



Institutional Strengthening of the Environment Research Centre:

CAPACITY DEVELOPMENT STRATEGY 2007 and beyond



Environment Research Centre
Ministry of Environment, Energy and Water

Written by: Elaine Glen
Layout and design: Aminath Nileysha, Mohamed Aiman

INTRODUCTION

The Government of Maldives established the Environment Research Centre (ERC) in 1990 to undertake research and analysis for the mandatory activities of the Ministry of Environment, Energy and Water to establish and manage a knowledge-base and an information dissemination mechanism. Since this time many activities were conducted by ERC, such as conducting a national coastal monitoring network, launching the Environmental Impact Assessment Regulations, Launching the GLOBE Programme in the Maldives, Launching the National Biosafety Framework, EU/World Bank project, establishing a regional waste management facility, construction of 16 island waste management centers, conducting a survey on Public Perception on the Environment, being the main focal point for the Montreal Protocol on the Substances that deplete the Ozone Layer and carrying out several activities under this protocol including awareness related to ozone issues, monitoring and controlling the imports of ozone depleting substances into the Maldives, banning of equipment using ozone depleting substances etc, Being the main focal point for the Convention on Biological Diversity, Huraa Mangrove park Project. However in 2006 the Environment Research Center underwent many changes; to the management, staff and office space, changes to its organizational structure (see Figure 1) and also increased responsibilities in the areas of waste management and Environmental Impact Assessment. With such wide ranging changes it was evident that the organizational capacity needed to adapt and be strengthened to function effectively.

The purpose of this document is to provide a strategy for capacity building of the staff of ERC. This would help us provide crucial information required by donor agencies when considering providing funding for the institutional strengthening and capacity building for the Centre. It will also be the basis for future evaluations to analyze our improvements and weaknesses in the years to come. This can then help us analyze reasons for these changes and also to find ways to overcome the weaknesses and also maintain our strengths.

The approach used for the capacity strategy of ERC utilized an assets based approach. The appeal of the assets based approach to assessing capacity lies in the premise that people and communities can drive processes themselves by identifying and mobilizing existing (but often unrecognized) assets, and thereby responding to and creating opportunities as they present themselves. In the case of the ERC institutional capacity has been identified as a weakness in delivering on donor funded projects. In order to protect their interests, donors are willing to

'dig deep' to find the funding for Technical Assistance but in many cases the capacity of the implementing institution remains weak during and after the project implementation.

The ERC recognizes the constraints on donors but, as part of a mandated in-line Ministry, it has obligations to deliver on non-donor funded initiatives and operational business as well. The ERC, however, believes that with proper preparation there are opportunities for synergies between donor funded technical assistance for 'projects' and the implementing agency's institutional capacity needs.

The assets based approach to assessing capacity rests on the principle that the recognition of strengths, gifts, talents and assets of individuals and communities is more likely to inspire positive action for change than an exclusive focus on needs and problems. Seeing the glass half-full is not to deny the problems, but to focus energy on how each and every member has contributed, and can continue to contribute, in meaningful ways to activities and outputs.

For many decades the approach to institutional capacity assessment has insisted that organisation's focus not on the strengths, but on the deficiencies, problems and needs. Help from the outside will arrive only when a convincing story of emptiness and need has been told.

In order to recognise the talents and resources of all individuals and the role they play within the implementing institution, some form of a "Capacity Inventory" is required. The inventory is simply a questionnaire aimed at uncovering a person's skills, areas of knowledge and experience, commitments, and willingness to be involved in activities and outputs. A template of the questionnaire used by ERC is given in **Annex 2**.

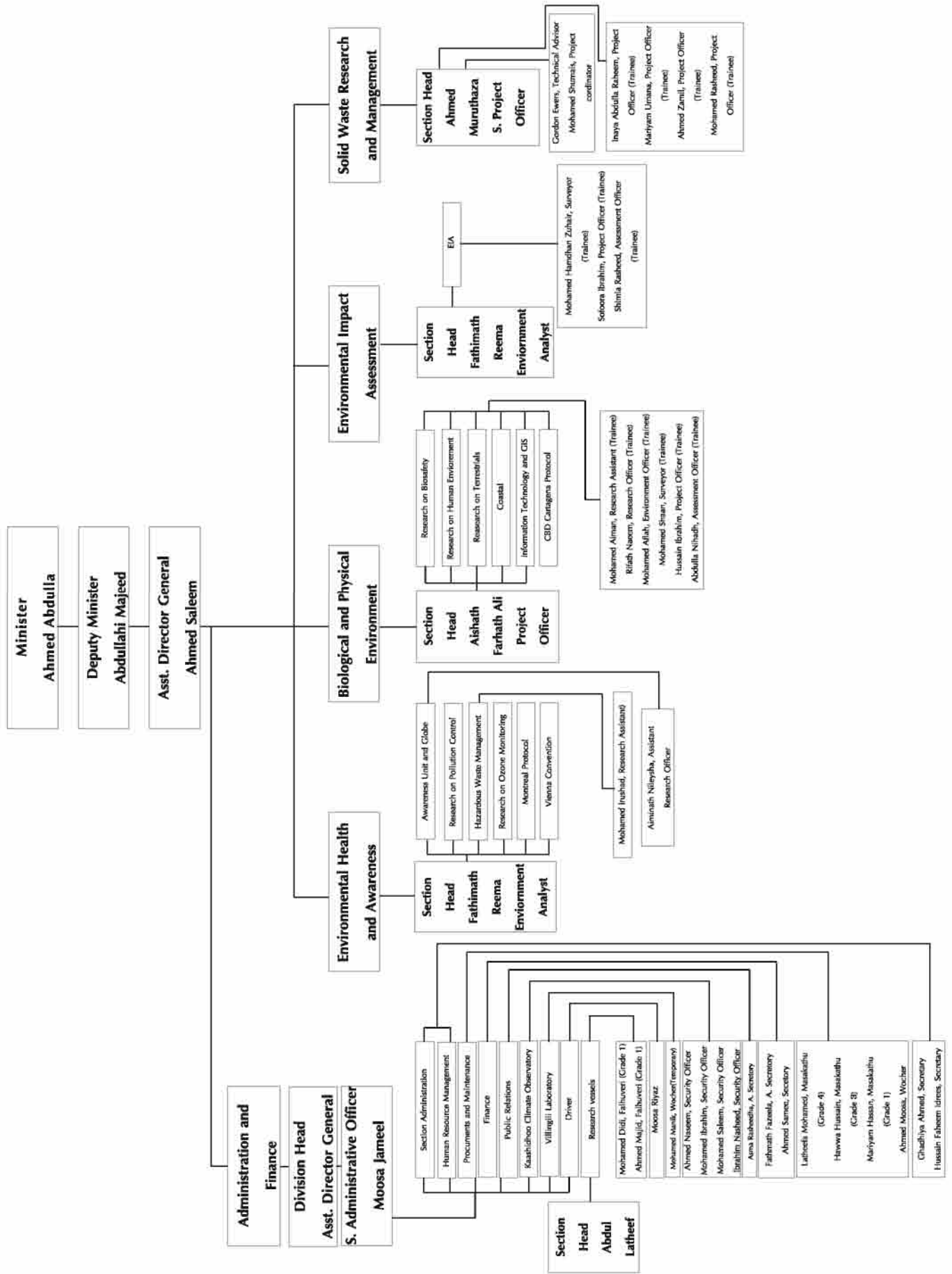
Once these combinations of assets and capacities have been mapped the ERC will be better placed to focus and direct outside resources to the locally generated agenda and plans, rather than existing as an object of charity. By participating in this process staff and management at ERC will become aware of their existing skills/ capacities and will hopefully feel empowered and motivated in the process.

METHOD

The process used in our approach is as follows:

- Collected stories about individual and organizational successes and identified the capacities of individuals that contributed to success (Most Significant Change approach to capture more qualitative aspects);
- Organized meetings with all available staff currently working in ERC to brief them about the Capacity Development Strategy and the importance of their feedback to produce a useful document and also the potential benefits of developing such a strategy.
- Collected information using the capacity inventory questionnaire about :
 - Individual qualifications and training;
 - Skills information (priority skills that they interviewee may be most confident in); and
 - Experience and potential interests.
- Interviewed Section Heads and the Head of ERC for their views on the strengths and weaknesses of the different sections and individuals of these sections.
- Mapped the capacities and assets of individuals/institutional against the mandate of ERC and identifying weaknesses/gaps.

Organizational Structure of Environment Research Centre (ERC)



RESULTS

a) Most Significant Change Stories

As part of the capacity assessment staff were invited to describe their most significant change story since working at ERC. Of the 23 stories submitted, 5 were selected by the team leaders as the most significant for the entire organization. The following section outlines the 5 stories that were selected. The stories reflect the changes that have occurred in ERC over the last 12 months and some

important lessons for the organization as a whole. In particular, the staff highlight the importance of having an orientation process to ERC when staff commence duties and being able to access relevant training and on the job mentoring in the first 3 months of employment. Furthermore the changes to the office space are highlighted as a positive change to the atmosphere and productivity of ERC.

Story no. 3

1- (a) Describe what you think is the most significant change that you contributed to, in some way, since you started working for ERC.

When I got the job at ERC as a surveyor I was having a basic idea what I have to do at my job. It is because I participated in few private surveys before I got my job. After I got my job I did not get enough training regarding the field. So I had to learn by looking the others do and by doing on my own. But still not very familiar with the theoretical way that the equipments are working and the data processing.

I learned how to use the Dumpy level on a survey organized by the ERC to access the damages caused by the Tsunami that affected lots of islands in Maldives which was conducted with a professor from a Japanese University.

As I was employed as a surveyor at ERC I took part in a few private Surveys and got familiar with the total station which is used in surveying and AutoCAD software which is used or drawing maps etc.

The ERC organized a GPS training program which we learned how to use the Trimble GSM 100 GPS. The training was only about the very basics of the GPS.

(b) Explain why you chose this particular change.

- * What difference has it made/will it make?
- * Why do you think this difference is important?

Learning from doing is the best thing because you will be very familiar with an equipment or software when us starts with zero and tries to learn on your own. But it will be much easier if we get the training from some one who knows and are familiar with the stuff. It was hard to learn on my own but it helped me a lot. The only thing missing is the theoretical ways how the equipment work and its really difficult with the software when you knows what it can do but u don't know how it can be done.

(c) Are there any lessons for ERC arising from change you have written about?

Giving the required training on the required field before any work I carried out is the most important thing to do.

Story no. 6

1- (a) Describe what you think is the most significant change that you contributed to, in some way, since you started working for ERC.

The most significant change is the working environment. Before it was very restricted. Now the atmosphere is very friendly. Everybody helps each other in their work and we feel more comfortable and happy.

(b) Explain why you chose this particular change.

*What difference has it made/will it make?

*Why do you think this difference is important?

I think it is very important for staff to have a happy and comfortable atmosphere to work well. And to want to come to work everyday. This also makes a significant improvement in the office's work progress.

(c) Are there any lessons for ERC arising from change you have written about?

Yes! All staff are motivated when they have a good atmosphere to work in. So ERC should always try to maintain this!

Story no. 10

1- (a) Describe what you think is the most significant change that you contributed to, in some way, since you started working for ERC.

I didn't know much about, actually I didn't know anything about Environmental Impact Assessment before I joined ERC. I attended a training program for EIA during my first week of ERC, which helped me understand process, not in detail but little bit at least. I understood the process in much detail when I started working in the EIA section. Getting to see the process first hand was a far greater experience than any document or training program. And during my short stay so far (I joined ERC last year) I've seen the process evolve and I hope I have contributed something to this evolution.

(b) Explain why you chose this particular change.

* What difference has it made/will it make?

* Why do you think this difference is important?

Well the difference it will make for sure will be the capacity of the EIA section will definitely be increased, with me fully understanding the process which in turn will make EIA section of ERC more efficient and more capable with all the changes and new ideas. On a personal note actually it's been a great learning experience, and a good experience to build up my self-confidence.

(c) Are there any lessons for ERC arising from change you have written about?

Learning is much more efficient from first hand experience rather than just boring documents and books. I think ERC should consider this in future when they training their staff.

Story no. 14

1- (a) Describe what you think is the most significant change that you contributed to, in some way, since you started working for ERC.

The most significant change that I had noticed in me, through out the short period of time in ERC is that, I learnt how to take responsibilities and learnt how to enter the information that carried out in each section of ERC.

(b) Explain why you chose this particular change.

*What difference has it made/will it make?

*Why do you think this difference is important?

After learning this I came to know what is "entering" and mostly what works that is been carried out in every section of ERC. I came to know this or I knew only after a week since I joined the ERC.

In my point of view this is a must that I should know what's the work done in ERC, to carry on my job in this center.

(c) Are there any lessons for ERC arising from change you have written about?

This important because in my point of view this is something that a person working in a office should know. Because rather than only knowing what going on in his or her section, its much more important to know what the works that is been carried out in all the sections. So that you will get a clear picture of that works that is been carried out overall through that

Story no. 16

1- (a) Describe what you think is the most significant change that you contributed to, in some way, since you started working for ERC.

Learnt to take responsibility and to work efficiently
During the first days working at the ERC, I didn't know how to manage or how any administrative or technical work is being done. I was given to do tasks like entering data, translating sending and receiving official letters and handling important documents. During this period, I had made several careless mistakes that lead to unexpected complications. I was told by my superior, about the mistakes I did and that I need to be more responsible towards my work, And that was the time when I realized that even the tiniest mistake can lead and grow in to huge problems. From then onwards I have grown to become one of the most responsible and work efficient staff at ERC.

Learning to take responsibility has lead me how:

- * To communicate with official personals and other respective individuals/parties
- * To Write official letters without drafts (both English and Dhivehi)
- * To manage most of the administrative work
- * To do graphic designing (have produced publications)
- * To organize national workshops and meetings
- * To deal with problems within the staff
- * How to carry our researches in the field
- * To work efficiently
- * Made it easy to work and communicate with my superiors and work mates

(b) Explain why you chose this particular change.

- * What difference has it made/will it make?
- * Why do you think this difference is important?

Learning to take responsibility has:

- * Helped to get my promotion. Got chances to participate in international meetings and workshops
- * Is trusted to perform and complete important work at center
- * Is trusted to organize workshops and meetings

(c) Are there any lessons for ERC arising from change you have written about?

As I believe an organization will only be properly managed with staffs that are willing to be very responsible and very hard working.

b) Capacity Inventory

i) OVERVIEW OF QUALIFICATION

As part of the capacity inventory each staff member was asked to outline their qualifications. All staff possessed high school certificates, some at the Advanced levels (9), but most possessed only Ordinary ('O') levels (14). As shown in Table 1, only 6 staff members (26%) possessed tertiary qualifications. Only

13% of the staff have/will attain post-graduate qualifications. Notably 3 of the 4 staff members with undergraduate degrees are section heads and the other 2 staff members are senior managers. The waste section possesses 2 of the 4 staff members with undergraduate degrees.

Table1: Summary of tertiary qualifications for ERC staff.

Graduate studies	Institution	Year	Location	Section
Bachelor of Social Science (Economics/Internet Studies)	University of Kwa Zulu Natal	2005	South Africa	Waste
Bachelor of Science (Chemistry)	University of Warwick	2006	UK	Env. Health/ EIA
Bachelor of Science (Biological Sciences)	Osmania University	2005	India	Biodiversity
Bachelor of Science (Microbiology)	Al Azhar Univeristy	2002	Cairo	Waste
Diploma in community health workers	Allied Health Services	1972	-	Senior Mgt
Bachelor of Science (Environmental Science)	University of South Pacific	-	-	Senior Mgt
Post-graduate studies	Institution	Year	Location	Section
MA in Sustainable Development	University of Staffordshire	Present	(E-learning)	Waste
Post graduate diploma in International Environmental Law	UNITAR	Present	(E-learning)	Waste
MSc (Ecology and Environment)	University of Lancaster	-	UK	Senior Mgt

Whilst there are few staff with tertiary qualifications many other staff members have undertaken further training in Male' and elsewhere, including:

- * Corporate Social Responsibility (World Bank Institute 2004)
- * Certificate in Graphics Specialist (IBS 2005 Male')
- * Office Management (CTL 2002 Male')
- * Budget course (IT Male')
- * Certificate I and III in IT (CYRYX 2007 Male')
- * Certificate II in IT (CYRYX 2007 Male')
- * Diploma in IT (ongoing) CYRYX Male'
- * Training on scrub typhus (National Institute of Commercial Disease 2006 New Delhi)
- * Integrated Coastal Zone Management (Walailak University 2006 Thailand)
- * Environmental Management Systems (ISO14000)

- * Training on management skills (Open University 2003 Malaysia)
- * Graphic Designing (IBS 2005 Male')
- * Networking/Web designing (IBS 2006 Male')

Furthermore ERC has also organized in house or local/regional training opportunities for its staff from time to time in relevant areas:

- * Facilitation training (Live & Learn Environmental Education April 2007)
- * EIA training workshop (UNEP 2006 Male')
- * Intensive EIA training workshop (CEA 2007 Sri Lanka)
- * GPS training (ERC 2007 Male')
- * Waste management training (ERC 2007 Male')
- * Study visit program on Solid Waste Management (AIT 2007 Bangkok)

ii) OVERVIEW OF EXPERIENCE

As part of the capacity inventory questionnaire each staff member was asked how long they had been working generally and specifically how long they had worked at ERC. The following table outlines the relative work experience of each section at ERC. Very few staff members have over 3 years work experience. Only the biodiversity section has the majority of staff with between 1-3 years work experience.

All sections have 2 or more trainees with less than 1 year work experience. It is clear that all sections need to dedicate a lot of time to train and mentor new staff members, however the depth of experience is lacking across all sections. Notably the two senior managers from ERC (Assistant Director General- Admin/Finance and Assistant Director General) had over 10 years of experience.

Table2: Summary of work experience in ERC across the 5 sections.

Section: Waste			
	Less than 1 year	1-3 years	3+
How many years have you been working?	3	1	2
How many years have you been working for ERC?	5		1
Section: Admin			
	Less than 1 year	1-3 years	3+
How many years have you been working?	2	1	1
How many years have you been working for ERC?	2	1	1
Section: Biodiversity			
	Less than 1 year	1-3 years	3+
How many years have you been working?	2	5	
How many years have you been working for ERC?	3	4	
Section: EIA			
	Less than 1 year	1-3 years	3+
How many years have you been working?	3		
How many years have you been working for ERC?	3		
Section: Environmental Health and Awareness			
	Less than 1 year	1-3 years	3+
How many years have you been working?		1	1
How many years have you been working for ERC?	1		1

iii) ERC OVERVIEW

The overall mandate of the ERC is to provide technical input into policy making of the Ministry of Environment, Energy and Water. However it is considerably more than a research center, as there are a lot of management activities too, including EIA and waste management. ERC currently consists of 5 sections: administration, solid waste research and

Management, Biological and physical Environment, Environmental Impact Assessment and Environmental Health and Awareness.

The following is a summary of the strengths and weaknesses of the ERC based on discussions with the Assistant Director General .

Strengths	Weaknesses
<ul style="list-style-type: none"> • Layout/design of awareness materials • Legal mandate - recognized as research arm of government - this mandate comes from the President and President's office in 1990 - this carries weight. • Good senior staff that are very qualified. Confident that work is done to a high standard. • Waste section is probably the strongest because of qualifications of the staff, outputs and number of projects and resources that it has attracted. No other section is comparable. 	<ul style="list-style-type: none"> • Research skills need further strengthening . Currently ERC does not have capable staff in this area. Not only does ERC need skills, it needs to use and apply the skills in day to day operations. • No equipment is available- eg air monitoring • Limited networks with other research institutions who could provide technical support to ERC. • EIA: Even with external reviewers ERC still needs to make its own decisions. EIA's cover a wide range of activities (eg hospitals, incinerators) . Therefore ERC needs multidisciplinary staff in EIA section. • Administration section is quite weak. Staff in this section have very little work experience and require much more training. • GIS is a very weak area. To undertake research good people with computer/GIS skills are needed. Basic information on environment is needed for ERC to perform. GIS is a must - how to analyze and present information. • Project management skills are very weak. If staff could develop and implement projects ERC could have attracted more resources. But ERC does not have the capacity to project manage. Even if the resources are obtained ERC does not have the capacity to implement effectively. • Basic government salary - it is very difficult to attract good staff. For example ERC had to accept staff who had a 'commerce' stream - not 'science' stream- in order to fill positions. Also the timing for recruitment of school leavers was wrong - at wrong time of year, it needs to be mid-year.

Since May 2006 ERC has benefited from an international consultant in the waste section, funded initially by Australian Red Cross/Canadian Red Cross and then subsequently by the World Bank. During this time this consultant has supported and advised the waste section specifically, but also other sections as

needed. Due to his unique perspective on the organization, he was also interviewed to provide input into this capacity assessment. The following table outlines how the consultant perceived the strengths and weaknesses of ERC.

Strengths	Weaknesses
<ul style="list-style-type: none"> • Some sections are stronger than others. Sections such as EIA which are generally stronger have become so due to external input as well as resourcing and institutionalization from within ERC. • ERC benefits greatly from being able to present work to a high level (eg publications etc). • ERC has keen, dynamic staff, not just the senior managers. • ERC does have people with specific skills which ERC can benefit from. • Finance section has a lot of systems in place which supports and benefits all sections in ERC. 	<ul style="list-style-type: none"> • Staff rely very heavily on Assistant Director General to champion different sections. • Section heads do an extremely good job, but are young and relatively inexperienced, especially in terms of project management. • ERC also suffers from not having a Project Management Unit (PMU) • General reluctance to fully coordinate with other Ministries and different sections of MEEW.

As part of the capacity inventory each staff member was asked to rate their skill level from weak, medium or strong for a range of skill sets. The following sections outline the findings of the capacity inventory from the 5 work sections of ERC.

iv) ADMINISTRATIVE AND FINANCE SECTION

The following section outlines the summary of results for the Administration section. This section is responsible for human resource management, procurement and maintenance, finance, public relations and research vessels. Four (4) staff completed the questionnaire from this section.

Some staff were unable to complete the questionnaire (eg research vessel crew) as they are not proficient in English. Also the section head for Administration could not be interviewed as he was on leave at the time.

Administration skills

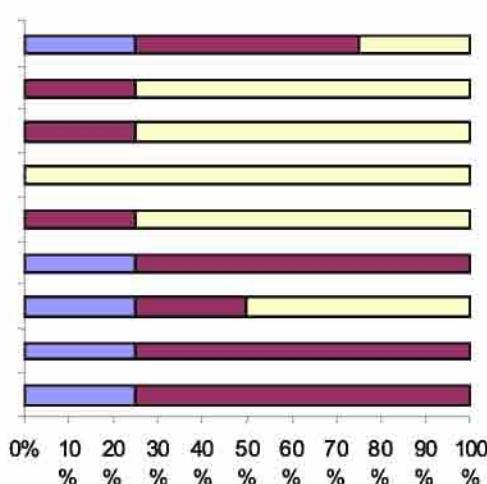


Figure 1: Administration skills in the Administration section.

Figure 1 displays the overall ratings for administration skills for the administration section. In general these skills are rated between medium to strong. Notably file management is mostly considered to be “medium”. However other sections have commented that the filing system at ERC is problematic and needs improvement in order to effectively retrieve files. Other skills such as conducting official meetings and writing correspondence are not so strong in this section. This is not surprising since this section is not responsible for working directly with clients.

Notably the administration section felt that they had weak skills when it came to client service related skills. In particular, none of the staff believed that they possess skills responding to enquiries or complaints promptly. As the administration section is often the first point of contact for clients, it will be essential to strengthen this skill set.

Community Liaison skills

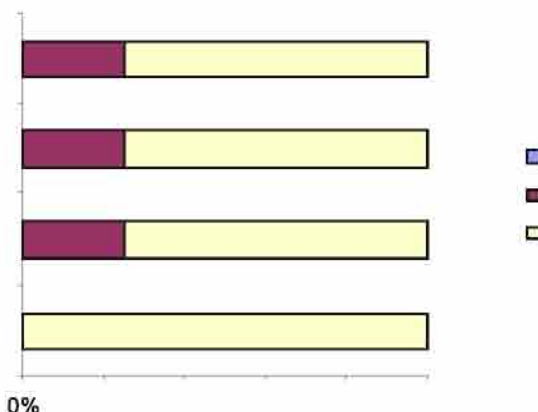


Figure 2: Community Liaison skills in Administration section

Not surprisingly administration section believed that they possessed weak skills in the field of community liaison. However if public relations remains as part of the mandate of this section, these general skills of community liaison will need to be improved.

General Management skills

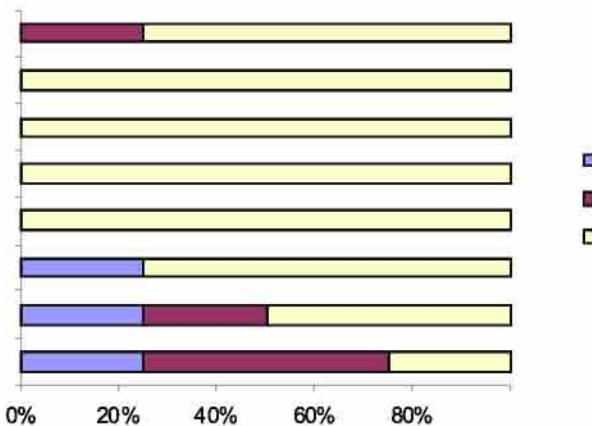


Figure 3: General Management skills in Administration section

In terms of general management the staff in this section generally lacked some key skills. The administration section is responsible for human resource management and finance skills, yet perceived that they were weak in areas such as managing conflict, recruiting people, making and managing budgets. Given the mandate of this section, it will be critical to strengthen these skills.

The staff in this section were also asked to rate their skills in the following areas:

- * Project management
- * Strategic development
- * Enforcement
- * Policy/legislation
- * Professional/technical skills (eg waste)

IT skills

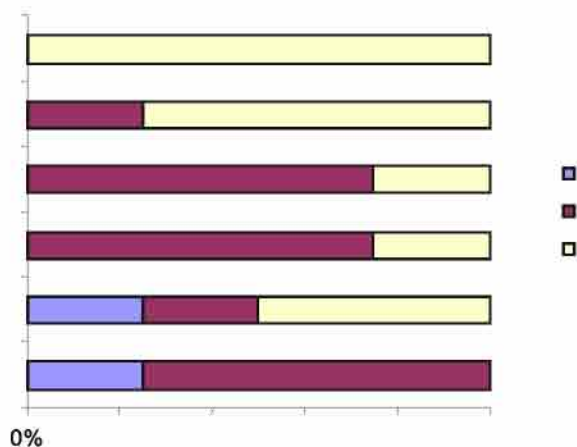


Figure 4: IT skills in the Administration section.

The administration section perceives that they possess reasonable computing skills working with ordinary computer programs, however none of the staff in this section possess advanced IT skills.

Organizational/communication skills

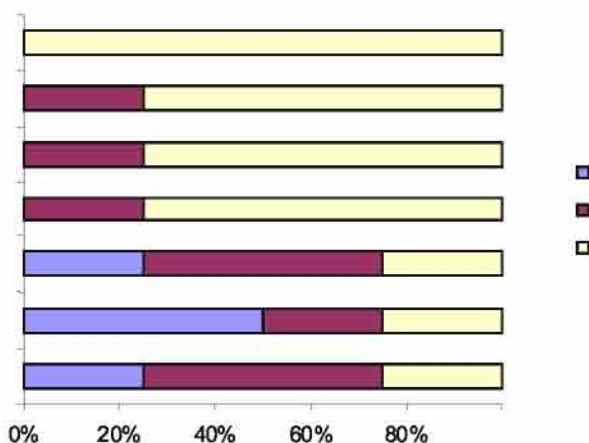


Figure 5: Organizational/communication skills in Administration section

The majority of staff in the administration section possess reasonable organizational skills (working to deadlines/managing workloads), but lack communication/report skills.

Client Service skills

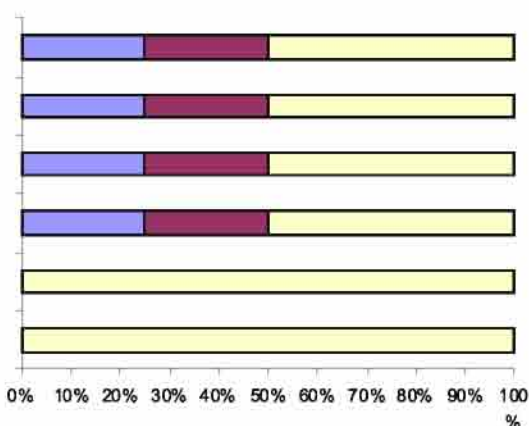


Figure 6: Client Service skills in Administration section

Not surprisingly all 4 staff (100%) indicated that they possessed weak skills in all these areas. With the exception of procurement skills, all of these skills are not required from these staff members in the performance of their jobs. Therefore although these staff members perceive that they are weak in these areas, they may not require professional development in this areas (with the exception of procurement/contract management).

Notably the staff from this section were asked whether they possessed other skills such as graphic design and drawing illustrations. Whilst this is a weak area, there is one staff member in particular who possesses excellent design and drawing skills and may be more suitable to the environmental health and awareness section.

v) SOLID WASTE RESEARCH AND MANAGEMENT SECTION

The following section outlines the summary of results for the solid waste research and management section. The mandate of this section is to do research on waste (eg appropriate ways to reduce/ minimize/waste audits etc) and develop management strategies and policies to deal with solid waste management issues. Currently this section is responsible for managing a number of large projects funded by the government of Maldives and international donors. These include:

- * Tsunami Debris and Waste Management Project (Australian Red Cross/ Canadian Red Cross Project): Construction of 79 Waste Management Centres in 74 islands.
- * Regional Waste Management Project: Construction of Waste Management Centres in 16 islands, Waste Awareness Programme (Live and Learn), Feasibility Study for a

regional Waste Management facility/ Landfill site in South Ari Atoll (SWECO International AB)

- * Chinese concessional loan project to purchase waste management equipments for WMCs in the Islands.
- * Construction of WMCs in 10 islands funded by the Public Sector Investment Programme of the government of Maldives.
- * Feasibility study for waste to energy by using incineration technology, funded by UNDP

Approximately 6 staff provided input into the capacity inventory. When the section head was interviewed he outlined the main strengths and weaknesses of the section:

Strengths	Weaknesses
<ul style="list-style-type: none"> • An international consultant has been working with the waste unit for up to 12 months providing day to day support and advice. • The unit includes 2 university graduates with strong qualifications, although they are not specific to waste. • In terms of Field work staff are confident at collecting environmental data, predicting/ assessing impacts on environment and consulting with communities. 	<ul style="list-style-type: none"> • Insufficient number of staff for work load. • Field officers are new and capacity is limited . Need a lot of guidance because inexperienced. Lack confidence especially interaction with community and answering technical questions or project related questions. • Limited skills in conducting waste audits. This is important to gain raw data for research and management. • Research skills could be improved • Filing system is poor . A dministration system needs some work because it is difficult to retrieve files.

¹ Since this questionnaire was completed a local NGO has provided facilitation training. So these ratings may have changed.

Administrative skills

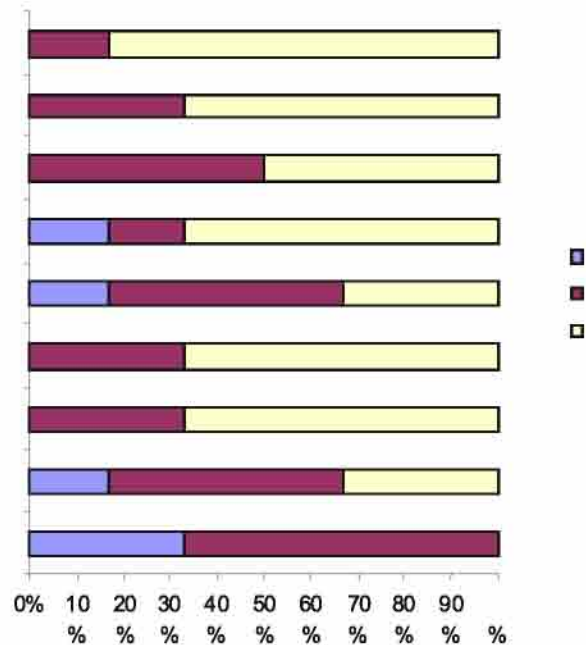


Figure 7: Administrative skills in waste section

In general the waste section possesses a range of levels of administration skills. Whilst everyone can type in English, 2 of the 6 staff possess weak skills for typing in Dhivehi. Likewise 4 of the 6 staff are not confident in writing correspondence or conducting meetings/recording meeting minutes. Interestingly

file management is a skill that is generally considered weak in this section. This fits with the section head's comments from the interview. The waste section could benefit from training in Dhivehi typing, file management, writing official correspondence and conducting official meetings.

IT skills

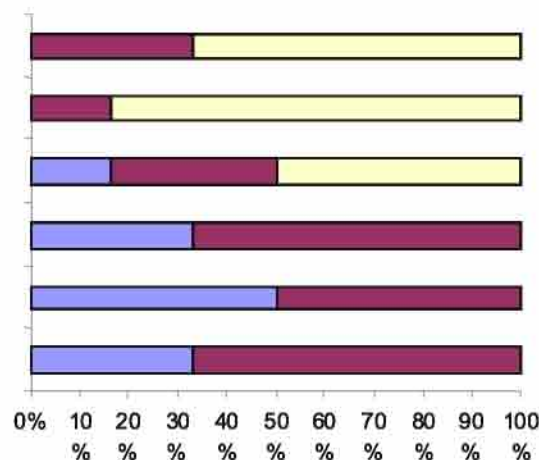


Figure 8: IT skills in waste section

With regard to IT skills, all staff members of the waste section possess medium to strong skills in general computing skills. A number of staff members indicated that they did not have strong skills in more advanced IT skills (networking etc). This is not of particular concern as the staff in this section need to maintain general level of IT skills. However this section may benefit from training in using project management software, such as MS project.

Organizational/communication skills

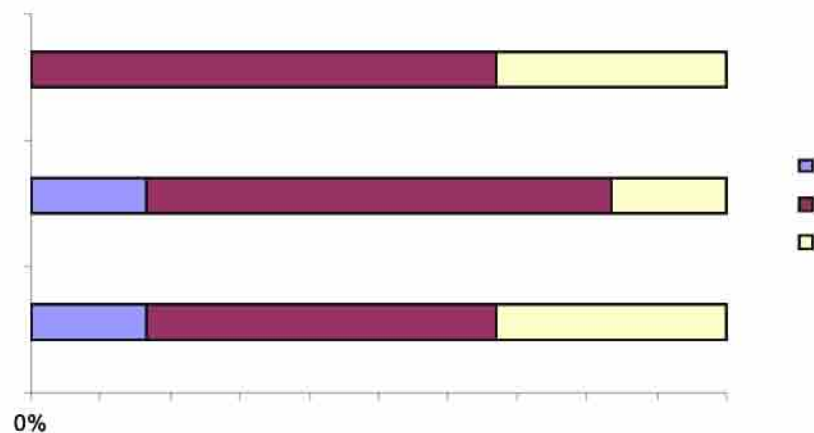


Figure 9: Organizational/communication skills in waste section

When it comes to organizational skills over 60% of the staff members were confident that they could manage workloads and work to deadlines. A small proportion of the waste section still perceived that they have weak organizational skills. When the data was disaggregated it revealed that it was the trainee staff members that were least confident in these areas.

Client Service skills

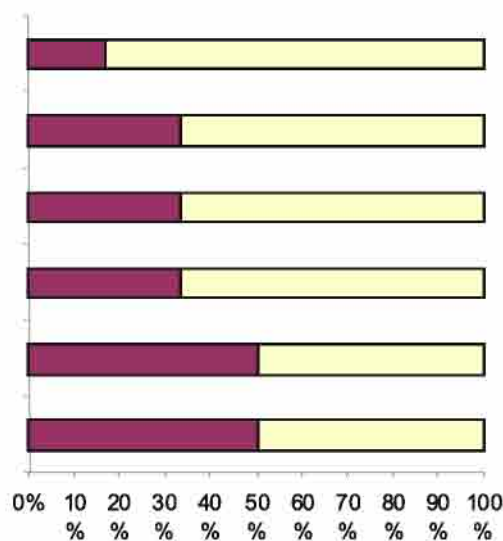


Figure 10: Client Service skills in waste section

In terms of client service skills, the waste section generally perceived that they possessed medium to weak skills. In fact 50% or more of the staff members felt that they had weak client service skills, especially regarding communicating, consulting and negotiating with clients. As this section is responsible for a number of large projects and dealing with international organizations, it will be critical to strengthen these skill sets.

² Since this questionnaire was completed a local NGO has provided facilitation training. So these ratings may have changed.

Community Liaison skills

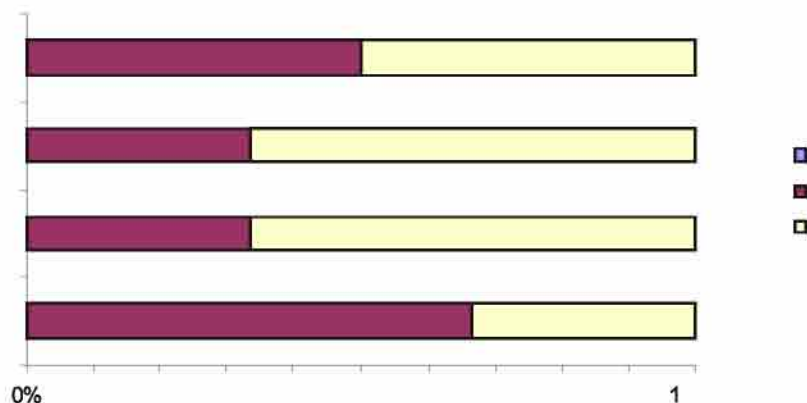


Figure 11: Community liaison skills in waste section

Although the majority of staff felt that they could organize community meetings, they perceived that they lacked the skills to speak at these meetings and mobilize the communities. Given the type of projects being conducted in the waste section, this is another critical skill set that will need to be further strengthened.

Communication skills

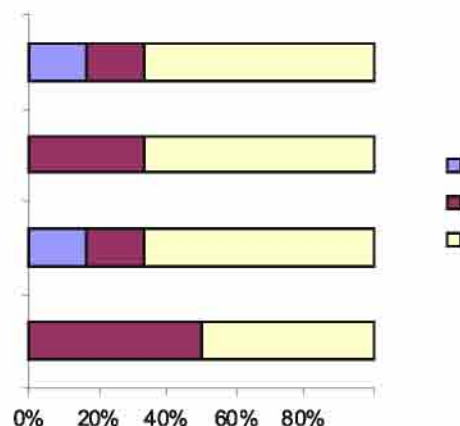


Figure 12: Communication skills in waste section

Most of the staff in the waste section perceive that they have weak skills in terms of communication skills. Although there is a section within ERC that deals with environmental awareness materials, this is an important skill that may need to be strengthened, in order not to place too much pressure on the limited staff in the Environmental Health/Awareness section.

General Management skills

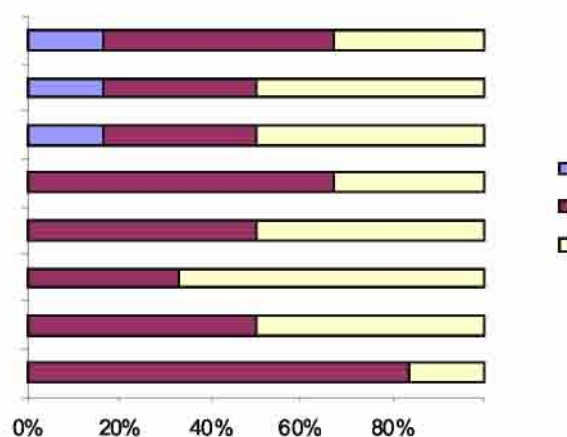


Figure 13: General Management skills in waste section

With regard to general management skills, a majority of staff members perceived that they had medium skills in 'planning work for other people'. This is an interesting theme that emerges across all sections, although only one of the staff members is in a supervisory position.

Project Management skills

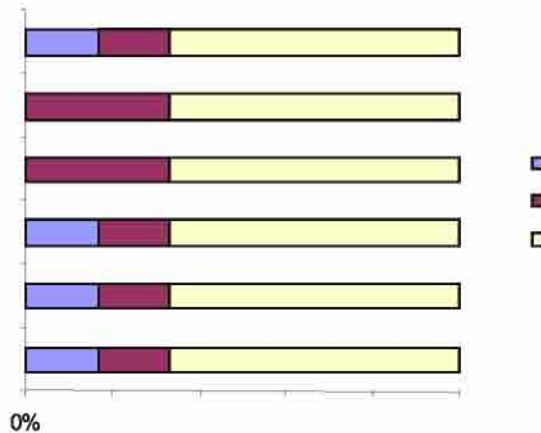


Figure 14: Project Management skills in waste section

Of particular concern is that a majority of staff members in the waste section possess weak project management skills. In all areas of project management over 60% of staff members considered that they had weak skills. Once again, in view of the number and scale of projects that the waste section has taken on recently it will be very important to strengthen these skills as soon as practicable.

Strategic Development skills

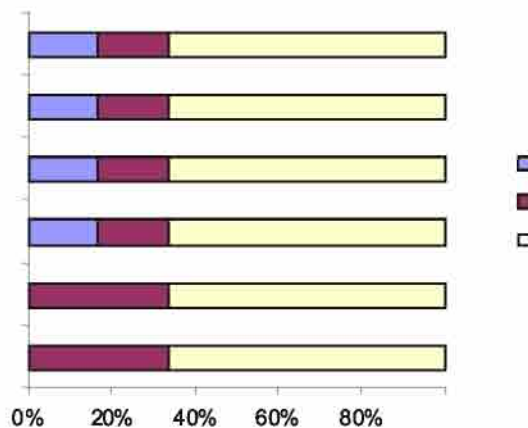


Figure 15: Strategic Development skills in waste section

Likewise strategic development skills are generally considered weak. These are the skills needed to think more broadly and identify gaps in existing programs. With the development of a Waste Management Strategic Policy and Strategy, these 'bigger picture' skills will need to be strengthened within the section.

Policy and Legislative skills

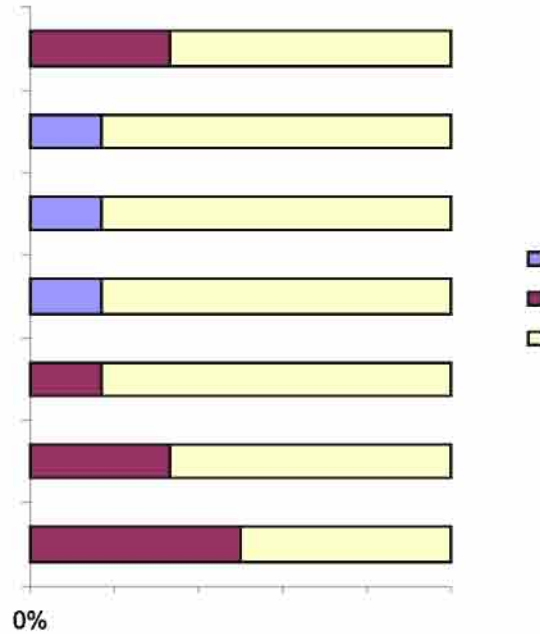


Figure 16: Policy and Legislative skills in waste section

Working for a government agency it is critical for staff to have a sound understanding of the local environmental policies and legislation. Although 50% of the staff members believed they possessed medium level skills regarding environment legislation, staff lacked other skills that 'authorized officers' within other environmental agencies would need to possess. If enforcement provisions (such as against EIA conditions) are to come into play for ERC, these skills will need to be strengthened.

Technical/Professional skills

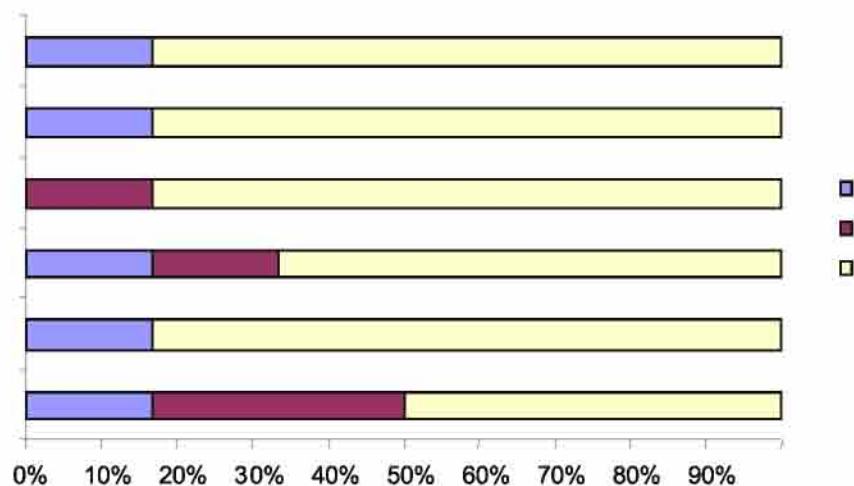


Figure 17: Technical/Professional skills in waste section

Finally in terms of technical skills 50% of the staff felt they possessed strong to medium level skills in providing technical advice on waste management. This is a strong sign, though there is still need of further strengthening of the staff in this area. Likewise very few staff members felt confident in research methods/techniques. This is an area that needs to be strengthened given the overall mandate of the ERC. In the other technical areas (biodiversity/coastal issues), the majority of staff have weak skills. Whilst these areas are not specifically required for the waste section, it does indicate that there is limited depth of experience in the environment field with this section.

VI) BIOLOGICAL AND PHYSICAL ENVIRONMENT SECTION

The following section outlines the summary of results for the Biological and Physical Environment section. This section has 4 units: biodiversity, biosafety, coastal and GIS. In the coastal unit the focus is on research relating to coastal erosion, impacts on the island environment from dredging, entrance blasting and harbour development. There is currently a 5 year program to monitor islands in North, Central and Southern regions 2 times a year in the 2 monsoon periods. In the biodiversity unit there is an upcoming post-tsunami coastal rehabilitation project, funded by UNEP/IUCN/Wetland International, on Kaafu Huraa after June. In biodiversity there is only one staff member.

No research is done per se in this section; mostly paperwork is completed to meet requirements on the Convention on Biological Diversity (CBD) and the Cartagena Protocol on Biosafety. A framework has been developed for the Biosafety protocol and a project will commence in June.

Seven (7) staff members from this section completed the capacity inventory questionnaire. When the section head was interviewed she highlighted the following as the perceived strengths and weaknesses of the section.

<ul style="list-style-type: none"> • surveying. The team had 3 days training about GPS/mapping, now they are mapping islands in Maldives for vegetation/shoreline position, so they can measure changes in the island environment over 5 years. • Improved awareness of the importance of mangroves: now people in the whole country are aware of mangrove ecosystems and their role in sustaining the island environment and the values of Maldives. • A comprehensive database exists with a lot of detail on coastal/ biodiversity/water matters. This is useful for the Assistant Director General or the Minister during trips. • Extensive photo database: more than 20,000 photos from the Maldives collected over 10 years. 	<ul style="list-style-type: none"> • full time person is needed to meet the international commitments. • Biodiversity; not much identification of terrestrial flora and fauna is available. Recently there has been some work done on mangroves, but other species are not known. Otherwise data has not been collected or is outdated. • In recent perceptions survey only 1% of respondents believed that habitat loss was an issue. Maldivian people are not concerned about it. Need to raise awareness about this. • Biosafety protocol: not much work has been done to date. There are no staff in the section allocated to this work. • Need GIS training and capacity building on GIS unit.
---	--

Administrative skills

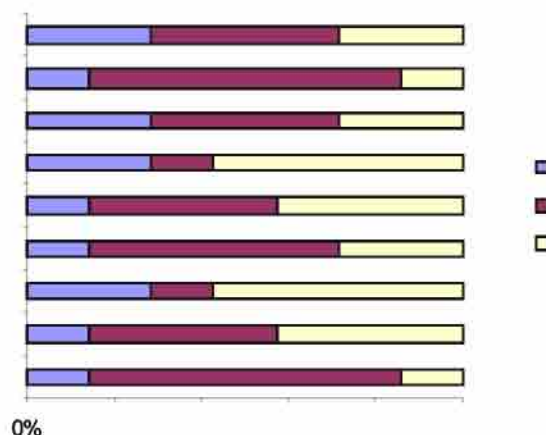


Figure 18: Administrative skills in Biodiversity and Physical Environment Section

In terms of administration skills a majority of team members believed they have medium to strong skills. Notably just under 50% of the staff consider that they

Have weak typing skills in Dhivehi, writing reports and correspondence. These skill areas will need to be strengthened in this section.

IT skills

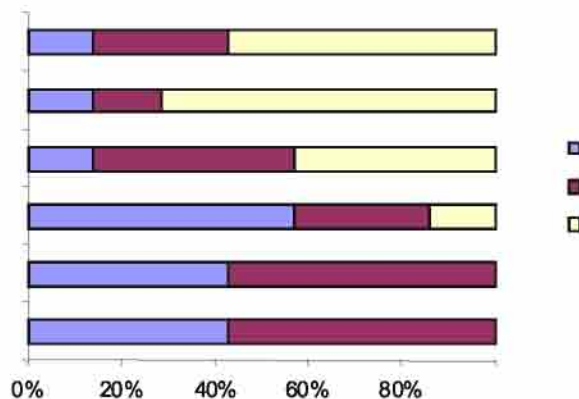


Figure 19: IT skills in Biodiversity and Physical Environment Section

Staff in the biodiversity section seem to be confident in general IT skills, however as with other sections are less skilled in advanced IT areas (eg networking). It is noted that the surveyor staff on the biodiversity team need capacity development in the analysis and use of advanced computer software (eg AutoCAD). This is reflected in the figure 19.

Organizational/communication skills

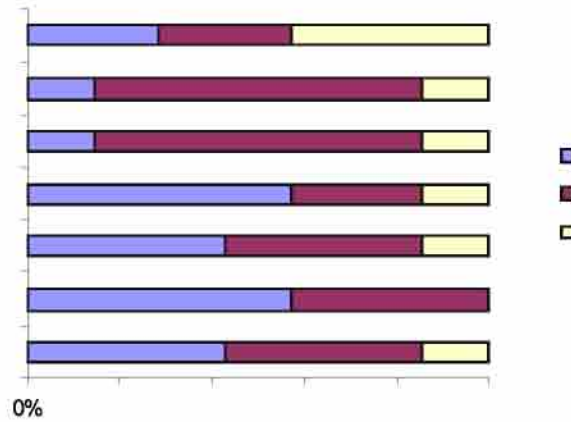


Figure 20: Organizational/communication skills in Biodiversity and Physical Environment Section

In terms of organizational and communication skills, the majority of staff in this section perceive that they have medium to strong skills. The only exception to this is in the area of information dissemination (eg brochures). Although there is an environmental awareness section in ERC, it may be useful to broaden the number of staff who possess these skills.

Client Service skills

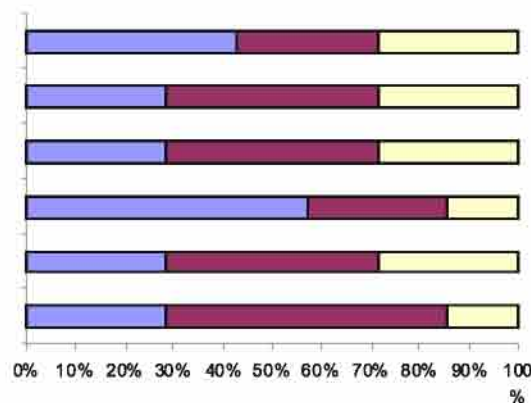


Figure 21: Client service skills in Biodiversity and Physical Environment Section

In terms of client service skills the biodiversity section seems to be overall more confident in this area. In all areas over 70% of the staff members believe they have strong- medium skills in client service. With the exception of new trainees, this skill area may not need to too much additional strengthening.

Community Liaison skills

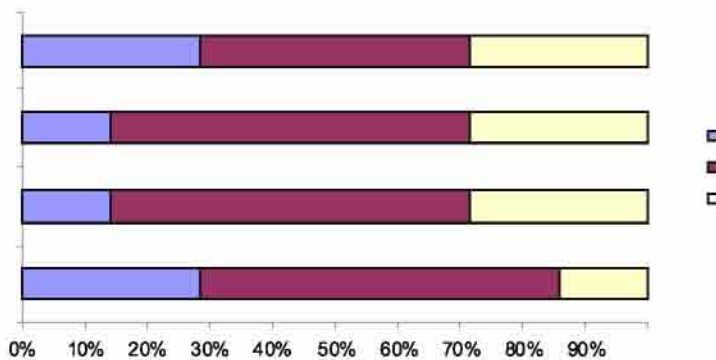


Figure 22: Community liaison skills in Biodiversity and Physical Environment Section

In relation to community liaison skills, over 70% of the staff perceive that they have medium to strong skills in this area. However some of the trainees may benefit from additional training in this area.

General Management skills

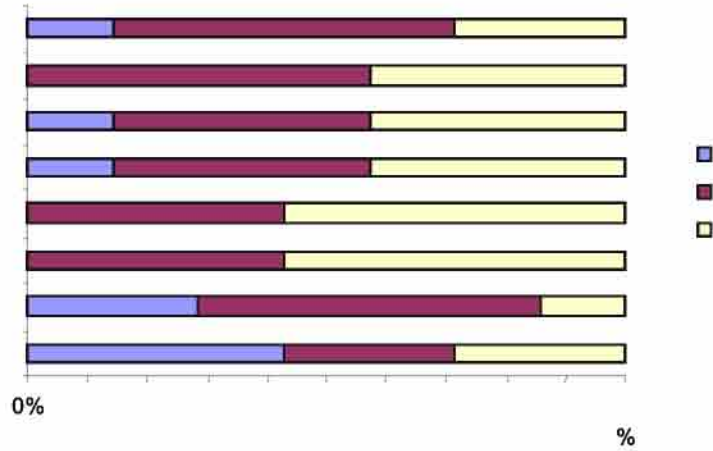


Figure 23: Organizational/communication skills in Biodiversity and Physical Environment Section

The biodiversity section could benefit from strengthening of general management skills. Although over 70% of the staff perceive they have medium to strong skills in planning work for other people, making and managing budgets and recording conversations still are relatively weak areas.

Project Management skills

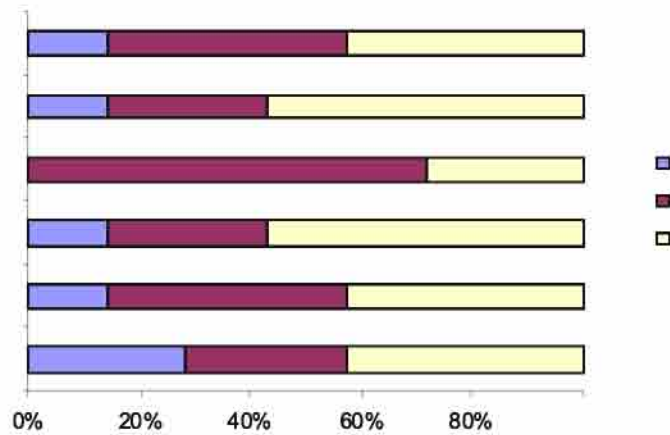


Figure 24: Project Management skills in Biodiversity and Physical Environment Section

Likewise approximately 40% of the staff in the biodiversity section could benefit from additional training/mentoring in project management skills. As there are a number of ongoing projects in this section that require management, it will be important to build these skills.

Strategic Development skills

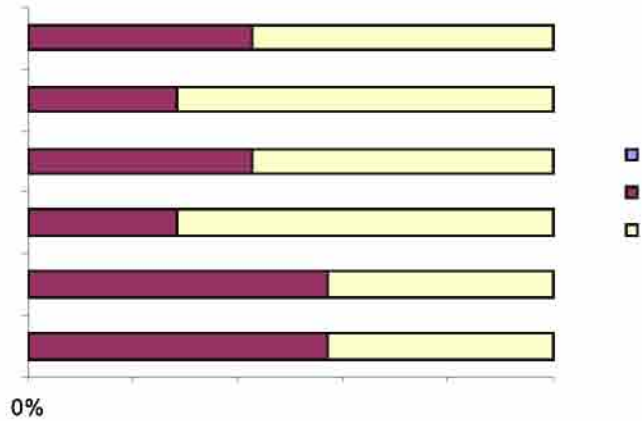


Figure 25: Strategic development skills in Biodiversity and Physical Environment Section

The biodiversity section perceives that they have some skills with regard to strategic development, although there are quite a few staff members who have weaker skills here. Given that this section is required to manage and implement the Convention on Biological Diversity, it will be critical to build greater capacity in this area.

Policy/legislative/enforcement skills

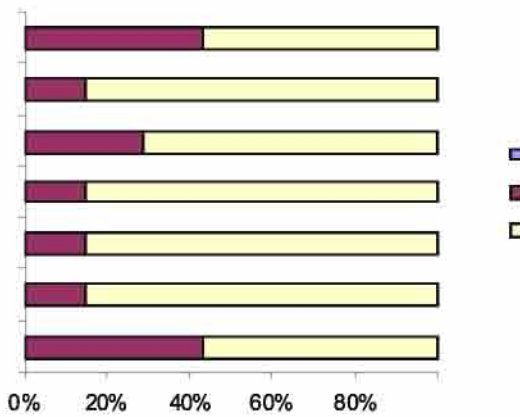


Figure 26: Policy/legislative/enforcement skills in Biodiversity and Physical Environment Section

Overall one of the weakest skill sets for the biodiversity section is legislation/ policy/enforcement. Whilst over 40% of staff perceive that they have medium level skills in regard to their knowledge of environment legislation and interview techniques, enforcement is a weaker area.

Technical skills

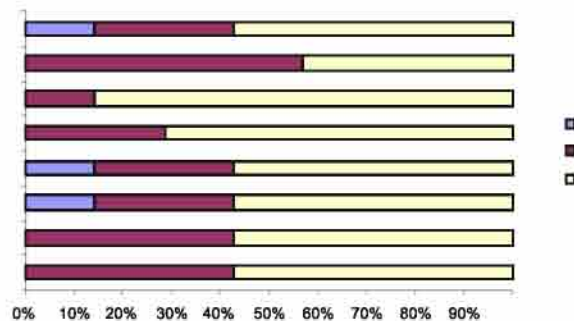


Figure 27: Technical skills in Biodiversity and Physical Environment Section

Finally whilst some staff in the biodiversity section possess some technical knowledge/skills over 60% of the section consider that they have weak skills across all these areas (waste, biodiversity, coastal, EIA, research skills). If ERC is not to rely on external EIA reviewers it will be critical to strengthen these technical skills, especially in research techniques, biodiversity and coastal issues.

Vii) ENVIRONMENTAL IMPACT ASSESSMENT SECTION

The following section outlines the summary of results for the Environmental Impact Assessment section. In 2006 the responsibility for the statutory assessment of EIA's was transferred from the environment section of MEEW to ERC. Since that time a new EIA regulation has come into effect on the 15th May 2007 and now the EIA section needs to post EIA's on their website and formally register consultants and monitor the projects once approved. This section provides scoping meetings with proponents and consultants to help finalize the Terms of Reference for EIA's.

This section is also primarily responsible for building awareness of the need for EIA's and how to use the EIA process effectively. Three (3) staff from the EIA section completed the capacity inventory questionnaire. When the section head was interviewed the following strengths and weaknesses were highlighted. In terms of strengths the section head believed that the section was going well, meeting its deadlines and providing timely reviews etc.

Strengths	Weaknesses
<ul style="list-style-type: none"> The process is quite smooth with a database to track the EIA's since last year in place. The database could however be improved. New EIA regulation has come into effect. This will improve the process and quality of reports. ERC has approximately 5 staff across all sections who can review EIA's. 	<ul style="list-style-type: none"> One staff member manages the process of receiving reports, forwarding to evaluators and then sending our notices. There is a need to ensure that all staff members are aware of this process, so as not to rely on 1 staff member. There is a limited number of evaluators for peak loads of EIA's and staff within ERC lack some confidence/depth of experience for EIA reviews.

Administrative skills

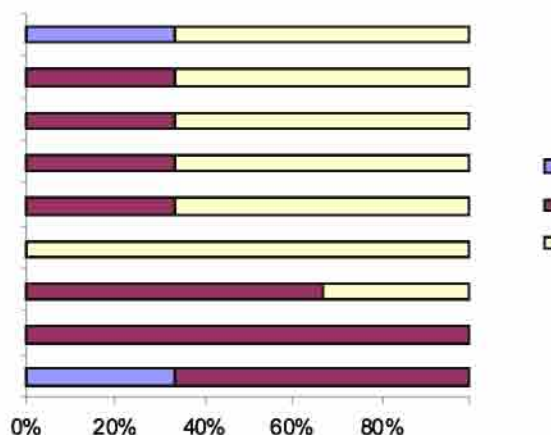


Figure 28: Administrative skills in the EIA section

In terms of administration skills the EIA section perceives that they have good typing skills in both English and Dhivehi. However 75% of the staff believes they have weak skills in writing reports and correspondence and conducting official meetings/recording meeting minutes. Notably none of the staff members have strong skills in file management. This section could therefore benefit from general administration skills. File management will be particularly important from the EIA section as the EIA documents will need to be posted on the website and tracked via a database.

IT skills

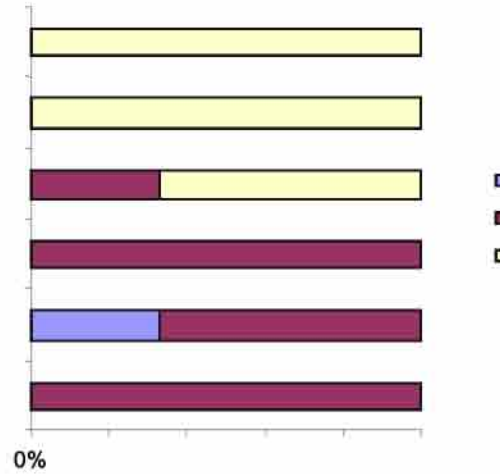


Figure 29: IT skills in the EIA section

The EIA section seem to possess medium level skills when it comes to general computing, however they do not possess more advanced IT skills. Given that the new EIA regulation will require EIA documents to be uploaded onto the ERC website it will be critical for the EIA section to possess more web based IT skills.

Client service skills

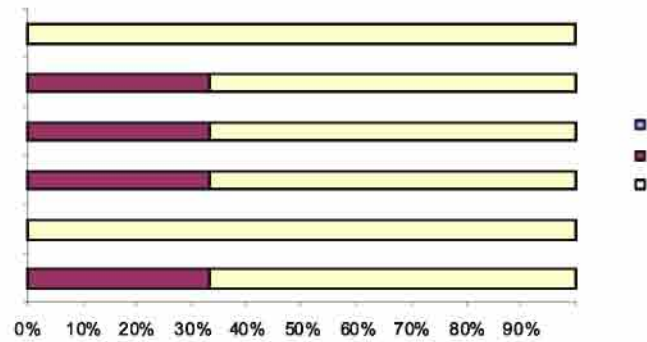


Figure 30: Client service skills in the EIA section

In terms of client service skills, the majority of staff in this section seem to lack skills for dealing with clients. It is understood that the EIA section hold pre- lodgment meetings with consultants/proponents, so these skills need to be strengthened.

Organizational skills

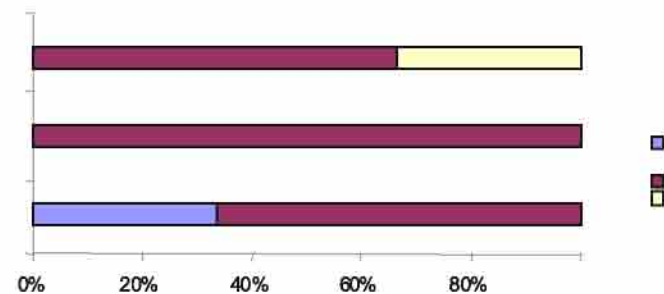


Figure 31: Organizational skills in the EIA section

In terms of organizational skills the EIA section mostly seems confident in managing workloads and working to deadlines. However given the importance of meeting statutory deadlines, it may be of value to strengthen these skills.

Community liason skills

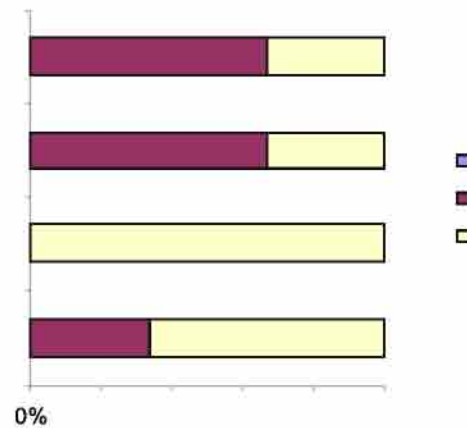


Figure 32: Community liason skills in the EIA section

The EIA section is not specifically required to work with communities; therefore it is not surprising that community liaison skills are somewhat weak.

General management skills

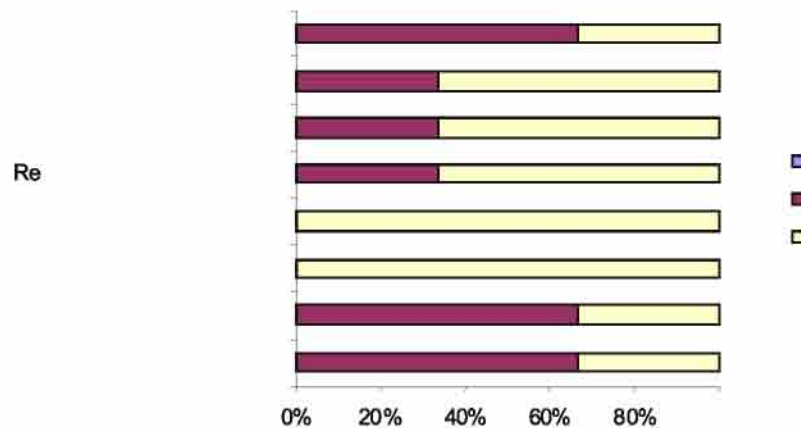


Figure 33: General management skills in the EIA section

In terms of general management skills, the EIA section seem to be confident in writing reports, reviewing work programs and planning work for other people. However they acknowledge that they lack skills in making and managing budgets/maintaining governance systems. Although budget making is not a major task of this section, the staff in this section will need some assistance with maintaining governance systems to ensure that the review of EIA documents is transparent, clear and decisions are well documented.

Project management skills

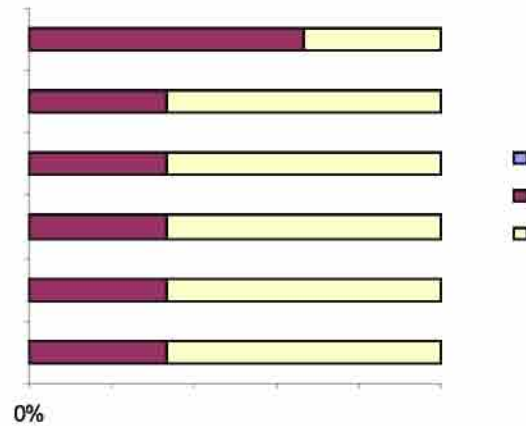


Figure 34: Project management skills in the EIA section

Project management skills in the EIA section are generally weak. Although this section does not necessarily undertake projects, it is required to meet statutory deadlines for EIA reviews etc.

On the whole strategic development skills are also perceived as weak in this section, however in general this skill set is not required for the performance of this section.

Policy/legislative skills

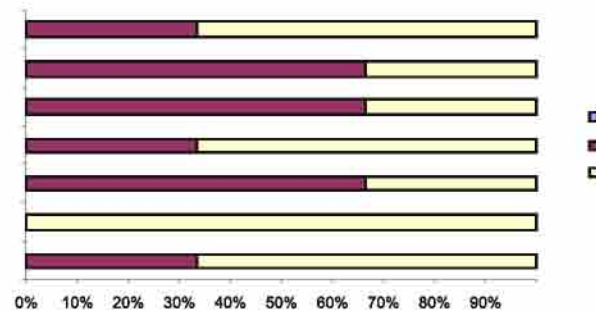


Figure 35: Policy/legislative skills in the EIA section

With the introduction of the new EIA regulation it will be important for staff to strategically reflect on its implementation and identify gaps etc. In general this section could benefit from skills in regard to policy/legislation. If enforcement provisions are to be introduced then these skills will need to be fostered.

Technical skills

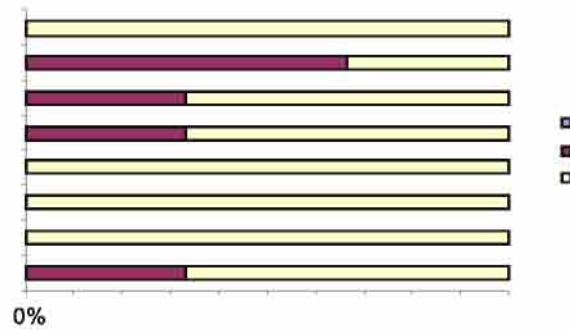


Figure 36: Technical skills in the EIA section

In general the EIA section possess weak to medium skills in reviewing EIA documents/making recommendations. Other technical areas such as coastal issues/biodiversity skills are also lacking in this section. Whilst the majority of staff in this section perform administrative functions (recording documents, allocating assessors, printing recommendations etc), there is value in improving the depth of experience in this section in regards to environmental issues, rather than relying on external reviewers.

Vii) ENVIRONMENTAL HEALTH AND AWARENESS SECTION

The following section outlines the summary of results for the Environmental Health and Awareness section. This section includes 4 subsections that were introduced in 2006: Ozone, Hazardous waste, pollution and awareness. Under the Ozone section ERC is responsible for maintaining commitments to the Montreal protocol as well as undertaking several projects (phasing out CFC's, controlling existing CFC users). The hazardous waste section has not done much work to date, but has done a preliminary assessment of oil contamination of land on 2 islands. There is a need to do research into how much hazardous waste is used in Maldives (especially oil and

batteries), although currently there is no regulation or disposal options. In the Pollution unit not much has been done to date. Discussions between ERC and STELCO (state run electricity provider in Male') are currently underway to finalise a contract to monitor the air quality in Male'. In the awareness unit a graphic designer translates/designs materials for all ERC sections.

Two (2) staff members from this section completed the capacity inventory questionnaire. The following strengths and weaknesses were highlighted during an interview with the section head.

Strengths	Weaknesses
<ul style="list-style-type: none"> Awareness section is very experienced and talented and has prepared numerous materials, especially leaflets for waste section. Ozone unit is functioning well and has had improved capacity since the visit of an ozone officer from Sri Lanka the ozone unit. 	<ul style="list-style-type: none"> Ozone section only has one staff member and there is a big workload. Chemistry background is helpful, but most of the work is project management. The section does not have any staff allocated to hazardous waste or pollution units, so often it needs to borrow staff from ERC. No experience/ knowledge/ skills/equipment in soil remediation/contaminated land. This is needed for the future. Hazardous waste and pollution sections are not doing so much currently (because of staffing and resourcing issues).

Administrative skills

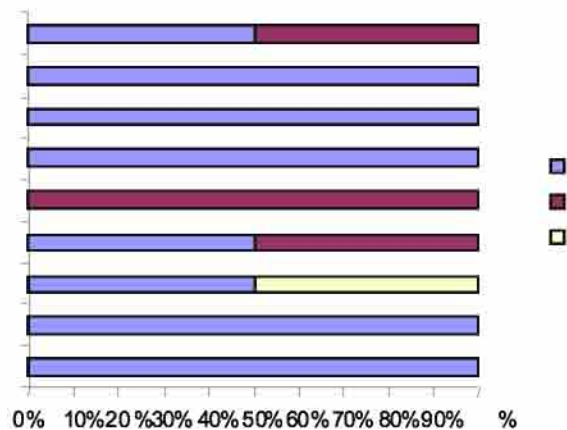


Figure 37: Administrative skills in the Environmental health section

The Environment health section only has 2 staff members, but these 2 staff members are quite confident when it comes to general administration skills.

IT skills

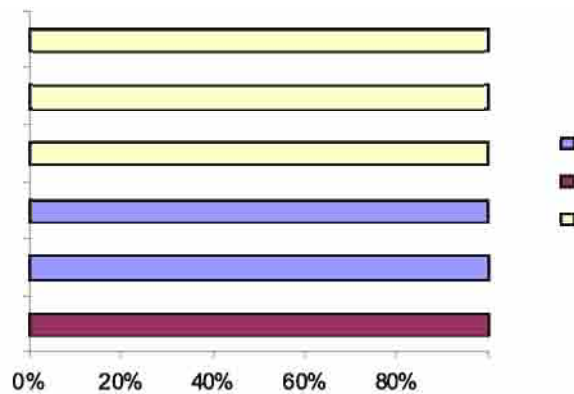


Figure 38: IT skills in the Environmental health section

Likewise the staff in this section have medium to strong skill sets with regard to general computing skills. However both members do perceive that they have weak skills when it comes to more advanced skills, although the graphic designer has good skills using design software.

Organization/communication skills

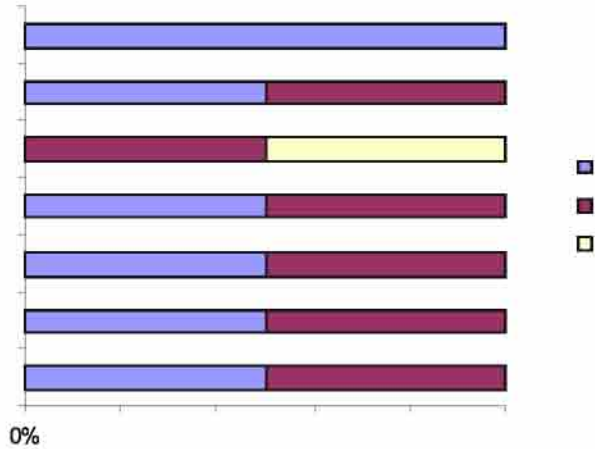


Figure 39: Organization/communication skills in the Environmental health section

Both staff members are also confident in managing workloads and working with limited direction. This section is especially strong when it comes to presenting data and brochures.

Client service skills

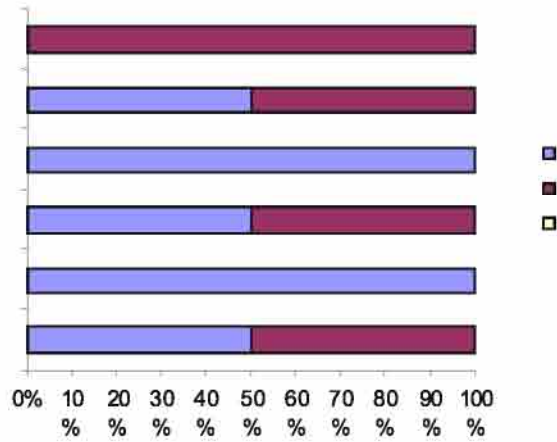


Figure 40: Client service skills in the Environmental health section

With regard to client service skills both staff members have strong to medium skills in this area.

Community liaison skills

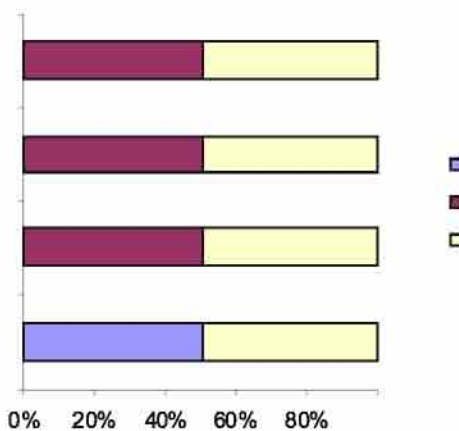


Figure 41: Community liaison skills in the Environmental health section

Although one staff member considers that she has weak skills in community liaison skills

General Management skills

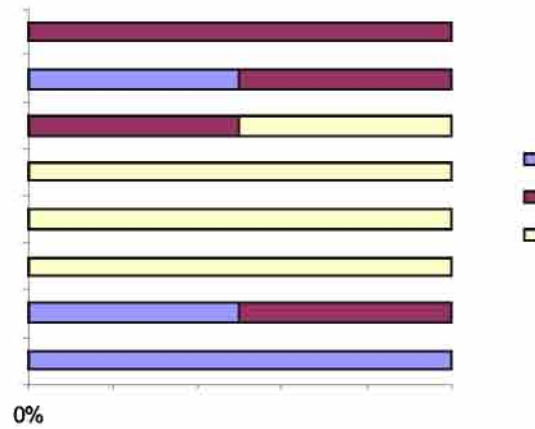


Figure 42: General management skills in the Environmental health section

With regard to general management skills both staff members feel confident in writing reports, reviewing work programs and planning work for other people. Areas of weakness include making budgets, maintaining governance systems and recording of conversations. These are not key skill areas for the environmental health section, but could be strengthened

Project management skills

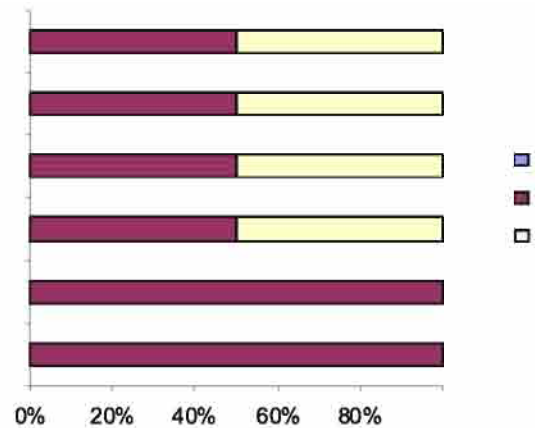


Figure 43: General management skills in the Environmental health section

With regard to project management skills both staff members perceive they have medium level skills in project documentation preparation and planning, however only 50% of the section possesses medium skills when it comes to the other project management skills (contract management, document review, procurement).

Strategic development skills



Figure 44: General management skills in the Environmental health section

In terms of strategic development bench-marking and strategic planning are weak areas, although priority identification and funding identification are considered stronger areas.

Policy/legislative skills

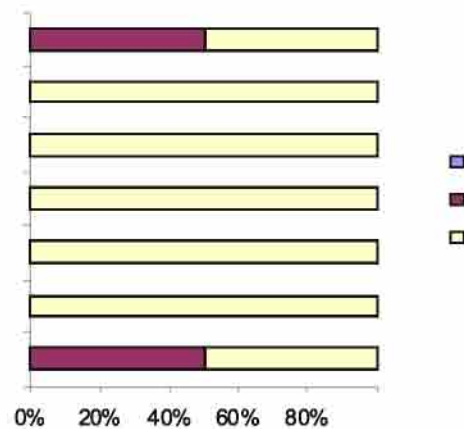


Figure 45: General management skills in the Environmental health section

In terms of legislation/policy skills both staff members perceive they have weak skills in policy/legislation and enforcement. Given that this section deals with the Montreal protocol, it will be important to strengthen legislative/policy

Technical skills

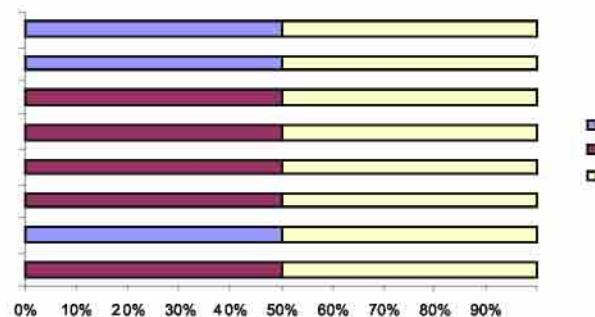


Figure 46: General management skills in the Environmental health section

In relation to technical skills 50% of the staff perceived that they had weak skills in many of these areas. One of the staff members is however very strong in graphic design and drawing illustrations. This is the graphic designer for the ERC.

IX) SENIOR MANAGERS

As part of this capacity inventory the Assistant Director General (Administration and Finance) and the Assistant Director General completed questionnaires. The former manager has an overall mandate for the administration and finance of ERC, whilst the Assistant Director General has

the overall responsibility to manage ERC. Both staff members are long time staff members of the Government of Maldives and the Environment Research Center. The following section provides an analysis of the skill ratings for both senior managers.

Skill	Deputy DG Admin	Assistant Director General ERC
Administration	Medium level skills in all areas, except weak skills in typing in English, writing reports and database mgt.	Strong skills in writing reports/correspondence/conducting official meetings. Weaker skills in file management/database mgt.
IT skills	Medium level skills in general IT skills, but weaker skills in advanced IT skills.	Medium level skills in general IT skills, but weaker skills in advanced IT skills.
Organizational Skills	Medium level skills in managing workloads, working to deadlines/ limited direction.	Strong skills in working to deadlines and with limited supervision.
Client Service	Strong skills in responding to complaints and maintaining effective communication with clients. Medium skills consulting and negotiating with clients.	Medium level skills in providing client service (consulting/ negotiating/maintaining effective communication.)
Community Liaison	Medium level skills in community liaison.	Medium level skills in community liaison.
Communications	Medium level skills in information collection/ presentation of data. Weak skills in report presentation.	Medium level skills in presenting data/preparing reports.
General Management	Medium skills in recruiting people, recording conversation, making and managing budgets, reviewing work programs. Strong skills in planning work for other people.	Medium level skills in managing conflict, recruiting people, planning work for other people, reviewing work programs etc.
Project Management	Medium skills in procurement, contract management, project monitoring and evaluation. Weak skills in project planning, document review and preparation.	Weak skills in project management.
Strategic Development	Medium level skills in strategic development.	Weak skills in strategic development.
Policy Development/ Legislation	Medium level knowledge of legislation and identifying gaps in policy framework.	Medium level knowledge of legislation and identifying gaps in policy framework.
Enforcement	Medium level enforcement skills.	Medium level enforcement skills.
Technical Skills	Weak skills generally, except on waste and coastal issues.	Medium level technical skills across all sections.
Other Skills	Medium level skills in graphic design/illustrations.	Weak skills in graphic design etc.

It is clear from the above table that both senior managers possess both a wide range of general and technical skills. However both senior managers could benefit from capacity development in general management, project management and strategic development. In particular both senior managers could benefit from training in public sector management.

CONCLUSIONS AND RECOMMENDATIONS

It is clear from the findings of this capacity inventory that the staff at ERC possess a range of skills and qualifications. Over the last 12 months ERC has grown and developed as an organization, in large part due to the management of the Assistant Director General and the dedication of the staff. It is hoped that by undertaking this reflective exercise that many staff members at ERC now recognize their own skills and the skills of their colleagues.

However if ERC is to fulfill its mandate in its entirety, it will be essential for the institution to be strengthened, both in the short term and the mid/long term (3-5 years).

Such institutional strengthening needs to occur at different levels of the organization including at: a section level, the management level, as well as across the entire organization. Furthermore whilst sending staff away to obtain tertiary qualifications is important to the organization in the long term, such a strategy will not allow ERC to meet current expectations and commitments. Therefore a capacity building strategy for ERC needs to incorporate both short term courses and longer term training opportunities. The following recommendations are offered for consideration in the capacity development strategy of ERC:

Environment Research Center (overall)

Objective:

- To strengthen the overall management skills and depth of knowledge and extent of experience of personnel.

Skill area	Target	Timeframe
Public Sector Management	<ul style="list-style-type: none"> • Section heads and senior managers should be placed within regional or international governmental Environmental Agencies for periods of up to 1 month to gain first hand experience of how other agencies deal with similar issues. • Senior Managers should undertake a public sector management program (e.g. e-learning). 	<p>- Starting 2008</p> <p>- Starting 2008</p>
Project Management, including using appropriate computer software.	<ul style="list-style-type: none"> • Section heads and other key personnel should undertake a project management course (e.g. e-learning). The course should include project planning, procurement, contract management and monitoring and evaluation. • Section heads and other key personnel should undertake training in using appropriate project management computer software. • Contract an expert on project management (in developing countries/ environmental sector) for 3 months to support and advise ERC. • Endeavor to recruit staff in to ERC professional positions with tertiary qualifications in project management or/and provide tertiary education (Undergraduate Degree) to existing staff in project management. 	- Starting 2008
Environmental Science	<ul style="list-style-type: none"> • Endeavor to provide tertiary education for existing staff or to recruit staff in to ERC professional positions with tertiary qualifications in environmental science/ management. • Endeavor to recruit section heads with prior experience in environmental sector and /or post graduate qualifications. 	- Starting 2008

- To strengthen key systems within the organization.

Skill area	Target	Timeframe
Staff orientation system	<ul style="list-style-type: none"> • Establish a staff orientation system to ensure familiarity with ERC. • Identify potential training requirements within 3 months of commencement. 	
File/Database management	<ul style="list-style-type: none"> • Utilising a local consultant improve current file management system for hard copy and electronic files. • Provide in-house training to all staff regarding the improved system. • Utilising a local consultant strengthen database management, especially in Biodiversity and EIA sections. 	
Advanced IT skills	<ul style="list-style-type: none"> • Urgently recruit a website manager/ designer especially for uploading of EIA's to the website. • Recruit staff or provide short term training to current staff on networking of computers. Computer engineering • Provide short/long term training in software engineering 	
GIS programs	<ul style="list-style-type: none"> • Provide short term training on using GIS programs (such as CAD). • Contract an expert on GIS programs for 3 months to support and advise the application of this system. 	

- To strengthen key general skill areas across the organization.

Skill area	Target	Timeframe
Research skills	<ul style="list-style-type: none"> • Network and form partnerships with other research institutions from the region and internationally, especially with marine expertise (eg such as James Cook University in Australia). • Offer short term placements for researchers to come to the Maldives and undertake research and in turn provide research skills to ERC staff. • Likewise offer short term placements for ERC staff to visit the research institutions and undertake research. 	2007 onwards

Strategic Development	<ul style="list-style-type: none"> Section heads and other key personnel should undertake short term training in strategic development. 	2007 onwards
Legislation/policy and enforcement	<ul style="list-style-type: none"> Provide short term training to current staff on national and international environmental legislation, during orientation and on a regular basis after that. Provide updated training sessions as required, when significant changes in legislation occur. 	2007 onwards
Facilitation skills	<ul style="list-style-type: none"> Provide short term course on facilitation skills to staff from all sections. (completed April 07) Provide practical experience in using facilitation skills. 	During 2007
Administrative skills (such as report/letter writing in English and Dhivehi, minute taking)	<ul style="list-style-type: none"> Provide local training opportunities for report writing in English and Dhivehi. Develop exemplars of reports, letters and minutes for staff to follow. Provide in-house training on how to write official government correspondence. Provide relevant tertiary education in this field including Bachelor of Administration/ Bachelor in Management 	2007 onwards
Finance skills, especially in making and managing budgets	<ul style="list-style-type: none"> Provide regular short term training to current staff on making and managing budgets. The training should focus on project and government budgetary processes. Provide relevant tertiary education in this field including Bachelor of Science (Honours) in Accounting 	2007 onwards

Waste Section

Objective: To strengthen the technical skills and knowledge in this section, especially with the trainees.

Skill area	Target	Timeframe
Waste Science, Waste Management	<ul style="list-style-type: none"> Endeavor to recruit staff in the section with science backgrounds, especially in environmental/engineering or waste science background. Where possible, send staff within ERC on relevant tertiary courses to obtain graduate or post-graduate qualifications. Undertake regular in-house waste management training, as new staff commence duties at ERC. 	Starting 2008 Ongoing from 2007
Waste Auditing	<ul style="list-style-type: none"> With the international consultant provide practical and theoretical aspects of waste audits in the Maldives. 	Within second half of 2007

Biodiversity section

Objective: To strengthen the technical skills and knowledge in this section, especially with the trainees.

Skill area	Target	Timeframe
Biodiversity	<ul style="list-style-type: none"> Recruit staff with qualifications, especially in field of taxonomy/botany/zoology to identify terrestrial flora and fauna. Send staff on short term courses in field of taxonomy/botany/zoology to identify terrestrial flora and fauna. Send staff within ERC on relevant tertiary courses in field of taxonomy/botany/zoology Contract an expert on CBD for 3 months to support and advise this section. (upcoming) 	- Starting 2008
Coastal	<ul style="list-style-type: none"> Recruit staff with qualifications, especially in field of surveying. Send staff on short term courses, especially related to oceanography, coastal engineering and hydrodynamics, Island Geomorphology, Geology, Remote Sensing and GIS, Civil Engineering, Surveying and Hydrology. Send staff within ERC on relevant tertiary courses especially related to oceanography, coastal engineering and coastal dynamics. 	- Starting 2008
Economic evaluations (livelihoods/cost benefit analysis etc).	<ul style="list-style-type: none"> Contract an expert on economic evaluations for 3 months to support and advise this section in the development of management plans. Send staff on short term courses, especially related to Socioeconomic Assessment. 	- Starting 2008
Biosafety protocol	<ul style="list-style-type: none"> Recruit staff with qualifications, especially biotechnology. Send staff on short and/or long term courses, especially related to biotechnology. 	- Starting 2008

Environmental Health and Awareness Section

Objective: To strengthen the technical skills and knowledge in this section.

Skill area	Target	Timeframe
Hazardous waste/ pollution	<ul style="list-style-type: none"> Recruit staff with qualifications, especially with strong science skills and undergraduate degree in environmental chemistry/ environmental engineering. Send staff on short term courses, especially related to hazardous waste/pollution. Send staff within ERC on relevant tertiary courses in environmental chemistry/ environmental engineering. 	- Starting 2008
Contaminated land/soil remediation.	<ul style="list-style-type: none"> Send staff on short term courses, especially related to contaminated land. Such courses should have a theoretical and practical component. Contract an expert on contaminated land for 3-6 months to support and advise this section. Send staff within ERC on relevant tertiary courses (BSc and MSc) in environmental chemistry/soil science/ environmental remediation 	- Starting 2008
Awareness	<ul style="list-style-type: none"> Send staff on short/long term courses, especially related to Environmental Education 	2007 onwards

EIA section

Objective: To strengthen the technical skills and knowledge in this section, and improve the overall management of EIA's.

Skill area	Target	Timeframe
EIA	<ul style="list-style-type: none"> Recruit staff with environmental science qualifications, especially with strong multidisciplinary skills. Send staff on short term courses, especially related to EIA techniques (eg UNEP course). This should be done at least yearly as new staff come into the organization. Send staff within ERC on relevant tertiary courses including Undergraduates in EIA, Sustainable Development, Environmental Engineering. 	- Starting 2008

Database management	<ul style="list-style-type: none"> Contract an expert on database management to improve the database and support and advise this section for minimum of 1 month. 	2007 onwards
Monitoring and enforcement of EIA's.	<ul style="list-style-type: none"> Send staff on short term courses, especially related to monitoring and enforcement, preferably with a government agency. Contract an expert on environmental enforcement for 3 months to support and advise this section. 	2007 onwards

Administration section

Objective: To strengthen the administrative skills and knowledge in this section, to improve the overall management of ERC.

Skill area	Target	Timeframe
Client service skills, especially responding to enquiries or complaints promptly.	<ul style="list-style-type: none"> Provide in house training regarding client service standards. Ensure there is a system in place to document and handle enquiries and complaints received by reception. 	2007 onwards
Public relations	<ul style="list-style-type: none"> For staff who need to speak to community members or the media, provide short term training in public relations. 	2007 onwards
Human Resource management, especially in terms of managing conflict and recruiting staff.	<ul style="list-style-type: none"> Ensure that staff involved in human resource management have received short/long term training in this area, especially regarding recruiting staff and managing conflict. 	2007 onwards

Annex 1: List of long and short term courses necessary and some potential training providers/institutions

Skill area	Course	Institution	Timing
Environmental Science	Bachelor of Applied Science with Honours	James Cook University, Australia	4 year degree
	BSc in Environmental Science	St. Joseph's College, India	3 years
GIS programs	BSc in Remote Sensing and GIS, BSc in Oceanography		
Research skills	BSc in Statistics and Research Skills		
Strategic Development	BSc in Strategic Development		
Waste Science/ Waste Management	Masters in Waste Science and Waste Management	University of Lancaster, UK	1 year
Biodiversity - taxonomy/botany/zoology	Masters in Environmental Science.	Griffith University, Australia	1.5 years
	Masters in Environmental Management	Flinders University, Australia	
	BSc in Biochemistry	University of Newsouth Wales, Australia	
Coastal (oceanography, coastal engineering and coastal dynamics)	Bachelor (Hons) of Marine Science and Technology,	University of Mauritius, Mauritius	4 years
	BSc in Engineering (Environmental),	Nanyang technological Univeristy, Singapore	
	BSc in Surveying	Univeristy of Otago, Newzealand	4 years
	Bachelor of Hydrology, Bachelor of Civil Engineering, Hydrodynamics, Island Morphology, Geomorphology.		
Contaminated land	BSc in Soil Science, Environmental Remediation, BSc of Science (Chemistry)	University of Warwick, UK	
Hazardous waste/pollution.	BSc in Environmental Chemistry, Environmental Management, Masters in Environmental Science/Environmental Remediation	National Univeristy of Sigapore,	
Public Sector Management	MSc PUBLIC SECTOR MANAGEMENT	Southbank University, UK	Part time – 2 years, on campus
	Master of Arts in Public Sector Leadership	Seek Learning www.seeklearning.com.au	e-learning
Project Management, including using appropriate computer software.	PMI Project Management Professional (PMP) Certification Training <u>At least 3 years of experience in project management</u> (Project Management Institute) PMI Certified Associate in Project Management (CAPM) Certification Training 58 hours (Project Management Institute) No pre-requisites	Seek Learning www.seeklearning.com.au	e-learning

Annex 2: Template of capacity inventory questionnaire

The purpose of this questionnaire is to provide detailed information on the qualifications, skills and experiences of all staff at the ERC. With this inventory we will be able to identify our strengths and also identify areas of weaknesses which we need to build upon.

Name:	
Job title:	
Start date:	
Have you held any other positions within ERC?	

Part I Qualifications and training received

Please list your existing educational qualifications, as well as any that are currently being obtained.

Date	Institution	Qualification

Describe how you use your qualifications in your day to day work?

--

Please list training that you have received.

Date	Institution	Course

Describe how this training has helped you in your day to day work?

--

Part II Knowledge and Skills

Please provide an accurate assessment of your existing skills.

Administrative

Strong	Medium	Weak	
			Typing (English)
			Typing (Dhivehi)
			Using computer programs (MS word, excel)
			Sending emails
			Researching on the internet
			File management (electronic and hard copy)
			Writing reports
			Writing correspondence
			Conducting official meetings
			Recording minutes of meetings
			Networking computers
			Computer/IT maintenance

Organizational skills

Strong	Medium	Weak	
			Managing workloads
			Working to deadlines

Organizational skills

Strong	Medium	Weak	
			Responding to enquiries promptly and professionally
			Responding to complaints promptly and professionally
			Maintaining effective communication with clients
			Maintaining records of communications
			Consulting with clients
			Negotiating with clients

Community Liaison

Strong	Medium	Weak	
			Establishing effective liaison with communities.
			Speaking at community meetings/forums
			Community mobilization skills

General Management

Strong	Medium	Weak	
			Planning Work for Other People
			Directing the Work of Other People
			Reviewing work programs
			Making Budgets
			Managing Budgets
			Keeping Records of All Your Activities
			Recruiting People
			Managing conflict
			Writing Reports

Project Management

Strong	Medium	Weak	
			Project planning
			Project liaison
			Procurement
			Contract management
			Project monitoring and evaluation
			Document review

Strategic Development

Strong	Medium	Weak	
			Strategic planning

Policy Development/Legislation

Strong	Medium	Weak	
			Knowledge of environment legislation
			Identifying gaps in existing policy framework

Enforcement

Strong	Medium	Weak	
			Knowledge of enforcement provisions in environmental legislation
			Knowledge of procedures for collecting evidence

Technical skills/Operational/Professional

Strong	Medium	Weak	
			Providing technical advice on waste issues and waste management.
			Providing technical advice on biodiversity issues
			Knowledge of research techniques
			Knowledge of coastal issues
			Reviewing EIS documents
			Making recommendations on EIS documents

Priority Skills

When you think about your skills, what three things do you think you do best?	
Are there any skills you would like to teach?	
What skills would you most like to learn?	

Part III Experiences

How many years have you been working?

How many years have you been working for ERC?

In your current position provide a summary of the type of tasks that you do on a day to day basis.

Please provide a summary of your work experience to date and the tasks/duties that you performed.

