

B7.4 PRIORITY OVERVIEW CHART FOR MUNICIPALITY-WIDE ISSUES

Priorities		Specification		Casual factors	Effects	Related Potentials
No.	Issue	Quantities/Quality/Location/ Affected Groups				
1	Poor collection of revenue/ Credit management	<ul style="list-style-type: none"> only 60% of rates collected only 35% of service fees collected 28% of expenditure spent on interest payments 	<ul style="list-style-type: none"> Lack of incentives for payment Lack of awareness Unemployment Poor councillor education 	<ul style="list-style-type: none"> Slow progress in overcoming service backlogs High dependence on loans 	<ul style="list-style-type: none"> Government subsidies for free services Awareness creation through IDP process 	
2	Insufficient use of river water	<ul style="list-style-type: none"> Ground/spring water 90% utilised River water used by rural population in unpurified condition No irrigated farming along the river 	<ul style="list-style-type: none"> No project plans for river water utilisation No hydrological studies 	<ul style="list-style-type: none"> Unsustainable use of ground water Insufficient household water for rural population 	<ul style="list-style-type: none"> Sufficient to serve household water needs for R50 000 HH plus 500 ha irrigated farming 	
3	No access road from rural villages to economic centres	<ul style="list-style-type: none"> Approx. 60% of rural population live more than 5 km from next motorable road (mainly Wards C,F,) 45% of rural population not accessible during rainy season 	<ul style="list-style-type: none"> Historically neglected Hilly area with many rivers: high construction costs per km 	<ul style="list-style-type: none"> No business Limited market access No public transport 	<ul style="list-style-type: none"> ISRDS funds Labour for maintenance programme 	
4	Disruption of public transport	<ul style="list-style-type: none"> 10 people killed, 15 injured last year through violence 24 days a year no transport 	<ul style="list-style-type: none"> Powerful syndicates Corruption Lack of law enforcement capacities 	<ul style="list-style-type: none"> Poor access to town/jobs/business/health facilities 	?	
5	Increased population in informal settlement areas from commercial forms					
6	Increasing HIV/AIDS rates					
7	Outdated electricity grid and infrastructure					

NOTE:

The list of priority issues should be based on decisions made in a workshop on Municipality-wide Analysis (Planning Activity 1/4). It should not be mixed up with summaries of community and stakeholder priorities.

B8 ISSUES INTERLINKAGES MATRICES

PURPOSE:

To enable the members of the decision-making forum on overall municipal priorities to consider the interrelations between the issues (including cause-effect relationships) raised by different groups from different perspectives.

APPLICATION IN IDP:

Relevant Planning Activity: 1/7

BACKGROUND:

The decision on overall municipal priorities (see Tool C1) has to take into consideration **criteria** like.

- a. The priorities of the different population groups (communities, stakeholders, etc.).
- b. The urgency of issues as indicated by statistical information.
- c. The number of people affected
- d. The degree to which an issue is interlinked with other issues.

In order to arrive on an informed decision on priorities, people therefore need to get an overview not only on the priorities from various perspectives, but it is as important to get an overview on relevant interlinkages.

Two types of interlinkages are of interest:

1) Interlinkages between municipality-wide issues and community/stakeholder issues

Communities and stakeholders' perspectives and the perspective of a municipality-wide analysis may differ, but the issues identified at the different levels may relate closely to each other. While community members and stakeholders may refer to concrete symptoms by which they are affected (like "unemployment"), a municipality-wide analysis may focus on more abstract macro-trends causing such symptoms (such as "economic decline", "lack of investment", or "population influx"). Those different perspectives have to be put into context rather than being regarded as completely different issues (B8.1).

- #### **2) Interlinkages between symptoms, causes and effects.**
- Strategic planning should address causes rather than symptoms. Thus, symptoms, causes and effects have to be seen in context (B8.2). Some issues may not have been frequently referred to as a priority problem, but been mentioned by many groupings as a major causal factor for a range of other problems. In such a case, it may be advisable to rank them high as a municipal priority. The number of interlinkages (in terms of cause-effect-linkages) a certain issue has with other issues is an important indicator for the strategic relevance of an issue (Tool B8.2).
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Description: See separate descriptions for Tools B8.1 and B8.2.

B8.1 MATRIX FOR INTERLINKING COMMUNITY/STAKEHOLDER ISSUES WITH MUNICIPALITY-WIDE ISSUES

Row One: All community and stakeholder priority issues are listed in the headings of the columns of the matrix.

Row two: Information on the affected communities and stakeholder groups and their respective priority ranks should be added in order to provide a picture of the relative importance and spread of each issue. Information can be recorded by indicating:

- CT = Community and the number of priority in (). Communities in the area can be listed and marked A – Z. The description will then read CT A,C (2).
- ST = stakeholders. Stakeholders can also be listed and given a letter in the alphabet (a – z). Priority number can be indicated in brackets. The description will then read ST d (1), ST f (3).

Column One: The municipality-wide issues are listed in the headings of the lines of the matrix.

Completion of matrix:

- The boxes of the matrix where issues interrelated are marked by **X**.
- In order to show the cause/effect relationship, one can indicate the direction of the linkages by arrows: If the municipality-wide issue is a causing and the community/stakeholder issue is a resulting factor, there will be a horizontal arrow (■).

If the community/stakeholder issue is the causing and the municipality-wide issue is the resulting factor, there will be a vertical arrow (■).

- In case the links have different importance or intensity. This can be indicated by allowing increasing the number of lines used to form the arrow (1 – 3 lines) for **example** (⇒).

B8.1 MATRIX FOR INTERLINKING COMMUNITY/STAKEHOLDER ISSUES WITH MUNICIPALITY-WIDE ISSUES

Community/ stakeholder issues	Access to household water	Poor road conditions in community	No or poor access roads to economic centres	Poor health conditions	No job opportunities	Limited access and use of land for	High illness due to HIV/AIDS production	High crime rate/ violence	No access to reliable public transport	Unreliable electricity supply
Affected communities (CT) and stakeholders (ST) with related priority numbers	CT: A, F (1) STA (1) C (3)	CT A (3) STE (3)	CT B,D (2) CT G (3) STD (2)	CT F (2) STA (2)						
Municipality- wide issues										
1. Poor collection of revenue/credit management	X→				X↓					X
2. Insufficient use of river water	X			X		X→				
3. No access roads from rural villages to economic centres			X	X	X				X↓	
4. Disruption of public transport due to taxi violence								X↓	X	
5. Increased population in informal settlement area from commercial farms	X↓			X	X→	X↓	X→	X		
6. Increase HIV/AIDS rates	X→			X	X↓		X→			
7. Outdated electricity grid and infrastructure										X↓

B8.2 MATRIX FOR INTERLINKING SYMPTOMS, CAUSES AND EFFECTS

DESCRIPTION:

In case causing factors and effect of priority issues have been identified by communities and stakeholder groups, these can be added to the list of issues. A matrix will be established which comprises of all issues (including causes, effects and municipality-wide issues) in the columns as in the lines, so that each issue can be related to each issue. The boxes of the matrix have to be filled with numbers indicating the frequency an issue was mentioned as a causing factor or as an effect by communities, stakeholder groups or at municipality level (information to be taken from Tools B6, 7 or 8).

EFFECT	Household Water	Road conditions in Community	Access Roads	Public Transport	Health Services/ Conditions	HIV / AIDS	Unemployment / Income Opportunities	Access to land for Production	Crime/Violence	Electrical Supply	Sanitation	Taxi Violence	Revenue Collection	Use of River Water	Population Influx from Farms	Recreation/Sports Facilities	Poor Service Payment	Poor Skills	Vocational Training	No Private Investment	TOTAL
Household Water	X	-	-	-	12	8	-	-	-	-	14	-	1	5	-	-	6	-	-	-	46
Road conditions in Community	-	X	-	4	-	-	2	3	-	-	-	-	-	-	-	-	2	-	-	7	18
Access Roads	-	-	X	19	5	-	3	4	-	-	-	-	3	-	4	-	1	-	-	11	50
Public Transport	-	-	-	X	9	-	5	-	-	-	-	2	-	-	4	-	-	1	2	1	24
Health Services/ Conditions	-	-	-	-	X	10	2	-	-	5	-	-	-	-	3	-	-	-	1	-	21
HIV / AIDS	-	-	-	-	7	X	13	-	3	-	2	-	1	-	-	-	2	1	5	5	39
Unemployment / Income Opportunities	4	2	-	2	4	1	X	-	15	3	1	-	-	-	2	-	9	2	-	-	45
Access to land for Production	-	-	-	-	3	-	16	X	4	-	-	-	-	-	8	-	3	-	-	7	41
Crime /Violence	-	-	-	-	-	2	6	-	X	-	-	9	1	-	-	2	-	-	-	8	28
Electrical Supply	-	-	-	-	2	-	3	-	1	X	-	-	-	-	-	-	4	2	-	5	17
Sanitation	-	-	-	-	14	8	-	-	-	-	X	-	-	-	1	-	2	-	-	-	25
Taxi Violence	-	-	-	12	-	-	-	-	4	-	-	X	-	-	-	-	-	-	-	2	18
Revenue Collection	6	7	3	1	-	-	-	-	-	8	6	-	X	2	-	4	-	-	-	3	40
Use of River Water	8	-	-	-	5	-	-	-	-	-	8	-	-	X	3	-	2	-	-	-	26
Population Influx from Farms	1	-	-	-	2	-	6	-	2	-	1	-	-	X	-	-	2	-	-	-	14
Recreation/Sports Facilities	-	-	-	-	-	2	-	-	9	-	-	-	-	-	-	X	-	-	-	4	15
Poor Service Payment	10	7	-	-	-	-	-	-	-	8	10	-	14	3	-	3	X	-	-	4	59
Poor Skills	-	-	-	-	-	-	5	-	2	-	-	-	-	-	-	-	-	X	-	7	14
Vocational Training	-	-	-	-	-	-	7	-	4	-	-	-	-	-	-	-	-	12	X	9	32
No Private Investment	-	4	-	-	-	-	18	5	-	-	-	-	-	-	-	-	2	1	1	X	31
TOTAL	29	20	3	28	63	31	86	7	49	19	47	11	20	10	25	9	35	19	9	73	

B9 PRESENTATION OF INFORMATION TECHNIQUES **B – M**

PURPOSE:

Provide hints to presenters or facilitators regarding the structuring and visualisation of information in the most understandable manner. For example at various stages in the IDP process information about financial resources and the allocation thereof have to be communicated and debated, while many participants may not be experts in the field, or may not be able to recognise the relativity of the size of the resources. An amount that may sound very large to an uninformed or inexperienced person may for example cover only a small part of the expenses and projects that are envisaged. Or participants may want to see a summary of how the size of the total available budget has increased/decreased over the past few years.

APPLICATION:

Planning workshops or meetings will require responsible persons to present a variety of different types of information (quantitative and well as qualitative) during different phases of the planning process. This include:

- a) Financial information
- b) Technical information from analysis processes/data/statistics
- c) Spatially oriented information
- d) Principles/policy guidelines

DESCRIPTION:

The tool describes a general preparation procedure followed by a description of four different presentation techniques and the usefulness of each technique, namely:

- Quantitative Data (B9.1 Pie chart, B9.2 Graphs)
- Qualitative information (B9.3 tables/matrix)

PREPARATION PROCEDURE:

Step One: Describe the following:

- a) **purpose** of the information sharing
- b) the **audience**
- c) **time** available.

This will influence the level of complexity of the information. Presenting information is not about impressing people with your knowledge, but about increasing the understanding of your audience. Information that is not understood is not useful in decision-making.

Step Two: Agree what **type of information** needs to be conveyed.

Step Three: Decide on most appropriate **presentation technique** by using hints described below.

Step Four: Ensure the technology that you select match with the facilities available at the venue where the presentation will be made. It will be useless to prepare a power point visualisation if the venue does not have sufficient space to project the images or it does not have reliable electricity supply.

BASIC PRINCIPLES OF PRESENTATION:

- The quality of your preparation determines the quality of your performance.
- “A B C”: Be accurate, be brief and be clear.
- Do not assume people understand - ask.
- Keep content uncluttered, simple and legible.
- Ensure that everyone can see your presentation.
- Face your audience NOT the visualisation.

Visualisations should not require much additional explanations – it should be sufficiently explanatory.

QUANTITATIVE DATA

B9.1 PIE CHARTS

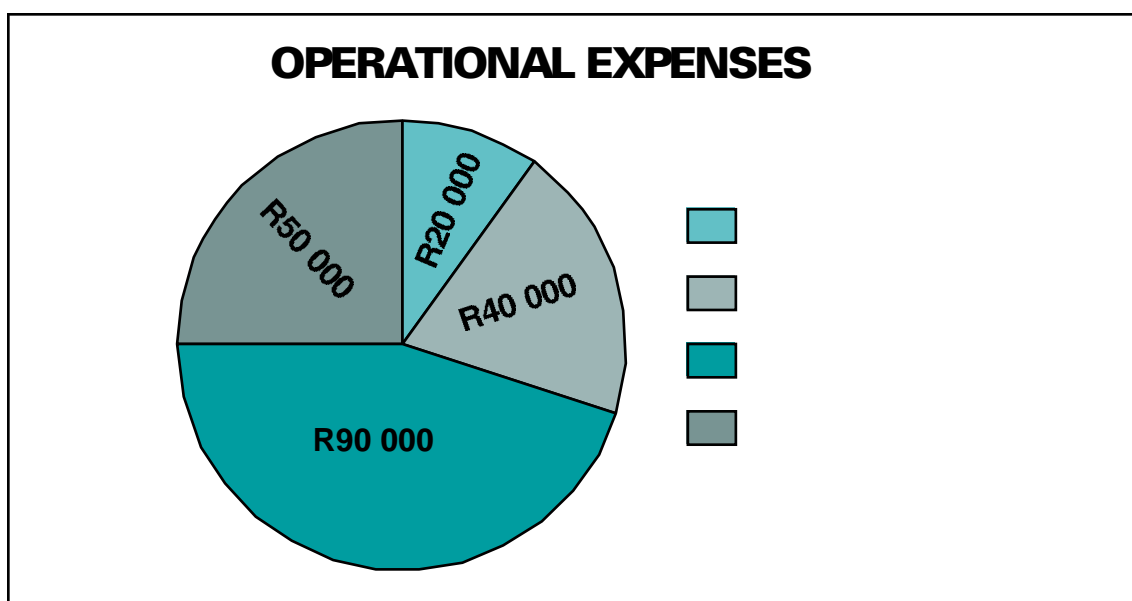
DESCRIPTION:

A pie chart is a visual representation of ratios and proportions among variables i.e. (1) relationship between different parts of a whole and (2) the proportion (size) of various parts in relation to the whole.

For example illustrating:

- The composition of the capital or operational budgets (i.e. which % is spent on what).
- The relationship between income generate by a sector and money spent on that sector.
- The ratio between rural and urban population.
- The ratio between different sources of income in communities.

EXAMPLE:



HINTS ON INFORMATION REQUIREMENTS

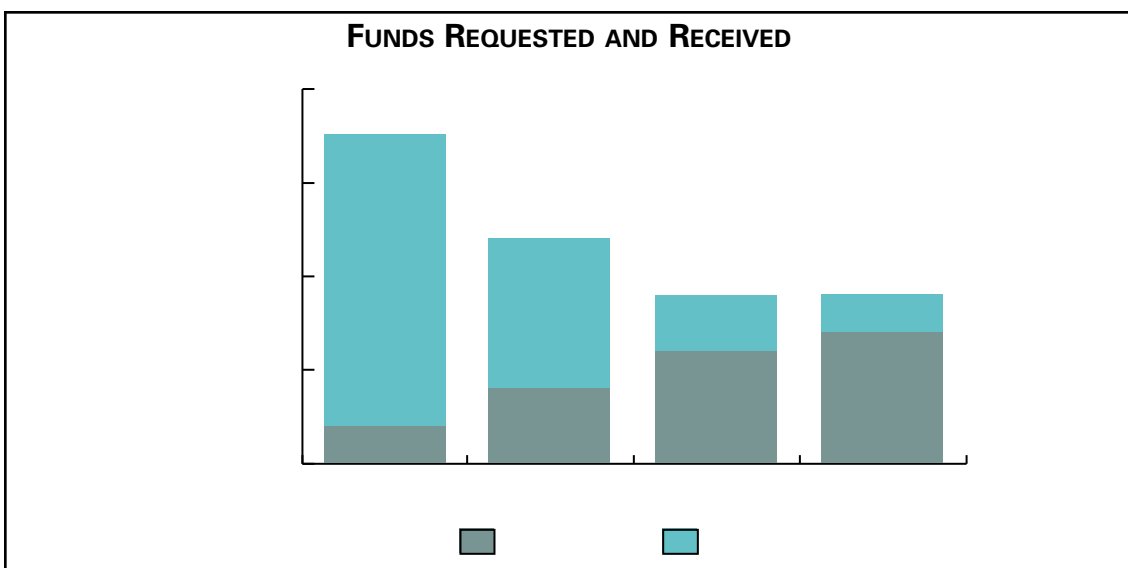
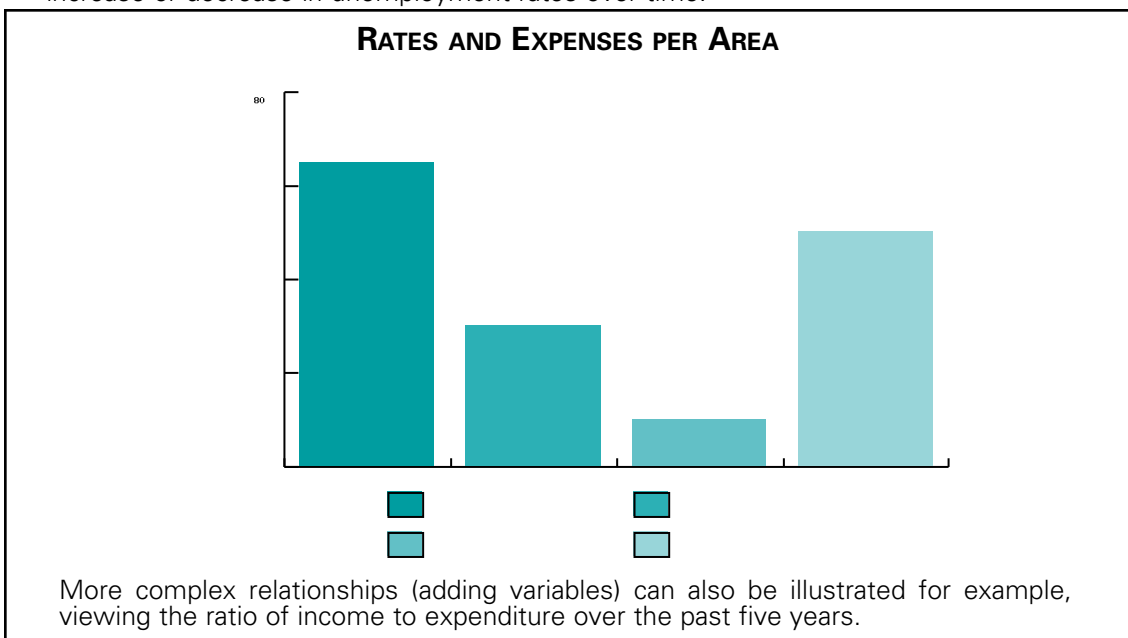
Information requirements for:	<i>Example:</i> Budget related data	<i>Example:</i> Population related data
Total size of the pie	R200 000	50 000 people
Description and size of variables that the pie comprises of	<i>Allocation of operational budget</i> Water – R20 000 Electricity – R40 000 Salaries – R90 000 Other – R50 000	<i>Source of income</i> Pension/grants: – 20 000 Part-time work: – 5 000 Formal/permanent employment: – 10 000 Self-employed: – 5 000 Remittance: – 10 000
Determine the percentage of each variable in relation to the whole (100%) – this will indicate the size of pie that will be allocated to the variable	Salaries – 45% Other – 25% Electricity – 20% Water – 10%	Pension/grants: 50% Formal employment: 20% Remittance: 20% Part-time work: 10% Remittance: 10%

B9.2 GRAPHS

DESCRIPTION:

Graphs are valuable in illustrating trends i.e. how certain factors change over time. Examples of trends are:

- rise or fall in total income for the past five years.
- increase in rates, revenue collection patterns over a specific period of time.
- increase or decrease in population size over time.
- increase or decrease in unemployment rates over time.



HINTS ON INFORMATION REQUIREMENTS:

- The time period that will be illustrated – this could be a few years/or months.
- The unit of the variable that will be illustrated:
 - Financial information – this refers to amounts of money (hundreds, thousands, millions).
 - Demographical trends could include population size/number of HIV/AIDS.

PRODUCING CHARTS: Assess the available “technology” to produce the charts. **Options** include:

1. Using a spreadsheet software package as the examples illustrated above.
2. Using graph paper and manually producing illustrations.
3. Using “working illustrations” as the bar charts or pie charts can be made by using coloured cardboard or paper pinned to a board or wall, and amended to reflect the decisions that were made in a meeting.

B9.3 STRUCTURING QUALITATIVE INFORMATION

DESCRIPTION:

Listing information that is related to one another will not be useful during a presentation. The intention is to structure information in a manner that shows the inter-relationships. Depending on the topic this can simply be done by:

1. Developing headings for the various lists: What combination of information will make most sense? This will greatly depend on the purpose of the presentation.
2. Ordering the headings in a logical sequence in the first row of the table.
3. Listing the related data in the columns.

Example of Table:				
Geographical area	Size of population		Economic activity	Major economic challenges
	Male	Female		
A	2 000	5 000	Subsistence farming	Limited land available No roads to markets
C	8 000	7 600	Employed in mines and related industries	Down-sizing of mines
D				
E				

In cases where more complex relationships have to be illustrated, *for example capacities of different stakeholders as described by staff component, type of services and budgets*, a matrix will be useful. The matrix allows for an additional variable to be added to the information and allows for a comparison of the variables:

- The first row captures the one set of variables, for example the names of stakeholder.
- The first column captures the second variable, for example the list of issues relevant to all stakeholders.
- The blocks allow for the capturing of the third variable, for example the details relating to each stakeholder.

Example of matrix:			
List of stakeholders	Stakeholder A	Stakeholder B	Stakeholder C
Issues			
Type of organisation			
Staff component			
Budget			
Types of services			

B10 SPATIAL ILLUSTRATION

PURPOSE:

To provide a fast, non-technical method to spatialise information during the planning process. Most municipalities have highly technical and sophisticated mapping techniques, for example GIS (discussed in B11). The use of spatial illustrations do not replace such technical approaches, but present an alternative option in cases where the relevant technology and professional skills are not available at a particular point in time.

APPLICATION:

Planning activity 1/5 requires a spatial orientation to development issues.

The spatial illustrations are useful to:

- Collect community level data (PRA – community Mapping techniques).
- Share information in a visual manner.
- Stimulate debate and discussion within a spatial context.

During community and stakeholder discussions (1/2) it will be useful to contribute existing information (1/1) to the debate. This information could include service provision or lack thereof, and potentials and constraints in particular areas as perceived by resource persons. Participants in such a debate can use the map to add and locate their own perceived needs as well as indicate areas of the existing information that is “incorrect”.

- During the discussions on municipal-wide priorities (1/7) as well as during discussions on strategies for priority issues (2/7) spatial illustrations could be useful to locate issues within a geographical space.
 - Locating proposed projects (3/3) within a municipal area could stimulate useful debate during the screening of draft project proposals (4/1).
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DESCRIPTION:

Spatial illustrations involve free-hand drawings. The use of mapping to present information needs to be sufficiently accurate in terms of scale, direction and location of base information. It should not be too cluttered so careful consideration should be given to what amount of information, for what area can meaningfully be represented in this manner. The process that follows is concerned with the use of the tool to present information or stimulate debate. It does not consider the use of “mapping” to collect information.

PROCESS:

Step One: Define the **purpose** for using the visual illustration. This will determine the scale of the map as well as the information that you will include. For example: if you would like to create awareness and open debate in the representative forum regarding the unequal distribution of services between rural and urban areas you will use the illustration to show the current service levels in rural versus urban areas.

Step Two: Define the area of interest i.e. determine the **boundaries** of your base map. This could be a municipal area as a whole or a particular community/village/ location in the municipality.

It is useful to indicate or leave space for neighbouring areas to establish geographical context for example the bordering municipalities.

Ensure that the size of the paper is workable. Big sheets of brown paper (2 x 1) meter are useful.

Step Three: Fill in major landmarks, for example:

- Rivers
- Mountains
- Main roads

These are important to provide the basic spatial orientation for other information and should therefore be located in a correct manner.

Step Four: Indicate all **towns and residential areas**.

Make distinctions in towns regarding:

- Former white residential areas
- Townships
- Informal settlements
- Industrial areas (where relevant).

Rural areas should indicate:

- Commercial farming areas
- Rural villages
- Small scale farming areas.

(This can be done by using different colours for the different types of land use).

Step Five: Indicate **location of problems/crucial issues**.

Step Six: Indicate the location of **potentials**.

HINTS:

1. Problems or potentials can be colour-coded according to the relevant dimension.
For example:
 - Infrastructure related problems or potentials: Blue
 - Municipal-wide trends/patterns or potentials: Red
 - Economy related problems or potentials: Green
2. Additional information on specific topics could be drawn on plastic/transparent sheets of paper and placed over the base map as required. This will prevent the illustration from becoming too cluttered. *For example.: During meetings or workshop discussions on economic conditions the sheet with economic information can be visualised.*
3. The mapping requires facilitators or presenters to have all the relevant information per geographical area at hand. It is useful to structure information in a table format to support the sketch with the visualised information in more detail.

B11 SPATIAL TOOLS: GEOGRAPHICAL INFORMATION SYSTEMS (GIS)

B

PURPOSE:

Geographical Information Systems can be many things to many people. In general GIS are computer programmes which allow for the processing of spatial data into information, generally information which refers explicitly to, and is used to make decisions about some portion of the earth.

APPLICATION:

Planning Activities 1/5, 2/3a, 9/8

GIS is an advanced and costly spatial analysis tool which should only be applied:

- if the spatial dimension of an issue is crucial (i.e. only if it is *relevant*).
- if the spatial situation is highly complex and if the interrelationship of many spatial factors is of importance (i.e. only in case it is *necessary* and advantageous compared to simple tools of spatial illustration).
- if you have the necessary data in a spatially disaggregated form, and if these data are sufficiently accurate and reliable (i.e. only if application is *possible*).

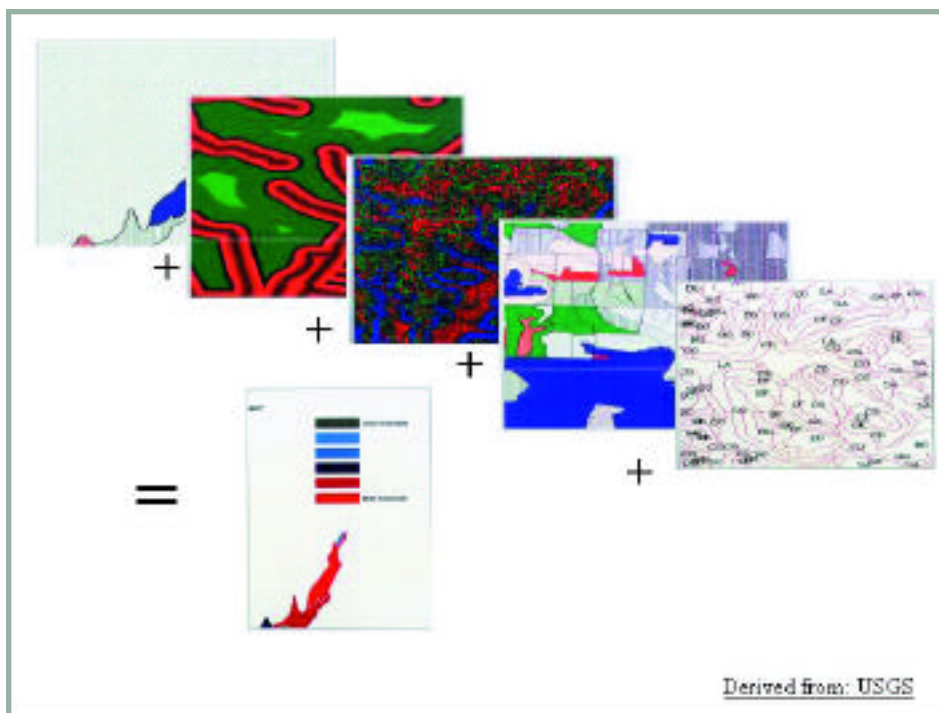
DESCRIPTION:

GIS makes it possible to input many different types of data and link them to different aerial units, for example a school, village, town district, province etc.

GIS can display data in different formats such as maps, graphs and tabular formats such as spreadsheets.

Although GIS is commonly used to create spatial representations (maps) it is able to manipulate geographical data to produce new information either by running statistical processes on the data or by combining different data sets to produce derivatives of data set relationships, for example Figure 1.

Figure 1: Example for Spatial Representation of Geographical Information



GIS is used by some local authorities for operational activities such as scheduling, billing, planning etc.

WHAT IS NEEDED IN ORDER TO USE A GIS?

It is important to note that GIS is a system, if certain parts are missing the system will not run as well as it should. In order to set up a GIS there are **eight main components**:

1. A need for the outputs that GIS can provide! If you do not have a need do not consider a GIS.
 2. The backing from your management structure, in terms of management support, financial support and human resources.
 3. A champion for the GIS if you do not have a dedicated person willing to set-up and run the GIS it will not work.
 4. GIS software (there are many on the market, including amongst others ESRI products, Intergraph, MapInfo. See the information links at the end for more information). It is important that the software you buy has the functionality to perform the tasks you want done. It is always a good idea to **perform a user requirement analysis** before you start your GIS so that money is not wasted buying a system that might have to be replaced in the short or medium term.
 5. Hardware: such as a computer to run your software and peripherals such as printers for output.
 6. Data: Geographical and attribute data. There are many methods of obtaining this data including primary (where you collect the data) or secondary methods (the Surveyor General, Consultants or information products mentioned in the toolbox such as the PIMSS CD).
 7. The skills to use the hardware and software.
 8. A process to ensure that the information you want from the GIS does not become outdated.
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WHAT TO LOOK OUT FOR WHEN OUTSOURCING YOUR GIS?

Although you may have good relations with your GIS consultant there are a few precautions that you should take.

1. When outsourcing it is critical to make sure to whom the data belongs, as well as what system is used (some GIS are not compatible with other types and converting data can be an expensive process). Do not pay for the collection of data you do not own. Do not get locked into a particular company through a badly worded legal document.
 2. Know what you are paying for, get the consultant to break down the costs into data collection and cleaning, processing, outputs and labour, do not pay more than you need to for data which is freely available.
 3. Insist on a metadata file of all the data included in the GIS and the processes that were used to derive the data. It may seem like a lot of trouble to go through initially but it will save money in the long run.
 4. Insist on a copy of the data even if you do not have a GIS. You may use another company next time and data is hard to get out of previous contractors.
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GENERAL GIS LINKS

<http://agid.igc.usp.br/links/LINKS16.HTM>

<http://gis.about.com/mbody.htm>

B12 COMPILATION OF OTHER INFORMATION TOOLS AND RELATED PROVIDERS IN SOUTH AFRICA

B12.1 GUIDE TO COMMUNITIES AND WATER SERVICES

INTRODUCTION

The Guide to Communities and their Water Service Levels was released by the Directorate of Macro Planning and Information Systems under the auspices of the Department of Water Affairs and Forestry in January 2000. (The Department is in the process of updating the CD with more recent information).

Released in the form of a CD and operating manual, the CD contains a framework of spatially represented water related information which is displayed on a viewer included on the CD. The CD contains information relating to information which supports the mandate received by DWAF in 1997 (Act 108 of 1997) to "ensure that all South Africans have equitable access to basic water supply and sanitation services." Information relating to the RDP service levels down to community level can be accessed on the CD.

DATA AVAILABLE ON THE CD

The Guide to Communities and their Water Service Levels has a number of useful data sets attached to various aerial units down to the level of communities. Various hydrological features such as underground water supply, dams, catchments as well as other more common data sets can also be found on the CD.

CONTACT DETAILS:

The Guide to Communities and their Water Service Levels is produced by the Directorate of Macro Planning and Information Systems under the auspices of the Department of Water Affairs and Forestry.

For more information on The Guide to Communities and their Water Service Levels contact Mr Fred van Zyl at (012) 336-8755 or Mr Jaco van Blerk at (012) 336-8570.

E-mail: ash@dwaf.pwv.gov.za.

B12.2 SA LAND COVER DATABASE

INTRODUCTION

The National Land-Cover Project (NLC) is the first standardised land-cover database produced for the whole of South Africa, Swaziland and Lesotho that provides national baseline information on land-cover.

The standard Land-Cover Classification Scheme for Remote Sensing Applications in South Africa is based on known land-cover classes that can be identified on high-resolution satellite imagery. The 31 broad-level thematic land-cover classes in the database can be adapted to suit individual user requirements. Updates of the product depend on market needs.

DATA AVAILABLE ON THE CD

The land-cover database was mapped from a series of 250 000 scale precision-corrected satellite images referred to as SpaceMaps. The images were captured primarily during 1994 – 1995. The data are presented as a series of individual files with the same coverage as the standard 1:250 000 scale Surveyor General national map sheet files. The completed land-cover data for Phases 1 and 3 are public domain and are available at a nominal cost. The data for Phase 2 are commercially available.

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CONTACT DETAILS:

The land-cover database is produced by the Satellite Application Centre, CSIR. **Launched on the:** 01 January 2001, the database can be purchased as a whole or in part. Area tiles are available as a digital downloads and can be viewed using Geographical Information System (GIS) software. The entire data set can be bought for a **Price:** R650

For more information visit the Website:

http://www.sac.co.za/geoinfo/nlc_report.htm

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CSIR Satellite Applications Centre

B12.3 PIMSS

INTRODUCTION

The PIMSS Demo CD was released in May 2001 by the Department of Provincial and Local Government, Department of Housing the CSIR and GTZ. The CD contains an "indication" of useful information which can be supplied for Local Government purposes. An upgraded version of the IDEA CD released by the Department of Housing and CSIR the PIMSS CD contains an array of relevant national and local government legislation as well as a viewer which links a number of data sets to the newly demarcated municipal boundaries.

The IDEA viewer and associated software was specially designed for ease of use. The viewer can be used to select paste and/or print the answers to specific questions (indicators) in map, table or chart format to either MS Word documents, Excel spreadsheet or PowerPoint presentations.

DATA AVAILABLE ON THE CD

IDEA has a developmental and economic bias and includes specific, pre-defined questions and answers in the following broad categories:

- o Economic
- o Demographic
- o Housing
- o Water and other infrastructure

Scale: PIMSS Demo CD is suitable for District Level analysis and covers all the districts in South Africa.

CONTACT DETAILS:

National Department of Provincial and Local Affairs

Planning and Implementation Support System (PIMSS)

The PIMSS Manager

Facsimile: (012) 334-0790

E-mail: [mailto: pimss@dso.pwv.gov.za](mailto:pimss@dso.pwv.gov.za)

B12.4 SA.EXPLORER

The SA.Explorer CD was released under the auspices of the Demarcation Board in March 2001.

SA.Explorer is a framework of spatially represented digital information which can be manipulated and displayed using the SA.Explorer software which is included on the CD.

The software allows a user to create their own maps as well as ascertain basic demographic, electoral, political and other information at a ward, municipal, provincial or national level.

The CD is accompanied by the SA.Explorer Tutorial which has step by step instructions and exercises to help master the use of the software. The Tutorial also contains two appendices containing metadata.

DATA AVAILABLE ON THE CD

Data includes: demographics, schools, rivers, railways, secondary roads, main roads, district councils (new and old), boundaries (ward, suburbs, municipal, traditional authorities, provincial and national), villages.

Scale: Mainly obtained from 1:250 000 and 1: 50 000 topographic series. Accuracy is given a between 50 and 500 metres.

CONTACT DETAILS:

For a copy of SA. Explorer, please send a request to msmdb@mweb.co.za.

Information about the CD can be obtained from <http://www.demarcation.org.za/>.

For other information please use the following contact numbers:

Telephone: (012) 342-2481/2

Facsimile: (012) 342-2480

E-mail: infomdb@mweb.co.za

B12. 5 ENPAT

INTRODUCTION

The main purpose of ENPAT is to pro-actively identify areas of potential conflict between: development proposals and critical or sensitive environments. ENPAT is presented on a genetic spatial data viewer that is easily accessible to most institutions and individuals.

ENPAT is a framework of spatially represented information (maps) to manage:

- o Environmental management parameters
 - o Potential impact of land use
 - o High risk development
-

DATA AVAILABLE ON THE CD

ENPAT has two distinct categories of information: 1) environmental characteristics and 2), socio-economic factors.

- o Environmental factors consist of _ geology, land types, hydrology, soils, vegetation and land cover.
- o Socio-economic – cadastral, infrastructure, land use and the cultural landscape.

Data sets are combined and assessed in terms of potential, and give an indication of environmental sensitivity and development opportunities. Management parameters are assigned to each of the sensitivity assessments these can be displayed in an EMF report.

Scale: ENPAT completed on a provincial scale for eight of the nine provinces.

CONTACT DETAILS:

ENPAT is produced for the Department of Environmental Affairs & Tourism by the University of Pretoria: Department of Architecture, Landscape Architecture & Interior Design.

For more information on ENPAT contact the ENPAT Project Manager: Gwen Breedlove at Tel: (012) 420-2550 or e-mail her at **breedlov@scientia.up.ac.za**.

B 12.6 INFRASTRUCTURE RELATED SOCIO-ECONOMIC INFORMATION

PURPOSE:

Integrated Development Planning – Socio-economic profiles

DESCRIPTION:

- Detailed Integrated Resource Base consisting of:
 - o Demographic information
 - o Labour market information
 - o Municipal Infrastructure information
 - o Gross Geographical Product information
 - Data and information available for all geographical levels, with the exclusion of the GGP data.
 - Data and information available for newly demarcated areas, GGP data only up to local municipal level and not enumerator area.
-

WHERE THIS TOOL CAN BE OBTAINED:

Name of Organisation:

DEVELOPMENT BANK OF SOUTHERN AFRICA

Division/Department:

DEVELOPMENT INFORMATION BUSINESS UNIT

Contact Person:

DAVID J VILJOEN

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B12.7 POPULATION PROJECTIONS 1996 – 2021

PURPOSE:

Integrated Development Planning – Socio-economic profiles

DESCRIPTION:

- Detailed population projections including:
 - A range of demographic indicators e.g. Life expectancy, fertility etc.
 - Projections per gender and age groups
 - Provincial level projections are published in the following reports:
 - Provincial Population Projections, 1996 - 2021: High HIV/Aids Impact
 - Provincial Population Projections, 1996 - 2021: Low HIV/Aids Impact
 - District and Local Municipal and place name projections available on request
-

WHERE THIS TOOL CAN BE OBTAINED:

Name of Organisation:

DEVELOPMENT BANK OF SOUTHERN AFRICA

Division/Department:

DEVELOPMENT INFORMATION BUSINESS UNIT

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Johan Calitz

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johanc@dbsa

Website Address: www.dbsa.org

B12.8 SOCIO-ECONOMIC INFORMATION ANALYSIS AND INTERPRETATION SUPPORT

PURPOSE:

Integrated Development Planning – Socio-economic profiles

DESCRIPTION:

- Socio-economic information analysis and interpretation support by means of a one-stop development information resource and public information service.
 - Service also includes capacity building support by means of:
 - o A publication called “Guidelines to Regional Socio-economic Analysis”.
 - o Advice and training support in terms of regional socio-economic analysis on request.
-

WHERE THIS TOOL CAN BE OBTAINED:

Name of Organisation:

DEVELOPMENT BANK OF SOUTHERN AFRICA

Division/Department:

DEVELOPMENT INFORMATION BUSINESS UNIT

Contact Person:

David J Viljoen

Contact numbers:

Tel: (011) 313-3043

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davidv@dbsa.org

Website Address: www.dbsa.org

B12.9 VIDEO: MUNICIPAL SERVICES FOR ALL

PURPOSE:

To illustrate to stakeholders, the issues surrounding choices available for delivering affordable and sustainable municipal services.

DESCRIPTION:

- A VHS video containing two videos aimed at:
 1. Communities / consumers of municipal services (26 mins) and
 2. Local councillors and town executives (27 mins).
 - Videos are available in English, Zulu, Sotho or Afrikaans.
 - Issues raised in the videos include:
 - o – Who should pay for municipal services?
 - o – Are services being provided at affordable rates?
 - o – How can municipalities sustain the levels of services they provide?
 - o – The need for integrated planning for service provision.
 - o – What processes should be followed to negotiate service levels with consumers (choices).
 - The video is accompanied by Facilitators Notes to assist in guiding the discussions surrounding the issues raised in the video with stakeholders.
-

WHERE THIS TOOL CAN BE OBTAINED:

Name of Organisation:

Development Bank of Southern Africa, PO Box 1234, Halfway House, Midrand, 1685

Division/Department:

Specialists Unit

Contact Person(s):

L Hedley, R. Marwood, H. van der Merwe or M. Marler.

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SECTION C

DECISION-MAKING

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INTRODUCTION

Planning means making decisions, which is usually not easy. In municipal development planning, we make decisions on utilisation of scarce resources in a situation of great need expressed by many different parties. A scenario which implies making tough choices.

If in the IDP process, difficult decisions have to be made in a needs oriented and strategic manner, and if we want to avoid creating a winner-loser syndrome which results in a situation where part of the roleplayers detach from the process, we have to make sure that:

- there is a fair, transparent and systematic decision-making procedure which is accepted by everyone involved;
- the decisions are made in line with generally accepted normative principles; and
- decision-making is based on a creative process of finding better, cheaper and more effective ways to satisfy needs, thus helping to find solutions which can satisfy more needs with given resources.

The decision-making tools presented in this section can assist in arriving at better decisions in a more systematic and transparent manner. They relate to three major fields of decision-making in the IDP process:

- Decisions on priority issues (C1).
- Decisions on the best strategies to deal with any given priority issue.
- Decisions on alternative options which may arise during project planning (e.g. related to type of activities, location, implementing agency).

Some of the tools focus on the process of identifying good options (C2). The better the strategic options are, the easier it may be to reach consensus. Other tools show how to ensure that policy guidelines and principles are adequately considered when making decisions (C3). Finally, there is a range of tools which assist in arriving at a participatory, well-informed and principle-led systematic choice between different options (C4, C5). In addition, there is a broad range of more sophisticated, computer-based strategising and decision-making tools, to which we can only refer in this guidebook (see C6 – C8).

Offering and using these tools does not mean ignoring the fact that decisions within the IDP process are fundamentally political ones. The tools provide space to relate political guidelines and priorities to information on the actual situation and on feasible technical options. They aim at well informed and participatory political decisions.

DECISION-MAKING BY PLANNING ACTIVITY

PLANNING ACTIVITY		TYPE OF DECISIONS TO BE MADE	TOOLS
1/2	Community/stakeholder level analysis	Decisions on community/stakeholder priorities	C1.1
1/7	Identification of municipal priority issues	Decisions on municipal priorities	C1.2
2/1	Vision	Decision on a vision for the municipality	D1
2/2	Working Objectives	Decision on objectives for the municipality	D2
2/3	Localising Strategy Guidelines	Decision on ways and means of applying national/provincial guidelines/principles to which local situations	C3
2/4	Financial Strategy	Decision on alternative revenue raising and asset management strategies	C2, C3, C4, C5
2/5	Creating strategic alternatives	Identifying a rich choice of options as a basis for good decisions	C2
2/8	Analysing alternatives		
2/9	Deciding on project proposals	Decisions on the preferred option or combination of options	C4, C5, C6 – 8
3/3	Designing project proposals	Decisions on outputs, indicators/targets, activities, location, implementing agencies, organisational options, technical options, etc	C2
3/6 – 3/9			C4, C5
5/5	Adoption by the municipal council	Decision on the draft IDP as a whole and on necessary amendments	

C1 PRIORITISATION

PURPOSE:

Deciding on priorities is a prerequisite for a focused and strategic planning process. Prioritisation tools can help arrive at common agreement on priorities (priority issues, priority needs, priority problems) in a participatory, democratic, transparent and rational manner. Thus, they help avoid arbitrary decisions or decisions made on the basis of opinions held by a few leaders. This is crucial in order to avoid participation fatigue or win-lose situations resulting from inappropriate decision-making procedures.

APPLICATION:

Prioritisation tools can be applied on various levels and at different stages of a planning process. First, it is important to get each community and each interest/stakeholder group to decide on their priorities, i.e. to rank their needs, problems or issues (Planning Activity 1/2). Secondly, at higher levels, such as the municipality as a whole, one will have to decide on overall priorities for the larger unit, taking the priorities of the sub-units into consideration, as well as other aspects and strategic considerations (Planning Activity 1/7).

DESCRIPTION:

Like any decision-making process, prioritisation can be done in principle by three different types of approaches:

- a. by consensus;
- b. by scoring; and
- c. by a structured process, based on systematic consideration of various sources of information.

The different approaches represent different conceptions of democracy (consensus versus majority vote versus technocratically based decision preparation). They also differ with regard to the degree of subjectivity or objectivity of decision-making. The different approaches can be combined during a specific prioritisation process.

Two prioritisation tools will be presented here as examples. One is simple and is usually applied at community and interest group level (C1.1). The other is more complex and is suitable for higher level prioritisation processes which have to consider a whole range of aspects and/or the results of other prioritisation processes (C1.2).

C1.1 PRIORITISATION BY SCORING

PURPOSE: SEE C1

APPLICATION: PLANNING ACTIVITY 1/2

DESCRIPTION:

Scoring is a process by which participants of a meeting, an organisation, or a committee indicate their own preferences in order to arrive at a representative picture of the importance the totality of participants have given to each of the issues (needs, problems) brought forward during the meeting. It is a democratic instrument which indicates the opinion of the majority.

PROCESS:

1. All issues/needs/problems mentioned by any of the participants are listed (in writing or by using a symbol).
2. Issues which are very similar may be clustered, provided those who mentioned a specific issue agree to have their issue subsumed under a wider category. (Caution: if clusters become too wide, the more specific needs may get lost).
3. Each participant gets a certain number of scoring points (say 3-5) and may allocate these to the issues listed. He or she could distribute their points amongst several issues or allocate numerous points to one highly prioritised issue.
4. The total number of scores added indicates the list of priorities.

Possible Modifications:

- a. **Differentiation by category of participant:** Each participant or each category of participants (e.g. men/women; or officials/representatives of certain interest groups, e.g. of environmental issues) is given a certain colour for scoring. This helps make differentiated interests more transparent. In addition, it offers an opportunity to give certain population groups or specialists more weight than others (e.g. neglected minorities or environmentalists).
 - b. **Group scoring:** Smaller groups get an opportunity to discuss their opinions and to provide a group score. Each group will be allocated a particular colour pen or symbol to make preferences transparent. Group scoring is useful if there are many participants in a decision-making forum and if these can be grouped according to interests.
-

C1.2 MULTIPLE ASPECT PRIORITISATION CHART

PURPOSE: SEE C1

APPLICATION:

The tool is useful for higher (municipality) level prioritisation processes which have to consider the priorities of sub-units as well as other information sources in a fair and systematic manner. It is a useful tool for Planning Activity 1/7 of the IDP process.

DESCRIPTION:

The chart summarises all relevant information for a prioritisation process in a way which encourages and facilitates a priority setting procedure which takes due consideration of the various sources of information. It is **linked to** the information compilation **tools B7 and B8**. For each issue arising from previous planning activities (1/1, 1/2, 1/4, etc.):

- the relevant specifications are summarised in short;
- the priority rankings from communities (geographical areas) and interest groups (stakeholders) are indicated;
- the relevant facts and figures (indicating the magnitude and seriousness) of the problem/ need are shown; and
- the intensity of interlinkages of the issue is shown,

to serve as an information basis for the scoring process.

Thus, the food requires decision-makers to recognise both people's needs (as collected in 1/2) as well as analytical and strategic considerations.

The following **principles** are to be considered:

- The **information collected** during the analysis phase (Activities 1/1, 1/2, 1/4) should be organised and presented in a manner to support the decision-making process. It would be too complicated to present *all* the information and therefore **aggregation suggested in B7 and 8 becomes critical**.
- All parties involved and affected should understand the **purpose and necessity** of the prioritisation (address possible win/lose mentality):
- Persons responsible for the decision should have **access to all the relevant information**. The choice should be information based and **not agenda or interest based**.
- Factors or **categories of information** that would assist to determine the importance of particular issues need to be clear and relevant.
- The selection process should be rational and therefore **discussions/dialogue** will be necessary.
- Choices should be **transparent** and people not involved in the decision-making process should be able to follow the rationale of the decision-makers.
- The **assessment procedure**, i.e. the use of ratings or scores based on information should be understood and accepted by all.

C1.2 MULTIPLE ASPECT PRIORITISATION CHART

Issues	Specifications	Priorities of stakeholders (i.e. by whom it is given Priority 1-3)				Importance as indicated by facts and figures		Strategic relevance	
		Priority	Community	Stakeholder	Municipality	Score	Score	Score	Total Score
Consolidated issues	Specifications as identified by communities and stakeholders					Major Indicators: (measurable manifestation of problem)	Refers to interlinkages with other issues and causes-effect (See tool B8)		
No access to water	A: Dry Borehole B: Drink river water E: Water fee not affordable F: Long distance to tap	1	A, B, E, F	7, 6, 5		2 300 household are without access to basic household water	75 Scores in interlinkages matrix Major effect areas: - health - sanitation - HIV/AIDS - service payments Major causes: - service payments - revenue collection - unemployment		
			C,	X	Mortality rate of 8% in area (children younger than 5)				
			G						
Insufficient income	C: Unemployment G: School leavers unable to find work H: Low farm income/low prices for produce B: Reduced remittances for female-headed households D: Cannot even afford basic foodstuffs.	1	C, G, H	1, 2, 3, 4	X	46% unemployment rate in municipality	131 Scores in Interlinkages Matrix Major effect areas: - Crime - Malnutrition - Migration to other towns - No payments for services Major causes: - no private investment - no access - HIV/AIDS - vocational training		
			B, D,		36% female headed households				
					40 cases of malnutrition reported in the last year				
	<ul style="list-style-type: none"> Unemployed: No jobs Small business/traders: No customers 	3		7, 8					

A, B, C, D etc. represent geographical areas or communities.
1, 2, 3, 4, 5, etc. represent different interest/stakeholder groups.

PROCESS:

1. Prepare a summary/consolidation of all information regarding problems/issues

A great challenge in the management of large volumes of information will be to prepare a consolidated chart that provides an overview of all relevant aspects required in the decision-making process.

The Multiple Aspect Prioritisation Chart structures the information according to:

- A description of the **issues**. The list of issues is a result of an aggregation process that is described in Tool B7.
- The **priority** that was indicated **by the people affected**, namely communities, stakeholders and municipal level. The second section of the chart is interested in the top three priority indications. In order to save space on the chart all community names can be listed and numbered by the letters of the alphabet. In a similar fashion stakeholders can be listed and numbered. The municipal wide priority number can be indicated by an X.
- The **importance** of the issue as indicated by **facts and figures**. This refers to the measurable manifestation of the issue and therefore mainly to quantitative data (for example number of people affected), and a description of the effect.
- The **strategic relevance** considers the **interlinkages** that the particular issue has with other issues (community and municipal interlinkages B8.1) as well as cause-effect relationships (B8.2).

In some scenarios not all the information, as described will be available during the compilation. It would be important to note that these information gaps exist. More important, the forum responsible for using the information in the decision-making should be made aware of the question marks and the possible consequences of *not* knowing.

Note:

The chart that is being described is but one example of how information can be structured. What is important is to provide a condensed overview on all relevant information which people require for an informed prioritisation process.

2. Create **common understanding**. Content of table should be discussed in detail.

People cannot assess a situation objectively if they have different points of departure in terms of understanding. The discussion should include:

- Clarifying areas of misunderstanding.
 - Addressing differences and discrepancies.
 - Adding to the information where possible.
 - Recognising where an information gap exists – and for now will remain a gap. Studies or inquiries could be commissioned at a later stage.
-

3. Decision-making

There are several options for arriving at a decision on priority issues:

Option A: Agreement by consensus

If all sources of information (people's priorities, importance according to facts and strategic relevance according to linkages) provide a similar picture, it may be easy to agree on a priority list by consensus. In that case, one only needs to list the issues in the agreed-upon order.

Option B: Scoring by areas for consideration

For each of the areas for consideration represented by the three columns of the prioritisation chart, i.e.

- community/stakeholder/municipality-wide workshop priorities,
- importance related to facts and figures,
- strategic relevance related to linkages,

scores are given. For column one (priority ranks) and three (which includes scores for linkages from Tool B8), the scoring can be done in a mathematical manner as the information source provides information which is already in numerical form. For column 2 ("importance"), scores would have to be allocated according to the assessment of the presented facts and figures (for further details on scoring methods see C1.1).

Option C: Free overall scoring under holistic consideration of all information

Members of the decision-making forum give their total scores which are to be based on the information provided with regard to all three areas for consideration in the overview chart, but it would be left to the overall assessment by the individuals, rather than being closely linked to the three individual aspects taken into account.

Option C is the most subjective manner of scoring and bears the risk that results from community and stakeholder level prioritisation and from data-based analysis may be ignored. Tool C1.1 provides some further hints on scoring procedures..

4. Dealing with non-prioritised issues

There will always be issues which are of high priority for a specific group or place only, and which consequently may not become a priority issue for the municipality as a whole. Nevertheless, such issues may require urgent solution.

To take an example: 90% of the settlement areas may have got water supply during the past five years. Only one area with 10% of the population is left to be done. For them, was has been priority no. 1 issue during the last five years. In such a case, their water problem will not become a municipal priority issue, but still has to be considered in the IDP.

Such issues have to be listed in an Annex or Section B of the list of priority issues for further consideration in the project planning phase.

C2 TECHNIQUES OF CREATING ALTERNATIVE AND INNOVATIVE IDEAS

PURPOSE:

To assist individuals or groups in the generation of new creative ideas, by using their knowledge and experience as well as by encouraging alternative/unconventional and original thought processes.

APPLICATION:

It can be useful whenever options have to be generated, usually where decision-making can be improved by having many ideas or options to choose from. Within the IDP process, the techniques may be used most effectively for Planning Activity 2/5 (Creating Alternatives).

INVENTORY OF TECHNIQUES

The table below illustrates possible approaches that could be explored during the identification of possible strategies. These include:

C2A Creativity focused techniques

- C2.1 Brainstorming
- C2.2 Walk-about brainstorming
- C2.3 Idea Cards and Idea Strings
- C2.4 Mind Maps
- C2.5 SCAMPER
- C2.6 Change the verb
- C2.7 Prompting – Wheel of Fortune/Dart Board
- C2.8 Visual Stimulation

C2B Rationality focused techniques

- C2.9 Roots-related option identification
- C2.13 Potential-related option identification
- C2.14 Dimension-related option identification

For the most comprehensive generation of ideas the various approaches should be used in combination with one another.

C2A CREATIVITY FOCUSED TECHNIQUES

Basic Principles:

Creative thinking and the generation of innovative ideas rely heavily on six basic principles. It is important to keep these principles in mind when structuring any idea-generation session.

Freewheeling

Nurture a secure and safe environment where participants have the confidence to freely offer ideas without fear for judgement or criticism during the idea generation stage.

Quantity

The generation of a large quantity of ideas should be encouraged. According to Linus Pauling (Nobel prize winner) “the best way to have a good idea is to have many ideas”. Creative idea generation is the flip-side of rational deduction. It requires the generation of many alternative ideas/options of which only 10 – 15% will be chosen for implementation.

Linkage/Group Work

Group work should be encouraged. Groups have greater potential than individuals to develop workable ideas due to cross-pollination and interaction between different ideas.

Non-linear

Idea generation sessions should be facilitated in a non-linear manner. Linear approaches to idea generation stifle right brain activity and force the mind to think within the limitations of prior knowledge and pre-conceived solutions.

New knowledge

Creative thinking demands that “old knowledge” be discarded briefly in order to open the mind for new innovative ideas. In this regard it is useful to not only bring knowledgeable people from different fields or domains together, but to also consider bringing on board employees and potential participants that are new to local government, the municipality and the local area.

Small Think Tanks

Creative idea generation and the application of the creative ideas described below is not suited to mass meetings and large groups. Ideally, creative idea generation should be structured around small (6 – 10 people) and effective think tanks and should be guided or directed by an able/appropriate facilitator to ensure that the creative process remains targeted and focused on the issue at hand.

DESCRIPTION:

Brainstorming is a process whereby as many as possible creative and even unusual ideas are identified to address a specific problem. The focus is to create quantity (as many as possible) and to reserve judgement (evaluation) until all ideas are collected. Even the most “silly” idea should be allowed as it can stimulate other more useful ideas. Individuals can do brainstorming, but it is also useful in groups. Alternatives include:

- 2.1 Walk-about brainstorm
- 2.2 Roots-related option identification
- 2.3 Potential-related option identification
- 2.4 Dimension-related option identification

For the most comprehensive generation of ideas the various approaches should be used in combination with one another.

The rules described during the Process are relevant to all brainstorming approaches in Planning Activities 2.1 to 2.4.

PROCESS:

1. **Clarify the problem** that is to be the subject of the brainstorming session. The session should have a very clear focus and issues should not become blurred.
2. Ensure all participants understand the “rules”.

RULES:

- The focus is on quantity of ideas
 - No ideas should be criticised during the listing stage
 - Ensure that all participants are contributing
 - All contributions must be visualised, for example with flipcharts or cards
 - Participants can use the ideas that are already recorded to build on
 - Do not stop the listing of ideas prematurely.
3. **Collect ideas:** The facilitator can start the process by giving one or two examples. C2.2 – C2.11 describe alternative options to collect ideas.
 4. **Clarify:** Read through all the ideas with participants and clarify to ensure all ideas are understood. The clarification may require the re-phrasing of some ideas. The re-phrasing should not change the idea but merely state it differently.
 5. **Structure and refinement**

Ideas can be structured by grouping/clustering similar ideas together or by identifying themes. *For example if a group has listed options to improve revenue collection some ideas might relate to improved credit control systems (institutional changes) and others could relate to increasing the client’s willingness to pay.*

Consider some of the ideas that appear less plausible and try through re-phrasing to make them more plausible.

6. **Selection of options** to be considered for evaluation. Sift ideas to distinguish between plausible and non-plausible ideas. You could possibly consider three categories namely: (1) Impossible, (2) Unlikely and (3) Possible. Selection can be done with voting where participants indicate with dots preferable options in the possible grouping.

Brainstorming sessions should involve people with a diversity of different backgrounds, including specialists, but not restricted to them. Persons with experience from other regions or even other countries are useful.

C2.2 WALK ABOUT BRAINSTORMING

B

DESCRIPTION:

It is a brainstorming approach which is stimulated and guided by questions.

PROCESS:

1. The group agrees on 4 – 6 questions that would assist to generate options. Some of the questions can be rational (a – c) and others more associative and fantasy related (d – e). For *example* if the issue is *poor revenue collection* the following questions can be useful:
 - a) *What solutions can we borrow from the private sector regarding credit control?*
 - b) *What causes do we need to eradicate to solve the problem?*
 - c) *How was the problem dealt with in the past?*
 - d) *What solutions starting with A, B or C (any letter from the alphabet) would be useful? (This is called the alphabet soup)*
 - e) *List your favourite song title and formulate an associate solution.*
 - f) *How is this problem/issue dealt with elsewhere (in South Africa or other countries)?*
2. Put the questions on flipcharts and arrange them in the room. Make sure sufficient space is available at each question “station” for small groups to work.
3. Divide the group into five small groups (or the number of questions that have been formulated) and give each group 3 – 5 minutes per flipchart to add ideas. Stop the process when all groups have had a chance with all the questions.
4. Consolidate all the flipcharts and start the refinement process. See steps four to six of Brainstorming.

C2.3 IDEA CARDS AND IDEA STRINGS

This technique involves capturing ideas on cards and circulating these cards to prompt new ideas or developing associated ideas. This technique is ideally suited to allow each of the group members an equal opportunity to participate in the idea generation process whilst minimising the fear of judgement.

POSSIBLE PROCESS:

1. Each participant is provided with a few cards (12cm x 20cm).
2. Each person is permitted 15 to 20 minutes to develop ideas and write one idea on a card.
3. During this phase, ideas should flow spontaneously and should not be judged.
4. Participants then exchange cards. Should the idea on the card spark a new idea, the new idea is written below the original idea.
5. This process may be repeated a number of times.
6. Once sufficient opportunity for the generation of ideas has been allowed, cards may be pinned on a board or pasted on a wall.
7. Opportunity should then be provided to discuss, combine, elaborate, change the ideas in plenary of group discussions.

The edited ideas are now re-written (one idea per card) for evaluation and prioritization.

C2.4 MIND MAPS

B

By capturing ideas that are generated in a linear manner such as a list, it creates an environment for left brain thinking and stifles the search for new and innovative ideas. By using mind maps to capture ideas it is not only possible to stimulate right brain thinking, but also encourage developing links between associated ideas that may in turn spark new ideas or at the very least ensure synergy between associated ideas or strategies. Mind Maps, developed by Tony Buzan is useful for the generation of ideas by association.

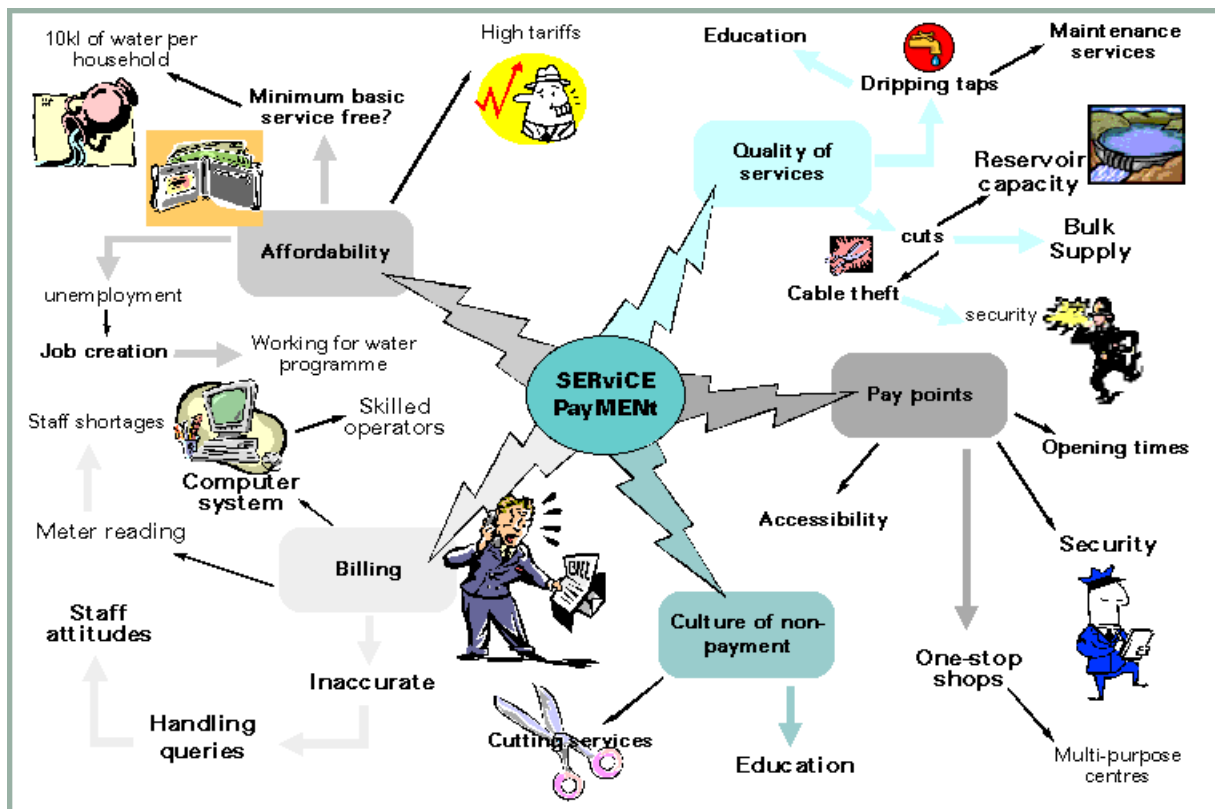
POSSIBLE PROCESS:

1. Start in the centre of the page with the main idea/problem.
2. Work outward in all directions, producing a growing and organised structure composed of key word and images depicting a number of possible approaches.
3. Draw lines to link associated ideas to illustrate inter-relations between various ideas.

KEY FEATURES OF A MIND MAP INCLUDE:

- Key words
- Organisation
- Association
- Clustering
- Visual memory – using icons, pictures, symbols and colour
- Uniqueness – every map will be unique to a given situation, the composition of the participants, the group dynamics and available information
- Conscious involvement.

EXAMPLE:



C2.5 SCAMPER (BY BOB ERBLE)

B

DESCRIPTION:

Bob Erble developed this technique to prompt ideas pertaining to possible areas of intervention. He proposes the use of a range of verbs to suggest possible strategies to address problems. All or some of these verbs indicate different strategic intervention approaches and may be used in generating ideas on related concrete strategies. The first letters of these verbs create the acronym SCAMPER.

- S** – Substitute
- C** – Combine
- A** – Adapt
- M** – Modify, magnify, minimize
- P** – Put to other uses
- E** – Eliminate
- R** – Reverse/re-arrange

POSSIBLE PROCESS

1. State the Problem.
2. List the possible types of interventions e.g. substitute, combine etc.
3. For each type of intervention, generate a potential strategy or series of strategies related to the specific problem.

EXAMPLE

Background

After an investigation of some key expenditure items that has shown recurrent deficits/losses to the municipality, it was agreed that the council restructure its current services with regard to dog licensing, the pounding of stray animals and the removal of carcasses. It annually costs the municipality more to render these services than the income derived from it. The municipality does, however, have an obligation to its ratepayers to ensure that these services are delivered.

Problem Statement

To deliver services pertaining to:

- Dog licensing
- Pounding of stray dogs
- Removal of carcasses

in a more cost-effective and efficient manner.

Possible Solutions

By using the SCAMPER prompts, the municipality may consider the following strategies to address the problem.

Substitute

Should the municipality consider an external service provider to provide all these services on behalf of the municipality – e.g. the SPCA in return for an annual grant in aid?

Combine

Should the municipality remain responsible for some of these services – such as carcass removal by the cleansing or parks division, whilst outsourcing the licensing and pounding to the SPCA?

Adapt

Should the municipality continue to provide the services, but in a more cost-effective way by using less personnel or by redirecting some of these services to other departments?

Modify, magnify minimize

Should the municipality charge more for dog licenses, thereby increasing revenue and avoid making a loss?

Eliminate

What would be the implications, should the municipality decide not to continue with the issue of dog licensing and pounding of stray dogs and only continue with the removal of carcasses?

C2.6 CHANGE THE VERB

B

DESCRIPTION:

This technique involves changing the problem statement by substitution of the original verb. This will change the perspective on the problem and allow the group to consider various different interventions. This technique is similar to the SCAMPER approach, but prompts the thinking process by posing a series of HOW questions.

POSSIBLE PROCESS

1. State the problem as a HOW question.
2. Make a list potential verbs to replace the original verb – Use a thesaurus if necessary.
3. Replace the original verb with an alternative verb on the list and generate a number of new HOW questions.
4. Where relevant, generate answers to the list of HOW questions.

EXAMPLE

Background	
<ul style="list-style-type: none"> • Poverty and joblessness due to farm evictions • People from other areas who are more qualified take up existing jobs • Communities highly reliant on subsistence farming • High potential for agriculture • Area regarded as a major agricultural production hub 	
Possible Process	Example
State the Original Problem	<ul style="list-style-type: none"> • Lack of appropriate skills amongst the unemployed?
State problem as a HOW Question	<ul style="list-style-type: none"> • How to develop appropriate skills amongst the unemployed?
Select a list of verbs	<ul style="list-style-type: none"> • Re-arrange • Combine • Manage • Divide • Encourage
Replace verbs and generate a new list of HOW Questions	<ul style="list-style-type: none"> • How to re-arrange appropriate skills amongst the unemployed? • How to combine appropriate skills amongst the unemployed? • How to manage appropriate skills amongst the unemployed? • How to divide appropriate skills amongst the unemployed? • How to encourage appropriate skills amongst the unemployed?
Provide Answers to HOW Questions	Possible Answers
<ul style="list-style-type: none"> • How to re-arrange appropriate skills amongst the unemployed? 	<ul style="list-style-type: none"> • Develop gender specific skills development strategies that will empower especially those most affected by unemployment
<ul style="list-style-type: none"> • How to combine appropriate skills amongst the unemployed? 	<ul style="list-style-type: none"> • Combine the agricultural and farming skills of evicted farm workers with business skills to ensure commercial self reliance and income generation.
<ul style="list-style-type: none"> • How to manage appropriate skills amongst the unemployed? 	<ul style="list-style-type: none"> • Organise evicted farm workers in co-operatives that harness skills to compete with established farmers.
<ul style="list-style-type: none"> • How to divide appropriate skills amongst the unemployed? 	<ul style="list-style-type: none"> • Ensure the diversification of skills to ensure the delivery of value adding services.
<ul style="list-style-type: none"> • How to encourage appropriate skills amongst the unemployed? 	<ul style="list-style-type: none"> • Lobby for the establishment of an agricultural college in the municipal area and offer bursaries to achievers.

C2.7 PROMPTS

B

DESCRIPTION:

To encourage role-players and participants to look at solving problems and developing strategies from a variety of integrated and multi-disciplinary or dimensional angles it is useful to provide prompts to stimulate participants to think about the possible ways and means to addressing a problem from different angles.

OPTIONS:

Dartboard

This process may be facilitated by writing various sectors and dimensions on a dartboard. Participants are afforded the opportunity to throw a dart. Where the dart lands determines the angle from which the group needs to consider possible interventions or intervention areas.

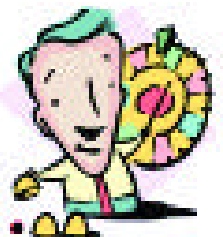







Wheel of Fortune/Roulette

Another variation of this game involves that various dimensions or sectors are represented on the sectors of wheel. The wheel is turned and the sector or dimension next to the arrow or where the ball land prompts the group to consider interventions in that sector or dimension.

Board Game

Various dimensions could also be indicated as places on a board game. By throwing a dice, the token will move to a new dimension which should in turn prompt the development of a new strategy from the perspective of that sector or dimension.

EXAMPLE:

WHEEL OF FORTUNE ROULETTE	DART BOARD	BOARD GAME
		
		
		
		

C2.8 VISUAL STIMULATION

B

Place a photograph, picture or illustration of the problematic condition in front of the group. This may spark some ideas around potential strategies that may not have been captured as part of figures and statistics of the problem.

C2.9 ROOTS RELATED OPTION IDENTIFICATION

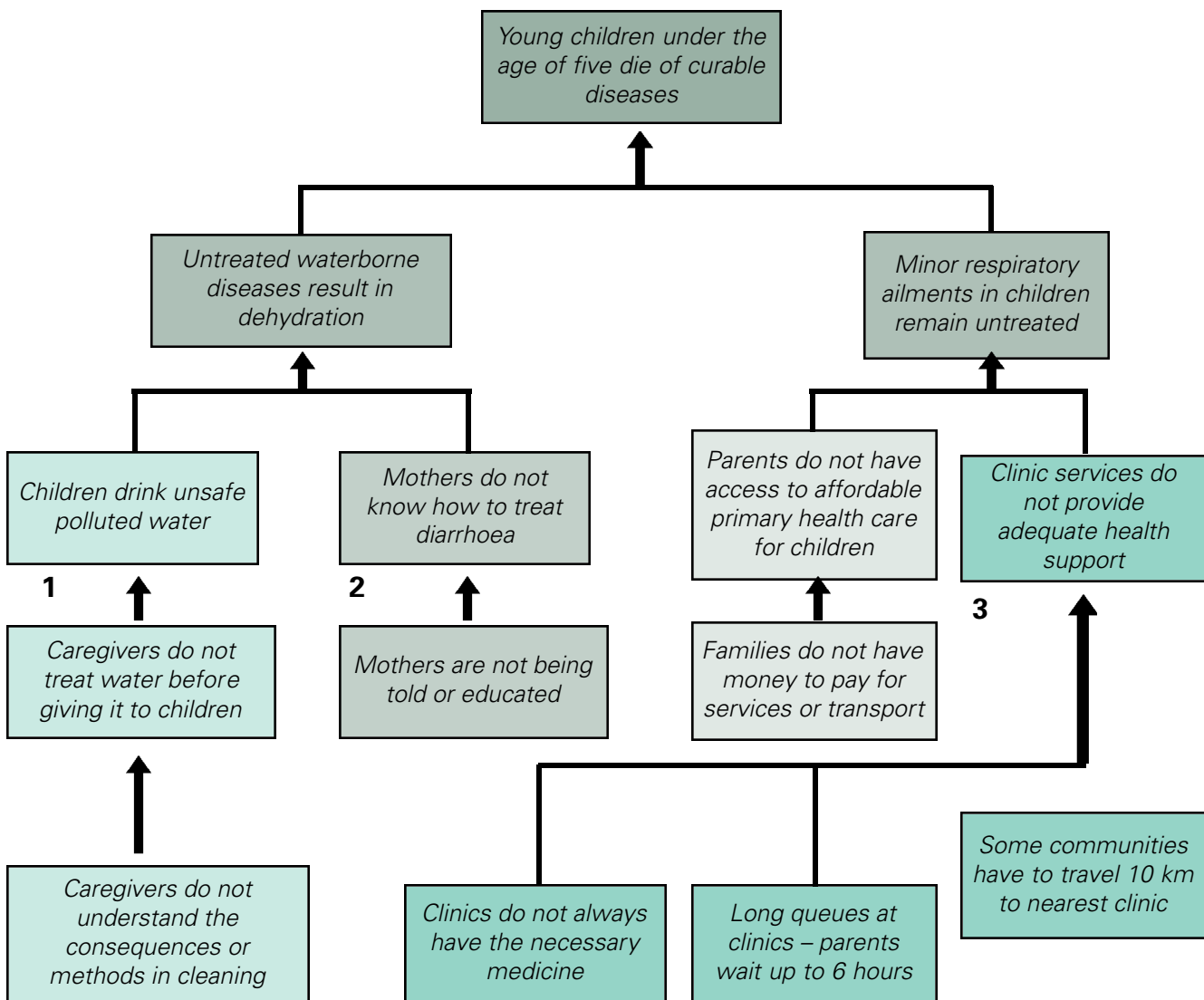
DESCRIPTION:

This approach relies on information that was collected during the problem analysis. Specific attention is given to the causes or constraints to ensure that not only symptoms are addressed by the solutions. Options are identified by considering approaches which address the roots or causes of a problem. So, this tool is based on the results of a problem analysis (Tools B3.1 – B3.3). In the event that the problem analysis was done by a “Problem Tree” (B3.2), it is useful to cluster similar causal factors together to arrive at possible strategies or areas of interventions.

POSSIBLE PROCESS:

1. Present results of the problem analysis in a visualised manner.
2. Encourage thinking about possible interventions which are suitable to address the causes of the problem.
3. Cluster those ideas which fit together as part of one strategic option.

EXAMPLE: ROOT-RELATED OPTION IDENTIFICATION



- Options:**
- 1 Water treatment project
 - 2 Education programme for mothers
 - 3 Improvement of clinic services

C2.10 POTENTIALS RELATED OPTION IDENTIFICATION

DESCRIPTION:

Potentials are identified at various points in the planning process. This include potentials identified during:

- The documenting of existing information
- The problem analysis with communities
- Institutional analysis of the municipality
- Economic/environmental analysis
- Municipal problem analysis

Information regarding these potentials as documented in the potential assessment chart (B9) will provide a very valuable source of information. Each potential may form the basis for a strategy or strategy component to resolve a problematic issue. Consequently, potentials are used to stimulate the process of identifying possible solutions.

PROCESS:

1. List all types of potentials from all sources of analysis.
2. Encourage thinking about possible ways and means of utilising these potentials for solving the problem.
3. Cluster similar ideas and list them as strategic options.

EXAMPLE:

Potential	Strategy Option
<ul style="list-style-type: none">• <i>Unutilised rainwater</i>• <i>Spring water source in neighbouring village with excess capacities</i>• <i>Traditional health practitioners</i>	<ul style="list-style-type: none">• <i>Establish rainwater collection systems</i>• <i>Extend bulk supply line</i>• <i>Identify possible roles of traditional health practitioners and make them part of the primary health care system.</i>

C2.11 DIMENSIONS RELATED OPTION IDENTIFICATION

DESCRIPTION:

Considering the same issue from different angles or from different point of views can be useful to generate possibilities. The following dimensions could be useful:

- Institutional solutions
- Financial solutions
- Social solutions
- Economic solutions
- Spatial solutions
- Physical solutions
- Technological solutions

This approach can be used in a workshop situation. Ensure that your participants have a wide range of experience so that they are able to view a single issue from different angles.

Resource persons with particular perspectives, for example an environmental, or a gender or an economic perspective will be useful.

POSSIBLE PROCESS:

1. Agree on the various perspectives or dimensions that would be useful.

Do not be too limiting in this regard as it is sometimes useful to look from an angle that did not seem relevant at the start. *For example considering the HIV/AIDS issue from a technological point of view might at first seem irrelevant. The Bill Gates Foundation fund Love Life projects (reproductive health programmes for youth) in South Africa that uses information technology i.e. computer terminals as information access points as well as creating future possibilities (career) for young people as a strategy towards HIV/AIDS reduction, however demonstrates that this may be a relevant perspective.*

EXAMPLE:

Issue: HIV/AIDS	
Dimension/Perspective	Possible Strategy Options
<i>Social</i>	<ul style="list-style-type: none"> • Strategies that address reproductive health practices in communities with specific reference to cultural elements. • Increasing the power of women in sexual relationships. • Creating recreational opportunities for young people.
<i>Economic Health</i>	<ul style="list-style-type: none"> • Improve the income status of women. • Increase access to reproductive health services – condom distributions, STD treatment programmes. • Health education.
<i>Institutional</i>	<ul style="list-style-type: none"> • Change clinic set-ups to be more client friendly. • Establish home-based care options.

C3 LOCALISE STRATEGIC GUIDELINES TOOL

PURPOSE:

The purpose of this tool is to assist you to reflect on national and provincial development guidelines and principles and develop specifically local strategic guidelines based on these. Thereby to assist you to identify, apply and demonstrate development principles in your local area that will form the basis for your strategies and projects.

APPLICATION:

Planning Activity 2/3 in general and for all dimensions such as:

- spatial strategic guidelines
- poverty/gender related strategic guidelines
- environmental strategic guidelines
- economic strategic guidelines
- institutional strategic guidelines

DESCRIPTION:

The tool provides a summary table that lists national/provincial guidelines (or principles or norms), the local situation(s) to which they may apply, and the locally specific strategy guidelines drawn from national/provincial guidelines.

PROCESS:

1. List all the guidelines, principles and norms set out in the relevant national and provincial policy guideline documents.
2. Note down fields/areas/situations in the local context to which the principles in column one may apply.
3. Devise local strategic guidelines and/or questions for assessing strategies and projects in terms of their compliance with national norms and principles.
4. Use this summary table as a basis for assessing strategies and project proposals.

EXAMPLES:

GUIDELINES TABLE (WITH ILLUSTRATIVE INFORMATION)		
National Principles and Norms	Local areas where it may apply	Local Strategic Guideline or question for assessing strategies and/or projects
Example for Spatial Guidelines: <ul style="list-style-type: none"> • Racial integration 	<ul style="list-style-type: none"> • New subsidised housing scheme • Access to hospital <p>Public transport system</p>	<ul style="list-style-type: none"> • Locate housing scheme between "township" X and CBD. • Use site which is equally accessible from all suburbs (i.e.: areas C or D). <p>Adjust time schedules to transport needs of women and aged people.</p>
Example for gender guidelines: <ul style="list-style-type: none"> • Gender equity 		

C4 IMPACT ANALYSIS MATRIX

PURPOSE:

To ensure that all information relevant to the various strategies options are available for the assessment and selection of the most appropriate option.

APPLICATION:

Once alternative strategies are created, analysis of each option is necessary (Planning Activity 2/8). Although not all the necessary information will be available at this point in time, municipalities should complete the impact analysis matrix as far as possible. This information will be used as the basis for the assessment of and decisions on alternatives (2/9).

DESCRIPTION:

The matrix provides a structuring tool for information on the expected impacts of different strategic options on various impact areas. The information is collected from (1) resource persons, (2) studies, as well as (3) opinions collected during public debates.

Possible impact areas to be analysed are e.g.:

- Impact of the strategy with regard to addressing the problem
- Impact on the natural resources
- Extent to which the strategy utilises local potentials
- Impact on the social structure i.e. gender and other vulnerable groups
- Cost/resource implications
- Institutional requirements
- Technical requirements
- Policy requirements
- Sustainability issues

The matrix enables decision-makers to compare strategies with one another. This is conducted during C5: Alternative Analysis.

PROCESS:

1. Decide what information, i.e. which impact areas, will be most useful during the analysis, and list these impact areas as headings of the rows of the matrix.
 2. List strategic options as heading for the columns of the matrix.
 3. Identify information requirements and adequate sources of information (see Tool B5)
 4. Information collection
 5. Fill in boxes of the matrix with the collected information
 6. Use the matrix for the analysis of alternatives (see Tool C5).
-

NOTE:

The sources of information will vary depending on the area of analysis as well as the type of strategies being analysed. For example:

- Heads of the relevant departments would be able to give (1) cost estimates of the various options as well as (2) institutional requirements.
- Technical officials should be approached to provide information regarding technical requirements.
- Public opinions will be useful regarding the social appropriateness and acceptance of strategies.
- The business community (interest groups and resource persons) can be approached to analyse economic related options.
- Innovative strategies will require document reviews or telephonic discussions with resource persons where experiences are available.
- Experts in the field of environment or gender (or any other cross cutting dimension) could be contacted.

In scenarios where very limited information is available and estimates will not suffice, studies or research can be commissioned in future if this strategy is selected.

Priority Issue: Poor collection of revenue						
Strategy options	Legal Action	Improved collection system	Engage contractor to collect service payments	Awareness campaigns	Improve service delivery where payments are influenced by disruptions in service	
Impact Areas for analysis						
Cost implications:	Contract with legal firm: R250 000 per annum	Erection of 5 pay points: R100 000 Computer system for billing: R50 000	Payment of contractors: 4 contractors at R10 000 per month	Four month drive at R15 000 per month	Upgrade service connections in 3 areas: Electricity: R500 000 Water: R350 000	
Impact on priority issue	Court action could take time	Currently 25% of uncollected fees are attributed to communities where no pay point exists. Faulty accounts contribute to 5% of the loss of revenue	Will assist in areas where people have difficulty to make payments – but households can refuse to give money to contractors	Masakhane projects contributed to increase in revenue in the following towns: x, y, z by an average of 15%	Disruption in services in areas A, B, C contributed 35% to total income loss	
Sustainability						
Compliance with LED principles						

C5 ASSESSING ALTERNATIVE OPTIONS

C5.1 ALTERNATIVE ANALYSIS MATRIX

PURPOSE:

This tool assists in analysing options/alternatives in a systematic and transparent manner. During the planning process you identify a range of possible options to choose from. After options have been identified, the options have to be analysed to determine which is best suited to solve the problems under consideration of various developmental policy guidelines.

APPLICATION:

The format presented here will be useful at any point where decisions based on a number of options are required. Specific application refers to:

- Once municipalities (local and district) have identified **strategic options** (2/5) and information is available regarding each option (2/8) the tool will assist with the assessment and decision-making. It will, therefore, also be used in the workshop procedure of 2/7.
- Identification and assessment of various **project options** prior to listing them as required in planning activity 2/9 and 2/10 and during the process of designing project proposals (3/3).

DESCRIPTION:

Alternative Analysis Matrix – use a table format to structure the following information:

- List of options
- Criteria to assist with the assessment
- Assessment process e.g. scores or ratings

The example described below refers specifically to the strategy phase 2/9.

PROCESS:

Step One: **Prepare a table outline** similar to the format that is illustrated in the example.

Step Two: **Clarify the decision-making issue.** For example:

Is the decision about strategy options (as in Planning Activity 2/9), or about the most appropriate service provider, or about the location of a capital investment project?

Step Three: **List all options.** The options can be generated by means of:

- Creative Brainstorming
- Ideas/suggestions from experts/resource persons and affected persons
- Considering available potentials
- Considering problem causing factors

(See C2: Generating ideas)

Step Four: **Develop criteria** that will be useful to assess the various options. This can be the most challenging step in the Alternative Analysis.

The quality of your decision will be influenced by the factors that you select to measure each option against. *For example when you have to select a service provider for a research project you would consider the:*

- *level of expertise*
- *cost/price*
- *availability (time)*
- *principles like using LOCAL service providers or affirmative action*

When considering various strategies the criteria could include:

a) Relevance:

- Contribution to deal with the priority issue or intended objective
- Utilisation of problem solving potentials

b) Policy Compliance: Fit with localised policy and strategic principles:

- Sustainability
- Poverty oriented
- Gender sensitive
- All other cross-cutting dimensions

c) Feasibility:

- Technical
- Economical
- Environmental
- Financial viability
- Institutional viability

NOTE:

- Not all criteria will be relevant to all issues or objectives. For example environmental guidelines would be very relevant for strategies that relate to road construction, but it would not be relevant for strategies that involves capacity building of community members.
- Arriving at relevant and useful criteria can be a decision-making challenge. The discussion leader/facilitator can find valuable hints on criteria if options are first discussed in terms of advantages (pros) and disadvantages (cons) or by means of a force field analysis (C5.1). For example if participants express concerns (disadvantage) whether community members will be able to transport waste to a central point (option 3) “institutional feasibility” will be a relevant criterion. If participants are excited regarding the job creation possibilities of option 3 “employment effect” will be a relevant criterion.

Such preliminary discussions could therefore generate valuable information to use during the alternative analysis.

Step Five: Specify Criteria

The criteria should be described in detail to ensure that all participants understand it in the same manner. For example:

- Institutional feasibility can refer to:
 1. The capacity of the municipality to manage the option or
 2. The ability of the target community to be involved, manage or maintain the option.
- Poverty orientation can refer to:
 1. The number of people that would benefit i.e. mass impact or
 2. To the type of target group that would benefit or
 3. To the extent to which the option contribute to poverty alleviation or
 4. To the cost of the particular option to households.

Formulating specifications for each criterion can deal with this possible confusion. One of the criteria could have more than one specification, but these should be assessed and discussed separately.

Step Six:

Agree whether to make a distinction between:

- **MUST criteria** – these are factors that the strategy has to adhere to without any exceptions or “technical feasibility”. Relevance can be considered as such MUST criteria. If such a criterion is not fulfilled by a certain option, that option has to be excluded.
- **SHOULD criteria** – factors that would be highly recommendable, but not a necessity. For example a strategy should utilise available potential. These criteria will be assessed by the extent to which the strategy conforms to the criteria. High scores will indicate a favourable correlation between the strategy and related criteria.

Step Seven:

Provide information on each option in relation to each criterion

In an attempt to promote rational, information orientated decisions, the information relevant to each strategy becomes critical.

This information could include:

- Existing/available data (1/1, 1/2, 1/4, 1/9, 2/3, 2/4) and results of studies.
- Opinions of technical experts – professional guesses and estimates. In cases where limited time and/or resources are available this will be sufficient.
- Opinions of stakeholders and comments collected during public debates.

The necessary data and study results should be ready and presented to the group responsible for making the assessment and decision. Although the criteria will only be discussed during the workshop – information with particular reference to compliance and feasibility issues should be prepared before the workshop where possible.

Opinions of experts, stakeholders and other participants will be added during the strategy workshop.

As some information gaps might exist during the workshop, the facilitator should document these gaps and only in cases that it severely influences decision-making, should decisions be postponed until after studies/information collection.

Step Eight:

Participants discuss each option and reach agreement regarding the most favourable option/s.

Example of alternative analysis

Objective: Household waste management system deals with the health threat posed in informal settlements

Criteria	Options		Municipality removes all waste – traditional	Waste is sorted at household level and removed by private recycling companies at central points	Waste collected at central point by municipality and sorted by unemployed for recycling
	Specification of criteria				
Relevance	Contributes to achieving the objective	Creating a safe environment for Number of households served	Creating healthy environment for all	Removal limited to central point	All waste from households are removed Health hazards to sorting teams
	Utilising problem solving potentials	Potentials include: labour of unemployed people	Institutional potentials of municipality	Recycling companies have greater scope of work – could employ more people	Use of labour
Policy: Compliance:	Poverty orientation	Cost for household	R20	R50	R10
	Environmental guidelines	Avoid pollution Increase Environmental awareness	In line No self responsibility and awareness	Positive – recycling possibilities and environmental standards can be set for private companies Self sorting creates awareness	Could create health hazards at central collection point Will contribute to recycling
Feasibility	LED guidelines	Number of job creation	None	Only within private companies 10 permanent jobs	High use of unemployed people 50 part time jobs
	Sustainability	Ability to maintain interventions via operational budget	High operational costs in terms of staff requirements	Low – operational cost carried by private companies	Collection and the creation of a site for waste to be sorted – highest long term cost. Public funding to pay for sorters of waste
Feasibility	Technical	Technological requirements	Use existing technology for waste removal	Highest level of technology	Labour intensive option
	Institutional:	Capacity of target group	Relies on institutional capacity of municipality only	Only community members with transport to deliver sorted waste to central point	Requires institutional capacities within target group to organise themselves in sorting teams

C5.2 SCORING PROCEDURES

In cases where groups are unable to reach decisions based on discussions, a process of numerical assessment can be used. This type of assessment can also be useful to provide clear and transparent reasoning for the selection procedures.

The assessment always *follows* an information-based discussion. Scoring should *never* be done without the required information. The steps described above will therefore precede these scoring steps.

Step One: Agree on procedure and scoring system. This will include agreeing:

- Who will score? (individuals, small groups or the total group)
- Will the particular scores of interests be made transparent? For example different interest groups use different colours during the scoring process.
- What rating system will be used?
 - a) Score out of ten: high score implies favourable options.
 - b) Allocate a total possible for all options i.e. 4 options are listed and the total score should add up to 20 per criteria. Each option is allocated a proportion of 20 according to the information. (see example)
 - c) Scale:
 - 2 : very favourable
 - 1 : favourable
 - 0 : neutral
 - 1 : unfavourable
 - 2 : highly unfavourable
 - d) Qualitative indication such as: Low/Medium/High
- Will a single score be allocated for each option or will a score be allocated per criteria for each option adding to a total score for the option?

Ensure that **all participants understand** the scoring system. This is as important as ensuring all participants understand the criteria.

Step Two: Allocate scores as agreed upon.

Step Three: Decision on one favourite option or on a mix of options.

- In case there is a clear vote in favour of one option, this strategy should be pursued.
- In case there is no clear scoring result in favour of one option, compromise strategies have to be designed by:
 - a) Deciding in favour of a **combined strategy package** consisting of several complementary strategy components.
 - b) Deciding on a **differentiated strategy** which supports different strategies for different places, different target groups or periods of time (phased strategies).
 - c) Deciding in favour of a **modified strategy** which takes recognition of areas of low/negative scoring and which may include aspects of other strategic options that would increase the scoring.
- Once options have been selected, it is worthwhile to check for areas in which these options scored low – the low scoring areas can be rectified or addressed within the project design.

MODIFICATIONS OF SCORING PROCEDURE:

a. **Variation of assessment criteria:** During the scoring and discussion process it may turn out that some criteria are irrelevant for the decision to be made, while other criteria are missing. In such a case, the criteria may be changed and the scoring process may be done again based on the new set of criteria.

b. **There are two slightly different procedures:**

1. **Procedure a:** Criteria that are considered to be more important can be allocated a weight (for example 2) and scores allocated to that criteria will be multiplied by 2.

2. **Procedure b:** Alternatively, all the “*should be*” criteria’s importance can be indicated by allocating a % out of the total of 100%. For example if you have 5 criteria:

Criterion A	5%
Criterion B	30%
Criterion C	10%
Criterion D	20%
Criterion E	35%
Total	100%

All scores are multiplied by the relevant percentage.