Olifants
Civil Society Organisation
Indaba

Derick du Toit, Stella Horgan, and Tebogo Mathebula
Welcome & Orientation

- Name tents
- Register please
- Group photo at tea time
- Facilities
- Phones off please
- Finances and logistics tea and lunch
- Events Wall!
- Purpose and Programme
# Programme

<table>
<thead>
<tr>
<th>TIME</th>
<th>AGENDA ITEM</th>
<th>DETAIL</th>
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</thead>
<tbody>
<tr>
<td>08h30</td>
<td>Registration</td>
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<tr>
<td>09h00</td>
<td>Welcome, Introductions</td>
<td>Orientation &amp; Purpose of Indaba</td>
</tr>
<tr>
<td>10h30</td>
<td>Tea &amp; Group Photo</td>
<td></td>
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<tr>
<td>11h00</td>
<td>Collective Vision</td>
<td>For middle and whole of the catchment</td>
</tr>
<tr>
<td>11h15</td>
<td>Letters of complaint</td>
<td>Overview and feedback</td>
</tr>
<tr>
<td>12h25</td>
<td>Catchment action</td>
<td>participants present</td>
</tr>
<tr>
<td>13h00</td>
<td>Lunch</td>
<td></td>
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<tr>
<td>14h00</td>
<td>Land &amp; climate change</td>
<td>Land use, Zoning and climate change</td>
</tr>
<tr>
<td>15h00</td>
<td>Way forward</td>
<td>The way forward, Reflections</td>
</tr>
<tr>
<td>15h30</td>
<td>Close</td>
<td></td>
</tr>
</tbody>
</table>
Introductions
Getting to know each other better...

Introduce yourself, the name of your organisation and its main focus...
Purpose & history of the indaba
Reflections, Progress & Collaborations cycle 3
Reflections

- More interactive group activities and time to discuss, more participation and sharing experience
Reflections

- Include youth, community, traditional leaders, business leaders in Indabas. Let's work collectively.
Reflections

- Punctuality and an earlier start to get more done
Reflections

- Understanding of legal issues, rights and how to make a change
Reflections

- More interaction with people from different parts of catchment
Reflections from the last Indaba...

Have any collaborations reflections evolved from the last Indaba?

Are you doing anything differently than before?
Recognition & Collaboration
The CSO Support Initiative aims to strengthen and mobilise the Civil Society sector in the Olifants Catchment by building resilience through training, communications and a supportive, enabling networking. Research shows that a large portion of the CSO sector is currently reactive rather than proactive when it comes to problems in the Olifants Catchment. We aim to contribute to transforming interested CSOs to be proactive and resilient in the face of climate change, resource degradation and growing livelihood insecurity.

Who, Where and What We Do

Khumani Support Group

Dealing with apartheid victims of gross human rights violations by advocating with the Dept. of Justice to consider those who were left behind after the TRC processes.
Collective vision
A collective vision...

• We have a method for arriving at a collective vision for the catchment
• We have not yet included Mozambique
• We need to work on how we are going to achieve the vision over the next (5?/10?) years?
• What is missing?
<table>
<thead>
<tr>
<th><strong>Working together...</strong></th>
<th><strong>Managing our waste...</strong></th>
<th><strong>Access to clean water...</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>LC</td>
<td>Businesses, local communities and environment work together</td>
<td>No pollution</td>
</tr>
<tr>
<td>LC</td>
<td>Communities and homes are self sustaining and work together with each other</td>
<td>Cleaner air (less air pollution)</td>
</tr>
<tr>
<td>LC</td>
<td>Community and environment symbiotic and progressive</td>
<td>No litter and toxic waste</td>
</tr>
<tr>
<td>LC</td>
<td>Greater consultation with communities (with regard to any land use development eg mining)</td>
<td>Cleaning campaign along catchment area</td>
</tr>
<tr>
<td>LC</td>
<td>Greater cooperation between communities and NGOs/ government</td>
<td>Dumping of nappies to be eliminated</td>
</tr>
<tr>
<td>LC</td>
<td>Strengthen the relationship between stakeholders</td>
<td>No dumping</td>
</tr>
<tr>
<td>LC</td>
<td></td>
<td>Creation of safe dumping sites</td>
</tr>
<tr>
<td>LC</td>
<td></td>
<td>Signs prohibiting dumping in open areas</td>
</tr>
<tr>
<td>LC</td>
<td></td>
<td>Pollution free catchment</td>
</tr>
<tr>
<td>MC</td>
<td>Community Participation</td>
<td>Toxic Tours-community affected visits</td>
</tr>
<tr>
<td>MC</td>
<td></td>
<td>More rains to clean the dirty that are on the rivers now</td>
</tr>
<tr>
<td>MC</td>
<td>Create awareness campaigns for the Olifants</td>
<td>We would like ot see our Olifants River having more water and also a clean water</td>
</tr>
<tr>
<td>MC</td>
<td>Have combination of all the CSOs (Lower, Upper and Middle)</td>
<td>At least at the end we can have bins around our areas where we can put pampers and papers to clean our environment</td>
</tr>
<tr>
<td>MC</td>
<td>Start mapping and documenting stories</td>
<td></td>
</tr>
<tr>
<td>MC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MC</td>
<td></td>
<td>Less carbon emissions</td>
</tr>
<tr>
<td>MC</td>
<td></td>
<td>Through the IDP budget, we want to be accommodated about waste collection</td>
</tr>
<tr>
<td>MC</td>
<td></td>
<td>Having specific spots where people can litter</td>
</tr>
<tr>
<td>MC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MC</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
A vision for...

1. Working together...
2. Managing our waste...
3. Access to clean water...
4. Care for our natural resources...
5. Improving our skills and ability to do things...
6. Getting young people involved...
7. Making sure we remain healthy...
8. Making a living in our catchment...
9. Reducing dependency on mining...
10. Enough food for everyone...
11. Being honest and transparent...
12. Involvement in catchment accountability...
13. Ensuring good service delivery...
14. Supporting good leadership...
What is Missing???
Global climate change

2015: the warmest year on record!
Have you seen this...
Where are your pics???

• Send to:

#ourolifants
Thato @award.org.za
Letters of complaint
Follow up on “Know your rights”
# Letters of Complaint

<table>
<thead>
<tr>
<th>From</th>
<th>To</th>
<th>Issue</th>
<th>Sent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elvis Komane</td>
<td>Samancor</td>
<td>Gravel road issuing dust with chrome waste</td>
<td>?</td>
</tr>
<tr>
<td>Zanele Msibi</td>
<td>eMalahleni Mun.</td>
<td>1. Child burned on mine land</td>
<td>?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Mine blasting 500m from community</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Discharging waste into dam and river</td>
<td></td>
</tr>
<tr>
<td>Marisane Malepe</td>
<td>DMR</td>
<td>Pollution of water by Twickenham mine</td>
<td>?</td>
</tr>
<tr>
<td>Moshabi Selowa</td>
<td></td>
<td>Borehole water drying up; pollution</td>
<td>yes</td>
</tr>
<tr>
<td>Lebo Podile</td>
<td>E.Motsoaledi Mun.</td>
<td>Sewer leakage into rover</td>
<td>?</td>
</tr>
<tr>
<td>Petros Msiza</td>
<td>DWS / Munic</td>
<td>Access to water</td>
<td>?</td>
</tr>
<tr>
<td>Emily Tjale</td>
<td>HRC</td>
<td>1. Maropong power station; access to forest</td>
<td>?</td>
</tr>
<tr>
<td></td>
<td>Green Scorps</td>
<td>2. Nappies, contaminated water</td>
<td>?</td>
</tr>
<tr>
<td>Peter Mashile</td>
<td>DWS</td>
<td>Nappies</td>
<td>?</td>
</tr>
<tr>
<td>Susan Moraba</td>
<td>Municipality</td>
<td>1. Shopping complex contaminating stream</td>
<td>yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Sewage into wetland</td>
<td></td>
</tr>
<tr>
<td>Frans Mogajana</td>
<td>DEA</td>
<td>Pollution of water in Moutse</td>
<td>?</td>
</tr>
</tbody>
</table>
# Letters of Complaint

<table>
<thead>
<tr>
<th>From</th>
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<th>Sent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rudolph Sambo</td>
<td>?</td>
<td>Water Quality in Witbank</td>
<td>?</td>
</tr>
<tr>
<td>William Biyem</td>
<td>?</td>
<td>Sewage into stream</td>
<td>?</td>
</tr>
</tbody>
</table>
Know your catchment
River Basins of Africa
The Olifants Catchment on a continental scale
The Olifants river catchment
A catchment under change....
Catchment action
Factors contributing to water streams pollution on the upper catchment of the olifants river

By secretary Elvis komane
culisamphakathi@gmail.com
Elvis.coalcity@gmail.com
Cell: 0827154293
Catchment actions (so far):

1. Mobilising the communities (Carbon Kills presentation)
2. CPAs insist on Green Housing in place of the RDP houses from municipalities (Doornkop CPA)
3. Participation in IDP and SDF processes (6 members of the Middle CSO)
4. Development of Mine alert to include CSO “crowd source” information

...and YOU ...

what action are you taking for Your Olifants
Caution...
Carbon KILLS !!!
Caution Carbon KILLS !!!

Our heat energy demand a threat to our head waters, natural water resources. Water tables surrounding wetlands, water streams, rivers including the olifants river.
Only four percent of South Africa’s area comprises high water yield areas.

In the Enkangala, 23% of the area is high water-yielding.

The headwaters of some of our most economically important river systems are fed from this area.
Knowing and understanding the Olifants upper catchment

This are the three rivers feeding the upper catchment of the olifants

. Wilge river
. Bronkhorspruit and
. Klein olifants

Factors contributing to pollution at the upper catchment

. Coal mining
. Power/energy production
. Polluted environment and air
. Local municipalities
. Surrounding communities
. Smelters and industrial activities
. Cars
Factors contributing to pollution at the upper catchment

- Coal mining in this catchment started in the 1890’s and by 2004 an estimated 50 000 m³ of mine water was discharged into the Olifants river daily,

- 64 000 m³/day from closed and abandoned mines.

- In 2001, mine water use in the catchment amounted to an average 4.6 %, but it contributed around 78% to the total sulphate load.

- Such pollution levels affect farmers, people living in the catchment as well as tourists and wildlife of the Kruger National Park.
Know your catchment...

A total of 29 major collieries and a number of smaller operations are active in the catchment, producing approximately 47 per cent of the country's coal production.

• Anglo American
• Bhp billiton
• Glencore
• Xtrata
• And others
IMPACTS OF COAL MINING

Deposit of toxic minerals in the water system due to acid mine drainage from mining waste and abandoned mine, more than 6000 mines are abandoned in this country and all produce AMD.
KNOWING AND UNDERSTANDING THE OLIFANTS UPPER CATCHMENT

IMPACTS OF COAL MINING

This mine is operating close to the dhuvha PowerStation next to an informal Community named kwasbamu, dust is a daily benefit to the nearest community is receiving.
KNOWING AND UNDERSTANDING THE OLIFANTS UPPER CATCHMENT

IMPACTS OF COAL MINING

CRACKS ON MY HOUSE WALLS AFTER BLASTING IN THE NEAREST COAL MINING

Our vegetation under threat
Knowing and understanding the Olifants upper catchment. How smelters and industries are contributing to the pollution?

- Carbon
- Sulphate
- Barium
- Antinomy
- Vanadium
- Magnesium
- And other toxic gases

- This are some of the biggest polluters in the upper catchment of
- The Olifants river

- Sammancor Ferrometals
- Evraz Highveld Steel
  -- Vanchem Vanadium
  -- Rand Carbide
- Transalloys
This are some of the biggest polluters in the upper catchment of
- The olifants river
-- Columbus steel
-- ferrochrome
KNOWING AND UNDERSTANDING THE OLIFANTS UPPER CATCHMENT

- Local municipalities
- Surrounding communities
In 2009, South Africa was the fourth largest exporter of thermal coal (65 Mt) after Indonesia (233 Mt), Australia (109 Mt) and Russia (82 Mt), producing three times China's output (18 Mt). In 2009, coal sales amounted to R65 billion, the highest value commodity for that year (platinum R58 billion, gold R49 billion). Approximately 64% of the coal sold domestically is bought by Eskom for energy production.
Lunch
Introduction to land use & why is it important
change in land use over a period of four decades
Activity:

• Please break into groups approx. 3 per group.

• Arrange the sketches over a period of 4 decades in the correct order 1970, 1980, 1990, 2000 as your group sees it.

• Identify and discuss the impact land use practices over time.

OWIA KOKROKO
“greatness of the sun”
Symbolises vitality and renewal
Introduction to land use planning
BIODIVERSITY & ecosystem services

- BIODIVERSITY = NATURE

- The diversity of all living things - plants, animals, insects etc.

- Comprised of biodiversity pattern & ecological processes.
BIODIVERSITY CONCEPTS

BIODIVERSITY PATTERN

- Species: e.g. rare plants, birds or animals etc.
- Vegetation types
- River types
- Wetland types

Ecosystems / habitats

Modjadji Palm (*Encephalartos transvenosus*)

W. Roland
VEGETATION ECOSYSTEMS (HABITATS)

**Grassland**

- Different
  - plants
  - animals
  - climates
  - soils

**Forest**

**Savanna**
RIVER ECOSYSTEMS (HABITATS)

Forest - Mountain

Ecoregions: Topography, altitude, slope, rainfall, temperature, geology & vegetation.

Grassland

Lowland
WETLAND ECOSYSTEMS (HABITATS)

LANDSCAPE SETTING & VEGETATION

MOHLAKA/NTLANGASI

Un-channelled valley bottom - Thicket

Seep on mountain slope

Floodplain wetland - Grassland

Depression (pan) - Grassland

Channelled valley bottom
CBA Map = Map of biodiversity pattern, process & targets
Land use planning... what is it?

**Land-use** planning is the general term **used** for a branch of urban planning encompassing various disciplines which seek to order and regulate land use in an efficient and ethical way, thus preventing land-use conflicts.
Zoning. ... Areas of land are divided by appropriate authorities into zones within which various uses are permitted. Thus, zoning is a technique of land-use planning as a tool of urban planning used by local governments in most countries.
What about a rural African context???
Only burial site forests left
Thinking ahead...
How does history affect land use planning?

88% of people on 10% of the land in Maruleng
Livelihoods and rural planning

Population increases: over-concentration

Nine years - 1000% increase in population

Forced re-settlement

154 people

1519 people
How does climate affect LUP?
Swakopmund: town with longest record of no rain – 9 years

Rainfall is less than 20 mm per year,

- Stormwater drains, gutters and drainpipes are rare.
How does agriculture affect land use planning

...Is the dead sea dying?
Economic opportunities and zoning...
Wildlife economy: e.g. game farms

Commonage grazing

Use natural resources e.g. medicinal, firewood

Irrigation

Catchment water provisioning

Rural residential settlements

Town residential
Natural resources... from where?.....

Energy for cooking

- 22554 (24%)
- 71737 (76%)

Source of Water

- 39253 (41%)
- 55368 (59%)

Natural resources... from where?.....
Fires to clear land to expand farms
The consequences of unintegrated planning?
We all want to be close to the river..
Land use activities: good or bad decisions? Who pays the price?
The "World's Dirtiest Air"

11 Coal-fired Power Stations in Mpumalanga

83% of SA's coal is mined in Witbank area

One of the world's largest coal plants, Kusile, will be in Witbank's vicinity

Planned Mines Existing Mines

Greenpeace
Impacts of mining outflows

- DNA studies show increased genetic damage
- Dose-response studies for arsenic show increased cancer risk
  - 3 x higher at CSIR study sites
- Higher reporting of a range of medical symptoms in mining areas
- Treatment of water for drinking and power generation is VERY expensive

© CSIR
“Its what you can’t see that is the problem”
Zoning gone wrong!!
Legacy of spatial planning and population concentration
largest part of Maruleng is still in a natural state basis for a thriving tourism industry (Maruleng Municipality, 2014a). Yet no EMP
SPLUMA & how it works?
LAND USE PLANNING
PRESENTATION BY SHIRHAMI SHIRINDA
LEGAL RESEARCHER
LEGAL RESOURCES CENTRE (LRC)

THE LEGAL FRAMEWORK
SPLUMA
Spatial Planning and Land Use Management Act
SPLUMA Principles

• spatial justice
• spatial sustainability
• efficiency
• spatial resilience
• good administration
SPLUMA objectives

• To provide for a uniform, effective and comprehensive system of spatial planning and land use management for the Republic;
• To ensure that the system of spatial planning and land use management promotes social and economic inclusion;
• To provide for development principles and norms and standards;
• To provide for the sustainable and efficient use of land;
• To provide for cooperative government and intergovernmental relations amongst the national, provincial and local spheres of government; and
• To redress the imbalances of the past and to ensure that there is equity in the application of spatial development planning and land use management systems.
How can we be involved in spatial planning decisions?
How can CSOs be involved?

• Read SPLUMA (download from www.ourOlifants.org)
• Have a copy of your local Spatial Development Plan
• Be AWARE of spatial priorities: nationally, provincially and locally
• Understand the zoning plans (Land Use Management System –LUMS) for your municipality
• Participate in the IDP and Spatial Development Planning process carried out by your municipality
LAND USE DECISION MAKING

- CBA MAP & GUIDELINES TO INFORM -

1) Rezoning applications
   • SPLUMA: must comply with environmental legislation (S42.2)

2) Environmental Impact Assessment
   • National Environmental Management Act, 107 of 1998

3) Water Use License Applications
   • National Water Act, 36 of 1998

4) Agricultural applications
   • SPLUMA Schedule 1 – provincial procedures for approval of agricultural applications
   • Conservation of Agricultural Resources Act, Subdivision of Agricultural Land Act (to be replaced by Sustainable Use of Agricultural Resources Bill)

5) Mining Authorisations
3. THE CBA MAP & LAND USE PLANNING
<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>DEFINITION/ DESCRIPTION</th>
<th>PRIORITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protected Areas</td>
<td>• Formal Protected Areas (NEM: Protected Areas Act)</td>
<td>Protected</td>
</tr>
<tr>
<td>Critical Biodiversity Area 1 (CBA1)</td>
<td>• Target areas (biodiversity pattern and / or ecological process).</td>
<td>Priority</td>
</tr>
<tr>
<td>Critical Biodiversity Area 2 (CBA2)</td>
<td>• Target areas (biodiversity pattern and / or ecological process).</td>
<td>Priority</td>
</tr>
<tr>
<td></td>
<td>• Alternative sites may be available to meet targets.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Can include agriculture - ecological process)</td>
<td></td>
</tr>
<tr>
<td>Ecological Support Area 1 (ESA1)</td>
<td>• Natural &amp; degraded areas supporting CBAs by maintaining ecological processes.</td>
<td>Priority</td>
</tr>
<tr>
<td>Ecological Support Area 2 (ESA2)</td>
<td>• No natural habitat (agriculture), but supports ecological processes.</td>
<td>Priority</td>
</tr>
<tr>
<td>Other Natural Areas (ONA)</td>
<td>• Natural areas.</td>
<td></td>
</tr>
<tr>
<td>No Natural Habitat Remaining (NNR)</td>
<td>• No natural habitat (e.g. intensive agriculture, urban, industry) or degraded natural areas.</td>
<td></td>
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</tbody>
</table>
- **Biodiversity sectors** input into multi-sectoral planning.
- **Aligned** (as far as possible) with existing SDFs.
- Once the bioregional plan is **gazetted**, municipal planning **must take** the CBA Map **into account**.
Combined biodiversity priorities

Biodiversity priorities
Combined biodiversity priorities

1. Provincial Conservation Plans
2. Protected Area Expansion Priorities
3. National Biodiversity Assessment and the National Freshwater Ecosystem Priority Areas
4. Threatened Habitats
5. Ecosystem Protection Levels
How can CSOs be involved?

• Are any of the principles of SPLUMA being violated?
• Monitor the allocation of land to developments (under the SDF)
• Ensure than projects in the IDP match the SDF (i.e. land must be available for each project and it must be in the correct zone)
• Is the competent authority issuing permission to develop land
• Are land use applications submitted for land use changes?
• Will there be any damage to natural resources and biodiversity under any development?
• Will your rivers or ground water be harmed in any way?
How can CSOs be involved?

• Be aware of any CRITICAL BIODIVERSITY AREAS (CBA) in your municipality

• The CBA map is gazetted but the IDP not so the CBA is more powerful than the IDP in making land use decisions
CHANGING PRACTICE
Change project

10 minutes to write expressions of interest: name, organisation and why interested in course.
Way forward
Reflection
Side A: This year’s Indaba programme was useful for me because....

BUT

SIDE B: It would have been MORE useful if ....