

- Planning and delivery of social infrastructure (government offices, schools, clinics, markets etc);
- Budgeting and prioritisation of investment;
- Land management (including mechanisms for plot allocation);
- Sustainability issues (environmental, financial and institutional);

2 UM objectives

- 2.1 To promote good UM practice and help embed it in day-to-day MoPI activities - this series of booklets and the UM Guidelines are important tools for this.
- 2.2 To complement the infrastructure investment programme implemented by GoSS with funding support from various international funding agencies.
- 2.3 To promote initiatives that involve little or no capital investment but will result in significant improvement in the urban conditions, e.g.:
 - new plot layouts
 - regularising land tenure
 - improving records on land tenure and planning permission
 - labour-intensive public works
- 2.4 To emphasise thinking about investment priorities and sources of funding - these are especially important for the planning and delivery of infrastructure investment e.g. roads, water & sanitation, electricity etc.
- 2.5 To focus on the needs and aspirations of low-income households, who make up the vast majority of the urban population.

3 Basic UM principles

- 3.1 **Fairness:** UM must address the interests of all in a fair and equitable manner, to ensure that all needs and aspirations are catered for. It is especially important to address the interests of the poor and disadvantaged, who make up the vast majority of the urban population but who are often excluded from important development decisions.
- 3.2 **A continuous process:** Planning should be seen as a process of continuous planning activities that move towards a long term vision, rather than separate single acts e.g. production of a master plan or housing layout.
- 3.3 **Build on what is there:** An important UM objective is trying to create a better place; and this involves a vision of change and improvement. However, the vision must build on what is there, concentrating on improving the existing conditions rather than trying to create a completely new 'modern' town.
- 3.4 **Incremental development:** This will be achieved most effectively through incremental development, implementing relatively small yet significant initiatives, which move in the general direction of the vision but which are based on current needs and the availability of resources.
- 3.5 **Minimise displacement:** The upgrading of existing areas or the development of new areas will inevitably result in some displacement - but this should be kept to an absolute minimum. Existing occupiers should only be displaced where there is a very strong case for doing so - and only as a last resort. Displacement should be accompanied by compensation, either a financial payment or provision of an alternative site.
- 3.6 **Cost-effective development:** It is important to develop land and infrastructure in a manner that is cost-effective - this will make limited investment funds go further and will ensure that costs charged for services to consumers will be kept down.
- 3.7 **Realistic standards:** To achieve cost-effective development, planning should be based on realistic technical standards that match current needs and available resources. There is no

benefit in aiming for very ambitious standards or high technology solutions - and these may in fact frustrate achievement of more modest development results.

4 Range of disciplines

4.1 UM involves a wide range of professional, technical and administrative disciplines from different backgrounds:

- town planning
- civil engineering
- architecture
- surveying
- economics
- social development

4.2 You are not expected to be an expert in all these disciplines - you will probably have good knowledge of one or two topics, and a general understanding of all the rest. This booklet and others in the UM series are intended to help increase your understanding of the broad scope of UM and to introduce you to topics which may not be familiar to you.

Teamwork is important

4.3 Good UM is a product of good teamwork - people with different skills from different professional and technical backgrounds all working together.

4.4 So you should:

- Value and respect the skills of colleagues that are different to your own;
- Be aware of the limitations of your own knowledge and capability;
- Recognise when you need to ask for help from a colleague;

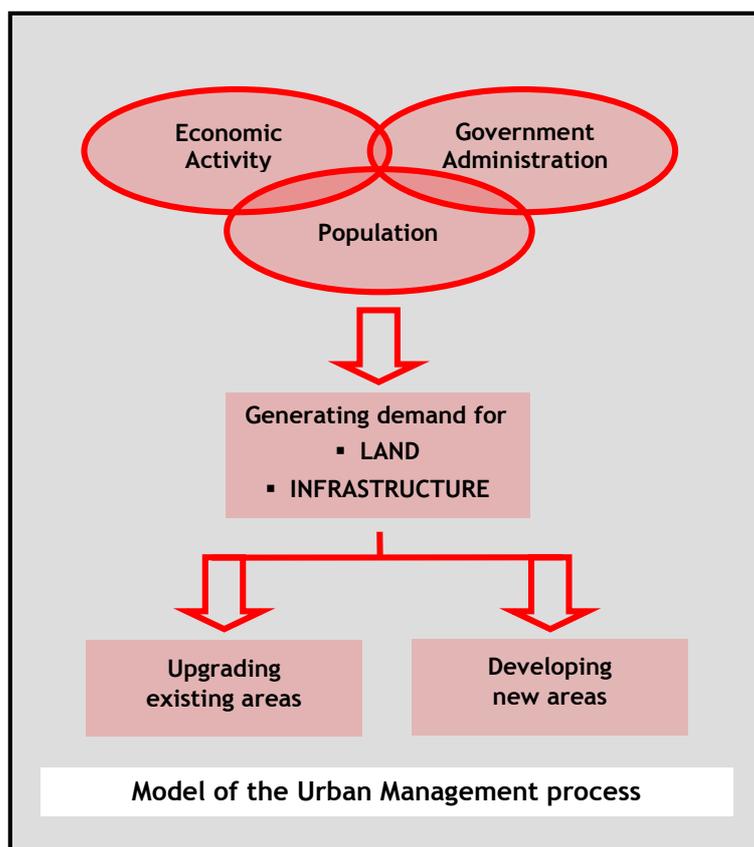
5 Reaching low-income households

5.1 Most MoPI staff share concerns about the quality of life experienced by many urban households - maybe you and your family experience these poor conditions. This concern needs to be carried through into day-to-day work of MoPI.

5.2 It is important that UM should embrace a pro-poor approach, and focus on the basic needs of the vast majority of urban households - it should not aim for an unrealistic vision of modern urban development.

5.3 International agencies (e.g. UN-Habitat, the World Bank, USAID) encourage Government to focus on low-income households - funding is sometimes made conditional on this approach; and some funding has been withheld when development was perceived to benefit more wealthy groups.

5.4 This message needs consistent application - and MoPI staff who are at the front line have an obligation for promoting these interests.



6 The Urban Management process (model?)

6.1 Figure X is an illustration of the UM process/model - it aims to help MoPI staff to a better understanding of:

- the context (or framework) within which they carry out their day-to-day work;
- the range of activities involved;
- their specific roles in planning.

6.2 There are three main drivers of urban development (the three oval shapes):

- **Economic activity:** the local economy made up of distribution of goods in shops & markets, manufacturing in factories & workshops, banking etc - that all create jobs.
- **Government administration:** the role of Government is especially important in a new country like South Sudan, where the private sector is not yet fully developed.
- **Population:** the urban population is the main stakeholder in the UM process. It relates with the other two drivers as workers or as users (or clients) of economic activities and Government services; and it creates the demand for residential land (the largest single land use in any town) and associated services e.g. water supply, sanitation, electricity, schools, playgrounds, markets etc. (> see Section 7 below)

6.3 The three drivers together generate demand for:

- **Land** - plots or sites on which to carry out activities: houses, markets, shops, offices, government buildings, workshops, factories etc.
- **Infrastructure** - roads, water supply, sanitation, electricity, schools, health facilities etc, that enable those activities to function effectively.

- 6.4 Most UM work concerns the planning and implementation of projects to meet demand for land and infrastructure - these fall into two distinct categories:
- **Developing new areas**, typically as urban expansion on the edge of the town;
 - **Upgrading existing developed areas**, focusing on degraded or poorly serviced areas.
- 6.5 Current town planning practice tends to focus on new development areas; but equal attention should be given to improving conditions in existing developed areas - there are many more people living in these areas under poor conditions than in new expansion areas.

7 Population change

8.1 Population change is made up of two components:

- **natural increase** - births minus deaths;
- **migration** - in-migration minus out-migration.

8.2 In most cases these two components result in urban population growth or increase: the number of births is greater than the number of deaths; and the number of people migrating into the town is greater than the number migrating out.

8.3 However in some circumstances they can result in population decrease - this is often the case in times of conflict and insecurity. For example the population of Abyei town decreased dramatically due to local conflict in 2007-09.

Migration: Movement of returnees/IDPs

8.4 Migration is stimulated by economic and social opportunity - towns are attractive because they offer opportunities for work, and better housing, schools, health facilities etc, so people to move there in the hope of enjoying a better quality of life. South Sudan has the additional factor of large numbers of returnees and IDPs who tend to return to towns rather than to rural areas, so adding to urban population growth.

Annual growth rate (AGR)

8.5 We measure the rate at which the population is growing by using the **annual growth rate** or **AGR**: this is the percentage by which the population grows from one year to the next. So a town that grows in one year from 70,000 to 75,000 has an AGR of 7.14% ($5,000 \div 70,000 \times 100$).

8.6 When looking at growth over a number of years, we calculate the average AGR. For example: it is estimated that the population of Juba increased from 120,000 to 250,000 in the period 1980-2005: this equates to an average AGR over 25 years of 3%.

8.7 Note that this is **compound annual percentage increase** - the average percentage by which the population increases from one year to the next: so Year 2 population = Year 1 population \times 103%, Year 3 population = Year 2 population \times 103% and so on). Beware! This is not the same as the total percentage increase ($130,000 \div 120,000 = 108\%$) divided by 25 years ($108 \div 25 = 4.3\%$).

Household size

8.8 In some cases, it is useful to think in terms of households rather than total population, because many urban services relate to the needs of households rather than individuals, e.g. housing plots, water supply and sanitation etc.

8.9 A 'rule of thumb' figure of 7-8 persons per household is commonly used - but it is important to use a figure that accurately reflects local circumstances.

Precise population figures are not essential

8.10 Although it is important to have a good idea of population data, it is not necessary to spend a lot of time and effort in chasing precise accuracy. This is because:

- the population is continually changing;

- precise figures are not essential for most urban planning activities - usually necessary only for very localised work.

8.11 It is important have a good sense of:

- the scale of total population
- the distribution throughout the town - how many people live in different districts
- the rate of change

These will allow you plan for the needs of the existing population and, equally important, to anticipate the future needs of increased population.

Defining the functional urban area

- 8.12 When planning urban management activities we need to have a clear idea of what we mean by the town, so that we know which areas of land are to be included in our urban planning and which communities will be involved.
- 8.13 So we need to define what we call the *functional urban area*: this is the contiguous built-up area that extends out from the town centre and which is commonly agreed to be the full extent of the town.
- 8.14 There is no scientific method for defining the boundary of the functional urban area - it is always subjective. As you move away from the town centre, development becomes less urban and more like a village - this is sometimes referred to as *peri-urban settlement*.
- 8.15 It is helpful to ask: do these households work in the town and do they require urban services (such as piped water supply, electricity etc)? If the answer is 'yes', then they should be defined within the functional urban area.
- 8.16 Note that the functional urban area may not be exactly the same as the administrative town boundary - in many cases it will extend beyond due to growth around the edge of the town.

8 Planning new development areas

- 8.1 The main purpose of new development areas is to cope with physical expansion of the town - so we refer to them as ***expansion areas***.
- 8.2 Expansion areas must be planned to meet the increase in demand for plots. Housing is by far the largest user of land in a town - so the greatest demand for plots will come from population increase is the most important determinant of the size of expansion areas required. But the demand will also include other important land uses: schools, health facilities, offices, markets, shops, workshops etc.
- 8.3 Planning of expansion areas should use a ***modular approach*** - this means preparing a plan for a neighbourhood block, with a given population and range of public facilities and services, which can be repeated to create larger a larger development.
- 8.4 Expansion areas will be planned in accordance with the approved town master plan - where there is one. Even if there is no master plan, you still need to plan expansion - population will grow anyway and will not wait for a master plan.
- 8.5 Public utilities (water supply, sanitation, roads, electricity etc) should be planned for ***progressive delivery***. Only basic level services need be provided at the start of development. So the plan will incorporate long-term provision, but actual delivery will be phased in line with budget constraints and the ability of individuals to pay for services.
- 8.6 ***Fair and open plot allocation procedures*** must be used to create public confidence: plots should be openly advertised and allocated on the basis of need. Multiple plot ownership (by one individual or members of the same family) must be controlled as it prevents the fair distribution of plots.

8.7 ↻ Find more detail in 2 - Planning New Development Areas

9 Upgrading existing areas

- 9.1 The term upgrading means improvement - so the upgrading of an existing area refers to the improvement of conditions, facilities and services for the benefit of local households and businesses. Upgrading these areas makes an important contribution to the improvement of the town as a whole.
- 9.2 Upgrading can be carried out in two types of urban area:
- **Formal or planned areas**, laid out according to an approved layout, with some security of land tenure, but with degraded or unimproved services: the main focus will be on improving infrastructure and regularising the development layout.
 - **Informal or unplanned areas** (e.g. squatters, IDPs) with few or no services, and no security of land tenure: the focus will be on providing or improving infrastructure and regularising the development layout, with special attention to land tenure.
- 9.3 Infrastructure will be provided at different service levels in different areas according to the ability and willingness of local households to pay for those services. It will be sensible to plan for **progressive improvement of infrastructure over time**, in line with budget resources and what the community can afford, rather than aiming for a high standard from the outset.
- 9.4 The local community should be fully involved in the planning and implementation of the upgrading exercise - that will ensure that:
- proposals reflect accurately local needs and aspirations
 - the local community buys in to the upgrading process.

➔ Find more detail in 3 - Upgrading

10 WHAT > WHEN > HOW: Three elements of a plan

- 10.1 For a development plan to be effective, it must have three elements: we describe these simply as WHAT, WHEN and HOW.
- 10.2 **WHAT**: this is the long term vision for what the plan hopes to achieve. This is typically presented as a map supported with text, data and diagrams, showing the future spatial arrangement of land uses (residential, commercial, public buildings etc) and main infrastructure components. The WHAT element is relatively easy to produce; but on its own changes nothing - it needs the support of two other elements.
- 10.3 **WHEN**: this is the phasing of development, working out when development is planned to happen. The long-term plan cannot be achieved in one step, but will be developed over a period of time. The WHEN element explains the steps required to reach towards the long-term vision, matched to available resources.
- 10.4 **HOW**: this is the explanation of how the plan is to be implemented. Implementation usually involves different agencies working together. The HOW element identifies which agency will be responsible for which action and over what period, and the coordination that is required between different agencies.

11 Different plan types

- 11.1 The word 'plan' usually refers to a map or diagram presented on a map base. This can show existing facts or features (e.g. a survey of an existing settlement or building); or it can show a proposed development (a new housing layout or building).
- 11.2 In UM, the term has wider meaning - it refers to a collection of information and ideas using maps, diagrams and text that present proposals for future development. The text needs the plans, and the plans need the text - one without the other is usually insufficient.
- 11.3 The table below lists some different types of UM plan:

1. Understanding UM

	Type	Typical Names	Objectives	Main Content	Typical scale
1	City or town-wide	<ul style="list-style-type: none"> - Master Plan - City Development Plan - Structure Plan 	<ul style="list-style-type: none"> - To set out long-term development strategy for city/town - To provide plan framework to guide more detailed planning (see below) 	<ul style="list-style-type: none"> - Survey of existing land use pattern & activities - Analysis of constraints and opportunities - Definition of plan year horizons - Population forecasts & land requirements - Alternative development models - Infrastructure requirements (roads, public utilities, schools etc) - Environmental considerations - Stakeholder consultation - Funding implications - Implementation mechanisms 	<p style="text-align: center;">1 : 10,000</p> <p style="text-align: center;">1 cm = 100 m</p>
2	District or Neighbourhood	<ul style="list-style-type: none"> - District Plan - Local plan - Neighbourhood Plan 	<ul style="list-style-type: none"> - Detailed recommendations for part of the town. - Can be entirely new development, mix of new and existing, or all existing development. 	<ul style="list-style-type: none"> - Survey of existing land use pattern & activities - Analysis of constraints and opportunities - Definition of plan year horizons - Population forecasts & land requirements - Alternative development models - Infrastructure requirements (roads, public utilities, schools etc) - Environmental considerations - Stakeholder consultation - Funding implications - Implementation mechanisms 	<p style="text-align: center;">1 : 5,000</p> <p style="text-align: center;">1 cm = 50 m</p>
3	Individual site or group of sites	<ul style="list-style-type: none"> - Site plan 	<ul style="list-style-type: none"> - Detailed proposals to show how sites are to be developed, consistent with District Plan. - Can be individual site or group of sites. 	<ul style="list-style-type: none"> - Detailed site(s) analysis - Local development context analysis - Implications of District Plan - Impact on neighbouring uses - Stakeholder consultation - Access arrangements - Implementation mechanisms 	<p style="text-align: center;">1 : 500</p> <p style="text-align: center;">1 cm = 5 m</p>
4	Informal settlement	<ul style="list-style-type: none"> - Settlement upgrading plan 	<ul style="list-style-type: none"> - Proposals for improvement of an under-serviced informal settlement. - Focus on assuring security of tenure, formalising land use pattern, provision of public utilities, access etc. 	<ul style="list-style-type: none"> - Detailed survey of physical features and socio-economic characteristics. - Stakeholder participation in plan formulation - Security of land tenure - Access - roads & footpaths - Public utilities - water supply & sanitation - Community development support - Funding implications 	<p style="text-align: center;">1 : 500</p> <p style="text-align: center;">1 cm = 5 m</p>

1. Understanding UM

	Type	Typical Names	Objectives	Main Content	Typical scale
				- Implementation mechanisms	
5	Regional development	<ul style="list-style-type: none"> - Regional development plan - Regional context study 	<ul style="list-style-type: none"> - Proposals for spatial development of large area beyond town e.g. whole or part of State. 	<ul style="list-style-type: none"> - Survey of existing land use pattern & activities - Analysis of constraints and opportunities - Definition of plan year horizons - Population forecasts & land requirements - Alternative development models - Infrastructure requirements (roads, public utilities, schools etc) - Environmental considerations - Stakeholder consultation - Funding implications - Implementation mechanisms 	<p>1 : 100,000</p> <p>1 cm = 1 km</p>
6	Thematic study (spatial)	<ul style="list-style-type: none"> - (Theme) plan or study - Sector Strategy 	<ul style="list-style-type: none"> - To formulate proposals for a particular technical theme or sector with explicit spatial development implications. - E.g. environment, transport, open space, vacant land. 	<ul style="list-style-type: none"> - Detailed analysis of existing theme/sector characteristics. - Stakeholder consultation - Analysis of constraints and objectives. - Formulation of proposals - Funding implications - Implementation mechanisms 	Not relevant
7	Thematic study (non-spatial)	<ul style="list-style-type: none"> - Policy paper - Sector strategy 	<ul style="list-style-type: none"> - To formulate proposals for a particular technical theme or sector. - E.g. housing, economic development, employment. 	<ul style="list-style-type: none"> - Detailed analysis of existing theme/sector characteristics. - Stakeholder consultation - Analysis of constraints and objectives. - Formulation of proposals - Funding implications - Implementation mechanisms 	Not relevant
8	Regulations/standards	<ul style="list-style-type: none"> - Design Regulations - Technical standards 	<ul style="list-style-type: none"> - To set down regulations or standards to be followed for particular type of development. - E.g. housing, building construction, sanitation. - May be mandatory or advisory. 	<ul style="list-style-type: none"> - Detailed technical specifications. - Explanation/justification for application - Definition of when, where and on whom they are applicable. 	Not relevant