG emissions. It has been estimated that urban areas account for over 70% of energy related greenhouse gas (GHG) emissions worldwide (Hoornweg et al., 2011).There is a great variety of projects to promote energy savings and energy efficiency as well as to increase the share or renewable energy and local energy production. It is common to expect that climate change adaptation planning and action should be based on scientific evidence. But science cannot provide absolute certainty about future. Society must be included in finding solution for climate change because simply postponing action until there is perfect evidence will increase the risks facing urban centers, their populations, industries, and those who depend on them. Cities at the forefront of climate change adaptation must show ways that scientific evidence can be used to support this process. City officials, academic partners and citizens must together create the most appropriate responses to climate change.

2.4 Waste management

Open dumping of waste is a concern to the environment and to the citizen's health in megacities. Constrained by budget pressures and with fast population growth cities in the developing countries are struggling to deal with the proliferation of municipal solid waste.

The growth of municipal waste demands a change both in practices and behavior in the society. Waste management involves a large number of different stakeholders, with different fields of interest. They all play a role in shaping the system of a city, but often it is seen only as a responsibility of the local authorities (Lilliana et al).Uncollected solid waste in megacities provides a favorable habitat for insects, vermin and scavenging animals which proliferate and spread air and waterborne diseases such as plague, dengue fever and diarrhea among local populations especially among the ones who live in slums. In China more than 70 percent of the waste ends on the landfills and has remarkably increased the number of sanitary landfills .Nearly 90 percent of the waste in India and Nigeria is disposed of on the unprotected landfills and waste sorting and collection is rarely done right. Taiwo (2009) lists six dump sites, (both existing and newly constructed) which he notes are erroneously referred to as "landfills", operating in Lagos State, and several other "closed dump sites" still being used illegally. Table 1 covers information in the three selected megacities about waste generated in the years 2000-2015 where it clearly illustrates a decrease but mostly an increase in the amount of waste throughout the years as per the World Review Population database and Lagos Waste Management Authority Statistics.

TABLE 1
WASTE GENERATION FOR MUMBAI, SHANGHAI AND LAGOS

	Mumbai (t)	Shanghai (t)	Lagos (t)
2010	11,653,200.00	7,320,000.00	2,818,991.00
2011	11,883,840.00	7,040,000.00	2,422,383.48
2012	12,065,300.00	7,160,000.00	1,981,362.20
2013	12,265,485.00	7,350,000.00	1,902,464.20
2014	12,525,025.00	6,084,000.00	1,177,259.00
2015	12,625,000.00	6,132,000.00	N/A

2.3 Loss of the open space and farmland

Urban areas are dominated by buildings but important difference between a pleasant and unfriendly urban setting is the presence of the open space. Open fields, boulevards, park and similar land uses allow people to visually escape from the congestion of the city. Urban green spaces are indispensable bridges between humans and nature as they are the primary preservers of biodiversity in cities (Jorgensen, Hitchmough, & Calvert, 2002).Unplanned urban growth does not take this important factor into consideration and that open space that remains often consist of small fragments. This pattern of behavior reduces human interaction, isolates people from their neighbors and greatly reduces the sense of community. The sociological benefits of our proposed model are related to resolving the inequality of resource distribution (Heynen, Per-

kins, & Roy, 2006) in terms of access to urban green spaces. Similar to other urban resources, green spaces are subject to unbalanced scattering (UN-HABITAT, 2013) Given that megacities are significant contributors to air pollution and population growth, ensuring that megacities have sufficient green space will help to slow environmental deterioration, improve the prosperity of cities, and enhance satisfaction of citizens. Urban green spaces help maintain the physical and mental health of city dwellers (Jackson, 2003)

3 THE THREE SELECTED MEGACITIES

3.1 Shanghai

In China Shanghai is remarkable in urban development In history the opening of Chinese treaty ports including Shanghai port was followed by American and French concessions. Shanghai became the most important port in the region and was a complex cosmopolitan trading center.in the beginning of 20th century. Some called it the „Paris of the East" (Chen 2009a, Wasserman 2009). Shanghai was between seven world largest cities in 30's but during the Second World War and the second Sino Japanese war the foreign concessions were disbanded and were followed by moving economic development from Shanghai to HongKong. After that period investment in urban infrastructure were really low but rural to urban migration continued with the same intensity. This was cause of emerging urban problems as pollution, overcrowding and traffic congestion and these problems led to the rising of informal housing. Government tried to control rural to urban migration through the „hukou" household registration system but was unsuccessful because it was driven by the labor needs of the fast growing industrial sector Zai Liang Hideki Morooka). In the 70's, industry fueled growth further contributed to the serious exacerbation of urban infrastructure, population growth and serious pollution. As one of the largest commercial and industrial centers worldwide, Shanghai has experienced high aerosol pollution, and the annual average concentration of PM2.5 (particles with an aerodynamic diameter of 2.5 μm or smaller) during 2003–2005 reached 94.6 μg/m3(Wang et al., 2006b). This was probably the main factor leading to the degradation of visibility (Fu et al., 2008 and Huang et al., 2009)The correlation analyses among PM2.5 and other pollutants show that the PM2.5 formation in Shanghai is affected by the sources similar to those of CO such as combustion, industry, mobile and oxidation of hydrocarbons Zhang et al 2015). According to the Twelfth Five-Year plan the governments intends to provide 36 million public housing units for low and medium income groups by 2015 and that represent about 20 per cent of total city housing units.(Zhubin et al).City redevelopment has caused a lot of discussion in the ethics field because redevelopment had caused residents to be displaced and relocated.The Shanghai sewerage system is loaded with more than 6.3 million cubic meters of sewage per day which is is divided in two parts, the drainage system and the sewage treatment system. Shanghai government established six centralized sewage systems in coexistence with 52 sewage treatment plants. The sewage treatment rate is higher than 80 per cent. Amount of municipal solid waste generated in Shanghai is bigger than 7 million tons. One of the biggest landfill in Asia is Laogang in southeast of Shanghai. It occupies more than 360 hectares of land. Trying to decrease amount of waste on the landfills government built several incineration factories and one of the largest waste to energy power plant is placed in Jiangqiao.

3.1 Lagos

Lagos is the biggest and most important city in the Federation of Nigeria, the country which is located in the coast of West Africa and consists of 30 states. The Metropolitan area of Lagos takes up to about 40 percent of the land area of Lagos state and it was home for about 90 percent of its population. Until 1991 Lagos was capital of Nigeria. More than 70 percent of industrial investment were in Lagos, and government decide to move country's administrative and political center in Abuja. That was an unsuccessful attempt to make balance in development because Lagos stayed to be Nigeria's commercial, financial and industrial center, controlling more than 80 percent of total foreign trade and import value. Lagos in 90's represented the biggest city in West Africa and first city from this continent which becomes one of the world's ten largest cities.The population started to grow similarly as in Shanghai, from the beginning of the 70's due to migration from rural area and high fertility rate. Rural people faced with poverty, big family sizes and bad soil quality didn't have other choice move to the city and try their luck. Some of them had luck because they had relatives who was already inhabitant of Housing is a one of the biggest problems in Lagos and we have situation that even people with higher income have to live together with other members of the family in one room average size on 4,3 square meters. Poor house condition and lack of the basic services are included in this accommodation. In this part of the city sewage system does not exist and it is served only in high income areas.

One of the most densely populated areas in Lagos are Shomulu which made efforts to provide good living conditions including social and basic needs to its local community where most of the houses are low and middle income houses and provision of required services as electricity, health care, communal waste management ,water systems, schools and roads are provided. Despite those efforts made in Shomulu, most land is still unplanned with no green places and trees and massive amount of garbage, shops and houses, poor quality buildings, poor infrastructure and waste disposal is uncontrolled. There is a lot of problems in these slums even if the way of living in Lagosian slums is not similar to other regions slums. Some of them are malfunctioning waste management system, lack of adequate sanitation and water supply and limited access to municipal electricity sources. Lagos has often been referred to as the most disorganized, dirtiest and most unsafe mega city in the world. Local government didn't provide minimum resources for healthy, save and productive life. Solid waste problems are huge in Lagos because of inade-

quate waste management and infrastructure. The estimated amount of waste was almost million tons per year and garbage is being dumped in valleys or swamps. Industrial waste has not be treated and it is discharged to public drains or surface water bodies. Water supply in Lagos does not is not enough to secure water demand. Inhabitants are forced to use too small amount of water because they either have to carry it from far away or they do not have access to clean water at all. Human induced water quantity and quality issues contribute to the destruction of the earth's natural environment, and its ability to sustain human as well as plant and animal life (Vitousek et al., 1997).Only small percentage of wastewater is treated and the sewage system is inefficient except the only conventional sewage system in the metropolitan area of Lagos, Victoria Island, which is the first commercial area in the city. Shoreline stabilization methods adopted for combating erosion along other sections of the Nigerian coast have also been counter-productive (Ebe and Antia, 1983 and Sunday and Taiwo, 2006), and in many cases have aggravated the erosion problem. In Nigeria, the City of Lagos has recorded a number of building collapses as a result of landslides (for other causes of building collapse in Lagos, see Section 8.4). Most landslides in Lagos are triggered by erosion (Section 10). Drainage channels become blocked during the dry seasons and create the stagnant pond of the contaminated water. The problem of contamination of the groundwater resources and aquifers underlying the Lagos metropolis has long been recognized.

Several studies have been undertaken on the quality of Lagos water and the efficiency of the distribution network. Among the more recent of these studies is that of Ayeni (2014) who assessed cholera incidence in urban slums in Lagos State, and emphasized the high risk of contracting cholera and other waterborne diseases through the domestic use of untreated water Food processing industry, solid waste from houses and chemical industry are main sources of pollution of the Lagos estuary which is a sink for the disposal of liquid, solid and gaseous waste for the entire city. Pro of urbanization of Lagos is attraction of mega city, provide opportunities for job, better school, better health center while some of the cons are over population, deforestation, loss of biological diversity, flooding, soil erosion, arable land decreasing water shortages, pollution .

3.1 Mumbai

Mumbai was originally a series of fishing villages (Neelima Risbud) that became a port and due to development today is a mega city placed on the west coast of India. Between 1971 and 2011, Mumbai's population increased steadily, from approximately 5,971,000 to more than 12,478,000 inhabitants. The United Nations (2012) has predicted that the population will continue to increase to 27 million inhabitants by 2025.It is India's financial center, major port and industrial area but also and center of culture. In 80's the economy was based mainly on textile, manufacturing and shipping.

Today Mumbai is a major center for out-sourced work system where companies mostly doing work for foreign companies. Mumbai contributes 40% of the State GDP, 5% of national GDP, and generates 40% of India's foreign trade (Bhagat and Jones, 2013). A huge amount of people migrate from the rural parts of the country because Mumbai offered to them varied work places, from highly payed jobs to practical work so they saw their opportunity for better life in the city. This city became known as ''The gateway to India "and the industry start to grow in this area really fast. But huge and uncontrolled population growth caused by rural to urban migration bring a huge problems for local and state government and they didn't succeed to find a properly solution for emerging issues. People are forced to live in slums like Dharavi which represent the second largest slum in Asia and it is home for more than 800000 people. Infrastructure is on the really low level and there is a little new free land for building homes or buildings and result of that is very expensive land so it is impossible for those people who living in shanty towns to afford homes for them and their families. recent estimates suggest slum populations within Greater Mumbai Municipal Corporation's boundary accounts for more than half of its citizens and more than one-seventh (15.2%) of the total slum population in India (Gupta et al., 2009).In Mumbai in the first decade of 21st century, 1959 slum settlements are registered with total population of 6,25 million which formed 54 percent of population. Houses are characterized with very small area, mostly less than 10 square meters and only 9 percent of houses have more than 20 square meter size. Besides industrialization, air and water pollution, waste mismanagement and water pollution from the slums is the biggest contributor to bad environmental conditions in Mumbai including lack of drinking water, lack of sanitation facilities and increase incidence of cholera. Industrial clusters were located near the center of the town and that area turned into a gas chamber with high concentrations of air pollution. Most cars in use have been used for decades and with very low quality engine. Though the performance of Mumbai is outstanding and since 1981, the per capita emission has decreased by half, from 110 to 66 kg, Mumbai need to further reduce CO2 emissions to meet international norms.

Air concentrations of PM, Nox and hydrocarbons have crossed the allowable limits creating numerous environmental and health problems to the Mumbai inhabitants. Increased unsustainable consumption of energy per capita also creates stress on the environment. Conceptual framework for sustainability metrics is also available for growing cities in India but requires comprehensive evaluation and a protocol for its effective implementation (JNNURM, 2005)The opposite is the case with per capita CO2 emissions, which have increased substantially since 1981.Implementation of strict emission norms and introduction of clean fuel and fuel substitution along with heavy dependence on public transport, would help Mumbai to remain relatively clean/The measures are Stricter emission norms and introduction of CNG driven buses reduce NOx emissions as well. Only 5 per cent of slums have individual water connection.

More than one hundred people in slums do not have water supply so women and children spend a lot of time to collect water on daily basis. Sanitation in slums are very bad quality and more than 70 per cent depend on community toilets provided by the government, only 1 per cent have individual toilets and others defecate in the open. Some types of drainage system have almost all settlements but they are nonfunctional. Main cause for blocking is garbage in drains. There is no organized system of solid waste collection and slum dwellers generally dump the waste in any open space. Slum dwellers may find themselves trapped in a low-skilled, low-income equilibrium as the continuous inflow of rural migrants maintains wages at near-subsistence levels, hindering the investments in human capital that aims wages at near-subsistence levels, hindering the investments in human capital that would be required to offset the adverse effects of slum living (Benjamin 2013).Table 2 shows that the estimated rate of which Lagos will increase from 2015 to 2025 will be much greater than that of Mumbai and Shanghai according to the India, World Population Review.

TABLE 2
POPULATION GROWTH FOR MUMBAI, SHANGHAI AND LAGOS
FIGURES ARE IN (10^3) THOUSANDS

Population	Mumbai	Shanghai	Lagos
2000 year (10^3)	16367	13959	7281
2005 year (10^3)	17891	16793	8859
2010 year (10^3)	19422	19980	10781
2015 year (10^3)	21043	23741	13123
2020 year (10^3)	22838	27137	16268
2025 year (10^3)	25207	29442	20030
Growth rate 2000 – 2010 (%)	18.7	43.13	48
Growth rate 2010 – 2015 (%)	8.35	18.82	21.7
Growth rate 2015 – 2025 (%) (estimation)	19.8	23.9	52.6

4 Environmental Ethics in Urban Development

Environmental ethics finds solution for sustainable development and to explain environmental change social impact. Environmental ethics builds on scientific understanding by bringing human values, moral principles, and improved decision making into conversation with science.
But there is still very little consensus about what sustainability actually means. Questions like what to sustain, who should benefit and what may be the best means of achieving sustainable goals. Whatever ethics we adopt will have to enable us to flourish in a technologically transformed world. Unfortunately, the central concerns of environmental ethics have been and largely continue to be heavily slanted towards animals, plants, endangered species, wilderness, and traditional cultures and not toward the problems of life in industrialized, urbanized society where most people now live (Alastair S. Gunn 1998). Urbanization is one of the most important issues in the environmental field, a terrain of environmental values and environmental issues which will be the true test of the ecological and social development in the future. The fact is that urbanization lead to the loss of the land around the city, but in this situation we have conflict in ethical positions. Government might have an ethical commitment to preserving the land around the city but at the same time have an ethical commitment to bringing in the jobs for growing population with the construction of a new factory on the outskirts of the town. It is genuinely hard to say what is right and what is wrong, In some cases it turns out that what is good for environment is also good for people. But that is possible for the cases for example when forest protection reduces jobs, a healthier forest can lead to new jobs in recreation, fisheries and tourism, but in urban development that is not possible. Although many claim that urban development is consequence of anthropocentric approach where the human interest and well-being are in the center that has denied with situation in Lagos and Mumbai. A lot of people moved to these cities looking for better life for them and their families. Is better life living in less than 10 square meters room without toilets and clean water access? In the same time they have a negative impact on the environment polluting local water sources, and dumping waste into the canals and on the streets. This is evident lose situation.

Megacities lead to the unsustainable use of nonrenewable resources for comfortable homes, well equipped hospitals, convenient transportation, home computers, fast food stores, battery operated toys and many more. How do we know what is enough? Can rich societies say "stop" we have enough" if they happen to consider the situation the poor societies are living in? Big industries around and within the cities are trying to secure big profit for their stockholders. The cheaper is to produce product, the greater is profit. It is often easier and cheaper in the short term to dump wastes into a river than to install a waste water treatment facility, and it is cheaper to release the waste into the air than it is to trap them in filters. All costs for these actions are payed by the community or environment rather than companies, industries and institutions. For the humanity this pollution is unethical and immoral but for the companies it can be just one more factor that determine profitability. The only solution for this is government's determination to solve this problem and bring the legislation to prevent further pollution as well as strict adherence to these legislation.

5 CONCLUSION

All three mega cities are financial and trade centers for their countries but unlike the local government of Shanghai, which somehow succeeded to find some measures to mitigate the consequences of the huge population growth, the local governments in Lagos and Mumbai have failed, presenting

excuses that the people who live in slums do not want to move out, but reason for such situations is the fact that they didn't provide better conditions for them but rather offered uncertainty. Despite cultural and religious differences of residents in all three towns we can find the same kinds of issues in a rapid urbanization and population growth. For rural to urban migrants is difficult to accept new rules and due to the lack of real solutions and legislation by the local government, they have a negative impact on the environment and in general they are hardly accepted by the higher income citizens.

Although the situation is not perfect and there is still a lot of work to be done, the government of Shanghai can be an example for governments of Lagos and Mumbai on how to mitigate the consequences of urbanization and control the impact on the environment and with environmental ethics, you can ensure that you are doing your part to keep the environment safe and protected. The most effective solution to this is stopping further expansion of the cities, larger investments in rural development and infrastructure ,cities to invest in green economy and to reach sustainability increased rate of urbanization by using advanced environmental friendly technologies, innovative policies and programs, strict monitoring and evaluation must and considering environmental ethics while making decision that will have a better impact on human nature and in achieving the desired development in sustainable manner

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