(REPORT ON MISSION OF)

PREPARATION FOR URBAN SITUATION ANALYSIS

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ABBREVIATIONS

MOC	Ministry of Construction
MONRE	Ministry of Natural resources and Environment
MPI	Ministry of Planning and Investment
TOR	Terms of Reference
VND	Vietnam dong
NUUP	National Urban Upgrading Programme
NUDP	National Urban Development Programme
NUDS	National Urban Development Strategy
UDA	Urban Development Agency
CA	Cities Alliance
UN-Habitat	United nations-Habitat
ACVN	Association of cities of Vietnam
AMCC	Academy of Managers for Construction and Cities
WB	World Bank
UNFPA	United Nations Fund for Population Activities
CTTOPP	Center for Technology Transfer of Physical Planning

I. INTRODUCTION

1.1. Background

Since 1986, implementing the policy of "Innovation", Vietnam has made significant achievements in the process of country reconstruction. Associated with economic integration, Vietnam has attached special importance to building urban systems, key urbanization areas as motive force and key element and framework for national economic development. In 1990, Vietnamese cities and towns began to flourish. Before that, the whole country had only about 500 cities and towns (urbanization rate was about 18%). In 2009, the Prime Minister issued Decision on adjustment of general planning orientation of Vietnam's urban system development by 2025, vision by 2050 (Decision No. 445/2009 dated 07/04/2009), replacing Decision No. 10/1998/QĐ-TTg and creating a basis for the development of cities and towns. In June, 2015[1] the whole country had 778 cities and towns, including 2 special Grade cities, 15 Grade I cities, 24 Grade II cities, 43 Grade III cities and towns and 74 Grade cities and IV towns and 620 Grade V towns. The urbanization rate reached 35.2%. The urban system contributes over 70% of GDP.

With the economic growth in Vietnam, poverty has been reduced significantly. However, there are still differences in living conditions and economic advantages in some cities/towns and regions. Some poor cities/towns or low income areas (LIAs) still exist. These areas are densely populated and have less access to basic services such as adequate housing, water and environmental sanitation, drainage, lighting, and other social utilities. In order to improve the living conditions of the urban dweller, the Government has approved the National urban upgrading program (NUUP) in the period from 2009 to 2020 (Decision No.758/QĐ-TTg dated 8/6/2009), through the investment plans to improve social and technical infrastructure and urban environment. To meet the goal of policymaking, management and improvement of development capacity - controlling of urbanization, the Government has approved a National urban development program (NUDP) for the 2012-2020 period (Decision No.1659/QĐ-TTg dated 07/11/2012). The program acts as a tool for the Government to control urban development and lay the basic foundation for decisions on urban development in the future.

Although it has achieved some positive results, basically the process of urbanization in Vietnam also shows many unsustainable development factors. The movement of large number of rural population to urban areas is creating challenges such as unemployment, wealth gap, lack of funding for investment in infrastructure and housing, lack of social security gadgets, decline in the quality of urban services, environmental pollution, floods and depleted resources. In the future, Vietnam urban areas will face many global arisings such as response to climate change, security and order, social-economic risks and the requirements of renewal in line with the trend of integration, such as improvment of the role of urban management apparatus, the quality of public services and administrative reform...

With the responsibility for the State management of urban development, the Ministry of Construction has studied and composed to submit indicators such as the indicators in Circular No.34-2009 under Decree No.42-2009 of Government on urban

[1] Source: Ministry of Construction

classification and Statistical Indicator System of Construction Sector. Also, it coordinates with the General Statistics Office - Ministry of Planning & Investment and UN-Habitat to study the construction of urban indicators, implemented in the framework of a component of the project supported by UNFPA to implement Vietnam Statistics development strategy in the 2011 - 2020 period and vision by 2030. These are quite reliable data system, a tool that helps urban areas identify and process information, properly assess the real situation and make decisions timely policy adjustments to cope with the challenges arising in management and urban development. Besides, UNHABITAT and ACVN organizations completed the urban observatory indicators in 2012, in which being associated with the national statistical indicators of Construction sector and referring to some indicators of International organizations. Although without legal capacity, the urban observatory indicators is also the urban indicators used for reference by the Managers and Specialists to monitor, evaluate and formulate development policies of Vietnam urban system.

In the world, there are a lot of indicators issued by international organizations, each indicators meet the different requirements and purposes, such as the indicators on housing of UNHABITAT, the indicators on decentralization of basic services in urban areas by United Cities & Local Governments, the indicators for Asian cities, the indicators for major cities of the WB and the urban indicators of Malaysia... In recent years, many urban indicators, which are beginning to study for Vietnam, are supported by international organizations such as the global indicators, the prosperous urban indicators, Vietnam urban indicators coping with climate change and green growth urban areas...

According to the project's objectives, it is necessary to comprehensively analysize and assess urban development situation as credible basis for policy making and strategy formulation of Vietnam urban development in the future. In order to meet this requirement, it is necessary to have a urban indicators with fully updated data for objective analysis and evaluation.

1.2. Content of Task A

a) To review the urban indicators: The consultants will conduct the collection and review of completed and ongoing urban indicators. The urban indicators to be reviewed include:

1. Vietnam urban indicator systemthat has been implemented by MOC (Project:VNM8P01) in collaboration with UN-Habitat within a component of the project supported by UNFPA to implement the Development strategy of Vietnam Statistics period 2011 – 2020 and vision to 2030,
2. Profile of urban areas implemented by UN-Habitat and ACVN in the project of Observing System of urban areas in Vietnam and.
3. The indicators in the Decree No. 42/NĐ-CP/2009 on urban classifications: The data system to be collected by UDA through the project of urban type Upgrading.

Comment [G1]: Đang thực hiện?

Comment [G2]: Dự án phân loại đô thị khác nâng cấp đô thị - Nâng loại đô thị

b) Based on the results of review an analysis of urban indicators, to assess the achievements and not achievements of the urban indicators to provide the scope and priority for work updating, improving data serving assessment of the current situation in the following steps.

1.3. Purposes and requirements of NUDS urban indicators

a) Purposes of NUDS indicators

According to the TOR, clause 5.4.1 of Task B which determines the scope of the investigation, surveys, thereby building a data frame. Data frame includes data showing the overall urban development at the locality, the advantages in comparison among localities, ensuring the ability to collect equally in urban areas. Data frame mainly consits of data groups according 9 fields : 1) Urban population; 2) Housing; 3) Urban land; 4) Urban infrastructure, 5) Urban economy; 6) Social services in urban area, 7) Labour, employment and income; 8) Urban management capacity; 9) Responding to floods and natural disasters due to climate change. Thereby determining the purpose of the indicators NUDS including:

- *Representative indicators.*

  With the data frame of 9 fields according to TOR, Consultants found that they are represented for assessment of urban status quo, urbanization speed, and development level compared among Vietnam urban areas, as well as compared to urban areas of the developing countries and the developed countries

- *The indicator helps to assess achieved results compared with the objectives of urban development mentioned in the national programs.*

  Up to now, our country has undertaken projects in order to mobilize large economic resources to develop Vietnam's urban system, at the same time upgrade urban areas and eliminate slums and low-income areas (LIAs). The projects mentioned above had practical results. After each project, we have evaluated the investment efficiency and spillover effects authentically. However, in order to evaluate comprehensively and objectively, evaluate sustainable impact of the projects, as well as to draw lessons for projects and programs in the future, indicators are necessary to demonstrate the value needed to be observed.

- *The indicator helps to assess the climate change adaptation and mitigation of disaster.*

  From 1994 to 2013[2], according to long-term risks due to climate change, Vietnam ranked 7th globally with an annual average of 392 people died and more than 1% of GDP loss due to disasters relating to climate change. Vietnam was considered as one of the 5 countries strongly affected by climate change and sea level rise. The risk of climate change already exists and is worsening, therefore it is necessary to have the specific plans to adapt and confront. The indicator helps to identify timely information to solve arising problems and response to climate change in the future.

- *Indicator helps to find the trends and forecast urban development.*

  By the survey values entered into indicators over time, we determine separated development trends of each urban area and the common existing situation for urban areas in our country.

- *Vietnam urban evaluation in the context of globalization*.

[2] *(http://vnexpress.net/tin-tuc/khoa-hoc/trong-nuoc/viet-nam-dung-thu-7-toan-cau-ve-thiet-hai-do-bien-doi-khi-hau-3331856.html)*

Indicators show the development level of each urban area in the context of globalization, compared with the criteria of "green growth" and ability to direct to "sustainable urban development". With the values observed in the indicators, we will find the things achieved and not achieved, thereby preparing plan and solutions in near future.

b) Requirements of NUDS indicators

Stemming from the purpose of the indicators mentioned in Section a), indicators must meet the following requirements:

- Indicators must reflect the existing issues of Vietnam urban areas in six economic regions. Depending on the location and classification of the urban areas located in which geographical region or socio-economic area, the indicators will show characteristics, reflect the level of economic and social development by regions.
- Indicators must express the urban infrastructure. The level of satisfaction technical infrastructure and social infrastructure represent the most important indicators, representation of urban quality, social security and people's satisfaction on the quality of the urban areas;
- Indicators must express the developing management capacity of current urban government. Also through indicators, these leaders have acknowledgement correctly the development situation and the key points needed to be handled promptly, as well as prepare short term, medium term and long term plans to solve each problem towards civilized and flourished urban area.
- The indicators must show tangible and intangible elements, factors collected can associate with a specific location in the urban area in the relationship between spatial data (maps) and property data (tables), at the same time, there are general data for the whole urban area without a specific location in the urban area. So the indicators must have characteristics so as to show visually by GIS technology, or simply by tables and urban areas.

II. REVIEW AND EVALUATION OF 3 INDICATORS

2.1. Vietnam Urban indicators – Version 1 (VNM8P01 – MOC03 Project)

Project "Supporting the implementation of Vietnamese Statistics Development Strategy in the 2011- 2020 period and use of census information in planning construction and development plan" (referred to as VNM8P01 Project) has been approved by the Prime Minister, in which the agency assuming the prime responsibility for implementing the project is General Statistics Office and agencies co-implementing the project are the Department of Labor, Culture, Social Affairs (Ministry of Planning and Investment), Development Strategy Institute (Ministry of Planning and Investment), Urban Development Authority (MOC). The capital of the project comes from Nonrefundable Grants of the United Nations Population Fund (UNFPA), UN-Habitat and counterpart expenditures, of which component implemented by the Urban Development Agency - MOC includes: Conducting assessment and upgrade, correcting and integration of the indicators into the statistical indicators system of MOC to meet Sustainable Urban Development, Millennium Development and National Development Goals**.**

In the 2012-2016 periods, UN-Habitat program supports for strengthening the capacity of Urban Development Agency - Ministry of Construction in research, evaluation, improvement of urban indicators and integrating it into the statistical indicators of the Ministry of Construction to help the formulation of Vietnamese urban development strategies. Bidding package called VNM8P01 - MOC03 Project, referred to as MOC03 Project, has been made to compile a **"Report on standardization of Vietnam urban indicators - Version 1"**

a) Purposes

Scope of work for Vietnam urban indicators - Version 1 has the following purposes:

- Based on assessment and analysis results of the current state of management, collection and use of statistical indicators with urban nature in Vietnam, preparing the "Report on Standardization of Vietnam urban indicators - Version 1" in line with condition of urban management and development in Vietnam.
- The urban indicators reflect the actual situation of urban development in Vietnam in the fields including but not limited to the following contents: Population and labor; social economic development; development of social infrastructure, urban infrastructure; the use of land, natural resources and urban environmental management.
- Proposing method of data collection and calculation of statistical indicators;
- Development of data management model and implementation from Central to local level;
- Plan for implementation of indicators preparation project, orientation of development roadmap of indicators in the next period and proposal for financial mechanisms implemented.

b) Basis of indicators

The proposal of Vietnam urban indicators - Version 1 was based on the review of indicators related to urban areas issues that published and executed in the countries, the published National programs, strategies as well as some international urban indicators guided, namely:

- National statistical indicator system was promulgated in Decision 43/2010/QĐ-TTg dated 02/06/2010 by the Government; Statistical Indicator System of Construction industry was issued in Circular No.05/2012/TT-BXD dated 10 October 2012 and Circular No. 06/2012/TT-BXD dated 10 October 2012 by the Ministry of Construction stipulating the general statistical report regime of the Construction industry;
- Circular No. 34/2009/TT-BXD (Circular No. 34-2009) dated 30 September 2009 detailing some contents of Decree 42/2009/NĐ-CP (Decree No.42-2009) dated 07 May 2009 by the Government on urban classification.
- The programs, strategies issued by the State: 2012 – 2020 National Urban Development Program (Decision No.1659/QĐ-TTg), National Strategy for Green Growth in the 2020 period (Decision No. 1393/2012/TTg).

- Refer to some indicators guided by international organizations such as UN-Habitat, ADB, WB, CA. The following indicators as:

  Global City Indicators (GCI) of UN- Habitat

  City of Prospect Indicator (CPI) of UN- Habitat

  Indicators for Managing Mega Cities (IMMC) of WB

  Urban Indicators for Asia's Cities (UIAC) of ADB.

  Sustainable Development Goals (SDG) of United Nations

  The list of the indicators and the definition of Cities Alliance (CA)

  Urban Indicators of Malaysia.

c) Opinions on Construction of urban indicators

There are 5 following opinions:

1. The urban indicators reflect the actual situation of development in Vietnam urban areas on the basics of urban areas in urban construction and management

- Effectively prepare urban indicators in order through indicators, it is posible to support for indicating urbanization situation, poverty levels, infrastructure services, environmental issues, housing and urban management in the Vietnam urban areas at the national level as well as at the local level, also through these indicators, show the urban quality. Therefore, the Urban indicators should develop norm groups with basic norms, but fully reflect the contents above.

2. Urban indicators are built with inheriting nature, integrated with management policies and urban development, with reference to the international common criteria.

- Currently, the State had Indicator System for National Statistics, the indicators of Construction sector are being applied, such as Decree 42-2009 about urban classification and statistical indicators of Construction sector issued in Circular No. 05/2012/TT-BXD dated 10/10/2012 and the Circular No. 06/2012/TT-BXD dated 10/10/2012 of the Ministry of Construction on regulating regime of synthetic statistical report of Construction sector.
- Urban indicators are integrated with the orientations, programs and strategies for urban development such as National urban development program from 2012 to 2020, the National Strategy for Green Growth for the period of 2012- 2020 as well as the Strategic orientation of the Sector such as the Housing strategy, water supply and drainage etc. Thus, the indicators can integrate and inherit available indicators of the indicators in use and consider the indicators being needed to respond in the future under the national directions and strategies of Vietnam urban development as well as centers as well as common international norms.

3. Urban indicators should cover the basic contents in the field of urban management and development at the sectoral level of the Construction sector through the original indicators. The indicators relating to other sectors and fields will be included in the expanded indicators for the implementation in the future.

- The original indicators include basic contents: general information about the urban areas; land and urban planning management; urban social infrastructure and

infrastructure management. The original indicators will be implemented immediately after the approval of competent authorities.

- The extension of the indicators as the indicators related to other sectors and fields will be implemented in the future according to plans, roadmaps and timelines proposed for the implementation.

  The expanded indicators of national statistical indicators or programs and orientations should be implemented early in 2017.

  With the indicators according to the international indicators may be slower to 2020.

- Norms of the urban indicators selected can include both quantitative and qualitative indicators, but the qualitative norms that are likely to advance to simultaneously quantify the norms selected should ensure relative stability and have the flexibility to change according to different periods.

- In the view, the development of urban indicators have the inheritance and integration, so the data collection should combine and use the data available from the other indicators in order to avoid duplication and expensive cost. The proposed new indicators should be clear and comprehensible in order there is no misleading collection and it is imposible to collect periodically

4. The indicators need to strengthen the self-control of the urban areas, the coordination between sectors and related parties.

- The indicators serves directly to urban areas, through the indicators, each urban area understands the strengths and weaknesses of their urban and have conditions to compare with other urban areas. Therefore, it is necessary to create the local autonomy in order each urban area is responsible for the provision of information collection as well as regular and sustainable data management. When building the indicators, it is important to meet the needs and concerns as well as to meet the local capacity in collecting, maintaining and managing the data. The indicators are also the basis for management decentralization, thus the indicators building needs the support and cooperation of the relevant agencies from the central to local level.

5. Urban indicators should be further researched for the completion in the next period to become an effective management tool of urban management and development from the central to local level.

The building of the urban indicators is guided by international organizations for a long time and based on which many countries have developed their own comprehensive urban indicators in order to serve the urban management and development. For our country, with the assistance of UNHABITAT and the General Statistics Office (GSO), this is the first time that the Ministry of Construction perform to build urban indicators reflecting comprehensively of the urban fields, however, due to the first time, so the indicators cannot meet the requirements of indicators with full information such as Name, definition, content, scope and calculation methodology, information collection sources, financing mechanisms for multiple Sectors, thus the indicators should be further studied for the completion during the next period.

d. Structure of indicators

Based on the review of the Urban indicators being applied, the documents issued by the State related to urban areas as well as the International indicators, Vietnam urban indicators - Version 1 determined:

- Selection of indicator groups used by many indicators.
- Selection of the Indicators in the key indicator groups, reflecting fundamental problems of each field applied by many indicators, on the other hand, conforming to the conditions of Vietnam.

* Some proposal for indicator group selection

International indicators often include 12 indicator groups used frequently. However, when considering the documents and indicators used by our country as the documents of Planning Law (2009), Construction Law (2014) as well as Circular 34 in urban classification, the technical infrastructure and social infrastructure includes a number of fields such as housing in the social infrastructure services, transport in technical infrastructures. According to Vietnam's practices, it often have general information item for easy identification of the urban areas, so it can combine several indicator groups with each other, for example, the planning is often linked to the land to decrease the number of the group. Therefore, Vietnam urban indicators - version 1 includes 9 following indicator groups: (see Table 1).

Table 1. Commonly used International indicator groups and Proposed indicator groups

No.	Commonly used International indicator groups	Draft of Indicators Version 1
1	Population	General information
2	Labour, Employment and Poverty	Population
3	Urban economy	Labour, Employment and Poverty
4	Land	Urban economy
5	Urban planning	Land and urban planning
6	Housing	Social infrastructure services
7	Traffic	Technical infrastructure services
8	Urban Basic Services	Urban environmental management and coping with climate change
9	Urban Environmental Management	Urban Management
10	Urban Finance	
11	Urban Management	

Vietnam urban indicators - Version 1 is structured as follows:

- General structure: The indicators consist of multiple key indicators (original indicators) as the indicators used immediately; and the sub-indicators (extended indicators) as the indicators that may perform after a period of 1 to 2 years or longer, depending on the specific conditions of each indicator.
- The indicators for statistics at the national level, industry level and urban level. The indicators demonstrate the synthesis and speciality;

- Clarify the content of each indicator and data collection methodology and data collection cycle. Data editing process. etc.

(Details of Vietnam urban indicators - Version I in Appendix 1)

In 9 indicator groups, each indicator group includes the sectors which have a close relationship with each other:

i. ***General information*** (4 indicators): including original indicators of: urban type, entire urban population, natural area of entire urban area and urbanization rate.

ii. ***Urban population,*** (5 indicators) including 3 original indicators of the population in the inner city/urban area; Population density in the inner city/ urban area and population density in the entire urban area. Remaining 2 extended indicators are the rate of natural population growth and mechanic population growth.

iii. ***Labor, Employment and Poverty*** (7 indicators): including 3 original indicators of non-agricultural worker rate, unemployment rate and poverty rate in urban areas.

4 extended indicators include: underemployment rate, income per 1 employee who is working, employed worker rate in urban areas and trained worker rate

iv. ***Urban economy*** (4 indicators) and all indicators are original: Total revenues in the locality, revenue and expenditure balance, per capita income, investment capital for urban construction.

v. ***Land and urban planning*** (4 indicators) and all indicators are original: The area of land for urban construction, urban land area, overall planning of nearest urban construction approved and land area reserved for development under long-term planning.

vi. ***Social infrastructure services*** (13 indicators), including 13 original indicators divided into:

Housing (including 5 original indicators) including: The rate of permanent, semi-permanent housing, the rate of housing in slums or low income areas; the rate of urban land, housing development program approved by the province, the rate of temporary housing, the rental compared to average income.

Socio-cultural public works (6 indicators) and all indicators are original: Land for construction of public works at residential quarter level; Land for construction of public works at city level, the number of commercial - service centers.

Urban greenery (2 original indicators) includes Green land in entire urban areas and public green land in the inner urban areas.

vii. ***Technical infrastructure services*** (including 29 indicators, in which, there are 22 original indicators 7 extended indicators) are divided into:

Urban transport (including 5 indicators, in which, there are 4 original indicators): The rate of urban land for transport/ urban land area; the rate of inner urban land for transport/ inner urban area; urban main road density and

the rate of public passenger transport. And only one extended indicator is average travel time for a travel to work place.

Urban water supply (including 6 indicators, in which, there are 4 original indicators and 2 extended indicators). 4 original indicators are: Water supply planning for urban areas, urban water supply standards for each person, and the rate of population supplied with clean water and the rate of water wastage. And 2 extended indicators are: The rate of qualified water as prescribed and interrupted water supply time during the day.

Urban drainage (6 indicators) and all indicators are original: The coverage rate of sewerage systems in urban areas, the rate of waste water collected, the rate of waste water treated, the rate of wastewater treated in technology zones, export processing zones and industrial clusters and the coverage rate of drainage system in the entire urban areas, the rate of households connected to the sewerage system.

Electricity supply (including 4 indicators, in which, there are 2 original indicators and 2 extended indicators). 2 original indicators are: Electricity supply norm of urban area and the rate of illuminated alleys. And 2 extended indicators are: Hours of interrupted electricity supply during the year and the proportion of renewable energy used in urban areas. These are two indicators that many international indicators mentioned, meaning to the quality of services for citizens.

Information, post and telecommunications (including 2 indicators and both of them are original indicators): The number of fixed subscribers and mobile subscribers, the proportion of households connected to the Internet.

Urban solid waste (including 4 indicators, in which, there are 3 original indicators and an extended indicator). 3 original indicators are: The proportion of urban solid waste collected, the proportion of urban solid waste treated and the proportion of urban solid waste recycled. And an extended indicator is the proportion of households sorting garbage at home, this is an important indicator as it determines the entire waste management and it is only successful when people participate actively and urban authorities direct drastically.

viii. ***Urban Environmental Management and coping with climate change*** (including 5 indicators, in which, there are 4 original indicators and an extended indicator). With 4 original indicators: The percentage of households using hygienic latrines, Urban area has developed plans to cope with climate change or not; The percentage of waterlogged land area/urban land area, number of public toilets on the main street in urban center. With an extended indicator is the level of air pollution compared with the level allowed. This is an issue related to the health of people in the cities, especially in big cities, so urban areas need to pay more attention in the coming years.

ix. ***Urban governance*** **(**including 6 indicators, in which, there are 4 original indicators and 2 extended indicators). 4 original indicators are: Satisfaction level of citizens and businesses for providing the basic services of urban authorities, Urban areas have website and receive the opinion of the people;

Management Regulation of architectural planning, demand for knowledge on urban management. Two extended indicators are: services provided by government through the Website/total services provided and the urban areas have urban database management program.

e) Consideration and evaluation

Achievements:

- Vietnam urban indicators – Version 1 with fully 81 indicators, in which, 63 original indicators reflect the fundamental problems of the fields in urban management and among 81 indicators, 37 indicators were used in the Indicators of MOC under Decree No.42-2009.
- Vietnam urban indicators – Version 1 has met the important requirement that: integrating with the national statistical norms as well as statistical norms related to the sectors' urban area: Natural Resources and Environment, Transport, Health, Labor, Invalids and Society; some indicators in social infrastructure services (health facilities, hospital beds) and technical infrastructure (drainage, water supply and management of domestic solid waste). Among total 81 indicators, 21 indicators have been integrated so indicators have had interdisciplinary collaboration to enhance the efficiency of statistical data and reduce the expenditure in survey and data collection.
- Vietnam urban indicators – Version 1 reflected the targets of National urban development program from 2012 to 2020 and National Strategy on Green Growth in the period of 2012-2020. In total 81 indicators, 22 indicators have been under the National urban development program and Strategy on Green Growth in the period of 2012 -2020.
- Vietnam urban indicators – Version 1 referred to the international indicators to choose some indicators being suitable with the conditions of our country to promote international integration in assessment and development of orientations for Vietnam urban development in the trend of globalization. So among total of 81 indicators, up to 20 indicators are the reference indicators of the international indicators**.**

Limitation:

- Urban indicators although reflect comprehensively the fields of urban areas, it has not met the requirements of a indicators with information for many sectors such as: definitions, contents, scope and calculation methodology, information collection sources and financial mechanisms. In the next period, it will have to continue to improve the Indicators

g) The inheritance from Vietnam urban indicators – Version 1 for Indicators NUDS.

- Vietnam urban indicators - Version 1 has not been approved and there are some other requirements with NUDS indicators, however, basically, both indicators reflect comprehensively the urban development.

  (1) In total 81 indicators under 9 groups (including 7 qualitative indicators of 81 indicators)

+ There are 39 indicators used in the national statistics and Circular 34 on urban classification as well as the indicators of ministries and departments relating to urban areas

+ There are 42 new indicators proposed including: 22 indicators under the National Programs, Strategies and Orientations and 20 indicators referring to the International indicators.

(2) Original indicators includes 63 indicators

+ 39 indicators existed in the national statistics and Circular 34 on urban classification

+ 24 new indicators include: 15 new indicators associated with the National Programs, Strategies and Orientations and 9 indicators referring to the international indicators

(3) Expanded indicators include 18 indicators: 7 indicators under National Programs, Strategies and Orientations and 11 indicators referring to the international indicators

- Thus, 63 original indicators are inherited into NUDS indicators, because these indicators have interdisciplinary collaboration, will be convenient in the investigation process of data collection. Besides, it also reflects the fields mentioned in TOR. In the expanded 18 indicators, especially 11 international reference indicators that will be considered to use in survey research process on the next step.
- Vietnam Urban Indicators-Version 1 has not been approved, so urban survey and assessment have not been performed. Therefore, the NUDS project has not utilized the data for situation assessment of urban system.

2.2. Vietnam urban Observatory system indicators (VUI)

Vietnam urban monitoring system indicators (VUI) had performed by UN-Habitat and ACVN in two years from 2010 to 2011.

In 2010, the urban indicators was made for the first time to evaluate the pilot in 3 cities as Viet Tri, Hai Duong and Phu Ly with 147 indicators.

In 2011, after receiving the data provided by three pilot urban areas, it is shown that many data is incomplete. UN-Habitat and ACVN organized National Workshop in conjunction with the Annual meeting of ACVN to talk with urban areas on the recommendation of the draft urban indicators to collect the data of 96 urban areas of the Association of Vietnam urban areas. Based on the comments of urban areas, the UNHabitat and ACVN agreed to adjust the indicators from 147 indicators to only 97 indicators to collect for 96 urban areas. However, in the reality, the Consultants only collect data from 65 urban areas.

a) Purposes

- In order to develop a data system that can observe and evaluate the operations of Vietnam urban areas, especially the medium and small urban areas, aim towards building a developed and equal society without poverty that Vietnam Government signed commitments in the implementation of Millennium Development Goals.

- Establish model urban observation system for 96 cities and towns in Vietnam (as member urban areas of ACVN) to collect the latest data. On the basis of the data collected, it will be meaningful in evaluating the development of urban areas in Vietnam, while contributing to the development of urban development policies at the national level.
- The data collection will help urban areas get better recognition on development situation and the limitations of their urban area, thereby preparing recovery plans.

b) Basis of indicators

With objectives mentioned above, the development of Vietnam urban indicators based on indicators related and documents on statistical indicators in general and urban indicators in particular including:

- Based on the 8 World Millennium Development Goals (MDG) including: *Thoroughly eliminate pauperism (extreme poverty) and malnutrition; Complete universal primary education, Enhance gender equality, status and capacity of women, Reduce child mortality, Improve Reproductive Health, Ensure environmental sustainability, Strengthen global partnership for development***,** Vietnam has built into 12 Vietnam Development Goals (VDGs).
- Refer to the Global city indicators
- Refer to Habitat Agenda Indicators
- Based on Decision No. 43/2010/QĐ-TTg (Decision No.43-2010) dated 02/06/2010 of the Prime Minister on promulgating the National statistical indicator system;
- Census 2009, the data in the Statistical Yearbook of the General Statistics Office of Viet Nam (GSO);
- Decision No. 28/2007/QĐ-BXD of the Ministry of Construction on promulgating indicator system and general statistical report system in construction;
- Circular No. 34/2009/TT-BXD dated 30/9/2009 of the Ministry of Construction - Detailing a number of contents of Decree No.42/2009/NĐ-CP on urban classification.

c) Structure of indicators

The indicators of Vietnam urban observation system consist of 97 indicators divided into 5 groups with a total of 15 topics, each topic has indicators reflecting the characteristics of that topic and being appropriate to indicators selected in the indicators reviewed.

Table 2. Commonly used International indicator groups and Proposed indicator groups

No.	Commonly used International indicator groups	Draft of Indicators Version 1
1	Population	General information
2	Labour, Employment and Poverty	Population and Labor

3	Urban economy	Poverty, housing and social issues
4	Land	Environment and infrastructure
5	Urban planning	Urban management and urban finance
6	Housing	
7	Traffic	
8	Urban basic services	
9	Urban Environmental Management	
10	Urban Finance	
11	Urban Management	

The topics and the main contents of each topic are as below:

i. ***Overview*** (5 indicators): Management decentralization, classification of urban areas, area and population density (based on indicators of urban classification under the Circular No. 34-2009)

ii. ***Issues on population and labor*** (15 indicators, based on indicators of the statistical sector)

Population (10 indicators) includes: General population, men and women, urban and rural areas; the number of households; the rate of population growth; population structure by age group; population quality; gender.

Labor (5 indicators) mostly reflects the rate of labor; quality of labor; gender.

iii. ***Poverty, housing and social issues*** (29 indicators)

Urban poverty (1 indicator) is about the poverty rate (taken according to poverty standards);

Housing (9 indicators) includes: type of house and floor area; removal of slums (based on indicators of the statistical sector, Circular No. 34-2009 and the International)

Education (5 indicators): reflects the situation of students in primary schools, secondary schools and high schools, gender indicator in students (based on census and indicators of statistical sector).

Health (7 indicators) reflects: child mortality rate; incurable and intractable disease situation; number of doctors and pharmacists, average life expectancy (on the basis of referring to indicators of Statistical sector and the International).

Culture (4 indicators) reflects: the number of theaters, cinemas, cultural houses at district and ward level (on the basis of referring to indicators under Circular No. 34-2009 and International indicators).

Safety (3 indicators) reflects: Social safety as firefighting, traffic accidents and number of criminal cases (referring to International indicators and statistical sector).

iv. ***Issues on environment and infrastructure*** *(including 36 indicators)*

Land-use (5 indicators) reflects major land types such as construction land; green land, urban land for transport, industrial land, land in unofficial development zones (referring to the indicators of the construction industry; Circular No. 34-2009)

Transport (6 indicators) reflects: Transport infrastructure, means of transport including personal cars; motorcycles, the proportion of passengers using the public transport, traffic types, (referring to indicators of Circular No. 34-2009, and Transport sector).

Rainwater drainage system (3 indicators) reflects: the problem of urban flooding, Proportion of urban and suburban drainage systems (new proposal of consultants)

Electricity supply, communication, water supply, wastewater drainage - solid waste - cemeteries, environmental sanitation referred to: wastewater drainage and environmental sanitation (including 22 indicators, referring to indicators used under the Circular No. 34-2009, Indicators of Construction industry and referring to International indicators).

v. ***Issues on urban governance and finance*** *(including 12 indicators):*

Economy (7 indicators) include: Gross urban product per capita, total revenues and expenditures of local budgets, domestic and foreign investment capital, per capita income per month, the average economic growth in 3 years (referring to indicators of the Circular No.34-2009, National statistical norms and International indicators).

Urban governance (5 indicators) include: people's representatives; the implementation of the right to vote; labor in the government and gender ratio; administrative reform (these indicators referred from the International indicators).

(Detailed in indicators of Vietnam urban observation system - Appendix II)

d) Consideration and evaluation

Achievements:

Through the structure of urban indicators VUI mentioned above, we can draw some following comments:

- The objective of the urban indicators VUI is to associate with the assessment of urban areas according to MDG and VDGs, so many indicators have to meet the key objectives of poverty reduction, health and social justice. Therefore, among 97 indicators, there are 14 indicators relating to assessment of poverty level, 7 indicators relating to gender equality, nearly 20 indicators relating to health, 11 indicators relating to culture, safety and welfare.
- The VUI indicators are surveyed according timeline coinciding with the publication of data of the Census of population and housing in 2009. Thus it took advantage of census results and also collects more data that the census of population and housing did not have, to be able to establish a rich data system.
- The VUI indicators surveyed in the urban areas of all six economic and social regions include the Northern Midland, Red River Delta, North Central and Central

Coast, Central Highlands, Southeast and the Mekong Delta. Therefore, urban areas surveyed ensure the representativeness to assess the real situation of Vietnam urban system.

- Objectively perceived at that time of 2010, this is the first time to prepare comprehensive indicators for assessment in many fields of the urban area, in which many indicators did not exist previously. Therefore indicators VUI can be considered an initial important result to see the status of urban limited aspects and in general management perspective of the industry as a reference to see an overall picture with different regions and urban types.

Limitations

- In VUI indicators, due to the large number of indicators and areas, some indicators of urban areas cannot be collected such as: Average economic growth over the last 3 years, the percentage of households lacking housing, the number of deaths due to illness and HIV infection, rate of manpower in People's Committee etc. The reason involves many sectors and indicators not be surveyed annually.
- Some indicators such as investment capital for infrastructure construction, domestic investment capital, foreign investment capital etc., by capital sources from various sources with the capital source managed by the government, with the capital source managed by the province, without belonging to the source managed by urban area, therefore the collection gets difficulties.
- Some indicators such as: whether urban areas have waterway airports, ports or railways across or not, the quantity of motorcycle/ person, these indicators have not reflected the development of urban areas, not clarified the characteristics of urban areas, so those indicators has not been core indicators and should be reduced.
- Important issues to our country's urban areas are impacts of climate change but there is only an indicator, which is *the proportion of urban area flooded at least 1 time/year*. That is not enough to assess the level of impact of climate change on urban areas.
- Some qualitative indicators as: There are financial resources for housing or not, your urban area has funeral homes or not, people are allowed to involve in socio-economic development planning or urban area has website or not. For these indicators, mostly urban areas answer "Yes", but after the "yes" data, it does not reflect the quality, so the value of the data is not high.
- With 97 indicators that some indicators are not collected, resulted in some urban areas failing to send written feedback, so initially only 65 urban areas respond and nearly 1/3 of the urban areas do not send written response. After continuing mobilization, 12 extra urban areas send information to make the City profile of 77 cities.

e) The inheritance from VUI indicators for NUDS indicators.

- The problems learned from the VUI indicators shows NUDS goals do not focus much on urban evaluation under Millennium Development Goals of the world (MDG) and the Vietnam Development Goals (VDGs), but needs a comprehensive analysis and assessment of the state of urban development for credible basis for

making policy and Vietnam urban developing strategy in the future. Therefore, for the VUI indicators well as the basic goal is assessment of the Vietnam urban areas in many ways, but further evaluating indicators of Millennium Development Goals, thus there will be many indicators that the indicators which NUDS Indicator can refer.

- VUI indicator also refers some indicators from the Indicators of Decree 42 on urban classification - the indicators are currently being applied, some indicators under Decree 42-2009 also are the indicators that NUDS will inherit in the next study.
- Data system of VUI urban indicators surveyed since 2009 cannot be updated on the NUDS urban indicators, the Consultant can use to evaluate the variability of the indicator data over time, accordingly identify and assess the problems of urbanization Vietnam more objectively.

2.3. MOC Urban indicators (under Decree No. 42/NĐ-CP on urban classification)

a) Purpose and objectives

According to Decree No. 42-2009 on urban classification, the Government issues this Decree for the purpose:[3]

- To organize, arrange and develop the national urban system.
- To prepare, approve the urban construction planning.
- To improve the urban quality and sustainable urban development.
- To develop policies and mechanisms for urban management and urban development.

Therefore the indicators of Circular No. 34-2009 that issued by MOC aim to meet the following objectives:

- Provide some detailed contents of Decree 42/2009/NĐ-CP of the Government on urban classification.
- Help People's Committee at all levels and relevant agencies grounds based on standards with specific criteria to review the status of urban development, assess the remaining problems. On that basis, continue to invest in urban construction towards a synchronized and sustainable urban development.

b) Basis of indicators

The development of indicators in Circular No. 34 based on the following grounds:

- Based on the requirements and contents of Decree 42/2009/NĐ-CP dated 07/5/2009 of the Government on urban classification.

[3] Under Article 2 of Decree No. **42**/2009/NĐ-CP on Urban classification

- Based on Decision No. 445/QĐ-TTg dated 07/04/2009 approved by Prime Minister on Adjustment of overall planning orientations for development of Vietnam urban system by 2025 and vision to 2050.
- Regulations from the documents of the State such as National statistical norms system; Census and the data in the Statistical Yearbook of General Statistics Office (GSO);
- The development orientations of the State on urban areas

c) Structure of indicators

Indicators of MOC under Decree No.42-2009 provide details on some contents of Decree 42/NĐ-CP/2009 including 6 standards with 49 norms (*stipulated in detailed in MOC Urban Indicators under Decree No.42/NĐ-CP-Appendix 3*) as follows:

i. ***Urban function standards*** (7 norms) include 6 quantitative norms and 1 qualitative norm.

Position and nature (1 qualitative norm)

Economy and society (4 norms) include: Total revenues in the province; Budget revenues and expenditures balance; Per capita income in year compared to the whole country; Average economic growth in last 3 years; Poverty rate; Annual population growth rate.

ii. ***Entire urban population size*** (3 norms), includes: Entire urban population; Inner urban population; the rate of urbanization.

iii. ***Population density*** (1 norm) is the density of population

iv. ***Proportion of non-agricultural labor*** (1 norm) is the proportion of non-agricultural labor

v. ***Urban infrastructure project system*** (30 norms) is divided into sectors:

Housing (2 norms): Average housing floor area; the rate of permanent, rather permanent, semi-permanent houses.

Public Works at urban level (8 norms): Land for construction of public works at residential quarter level; Civil land norm; Land for construction of urban public works; Health facilities; Education and training institutions (including universities, colleges and vocational training centers); Cultural centers, cinema, theaters; Sport centers; Trade and service centers.

Transport system (5 norms): Traffic hubs; the rate of land for transport in the inner urban areas compared to construction land in the inner urban areas; Road density in the inner urban areas (taking into account road red line width ≥ 11.5 meters); the rate of serving public passenger transport; the area of land for transport/ inner urban population.

Water supply system (3 norms): Water supply standards in the inner urban areas; The rate of inner urban population supplied with clean water; The rate of water loss.

Drainage system (3 norms): The density of the main sewer line in inner urban areas; the rate of domestic wastewater treated; the rate of new production bases with wastewater treatment plants.

Electricity supply system (3 norms): Electricity supply norms of inner urban areas; the rate of inner urban main streets illuminated; the rate of alleys illuminated.

Information and telecommunications system (1 norm): The average telephone subscribers/ population.

Trees, waste collection and treatment and funeral homes (5 norms): Urban green land; Public green land of inner urban areas; The rate of solid waste collected in inner urban areas; The rate of solid waste treated in inner urban areas; Number of funeral homes in inner urban areas.

vi. ***Architecture, urban landscape*** (7 norms) divided into sectors:

Regulations on management of the entire urban architecture (1 qualitative norm)

New urban areas (2 norms): New urban areas; urban improvement and embellishment.

Urban civilization streets (1 norm): The rate of urban civilization street/ total main streets in inner urban areas;

Public space (1 norm): Number of public space at urban level.

Typical architectural and architectural work complexes (2 norms): There are the typical architectural works, cultural and historical works, heritages; the rate of heritage, cultural, historical and typical architectural works restored and embellished.

Table 3. Comparison of Commonly used International indicator groups and Proposed indicator groups

No.	Commonly used International indicator groups	Draft of Indicators Version 1
1	Population	Urban functional standards
2	Labour, Employment and Poverty	The scale of whole urban population
3	Urban economy	Population density
4	Land	The proportion of non-agricultural workers
5	Urban planning	The system of urban infrastructure projects
6	Housing	Urban architecture and landscape
7	Traffic	
8	Urban basic services	
9	Urban Environmental Management	
10	Urban Finance	
11	Urban Management	

d) Consideration and evaluation

Achievements:

- *MOC urban indicators in Decree No.42 on classification is an important tool in assessing urban existing situation, issuing plan, spending suitable power source for urban quality and appearance improvement*.

  On 7/4/2009, Prime Minister issued Decision No. 455/QĐ-TTg on approving the adjustments of overall planning orientations for development of Vietnam urban system by 2025 and vision to 2050 and on 07/5/2009, Prime Minister issued Decree No. 42/2009/NĐ-CP on urban classification, then on 30/9/2009, Ministry of Construction issued Circular No. 34 providing details on some contents of Decree No. 42/2009/NĐ-CP, in which, evaluation indicators with 6 standards and 49 norms helped urban areas have directions to strive to achieve the criteria of quality improvement corresponding to recognizing the urbangrade . The MOC urban indicators in the Decree 42/NĐ-CP-2009 on the urban classification is the legal urban indicators carried out from 2009 to present.

  After 5 years of implementation, the MOC urban indicators has become a positive tool to help Urban government assess the urban situation, promulgate plans, put appropriate resources to enhance the urban quality and appearance. Many urban areas after type upgrading have confirmed that the role is motivation to promote local and regional economic restructuring.
- *Among 49 norms, there are 37 norms on infrastructure project and landscape architecture*

37 norms of infrastructure works and landscape architecture express the interest of the State and urban governments to the life quality of the people in order to improve living conditions for all strata of the population because the urban poverty is not only income poverty, but also multidimensional poverty in relation to urban infrastructure. These indicators created the interest of urban leaders in recent years in upgrading urban infrastructure.

- *Being consistent with statistical data management situation*

MOC urban indicators with a total of 49 criteria integrated into the 6 standard groups reflects the general and detail information; reflect a number of important areas related to urban development reality, consistent with the statistical data management situation. Thus, the statistical data in the upgrade project has high reliability and is stamped for the endorsement by the local agencies.

Non-achievements:

- *MOC urban indicators do not refer to the binding in the use of statistical indicators for monitoring sanctions and urban quality control after recognizing urban type upgrade.*

In reality, the application of the MOC indicators meets many inadequacies, many local governments have no plan and measures to monitor and overcome the lacked standards and criteria, aiming at a comprehensive and developed urban area.

- *There is no appropriate urban indicators to regulate for the specific urban areas*

Many urban areas have in-depth individual characteristics and properties in the fields of culture, landscape and environment or mining, industrial, agricultural and forestry production such as Hue, Ha Long, Hoi An, Dung Quat, Nhon Trach and Phu Quoc ... during applying the MOC indicators, it will be more criteria of population, population

density, landscape, road sections... which are difficult to perform and have incorrect assessment compared with the specific functions of urban areas.

- *Some norms of indicators needed to be changed to meet the requirements of urban development in the new period.*

The indicators on urban infrastructure facilities are only for urban areas and inner cities, so these indicators get high scores when be considered to increase grading. However, in fact, the suburban areas and the outskirts still lack of clean water supply, sewerage, solid waste management and environmental sanitation. According to the criteria of National Programs, Strategies and Orientations in the period 2012 to 2020 on urban areas, require a consideration on the scale of the whole urban area. Thus, that this problem well done is an important solution to remove the appearance of new low-income areas arising from too large urban expansion to ensure the norms of the urban population that has not interested to invest in infrastructure synchronously.

The criterion for the scale of whole urban population in the provisions of the MOC indicators is quite high. Most urban areas are failed and calculate higher than the reality including official and unofficial population. Due to higher provisions on population size, many localities have actively expanded urban areas, get more population from the surrounding areas to become urban residents. The expansion of the urban boundary has created a lot of pressure in the sustainable urban management and development due to unreasonable land use, increase of public investment resources to not-in-need areas and the appearance of low-income residential areas.

- *Some norms should be added to meet the new situation on climate change and the integration trend with the urban areas in the region and around the world.*

Our country is one of five countries in the region severely affected by climate change. However, the indicators of Circular No. 34-2009 have not had indicators mentioning this very important issue. This is issue needed to be researched and added aiming at involving the attention of urban government and people in coping with climate change and reducing disasters.

- *The MOC indicator did not mention urban governance*

This issue is mentioned in all international indicators such as the CA, WB, UH-HABITAT and ADB. Because urban governance is closely related to the enforcement of urban government in providing services to people and it depends on the capacity of urban governments in the administration and urban management.

At the present time, the Ministry of Construction is soliciting opinions from various agencies and social organizations for the draft to prepare for promulgating a Decree replacing Decree No. 42/2009/NĐ-CP of the Goverment on Urban classification.

e) The inheritance of MOC indicators in the Decree No. 42-2009 for NUDS

- The indicators in the criteria group of "Urban function" are placed in correlation with regional and national development planning. Thus, it reflected the position, role and function of urban areas in the national urban system.
- The indicators in the criteria group of "population" are not feasible; especially regulations of the entire urban population in the urban areas type III, IV and V

showed that there is no encouragement of development to the medium and small urban areas.

- Criteria group of "percentage of non-agricultural workers" is not consistent with the scope of assessment in the inner city or concentrated construction area. According to the standards of international organizations, the percentage of non-agricultural workers aims to evaluate labor structure of a locality or compare labor structure among urban areas and is defined within the boundaries of this locality.
- The indicators in the criteria group of "urban infrastructure" are recently defined on urban infrastructure and urban social infrastructure, and it is lack of norms on urban environmental sanitation aiming to assess the urban life quality in more detail. On the other hand, it only counts inner city/urban but excludes the entire urban area, thus leading to many difficulties in life quality of people in the suburbs, this also makes the asynchrony in urban infrastructure system.
- MOC indicators in Decree No. 42-2009 on urban classification are the legal indicators currently being used by urban areas for urban classification, after study and review, it is possible to include many indicators into NUDS indicators.
- Urban data system in the MOC urban indicators is not consistent from 2008 to 2015. So, NUDS indicators can only succeed the data from MOC indicators in 2014 to 2015, the other data will be exploited for analysis and comparation.

III. URBAN INDICATORS NUDS

According to the TOR of Task A, after reviewing the urban indicators and analyzing the achievements and non-achievements of the urban indicators, the Consultants gave the scope and priorities for data update and improvement. This is required for the NUDS indicators meet. With this request Consultants suggested some following contents:

3.1. Some requirements on the research scope and the priorities according to TOR

Based on the project's objectives and the contents of the Task B on plannings, investigations, surveys and researches agreed in the inception report, the data frame focus on 9 fields and issues to highlight the characteristics of urbanization in Vietnam. The details are in the following table:

Table 4: Expected research the scope and priorities according to TOR

No.	Scope	Contents should be considered
I	Urban population	Population size, Population density, Urbanization rate, Population growth rate,
II	Housing	Floor area of housing, Housing price, Rents compared with the average income of household/ month...

III	Urban land	The land area for urban construction, The proportion of land reserved for development under long-term plan.
IV	Urban technical infrastructure	The proportion of land for transport, The proportion of transportation vehicles use, Trees, The percentage of households using fresh water, Electricity supply, Telephone, Internet, Garbage collection and disposal, The proportion of costs for investment and maintenance of technical infrastructure in the annual budget of urban areas.
V	Urban economy	Total budget revenue, Economic growth rate, Revenues and expenditures balance Income per capita
VI	Social services in the urban areas:	The land proportion for medical works, Education, Culture and society, Sports, Number of hospital beds/ 103 people, The percentage of students attending the school, Garbage collection, Service costs compared with average income
VII	Labour, Employment and Income	The average income of households, Poverty rate, Child labor rate, Unemployment rate
VIII	Urban management capacity	The number of administrative procedures about the urban fields - construction done every year, Number of public servants in urban management department and indicators for evaluating urban management capacity.
IX	Coping with floods and	The proportion of land area for urban construction

	natural disasters due to climate change	affected by flooding every year, Number of households directly affected, Number of households had to temporarily move, Number of plans coping with natural disasters (annual plan, flood maps ...).

3.2. Proposals of priorities for NUDS's data update

With 9 fields and 41 contents suggested in the scope of work of NUDS required by the TOR, Consultants found that:

* 9 fields mentioned in the Task B of TOR fully reflected the key issues to assess the real situation of urban areas.

* 41 contents of 9 fields are the core issues and the implications for Consultants to research and make the contents which should be prioritized in order to evaluate more fully and comprehensively for each urban area.

After reviewing domestic urban indicators and referencing the urban indicators of several international organizations, Consultants recommended supplementing some priority contents and further clarifying these contents. Those also are fundamental to build NUDS indicators aiming to service data improvement. These priorities proposed include:

The urban population; It is necessary to define clearly between inner city/urban area and suburban. This is to recognize clearly and objectively about the urban development recent time (urban expansion is too large compared to the requirements of development, etc.)

Housing: It is necessary to add some contents to evaluate the implementation of national housing programs at the local level, urban poverty reduction through the temporary housing deletion etc.

Urban land: Recently, land issue in urban areas is quite outstanding reflected in the expansion of urban areas into agricultural land. Reserved land in the cities is huge and inefficient use affecting production and livelihood of farmers.

Urban infrastructure system: Urban technical infrastructure system affects the delivery of basic services to the urban population. However, due to the large urban expansion has led to a lack of synchronization of urban infrastructure. Therefore, these content has to be more detailed and completed the contents of the urban infrastructure. Such has been the objectively evaluation of the implementation of Orientations, an important Strategy of the State thereby determining the results as well as the limitations that need to be tackled in the coming period.

Urban economy: In the process of urban development of each urban economy as the budget for development is important but the fund for operation and maintenance is also important. On the other hand, the annual investment shows the balance of revenues and expenditures of the urban area or need reasonable adjustments for other priorities.

Social service: a field related to the supply of basic services of urban authorities to people, thereby also showing the life quality of urban residents. In recent years, the

issue of public space, especially public spaces in residential areas and residential complex are incomplete and do not meet requirements to serve children and the elderly. Thus, this is the issue that should be considered as a priority.

Labor, employment and income: Along with contents of the poverty rate, unemployment rate, per capita income and the rate of child labor/total of labor as well as a number of issues to be considered as a priority relating to labor quality such as percentage of workers trained, the percentage of workers employed and the rate of non-agricultural workers.

Management capacity: Urban management capacity is a very important sector showing the controlling ability of the urban government in the urban construction, development and management. The management must be based on a legal basis, such as General Urban Planning, Management Regulation of urban architecture, urban development program approved by the authorized agencies and how non- permission construction situation is, so on.

Coping with flood and natural disasters due to climate change. In recent years, the issue of climate change is becoming more severe, but this field has not been concerned by municipalities e.g. not make an action plan to respond to climate change, urban water logging problems, relocation issues when having natural disasters and floods plans to respond to emergencies etc. Therefore, in the preferred content, it needs to be considered additionally to properly assess the actual situation.

IV. CONCLUSION

Based on the analysis of the scope and contents of the proposals of the Consultants, it will be the basis for Consultants to conduct further research, review and identify the indicators in each indicator group of NUDS urban indicatorswhich will be implemented in Task B.

V. APPENDIX.

Appendix 1: Vietnam Urban Indicator – Version I

Group	No.	Indicators	Unit
		I. General	
		Original Indicators	
GROUP I	1	Urban grade	Grade
	2	Whole city population	people
	3	Whole city natural area	ha
	4	Urbanization	%
		II. Urban Population	
		Original Indicators	
GROUP II	5	Population inner city	People
	6	Population density inner city	person/km2
	7	Population density in whole city	person/km2
		Extended indicators	
	1	Natural population growth rate	%/year
	2	Mechanical population growth rate	%/year
		III. Labor, jobs and poverty	
		Original Indicators	
GROUP III	8	Non-agriculture labor	%
	9	Unemployed (%)	%
	10	Poor households in the city	%
		Extended indicators	
	3	Rate of employment lacking (%)	%
	4	Average income of employees	Mil./year/person
	5	Rate of employee in the city	%
	6	Rate of trained employee	%
		IV. Urban Economy	
		Original Indicators	
GROUP IV	11	Total state budget revenue in the city	Bil./year
	12	Balance state budget	/
	13	Per capital income	Mil.dong/person. year
	14	Urban construction capital	Bil./year
		V.Land and Urban Plan	
		Original Indicators	
GROUP V	15	Urban n construction land Area	ha
	16	Area inner and out of the city	ha
	17	Latest approved City master Plan	Decision No.
	18	Preserved land for development in long-term Plan	Ha
		Extended indicators	
	7	Urban construction density	Person/ha
	8	None-construction urban land	%
	9	Illegal residential land	%
		VI. Socio infrastructure Service	
GROUP VI		**6.1.Residentital housing**	
		Original Indicators	

Group	No.	Indicators	Unit
	20	Rate of permanent housing	%
	21	Rate of slum (or low-income housing)	%
	22	Rate of residential land in the city	%
	23	Residential housing development Programme approved by the Provinces	Exist/None
	24	Rate of shelter	%
	25	Housing renting fee comparative with monthly income of each household	Mil./month.Households
		6.2. Public works and socio- culture works	
		Original Indicators	
	26	Land for public works in residential area	m2/person
	27	Land for public works in the city	m2/person
	28	Health care	bed/1000 people
	29	Number of Education centers	Number of Unit
	30	Number of culture – sport centers	Number of Unit
	31	Number of Commercial – service Centers	Number of Unit
		6.3. Urban tree	
	32	Land for green tree in whole city	(m2/person)
	33	Land for green tree inner city	(m2/person)
		VII. Technical infrastructure	
		7.1. Transportation	
		Original Indicators	
	34	Rate of land for transportation /Urban land area	%
	35	Rate of land for transportation inner city/land area inner city	%
	36	Density of main road	(km/km2)
	37	Rate of passenger public transportation (%)	%
		Extended indicators	
	10	Average moving in a trip from start place to office	Minutes
		7.2. Urban water supply	
		Original Indicators	
	38	Water supply source for city	exist/None
GROUP VII	39	Cosmetic urban water supply standard (little/person.day&night)	Little/person.day&night
	40	Rate of urban residents using pure water	%
	41	Rate of water lost (%).	%
		Extended indicators	
	11	Rate of standard domestic water	%
	12	Time of water supply interruption in a day	Hour
		7.3. Water drainage	
		Original Indicators	
	42	Rate of coverage water drainage inner city	%
	43	Rate of collected waste water	%
	44	Rate of treated domestic water	%
	45	Rate of treated waste water from industrial zone, Export processing zone, industrial zone	%
	46	Rate of coverage waste drainage in whole city	

Group	No.	Indicators	Unit
	47	Rate of connection works of households to the water drainage system (%)	%
		7.4. Power supply	
		Original Indicators	
	48	Indicator of domestic electricity supply in urban areas	KW/person/year
	49	Rate of alleys to be illuminated	%
		Extended indicators	
	13	Number of power supply interruption hour in a year.	Hour
	14	Rate of recycling energy in the city	%
		7.5. *Information and telecom system*	
		Original Indicators	
	50	Number of subscribers	unit/100 people
	51	Rate of households connecting internet/100.000 people	%
		7.6. Solid waste	
		Original Indicators	
	52	Rate collected solid waste	%
	53	Rate of treated solid rate	%
	54	Rate of recycled solid rate	%
		Extended indicators	
	15	Rate of households having waste classification in home	%
		7.7. Urban cemetery	
		Original Indicators	
	55	Number of funeral home and funeral in hospital	Number of funeral home/100.000 people
		Extended indicators	
	16	The rate of cremation forms	Number of cremated people/ number of dead
		VIII. Urban environmental management	
		Original Indicators	
	56	Rate of households use sanitary latrines	%
	57	Built plan responding to Climate change	Exist/None
GROUP VIII	58	Rate of flooded land/city area	%
	59	Number of public toilet on the main street/1.5km in urban downtown area	Num. of public toilet/ 10.000 people
		Extended indicators	
	17	Rate of Polluted air under standard limited	%
GROUP IX		**IX. Urban management**	
	60	Satisfaction levels of citizens and businesses to provide the basic services of municipal governments (of respondents satisfied on the	%

Group	No.	Indicators	Unit
		number of respondents)	
	61	City having website and collecting comments of residents	Exist/None
	62	Regulations of urban architecture and plan management	Exist/None
	63	Demand of urban management capacity	Exist/None
		Extended indicators	
	18	The provided service of government through website/total provided services	%
	19	Data basic management of the city	Exist/None

Appendix 2: Urban Observatory System Indicator (VUI)

Indicator	Indicator description	Unit
1. Overview (5)		
TQ01	Management	Level
TQ02	Urban grade	Grade
TQ03	Total urban area	Km 2
TQ04	Urban area	Km 2
TQ05	Constructed urban land area	Km 2
2. Population and Labour (15)		
DS01	General Population	People
DS02	Male	People
DS03	Female	People
DS04	Urban people	People
DS05	Rural people	People
DS06	Total households	Households
DS07	Population growth rate per year	%
DS08	Natural population growth rate	%
DS09	Urban population growth rate	%
DS10	Rural population growth rate	%
LD01	Labour rate in population	%
LD02	Unemployment rate	%
LD03	Labour rate in population of working age	%
LD04	Female labor rate (in total labor)	%
LD05	Non-agricultural labor rate	%
3. Poverty, Housing and social issues (29)		
Ng01	Poverty rate (according to urban poverty standard)	%
NO01	Rate of households with permanent housing	%
NO02	Rate of households with semi-permanent housing	%
NO03	Rate of households with less-permanent and simple housing	%
NO04	Floor area per capita	m2 of floor / person
NO05	Floor area per capita in urban area	m2 of floor / person
NO06	Rate of households lacking of housing	%
NO07	% of Temporary/simple housings is cleared in 10 years from 1999 to 2009	%
NO08	Is there financial resource for urban housing?	Yes/No
NO09	How many households are likely to be displaced and cleared? Cause for each type of household	Households
GD01	Rate of female students comparing to male students in primary school, secondary school, high school.	%
GD02	Rate of female students comparing to male students in primary school.	%
GD03	Rate of female students comparing to male students in secondary school.	%
GD04	Rate of female students comparing to male students in high school.	%

Indicator	Indicator description	Unit
GD05	Number of students/teacher in primary school, secondary school and high school.	Students
YT01	Under-five mortality rate	%
YT02	Number of deaths due to HIV	People
YT03	Rate of infection and deaths due to malaria (/10,000 people)	cases/ 10000 people
YT04	Rate of infection and deaths due to tuberculosis (/10,000 people)	cases/ 10000 people
YT05	Number of doctors/10000 people	Doctors/10000 people
YT06	Number of pharmacists/10000 people	Doctors/10000 people
YT07	Life expectancy	Years-old
VH01	Number of cinemas	Cinemas
VH02	Number of theaters	Theaters
VH03	Number of district-level cultural houses	Cultural House
VH04	Number of ward-level cultural houses	Cultural House
AT01	Number of firemen/10000 people	Firemen/10,000 people
AT02	Number of fatal traffic accidents	Accidents
AT03	Number of crimes/100000 people	Crimes/100,000 people
4. Environment and Urban infrastructure (36)		
SDD1	Rate of land in construction land.	%
SDD2	Rate of trees in construction land.	%
SDD3	Land rate for urban transport in construction land.	%
SDD4	Area rate of informal development areas in total urban land area	%
SDD5	Rate of land for industry in urban construction land	%
GT01	Private cars/10000 people	Cars/ 10000 people
GT02	Number of motorbikes per capita	Motorbikes /person
GT03	Rate of passengers using public transport mean (bus)	%
GT04	Is there railway in your urban center?	Yes/No
GT05	Is there inland waterway in your urban center?	Yes/No
GT06	Is there airport in your urban center?	Yes/No
TNM1	Rate of urban roads with rainwater drainage system	%
TNM2	Rate of rural roads with rainwater drainage system	%
TNM3	Rate of urban area flooded at least 1 time/year	%
CD01	Rate of households supplied with electricity	%
CD02	Rate of urban households supplied with electricity	%
CD03	Rate of rural households supplied with electricity	%
CD04	Use of electricity per capita	Kwh/ person/year
CD05	Rate of streets (with cross-sections from 1.5 m or more) with artificial lighting	%
TT01	Rate of Internet subscribers/100 people	%
TT02	Rate of telephone subscribers/100 people	%
TT03	Rate of mobile subscribers/100 people	%
CN01	Rate of urban residents supplied with tap-water	%
CN02	Rate of urban residents using tap-water	%

Indicator	Indicator description	Unit
CN03	Rate of urban residents using other fresh water sources	%
CN04	Use water per capita in family, use for living	Liters/person/day
CN05	Rate of water loss	%
VS01	Volume of solid waste of entire urban center	Tons
VS02	% Urban population with regular collection of solid waste	%
VS03	Rate of solid waste collected	%
VS04	Rate of solid waste is hygienically treated in total solid waste	%
VS05	Rate of urban households using sewage drain	%
VS06	Is there sewage treatment plant in your urban center?	Yes/No
VS07	Rate of industrial wastewater is collected and processed.	%
VS08	Is there funeral home in your urban center?	Yes/No
VS09	Land area for cemeteries /10,000 people	Ha/10.000 people
	5. Urban Management and Finance (12)	
KT01	Gross domestic product per capita of urban	Million VND
KT02	Total local budget revenue	Billion VND
KT03	Total local budget expenditure	Billion VND
KT04	Domestic investment capital	Billion VND
KT05	Foreign investment capital	Million USD
KT06	Income per capita/month	Million VND/person
KT07	Average economic growth rate in the last 3 years	%
CQ01	Rate of People's Committee personnel in labor of city	%
CQ02	Rate of female people in People's Committee	%
CQ03	Number of average days to get a license	Days
CQ04	In your urban center, Do people have right to involve in planning economic-social development and budget?	Yes/No
CQ05	Is there web in your urban center?	Yes/No

Appendix 3: MOC urban indicators (under the Decree No 42/NĐ-CP/2009 on classification of urban area)

No	Assessment indicator	Unit
I	**Urban function**	
	Location and nature of urban area	
	Economy and society	
2	Total budget receivables in the region	(billion dong/year)
3	Balance budget receivables and payables	
4	Per capita income comparing to the whole country	(time)
5	Average economic growth in 3 latest years	(%)
6	Poverty rate	(%)
7	Rate of annual population growth	(%)
II	**Scale of the entire urban population**	
8	Population of the entire urban area	(1000 people)
9	Urban population	(1000 people)
10	Rate of urbanization	(%)
III	**Population density**	
11	Population density	(people/km^2)
IV	**Rate of non-agricultural workmen**	
12	Rate of non-agricultural workmen	(%)
V	**Urban infrastructure system**	
	Housing	
13	Average floor area for the urban area	(m^2 of floor/person)
14	Rate of permanent houses, semi-permanent houses inner city	(%)
	Urban public works	
15	Construction land of regional public works	(m^2/person)
16	Target of civil land	(m^2/person)
17	Construction land of urban public service works	(m^2/person)
18	Health facilities (professional medical centers, hospital of levels)	(bed/1000 people)
19	Training and education facilities (universities, colleges, vocational schools)	(unit)
20	Cultural centers (theaters, cinemas, museums, cultural houses)	(work)
21	Sport centers (stadiums, gymnasiums, clubs)	(work)
22	Commercial – Service center (market, supermarket, store...)	(work)
	Traffic system	
23	Traffic nodes (airports, railway stations, ports, waterways, bus station).	(Level)
24	Rate of land in urban area traffic land comparing to construction land in urban areas	(%)
25	Road density in urban areas (taking into account road with red line width ≥ 11.5 meters).	(km/km^2)
26	Rate for serving public passenger transport (%)	(%)
27	Traffic land area / urban population	(m^2/person)
	Water supply system	
28	Standard of domestic water supply for urban areas	(litter/person/day and night))

No	Assessment indicator	Unit
29	Rate of urban population provided fresh water	(%)
30	Rate of water loss	(%)
	Water drainage system	
31	Density of main drains in urban areas	(km/km^2)
32	Rate of treated domestic wastewater	(%)
33	Rate of new constructed production facilities with wastewater treatment station	(%)
	Electricity supply system	
34	Indicator of domestic electricity supply in urban areas	(kwh/person/year)
35	Rate of main streets in urban areas to be illuminated	(%)
36	Rate of alleys to be illuminated	(%)
	Information and telecom system	
37	Number of average telephone subscribers /population	(unit/100 people)
	Trees, collection and treatment of waste and funeral houses	
38	Urban tree land	(m^2/people)
39	Public tree land in urban areas	(m^2/people)
40	Rate of collected solid waste in urban areas	(%)
41	Rate of treated solid waste in urban areas (appropriate landfill, recycling, combustion technology)	(%)
42	Number of funeral houses in urban areas	(house)
VI	**Urban architecture and landscape**	
	Regulations of entire urban architecture management	
43	Regulations of entire urban architecture management	
	New urban area	
44	New urban area	(area)
45	Urban renovation area	(area)
	Civilized urban streets	
46	Rate of civilized urban streets/total main streets in urban areas	(%)
	Public space	
47	Number of urban public area	(area)
6.5	***Typical architecture work and architecture complex***	
48	Typical architecture works, history and culture works, heritages:	
	a) a) to be recognized as the international /national level by competent state agencies, professional associations or international organizations	
	b) Recognized by competent state agencies or local professional associations	
49	Rate of restored and renovated typical architectural, historical and cultural works	(%)