Overview Olifants Basin Development Trajectory _draft april 2003

Socio-Political Economy and Land and Water Management		Water Users Groups					
Political, economic and demographic developments and natural calamities	Land and Water Governance Frameworks	Pedi and other agro-pastoral societies	Settlers farming, fisheries, and food processing	Migrants Mining, Mineral Processing, and Energy Generation	Urban domestic users, secondary industries, and services	Eco-tourism	
Environmental setting Tributaries/Olifants; escarpments; Highveld, middle veld, lowveld; Limpopo, downstream Moz. Bushveld complex MAP with boundaries Transvaal, homelands, countries		Rainfall, soil, temperature, vegetation, streams, groundwater, floods, erosion/siltation, fisheries, natural shelter, fauna/tsetse	Rainfall, soil, temperature, vegetation, streams and groundwater, erosion/siltation, fisheries, shelter, fauna tsetse, locusts, Rinderpest, malaria	Minerals pollution, siltation, sites of deposit: Steelpoort – Polokwane, Rustenburg Bushveld deposits	Streams, groundwater	Wild life, ivory hunting, savannah, forestry, scenery beauty Sustain ecology Sustain tourists luxury resorts	
Indigenous Societies < 1830s San; various agro-pastoralists groups from North to South, and later returning from South. Difaqane/ 1816-1828: influence European colonialists and impacts. Mzilikaze 1837 MAP migration movements.	Indigenous land and water tenure (several elements valid till today) Streams for boundaries & settlements Political and kinship structures (cattle, cropping, chiefs, kinship/marriage, age/ gender)	Rights and responsibilities chiefs & community members Integrated NRM of land, water, trees, for simultaneous cropping, livestock, trees, fisheries bit, food processing Water open access resource; some norms; cosmology		Phalaborwa: at least 1200 years of copper and iron mining; hardly water dependent			
Colonial Conquest 1830s - 1910 1830s onwards: Great Trek, Christian missions. Violence, divide and rule of chiefs; land appropriation; taxation 1852 Lydenburgh Republic; native governors black areas. 1870s discovery minerals; 1877: British annexation; 1879 British conquest of the Pedi. Anglo-Boer wars (Vrijheids oorlogs) 1880-1882 and 1899-1902. Burgersfort battle, Bronkhorstspruit Railway Pretoria-Maputo (water for steam engines/later tractors!) Witwatersrand: mining and impact on politics 1910 Union into state of RSA.	Land/water 'Trekboers' occupation of best land for agriculture by survey and granting property rights, 1855 settler constitution natives no 'burgher' rights, and only 'burghers' own land. 1881: Pretoria convention Native Commission has to register land Land rights often with mineral rights 1908: Transvaal water law	Losses of land losses of cattle – disease and shot by whites to prevent contagious disease; Start male labor exodus to mines and white farms. Impacts: less ploughing, erosion of communal grazing arrangements; off farm incomes Also: maize from USA via Maputo	'Trekboers' Mainly extensive pastoralists,/wool, hunters, slash and burn cropping? Stock watering Land grab. e.g. Arabie scheme already titled deeds in 1871-3. Own institutions and self-financing IBs and dam committees With increasing demand from mining sector Witwatersrand turning towards commercial cropping	Gold: first Barberton, 1873: Pilgrimsrest, Polokwane, Coal: Witbank Middelburg area. 1895 Tweefontein Ogies first Water provision through ?? Immigration labor by Pedi and Mozambicans/Zimbabweans	Settling near streams Lydenburg, Middelburg, Bronkhorstspruit, Witbank, Groblersdal, Pilgrimsrest, Burgersfort, Phalaborwa, etc.	1898: Creation Sabie Game Reserve by Paul Kruger ivory hunting	
Consolidation of Segregation 1910 – 1931 MAP 4 provinces RSA; Olifants South-EasternTransvaal Province Central government Legal consolidation of colonial resource control. 1927: Native Administration Act for black areas. Labor control: Masters and Servants ordinance. Miners strike; resistance new ANC,	Land 1905-1913: still possible for blacks to have land in own names Land Acts 1913 Natives Land Act and 1936 Native Trust and Land Act: 13% of land for blacks under South Africa Native Trust (later SADevelopment Trust), denial land ownership to blacks, prohibition tenancy.	Increasing population and land pressure Intensified (male) labor exodus, also to WOI (ship sank; little compensation for widows as military pension) 1930-32: 'Lerole' dust and starvation	Increasing own irrigated agriculture food and some export crops from rivers and with farm dams Ex. Loskop, Rustenburg, Highveld, Steelpoort, Blyde-Tzaneen, Ohrigstadt, Hoedspruit	Further prospecting around Phalaborwa State companies and foreign interest Coal ESKOM; 1925-34: ISCOR, small industries coal and metal steel factory Middelburg Minerals: Phosphate Development Corporation Phoscor Rustenburg, Marble Hall, Steelpoort, Mafefe Transvaal Or Company SASOL 1925 (oil production already	Continued development of small white rural and mining towns (textiles, leather?)	Extension to Kruger National Park	

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SACP, PAC.	Water			in 60s Secunda 60s 70s partly in		
1918: influenza epidemic	private development			Olifants)		
Some economic progress: start	Department of Irrigation			Water provision/waste – who pays?		
manufacturing sector; SA Spoornet	start of state-initiated development of					
1929-1931 Great Depression	dams and schemes			Manufacturing?		
1928-December 1931: Droughts				8		
White agriculture worst affected; high	1912 national Irrigation Act			Own institutions and dam committees		
white unemployment	1) 12 national irrigation rice			own institutions and dain committees		
winte unemployment						
1931 – 1974: The 'Long Economic						Private nature reserves, black
Boom' for Whites	Water in white areas:	Increasing population, land and water	Accelerated infrastructure	Coal: main energy provider in	Urban development, municipilaty	communities' displacement
Boom for wintes	Well-funded investments in	pressure;	development: e.g. Loskop Dam	country; up to 80% of land.	Interbasin transfers to Polokwane	communities displacement
Abandonment of gold standard and	infrastructure, irrigated agriculture	pressure,	poor white farmers main beneficiaries	E.g. 1975: Kleinfontein Interbasin	interbasin transfers to 1 olokwane	Wetlands?
positive economic impacts of World	1934: Water Act	Water: Tshepo's rolling rivers for 3-6	public dam and scheme development	transfer from Komati		wettands:
			public dani and scheme development	transfer from Komati		DWAE forestry plantations 17 000 ha
War II: gold-based "long boom" up to	by 1950s expansion to other sectors:	months and pools with hippos, that	D-44	M:		DWAF forestry plantations 17.000 ha.
1974.	1956 Water law Act no.54 (IBs,	disappeared	Pattern of allocation of many small	Minerals: expansion, also in		In Blyde Steelpoort.
Data to the second of	Government Water Control Areas,	T 1 1	plots and gradual land concentration	homelands, asbestos, etc.		
Ethnic socialism: state-steered	including urban/industrial pollution	Land: plot sizes by about half landless		- 40== D		
capitalism for whites, till 1994.	issues, etc)	half of black population in homelands	Food processing; packaging;	E.g. 1975: Blyde dam (hydropower		
Public investments in:	1970 Commission of Inquiry into	by 1990s; half landless, small plot		not exploited), pipe line by mines)		
- white poor's wellbeing and national	Water Matters.	sizes	Cotton manufacturing?			
food security, through dams and		land eviction after dam development,				
irrigation scheme development,	Transboundary: 1966 Helsinki rules	e.g. Moutse	Black farm laborers			
market protection etc.	for 'international' water governance					
	within and outside the RSA	Scattered white irrigators e.g.				
- Mining corporations,	1964 Limpopo commission SA	Mashabela, Boschkloof, Arabie: farms	1950s Fisheries: trout Blyde and			
- coal, ESKOM, SASOL	Portugal	later bought by Trust leaving	Steelpoort			
		homelands. Irrigation: Control of	Pilgrimsrest, Lydenburgh (also in			
Economy gradually required more	Land in white areas: continued	Irrigation Schemes in Bantu Areas	Sand/Inkomati)			
skilled labor, but apartheid system did	control, e.g. white war veterans	(Proclamation R5 of 1963)?				
not allow.	knowing that carrying capacity was					
	too low for increasing population.	WOII War veterans given bicycles and				
Apartheid 1948	Intensified forced removals since	coats;				
Growing influence of Afrikaner over	1913, from black spots from 1960s	,				
British, politically and increasingly	onwards; with 3.5 million surplus	Betterment				
economically; election Apartheid	people nation-wide.	To avoid food imports				
government in 1948. Separate	1960 Group Areas Act. Territorial	Forced resettlement and villagization				
development.	Authorities Act	Limits on land cultivation				
Indians and coloreds Curtailing rights.	114010110101110011100	Cattle curtailing				
India: first in 1948 to impose	Black areas/Homelands					
international sanctions	Land tenure:	Mid1970s large-scale agricultural				
Blacks: denial all political rights of	1969: PTOs under Bantu Areas Land	projects with newly createad parastatal				
blacks unless they were economically	Regulations by Bantu Commissioner.	organizations and private investors;				
useful, Stripped of South African	On land acquired by the Native Trust	benefits for small elite allied to				
citizenship	efforts to establish black commercial	homeland governments. e.g. Flag				
Creation black homelands , based on	farmers.	Bashielo scheme, Zebediela MAP				
artificial ethnicity, 8 later 10.	Talliolo.	Dasinero serienie, Zeoculcia WiAi				
Aims: reproduction of the labor force;	Betterment schemes					
reduced mobility for mines and farms	Huge land pressure, exodus male					
with Pass laws, implemented by chiefs	labor, soil erosion					
Under Department of Bantu Affairs	Native Trust also charged with the					
1951: Bantu authorities Act	economic development of the					
	overcrowded and poverty-stricken					
1955: Bantu education 1959: Promotion of Bantu Self-						
	reserves to prevent economic and ecological crisis: betterment.					
Government Act, strengthen power of	ecological crisis: betterment.					
government-appointed chiefs. Bantu	1022 Nativa Faanamia Ci					
administration political co-option	1932 Native Economic Commission:					
chiefs; Pedi contest 1958	grazing rights have to go					
1972: Lebowa&Gazankulu	1956Tomlinson Commission UP					
1061 67 1 1: 71 72 7	(Houghton summary)					
1961-67 drought; 71-72 floods	1983 National Development Plan					
	Lebowa UP					

Economic recession and political			Continuation irrigated farming	Supportive?		
turmoil 1974 – 1994 Decline economic growth; much higher inflation; decline public investments in infrastructure drought 1981-1984 Global economic recession; lack of skilled labor needed for modern economy, growing resistance, Sharpeville, Soweto, UDF, 1976-84: effective repression; 1975: Angola; 84-86: political turmoil; From grand apartheid to petty	Issues: payment of urban water supply (like rents etc.); rates and taxes in Vaal triangle Decline in investments in infrastructure: white papers become more elaborate, include inflations, environmental concerns Preparation new water law, e.g. 1986 DWA book	Role urban blacks UDF, repression witch burnings in Sekhukhune	Continuation irrigated farming Onverwacht entirely colored farming community from Pretoria	Supportive? New strategic reserves to protect power stations?		Blyde Unesco World heritage site
apartheid to political reform 1986-91: state of emergency, de Klerk international pressure; End Cold War communist threat had gone; de Klerk pragmatic						
negotiated transition to democracy; agreements on civil service, property rights from 1970-85 double population from 7 to 14 million people with less than 10% increase in land . Average 1 ha per household of 6; half landless cholera Lebowa 1980 MAPS poverty, density, gender, as						
Post 1994: Democracy and persistence of dual Economy 1994: democratic election composition civil service, new local government-role chiefs RDP, GEAR, ISRDS Agricultural-irrigation liberalization policies, also for homelands Aids Urbanization/rural towns: booming especially after 1990 Unemployment Growing Income inequities; only small black minority 1991-1995: droughts 1996: floods 2000 floods devastation; cholera	Land reform: three fold; Restitution since 1913; redistribution by open market; tenure reform Water: Water Services Act, NWA: commitment and political will; Pollution control: ecological reserve Heavy metals not by DWAF. KPN monitors.	land claims: Masha, Moganyaka-Leeuwfontein, Boschkloof Cutting subsidies: collapse irrigation schemes e.g. Flag Bashielo, white farmers move in Water: rural domestic water supply; Free basic water	Slight Expansion, e.g. Hoedspruit and Blyde area (failing black empowerment), Loskop, Continued farm labor evictions	Accelerated expansion: especially platinum but also related minerals; Steelpoort deposit from top Steelpoort to Polokwane; water limiting factor scoping studies and certification ongoing Flag Bashielo dam elevation, and lease Rooipoort Dam SASOL line in Mozambique Lease; buying farm land with water rights Stronger water capture, e.g. groundwater Pollution goes on.	Inter basin transfers? Polokwane; Rooipoort Olifants Sand transfer scheme feasibility study	Tourism biggest growth; even more than mining 8 tourists create one full-time job Kruger to Canyon Transboundary game reserve RDP Working for Water alien species. Ecological Reserve Periods of no flow, impacts on park Boreholes for animals, too competitive; go back to rivers. KPN monitors heavy metals.
Key issues	Implementation of policies and legal frameworks and effectively redressing 'existing lawful use', including small- scale productive uses and poor people's water rights protection ETC	Empowerment, integrated agricultural development; integration into Lepelle CMA and transition WUAs ETC Transboundary management	Compulsory Licensing; water demand management, crop choice, pollution, sharing benefits eg transformation IBs ETC Transboundary management	Compulsory Licensing; Water demand management, pollution, sharing benefits Transboundary management	Township development; peri-urban agriculture	Compensation displacement Own water resources development Sharing benefits Transboundary management; Massingir dam