INTRODUCING THE BCLME PROGRAMME TO THE WIDER AUDIENCE WITHIN THE COASTAL COMMUNITIES



FINAL REPORT (BCLME PROJECT LMR/COM/03/02)

Prepared by EcoAfrica Environmental Consultants



October 2004

INTRODUCING THE BCLME PROGRAMME TO THE WIDER AUDIENCE WITHIN THE COASTAL COMMUNITIES

FINAL REPORT

SECTION 1: INTRODUCTION
SECTION 2: PROPOSED ACTIVITIES AND EXPECTED OUTPUTS
SECTION 3: OUTPUTS ACHIEVED 4
SECTION 4: FINANCIAL REPORT
ADDENDUM I: DLIST STATISTICS AND PORTAL CONTENT
ADDENDUM II: BCLME BURSARY HOLDERS FOR DLIST COURSE
ADDENDUM III: MEMORANDUM OF UNDERSTANDING WITH PENINSULA TECHNIKON14
ADDENDUM IV: PAPER PRESENTED AT THE 6 TH WATER INFORMATION SUMMIT 19
ADDENDUM V: ARTICLE ABOUT DLIST ON BCLME NEWSLETTER
ADDENDUM VI: ARTICLE ABOUT DLIST ON SANCOR NEWSLETTER 40

SECTION 1: INTRODUCTION

The Distance Learning and Information Sharing Tool (DLIST on <u>www.dlist.org</u>) was established as a pilot project with Global Environment Facility (GEF) funds to link stakeholders in the coastal areas that flank the Benguela Current Large Marine Ecosystem (BCLME) and provide them with a common pool of knowledge and a space for open discussion. DLIST was successfully implemented in the coastal areas of South Africa and Namibia and has proven to be a useful networking platform and source of information on the BCLME's resources, people and activities. When the initial funding ceased before the World Summit on Sustainable Development (WSSD) in 2002, the BCLME Programme decided to step in to provide bridging funding to strengthen DLIST contact on the ground and make sure DLIST continued playing its role until further dedicated funding was available. New funding is now on the horizon, with the GEF-funded Medium Size Project (MSP) expected to start in April 2005. This report is the Final Report that describes, in a summarised format, the activities undertaken during the BCLME Programme grant as well as the outcomes achieved.

SECTION 2: PROPOSED ACTIVITIES AND EXPECTED OUTPUTS

In the BCLME Programme grant a set of activities were proposed to support DLIST by bringing it closer to the ground and using it as a platform to disseminate and make available information about the BCLME Programme and the coastal areas that the programme targets. The following activities and associated outputs were proposed:

Ac	tivities	Outputs
1)	Register potential users as recommended by the programme	Registration of BCLME stakeholders in DLIST
2)	Facilitate a web based discussion forum in which many communities, tiers of government and other role players participate on a range of topics relevant to management in coastal areas	Up and running discussion forum for stakeholders
3)	Manage a help line facility whereby community- based and other groups or entities can seek help in a range of environmental and governance issues and are then connected to relevant parties that can assist them	Functional, user-friendly help- line facility
4)	Produce a set of resources including a slide and map collection of coastal processes and biological diversity that will be available to DLIST registered users	Comprehensive package of resource material (eg slides, maps) on-line for registered users
5)	Provide on-line, broad-based library that contains extensive resources relevant to coastal areas	Accessible on-line library

Table 1: Activities proposed in the Terms of Reference (ToR) with listed outcomes

Activities	Outputs	
6) Open BCLME Programme kiosk on DLIST website	BCLME DLIST Kiosk on DLIST	
 Provide distance learning in the form of a fully accredited B-Tech level course that has six month duration and is entitled "Environmental Engineering - An introductions to sustainable development in coastal areas" 	Five students completed course in environmental engineering - an introduction to sustainable development in coastal areas	

An eighth outcome, as requested by the BCLME Programme CTA in an e-mail sent to Dr Odendaal on January 30 2003, was to summarise the "lessons learned" gathered through DLIST.

SECTION 3: OUTPUTS ACHIEVED

Each expected outcome addressed in Table 1 above is briefly discussed below:

- Over the last four years the DLIST pilot has shown great promise to address the problems of poor information access and lack of learning opportunities related to the BCLME. In an area plagued by poor information DLIST has bridged barriers between the classic groupings in society: tiers of government, communities, private sector, and other interest groups. Interest in DLIST is still rising in terms of registered users and visitors to the website. The number of DLIST registered users has increased exponentially from 74 in August 2002, just after this grant started, to 308 in October 2004. More people keep signing up every day, with growing numbers of users from Angola and also from programmes such as the Succulent Karoo Ecosystem Plan (SKEP) and recently the Namib Coast Biodiversity Conservation and Management (NACOMA) Project. Addendum I presents some relevant DLIST statistics.
- 2. The discussion forums are the most popular DLIST function and have not only grown in number of discussion threads and messages posted since the BCLME Programme grant started, but also expanded their reach to the different tiers of society that use DLIST. In late 2002, there were 15 discussion threads and a total of 114 messages posted, with 22 postings for the most popular discussion thread ("World Summit for Sustainable Development"). Some of these discussion threads have been initiated by DLIST users that received bursaries from the BCLME Programme. Community stakeholders were identified and provided with bursaries and assisted in initiating and participating in DLIST discussions, including from Multi-Purpose Resource Centres (MPRCs) and individuals in Namibia and Angola. Visits were conducted to coastal communities in the three countries and stakeholders made aware of DLIST and encouraged to register and

participate in discussions online. Currently there are 50 discussion threads on DLIST, with topics ranging from environmental education to community-based tourism and mariculture, transfrontier parks, wetlands, coastal management policy, world heritage sites and poverty alleviation. The number of postings has increased exponentially to 608 postings, with "Mining Minerals and Sustainable Development" alone having 32 postings. Addendum I shows a detailed list of the discussion threads that currently exist on DLIST.

- 3. While the Message Board of DLIST remains very informative, the messages on the discussion forums have progressively become more opinionated. For a number of DLIST users the discussions have provided them with an opportunity to air their views, have their voice heard and seek advice. The DLIST help line provided administrative and technical assistance, made it possible for people to participate in discussions anonymously, facilitated access to documents and put stakeholders in touch with each other. One example is the most popular discussion thread, "Mining Minerals and Sustainable Development", where community members, MPRCs and other players discussed openly about mining decommissioning in the coastal areas of South Africa. This open discussion resulted in the involvement of the School for Mining, the Government Department for Minerals and, through EcoAfrica as mediators, De Beers, and culminated with EcoAfrica soliciting an expert review of the closure report of Trans Hex. Management of protected areas was another topic of discussion that prompted the involvement of legal people who provided advice to DLIST users. In acknowledging the potential of DLIST to facilitate technical support to communities and other players in the coastal areas, the started up DLIST 911 help function will be further investigated and will be included in the future GEF grant for DLIST so that this support function that DLIST provides can be streamlined and made accessible to the growing network of DLIST users in South Africa, Namibia and Angola.
- 4. The EcoAfrica/Francois Odendaal Productions (FOP) collection of slides of the BCLME coast, its people and activities is growing and, during this grant, photographs of Angola were taken during visits to coastal communities. Some of these slides and maps have in many occasions been made available to DLIST users for use in brochures, posters, reports, presentations and advertisements. Community businesses in South Africa, communities at the World Parks Congress, and the Institute for Development of Artisanal Fisheries (IPA) in Angola, for example, have had access to slides through DLIST. The provision of slides and maps to DLIST registered users has been and continues to be done upon request, as further funding is required to make the whole collection available on the DLIST portal. An investigation has been already carried out, based on input from IT and design experts, to determine how the future DLIST Photo Library can work in the future when the new GEF grant is available.

- 5. The DLIST library is growing into one of the most complete set of documents pertaining to the BCLME coastal areas, and its growth since the start of this grant is estimated at 40%. The library has continuously been enhanced with information from DLIST partners such as the BCLME Programme. Other programmes implemented in the target area have also started using DLIST to post relevant documents, one example being the NACOMA Project that had its Preparation Workshop Proceedings recently posted on the Message Board. Interns at EcoAfrica have worked on gathering and scanning documents to add to the DLIST Library, with a view to building a comprehensive electronic library in the BCLME that can be replicated in the Cape University of Technology (CPUT)¹ in South Africa, University of Namibia (UNAM) and University Agostinho Neto (UAN) in Angola to ensure decentralization of knowledge. This replication will happen largely in the electronic form so that requests for PDF files of documents can be easily complied with, and discussions with the above mentioned institutions have already started.
- 6. Information about the BCLME Programme has been regularly disseminated on DLIST. A kiosk was opened for the Programme in July 2002 (see Addendum I), where relevant information has been posted such as the Project Document and the Strategic Action Programme. In addition, information about events, tenders, bursaries and achievements of the BCLME Programme has been posted on the Message Board, and discussions around the programme have been held in a dedicated discussion thread. The BCLME Programme and DLIST have clear synergies in terms of their target areas, donor and objectives and have increasingly been using these synergies to further advance the sustainable and equitable management of the BCLME coast. Through the use of DLIST discussion forums, message board, library and the dedicated kiosk, the BCLME Programme has found a platform that can assist in translating its scientific results and reaching the wider audience in the coastal areas who is ultimately the target of the programme's activities. One example that illustrates the synergy between the two programmes is the recent DLIST Discussion Group that was held in Luanda, Angola in September 2004 as part of the preparation phase for the forthcoming GEF grant. Following on the support provided by the BCLME Activity Centre in Luanda to a Presentation about DLIST at the University Agostinho Neto in 2003, the BCLME Activity Centre was represented in the 2004 workshop and used the event to distribute the latest BCLME Newsletter.
- 7. The distance learning component of DLIST is established as a fully accredited course on *Environmental Engineering Sustainable Development in Coastal Areas* at Peninsula Technikon in Cape Town. Already people such as committee members of the Richtersveld Community Property Association (CPA), regional planners, MPRC managers and community leaders have participated in this

¹ Peninsula Technikon and Cape Technikon are being merged to form the Cape University of Technology (CAPUT).

course and many more have showed interest in participating in the future. In 2004 a record number of 55 students enrolled in the DLIST course. Through this grant, the BCLME Programme sponsored a number of students (see Addendum II). In the forthcoming GEF grant for DLIST, the course will be improved and expanded into Namibia and Angola, and possibilities are also being investigated to infuse coastal issues into other courses such as Foundation Courses at CPUT and, in a later stage, an open elective course. A Memorandum of Understanding (MoU) was signed in late 2002 between EcoAfrica and Peninsula Technikon regarding the application of DLIST to the Environmental Engineering course (Addendum III), paving the way for further MoUs with other academic institutions along the BCLME for course expansion, as well as enhanced cooperation with research institutions and the BCLME Activity Centres.

8. DLIST provides a platform for networking and exchange of "lessons learned" between different parties, projects and programmes at all levels. As such, DLIST represents a common pool of knowledge and a growing database of "lessons learned" accessible to all parties that can apply them on the ground. These "lessons learned" have in some occasions been put into a summary or analysis format, an exercise that helps continuously assessing DLIST and improving it. A paper entitled "Can ICT effectively bridge the information and knowledge gap across geographical and social boundaries" was written by Francois Odendaal and Roger Abels and presented at the 6th Water Information Summit in Delft, The Netherlands, in September 2003 (see Addendum IV). This paper will now be rewritten to incorporate the latest DLIST statistics and insights. Furthermore, articles about DLIST have been published in the BCLME Newsletter (Addendum V) and the South African Network for Coastal and Oceanic Research (SANCOR) Newsletter (Addendum VI and available on

<u>http://www.botany.uwc.ac.za/sancor/</u>), as well as short project descriptions in the Development Gateway portal (<u>www.developmentgateway.org</u>) and the EIS Africa Newsletter (<u>http://www.eis-africa.org/</u>).

SECTION 4: FINANCIAL REPORT

Project Number: BCLME Project LMR/COM/03/02

Project Title: Introducing the BCLME Programme to the Wider Audience within the Coastal Communities

Total Amount of Funds under this Agreement: US \$ 16,000

Date of Signature of the Agreement: 20 June 2003

General category of expenditures	July 2003 to 4 December 2003	December 2003 to October 2004	Totals
Manpower / labour	2,911	9,043	11,954
Travel			
Consumables		792	792
Equipment			
Others	1,739	1,403	3,142
Miscellaneous	39	73	112
Total	4,689	11,311	16,000

Table 2: Costs for the Period covering from 01 July 2003 to 30 June 2004 (in \$US)

Budget notes

Manpower / labour: Expert advise, Specialist input into planning, review, discussions, help line; Specialist IT technical assistance; DLIST dedicated coordinator at EcoAfrica; Facilitation in Angola; Outstanding advice; Administration fees (full details in EXCEL available from EcoAfrica).

Others: Bursaries for discussion forums to community stakeholders; Course Student fees; Training for Peninsula Technikon.

Miscellaneous: Bank charges; General expenses; Internet, telephone, fax.

Deviations: Travel was paid for from other grants, including the BCLME Programme grant "An Assessment of Means of Involving Coastal Communities in the BCLME Programme", as more time than anticipated were used in category 1 (Manpower). Consumables were usurped by EcoAfrica overheads, but a total of US \$792 was included in this grant's costs to cover library material, CDs to store photographs and stationary.



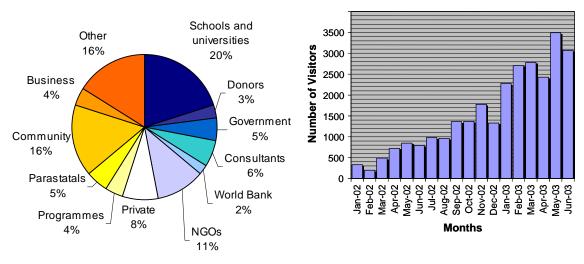


Figure 1: Origin of DLIST registered users

Figure 2: Number of visitors to DLIST

Торіс	Postings (Aug/2002)	Postings (Oct/2004)
Message Board	19	207
Community-based Tourism Development in the Richtersveld	5	20
Mariculture in Southern Africa	-	1
Bridging the Gap	-	9
Coastal and other wetlands	-	7
Mining Minerals and Sustainable Development	-	32
General	8	15
How well are the transfrontier parks working?	-	3
View from the ground	-	3
Preserving the Richtersveld's Heritage	-	6
Artisanal/small-scale mining	-	2
Information & Communication Technology (ICT) and Poverty Reduction	-	9
Legal Resources for Communities	-	7

Table 3: Discussion Threads and Postings
--

Торіс	Postings (Aug/2002)	Postings (Oct/2004)
Friends of Water - SARUNO	-	7
Land Ownership, Natural Resources and Mineral Rights	7	14
Orange River Mouth Development Process	-	9
Community-based tourismbut are they doing business?	10	22
Capacity building and skills enhancement for community participation in mining developments	-	18
What is discrimination?	-	9
What else can we do with our land?	-	1
What is sustainability	-	2
CoastCare - Northern Cape	-	3
Environmental concerns in post-war Angola	-	7
Benguela Current Large Marine Ecosystem	-	9
Environment important for government	-	1
This conference will give a chance to communities and local government to communicate to find out what they expect from each other	-	5
DLIST-DL Course Participants Training Workshop, May 10th and 11th, Hondeklipbaai	1	3
Coastal Management Policy	-	9
Small Business Developments in the Northern Cape Coastal Areas	-	5
Tourism in Angola	-	5
World Parks Congress	-	14
NGOs in developing countries (P)*	-	1
A World Heritage Site for the Richtersveld?	1	4
The Succulent Karoo Ecosystem Plan	5	11
Sheep, sun and smoking braais	-	4
An Outsiders Point of View	-	7
Presentation of the first steps for the nature trail in Soebatsfontein. What is your opinion? Do you have any comments?	-	1
Responses to the HIV/AIDS epidemic	2	6
Who gets the money?	-	12
Justice Making	_	1
International Donors and Development - Is it Worth it?	-	17

Торіс	Postings (Aug/2002)	Postings (Oct/2004)
Integrated Development Planning	2	3
Environmental Education in Schools	-	6
World Summit for Sustainable Development (WSSD)	22	34
Local media	-	4
Computer Literacy	2	3
International Governance for Sustainable Development	8	8
Poverty Alleviation lessons learned	10	10
Richtersveld - unfolding the Big Picture	12	12
Total number of postings	114	608

Name	Organisation Type	Created
Training and Support for Resource Management	Other	Feb-02-02
Environmental and development facilitators	Consulting firm	Feb-03-02
Integrated Coastal Management in the Erongo Region	Government Agency	Feb-04-02
Southern Gateway to Namibia	Government Agency	Feb-05-02
Richtersveld Local Municipality	Government Agency	Feb-06-02
Transformation through tourism	Coastal association	Feb-06-02
People and Parks	Coastal project/programme	Feb-06-02
Towards a Richtersveld World Heritage Site	Coastal project/programme	Feb-07-02
Hardap Region Beauty Beyond Comparison	Government Agency	Feb-25-02
Conservation International	Non-Governmental Organisation	Apr-08-02
Kunene Regional Council	Government Agency	Apr-17-02
Hondeklipbaai Multi-Purpose Resource Centre (MPRC)	Coastal project/programme	Apr-30-02
Sustainable development	Non-Governmental Organisation	Jun-06-02
Fair Trade in Tourism South Africa	Non-Governmental Organisation	Jun-19-02
Succulent Karoo Ecosystem Plan (SKEP)	Coastal project/programme	Jul-10-02
Benguela Current Large Marine Ecosystem Programme	Coastal project/programme	Jul-26-02
Community -Based Organisations	Other	Aug-08-02

Table 4: Kiosks open on DLIST (October 2004)

Name	Organisation Type	Created
Ebenhaeser MPRC	Coastal project/programme	Aug-08-02
Doringbaai MPRC	Coastal project/programme	Aug-08-02
The Walvis Bay Agenda 21 Experience	Government Agency	Aug-21-02
Richtersveld Community-Based Natural Resources Management (CBNRM) Programme	Non-Governmental Organisation	Nov-27-02
Environmental Engineering - sustainable development in coastal areas	University/Educational institution	Feb-11-03
Green Clippings	Non-Governmental Organisation	May-12-03
FRIENDS OF WATER - SARUNO	Multilateral Organisation	Jun-17-03
EcoAfrica Angolan office	Consulting firm	Aug-29-03
EcoAfrica Namibia	Consulting firm	Sep-12-03

ADDENDUM II: BCLME BURSARY HOLDERS FOR DLIST COURSE

Name	Organisation
Sheldon Matthys	Multi-Purpose Research Centre (MPRC), Hondeklipbaai
Priscilla Magerman	SANParks
Henley Strauss	Richtersveld Community-Based Natural Resources Management (CBNRM) Programme
Kinnear Landers	Alexkor Ltd environmental officer

Table 5: BCLME Programme Bursary Holders for DLIST Course

Note: a fifth person, Anton Meyer, started the course but dropped out.

ADDENDUM III: MEMORANDUM OF UNDERSTANDING WITH PENINSULA TECHNIKON

Memorandum of Understanding between EcoAfrica and Peninsula Technikon regarding the application of the DLIST_© information sharing platform to the Environmental Engineering course

- 1. EcoAfrica is an organisation comprised of experts that collectively pursue environmental sustainability and social change, often in partnership with like-minded institutions. EcoAfrica developed the web-based distance learning platform DLIST_© with the purpose of making available a powerful knowledge management tool that can play a significant role in promoting sustainable and equitable development in the so-called developing world. The DLIST_© platform and its current and new applications are continuously being developed. Development for the generic and current DLIST_© platform came from various sources. Norwegian Trust Funds, EcoAfrica, the World Bank and the Global Environment Facility (GEF) contributed about two hundred thousand US dollars in cash and in kind to the development of DLIST_© over a period of about three years.
- 2. The generic DLIST_© platform itself is not open source and EcoAfrica retains the intellectual property rights to the DLIST_© platform. However, EcoAfrica wishes to make the platform available to appropriate organisations and institutions on a partnership basis between EcoAfrica and such institutions to advance sustainable and equitable development. Such partnerships will usually be on a limited and non-profit basis to ensure that the mutual transfer of capacity does occur within set time frames. The application of the generic platform can be modified to accommodate highly divergent knowledge management needs. In each case the DLIST_© platform will be made available in such a way that partnership institutions will derive maximum benefit from the web-based

platform and can use it to add their own innovations and in some instance ameliorate existing courses without conflict of interest with other partnership institutions.

- 3. In South Africa the DLIST_© platform will be made available to Peninsula Technikon for the application in the current Environmental Engineering course that EcoAfrica developed with the Engineering Department seven years ago. The current DLIST_© distance learning course component will be modified to reflect and enhance the contents of the existing Environmental Engineering course so the latter can be offered as a fully-fledged distance learning course or be used as a web-based tool to assist day students taking the Environmental Engineering course at Peninsula Technikon. Thus the Environmental Engineering course will have a distance-learning as well as a web-assisted option for day students (see attached brochure describing the options). The difference between the two options is that the DL course entails minimal contact with part-time students who live and work far from the administrative centre while the web-assisted option is the enhanced Environmental Engineering course that relies on the web-based DLIST_© version as a resource.
- 4. The partnership between Peninsula Technikon and EcoAfrica will entail both organisations contributing to the best of their abilities to realise the full potential of the course titled "Environmental Engineering – Sustainable Development in Coastal Areas" by enhancing and updating course content on the current DLIST_© and by offering the course together over a transfer period during which all the necessary capacity will be mutually transferred between the institutions including the development of the necessary IT capabilities at Peninsula Technikon. The EcoAfrica DLIST_© Team and the Peninsula Technikon Engineering and IT Departments will agree on a schedule that will govern the implementation of such activities. In this

endeavour EcoAfrica hopes to be able to continue to rely on the partners in DLIST_© thus far, including the World Bank, the Global Environment Facility (GEF) and IW:Learn for their support and guidance.

- 5. The proposed transfer period will be three years during which the course will be offered three times both as a distance learning and web-assisted course at the Peninsula Technikon over a semester. During this period the reliance on EcoAfrica will progressively decrease so that the course can be offered fully by the Peninsula Technikon with no further assistance from EcoAfrica after three years. At that point this particular partnership will lapse unless both parties feel that there are continued advantages in prolonging the partnership or even in making it a permanent feature.
- 6. When contributing to the web-assisted option of the Environmental Engineering course, for instance giving lectures or leading field trips EcoAfrica staff will be remunerated normally like any other part-time lecturers and at the same rate. This follows the example of the current Environmental Engineering course in which EcoAfrica initially gave many lectures before its involvement was phased out almost entirely over a period of several years. Income from the distance learning option will be applied entirely to the development described in the paragraphs above, including paying for EcoAfrica's time and making travel funding available for EcoAfrica as well as Peninsula Technikon staff for course induction or field trips to assist remotely located students. Should any funding be left over from this source of income (the distance learning option) it will be recycled back to the students as the EcoAfrica Award of Excellence for the best student in the "Environmental Engineering – Sustainable development in Coastal Areas" course as has been the case over a number of years.

- 7. Peninsula Technikon and EcoAfrica must make sure that the "Environmental Engineering – Sustainable Development in Coastal Areas" course remains affordable to students or the overriding purpose of transformation and access of information and learning opportunities to previously disadvantaged students and underprivileged individuals will be defeated. At the same time the course needs to be self-sustainable. While the income from students' fees is sufficient to make the Environmental Engineering course self-sustainable it is anticipated that the income derived from the distance-learning version of the course will fall far short of the development and installation costs that will be incurred by EcoAfrica and the Peninsula Technikon over the next three years. Peninsula Technikon may consider making available some of its core funding for this purpose as distance learning has long been identified as a future direction for the institution's continued development. EcoAfrica on its part will continue its efforts to try and find development funding for delivery, installation and further innovation of the course. It is understood that both institutions will do their best to find the funding necessary to cover the costs of developing and installing the "Environmental Engineering – Sustainable Development in Coastal Areas" course at the Peninsula Technikon over the next three years.
- 8. Depending on how the partnership between Peninsula Technikon and EcoAfrica develops, there may be further possibilities for collaboration. For instance, the current Environmental Engineering Course may evolve totally away from the generic DLIST_© template so it can eventually be offered under its own home page titled "Environmental Engineering – Sustainable Development in Coastal Areas" and using its own unique url (for instance: www.enviro-engin.org). Such a unique url will remain linked to the "family" of DLIST_© innovations using the generic template for knowledge management applications that lie away from environmental

engineering as such. Such a link will ensure that the Environmental Engineering course participants will have access to an ever-widening resource base in the field of sustainable development and will help to break the traditional barriers between disciplines. It will also pave the way for further partnerships between EcoAfrica and Peninsula Technikon along the lines of reviving the Environmental Evaluation Unit or developing a virtual facility that is multi-disciplinary in its approach and in which many departments can participate at the same time. Moreover, the generic DLIST_© platform can also link institutions across the region, provided they ascribe to the same overall philosophies of environmental sustainability, equitable development and social change.

ADDENDUM IV: PAPER PRESENTED AT THE 6TH WATER INFORMATION SUMMIT

CAN ICT EFFECTIVELY BRIDGE THE INFORMATION AND KNOWLEDGE GAP ACROSS GEOGRAPHICAL AND SOCIAL BOUNDARIES?

FRANCOIS ODENDAAL AND RODGER ABELS²

Abstract

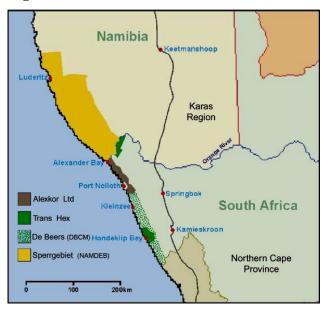
The coastal areas flanked by the Benguela Current Large Marine Ecosystem (BCLME) along the west side of Southern Africa are in a rapid state of transition. Changes in land ownership, political dispensation and administrative systems and entities, as well as dwindling diamond reserves are bound to heavily influence patterns of livelihood and resource utilisation. Grazing lands, living marine resources, biodiversity and water are particularly important resources along the semi-arid and arid western side of Southern Africa. Not only is there tremendous pressure on the trans-boundary water resources such as the Orange River that forms the boundary between Namibia and South Africa, but the rich Benguela Current also holds the promise of a better future for a region where debilitating poverty is endemic and worsening. Planning is key to a better and more secure life for the people of the region and the survival of its unique biological and cultural heritage. Access to information is therefore critical, both to inform mandatory integrated development planning processes currently underway, and to lead the impoverished communities to new possibilities of developing alternative livelihoods to the downscaling mining industry. Information sharing, or the lack there-of, has time and again been identified as the single major obstacle to sustainable development in the region. Thus a web-based Distance Learning and Information Sharing Tool (DLIST), accessible at www.dlist.org was developed with funding from the Global Environment Facility (GEF) and assistance from the World Bank and IW:Learn. After two years a number of tends have become apparent that point to the ability of DLIST to bridge the knowledge gap between the "knows" and the "know nots", who happen to be closely correlated to the "have's" and the "have nots". Results from the approach taken by DLIST ought to be useful to other initiatives that aim to take on the challenge of bridging the knowledge divide by creating a common "pool" of knowledge" for the purposes of integrated development planning that is equitable and sustainable.

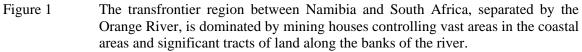
² EcoAfrica, 3 Bishop Road, Observatory 7925, South Africa (see: www.ecoafrica.co.za).

1 Introduction

The coastal areas flanked by the Benguela Current Large Marine Ecosystem (BCLME) along the west side of Southern Africa are in a rapid state of transition. Dramatic changes in the political landscape³ have led to a decentralized approach to governance in the region and the imperative to increase access to lucrative marine resources to the broader population as well as "open up" coastal areas that were previously off limits to local communities and broader society. Until now, access to over 90% of the coastline in the Northern Cape and Southern Namibia has been severely restricted because of diamond mining (Figure 1). Now land-based diamond deposits in the ancient coastal marine terraces are becoming depleted and the major mining houses have started to scale down their activities. Vast tracks of coastal areas will soon start to become available again for land uses other than mining. On the negative side, downscaling of the mining industry, by far the biggest employer in the region is having a pronounced effect on the social and economic profile of the region. The loss of a job can affect an entire family or extended family, and unemployment is rampant and threatening to spiral out of control.

Figure 1





³ South Africa, Namibia and Angola all suffered from long-lasting political conflict and suppression linked directly or indirectly to colonialism that spanned several centuries and culminated in the Apartheid era. New political dispensations in those countries heralded in an era that demand renewed access to coastal areas were resource distribution and access had been heavily influenced by discriminatory practises. Scarcely a decade ago colonialism ended in Namibia, followed by South Africa a few years later, bringing peace and relative stability to the region. With respect to stability Angola was the last to follow with the recent end to the armed conflict between government forces and UNITA rebels that lasted almost three centuries.

Fortunately there are increasing attempts to develop alternative livelihood options. Already activities in the region include livestock farming, agriculture, fishing and the harvesting of living marine resources, mariculture, tourism and conservation. All of them are taking place at levels far too low to counter the negative effects of mining downscaling, but they are likely to be stepped up in the coming post-mining era. To optimize the benefits that can come from the proper development of alternative resources, pro-active planning has become essential. Information lies at the heart of planning. Information sharing has been identified as the biggest obstacle standing in the way of collective planning⁴, and now needs to involve all key role players and civil society in general. The question arises whether ICT can meet the challenge of information sharing and knowledge management over a vast area that is marked by intense societal stratification and a culture of 'non-sharing of information'.

2 A Culture of 'Non-Sharing of Information'

For democracy to function well people have to be reasonably informed in terms of events and processes that can influence their lives. This requires a reasonable level of access to information and the sharing of relevant information between key players and with civil society. Like many other parts of the developing world, the transfrontier region between South Africa and Namibia falls far short of this mark. In Apartheid years information sharing was strongly influenced by the realities of a racially divided society where privilege, access and quality schooling largely belonged to the 'white' sector of society. The mining houses further divided society into masters and workers, the former being 'in the know' whereas the workers, having their origin in the local so-called 'coloured' communities and the 'black' migrant labour system, became thoroughly marginalized over a number of decades. Older people from the ranks of the community who worked on the mines recall how even learning to speak English was discouraged on the old State Alluvial Diggings that today is known as Alexkor Ltd⁵. Unfortunately, the culture of "non-sharing of information" has persisted to this day, well into the post-94 democratic elections that ushered in the "New South Africa". This is not surprising as information in the mining-dominated region still brings an advantage that can best be described as the "early bird that knows most, catches the worm". The "privatization of information" is a

⁴ From over 90 public and interest group meetings held throughout the area as part of the Integrated Development Planning (IDP) process conducted by the Richtersveld Transitional Council and the Richtersveld Municipality (see Richtersveld Transitional Council, 2000; Richtersveld Municipality, 2002), it has become abundantly clear that people know very little about their region, even large-scale initiatives that have the potential to drastically influence their lives, let alone emerging opportunities that they can take advantage of.

⁵ Alexkor Ltd is a large government-owned mining house that controls the coastal area from the mouth of the Orange River to South of Port Nolloth. It was established as the old 'State Alluvial Diggings' when diamonds were discovered in 1927 near Port Nolloth. Shortly afterwards the local Nama-speaking people were displaced from their ancestral grazing lands to create work for 'Poor Whites' stranded by the Great Depression. The region was declared off limits except those who worked on the mines.

phenomenon that remains difficult to combat as it occurs amongst people affiliated with the old regime as well as certain comrades that form part of the new order.

3 A Myriad of Plans – but whose plans are they really?

Information sharing, or the lack there-of continues to hamper planning. This is best understood by examining some of the many planning and development initiatives that are happening simultaneously in the transfrontier region. These planning initiatives often have their origins in different and sometimes geographically distant places, which complicates information sharing even further. These initiatives include, amongst others, a Transfrontier Park (TFP), a larger Transfrontier Conservation Area (TFCA)⁶, a Spatial Development Initiative (SDI)⁷, an Integrated Development Planning (IDP) process, sector plans, protected area management plans⁸, and Environmental Management Programme Reports (EMPRs) and other types of strategic plans for the mining houses⁹. All of these planning initiatives, amongst others in the region, claim to want to play an important role in bettering the lives of the people of the region. Yet, with the exception of the Transfrontier Park (TFP) and the Integrated Development Planning (IDP) process, the inhabitants of the region by and large have little or no knowledge of them beyond knowing that they exist, and then only in the case of a handful of people.

4 The Integrated Development Planning (ICP) Process

At this point it may be useful to briefly dwell on the significance of the Integrated Development Planning (IDP) process, or the "IDP" as it is popularly known. With the change of government in 1994, increasing emphasis was placed on creating development

⁶ "Transfrontier Conservation Area" means relatively large areas straddling frontiers between two or more countries and cover large-scale natural systems encompassing one or more protected area. See: *Draft Memorandum of Understanding on the Establishment of the Richtersveld/Ai-Ais Transfrontier Conservation Area* (DEA&T/Peace Parks Foundation, June 2001).

⁷ Spatial Development Initiatives (SDIs) are large-scale development planning and implementation initiatives with their origins in national government's Department of Trade and Industry and the Development Bank of South Africa. They aim to promote investment-led growth in underdeveloped regions of the country that have potential for economic development (see: www.africansdi.com).

⁸ Conservation planning is driven by different agencies, for instance the South African National Parks (SANParks), the DEA&T, the Northern Cape Nature Conservation Services (NCNCS) at provincial government level, NGOs such as Peace Parks Foundation (PPF) and Community-based Organizations (CBOs).

⁹ For the transfrontier region there exist mariculture and fishing sector plans, park management plans, a development plan for the Orange River Mouth Ramsar site, now being referred to as the Orange River Mouth Transfrontier Conservation Area (ORM TFCA), obligatory EMPRs (outlining decommissioning and rehabilitation plans) and strategic plans for the mining houses, but the public is generally unaware of these plans. Affected parties tend to have little or insight into them, often for no other reason that they were not involved to the extent that they are supposed to be, or simply because it may be very difficult to get hold of such plans (visit: <u>www.dlist.org</u>, and see discussion forums).

opportunities for the poor, and a renewed emphasis was placed on the rural areas, most of them being economically depressed and marked by highly skewed land ownership, often economically trying circumstances and few livelihood options for historically disadvantaged individuals who have been traditionally at the bottom of the food chain. Two recent reform processes aim to address this state of affairs. The first was the demarcation of South Africa into municipalities that no longer consist of single towns only but in fact are small regions containing one or more cities and towns as well as often vast tracts of rural areas, much of it economically depressed. The reason is that under the previous regime access to, and distribution of resources became unequally distributed and tended to be in the hands of few and ended up concentrated mostly in towns and cities. The new demarcation ensured that poor areas and wealthy nodes could be treated as single municipal planning units.

The second reform process was the installation of the local government system that came into being on December 5, 2000 with countrywide local government elections. Municipal areas are divided into wards that elect councilors to represent the inhabitants in local government. Local government under the Municipal Systems Act (2000) and the Municipal Structures Act (1998) has a strong role to play in bringing about equitable and sustainable development. The main tool in achieving integrated and sustainable development is the mandatory Integrated Development Planning (IDP) process. Each local government had to embark on a continuing and participatory planning process in which all role players have the opportunity to collectively work out a Vision and development priorities for the municipal area.

The power of the IDP to incorporate the aspirations of people and reconcile them with the natural advantages and other realities of the region has become well appreciated. Isaacs and Mohamed (2000) recently stated: "The participatory, community-driven integrated development planning (IDP) process that has just been initiated in the Richtersveld through a series of community meetings and workshops provides an ideal opportunity to set local development objectives, identify priority areas and develop an integrated vision for the Richtersveld. It is therefore critical that conservation plans be integrated into this process. This could be a unique opportunity to ensure that the national park, that remains an important asset for the Richtersveld, can be linked to proposed community conservation initiatives, such as a community 'conservancy' that will link the park to a provincial conservation area. Limited opportunities for the expansion of stock farming and the de-commissioning of the mines in the future point to the need to investigate other land use options".

The IDP is not only an appropriate tool for local and regional planning. It also provides the opportunity for national, provincial and local planning to be reconciled and harmonised with the ground. As the overseers of the planning process and eventually implementation itself, local government remains closely tied to the ground as the first tier of government that is in constant touch with the electorate. It is at this level where national policies and initiatives can be reconciled with the aspirations of the people. The Interim IDP for the Richtersveld communal area has already been used most successfully in the setting of priorities and the identification of projects and programmes. They include poverty alleviation projects funded through the DEA&T (EcoAfrica (ed.) 2001), a NORAD programme funded through the DEA&T and a Global Environment Facility (GEF) PDF Block A Award for Medium-Sized Project (MSP) proposed by local government.

The IDP process first started with the Richtersveld Transitional Council, before the communal lands under this council was amalgamated with other areas and town into a large Richtersveld Municipality in December 2000. The amalgamated Richtersveld Municipality was one of the first municipalities to hand in an IDP in 2001, and has now its second version completed in early 2003. What has become evident during this expanded IDP process is that information sharing mechanisms must be put in place in order to find information and keep it updated, organised and accessible. Such information should include all planning initiatives in the area that can inform the IDP so it can achieve its primary objectives of improved service delivery and an equitable and sustainable future for the region's inhabitants.

5 Obstacles to Participatory Planning

In spite of the laws promoting planning, integrated development planning in the transfrontier region has not been easy for various reasons:

- Participation in planning is a new experience for most people. Previously in South Africa, planning was imposed in a "top down" manner on the majority of people. Although recent policies and laws make integrated development planning by local government mandatory, certain difficulties are experienced in its implementation and lessons are still being learned (Baumgart and Turner, 2002). Although strongly rooted in the law, not all role players understand the significance and strengths associated with the Integrated Development Planning (IDP) process.
- Participatory planning is difficult to achieve when people are not properly informed. Reliable information remains difficult to track down. Information flow remains largely restricted to the educated and/or privileged tiers of society. Many people tend to 'privatise' information that they perceive as valuable currency. Access to information and its poor flow through society can therefore be considered a major constraint in development planning. Planning by the mining industry is often considered neither transparent nor inclusive of affected parties.
- Many different role players are involved in initiatives in the transfrontier area. Convergence in planning is hampered by the lack of a formal overarching integrated planning framework, and because the various initiatives tend to have their origins in geographically distant places and often far away from the area. The result is many planning initiatives that have poor communication with one another.

The question arises as to the role that knowledge management (KM) and information sharing can play in overcoming these obstacles to integrated development planning. Specifically, can KM improve the synchrony, synergy and harmonization of the different integrated conservation and development initiatives by facilitating information sharing and making relevant information accessible? And what role can ICT play in KM over such a geographically spread out area?

6 The Distance Learning Information Sharing Tool (DLIST)

Following a meeting of the Northern Cape Coastal Working Group in late 1998, the World Bank facilitated discussions with a range of regional stakeholders, in order to address the problem of information sharing. At a workshop held on February 5th 1999 that included representatives of FAMDA, Alexkor Ltd, local government, provincial government, communities, other stakeholders and Namibians from the transfrontier region, participants welcomed the possibility of an information sharing and knowledge management mechanism. Soon after, the development of the Distance Learning Information Sharing Tool (DLIST) for the region started in earnest.

DLIST is essentially a web-based platform whose organization and function can best be explained through a visit to the site <u>www.dlist.org</u>. DLIST have two main components: *distance learning* and *information sharing*. The former is organized as a course with modules that cover a range of topics¹⁰, including living marine resources, coastal management, integrated development planning, environmental assessment and governance. The *information sharing* part focuses on various means of gathering information, organizing it, and making it more accessible. It consists of a library, a Message Board, Discussions Forums and Kiosks established by a range of partners. These components are available to registered users¹¹ to post items and start discussion threads.

In order to facilitate information sharing and knowledge management, DLIST has the following broad objectives:

- To foster networking opportunities between coastal role players involved in sustainable development, in order to establish functional information and knowledge sharing 'communities of practice';
- To optimize planning and implementation of effective and appropriate integrated coastal zone management solutions for the region, through collaborative problem solving and planning;

¹⁰ Academics, planners, environmental practitioners and local experts contributed to the topics. A high premium was placed on local expertise. For instance the Mayor of the Richtersveld Municipality, Mr Dan Singh, contributed significantly to the section on governance.

¹¹ Anyone can become a registered user by following the instructions that start on the home page. Registered users are automatically alerted when items are posted on DLIST. Registered users include a wide spectrum of people and they contribute to information sharing by posting all sorts of information as well as sharing their opinions in the Discussion Forums.

- To develop an internet-mediated learning environment that assists in developing a strategic development plan for the region; and
- To create an ongoing and self-sustaining learning and information sharing through the posting of events, useful information and to promote open discussion between people.

The information sharing part of DLIST can thus be described as a "pool of knowledge" that is constantly growing. Information constantly flows into the pool from a range of sources, or "information communities" in KM language, that are linked to the "pool of knowledge" in a manner that they can also retrieve useful information on an as-needed basis. Every effort is also made to link "information communities" up with one another directly. The DLIST "pool of knowledge" can be presented as a circle, representing the "pool", with two-way arrows leading into it from "knowledge communities" or "informants". The flow of information should be a continuous process considering the dynamic nature of the region. Information content should be steered largely by the needs of the users. For more information on how the "pool of knowledge" functions in terms of highlighting "natural advantages" of the region and soliciting information from different parties and again making it available to all, please see Mabudafhasi (2001, 2002), or visit www.dlist.org.

7 How well is DLIST doing?

Evaluating the effect of DLIST on the region is not an easy task. There are two parts to the assessment, namely deductions from the available web statistics that are necessarily quantitative in nature and give measures of the "connectivity levels" of DLIST through time, and the second part will be qualitative and anecdotal rather than quantitative in nature. Finally such information can be used to speculate on the extent by which DLIST is influencing the region in terms of achieving more sustainable outcomes through better planning as the result of making knowledge available and promoting better access to, and sharing of information. For a more complete assessment of DLIST it will obviously be necessary to solicit opinion from the full set of DLIST contributors and participants in a systematic manner, as it is they who really form DLIST and contribute or draw from its common "pool of knowledge".

7.1 Web Statistics

Number of Hits

The first step in information sharing is to find the information. The first measure of this is the total number of hits that the site has enjoyed since its inception, namely 271, 911. These hits were made by a total of 143 375 different visitors. Such statistics are not especially useful other than to indicate that the site is being reached by a large number of people.

Number of Visitors

The number of visitors per month has been increasing from over 300 in January 2002 to more than 3500, more than ten times as many, in May 2003. The increase appears to be almost exponential and there is no sign of slowing down.

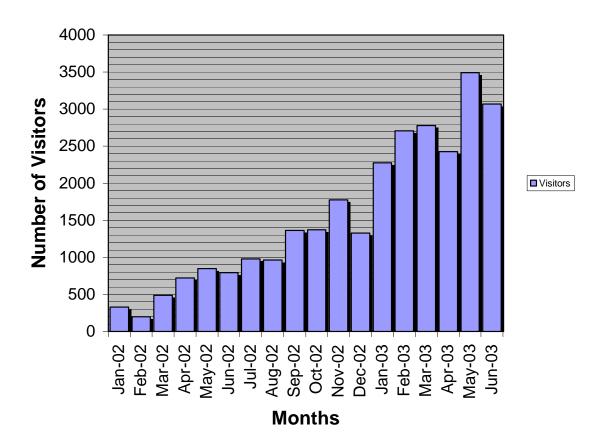


Figure 2

Figure 2 shows the number of visitors to the site from when DLIST went live in January 2003 to June 2003. The apparent decline in June is because the statistics were drawn on June 23.

Time Spent on the Site

Not surprisingly, given the increase in visitors over time, the actual time spent viewing DLIST by visitors has increased over time from 5000 minutes in January 2002 to at least 21 000 minutes (or 350 hours) in June 2003. The total number of minutes that DLIST was viewed since the site went live comes to 143 375 minutes. More interesting is that 25 930 visitor sessions had an average length of 22 minutes, meaning that a large number of people spend considerable time on the site.

Figure 3

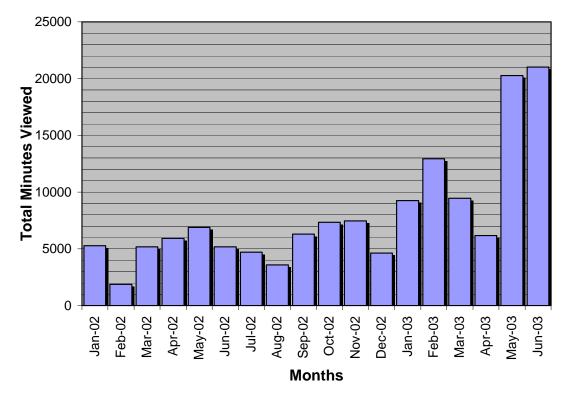


Figure 3 shows the total number of minutes that DLIST has been viewed every month from January 2003 to June 2003.

Regular Visitors and Popular Entry Points

Perhaps the most significant aspect of visitor statistics is that 332 visitors have visited the site more than ten times. This means there is a fairly large group of people that visit the site regularly. Bear in mind that this is a sparsely populated region and that the total number of planners and decision makers for the region, at least the South African and Namibian part, can scarcely be in the hundreds. Equally interesting are the statistics showing that the most popular entry point into the DLIST site is not the homepage as one would expect, but in fact the discussion threads. This means many visitors go directly to the discussion threads which can be interpreted both as a result of the automatic messages sent to registered users when a discussion is posted but also because people are clearly interested in the opinions of others.

The Users Profile

One problem that has often been identified when it comes to information sharing is that information moves in stratified layers or in sectors, which entrenches monopoly of information by privileged groups or classes. However, in the case of DLIST an examination of the discussion forum contributors and the registered users profile shows that people from all types of groups access and contribute to DLIST.

Figure 4

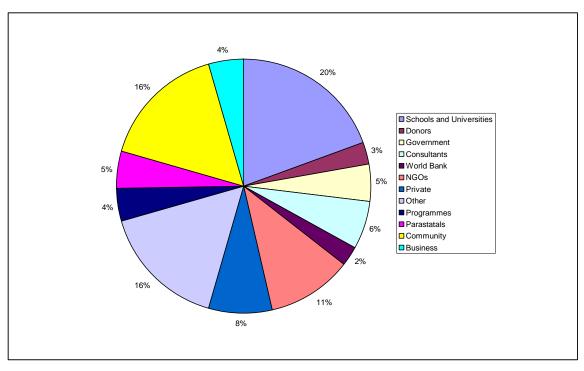


Figure 4 shows the proportions of DLIST registered users that fall into different groups of users. 16% of registered users could not be clearly placed in any of the above groups.

7.2 Qualitative and Anecdotal Measures

'Linking' Large-Scale Programmes

There are a number of large-scale programmes in the region. Unbelievably, they are often unaware of one another, or are only distantly aware of one another (meaning someone has heard of a programme but has no idea who is involved in it, or what the programme aims to accomplish). Furthermore, entities that can be considered key to planning, such a local and district or regional level governments were often totally unaware of such programmes. For instance, there are a number of programmes and projects funded in full, or partially by the GEF. They include the CEPF-funded SKEP programme, the NACOMA programme allocated to the ICZMC in Namibia, the RCBCP GEF-funded MSP project, the BCLME programme and BENEFIT. Apart from the GEF-funded programmes, there are also programmes such as BIOTA, the Richtersveld CBNRM Programme funded by Conservation International, GTZ/Transform, and the SCL programme funded by DFID through Marine and Coastal Management (MCM) and other DEA&T poverty relief programmes. DLIST may not have posted everything available on each programme but has covered substantial ground in making people aware of the different programmes and linking them up with one another. Several of them now use DLIST to advertise events, tenders and to make reports available.

'Linking' Role Players

By the time the first year-end DLIST report was published in August 2002, sixty government entities and agencies, donor programmes, NGOs, CBOs, Multi-Purpose Resource Centres (MPRCs), CB tourism route players such as the SNTRA, industry players, businesses, institutions and other organizations have interacted through DLIST in one form or another (by opening kiosks, posting discussion forums or signed up as registered users). That number would have more than doubled by now. There were 74 registered users and that number has more than tripled to 232 and more are signing up almost daily. Note that 'linking' is in italics because a mere 'link' through DLIST is obviously far from sufficient in terms of what is needed in the functional and active linking of role players, but it is a start. It is significant that the vast majority of local and regional government planners in the region are registered users on DLIST as they obviously are networking agents themselves by virtue of being planners.

Contributing to Individual Capacity

Institutions and programmes are fond of boasting about how they were responsible for building the capacity of people on the ground. Such assertions can be dangerous and unfounded and at best are difficult to measure so that such assertions are more often than not meant for the ears of the donors than anyone else. In reality, those individuals whose "capacity has been built" were in many cases already highly capacitated people by virtue of having had to overcome adversity to be in the positions they were in when these programs and institutions first made contact with them. In spite of the difficulties in estimating and accurately identifying the sources of capacity building, at least an attempt should be made to assess the capacity building properties of DLIST. Other than its *information sharing* part, DLIST has also a *distance learning* part. The question arises as to how successful DLIST has been in building the capacity of students that enrolled in the distance learning part of DLIST as part of the first experimental group of ten students, and then later as a semester cohort of distance learning as well as web-assisted students after DLIST has been incorporated into the syllabus of Peninsula Technikon as a fully accredited B Tech course titled Environmental Engineering – Sustainable development in Coastal Areas. During a BCLME Working Session on Large Marine Ecosystems at the WSSD, members of the experimental group of DLIST distance learners gave spontaneous and glowing tribute to DLIST as a mechanism to enable people through the sharing of information and making course materials available. The precise effect of DLIST as a fully accredited distance learning and web-assisted course offered at Peninsula Technikon is still being assessed

8 But is DLIST really making a Difference?

Whose reality counts?

That DLIST is increasingly successful in terms of in terms of its use by role players and its overall visibility is undisputable. DLIST as a web-based platform is doing well, and there have been a number of requests to emulate it in other Large Marine Ecosystems as well as inland. The more important and much more difficult question to answer is whether DLIST is making, or can be making a positive difference to the lives of those "on the ground", meaning the vast majority of people who thus far have seen little of the riches of the coastal areas flanked by the Benguela Current. What would making a difference actually mean? How would one measure it? Presumably differences made could be direct by making people aware of opportunities, or more indirect by facilitating integrated development planning that incorporates the needs of all parties. Such questions can be the subjects of sizeable papers and they can scarcely be addressed here fully. Instead, comments are offered as food for thought under the subheadings below, with the purpose of setting the background for the final section that will address where DLIST should be go from here.

Disseminating "Lesson Learned" on Poverty Alleviation

The western world that controls most of the donor funding currently has what can be almost described as a pre-occupation with the poverty of the developing world. Vast sums of money are spent on "Poverty Alleviation", "Poverty Relief", Poverty Reduction" and even "Poverty Elimination" programmes. The "lessons learned" that are generated find their way into academic or working papers for development practitioners, but are seldom if ever spread to the ground where, one assumes, the lessons are often generated and where the successes or failures of the programmes are be felt. DLIST has made strong attempts not only to make "lessons learned" accessible to all is users but also to solicit the input of those implementing funding at ground level as well as those affected on the ground. Attempts to solicit these lessons in a collective manner will continue as the body of knowledge from real-life experiences in the region continues to grow. Presumably the effect will be that "lessons learned" will be taken into account during the application of new programmes and projects. That there are far more regular visitors that registered users indicates that many more people 'listen' to the discussions than those actually taking the step to start a discussion or participate in ongoing discussions themselves. Strong discussions have been started by people from the communities in the coastal and immediate inland areas on topics as wide ranging as donor funding, community-based tourism, the WSSD, rights to biodiversity, the damage caused by the mines, governance issues at the local and regional government level, and even obstacles to development that have their origins in the communities themselves. People from a wide range of sectors, including planners and decision makers read these discussions. Recently there have been increasing requests from people on the ground to be able to start discussions unanimously as many of them still fear repercussions in terms of employment opportunities while a general fear to raise issues surrounding government and governance unfortunately still persists in certain quarters, although at a much lower level than pre-94. It is expected that people will be more outspoken and will partake in discussions more frequently if they have a choice to do so unanimously (but with the option of adding their names below discussions if they want to).

There is another dimension here. While peoples' names were added below discussions the vast majority of them remain "unanimous" in terms of their positions, stature and "importance". Thus information is spread in a manner that is not "weighted", meaning that everyone's opinion theoretically counts as much as the opinion of the next person. It is encouraging that people "listen" to one another on DLIST, regardless of who they are, even if they may not do so outside cyberspace. This again points to DLIST as a "melting pot" of information and a "pool of information" that is diverse in terms of both its origin and its users. DLIST registered users come from schools and universities, the donor community, government, consultants, the World Bank, NGOs, the private sector, environment and development programmes, parastatals, coastal communities and the business sector. No single group dominates the users profile and users hailing from what can be considered historically disadvantaged communities fall in the top three user groups.

The question arises whether DLIST may in fact be starting to serve as a "voice" for the previously "voiceless"? If so, then it is starting to bridge an extremely important gap, and one that is notoriously difficult to close in a systematic and sustained manner. By facilitating information sharing, DLIST also acts as an agent of transformation. It enables a dynamic collective voice from the ground to be heard, as well as from partners who have sustainable development at heart. It made strong input into the World Summit for Sustainable development (WSSD), both through high level input into the pre-WSSD Oceans and Coasts at Rio + 10 where the DLIST presentation received the only standing ovation, and at the WSSD itself where community members had the opportunity to increase their visibility and interact with managers of large programmes. At least partly as a result of these interactions there is an increasing awareness of some of the mega-

programmes of the need to involve communities, even if such involvement was not included in their original inception.

The inclusive approach inherent in DLIST and its close affinity to planners and the IDP process, at least in the Richtersveld Municipal Area, also makes it an excellent planning tool. The premise would be that information sharing and making knowledge accessible to a range of role players would facilitate convergence in planning for sustainable outcomes, including having an effect on integrated development plans and the implementation of stand-alone projects. In contrast to, say, a government agency website or a virtual university course, DLIST places substantial value on obtaining knowledge helps to define the context of development in the region, and thus can thus influence integrated development planning to be more "equitable" in its aims, and therefore more sustainable. Most importantly, the flow of information through DLIST significantly influences the imbalance that exists between the "*knows*" and the "*know nots*". After all, knowledge is power, and power and money often go hand in hand.

9 The Road Ahead

The web statistics clearly show that the saturation point of DLIST has not been reached. More and more people are starting to make use of this ICT innovation. The degree to which the ground will find their voice in DLIST is largely limited by access to computers. The web has the potential to be a great equalizer, but like television it represents "neutral" technology and therefore it is important that KM platforms such as DLIST exist that will allow the historically disadvantaged communities to share and contribute to the available body of knowledge at all times. The availability of hardware and internet connections still fall far short of what is necessary and poverty alleviation and other projects would be wise to work toward increased access to the web at every opportunity¹². It is encouraging that DLIST is gaining increasingly wider participation, including by the Richtersveld Youth and SARUNO, a trilateral schools initiative involving South Africa, Russia and Norway aimed at building awareness surrounding the burning issues of water quality and availability. This is not the only example of DLIST straddling the North and South, as many open and frank discussions were also had between people from those two "halves" of the planet.

¹² At grassroots level DLIST-related information is disseminated to the broader public through a newspaper called the *Richtersveld News* that is published by the Richtersveld local government. It is not surprising that the Richtersveld Municipality has been praised, and is held forth as an example of a municipality that is taking full advantage of the IDP process, one that is described as *government planning with the people*.

DLIST is destined to play a growing role in integrated development planning throughout the region. It recognizes that coastal management and integrated development planning to a large extent are political processes that involve a number of key actors and interest groups in addition to government (Beatley, et al. 1994). These different coastal stakeholders and groups have different perspectives on coastal management integrated development planning. Management decisions and planning directives are often the result of the interplay between these different groups. Decisions tend to be based on available information. For DLIST to be an "honest broker" it must promote transparency, provide open access to information resources, yet operate independently from political processes or development agendas set by powerful role players. The problem of information control is partly overcome by providing different players with the possibility to have their own "information kiosks" attached to the DLIST information platform for which they will control the content. Furthermore, the DLIST platform is designed to have bulletin boards, discussion forums, and so on, to which any party can contribute.

Finally, the sustainability of DLIST needs to be commented on. Now that it has been established as a pilot DLIST is not expensive to maintain. However, there are continuous calls for its expansion to the rest of the BCLME coastal areas, as well as to the Agulhas Current coastal areas, in particular Mozambique and Madagascar and potentially even the Norwegian Shelf, the White Sea and the Barents Sea. The pre-occupation with LMEs is a result of DLIST being a pilot project supported by GEF International Waters funding through IW:Learn and the World Bank. As an ICT innovation it can be as easily applied to the realm of fresh water, protected areas or any other part of the globe where there is a need for knowledge management and an equalisation of access and opportunity. It is the latter point that distinguishes DLIST from being a mere database or information exchange for which much less complicated ICT platforms will suffice.

8 Acknowledgements

DLIST has essentially been a collective effort involving numerous parties. However, those involved in its early inception, specifically Indu Hewawasam and Andy Hooten of the World Bank and Carl Lundin of IUCN should be singled out for their dogged belief in this particular ICT innovation; ICRIFORUM that led the way in programming; Dann Sklarew and IW:Learn staff for their role in managing GEF funding and supporting DLIST in other ways; Hayley Rodkin of the Department of Water Affairs and Forestry (DWAF) for ameliorating the uses of DLIST and Ilyas Omar of Peninsula Technikon for establishing DLIST as a fully accredited course at a tertiary institution; a succession of EcoAfrica task managers including Neil Grange, Bernice Mclean, Sascha Edelstein, Ian Turner and Thomas Cousins; numerous contributors to the distance learning course materials, and far too many to mention; the BCLME programme for continuing support; Al Duda of the World Bank for characteristic enthusiasm and encouragement; the Deputy Minister of DEA&T, the Honourable Rejoice Mabudafhasi for her unwavering support; but most of all, the registered users of DLIST, far too many to name, that make DLIST what it is.

9 Literature Cited

Baumgart, J. and S. Turner, 2002. Lessons learned in CBNRM. Unpublished Document, GTZ/Transform, Pretoria 2001.

Beatley, T., Brower, D. and A. Schwab. 1994. An Introduction to Coastal Zone Management. Washington, D.C: Island Press.

Isaacs, M. and Mohamed, N., 2000. *Co-managing the commons in the 'new' South Africa: room for manoeuvre?* Paper presented to the 8th biennial conference of the International Association for the Study of Common Property, Bloomington Indiana.

Mabudafhasi, R. 2001. Knowledge Management, Capacity Building and a Collective Approach to Sustainable development in the Coastal Areas of the Northern Cape, South Africa. Input: Global Conference on Oceans and Coasts at Rio + 10, Paris, December 2001.

Mabudafhasi, R. 2002. The Role of Knowledge Management and Information Sharing in Capacity Building for Sustainable Development. WBI Working Papers. The World Bank Institute.

Richtersveld Transitional Council, 2000. *The Interim Integrated development Plan (IDP) for the Richtersveld*. Lekkersing, Richtersveld: TRC.

Richtersveld Municipality, 2002. How far have we come in addressing the priority issues in the Integrated Development Plan (IDP)?

10 List of Acronyms

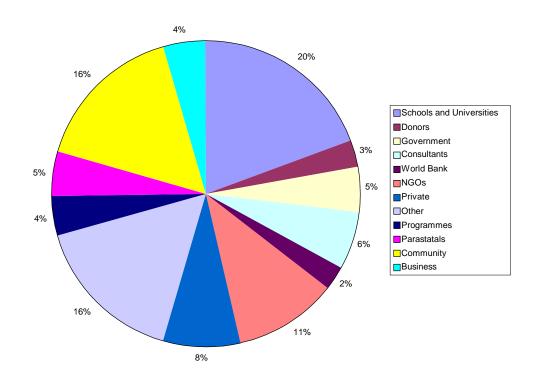
CB	Community-based
CBNRM	Community-based Natural Resource Management
CBO	Community – based Organisation
CEPF	Critical Ecosystems Partnership Fund
CI	Conservation International
CSIR	Council for Scientific and Industrial Research
CPA	Community Property Association
DEA&T	Department of Environment and Tourism
DLIST	Distance Learning Information Sharing Tool
DFID	Department for International Development (Britain)
DWAF	Department of Water Affairs and Forestry
EMPR	Environmental Management Programme Report
IDP	Integrated Development Plan
FAMDA	Fishing and Mariculture Development Association
GEF	Global Environment Facility
GTZ	German Technical Co-operation
ICZMC	Integrated Coastal Zone Management Committee
ICRIFORUM	International Coral Reef Initiative Forum
ICZM	Integrated Coastal Zone Management
IW:LEARN	International Waters Learning Exchange and Resource Network
KM	Knowledge Management
LME	Large Marine Ecosystem
MCM	Marine and Coastal Management
MPRC	Multi-purpose Resource Centre
NGO	Non – governmental Organisation
NORAD	Norwegian Agency for Development Cooperation
MET	Ministry of Environment and Tourism (Namibia)
MSP	Medium-sized Project (relating to the GEF)
NACOMA	Namib Coast Biodiversity Conservation and Management Program
NAMDEB	Namibian Division of De Beers
NCCWG	Northern Cape Coastal Working Group

NCNCS	Northern Cape Nature Conservation Services
NGO	Non-government Organization
NORAD	Norwegian Government Funding Agency
PPF	Peace Parks Foundation
Ramsar	Town in Iran after which the Ramsar Convention is named
RCBCP	Richtersveld Community Biodiversity Conservation Programme
RNP	Richtersveld National Park
SAD	Staats Alluviale Delwerye
SAHRA	South African Heritage Resources Association
SANParks	South African National Parks
SCL	Sustainable Coastal Livelihoods (programme managed by MCM)
SDI	Spatial Development Initiative
SKEP	Succulent Karoo Ecosystems Plan
SNTRA	South-North Tourism Route Association
TFCA	Transfrontier Conservation Area
TFP	Transfrontier Park
WB	World Bank
WBG	World Bank Group
WHS	World Heritage Site
WSSD	World Summit for Sustainable Development

ADDENDUM V: ARTICLE ABOUT DLIST ON BCLME NEWSLETTER

BCLME Programme Supports Information Sharing and Distance Learning in the Benguela Current Coastal Areas

DLIST is an online platform for discussion and learning that was designed to test the feasibility of using ICT to advance sustainable development in the coastal areas of Angola, Namibia and the west side of South Africa. These coasts are all flanked by the Benguela Current Large Marine Ecosystem (BCLME). DLIST has two components: information sharing and distance learning. The information sharing component focuses on various means of gathering information, organising it, and making it more accessible. It consists of a library, a Message Board, Discussions Forums and Kiosks established by a range of partners. The information sharing part has been massively successful with a large number of people registering as DLIST users and taking part in discussion forums. What is especially encouraging is that DLIST involves a vast range of people spread across categories such as indicated on the pie chart of people who are DLIST registered users.





The popularity of DLIST continues to rise in terms of visitors (there have been well over 300 000), and new participants register almost daily. Figure 2 below shows the performance of DLIST in its first eighteen months of existence. The number of visitors continues to rise at the same rate.

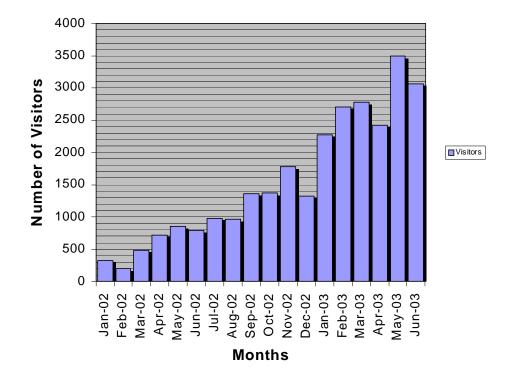


Figure 2

The distance learning part of DLIST has been equally successful. It has been established as a fully accredited tertiary institution course at Peninsula Technikon in Cape Town, South Africa, namely *Environmental Engineering – Sustainable Development in Coastal Areas*. In 2004 there a record 56 students took the course, representing a good spread of industry and government and including participants from as far away as Tanzania. DLIST is a cheap and effective distance learning mechanism and the BCLME Programme has sponsored several students to take part in the semester course.

Launched as a global pilot of a GEF through a UNDP-led project known as IW:Learn DLIST was designed and implemented by EcoAfrica (www.ecoafrica.co.za). With further support from the GEF DLIST will soon enter its second phase, aimed at improving the platform and expanding it into areas of South Africa and Namibia left out thus far, as well as into Angola. Already DLIST has an extremely diverse cross section of society as participants, from national, provincial and local government to NGOs and community-based interest groups. The result is a growing common "pool of knowledge" and a platform where government and the people can meet easily, openly or anonymously, thus empowering communities and ground level governance and increasing regional cooperation between the three countries.

ADDENDUM VI: ARTICLE ABOUT DLIST ON SANCOR NEWSLETTER

DLIST-Benguela, a tool connecting coastal stakeholders

Along the Benguela Current Large Marine Ecosystem (BCLME) a mechanism is in place that has the potential to shorten the distances between people across geographical and social boundaries when it comes to sharing information and debating issues. The Distance Learning and Information Sharing Tool (DLIST) provides a platform for knowledge sharing and learning to a wide range of stakeholders, from governmental and non governmental entities to private businesses, academics and communities, in South Africa, Namibia and increasingly Angola. 'Lessons learned' are invaluable *per se*, but even more so in a regional context where the three countries flanked by the BCLME share natural resources such as the marine ecosystem, fish and water bird species, rivers and wetlands, and in some instances social and historical features. While the popularity of DLIST continues to grow, a second phase is planned that will build on feedback provided by users of DLIST pilot to improve both components of information sharing and distance learning, while expanding them into areas thus far left outside, particularly Angola.

What is DLIST?

DLIST is an online platform for discussion and learning that was designed to test the feasibility of using Information and Communication Technologies (ICT) to advance sustainable development in the coastal areas of Angola, Namibia and the west side of South Africa. These coasts are all flanked by the BCLME and this platform is known as DLIST Benguela. Launched as a global pilot of the Global Environment Fund (GEF) through a United Nations Development Programme (UNDP)-led project known as IW:Learn, DLIST was designed and implemented by EcoAfrica (www.ecoafrica.co.za).

DLIST has two components: information sharing and distance learning. The information sharing component focuses on various means of gathering information, organising it, and making it more accessible. It consists of a Library, a Message Board, Discussions Forums and Kiosks established by a range of partners. The distance learning component of DLIST has been established as a fully accredited tertiary institution course at Peninsula Technikon in Cape Town, South Africa, namely *Environmental Engineering – Sustainable Development in Coastal Areas*.

Facts about DLIST		
What	An online platform for sharing information and discussing issues pertaining to the coastal areas along the BCLME and beyond, and a distance learning course on sustainable development in coastal areas	
Whose	Collectively "owned" by all stakeholders along the BCLME coasts that use it to air their views, update themselves with the latest news or broaden their knowledge	
Where	On <u>http://www.dlist.org</u> and virtually everywhere along the BCLME coasts and beyond	
Why	To contribute to bridging the knowledge gaps across geographical and social boundaries along the BCLME and empowering stakeholders at all levels to participate in the sustainable management of the BCLME	

A tool adapted to the regional context

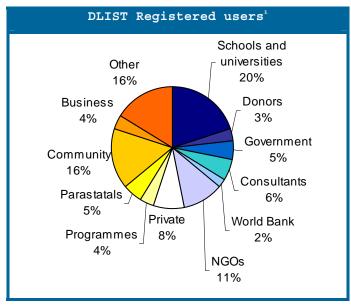
Lack of information sharing has time and again been identified as a major obstacle for sustainable development in the coastal areas of the BCLME. This coast has for the past years experienced rapid transition, resulting from political changes and decentralisation processes, the scaling down of mining activities and opening up of areas previously inaccessible in South Africa and Namibia, easier access to the Angolan coast following the peace process, and the resulting increased reliance on activities such as fishing, tourism and conservation as livelihoods. The historical lack of information in the region is being challenged by the need for BCLME coastal stakeholders to be connected and informed, especially in face of the growing importance that is being attached to balancing biodiversity conservation with local economic development. Information lies at the heart of development planning and information sharing is crucial for proactive and participatory planning. Knowledge management and sharing is needed not only at the national level across social boundaries, but role players also need to be connected across political borders. Along the BCLME, the Orange River Mouth, a Ramsar site, marks the coastal border between South Africa and Namibia, while the border between Namibia and Angola falls within the Transfrontier Conservation Area (TFCA) of Iona/Skeleton Coast.

At the same time, there is mounting evidence that ICT can contribute to sustainable development by, for example, enhancing good and transparent governance, fostering the empowerment and participation of communities, promoting information sharing at lower costs, and providing environmental monitoring and response systems. The question arises whether ICT can meet the challenge of information sharing over a vast area that is marked by intense societal stratification, a culture of 'non-sharing of information' and lack of ICT infrastructure. The answer lies with the coastal stakeholders, but the results achieved thus far by DLIST are promising.

What have the coastal stakeholders achieved thus far?

The popularity of DLIST continues to rise in terms of website visitors – there have been well over 300 000 hits on the site and new visitors arrive daily. Five years after DLIST's inception, there are about 700 registered users that participate in online discussions. In 2004 a record of 56 students took the course, representing a good spread of industry and government and including participants from as far away as Tanzania.

Already DLIST has an extremely diverse cross section of society as participants, from national, provincial and local government to Non-Governmental Organisations (NGO) and community-based interest groups. The result is a growing common 'pool of knowledge' and a platform where government and the people can meet easily, openly or anonymously, thus empowering communities and ground level governance and increasing regional cooperation between the three countries. DLIST has succeeded in overcoming the obstacles created by stratified information flows in that contributors are 'equalised' through their access to the web-based platform.



Creating a 'common pool of knowledge'

DLIST is creating a knowledge base for the BCLME coastal areas, therewith providing a common tool to disseminate and share scientific findings with communities on the ground where relevant. DLIST attempts to make 'lessons learned' accessible to all its users, as well as solicits the input from implementing and affected parties on the ground. It is expected that 'lessons learned' will be taken into account during the application of new programmes and projects. Furthermore, this sharing of information, opinions and experiences acts a major tool for awareness building. The discussion threads and the library contents cover issues that range from ICT, donors and environmental law to the Integrated Development Planning (IDP) process in the Richtersveld, the rehabilitation of the Orange River Mouth, coastal wetlands, environmental challenges in Angola, and community-based tourism, to name only a few.

Connecting role players, programmes and opportunities

In Namagualand or along the Angolan coast poor communities live next to rich marine resources but they have no access to information about these resources. Many role players in the region are thirsty for information, not only about the resources they are reliant upon, but also planning processes and funding, training and business opportunities. DLIST facilitates access to such information, and also offers role players a space on the website where they can present themselves (DLIST kiosks). DLIST aims to further involve coastal communities through existing structures such as the emerging multi-purpose resource centres (MPRCs) established in South Africa, and the 14 support centres planned by the Institute for Development of Artisanal Fisheries (IPA) for coastal communities in Angola. DLIST can help disseminate and identify synergies between the multitude of programmes that are implemented or planned for the region. Examples of such programmes are the BCLME Programme in the three countries, the GEF-funded Namib Coast Biodiversity Conservation and Management Project (NACOMA) in Namibia, the Critical Ecosystems Partnership Fund (CEPF)-funded Succulent Karoo Ecosystem Plan (SKEP) programme and the Richtersveld Community-Based Natural Resources Management (CBNRM) Programme funded by Conservation International and GTZ/Transform, and the GEF-funded National Biodiversity Strategy and Action Plan (NBSAP) and IPA's Programme for the Promotion and Development of Artisanal Fisheries in Angola that relies on a blend of internal and external funding.

Supporting integrated planning processes

DLIST plays an important role in integrated planning in the regionⁱⁱ by providing a platform for display of documents for comment, for discussion between interested parties and for sharing 'lessons learned'. DLIST has played a role in the IDP process in the Richtersveld, for example, but also in Regional Development Plans (RDPs), wetland management plans and TFCAs. The DLIST pilot distance learning course offers modules on other planning tools as well, including Environmental Management Planning (EMP), Environmental Impact Assessment (EIA) and Strategic Environmental Assessment (SEA).

Enhancing distance learning

DLIST contributes to the commitment across the African continent to make distance learning a major thrust in education policies. Already people such as committee members of the Richtersveld Community Property Association (CPA), regional planners, MPRC managers, among others, have participated in the distance learning part of DLIST and have received accreditation from the Peninsula Technikon in Cape Town. Courses can be online, or web-assisted, meaning students can take the courses from afar, or students at the institution can use the DLIST site to augment and enrich the course material they receive from lecturers.

What's next?

With further support from the GEF, DLIST will soon enter its second phase, aimed at improving the platform and expanding it into areas of South Africa and Namibia left out thus far, as well as into Angola. Based upon the feedback received from users of DLIST pilot, some improvements will include the training and appointment of local level moderators and 'facilitators' to stimulate and enrich discussions; the creation of the 911 function to bring environmental assistance to parties on the ground; the expansion of the distance learning course to include institutions and students in all three of the target countries; and ultimately making the information sharing part self-sustainable.ⁱⁱⁱ Using the DLIST experience, a plan is underway to create an information sharing platform on the other side of the African continent that is flanked by the Agulhas and Somali Currents.

¹ Odendaal, F. and R. Abels, 2003. *Can ICT effectively bridge the information and knowledge gap across geographical and social boundaries?* Paper presented at the 6th Water Information Summit in Delft, The Netherlands, September 2003.

^{III} Mabudafhasi, R. 2002. *The Role of Knowledge Management and Information Sharing in Capacity Building for Sustainable Development*. WBI Working Papers. The World Bank Institute, and; Richtersveld Municipality, 2002. *How far have we come in addressing the priority issues in the Integrated Development Plan (IDP)?*

^{III} UNDP/GEF Block A Project Development Fund (PDF) for *Distance Learning and Information Sharing Tool for the Benguela Sea Board (DLIST-Benguela)*, 2004.