Inkomati Catchment Management Strategy
Visioning Exercise
Crocodile River Sub-catchment
9 March 2010

Facilitator: Prof Kevin Rogers

The facilitator introduced the customised Adaptive Planning Process and explained how this process would provide the insight on stakeholders' perspectives of a desired future state for the Crocodile sub-catchment. In so doing stakeholders were providing guidance to the technical team that would draft the catchment management strategy (CMS). This team will comprise ICMA and DWA staff, as well as a range of external experts. The first draft CMS would be circulated to stakeholders and again workshopped with them on 24 March 2010. The plan would then be submitted to the Minister DWA for approval.

This document represents the outcome of the first stakeholder (public participation) meeting for the Crocodile River Sub-catchment of the Inkomati Catchment.

Key issues raised by stakeholders

1. Protection, control and management of the resource
2. Sustainable use and development regarding quality and the decision making process
3. Implementation of the reserve
4. Water available for economic growth and urban use
5. How can we have fairness in times of low supply (drought)
6. Role of local individuals in water resource management
7.Development
8. Economic Development – governance: how can we work together
9. How does the process of sustainability work?
10. The current resource status
11. Strengthening institutional relations
12. Future scenario of water use
13. Privatized water reserves/infrastructure, and equity – how can they be shared
14. Assurance of supply
15. Effective community use of water
16. Shortage of water in this country and yet exporting it to other countries
17. How do we go about dealing with issues of water rights and licensing?
18. How is our strategy coming in line with the WSDP
19. Concerned that local authorities are not dealing with water saving technologies / management
20. Stop talking – start building infrastructure
21. Allocation of water, especially to agriculture
22. Delegation of responsibilities such as monitoring of information
23. Climate change issues
24. Water allocation, sustainability

25. How do we decide what is fair and equitable?
26. Management of alien vegetation
27. How important is irrigation and reservoirs for irrigation farmers?
28. Recognizing the importance of the National Freshwater Priority Areas
29. What are we doing about conserving more water and building more dams?
30. How do we communicate all the issues dealt with today?
31. Community awareness of what is dealt with today. Not to just change for change itself
32. Classification – land use
33. How can we distribute equitably without meters?
34. Affordability – water management
35. Water management for the tourism management and biodiversity
36. Lack of realization about the connections between the landscape, the rivers, and ensuring health for the people
37. As first CMS, can we move and rise up to the challenge
38. Make people and stakeholders be aware of what CMS is?
39. Shared understanding of water resource management
40. Taking ownership and responsibility of the CMS
41. Strengthen the support of water services
42. Setting a trend for managing the sustainability of the water resources
43. Effective tariffs
44. Infrastructure development (dams) for emerging farmers and that water does not flow to Mozambique
45. Engagement on more dams for emerging farmers
46. Refurbishment of existing infrastructure
47. Management of coal mining in the upper Komati
48. Active identification in public participation in the water resource management
49. How is the strategy going to address spatial coordination
50. Reconciliation strategies
51. Require political will and buy-in
52. Enforcement and compliance
53. Education to the future
54. Pollution of underground water
55. Alignment with the National Water Resource Strategy
56. Conjunctive use of water, ground water and rain harvesting
57.Incentives and dis-incentives / sustainable land use / incentives for conservation of water
58. Maintain ecosystem goods and services
59. Measure on water quality
60. Financial implications of the strategy
61. Environment is not maintained properly thus experiencing problems
62. Safety precautions taken around dams and reservoirs – people committing suicide
63. Wetlands
64. Waste water treatment works
65. Water summit involving neighboring countries involving building more dams

Vision

A vision is a concise statement describing the shared desire for the future conditions of the sub-catchment.

A water resource that is:
Shared equitably and sustainably in terms of quantity, quality and finances
Managed adaptively, co-operatively and progressively to achieve social, economic and environmental justice, and promote healthy living

Values

Our values are the principles we use to evaluate the consequences of actions (or inaction), to propose and chose between alternative options and decisions. The sub-catchment value set reflects the values shared by the stakeholders of the sub-catchment.

- We acknowledge the interdependence of stakeholders within and without the catchment.
- Management must be adaptive and outcomes driven, with solutions being simple, practical and implemented.
- Decisions, actions and outcomes are subject to performance review using measurable indicators.
- Decision making must be participatory, transparent and consensus based to build trust and cooperation between stakeholders.
- Decisions must be well informed to ensure they are credible and legitimate.

Context

The range of social, technical, economic, environmental and political facts, conditions, causes and surroundings that define the circumstances relevant to a problem, provide the Acontext@ within which decisions are made. The context is therefore a fundamental element of any decision making environment.

Vital Attributes

The few most important characteristics/properties of the system to be managed are its Avital attributes@. They may be may be technical, ecological, legal, historic, social or economic.

- The wide range in altitude between escarpment and the Mozambique border dictates the distribution of rainfall, evapotranspiration and runoff with wetter cooler conditions in the west, and hotter drier conditions in the east.
- This range is accompanied by a diverse and scenic mosaic of landscapes and land uses on generally fertile soils.
- The very high biological diversity is complemented by high cultural diversity, a rich heritage and unique petrology (oldest rocks and signs of life in the world).

- The sub-catchment has very high urban growth because it straddles the Maputo Development Corridor and contains the Mpumalanga Capital (Nelspruit).
- The economy has a strong base in agriculture, forestry, government, tourism and mining and all these activities are inextricably tied to the Crocodile River and its tributaries.
- There are still large disparities in access to water and in the economy.
- There is good irrigation infrastructure on the whole but with only one large dam (Kwena), management is largely limited to run-of-river.
- Knowledge of, and expertise in, Water Resource Management is high.
- There are a large number of land claims covering a large area of the catchment, many of which have been resolved.
- The Crocodile River is an important source of water for Mozambique.

Threats

Threats are factors within, or outside, a partnership that undermine its values and inhibit the pursuit of the vision. Threats are also factors or processes that inhibit ecosystem determinants or vital attributes.

- A large area covered by a large number of alien plant species.
- The river is oversubscribed under a poor and unimplemented allocation policy/plan
- Continued poor landuse planning is a very important threat. This includes: Uncontrolled and/or poorly planned rural and urban growth leading to pollution of both surface and ground water; degradation of riverine areas and the scenic mosaic; uncontrolled tourism development and poor/inappropriate landuse practices; continued circumvention of regulations by developers and mining.
- A continued lack of solid and liquid waste management.
- Non-implementation of the Reserve and aseasonal flows from the Kwena River are undermining the sustainability of the resource.
- Continued inefficiencies in irrigation practices, which lead to excessive water use and pollution.

Objectives

Objectives should be aimed at overcoming threats to ensure the persistence of vital attributes and/or their determinants, under the guidance of the vision statement.

The primary objective must be to achieve full delegation of authority to the ICMA so that they can complete the licensing process and begin practicing IWRM to achieve equity, efficiency and sustainability of water use.

Sustainability

- Increase the water yield by developing new infrastructure and eradicating alien vegetation.
- Water use is fully metered/measured, monitored and compliant

- Targets are set and a process for implementing the Reserve put in place which includes full integration of the National Freshwater Ecosystem Priorities.

Funding

- Develop a transparent and attainable plan for funding that identifies the sources of funds, mechanisms for gathering those funds and for allocating them to priority projects, and ensures performance auditing.
- Develop a billing system that includes waste discharge charges.
- Develop and implement incentives for more equitable and efficient water use.

Co-operative governance

- Urgently develop a system of co-operative governance that gives water a high profile across local and regional government structures, and minimizes the circumvention of water policy during economic development.