Protected area management training in West and Central Africa
Impacts and recommendations
Protected area management training in West and Central Africa

Impacts and recommendations
Table of contents

List of acronyms.......................................................................................................................... 5
Executive Summary.......................................................................................................................... 7

1. Study Context and Objectives.................................................................................................. 8
   1.1. Context.................................................................................................................................. 8
   1.2. The Needs in the Region................................................................................................. 9
   1.3. University Diploma in “Protected Area Management”...................................................... 9
       a. Objectives......................................................................................................................... 9
       b. Course Content ............................................................................................................... 10
       c. Training Course Target ................................................................................................. 10
       d. Diploma............................................................................................................................. 10
       e. The Courses Run to Date............................................................................................... 10
   1.4. International Master’s in Protected Area Management.................................................... 11
   1.5. Unique Training Courses................................................................................................. 11
   1.6. Objectives of the Study.................................................................................................... 12

2. Methodology............................................................................................................................ 13

3. Results – Quantitative Analysis............................................................................................. 14
   3.1. General Data on the Two Courses.................................................................................. 14
       a. Geographical Distribution............................................................................................... 14
       b. Gender Distribution.......................................................................................................... 14
   3.2. The University Diploma................................................................................................... 15
       a. General Data..................................................................................................................... 15
       b. The Students and the Course.......................................................................................... 16
       c. Graduates’ Professional Career...................................................................................... 16
       d. Initial conclusions on the University Diploma.............................................................. 21
   3.3. The Master’s..................................................................................................................... 22
       a. General Data..................................................................................................................... 22
       b. The Graduates and the Course........................................................................................ 23
       c. Graduates’ Professional Career...................................................................................... 23

4. Course impacts and implementation of skills acquired.......................................................... 26
   4.1. Better understanding of protected areas.......................................................................... 26
   4.2. Protected Area Management Planning............................................................................ 28
   4.3. Evaluation of the effectiveness of protected area management....................................... 29
   4.4. Ecological monitoring, wildlife census techniques and introduction to GIS.................... 29
   4.5. Participatory approach/management and promotion of protected areas......................... 30
   4.6. Fundraising....................................................................................................................... 31
   4.7. Other specific activities set up following the courses....................................................... 31
       a. Discussion on the creation of new protected areas......................................................... 31
       b. Teaching........................................................................................................................... 32
       c. Other Benefits.................................................................................................................. 32
   4.8. Brief comparison of the UD and the Master’s................................................................. 32
   4.9. Conclusions....................................................................................................................... 33

5. Recommendations, limitations and conclusions.................................................................... 35
   5.1. Recommendation of measures to improve the courses.................................................. 35
   5.2. Limitations......................................................................................................................... 37
   5.3. Conclusions....................................................................................................................... 38
Annexes

Appendix 1: Master’s Programme
Appendix 2: Questionnaire
Appendix 3: List of people met
Appendix 4: A few more testimonies

List of tables
Table 1: List of “University Diploma” Courses run
Table 2: Number of Questionnaires filled out
Table 3: Summary (Geographical, gender and course distribution)
Table 4: Comparison of priority themes for capacity building in the 3 regions
Table 5: Specific activities in the field of protected area management planning
Table 6: Specific activities in protected area management effectiveness assessment
Table 7: Specific activities in ecological monitoring

List of figures
Figure 1: Distribution of Students by Country
Figure 2: Gender Distribution of Graduates
Figure 3: Geographical Distribution of UD Students
Figure 4: Distribution of UD graduates by type of organisation
Figure 5: Distribution of UD graduates by country and type of organisation
Figure 6: Distribution of UD graduates by country working in connection with a protected area
Figure 7: Distribution by type of organisation in connection with a protected area
Figure 8: Type of organisation before and after the course
Figure 9: Geographical and gender distribution of students (Masters)
Figure 10: Distribution of graduates by type of organisation (29 responses)
Figure 11: Distribution of graduates by type of organisation and country (29 responses)
Figure 12: Type of organisation in connection with a protected area or around one
**List of acronyms**

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIPA:</td>
<td>Biodiversity Conservation and Poverty Alleviation – World Bank project</td>
</tr>
<tr>
<td>CITES:</td>
<td>Convention on International Trade in Endangered Species of Wild Fauna and Flora</td>
</tr>
<tr>
<td>DAMCP:</td>
<td>Direction des Aires Marines Communautaires Protégées (Senegal) – Directorate of Community Marine Protected Areas</td>
</tr>
<tr>
<td>DPN:</td>
<td>Direction des Parc Nationaux (Senegal) – Directorate of National Parks</td>
</tr>
<tr>
<td>EoH:</td>
<td>Enhancing our Heritage</td>
</tr>
<tr>
<td>ERAIFT:</td>
<td>École Régionale post universitaire d’Aménagement et de gestion Intégrés des Forêts et Territoire stropicaux – Regional post-graduate school for the integrated development and management of forests and tropical areas</td>
</tr>
<tr>
<td>FIBA:</td>
<td>Fondation Internationale du Banc d’Arguin – International foundation for the Banc d’Arguin</td>
</tr>
<tr>
<td>GEF:</td>
<td>Global Environment Facility</td>
</tr>
<tr>
<td>GIDEL:</td>
<td>Gestion Intégrée et Développement Durable du Littoral Ouest africain – Integrated Management and Sustainable development of the West African Coastline</td>
</tr>
<tr>
<td>GIS:</td>
<td>Geographical Information System</td>
</tr>
<tr>
<td>IUCN:</td>
<td>International Union for Conservation of Nature</td>
</tr>
<tr>
<td>MOOC:</td>
<td>Massive Open Online Course</td>
</tr>
<tr>
<td>NGO:</td>
<td>Non-Governmental Organisation</td>
</tr>
<tr>
<td>OFINAP:</td>
<td>Office National des Aires Protégées – National office for protected areas</td>
</tr>
<tr>
<td>OIPR:</td>
<td>Office Ivoirien des Parcs et Réserves – Ivorian office for parks and reserves</td>
</tr>
<tr>
<td>PACO:</td>
<td>Programme Afrique Centrale et Occidentale – Central and West Africa programme</td>
</tr>
<tr>
<td>PAMETT:</td>
<td>Protected Area Management Effectiveness Tracking Tool</td>
</tr>
<tr>
<td>PNT:</td>
<td>Parc National de Tai – Tai National Park</td>
</tr>
<tr>
<td>PRCM:</td>
<td>Partenariat Régional pour la Conservation de la zone côtière et marine de l’Afrique de l’Ouest – Regional partnership for the conservation of coastal and marine zones in West Africa</td>
</tr>
<tr>
<td>RAMPOA:</td>
<td>Réseau des Aires Marines Protégées d’Afrique de l’Ouest – Network of West African Marine Protected Areas</td>
</tr>
<tr>
<td>RAPPAM:</td>
<td>Rapid Assessment and Prioritization of Protected Areas Management</td>
</tr>
<tr>
<td>UD:</td>
<td>University Diploma</td>
</tr>
<tr>
<td>WCPA:</td>
<td>World Commission on Protected Areas</td>
</tr>
<tr>
<td>WCS:</td>
<td>Wildlife Conservation Society</td>
</tr>
</tbody>
</table>
Protected area management training in West and Central Africa: Impacts and recommendations

Roan antelope, Zakouma national park, Chad
Executive Summary

In West Africa, the importance of natural resources for economic development means that protected areas are subject to various pressures, which have a severe impact on environmental resources both around and within protected areas. Protected areas are gradually being over-run and anthropic pressure is upsetting even further the already fragile balance. The resulting losses are both ecological and economic because the resources are being used in an unstructured and unsustainable manner.

These changes are not always accompanied by training for the different protected area stakeholders. Yet a wide range of knowledge and skills is required to manage protected areas: knowledge of natural resources, understanding of how they function, setting up of monitoring systems, understanding of stakeholders using the resources. Thus when an area is classified as protected, this should go hand in hand with a skills development policy and the recruitment of sufficiently qualified staff; however this is rarely the case. Planning tools, monitoring and evaluation tools, consultation methodologies and the legal or technical standards are generally poorly understood by most protected area managers.

Furthermore, the training that is provided or is part of school or university “Water and Forestry” departments – of which most protected area managers are graduates – does not include specific modules on protected areas and to date very little training aims at equipping the different stakeholders in the field (managers and their partners, scientists, NGOs, private companies etc.) with the tools or the technical and scientific skills required to improve the way they manage their parks and ensure lasting results.

Furthermore, the quantitative needs in the main national institutions responsible for protected areas remain considerable.

Therefore, building capacities in “protected area management” remains a priority for the development and conservation of parks and reserves in West Africa. It is with this in mind that the IUCN’s Central and West Africa Programme (IUCN PACO) set up a short-term and a long-term course in 2008.

In six years around 150 interns from more than 15 different countries have taken one of the two courses on offer. The evaluation of what has been learnt and how it is applied shows very good results and highlights the relevance and the utility of these courses. The main changes observed are an improvement in knowledge in the protected area field, changes in professional attitudes and personal development (generally shown by greater self-confidence). In addition to these changes, the courses have helped to generate a regional network of French-speaking experts. The multitude of often laudatory comments received from the auditors just confirms the conclusions of this study and, in particular, the need to continue these training courses.
1. Study Context and Objectives

1.1. Context

The creation of protected areas in Sub-Saharan Africa began early in the 19th Century. It continued pretty much until the end of the 1950s. At the same time, social, territorial and agro-climatic changes participated in the gradual loss of biological diversity and encroachment into certain protected areas.

In West Africa, the importance of natural resources for economic development means that protected areas are subject to various pressures, which have a severe impact on environmental resources both around and within protected areas. Protected areas are gradually being over-run and anthropic pressure is upsetting even further the already fragile balance. The resulting losses are both ecological and economic because the resources are being used in an unstructured and unsustainable manner.

These changes are not always accompanied by training for the different protected area stakeholders. And yet in order to manage and conserve natural resources a knowledge of the resources in question is required as well as an understanding of how they function. Furthermore, they must be monitored and the stakeholders using the resources must be understood. The training that is provided and is a part of school or university “Water and Forestry” departments does not include specific modules on protected areas.

When an area is classified as protected, this should go hand in hand with a skills development policy and the recruitment of staff sufficiently qualified to implement ecosystem conservation policy. Therefore there is a pressing need to build the capacities of young managers responsible for promoting biodiversity conservation in protected areas. Furthermore, more efficient and sustainable management of protected areas should be established.

Building capacities in “protected area management” is therefore a priority for the development and conservation of parks and reserves in Africa. Planning tools, monitoring and evaluation tools, consultation methodologies and the legal or technical standards are generally poorly understood by most protected area managers.

Participants to the 6th edition of the UD, Burkina Faso
It is with this in mind that the IUCN, initially in partnership with 2iE (Ouagadougou, Burkina Faso) and subsequently with Senghor University of Alexandria (Egypt) offers short and long-term courses. These courses are aimed at providing the different stakeholders in the field (managers and their partners, scientists, NGOs, private companies etc.) with the tools or the specific technical and scientific skills required to improve the way they manage their parks and ensure lasting results.

The two training courses are:

- **University Diploma** aimed at young professionals. It takes eight weeks of five to six day modules which combine theory with field visits.
- **Master’s Degree**, a two year course which enables young graduates to specialise in this field.

### 1.2. The Needs in the Region

When an area is classified as protected, this should go hand in hand with a skills development policy and the recruitment of staff sufficiently qualified to implement ecosystem conservation policy. However this is not always the case and most stakeholders responsible for protected areas are too often under-staffed.

Data for evaluating the quantitative staffing needs of protected area are still rare. For managers, the estimates range from 500 to 600 per year according to IFIP (2009) and from 80 to 200 according to Braun (2012), whose study focuses on Central Africa (2012). Hausser (2013) refined the analysis and estimates needs at between 100 and 200 per year for decision-makers and from 80 to 150 per year for those gathering data on biodiversity.

Interviews with certain managers of structures responsible for protected areas helped to specify the number of people to be trained. For Ivory Coast, it was estimated that the Ivorian Parks and Reserves Office (OIPR) needs to recruit more than 200 more agents. In Togo, it would be necessary to train (up skill) fifteen managers per year and in Senegal around ten agents (from the Protected Community Marine Areas Directorate) are concerned (this figure is much higher if the needs of the National Parks Directorate are included).

### 1.3. University Diploma in “Protected Area Management”

#### a. Objectifs

The objective of this training course ("Building Skills in Protected Area Management") is to equip protected area managers (and their partners) with the tools as well as the specific technical and scientific skills to improve the way they manage parks and to ensure their actions are long-lasting. At the end of this course, the participants will have acquired/reinforced the priority skills for managing protected areas. They will be capable of implementing plans that are adapted to the sustainable management of environmental resources. Their skills in ecological monitoring, human/wildlife conflict resolution, and local reconciliation and consultation will be strengthened. Their knowledge of general tools (agreements, environmental law, management instruments, standards etc.) will also be improved, which will make them operational, able to propose and implement conservation policy.
b. Course Content

The entire course is made up of modules which combine lessons in theory with a field trip to apply the various tools acquired. This trip is particularly targeted at learning techniques for ecological monitoring, taking inventories, combatting poaching, diagnosing conflict situations and identifying parties involved in the conflict as well as the setting up of consultative frameworks. The teachers are experts from and/or who have experience in the West Africa Region. The course is entirely given in French.

List of modules:
- Module 1: Conservation policy and problems in protected area management
- Module 2: Evaluation and planning in protected area management
- Module 3: Participatory approach/management and promotion of protected areas
- Module 4: Notions of practical ecology for protected area management
- Module 5: Ecological monitoring, techniques for wildlife census taking and an introduction to GIS
- Module 6: Field trip and data processing
- Module 7: Environmental law and sustainable development
- Module 8: Environmental economy

c. Training Course Target

This training programme is aimed at protected area managers from the public, para-public and private sectors in West and Central Africa. It also targets NGOs or association managers working in the environmental field or in renewable natural resource management. Candidates must have professional experience and a bachelor’s degree or the equivalent.

d. Diploma

The course is evaluated and enables successful students to obtain a University Diploma in “Protected Area Management” awarded by Senghor University.

e. The Courses Run to Date

To date, the course has been run five times in West Africa, for a total of 99 students. At the time of this study, the course was being given for the sixth time (April-May 2014).

Table 1: List of “University Diploma” Courses run

<table>
<thead>
<tr>
<th>Date</th>
<th>Number of participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>DU 1 January/March 2011</td>
<td>21 (5 countries)</td>
</tr>
<tr>
<td>DU 2 10 October/2 December 2011</td>
<td>18 (7 countries)</td>
</tr>
<tr>
<td>DU 3 6 February/30 March 2012</td>
<td>21 (9 countries)</td>
</tr>
<tr>
<td>DU 4 8 October/30 November 2012</td>
<td>19 (8 countries)</td>
</tr>
<tr>
<td>DU 6 8 April/31 May 2013</td>
<td>20 (10 countries)</td>
</tr>
<tr>
<td>DU 8 7 April/31 May 2014</td>
<td>18 (11 countries) are not covered by this study</td>
</tr>
</tbody>
</table>

A similar training course was organised for Central Africa in partnership with IUCN, Senghor University and WCS in 2012 (UD 5) and 2013 (UD 7). This course will be run for a third time from 20 October 2014 to 14 December 2014. This study only covers the West Africa University Diploma.
1.4. International Master’s in Protected Area Management

For the reasons mentioned in Section 1.1, IUCN has also set up a long training course in partnership with Senghor University. The university was seeking to enhance the courses they offered by specialising in the management of such areas. Thus, the Master’s now offers a major in “Protected Area Management” as well as the other subjects already offered by the University.

The first year consists in “generalist” study (environmental and development issues, the economy of the environment, environmental law, international relations, general ecology, English, IT, project management, management tools, environmental evaluations etc.) which ends with a 10-week internship in a professional situation. The second year focuses on the major subject, protected areas (protected area conservation/management policy and strategies, forestry, decentralisation, environmental education, protected area management tools, financing, effectiveness, promotion etc.) and concludes with the presentation and defence of the internship dissertation. The overall Master’s programme is given in Appendix I.

To enrol, students must hold an honours degree at least (4 years university study). Candidates with relevant professional experience may be eligible. Selection is based on evaluation of written applications. After the course, students who have successfully completed all the modules will receive a Master’s in Protected Area Management. This degree is not recognised by the African and Malagasy Council for Higher Education (CAMES), but is by the Egyptian authority. The process to obtain CAMES recognition is underway.

The first course for the Masters in “Protected Area Management” was run in partnership with 2iE starting in 2008. The course was run for a second time, in partnership with Senghor University in 2011 with 26 students. In all, 49 students have obtained this degree. The third cohort began the course in September 2013.

1.5. Unique Training Courses

These two training courses, specifically created to build capacities in “protected area management” in West Africa, are unique in the sub-region.

The École Régionale post universitaire d’Aménagementet de gestion Intégrés des Forêts et Territoires tropicaux—ERAIFT (Regional post-graduate school for the development and integrated management of forests and tropical areas) offers a post-graduate diploma in development and integrated management of forests and tropical areas. This diploma is recognised by CAMES and takes 18 months, including 10 months in the class-room and 2 months of collective work experience in the field and 6 months to prepare a dissertation. Apparently, ERAIFT is currently looking to convert this post graduate diploma into a “professional” Master’s and a “research” Master’s. However, very little information is available. Furthermore, there is one significant difference with the Master’s offered by IUCN: the cost (around 15,000 USD).

On the topic of marine protected areas, the Master’s in Integrated Management and Sustainable Development of West African Coastlands (GIDEL) from Cheikh Anta Diop University in Dakar should also be mentioned. Almost seven years after this course was begun more than 60 Master’s degrees have been awarded as well as around ten theses particularly in the field of coastal community resilience, the governance of marine protected areas in Senegal, coastal erosion, climate change and coastal area planning and development.

The recent regional evaluation of demand and supply in terms of courses for protected area professionals in West and Central Africa (Hauser, 2013), highlights that currently only the University Diploma and the Master’s are actually operational.
Furthermore, a study of the feasibility, interest and relevance of setting up distance learning courses through the internet for protected area management professionals (IUCN/PACO, 2013), concludes that there is a high demand for in-classroom courses by students in the sub region, which does not support the proposal of exclusively e-learning type courses. This is even more relevant if we consider the constraints related to equipment and Internet access in the countries of the sub-region.

Thus, we can conclude that in their current format, these two training courses are unique in the sub-region and respond effectively to an existing demand.

1.6. Objectives of the Study

The main objectives of the study were to:

- Evaluate the effects of the training on students’ career paths,
- Analyse the perceptions of past students and gather any recommendations to improve the courses,
- Create an interactive database of graduates to enable the training courses to continue to be evaluated and to encourage communication and collaboration among course alumni across the region,
- Recommend measures to improve the courses,
- Evaluate quantitative needs.
2. Methodology

In order to gather the information for this study (student profiles, training, professional experience, comments on the course itself, application of skills learned etc.), a questionnaire (Appendix 2) was developed. This questionnaire had both multiple choice and open-ended questions. It was sent to 148 students (UD and Masters) in March 2014. Following the questionnaire, many telephone interviews were held in order to explore their responses further. It is important to emphasise that many students helped the consultant in distributing the questionnaire, contacting other graduates or, for example in the case of UD 6, posting it on the graduates’ Facebook page.

In May 2014, students in three countries were visited (Niger, Burkina Faso and Ivory Coast) as well as students of the 8th course who had just begun classes in Ouagadougou (a list of the people met is provided in Appendix 3).

The number of responses received and the availability of graduates in the context of this study was commendable. In total 102 questionnaires were filled in (73 for the UD and 29 for the Master’s). For the Master’s, four countries did not return their questionnaires: Central African Republic, The Gambia, Guinea and Democratic Republic of Congo.

Table 2: Number of Questionnaires filled out

<table>
<thead>
<tr>
<th></th>
<th>University Diploma</th>
<th></th>
<th></th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of students</td>
<td>Number of responses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DU 1</td>
<td>21</td>
<td>15</td>
<td>71,4 %</td>
<td></td>
</tr>
<tr>
<td>DU 2</td>
<td>18</td>
<td>12</td>
<td>66,7 %</td>
<td></td>
</tr>
<tr>
<td>DU 3</td>
<td>21</td>
<td>15</td>
<td>71,4 %</td>
<td></td>
</tr>
<tr>
<td>DU 4</td>
<td>19</td>
<td>15</td>
<td>79 %</td>
<td></td>
</tr>
<tr>
<td>DU 6</td>
<td>20</td>
<td>16</td>
<td>80 %</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>99</td>
<td>73</td>
<td>73,7 %</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Master’s</th>
<th></th>
<th></th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of students</td>
<td>Number of responses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Master 1</td>
<td>23</td>
<td>12</td>
<td>52,2 %</td>
<td></td>
</tr>
<tr>
<td>Master 2</td>
<td>26</td>
<td>17</td>
<td>65,4 %</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>49</td>
<td>29</td>
<td>59,2 %</td>
<td></td>
</tr>
</tbody>
</table>

The questionnaires were not filled out in a uniform manner, and certain questions were sometimes skipped by the students. Therefore the percentages are calculated in a relative manner (in relation to the number of responses received).

It is important to note that five students have completed both the UD and the Masters. Of them 3 carried out the Masters after the UD.
3. Results – Quantitative Analysis

3.1. General Data on the Two Courses

a. Geographical Distribution

At the time of the study, we counted 148 graduates (99 for the University Diploma and 49 for the Masters). The geographical distribution shows that six countries benefitted well from these courses: Burkina Faso (23), Senegal (22), Togo (19), Ivory Coast (18), Niger (17) and Benin (16). One Italian student also completed the UD, paying his own costs, but was not taken into account in this study.

![Figure 1: Distribution of Students by Country](image1)

b. Gender Distribution

In total, a little more than 20% of the graduates are women. While this figure seems low it is nonetheless more than significant in light of the actual situation in the field where few women are involved in protected area management.

![Figure 2: Gender Distribution of Graduates](image2)
The table below (Table 3) summarises the geographical and gender distribution of the 148 graduates. It is important to remember that the study only focused on the UD in West Africa (which is why there are no graduates from Central Africa).

### Table 3: Summary (Geographical, gender and course distribution)

<table>
<thead>
<tr>
<th>Country</th>
<th>Total</th>
<th>Total</th>
<th>Man</th>
<th>Woman</th>
<th>Total</th>
<th>Man</th>
<th>Woman</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benin</td>
<td>16</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>13</td>
<td>10</td>
<td>3</td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>23</td>
<td>7</td>
<td>6</td>
<td>1</td>
<td>16</td>
<td>14</td>
<td>2</td>
</tr>
<tr>
<td>Burundi</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Cameroon</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Cape Verde</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Central African Republic</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Ivory Coast</td>
<td>18</td>
<td>4</td>
<td>4</td>
<td>0</td>
<td>14</td>
<td>13</td>
<td>1</td>
</tr>
<tr>
<td>The Gambia</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Guinea</td>
<td>9</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>7</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Madagascar</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Mali</td>
<td>6</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>4</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Mauritania</td>
<td>7</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>6</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Niger</td>
<td>17</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>13</td>
<td>10</td>
<td>3</td>
</tr>
<tr>
<td>Democratic Republic of Congo</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Republic of Congo</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Senegal</td>
<td>22</td>
<td>11</td>
<td>7</td>
<td>4</td>
<td>11</td>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>Chad</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Togo</td>
<td>19</td>
<td>5</td>
<td>5</td>
<td>0</td>
<td>14</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>148</td>
<td>49</td>
<td>39</td>
<td>10</td>
<td>99</td>
<td>78</td>
<td>21</td>
</tr>
</tbody>
</table>

#### 3.2. The University Diploma

##### a. General Data

It can be noted that six countries benefitted well from the training courses: Burkina Faso, Togo, Ivory Coast, Niger, Benin and Senegal. Three others (Guinea, Mauritania and Mali) had between four and seven people trained. Thus it can be noted that particular attention is paid during selection of candidates to the students’ country of origin so that the sub-region is trained evenly.

![Geographical Distribution of UD Students](image.png)
Member of the World Commission on Protected Areas

The World Commission on Protected Areas is the largest global network of protected area experts. It is managed by the IUCN Global Protected Areas Programme and has more than 1,400 members across 140 countries. Among the responses received only 3 respondents (out of 61) are members of this commission. However, 63 respondents would like to join. It would therefore be important during the course to encourage students to join the network and help/sponsor them if necessary. Furthermore, 50% of them are under 35 and could also join the young professionals sub-commission.

b. The Students and the Course

Out of the 67 responses received 61 students (91%) declared that the training had met their expectations. An open question asked students to list the five strong points and the five weak points of the course. The most frequently mentioned strong points are:

- The creation of a network of professionals / sharing of experience (38 times),
- The content and quality of the courses (36 times),
- The quality of the teachers (34 times),
- The field trip (30 times),
- How easy it was to enrol – enrolment procedure (59 times).

Among the most frequently mentioned weak points are:

- The module on GIS/remote sensing not detailed enough (30 times),
- Generally insufficient hours (and therefore certain subjects covered too briefly) (13 times),
- Not enough practical training (12 times).

Finally, for some respondents there was a misunderstanding regarding the UD and the Master’s. Many UD students would have liked to do the Master’s afterwards. It is important that during the UD the difference between the two diplomas be clearly explained.

c. Graduates’ Professional Career

Current Roles of Graduates (data according to type of organisation)

The majority of the respondents (60%) work in the public sector and around 20% in NGOs. There are also almost 10% who are currently students.
The respondents who are currently students are studying:

- Master’s in Natural Resource and Biodiversity Management (RESBIO) at the University of Abomey-Calavi in Benin.
- Course for Water and Forestry Engineers and the National School of Water and Forestry (ENEF), Burkina Faso.
- PhD student in Climate Change and Land Use at Kwame Nkrumah University, Kumasi, Ghana.
- Master’s in Protected Area Management at Senghor University of Alexandria, Egypt.
- Masters in Tropical Ecosystem Management, AGROPARISTECH, France.

The UD has thus enabled some students to continue their studies in the field of protected area management.
Figure 5: Distribution of UD graduates by country and type of organisation

I.O.: International Organisation
In most countries, there is a good distribution across the different types of organisation. As regards Ivory Coast, IUCN should try to involve more NGOs in the future. This is the same for Mali.

Respondents working in connection with a protected area or around one

More than 60% of the respondents are currently working in a protected area or the surrounding area. This is an encouraging result: it indicates that the skills acquired are useful and that the training meets a real need. This percentage rises to more than 85% when we include respondents who have, at some stage, worked in or around a protected area.
At the current time, the public sector is the greatest beneficiary of this capacity building. In the future, NGOs and the private sector should be encouraged to be involved. However, it is totally understandable that the latter are less able to make their staff “available” for eight weeks.

Many of the respondents are working in government institutions responsible for protected areas, whether at central level or on-site. For instance:

At central level:

- Benin: Direction Générale des Forêts et des Ressources Naturelles – General Directorate for Forestry and Natural Resources (Ministry of the Environment),
- Burkina Faso: Office National des Aires Protégées (OFINAP) – National Office for Protected Areas,
- Ivory Coast: Office Ivoirien des Parcs et Réserves (OIPR) – Ivorian Office for Parks and Reserves,
- Mali: Projet Extension et Renforcement du Système des Aires Protégées au Mali – Project to Extend and Strengthen the Protected Area System in Mali (Ministry of the Environment and Sanitation),
- Niger: Direction de la faune, de la chasse et des aires protégées – Directorate of Wildlife, Hunting and Protected Areas (Ministry for the Environment),
- Senegal: Direction des Aires Marines Communautaires du Senegal – Directorate of Community Marine Areas in Senegal (Ministry of the Environment and Sustainable Development),

On a protected area site:

- Ranger at the Termit and Tin-Toumma national natural reserve (Niger),
- Ranger at the Marine Protected Area of Cayar (Senegal),
- Ranger at the Joal-Fadiouth Marine Protected Area (Senegal),
- Deputy Ranger at the Ferlo Nord Wildlife Reserve (Senegal),
- Deputy Ranger at the Djoudj Bird Park (Senegal),
- Ranger at Diawling National Park (Mauritania),
- Deputy Ranger at the natural community reserve of Somone, (Senegal).

As well as holding positions in connection with protected areas, some graduates also hold positions to do with international agreements:

- The appointment of one graduate as a member of the national management body for Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES),
- The appointment of a graduate as national focal point for the Ramsar Convention,
- A World Heritage Programme manager within the protected area programme for West and Central Africa of IUCN.
Comparison of the type of organisation students belonged to when taking the course and when the study was carried out

There was little change in the distribution of respondents among the different types of organisation after completing the UD course. However, it can be highlighted that none of the UD graduates is unemployed. 26 graduates hold the same position they did when doing the course.

**d. Initial conclusions on the University Diploma**

Before studying the impacts of the UD in more detail, a few lessons can already be learned:

- **Well-selected candidates**

It can be noted that particular attention was paid to the choice of students. Thus there is a very good geographical and professional distribution. Furthermore, the fact that more than 80% of the students have, at some stage or other, worked in connection with a protected area emphasises even further this attention paid during the selection process.

- **Highly satisfied students**

Overall, the students are satisfied with the course, its content and the quality of teaching. Furthermore they highlighted the importance and the utility of building a network of practitioners. This network enables them to share experiences. Their pride in belonging to this network of French-speaking professionals came through fairly clearly in the interviews and questionnaires. Almost all the groups have created their own Facebook page or distribution list to keep in contact.

- **A unique and appropriate course that meets a real need**

This course which is unique in the sub-region offers an exhaustive range of skills over a relatively short period of time. It addresses the main subjects that are important in protected area management.
Recently, many studies have been carried out to assess the needs – in terms of capacity building – for marine protected area stakeholders. The conclusions of three studies (Gombos et al., 2011, Di Carlo G., Lopez A., Staub F., 2012, Staub F., Duval Diop D., 2014) converge and identify the same priority themes for capacity building (Table 4 – Comparison of the priorities for capacity building in 3 regions). We have realised that the modules offered in the UD correspond quite well to the results of these studies, in particular the following modules:

- Module 2: Evaluation and planning in protected area management
- Module 3: Participatory approach/management and promotion of protected areas
- Module 4: Notions of practical ecology for protected area management
- Module 5: Ecological monitoring, techniques for wildlife census taking and an introduction to GIS

Table 4: Comparison of priority themes for capacity building in the 3 regions

<table>
<thead>
<tr>
<th>For West Africa (based on a panel of 26 MPA in 5 countries) Sources: Staub F., Duval Diop D. 2014</th>
<th>For the Mediterranean (based on a panel of 42 MPA in 16 countries) Sources: Di Carlo G., Lopez A., Staub F. 2012</th>
<th>For the Caribbean (based on a panel of 27 MPA in 10 countries of the Caribbean) Source: Gombos et al., 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge on marine biodiversity and ecology</td>
<td>Conservation of specific habitats or species (very high priority)</td>
<td>Application of regulations (“refresher”)</td>
</tr>
<tr>
<td>Participatory management and shared governance</td>
<td>Involvement of stakeholders (very high priority)</td>
<td>Financing</td>
</tr>
<tr>
<td>Management planning</td>
<td>Marine biodiversity and ecology (very high priority)</td>
<td>Socio-economic monitoring</td>
</tr>
<tr>
<td>Conservation/management of specific species or habitats</td>
<td>Application of regulations and patrols (very high priority)</td>
<td>Biophysical monitoring</td>
</tr>
<tr>
<td>MPA development and zoning</td>
<td>Scientific monitoring (very high priority)</td>
<td>Management Plan</td>
</tr>
<tr>
<td>Training for research and monitoring</td>
<td>Visit management (diving, nautical activities) (high priority)</td>
<td>Awareness-raising and education</td>
</tr>
<tr>
<td>Threats and pressures</td>
<td>Self-financing mechanisms (high priority)</td>
<td>Evaluation of effectiveness</td>
</tr>
<tr>
<td>Sustainable financing of MPAs</td>
<td>Management of fishing (high priority)</td>
<td>Management of fishing</td>
</tr>
<tr>
<td>Administrative capacities</td>
<td>MPA zoning (high priority)</td>
<td>Alternative means of subsistence</td>
</tr>
</tbody>
</table>

The UD Programme is therefore consistent and responds well to the expectations and needs of protected area stakeholders. Furthermore, and this point will be discussed further, the knowledge acquired in these priority fields (participatory management, planning for management, scientific monitoring) are those that were used the most.

3.3. The Master’s

In all, 29 questionnaires were filled out: 12 for the first Master’s course and 17 for the second. Four countries did not respond: Central African Republic, The Gambia, Guinea and Democratic Republic of Congo.

a. General Data

With 11 people trained (more than 20% of the total trained) Senegal is the country that has most benefitted from the Master’s course. Burkina Faso, Togo, Ivory Coast and Niger (between 4 and 7 students) are also well represented. 20% of the students were women.
b. The Graduates and the Course

More than 70% of the graduates said they were very satisfied with the course and consider that it met their expectations. They also highlighted how easy it was to enrol.

The most frequently mentioned strong points are:

- The quality of the teaching,
- The programme content and subjects covered,
- The creation of a network of protected area management specialists in French-speaking West Africa.

Among the most frequently mentioned weak points are:

- A lack of practical experience,
- The subject of GIS/remote sensing not detailed enough,
- A lack of follow-up from the IUCN, particularly after the course.

It is also important to mention that a third of the respondents found it hard to find an internship.

C. Graduates’ Professional Career

Current role of graduates (data by type of organisation)

Around 60% of the students are now employed in the public sector and just under 20% in NGOs (Figure 10).
Out of the 29 responses received, it can be noted that 60% (18 respondents out of 29) of the graduates now work in connection with a protected area. This figure reaches more than 70% (21 respondents out of 29) if those working indirectly with a protected area are taken into account. Most graduates are now working in the public sector, which represents almost half the students employed within a protected area. Therefore the course enables graduates to obtain protected area management positions, clearly fulfilling its objectives.
Furthermore, as well as training students in protected area management, we can note that the positions held by graduates are important ones. The example of Niger is the most significant. Indeed, graduates “monopolise” protected area management roles: in the Ministry of the Environment, Hygiene and Sustainable Development, in the General Directorate of Water and Forestry, in the Protected Area Division, the Wildlife, Hunting and Protected Areas Directorate, as well as in sub-directorates, positions are held by graduates. Graduates can also be found in charge of protected areas:

- Ranger at the Sena-Oura National Park (Chad),
- Deputy Ranger at the Dimonika Biosphere Reserve (Congo),
- Head of ecological monitoring at W National Park Benin (Benin),
- Ecological monitoring manager in the Giraffe zone (Niger).
4. Course impacts and implementation of skills acquired

The courses have had numerous effects at various levels: at the student level, the institutional level but also at national and regional level. The graduates have been able to develop and improve their knowledge. The impact can also be felt on their professional attitudes and personal development (self-confidence). The institutions thus benefit from these effects as they now have staff who are more convinced, at all levels of the importance of protected areas.

4.1. Better understanding of protected areas

It is undeniable that the courses have been very beneficial for the vast majority of the students. Generally speaking, the main effects of the courses concern the understanding of the “protected area” concept, how they work and why they are useful. Following the courses, students have a new vision of protected area management issues. This notion which is very often highly abstract has become concrete. Furthermore, the courses bring and/or reinforce knowledge for more effective management. They enable the tools required and in particular the importance of management plans and ecological monitoring to be better understood.

It can also be highlighted that certain respondents said they had better understood the IUCN protected area management categories and tried to apply them at a national level.

Graduates now work in a much more professional manner using concepts that they now understand better and more rigorous work methods.

As many testimonies from the graduates were very significant and revealed the true impact of the courses in the field and the implementation of their new skills, the following sections of the report will be illustrated with these testimonies.
Graduate testimonies:

“The course helped me to understand the point of setting up protected areas, but in particular the need to manage them effectively. I encourage the continuation of this course which is very useful for people working directly or indirectly in protected area management.”

“There is no doubt that the UD for me was a veritable specialisation. Since taking the course I have a clear vision of protected area management. Ecological monitoring has been taken in hand. My ability to prepare grant requests has been increased. Protected area management has become something I can do easily. That is to say I learnt a lot in this course. Having already worked in protected areas throughout my professional career I was able to clarify a lot of things and I now have a clear vision of how to run my protected area management programmes.”

One of the direct consequences of this improved understanding of protected areas is the graduates’ feeling that they are now better equipped to manage effectively. They are especially reassured in their vision/convictions. They confirm that they are now better equipped to develop arguments in favour of protected areas. Many respondents confirmed that they are now more confident as they feel they understand the subject better. They also find it easier to take a stand during meetings (at national, regional and/or international levels) and are even able to influence decision makers.

Graduate testimonies:

“I have more confidence in my capacities in this field”

“Since taking the course I have gained much more assurance in giving presentations and talks to raise awareness and in conducting meetings. When I use a word like governance or management, I know that there is a difference. When I talk about heritage values I know what it means and so on… I am pretty good at negotiating requests for support from donors, justifying the needs, the problems to be resolved, the expected results etc.”

A very significant example of this improved ability to influence decision makers is the case of Niger, where the Directorate for Wildlife, Hunting and Protected Areas has quadrupled its budget for protected areas following “lobbying” by course graduates. As well as an increased budget, the following provisions have been made:

- Setting up of operational management units for all protected areas in Niger,
- Training of managers and protection agents in protected area surveillance,
- A move towards sustainable financing mechanisms for protected areas,
- The development or revision of certain protected area management plans,
- Implementation of ecological monitoring.

Finally, many graduates have become resource persons for their organisation or country. Thus they are regularly consulted on issues related to protected areas or are members of technical committees on protected areas.

A final important point also clearly illustrates this change in approach: a large number of the graduates came from a “forestry” background and had been trained in a resource use approach. Now, they recognise that their approach is based on the conservation/sustainable management of resources. They admit they no longer speak the same language as their colleagues who have not done the course.
4.2. Protected Area Management Planning

Many respondents highlighted the usefulness of the course as regards protected area management planning. The following elements are better understood:

- The need for an up-to-date management plan,
- The formulation of priority objectives,
- The integration into the management plan of a section on monitoring and governance principles,
- The involvement of all stakeholders and if necessary those from the surrounding area,
- As well as the management plan there are a few other related plans or documents that support or supplement it: business plans, development plans etc.,
- A method for defining conservation objectives in consultation with protected area communities.

Graduate testimony:

“The UD changed me by making me more open to exchanges with all stakeholders, including with “enemies” of the protected area. My management approach is more inclusive and I am more attentive to the use of the management plan and the implementation of an ecological monitoring system, even if there is not always enough money to monitor all the indicators. One thing is clear, thanks to this course I am more aware of how things should be managed and the different stages in developing a management plan”.

In the field, the impacts can be seen in the way management plans are read more carefully and revised/updated when necessary. Many respondents have participated directly or indirectly to varying degrees in developing or updating management plans. Table 5 lists specific activities in the field of protected area management planning.

Tableau 5: Specific activities in the field of protected area management planning

<table>
<thead>
<tr>
<th>Country</th>
<th>Name of Protected Area</th>
<th>Implementation of skills acquired</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benin</td>
<td>Parakou Urban Forest</td>
<td>Development of a simple management plan</td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>Arly National Park</td>
<td>Participation in management plan development (now awaiting adoption by the National Assembly)</td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>W Cross-border biosphere reserve</td>
<td>Participation in drawing up management and development plan (undertaken). This plan had not been updated since 2010</td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>Nazinga Game Ranch</td>
<td>Monitoring of the drawing up of a development and management plan</td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>Hippopotamus Pond Biosphere Reserve</td>
<td>Monitoring of the drawing up of a development and management plan</td>
</tr>
<tr>
<td>Senegal</td>
<td>Marine protected areas of Sangomar and Gandoul</td>
<td>Participation in development of management plans for two newly created MPAs. The management plans are finalised and have been presented to local communities</td>
</tr>
<tr>
<td>Senegal</td>
<td>MPA of Cayar</td>
<td>Participation in updating the management plan</td>
</tr>
<tr>
<td>Ivory Coast</td>
<td>Taï National Park</td>
<td>A graduate is the secretary of the Committee for updating the development and management plan. Other graduates are on this committee and have participated actively in updating the development and management plan of Tai National Park (PAG 2013-2018)</td>
</tr>
<tr>
<td>Ivory Coast</td>
<td>Taï National Park</td>
<td>Updating of development and management plan underway</td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>Classified forest and partial reserve of the Comoé-Léraba</td>
<td>Proposals of concrete actions for the revision of the development and management plan</td>
</tr>
<tr>
<td>Togo</td>
<td>Fazao-Malfakassa National Park</td>
<td>Substantial contribution to the writing of the Fazao-Malfakassa park management plan (undertaken). NB: this park is on the UNESCO world heritage indicative list</td>
</tr>
<tr>
<td>Mauritania</td>
<td>Diawling National Park</td>
<td>Updating of management plan</td>
</tr>
</tbody>
</table>
Graduate testimony:

“As secretary of the Tai National Park Committee for updating the development and management plan I have put into practice the different steps of management planning that I learned on the course. In particular, heritage values and zoning have been properly included in the update. I constantly kept in mind the need to engage with stakeholders, particularly the local communities so at the pre-planning stage, several local public consultations were planned. The last I heard they have been carried out. I even participated in the latest one with the technical stakeholders, administrative authorities etc., facilitating the proceedings (not to blow my own trumpet) with relative ease!”

4.3. Evaluation of the effectiveness of protected area management

It was often highlighted that the course enabled a better understanding of the tools for evaluating protected area management effectiveness, in particular thanks to a better grasp of tools such as:

- Management Effectiveness Tracking Tool (METT),
- Enhancing our Heritage (EoH),
- Rapid Assessment and Prioritization of Protected Areas Management (RAPPAM).

Table 6 gives a few examples of the use of management effectiveness evaluation skills acquired through the course.

Table 6: Specific activities in protected area management effectiveness assessment

<table>
<thead>
<tr>
<th>Country</th>
<th>Name of Protected Area</th>
<th>Implementation of skills acquired</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benin</td>
<td>Pendjari Biosphere Reserve</td>
<td>Annual use of METT and EoH in the context of management assessments</td>
</tr>
<tr>
<td>Ivory Coast</td>
<td>Tai National Park</td>
<td>METT evaluation in October 2013 and EoH assessments</td>
</tr>
<tr>
<td>Niger</td>
<td>W Regional Park</td>
<td>EoH assessments</td>
</tr>
<tr>
<td>Ivory Coast</td>
<td>Comoé National Park</td>
<td>Getting ready to use EoH</td>
</tr>
</tbody>
</table>

4.4. Ecological monitoring, wildlife census techniques and introduction to GIS

The skills acquired (or strengthened) in the context of the module on ecological monitoring and wildlife census techniques are used a lot because they are very practical. They respond to both the realities and the needs on the ground. There are many examples of respondents setting up monitoring systems and developing new indicators. The results are analysed carefully. Table 7 gives some concrete examples.
Table 7: Specific Activities in Ecological Monitoring

<table>
<thead>
<tr>
<th>Country</th>
<th>Name of Protected Area</th>
<th>Implementation of skills acquired</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benin</td>
<td>Pendjari Biosphere Reserve</td>
<td>Improvement of the ecological monitoring system Walked transects for wildlife census (2013)</td>
</tr>
<tr>
<td>Ivory Coast</td>
<td>Tai National Park</td>
<td>Validation of ecological monitoring reports made by a graduate</td>
</tr>
<tr>
<td>Senegal</td>
<td>Gueumbeul special wildlife reserve</td>
<td>Setting up of an antelope monitoring protocol</td>
</tr>
<tr>
<td>Senegal</td>
<td>MPA of Cayar</td>
<td>Setting up of an ecological monitoring system</td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>Classified forest and partial wildlife reserve of the Comœ-Léraba</td>
<td>Carrying out of wild animal and bird census</td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>Pama partial wildlife reserve</td>
<td>Setting up of an ecological monitoring and census system along tracks and around water holes.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Evaluation of the effectiveness of anti-poaching by recording clues and indicators found.</td>
</tr>
<tr>
<td>Niger</td>
<td>W Park</td>
<td>Mammal census 2013</td>
</tr>
<tr>
<td>Niger</td>
<td>W Park</td>
<td>Ecological monitoring (census and monitoring of mammals, birds, fish etc.)</td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>Deux Balé N</td>
<td>Setting up of a water hole monitoring mechanism and an elephant monitoring mechanism</td>
</tr>
</tbody>
</table>

Graduate testimony:

“As regards ecological monitoring, I can say that the course increased my skills by enhancing my knowledge of indicators for monitoring birds and the proper way to store data in a dynamic database. It also taught me other surveillance indicators which are now helping me in our activities to combat poaching and assess its extent.”

4.5. Participatory approach/management and promotion of protected areas

This module was also highly appreciated by the respondents and has proven to be very useful in their work. The skills are used a lot in the field; they help in particular to improve collaboration with all stakeholders who are now considered as important partners in protected area management. The respondents are now convinced that a protected area can only be managed effectively if the local communities are involved and informed. The terms used in certain responses to the questionnaires clearly underline this change in approach: before the course the local communities were considered “the enemy”, whereas they are now described as “allies”.

The main changes are:

- Improved awareness among local communities so that they better understand the need to properly manage the resource that is necessary to their well-being,
- More solid knowledge (better arguments) to explain to the local communities the notions of participatory management,
- Better collaboration with and consideration of the opinions of local stakeholders in decision-making,
- Better understanding of how to involve local communities in the different site management activities, how to share roles and responsibilities, community representation in decision-making and management bodies.

Graduate testimonies:

“In a project to restore a classified forest, the course helped to enhance the awareness-raising of local communities around the forest by giving them more information on how protected areas work and the relationships that link protected areas to local communities in the context of participatory management”.

“It helped me to build my capacity to collaborate with and take into account the opinions of local stakeholders in decision-making processes”

“The course helped me to revise my approach with local communities. From an approach based on repression before the UD, I have come around to a much more participatory approach after the UD”.

“Finally, the UD changed me by making me more open to discussions with all stakeholders, even the “enemies” of protected areas. We have improved communication and can pool our energy”.

“Furthermore, as a government manager, repression was always at the heart of our action, but the training received from our lecturers has enabled us to open up more and more to the communities and actually involve them in managing protected areas”.

“Around Togodo-Sud actions are underway to bring local communities on board as regards good park management and the reduction of poaching and other illegal use of resources”.

4.6. Fundraising

Following the courses, many respondents have taken steps to seek financing. Few requests have been fulfilled but it is still worth highlighting the fact that this is now undertaken. Furthermore, besides submitting requests for funding, investment plans (in particular at the OFINAP) have also been developed.

One of the funding requests that has been granted is the project to restore the artisanal gold mining sites in Tai National Park (Ivory Coast).

4.7. Other specific activities set up following the courses

a. Discussion on the creation of new protected areas

As was mentioned earlier, the respondents are now reassured of the utility of protected areas. A certain number of better equipped respondents have been working on the creation of new protected areas. For instance:

- **Togo**-project to create a new marine protected area,

- **Mauritania**-discussion on the status of a classified forest rich in biodiversity and which is home in particular to the black swan (a protected species at European level by Appendix I of the European Union Bird Directive, and regulated internationally by Appendix II of the Bonn Convention on migratory species),

- **Guinea**-discussion on the creation of a community reserve at Niagara (Mamou), in the Fouta-Djallon in the north-east of the country, in partnership with Niagara Rural commune. This initiative has been welcomed by the local communities,
- **Togo**-development of a plan to create a community area next to Fazao-Malfakassa National Park in the village of Baghanin Bassar Préfecture, in the north of the country (Kara Region). Several activities have been carried out to this end, the file is under review,

- **Togo/Benin**-participation in work to create a cross-border biosphere reserve which includes Togodo-Sud Park (Togo) and Adjamé Reserve (Benin).

### b. Teaching

Some graduates give classes, the new skills they have learnt have enabled them to update or improve them. These include:

- A course for a Bachelor’s in protected area development and management at the Catholic University of West Africa (UCAO),

- A course in protected area development for 3rd year Water and Forestry Technician students in the practical forestry training centre at Tabakoro, Bamako (Mali),

- Updating of some elements of the course on conservation policy and protected area management issues for a course taught at the Agricultural Technical College (Benin), which offers a specialisation in Water and Forestry

- A course at Niamey University as part of the “Tropical Zone Management” module.

### c. Other Benefits

There are also many testimonies from graduates confirming that the course enabled them to obtain positions of responsibility and/or to be more easily chosen for additional training. One example is a respondent who has been appointed National Focal Point for the Ramsar Convention (Burkina Faso).

### 4.8. Brief comparison of the UD and the Master’s

It is difficult to compare the two courses as they do not have the same objectives. The UD targets professionals already working in the sector and takes place over a short period of time. The Master’s is a long-term course and targets students who wish to specialise. Nonetheless, we have noted that at this stage the UD seems to better respond to needs on the ground. Indeed, the main effects and most significant impacts were noted for those who had taken the UD course. This result seems logical as more people have taken it and most of them were already working in connection with a protected area. They were therefore able to put their new skills into practice immediately. **It would appear that priority should be given to continuing the UD course.**
4.9. Conclusions

The elements discussed above illustrate perfectly the changes in behaviour and new approaches adopted by course graduates after completing the course. Better equipped with new and/or enhanced skills, reassured in their convictions regarding the utility of protected areas, the graduates are endeavouring to change things, fill in gaps they have identified, set up or update management and development plans, improve monitoring systems, evaluate management effectiveness and so on. Thus these courses are truly useful and fill an important gap.

It is also important to emphasise that decision-makers in the protected area field are aware of the importance of these courses and the positive effects they have had on those who have taken them.
Mole National Park, Ghana
5. Recommendations, limitations and conclusions

5.1. Recommendation of measures to improve the courses

Responses to the questionnaire and interviews show that respondents are very satisfied with the courses as they are. Once again, more than 80% of respondents for the UD and 70% for the Master’s considered that the course had met their expectations. The main weak points expressed by the graduates were:

- Generally speaking, insufficient time and therefore certain subjects were covered too rapidly, not enabling an in-depth knowledge and familiarity with the tools to be acquired. However, the subjects mentioned vary from one respondent to another. The only theme that recurs frequently concerns the introduction to GIS and remote sensing.

- Not enough practical application. Respondents greatly appreciated the field trip and data processing. This practical aspect of the course enabled them to try out their new skills and get in touch with realities in the field. Many respondents would have liked the practical phase to be longer.

- A lack of follow-up after the course. Capacity building should not end with the course and IUCN should follow up with graduates throughout their professional career. Many respondents regretted the lack of follow-up and were very pleased to see that IUCN was currently carrying out a study on what graduates were doing and the impact of the courses.

The recommendations below aim to offer ideas for mitigating these weak points:

1. Insufficient hours

The number of hours, of the UD in particular, was very often deemed insufficient. The specific subjects mentioned vary from one respondent to another depending on their expectations. While eight weeks is a long time for working professionals, some possible ideas for resolving this problem could be:

- Group students with similar backgrounds

While the mix of students on the courses helps to share experiences and stimulate discussion among different stakeholders, it can also slow teaching down, particularly if the differences are too marked. Groups of students with more similar backgrounds would enable skills to be acquired faster and the course to be more functional. At the moment, the teachers have to adapt to their audience and deal with students who have very different levels and expectations. Grouping classes by job type would mean notions already understood could be skimmed over and the emphasis could be placed on subjects important for the class as a whole. The mix of levels among the students was highlighted several times. For instance rangers and deputy rangers could be grouped together, government employees, monitoring managers and so on, while retaining a good regional distribution.

- Add in optional modules

The course programme is already packed, it would appear impossible to add modules into the core course. However, IUCN could envisage the creation of optional modules by adding a ninth week for interested students. Specialised refresher sessions could also be organised according to demand.
The creation of distance learning or on-line courses could also be considered, particularly Massive Open Online Courses (MOOC), to go into certain subjects in more depth or to integrate new or emerging issues.

Similarly, an optional week in the field could be envisaged at the end of the course.

### 2. A lack of post-course follow-up

To date around 150 people have taken the courses and IUCN now has a network of “specialists” in protected area management in French-speaking West Africa. It is important to keep this network alive to maintain the relationships that have been built and to enable graduates to share experiences. Many course groups have created their own distribution list of Facebook page (https://fr.groups.yahoo.com/neogroups/dugap6/info) to keep in contact.

With the creation of an Internet forum (http://papaco.org/phpBB3/), IUCN offers a tool to maintain relationships and experience sharing. So far around 80 people have signed up. However, for the moment this forum is not used very much as it is not very practical and does not work very well. Furthermore, discussions need more moderation. The network of graduates from the Master’s in protected area management (Klagenfurt) –http://www.alumnimpa.net– is a good example of an alumni association.

Besides this forum, a bi-annual newsletter could be a good way of coordinating and strengthening this network of francophone experts.

The organisation of technical and thematic discussion days would also be an excellent way to reinforce the network and continue capacity building.

Finally, IUCN should try to involve alumni as much as possible in its projects, workshops, meetings etc.

### Other recommendations

- **Marine Protected Areas**

While the general concepts around protected areas are applicable to marine protected areas, there are nonetheless many differences in how they are managed. Furthermore, more than 60% of the countries that benefitted from the courses have a coastline. Therefore a specific course in marine protected areas (in the form of a UD) would be responding to a specific need of the sub-region. A recent gap analysis of skills among stakeholders in the regional network of marine protected areas in West Africa (RAMPO) showed there is a need for capacity building. Finally, there are many initiatives in the sub-region with which IUCN could develop such a course (RAMPO, FIBA and PRCM in particular). The creation of a UD in “Marine Protected Areas” would be a perfect complement to the GIDEL Master’s.

As a first step, and to test the interest in such a course, an optional additional week could be added to the course. If there is enough interest, it would be advisable to develop a specific course (UD) on marine protected areas. This UD would then be organised in a country with marine protected areas (such as Senegal).
- **Recruitment**

While the recruitment of students is not entirely up to the IUCN, in light of the applications received, the IUCN is encouraged to facilitate access for NGOs and the private sector. For the moment more than half the Master’s students (59%) and practically two-thirds (65%) of the UD students come from the public sector. As most of the students were told about the course by colleagues, in the future the course should be advertised more widely and not only within institutions in charge of protected areas.

- **Institutionalisation of the courses (the UD)**

A “National” UD could be developed in certain countries and adapted to meet the specific demands of the country. This course would be led and organised by the national institutions in charge of protected areas and the IUCN would provide technical support and expertise.

For Ivory Coast for instance, in the context of protected area sector reforms, each new recruit is supposed to receive training. Unfortunately, the Protected Area Management Framework Programme (PCGAP) has not yet been able to be properly implemented. Thus IUCN could work with the OIPR in order to develop and implement the PCGAP.

This recommendation particularly applies to countries where there are large national agencies (in terms of staffing levels) responsible for protected areas. However, by no means is this course intended to replace the current UD. It would be a complementary course for those countries with many people needing training.

- **The name of the diploma: University Diploma**

Many respondents admitted that the diploma awarded for the UD course, the University Diploma, was not particularly gratifying and not necessarily recognised by the different countries. IUCN should work with Senghor University to find a new name for this diploma or explore the possibility of a certification system. Certification also has the advantage of ensuring a certain degree of follow-up after the course as it needs to be renewed after a certain period of time (to be determined).

- **Alternate course location**

To date the UD course has always been held in Ouagadougou (Burkina Faso) for practical and financial reasons. Indeed, as IUCN-PACO is also based in Ouagadougou this facilitates organisation and enables the IUCN team to give classes easily. Furthermore, the costs (classroom and lodging and food for the students) are relatively low.

However, organising the UD course in another country of West Africa would enable new partners to be involved, particularly certain institutions responsible for protected areas (OIPR in Ivory Coast or the DPN in Senegal). It is therefore recommended that IUCN explore the possibility with these national institutions of co-organising the UD.

5.2. Limitations

The courses are highly useful and enable graduates to be more operational on the ground. However, certain external factors have an impact on this effectiveness:

- The lack of resources, particularly financial resources, of the institutions in charge of protected areas often hinders the application of skills learnt. Indeed, without resources, ecological monitoring for instance is very difficult to implement.
- Graduates are often confronted with visions that are different to theirs, particularly from their management. This makes it difficult to apply their new skills as the actions proposed are not necessarily supported by everyone. IUCN could advocate for protected areas among decision-makers. In certain countries there is a high turnover of positions and some respondents are transferred after the course to roles that have no connection with protected areas. The IUCN could encourage the countries (institutions) to make better use of the staff trained.

- In certain countries the graduates find themselves alone when they get back from the course and unfortunately have no power to change anything. It is therefore important to train “as many people as possible” in a given country so that course graduates can have an impact on awareness and conservation strategies.

5.3. Conclusions

Capacity building in “protected area management” is one of the priorities for developing and conserving parks and reserves in Africa. Planning tools, monitoring and evaluation tools, consultation methods etc. are generally poorly grasped by most managers and other protected area stakeholders.

The two courses offered are the only initiatives within the sub-region aimed at meeting the needs that have been identified repeatedly for over a decade in the field of protected area management capacity building.

They also respond to the needs expressed by practitioners by covering, even briefly, the main subjects related to protected area management. They offer two different and complementary options. One (the UD) is aimed at working professionals and the other mainly targets students (the Master’s).

The many examples of how the skills learned during the course have been put into practice in the field, of changes in students’ mentalities regarding protected areas and the positive testimonies they offer, are all reasons for continuing these courses. Furthermore, with now more than 150 people trained, many graduates can now be found in key positions in all institutions responsible for protected areas, who will now be able to work towards more effective management. There is no doubt that many positive changes in protected area management will be seen more and more frequently, as the number of graduates continues to increase.

It can be noted that at this stage the UD seems to better respond to needs on the ground. Indeed, the main effects and most significant impacts were noted for those who had taken the UD course. This result seems logical as more people have taken it and most of them were already working in connection with a protected area. They were therefore able to put their new skills into practice immediately. It would appear that priority should be given to continuing the UD course.

In conclusion, a final testimony summarises the conclusions of this study very well:

“This course was of immeasurable benefit. It provided me with the tools I needed to manage protected areas such as drafting and updating management plans, working around protected areas etc. I would even go so far as to say that if this course did not exist it should be created.”
List of Appendices

- Appendix 1: Master’s Programme
- Appendix 2: Questionnaire
- Appendix 3: List of people met during the field visit
- Appendix 4: A few more testimonies
Appendix 1: Master’s Programme

A multi-disciplinary course, contributing to an open vision of the management of protected areas and their environment. Four major disciplines:

- Natural sciences: biology, ecology, botanical studies, zoology etc.
- Social sciences: rural sociology, traditional resource use, management policy (local and international), participatory approach, rural micro-economy etc.
- Applied technologies: forestry, wildlife, aquatic resources, environmental management tools (GIS, ESIA etc.).
- Management: administration, project management, human resources, financial management etc.

<table>
<thead>
<tr>
<th>Sciences and basic techniques</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Statistics and data analysis</td>
<td>27</td>
</tr>
<tr>
<td>IT</td>
<td>27</td>
</tr>
<tr>
<td>Land ecology</td>
<td>27</td>
</tr>
<tr>
<td>Marine ecology</td>
<td>27</td>
</tr>
<tr>
<td>General ecology</td>
<td>27</td>
</tr>
<tr>
<td>English</td>
<td>27</td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td><strong>162</strong></td>
</tr>
</tbody>
</table>

Technical Module 1 – Management

| Human Resource Management             | 27     |
| Environmental Management              | 27     |
| Participatory approaches              | 27     |
| Local knowledge and biodiversity management | 27     |
| Communication                         | 27     |
| Rural economy                         | 27     |
| Project management                    | 40     |
| Field trip                            | 15     |
| End of semester project               | 75     |
| **Sub-total**                          | **292**|

Semester 1 454

Technical Module 2 – development and management of protected areas

| Development of protected areas        | 40     |
| Development methods and techniques    | 27     |
| Protected area development and management plan | 54     |
| Aquatic area development and management plan | 54     |
| Promotion of protected areas          | 27     |
| Ecological monitoring                 | 27     |
| GIS applied to natural resource management | 40     |
| Quality Management Systems            | 15     |
| Field trip                            | 25     |
| End of semester project               | 75     |
| **Sub-total**                          | **386**|

Semester 2 386
Appendix 2: Questionnaire

University Diploma (UD) on “Protected Area Management Capacity Building” and the Master’s in Protected Area Management

Questionnaire for Course Graduates

You have received this questionnaire because you completed the University Diploma (UD) on “Protected Area Management Capacity Building” or the Master’s in Protected Area Management set up by the Central and West Africa Programme (PACO) of the International Union for Conservation of Nature (IUCN) in collaboration with 2IE (for the first course) and Senghor University (Université de la Francophonie based in Alexandria in Egypt) for the second course, with funding from the Fonds Français pour l’Environnement Mondial (FFEM), the US Fish and Wildlife Service (USFWS) and the Global Environment Facility (GEF) via the World Bank. To date five courses have been run in West Africa for the University Diploma and two for the Master’s, with a total of 140 graduates. IUCN-PACO has decided to analyse graduates activities since completing the course in order to make any necessary changes in response to the needs and realities on the ground. This study is also intended to highlight how the skills acquired have been put into practice in the field, their impacts on your careers and in particular, how the course has enabled you to better understand the day-to-day management of your protected area and/or the general issues surrounding conservation in your country and the sub-region.

Your answers to the questions below will be summarised and integrated anonymously in this study. Please return your questionnaires by email to Francis Staub: fstaub@biodiv-conseil.fr by 14 March 2014.

Thank you very much for your important collaboration.

A. Your profile

Course taken (tick which course you took)

<table>
<thead>
<tr>
<th>University Diploma</th>
<th>Master in Protected Area Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>UD 2 (9 October-2 December 2011, Ouagadougou, Burkina Faso)</td>
<td>Class of 2011-2013</td>
</tr>
<tr>
<td>UD 3 (6 February-30 March 2012, Ouagadougou, Burkina Faso)</td>
<td></td>
</tr>
<tr>
<td>UD 4 (8 October-30 November 2012, Ouagadougou, Burkina Faso)</td>
<td></td>
</tr>
<tr>
<td>UD 6 (8 April-31 May 2013, Ouagadougou, Burkina Faso)</td>
<td></td>
</tr>
</tbody>
</table>
B. Education

Please list your higher education in order of the most recent to the oldest (specifying the diploma obtained, the name of the institution and the year).

C. Your professional career path

Current position:

Position:
Sector (NGO, public sector, private sector):
Organisation:
Department:
When did you begin this job? Month/Year
What are your main responsibilities?
Is the position directly related to the management of a protected area or its surrounding area? If yes, which one(s)?

Position held upon beginning the UD or Master course

Position:
Sector (NGO, public sector, private sector):
Organisation:
Department:
When did you begin this job? Month/Year
What are your main responsibilities?
Previous positions (list your last two jobs)

Position: 
Organisation: 
Department: 
Period (from month/year to month/year): 
What were your main responsibilities?

Position: 
Organisation: 
Department: 
Period (from month/year to month/year): 
What were your main responsibilities?

Name and contact details of 3 colleagues:

D. The University Diploma

How did you find out about this course?

How easy was it to enrol?

Did the course meet your expectations?

What are the strong points of the course? List the five main strong points.

What are the weak points of the course? (subjects not covered or not covered in enough depth for instance). List the five main weak points.

What are your suggestions for how the course could be improved?

E. The Master’s

How did you find out about this course?

How easy was it to enrol?

Where did you do your internship? What were your main responsibilities?

Did you find it difficult to find an internship?

What was the topic of your dissertation? If you have an electronic version please send it to us.

What options did you choose?

Did the course meet your expectations?

What are the strong points of the course? List the five main strong points.

What are the weak points of the course? (subjects not covered or not covered in enough depth for instance). List the five main weak points.

What are your suggestions for how the course could be improved?
F. After the Course

Have you taken any other courses since? If yes, what are they?

**Putting skills learned into practice**—how did the course help you to better understand the day-to-day management of your protected area and/or in your country? Please provide concrete examples of actions that your new or reinforced skills enabled you to implement (review of management plans, implementation of ecological monitoring, evaluation of the effectiveness of your protected area management, grant requests etc.).

**NB:** This question is very important for the study, even partial responses would be very helpful.

Are you in contact with the other graduates from your class?

Are you in contact with the other graduates from other class(es)?

If yes, in what context?

- Friendship
- Professional reasons
  - Sharing of information (if possible specify what type of information)
  - Requests for information (if possible specify what type of information)
  - Other

Would you be interested in belonging to a graduate network? If yes, in what form?

Have you been in contact with the teachers since your course?

If yes, in what context/why?

Thank you very much for your time and we will keep you informed of the study’s progress.
Appendix 3: List of people met

Mariama Djibo Waziri (DU 2)  
Niger - Projet d’Appuis Communautaires pour la Résilience Climatique (PACRC)  

Mariama Sani Tahirou (DU 6)  
Niger - Bureau d’Évaluation Environnement et des Études d’Impact (BEEEI)  

Lt/Col Issa Mariama Ali Omar (Master)  
Niger - Directrice de la Faune, de la Chasse et des Aires Protégées  

Cdt. Ali Laoual Abagana (Master)  
Niger - Directeur adjoint de la Faune, de la Chasse et des Aires Protégées  

Hamissou Halilou Malam Garba (Master)  
Niger - Direction de la Faune, de la Chasse et des Aires Protégées, Chef de Division Aires Protégées  

Boucar Harouna (DU 1)  
Niger  

Moussa Mahaman Salifou (DU 1)  
Niger - Cellule d’Analyse et de Prospective en Développement (CAPED), Expert en Aménagement du territoire et Valorisation des Espaces Protégés  

Moussa Maman Bouaye (DU 1)  
Niger - Ministère en charge de l’environnement, Direction de la Faune, de la Chasse et des Aires Protégées  

Barnabé Kaboré (DU 1)  
Burkina Faso - Office National des Aires Protégées (OFINAP)  

Harouna Hugues Sawadogo (DU 4)  
Burkina Faso - Office National des Aires Protégées (OFINAP)  

Kabora Lamech (Master)  
Burkina Faso - Point focal national de la Convention de Ramsar  

Aicha Tapsoba (Master)  
Burkina Faso  

Eric Bayala (Master)  
Burkina Faso  

Pascal Rouamba (Master)  
Burkina Faso - African Wildlife Foundation  

Koutoua Benoit Amon (DU 4)  
Ivory Coast - Office Ivorien des Parcs et Réserves (OIPR)  

Yao Roger Kouadio (DU 1)  
Ivory Coast - Office Ivorien des Parcs et Réserves (OIPR)  

Issa Diarrassouba (DU 1)  
Ivory Coast - Office Ivorien des Parcs et Réserves (OIPR)
Amara Ouattara (DU 2)
Ivory Coast - Office Ivoirien des Parcs et Réserves (OIPR)

Lt/Col. Adama Tondossama
Ivory Coast - Office Ivoirien des Parcs et Réserves (OIPR), Directeur Général

Dr. Kah Martine GauzeTouao
Ivory Coast - Coordonnatrice du Comité National du Programme MAB&Point Focal du Programme MAB/UNESCO

Edmond Mani Bi (DU 3)
Ivory Coast - Comité national MAB, chargé des programmes de l’Unesco & assistant du point focal de la Convention du Patrimoine naturel et du Programme MAB UNESCO

Salimata Kone Tondossama (DU 3)
Ivory Coast - Ministère des Eaux et Forêts (MINEF), Direction de la Faune et des Ressources Cynégétiques (DFRC), Sous-directeur de la faune et de la chasse

Major Édouard Ané-B. Kesse (DU 6)
Ivory Coast - Ministère de l'Environnement, de la Salubrité Urbaine et du Développement Durable, Direction de l’Écologie et de la Protection de la Nature
Appendix 4: A few more testimonies

“There is no doubt that the UD for me was a veritable specialisation. Since I took the course I have a clear vision of protected area management. My ability to prepare grant requests has been increased. Protected area management has become something I can do easily. That is to say I learnt a lot in this course. Having already worked in protected areas throughout my professional career I was able to clarify a lot of things and I now have a clear vision of how to run my protected area management programmes.”

“This course really helped us to gain better grasp of the day-to-day management of a protected area but also on a national level because we were able to intervene at both levels. As regards the protected area we apply the skills we learnt in the UD on a daily basis, particularly as regards development and promotion. On a central level, the course enabled us to be better equipped to plan (particularly the management plan).”

“The quality of our work in parks and reserves has improved. The subjects relating to nature conservation were clearly explained, governance and protected area management, the approaches highlighted, the ecological theories clearly explained, with examples, management planning, ecological monitoring, community relations at the heart of protected area management because they are the cause of the problem of diminishing biodiversity, environmental law, international conventions, financing mechanisms, community areas etc… I remember it all as if it were yesterday. And the thematic discussions to understand the approaches in each country were very edifying. Our professional development gives testimony to the impact of this training. After the course I worked in the two largest parks in Ivory Coast where I gave my modest contribution as a protected area manager on the basis of the experiences shared and discussions with the other managers from other countries in the sub-region. Contacts and real relationships have been built. If I need information on the realities of a protected area issue I know where I can find it. I will never be able to thank IUCN enough for taking the initiative to organise this important course.”
Kob, Shai Hills resource reserve