CRITICAL ECOSYSTEM

# **CEPF Final Project Completion Report**

Organization Legal Name:	Enviromatics - Amjad and Majdi Salameh Company
Project Title:	Developing a Web-enabled and Geo-referenced Database Solution for Yemen's Biodiversity
Grant Number:	66263
CEPF Region:	Eastern Afromontane
Strategic Direction:	2 Improve the protection and management of the KBA network throughout the hotspot.
Grant Amount:	\$127,491.18
Project Dates:	June 01, 2016 - May 31, 2018
Date of Report:	November 26, 2018

#### **Implementation Partners**

List each partner and explain how they were involved in the project

Sustainability Foundation for Nature Conservation (SFNC). Arranged through sub-contract agreement. SFNC (1) contributed to system analysis and testing, (2) led implementation of Naturemena outreach activities (organizing national workshop, launching celebration events, media coverage, training of locals to use of the solution, etc.) (3) Contacted potential project partners like UNDP Yemen, GIZ office in Yemen, and the CHM – Royal Belgian Institute of Natural Sciences, and Yemen EPA.

Foundation for Endangered Wildlife (FEW). Engaged through sub-grant agreement upon which Enviromatics facilitated the release of sub-grant payment for FEW .

Birdlife International. Provided the project with the information available/needed about IBAs and birds in the project implementation area in addition to a number of pictures.

Other Potential Partners. Communication with the Saudi Wildlife Commission was initiated but could not be further materialized. Engagement with the RSCN, Jordan Trail NGO and with the Royal Botanical Garden in Jordan was commenced to make use of the IT platform, replication of the solution or scaling it up to include Jordan. Exchange of findings and lessons learned was arranged with the RSCN. Further engagement needs more time to be materialized.

#### **Conservation Impacts**

Summarize the overall impact of your project, describing how your project has contributed to the implementation of the CEPF ecosystem profile

Our project was designed originally to address pre-identified need for such biodiversity database solution and in compliance with CEPF Investment Priority 2.2: 'Support the role of civil society organizations in the application of site safeguard policies and procedures, including the strengthening of environmental impact assessment implementation in order to address ongoing and emerging threats to all terrestrial KBAs (including freshwater KBAs)', and accordingly complies with CEPF Strategic Direction 2: 2. 'Improve the protection and management of the KBA network throughout the hotspot'. It is also linked to Investment Priority 2.3: 'Advance the identification and prioritization of KBAs in Africa and the Arabian Peninsula, including those that have irreplaceable plant diversity'.

The logic behind the project is basically enhancing Yemeni CSOs (and other beneficiaries) access and sharing of biodiversity information, to improve CSOs Knowledge and capacity to advocate EAM as critical ecosystem, improve the capacity of CSOs for advocacy of biodiversity, and overall to contribute to enhancing the efficiency of CSOs engagement in conserving biodiversity in KBAs in Yemen. An important element of this logic is that information feed from local environmental CSO's, conservation professionals and biodiversity enthusiasts would form core element of the biodiversity database solution (Naturemena), and the wealth of such observations and lessons learned feed would facilitate informed decision making, monitoring of biodiversity and threats to it, and would contribute to conveying awareness messages to the general public as part of a growing culture of biodiversity advocates.

Naturemena have been developed and operational from its web address www.naturemena.com. The development process is complete for all designed tools, and it present all geo-referenced data available from secondary sources, including those provided by Birdlife International, and the results from a desk-top review of literature carried out by senior Yemeni and Jordanian experts. More information, reports, training materials and case studies are planned to be periodically uploaded to the solution and made available to the users. This process of continued growth of the datasets will be through two main streams; (1) ENVIROMATICS team and partners, and (2) users of the solution.

With regard to biodiversity baseline and monitoring, the project targeted impact is establishing and maintaining and updating habitat, species and threats information by solution users noting that some of the KBAs and protected areas information are already available from the solution. The impact achieved is developing the tool for data gathering/sharing by CSOs based on scientific approach, and adding baseline information available to date. This tool is location specific thus to allow spatial and country wide analysis of such observations. Hence, none of the solution users have shared any such observations to date.

The solution interface has mobile responsive design which can be opened from any computer or smartphone connected to the internet. All information currently available through the solution are available in Arabic and English. This also include training materials developed by the CEPF funded project which was led by the United Society for Developing Water Resources and Environment (USDWE) and were made available through the website www.eiay.org. The news about transferring all training materials to Naturemena was shared through social media (paid Facebook Advertisement) and through SFNC network.

The database is now available online and marketing campaign was implemented in 2017 through Facebook and through our local partner in Yemen (SFNC). Impact targets of at least 100 end-users was set to be achieve by May 2017 and was rescheduled to be November 2017 given the need for a third development cycle to accommodate feedback from the scientific advisers.

Planned Long-term Impacts - 3+ years (as stated in the approved proposal)

Impact Description	Impact Summary
CSOs, researchers, donor agencies and local government active in the EAM region in Yemen provided, through web-enabled and user friendly system, with up-to-date relevant biodiversity information needed for informed decision making that significantly contribute to effective protection and management of KBA network throughout the hotspot.	The solution is available on line to all interest groups and people. Marketing of the solution was arranged through a national workshop, and social media campaigns (see results below under respective activity)

Impact Description	Impact Summary
One complete web-based database with	The database is available online to all CSOs and other
information about biodiversity in the KBA	interest groups, campaign materials have been
network within the EAM region in Yemen	developed and used for the marketing campaign.
(KBAs delineation info., habitat, species	
diversity, species conservation status,	
flyways important for migratory birds, KBA	
protection status, threats to biodiversity,	
conservation priorities, etc.)	
accessed/used by at least 100 end-users	
by May 2017, and accessed by at least 500	
end-users by End of May 2018.	
By End of June 2017, at least 75 e-copies	It was suggested by the Grantee in earlier reports to
on flash desks of the complete desk-top	cancel this activity as the web version of solution is
database with information about	sufficient for all users and due to limitation related to
biodiversity in the KBA network within the	the ability to distribute CDs of flash discusses to CSOs
EAM region in Yemen (KBAs delineation	and government while war and insecurity prevails
info., habitat, species diversity, species	within the EAM region in Yemen.
conservation status, flyways important for	
migratory birds, KBA protection status,	
threats to biodiversity, etc.) distributed to	
at least 50 end-users from CSOs in Yemen,	
in addition to 25 copies distributed to	
related governmental organizations,	
universities and donor agencies in Yemen.	
National event organized and held in	The national event was organised with the participation
Yemen to present the database to	of 25 people (9 female and 16 male participants. Media
representatives of at least 50 CSOs,	coverage by national TV and by social media was
governmental organizations, University	arranged. Increasing the number of participants to
professors, students and donor agencies	reach the targeted 50 CSOs could not be arranged due
completed by April 2017.	to security conditions, however the Facebook
	campaigns succeeded in reaching wider segment of the
	community (see results on the campaign below)
Social media campaign completed by	Solution Marketing campaign have been completed.
March 2017 with at least 1000 views to	According to Facebook Ads Management Tool, and with
promote the system to Yemeni CSOs,	regard to posts/ads reach, the total delivery/impression

Planned Short-term Impacts - 1 to 3 years (as stated in the approved proposal)

government and international	of our compaign until December 21/2017 is 62 120
government and international organizations active in Yemen	of our campaign until December 31/2017 is 62,139 people (reach frequency of 1.33), and the total reach is 46,812 people. 92.28% of this reach was among males and only 7.62% among females. Age distribution shows that 24.57% were in the age group of 18 to 24 years, 44.33% for age group 25 to 34 %, 19.41% for age group 35 to 44 years, 7.76% for age group 45 to 54, 3.52% for age group 55 to 64 years, and 0.41% for age group 65+ years. Geographic distribution by country shows that 61.57% reach of people resident in Yemen, 28.24% in Saudi Arabia, 5.81% in Jordan, and 4.38% in Kuwait. The distribution by region shows that Ad Dali' (Yemen) scored the highest reach with 46.56%, followed by Makkah (Saudi Arabia) with 11.11%. on this regard it is important to note that Saudi Arabia do host large Yemeni population (mainly males), most of them are livening in Makkah Province. 266 people liked our announcements about the solution/website and 268 people followed the link from our Facebook page (Nature Yemen) to the solution website
Long-term sustainable hosting,	(www.naturemena.com). The solution is currently operation from the Grantee
tong-term sustainable nosting, maintenance and update mechanisms for the database in place by May 2018	offices using the infrastructure sponsored by the project. Long-term sustainability of hosting have been arranged as such noting that the Grantee will continue for a minimum of two more years covering other hosting costs (e.g. internet, electricity, maintenance, etc.). Fundraising and sponsorship for cost covering for the period beyond the coming two years is being addressed as part of the implementation of the sustainability plan.
Database system business and marketing plan produced, and at least three partnership agreements with interested partners/sponsors negotiated to ensure system sustainability, scalability and replicability by March 2018	Sustainability and Marketing Plan was developed and implemented. Further follow up actions for post project are being implemented including discussions related to partnership to improve the solution and enhane its sustainability with SFNC and some private sector companies. The current war and security conditions in Yemen are negatively impacting related discussions
At least three proposals (research and/or grant proposals) prepared by three Yemeni end-users of the system to address research needs or conservation priorities identified after using the system by May 2018.	One proposal to undertake floristic survey in Jabal Al A'arais in Abyan was received in November 2018 from Dr. Othman Al Hawshabi (attached). This impact could not be fully achieved due to reasons beyond project implementer capacity. This is basically related to the escalations in war, security and poverty challenges in Yemen which diverted the attention of national scientist in Yemen away from focusing on the project and its activities. The war and security constrains limited the ability and willingness to undertake field

research activities.

Describe the success or challenges of the project toward achieving its short-term and long-term impact objectives

#### Successes

The solution as web-enabled and GIS referenced biodiversity database information management system has been developed completely and successfully, and is currently operational as www.naturemena.com with in-house hosting of the solution from Grantee offices and using the infrastructure funded by the project (i.e. from CEPF).

With the aim of maintaining the cumulative impacts from two of the CEPF funded project which Enviromatics was engaged in, including this project, we have managed incorporation and combining of the training materials developed by USDWE/ENVIROMATICS through the CEPF funded project for capacity building which is also available through www.eiay.org thus to ensure continuity of the capacity building programme initiated by USDWE. The new release also includes a new tool for local CSOs, experts and others to share their observations of wildlife (subject to review by the Project technical experts), and also including Arabic version of the information on IBAs available from Birdlife International.

#### Challenges

The quality of data available from secondary sources (except those from Birdlife) are by mostly repetitive on observations and are lacking proper geo-referencing. More specifically the species records data and its distribution are available in narrative forms referring to locality names (towns, villages, etc.). The absence of proper georeferenciation of species observation records have rendered the team ability to use such data.

Security and safety risks in Yemen restrained the capability of our local partner (SFNC) from travelling across the EAM region in Yemen to promote the solution and to collect additional data from CSOs and local authorities.

To overcome this situation, and with support from the technical team, the biodiversity expert is undertaking geo-referencing of reported observations using gazetteer for Yemen that includes all localities and their GPS coordinates. The Project Biodiversity Expert and the technical committee had undertaken cross check of gathered records and matching them with their appropriate coordinates. Information gaps with regard to protected areas delineation is still standing. Obviously, the national authorities in Yemen are lacking such GIS maps or even map images of their established and proposed protected areas, an issue which cannot be resolved by our project.

It was planned that at least three proposals (research and/or grant proposals) prepared by three Yemeni end-users of the system to address research needs or conservation priorities identified after using the system. It is unfortunate that the ongoing war in Yemen have significantly affected possible end-user's willingness to go further and prepare proposals. Demotivation seems prevailing among those in our network and this outcome could not be achieved. Hence, one proposal was received in November from Dr. Othman AL Hawshabi to undertake floristic survey of Jabal Al A'arais in Abyan ( العرانس، محافظة أبين).

"Agile" approach for the development process of the solution could not be fully implemented due to beneficiaries limited access to the solution interface(website) when the first version was released. This situation was mainly caused by the unrest and war situation in the country.

Were there any unexpected impacts (positive or negative)?

Availability and getting access to habitat and vegetation digital maps, and also species distribution maps or geo-referenced species record has been a major challenge for this project. Even the maps which we could collect in hard copies with support from our local partners and contacts network were mostly in low resolution which can not be digitized. We were hoping to receive digitized maps for the vegetation maps of Yemen from the Ministry of Agriculture and the maps of protected areas in Yemen (Through our local partner, SFNC). It is unfortunate that such information could not be made available and most likely these maps are not existent. Yemen EPA do not have digitized maps for their Protected Areas, and hard copies are available for only Bura'a and for Soctra.

Though several nature conservation programmaes and projects were implemented at least during the last two decades in Yemen with technical and financial support from international donors, however it was surprising to note that the EPA and the Ministry of Agriculture, and even the research institutions do not have electronic or even high-quality data sets on biodiversity from those projects. Even the technical reports which we could get access to are scanned copies with low to moderate scanning quality.

Therefore, the project ecology experts undertook intensive review of literature and managed to collect some information with coordinates and/or clear addresses which we managed to include in the database. Yet, there is a good room for major improvement once the security conditions permit local researchers and scientist resume their field research (i.e. for scientific purposes) and hopefully to use the project developed tools to share geo-referenced data.

Some of the experts who are thought to have/hold position of geo-referenced biodiversity data were contacted through the project team and our local partner SFNC and they offered to sell the information but not to share it without compensation. Given that the project budget did not include cost lines for such expenses, and given that we were unable to pre-test the quality of data available through similar channels therefore this mechanism for data acquisition was not implemented. On another subject, it was not expected to have such a decline in local biodiversity and ecology expert's willingness to use the database on voluntary basis. Many of those invited to use the solutions developed did not share any information, and some of them requested to be financially compensated to share their data through Naturemena. This perhaps has also to do with the serious economic challenges those experts and scientist are currently facing with the civil war in the country and not getting paid from their employers.

Though the marketing campaign was successful in terms of campaign reach and people reactions, yet those visitors of the solution website cannot be fully noted as full or regular users given that their use was limited to accessing data, and yet none of them shared information about biodiversity through the tools. Hence, there are reasons for this situation which can be summarized in the following:

- Environmentalists, activities, biodiversity specialist and CSOs in the targeted areas are under serious security and poverty pressures, mainly due to the ongoing war in the country. Therefore, it is noted that these issues are taking their full attention leaving very little attention to some serious crimes against nature like killing of endangered animals, tree cutting and deterioration of habitat.
- 2. Communication with biodiversity experts and university teachers in Yemen shows that they do not undertake any field surveys since beginning of the war, mainly due to security reasons and due to the in availability of financial resources for such research.
- 3. Some of the contacted university teachers and researchers expressed interest in sharing their available information if it is paid for.
- 4. Most of the environmental CSO's are no longer active in the field, and they are keeping their activities to minimum effort. Mostly they do some posting on social media or very limited

discussion groups and email communications. Lack of funding and security considerations are behind this situation.

## **Project Components and Products/Deliverables**

	Component			Deliverable
#	Description	#	Description	Results for Deliverable
1	Data Gathering and Management: Collate, compile, validate and managed all scientific data available about biodiversity in the EAM region in Yemen.	1.1	Inventory of gathered, validated and compiled data, data sources and related information	All information available from local partners and published references have been completed, data compilation and validation have been completed, validated data have been uploaded to the database system and are currently available from the Solution website "www.naturemena.com". Data sources and related information are documented and have been also uploaded to the website. Information gaps identified are mainly related to maps of protected areas and vegetation types.
2	Biodiversity database system	2.1	Biodiversity Database System for the Project Areas operational and accessible from the web	The biodiversity database system has been developed, a second release (version) of the solution have been released to the project team of experts and advisers for final review and comments. The website is now available (see www.naturemena.com) and will be announced/shared with CSOs and other identified stakeholders in early August 2017 after the consolidation of reviewer's comments. It is important to note that that there is a website for users from which they can access all available information and also contribute by reporting their observations about wildlife within the EAM region in Yemen, and there is also the back-end application which is accessible for the solution administrators (developers and scientific advisers). The database/solution website has been announced through our local partners in Yemen (SFNC), and through Facebook campaign.
2	Biodiversity database system	2.2	100 copies of the desk-top (Static) version of the Biodiversity Database System for the Project Areas	After discussions with the Project Partners in Yemen and with Mr. Sharif Jbour we reached the conclusion that the value of having static version of the database system is not as much envisaged at the time of Project Development. Therefore it is decided (suggested to CEPF) that this deliverable is to be cancelled and to use the money allocated for the purchase of flash-disks for other project activities. Another reason to reaching this decision is the expected security constraint to ship the flash-discs with the static version of the solution to CSOs, and the

Describe the results from each product/deliverable:

				fact that Internet is working properly in Yemen.
3	National workshop, marketing campaign, and sustainability	3.1	Solution marketing and sustainability plan	Solution scalability, replication and sustainability was briefly discussed with local partners in Yemen (SFNC, WAM and FEW), with Ms. Haifa Abdulhalim from the World Heritage Center in Bahrain (IUCN Regional Office for West Asia), RSCN and the Royal Botanical Garden of Jordan, and with other private sector entities in KSA and Bahrain. Options being considered for scalability include scaling up the system to cover other priority conservation in Yemen including Socotra and possible the EAM region in KSA, as for replication we are discussing with the Royal Botanical Garden of Jordan replicating the system for Jordan. As for sustainability, and noting that the solution is being hosted in-house by Enviromatics, we are considering having the scalability and replicability options paid for by interested parties or through other projects, and have cost sharing of hosting costs for Yemen EAM data base (naturemena) covered through these projects. The sustainability plan has been finalised along with the solution marketing plan. Marketing through Facebook was completed, promotion of the system among local networks in Yemen was undertaken by the project local network including Dr. Othaman Al Hawshabi and Dr. Salem Busais who verbally communicated the website address and news
3	National workshop, marketing campaign, and sustainability	3.2	National workshop/eve nt to announce and celebrate the release of the database system	A National event (workshop) to announce the release of the first version of database system was organised by the Project local partner; SFNC, in February 14 2017 in Aden with the participation of 25 representatives of CSOs from all over the EAM region in Yemen. The event was also attended by the Deputy Governor of Aden and the Deputy Director of EPA in Aden, and the event was covered by a national TV channel and newspapers.
3	National workshop, marketing campaign, and sustainability	3.3	List of organizations contacted to discuss opportunities for the sustainability, growth and replication of	A list of consulted organizations is available and is being updated regularly.

			the solution/proje ct	
3	National workshop, marketing campaign, and sustainability	3.4	Social media campaign to promote and market the use of the system	Solution Marketing campaign have been completed. According to Facebook Ads Management Tool, and with regard to posts/ads reach, the total delivery/impression of our campaign until December 31/2017 is 62,139 people (reach frequency of 1.33), and the total reach is 46,812 people. 92.28% of this reach was among males and only 7.62% among females. Age distribution shows that 24.57% were in the age group of 18 to 24 years, 44.33% for age group 25 to 34 %, 19.41% for age group 35 to 44 years, 7.76% for age group 45 to 54, 3.52% for age group 55 to 64 years, and 0.41% for age group 65+ years. Geographic distribution by country shows that 61.57% reach of people resident in Yemen, 28.24% in Saudi Arabia, 5.81% in Jordan, and 4.38% in Kuwait. The distribution by region shows that Ad Dali' (Yemen) scored the highest reach with 46.56%, followed by Makkah (Saudi Arabia) with 11.11%. on this regard it is important to note that Saudi Arabia do host large Yemeni population (mainly males), most of them are livening in Makkah Province. 266 people liked our announcements about the solution/website and 268 people followed the link from our Facebook page (Nature Yemen) to the solution website A new campaign is planed for the release of the new version of the solution in the coming few months
3	National workshop, marketing campaign, and sustainability	3.5	Three propositions for partnership, sponsorship or marketing support discussed and negotiated with interested national, regional or international organizations	The idea of partnership to make best use of the developed database and website was shared with the Royal Society for the Conservation of Nature in Jordan, and with the Royal Botanical Garden in Jordan. MoU is under negotiation between Enviromatics and the Botanical Garden to replicate the system for the conservation of plants in Jordan. Possibility for sponsorship of solution hosting was raised with GIZ (Jordan office), and with MAB group (business company in UAE). GIZ do not seems interested enough at this stage to proceed with discussions. As for MAB, Dar Al Omran and CCG our contact in these companies explained that they might be able to provide sponsorship for one year, in 2019.

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3	National	3.6	Three research	One proposal to undertake floristic survey in Jabal Al
	workshop,		and/or grant	A'arais in Abyan was received in November 2018 from Dr.
	marketing		proposals	Othman Al Hawshabi (attached)
	campaign, and		prepared	This deliverable could not be fully achieved due to
	sustainability		jointly with	reasons beyond project implementer capacity. This is
			three end-	basically related to the escalations in war, security and
			users of the	poverty challenges in Yemen which diverted the attention
			system to	of national scientist in Yemen away from focusing on the
			address	project and its activities. The war and security constrains
			research need	limited the ability and willingness to undertake field
			or	research activities.
			conservation	
			priority within	
			the system	
			geographic	
			coverage areas	
			in Yemen	
3	National	3.7	Baseline and	Completed and submitted
	workshop,		final CSTT	
	marketing		produced	
	campaign, and			
	sustainability			

Please describe and submit any tools, products, or methodologies that resulted from this project or contributed to the results.

The solution can be accessed on the following link www.naturemean.com One proposal for research project in Abyan is attached (in Arabic Language)

## **Lessons Learned**

Describe any lessons learned during the design and implementation of the project, as well as any related to organizational development and capacity building.

Consider lessons that would inform:

- Project Design Process (aspects of the project design that contributed to its success/shortcomings)
- Project Implementation (aspects of the project execution that contributed to its success/shortcomings)
- Describe any other lessons learned relevant to the conservation community
- 1. Information sharing is one of the most challenging aspects with regard to the development of similar solutions. Organizations and expert's willingness to share information is conditional by

having such information paid for, even if such information is gathered previously by funded projects or if such information is already published in a book or scientific magazine. This limitation in hindering regions and countries similar to Yemen from building on previous accomplishments or to make better use of the information available for informed decision making.

- 2. Similar projects require higher investment for acquisition of data, engagement of local CSOs and marketing. The assumption that CSOs would require only basic information about the existence and value of the developed solution, especially during the time of war, was in sufficient to achieving targeted number of users.
- 3. Due to war-induced geo-graphic isolation of people, it seems important to have civil society mobilizers for similar projects in each targeted geographic area (e.g. governorate) who would play roles for acquisition of data, spreading the news about the solution, and contributing to its marketing.
- 4. Though the developed solution does have powerful IT side, hence availability of data is deterministic to the overall impact of similar solutions. Acquisition and digitization of sufficient amount of data was incorrectly assumed to be feasible within the lifetime of the project and through few local consultants. A major lesson learned is the data build up require more attention, time and budget.
- 5. Social marketing of similar products is understood to be effective to promoting wider use of similar products, hence economic incentives have been asked for by people likely to share related biodiversity information through the solution. Other users (i.e. users interested in only obtaining information) require more pursuant share of the news about similar solutions and release of news about new findings to continue using / re-visiting the interface of the solution.
- 6. Digitization, geo-referencing and re-mapping of available biodiversity maps available from secondary sources is a critical action for similar database solutions and should also be sufficiently accounted for with sufficient budget, and should start as early as possible in the implementation of the project.
- 7. Changing social, economic and political situations in Yemen, and accordingly similar countries, do have serious implication on the magnitude/number of people using the solution. It also introduces new needs, like for example the need to observe and report on threats of the war and absence of law enforcement on critical ecosystems and on biodiversity. The developed solution does have the potential to positively contribute to post-war conservation planning, but this is conditioned by having more and more environmental activities using it and reporting on their related observations.
- 8. This project gave us the opportunity to build our own capacity with regard to the analysis and development of biodiversity data base solutions and also the overall management of biodiversity information. Such a capacity is immensely needed in our region as most of the countries and organizations are reliant on obtaining external services from developed countries to build such systems.
- 9. Communication and exchange of knowledge and experiences between organizations having similar solution or in the process developing it would be of great value to enhance its capability and outcomes. Our discussions with the RSCN BIMS project provided both parties the opportunity to improve their solutions, and stimulated discussions for future collaboration.
- 10. Discussions with some of the consultancy and research institutions revealed that having mobile application for the solution would perhaps facilitate wider use among professionals and activities in terms of reporting on their observations (species, threats, etc.). Hence, such

organizations seem more into purchase of ready-made apps instead of taking part (as partners) into the development process.

11. Having news section in the interface of the solution is needed to ensure gaining the attention of the users and to encourage them to visit the website of the data base more frequently, and perhaps to invite others to join. Linking such news feed with the solution social media fronts would also be of great value.

### Sustainability / Replication

Summarize the success or challenges in ensuring the project will be sustained or replicated, including any unplanned activities that are likely to result in increased sustainability or replicability.

The design of the project assumed that solution maintenance and hosting costs would be the only consideration for solution sustainability and replicability. It is now clear to us that sustainability of information feed, build up of data repository, and continuing efforts for data digitization and translation can be much more time and effort demanding, and of higher costs, at least until the users commence more active engagement in data sharing through the solution.

In our proposal we have explained that the solution will be running with a business case. The first option considered for building the business case require having commercial use (paid accounts) of the website and the data which is not possible given the nature of the project (being funded with prime objective of CSOs free access to information) and given the terms set forth by the primary owners of the presented data on use of data. Therefore, the other options considered for building a business case are in-house hosting of the solution (implemented), plus having sponsorship program (under development) and targeting grants. The sustainability plan for the project is based on combining inhouse hosting along with the sponsorship programme for solution maintenance and operational costs, and grants for scale-up and expansion.

Short term sustainability of the solution in terms of institutionalizing Naturemena not only as a product but also as a unite within our company (Enviromatics) and maintaining in-house, hosting of the solution (IT and data) is already in place by having the infrastructure for solution host in place, and having the IT team responsible for keeping the solution functional and accessible from its current address without extra costs other than internet services and electricity for server's operation and cooling.

Solution scalability, replication and sustainability was briefly discussed with local partners in Yemen (SFNC, WAM and FEW), with Ms. Haifa Abdulhalim from the World Heritage Center in Bahrain, RSCN and the Royal Botanical Garden of Jordan, and with other private sector entities in Jordan, KSA and UAE. Agreements for such actions have not been materialized to date.

Solution scaling up is already on going, and during the period from May until November 2018 we have managed to activate the threats observation module using Birdlife Threats Evaluation Form used for IBA's. We have also discussed the expansion of the geographic scope for solution service coverage to include other areas with related possible partners from Jordan, and we are planning to present the same to other organizations in the region having KSA as first priority given that the EAM region extends in south Saudi Arabia as will.

Unplanned activities constituted travel to neighboring countries in search for regional partners (already visited UAE, and we are planning to visit KSA and Kuwait in early 2019), the development of new modules which were not part of the original design, and having social marketing campaigns after the completion of the grant project duration. The new promotional campaign through Facebook (targeted audiences) is planned after the release of the new version of the solution in early December 2018.

#### **Safeguards**

If not listed as a separate Project Component and described above, summarize the implementation of any required action related to social, environmental, or pest management safeguards

Given the nature of our project and its activities, it do/did not trigger any negative social or environmental impact. Hence, it does have positive impact on supporting civil society capacity to engage effectively in environmental safeguarding through making necessary biodiversity information readily available for informed decision making, and also through providing training materials and knowledge about environmental safeguarding tools.

#### **Additional Comments/Recommendations**

Use this space to provide any further comments or recommendations in relation to your project or CEPF

Coordination and collaboration between donor agencies to ensure meaningful exchange of knowledge and experience, and assuring that the information gathered are available to all interest groups is essential to build on successes and to advocate informed decision making. We would recommend that CEPF initiate/stimulate such coordination in Yemen.

Post war conservation actions are definitely required in Yemen. The earlier coordination and planning for such programmes the better for nature conservation. Such effort requires obtaining sufficient amount of relevant information from primary sources, and therefore we recommend that future CEPF grantees and partners are advised to use Naturemena to report on such observations and to use the same solution to acquire data for conservation planning.

## **Additional Funding**

Provide details of any additional funding that supported this project and any funding secured for the project, organization, or the region, as a result of CEPF investment

#### Total additional funding (US\$)

#### Type of funding

*Please provide a breakdown of additional funding (counterpart funding and in-kind) by source, categorizing each contribution into one of the following categories:* 

- A Project Co-Financing (other donors or your organization contribute to the direct costs of this project)
- *B* Grantee and Partner Leveraging (other donors contribute to your organization or a partner organization as a direct result of successes with this CEPF funded project)
- *C Regional/Portfolio Leveraging (other donors make large investments in a region because of CEPF investment* or successes related to this project)

## Information Sharing and CEPF Policy

CEPF is committed to transparent operations and to helping civil society groups share experiences, lessons learned, and results. Final project completion reports are made available on our Web site, <u>www.cepf.net</u>, and publicized in our newsletter and other communications.

1. Please include your full contact details (Name, Organization, Mailing address, Telephone number, Email address) below

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