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# PROPERTY & ACCESS RIGHTS IN PUBLIC DAMS

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for Aquatic Biodiversity

# Background & context

- South Africa has great potential for development and enhancement of inland fisheries through use of storage dams and lakes
- This potential remains largely under/unutilised
- Inland fisheries could promote rural livelihoods & food security
- WRC & DAFF commissioned a 4 yr “Baseline and scoping study on the development and sustainable utilisation of storage dams for inland fisheries and their contribution to rural livelihoods”
- Institutions: PLAAS, Department of Ichthyology and Fisheries Science (DIFS)- Rhodes, Africa Centre for Water Research (ACWR) and South Africa Institute for Biodiversity (SAIB)
- Current delivery— diagnostic research on existing property & access rights in order to recommend revisions

# Framework for analysis: property rights as bundles of rights

(Ostrom, 2010; Schlager and Ostrom 1992)

- **Access right:** right to use/enter a defined resource (non-consumptive)
- **Withdrawal right:** right to harvest products (consumptive use) of the resource
- **Management right:** right to regulate use patterns of other harvesters and to improve resource
- **Exclusion right:** right to exclude others
- **Alienation right:** right to sell or lease resource

# Operational positions in relation to rights to resource

- **Viewer (aesthetic):** Right holder with access rights only
- **Authorised user:** Right holder with access and withdrawal (consumptive) rights
- **Claimant:** Right holder with access, withdrawal and management rights
- **Proprietor:** Right holder with access, withdrawal, management and exclusion rights
- **Owner:** Right holder holding all the 5 rights (access, withdrawal, management, exclusion and alienation)

# Bundles of rights & associated positions towards resource

Type of right	Associated position				
	<i>Viewer</i>	<i>Authorised user</i>	<i>claimant</i>	<i>proprietor</i>	<i>owner</i>
<i>Access</i>	X	X	X	X	X
<i>Withdrawal</i>		X	X	X	X
<i>Management</i>			X	X	X
<i>Exclusion</i>				X	X
<i>Alienation</i>					X

# Evidence from empirical studies

- Holding claimant's rights (access, withdrawal and management) positively affects capabilities of claimants to self-organize.
- Having the authority to exclude others (proprietary rights) gives more capabilities and confidence for proprietors to invest in improvements in the resource
- Contrary to economic theory, the right to alienate a resource is not key to sustainable use. There are many examples users of Common Pool Resources who have used resources sustainably over time without alienation right. Key is security of property rights bundles

# Total number of dams

<http://www.dwa.gov.za/DSO/Publications.aspx>

Province	Total number of dams
Eastern Cape	697
Free State	404
Gauteng	332
KwaZulu Natal	924
Limpopo	312
Mpumalanga	479
Northern Cape	82
North West	149
Western Cape	1324
<b>Total</b>	<b>4703</b>

# Total & categories of public dams

Province	Size of Dam				Total
	Large (wall over 30m high)	Medium (wall between 12 & 30 m high)	Small (wall less than 12 m high)	Non categorised	
Eastern Cape	31	52	41	1	125
Free State	8	33	36		77
Gauteng	12	17	59		88
KZN	13	25	27		65
Limpopo	14	26	16		56
Mpumalanga	17	35	21	2	75
Northern Cape	2	5	9	2	18
North West	7	21	31		59
Western cape	28	59	53	1	141
<b>Total</b>	<b>132</b>	<b>273</b>	<b>293</b>	<b>6</b>	<b>704</b>



# Dams surveyed

## •Used purposive sampling

	Dam or water body	Province
1	Driekoppies	Mpumalanga
2	Lake Fundudzi	Limpopo
3	Nandoni	
4	Makuleke	
5	Uphongolo (Lake Jozini)	KwaZulu Natal
6	Voëlvlei	Western Province
7	Clanwilliam	
8	Bloemhof	Free State
9	Mnyameni	Eastern Cape
10	Gubu	

# Preliminary findings

- Users
- Custodial and management rights
- Management of 'Biodiversity'
- Natural Lakes and Impoundments
- User Rights
  - Angling and recreational fishing and Yachting clubs
  - Tourism concessions
  - Communities
  - Co-management rights
- Preliminary Recommendations

# Users

- Environmental reserve
- Municipalities (bulk extraction of domestic water)
- Commercial farmers (irrigation)
- Angling clubs (including recreational fishers)
- Yachting clubs
- Tourism concerns (lodges + waters sports)
- Communities (domestic, fishing, agriculture/irrigation)
- Nature reserves (government and private game farms)

# Custodial and management rights

- NWA (1998) - all water is a national asset legally held under the stewardship and custodianship of state on behalf of its citizens.
- Custodial (ownership) rights held by government departments (DWA, DAFF, etc) and municipalities on behalf of society
- Thus gives depts. authority to determine access, withdrawal, management, exclusion and alienation (lease usually)rights
  
- **Instruments (legal and regulatory)**
- NWA (Schedule one; General authorisations; Existing lawful uses; and Water use licences).
- Water Services Act (1997): Governs domestic water supply services
  
- Use of dams by existing private clubs, anglers, tourism concessions on basis of 'continuation of existing lawful use' (historical rights) given that most have been using the dams since prior to 1994 or general authorisations (if new applications).
- NWA does not specifically mention fisheries as a resource in dams despite wide use for recreational and subsistence fishing

# Management of 'Biodiversity'

- Authority to manage and regulate use of living organisms (so called 'management of biodiversity') ceded to Provincial Departments of Nature Conservation (PDsNC).
- PDsNC supposed determine access, withdrawal, exclusion and management rights for fisheries (making them proprietors)
- **Instruments (legal and regulatory)**  
Provincial nature conservation ordinances, National Environmental Management Act (NEMA) & National Environmental Management and Biodiversity Act (NEMBA).
- Permits (e.g. recreational) and licences (e.g. commercial fishing, e.g. Bloemhof dam)

# Natural Lakes and impoundments

- Usually custodianship held by TA of area even though NWA does not explicitly recognise customary management
- e.g. Lake Fundudzi - royal family has historically controlled access, withdrawal, management and exclusion rights.
- Also the case for public dams surrounded by rural communities such as Nandoni and Makuleke. Communities strongly believe the dams belong to them
- Thus exist under dual property rights regimes – public and communal
- **Instruments (legal and regulatory)**
- Traditional Leadership and Governance Framework Amendment (TLGF) Act (41 of 2003) and Communal Land Rights (CLR) Act (11 of 2004).
- Communal controls and also formal instruments (by PDsNC)

# USER RIGHTS: Angling & recreational fishing, and Yachting/sports clubs

- Formally have access (rights to enter the dam area, build infrastructure on the dam frontage) and withdrawal rights (take away alien species) fish caught
- Fencing off areas with infrastructure privatises such areas, *de facto* creating exclusion rights
- Where they limit or deny other fishers (e.g. netters) right to fish, confiscate and destroy they are exercising exclusion and management rights not within their authorisations

# Tourism concessions

- Lease of land on dam frontage for tourism concessions legally gives such concessioners access rights only
- Proximity to dam (water) enables them to create secondary rights e.g. access rights to the dam for water sports, recreational fishing, etc. for their guests



# Communities

- 'Communities' here used to refer to people under customary rule of TAs. Also used to refer farmworkers and township dwellers
- Have access rights to dams that DWA gives to general public (6am to 6pm).
- Should be able use recreational permits and so exercise withdrawal fishing rights
- Communal regime water bodies (e.g. Fundudzi), people have historically fished without permits.
- Dual regimes (public of communal) e.g. Nandoni & Makuleke results in ambiguity as most fishers do not use permits & frown upon being harrassed about these
- Main conflict arises where fishers from communities use nets (e.g. in Uphongolo, and Driekoppies dams). Underlying belief among most anglers and conservation authorities is that nets are destructive and should therefore be banned
- Thus on some dams anglers, lodge owners and recreational fishers take law into their own hands and try to enforce the exclusion of use of nets.

# (Co-)management rights

- NWA provides for establishment of Catchment Management Agencies (CMAs) in all 19 designated water management areas.
- Each CMA required to draw up a management strategy and perform core functions required to implement Act, including active promotion of user participation for communities.
- Implementation guidelines of Act also emphasize representivity and inclusivity of all stakeholders' interests, needs and values
- NWA also proposes establishment of Water User Associations - cooperative statutory bodies for water users wishing to undertake water-related activities for their mutual benefit.
- Involvement of users in management through CMAs and/or WUAs offers to create and extend management rights for users.
- Can these be used to strengthen and protect fishing property and access rights for communities?
- Problem - usually such bodies are captured by the most powerful actors for their own interests and benefits.

# PRELIMINARY RECOMMENDATIONS

- **Preliminary because:**
  - Need to workshop findings with key stakeholders.
  - Current findings assume that selection of dams for sample survey are representative enough for generalising
- Need to clarify who has what type of rights
- Need for existing rights holders to accept and concede to sharing fishing rights with communities.
- Need to develop and implement secure access, withdrawal (consumptive) and co-managerial rights for marginalized communities
- Need to raise awareness among communities about their rights
- Need to investigate and decide what species could be stocked for development of an inland fishery
- Need to resolve who will be responsible for management of inland fisheries
- Need to draw up fisheries management plans for dams (Linked to Catchment management plans?)
- Need to develop applicable legislation for inland fisheries

**THANKS**

