

## **Role of Universities in Meeting the Challenges of a Changing Urban Environment<sup>4\*</sup>**

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**Abstract:** Many countries in the world today have seen rapid growth of their cities and urban centres. The impact of continuous economic growth and population increases on the urban environment can be unprecedented. The scenario of the urban environment has been changed and with it the direction in which the cities and towns should be managed and planned. Given the current practice in urban management and governance, there is a dire need to be more focused in the way cities, especially those in the developing countries, are planned. Governments today need enhanced knowledge and the latest information for effective and balanced city management. The relevance of universities comes into perspective and as aptly envisioned, the universities hold the key to the future of good urban management. Universities can be harnessed to help governments build their towns and cities. Recognised as centres of excellence, universities can contribute to better urban development and management by generating new ideas, strategising policies and promoting public awareness. Indeed, in this new millennium, universities have a crucial role to play in meeting the challenges of a changing urban environment.

### **1. Introduction**

As the world enters the third millennium, the most significant trend that stands out is the progressive urbanisation of the world and the changes it will mete out. There will be profound economic and social changes that will accelerate and deepen the process of governance in many countries, because of the changing urban environment. The inevitable conclusion is that cities, towns and urban centres all over the world will have an increasing role in sustaining growth and development and continued urbanisation will change the way governments conceive of strategies in managing environmental friendly sustainable development.

The Habitat Agenda has acknowledged the contribution of urbanisation thus far in the cities and towns, where it has been “associated with economic and social progress, the promotion of literacy and education, the improvement of the general state of health, greater access to social services and cultural, political and religious participation. Cities and towns have been engines of growth and incubators of civilisation and have facilitated the evolution of knowledge, culture and tradition, as well as industry and commerce” (UNCHS 1999). Despite such progress made by the cities and their residents, the price exacted for such achievements has been at the expense of the urban environment which over the years has seen environmental pollution, large scale poverty, overcrowding and congestion and continuous urban degradation.

In many developing countries, cities have grown far beyond imagination; over only 60 years,

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the developing world's urban population increased tenfold, from around 100 million in 1920 to close to one billion in 1980 (The World Commission on Environment and Development 1987). The population of many sub-Saharan Africa's larger cities has increased many folds over a period of 30 years (1950–1980), for example Nairobi, Lagos and Cairo. The same trend has occurred amongst the populations in many Asian and Latin American cities such as Manila, Jakarta, Bombay, Sao Paulo, Mexico City (see Table 1).

Within the ASEAN region, three countries have attained much higher levels of urbanisation

**Table 1:** Rapid population growth in some third world cities (in millions)

City	1950	Most Recent Figures	UN Projection for 2000
Mexico City	3.05	16.0 (1982)	26.3
Sau Paulo	2.70	12.6 (1980)	24.0
Bombay	3.00 (1951)	8.20 (1981)	16.0
Jakarta	1.45	6.20 (1977)	12.8
Manila	1.78	5.50 (1980)	11.1
Lagos	0.27 (1952)	4.00 (1980)	8.3
Nairobi	0.14	0.83 (1979)	5.3
Cairo	2.50	8.50 (1979)	13.2

*Source:* The World Commission on Environment and Development. 1987. *Our Common Future*, p.237. Oxford University Press.

by 1995: Singapore at 100 per cent, and both Malaysia and the Philippines at 54 per cent (Lee 1997). However, these figures have been projected to increase by the year 2025 where it is estimated that the level of urbanisation in Malaysia would increase to 73 per cent and the Philippines to 74 per cent, while 61 per cent of Indonesia's population will live in urban centres and the corresponding figure for Thailand will be 39 per cent (Lee 1977).

The countries of Asia and Africa have seen most growth in terms of population and regional economics. In fact by 2010, Asia is expected to be home to 4.2 of the world's 7 billion people with 43 per cent residing in cities (Malaysia 2000). Furthermore, with an average economic growth rate of 7 per cent over the 1990–1995 period (compared to only 1.7 per cent globally), ASEAN as a region has become one of the fastest growing regional economies (Lee 1997).

These configurations place the urban challenge squarely upon the developing countries. Rapid urban population and economic growth have changed the scenario of the urban environment and the direction in which urban centres will be managed and planned.

## 2. Meeting the Urban Challenge and Emerging Awareness of the Need for Urban Environmental Management

As past practices have demonstrated, few city governments in the developing countries have the power, resources and trained staff to provide their rapidly growing populations with the services, facilities and planned infrastructure needed for an adequate existence. Furthermore, the uncontrolled physical expansion of towns and cities have had serious implications for the urban environment. This is due to the fact that with unprecedented growth, physical

development has advanced with unguided plans and regulations resulting in haphazard growth and development. Once an area is built up, it is difficult to revert to its old form or structure. In most cases, the problems are linked to inappropriate patterns of development and lack of coherence in policies and strategies in urban development and physical planning. This further exacerbates the already low priority given to urban management especially within the context of an urban environment that is never static.

There is an urgent need to plan and manage our urban environment for any lack of this will only negate the achievements derived from successful economic growth. Subsequently, any macro-economic development policy that is adopted by the country has to take into consideration the environmental and social consequences upon the cities and urban centres. This is because cities are the power-houses of a nation and account for a large proportion of a nation's gross national wealth. The overriding concern that arises from this is the issue of how to administer cities to respond to the forces that come with a changing urban environment. Given the current urban conditions in most cities of Southeast Asia (persistent traffic and road congestion, worsening water and air pollution, flooding, inadequate sanitation and garbage collection, increasing urban crime and problems of slum and squatter settlements), existing practices of urban governance and urban planning appear inadequate and not sufficiently effective.

In the past, the practice by governments in Southeast Asia in the governance and management of urban centres had been exclusively an exercise in centralised administration with functions focusing mainly upon the physical needs of the urban population. The new governments having evolved from their colonial legacy and with their new found independence were determined to impress upon their citizens that they as the new ruling elite can also deliver the fruits of development. However, the macro picture of society in these countries was one of low literacy rate, low income, insufficient infrastructural facilities such as proper sanitation, water, electricity, schools and health clinics. Development therefore, began to take the form of programmes that emphasised infrastructural and physical development in an effort to uplift the livelihood and standard of living of the populace. In Malaysia for instance, five year plans and various development programmes were launched in an effort to increase the living standards of its people and to spearhead economic development and restructure society. However, the administration was highly centralised and tended to focus on providing traditional technical services such as the building of schools and low cost houses, provision of water, energy, roads and garbage collection services. Yet, at the same time, for these newly independent governments, the framework of laws and policies which they had established were totally inappropriate to deal with the changing urban environment that was about to confront them in the near future. The structure and institutions in many of the developing nations were designed to deal predominantly with socio-economic development and was not intended to cope with rapid urbanisation and to plan and map out the future of cities.

Local governments were set up based upon classical traditional approaches and were never prepared by central governments to confront the enormity of town planning and management of urban centres that are homes to a few million people. Hence, when local governments were required to manage rapidly expanding urban towns and cities, they were in most cases unable to carry through effectively. What happens in most cases is that the countries concerned turned to the adoption of imported models to manage the problems of their cities and fast expanding urban centres much to the detriment of their own town planning and urban societies. "Urban development cannot be based upon standardised models, imported

or indigenous. Development possibilities are particular to each city and must be assessed within the context of its own region. What works in one city may be totally inappropriate in another” (The World Commission on Environment and Development 1987).

Needless to say, the age-old practice by developing countries of relying upon imported models for city management and planning will only result in creating even greater and more complex problems for the habitat of the local people. In most cases these imported models are ignorant of the culture and basic fabrics of the local urban environment. Yet at the same time, every country needs to have proper management and planning of its urban centres and to map out their future. These can only be carried out if governments possess within their own ambit the expertise and know-how as key agents of planning and development. City governments need enhanced and up-to-date information as well as data to plan effectively and appropriately. Also essential are institutional and financial capacities as well as urban specialists and environmentalists to adequately complement the planning and governance of the cities. In this context, developing countries should start focussing internally and search within their own sphere of expertise for solutions to resolve their own urban problems. In line with this view of thinking globally but acting locally, it is timely that at this juncture countries should re-look the role of their universities in the future of the big cities especially in conjunction with their contribution towards meeting the challenges of an ever changing urban environment.

### **3. Role of the Universities – A Background**

History has shown time and again that only through the process of education, human beings and societies can reach their potential. This belief was perpetuated continuously with the establishment of schools, colleges and universities. Many countries in an effort to seek enlightenment for their society have never failed to further encourage their people to seek higher education and to become learned. Within this context, the culture of education had been reinforced and the establishment of universities became *sine qua non* for development in a country. This concept was not lost on the developing countries, and where and when possible local universities and higher educational institutes were established to cater to the educational demands of the local population and to demonstrate some semblance of progress in economic development. Therein was laid the foundation for the foremost role of the universities i.e. to provide higher-level education and to produce graduates for the nation. This so-called first phase in the role of the universities as we know it today was to produce as many intellectual graduates as possible with depth of learning to fulfill the role of the universities for its own sake without truly meeting the actual needs of the society; hence, drawing the label of ivory tower.

The changing environment and society in the developing countries hastened the role of the universities into its second phase where universities were now expected to produce graduates to meet the needs of development in the country per se. The role of the universities began to transform to become more aware and sensitive to the demands of a changing economy within the country. Thus, universities became more inclined towards research, training and consultancy especially for industries and this is where universities are placed today. This is society’s perception of universities and their role within the context of a changing urban milieu. The question that surfaces is, can there be a transgression to a third phase for the universities considering that we are in the 21<sup>st</sup> century which has been aptly termed the urban

century?’ (Asian Productivity Organisation 1997)

Barring our acceptance of a traditional role for the universities and taking the cue of a paradigm shift in our mentality, the role of our universities can be put on course for the third phase. The relevance of this new phase in the role of the universities will be even more acute and necessary considering the nightmarish situation of our urban environment today. The universities hold the key to the future of every city because of the sheer number of graduands that pass through their corridors every year and who in turn become the leaders and shapers of society. It is only realistic to recognise the influence and power at the behest of the universities and which should be harnessed to help governments build their towns and cities. This need to commit universities and institutions of higher learning to foster a better urban environment is well documented in Agenda 21, a programme of action for sustainable development by the United Nations. Agenda 21 places emphasis upon “education as critical for promoting sustainable development and improving the capacity of the people to address environment and development issues” (United Nations Agenda 21).

It is acknowledged that in this changing process, development cannot be put on hold for the sake of the environment nor should development be carried out at the expense of the environment. With everyone’s commitment to sustainable urban development, many of the developing countries have been challenged to pursue greater economic growth without compromising the status quo of the environment. Therein lies the difficulties in translating this commitment to reality. Nevertheless, the solution may be found within the universities which hold the key to the future of good environmental urban governance as within their campuses can be located the talents and experts. The time has come whereby governments in the developing countries should start dedicating universities as centres of excellence for generating new ideas, concepts and models in urban planning and governance.

#### **4. Universities as a Focal Point in Managing the Urban Environment**

The role of the universities in meeting the challenges of a changing urban environment can be focussed upon six broad but crucial areas as outlined below:

(a) Re-orientating graduates for future needs

This is linked to the philosophy of how urban problems should be assessed and resolved. Universities can play the role of re-orientating attitudes so that graduates will possess the capacity to address and assess urban development concerns not only from the technical aspects but in a holistic manner that take into consideration ethics, values and attitudes consistent with sustainability. As Chapter 36 of Agenda 21 states, “environment and development education should deal with the dynamics of both the physical/biological and socio-economic environment, which should be integrated in all disciplines” (United Nations Agenda 21). Universities can encourage cross-disciplinary courses to be undertaken which will prepare graduates in handling any major urban environment and development issues in a wholesome concept.

(b) Capacity building

In the light of a dearth of urban environmental experts in most developing countries, there is a niche for universities to produce the required talents and provide the relevant training. Specialised urban development programmes can be developed catering to the

specific requirements of the government. Alternative courses can be introduced aimed at training future decision makers. These can be operationalised through the establishment of departments or institutes for urban studies within the universities. These centres of excellence will ensure a continuous pool of urban experts to meet the demands of a changing urban environment.

(c) Training

Training is important and recognised as necessary to fill the gaps in knowledge and skills required by individuals in their jobs. In this the universities may ensure that their training programmes inculcate elements of not only technical know-how but awareness of good governance. In cooperation with relevant agencies (local and international), universities can develop strategic practical training programmes that will produce experts that will be prepared to deal with increasing globalisation and its encroaching influence upon town and city planning.

(d) Research and data base centre

Research and teaching approaches related to urban management should be built upon by the universities. Universities can and should become the repository for all data and information concerning this area of specialisation. Towards this end, universities can extend their traditional role as research centres by promoting their facilities at the national or regional levels and encourage cooperative research and information sharing and dissemination. As an example, in South Korea there has been established the Kumi Information Centre of IT (KICIT) in Kumi City which is a joint-venture between the Kumoh National University of Technology and private sector industries. The KICIT provides up-to-date information on technology and management to local business enterprises. Needless to say, this concept can be replicated in other universities but with emphasis on urban environmental management.

(e) As a catalyst

With rapid growth in towns and urban centres, there is a continual need to generate new ideas and designs to combat the urban challenges that follow rapid urbanisation. Universities can stimulate initiatives to enhance institutional capabilities that can respond continuously to the emerging issues related to the environment and sustainable development. Universities should be proactive and assist governments to formulate policies and strategies for better urban governance. Universities should be viewed as the 'shapers' and 'movers' of society.

(f) Promoting public awareness

Overall, there is still an acute lack of awareness of the interrelated nature of human activities and the environment due to inaccurate information or insufficient knowledge. In particular, the developing countries need to increase public sensitivity with regard to problems in urban development and management. Universities should allow themselves the privilege of being the motivators in achieving sustainable development. This can be subsequently carried out through promotion of environmental programmes and activities via seminars, workshops and conferences. By also working together with

the non-governmental agencies and voluntary societies, universities can help promote awareness in the community. Public awareness building activities should also be an essential curriculum of global education whereby community attitudes and values are strengthened in conjunction with the physical development of the urban centres. Not only students but the community as well has to be prepared to understand and cope with urban development problems.

## 5. Conclusion

This paper has attempted to provide an overview of the challenges that urban development will have upon our environment especially in this new millennium. As the theme of the conference has highlighted, in all likelihood, societies in this globalised world will face new critical environmental and urban problems which will entail new concepts and problem solving procedures. Indeed, the responsibility of determining solutions and resolving the problems will fall upon the new generation of decision-makers, synonymous with the future leaders of respective countries.

The expectation of society to have leaders of exemplary calibre is justified. Therefore, the onus will be on universities and institutions of higher learning to produce future graduates of quality with innovative minds to determine the path to a progressive society in the new century. Certainly, there is a role for universities to play in meeting the challenges of this ever changing urban environment and this role, in conclusion, will be the leading role.

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