Roles of Local Governments in
Urban Environmental Management: A Review

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Abstract

Urban environmental problems have become a new issue for all human beings to manage because half of the world’s population lives in urban setting. Urban environmental management is administered by many government agencies through many levels of government – central, regional, provincial, and local. While the local being the weakest, the role of local government has been increasingly concerned because it is at the local level where people interact with their local government on daily basis. Local government authorities can be seen as the managers and providers of key infrastructure supplies preventing from the environmental damage. It is clearly needed to develop institutional mechanisms for the local governments to manage problems on environmental issues. This requires support from all related actors at all levels. The challenge is how to build up the capacity of local government authority in order to generate the administrative flexibility and innovations, and public participation for better urban environmental management to likely succeed.

Keywords: Urban environmental management, local governments, local government capacity, cooperation of stakeholder
1. Introduction

By reviewing related studies conducted in the last decade, it shows that, more than half of the world’s population will live in urban areas by the end of this century. In the past 30 years the people living in the Asian and Pacific Region has increased and in the next 30 years, the number of people is expected to increase to approximately 1,450 million people or 250 per cent. The process of urbanisation will bring about more difficulties for limited human and natural resources to cope with this difficulty (World Bank, 1997 and UN-ESCAP, 1999). The recent studies confirmed that the urban population in developing countries is expected to grow from 2 billion in 2000 to 3.9 billion in 2030 (Vlahov et al., 2006, 2007, UNFPA, 2007 and UN, 2006, cited in Kjellstrom et al. 2007).

Up until now, urbanization still being a major challenge for the 21st century, as urban population has been rapidly increasing, basic infrastructure is insufficient and the emerging social and economic inequities in urban areas result in various serious problems. Moreover, it is predicted that almost all the world’s growth in population over the next 2-3 decades will be in urban areas, of developing countries (UNFPA, 2007 cited in Kjellstrom et al. 2007).

Urban growth causes both positive and negative impacts on the environment and human beings. On the one hand, in terms of positive impacts, the urbanisation has been associated with declining birth rates, which reduce population pressure on natural resource use. On the other hand, the environment in most cities in the developing countries is deteriorating rapidly. These problems have grown faster than our ability to solve them. Further, environmental problems in the urban context are getting more serious as a result of huge numbers of people live in the world’s cities. The numbers of people are also increasing rapidly as a result of migration to urban centers and population growth.

This article will focus on urban environmental problems and the roles of local governments in tackling them. It will explore why the challenges in building up the local government capacity and the cooperation of local stakeholders need to be taken into account.
2. Urban Environmental Management

Urban environmental problems are evident in a number of ways in and around the cities in developing countries. The decline in air and water quality, problems of waste disposals, more intense competitions for space in congested areas, and the worsening of natural support systems and the living conditions for urban dwellers are obviously seen in many regions (UN-ESCAP, 1994). City dwellers are, then, facing various problems of urban environment, which cause many negative impacts on their lives.

Moreover, a paper prepared for a UN conference indicated that Asia boasts nine of 14 mega-cities (defined as having populations of more than 8 million) of the developing world. The urban environmental problems in these cities include polluted air and waterways, and severe shortages of basic facilities (water, sewage systems, garbage-disposal services, and transportation), due to “the fact is that in the history of mankind, no one has ever had to do the planning for cities of this dimension…” (Williams, 1994).

For Usback (n.d.), the pollution and environmental agenda at the local level can be seen in various problems comprising with (i) air pollution; from motor vehicles, photochemical smog, lead pollution, smoke from combustion heaters, greenhouse gas emissions, industrial pollution and odor, noise from vehicles, aircraft noise, noise from domestic animals, (ii) waste mistreatment; excessive demand and waste, loss of environmental flows and bio-diversity in water ways, ground water pollution, storm water and waterway pollution from urban and agricultural run-off, pollution from sewage, and (iii) solid waste; litter, hazardous waste such as chemicals, motor vehicle tires and visual pollution.

Similarly, as UNCHS (1996) noted, major urban problems of cities are increasingly severe. The most pressing urban environmental problems are related to increasing populations, economic specialization and shifting land use patterns, as well as inadequate housing, water and sewerage facilities among others (UNCHS, 1996).

Furthermore, environmental problems in urban areas vary from city to city and region to region. As what Kammeier (2000) emphasized that the pattern of environmental “pressure points” differs from city to city. Poor cities have different agendas from rich cities (Kammeier, 2000). As the World Bank noted that problems of urban environment are influenced by many factors such as city’s size, population growth, local geography, and climate. Moreover, rapid
economic and population growth can exacerbate these problems. The problem can be worsening if the organisation handling the problem is weak. (World Bank, 1997)

It is noted that a multitude of factors influence outcomes in each local circumstance. Urban development is highly complex and many factors play a role in influencing the effects on urban people’s well-being (Martínez et al., 2008). Therefore, organizations at all levels must pay considerable attentions to environmental impacts in order to achieve sustainable urban management.

3. Roles of local government in dealing with urban environmental problems

Governments are the most significant actors dealing with the development tasks. Governments are needed to plan for a country’s development and economic growth, to regulate polluting activities, to harmonise competing uses of the urban environment, and to address problems of equity (Swan, 1997 and World Bank, 1997).

As UNCHS and CITYNET (1997) noted, the local government is the array of government, which is closest to the people. It is at the local level where people interact with their local government on daily basic needs. Local governments usually stand for primary responsibility for urban infrastructure, land use planning, and directly involved in the provision of basic water, sanitation, and garbage disposal services. Local authorities can be seen as the managers and providers of key infrastructure supplies preventing from the environmental damage. As city dwellers, people expect the local government to run in a functional way in order to fulfil their needs (UNCHS and CITYNET, 1997, UNDP, 1992 and World Bank, 1997).

Nowadays, local governments themselves are concerned that the range of urban environmental issues are too complex. Nevertheless, the importance of local governments cannot be denied. Local governments play a central role in managing the urban environment. In other words, they are responsible for most aspects of environmental management at the city level. Local governments, therefore, need to be enhanced in various terms in order to meet the challenge of providing urban environmental management (UN-ESCAP, 1994).

Two trends challenging the local government management are as follows: First, there is a need to improve the performance and results of the local management. Second, there is a growing concern on the popular participation in problem solving (Marshall and Wray, 1999).
Therefore, this paper reviews the concerns based on these two challenges in the following section.

4. Local government capacity and the management of urban environmental problems

Einsiedel and Sosmena (1994) defined “local government capacity” as “the ability of a local government to plan for development, mobilise and allocate resources, and implement development undertaking in furtherance of individual well-being and societal welfare”. They argued that there are essential capacities required of a local government in order to effectively respond to the local needs. Broadly speaking, these capacities can be seen as effective goal-setting, formulation of appropriate development strategies, mobilisation of sustained political and community-based support for local development. Moreover, as Acosta et al (1991) noted, local government capability is defined as the ability of a local government in improvement its internal operating procedures in terms of goal setting, policy planning, policy implementing, monitoring and financial management.

If we link the local government capacity with urban environmental management, it can be defined as “the ability of the local government to perform their tasks relating to urban environmental issues”. Those tasks can be seen as formulating, planning, implementing, and evaluating plans and policies towards the environmental management problems in the urban areas.

As World Bank stated about the urban management issues that “institutions are weak, resources are scarce and technical capacity is inadequate” (World Bank, cited in UNCHS, 1996). Governments have set the priority in providing infrastructural projects to promote economic activities e.g. power plants and ports, rather than sewage and waste-management plants. However, Williams (1994) argued that with few exceptions, Asian governments are failing to provide even the most basic services, such as sanitation and piped water for much of their people. This can be said that the problems of existing capacity of the local government are getting more serious, and these need to be addressed in a proper way. Eeven if new technologies and huge financial resources are available, the system will no longer work, as they can never have the capacity to understand the complex convergence of problems at each local context. (Swan, 1997)
In addition, Analoui (1997) noted that public sector organisations, particularly in developing countries, are well known for their ineffectiveness, poor performance, and lack of necessary force for achieving development targets. This is usually related to a lack of ability and competence in identifying opportunities; untrained, unskilled personnel; and lack of qualified managers.

From the above mentioned statement, this article considered that the institutions, especially the local governments, are weak. The resources are scarce, particularly the financial resource, as well as a lack of organisational competencies. It is argued that, not only technical capacity, which is inadequate, but there are also many more capacities that the local government cannot attain.

Another example of purported progress is the recent mushrooming of municipal and local government environmental departments, co-ordinators, task forces, staff committees, and citizen boards. At one level this is certainly appropriated. However, even in some cases of developed countries, these impediments still exist. For instance, the inadequate funding, uncertainties and delays in program administration, inadequate communication with senior levels in the government, and inadequate technical assistance were all perceived as obstacle for local responses to environmental problems. (Roseland, 2000)

Therefore, a crucial need is to enhance the capacity of local government especially in the cities. Various factors such as strong institutional capacity, adequate funding, effective organizations, clear lines of authority, and qualified staff are needed in order to achieve the effective urban environmental management. However, such factors are often lacking in local government organizations in developing countries. Many urban areas are increasingly facing numerous urban environmental issues with a weak institutional structure, inadequate budget, constraints in the administrative system, and obstacles in meeting the real needs of the local people (World Bank, 1997).

Meanwhile, the overarching structural inequities of globally and nationally constituted inequality prevailed. From this viewpoint, ‘state-led development’ was seen as a dead-end track, unlikely to generate a more equitable future for the urban residents of Southern nations (Fine, 1999; Devas, 2004 cited in Parnell and Robinson, 2006). The greatest importance is that the capacity of key institutions should be strengthened, enabling actors to respond effectively and efficiently to the demands placed upon them. This includes developing better field techniques,
generating greater awareness of the need to listen to, and learn from, the voices of the poor and marginalized, and formulating strategies to enable these groups to participate in shaping policies which might subsequently affect them. This is why some scholars further pointed the urgent need to develop and promote innovations in pro-active approaches to shelter and servicing that provide accessible alternatives for the world’s growing urban population and especially for the urban poor (Martínez et al. 2008).

Development of the tools and capacity to collate and manage appropriate data-sets is also needed. Such institutions must have the necessary human and physical capital, including an adequate reserve of appropriate vehicles, in order to provide decision-makers with reliable information, analysis and guidance for policy and action, particularly in more remote areas (Milligan and Binns, 2007). It is undeniable that the role of internet is perceived as a tool to improve local institutional capacity in order to handle with the urban environmental management tasks.

5. The cooperation between local governments and other stakeholders

This dimension is highlighted because the single local government is inadequate in dealing with urban environmental problems, the stakeholders should cooperate in the management system to work together in developing their city. As urban environmental management is not a specific role of individuals, it is the collective actions. This task can be defined as the efforts to coordinate and integrate public as well as private actions to tackle the major problems that the inhabitants of cities are facing, and to make a more competitive, equitable and sustainable city (Van Dijk, 2000 cited in van Dijk and Mingshun, 2005). Therefore, coordinations between the urban multi-sectors and urban multi-actors are significant in effective urban management, in particular the environmental tasks (van Dijk and Mingshun, 2005).

Drawing from the research findings on “the participatory approach to municipal finance”, it was suggested that there is a need to strengthen the capacity and capability of local governments in order to interact effectively with all urban partners and meet the needs of business and citizens (Lohse, 1993 cited in CITYNET, 1999). The current trend in any development project is to address public involvement and participation as a key feature.
Therefore, it is vital to include other actors at every stage in urban environmental management schemes.

It is also found that various action plans emerged from UNCED through Habitat II. In addition to this, Agenda 21 placed a central concern on the role of local communities and local government in solving urban environmental problems. It signifies role of local authorities in achieving sustainable human settlement in an urbanising world. The new habitat agenda represents a significant paradigm shift as it advocates a decentralisation of responsibilities from central to local governments and to communities. This is an emergence of the new role for many actors and the creation of partnership among those relevant actors. Most importantly, the local government is the most suitable level to establish partnership with other actors and therefore needs to be strengthened (UNCHS and CITYNET, 1997 and Sheng and Mohit, 1997).

The involvement of various actors at the local level can increase the appropriate management in urban environmental issues. However, some authors argued that the policy process for involving interested parties from different sectors in mobilising the local tasks remains moderately underdeveloped (Ooi, 2007). Also, a recent review examined that weak capacities at the local government level in many areas encouraged writers to support a wider range of local development agents (Rakodi, 1997). It is suggested that for urban development, the civil society should get involved in order to promote the particular tasks. (Cox, 1997, Evans, 1996a, 1996b, Harris et al., 2004, Mitilin and Satterthwaite, 2004, Bond, 2000 cited in Parnell and Robinson, 2006) The role of civil society is vital because a proper balance of state and civil society can be another channel to stimulate political participation and educate people in democracy and civic culture.

Over the past decade, key figures have argued that little scope might have existed in the decentralisation of power to local government. It is a shift to greater state civil society collaboration and failed to deliver meaningful changes in practical democracy on the streets. This is because local realities were ignored (Crook and Manor, 1995; Mohan and Stokke, 2000 cited in Parnell and Robinson, 2006). Moreover, some scholars, such as Federickson (1997) and Moore (1995) emphasized that modern public administration is a network of vertical and horizontal linkages between organizations of all types—governmental, non-governmental, and quasi-governmental; profit, nonprofit and voluntary. Citizens participate in these organizations in many ways and at many points. In the same way, Moore (1995) agreed that public
administrators have a responsibility not only to meet the organizational goals of the bureaucracy, but also to look upward and outward at the collective needs and values of society at large (Moore, 1995 and Federickson, 1997 cited in Lando, 1999).

Today the interactions between different actors are increasingly complex and characterised by ‘networks’, ‘mutual adjustments’ and ‘cooperative management’ rather than ‘hierarchy’ and ‘government’ (Lundqvist, 2001 cited in Eckerberg and Mineur, 2003).

The participation of stakeholder and groups can be identified in various terms. One possible solution for the participation of various groups at the local level can be identified as the local network. The concept of network consists of the total of relations among (public and private) organisations, institutions and persons. It can be seen in terms of two-way dynamics such as mutual relations among participants, or interdependency among actors (van den Berg and Braun, 1999 cited in CITYNET, 1999). In the case of China, public participation in urban management is hardly developed in a number of cities.

For a successful participation, certain elements must be taken into account. Firstly, it is the availability of the information, which is the foundation of public participation. Relevant information such as decisions, local priorities, strategic and action plans must be available to the stakeholders. Secondly, it is also highlighted in building the consensus among stakeholders. The consensus can be built by negotiations, discussions, and sharing ideas among the stakeholders. Therefore, strategic and action plans can be drawn up jointly and agreed upon by all stakeholders. For some categories of decisions that affect a broad spectrum of interests, a fair hearing is no longer sufficient to achieve a lasting and equitable result. Direct participation in the decision-making process is incredibly necessary (Owens, 1990 cited in Roseland, 2000). The last element is to supervise the implementation of the strategies and action plans. The challenge will be to achieve more coordination between the municipal and district levels in big cities and to assure some degrees of popular participation (van Dijk and Mingshun, 2005). This is as Yang et al (2006) supported, the public participation and monitoring is critical for favourable practices (Yang et al, 2006).

At this stage, the case of Prik municipality, Songkhla, Thailand , as a successful case, can be applied. Prik municipality tries to undertake the tasks via the “partnership-based” and shift from “local government-based “to “local governance-based”. Prik municipality has been defined.
as “potential organization” in working and collaborating with public organizations, regional government authorities, civil society organizations, and other local government authorities. Public participation will occur when the persons or groups has an adequate and equal opportunity in getting involved in any public tasks such as in policy process from the first stage of formulating policy to the one of evaluating policy. Participation of the people can be seen as (i) formal participations such as local election, and (ii) The informal participation such as getting involved in terms of policy making process through; identifying problem, prioritizing their own needs, formulating plans and policies, implementing it, and evaluating it. (Choosuk, 2010)

The participatory-based and building up partnership with many other organizations have led to the robust outcomes for this municipality to run their tasks with the support from outsiders. As in the project towards environmental management, Prik municipality has conducted the zero-waste management concept. In this activity, the municipal authority has worked closely with the university, i.e. Faculty of Environmental Management and the Office of Environmental Policy and Planning Regional 16th, Ministry of Natural Resource and Environment for more than 10 years. (Choosuk, 2010)

It is concluded that stakeholder participation dimension relates to the “involvement” of several actors. All of them can join and get involved in order to accomplish the particular purpose. Many studies have pointed out that finally local government will not only strengthen their own capabilities, but also have to work effectively with other urban actors in order to handle their urban environmental management tasks. (van den Berg and Braun, 1999; Lohse, 1993 cited in CITYNET, 1999; Moore, 1995 and Federickson, 1997 cited in Lando, 1999).

6. Conclusion

As a result of half of the world’s population lives in urban settings, urban environmental problems have then become a new issue for all human beings to manage properly. In dealing with urban environmental problems, local government organizations play a vital role in almost all aspects of management at the urban local level. Even the role of local governments is increasingly important, various constraints of the local governments towards the urban environmental management still exist. A crucial need is to enhance the capacity local government which is the result of the difficulties of weak institutional structures, inadequate
budget, constraints in the administrative system, and obstacles in meeting the real needs of local people. The single local government is not enough in dealing with urban environmental problems. It is believed that other stakeholders should also get involved in the management system to work together in developing their city. The solution will not only depend on the institutional changes, but the mobilization of the public, including communities and the private sector is very vital. The great challenge is how to build up the capacity of local government in handling with their tasks, as well as cooperating with other stakeholders at the local level to mobilise the urban environmental management tasks.

Bibliography


