Sudan University of Science And Technologies
College of Graduate Studies.

**URBAN GOVERNANCE INDEX (UGI)**
**IN KHARTOUM STATE LOCALITIES**
*(Case study : Eastern Nile Locality)*

(حالة دراسية : محلية شرق النيل)

A thesis Submitted in partial fulfillment of MSc. degree in Architecture (Urban Design)

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Quranic Aayah

بسم الله الرحمن الرحيم

((prepare against them whatever you are able of power and of steeds of war by which you may terrify the enemy of Allah and your enemy and others besides them whom you do not know)).

Alanfal-60
DEDICATION

I dedicate this research report affectionately to the following:
Spirit of my parents,
My own family wife and sons…
And my extended family brothers and sisters…
To all and for all I humbly presenting this thesis.
ACKNOWLEDGEMENT

This research report has been undertaken in partial fulfillment of the degree of Master of Urban Design. I wish to acknowledge certain institutions and individuals for their contributions towards the production of this research report. I would like to thank my family with sincere gratitude for their unconditional support. My sincere thanks also go to my sponsors. First, I want to thank Sudan government for sponsoring my studies and as well as my living expenses. Secondly, the locality staff of Eastern Nile Locality at Greater Khartoum for their kind assistance.

Lastly, I wish to humbly acknowledge with sincere gratitude, my supervisors Dr.Khadiga Mohd.Osman and Dr.Awad Saad for their valuable advice and guidance during the writing of this report. It is their persistent criticism that brought hope and confidence in me, even at the most depressing moments. they were truly a source of inspiration. Their support has certainly made studying at Sudan university an enhancing and developmental experience. Although the views and opinions expressed in the report remain my own, my ability to engage with the debates and discussions remain the responsibility of my supervisors and the other lecturers in the Sudan University College of Architecture.
ABSTRACT

The attention to the studying of aspects that affecting the development of the cities all over the globe is at great increasing specially from the financial institutes, donors and NGOs which focus its programs on the urban poverty and the city products. In this respect analyzing the urban situation and measuring relevant progress the mentioned establishments remain relying on the development of indexes as appropriate references and measuring tools.

This research is focus on what is called ((Urban Governance Index UGI)) and its affect on city development which is measured by what is called ((City Development Index CDI) depending on the international studies incurred in this respect.

The research in chapter three has conceptualized the UGI providing detailed description to the origin and definition of the term urban governance through deferent paths that it has been originated from, and giving details about what is considered to be an appropriate definitions set by the UN-Habitat. In describing the details of the late definition this chapter has also included the description of the 25 indicators composing the UGI index after sub-classified to four sub-indexes.

In proofing the importance of the UGI the research has studied its affect on the city development using CDI as measurement tool.

In chapter the research has described the way that the site implementation of the UGI can be under carried and how the sampling and questionnaire can be followed.

In the application side of the research we provide the past case study the made in Ulanbaataaar, Magnolia’s similar case done before by the UN-Habitat where the UGI and CDI has been accounted and the relationship between them has been examined.

The procedure of the site studies has reflected some complexity and monotonous details but still it is important to be under carried as keyway to the understanding of development mechanism.

The chapter four in addition to the past case- is also included the local research case study which is Khartoum State Locality(Eastern Nile Locality) as only one case studied by the researcher to explain how the UGI can be applied to the local file using questionnaire to reach to the required result through analytical ways.

The researcher has reached to the sub-indexes values of the UGI for Khartoum Localities and used in drawing the UGI diagram following the same procedure used in the past case study of Ulaanbataaar.

The sixth chapter of the research is provided for the detailed discussions of results drawn from the analysis carried under chapter five which comprises the analysis of the research main question and the research six assumptions. In addition to the discussion this chapter has included the recommendations, references and appendixes of the research.
المستخلص

يتبادر الاهتمام على مستوى العالم وعلى رأس المنظمات المهتمة بشؤون التنمية والمؤسسات المانحة التي تقوم بتوفير الفرص لتحسين مستوى المعيشة ومحاربة الفقر الحضري تتم جميعها بدراسة المؤشرات على نمو المدن وفي هذا الصدد استحدثت المؤشرات المختلفة لمعرفة وتحليل الواقع عبر هذه المؤشرات القياسية.

هذا البحث يتم في كثير من جوانبه بلغت النظر إلى تأثير الحوكمة الحضرية على نمو المدن مستفيدة من التجربة العالمية والدراسات السابقة في هذا المجال.

قدم البحث شرحاً صادقاً لوصف وتعريف مصطلح الحوكمة الحضرية فيما تعريفه بواسطة منظمة الأمم المتحدة الموكل حيث تبناه البحث باعتباره التعريف الأولم وفي شرحه تم تحديد المؤشرات المؤثرة على طريقة حساب هذا المؤشر المرجعي وعددها 25 مؤشر مقسمة على أربعة أقسام مرجعية. كما أضطلع البحث بشروحات وتعريفات صادقة لمؤشر تنمية المدن وترعرعا من خلال هذا البحث على المتغيرات المؤثرة في حساب هذا المؤشر.

ولابد من أن تكون المؤشرات الأساسية مؤشرات تتأثر باقتصاد المدينتين، وما أدّى إلى أن تكون هذه المؤشرات مستفيدة من التحليلات القياسية.

ثم انتقل البحث لدراسة كيفية أجراء الدراسات الميدانية لهذا المؤشر وطريقة حسابها وعلى الرغم من أنه اتضح لنا شيئاً من التعقيد في الطريقة الميدانية إلا أن أهمية حساب المؤشر وانعكاساته ذلك على المدينة تجعل من تحليل من طريقة حساب تلك الضرورة لمناصر من اتباعها.

استخدم البحث نموذجاً دراسياً سابقاً جربت دراسته بواسطة منظمة الأمم المتحدة بمدينة ألانبتوبر بدولة منغوليا وذلك لمزيد من توضيح الطريقة الميدانية حيث تم دراسة مؤشر الحوكمة الحضرية ومؤشر نمو المدينتين وحساب العلاقة بينهما لتتأكد أهمية الربط بين المؤشرات في أي دراسات حضرية.

أعتمد الباحث في هذا البحث محلية شرق النيل كنموذج لولاية الخرطوم حيث تم شرح لمؤسسات الميدانية وجرت الدراسة الميدانية عن طريق الاستبان المطبق مع هذا البحث واعتمادهما المنهج التحليلي لهذا البحث.

وصل البحث عبر الطرق الحسابية إلى قياس مؤشر الحوكمة الحضرية في محليات الخرطوم باستخدام المنهج المذكور كنموذج دراسي واستخدمت الرسومات التوضيحية لتوضح المؤشر حسب الطرق المتصلة.

ناقد المساح السادس والأخير للبحث كل نتائج التحليل التي وردت بالباب الخامس والتي شملت استمالة البحث ومراجعات مؤشر الحوكمة وفرضيات البحث الستة واختتم البحث بالوصيات التي خرج بها الباحث.
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<td>Asian Development Bank</td>
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<tr>
<td>CBO</td>
<td>Community Based Organization</td>
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<td>CDI</td>
<td>City Development Index</td>
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<tr>
<td>CPI</td>
<td>Corruption Perception Index</td>
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<td>CSO</td>
<td>Civil Society Organization</td>
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<td>Global Urban Observatory</td>
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<td>GURI</td>
<td>Global Urban Research Initiative</td>
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<td>ICSSR</td>
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<td>Non Governmental Organization</td>
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General Framework of the Study
Chapter-1
General Framework of the Research

1-1: Introduction:
Sudan is a developing country where the people displaced their home villages and stay in cities, cities like Khartoum capital is suffering acute urban poverty which is aggravated by the international community embargo...overcoming such situation is likely to be through efficient urban management. This is only can be done through following standardization of management system and measuring indexes.

International donor agencies like UNDP (2000) and the World Bank (2003) pay increasing attention to issues like urban poverty and development. However, whether and how the livelihoods of the urban poor change for the better or the worse, depends heavily on the way that urban governance “functions”. Thus good urban governance is considered the key to urban development and poverty alleviation (Rawoo 2005 : 20). In this context, governance does not only refer to the city administration but also to the wide range of actors partaking in the processes of decision making and urban activities. These include amongst others civil society organizations (CSOs), community based organizations (CBOs), religious groups as well as formal and informal private businesses. As such, urban governance can be theoretically embedded into the „urban regime approach“ (Stone 1989), as it is about the cooperation of different actors of a community's institutional life. In doing so the approach focuses on the possibilities and limitations for a consortium of actors in fostering a set of governing coalitions. Recognizing that “the structure and processes of city governance have important implications for whether and how urban poverty is addressed” (DEVAS 2005 : 351), there is broad consensus among the scientific community on the significance of governance for urban poverty reduction. Furthermore, the social and economic development of cities in developing countries depends largely upon the abilities, resources and the responsiveness of local government management. However, according to Jeffrey Sachs, director of the Earth Institute at Columbia University, appropriate governance of cities is elementary for sustainable urban development alongside the policy issues of planning and having a development strategy (Sachs 2003). Following this rationale, some authors relate most urban problems to the lack of attention given to developing effective governance structures, recognizing that this is “a very different `urban agenda` to the one that focuses on `urban growth` as the problem” (Satterthwite 2005 : 20). Against this background, UN Habitat launched the Global Campaign on Urban Governance in 1999. The campaign’s goal is to enhance the quality of life in cities as well as to contribute to the eradication of poverty through improved urban governance (Taylor 2000 : 198). Stating that the quality of urban governance is the single most important factor for the eradication of urban poverty and for prosperous cities, the campaign aims to increase the capacity of local governments and other stakeholders to practice good urban governance. As UN Habitat argues:“There is an emerging consensus that good governance is the sine qua non for sustainable human and settlements development.” (UN Habitat 2002a : 7) Thereby the campaign’s theme is the „Inclusive City“ that promotes growth with equity as well as social, economic and political participation regardless of economic means, gender, race, ethnicity or religion. Bearing in mind the urbanization of poverty, the campaign focuses on the needs of the excluded urban poor. However, since most urban administrations in developing countries like Sudan feature inadequate data and information on trends and developments forming their cities, their ability of understanding these processes is exacerbated. The very matter of fact also results in their
deficient capacity to develop and test efficient urban policies. Consequently these shortcomings have an effect on almost all components of urban planning, namely urban management, strategic and sector planning, private sector involvement and more. This study is at utmost importance to come in this time to draw the attention to the need of increasing of cities management and using the international measurement indexes in order to speak one language together with the international community as we are part of that community.

1-2: Problem of the Research:
The research problem emphases the lack of the Sudanese community as general and the local urban authorities in name and their partners to the basic knowledge of urban good governance indexes and importance of the later in measuring the urban performance that has led to serious problems such as :
1-2-1:- Ignorance of the local authorities to the local community’s views and neglecting their vital requirements.
1-2-2:- Misusing of the available resources due to the weak knowledge about sustainability of these resources.
1-2-3:-Focusing on the increasing of the income to the localities administration rather than public utilization
1-2-4:-Redundancy of most of the system members due to their week knowledge or lack of authorization from the centre.
1-2-5:-Weakness of the organization charts and absence of the accountability
1-2-6:The lack of centralized decision at state level makes the whole decentralization system in the localities as null.
1-2-7:-loss of urban system credibility at international level due to loss of combative criterion.
This research will focus on the reality of the current situation of the local urban authorities in respect to the urban good governance principles.

1-3: Importance of the research
1-3-1: Being the first Sudanese study to the urban good governance -which has been discussed for last 20years worldwide- with less care to this program in Sudan-this study highlight the need for using the criteria of this international program as step forward to develop national observatory chamber to implement the national ambitious strategies.
1-3-2: The recommendations of this study has come after site survey and analysis which will help the decision makers to necessity of reconsidering the ways the planning committees used to be formulated and functioning during the past couple of decades.
1-3-3: This research also has come few months before presidential elections 2015 to reflect the acute need to revising of all urban planning system in favor to the transparency and good urban governance especially in land use aspects.

1-4: Aims of the research:
1-4-1-understanding the way how the city performance index (CDI) is functioning to urban governance Index (UGI)
1-4-2-understanding the site work through which the real situation of good governance can be measured and compared to the optimum requirements and understanding ways variables tends to affect the performance of the urban management system..

1-5: Research Limitation:
1-5-1-spacial limitation
This research is limited to the greater Khartoum localities however special focus has been put on Sharq Elneil locality as sample.
1-5-2-Time limitation:
This research started and concluded at year 2014

1-6: Question and assumptions of the research:
1-6-1: Question of the research:
(What is the urban governance? how can it be measured? and to what extent that the principles of UG is profound in Khartoum city)?

1-6-2: Research assumptions:
This research has 6 static assumptions:

Assumption one:
((No significance variation attributed to the number of members utilized variable in urban governance index of Khartoum localities at level of indication (a=0.5).)

Assumption two:
((No significance variation attributed to level of education variable in urban governance index of Khartoum localities at level of indication (a=0.5))

Assumption three:
((No significance variation attributed to the spatial level variable in urban governance index (UGI) of Khartoum localities at level of indication (a=0.5)

Assumption Four:
((No significance variation attributed to the type of formation variable (employment) in urban governance index(UGI) of Khartoum localities at level of indication (a=0.5)

Assumption Five:
((No significance variation attributed to the way of appointment variable in urban governance index(UGI) of Khartoum localities attributable to the variable of source of finance at level of indication (a=0.5))

Assumption six:
((No significance variation attributed to the change in variable of law, regulation and blogs awareness in urban governance index(UGI) of Khartoum localities at level of indication (a=0.5))

1-7: Research structure:
This research is consists of six chapters covering the topic in destails:

Chapter-1 is specified for illustration of the general framework of the research including topic introduction, research Problem, importance of the research, aims of the research, research limitation, question and assumptions of the research and finally this research structure.

Chapter-2:is specified to give historical and general background about the concept of urban governance index as the main tool innovated to measure how governments, organizations and individual perform in respect to urban management ,this chapter is composed of general introduction about UGI concept, conceptualization of UGI,notion of UG or how literature of UG could be obtained, linking UG and development and linking UGI and city development in form of CDI as well. also this chapter is linking the UG and pro-poor policies to reduce poverty in urban areas .and concluded as usual with conclusion summarizing the chapter main features.

Chapter-3: This chapter has been composed of the introduction giving how the UGI can be accounted using the (indicators)as main guide to the field work purposing to get the real situation of UGI at site. The chapter also consisted of some knowledge about indicators and how it has been derived and its importance in the world of measuring the urban complicated
phenomena. The chapter has given detailed definition about the UGI five components with drop to the security sub-index as per UN-Habitat practice and for statistical reasons. This chapter has to show what is meaning of influential aspects of UGI on City Development Index (CDI).

Then as finally the chapter summary which includes brief summary shows the importance of this chapter in the research report.

**Chapter-5:** this chapter gives answer to the research main question with necessary details and summaries to the answer. The chapter is also give abroad analysis to the research assumptions in statistical approach.

The conclusion of this chapter gives summary of what main lessons we aim to come up from detailed analysis and statistical explanations that the chapter has composed of.

**Chapter-6:** is the final chapter in this research and aimed to give more explanations for the main features of this research starting with discussion to the answer of the main question analysis, discussing the analysis of the UGI sub-indexes and discuss the analysis of the research assumptions. Finally the research recommendations have been attached to this chapter.

*the references for this thesis is listed in separate tables started with Arabic references table, and then the appendixes of the research.

**1-8: Conclusion:** in this chapter we structured out the research where we introduced this chapter by advocating the concept of the research, developing the main research question, stating the research assumptions framing the limitation of the research and finally we enlisted the six parts composing the report.
Chaptet-2

Historical Background and Conceptualization of the Urban Governance
Chapter-2

Historical background
And Conceptualization of Urban Governance

2-1: Introduction:
This chapter is answering the first part of the research question (What is the urban governance?)
As Urban Governance Index (UGI) has been created to answer to these needs [UNHabitat2003].
The UN-Habitat has disaggregated this index into five principles of “good” governance, such as
effectiveness (efficiency, subsidiarity, strategic vision), equity (sustainability, gender equality,
intergenerational equity), accountability (transparency, rule of law, responsiveness), participation
(citizenship, consensus orientation, civic engagement), and security (conflict resolution, human
security, environmental safety). In practice, the UGI embraces 16 indicators, which are based on
factual data provided by municipalities and local governments, and grouped into the first four
sub-indices (the security index was dropped for statistical reasons). This indicator can be useful
to test for “correlation between the quality of urban governance and urban poverty reduction, city
competitiveness and inclusiveness” [UN-Habitat 2003]. The UGI is planned to be refined
through global initiatives, like surveys of 120 cities conducted mid-2005 to obtain a statistically
valid global data base, and national efforts, to develop capacity for data collection. These
indicators reveal the factors explaining the differences in governance processes and quality
across regions, and therefore allow comparisons between cities in a country. They also promote
participation, accountability and efficiency by helping “municipalities improve their functioning,
engage more closely with the communities, and become more responsive and accountable” [UN-
Habitat 2005].

2-2: Conceptualizing Urban Governance
2-2-1: Dimensions of Governance
When conceptualizing governance, four dimensions can be distinguished according to Harpham
and Allison (HARPHAM & ALLISON 2000 : 116). Drawing on an existing framework of
governance (HARPHAM & BOATENG 1997) they identify a technical, a political, an
institutional as well as a cultural dimension. The technical dimension highlights the relationship
between economic and human development. Recognizing tremendous imbalances particularly in
cities of developing countries, this dimension addresses issues of service provision or the
allocation of resources. Thus urban decision makers are responsible to foster processes moving
towards a more evenly situation. The political dimension is closely linked to the technical one by
referring to the establishment of objectives as well as the exercise of leadership. On this note the
political dimension addresses the setting in which public administration and civil society interact.
Since in many cities of the developing world the public as well as the private sector partake in
the provision of services, boundaries between the respective fields do often overlap and
responsibilities are difficult to assign. Along with that come issues like corruption, allocation of
rights and duties between private and public authorities or unclear hierarchies. Hence the
institutional dimension addresses the need for a legal framework and effective mechanisms to
meet such issues. However, one has to notice that the technical, political and institutional
dimensions are not only closely related to each other but also strongly affiliated to the normative
concept of “good governance” generally promoted by international donor agencies. They incorporate principles such as equity, accountability, transparency and participation. In this respect the cultural dimension recognizes the importance of specific values, beliefs and norms existing in a (urban) society. Hence it is the sum of all stakeholders in urban governance deciding on what good governance is or rather in which setting the other dimensions take place.

2-3: The Notion of Urban Governance

When dealing with the concept of urban governance, it will be helpful to outline the general concept of governance before. Emerging in the 1990s, the conception expanded into the international development arena and the scholarly world ever since. While definitions and approaches to the concept of governance abound, according to McCarney a distinction can be made between three different definitional paths (McCarney 2003 : 33). The first one is primarily global and originates from the international donor community, led by the World Bank. Thus an early publication of the World Bank defined governance as “ [...] the manner in which power is exercised in the management of a country’s economic and social resources for development.” (World bank 1992 : 1). Here governance is state centric, with a focus on effective government, sound fiscal management as well as accountability in the public sector. Hence it is most affiliated to the concept of “good governance”, for which it is also often criticized as being donor driven and to expedite a neoliberal policy discourse. This definition of governance, strongly linked to the Bank’s structural adjustment policy was then widened by adding the element of a “[...] strong civil society participating in public affairs ” (World bank 1994 : VII). While still being state centric, the inclusion of a civil society indicates the distinction that has to be made between “governance” and “government”. This distinction is frequently being referred to by various authors when conceptualizing governance, oftentimes corresponding to a definition of McCarney, Halfani and Rodriguez: “Governance, as distinct from government, refers to the relationship between civil society and the state, between rulers and the ruled, the government and the governed. [...] It is this latter aspect – the relation of civil society to the state – that distinguishes the study of governance from other studies of government.”(McCarney, Halfani & Rodriguez 1995 : 95, 96) McCarney chalks the second definitional path for the most part to a group of U.S. political scientists. At this juncture governance is broadened by integrating ideas of democracy and legitimacy as well as to recognize alternative power concentrations instead of traditional government (McCarney 2003 : 36). Finally, the third definitional track relates to the concept of urban governance that evolved from the work of the GURI (Global Urban Research Initiative) starting in the early 1990s. Focusing on the local level, the GURI’s approach was to particularize the concept of governance in an urban context. Taking up the above-quoted definition of governance, the GURI developed an urban-governance framework including elements mostly considered to lie beyond the public-policy process. Thus illegal operators, informal-sector organizations and social movements were incorporated, recognizing that these elements are nevertheless contributory in the development of third world cities as well as having a significant influence on the urban landscape (McCarney 2003 : 37). In this respect urban governance can be related to the phenomena of heterarchy and informality. However, against the background of more complex stakeholder constellations, Patrick Le Galès argued to substitute the term “government of cities” for “urban governance”. Thus the latter would imply more diversity in the organization of services, a greater variety of actors and more flexibility (LE Gales 1995 : 60). In order to meet these changed basic conditions in terms of nomenclature as well, urban governance is presumed to be an appropriate notion. At this the United Nations Human Settlements Program me defines urban governance as: “[...] the sum of the many ways
individuals and institutions, public and private, plan and manage the common affairs of the city. It is a continuing process through which conflicting or diverse interests may be accommodated and cooperative action can be taken. It includes formal institutions as well as informal arrangements and the social capital of citizens.” (UN HABITAT 2002a : 14) This definition does not only distinguish between government and governance but also recognizes the variety of different stakeholders partaking in the urban governance process. Hence the term “government” refers to a political unit in order to implement policy making while the word “governance” specifies an overall responsibility for political and administrative functions. The figure below scrutinizes the stakeholder constellation of urban governance in more detail.

Fig.2-1: Actors in urban governance

As the figure suggests, the various actors, parties and interests involved can be further subdivided into the following groups **Table (2-1):**
I. Governmental
· central government
· municipal government
· development corporations or authorities
· central government agencies locally (e.g. district commissioners, police)
· traditional authorities (e.g. chiefs)
· state-owned public utilities

II. Businesses
· formal sector: international/national
· formal sector: local
· informal sector (distinctions are not clear-cut)

III. NGOs/CBOs/CSOs
· internationally connected NGOs
· formal civil society organizations (e.g. trade unions, churches and other religious organizations, political parties)
· local, community-based organizations

IV. Households/individuals
Governance is about collective action. Since households/individuals are objects and participators (consumers, voters) they are still included into the framework.

Table 2-1: Various actors, parties and interests involved in urban governance

In addition, these groups are determined by their contexts and the relationships prevailing among each other (DEVAS 1999 : 20, 21). While the contexts and constraints may comprise:
· The legal and regulatory environment
· Cultural traditions, allegiances, behavior, attitudes
· The extent of trust in and legitimacy of institutions (of government & civil society)
· Access to resources and
· Access to information,
The relationships prevailing among the stakeholders may be:
· Market relationships (like distortions and inequalities)
· Authority relationships (e.g. allocation, regulation, taxation, employment)
· Political relationships (informal and formal, including clientelism, patronage and vote buying....)
· Power relationships (e.g. influence, lobbying, violence, intimidation)
· Decision-making (formal and informal, including the rules of the game which govern those decision-making processes).

In the course of its Global Campaign on Urban Governance, UN Habitat promotes "good" urban governance, thus adding a value judgment to the concept. Being aware of that, the agency identifies various principles characterizing the very “good urban governance” which are interdependent and mutually reinforcing (UN-Habitat 2002a 19):
Fig. 2: Principles of good governance identified by UN HABITAT
Source: modified according to UN HABITAT, page 19.

2-4: Linking Urban Governance and Development:
2-4-1: Impacts of Global Shifts on Urban Governance:
While urban governance is usually discussed at the local level, it is considered to be influenced by three global processes in general. Although these shifts, namely globalization, decentralization and democratization, affect every city in an enormous manner, this holds particularly true for those of the developing world.

2-4-1-1: Globalization:
Since global competition and the ease of capital flows uncouple production and trade from the solely national context, cities face a variety of opportunities and challenges. Thus economic growth has often proved to be a mayor aspect of improved development since increased literacy, life expectancy or health statuses in most cases resulted from urban generated economic surpluses (Cohen 2001: 5). However, globalization can also imply increased urban vulnerability since cities feel impelled to become more flexible and to have a sense of business in order to sustain local business and inward investment (DEVAS 2004: 27). Against the background of that there is a widespread debate about globalization increasing social inequalities and spatial segregation in cities (Marcuse & Van Kempen 2000: 271; DEVAS 2004: 28). As national borders restrict labor, yet not capital flows, urban-centered migration is a phenomenon that can be identified primarily in developing countries. Hence, due to a huge presence of labor migrants on the one side and transnational companies on the other, cities often become a “contested terrain” (Sassan 2005: 84).
As cities compete for the attraction of global companies, trying to offer better infrastructure, easier regulatory regimes and lower taxes, the interests of global investors often have a higher status in urban decision making than the ones of the local population (DEVAS 2004: 28). The construction of industrial parks in southern cities is an example of external dominance of local spatial structures. Having implications on resources and infrastructure as well as on the access to
land, they create “new geographies of margins and new peripheries” (SASSEN 1994 : 193). Hence such processes can undermine urban governance, eroding the accountability of local decision makers.

2-4-1-2: Decentralization:
Following the centralization of governmental responsibilities during the post-independence era, decentralization processes proceeded throughout the developing world in the 1990s. Being driven by a variety of motives, those were mainly practical, economic and political considerations. However, the allocation of rights and duties to the local level meant a reconsideration of local or rather urban governance, since these processes partially resulted in a complete restructuring of urban and central power relations. For instance Brazil, India, South Africa and the Philippines endowed municipalities with new constitutional powers. This way urban administrations to some extent got the responsibility to manage the sectors of transport, health and education (Stren 2003 : 8). In the course of that not only did local decision makers gain more authorities (South Africa, Philippines) but also did it bring about the emergence of participatory elements (participatory budgeting in Brazil). While these transformations added up to more capacity of urban stakeholders on the one hand, they also implied more liabilities on the other. In addition, there is also evidence for decentralization processes deteriorating urban administrations authorities. Having passed an amendment addressing the power relations between urban and central agencies in India, the role and functions of municipalities have been undermined ever since (DEVAS 2004 : 32). Furthermore, decentralization can bring about the risk of transferring power from national to local elites, thus just shifting instead of solving problematic power relations. Evidence on that is, for instance, reported for India (World bank 2000a : 109).

2-4-1-3: Democratization:
In addition to the global shifts mentioned above, democratization is considered to be a third element of transition impairing urban governance. Although democratization and decentralization do not necessarily emerge parallel to each other, there still appears to be a connection between the two. Hence there is a broad consensus on the fact that decentralization fosters democratic processes, since it grants political autonomy to regional authorities. Democratic transitions as well as decentralization processes took place in developing countries particularly in the 1990s. Identifying an increase of democracies at a global scale, the political scientist Samuel Huntington thus referred to this circumstance as the “third wave” of democratization (Huntington 1993) Even though the term democratization varies widely in its meaning, it is most often associated with political pluralism and a certain degree of individual rights. As this implies transparent and fair electoral processes as well as a responsive and free civil society, democratization can be strongly linked to the political and institutional dimensions of urban governance mentioned above.

2-5: The Relationship Between Urban Governance and City Development Processes:
As aforementioned, the notion of governance is broader than government as it incorporates a lot more stakeholders than just governmental agencies (see figure 3). In addition, the term goes beyond management, focusing on the mechanisms and processes of administration, management and implementation. Thus governance is process oriented, highlighting the progress in “decision-making, decision taking and implementation” (UN Habitat 2004a : 15). Given that governance is a neutral concept, there is a possibility of actors, mechanisms, processes and institutions to create positive as well as negative outputs. Hence UN Habitat promotes “good” urban governance which is considered to foster city development processes such as urban poverty reduction, a
more equitable share of economic growth and the increase of local ownership in development projects, thus adding up to the concept of social inclusion. Recognizing that social exclusion is wider than poverty, often regarded as static income poverty, the quality of governance is considered to determine the ability of urban dwellers to participate in urban facilities and services. Based on that, UN HABITAT identifies five principles accounting for “good” urban governance, namely effectiveness, equity, accountability, participation and security (UN Habitat 2004a : 16), which find themselves in the figure below.

![Diagram of good governance principles](source.png)

Fig. 2-3: Elements of good governance

That very principles are then linked to Amartya Sen’s five measures of freedom (SEN 1999 : XII). Accordingly each principle can be utilized to assess these freedoms: effectiveness for economic facilities, equity for social opportunities, participation for political freedom, accountability for transparency guarantees and security for protective security. Thus economic opportunities could be measured by the effectiveness of production and exchange as perceived by the local population. Furthermore social facilities could be reflected by the degree of equity existing in a society as well as political freedom could be measured by the level of participation. While transparency guarantees are associated with accountability, protective security is suggested to be expressed by a security assessment.
These relationships are based on “the more inclusive idea of capability deprivation” as a development obstacle, instead of the “exclusive concentration on income poverty” (SEN 1999 : 20).

2-6: Major Challenges on Urban Governance
Given the rapid pace of urbanization in developing countries, urban decision makers face a variety of challenges which are outlined in the following. However, these cannot be examined separately since they all interact. Thus a city’s financial resources impact on its capacity to meet development goals just like its ability to manage diversity and security issues depends on its financial and capacity dimension.

2-6-1: Capacity:
The inability of cities in the south to keep pace with rapid urban growth first arose in the 1960s and 1970s. At that time slum and squatter settlements grew in number and extend throughout the developing world. Since central as well as municipal authorities appeared to be overextended by the situation, often trying to limit these processes by zoning, low income residents reacted either via building uncoordinated individual dwellings or arranging “land-invasions”. Recognizing the impact of such developments, many countries initiated centralized housing banks and construction agencies. While those were able to account for the construction of a considerable amount of housing units, they were incapable of keeping pace with immigration levels just as maintenance was poor (MONTGOMERY ET AL 2004 : 364). Hence international agencies, government departments or similar bodies like housing boards, employed two more collaborative approaches, namely the “sites and services projects” and the “squatter upgrading projects”. While the sites and services approach aimed at enabling low income citizens to build their homes on marginally serviced plots via assistance in form of training and loans, the second one regularized land tenure and improved services in slum settlements. However, in the course of time strategies shifted towards reforms in the governance of urban services including Public Private Partnerships (PPP) and cooperation's with NGOs. Given their rapid growth, cities of the south face severe problems regarding service provision. While the urban administration is often responsible for a variety of sectors such as waste, electricity, health, education and transport, there is often a lack of qualified professional staff to meet these responsibilities. In addition, for the most part urban fiscal resource bases and the level of service demand are not in line at all. Such conditions are common place in cities of the developing world since the devolution of duties and responsibilities does not always coincide with the authority to generate sufficient financial capital.

2-6-2: Financial Resources:
As aforementioned, the lack of capacity to meet service demands, is highly linked to an inadequate fiscal situation. Although there are several reasons for that, the devolution of responsibilities without sufficient financial authorities to the local level is a major one (UN Habitat 2001a : 152). While some authors point out that this process has begun to change, however this comes about at a very slow pace. A major factor for this disparity is that cities’ revenues are generally based on property taxes and service fees instead of more lucrative and collectible ones like income taxes. While generation of revenues in southern cities is yet difficult to undertake, most municipalities are dependent for up to one-third of their financial resources on other governmental levels (MONTGOMERY ET AL 2004 : 373). However, even these mandated revenues are not always reliable. Given enormous corruption, the financial dimension brings about tremendous challenges on urban governance.
While recognizing these hindrances, some countries started to implement laws ensuring that a certain amount of central state revenues is directed to municipalities, Bolivia’s “Ley de Participación Popular” being an example. This law guarantees a fiscal transfer of 20 per cent of all central government revenues to municipal governments.

As municipalities face the problem of generating revenues, “informal” mechanisms of budget generation can emerge. Thus there is evidence of Chinese local governments gaining “off-budget revenues”. Those are composed of donations by enterprises to specific public projects, profits from township-owned enterprises or incomes from the leasing of public land to enterprises. Although there is controversy on the legitimacy of such revenues, evidence shows that off budgets foster local participation and ownership in urban governance (GANG 1999: 234, 235). While there are other prominent examples for participative fiscal governance mechanisms (such as Participatory Budgeting in Brazil), such processes bear the risk of local elites bestriding decision making, often referred to as “elite capture” (DEVAS 2004: 30).

2-6-3: Diversity:
One of the major difficulties that cities in developing countries have to face is cultural and socioeconomic diversity. Against the background of polarization and segregation, this challenge has a social as well as a spatial dimension. Thus the lack of coherence arises in dual structures. Gated communities offering exclusive schools and private water services stand opposed to illegal settlements without drainage, scant electricity and high crime rates. Given such a fragmented socio-spatial urban structure, some authors recognize “the widespread retreat of the idea that networked services are ‘public’ services that should be available to all at standard tariffs” (GRAHAM & MARVIN 2001: 96). As such trends can be even reinforced by particularism and localism, collective action is hardly to become effective.

2-6-4: Security:
As crime rates are increasing in cities throughout the developing world, security has become a governance issue ever since. Hence the security dimension of city governance “implies that there are adequate mechanisms/process/systems for citizens’ security, health and environmental safety” and “signifies there are adequate conflict resolution mechanisms through the development and implementation of appropriate local policies on environment, health and security for the urban areas.” (UN HABITAT 2004a: 26). In this regard rapid urbanization is considered to exacerbate the ability of authorities to face security and safety demands due to three factors. First, the incidence of crime and violence is likely to be higher in larger cities since they concentrate victims, crime opportunities and markets for stolen items. Second, prison regime is assumed to be hampered by less expenditures on law enforcement per capita as well as a lower degree of community cooperation with the police. Finally larger cities are presumed to house a higher rate of crime-prone individuals and potential criminals (UN HABITAT 2007: 14).

Against this background the issue of security is highly relevant since it has an enormous impact on the social capital in both formal and informal urban institutions. Thus crime and insecurity are challenging the governability of social institutions as well as the cohesion of neighborhoods and communities.

2-6-5: Authority:
Since all dimensions of challenge mentioned above are interlinked, this applies to authority as well. As aforementioned, developing countries have undergone massive change in the course of democratization and decentralization processes. While these transitions brought about devolution of powers and authorities to the local level, they were accompanied by massive demographic
growth and geographical expansion. However, the urban growth, generally taking place at the fringes, is not necessarily in line with administrative borders. Thus there is evidence of Ahmadabad, an Indian city with an estimated population of over 5 million, being divided into 163 villages, towns and municipal councils besides various special purpose agencies being active. Consequently service provision is unclear or does not happen at all. In addition, central governments still hold major responsibilities instead of devolving them to local authorities. Thus housing, land, education or healthcare oftentimes remain in the hands of the central state or private agencies, constraining responsiveness of local authorities to the poor. Furthermore, particularly Asian cities show a tendency to assign public duties to a wide range of development agencies, public utility companies or slum clearance boards. Hence transparency and accountability are weak since these authorities are subject to competition, exacerbating maintenance and the operation of services (DEVAS 2004 : 97).

Finally, cities of the south are organized in different “models” of governance. Thus Abidjan, Ivory Coast, is built-on as a two-tier system with lower-level municipalities undertaking assigned local functions and a higher-level council covering the urban entity (MONTGOMERY ET AL 2004 : 405). In contrast, a variety of cities is organized in a one tier manner, either by a collaborative system of autonomous local governments or by a unitary city government. Given such a multiplicity of governmental organization along with a range of private agencies and civil society stakeholders, the allocation of rights and duties arises as a major challenge of urban development.

2-7: Urban Governance and Poverty Reduction:

There is a broad consensus among academics and practitioners on the significant role of governance for poverty alleviation at the local level. Recognizing poverty reduction as one of the major goals of the international development agenda, one has to explore the interface between urban governance and poverty. Thus a range of characteristics that are specifically faced by the urban poor can be identified (BAHAROGLU & KESSIDES 2002 :124):

- Commoditization (reliance on the cash economy)
- Overcrowded living conditions (slums, squatter settlements)
- Environmental degradation (density, exposure and location of marginal settlements)
- Social fragmentation, violence, insecurity (loss of social capital)

Such risks are enforced by corruption, inappropriate policies and inadequate legal frameworks, giving way to social exclusion. As aforementioned, these issues are governance-related, thus revealing the strong interrelationship between governance and poverty. It is in this context, that governance structures need to address urban poverty in a proper manner. Therefore it is important to explore how poverty is approached as well as regarded by major stakeholders. Do local authorities tend to ignore informal settlements? Does eviction take place? Are pro-poor policies implemented or do they only exist formally? Are there special pricing policies targeting the poor? These questions provide essential information about the governance situation in cities of developing countries.

Apart from local authorities’ attitude towards poverty, the legal status of poor people in cities of the south is of significant importance as well. Since southern cities oftentimes feature outdated legislation, local authorities are kept from setting about grievances in informal settlements. For instance, research showed that the Colombo Municipal Council (CMC) was prohibited to spend money on under-serviced settlements not paying property tax (Fernando Et Al 1999 : 67). There is also evidence of the Bangalore Slum Clearance Board being unable to provide water and
remove waste from unregistered slum areas. In addition, the municipal government is not authorized to regularize land tenure without the central government’s approval (Benjamin & Bhuvanisharil 1999 : 57). Such legal constrains exacerbate a proper governance approach to poverty to a vast extend. In addition to such crucial elements, the ability of the urban poor to participate in decision making and to access basic services (e.g. sanitation, health care) is of particular importance. As those issues have a huge impact on the potential of poor people to actively take part in urban life, they determine a city’s character – either inclusive or rather exclusive. This challenge is even reinforced by intensive competition for resources and political power between the poor and local or global elites. As cities like Bangalore are trying to integrate into the global economy, their internal structures change within the process. Thus Bangalore features two types of economies with different links to governmental structures. On the one hand there is a global corporate economy, endowed with connections to higher levels government. On the other hand there is a “localized” economy, only possessing connections to local government. Since almost all decision making on urban development is exercised through higher level authorities, the localized, often informal economy has only little influence on such issues. Since southern cities are oftentimes overextended in being responsive to the needs of their poor population, the very resort to informal activities and social networks in order to sustain their livelihood. However, such livelihood strategies are again highly dependent on the institutional context. If, for example, informal trading is exacerbated by legal constraints, this has a huge impact on the livelihood assets of the poor. In addition, one has to appreciate the fact that despite sound performance of cities in tackling poverty, the numbers of poor people may still rise. Given the fact that cities are neither isolated from their national economy nor from their hinterlands, macro and me so level pressures might undermine urban poverty policies (DEVAS 2000 : 2).

Finally, as cities in the developing world grow so rapidly, they often feature a wide gap between jurisdictions and their actual size. Hence the issue of boundaries becomes essential as most of the growth takes place at the fringes, where the need for services is greatest. Given that the poor communities live outside the legal responsibilities of municipal governments, their actual infrastructure situation is oftentimes unbearable. This adds up to another governance-challenge.
Fig. 2-4: Competing governance circuits in Bangalore

2-8: Conclusion:
Being part of donors shift the urban governance has to measure the outcome reforms carried out by the local to combat with urban relief requirements, hence the aggregated criteria for measuring UG is considered to be representative of global view in local spatial level.

The bottom-up service concept is the main concept driving the urban governance principle; hence the UG is mainly representing correlation between governors and their citizens rather than specifying type of government formation.

UG as donors interest does not contradict with any other national ambitious application and can its principles be useful in quantifying any other local programs on condition that UG must be part of the local governors interest, as it forming as a bottom line for fighting poverty.
Chapter-3

Theoretical Background of the Research
Chapter-3

Theoretical Background

3-1: Introduction:
This chapter is answering for the second part of the research question: How can the urban governance be measured?
As social and economic urban development is increasingly focusing on local government management, many cities in developing countries are not endowed with adequate data and information to meet these challenges. As appropriate data is not at hand, many elements of urban management, strategic and sector planning, private sector involvement et cetera cannot be properly administered. On the grounds of that, the relationship between policy initiatives and urban outcomes just as the connections between the performance of specific sub-sectors and broader social and economic development can hardly be comprehended (ASIAN DEVELOPMENT BANK 2001 : X). Hence urban indicators, as a means to monitor urban structures and processes, have gained popularity in recent years.

3-2: Urban indicators – Depicting “what is going on in cities”:
3-2-1: Indicators:
Being the Arabic correspondent for pointer, an indicator is effectively a small model by itself. Thus it incorporates components of cause and effect, of social norms that constitute progress as well as of policy actions and outcomes (Asian Development Bank 2001 : 16, 17). As UNDP states:
“An indicator is a device for providing specific information on the state or condition of something. An indicator is also a measure, gauge, barometer, index, mark, sign, signal, guide to, standard, touchstone, yardstick, benchmark, criterion and point of reference.”
(UNDP 2009b : iii) An indicator can best be distinguished from other data types by the fact, that it is formally linked with policy. Hence it establishes a connection between policy and statistical data. In addition, it provides evidence on the existence of a certain condition or that specific results have or have not been achieved. As indicators enable decision-makers to assess progress towards the achievement of intended outputs, outcomes, goals, and objectives they are an integral part of a results-based accountability system. The connections between data, statistics, and indicators are presented in the figure below. While raw data and information is typically added into statistics, these are often of limited use for policy since they demand further interpretation and analysis. Therefore indicators are created – normally single numbers (most frequently ratios), allowing for comparisons over time and space.
Moreover, they hold normative as well as policy implications. However, in contrast to statistics, indicators are often considered means to information and explanation of complex socio-economic phenomena as they provide the public with a bigger picture of the problem of particular interest.
Fig. 3-1: The Data Triangle

Indicators can resort to quantitative (raw data, comparable numbers) and qualitative (perceptions, values, binary) information. There is a broad consensus that indicators need to be feasible to collect and interpret. In addition they must be practical to implement and therefore should be the subject to periodic review so as to meet changing circumstances and information. There exists a general consensus that four types of indicators can be distinguished. They are highlighted in the following box:

However, three main types of indicators are usually identified in the field of urban policy (Asian Development Bank 2001: 17):

a) Performance indicators
Measuring facets of the performance of organizations, sectors or cities in general, aiming at identifying if aspired goals are met.
b) Needs indicators Measuring a need or deprivation, such as poverty indicators.
c) Issue-based indicators:
   Measuring specific matters or sectors such as crime and safety, unemployment, urban sprawl or air quality.
Against this background, an indicator might also be defined as “a summary and synthesized measure that indicates how well a system might be performing” (FLOWERS ET AL. 2005: 240).

3-2-2: Indexes:

Indexes constitute the top level of data organization, representing nexuses of indicators produced to identify the overall advance of the object of study. They are used whenever it is aimed at measuring broad themes or concepts in a single number. Such concepts are for example sustainability or good governance. Against the background of their multidimensionality, themes of that ilk are not directly measurable as indexes incorporate either various components which are represented by different indicators or sub-indexes. As such, an index provides a consistent framework for placing data from various sources into common units.

Using indexes as a framework for the collection of topic driven indicators has become an essential methodological approach in the field of (urban) development studies (ASIAN DEVELOPMENT BANK 2001: 21, 22). In doing so indexes are generally derived ad hoc or by utilizing statistical data reduction techniques such as factor analysis. However, urban indexes as well as indicators can be categorized by identifying six essential issues, providing information on the “environment in which indicators development takes place” (ASIAN DEVELOPMENT BANK 2001: 18). Therefore it has to be clarified who is the primary user, utilizing and commanding the indicator/index. In addition one has to be aware of the urban perspective. This means defining if the city is considered a political entity of interacting stakeholders, an entity aiming to meet development goals, a physical system of operating stakeholders, a set of units and processes aiming at best performance or a system of control and accountability. Furthermore the principal use and rationale of the indicator/index has to be identified. Moreover one needs to find out about, if the indicators are to comprise and compare development progress between different stakeholders or if they are used for particular internal organizational processes (political and organizational context). Another elementary issue is the spatial level or rather scope. Hence it has to be specified at what level indicators and indexes are applied. The different levels of indicator applications is shown in figure 6.
Finally it has to be clarified who is responsible for the issuing of indicators since they can be issued by expert groups as well as through a consultative process involving stakeholders. In this regard it is also important to specify if the indicators/indexes are developed via a top-down or a bottom-up process. As “urban and regional indicator projects aim to generate synergistic utility out of measures of urban quality and progress, trying to transform assessment measures into strategic levers for system change” (HOLDEN 2006:170), probably one of the most important organizations dealing with urban indicators is the Global Urban Observatory (GUO) of UN HABITAT.

Yet using indicators in development policy and cooperation has emerged as a feasible way of measuring progress. Thus UNDP has published a range of human development indicators in its “Human Development Reports” (1993-96) just as the World Bank has published the “Social Indicators of Development” report (World Bank 1993). In addition, the Human Development Report introduced by UNDP in 1990 is in all likelihood the best known statistical measure of development. However, the urban indicator movement began with the emergence of the joint UN HABITAT/World Bank Housing Indicators Programmer. The program's success gave way to the development of a set of urban indicators designed to capture requisite information on cities as well as to monitor the urban performance in respect to desired policy targets. Moreover, as a result of the Habitat II conference, all of UN HABITAT’s partner groups, comprising local authorities and communities were requested to regularly monitor and evaluate their own
performance in the implementation of the Habitat Agenda through comparable human settlements indicators (FLOOD 1997a: 1639). In recent years urban indicators oftentimes appear in terms of sustainability indicators. Here, sustainable urban development means an integrative dealing with ecological, economic, social, and cultural aspects of urban development in a long-term perspective. As many cities try to implement sustainable urban development on the local level, such an attempt requires the cooperation of a variety of authorities, stakeholders and social groups on different political levels. However, in order to figure out to what extent actual urban development processes comply with envisaged sustainability, adequate assessment procedures are essential (WEILAND 2006: 241). However, since the United Nations Conference on Environment and Development in 1992, a variety of sustainability indicator approaches have been designed with highly aggregated indexes existing beside indicator sets with many single indicators. In doing so, to some extend a few complex key indicators are combined with a large number of simple indicators. The Urban Indicators Programmer (UIP) of UN HABITAT shall support both the implementation of Agenda 21 (the UN program on sustainable development enacted by 172 states) and the Habitat Agenda. As sustainable urban development requires strategic long-term goals and objectives acceptable for the majority of the urban population, that very goals and objectives have to be assessed and controlled. Such a monitoring via urban indicators is shown in figure 7.

Based upon information on local conditions, the city community can develop guidelines, objectives and strategies for urban development. That very strategies in turn can foster the
implementation of objectives just as preparing the enforcement of certain measures. At this, regular analysis and monitoring of city development by means of urban indicators is a requisite precondition for the evaluation, to what extent actual city development processes are in line with desired development outcomes. Based on the final assessment, new guidelines can be designed as well as strategies be redefined (WEILAND 2006 : 247). Recognizing that indicators are a feasible way of measuring and monitoring urban development and performance, there is a variety of reasons for applying them. Given the complex constellations in municipal governments, it is essential that public authorities inform the city population about urban governance processes, as can be done via indicators (MINISTRY OF MUNICIPAL AFFAIRS AND HOUSING ONTARIO 2007 : 5). Moreover, indicators and indexes have become an instrument for monitoring the outcomes of policy implementation in urban planning (GANSER 2008 : 111). In addition, measuring municipal performance and cash flows, helps to detect strengths and weaknesses in urban management processes of developing countries.

In the following, two indexes highlighting urban governance and urban development shall be introduced: The Urban Governance Index (UGI) and the City Development Index (CDI). As both indexes claim to identify what constitutes the respective concept they reflect, a systematic analysis of that very concepts shall be conducted. While the CDI is a broad policy-based indicator system looking at the health of cities or sectors, it covers areas beyond the realm of a single management structure. Thus the index is intended to foster and inform a dialogue between different parties involved in urban development. In contrast the UGI is aimed at generating a governance profile of the respective city. Here the focus is on monitoring results of capacity building efforts, just as to establish an objective set of data to feed the review of urban governance strategies and other development policies. As such the index intends to provide an objective account on achievements of local elected leaders.

3-3: The Urban Governance Index:
In 1999 UN HABITAT launched the Global Campaign on Urban Governance in order to support the implementation of the Habitat Agenda goal of “sustainable human settlements development in an urbanizing world.” Against this background, the campaigns goal is to contribute to the eradication of poverty by increasing the capacity of local governments and other key stakeholders to improve their urban governance quality. Here the campaign theme is “inclusiveness”, promoting cities “where everyone, regardless of wealth, gender, age, race or religion, is enabled to participate productively and positively in the opportunities cities have to offer” (UN HABITAT 2002a : 5). Thus inclusive decision-making processes are an essential means to achieve this goal. The campaign is based on UN HABITAT’s assumption that the quality of urban governance is the single most important factor for the eradication of poverty and for prosperous cities. In this context, the Urban Governance Index represents one of the campaign’s “Flagship Products” (UN HABITAT 2002a : 6). However, the index is supposed to be an advocacy and capacity-building tool to assist cities and countries in monitoring their quality of urban governance.

As it is envisaged to be a measure of good governance and inclusiveness in cities, the UGI has been field tested in 24 cities across the world. At this, the index-structure reflects four core principles of good urban governance promoted by the campaign as the overall organizing framework for the index: effectiveness, equity, participation and accountability. Furthermore an agreement between UN HABITAT and UNDP’s Oslo Governance Centre arranges for jointly exploring the integration of the Governance Centre’s national governance indicators and UN HABITAT’s locally orientated index in three pilot countries.
Most recently the index has been developed for Ulaanbaatar, Mongolia in 2006. This will be part of the case study which is covered later on in this study.

3-3-1: Measuring urban governance:
Ever since the Paris Declaration on Aid Effectiveness in 2005 there is a broad consensus on development cooperation to be goal-oriented. Since the same goes for the role of governance in achieving the Millennium Development Goals, measuring governance has come to the forefront of the international development debate. As international donor agencies have also applied pressure towards reforms in urban governance, the need to monitor the implementation of such changes in urban management has emerged. For that reason a large variety of governance related indexes and indicators has been produced.

However, only few of these instruments focus on the urban dimension of governance measurement. Yet one of the main differences between national and local/urban governance assessments is the greater proximity to real-world issues, as national governance commonly deals with systemic policies while the local level is “in a daily and intensive interaction with the citizens” (UNDP 2009a : 7). A popular example of governance-focused development research at the national level was undertaken by the World Bank (KAUFMANN, KRAAY & ZOIDO-LOBATON : 1999). The study reveals a positive relationship between indicators of good governance and development outcomes such as per capita income, infant mortality and adult
literacy. Those connections have been recently verified by a follow-up study (KAUFMANN, KRAAY & ZOIDO-LOBATON : 2008). While these findings apply to the national level, it is argued that they are valid at the local or rather city level as well. Hence, against the background of massive urbanization, the notion of urban governance has come to the fore. However, as the connection between city governance and urban development is assumed, it is essential to measure that very local governance.

Yet governance indicators are often holistic and aggregate or focus on ranking, while not necessarily revealing variations between diverse contexts, spatial levels or aspects of governance (NARANG 2005 : 2). In addition, their scope can be narrowed, focusing on only one aspect of governance such as Transparency International’s (TI) Corruption Perception Index (CPI). Besides, this index does only highlight perceived instead of actual corruption.

As the research into urban governance and city performance is limited, due to shortcomings in data collection and availability, one study worth mentioning is the World Bank’s database on globalization, city governance and city performance (KAUFMANN, LÉAUTIER & MASTRUZZI 2004). The study covers 412 cities worldwide, based on 35 variables and indicators of already existing databases (for instance the GUID II of UN HABITAT). It aims at revealing the impact of globalization on sound urban governance as well as if globalization and good urban governance influence city performance. In doing so, the analysis suggests that governance and globalization are interconnected and impact positively on city performance. At this the findings result from econometric testing. Hence the authors state that “improving governance at the city level allows cities to translate global opportunity into local value for their citizens” (KAUFMANN, LÉAUTIER & MASTRUZZI 2004 : 38). In the process urban governance is measured by a city’s provision of services to its citizens and the “functioning” of its public sector. Thus some indicators among others are access to water, sewerage and electricity as well as bribery in utility, trust in politicians and the quality of the postal system (KAUFMANN, LÉAUTIER & MASTRUZZI 2004 : 15). However, these city governance indicators are geared towards the positive connection between urban governance and the “performance” of global cities. Yet figure 9 suggests, that access to services like sewerage and the quality of infrastructure are better, if there is control of corruption plus bribery and state capture (illegal payments made by companies) being low.
However, when measuring governance via indicator-based assessments, four challenges come to the fore, namely concept definition, measure choice, sample choice and indicator evaluation (STEWARD 2006 : 197). Hence it has to be agreed on which elements constitute good urban governance first, recognizing the normative nature of “good”. Furthermore it has to be resolved how the various aspects of city governance can be measured. This implies, for instance, to decide which indicators quantify the issue of participation. Regarding the sample choice there are two risks when measuring city governance. First, a horizontal sample challenge (risk of administrative boundaries to mask sub-community distributions; e.g. average city income per capita versus per capita income in different districts). Secondly, a vertical sample challenge as local decisions often dependent on higher levels of government and the interaction of various stakeholders.

Finally, the evaluation of selected indicators is an important factor. This is closely linked to the first parameter and again of a highly normative nature.

In addition to these aspects, the type of indicators used for urban governance measurement are crucial. At this there is an emphasis on process- and performance related indicators, along with the traditional outcome- and impact focused ones. As governance comprises the “mechanisms, processes and institutions, through which citizens and groups articulate their interests, exercise their legal rights, meet their obligations and mediate their differences” (UN HABITAT 2004a : 18), the focus in measurement is on how decisions are made and the complex relationships determining them. However, the selection of indicators is always defined by the objectives of the monitoring system and the policy and program objectives to be achieved. Hence a connection between indicators and program/policy objectives can be established.
While there exists a variety of indicator initiatives, two main approaches have been outstanding in the past. First, the ‘systems approach’ primarily developed by the OECD, that was most notably used for environmental reporting in the course of Agenda 21. Secondly, the ‘policy based approach’, that resulted from the social indicators movement of the late 1960’s. Originating from an econometric perspective, it was modified by the World Bank as well as UN HABITAT in the following. However, measuring urban governance also brings about methodological problems. Thus a disparity between “de facto” and “de jure” situations might exist. As such, de facto refers to the processes/conditions in practice but not necessarily ordained by law, while de jure implies that these very conditions might be officially fixed by law without essentially being in practice. Hence anti-corruption units may focus on eliminating political opponents instead of tackling corruption. In the same way specialized trained staff may be transferred to assignments where the training is irrelevant in order to hide low government effectiveness (WESCOTT 2000 : 6). Yet each aspect of urban governance can be measured in different ways and for different purposes. Thus there are, for instance, numerous ways to measure corruption (consultation of the public or of experts, perceived or experienced corruption). However, there are more alternatives to measure corruption other than that mentioned (WESCOTT 2000 : 9). As aforementioned, urban governance is assumed to have a direct impact on development targets such as poverty reduction or service provision. Hence indicators can be a meaningful tool for capacity-building where local governance structures are weak. Yet there needs to be a balance between universality and contextualization. While a universal approach to governance indicators would exacerbate measuring such a variable concept as the quality of governance, their adjustment to a very specific institutional environment (national or local) would reduce the comparability of data. Hence the development of `core
indicators’ (relevant across different countries and contexts) and ‘satellite indicators’ (specifically suited to a particular context) is helpful (NARANG 2005: 3).

As urban governance is most notably based on the principles of participation, accountability and efficiency, it is essential to recognize their different policy and capacity implications at the local level compared to the national level. Thus urban or local governments are the primary providers of basic services such as water supply, sanitation, sewerage, waste management, health, education and sometimes housing facilities. So the quality of governance depends on how the very authorities engage their communities in decision making, build partnerships with stakeholders and foster responsiveness and accountability to their citizens. Furthermore they have to assure access of the poor and marginalized groups to services and to decision-making processes (NARANG 2005: 4).

However, these issues are difficult to measure and disaggregated analysis turns out to be very complex. Besides, existing indicator sets are often applied as ranking instruments, not easily qualifying for being linked to policy reform and capacity building needs. For that reason UN HABITAT developed the Urban Governance Index in order to meet the challenges mentioned above. Being the second main attempt in measuring urban governance besides the World Bank research, the UGI is an advocacy and capacity building tool to assist cities in monitoring the quality of their inclusiveness as well as their governance situation.

3.3.2 The index framework

As aforementioned, UN HABITAT believes well functioning urban governance to be a major determinant of sound city development, thus contributing to the eradication of poverty. At this the UGI has been developed with a two-fold purpose aiming at two different spatial levels. At the global level it is to demonstrate the significance of good urban governance in achieving extensive development objectives. This implies for instance achieving the Millennium Development Goals, as the United Nations System has assigned UN HABITAT the responsibility to assist the UN members states in monitoring and gradually attaining the “Cities without Slums” Target 11 (to have achieved a significant improvement in the lives of at least 100 millions slum dwellers by 2020) (UN HABITAT 2004b: 3). In addition the UGI shall foster the implementation of the Habitat Agenda.

While these goals and targets are of a global scale, the UGI has also a local level approach. Here, the index is presumed to mobilize local action for improving the quality of urban governance.

In order to review the progress in developing the UGI, an expert meeting was held at the World Urban Forum in 2002. In the course of this meeting it was decided that alongside with UN HABITAT also UNDP, the World Bank and Transparency International should be involved in developing the index. Subsequently a two-staged field test was conducted in order to select feasible indicators and assess the credibility of the UGI as a tool (UN HABITAT 2004a: 2). While the first stage comprised 12, the second test covered 24 large and medium sized cities from different regions (Douala, Yaounde, Louga, Dakar, Ibadan, Enugu, Amman, Tanta, Ismailia, Naga City, Colombo, Moratuwa, Negombo, Matale, Kandy, Kotte, Pristina, Montreal, Vancouver, Montevideo, Quito, Santo Andre, Bayamo, Guadalajara City). However, the expert meeting identified a list of 66 indicators based on the central issue of inclusiveness. As it was not feasible to utilize all of the 66 indicators for the field test though, a structured evaluation exercise was to reduce indicators. Here, indicators were tested to meet the criteria of consistency with the Urban Governance
Campaign goal, ease of collection, credibility, comparability across countries and their media appeal. As a result, 26 indicators were short-listed to be field-tested.

As mentioned above, the notion of urban governance is a complex concept. Hence the main objective of the UGI is to synthesize the variety of complex concepts by a “simplified summary measure” (UN HABITAT 2004a : 16). In doing so, the index is to measure the composition of governance related mechanisms, institutions as well as processes.

However, the UGI is based on seven principles of good governance identified by a UN Inter-Agency meeting in June 2001, namely sustainability, subsidiarity, equity, efficiency, transparency/accountability, civic engagement and security. As a result the following principles form the framework for the Urban Governance Index:

This approach does not necessarily have to be linked to the functions of local government. However, a focus is on the quality of relationships and processes between local key stakeholders. In doing so, the applied approach resembles the World Bank’s Sustainable Cities framework. Here, the four domains making up the framework are livability, competitiveness, good governance/management and bank ability (WORLD BANK 2000b : 46). In terms of data the UGI employs a quantitative approach whereas data is collected at the city level. Yet the core set of quantitative data can be supplemented with qualitative surveys.

Fig. 3-7: The Urban Governance Index Framework
Source: UN HABITAT 2004a, page 1.

However, the UGI features some methodological loopholes. Thus the index utilizes proxy indicators as many governance issues are difficult to measure. Here, there is a risk of measurement errors and biased estimates. Another methodological weakness of the index
framework is “unconfirmed causality”. This term means that the existence of a certain measure does not necessarily result in an effective governance process. In addition, as the UGI is on process indicators, the index focuses primarily on binary data. Yet with binary data it is hard to deduce the most relevant indicators and determine loadings to the variables since statistical techniques such as Principle Component Analysis are more credible when single numbers indicators are analyzed (UN HABITAT 2004a : 19). A principal components analysis (PCA) of a set of variables extracts statistically independent linear combinations of the underlying variables which are most significant and explain the most variance in the data. As the UGI is a comparative index it aggregates indicators into sub-indexes in order to simplify a variety of findings. Hence enough indicators need to be selected to cover all relevant issues of urban governance while at the same time too many indicators pose the risk of diluting the impact of changes to any individual indicator.

Given the two common approaches to designing index frameworks just as indicator systems, both a top-down as well as a bottom-up approach are employed in the UGI (UN HABITAT 2004a : 19,10). While top-down foresees the design of a conceptual framework just as the identification of indicators that fit, it poses the risk of oversimplifying reality. In addition, it might identify irrelevant or impractical indicators as well as it might be difficult to sustain. Moreover, such an approach runs the risk of finding no acceptance locally. On the other hand, a bottom-up approach focuses on participation of local stakeholders thus guaranteeing local ownership in order to make sure that collected data is locally relevant and used in decision-making. Both approaches have been utilized in the index framework since a first stage of developing the index focused on a desk study, identifying indicators. Subsequently a second stage comprised two rounds of field test for selected indicators at which participatory collection and evaluation were imperative (UN Habitat 2004a : 20). As aforementioned, the selection of indicators for the UGI is based on the principles framework comprising five principles of good urban governance. However, the methodology for arriving at the final index is shown below. Initially the principles of effectiveness, equity, accountability, participation and security provide the basis for the proposal of indicators. Against the background of their ability to meet the five criteria mentioned above, a number of indicators have been selected. As already mentioned, the number of indicators to be selected is essential. Subsequently a field test gave a first impression of the index. Hence a second field test was undertaken to test the modified set of indicators just as the sub-indexes, after feedback from the participating cities was received. In the following, methodological issues like assigning loadings et cetera were handled and a UGI-formula was designed.
3.3.3 UGI-field test

Two stages of field tests were undertaken in the course of the index-development. Stage one was conducted between March and May 2003, stage two between January and March 2004. As the tests were to evaluate the indicators and sub-indexes, the resulting feedback provided the basis for the second stage. At this, it was essential to refine the data in order to better evaluate the UGI. However, a modified set of indicators was collected in the second stage based on recommendations. While stage one gave first impressions on specific indicators and the overall index-design, the second stage allowed for a final draft set of indicators making up the UGI.
In terms of sample size circa 30 cities were selected for the field test whereupon 24 actually participated. While all of them were UN HABITAT partner cities, it was aspired to account for a variety in the city sample “taking into account geography, socio-economic status, political system and population size” (UN HABITAT 2004a : 29). However, it has to be noted that sample cities feature a significant variation in their size and population. Thus Matale, Sri Lanka accounts for a population of approximately 37,000 inhabitants while Guadalajara City, Mexico has a population of circa 1,600,000 (core-city) and approximately four million (metropolitan region). In addition, one has to be aware of the fact that the collected population data does not differentiate between urban agglomeration, metropolitan and municipal areas. While Latin America and the Caribbean region featured the most representative sample with all five cities being located in different countries, Asia and the Pacific accounted for the largest sample. Yet except for Naga City, Philippines all Asian cities were from Sri Lanka. Besides, Africa and the Arab region were represented by nine cities while Europe only featured Pristina, Kosovo.

The total collection level of data sets answered to data sets presented was 93 percent and 89 percent for the first and the second stage respectively. Here, the lowest collection level became apparent for indicators that applied to the sub-indexes of effectiveness, equity and participation. However, due to their binary nature (Yes/No), most of the indicators referring to security, accountability and equity showed a high collection level.

![Fig. 3-9: UGI field test data collection level by indexes in percent](source: UN HABITAT 2004a, page 31.)

**3-3-4: Detailed analysis of the UGI**

In the following each sub-index of the UGI together with its respective indicators will be scrutinized. However, as the Security sub-index was not recommended to be included in the overall-index, it will just be covered briefly at this point. Thus the Expert Group Meeting on the Urban Governance Index in 2002 identified crime, natural disasters, health, environment, security of tenure and conflict resolution as dimensions of security. Yet, as there was disagreement on the inclusion of a security dimension in the index, the following definition was recommended:

“Security of governance implies that there are adequate mechanisms/process/systems for citizens’ security, health and environmental safety. It also signifies there are adequate conflict
resolution mechanisms through the development and implementation of appropriate local policies on environment, health and security for the urban areas.”

(UN HABITAT 2004a : 26)

At this, it was proposed to measure the level of security in different parts of the city via local level perception surveys. Such an approach was considered meaningful as even a high provision of inputs like the number of policemen or their capacity does not necessarily result in a higher level of security. However, the first stage of the field-test indicated a weak representation in addressing the security principle. Thus the identification of indicators on the processes and institutions addressing security turned out to be very difficult. Hence it was proposed to exclude most of the indicators and review other potential indicators for the second stage. Yet the second stage provided only mild improvement in the overall score of the sub-index as the majority of indicators received a low ranking. Here only one indicator (“Communities in conflict resolution”) received high ranking as it addressed the four factors mentioned in the evaluation section alone.

However, the respective sub-indexes and indicators will be scrutinized in the following. At this the definition for each sub-index accounts for the selection of indicators, as it presents its linkage to policy objectives just as its significance to the principle of governance. Moreover, some indicators refer to the Global Urban Indicators Database (GUID).

3.3.4-1: Effectiveness sub-index and indicators:

Effectiveness of the local government just as the quality and the cost of services it provides determine the functioning of the city to a large extent. At this institutional efficiency comprises subsidiary of authority, sufficient resources, predictability of processes and institutions, autonomy to meet responsibilities as well as the management of revenue resources. In this respect effectiveness highlights the mechanisms (policies, standards, survey instruments, quality of administration) in place that ensure an effective delivery of public services just as responsiveness to the urban society. On this account the Expert Group Meeting on the UGI recommended to following definition of effectiveness: “Effectiveness of governance measures the existing mechanisms and the sociopolitical environment for institutional efficiency (through subsidiary and effective predictability) in financial management and planning, delivery of services and response to civil society concerns.”

(UN HABITAT 2004a : 23)

**Indicator 1: Local government revenue (LGR) per capita**

This indicator measures the financial resources available to a local government via total income per person. In doing so, the indicator is defined as the total local government revenue annually collected (both capital and recurrent for the metropolitan area, in US dollars) per capita in a three year average. However, it has to be specified if the LGR refers to the municipal area or the metropolitan region. The indicator can be derived from various sources such as taxes, user charges, transfers from higher levels of government or loans. At this, taxes include municipal rates and levies or local taxes on property and business. User charges involve local government charges for services such as water or waste just as building permits. Transfers imply formula driven payments such as repatriation or income tax while other income sources cover revenues such as donations or aid (MEHTA 2004 : 1). The indicator is normalized using the maximum and minimum known values. Here the importance of local governments being able to collect revenues has to be noted. Thus “in many countries, revenue has not kept pace with expenditure
requirements” (MONTGOMERY ET AL. 2004 : 373) since there is a gap between cities’ responsibilities and authorities.

**Indicator 2: Ratio of actual recurrent and capital budget**
Indicator 2 measures the estimated balance between the different budget sources (recurrent and capital). This balance presents an indication on the viability, independence and control over resources of the local government and is thusly a predictor of its financial sustainability as well as effectiveness. Here recurrent budget means the income derived on a regular basis such as taxes and user charges while capital budget refers to fixed income derived after allocation of funds from internal or external sources. However, as some cities in the South have irregular approvals of sources of revenue this indicator shows some limitations in terms of data collection.

**Indicator 3: Local government revenue transfers**
The extent to which local government is dependent on the revenue transfers from higher levels of government provides information on the viability and independence over financial resources (see figure 15). The indicator is of particular relevance as “most local authorities (in developing countries are) dependent for up to one-third of their revenue on other levels of government” (MONTGOMERY ET AL. 2004 : 373). At this it is assumed that the lesser the extent of revenue transfers, the more discrete and independent the local government is likely to be over financial resources.

The indicator is measured by dividing the income originating from higher levels of government by the total amount of local government revenues (transfers and nontransfers). Subsequently the result is multiplied by 100 to arrive at a percentage (MEHTA 2004 : 3). Scoring on the percentage of transfers is: 0-25% = 1.0 ; 25-50% = 0.75 ; 50-75% = 0.50 and 75-100% = 0.25
**Indicator 4: Ratio of mandated to actual tax collection**

By measuring the rate of actual to mandated tax collection the indicator targets the efficiency in the tax collection system. In addition it is, to a certain extent, a proxy to the “willingness of citizens to pay taxes”. Thus it is “perceived as an important indicator to widen the principle of effectiveness and reduce its local government bias” (UN Habitat 2004a: 34).

**Indicator 5: Predictability of transfers in local government budget**

Indicator 5 addresses the quality of relevant institutions by measuring whether procedures exist that enable the local government to know the funds to be transferred in advance (intergovernmental fiscal transfers). In doing so, it provides information about the level of commitment, confidence and regular support by the higher level of government in local administration. This is an important issue in urban governance as it can foster effective planning and implementation of projects. Thus the indicator aims at detecting if the local authority knows well in advance (2-3 years) about the amount of budget and level of consistency/regularity in receiving transfers from higher levels of government. However, in the course of the UGI fieldtest some cities reported shortcomings regarding the transfer mechanisms. Thus in some cases even the central government was not aware of their own budgets in advance while in other cases clear procedures of transferring funds were present indeed but funds were still not transferred (UN HABITAT 2004a: 35). Indicators 1-5 are important for displaying a city’s financial autonomy. This of particular importance since a lack of capacity to meet service demands is highly linked to an inadequate financial situation.

**Indicator 6: Published performance delivery standards (PPDS)**

The indicator addresses the institutional quality of cities by measuring the existence of mechanisms required for efficient delivery of various basic services. That way published standards demand the local government to be efficient in the delivery of services just as accountable to the targets the local government has set for itself. In order to make up the indicator the following questions have to be addressed:

- Is there currently a formal publication of performance standards (PPS) for key services delivered by the local authority? (Yes/No)
- If yes, what is the number of key services for which the PPS is present (S)?
- What is the total number of key services for which PPDS should be present (T)?

Published performance delivery standards (PPDS) are then calculated by multiplying PPS with the quotient of S and T. At this, key services comprise water supply, electricity, sanitation, solid waste management, health and education services. Notwithstanding the indicator’s binary nature, the formula allows for intermediate scores. Thus its credibility as well as possibilities to monitor progress over time are enhanced.

**Indicator 7: Customer Satisfaction Survey**

The customer satisfaction survey provides information on the willingness of the local administration to receive critical feedback from its citizens. In addition it indicates, if the local government is willing to modify existing systems, which fosters responsiveness to citizens needs...
and thusly effective urban governance. Moreover, by asking for feedback from its citizens the local administration is holding itself accountable (MEHTA 2004:5).

**Indicator 8: Existence of a Vision Statement**

Indicator 8 addresses the mechanisms in place for an effective articulation of a city’s goal. Thus the existence of a vision statement demonstrates commitment of the local authority towards the welfare of the urban population. If such a vision statement is articulated in a participatory process it increases accountability as well as ownership. At this, in order to arrive at the indicator result, the following questions need to be addressed:

- Is there a vision statement (VS) developed for the cities’ future by the local government? (Yes/no)
- If Yes, has the vision statement been drafted through a participatory process (PP) involving local government, civil society and the private sector? (Yes/No)

$$\text{Vision statement (VSE)} = 0.5 \times (\text{VS} + \text{PP})$$

However, the first stage of the UGI field-test displayed limitations of the indicator in addressing the criteria of credibility since it failed to measure progress in realizing the very vision statement. Yet, as the indicator measures the participation level, it provides intermediate scores to the binary variable thus improving its significance.

**3-3-4-2: Equity Sub-Index and Indicators**

Equity in urban governance means that all sections of the urban society have access to basic services. Recognizing UN HABITAT’s goal of achieving “inclusive cities”, the following definition of equity in urban governance is proposed:

“Equity implies inclusiveness with unbiased access (be it for economically weaker sections, women, children or elderly, religious or ethnic minorities or the physically disabled) to basic necessities (nutrition, education, employment and livelihood, health care, shelter, safe drinking water, sanitation and others) of urban life, with institutional priorities focusing on pro-poor policies and an established mechanism for responding to the basic services.”

(UN HABITAT 2004a : 23) As equity of governance is envisaged to focus on the policies, process, tools or mechanisms present for access to basic services, equity in decision making is another important aspect of the sub-index. In addition, equity implies the sustainable management of urban areas as cities need to balance their social, economic and environmental needs.

**Indicator 9 : Citizens’ Charter: right of Access to basic Services**

This indicator addresses the institutional accountability of a city towards its citizens in providing equitable access to services. Thus it is queried if a signed, published statement (charter) from the local authority exists which acknowledges citizens’ right of access to basic services. At this the Citizen Charter may have been drafted by the local authority or representative people’s associations (MEHTA 2004 : 5). In order to measure the indicator, the following questions have to be answered:

- Is there a signed, published statement (charter) from the local authority which acknowledges citizens’ right of access to basic services (CC)? (Yes/No)
• If yes, what is the number of key services for which the CC is present (S)?
• What is the total number of key services for which CC should be present (T)?

Citizen charter for basic services (CCS) is then calculated using the following formula:

\[(CCS) = CC \times \frac{S}{T}\]

Again, key services include water supply, electricity, sanitation, solid waste management, health and education. In addition, it is queried what medium is utilized in order to publicize the charter (newspaper, radio, Internet etc.). While testing the indicator in the first stage, many cities reported mechanisms similar to the citizen charter. However, due to different names these were not included just as some cities although featured such mechanisms while these were anchored at the state level but applied locally (UN HABITAT 2004a : 37).

Hence the indicator was modified in the second stage to respond to these shortcomings.

**Indicator 10 & 11: Proportion of Women Councilors & of Women in Key Positions**

While indicator 10 addresses gender equity via representation of women involved in local government decision-making, indicator 11 aims at detecting the actual influence of women on local decision-making. As indicator 10 expresses the number of women councilors, both elected and nominated (in the last election) as a percentage of the total number of councilors in the local authority, the following equation is used to construct the indicator:

\[X = \frac{(W_{e} + W_{n}) \times 100}{T}\]

Moreover, the percentage of women councilors in key positions can be addressed via:

\[Y = \frac{W_{k} \times 100}{T}\]

with X for the percentage of women councilors, We for the number of women councilors elected, Wn for the number of women councilors nominated, T for the total number of councilors in the last elections, Wk for the number of women in key positions (Mayor, Deputy Mayor etc.) and Y for the percentage of women in key positions. As additional information improves the credibility of both indicators, the date of the most recent election held just as the frequency of local elections are queried.

**Indicator 12: Pro-poor Pricing Policies for Water**

Water is definitely a governance issue since it affects the whole urban population with poorer sections often facing problems in access to this basic service. Hence the term “water governance” can be utilized to refer to “[...] the range of political, social, economic and administrative systems in place to develop and manage water resources and the delivery of water services at different levels of society” (ROGERS & HALL 2003 : 7). In this context “pro-poor water governance” describes the course of action of such systems to provide water for the poor sections of urban dwellers (Connors 2005 : 202). Pro-poor policies signify the local governments commitment and measures for equitable distribution of basic services with water being a key service. In doing so the indicator emphasizes on whether there is a policy that takes into account the needs of the “water poor” (Allen Et Al. 2006). This policy would in turn result in lower water-prices for urban poor in comparison to other urban dwellers or business/industrial consumption. Moreover, the proportion of households with access to water provides a proxy to its affordability just as accessibility. At this the pro-poor policy can be evaluated in terms of its content and the actions undertaken through the policy (MEHTA 2004 : 7):

• Is there a pro-poor pricing policy for water? (Yes/No)
- Percentage of households with access to water supply (within 200m)
- Median price of water (supplied by the local authority):
  a) Informal settlements (poor households) (Wi)
  b) Other residents (Wr)
  c) Difference in the median water price = Wr-Wi

However, in the absence of data on water prices, it is queried if the water price in informal settlements is cheaper or identical to the one in other residential areas. In addition the indicator aims at detecting the city’s water supply delivery mechanism and/or the policy’s key features such as subsidies or cross-subsidies. Regarding this indicator the average price of water is defined as the cost per hundred liters of water in US dollars at the time of year when water is most expensive. Yet the first stage of the field-test revealed limitations in the indicator’s universality, ease of collection and to some extent its credibility (UN HABITAT 2004a : 37). Thus measuring the sheer existence of a pro-poor policy towards water resulted in skewed results since in a variety of cities in developing countries water is not the responsibility of the local government. Furthermore sometimes there is no official record of informal or poor settlements. Moreover, various informal settlements are not endowed with a water supply system and dwellers are forced to buy expensive drinking water from water containers or from the informal market. This is because marginal settlements are oftentimes located on the outskirts where public tabs or borewells are not existent (Conners 2005 : 206, 207). Against this background it is meaningful to measure the extent to which policies are pro-poor via querying to what extent water is provided. In case there is no provision of water, the urban poor will not benefit. Thus the “proportion of households with access to water” provides a proxy to the affordability and the level of accessibility for such cities, even if it is an output indicator.

However, as mentioned above, water is not necessarily the responsibility of local authorities. Thus a variety of cities in the developing world tend to shift responsibilities to state-run or parastatal agencies, lacking adequate mechanism of accountability to local citizens (DEVAS 2001 : 992). Assuming that “pro-poor policies are possible with transformation in city governance” (Mitra 2008 : 97), some authors point at the fact that such pro-poor orientation requires a certain authority of the local government over water issues. In addition, if water is in fact a responsibility of a city authority, this does not inevitably indicate that the poor access their water via this authority. As Allen et al. state: “Failure by the public and private sectors to support water provision often means that the poor, are left to their own devices in accessing these essential services. As their needs and practices often remain “invisible” to the public sector, policy changes aimed at improving the efficiency of formal water provision frequently do little to ensure better access […].” (Allen Et Al. 2006 : 349)

Indicator 13: Street Vending (Incentives for informal businesses)
Indicator number 13 reveals the endeavors of the local government in “providing equal opportunities for informal businesses to participate in the economic sphere of the society” (Mehta 2004 : 7). Thus the indicator exposes the presence of specific plots in the central retail areas of the city where small scale or rather informal street vending is not allowed or submitted to particular restrictions. As most of the urban poor earn their living via the informal sector, this “economy of the poor” being “the original urban economy” (Tannerfeld & Ljung 2006 : 50) has to be acknowledged as an inherent part of cities in developing countries. Recognizing that the informal economy sometimes also does not have a say in urban policy, a variety of authors argue
for interventions made by local governments to create opportunities and incentives for the informal sector (Friedman, Hlela & Thulare 2005 : 66).

Bearing this in mind, the local government “has to set the institutional framework for business and the rules of the game, and ensure that enterprises receive appropriate incentives to facilitate efficient performance. Such interventions have potential for mainstreaming the informal economy alongside larger formal enterprises.” (Mitullah 2005 : 177) Initially named “Street Vending” the indicator showed limitations in addressing similar incentives for informal businesses in the first stage of the field-test. Consequent upon its shortcomings in addressing universality and credibility it was modified in order to cover other incentives given for street vendors. Being renamed “Incentives for informal business”, the indicator comprised two variables in the second stage. The first one covered street vending restrictions as well as incentives like information public markets and municipal fairs. The second one asked for the number of protests or confrontations regarding street vending within the past year. As a result of the field-test almost all cities provided the relevant incentives. However, the number of protests was not easily collectible just as results were absolute values since the first variable was binary in nature. The existence of pro-poor policies for water as well as incentives for informal trading are definitely indicators of an urban policy targeting marginalized sections. Yet it has to be noted that “improving urban conditions requires not just water, sanitation, health care, adequate shelter, or transportation, but all of these services combined, in addition to jobs” (Ruble Et Al. 2006 : 69).

3-3-4-3: Participation sub-index and indicators:
Given its complex nature, the sub-index of participation was defined by the principles of representative democracy and participative democracy. However, in order to ensure that the respective indicators are in line with the campaign’s policy objectives, the following definition of participation was taken as a basis for the sub-index: “Participation in governance implies mechanisms that promote strong local representative democracies through inclusive, free and fair municipal elections. It also includes participatory decision-making processes, where the civic capital, especially of the poor is recognized and there exists consensus orientation and citizenship.” (UN Habitat 2004a : 24) Here civic capital is referred to as “the collective civic capacities of a community” (Potapchuk & Crocker 1999 : 175). Drawing on Robert Putnam’s work on Social Capital, the authors argue that civic capital moves this concept to the institutional level as different stakeholders in urban governance act based on norms and trust in order to achieve certain goals (Potapchuk & Crocker 1999 : 176). At this, civic capital is incorporated in the concept of representative democracy, which is defined by competitive elections based on universal suffrage just as secret ballots. In addition, elected representatives act on behalf of the public just as they are accountable to the electorate. However, participatory governance is an essential factor of representative democracy as it relies on “mechanisms such as interest group meetings, hearings, and community involvement in budgeting and planning” (UN HABITAT 2004a : 24). Moreover, the information of the local public as well as its involvement in key decisions are significant features of representative democracy, similarly being criteria of civic capital. That way “citizens generally participate in decisions that affect their quality of life” (Centre of Governance and Demogracy 2000 : 12). Yet it is also important that local governments are responsive to and interactive with urban citizens, thus determining the level of participative democracy. However, sound participation may not always result in positive
outcomes as there is evidence on certain cities where outputs such as urban services are high despite a low level of participation (UN Habitat 2004a : 24).

**Indicator 14: Elected Council**
Indicator 14 measures if the local governing council is elected via democratic processes. At this an elected council refers to a body of local government officials with an administrative, advisory or rather representative function at the city level. However, these officials need to be chosen by the local population by means of organized voting. Thus it is argued that if the local council is elected in an unbiased and free process, firstly the local population is involved in identifying the personnel most suitable for governing the city and secondly such a council is more responsive to its citizens needs (Mehta 2004 : 8). In this respect the indicator is considered a robust measure of representative democracy. While it received a high ranking in the first stage of the field-test, modifications were still put on in order to cover both “elected” and “appointed” councils. In doing so the value “0” is assigned for appointed councils while “1” is assigned for elected ones. However, due to its binary nature, the indicator shows limitations in measuring progress over time.

**Indicator 15: Election of the Mayor**
This indicator measures the way in which the mayor is elected, namely directly elected, elected amongst the councilors or appointed. Utilizing a simple Yes/No distinction, the following scores are assigned (UN Habitat 2004a : 40):
- Directly elected (1.0)
- Elected amongst councilors (0.75)
- Appointed (0.50)
In doing so, intermediate scores can be applied towards the indicator. As the way in which the mayor is elected demonstrates the involvement just as the participation of the urban population in decision-making (MEHTA 2004 : 8), the indicator is relevant to governance institutions and addresses representative democracy. Yet the scoring is carried out according to a research paper on urban governance (DEVAS 1999). While every system bears strengths just as weaknesses, a directly elected mayor is associated with the greatest level of local participation.

**Indicator 16: Percentage of Voter Turnout**
The participation of the urban population in political processes is an essential factor determining urban governance. As such the percentage of voter turnout highlights the level of urban representative democracy, reflecting in faith, interest as well as involvement in the election process. Thus, in order to arrive at the indicator, the total voter turnout of both male and female (in percent) in the last election is measured. Initially named “Voter participation by Gender”, the first stage of the UGI field-test exhibited some shortcomings in ease of collection as only 4 out of 12 cities reported data (UN habitat 2004a : 40). Hence it was modified to the current nomenclature.

**Indicator 17: People´s Forum**
While the indicator only received moderate ranking in the first stage due to its lack of universality, it was modified for the second stage. At this it is able to address analog participatory arrangements and alternate forms of people’s councils such as public neighborhood
committees, city consultations or people’s assemblies. This was important as different cultural urban contexts may feature such forms while not being incorporated. However, the existence of a public forum indicates whether informal or formal mechanisms are at hand for urban citizens to express their wants and needs. In addition, a people’s forum enables the local population to engage in the development and review of local policies and budgets. Thus institutional structures must allow for city leaders holding public meetings and hearings as well as organize referendums. In doing so, the local government is expected to “publish budgets for greater transparency and encourage the citizenry to examine them critically” (Racel Is 2005: 86). Again, a binary query is employed using a Yes/No distinction.

**Indicator 18: Civic Associations Per 10,000 Population**

Indicator 18 aims at detecting the vibrancy of urban civic life via the level of civic engagement. At this it is assumed that organized groups and civic associations are essential to fostering a sense of community. However, a greater number of civic associations is believed to increase the likelihood of vulnerable or marginalized groups to be better represented in urban governance processes (MEHTA 2004: 9). Apparently it is debatable if the sheer quantity of CSOs and NGOs is an expression of vulnerable urban dwellers making their voice heard. Thus Mitlin, based on a study of ten cities in developing countries, gives evidence of NGOs showing barely any commitment to their role in advocacy and poverty alleviation (Mitlin 2005: 137). Yet the indicator is constructed by measuring the number of registered civic associations per 10,000 people within the local authority's jurisdiction. In doing so, the total urban population is divided into clusters of 10,000. First the number of registered civic associations is multiplied by 10,000. Subsequently the product is divided by the total urban population. Hence the following equation can be utilized to arrive at the indicator:

\[ C = \frac{10,000 \times N}{Y} \]

where C being the number of civic associations per 10,000 people, N being the number of civic associations and Y being the total urban population. However as mentioned above, the ability of civil society organizations to act on behalf and - even more important - in the interest of the poor, may be narrow. This can be explained by three factors (Mitlin 2005: 143):

- Leaders of civil society organizations might not represent the interests of the urban poor and marginalized.
- Competition between various organizations might result in a loss of effectiveness.
- CSOs and other groups might not be in the position to get in touch with important key stakeholders involved in the city development process.

**3-3-4-4: Accountability Sub-Index and Indicators**

Accountability is probably one of the most established attribute of good governance. Referring to “good urban governance” in this regard, accountability is one of the five principles constituting the Urban Governance Index. At this, the local government just as the private sector and civil society organizations are obliged to be accountable to the public and to their institutional stakeholders. Yet decision-making and decision taking proceeding internal or external to an organization/institution determines who is accountable to whom.
However, commonly an urban organization/institution is accountable to those sections of the population, who are affected by its decisions or actions taken. Thus accountability is considered the basis for a well functioning local governance process (UN Habitat 2004a: 25). Based on these assumptions, accountability in urban governance is a given if: “Mechanisms are present and effective for transparency in the operational functions of the local government; responsiveness towards the higher level of the local government; local population and civic grievances; standards for professional and personal integrity and rule of law and public policies are applied in transparent and predictable manner” (UN Habitat 2004a : 25) As the definition is the basis for the identification of UGI indicators, a distinction is drawn between transparency, responsiveness as well as integrity. In doing so, transparency is characterized by:

- Decision-making and decision-taking being geared towards rules and regulations
- Directly accessible processes, institutions and information

Hence transparency is considered measurable by the level of regular, organized and open consultations of citizens on urban fiscal issues or other relevant matters. Here, the process of participatory budgeting can serve as an example of transparent politics. Moreover, actors in urban governance need to be responsive to all affected stakeholders, bringing about mechanisms allowing for communication between “the government and the governed” (McCarney, Halfanil & Rodriguez 1995 : 95, 96). Such mechanisms can be hotlines, complaint offices, citizen report cards and procedures for public petitioning and/or public interest litigation. Yet transparency is also an essential factor determining the implementation of urban projects such as housing upgrading programs. If such a project is based on the participation of the local population, e.g. via a negotiated contract, freely available information on responsibilities and duties is the pivot of the whole process (Tannerfeldt & Ljung 2006 : 94).

Finally, integrity is a crucial element of accountability in urban governance as it demonstrates the manner in which public officials execute their duties and feel obliged to their electorate. Recognizing that the election process is only one part of influencing decision-making, yet it has to be noted that the level of accessibility and accountability especially to the urban poor, is another crucial element in urban transparency (DEVAS 2002 : 212). Thus a well functioning system of checks and balances provides a basis for trust of civil society into the urban administration. At this, corruption control mechanisms, regular independent audits just as independently executed programs to test public officials integrity may be adequate measures to this end (UN Habitat 2004a : 25). Recognizing the aforementioned principles of accountability, the following indicators make up the subindex.
**Indicator 19: Formal Publication of contracts/tenders, budgets & accounts (CTBA)**

Taking into account the need for an open flow of information, this indicator highlights the willingness of the local authority to be transparent in conducting its activities. Besides, a formal publication of operations provides the basis for control of corruption. At this, the indicator is arrived at by querying if there is a formal publication of:
- Contracts and tenders (CT)? (Yes/No)
- Budgets and accounts (BA)? (Yes/No)

Again, while Yes is assigned “1”, No is assigned “0”. Subsequently the following equation is utilized to calculate the indicator score:

\[ \text{CTBA} = \frac{\text{CT} + \text{BA}}{2} \]

Since the indicator received a high ranking and all cities were able to report data, it was included in the UGI despite its binary nature. However, as it comprises of four variables intermediate scores can be applied thus increasing its potential for comparison and monitoring trends.

**Indicator 20: Control by higher levels of Government**

This indicator measures the control of higher levels of government such as national or provincial by closing the local government or removing councilors from their office. As such, it shows the direction of accountability since the central authority’s ability to close the local government will tend to move councilors accountability more upwards instead towards the citizens. At this the indicator is split into 2 variables, the first addressing the urban governments independence and autonomy, the second addressing its responsiveness:

Variable 1 (independence/autonomy): Control of higher governmental levels (CG) Can higher levels of government:
- Close the local government (CLG)? (Yes/No)
- Remove councilors from office (RC)? (Yes/No)

\[ \text{CG} = \frac{(\text{CLG} + \text{RC})}{2} \]

Variable 2 (responsiveness): Local governments authorities (LGA) Can the local government, without permission from higher governments:
- Set local tax levels (SLT)?
- Set user charges for services (SUC)?
- Borrow funds (BF)?
- Choose contractors for projects (CP)?

\[ \text{LGA} = \frac{(\text{SLT} + \text{SUC} + \text{BF} + \text{CP})}{4} \]

Indicator 20 is then constructed using the following equation:

\[ \text{Indicator 20} = \frac{\text{CG} + \text{LGA}}{2} \]

**Indicator 21: Codes of conduct**

Indicator 21 measures the codes of conduct applied at the local level thusly addressing the local authority’s commitment towards the integrity of its officials (MEHTA 2004 : 10). In doing so it detects the existence of a signed published statement of standards of conduct that citizens are
entitled to from their elected officials and local government staff. However, it is important to analyze if the very codes are applied at the local level to cover different institutional arrangements.

**Indicator 22: Facility for citizen complaints:**
In order to cater to the principle of responsiveness, a city should feature a facility to respond to and receive complaints. Again, the standard procedure of assigning scores of “1” and “0” is employed when querying the following variables:

- Presence of any facilities/mechanisms to receive complaints from citizens? (Yes/No)
- Presence of an official appointed to receive and respond to complaints against public authorities? (Yes/No)

**Indicator 23: Anti-corruption Commission**
As the existence of an anti-corruption commission is regarded being evidence of the urban administration’s commitment towards integrity, the indicator is selected. However, since it is binary in nature it fails to measure any form of progress made by the city.

**Indicator 24: Disclosure of income & assets (DIA)**
This indicator investigates if locally elected officials are obliged to publicly disclose their income and assets just as the ones of their family before taking office (MEHTA 2004 : 11). Again, the standard method of assigning scores is applied:

- Are locally elected officials required by law to publicly disclose their personal income/assets (PIA)? (Yes/No)
- Are locally elected officials required by law to publicly disclose their family income/assets (FIA)? (Yes/No)
- Are local officeholder’s incomes and assets regularly monitored (IAM)? (Yes/No)

Indicator 24 is then arrived at via:

$$DIA = 0.75 \times (PIA + FIA) + 0.25 \times IAM$$

**Indicator 25: Independent audit**
Since the city’s budget is an issue that the total urban population is affected by, the last indicator measures its very existence in order to present the local government’s accountability towards its electorate and its transparency in resource allocation and use (MEHTA 2004 : 12). The indicator turned out to respond well to the factor of ease of collection, as all cities participating in the field test were able to report data.

When reviewing the individual indicators, a certain degree of local government bias becomes conspicuous. Thus a lot of indicators address local authorities or issues related to them. Recognizing this bias, indicators have been revised in the course of the field-test (UN Habitat 2004a : 59). Here the local government bias refers not only to defining governance but also to the selection of indicators. In order to counter this effect, other participatory indicators were incorporated as well as indicator-loadings were adjusted (balance of loading between various principle objectives).

**3.5: The City Development Index:**
As aforementioned, urban indicators became a means of urban development policy at the latest since the Habitat II conference. As certain resolutions of UN HABITAT called for a mechanism to monitor global progress in the implementation of the Habitat Agenda, the Global Urban Observatory (GUO) designed an indicators-system comprising of 30 key indicators and 9 qualitative data (UN HABITAT 2000 : 3). In the process this system is considered the minimum data required for reporting on shelter and urban development in line with the twenty key areas of commitment in the Habitat Agenda. However, following the Habitat II conference, the first Global Urban Indicators Database Version 1 (GUID I) collected key urban indicators in 237 cities, the year of reference being 1993. In the course of the ensuing statistical analysis of that data, the City Development Index (CDI) was derived. At this, its purpose was to rank cities along their level of development as well as providing a baseline for comparative display of indicators revealing urban conditions (UN HABITAT 2002b : 1). Originally developed in 1997, the CDI has been modified in reaction to the Global Urban Indicators Database Version 2 (GUID II), the year of reference being 1998. Furthermore the utilization of the index for the Asian Development Bank’s Cities Data Book (coverage of 18 Asian cities in 1999) just as the 2002 Human Development Index added to its modification. However, while the CDI is based on the five sub-indexes of City Product, Infrastructure, Waste, Health and Education, it is still assumed to be the best single measure of the level of development in cities (UN HABITAT 2002b : 3).

3.5.1: Measuring urban development:
The notion of urban development is a wide and complex one. This cognition comes to the fore in the multitude of international agencies and programs addressing the very issue. Recognizing that “urban development requires an approach that is even more integrated - across the physical environment, infrastructure, finance, institutions, and social activities” (World Bank 2000b : 5), there is also a wide range of concepts that are used to express city development. One conception often applied to depict a city’s development is urban poverty. However, while poverty is definitely a component of development, it is difficult to measure since it compasses a variety of impacts and dimensions as seen in figure 16.
Bearing this in mind, a measurement of urban poverty would have to capture income/consumption, assets, time costs, shelter, access to basic services, social safety nets, protection of rights just as political voice (MONTGOMERY ET AL. 2004 : 165). However, poverty in cities is typically being measured by using unidimensional income-based poverty. Yet another approach of measuring urban development is analyzing the level of social polarization or rather inclusiveness. While inclusiveness is an undeniable factor of development, again it is hard to measure and no standardized scale units exist on those parameters. However, since development is to be geared towards the concept of sustainability, sustainability indicators are more and more considered a sound measure of a city’s performance (WEILAND 2006 : 243). In this context sustainability is considered to express the broad spectrum of economy and society just as environmental issues. Taking this as a basis, one possible framework for sustainability indicators is shown below.
One example of urban sustainability measurement is the ecological footprint. This index calculates the amount of space a city uses to survive on a global level since cities are material and energy consuming (Wackernage El Et Al. 2006). However, the index is limited in terms of informative capacity and accuracy as it focuses on the extent of the environmental impact from an urban agglomeration. Yet it is “the foot of development that leaves the print; and economic development cannot take place without cities” (TannerfeldtT & Ljung 2006 : 62). Moreover, a wide range of cities has designed sustainability indicators. However, these indicator sets cater to specific local settings. While this matter of fact is meaningful in principle, such indicators do not allow for a comparison of cities though. One major attempt to measure global urban conditions and trends was undertaken by the Global Urban Observatory (GUO) in order to develop and apply policy-oriented urban indicators, statistics and other urban information. Collecting data on these issues in 1993 and 1998, the GUO aimed at analyzing and comparing urban development on a global scale. At this indicators focused on the following data:

- Housing
- Urban population
- Employment
- Unemployment
- Transport
- Local Government revenue
- Water
- Waste management
- Health
- Education
- Crime

Plus nine qualitative data sets

Tab. 3-1: Data for Global Urban Indicators Database II
Source: The author according to GUID II

When looking at the “development” of a city, oftentimes the City Product per person is taken as a measure of performance. While it is still regarded an important measure of city development, by now there is broad consensus on the City Product not being an effectual indicator of urban standards as it only corresponds to the economic output. Another indicator of effectual development in cities is regarded to be the level of waste management. As inadequate waste management results in high pollution levels and health problems (BOADA ET AL. 2003 : 2.1), municipalities need to develop a strategic vision of how to meet these challenges. This holds especially true as between one-third and one half of solid waste generated in most cities of the developing world are not collected, resulting in illegal dumps on streets, open spaces and wasteland, blocking drains and contributing to flooding (SHARMA 2000 : 3). Moreover, the healthcare system of a city is oftentimes used in order to express its capacity of providing its population with adequate services. Given that access to health services is essential for urban prosperity, indicators such as the number of doctors present for a certain spatial area, the number of hospitals or under-5 mortality are employed for that purpose. Further indicators for urban health might be incidence of chronic diseases or air quality. In addition, the quality of urban infrastructure can be measured. However, at this juncture infrastructure can comprise a variety of functions and institutions. Hence it has to be agreed on what is to determine urban infrastructure thus determining what is to be measured as well. Yet urban infrastructure is commonly regarded
to consist of basic physical and organizational structures such as piped water connections, sewerage, electricity supply or a sound network of streets.

3.5.2: The index framework:

As mentioned above, the CDI was constructed as a result of the GUID II. Recognizing broad consensus on the fact that urban development is a complex concept, there have been initiatives to statistically measure the performance of cities in particular fields of development in the past. However, there exists a variety of concepts regarding cities just as urban development that „although complex and multifaceted, are meaningful and desirable to measure“ (FLOOD 2001: 1). Such conceptions comprise the urban development level, livability, sustainability, relative disadvantages or rather poverty, congestion as well as inclusiveness. Yet, bearing in mind the multidimensionality of these ideas, a single indicator is not able to cover such ideas. Hence a combination of indicators, namely an index, is needed in order to address the diverse facets of city development. Up to now, the two urban indexes considered most useful, are the City Product per person and the City Development Index. Expressing the Gross Domestic Product at the city level, the City Product is a measure of urban economic output. However, urban GDP is regarded an inadequate measure of city development since „GDP only offers the physical basis for the development of a city but is far from enough“ while „many problems involving healthcare, housing, education and employment are yet to be settled“ (XIAOYING 2007: 10). By contrast, the CDI is to be a measure of average well-being and access to urban facilities. As it is to express the level of depreciated total expenditure over time on urban services and infrastructure, the index can be utilized as a proxy for the human and physical capital assets of the city. Intended to serve as a broad policy-based indicator system, the approach of the CDI is a threefold:

- Holistic, as it analyzes the health of cities and sectors as a whole
- Inclusive, as it covers areas beyond the realm of a single management structure
- Pluralist, as it intends to foster and inform a dialogue between different stakeholders involved in urban development.

In doing so it is largely driven or integrated with the process of establishing urban strategies and policies. While the CDI is usually constructed to reveal development outcomes, it can also be applied in order to identify development deficits rather than achievements thus highlighting sectors that need investment. In this respect the index can serve as a planning tool for urban development strategies such as IDP or CDS.

Amongst other reasons, UN habitat assumes the CDI to be the best single measure of the level of development in cities (UN HABITAT 2001b: 116). However, being a composite index as well as the UGI, the City Development Index consists of five sub-indexes:

**City Product**

The City Product is a pure qualitative measure giving the economic output of a city.

**Infrastructure**

The sub-index measures urban facilities such as water connections, sewerage, availability of electricity and telephone connections.

**Waste**

The sub-index expresses the city’s approach to waste management measuring wastewater treated and the existence of formal solid waste disposal.

**Health**
Life expectancy is used as a measure of health since there is a strong correlation with child mortality and infant mortality. In addition, data on these issues is more easily available and more consistent across various cities.

**Education**

This sub-index measures the quantity of literacy among the urban population plus the number of enrolled people in the city.

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![City Development Index Framework](image)

**Fig. 3-14: The City Development Index Framework**


Figure 18 shows the index framework according to Flood. The radar graph of the CDI plots each sub-index on its own axis radiating from the centre-point. In this figure all cities for which CDI data is at hand, are divided into quintiles according to their CDI values (FLOOD 1997b: 13). Each quintile contains 20 percent of all cities in the database, arrayed from lowest to highest CDI values following a scale ranging from 0 to 1. At this it becomes present that the five sub-indexes increase at different rates as the CDI increases. Thus the two best performing sub-indexes are the areas of health and education, both being components of the Human Development Index as well. As satisfactory levels of performance are reached on the health index for all but the bottom 20 percent of cities and for the education index above the bottom 40 percent, the strong emphasis being placed on social areas is highlighted. In turn, waste management is the weakest area as it is also a sector that requires high investment (FLOOD 2001: 2). The CDI also correlates well with the national Human Development Index. However, as there are considerable variations between cities in every respective country just as there are differences between rural and urban settings,
the CDI provides a better measure of city development. For example, the city of Niamey, Niger suffers from inadequate infrastructure such as waste management and severe poverty. While Niger scores 0.3 on the Human Development Index, Niamey just scores 0.2 on the CDI due to its aforementioned problems (see figure 19).

![Graph showing correlation between City Development Index and Human Development Index](image)

**Fig. 3-15: City Development Index versus Human Development Index**
Source: modified according to UN HABITAT 2002b, page 117.

However, it has to be noted that composite indexes such as the City Development Index cannot replace strategic city information and data on trends such as urbanization or urban growth.

### 3.5.3: Detailed analysis of the CDI:

The following section scrutinizes the five sub-indexes making up the CDI. In doing so, particular indicators are presented in order to illustrate their relevance for the respective sub-index.

#### 3-5-3-1: City Product sub-index:

Apparently the economic output of a city is a clear sign of its performance. As such, the City Product defines that very performance. Moreover, it allows for an interpretation of urban fiscal capacity as it:

- determines the urban administration’s financial resource base
- expresses the ability and authority of a city to collect revenues such as taxes etc.
- gives a general account of urban dwellers financial endowment

Being of a purely qualitative nature, the City Product can help in preparing municipal budgets. However, it fails to capture other dimensions of growth such as investment, competitiveness, exports, employment, house prices or local inflation. Yet finance is a significant criterion of urban development and how it is geared towards marginalized sections, as it determines the management of public expenditures and financing of infrastructure. Hence the City Product is a meaningful indicator of city performance. While it is assumed that the rate of public-sector
expenditure accounted for by municipal governments particularly in developing countries is relatively low, data on local finance is scant though (STREN 2001 : 107). Given that a city’s economic growth is generally assumed to be a means of countering urban poverty, the following questions determine this supposition (DEVAS 2003 : 3):

- How can city governments mobilize the resources required to meet the service and infrastructure needs of marginalized urban sections?
- How do local taxes and other revenue sources impinge on the poor?
- How can marginal sections influence budgetary decisions and resource use?

In addition, it has to be clarified, in how far marginalized sections have a share in the City Product. However, while a variety of consumption variables such as square-meters of housing per person, local government income or city expenditure on infrastructure correlate strongly with the City Product, it is in fact “a composite index in its own right” (FLOOD 1997b : 10) as it covers expenditure on these items already. The correlation between City Product and housing size (as an indicator of social prosperity) is given in the figure below:

![City Product Vs Housing sizes](image)

Fig.3-16 city product Vs Housing sizes

While the product was initially drawn up by a logarithmic function, its formula was changed to include the components of residential density and urban population (see section on CDI formula and calculation). These elements are added in order to cater better to conditions such as metropolitan regions, peri-urban regions, megacities etc. Yet it is difficult to assign values to the above mentioned phenomena, as administrative borders and actual borders are in many cases not in line just as official and factual urban populations are not. As the City Product is only one value in the function determining the total product, it is calculated according to the following formula, with GNP referring to the Gross National Product:

City Product = GNP * number of households in the city * average household income in the city (total national household income, from national accounts)
3-4-3-2: Infrastructure sub-index and indicators:

The CDI defines the level of urban infrastructure by the proportion of dwellings with piped water on property, a connection to the sewerage system, a telephone in the dwelling and the existence of electricity supply. In doing so, the indicators refer to data collected in the course of GUID II.

Indicator 1: Water connections

As there is broad consensus on the importance of water for every kind of development, the percentage of households connected to the water network is a central element of the infrastructure sub-index. Given that households in informal settlements are oftentimes not connected to a network, they are forced to buy water from vendors at enormous rates. Yet the quality and reliability of local services for water has a major impact on communities living in informal settlements, as they are particularly vulnerable to diseases and epidemics in the absence of such services (UN HABITAT 2000: 17). However, a variety of major problems has to be overcome in order to ensure sound water supply and sanitation services such as:

- water scarcity
- high economic costs for water provision (establishing a network, building wells etc.)
- financing constraints (insufficient public funds, inadequate water pricing) and
- management problems (unclear responsibilities for water, e.g. variety of utilities and agencies)

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Delhi</th>
<th>Dhaka</th>
<th>Karachi</th>
<th>Bangkok</th>
<th>Jakarta</th>
<th>Manila</th>
<th>Beijing</th>
<th>Seoul</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population (millions)</td>
<td>13.0</td>
<td>13.2</td>
<td>10.4</td>
<td>7.2</td>
<td>11.4</td>
<td>12.6</td>
<td>10.8</td>
<td>10.0</td>
</tr>
<tr>
<td>Water coverage (percent)</td>
<td>69</td>
<td>65</td>
<td>83</td>
<td>75</td>
<td>35</td>
<td>70</td>
<td>95</td>
<td>100</td>
</tr>
<tr>
<td>Water service (hours/day)</td>
<td>7</td>
<td>6</td>
<td>4</td>
<td>24</td>
<td>19</td>
<td>16</td>
<td>24</td>
<td>24</td>
</tr>
<tr>
<td>Production (millions of cubic meters per day)</td>
<td>2.3</td>
<td>0.7</td>
<td>1.6</td>
<td>2.9</td>
<td>0.9</td>
<td>2.5</td>
<td>1.8</td>
<td>5.0</td>
</tr>
<tr>
<td>Unaccounted-for water (percent)</td>
<td>40</td>
<td>50</td>
<td>n.a.</td>
<td>37</td>
<td>52</td>
<td>58</td>
<td>7</td>
<td>38</td>
</tr>
<tr>
<td>Outlets metered (percent)</td>
<td>53</td>
<td>68</td>
<td>1</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>99</td>
<td>100</td>
</tr>
<tr>
<td>Liters used per day per person</td>
<td>145</td>
<td>120</td>
<td>124</td>
<td>240</td>
<td>157</td>
<td>116</td>
<td>190</td>
<td>198</td>
</tr>
<tr>
<td>Cost per cubic meter (dollars)</td>
<td>0.49</td>
<td>2.46</td>
<td>n.a.</td>
<td>4.72</td>
<td>7.60</td>
<td>3.70</td>
<td>1.64</td>
<td>5.29</td>
</tr>
</tbody>
</table>

Tab.3-2: Indicators of water resources in selected cities of the developing world

Table 3 gives an impression of the urban water situation in some major cities in developing countries.

Indicator 2: Sewerage

As sewerage systems collect human feces in order to separate it from its producers, they are an integral element of preventing diseases and outbreaks. Recognizing that cities are concentrations
of people, the quality and quantity of sewerage systems is essential for sustainable urban development.

**Indicator 3 & 4: Electricity & Telephone Connections**
Electricity provides the basis for electric light and a variety of other objects. Yet a telephone connection can foster information transfer thus facilitating job opportunities etc. Since the availability of electric light assists longer daytime, the quality of life is clearly improved by these factors.

**3-4-3-2: Waste Sub-Index and Indicators**
The waste sub-index is composed of both indicators wastewater treated and garbage collection. Since in most cities of the developing world, municipal governments only have the ability to collect from 30 to 80 percent of total waste (MACLAREN ET AL. 2007 : 215), the sub-index is of essential relevance for urban development. Thus different organizational forms (private or public responsibility) and capacities of cities have to be recognized. However, as solid waste management is in most cases a major responsibility of local governments, it is also a cost-intensive one. Given that significant percentages of municipal budgets in developing countries are spent on this issue, waste is a meaningful indicator of urban performance. Yet data on urban waste-management is not very reliable since many developing cities ignore informal disposal just as the informal sector.

**Indicator 5: Wastewater Treated**
The indicator refers to the “percentage of all wastewater undergoing some form of treatment” (UN Habitat 2000 : 27). Since water treatment reduces the incidence of a variety of waterborne diseases, an effective effluent treatment system is a significant indicator of the level of local development and of community health. Thus water pollution from human wastes can be minimized via sufficient investment in treatment systems. At this the rate of treated wastewater is a key indicator of water quality management (UN HABITAT 2000 : 27). Moreover, the indicator is helpful in discerning between levels of development in countries with higher income, as even developed cities do not necessarily feature adequate wastewater treatment.

**Indicator 6: Solid waste disposal / households receiving garbage collection**
As mentioned above, inadequate waste management causes high pollution-levels and serious health problems (Boada Et AL. 2003 : 2.1). However, the generation of solid waste, especially in major cities of the developing world, exceeds their capacity of collection. Furthermore, even when municipal budgets are in line with collection requirements, safe disposal of collected wastes still remains a problem (UN HABITAT 2000: 28). Thus the enormous landfills and waste disposal sites in cities like Buenos Aires or Chennai just as the incidence of open dumping are reminders of waste disposal practices and capacities in Third World Cities. Against this background the indicator depicts a city’s ability to meet the aforementioned challenges as a percentage of waste collection levels.

**3-4-3-3: Health Sub-Index And Indicators**
Access to basic social services increases radically with development. As the City Development Index partially parallels the Human Development Index, though at the city level, health is employed as a part of the former. At this the sub-index comprises the indicators of life expectancy and child mortality (under-five mortality).
**Indicator 7: Life Expectancy**
Life expectancy is used as a measure of health due to its strong correlation with child mortality and infant mortality. However, in developing countries data on life expectancy is not necessary at hand at the city scale. Hence such data is arrived at by the following procedure (FLOOD 2001: 5, in order of priority):
- Data is replaced by another national city of similar size.
- National figures (or national urban if available) are used.
- Data of a nearby city or place at a similar level of development is used.

**Indicator 8: Child Mortality (Under-five mortality)**
Being regarded a powerful indicator of the quality of life in cities, under-five mortality is directly correlated to evidence on low environmental development such as the level of wastewater treatment or sewerage and sanitation facilities. However, child mortality differs from infant mortality which provides information on the mortality of under-one year old infants (UN HABITAT 2000: 18). At this, child mortality, defined as the percentage of female and male children who die before reaching their fifth birthday, is calculated by dividing the number of deaths for children below the age of five years during one year by the average number of live births during the last five years. This indicator provides reliable information on urban health since a huge number of deaths are the result of malnutrition and poor life conditions such as poor shelter, polluted water and inadequate sanitation.

While it was initially considered to include the indicator of hospital beds per 1000 population, it was eventually excluded as many whole regions are served by hospitals located in smaller cities, thus featuring very high hospital bed ratios. In addition, the indicator informs little about the overall quality of urban health care (FLOOD 1997b: 44).

**3-5-3-4: Education sub-index and indicators**
Education is a major determinant of development in general. At this the CDI education sub-index comprises adult literacy, the percentage of primary and secondary enrollment as well as the rate of graduates per 350 urban dwellers.

**Indicator 9: Adult literacy**
The indicator addresses the percentage of the adult population who are literate. At this literacy is defined as being “able to read and understand a simple paragraph in one’s first written language” (Asian Development Bank 2001: 63). As illiterate people will face problems in improving their economic or social situation, literacy is the precondition for urban prosperity. Yet a high illiteracy rate will result in a deficit of well trained urban dwellers for modern economic activity or administration.

**Indicator 10: Primary Enrollment**
The indicator refers to the percentage of children of eligible age, by sex who are enrolled in primary school. Although enrollment ages vary between countries, they are generally estimated 6-12 years (Asian Development Bank 2001: 63)

**Indicator 11: Secondary Enrollment**
Indicator 11 covers the percentage of children of eligible age, by sex who are enrolled in secondary school. Again there are country variations but age ranges are assigned from 6-12 years. As low school enrollment rates depict a lack of literacy and numeracy in the population, a
city’s success in retaining children in school is regarded a major measure of social development as well as the capability of the urban society to maintain human resource investment (Asian Development Bank 2001: 63). Yet it has to be noted that country variations exist in terms of enrollment rates for boys and girls, which holds especially true for secondary education. Hence cultural attitudes have an impact on access to educational opportunities.

**Indicator 12: Graduates Per 350 Population**

This indicator measures the level of higher education achievement just as human capital development. In doing so, it addresses the rate of male and female tertiary graduates in the adult population. At this the indicator is defined as the proportion of male graduates to all adult males, and female graduates to all adult females (Asian Development Bank 2001: 65). While tertiary graduates comprise graduates and diplomats from universities as well as other accredited tertiary level institutions, it does not usually cover graduates from vocational private colleges. Since low rates of graduates will minimize the pool of trained staff for management and technology, the indicator indirectly refers to urban productivity.

**3-5: Conclusion:**

We specified this chapter for answering the question of how can we measure the urban governance? in this respect we defined the four sub-indexes of the UGI and the 25 indicators through which we account the UGI.

Also we linked the UGI with the city development process showing the relationship between the two.

This lead the researcher to answer how the city development process itself can be measured? where pointed out what we call it City Development Index and its 12 indicators through which the CDI could be accounted.
Chapter-4

Similar Study for UGI Applications and Case Study Methodology
Chapter-4
Similar Study for UGI Applications
and Case Study Methodology

4-1: Introduction:

This chapter to cover some previous study made at Ulnabtaaar city to show the improvement occurred as result of similar improvement of urban governance performance.

Most notably is the measurement of progress is made here through measuring other index called City Performance Index (CDI) this also give us an example of how to study the progress caused by any type of application to our cities.

Further more this chapter is covering the methodological steps of how we account UGI for our case study these is steps are to be strictly followed in any similar case to measure UGI.

4-2: Similar Study Undercarried:

Fig.4-1: Ulaanbaatar, aerial view

Initially founded as a nomadic Buddhist monastery in 1639, the city became a major manufacturing center in the 20th century. Since Mongolia is predominantly rural, Ulaanbaatar
represents the country’s cultural, industrial and financial center, housing approximately 38 percent of Mongolia’s population.

4-2-1: Political structure:
Mongolia is divided into 21 provinces (Aimags) and the nine administrative districts (Düüregs) of Ulaanbaatar, including six urban and three remote districts. The six urban districts are Chingeltei, Khan Uul, Bayanzürkh, Songino Khairkhan, Sükhbaatar and Bayangol. Although Nalaikh and Baganuur are separate cities they are administratively associated with the capital. Moreover Bagakhangai and Baganuur form a sort of exclave. While Bagakhangai is located in the Töv Province, Baganuur stretches between the Töv and Khentii provinces. Yet the three remote Düüregs are located 45-110 kilometers away from the city’s main built-up area. Moreover, all districts are subdivided into sub-districts (Khorooos) again. To date Ulaanbaatar features 132 Khorooos. Ulaanbaatar is governed by a city assembly (Citizen’s Representatives Hural) consisting of forty councilors, elected every four years. At this the mayor is nominated by the city council and is appointed by the prime minister who signs the contract for the mayor’s tenure. In turn, the mayor appoints a deputy with the prime minister’s approval. Besides he submits his performance report to the prime minister twice a year whereas the prime minister is able to cancel the mayor’s decision in case that it does not comply with legal acts (Asian Development Bank 2001 : 233). The legal organization of Ulaanbaatar’s city governments is shown in the figure below.

![Diagram of Ulaanbaatar city government](image)

Fig. 4-2: Organization of Ulaanbaatar city government

Since Mongolia has undergone a democratization process following the 1990s, the central government began to decentralize state powers to local governments. In the course of this, administrative accountability and transparency were to be consolidated. However, as it has often been described before, the ratio between duties and authorities has been inadequate (ASIAN DEVELOPMENT BANK 2001 : 234).
4-2-2: Urban challenges and poverty:

After having undergone a market-oriented transition in 1991, urban development processes have intensified particularly because of migration into the cities. Thus most notably rural families come to the urban centers in search of employment opportunities and better living standards, as harsh climatic conditions make it very hard for them to safeguard their livestock. However, while secondary cities such as Erdenet or Darkhan also see such processes, the capital still being the center of the country has to absorb enormous rates of migrants. At this, the net inward migration from other parts of the country is estimated to account for circa 45 percent of Ulaanbaatar’s population growth (Asian Development Bank 2001: 234). Yet these processes place a burden on the city’s infrastructure, with enormous migratory flows into the capital resulting in uncontrolled settlements in peri-urban areas. These settlements, called Ger areas, are urban slums expanding throughout Ulaanbaatar. However, they lack adequate basic infrastructure such as piped water, electricity, a street network or drainage just as general basic services and safety nets. Yet these Ger areas account for about 60 percent of Ulaanbaatar’s population (approximately 135,000 households). At this, Ger settlements are either composed of small traditional nomadic Gers (generally 25 square-meters) or small houses (circa 24-32 square-meters) that are mostly informally constructed (Asian Development Bank 2008: 5). However, major growth takes place in that very informal settlements, although such housing does not comply with the city governments regulations (Asian Development Bank 2001: 234, 235). It is estimated that 47 percent of the city population live in Ger areas. Here earnings just as living conditions are particularly lower than in the core city. Moreover, these areas, accounting for high numbers of Ulaanbaatar’s street children, are prone to flash flooding as they are situated on flood plains and hill slopes. Apparently such urban conditions have a serious impact on the incidence of poverty. Thus the rate of Ulaanbaatar’s urban dwellers living below the official poverty line of 17 US Dollars per month was 20 percent in 2006 (sian Development Bank 2008 87: 5). Yet some estimations refer to much higher rates of urban poor, pointing at the great number of unregistered migrants. At this most income is spent on food, indicating a high proportion of poverty (see figure 23).

Fig. 4-3: Ulaanbaatar: Household expenditure in percent
On the top of this comes the fact that due to the harsh climate, the operation of coal fired stoves and motor vehicles causes serious air pollution thus adding up to health problems. Moreover, urban infrastructure is declining as a result of inadequate recovery of costs. This involves water supply, electricity, sanitation and urban transport. In addition, the urban environment suffers from water pollution via surface water (untreated sewage) just as groundwater (prevalence of pit-latrines). Besides, the urban economy of Ulaanbaatar is to a wide extent affected by an informal sector, comprising predominantly of retail trading, transport and services.

4-2-3: Provision of Municipal Services:
The city provides basic services such as water, heating, sanitation and electricity. However, there are differences between the formal areas and the Ger areas. As the former are serviced by Ulaanbaatar’s formal network, Ger areas feature on-site sanitation while water is bought from kiosks. Yet the city’s supply infrastructure is in need of maintenance and renovation. Moreover, profound varieties in urban consumption levels exist between formal and marginal settlements. While water consumption in formal apartment blocks accounts for up to 200 liters or more per day, the majority of urban dwellers consume approximately eight liters per day. Although the water supply by tankers to the city’s kiosks is being replaced through underground pipes, there are only scant individual connections to the water supply network. Hence the rate of individual water connections just as water unaccounted for amounts remains very high. Similar urban disparities exist in terms of sewerage. While the city’s formal areas are connected to the sewerage system being connected to a treatment plant, Ger areas mostly depend on drainage pits (Asian Development Bank 2001 : 234). Heating is considered a basic service due to Ulaanbaatar’s harsh climate with three forms of heating systems being present in the city. While a district heating system connects the city’s thermal power plants to the formal built-up city, coal-fired stoves are utilized in Ger areas for heating just as cooking, yet adding up to environmental problems (Asian Development Bank 2001 : 234). In addition, boiler houses heat single or groups of buildings. Since thermostatic controls are not very common, energy conservation and maintenance remain a challenge to utilities. However, recognizing these issues, the Asian Development Bank has conducted the Ulaanbaatar Heat Efficiency Project between 1997 and 2007 in order to address numerous shortcomings in the city’s heat supply.
4-2-4: UGI application in Ulaanbaatar:

4-2-4-1: Effectiveness:

<table>
<thead>
<tr>
<th>No.</th>
<th>Indicator</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Effectiveness Sub-Index</strong></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Local government revenue per-capita (LGR)</td>
<td>0.11</td>
</tr>
<tr>
<td>2</td>
<td>Ratio of recurrent and capital budget: (RRC), Recurrent</td>
<td>0.11</td>
</tr>
<tr>
<td></td>
<td>Budget = R, Capital Budget = C; R = 27261050, C =</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1907360</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Local Government revenue transfer (LGT)</td>
<td>0.10</td>
</tr>
<tr>
<td>4</td>
<td>Ratio of Mandated to Actual Tax collected (TC)</td>
<td>0.10</td>
</tr>
<tr>
<td>5</td>
<td>Predictability of transfers (PoT)</td>
<td>0.00</td>
</tr>
<tr>
<td>6</td>
<td>Published performance delivery standards (PPDS)</td>
<td>0.15</td>
</tr>
<tr>
<td>7</td>
<td>Consumer Satisfaction Survey (CSS)</td>
<td>0.10</td>
</tr>
<tr>
<td>8</td>
<td>Vision Statement effective (VSE)</td>
<td>0.10</td>
</tr>
<tr>
<td></td>
<td><strong>Effectiveness Sub-Index</strong></td>
<td>0.77</td>
</tr>
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</table>

Tab. 4-1: Effectiveness sub-index, indicators and values for Ulaanbaatar

4-2-5-2: Equity:

<table>
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<tr>
<th>No.</th>
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<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Equity Sub-Index</strong></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Citizens' Charter for Basic Services (CCS)</td>
<td>0.00</td>
</tr>
<tr>
<td>10</td>
<td>Percentage of women councillors (WC)</td>
<td>0.06</td>
</tr>
<tr>
<td>11</td>
<td>Percentage of women councilors in key positions (WK)</td>
<td>0.03</td>
</tr>
<tr>
<td>12a</td>
<td>Existence of pro-poor water policy (PPC)</td>
<td>0.00</td>
</tr>
<tr>
<td>12b</td>
<td>Percentage households with water connection (HH wat)</td>
<td>0.14</td>
</tr>
<tr>
<td>12c</td>
<td>Is water price cheaper for poor settlements? (WP)</td>
<td>0.00</td>
</tr>
<tr>
<td>13</td>
<td>Incentives for informal market (IM)</td>
<td>0.15</td>
</tr>
<tr>
<td></td>
<td><strong>Equity Sub-Index</strong></td>
<td>0.39</td>
</tr>
</tbody>
</table>

Tab. 4-2: Equity sub-index, indicators and values for Ulaanbaatar
4-2-4-3: Participation:

<table>
<thead>
<tr>
<th>No.</th>
<th>Indicator</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>Elected Council (EC)</td>
<td>0.15</td>
</tr>
<tr>
<td>15</td>
<td>Locally Elected Mayor (LEM)</td>
<td>0.00</td>
</tr>
<tr>
<td>16</td>
<td>Voter Turnout (VT)</td>
<td>0.17</td>
</tr>
<tr>
<td>17</td>
<td>People’s Forum (PF)</td>
<td>0.15</td>
</tr>
<tr>
<td>18</td>
<td>Civic Associations per 10,000 population (CA)</td>
<td>0.21</td>
</tr>
</tbody>
</table>

Participation Sub-Index: 0.68

Tab. 4-3: Participation sub-index, indicators and values for Ulaanbaatar

4-2-4-4: Accountability:

<table>
<thead>
<tr>
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<th>Indicator</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>Formal publication (FP)</td>
<td>0.20</td>
</tr>
<tr>
<td>20</td>
<td>1. Control by higher level of govt (CG)</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>2. Local Government Authorities (LGA)</td>
<td>0.06</td>
</tr>
<tr>
<td>21</td>
<td>Codes of Conduct (CoC)</td>
<td>0.00</td>
</tr>
<tr>
<td>22</td>
<td>Facilities to receive complaints (FRC)</td>
<td>0.10</td>
</tr>
<tr>
<td>23</td>
<td>Anti corruption commission or agency at the local level (ACC)</td>
<td>0.00</td>
</tr>
<tr>
<td>24</td>
<td>Personal income and Assets (PIA)</td>
<td>0.00</td>
</tr>
<tr>
<td>25</td>
<td>Regular independent audit (RIA)</td>
<td>0.15</td>
</tr>
</tbody>
</table>

Accountability Sub-Index: 0.51

Tab. 4-4: Accountability sub-index, indicators and values for Ulaanbaatar
Fig. 4-4: Urban Governance Index for Ulaanbaatar 2006

4-2-5:CDI application in Ulaanbaatar:
4-2-5-1: City Product:
Ulaanbaatar’s City Product per capita was 505 US Dollars in 1998 (see annex 3) resulting in a CDI sub-index of 53.7 (FLOOD 2001 : 1). The index is essential for providing information on urban productivity. At this it can inform about the level that the city’s economic growth keeps pace with population growth. Given the considerable migration into the capital, this is of particular importance. Hence the informal economy of Ulaanbaatar has to be recognized as it has played an increasing role in the expansion of production in the city. In this regard Ulaanbaatar’s informal employment rate was approximately 55 percent in 2001 (Asian Development Bank 2001 : 61).

4-2-5-2: Urban infrastructure:
As aforementioned, it is difficult to give an account of the city’s infrastructure. Hence, although the majority of the urban population officially has access to basic services such as water,
sewerage, electricity and telephone connections, there are still some constraints. Thus Ger area residents have the possibility to buy water from trucks and vendors (kiosks) indeed but prices for such a supply are far from average. Most notably, this procedure of getting access to a basic need does not fall under the classification of basic service supply. Yet half of the city’s population lives in informal Ger areas, facing immense difficulties in gaining access to basic services and urban infrastructure (e.g. no paved access roads). As a result Ulaanbaatar’s infrastructure sub-index score is 59,0.

4-2-5-3: Waste management:

While waste management is generally a problem of cities in developing countries, Ulaanbaatar features a relatively proper system of waste treatment. Thus there are public solid-waste companies in each district.

![Waste Management Chart](image)

Fig. 4-5: Methods of solid waste disposal in Ulaanbaatar
Source: modified according to ASIAN DEVELOPMENT BANK 2001, page80

Besides, authorized intermediate solid-waste points are present in Ger areas where households can dispose their garbage. At this district solid-waste companies collect garbage from those points and transfer it to dump sites (Asian Development Bank 2001 : 422). Hence Ulaanbaatar scores 90,0 on this sub-index.

4-2-5-4: Health:
The city’s health sub-index score is relatively moderate with a value of 72,5. Thus under five mortality was 4.25 percent as well as life expectancy was 63,9 for female and 59,7 for male respectively. However, due to Ulaanbaatar’s environmental problems mentioned above, the health sub-index could be seriously affected.

4-2-5-5: Education:
As the Urban Governance Index already revealed a small proportion of women in higher governmental offices, in Mongolia women are generally over represented in higher education and well represented at mid senior management levels. However, they are severely underrepresented in higher political office (UNDP 2006 : 11). Figure 26 highlights these aspects by providing the indicators of the education sub-index resulting in a score of 66,7.
It is obvious that, while primary enrollment rates are consistently high, secondary enrollment is not that common. There may be various reasons for that, such as entering the workforce instead of attaining school or women becoming housewives and leaving school. While secondary enrollment is low, this is also true for the number of tertiary graduates. However, graduate rates have risen in recent years due to the liberalization of education policy in addition to the establishment of several private colleges (ASIAN DEVELOPMENT BANK 2001: 419). The total CDI for Ulaanbaatar is shown below.

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Fig. 4-7: City Development Index for Ulaanbaatar
4-3: governing Third World Cities – does it affect development Outcomes?
The present study has shown that both city development and urban governance are concepts that are difficult to measure. However, it is of utmost importance to keep doing it as data availability and reliability are major concerns in terms of measuring any type of urban progress, specifically in developing countries. Local leaders and decision makers need to be provided with guideposts on the state of governance in their cities and communities. Recognizing that phenomena like mass poverty, poor health conditions and insufficient education can hardly be ignored, the debate on governance – understood as a broad system of all stakeholders – has to be intensified. As the case of Ulaanbaatar has shown, a relatively effective urban government can positively impact on issues such as waste-management. However, the latter is relatively easy to achieve while endeavours to counter profound inequality or education requires much more fundamental changes. Here the low levels of accountability and equity manifest in poor scores for infrastructure, education and health care. Recognizing that particularly women and children are most seriously affected by such grievances, it is essential to foster attempts of good urban governance in third world cities. This statement is also confirmed by the interpretation of expert interviews, which formed the basis of the diploma thesis underlying this study. Decision makers need to take into account the needs of the excluded and disadvantaged. Here an inclusive governance approach will incorporate the informal economy, the socially disadvantaged and especially women as they are prone to a variety of discrimination thus holding key to a variety of development challenges. Bearing this in mind, development politics and particularly urban planning in developing countries has to recognize the inefficiency of top-down approaches. Hence taking the needs of the marginalized into account and integrating them into the decision making process is vital for sustainable urban development in the global south.

4-4: Methodology of the Case Studying:

4-4-1: Introduction:
This part of chapter is specified for the methodology of the case studying, the context of the case, the tools of the study and the credibility of these tools in addition to the means of analysis, statistics and variables to prove the assumptions.

4-4-2: Theory of the Case Study:
In this study followed the descriptive survey method, and analytical approach, it dealt with the models, theories and previous studies, which included a topic literature formed as theoretical part of the study, which included a description of the reality of the situation of urban planning committees at Greater Khartoum where the study has been taken.

Through access to references and books, periodicals, theses relating to the subject, as the use of studies, reports and bulletins issued by relevant centres and the institutions interested in good governance and local government and the local administration, in addition to the websites of the institutions and specialized centers interested in this subject, consended articles, opinions and working papers at conferences and relevant international organizations, Such as the World Bank, United Nations Development Programme, and the Conference on Good Governance in Amman.
The reason for choosing this approach is the possibility of understanding the basics of good governance, local administration and local government, and an attempt to expand access and familiarity with all aspects of the general theory and the literature of the subject study, and take a glimpse at the local government and local administration. In addition to identifying the aspects of good governance in Sudan in particular, an opportunity to inspire this term which longly has been used in Sudan and in internationally by global institutions.

An analytical method has been followed and the evaluation of the current reality done through the study question, answering it and analyzing the drawn conclusions.

And that the reason for choosing the analytical method, is to recognize the Sudanese situation reality. To develop the suitable proposals and substantive recommendations that including the correct basics for application of the principles and fundamentals of good governance over local bodies in the country as general.

In order to achieve the desired goal and objective results, and the possibility of developing recommendations and proposals, questionnaire was designed as a scientific instrument followed in academic studies and survey, and use them to measure some indicators of Urban Good Governance Index (UGI) that can be applied to the current local recognition to its present situation and the extent of adoption.

4.4.3 : Study Community and sampling:

The study population consists of members and heads of local bodies and managers working at Greater Khartoum localities and administrative units belonging to them, and since it was identified in the study East Nile locality, that been only and taken as a case study, the Study population is all the members and the heads and directors of local bodies in East Nile locality (Sharq Elneil Province)

The locality composed of 8 administrative units with full description to geographical, social, economical and administrative aspects been included in the province website: 9.

The population and demographical forecasting is also included in the same website. Appendix (4)

The sample of the study sample are comprehensive, so questionnaire was distributed to all members of bodies. The aforementioned local presidents and managers, or one of the administrative staff, numbering 205 members, and 33 Chairman of the Board, and 22 directors or administrative staff, working in these bodies. Because some of the bodies are not there. The director or staff, any 260 questionnaires, they accounted for 100% of its community studies. The following tables illustrate the study sample according to the independent variables:

<table>
<thead>
<tr>
<th>Position</th>
<th>frequency</th>
<th>Percentage%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head of Committee</td>
<td>33</td>
<td>13.4</td>
</tr>
<tr>
<td>Member-planner</td>
<td>191</td>
<td>77.9</td>
</tr>
<tr>
<td>Engineer-Member</td>
<td>21</td>
<td>8.7</td>
</tr>
<tr>
<td>Member-other</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>245</td>
<td>100</td>
</tr>
</tbody>
</table>

Table(4-5) sample distribution over employment position variable:::
<table>
<thead>
<tr>
<th>Qualification</th>
<th>frequency</th>
<th>Percentage%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than Diploma</td>
<td>38</td>
<td>15.5</td>
</tr>
<tr>
<td>Diploma and above</td>
<td>207</td>
<td>84.5</td>
</tr>
<tr>
<td>Total</td>
<td>245</td>
<td>100</td>
</tr>
</tbody>
</table>

Table (4-6) distribution of the sample according to the education level variable

<table>
<thead>
<tr>
<th>Committee level</th>
<th>frequency</th>
<th>Percentage%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Village</td>
<td>53</td>
<td>21.6</td>
</tr>
<tr>
<td>locality</td>
<td>148</td>
<td>60.4</td>
</tr>
<tr>
<td>state</td>
<td>44</td>
<td>18</td>
</tr>
<tr>
<td>total</td>
<td>245</td>
<td>100</td>
</tr>
</tbody>
</table>

Table (4-7): Distribution of the sample according to the spatial administration variable

<table>
<thead>
<tr>
<th>Recruitment</th>
<th>frequency</th>
<th>Percentage%</th>
</tr>
</thead>
<tbody>
<tr>
<td>election</td>
<td>153</td>
<td>62.4</td>
</tr>
<tr>
<td>appointment</td>
<td>31</td>
<td>12.7</td>
</tr>
<tr>
<td>mixed</td>
<td>61</td>
<td>24.9</td>
</tr>
<tr>
<td>total</td>
<td>245</td>
<td>100</td>
</tr>
</tbody>
</table>

Table (4-8) distribution according to the type of formation (employment)

<table>
<thead>
<tr>
<th>Source of finance</th>
<th>frequency</th>
<th>Percentage%</th>
</tr>
</thead>
<tbody>
<tr>
<td>self</td>
<td>65</td>
<td>26.5</td>
</tr>
<tr>
<td>local</td>
<td>23</td>
<td>9.4</td>
</tr>
<tr>
<td>external</td>
<td>23</td>
<td>9.4</td>
</tr>
<tr>
<td>all</td>
<td>134</td>
<td>54.7</td>
</tr>
<tr>
<td>total</td>
<td>245</td>
<td>100</td>
</tr>
</tbody>
</table>

Table (4-9): Sample distribution according to financial sourcing variable

<table>
<thead>
<tr>
<th>Awareness</th>
<th>frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>yes</td>
<td>168</td>
<td>68.6</td>
</tr>
<tr>
<td>no</td>
<td>77</td>
<td>31.4</td>
</tr>
<tr>
<td>total</td>
<td>245</td>
<td>100</td>
</tr>
</tbody>
</table>

Table (4-10) Sample distribution according to awareness of laws, regulations, and blogs
4-4-4: Research instrument:
The research has used the questionnaire as suitable tool for gathering site data (appendex no.1). The questionnaire has been distributed over 260 Administration, counsels and planning committee members, out of which 247 ones has been returned back to me, 13 was lost and 2 ones of 247 are spoilt due to infulufillment to the answering conditions. The researcher has analysed 245 questionnaire papers and processed it statistically.

4-4-4-1: Reliability of the questionnaire instrument:
We have assured from the credibility of the questionnaire through passing it to group composed of eight of proffessionalist ,and prcticionist with widen knowelege of the study field (appendex-2). after some discussions and corrections the concensus has been achieved over the representivity and inclusiveness of the questionnaire paper contents.

4-4-4-2: co-efficient of stability :
The research has accounted the co-efficient of the stability of Cronbach Alfa for the questionnaire instruments at all schemes and found that it achieved high stability at all. thus the research has been satisfied for using the questionnaire

Table No.( 4-11 ) result of Cronbach Alfa Equation for getting stability co-efficient

<table>
<thead>
<tr>
<th>Themes</th>
<th>Cronbach Alfa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effectiveness sub-index</td>
<td>.91</td>
</tr>
<tr>
<td>Equity Sub-Index</td>
<td>0.92</td>
</tr>
<tr>
<td>Participation Sub-Index</td>
<td>.88</td>
</tr>
<tr>
<td>Accountability sub-Index</td>
<td>.87</td>
</tr>
<tr>
<td>overall Average</td>
<td>0.90</td>
</tr>
</tbody>
</table>

Shown in Table (4-11) that the reliability coefficients for the areas of the questionnaire ranged between (0.87 0.92), reaching a total reliability coefficient (0.90), all of which reflect the transactions meet the constant good The purposes of the study

4-4-4-3:. The questionnaire composition:
The study included a tool (questionnaire) seven specific parts implicit in the tool, and is not a form,
Each part consists of five paragraphs measure indicator of good governance to be studied in Greater Khartoum local bodies, has not been clarified parts of the questionnaire in order to get us answers by objective reality of the local authority, and to avoid the impact of addressing parts on the respondents, as well as not to exaggerate the positive or negative answer. The paragraphs of the resolution are as follows:
- 1-8 are questions specified to the sample representative information.
- 9-21 questions concerning the indicators from 1-8 of the effectiveness Sub-index.
- Questions from 22-30 concerning indicators 9-13 of equity Sub-index.
Questions from 30-61 concerning indicators 14-25 of participation Sub-Index
Questions concerning the index of 16-20 responding to the needs of the community.
Questions concerning the index of 21-25 community participation in decision-making.
Questions concerning the index of 26-30 independent local bodies and decentralization.
Questions concerning the index of 31-35 efficiency and effectiveness

4-4-5: Procedures of the study:
The study was conducted according to the following steps:
I- The design of the questionnaire and preparing till finalized.
II- Identify study population and sampling process.
III- deciding on the distribution of the sample
IV- Collect questionnaires from respondents and remarking it and entered into the computer, and processed statistically using the Statistical Package for the Social Sciences program. (SPSS)
V- Getting back the samples answers.
VI- Extract results of the questionnaires and analyzing and discussing it..

4-4-6 Variables of the study:
The study includes the following variables:
4-4-6-1: First, the independent variables:
I- Variable number of members of local bodies
II- Variable Number of Members holders and holders of university degrees (Qualification)
III- Primary source of income for local bodies and funding bodies
IV- Way the formation of the local authority.
V- Local body type and classification, municipality or village council or committee projects.
VI- Extent of informed knowledge of the members and the heads of local bodies and managers of the laws, regulations and codes specific to their work and the work of their organization.

4-4-6-2: Secondly, the Dependent Variable:
The dependent variable is one variable, a fact indicators of good governance, which you will learn from him by answering the questionnaire vertebrae, which includes the measurement of four sub-indexes of the Urban Governance Index which namely are: Effectiveness, equity, participation and Accountability sub-indexes.
In order to process the data, the researcher used statistical software packages for the Social Sciences (SPSS) using the statistical treatment of the following:
I. Averages and percentages
II. (V) Test for two independent groups. (Independent Test)
III. Analysis of variance (One way ANOVA) and test High posteriori comparisons between averages when necessary.

4-5: Conclusion
This chapter joined between similar study where the progress in urban governance has been measured and the corresponding progress in the city development also shown which give evidence that where we apply the principles of good governance in urban field of yield accountable positive changes.
Also we stated the methodology of studying the case using the means of questioning some samples of urban management community.
Chapter-5

Case Study Analysis
Chapter-5

Case Study Analysis

5-1: Introduction:

This chapter is answering to the third part of the research question” to what extent that the principles of UG is profound in Khartoum city)? and is specified mainly for analyzing the result of the questionnaires answers provided by 250 of the respondents of the Greater Khartoum Localities been questioned to understand the reality of the urban governance reality in our management of the Khartoumj capital localities.

In the starting of the chapter we focus on the way how the research of the case has been undercarried to come up with logical answer following the traditional steps of research practices. The chapter first has start with answering the main research question and then provide the analysis where answer is drived.

Here also the 6 research assumptions which has been stated in chapter one is discussed broadenly and statistically analysed using SPSS formula.

5-2: Analysis of the main question

(What is the urban governance? how can it be measured? and to what extent that the principles of UG is profound in Khartoum city)?

To determine that we used the arithmetical means and percentages for each sub –Index of the UGI.

In other words to answer the main question we have to apply the standards of urban governace measurements through using group of indicators as mentioned in the theoretical background in chapter-4

Tables from 9-14 indicate the reality of the UGI in Khartoum localities whereas the conclusion of table 15 indicate the summary of all tables and overall score of the UGI

For the analysis purposes we adopt the following percentages categories as references:

80% and more is high score
79.9%-70% good percentage
69.9%-60% mideum percentagte
59.9-50% low percentage
49.9%and less is poor percentage
## 1-Effectiveness Sub-Index

<table>
<thead>
<tr>
<th>Indicator no.</th>
<th>Indicator name</th>
<th>Symble</th>
<th>Formula</th>
<th>Value Achieved</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Local government revenue (LGR) per capita</td>
<td></td>
<td></td>
<td>0.09</td>
</tr>
<tr>
<td>2</td>
<td>Ratio of actual recurrent and capital budget</td>
<td></td>
<td></td>
<td>0.09</td>
</tr>
<tr>
<td>3</td>
<td>Local government revenue transfers</td>
<td></td>
<td></td>
<td>0.10</td>
</tr>
<tr>
<td>4</td>
<td>Ratio of mandated to actual tax collection</td>
<td></td>
<td></td>
<td>0.10</td>
</tr>
<tr>
<td>5</td>
<td>Predictability of transfers in local government budget</td>
<td></td>
<td></td>
<td>0.00</td>
</tr>
<tr>
<td>6</td>
<td>Published performance delivery standards (PPDS)</td>
<td></td>
<td></td>
<td>0.11</td>
</tr>
<tr>
<td>7</td>
<td>Customer Satisfaction Survey</td>
<td></td>
<td></td>
<td>0.08</td>
</tr>
<tr>
<td>8</td>
<td>Existence of a Vision Statement</td>
<td></td>
<td></td>
<td>0.06</td>
</tr>
<tr>
<td></td>
<td>Overall effectiveness score</td>
<td></td>
<td></td>
<td>0.63</td>
</tr>
</tbody>
</table>

Table no.(5-1)

## 2-Equity Sub-Index:

<table>
<thead>
<tr>
<th>Indicator No.</th>
<th>Indicator name</th>
<th>Symble</th>
<th>Formula</th>
<th>Value achieved</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>Citizens’ Charter: right of access to basic services (CCS)</td>
<td></td>
<td></td>
<td>0.00</td>
</tr>
<tr>
<td>10</td>
<td>Proportion of women councilors (WC)</td>
<td></td>
<td></td>
<td>0.03</td>
</tr>
<tr>
<td>11</td>
<td>Proportion women in key positions (WK)</td>
<td></td>
<td></td>
<td>0.01</td>
</tr>
<tr>
<td>12</td>
<td>a-Pro-poor pricing policies for water (PPC)</td>
<td></td>
<td></td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>b-procentage of household with water connection (HH wat)</td>
<td></td>
<td></td>
<td>0.06</td>
</tr>
<tr>
<td></td>
<td>c-Is water price cheaper for poor settlements (WF)</td>
<td></td>
<td></td>
<td>0.08</td>
</tr>
<tr>
<td>13</td>
<td>Street Vending (Incentives for informal businesses) (IM)?</td>
<td></td>
<td></td>
<td>0.14</td>
</tr>
<tr>
<td></td>
<td>Overall score of equity sub-Index</td>
<td></td>
<td></td>
<td>0.32</td>
</tr>
</tbody>
</table>

Table no.(5-2)
3-Participation Sub-Index:

<table>
<thead>
<tr>
<th>Indicator No.</th>
<th>Indicator name</th>
<th>Symble</th>
<th>Formula</th>
<th>Value achieved</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>Elected Council</td>
<td></td>
<td></td>
<td>0.15</td>
</tr>
<tr>
<td>15</td>
<td>Election of the Mayor</td>
<td></td>
<td></td>
<td>0.00</td>
</tr>
<tr>
<td>16</td>
<td>Percentage of Voter turnout</td>
<td></td>
<td></td>
<td>0.13</td>
</tr>
<tr>
<td>17</td>
<td>People’s forum</td>
<td></td>
<td></td>
<td>0.11</td>
</tr>
<tr>
<td>18</td>
<td>Civic Associations per 10.000 population</td>
<td></td>
<td></td>
<td>0.09</td>
</tr>
</tbody>
</table>

Overall score of Participation sub-Index: 0.48

Table no.(5-3)

4-Accountability Sub-Index:

<table>
<thead>
<tr>
<th>Indicator No.</th>
<th>Indicator Name</th>
<th>Symble</th>
<th>Formula</th>
<th>Value Achieved</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>Formal Publication of contracts/tenders, budgets &amp; accounts (CTBA)</td>
<td></td>
<td></td>
<td>0.20</td>
</tr>
<tr>
<td>20</td>
<td>Control by higher levels of Government</td>
<td></td>
<td></td>
<td>0.00</td>
</tr>
<tr>
<td>21</td>
<td>Codes of conduct</td>
<td></td>
<td></td>
<td>0.08</td>
</tr>
<tr>
<td>22</td>
<td>Facility for citizen complaints</td>
<td></td>
<td></td>
<td>0.10</td>
</tr>
<tr>
<td>23</td>
<td>Anti-corruption Commission</td>
<td></td>
<td></td>
<td>0.00</td>
</tr>
<tr>
<td>24</td>
<td>Disclosure of income &amp; assets (DIA)</td>
<td></td>
<td></td>
<td>0.00</td>
</tr>
<tr>
<td>25</td>
<td>Independent audit</td>
<td></td>
<td></td>
<td>0.15</td>
</tr>
</tbody>
</table>

Overall score of accountability sub-Index: 0.53

Table no.(5-4)

5-3 : Analysis of the research question:

Table no( 5-5)ordering accounting the arithmetical means and percentages for the reality of the urban governance application at greater Khartoum localities at x=245
<table>
<thead>
<tr>
<th>Order</th>
<th>Sub-Index name</th>
<th>Value average of sub-index</th>
<th>In percentage%</th>
<th>Reality estimation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Effectiveness</td>
<td>0.63</td>
<td>63%</td>
<td>Medium</td>
</tr>
<tr>
<td>2</td>
<td>equity</td>
<td>0.32</td>
<td>32%</td>
<td>Poor</td>
</tr>
<tr>
<td>3</td>
<td>Participation</td>
<td>0.48</td>
<td>48%</td>
<td>Poor</td>
</tr>
<tr>
<td>4</td>
<td>Accountapility</td>
<td><strong>0.53</strong></td>
<td>53%</td>
<td>Medium</td>
</tr>
<tr>
<td></td>
<td>UGI Value</td>
<td>0.49</td>
<td>49%</td>
<td>Poor</td>
</tr>
</tbody>
</table>

**Table no.(5-5)**

Organizing the resulted percentages of the responsiveness of Khartoum localities to the good governance in descending order:

**5-4: Analysis of the Assumptions:**

**5-4-1: Analysis of Assumption no.1:**

(No indicative statistical variation in the reality of urban good governance index at the level (a=0.05) due to the change in the variable of number of localitys members). For the proving this assumption we use the following linear variation as stipulated in table no.5-6

<table>
<thead>
<tr>
<th>Sub-Index name</th>
<th>1-5</th>
<th>6-10</th>
<th>11 and more</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effectiveness</td>
<td>3.22</td>
<td>3.41</td>
<td>3.46</td>
</tr>
<tr>
<td>Equity</td>
<td>3.25</td>
<td>3.43</td>
<td>3.26</td>
</tr>
<tr>
<td>Participation</td>
<td>3.33</td>
<td>3.41</td>
<td>3.31</td>
</tr>
<tr>
<td>Accountability</td>
<td>3.13</td>
<td>3.18</td>
<td>2.94</td>
</tr>
<tr>
<td>Total score</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Table (5-6)**
The result of the analysis of linear variation for difference indication of good urban governance in the reality of Khartoum localities practice due to the variable of the number of members.

**Table (5-7):** The results of the analysis of variance for the significance of differences in the reality of urban governance sub index in local bodies Khartoum localities variable depending on the number of members

<table>
<thead>
<tr>
<th>Sub-Index name</th>
<th>Source of variation</th>
<th>Indepency</th>
<th>Sum of variation 2</th>
<th>Means of squares</th>
<th>indication*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effectiveness</td>
<td>Between groups</td>
<td>2</td>
<td>1.47</td>
<td>0.73</td>
<td>0.47</td>
</tr>
<tr>
<td></td>
<td>Within</td>
<td>242</td>
<td>238.91</td>
<td>0.98</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>244</td>
<td>240.39</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Sub-Index</td>
<td>Between groups total</td>
<td>Within groups total</td>
<td>Between groups total</td>
<td>Within groups total</td>
<td>Total score</td>
</tr>
<tr>
<td>-----------</td>
<td>----------------------</td>
<td>---------------------</td>
<td>----------------------</td>
<td>---------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>equity</td>
<td>2 242 244</td>
<td>1.66 214.88 216.56</td>
<td>0.84 0.88 0.9 4 0.38</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participation</td>
<td>2 242 244</td>
<td>0.49 226.34 226.84</td>
<td>0.24 0.93 0.2 6 0.76</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accountability</td>
<td>2 242 244</td>
<td>2.34 156.67 159.02</td>
<td>1.17 0.64 1.8 1 0.16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total score</td>
<td>2 242 244</td>
<td>2.13 210.27 212.41</td>
<td>1.06 0.86 1.2 3 0.29</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Indicative at level( $a=0.05$)

From table 5-7 it is clear that no indicative variation at the level ($a=0.5$) in the reality of the good Urban governance field for indicators in Khartoum localities.

In order to determine the differences between those who were in the area of autonomy and decentralization, use the Scheffe test (Between the averages, and the results of the table (5-8 (Scheffe Post-hoc Test) for a posteriori comparisons showoing it

**5-4-2: Analysis of assumption no.2**

*(No significance variation attributed to level of education variable in urban good governance index of Khartoum localities at level of indication (a=0.5)*

To exam the above assumption we use test(T) for the two groups as been indicated in table no(5-8)

Table 19: show the test (T) Results the significance of differences in the reality of Urban governance index in khartoum localities variable depending on qualification.

<table>
<thead>
<tr>
<th>Sub-Index</th>
<th>Less than diploma</th>
<th>Diploma nad above</th>
<th>(T)</th>
<th>indication</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>mean</td>
<td>diversion</td>
<td>mean</td>
<td>diversion</td>
</tr>
<tr>
<td>effectiveness</td>
<td>3.31</td>
<td>0.97</td>
<td>3.41</td>
<td>0.99</td>
</tr>
<tr>
<td>equity</td>
<td>0.46</td>
<td>0.73</td>
<td>0.96</td>
<td>3.39</td>
</tr>
<tr>
<td>participation</td>
<td>0.88</td>
<td>0.15</td>
<td>0.92</td>
<td>3.13</td>
</tr>
</tbody>
</table>
Accountability | 3.15 | 0.87 | 3.10 | 0.79 | 0.34 | 0.73  
Total value  | 0.14 | 1.46 | 0.97 | 3.34 | 1.01 | 3.60

Shown in the table (5-8) that there are no statistically significant differences at the level of \( a = 0.05 \) in the reality of the indicators of Urban governance index in Khartoum localities attributed to the level of education.

5-4-4: Analysis of Assumption No.3:

(No significance variation attributed to the spatial level variable in urban governance index(UGI) of Khartoum localities at level of indication \( a = 0.5 \))

In order to exam the above assumption we use test of linear variation in table 19 shows the arithmatica means whereas table 21 shows the result of the analysis of the linear variation tests.

Table (5-9) the arithmetical means calculation:

<table>
<thead>
<tr>
<th>sub index</th>
<th>Village/neighbourhood</th>
<th>locality</th>
<th>state</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficiency</td>
<td>3.8</td>
<td>3.27</td>
<td>3.32</td>
</tr>
<tr>
<td>equity</td>
<td>3.78</td>
<td>3.23</td>
<td>3.34</td>
</tr>
<tr>
<td>participation</td>
<td>3.51</td>
<td>3.008</td>
<td>3.14</td>
</tr>
<tr>
<td>Accountability</td>
<td>3.70</td>
<td>3.25</td>
<td>3.44</td>
</tr>
<tr>
<td>total</td>
<td>3.59</td>
<td>3.19</td>
<td>3.28</td>
</tr>
</tbody>
</table>

Table(5-10): show the analysis result of the linear variation test.

<table>
<thead>
<tr>
<th>UGI sub-index</th>
<th>Variation source</th>
<th>Sum of diviation squares</th>
<th>Squares means</th>
<th>Value(F)</th>
<th>indication</th>
<th>Impendancy value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficiency</td>
<td>Between groups</td>
<td>11.19 229.19 24.39</td>
<td>5.59 .94</td>
<td>5.91</td>
<td>*0.003</td>
<td>2 242 244</td>
</tr>
<tr>
<td>Equity</td>
<td>Between groups</td>
<td>11.96 214.88 226.84</td>
<td>.98 .88</td>
<td>6.73</td>
<td>*0.001</td>
<td>2 242 244</td>
</tr>
<tr>
<td>participation</td>
<td>Between groups</td>
<td>10.10 202.31 212.41</td>
<td>5.05 .83</td>
<td>6.04</td>
<td>*0.003</td>
<td>2 242 244</td>
</tr>
</tbody>
</table>
Table(5-10):
Shown in the table (5-10) that there are no statistically significant differences at the level of (a=0.05) in the reality of the indicators of Urban governance index in Khartoum localities attributed to the spatial level.

While the differences were statistically significant on the remaining sub-indexes and the overall value depending on the spatial level variable, and to determine between which sub-indexes the variations and the total score, use the Scheffe test between the averages, and the results tables (Scheffe Post-hoc Test) for a posteriori comparisons. tables no: (5-11), (5-12), (5-13) show that 1-Effectiveness sub-Index:
Table(5-11): Scheffe test results for the significance of differences in the reality of the urban governance index(UGI) :effectiveness indicator due to the change in the variable of the spatial level.

<table>
<thead>
<tr>
<th>Spatial level</th>
<th>Neighbourhood/village</th>
<th>locality</th>
<th>state</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neighbourhood/village</td>
<td>6.04 145.66 151.70</td>
<td>0.52*</td>
<td>*0.47</td>
</tr>
<tr>
<td>Locality</td>
<td></td>
<td></td>
<td>-0.05</td>
</tr>
<tr>
<td>State</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Statistically indicative at a=0.05

Table(5-11):
It is clear that from the table the difference in the effectiveness sub-index was statistically indicative in the total value between (village/neiborhood level and state level) whereas it has no statistical significant indication between them

5-4-4: analysis of assumption 4:

((No significance variation attributed to the way of appointment variable in urban governance index(UGI) of Khartoum localities at level of indication (a=0.5))
To exam this assumption we use the linear variation analysis as per table no5-(5-12) aritmatical means and table5-13) which show the result of linear variation analysis.

Tabe (5-12):the arithmetical means for the (UGI)sub-indexes in the reality of Khartoum localities according to change in the variable of the type of employment
### Table (5-12)

Table (5-13): the result of linear variation analysis in the reality of the UGI sub-indexes in Khartoum localities due to change in type of formation (employment).

<table>
<thead>
<tr>
<th>Sub-index</th>
<th>Variation source</th>
<th>Independance value</th>
<th>Total of squared diviation</th>
<th>Squares means</th>
<th>(V)</th>
<th>Indication*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Between groups</td>
<td>2 242 244</td>
<td>21.80 218.58 240.39</td>
<td>10.90 0.90</td>
<td>12.07</td>
<td>*0.0001</td>
</tr>
<tr>
<td>effectiveness</td>
<td>Within groups</td>
<td>2 242 244</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equity</td>
<td>Between groups</td>
<td>2 242 244</td>
<td>13.67 213.17 226.84</td>
<td>6.83 0.88</td>
<td>7.76</td>
<td>*0.001</td>
</tr>
<tr>
<td></td>
<td>Within groups</td>
<td>2 242 244</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>total</td>
<td>2 242 244</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>participation</td>
<td>Between groups</td>
<td>2 242 244</td>
<td>22.99 189.42 212.41</td>
<td>11.49 0.78</td>
<td>14.68</td>
<td>*0.0001</td>
</tr>
<tr>
<td></td>
<td>Within groups</td>
<td>2 242 244</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>total</td>
<td>2 242 244</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>accountability</td>
<td>Between groups</td>
<td>2 242 244</td>
<td>14.13 221.78 235.91</td>
<td>7.06 0.91</td>
<td>7.71</td>
<td>*0.001</td>
</tr>
<tr>
<td></td>
<td>Within groups</td>
<td>2 242 244</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>total</td>
<td>2 242 244</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Between groups</td>
<td>2 242 244</td>
<td>15.05 136.64 151.70</td>
<td>7.52 0.56</td>
<td>13.33</td>
<td>*0.0001</td>
</tr>
<tr>
<td></td>
<td>Within groups</td>
<td>2 242 244</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>total</td>
<td>2 242 244</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*variation is statistically significant at level a=0.05

**Table (5-13)**

From table (5-13) there is statistically significant variations at the level of a=0.05 in the reality of UGI attributable to the change of the variable of type of formation (employment).

In order to determine between which of the sub-indexes values and the total was the differences, Scheffe test was used for comparisons posteriori (Scheffe Post-hoc Test) between the averages, and the results tables (5-14), (5-15), (5-16), 5-17), (5-18), (5-19) shows that
**5-4-4-1-effectiveness sub-Index:**
Table (5-14) is the result of Scheffe test for variations UGI in the reality of the Khartoum localities according to change in the variable of the type of management employment.

<table>
<thead>
<tr>
<th>Type of employment</th>
<th>election</th>
<th>employment</th>
<th>mix</th>
</tr>
</thead>
<tbody>
<tr>
<td>election</td>
<td></td>
<td>-0.24</td>
<td>*0.62</td>
</tr>
<tr>
<td>appointment</td>
<td></td>
<td></td>
<td>*0.86</td>
</tr>
<tr>
<td>mix</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Statically significant variation at level a=0.05

**Table (5-14)**
From table(14) the differences was significant in the effectiveness sub-index due to type of employment variable between election and mix whereas it wasn’t significant between election and appointment.

**5-4-4-2-equity sub-index:**
Table(5-15) Scheffe test results for the significance of differences in the reality of equity sub-index in Khartoum localities attributable to change in the variable of type of management formation(employment)

<table>
<thead>
<tr>
<th>Type of employment</th>
<th>election</th>
<th>appointment</th>
<th>mix</th>
</tr>
</thead>
<tbody>
<tr>
<td>Election</td>
<td></td>
<td>-0.19</td>
<td>*0.47</td>
</tr>
<tr>
<td>Appointment</td>
<td></td>
<td></td>
<td>*0.67</td>
</tr>
<tr>
<td>Mix</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*statically indicative at a=0.05

**Table(5-15)**
From table (5-16)the variations was statically significant in the equity sub-index between mix and (election and appointment) towards the (election and appointment) whereas no significant difference between election and appointment

**5-4-4-3-Participation Sub-Index:**
Table no(5-16): shows the result of Scheffe test for the significance of differences in the reality of participation sub-index in Khartoum localities attributable to change in the variable of type of management formation(employment)

<table>
<thead>
<tr>
<th>Type of employment</th>
<th>election</th>
<th>appointment</th>
<th>mix</th>
</tr>
</thead>
<tbody>
<tr>
<td>Election</td>
<td></td>
<td>-0.17</td>
<td>*0.43</td>
</tr>
<tr>
<td>Appointment</td>
<td></td>
<td></td>
<td>*0.61</td>
</tr>
<tr>
<td>Mix</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*statically significant at level a=0.05

**Table no(5-16)**
From table (5-16) the variation was statically significant in the participation sub-index between election and appointment and mix towards (election and appointment) whereas the variations was statically insignificant between election and appointment.

5-4-4-4- Accountability sub-index:

Table no(5-17) shows the result of Scheffe test for the significance of variations in the reality of accountability sub-index in Khartoum localities attributable to change in the variable of type of management formation (employment).

<table>
<thead>
<tr>
<th>Type of employment</th>
<th>election</th>
<th>appointment</th>
<th>mix</th>
</tr>
</thead>
<tbody>
<tr>
<td>election</td>
<td></td>
<td>-0.21</td>
<td>*0.49</td>
</tr>
<tr>
<td>appointment</td>
<td></td>
<td></td>
<td>0.70</td>
</tr>
<tr>
<td>mix</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* statically significant at level a=0.05

Table no(5-17)

From table (5-17) the variation was statically significant in the accountability sub-index between election and appointment and mix towards (election and appointment) whereas the variations was statically insignificant between election and appointment.

5-4-4-5: Total value:

Table no(5-18) shows the result of Scheffe test for the significance of variations in the reality of UGI total value in Khartoum localities attributable to change in the variable of type of management formation (employment).

<table>
<thead>
<tr>
<th>Type of employment</th>
<th>election</th>
<th>appointment</th>
<th>mix</th>
</tr>
</thead>
<tbody>
<tr>
<td>Election</td>
<td></td>
<td>-0.21</td>
<td>*0.51</td>
</tr>
<tr>
<td>Appointment</td>
<td></td>
<td></td>
<td>*0.72</td>
</tr>
<tr>
<td>Mix</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* statically significant at level a=0.05

Table no(5-18)

From table (5-18) the variation was statically significant in the UGI total value between (election and appointment) and mix towards (election and appointment) whereas the variations was statically insignificant between election and appointment.

5-4-5: Analysis of assumption no.5

((No significance variation in urban governance index (UGI) of Khartoum localities attributable to the variable of source of finance at level of indication (a=0.5))
To examine this assumption we use the linear variation analysis as per Table no(5-19) arithmetical means and table5-20) which show the result of linear variation analysis.

Table (5-19): the arithmetical means for the (UGI) sub-indexes in the reality of Khartoum localities according to change in the variable of the source of finance.

<table>
<thead>
<tr>
<th>Sub-index</th>
<th>self</th>
<th>local</th>
<th>external</th>
<th>all</th>
</tr>
</thead>
<tbody>
<tr>
<td>effectiveness</td>
<td>3.66</td>
<td>3.49</td>
<td>2.59</td>
<td>3.38</td>
</tr>
<tr>
<td>equity</td>
<td>3.63</td>
<td>3.40</td>
<td>2.73</td>
<td>3.35</td>
</tr>
<tr>
<td>participation</td>
<td>3.37</td>
<td>3.25</td>
<td>2.54</td>
<td>3.11</td>
</tr>
<tr>
<td>accountability</td>
<td>3.63</td>
<td>3.40</td>
<td>2.72</td>
<td>3.37</td>
</tr>
<tr>
<td>Total value</td>
<td>3.52</td>
<td>3.36</td>
<td>2.63</td>
<td>3.29</td>
</tr>
</tbody>
</table>

Table (5-19): the result of linear variation analysis in the reality of the UGI sub-indexes in Khartoum localities due to change in source of finance.

<table>
<thead>
<tr>
<th>Sub index</th>
<th>Source of variation</th>
<th>Indipendance value</th>
<th>Sum of variation squares</th>
<th>Means of squares</th>
<th>(V)</th>
<th>Indication*</th>
</tr>
</thead>
<tbody>
<tr>
<td>effectiveness</td>
<td>Between groups</td>
<td>3</td>
<td>19.94</td>
<td>6.64</td>
<td>7.26</td>
<td>*0.0001</td>
</tr>
<tr>
<td></td>
<td>Withing roups</td>
<td>241</td>
<td>220.45</td>
<td>0.91</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>total</td>
<td>244</td>
<td>240.39</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>equity</td>
<td>Between groups</td>
<td>3</td>
<td>14.11</td>
<td>4.70</td>
<td>5.23</td>
<td>*0.001</td>
</tr>
<tr>
<td></td>
<td>Withing roups</td>
<td>241</td>
<td>212.73</td>
<td>0.88</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>total</td>
<td>244</td>
<td>226.84</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>participation</td>
<td>Between groups</td>
<td>3</td>
<td>11.95</td>
<td>3.98</td>
<td>4.79</td>
<td>*0.003</td>
</tr>
<tr>
<td></td>
<td>Withing roups</td>
<td>241</td>
<td>200.46</td>
<td>0.83</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>total</td>
<td>244</td>
<td>212.41</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>accountability</td>
<td>Between groups</td>
<td>3</td>
<td>14.25</td>
<td>4.75</td>
<td>5.16</td>
<td>*0.002</td>
</tr>
<tr>
<td></td>
<td>Withing roups</td>
<td>241</td>
<td>221.56</td>
<td>0.92</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>total</td>
<td>244</td>
<td>235.91</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total value</td>
<td>Between groups</td>
<td>3</td>
<td>13.71</td>
<td>4.57</td>
<td>7.98</td>
<td>*0.0001</td>
</tr>
<tr>
<td></td>
<td>Withing roups</td>
<td>241</td>
<td>137.99</td>
<td>0.57</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>total</td>
<td>244</td>
<td>151.70</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Statically significant at level of a=0.05

From table (5-19) there is stitically significant variations at the level of a=0.05 in the reality of UGI attributable to the change of the variable of source of finance.
To determine between which values of the sub-indexes and total the variation was? the scheffé (Post-hoc test) is used to answer this question.
Table 5-20:5-23 was used to show the analysis result of this test

**5-4-5-1-effectiveness sub-Index:**
Table (5-20) is the result of Scheffe test for variations UGI in the reality of the Khartoum localities according to change in the variable of the source of finance

<table>
<thead>
<tr>
<th>Source of finance</th>
<th>self</th>
<th>local</th>
<th>external</th>
<th>all</th>
</tr>
</thead>
<tbody>
<tr>
<td>self</td>
<td></td>
<td></td>
<td>0.17</td>
<td>*1.07</td>
</tr>
<tr>
<td>local</td>
<td></td>
<td></td>
<td>*0.90</td>
<td>0.11</td>
</tr>
<tr>
<td>external</td>
<td></td>
<td></td>
<td></td>
<td>*0.79-</td>
</tr>
<tr>
<td>all</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Statically significant variation at level a=0.05

**Table (5:20)**
Table(5-20) the result of the scheffe test for the variations significance of effectiveness sub index of the UGI in the reality of the of Khartoum localities according to the variable of source of finance
- From table(5-20) the differences was significant in the effectiveness sub-index due to type of employment variable between (self and external) and( local and all) whereas it wasn’t statically significant between( self,local and all).

**5-4-5-2-equity sub-index:**
Table(5-21) Scheffe test results for the significance of differences in the reality of equity sub-index in Khartoum localities attributable to change in the variable of type source of finance.

<table>
<thead>
<tr>
<th>Source of finance</th>
<th>self</th>
<th>local</th>
<th>external</th>
<th>all</th>
</tr>
</thead>
<tbody>
<tr>
<td>self</td>
<td></td>
<td></td>
<td>0.22</td>
<td>*0.90</td>
</tr>
<tr>
<td>local</td>
<td></td>
<td></td>
<td>0.76</td>
<td>0.05</td>
</tr>
<tr>
<td>external</td>
<td></td>
<td></td>
<td></td>
<td>*0.62-</td>
</tr>
<tr>
<td>all</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Statically significant variation at level a=0.05

**Table(5-21)**
Table(5-21) the result of the scheffe test for the variations significance of equity sub index of the UGI in the reality of the of Khartoum localities according to the variable of source of finance
- From table(5-21) the differences was significant in the equity sub-index due to the source of finance variable between external (self, local and all) towards(self, local and all) and( local and all) whereas it wasn’t statically significant between self, local and all.

**5-4-5-3-Participation Sub-Index**
The table no(5-22) shows the result of Scheffe test for the significance of differences in the reality of participation sub-index in Khartoum localities attributable to change in the variable of type of source of finance.

<table>
<thead>
<tr>
<th>Source of finance</th>
<th>self</th>
<th>local</th>
<th>external</th>
<th>all</th>
</tr>
</thead>
<tbody>
<tr>
<td>self</td>
<td>0.12</td>
<td>*0.82</td>
<td>0.25</td>
<td></td>
</tr>
<tr>
<td>local</td>
<td></td>
<td>*0.70</td>
<td>0.13</td>
<td></td>
</tr>
<tr>
<td>external</td>
<td></td>
<td></td>
<td>*0.56-</td>
<td></td>
</tr>
<tr>
<td>all</td>
<td></td>
<td></td>
<td></td>
<td>*statically significant at level a=0.05</td>
</tr>
</tbody>
</table>

Table(5-22)

- From table(5-22) the differences was significant in the effectiveness sub-index due to source of finance variable between external and (self, local and all) towards (self, local and all) whereas it wasn’t statically significant between (self, local and all).

5-4-5-4: Accountability sub-index:
Table no(5-23) shows the result of Scheffe test for the significance of variations in the reality of accountability sub-index in Khartoum localities attributable to change in the variable of source of finance.

<table>
<thead>
<tr>
<th>Source of finance</th>
<th>self</th>
<th>local</th>
<th>external</th>
<th>all</th>
</tr>
</thead>
<tbody>
<tr>
<td>self</td>
<td>0.23</td>
<td>*0.91</td>
<td>0.26</td>
<td></td>
</tr>
<tr>
<td>local</td>
<td></td>
<td>*0.67</td>
<td>0.02</td>
<td></td>
</tr>
<tr>
<td>external</td>
<td></td>
<td></td>
<td>*0.65-</td>
<td></td>
</tr>
<tr>
<td>all</td>
<td></td>
<td></td>
<td></td>
<td>*statically significant at level a=0.05</td>
</tr>
</tbody>
</table>

Table no(5-23)

From table(5-23) the variations was statistically significant in the accountability sub-index between external and (self, local and all) towards self, local and all whereas it wasn’t significant between self and local and all.

5-4-5-5: Total UGI value:

Table no(5-24) shows the result of Scheffe test for the significance of variations in the reality of UGI total value in Khartoum localities attributable to change in the variable of type of the source of the finance.

<table>
<thead>
<tr>
<th>Source of finance</th>
<th>self</th>
<th>local</th>
<th>external</th>
<th>all</th>
</tr>
</thead>
<tbody>
<tr>
<td>self</td>
<td>0.16</td>
<td>*0.89</td>
<td>0.23</td>
<td></td>
</tr>
<tr>
<td>local</td>
<td></td>
<td>*0.73</td>
<td>0.07</td>
<td></td>
</tr>
<tr>
<td>external</td>
<td></td>
<td></td>
<td>*0.66-</td>
<td></td>
</tr>
<tr>
<td>all</td>
<td></td>
<td></td>
<td></td>
<td>*statically significant at level a=0.05</td>
</tr>
</tbody>
</table>

Table no(5-24)
From table (5-24) the variations was statically significant in the UGI total value between external and (self, local and all) towards (self, local and all) where as it was not significant between self, local and all.

5-3-6: Analysis of Assumption no.6
((No significance variation attributed to the change in variable of law, regulation and blogs awareness in urban governance index (UGI) of Khartoum localities at level of indication (a=0.5))

Table (5-25): shows the results of test(t) for the significance of variations in the reality of UGI attributable to the variable of laws, regulations and blogs awareness.

<table>
<thead>
<tr>
<th>Sub-index</th>
<th>yes</th>
<th>no</th>
<th>(V)</th>
<th>indication</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>means</td>
<td>deviation</td>
<td>means</td>
<td>deviation</td>
</tr>
<tr>
<td>effectiveness</td>
<td>3.68</td>
<td>0.88</td>
<td>2.76</td>
<td>0.92</td>
</tr>
<tr>
<td>equity</td>
<td>3.64</td>
<td>0.86</td>
<td>2.79</td>
<td>0.90</td>
</tr>
<tr>
<td>participation</td>
<td>3.38</td>
<td>0.81</td>
<td>2.61</td>
<td>0.96</td>
</tr>
<tr>
<td>accountability</td>
<td>3.65</td>
<td>0.85</td>
<td>2.80</td>
<td>0.98</td>
</tr>
<tr>
<td>Total value</td>
<td>3.54</td>
<td>0.62</td>
<td>2.75</td>
<td>0.84</td>
</tr>
</tbody>
</table>

*tabulated (v) =1.96

Table (5-25):

Table no.5-25 shows existence of statistically significant variations at level of indication a=0.05 in the reality of the UGI in Khartoum localities attributable to the variable of laws, regulations and blogs awareness between aware and not aware towards aware.

5-4- Conclusion

In this chapter we included all the statistic analysis used for accounting UGI and its sub-index started from analyzing the main research question through the analysis of the six research assumption using arithmetical means, linear variance (T) test and Sceffè test to analyse the outcomes.
Chapter 6

Discussion of Research Analysis and Recommendations
6-1: Introduction:
It is important for the field results and analysis incurred in chapter 5 to be discussed broadly to assist the researcher to reread the results of the analysis table against the assumptions. We start with the research main questions discussing answers shown from tables in chapter 5 depending on categories set out in chapter 3. The discussions are covering the analysis of the sub-indexes of the UGI and extended to cover the six statistical assumptions analysis. This is the last chapter of the research thus; it is consisted of the research recommendations, references and the appendixes.

6-2: Discussion of Research Question Analysis:
The analysis answer of the research question has reflected poor UGI at Khartoum localities which clearly affected the urban performance and hence city development Index. The clear indications of the poor UGI is represented in:

- Poor residential environment at the capital of the locality.
- Very poor public health system
- Less caring with public realms(open space, streets,
- Negative relationship between localities and their citizen
- Absence of women participation(less than 6%).
- No. formal attempts of investments in private-public sector partnership.

6-3: Discussion to the four sub-Indexes:

6-3-1: Effectiveness sub-Index:
Khartoum localities authorities effectiveness in this research is medium mainly due to the fact the authorities in theses localities are not holding to the main services provided to the citizen that. For example services like electricity, water supply and infrastructure construction are centralized and not provided by the localities that prone very high dependability of the local villages / neighborhoods and weakening the relationship between local partners (localities and /organizations citizens)

Revenue per capita was 29.6 US Dollars (total average local government revenue between 2002-2001 = 29,086,300; official total city population = 952,410) in 2005. Yet, bearing in mind the huge number of unregistered migrants in the city, the revenue is likely to be considerably lower. The capital’s revenue consists of 13 percent of transfers by the central budget. Moreover, the actual transfer was reduced between 2003 and 2004 since some public entities now receive their
budget from their respective ministries. In addition, the city does not receive any subsidies from the central state. There are no public performance delivery standards designed by the respective ministries and agencies. These standards are developed locally and comprise for example water provision, electricity, hygiene, waste removal, health, and education services. No Information brochures of standards also exist and are sold to citizens and business entities. However, it means Sharq Elneil localities citizens do not receive any information nor they not participating in the channels where policy of services are cooked. In addition, a consumer satisfaction survey is carried out every year at the capital city level. Yet this survey is not widely distributed and not broadly established among the city population (according to the majority of questionnaire answers). Sharq Elneil also features a general plan for the development of the capital city up to 2033 (existence of a vision statement) but this plan has not made by the local partnership hence no one knows about its details as supposed to be strategic. While there are and have been consultations on different spatial urban levels on this issue, it is still not known by the whole population. At this, it has to be noted that especially the urban poor and the informal society face problems in access to the formal political process of the city and they complain lack of transparency and no certain office is specified for citizens complaint. As summary of calculations which show medium over estimate of the sub-index on the effectiveness (0.63 out of 1.0) as most criteria for the corresponding indicators are not met all.

6-3-2: Equity Sub-index:

In terms of equity, the city shows the lowest UGI score. This is due to the fact that Sharq Elneil does not correspond too well to the sub-indexes indicators as presented in the following. There is no published citizen’s charter present, informing on residents rights such as the right to basic services. Although there are some arrangements between dwellers of Urban central area and the centre area service entities covering basic services, only 50 percent of the city population lives in urban area. As aforementioned, cultural differences oftentimes determine the level of access for females to various institutions. This is particularly true for Sharq Eneil, with only few women councilors in the administration and council less than 6%. However, the UGI revealed some explanations for that, indicating shortcomings in gender equality. Khartoum state has quota system for women just as women are usually not endowed with sufficient financial resources to run for public office (UNDP 2006: 11). In addition, Sudan’s capital does not feature a pro-poor policy for water provision. Dwellers of informal settlements pay a multiple of the prices charged in formal residential areas. Thus, while the price per cubic meter in formal areas is around 0.05 US Dollars, it is 0.58 US Dollars at water distribution kiosks and 1.16 for water truck deliveries in the Kuku areas, the locality provides particular areas in the central parts, where small scale informal street vending is allowed and submitted to particular restrictions though (incentives for informal businesses). Moreover, Sharq Elnei’s city government supports informal activities of providing information on markets and fairs by citizens. Against this background the equity sub-index for Sharq Elneil is very low as seen in the table. An issue most striking is that even though the city is in charge of basic service provision (electricity, water, sanitation), there is no document guaranteeing access to these. This is particularly a drawback since the incidence of urban poverty in Sharq Elneil Locality is very high.
6-3-3: discussion of participation sub-index:
Just as effectiveness, the participation sub-index presents a relatively high score. At this the city corresponds well to the indicators addressing the respective principle. Thus the city councilors are directly elected and there appears to be a high voter turnout in municipal elections. Yet, members of the Citizen’s Representative are not necessarily full-time jobs with councilors often holding senior positions in the city government or with the private sector. Apparently there may be conflicts of interest due to this). Furthermore, while the few number of civic associations subtracted Sharq Elneil’s participation score, evidence shows that only 2% percent of registered NGOs are in fact operational. Hence a multiplicity of civic organizations uses the registration for tax or other purposes.Moeover, in Sharq Elnei the commissioner- like others localities commissioners in Sudan- is not directly elected by citizens but is appointed by higher level government. Yet there are frequent meetings and consultations taking place in the capital city(Kuku). The respective values for participation are presented by the table no.(Chapter-4)

6-3-4.Discussion of accountability sub-Index:
Although the city disseminates formal information about contracts, tenders, budgets and accounts via newspapers, radio, the Internet and notice boards, that very information is not always available to Sharq Elneil locality residents as they lack access to those channels. As higher levels of government can terminate local government operations just as they can remove members of the locality or city council, there is a strong control by higher governmental levels and local authorities normally are squeezed to a certain area of authorization. Furthermore, the local government is bound to higher level government not to interfere in the area of setting tax levels or discuss any option with regards to dispense any of the quota . Most notably with regard to the principle of accountability is the fact that there is no anticorruption commission as well as no independent audit. In addition, locally elected officials are not obliged by law to publicly disclose personal income and assets as the look at somethinig concern to the higher level ministerial and councilors’ affairs. However, Sharq Elneil overall governance situation is presented in appendix ( ), charting
Yet Sharq Elneil scores average on the sub-index as seen in table 7.in Chapter-4 is very low.

6-4: Discussion of Assumptions Analysis:

6-4-1 Discussion of Analysis of Assumption No1 :

(No indecative statistical variation in the reality of urban good governance index at the level (a=0.05) due to the change in the variable of number of localitys members).
This assumption has shown no effect on good governance principle due to the size of the locality. it is not making any significance whether the council of the locality,administration staff of even the number of spatial units blong to the locality…the principle of good urban governance remain subject for consensus in respect to the size of the locality or district.
6-4-2: Discussion of Analysis of Assumption No2
((No significance variation attributed to level of education variable in urban good governance index of Khartoum localities at level of indication (a=0.5))

To exam this assumption we used the (t-test) for two different groups and the results has shown that the value of accounted (t) is less than the tabulated ( t)value this is why we accept the zero value assumption. I.e there is no considerable variations in the value of UGI due to the level of education of the locality members this look strange for first sight but when we look to the authorization delegated to the localities we find that all technical services and ambitious planning are not managed or coming from localities hence no meaning for using high qualified personnel.

6-4-3: Discussion of Analysis of Assumption No1 :
((No significance variation attributed to the spatial level variable in urban governance index (UGI) of Khartoum localities at level of indication (a=0.5))

We used here the analysis of the linear variation test to exam this assumption the exam show there is considerable variations in UGI value attributable to the variable of spatial administration level in order to understand to which one of the spatial levels the variation is attributed we used *(scheffe post-hoc test) the result shown UGI is most affect by the locality level due to the direct relation with the citizen’s affairs.

6-4-4: Discussion of Analysis of Assumption No4 :
((No significance variation attributed to the type of formation(employment) variable in urban governance index(UGI) of Khartoum localities at level of indication (a=0.5))

To exam this assumption the researcher used the linear variation test to check on the influence of the variable of type of formation the result has shown considerable variations attributed to this variable..which means there is considerable differences in the urban governance performance due to the way the management has been employed i.e elected ,directly assigned or mixed…the first has shown great sensitivity towards the urban governance issues.

6-4-5:discussion of assumption no.5:
((No significance variation in urban governance index(UGI) of Khartoum localities attributable to the variable of source of finance at level of indication (a=0.5))

For examination of this assumption we used the analysis of linear variation test which has shown considerable variation in the main UGI value attributable to the variable of the source of finance to determine which of the sub=index has been affected by this variable we used *(scheffe post-hoc test) which indicate that the UGI will be increased if the source of the finance will be (internally,locally or all)rather than external source as the internal and local source will be increased when the service do same and improved in term of quality and the accountability and participation are also increased.
6-4-6: discussion of assumption no.6:

((No significance variation attributed to the change in variable of law, regulation and blogs awareness in urban governance index (UGI) of Khartoum localities at level of indication (a=0.5))

We use (t-test) to compare between two independent groups and the result shown significance variations between the two groups towards the group which aware with laws, regulations and blogs of the locality.

The reason for this result is very absolute due to those acquainted with the laws specially the laws and regulations of the states and locality formations and local opinions of the locality community are more focusing on the locality challenges and specially citizens suffering and expectations…and carrying mature view to the future city prosperity.
6-5: Research Recommendation:

According to the conclusions the researcher has able to achieve through this research data and analysis he recommend the following:

6-5-1: Administratively:

I-The urban governance is statistical process and should be part of day to day duty of the localities administrations with qualified personnel dedicated purposely to this function.

I-Locality is very important part in the body of the urban system should be legally and administratively facilitated to play an important role in the future of the city performance.

i.e we should look to the effectiveness, equity, participation and accountability aspects to support urbanization process.

III-the system of decentralization has to be completed through type of formation to the localities system and democratically forming the local planning committees to help localities develop self sources of finance to help in building their city and prioritizing their public realm.

IV-speed-up of establishing a National Urban Observatory body in Sudan to avail all urban records for the future urban debates information-based decisions

V-Urban governance index literature and analysis is constituting an important mile stone on the way of quantification of national urban strategy representing the national ambitious interest rather than global shift..to take our cities step forward in the strategic struggle which strike the region and the world threatening the resources.

6-5-2: Academically:

I- The researcher is strongly recommending further studies in the field of urban modeling, urban design scenarios, City Development Index and city management, urban strategic planning

II- Urban modeling is appropriate modern subject recommended as part of urban planner/designer qualification requisitions hence; Sudan University of Sience and Technology (SUST) is urged to add this as subject for urban studies student.
List of References

2- ASIAN DEVELOPMENT BANK (ADB) (2008): Proposed Grant Assistance Mongolia:
18- UNITED NATIONS HUMAN SETTLEMENTS PROGRAMME (UN HABITAT) (2004a):
Appendix-1

Questionnaire

Division one: General information
Name of locality: ……………………… Population: ………………………
To Mr. /Mrs. …………………………………………………
2- Position: ………………. Commissioner ( ) Council Spokesman ( )
Council member ( ) administrative officer ( )
3- Number of locality member: Total ( ) Male ( ) Female ( )
4- Number of Graduate of the locality members (Diploma and Higher) ( )
5- Number of Planning Committees ( )
6- Ways of committees formation: Elections ( ) Appointment ( ) Mix ( )
7- Financial sources of the locality: Self i.e. taxes user charges etc. ( )
local i.e. ministry, private sectors support etc. ( ) Total ( ) Other ( )

Division Two Private informations:
8- Are you aware about the local laws, blogs which regulate Khartoum state localities
authorization Yes ( ) No ( )

Effectiveness Sub-Index:
Indicator(1)
9- Is information of the Locality revenue and population is available Yes ( ) No ( )
10- If the above answer is yes please give total revenue of the locality for the following years
2010-2011-2012 and populations for the same years.

Indicator(2)
11- What is actual recurrent of the locality?
And what is capital budget?

Indicator(3)
12- What is income originating from higher levels of government?
13- What is the total amount of local government revenues (transfers and non-transfers)?
Indicator (4)

14- what is the actual tax payable to the locality?
What is the payable annual mandated tax?

Indicator (5):

15- What is percentage of the financial achievement compared to the predicted income for the last 3 years?

Indicator (6):

16- Is there published performance delivery services (PPDS)? Yes ( ) No. ( )
If the answer is yes what is the list of these services?

……………………………………………………………………………………………………
……………………………………………………………………………………………………
……………………………………………………………………………………………………
……………………………………………………………………………………………………
……………………………………………………………………………………………………
……………………………………………………………………………………………………

17- what is the list services that must be included in this list?

……………………………………………………………………………………………………
……………………………………………………………………………………………………

Indicator (7):

18- Is there any tool for regular customer satisfaction survey? Yes ( ) No. ( )

19- Is there any type of announcement for encouraging citizens to complain about their services quality? Yes ( ) No ( )

Indicator (8):

20- Is there a vision statement (VS) developed for the cities’ future by the local government? (Yes/no)
21- If Yes, has the vision statement been drafted through a participatory process (PP) involving local government, civil society and the private sector? (Yes/No)  
\[(VSE) = 0.5(Vs + PP)\]

**Equity Sub-Index:**

**Indicator(9):**

22- Is there a signed, published statement (charter) from the local authority which acknowledges citizens’ right of access to basic services (CC)? (Yes/No)  
23- If yes, what is the number of key services for which the CC is present (S)?  
24- What is the total number of key services for which CC should be present (T)?  

Citizen charter for basic services (CCS) is then calculated using the following formula:
\[(CCS) = CC \times S/T\]

**Indicator 10&11**

25- What is the percentage of the women councilor elected in the last elections?  
26- What is the percentage of nominated women councilers?  
27- What is the percentage of the women in the key positions of the locality?

**Indicator 12:**

28- Is there a pro-poor pricing policy for water? (Yes/No)  
29- Percentage of households with access to water supply (within 200m)?  
30- Median price of water (supplied by the local authority)?

**Indicator 13:**

31- Is the locality providing support to the street venders in form of urban centre plots or providing opportunities to these activities to contribute to the economic of the society?

**Participation sub-index and indicators**

**Indicator 14:**

32- local governing council of the locality is elected via democratic processes  
Yes(    )    No(    )
33- Is the locality Commissioner is:
- Directly been elected
- Elected amongst councilors
- Appointed

Indicator 16:
34- What is the percentage of the last elections turnout?

Indicator 17:
35- Is locality allow for people forums to discuss matters, need, organize referendums and respond by publishing budgets for greater transparency and encourage the citizenry to examine them critically in open meetings? Yes ( ) No ( )

Indicator 18:
36- What is the number of the civic association per 10,000 population in the locality?

Accountability Sub-Index

Indicator 19:
37- Is there formal publication of:
- Contracts and tenders (CT)? (Yes/No)
- Budgets and accounts (BA)? (Yes/No)

Indicator 20:
38- Can higher levels of government:
- Close the local government (CLG)? (Yes/No)
- Remove councilors from office (RC)? (Yes/No)
39- Can the local government, without permission from higher governments:
- Set local tax levels (SLT)?
- Set user charges for services (SUC)?
- Borrow funds (BF)?
- Choose contractors for projects (CP)?

Indicator 21:
40- Is the locality has a signed published statement of standards of conduct that citizens are entitled to from their elected officials and local government staff?

Indicator 22:
41- Is the locality enjoy:
- Presence of any facilities/mechanisms to receive complaints from citizens? (Yes/No)
- Presence of an official appointed to receive and respond to complaints against public authorities? (Yes/No)

**Indicator 23:**

42- Is the locality has an independaant anti-corruption commission?

**Indicator 24:**

43- Are locally elected officials required by law to publicly disclose their personal income/assets (PIA)? (Yes/No)
44- Are locally elected officials required by law to publicly disclose their family income/assets (FIA)? (Yes/No)
45- Are local officeholder’s incomes and assets regularly monitored (IAM)? (Yes/No)

**Indicator 25:**

46- Is the locality has independent auditors that are allowed to report transparently to the electorates? Yes( ) No ( )
Appendix-2
Locality Organization Chart
근본부-3
수단
수단 공화국 토지법 정부 2003

مرسوم مؤقت "قانون الحكم المحلي لسنة 2003م"

مرسوم مؤقت رقم 1 لسنة 2003

عملا بأحكام دستور جمهورية السودان لسنة 1998م، أصدر رئيس الجمهورية المرسوم المؤقت الآتي

الفصل الأول

أحكام مبهمية

1- يسمى هذا المرسوم المؤقت "قانون ديوان الحكم المحلي لسنة 2003م"، ويمل به من تاريخ التوقيع عليه. (وقع عليه في 4 يناير 2003م).

2- (1) يلغى قانون الحكم المحلي لسنة 1998م.

(2) على الرغم من الإلغاء الوارد في البند (1) تظل جميع الأوامر الصادرة بموجب قانون الحكم لسنة 1998م سارية إلى أن تلغى أو تعدل.

3- في هذا القانون، ما لم يقتض السياق معنىً آخر:

"الحكومة" يقصد بها مجلس وزراء الولاية وفق أحكام الدستور،

"المعتمد" يقصد به الشخص الذي يتم تعيينه معتمداً للمحلية وفقاً للمادة 16.
الرئيسي يقصد به رئيس المجلس المنتخب وفقاً لأحكام المادة 11.

المحلي يقصد بها أي من المحليات المنشأة وفقاً لأحكام المادة 14(1).

المجلس يقصد به مجلس المحلية المنتخب وفقاً لأحكام المادة 7.

الأمر المحلي يقصد به أي تشريع يصدره المجلس وفقاً لأحكام المادة 19.

الإداري المهني يقصد به الشخص المعني في جهاز الضباط الإداريين.

اللجنة يقصد بها أي من لجان المجلس التي تشكلها وفقاً لأحكام هذا القانون.

العضو يقصد به عضو مجلس المحلية.

اللجنة الشعبية يقصد بها اللجنة الشعبية المنشأة بموجب أحكام المادة 21.

الفصل الثاني

المحلية

إنشاء المحلية

4- (1) تنشأ المحلية بمرسوم جمهوري يصدره رئيس الجمهورية بعد التشاور مع حكومة الولاية.

(2) يراعى في إنشاء المحلية المعايير الآتية:

(أ) عدد المناسب من السكان بما لا يقل عن مائة ألف نسمة،

(ب) الرقعة الجغرافية المناسبة،

(ج) الموارد المالية المناسب.

3- يجوز لمجلس وزراء الوزارة بتوصية من المعتمد المعني، ما كان ذلك ضرورياً إنشاء وحدات إدارية بالمحليات على أن يحدد مجلس وزراء الوزارة مهام تلك الوحدات الإدارية.

الشخصية الاعتبارية

5- تكون للمحلية شخصية اعتبارية وصفة تعاونية وحلفاء عام.

6- (1) تختص المحلية بتقديم الخدمات والتنفيذية والإشراف عليها وممارسة السلطات المحددة في الجدول الملحق بهذا القانون أو أي اختصاصات وسلطاتها
أخرى واردة في أي قانون آخر.

(2) على الرغم من عمومية نص البند (1) تختص المحلية بالآتى:

أ) أمين المحلية،

(ب) الإشراف على أداء اللجان الشعبية،

(ج) أي اختصاصات تكافئ بها حكومة الولاية.

الفصل الثالث

المجلس

تكوين المجلس وأجله 7- (1) يكون للمحلية مجلس تشريعي منتخب على الوجه الآتى:

(أ) 90% من العضوية بالتنافس في دوائر جغرافية بالانتخاب مباشر،

(ب) 10% من العضوية بالتنافس في دوائر بالانتخاب الخاص

المباشر تمثل النساء،

(ج) تتراوح عضوية المجلس بين عشرين وثلاثين عضواً وفقاً لما يخدم أمان التأسيس.

(2) لا يجوز الجمع بين عضوية مجلس المحلية ومجلس الولاية.

(3) يكون أجل المجلس ثلاث سنوات ويجوز لمجلس وزراء الولاية حل

المجلس بموجب قرار يوافق عليه مجلس الولاية.

(4) إذا حل المجلس وفقاً لأحكام البند (2) يجب إجراء انتخابات تكوين

مجلس جديد في مدة لا تتجاوز سبئين يوماً.

(5) في حالة تعذر تطبيق البند (3) لأسباب قاهرة أو طارئة يجوز

حكومه الولاية اتخاذ التدابير اللازمة لإدارة المحلية.

(6) بين الرئيس أميناً عاماً من بين العاملين بالمحلية بالتشاور مع المعتمد

ويمكن مسؤولية لدى الرئيس عن تسيير الأعمال التنفيذية بالمجلس.

(7) يؤدي كل عضو منتخب لمجلس المحلية القسم التالي قبل اتخاذ مقدمه

عضواً بالمحلية ( أقسم بالله العظيم أن أودي واجب كعضو بمجلس

المحلية بكل الصدق والأمانة وأأن أعمل جاهداً لخدمة مواطني المحلية

والله على ما أقول شهيد).

اختصاصات المجلس 10- يكون المجلس مختصاً بممارسة السلطات الآتية:

أمين عام المجلس:
أ) إجازة مشروعات الأوامر المحلية،

(ب) إجازة الخطة والموازنة السنوية للمدينة بأمر مدني،

(ج) الرقابة وطلب المعلومات من المعتمد حول أداء الجهاز التنفيذي للمدينة.

(د) الموافقة على إنشاء اللجان الشعبية،

(ه) قيادة برامج التعبئة والاستفتاء للمدينة.

و) أي اختصاصات أخرى يحددها أي قانون.

11-1) تخب رئيس المجلس رئاسة اجتماعات المجلس والتوقيع على محاضره وقراراته وإعداد جدول اجتماعاته.

12-1) يشكل المجلس لجان لاستثمار أعماله.

13-1) تسير عضوية جلسات المجلس لأحد الأسباب الآتية:

أ) فقدان أي من شروط الأهلية المقررة قانوناً،

ب) الغياب عن جلسات المجلس ثلاث اجتماعات متتالية دون عذر مقبول،

ج) الاستقالة

14-1) تكون جلسات المجلس مفتوحة للجمهور ما لم يأمر الرئيس بغير ذلك.

2) يجوز للجمهور الإطلاع على محاضر اجتماعات المجلس وذلك بالكيفية التي تحددها لائحة المجلس الداخلية.

الفصل الرابع

الجهاز التنفيذي
تكوين الجهاز التنفيذي 15 - (1) يتكون الجهاز التنفيذي للمحلية من المعتقد والمدير التنفيذي للمحلية والعاملين بها.

(2) يكون للمحلية هيئة تنظيمي ووظيفي لا يتجاوز أربع إدارات عامة وفقاً لما تحدده حكومة الولاية.

(3) يكون جميع العاملين بال المحلية مسؤولين عن تصريف مهامهم لدى المعتمد.

16- (1) يكون لكل محلية معتمد يعينه ويعفيه الوالي بالتشاور مع رئيس الجمهورية، يتولى رئاسة الجهاز التنفيذي للمحلية.

(2) يكون المعتمد المسؤول التنفيذي الأول للمحلية.

(3) دون المساس بعمومية نص البند (2) أعلاه يختص المعتمد بالآتي:

أ) الإشراف العام على حسن إدارة المحلية وأمنها,

(ب) الإشراف والتابعة والمستند على مهام الأجهزة الإدارية والتنفيذية على مستوى المحلية وتمثيل الوزير الوالي في مباشرة تلك المهام,

(ج) التوصية للمجلس بإنشاء اللجان الشعبية والإشراف على أنشطتها,

(د) قيادة العمل الاجتماعي والسياسي والمحليية وتمثيل المحلية رسمياً في المناسبات الدينية والقومية,

(ه) أي اختصاصات تفوض له من حكومة الولاية أو الحكومة الاتحادية.

17- (1) يعين والي مدير تنفيذي للمحلية من ذوي التأهيل والخبرة والكفاءة من بين الإداريين المهنيين بتوصية من المعتمد.

(2) ينوب المدير التنفيذي عن المعتمد في حالة غيابه.

18- (1) كون المعتمد رئيساً للجنة الأمن ومنسقاً لأعمال الأجهزة الأمنية بالمحلية.

(2) تتولى لجنة الأمن بالمحلية والمكونة وفقاً للقانون الاتحادي مهمة الحفاظ على الأمن العام بها ويجوز لها في سبيل ممارسة هذه المهمة اتخاذ كل الوسائل والإجراءات القانونية أعلاه.
الفصل الخامس
الأوامر المحلية

إصدار الأوامر المحلية
19-1 (1) يجوز المجلس مشروعا الأوامر المحلية المقدمة إليه من الجهاز التنفيذي ويتخذ الأمر المحلي نافذاً من تاريخ إجازته في المجلس، وتوقع رئيس المجلس عليه ويقوم الرئيس برفع الأمر المحلي للمعترض.

2 (2) يودع المعتمد الأمر المحلي المجاز لدى حكومة الولاية في مدة لا تتجاوز الخمسة عشر يوماً من تاريخ إجازته.

3 (3) تودع حكومة الولاية الأوامر المحلية لدى مجلس الولاية ويجوز لها في حالة اعتراضها على أي أمر ملغي أن توقف سريانه وتقترح تعديلات عليه على أن ترفع ملاحظاتها تلك لمجلس الولاية في مدة لا تتجاوز أسبوعين من تاريخ إيداع الأمر المحلي لديها.

4 (4) إذا لم يpit مجلس الولاية خلال شهر في الأمر المحلي المودع لديه يعتبر الأمر المحلي مجازاً حكماً من مجلس الولاية.

العقوبات
20- يجب أن يضم أي أمر محللي يجوزه المجلس عقوبة السجن أو الغرامة عن الإخلال به، على أنه يجوز أن تصل العقوبة إلى ضعف الحد الأقصى للمدة أو مقدار الغرامة في حالة الإخلال المستمر.

الفصل السادس
اللجان الشعبية

الإنشاء والانتخاب
21- (1) تقوم في الحي أو القرية أو الفريقة لجنة شعبية بموجب قرار يصدره المعتمد بموجب المجلس.

الأعضاء
(2) تم انتخاب أعضاء اللجنة الشعبية انتخاباً مباشرةً من المواطنين ذوي الأهلية في اجتماع عام.

الاختصاصات والمهام
22- (1) تتولى اللجنة الشعبية ممارسة الاختصاصات والمهام الآتية:

(1) تحدد اللوائح إجراءات انتخابات اللجان الشعبية.
أ) العمل على ترتكب المجتمع ومحاربة المظاهر الاجتماعية

ب) اقتراح الخدمات الأساسية ومتابعة تنفيذها مع الجهاز التنفيذي بالمحليات،

(ج) استطاع أن يجهد الشعبي لمقابلة الخدمات المحلية إنشاء وتسيرها،

د) الإشراف على مجالس الآباء والجمعيات الخيرية ودور العبادة ومراكز محو الأمية ورياض الأطفال،

هـ) المشاركة في أعمال النظافة وترقية وتنظيم خدمات صحة البيئة وحفر ونظافة مصارف الأمطار،

و) مراقبة ومتابعة المباني غير المشروعة والحجزات وسائر التعديلات على الأراضي الحكومية والتبلغي عنها.

ز) أي مهام توكل إليها من الجهات المختصة في جمع وتوزيع الزكاة وتحصيل العوائد والرسوم والضرائب المحلية.

(ح) تحرير الشهادات الإدارية لاعتمادها لدى المحلية.

ط) أي اختصاصات أخرى يفوضها لها المعتمد.

الموارد المالية للجنة الشعبية

(1) تتكون الموارد المالية للجنة الشعبية من الآتي:

أ) النسبة التي تحدها لها المحلية من عائدات مشاركتها في تحصيل العوائد والرسوم والضرائب المحلية.

ب) رسوم اعتماد الشهادات الإدارية وفقاً للفئات التي تحدها المحلية.

(ج) التبرعات والهبات والمنح والدعم الشعبي.

(2) تحتفظ اللجنة الشعبية بسجلات الإيرادات والمصروفات وتخصيص للمراجعة.

حل اللجنة الشعبية

(أ) يقر بقرار من نصف أعضاء مؤتمر اللجنة الشعبية في اجتماع قانوني.

(ب) يقر بقرار من المعتمد يوافق عليه المجلس.

أجل اللجنة الشعبية

23-1

24-2

25
الفصل السابع
الأحكام المالية

الموارد المالية للمحلية
26 - تكون الموارد المالية للمحلية من الآتي:

(أ) ضريبة العقارات.
(ب) ضريبة الإنتاج الزراعي والحيوي، على أن يخصص منها نسبة 40% للولاية.
(ج) رسوم وسائل النقل البري والنهري المحلي.
(د) نصيب المحلي من القيمة المضافة للولاية حسب ما يحدده القانون الاتحادي.
(ه) المنح والقروض والتسهيلات الإستثنائية الداخلية التي توافق عليه حكومة الولاية.
(و) نسبة من أرباح المشروعات الودادية للمحليات القائمة أو التي ستتم إليها المشروع وفق ما يحدده القانون الودائي.
(ز) الرخص التجارية والمحلي.
(ح) ضريبة القطعان.
(ط) العواند المحلية.
(ي) ضريبة الأطيان.
(ك) أي موارد مالية محلية أخرى.

السنة المالية
27 - تبدأ السنة المالية للمحليات في اليوم الأول من شهر يناير من كل سنة ميلادية تنتهي في اليوم الحادي والعشرون من شهر ديسمبر من ذات السنة.

الموازنة السنوية
28-(1) يعد المعتمد مقترحات الموازنة السنوية للمحلية التي تحتسب على تقديرات الإيرادات والمصروفات المالية بما في ذلك مال التجديدات واحتياطي المنشأ.

(2) تخصص الموازنة لمقابلة الصرف على الخدمات المحلية والتنمية.

(3) تعرض على المجلس مقترحات المعتمد لجعلة المصارف المدرجة بالموازنة في مشروع أمر مهني للاعتماد كما تعرض مقترحات.
الضرائب والرسوم والمفروضات الأخرى في مشروعات أوامر محلية مالية.

(4) يجوز المجلس مشروع الموازنة الخاصة بالمحلية فصلا فصلا وهكذا.
وجداولها ثم يجوز مشروع الأمر المحلي بالاعتماد الإجمالي ويبدو لدى حكومة الولاية على النحو الوارد في المادة 19 من هذا القانون.

الحسابات

29- تخصص المحلية بحسابات صحيحة ومستوفاة للإيرادات والمصروفات وفقاً للأسس المحاسبية السليمة وتُرفع لحكومة الولاية تقرير قفل الحسابات الختامية في مدة لا تتجاوز ثلاثة أشهر من نهاية السنة المالية.

المراجعة

30- يقوم ديوان المراجعة بالولاية سنوياً بمراجعة حسابات المحليات ويرفع تقرير عنها لحكومة الولاية.

الفصل الثامن

سلطة إصدار اللوائح

31-(1) يجوز لحكومة الولاية إصدار اللوائح المنظمة لأحكام هذا القانون.

(2) مع عدم الإخلال بعموم ما تقدم المجلس لائحة داخلية لتنظيم إجراءات أعماله.
الجدول
جدول اختصاصات المحلية وسلطاتها
المرفق بقانون الحكم المحلي لسنة 2003م

القسم الأول
المالية والتنمية الاقتصادية

1. إعداد خطة التنمية الاقتصادية والاجتماعية للمحلية وفقاً للموجهات الولائية.
2. إعداد وحفظ وتنظيم سجل إحصائي لجميع منشآت المحلية الاقتصادية والتنموية والخدمية.
3. تشجيع الاستثمار وتسهيل أعمال المستثمرين وفق القوانين السارية.
4. تشجيع مشاريع العون الذاتي وأعمال الجمعيات الخيرية والطوعية.
5. تنظيم الأسواق وأماكن البيع وفق الموجهات الولائية.
6. نشر التوعية بين المواطنين ببرامج التنمية الاقتصادية والاجتماعية المجازية.
7. تنظيم النشاط التجاري بمنح الرخص اللازمة لجميع أنواع النشاط التجاري بال المحلية.
8. إجراء الدراسات والبحوث التي تهدف إلى تطوير وترقية المحلية وزيادة مواردها.
9. إعداد تقديرات الإيرادات والمصروفات للسنة المالية قبل بدئها.
10. إجازة مشروع موازنة المحلية.
11. ضبط المال العام بإعداد التسويات وفق الحسابات في معايديها وتقديم البيان الختامي لحسابات المحلية لحكومة الولاية.
12. الإعلان والتصديق على العطاءات الخاصة بالمحلي.
13. تقديم وإعادة تقدير العوائد والأموال ذات الربط وفق الفئات المقررة.
14. مراقبة الموازين والمكابل والرقابة على الأسواق.
15. رعاية وتنظيم المعارض بالمحلي.

القسم الثاني
التشريع والشئون القانونية

1. إعداد وإصدار الأوامر الملحية واللوائح المنذفة لها وسائر التدابير التشريعية اللازمة للتنفيذ.

2. إصدار اللوائح الداخلية المنظمة لأعمال المحلية ولجانها وإدارتها المتخصصة.

3. السعي مع الجهات المتخصصة لإنشاء محاكم العوائد ومحاكم مخالفات قواعد البيئة الصحية والاجتماعية وغيرها من الظواهر السالبة.

4. متابعة الإجراءات التنفيذية للالتزامات القانونية المتعلقة بشئون المحلية من اتفاقيات و التعاقدات.

القسم الثالث
الشئون الهندسية

1. إنشاء وصيانة مصانع المياه ومنشآت مياه الشرب في المناطق الريفية.

2. إنشاء الاستراحات العامة ومشاريع التشجير بالمتنزهات والموايدين العامة وصيانةها والانتقال من عائدها.

3. إداره الطرقات والموايدين والساحات العامة.

4. تشجيع الإسهام الشعبي في إنشاء الطرق المعبده.

5. صيانة الطرق الداخلية الترابية بالمحلي.

6. تحديد أماكن المراسي العمومية بالتنسيق مع الجهات المتخصصة وتنظيم موقف وسائل النقل.

7. تنظيم مرافق الحيوانات ورادو الهوا.

8. تنظيم البناء العمراني غير المتعدد الطوابق وإصدار تصاريح البناء ومراقبة تنفيذ البناء وإصدار الشهادات الخاصة بتكميل البناء ومحاربة السكن العشوائي.

9. التوصية بتخطيط الأراضي للأغراض السكنية والزراعية والصناعية والاستثمارية وفق خطة الولاية.

10. المساعدة في تخطيط أراضي القرى وفقًا لأحكام قانون التصرف في الأراضي والتخطيط العمراني.

القسم الرابع
الصحة

1. وضع الخطط وإعداد وتنفيذ المشاريع للارتقاء بصحة البيئة.
القسم الثاني

التعليم

1. إنشاء وإدارة مدارس الأساس وصيانةها وتسهيلها.
2. إنشاء وإدارة فصول تعليم الكبار و柅م المحسن الأمية.
3. تنظيم رياض الأطفال والحضانات وتسهيلها وتأهيل العاملين بها.
4. تشجيع قيام الخلاوي ورعايتها.

5. الاهتمام بالأنشطة التربوية وإقامة الدورات المدرسية بمرحلة الأساس.

6. التوصية بإنشاء المدارس الثانوية.

7. التنسيق بين مجالات الأباء بالمحلية والعمل على تحسين وتشجيع المتفوقين من التلاميذ والمدارس.

القسم السادس

الزراعة والموارد الطبيعية والثروة الحيوانية

1. المشاركة في برامج المحافظة على الموارد الطبيعية ووقايتها ضمانًا للاستخدام الأمثل والمستدام.

2. رعاية الغابات وتشجيع التشجير.

3. إنشاء خطوط النار.

4. الإسهام في إبادة الآفات الزراعية.

5. تحديد ورعاية وتحسين أماكن المراعي وموارد المياه بالتنسيق مع جهات الاختصاص.

6. تحديد مسار الحيوانات داخل الأراضي الزراعية.

7. تشجيع التعاونيات الزراعية.

8. الاهتمام بالنشاط الزراعي والسعي مع الجهات المتخصصة لتوفير مستلزماتها.

9. العمل على نشر الثقافة والإرشاد الزراعي.

10. تنظيم الإحصاء الزراعي.

11. العمل على درء خطر السيول وتوفر سبل الري والتصريف وتخزين المياه اللازمة لتعزيز الأراضي الزراعية بالتنسيق مع الجهات المتخصصة.

12. إنشاء الشفخانات ونقاط الغيار البيطرية الثابتة والمتحركة وإدارتها.

13. نشر الوعي الخاص بتربية الحيوانات وتطهيرها ضد الأمراض.

14. الإسهام في تحسين نسل الحيوانات وإدخال السلالات المحسنة.

15. تشجيع أقامة مشاريع تربية الماشية والدواجن والأسماك.
القسم السابع

الشئون الاجتماعية

1. العمل على تخفيف وطأة الفقر ورعاية العجزة والأيتام والأرامل والمعوقين والعمل على توفير وسائل العيش الكريم لهم بالتنسيق مع الجهات ذات الصلة.

2. رعاية المساجد ودور العبادة والخلاوي ورياض الأطفال.

3. معاونة الأجهزة المختصة على توسيع أوعية الزكاة نصاباً ومقداراً أو مصارفاً وجبايته وتوبيعها على المستحقي.

4. المحافظة على الآثار القومية ورعاية التراث من الاندثار ورعاية الموروثات الحميدة وفق خطة الأجهزة المعلنة.

5. الاحتفال بالمناسبات الدينية والقومية.

6. تأصيل وترشيد الحفاظ على الأدب والثقافة ورفع مستوى المواطنيين.

7. العمل على تعزيز الروابط الاجتماعية والثقافية والطوعية من خلال تبادل الزيارات وإقامة المعسكرات.

8. العمل على إحداث التغيير الاجتماعي والثقافي وتطبيق أساليب تنمية المجتمع ورفاهيته وتنفيذ مشروعات وبرامج التنمية المستدامة.

9. تشجيع مشاريع الخيرات وال الاجتماعي والثقافي والمشاركة في المجتمع وتفعيلها ومشاركتها وتشجيع أعمال الجمعيات الخيرية.

10. الرد على الأحداث والأحداث والقضايا والقضايا من خلال المداخلة والاعتراف والتدابير والجهود وجميع المظاهر الاجتماعية السالبة.

11. التهرب والثقافة الرياضية والرياضة بمراكز وبيوت الشباب والرياضة والإشراف على الأندية والروابط الرياضية والثقافية الاجتماعية.

12. تقوية روح التسامح الديني والاهتمام والتكافل الاجتماعي.

13. الاهتمام بالثقافة والأسماء والمؤسسات والمساعدات.

14. تشجيع مبادرات الصلح واتخاذ الوسائط السلمية لتجنب المواجهات والعمل على نبذ النزاعات الجاهلية.
15. تشجيع إنشاء المسارح المحلية وتشكين إدارتها وإنشاء الكتبية العامة وقاعات المحاضرات ودور العرض الثانوية ووسائله المتجولة لتنمية المجتمع وتقدمه.

16. الاهتمام باللغات والثقافة المحلية والفنون الشعبية وتشجيع المبدعين.

17. العمل على إعداد السجل الاجتماعي.

القسم الثامن

التعبئة العامة والاستفتار

1. الإعداد والمشاركة في تسبيب القوافل الدعوية والتكافلية.

2. نشر معاني الذود عن العقيدة والوطن.

3. حشد طاقات الجماهير وتسخيرها لإنجاح برامج المحلية الخدمية والتنموية.

4. تشجيع التكافل وروح المشاركة الشعبية والعمل الطوعي والعون الذاتي.

القسم التاسع

الأمن والأغراض العامة

1. حصر وإعداد وتصنيف سجل المهدادات الأمنية المحلية.

2. التصديق على تسبير المواكب والتجمعات والعمل على تقليل الإزعاج والضوضاء والفوضى.

3. المساهمة في تنفيذ برامج الأمن الوقائي والمساعدة في القضاء على أسباب الجريمة واستنسلال التسول والدجل والمقامرة وجرائم وجوه الأحداث.

4. المساهمة مع الجهات المختصة في حصر وتنظيم إقامة وتحركات اللاجئين.

5. التصديق باستخدام الطرق لفلاحات الخاصة وإقامة الحفلات العامة الخاصة التي تستخدم فيها مكبرات الصوت.

6. اتخاذ الاحتياطات لمقاومة الحرائق والفيضانات والسيول وإنشاء فرق الإطفاء وحماية المنتشات.

7. إصدار الأوامر اللازمة لقيام بالعمل الطوعي وفي حالة الكوارث والأوبئة.

8. عمل الترتيبات اللازمة لحفظ المواد القابلة للالتهاب والاشتعال أو المؤثرة على صحة الإنسان والحيوان.
بعبداً عن المساكن.

9. تنظيم ارتياض دور الترويج المحلية.

10. تنظيم جمع التبرعات والإعانات والدعم للمناشط الدينية والتعليمية والاجتماعية والثقافية والرياضية والخيرية.

11. تسمية الشوارع وترقيم المنازل وعمل لافتات الطرق واتخاذ أي تدابير أخرى لتسهيل المرور المأمون لحركة الراكبين وتنظيم حركة الراجلين.

12. مساعدة الجهات المختصة في تقييد وتنظيم حمل الأسلحة النارى والأسلحة الخطرة والألعاب النارية.

13. رفع التقارير الأمنية للمستوى الأعلى.

القسم العاشر

الاختصاصات المتنوعة

1. استقبال الزوار الرسميين.

2. إصدار واعتماد الشهادات الإدارية.

3. توفير قاعدة بيانات محلية عن المناشط والمؤسسات والمراكز.

4. رفع التوصيات للجهات المختصة فيما يتعلق بتنظيم وتفقييد الهجرة من الدول المجاورة وغيرها.

5. مساعدة الجهات المختصة على حصر القوى العاملة بالمحلية وتنظيم التعليم بها واختيار أفكار العناصر وترشيح الكوادر العاملة للتدريب والتأهيل.

6. أداء أي أعمال أخرى مفوضة أو مولودة بالإنابة عن الأجهزة الولائية أو الاتحادية.
Appendix-4

Researcher Personal Information

Name: IbnRoshd Hamadtu Abdelgadir

Birth date: 23/7/1965

Gender: Male

Nationality: Sudanese

Qualification: BSc. Architecture-Construction

University: Sudan University For Science and Technology

Experience: 26 years in the field of construction

Marital status: Married father of 5 children

Position: General Manager-Tafrah Consulting Group Qatar State.