

**MANAGEMENT OF TRANSBOUNDARY WATER RESOURCES**  
**A Short Course for the SADC Region**  
**Harare, Zimbabwe**  
**26-30 July 1999**

Topic	Presenter	Time	Duration
<b>THEME: Poverty, Development And Natural Resources</b> <b>PERIOD: Monday afternoon, 26 July 1999</b>			
Poverty and development <ul style="list-style-type: none"> <li>• The nature of poverty</li> <li>• Access to/dependence on natural resources</li> </ul>	Bob	14h00 – 14h30	½ hour
Common sense economics <ul style="list-style-type: none"> <li>• What is wealth</li> <li>• Requirements for development &amp; economic growth</li> <li>• Role of natural resources in development</li> <li>• The value of natural resources</li> <li>• The economics of natural resources in development</li> </ul>	Rashid Hassan	14h30 – 15h00	½ hour
<b>TEA BREAK</b>		15h00 – 15h30	½ hour
<b>Discussion</b>		15h30 – 16h00	½ hour
Water as an input to economic development <ul style="list-style-type: none"> <li>• The role of water in social and economic development</li> <li>• The value of water as an input to production</li> <li>• Financing water resources development</li> <li>• Recovering the costs of water development</li> <li>• The impact of water in different sectors of the economy</li> </ul>	Rashid Hassan	16h00 – 16h30	20 min
<b>Discussion</b>		16h30 – 16h40	10 min
The environment as the resource base <ul style="list-style-type: none"> <li>• The environment as the source of water</li> <li>• The inter-relationship between the environment and water</li> <li>• The role of aquatic ecosystems in water resources management</li> </ul>	Jenny Day	16h40 – 17h00	20 min

<b>THEME: International Water Resources Management</b>			
<b>PERIOD: Tuesday, 27 July 1999</b>			
Course orientation & introduction to day	Bob	08h30 – 08h40	10 min
Water resources of Southern Africa <ul style="list-style-type: none"> <li>• An overview of the climate and hydrology of the region</li> <li>• A description of the water resources of the region</li> <li>• A review of international water courses in Southern Africa</li> </ul>	Len	08h40 – 08h55	15 min
<b>Discussion</b>		08h55 – 09h05	10 min
Demand and supply issues <ul style="list-style-type: none"> <li>• An overview of demand for water in the region</li> <li>• Factors affecting the growth of demand</li> <li>• Defining water scarcity</li> <li>• Water demand management</li> <li>• Coping with scarcity in international river basins</li> </ul>	Len	09h05 – 09h35	30 min
Jordan River – Introduction, demand and supply	Aaron	09h35 – 10h00	25 min
<b>TEA BREAK</b>		10h00 – 10h30	30 min
<b>Discussion</b>		10h30 – 11h00	30 min
Environmental planning and management <ul style="list-style-type: none"> <li>• The impact of increasing demand and scarcity on water resources</li> <li>• The impact of infrastructure development on the resource</li> <li>• Predicting the impact of development</li> <li>• Watershed management</li> <li>• Planning for minimum impact and ensuring the security of the resource</li> <li>• Ongoing management of the resource</li> <li>• Determining indicators, information management and ongoing impact monitoring</li> <li>• Environmental planning and management of international water resources</li> </ul>	Jenny Day	11h00 – 12h00	1 hour
		12h00 – 12h30	30 min

<ul style="list-style-type: none"> <li>• Multi-sectoral co-ordination – agriculture, power generation, domestic &amp; municipal, industry, conservation, tourism, leisure</li> <li>• Managing in times of stress – droughts and floods</li> <li>• Information management</li> <li>• Financing integrated basin management</li> <li>• Institutional arrangements and options</li> <li>• Legislative and regulatory requirements</li> <li>• The implications of international river basins</li> </ul>			
TEA		15h00 – 15h30	30 min
Zambezi – basin management	SADC SARDC	15h30 – 15h45	15 min
<b>Discussion</b>		15h45 – 16h05	20 min
The politics of water: sovereignty and security (Jordan River)	Aaron	16h05 – 16h45	30 min
<b>Discussion</b>		16h45 – 17h00	15 min
Closure			

<b>THEME: Legal and Institutional Instruments for International Water Management</b>			
<b>PERIOD: Wednesday, 28 July 1999</b>			
International legal instruments <ul style="list-style-type: none"> <li>• UN Convention (global) – history, content, key issues, international reactions</li> <li>• SADC Protocol (regional) – history, content, amendment</li> <li>• Basin agreements</li> <li>• Bi-lateral and multi-lateral examples</li> </ul>	Mapula Makara	08h30 – 09h10	40 min
<b>Discussion</b>		09h10 - 09h30	20 min
Lesotho Highlands example	Bob	09h30 - 09h45	15 min
Mekong River example	Len	09h45 - 10h00	15 min
<b>TEA BREAK</b>		10h00 – 10h30	30 min
The processes of reaching agreement <ul style="list-style-type: none"> <li>• Establishing national interests and water demands</li> <li>• Water utilisation and national economic strategies</li> <li>• Determining mutual interests</li> <li>• Negotiations and looking for win-win solutions</li> <li>• Ratification and adoption processes</li> <li>• .....</li> </ul>	Aaron	10h30 – 11h00	30 min
Jordan River processes	Aaron	11h00 – 11h30	30 min
Nile Basin Initiative	Len	11h30 – 12h00	30 min
<b>Discussion</b>		12h00 – 12h30	30 min
<b>LUNCH</b>		12h30 – 14h00	
Legal instruments and options <ul style="list-style-type: none"> <li>• Essential components of agreements</li> <li>• Range of international agreements – from treaties to diplomatic notes</li> <li>• Drafting of legal instruments</li> </ul>	Mapula Makara	14h00 – 14h30	30 min

<ul style="list-style-type: none"> <li>• Options - River basin commissions, joint technical committees, etc</li> <li>• Operation and management</li> <li>• Project implementation processes</li> <li>• Information management</li> <li>• Financing</li> <li>• International support</li> <li>• Dispute resolution mechanisms</li> <li>• Matrix of legal instruments &amp; institutional options</li> </ul>			
<b>Discussion</b>		16h00 – 16h15	15 min
Lesotho highlands example	Bob	16h15 – 16h45	30 min
Briefing on practicum exercise	Aaron / Len	16h45 – 16h55	10 min
Closure		17h00	

<b>THEME: Implementation and Application</b> <b>PERIOD: Thursday, 29 July 1999</b>			
Overview of course, summary and recap	Bob	16h45 – 16h55	15 min
Water resources management practicum – Exercise 1 <ul style="list-style-type: none"> <li>• Introduce exercise</li> <li>• Prepare national water resources management strategy</li> </ul>	Aaron / Len		1 ¼ hour
TEA BREAK		10h00 – 10h30	30 min
Water resources management practicum – Exercise 2 <ul style="list-style-type: none"> <li>• Introduce exercise</li> <li>• Present national management strategies</li> <li>• Review basin implications</li> </ul>	Aaron/ Len	10h30 – 11h30	1 hour
Review process	Aaron, Bob & Len	11h30 – 11h45	20 min
Negotiation skills	Aaron	11h45 – 12h30	40 min
LUNCH		12h30 – 14h00	
IUCN/GWP visit		14h00 – 15h30	1 ½ hours
TEA		15h30 – 16h00	30 min
Water resources management practicum – Exercise 3 <ul style="list-style-type: none"> <li>• Introduce exercise</li> <li>• Prepare proposals for negotiations on compromise / joint management</li> </ul>	Aaron / Len	16h00 – 17h00	1 hour
Closure		17h00	

**THEME: Implementation and Application continued**  
**PERIOD: Friday, 30 July 1999**

Water resources management practicum – Exercise 4	Aaron / Len	08h30 – 09h30	1 ½ hour
<ul style="list-style-type: none"> <li>• Introduce exercise</li> <li>• Present suggested options</li> <li>• Negotiate utilisation, key elements of a protocol, basic institutional arrangements</li> </ul>			
TEA BREAK		10h00 – 10h30	30 min
Review process & discussion		10h30 – 11h15	45 min
Presenters' wrap up of course	Bob, Aaron & Len	11h15 – 11h45	30 min
Course evaluation		11h45 – 12h00	15 min
Closing remarks		12h00 – 12h30	30 min
Closure		12h30	