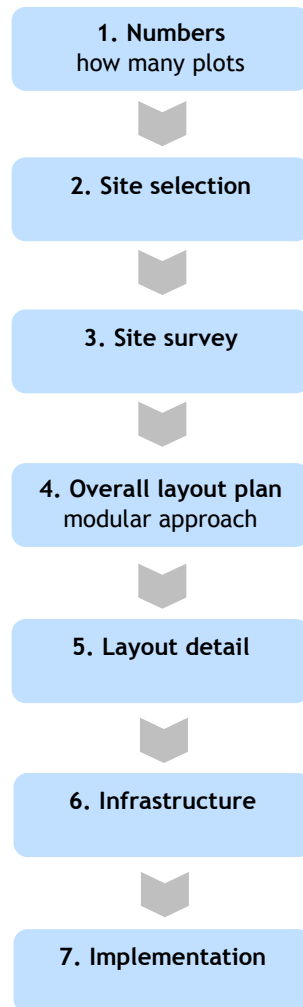


2 PLANNING NEW DEVELOPMENT AREAS

SUMMARY:

- This booklet is about planning *new development areas* to accommodate urban growth – these may also be called *expansion areas*.
- The aim is to develop new areas of the town to ensure that there are sufficient plots to accommodate the increased demand that comes with urban growth.
- Housing or residential use is the single largest user of land and is therefore the main factor that determines of the size and character of expansion areas. So this booklet concentrates on housing plots, but also considers other facilities (such as open space, schools, markets, workshops etc) that are needed to create balanced communities. .
- Many States have done impressive new development areas that have contributed to the number of housing plots available for allocation. These demonstrate that the skills and resources are available – in practice it costs almost nothing, needing only planning staff to prepare a layout plan, and survey teams to set out the plan on the ground.
- There is a need to learn from experience, copying those examples that represent good practice and simultaneously applying techniques that produce more efficient and cost-effective layouts.



Steps to prepare a plan for an expansion area

1 Numbers - how many plots?

- 1.1 The first task is to establish how many plots are to be provided in the expansion area.
- 1.2 The aim of planning expansion areas is to ensure that plot delivery keeps pace with demand - this means that every household that needs a plot is able to get one. So we need to have an overall picture of total demand.
- 1.3 When planning a single expansion area, we need to have target figure of the number of plots to be provided in the development. This >>>>> >

👉 Find more detail in 1 - Understanding Urban Management, Section 8.

2 Site selection

- 2.1 The next task is to select the site for which the development layout will be prepared
- 2.2 Sites for expansion will usually be undeveloped land on the edge of town. But they can also be infill sites - unused or under-used land within the existing town structure, which can accommodate additional plots.
- 2.3 Where there is an approved master or development plan, the selection of expansion areas will follow the plan. If the plan shows proposed phasing, site selection will follow the plan recommendations. Where no phasing is shown, a judgement will be made on the most suitable area(s) to develop first.
- 2.4 If there is no approved plan, expansion areas will be selected on the basis of four simple criteria:
 - **Links to town:** The area selected should be connected or close to the existing town, and especially the infrastructure and services networks - this will allow the new area function effectively as part of the town. Avoid remote locations that require all new services and extensive infrastructure.
 - **Drainage:** Avoid areas at risk of seasonal flooding, and ideally have a gentle slope that facilitates the removal of surface rain water by natural drainage.
 - **Land tenure:** Avoid any contentious land issues with current occupiers. This may be achieved through selecting unoccupied land, or through negotiation with current occupiers, including appropriate compensation.
 - **Environmental factors:** Avoid valuable agricultural or pasture land, established woodland, important water courses, areas of local ecological significance, and culturally significant sites (e.g. customary burial sites).

3 Site survey

- 3.1 Once the site is selected, the next task is to do a detailed site survey of the chosen site.
- 3.2 The site survey will record to actual conditions on the site:
 - Landform
 - Drainage
 - Land use
 - Other features e.g. trees, rocks, existing buildings etc.
- 3.3 A detailed knowledge and understanding of the site will allow the planner to adapt the layout to make it more attractive and efficient.

Insert EF's material under SITE PLAN (a full topographic survey as he describes is probably too advanced - need to pitch at appropriate level)

- 3.4 The survey will be carried out by MoPI surveyors. is an important role for MoPI Surveyors, which they rarely do at present

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4 Overall layout plan - the modular approach

- 4.1 The modular approach plans development as **a series of blocks** which are planned as integrated neighbourhoods or communities, with a range of public facilities and services (schools, health, recreational open space, markets, shops, employment etc) to meet the daily needs of the resident population.
- 4.2 It uses a step-by-step approach to expansion: the module can be repeated progressively - like building blocks - to plan development of the town over time.

- 4.3 There is no fixed size for a module - it needs to be large enough to support a range of facilities, and small enough for sensible implementation. If it is too large, development is likely to remain incomplete for many years; if it is too small, it will not be able to support a reasonable level of services.
- 4.4 A typical module will accommodate 5-10,000 population (corresponding to 600-1,250 housing plots). In larger towns, a module can be planned to accommodate up to 20,000 population (= 2,500 plots). **to be verified**
- 4.5 Housing will be the largest single land use in the module, occupying over 50% of the total land area. The following is a typical breakdown of land use in a module: **to be verified**

	Land use	%
1	- Housing plots	55
2	- Roads & footpaths	10
3	- Schools	12
4	- Open space & recreation	8
5	- Commercial uses	8
6	- Community facilities	7

- 4.6 The module does not have to be a regular square or rectangle - the landform may favour an irregular shape. And it does not have to use right angles - it can be planned as an irregular, deformed grid.

5 Detailed layout planning

Incorporate EF's text covering:

- **Plot shape (rectangular, not square)**
- **Plot size**
- **Road/footpath access**
- **Open space**
- **Community & commercial facilities**
- **Public/private space**

- 5.1 Layout design must promote cost-effective development for two important reasons:
- **To reduce infrastructure costs:** Each metre of road, drain, water pipe and electricity cable costs money - plan layouts so that the shortest length of network length serves the largest number of plots.
 - **To reduce land coverage:** The supply of urban development land is not infinite. In some towns (e.g. Malakal, Bentiu) there is already a real shortage; and in towns where there is currently no problem, there will be increasing pressure as the towns expand.
- 5.2 So remember these simple rules for cost-effective layout planning:
- **Small plots:** The smaller the plot, the more households or activities can be accommodated on a given area of land.
 - **Rectangular plots:** More cost-effective than square plots - run utilities along the short side, and a given length of pipe will serve more plots for the same cost.

- **Sensible road width:** roads in housing areas are often planned much wider than necessary for the volume of traffic.
- **Footpaths to serve housing plots:** Housing plots can be served effectively with footpaths for low-income households that do not own a car.
- **Institutional plots:** Plots allocated to Government departments and other institutions are often much larger than they need - plot size should be based on real needs.

6 Infrastructure

- 6.1 New development areas need infrastructure (water, sanitation, roads, drainage, electricity etc.) to serve the needs of households, commercial operations (shops, markets, offices, workshops etc) and social facilities (schools, clinics etc).
- 6.2 It will usually not be possible to provide these services to a high standard from the outset; and it is possible that some cannot be provided at all at the start. This is because:
- The limited coverage of existing utilities networks and their degraded condition means they will not be able to serve outlying areas.
 - Local communities will be unable to pay the service charges needed to support the services.
- 6.3 So planning of expansion areas should be based on **incremental delivery** of services over time - starting off with low levels of supply that are improved gradually over time. For example:
- **Roads:** start with un-surfaced demarcated road reserves > graded gravel or laterite surface > asphalt surface.
 - **Water supply:** start with communal standpipes > metered private standpipes to groups of houses > individual household supply.
- 6.4 Different service levels can be provided within one neighbourhood, according to the individual household's ability to pay: some households can have individual water supply, while their neighbours use communal standpipes. This will be managed by the relevant utility corporation.

☞ Find more detail in sections 4-8 dealing with Infrastructure.

7 Implementation

- 7.1 If the scheme is to be set out **with no public utilities**, then implementation involves the following steps:
- i. Confirm the site is clear of development - this may involve resettling or clearing existing occupiers.
 - ii. Advertise and allocate the plots - see rules below.
 - iii. Surveyors demarcate the plots on the ground in accordance with the approved layout plan.
 - iv. Formal handover on site by Lands Officer to authorised plot-holders, with assistance of Surveyors.
- 7.2 If the layout is to be developed **with public utilities**, implementation follows the same steps with one addition: coordinate with the utilities providers on the timing of construction.

Fair and transparent allocation of plots

- 7.3 It is important to have fair and open allocation procedures for plots in new development areas. Past procedures have not always met the basic test of equitable allocation according

to need; and they have frequently given the impression of being corrupt, even when they are not.

7.4 There are three important rules to follow:

- Plots should be openly advertised using local newspapers and radio to reach the entire population, including the most disadvantaged;
- Plots should be allocated on the basis of need, and not on a first-come-first-served basis.
- Multiple plot ownership by one person or members of the same family should be forbidden.
- It is sensible to advertise and start the allocation procedure *before* plots are demarcated on the ground - this can prevent unauthorised occupation of plots.