



United Nations
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World Heritage Patrimoine mondial

37 COM

Distribution limited / limitée

Paris, 17 May / 17 mai 2013

Original: English

UNITED NATIONS EDUCATIONAL,
SCIENTIFIC AND CULTURAL ORGANIZATION
ORGANISATION DES NATIONS UNIES
POUR L'EDUCATION, LA SCIENCE ET LA CULTURE

CONVENTION CONCERNING THE PROTECTION OF THE WORLD
CULTURAL AND NATURAL HERITAGE

CONVENTION CONCERNANT LA PROTECTION DU PATRIMOINE
MONDIAL, CULTUREL ET NATUREL

WORLD HERITAGE COMMITTEE / COMITE DU PATRIMOINE MONDIAL

Thirty-seventh session / Trente-septième session

Phnom Penh, Cambodia / Phnom Penh, Cambodge
16-27 June 2013 / 16-27 juin 2013

Item 7 of the Provisional Agenda: State of conservation of properties inscribed on the World Heritage List and/or on the List of World Heritage in Danger.

Point 7 de l'Ordre du jour provisoire: Etat de conservation de biens inscrits sur la Liste du patrimoine mondial et/ou sur la Liste du patrimoine mondial en péril

MISSION REPORT / RAPPORT DE MISSION

Socotra Archipelago (Yemen) (N 1263)
Archipel de Socotra (Yémen) (N 1263)

4-14 November 2012 / 4-14 novembre 2012

This mission report should be read in conjunction with Document:
Ce rapport de mission doit être lu conjointement avec le document suivant:

WHC-13/37.COM/7B.Add

IUCN

**REPORT ON THE MISSION TO Socotra Archipelago, Republic of Yemen
FROM 4 TO 14 November 2012**



Photo © Ms. Haifaa Abdulhalim

**Tarek Abul Hawa
Haifaa Abdulhalim**

April 2013

ACKNOWLEDGEMENTS

The mission team would like to extend their thanks to the Government of the Republic of Yemen for all the cooperation and support provided during the course of the mission. The team is particularly grateful to Mr. Malek Abdul Aziz for organizing the mission and taking care of all logistics. We are also very grateful to HE Eng. Abdul Rahman Al Iryani and Dr Abdul Karim Nasher for accompanying the mission and providing valuable insights and reflections. Special thanks are extended to the EPA (Environmental Protection Authority) team in Socotra headed by Mr. Ahmad Sa'eed for their great efforts in facilitating the mission to the Archipelago and to Mr. Ismael Mohammad for his dedication and support.

The mission team would also like to thank the Arab Regional Centre for World Heritage (ARC-WH) for participating in the mission and sponsoring the participation of the IUCN regional World Heritage focal point from the Regional Office for West Asia.

Finally, a heartfelt thank you to all the great people of Socotra for their warm welcome and reception and great commitment to conserve their natural heritage for the whole world to enjoy.

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ACRONYMS

ARC-WH	Arab Regional Centre for World Heritage
EIA	Environmental Impact Assessment
EPA	Environmental Protection Authority
GEF	Global Environmental Facility
GEF SGP	Global Environmental Facility Small Grants Program
IUCN	International Union for the Conservation of Nature
MOA	Ministry of Agriculture
MOF	Ministry of Finance
MOFW	Ministry of Fisheries Wealth
MOPIC	Ministry of Planning and International Cooperation
MOPWH	Ministry of Public Works and Highways
MOT	Ministry of Transportation
MOWE	Ministry of Water and Environment
OUV	Outstanding Universal Value
PA	Protected Area
PERSGA	Program for the Environment of the Red Sea and Gulf of Aden
SCDP	Socotra Conservation and Development Program
SoOUV	Statement of Outstanding Universal Value
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
WH	World Heritage
WHC	World Heritage Committee
WWF	World Wildlife Fund

EXECUTIVE SUMMARY

The Socotra Archipelago was inscribed on the basis of criterion (x) in recognition of its Outstanding Universal Value (OUV) in terms of the diversity and endemism of its flora and fauna. The inscription took place during the 32nd session of the World Heritage Committee (Quebec City, 2008).

This is the first IUCN mission to the Socotra Archipelago since its inscription, and was conducted from 4 to 14 November 2012 in order to assess the progress achieved by the State Party in the implementation of the recommendations of the World Heritage Committee (Decision 32 COM 8B.5).

The mission team met with a large number of stakeholders and interest groups both in Sana'a, the capital of Yemen, and on Socotra. These included meetings with the Advisor on the National Dialogue of Yemen, the Ministers of Water and Environment (MWE) and Public Works and Highways (MOPWH), meetings with local government representatives in Hadibu and Qalansya Directorates, and numerous meetings and interviews with local communities' leaders and representatives. The mission was organized and accompanied by the Ex-Minister of Water and Environment; the senior national academic expert specialized on Socotra, the head of the Socotra coordination unit in Sana'a and the head of the Environmental Protection Authority (EPA) branch in Socotra including several of his key staff and technical experts.

The mission noted that the difficult period Yemen is going through politically has been a primary factor inhibiting its ability to follow up on the recommendations of the World Heritage Committee. The mission concluded that at the time being, the OUV of the Property is maintained, while noting very strong concerns over several factors influencing its long term conservation. Particularly, there is a lack of proper institutional framework mandated to oversee the management of the Property to be well equipped with adequate levels of human and financial resources.

The Mission concluded that the Outstanding Universal Value of Socotra Archipelago was still preserved. However, concerns remain about several factors threatening the property.

Among all other factors influencing Socotra, the issue of road construction across the island, particularly within core areas of biodiversity, represents an ongoing threat and major impact on the integrity of the property. However, following the recommendations of IUCN and the World Heritage Centre, and in addition to other internal factors in Yemen, old road projects were revised, and new road construction activities were stopped since 2010. Nonetheless, there is no guarantee that road construction will not recommence on the islands, as significant parts of the MOPWH master plan have not been realized to date. **The mission therefore concludes that, if the construction of new roads within the core biodiversity areas is recommenced, it would pose a serious threat to the OUV of the property and this would therefore form a clear case for inscription of the property on the List of World Heritage in Danger, in accordance with paragraph 180 of the Operational Guidelines of the World Heritage Convention.**

The mission also concluded that several issues with planning and management and stakeholder involvement need to be urgently addressed.

The mission further emphasizes a number of existing and potential threats to the integrity of the property including excessive grazing of cattle and livestock, invasive species and tourism. The magnitude of these threats is increased by the lack of adequate controls and monitoring systems by the management authorities on the Archipelago. In addition, the mission notes the threats on marine resources and biodiversity including export fishing and over fishing of marine resources in Socotra and the wider Indian Ocean. These threats are also associated with limited enforcement capacity and the lack of adequate policies and regulations needed to ensure long term sustainability of these resources.

The mission concluded that the underlying root cause for most factors influencing the long term conservation of the property is the lack of systematic and structured follow up on the 2008 Cabinet decrees, representing a major setback on the progress made in 2008 to achieve the required long term conservation and effective management of the World Heritage property.

In light of the above, the mission strongly recommends the following urgent actions to address certain issues:

Planning and Management

1. Develop an agreed action plan, which should be time bound and well-resourced to immediately implement all decisions taken in the 2008 Decrees. It is strongly advised that IUCN and the World Heritage Centre are involved in the process of the development and implementation of the action plan.
2. Accelerate the processes leading to the establishment of an Archipelago wide management authority legally mandated and well-resourced to oversee the conservation of the property and its sustainable development. The mission notes that the current political reforms taking place in Yemen represent a rare opportunity to strengthen the legal and institutional status of Socotra in accordance with its World Heritage status.
3. Secure fiscal allocation for Socotra Archipelago as part of the annual national budget. The allocation needs to be sufficient to implement core conservation programs of the property;
4. Adopt an emergency action plan to reactivate the management program for the Archipelago with a focus on empowering EPA and local councils as well as the local associations managing all pilot Protected Areas;
5. Devise a clear strategy on including the outer islands in all management programs of the Archipelago including solutions to year round access, communication and reporting.

Road construction

6. Take a clear decision on the cancellation of the remaining components of the Qarya-Hegher road and the Hai Al Salam-Nojed road and the rehabilitation of the areas already impacted by the constructed parts.
7. Revise the MOPWH road master plan to be fully in line with the World Heritage zoning plan. The new master plan should not include any proposals for new highways within the property, and should adopt a new set of guidelines and criteria for the construction of new roads which are vitally needed for the development of the Archipelago and respond to local priorities. These roads should comply with the proposed rural access roads category with minimal ecological footprints and a clear set of criteria for selection.
8. Adopt a comprehensive rehabilitation program to remedy the impacts of previous roads. The rehabilitation program should be based on sound environmental and engineering guidelines. Priority should be given to the main roads connecting the northern and southern parts of the Island.
9. Develop and adopt an effective EIA process for all new infrastructure development in the Archipelago including roads, ports, large scale tourism development, fisheries facilities and so forth. The EIA systems should follow internationally accepted standards and guidelines and should represent an independent process involving the World Heritage Committee.
10. Undertake a Strategic Environmental Assessment of the road network on Socotra to inform it of the least environmentally damaging options for transportation on the island. The State Party is strongly advised not to approve any new major development project without prior consultation with the World Heritage Centre and IUCN.

Stakeholders Involvement

11. Devise and launch a World Heritage introduction program in Socotra and Yemen with the aim to raise national awareness of the property;
12. Adopt a capacity building program strongly attached to sustainable financing mechanisms for civil society organizations on the Archipelago to become active partners in the conservation and sustainable development of the property;
13. Implement a comprehensive training program for key personnel from all key institutions involved in the management of the Archipelago to raise awareness towards the property's importance and exchange knowledge and experience from other similar regions of the world;

14. Further invest and capitalize on best practices empowering local communities to acquire a leading role in managing their natural heritage within an effective collaborative management approach to biodiversity conservation and sustainable management of natural resources. This includes the community based sea turtles conservation, honey production initiative, ecotourism and protected areas management programs.

Tourism Development and Management

15. Develop and implement a clear ecotourism development and marketing strategy for the Archipelago in collaboration with local and international private sectors;
16. Implement a comprehensive interpretation plan for the property at all key access points and social and commercial centers with the aim to re-brand the Archipelago in accordance with its World Heritage Status;
17. Undertake a comprehensive tourism carrying capacity assessment and establish a monitoring system to ensure tourism sustainability and its minimal impact on the natural heritage and associated cultural values of the Archipelago.

Biodiversity Monitoring and Other Resources Conservation

18. Put in place an effective biodiversity monitoring system with the objective to assess the current impacts of other threats, such as cattle grazing and invasive species, and devise threat specific strategies to ensure their minimal long term impacts.
19. Adopt a clear strategy on strengthening the marine enforcement capacity supported by a clear policy framework.
20. Undertake a comprehensive study on the potential impact of land grabbing and land conflicts and devise a clear strategy to ensure their minimal impact on key World Heritage values and features.
21. Expand efforts to document and protect the cultural heritage of Socotra as a holder of great traditional and indigenous knowledge and practices related to the conservation and sustainable utilization of the property's resources;

1. BACKGROUND TO THE MISSION

This mission was conducted in follow up to the property's inscription on the World Heritage List in 2008 (Decision 32 COM 8B 5), and assessed the progress achieved by the State Party in the implementation of the recommendations of the World Heritage Committee. The mission took place from 4 to 14 November 2012 in a period during which Yemen is going through major socio political transformation and reform.

The Socotra Archipelago was inscribed on the basis of criterion (x) in recognition of its Outstanding Universal Value in terms of the diversity and endemism of its flora and fauna. 37% of Socotra's 825 plant species, 90% of its 34 reptile species and 95% of its 96 land snail species do not occur anywhere else in the world. Socotra is of particular importance to the Horn of Africa's biodiversity hotspot and is one of the most biodiversity rich and distinct islands in the world. The islands are also recognized for the diversity of the marine life comprising 253 species of reef-building corals, 730 species of coastal fish and 300 species of crab, lobster and shrimp.

Upon inscription, Socotra was confirmed to meet the condition of integrity as stated in the *Operational Guidelines for the Implementation of the World Heritage Convention* (Operational Guidelines). It is of sufficient size to adequately encompass all terrestrial and marine attributes critical for the long term conservation of its biodiversity. The zoning plan of Socotra demonstrates adequate design by including 75% of the property in high ranking Protected Areas including nature sanctuaries, national parks and special botanical areas. The same case applies to the marine parts of the property by including all key elements of marine ecosystems and diversity. Both the terrestrial and marine core zones (277,512 ha and 132,948 ha respectively) of the property were enhanced by a well-designed buffer zone with a total of 1,740,958 ha (91,997 for the terrestrial part and 1,648,961 for the marine).

The World Heritage Committee decision 32 COM 8B 5 reported positively on the legal protection framework of the Archipelago. This includes commending the State Party's commitment to protect the property through the 2008 presidential decree.

Nonetheless, the World Heritage Committee identified several key issues to be addressed to ensure the proper protection and effective management of the property. These include the need to control and limit roading, overgrazing, and overharvesting of terrestrial and marine natural resources. Furthermore, future threats were also highlighted, including unsustainable tourism and invasive species. In addition, the need for a sustainable financing strategy was highlighted to make available adequate levels of human and financial resources needed for the long term management of the property. Finally, the Committee highlighted the need to enhance the linkages between the management of the property, its buffer zones and the Socotra Biosphere Reserve.

In summary, the World Heritage Committee decision requested the State Party to effectively implement the 2008 presidential decrees (see Annex VI), particularly to ensure that:

1. Management planning for the World Heritage property be enhanced to deal more effectively with key threats, in particular ensuring that:
 - a. future roading works minimize environmental impacts on biodiversity and where possible are located outside the property;
 - b. grazing impacts on biodiversity are monitored and effective measures taken to reduce environmental impacts from grazing; and
 - c. invasive species are effectively controlled, including through limiting the entry of invasive species at ports and the airport;
2. A separate management authority is established for the World Heritage property which would give priority attention to the conservation of the unique biodiversity of the property. This Authority should have adequate sustained human and financial resources, and enforcement capacity;
3. The buffer zones (which are not part of the inscribed property) be managed in a complementary manner to the property, with appropriate linkages developed with the management of the Socotra Biosphere Reserve; and
4. A sustainable financing strategy be developed for the World Heritage property, which includes ongoing and adequate support from the Government of Yemen and international support from donors and partners;

The monitoring mission was organized in follow up to the recommendations set forth in World Heritage Committee Decision 32 COM 8B 5 (2008, Quebec City) with the objective to assess progress made since the property was inscribed on the World Heritage List. The ten day mission included an extensive field visit to the Archipelago with two days spent in the Yemeni capital of Sana'a and eight spent on site. A significant number of locations were visited during the mission and a large number of individuals and groups representing the various stakeholders were interviewed and met.

It is important to note upfront that the mission team was not able to visit any of the outer islands of the Archipelago due to security restrictions advised by the State Party; nonetheless, the field visits on the main Island of Socotra were extensive and covered almost all regions. As a result, most of the information provided in this report reflects the status of the main island of Socotra and, only when specified, reports on information obtained on the outer islands through literature review or stakeholders interviews.

The mission was accompanied by the director of the Arab Regional Center for World Heritage (ARC-WH); nevertheless, the Center's participation was separate from the mission and was geared towards exploring potential areas of cooperation with the Yemeni counterparts and possible venues for support incremental to the mission's findings and recommendations. As per mission reporting guidelines, ARC-WH did not contribute to the preparation of this report.

2. NATIONAL POLICY FOR THE PRESERVATION AND MANAGEMENT OF THE WORLD HERITAGE PROPERTY

2.1. Protected Area Legislation

Socotra was first declared a Protected Area under Yemeni Law in 1996 under the name Socotra Island Protected Area. In 2000, presidential decree 275 titled “the Conservation and Zoning Plan for the Socotra Islands” was the key legislative framework adopted for the Archipelago as it was the first document to elaborate on the management framework for the Islands. The Zoning plan identified several categories of Protected Areas within the Archipelago according to *inter alia* their levels of significance for biodiversity, traditional use and threats. These included cores classified as sanctuaries, national parks and areas of special botanical importance. Two other main land categories were also identified to accommodate needed levels of development, namely, the resource use areas and the general use zone.

At the time when the presidential decree was passed, it represented the highest level of protection given to a natural site ever established in Yemen. Between 2000 and 2007, however, no additional legislative frameworks were developed or adopted for Socotra. It wasn't until the nomination of Socotra for inclusion on the World Heritage List that the government of Yemen, in response to issues raised by IUCN during the November 2007 field evaluation mission, decided to pass five Cabinet Decrees (number 45-49) in 2008 setting the legal framework for the protection, management, and sustainable development of the Archipelago.

2.2. Institutional Framework

Presidential decree number 275 (2000) stated that “all ministries and institutions involved in the development of Socotra must adhere to the implementation of the Conservation Zoning Plan, each in their areas of specialization”. This represented the first institutional coordination framework adopted for Socotra; however, it is evident that this presidential instruction was never made fully effective, particularly in the case of the relationship between the EPA and the MOPWH.

At the time, the EPA – supported by the UNDP (United Nations Development Program) led Socotra Conservation and Development Program (SCDP) – was taking a lead in institutional coordination and collaboration. The Socotra Branch of the EPA expanded significantly during that period, from having only one representative in 1996 to over one hundred staff members in 2007 at two district offices in Hadibu and Qalansya and across the islands.

Currently, and since the termination of the SCDP in 2008, the number of staff and capacity of EPA has significantly declined, leading to a major regression of its strategic position in the planning and management of the island, which – in view of the mission team – represents a key challenge facing Socotra as a World Heritage site. Detailed elaboration of this subject is presented in the following sections. The number of staff and allocated

resources available today to the EPA branch on the island are less than 50% of what they were in 2008.

2.3. Management Structure

Since the establishment of Socotra as a Protected Area (PA) in 1996 and until today, no clear management structure has been put in place. In 2000, upon the presidential decree, the Socotra Archipelago zoning plan was envisioned to be implemented through an agreed management structure through which all concerned institutions would adhere to contribute – in respect to their national mandates – to the protection and sustainable development objectives of the Archipelago.

For almost ten years, the EPA, supported by SCDP, took a leading role in the coordination of the management efforts on the islands. Particular success was achieved in their cooperation with the local government and its elected council as well as with several other national institutions such as the Ministry of Fisheries (MOF), the Ministry of Agriculture (MOA) and the Armed Forces.

It was always agreed that for the Socotra Archipelago to be effectively managed and sustainably developed, it needs to be managed through a unified management structure enforced with optimal levels of legislative powers, human and financial resources and political support.

2.4. Other International Designations and Programs

The Socotra Archipelago has been long recognized for its global significance. Botanists rank Socotra among the top ten islands in the world in terms of botanical diversity (Miller et al., 1996), the WWF (World Wildlife Fund) listed Socotra in the Global 200 Eco-regions, IUCN recognizes Socotra as an important center of endemism and host to hundreds of rare plant species, Birdlife International in 1994 reported the Archipelago as containing 22 Important Bird Areas, UNESCO (United Nations Educational, Scientific and Cultural Organization) recognized it as a Man and Biosphere Reserve, and it was listed in the regional network of Important Marine Protected Areas by PERSGA (Program for the Environment of the Red Sea and Gulf of Aden) in 2000.

3. IDENTIFICATION AND ASSESSMENT OF ISSUES/THREATS

The mission was primarily mandated to examine the status of the Socotra Archipelago World Heritage property and update on the key issues identified by the World Heritage Committee upon the inscription of the property in 2008.

This section attempts to analyze these key issues based on the information available at the time of the mission. It is important to note that the level of documented evidence provided by the State Party before and during the mission up to the preparation of this report was limited, and hence most of the analysis is based on the information obtained from the accompanying team of national and local experts, stakeholders meetings and field observations. The past knowledge of the Archipelago by one of the mission's team leaders was also extensively utilized to engage in in-depth discussions of most of the topics addressed.

To start with, the general impression of the mission team is that Socotra has not changed in terms of its people and its nature since its last evaluation by IUCN in 2007. On one hand this could be positive as it entails that Socotra did not suffer any adverse impacts from development. However, on the other, it also indicates that very little has been done since inscription to ensure the long term effective management and sustainable development of the Archipelago.

3.1. Management Planning for the World Heritage Property

The mission found little evidence of systematic management planning framework development or alterations since the time of inscription. It seems that the property went through a period of stagnancy right after the inscription, giving the impression that the inscription was perceived by many of those involved as an end of a process rather than the start of a whole new era for the Archipelago.

There was no clear indication on the new WH status of Socotra. The mission was not able to document any interpretation materials informing residents or visitors of their presence in a World Heritage site. This includes a lack of information boards in strategic locations such as at the airport, the port and main highways; a lack of any printed materials; and a lack of any road signs describing the different zones and areas of the World Heritage site, or giving instruction as to what can and cannot be done in different zones.

The mission also documented little awareness – with the exception of some of the EPA staff – of the concepts and applications of the World Heritage status for Socotra. Many of the stakeholders met were not aware of what it means to be a World Heritage site; they were not introduced to the implication of such an inscription on the world status of Socotra and on their livelihoods and approaches to managing the site's natural resources. These challenges are of particular impact when it comes to stakeholders who are categorized as negatively affecting the Islands, such as the Ministry of Public Works and Highways, the Roads contractors, the expatriate traders arriving from other regions of Yemen, and to a lesser extent, visitors and researchers.

The termination of key internationally funded programs in Socotra seems to have had a major impact in EPA and its ability to maintain the needed levels of protection of the Archipelago. This primarily includes SCDP which was the backbone for most planning and management initiatives undertaken in Socotra since late 1990s. The untimely departure of SCDP caused the sudden deterioration of EPA's capacity to take a leading role in managing the newly established World Heritage site. Overnight, and being the lead management and protection agency on the islands, EPA lost most of its operational capacity, most of its staff and most of its institutional recognition among local government and local communities.

On the other hand, Socotra still has many who were strongly involved in EPA and SCDP during their strength period. For example, the current local governor of Hadibu district is the ex-EPA head in Socotra. This was evident in the level of understanding and support for World Heritage that he presented to the mission. Furthermore, several local council members were also ex members or ex associates of EPA, hence expressing a high level of readiness to facilitate a positive engagement in the management of the site according to World Heritage standards.

3.2. Roads Construction

It is the mission's view that the roading issue remains the most critical factor influencing the World Heritage status of Socotra. Among all other issues identified by the World Heritage Committee upon inscription, roading is perceived as the one with the most past impacts and possible future impacts.

The World Heritage Committee (2008, Quebec City) requested the State Party to ensure that all post-inscription roading works must minimize environmental impacts on biodiversity and, where possible, be located outside the property.

Since inscription, Socotra went through three phases in terms of a roading program. The first phase was in late 2007 and early 2008 when the Archipelago was inscribed and the Government of Yemen passed the cabinet decree number 46 for the year 2008. The decree stated that the Ministry of Planning and International Cooperation (MOPIC) and the Ministry of Public Works and Highways, in cooperation with the Ministry of Water and Environment, would update the road master plan for the Archipelago to be based on the conservation zoning plan and considering socio-economic factors. The decree also instructed the ministries to search for sources of funding to rehabilitate and maintain the natural areas damaged by road construction and adopt a set of specific guidelines and criteria for road construction on the Archipelago considering IUCN standards and its status as a World Heritage property. The mission found that the master plan has not been updated, and no evidence was presented to demonstrate efforts in securing needed funding for the rehabilitation program or the adoption of the criteria and guidelines for environmentally sensitive roading.

The second phase was the period between late 2008 and 2010, and seems to have been the worst in regard to road construction on Socotra. During this period, road construction was at its peak, with contractors trying to get as much as possible done before the enforcement

of the new cabinet decree number 46. Simultaneously, this period witnessed the withdrawal of key internationally funded programs and the associated deterioration in the capacity and influence of EPA. The mission notes that most of the impacts on the biodiversity and natural resources of the islands took place during this period. This includes the extension of several main roads to areas within and close to some of the most important and sensitive biodiversity cores of Socotra such as the Hegher Mountains (e.g. the Qarya-Hegher Ma'ona road, the Qademena-Matyaf road).

The third period began in 2011 when Yemen went through the public revolt phase, and during which Socotra saw a total stoppage of all development activities including road construction. All road construction activities have been frozen since early 2011, and it seems that the government of Yemen has no intention to continue the expansion of the road network on the islands. In his meeting with the mission, the new Minister of Public Works confirmed that there were several mistakes made in the past in regard to the approach to road construction. He emphasized that the new Yemeni government will not allow this controversial issue to continue, and that the current times represent a great opportunity to put an end to these wrongs and adopt a new approach to road construction for Yemen and particularly for Yemen's prime natural jewel. The Minister confirmed that the road master plan will be reviewed and updated, no new highways will be allowed in Socotra, no other new roads will be constructed without the written approval of the Ministry of Water and Environment, real efforts will be put in place to rehabilitate the areas subjected to damage through previous roading activities, new road categories (with a maximum of four meters wide) will be especially designed to meet the World Heritage conditions and standards, and an effective environmental impact assessment will be put in place in cooperation with MOWE. The Minister concluded by stating that the IUCN report recommendations will represent the adopted strategy for MOPWH future involvement on the Archipelago.

The mission noted that such a change of position from the MOPWH is very commendable and reflects a real transformation in the mindset and approach towards one of the key development activities on the Archipelago.

The mission's meeting with road contractors confirmed the statements made by the Minister. The chief engineer stated that all road works have been stopped on the islands and that MOPWH instructions were to stop all works until further notice. The mission observed no active roading activities across the islands including an almost total absence of excavation machinery and equipment – there were simply no signs of any recent road works in all sites visited. Further, during an unplanned visit to the main inventory yard of the contractor, almost no machinery or equipment was recorded, as the chief engineer informed the mission team that all machinery was relocated outside the island to be used in other projects of the company in mainland Yemen.

The mission is pleased to be able to report a high level of unconditional support by the many leaders and members of local communities for the previously unchecked road construction across the island regardless of the clearly high level of impact on the landscapes, rangelands and even traditional barns and local acquisitions. Many local

community representatives seem to only recognize the short term importance of the road network for their livelihoods and accessibility. No considerations were expressed on the way these roads are constructed or their current and future potential impacts. Nevertheless, several local leaders made comments on how they feel obliged to accept whatever is offered to them as long as it serves their long needed access to the outside world. One respondent stated that, "Roads have their positives, but you need not be an expert to see what destruction they have done to our island".

The mission aimed to establish a clear understanding of the status of the road network by undertaking a thorough analysis of the network on the Archipelago and comparing the road status at the time of inscription with the current status. Key findings of this analysis revealed the following:

- Almost all road works on the Archipelago took place on the main island of Socotra. This is due to the fact that most of the population lives on the main island and there is a high level of inaccessibility to the other islands;
- Most of the post-inscription road construction was on already contracted highways and roads on the island. No major road construction projects were initiated after inscription;
- Despite the above, these road works still had a significant impact on the islands' biodiversity, ecosystems and landscapes. However, there is a rather varied pattern respective to road location, length, size and timing;
- After the 2008 decree, a new category of roads was introduced, category (B), to be used for all remaining road strips across the islands in response to the advice of IUCN and the WHC (World Heritage Committee). Before this decision, only category (A) was recognized which allows 7 meters width of asphalt with 6 meters of shoulders. Category B roads are 6 meters wide with only 3 meters of shoulders;
- Although the change of category represents a positive direction towards minimizing the roads' footprint, most of the negative impacts took place during the preliminary excavations, at quarrying sites and from temporary access dirt roads. No rehabilitation of any quarrying sites, temporary access roads or excavation activities was documented during the mission. Also, many of these sites were reported to have an ongoing impact due to effects of weather conditions including rain and wind;
- MOPWH informed the mission that a third category of roads will be introduced for any future road works on the island, which will represent the primary category to be used. This will be the rural access roads category, allowing a 4 meter width with 2 meter shoulders. Further, a special fund will be established for road maintenance and rehabilitation. If enforced and realized, it is the mission's view that these decisions will represent a very positive shift in the roading program on the island to become more sensitive and responsive to its World Heritage status and priorities.

The following map demonstrates the current status of the road network on Socotra:



The following table summarizes the main roads established in Socotra, their categories and level of completion:

No	Road Project Name	Total Length (km)	Road Category (km)		Construction Stage (km)			
			Cat. A	Cat. B	Asphalt	Base course	Sub-grid	Unfinished
1	Hegher-Qaryah-Momi	68	35	33	41	13	14	0
2	Hegher-Qaryah-Erisel	51.5	25.5	26	29	14	8.5	0
3	Hahreg-Ma'onah-Hegher	30	10.5	19.5	10.5	2.5	0	17
4	Ma'onah-Hai Assalam-Nojed	24.5	0	24.5	0	0	13	11.5
5	Momi-Matyaf	15	0	15	0	0	13	2
6	Mori-Diksam-Matyef	88.5	62	26.5	62	10	16.5	0
7	Estero-Qa'arah	20	0	20	0	20	0	0
8	Ghubbah-Ma'alalah-Sho'ab	57	30	27	47	0	10	0
9	Diksam-Manhi	6	6	0	6	0	0	0
10	Mori-Qalansya	66	66	0	66	0	0	0
	Totals	426.5	235	191.5	261.5	59.5	75	30.5

Notes on the table:

- The total road network length approaches 430 km, and it is thought that this represents one of the highest per capita road allocations in the region and possibly the world (Abdul Rahman Al Iryani personal comment);
- The road network on the island has no clear socio-economic rationale. It seems that the road master plan was based merely on engineering and security related perspectives with almost total absence of proper environmental and socio-economic criteria;
- Most of the key master plan roads are finished to various levels of construction phases;
- It is very strongly advised that no new roads are needed for the key areas of the island. There are very few areas to which the road network has not arrived or approached;
- Road number 3, the Hahreg-Ma'onah-Hegher, must not be continued as it plans to cross through one of the most critical core zones of the island and serves negligible socio-economic purposes. It is also critical that the 2.5 km of this road that has already been excavated be rehabilitated as it is under severe levels of erosion by rain and wind, and will continue to deteriorate if proper rehabilitation measures are not put in place;
- The same applies for road number 4, Ma'onah-Hai Assalam-Nojed. This road has no clear strategic importance and there are two other existing main roads that seem to serve the same function of linking the north and south sides of the island;
- There does seem to be a need to properly finish road number 5, Momi-Matyaf, as most of it has already been built and the remaining 2 km are necessary to link its two extensive stretches to the east and the south. Nonetheless, special care needs to be put in place for the finalization of the road based on a clear EIA model;
- All un-asphalted roads represent high-risk roads in terms of vulnerability to erosion and deterioration due to weather conditions and repetitive use. A proper well equipped maintenance plan is critically needed on the island;

3.3. Livestock Grazing

The World Heritage Committee (2008, Quebec City) requested that the Yemeni Government carefully address the grazing impacts on biodiversity and their need to be monitored, with effective measures taken to reduce grazing impacts on the environment.

The impacts of excessive grazing are evident throughout the main island of Socotra. It was unanimously agreed by all those met or interviewed during the mission that it is in no one's capacity to assess the actual level of grazing impact on the biodiversity and rangeland productivity of the Archipelago. The mission was not able to locate strong evidence on any systematic approach towards addressing the grazing impacts. The mission was informed that little was and could be done to address the grazing challenges at this stage. This is due to the socio-economic sensitivity of the activity for local people and the fact that the islands have gone through two years of severe drought from 2009 to 2010.

The 2008 Cabinet decree number 48 addressed the needed procedures to reduce the anticipated damage caused by uncontrolled grazing. The decree represents a very strong legal tool in response to the WHC recommendation, and includes a strong list of on the ground measures in response to the grazing challenge. It called upon the MOA to adopt all measures needed for effective rangeland management on the islands by: encouraging traditional rangeland practices, establishing pastoralist associations mandated to implement a restoration of the seasonal movement (transhumance), and establishing farms outside the WH property supported by incremental feeding leading to improved livestock productivity while facilitating livestock export from the island. It is also envisaged in the decree that the pastoralist associations would establish and agree on a system for rangeland carrying capacity strategically aligned to off-rangeland fattening schemes and livestock export procedures.

Regarding these decisions, the mission discussed the proposed actions with the Minister of Water and Environment, the local governor of Hadibu and the local governor of Qalansya. The result of the discussions showed very little evidence of any follow up action being taken by any of the authorities concerned with the implementation of the Cabinet decree. It seems that the complexity of the subject and its social and economic sensitivity did not permit much action to be taken. Nevertheless, the mission took note of several positive attempts to deal with the grazing issue directly and indirectly.

These initiatives include the long established native tree nursery near Hadibu. The nursery was established in 1996 and one of its objectives is to propagate key native trees of the Archipelago with the aim to use them in afforestation schemes in key deteriorated rangelands. Despite the decline of support from external donors (with the exception of support provided personally by Mr. Abdul Rahman Al Iryani) the nursery is maintained and managed by a local family by using their self-generated resources and efforts. The main challenge facing the nursery is to find suitable areas for planting the grown trees along with on site management systems to ensure their sustainability.

Another good initiative noted was the cluster of small scale tree ex-closures of varying size (ranging from few tens to few hundreds of square meters) developed with support from the Czech Republic to assess the impact of grazing. The visual impact of the initiatives is very apparent, however, it was not clear to the mission if these initiatives were implemented with an adequate level of collaboration with EPA and MOWE, as well as local communities, and if the initiatives were linked to decision support systems. The new management of EPA on site did express a strong intention to establish direct communication with the initiative to ensure synergy and collaboration.

A third interesting initiative is related to a program for beekeeping and honey production led by a French entrepreneur. This initiative began in the early 2000s and is currently supported by the GEF Small Grants Program (GEF SGP). The important element of this initiative is that it represents an integrated program addressing social, economic and environmental aspects of beekeeping and honey production. It builds the capacity of local beekeepers and rangeland users on sustainable practices of beekeeping and honey production. To date, over one hundred beekeepers have been trained and supplied with basic equipment, linked to a central locally managed quality assurance and marketing outlet. The indirect positive impacts on the natural rangelands of Socotra could be considerable as it will motivate livestock owners to take better care of their rangelands for the sake of their beekeeping business. It will promote more diversified income to livestock owners across the island and create growing awareness and incentives to protect rangelands and their associated biodiversity.

The mission recognizes that the grazing issue represents an ongoing and possibly expanding challenge facing the WH property and of the main island of Socotra specifically, and possibly the island of Abdul Kori – with almost no information available on the status of the latter and/or the threats it faces in this regard.

3.4. Invasive Species

The World Heritage Committee (2008, Quebec City) requested the government of Yemen to ensure that invasive species are effectively controlled, including limiting the entry of invasive species at ports and the airport.

The 2008 Cabinet Decree number 48 article 2 instructs the Ministry of Transportation, in cooperation with MOA, to establish an alien species prevention system to be introduced to all key access ports (air and sea), with exceptions only permitted with official approval from MOWE. In addition, the ministries were mandated to advise all local authorities to facilitate the export of live and slaughtered livestock under strict regulations set by veterinary authorities, including the installation of an adequate quarantine facility in each of the primary access ports.

The mission was not able to document any concrete action taken by relevant authorities to activate the implementation of the decree. Only few examples were provided by EPA staff of ad hoc activities taken to deal with urgent alien species import or native species export. Several cases were mentioned to the team including the prevention of the introduction of exotic palm trees in 2009, and the halt of the export of dead coral from the north-western coasts of the island in the region of Gubbah.

It is important to note that there are two main official access ports to/from the island of Socotra; the airport and the sea port both located in the Hadibu area. Nonetheless, a significant proportion of materials –commercial and noncommercial– and transactions to and from the islands take place through numerous unofficial access ports distributed throughout the islands. This makes applying an effective integrated control system equipped with adequate measures a great challenge that requires significant financial, human and logistical resources.

The issue of the lack of control over the numerous access points on the island – both official and unofficial – was repeatedly expressed by the various stakeholders met. It seems that the issue of the decline of the capacity of the EPA on the island, especially after 2008, contributed to an amplification of the problem.

It is the team's point of view that the current management arrangements for the islands, the lack of technical and logistic capacity of the EPA and access point management authorities, the lack of structured coordination between concerned institutions, and the unstable political circumstances on the Archipelago and Yemen have all contributed to the fact that no one is able to adopt a clear system for invasive or alien species control, or the export of native biodiversity.

The status is even more challenging for the outer islands of the Archipelago where almost no information is available and very little control is exerted on access and transactions.

3.5. The Archipelago Management Authority and Sustainable Financing

The World Heritage Committee (2008, Quebec City) requested the Government of Yemen to establish a separate management authority for the WH property mandated to give priority attention to the conservation of the unique biodiversity of the property. The Authority was anticipated to have adequate sustained human and financial resources, as well as enforcement capacity. The Committee's decision emphasized the need to develop and adopt a sustainable financing strategy for the WH property, which includes ongoing and adequate support from the Government of Yemen and international support from donors and partners.

The Cabinet Decree of 2008 number 49, under the heading of mobilizing necessary funding for setting up an effective institutional and management structure for the Archipelago, advised MOPIC and the Ministry of Finance (MOF) to secure the needed sustainable financing support for the establishment of an Archipelago wide administrative structure based on its WH status. The decree suggested that such a structure could be associated with certain levies to enhance its financial capacities, such as an entry fee for non-resident visitors, a mechanism for collecting fines for violations of site regulations (e.g. environmental law and other relevant legislative frameworks), as well through allocating the needed funds from the national budget starting from 2009.

The decree further elaborated that MOWE is mandated to put forth a proposal for the establishment of such an entity in close coordination with the Ministries of Local Administration, Legislation, Civil Service, Tourism, Agriculture and Fish Wealth with the final aim being to ensure the sustainable development of the Archipelago while conserving its unique environment, biodiversity and landscapes which collectively comprise its World Heritage values and attributes.

The mission perceives this part of the Cabinet Decree as being a very advanced stepping stone proposal for a strategic shift in the national approach to the management of World Heritage Sites (the only natural one as is the case of Socotra). The decree reflects a clear vision as well as a genuine interest and commitment from the Yemeni government to support a long term effective management of the World Heritage Site.

Despite the above, the mission was unable to document any structured progress made towards the establishment of an independent management entity or the adoption of a sustainable financing strategy for the Archipelago. It seems that the decline of international support to Socotra in 2008 and resulting rapid decline of the EPA position on the Archipelago and subsequent period of political instability and social reform starting late 2010 all prevented the start of any significant follow up of the decree.

Today, the EPA suffers from a serious lack of institutional, technical and financial capacities and resources to re-establish its leading role in Socotra. Several clear examples were documented by the mission reflecting the challenging conditions of EPA on the island, including the loss of almost three quarters of working staff right after the departure of the SCDP in 2008, the extremely modest allocated budget available to operate the authority's

program on the island (2012 allocations were not disbursed yet and totaled around 5,000 USD as an annual budget), and most importantly the declining recognition among local stakeholders of the EPA's leading role which has expanded over a decade. Most of the key competent staff of EPA left to work on other private or official jobs such as tourism and education. The EPA building seemed as if it had been dysfunctional for quite a while with clear indications of urgent need for maintenance. During the mission's visit, the new head of the EPA, assigned only one week prior to the mission's arrival, noted that the electricity in the building was turned on for the first time in two years.

On the other hand, it is important to note that Socotra is not at all disconnected from the national revolution and its role on civic society has tremendously evolved over a very short period of time. Socotris today are actively discussing the Archipelago's future with the committee of national dialogue headed by Abdul Karim Al Iryani. The mission was involved in several key discussions on this subject and notes that more than one of the proposed scenarios for the future administration of Socotra indicates a direction towards the establishment of an autonomous entity mandated to oversee the management, development and conservation of the Archipelago.

The meeting with civic society representatives of Socotra – who have established what is referred to as the national council of Socotra – revealed that the people of Socotra have come together and agreed on a new framework for their self-representation and management. The head of the council informed the mission that the people of Socotra will not accept any governance option which does not grant them full autonomy and control over their resources and rights. They are active participants in the on-going national dialogue and have put together their constitutional framework and are currently adopting several key movements and campaigns to protect the islands from external threats. One interesting campaign is organized around the elimination of Qat from the islands. A study on its social, economic and environmental impacts was undertaken and a public hearing process has currently been implemented to achieve a majority decision on the total ban of Qat from the islands. It is also worth noting that the last two years witnessed the creation of many local civil society organizations, several of which are dedicated to promote the sustainable development of the islands, the protection of Socotra's natural and cultural heritage and the strengthening of the political and social representation of the people of Socotra on the national and international levels.

After the termination of the SCDP program and the decline of EPA capacity, at least five local associations, created with support from EPA and SCDP to oversee the management of the pilot Protected Areas established in mid 2000s, decided unilaterally to maintain the management programs for their respective areas regardless of the level of follow up and support provided by EPA. The Di Hamri Marine Protected Area on the northeastern coast, Skand Terrestrial Protected Area in the heart of Hegher Mountains, Roosh Protected Area on the eastern coast, Homhil Protected Area in the Eastern highlands and Gubbah Sea Turtles conservation program all maintained commendable levels of protection and maintenance. A member of the mission team visited the same areas in 2007 during IUCN's evaluation mission and can confirm few changes to the overall status of the sites, including adequate levels of follow up and implementation of their management programs. This

initiative was perceived very positively by the mission team and is considered to be a good practice in empowering local communities to acquire a leading role in managing their natural heritage within an effective collaborative management approach to biodiversity conservation and sustainable management of natural resources. The mission encourages full capitalization and proper documentation on such initiatives by the State Party, as they could represent good material for sharing across the region and at World Heritage Sites globally.

During the meeting with His Excellency Dr. Abdul Karim Al Iryani, he expressed full support for the establishment of the strongest possible institutional framework for Socotra utilizing whatever option is reached through the national dialogue process. He clearly stated that the priority for the year 2013 should be to secure the maximum level of fiscal allocation for Socotra as the national dialogue will need extra time and effort considering current conditions and constraints. He advised the team in charge of the Socotra support unit in Sana'a at MOWE to try and achieve a separate budget line for Socotra in the 2013 national budget.

There has also been a decision by the Minister of Water and Environment to revitalize the Socotra Coordination unit in Sana'a to be the focal point for all national and multilateral cooperation activities implemented by the various government institutions, donor agencies and the private sector.

Another positive development is the current restructuring of the EPA branch in Socotra. A new director was assigned upon the mission arrival, Mr. Ahmad Sa'eed, a strong local botanist. Mr. Sa'eed is currently re-structuring the EPA team, negotiating higher budget allocations from the central government, re-establishing communication with key national and international stakeholders, donor agencies and interest groups and re-activating EPA's presence among local authorities and management institutions - all constituting a more optimistic view of the future of Socotra under its World Heritage status.

3.6. The Buffer Zones

The World Heritage Committee (2008, Quebec City), while recognizing that the property's buffer zones are not part of the inscribed property, urged the Government of Yemen to manage them in a complementary manner to the property, developing appropriate linkages with the management of the Socotra Biosphere Reserve.

The legislative frameworks developed for the Archipelago in 2008 did not make a clear reference to the buffer zones and their relationship with the property. -The mission considers that this represents a fundamental weakness in the possibility of adopting a fully integrated management approach to the Archipelago.

The current legal and management status of the buffer zones has not changed since the inscription of Socotra. It is important to note however, that the mission recorded several indications of land use pressures in these buffer zones, particularly those adjacent to core areas. There seems to be a growing issue of land grabbing in buffer zones and development

zones on the island. This represents a potentially harmful trend leading to land conversion into residential, tourism, military, and other land uses at the expense of more sustainable local development and expansion. Further, the lack of any demarcation or signage of the buffer zones makes it difficult for land users to recognize the limits of the World Heritage site, hence potentially allowing direct encroachment into it.

The key buffer zone areas which require special and priority attention in the management arrangement of the Archipelago include the areas surrounding the Momi Airport, the areas immediately bordering the outskirts of the cities of Hadibu and Qalansya, the areas stretching to the east and south-east of the town of Qarya, and the areas surrounding the south region army camp on the coast of Nojed.

On the other hand, the status of the Socotra Archipelago as a Man and Biosphere Reserve, which includes all of the property's buffer zones, does not represent any legal significance as it is not recognized in the national legislative framework. The mission considers that focus and emphasis should be given to the World Heritage Zoning Plan adopted in the WHC Decision 32 COM 8B.5 (2008, Quebec City) and its relevance to the Socotra Archipelago Zoning Plan (presidential decree number 275 for the year 2000) recognized by the various legal decrees adopted nationally for the property.

4. ASSESSMENT OF THE STATE OF CONSERVATION OF THE PROPERTY

4.1. Outstanding Universal Value

The Socotra Archipelago was inscribed on the World Heritage list on the basis of Criterion x (biodiversity and threatened species). The World Heritage Committee adopted the Statement of Outstanding Universal Value (SoOUV) of the property in 2008 and no changes were made to the statement since inscription. The SoOUV elaborated the rationale for inscription as follows:

Criterion x: Socotra was recognized by the World Heritage Committee to be of global importance in regard to biodiversity conservation because of its exceptional level of biodiversity and endemism in many terrestrial and marine groups of organisms. Socotra is particularly important for its diversity of plants and has 825 plant species of which 307 (37%) are endemic. Socotra has high importance for bird species as underlined by the identification by Birdlife International of 22 Important Bird Areas on Socotra. Socotra also supports globally significant populations of other land and sea birds, including a number of threatened species. Extremely high levels of endemism occur in Socotra's reptiles (34 species, 90% endemism) and land snails (96 species, 95% endemism). The marine life of Socotra is also very diverse, with 253 species of reef-building corals, 730 species of coastal fish and 300 species of crab, lobster and shrimp, all well represented in the property's marine areas.

In terms of integrity, the IUCN 2007 evaluation reported that the property is of sufficient size to adequately represent all the terrestrial and marine features and processes that are essential for the long term conservation of the Archipelago's rich and distinct biodiversity. The terrestrial nature sanctuaries, national parks and areas of special botanical interest included in the property encompass about 75% of the total land area. They protect all the major vegetation types, areas of high floral and faunal values, and important bird areas. The marine nature sanctuaries included in the property encompass the most important elements of marine biodiversity. The property's integrity is further enhanced by terrestrial and marine buffer zones that are not part of the inscribed property.

The 2008 Cabinet Decree number 45 mandated the MOWE to update all topographical maps of the Archipelago according to their relevance to the key values constituting the OUV of Socotra. It also instructed MOWE to work on enhancing the Archipelago-wide monitoring system to achieve a long term protection of its key natural values. MOWE was advised to adopt an awareness raising strategy and a participative approach for the development of the monitoring system, hence ensuring active engagement of national and international academia, local communities and government institutions in the planning and management of the conservation and sustainable development of the Archipelago.

The mission was constrained by the lack of adequate levels of documentation provided by the various institutions met or contacted before and during the mission on the update of the status of the values, integrity and management requirements for Socotra. No evidence

was found of a systematic biodiversity monitoring system which would enable an accurate scientific assessment based on the 2008 baseline.

The lists of key biodiversity groups' species and their distribution across the Archipelago – although seemingly unimpaired – were not properly updated since inscription. This includes the main terrestrial flora and fauna groups as well as marine ones. The EPA research and monitoring station visited during the mission seems not to have been active for a few years and the lists and specimens available there date back to the time of inscription.

In response to the above constraint, the mission was obliged to base its judgment of the status of the property's OUV on the results of direct field visits and discussions conducted with the various stakeholders. These included conducting extensive visits to as many areas as possible across the island and interviews with local community members, EPA staff past and current, and national and international experts – those who were available in Yemen and on the island during the mission and those contacted through electronic communication.

In terms of integrity, and based on the elaborative inspection by the mission team on all key features and processes constituting the property's integrity, it is well recognized that all key features and processes critical for the long term conservation of the property have not been subjected to adverse impacts of development activities. All key sanctuaries, national parks and areas of special botanical importance seem in good condition and are not suffering serious impacts from the key threats identified in this report.

A special note is made here on the impacts exerted by roading activities as they represent the main source of threats on the integrity of the property, and need to be subject to a strict control and rehabilitation framework to ensure the elimination of their past impacts and the avoidance of their potential future impacts. It is well received that road construction has not been active on the islands for over two years now, but it is critically important to put in place all required safeguards, guidelines and regulatory mechanisms to ensure that future roading will have minimal, if any, impact on the OUV of the property.

In conclusion, the mission team considers that the OUV of the property is maintained at the current time.

Nonetheless, the mission is very concerned by the lack of proper monitoring data of the key biodiversity values of the Archipelago which are critical for enabling proper reporting on the status of the property's OUV.

Further, as stated above, the mission expresses utmost concern over the potential impacts of future roading activities in the case that no adequate controls are put in place.

Additionally, the mission notes the threats on marine resources and biodiversity including export fishing and over fishing of marine resources in Socotra and the wider Indian Ocean. These threats are compounded by limited enforcement capacity and the lack of adequate

policies and regulations needed to ensure long term sustainability of these resources. The mission team strongly advises the State Party to adopt a clear strategy on strengthening the marine enforcement capacity supported by a clear policy framework.

Finally, the mission identified new potential threats to the property's OUV and integrity. This includes increasing incidents of land grabbing and encroachment on pristine areas, and increased conflict over land rights between local communities. This issue could have serious implications on the intactness of some of the key biodiversity hot spots on the Archipelago and particularly on the most pristine coastal areas in the eastern and southern coastal zones (e.g. Shou'ab, Eirsel, and Qarah). The mission recommends that the State Party be urged to undertake a comprehensive study on the potential impact of land grabbing and land conflicts and devise a clear strategy to ensure their minimal impact on key World Heritage values and features.

5. CONCLUSIONS AND RECOMMENDATIONS

For the time being, the Outstanding Universal Value of Socotra Archipelago is perceived to be maintained. However, concerns remain about several factors threatening the property.

Among all other factors influencing Socotra, the issue of road construction across the island, particularly within core areas of biodiversity, represents an ongoing threat and major impact on the integrity of the property. However, following the recommendations of IUCN and the World Heritage Centre, and in addition to other internal factors in Yemen, old road projects were revised, and new road construction activities were stopped since 2010. Nonetheless, there is no guarantee that road construction will not recommence on the islands, as significant parts of the MOPWH master plan have not been realized to date. **The mission therefore concludes that, if the construction of new roads within the core biodiversity areas is recommenced, it would pose a serious threat to the OUV of the property and this would therefore form a clear case for inscription of the property on the List of World Heritage in Danger, in accordance with paragraph 180 of the Operational Guidelines of the World Heritage Convention.**

The mission also concluded that several issues with planning and management and stakeholder involvement need to be urgently addressed.

The mission further emphasizes a number of existing and potential threats to the integrity of the property including excessive grazing of cattle and livestock, invasive species and tourism. The magnitude of these threats is increased by the lack of adequate controls and monitoring systems by the management authorities on the Archipelago. In addition, the mission notes the threats on marine resources and biodiversity including export fishing and over fishing of marine resources in Socotra and the wider Indian Ocean. These threats are also associated with limited enforcement capacity and the lack of adequate policies and regulations needed to ensure long term sustainability of these resources.

The mission concluded that the underlying root cause for most factors influencing the long term conservation of the property is the lack of systematic and structured follow up on the 2008 Cabinet decrees, representing a major setback on the progress made in 2008 to achieve the required long term conservation and effective management of the World Heritage property.

In light of the above, the mission strongly recommends the following urgent actions to address certain issues:

Planning and Management

1. Develop an agreed action plan, which should be time bound and well-resourced to immediately implement all decisions taken in the 2008 Decrees. It is strongly advised that IUCN and the World Heritage Centre are involved in the process of the development and implementation of the action plan.

2. Accelerate the processes leading to the establishment of an Archipelago wide management authority legally mandated and well-resourced to oversee the conservation of the property and its sustainable development. The mission notes that the current political reforms taking place in Yemen represent a rare opportunity to strengthen the legal and institutional status of Socotra in accordance with its World Heritage status.
3. Secure fiscal allocation for Socotra Archipelago as part of the annual national budget. The allocation needs to be sufficient to implement core conservation programs of the property;
4. Adopt an emergency action plan to reactivate the management program for the Archipelago with a focus on empowering EPA and local councils as well as the local associations managing all pilot Protected Areas;
5. Devise a clear strategy on including the outer islands in all management programs of the Archipelago including solutions to year round access, communication and reporting.

Road construction

6. Take a clear decision on the cancellation of the remaining components of the Qarya-Hegher road and the Hai Al Salam-Nojed road and the rehabilitation of the areas already impacted by the constructed parts.
7. Revise the MOPWH road master plan to be fully in line with the World Heritage zoning plan. The new master plan should not include any proposals for new highways within the property, and should adopt a new set of guidelines and criteria for the construction of new roads which are vitally needed for the development of the Archipelago and respond to local priorities. These roads should comply with the proposed rural access roads category with minimal ecological footprints and a clear set of criteria for selection.
8. Adopt a comprehensive rehabilitation program to remedy the impacts of previous roads. The rehabilitation program should be based on sound environmental and engineering guidelines. Priority should be given to the main roads connecting the northern and southern parts of the Island.
9. Develop and adopt an effective EIA process for all new infrastructure development in the Archipelago including roads, ports, large scale tourism development, fisheries facilities and so forth. The EIA systems should follow internationally accepted standards and guidelines and should represent an independent process involving the World Heritage Committee.

10. Undertake a Strategic Environmental Assessment of the road network on Socotra to inform it of the least environmentally damaging options for transportation on the island. The State Party is strongly advised not to approve any new major development project without prior consultation with the World Heritage Centre and IUCN.

Stakeholders Involvement

11. Devise and launch a World Heritage introduction program in Socotra and Yemen with the aim to raise national awareness of the property;
12. Adopt a capacity building program strongly attached to sustainable financing mechanisms for civil society organizations on the Archipelago to become active partners in the conservation and sustainable development of the property;
13. Implement a comprehensive training program for key personnel from all key institutions involved in the management of the Archipelago to raise awareness towards the property's importance and exchange knowledge and experience from other similar regions of the world;
14. Further invest and capitalize on best practices empowering local communities to acquire a leading role in managing their natural heritage within an effective collaborative management approach to biodiversity conservation and sustainable management of natural resources. This includes the community based sea turtles conservation, honey production initiative, ecotourism and protected areas management programs.

Tourism Development and Management

15. Develop and implement a clear ecotourism development and marketing strategy for the Archipelago in collaboration with local and international private sectors;
16. Implement a comprehensive interpretation plan for the property at all key access points and social and commercial centers with the aim to re-brand the Archipelago in accordance with its World Heritage Status;
17. Undertake a comprehensive tourism carrying capacity assessment and establish a monitoring system to ensure tourism sustainability and its minimal impact on the natural heritage and associated cultural values of the Archipelago.

Biodiversity Monitoring and Other Resources Conservation

18. Put in place an effective biodiversity monitoring system with the objective to assess the current impacts of other threats, such as cattle grazing and invasive species, and devise threat specific strategies to ensure their minimal long term impacts.

19. Adopt a clear strategy on strengthening the marine enforcement capacity supported by a clear policy framework.

20. Undertake a comprehensive study on the potential impact of land grabbing and land conflicts and devise a clear strategy to ensure their minimal impact on key World Heritage values and features.

21. Expand efforts to document and protect the cultural heritage of Socotra as a holder of great traditional and indigenous knowledge and practices related to the conservation and sustainable utilization of the property's resources;

6. ANNEXES

Annex I: Terms of Reference

TERMS OF REFERENCE

IUCN Reactive Monitoring Mission Socotra Archipelago – Republic of Yemen

November 2012 (proposed date)

At its 32nd session, the World Heritage Committee requested the State Party of Yemen to invite a reactive monitoring mission to Socotra Archipelago World Heritage Site, to be conducted by IUCN (Decision **32 COM 8B.5**). The objective of the monitoring mission is to assess progress made with the recommendations made by the Committee at its 32nd session when the property was inscribed on the World Heritage List. The mission team will consist of Tarek Abul-Hawa and Haifaa Abdulhalim, both representing IUCN. The mission will be accompanied by Dr. Saeed Alkhuzai, Director of the Arab Regional Centre for World Heritage (ARC-WH).

In particular, the mission should address the following key issues:

1. Assess management planning and implementation for the property and its ability to deal effectively with key threats, particularly in relation to environmental impacts and impacts on biodiversity from roading works and infrastructure development, grazing and wood collection, tourism development, export of indigenous species and control of invasive species, including through limiting the entry of invasive species at ports and the airport;
2. Assess progress with the establishment of a separate site-based management authority for the property, which should give priority attention to the conservation of its unique biodiversity, and which should have adequate sustained human and financial resources and enforcement capacity;
3. Assess management of the buffer zones (which are not part of the property) to ensure they are managed in a complementary manner to the property, with appropriate legislative framework and linkages with the management of the Socotra Biosphere Reserve;
4. Review the financing strategy for the property and assess whether it includes sustainable and adequate support from the Government of Yemen, and international support from donors and partners;
5. In line with paragraph 173 of the *Operational Guidelines*, assess any other relevant conservation issues that may negatively impact on the Outstanding Universal Value of the property, including the conditions of integrity and protection and management;

The mission should be assisted to conduct the necessary field visits to key locations, including areas where new roading works have been undertaken since the property's inscription, areas potentially impacted by grazing, potential entry points for invasive species (ports and the airport), and key areas in the buffer zones. In order to enable preparation for the mission, it would be appreciated if the following items could be provided to the World Heritage Centre (copied to IUCN) as soon as possible, and preferably no later than mid October:

- a) The most recent management plans for the property, its buffer zones, and the Socotra Biosphere Reserve, including grazing and invasive species control strategies if available;
- b) Data on human and financial resources of the management authority for the property;
- c) The sustainable financing strategy;
- d) The bio safety framework, particularly such regulations related to endemic species in Socotra Archipelago.

The mission should also hold consultations with the Yemeni authorities at national and provincial levels, in particular representatives of the Ministry of Water and Environment-, the Environmental Protection Authority, the Ministry of Public Works and Roads , the Ministry of Planning and International cooperation Development, and the Ministry of Agriculture and Irrigation. In addition, the mission should hold consultation with a range of relevant stakeholders, including i) researchers; ii) NGOs (including the Yemen Society for the Protection of Wildlife); iii) representatives of the UNDP Socotra Governance & Biodiversity Project; iv) representatives of key local communities; and v) representatives of the tourism sector (including the Socotra Ecotourism Society).

ARC-WH kindly offered to accompany this mission in order to discuss how it might provide assistance to Socotra in the future, and will be represented by its Director Dr. Saeed Alkhuzai. While ARC-WH will accompany the entire mission, the mandate within the scope of the monitoring mission to report on progress achieved in the implementation of Committee recommendations and on any other relevant conservation issues remains fully with IUCN. However, the mission will consult with ARC-WH to ensure that mission recommendations and future ARC-WH support to Socotra are mutually compatible.

Based on the results of the above-mentioned assessments and discussions with the State Party representatives and stakeholders, the mission will develop recommendations to the Government of Yemen and the World Heritage Committee to conserve the Outstanding Universal Value of the property and improve its conservation and management.

The mission will prepare a concise mission report on the findings and recommendations of this reactive monitoring mission by end-December 2012, following the standard format.

Annex II: Mission itinerary and program

**IUCN Evaluation Mission
to the Socotra Natural World Heritage Site
Visit Itinerary 04 – 14 November 2012**

Tuesday 4 November

15:30 Arrival ARC-WH to Sana'a (Dr Saeed Al Khuzai)

20:00 Arrival of IUCN team (Haiffa and Tarek)

Programme in Socotra

Day One – Monday 5 November

06:30 Travel to Sana'a airport

08:30 Departure to Socotra via Mukalla (with stop in Mukalla for 30-45minutes)

11:15 Arrival at Socotra Airport

12:00 Check-in at Summerland hotel and drop luggage

13:00 Early lunch at Adeeb's palm garden

14:15 Visit EPA office in Hadibu

Introduction by head of EPA Socotra

15:00 Driving to Di Hamri Marine Protected Area, spending the afternoon in the MPA;

Snorkelling and maybe diving

Meet with local representatives

Discussion on protected area management and issues between 2007 and date

Drive back and overnight in Hadibo

Day Two – Tuesday 6 November

06:30 Breakfast in Hadibo

07:30 Meeting with Hadibo District Director and Local Council

- 08:30 Meeting with Public Work and Highways office in Hadibo
- 09:30 Drive to Homhil Protected Area
- 11:30 Site tour
- Lunch in Homhil
- Meet with locals
- Discussion on protected area management and issues between 2007 and date
- 14:30 Move up to Momi area
- 16:30 Drive back Momi - Hadibo

Day Three – Wednesday 7 November

- 06:30 Breakfast in Hadibo
- 07:30 Drive to Qualansiya District
- 09:30 Meeting with the Deputy Governor for Socotra Archipelago affairs and with District Director and Local Council, (also with member of parliament if he is in Socotra)
- 11:00 Tour in Ditwah marine PA and RAMSAR site and talk with some local people
- 12:30 Lunch in Qalanasiya village or protected area camp
- 13:30 Trip by boat to Shua'ab and Neet
- Meet with locals in Shua'ab
- 16:30 Return back to Hadibo via the new constructed road between Shua'ab and Hadibo
- Overnight in Hadibo

Day Four – Thursday 8 November

- 06:30 Breakfast in Hadibo
- 07:30 Drive to Diksam- stop in Eriosh archaeological site
- Walking to Skand PA
- 12:30 Light lunch in the way
- 15:30 Drive to Wadi Daerhor and view the Dragoon Blood Tree forest at Firemhen area
- 16:30 Continue south to Amak camp in Nojed

Dinner and overnight in Amak camp

Day Five – Friday 9 November

06:00 Breakfast in Amak camp
07:30 Drive to the eastern part of Nojed seeing fisheries activities and talk to fishermen
12:30 Lunch with locals
13:30 Move to the western part of Nojed know the specific features of the area and meeting with locals
Dinner and Overnight in Qa'arah

Day Six – Saturday 10 November

06:00 Breakfast in Qa'arah
07:00 Trip by boot to Darsa and Samha Island; seeing the features of the Islands and meet locals in Samha
12:30 Light launch
15:00 Return back to the main island of Socotra to Qa'arah
Dinner and Overnight in Qa'arah

Day Seven – Sunday 11 November

06:30 Breakfast in Qa'arah
07:30 Drive back towards to the northern side of the Island through Wadi Faerho
Continue to the eastern part of the Island to Rosh MPA
12:30 Lunch in Rosh camp and meeting with locals
14:00 Continue east to Eriaher landscape
16:00 Return back to Hadibo
19:00 Gathering dinner in Hadibo and discussion with some key persons in Socotra and EPA team

Day Eight – Monday 12 November

07:00	Breakfast in Hadibo
08:30	Visit NGOs in Hadibo and any other environmental initiatives
10:00	Meet with road construction company
12:00	Departure to Sana'a
14:45	Arrive to Sana'a Airport
	Afternoon is a time for internal meeting and preparation for the upcoming meetings with officials and partners in Sana'a

Programme in Sana'a

Tuesday 13 and Wednesday 14 November 2012

The 2 days programme in Sana'a will include meetings with officials representing Yemen Authorities in addition to other partners involved in Socotra.

The meetings in Sana'a will be with the following;

- EPA Chairman
- Minister of Water and Environment
- Ministry of Public Works and Highways
- Ministry of Planning
- Socotra member of parliament
- United Nation Development Programme
- Decentralisation project
- Yemen UNESCO-committee
- Dr. Abdul-Karim Al Eryani, President Advisor and head of the National Dialog Committee

A specific time schedule and places of the meetings will be confirmed before the return of the team from Socotra to Sana'a.

Participating in the Mission:

IUCN: Haifaa Abdulhalim & Tarek Abul Hawa accompanied by Dr. Saeed Al Khuzai, Arab Regional Centre for World Heritage

EPA Yemen, Malek Abdulaziz

Knowledgeable References; Abdul-Rahman Al Eryani, Dr. Abdul-Karim Nasher and (maybe) Dr. Omar Al Sagher

Annex III: List and contact details of people met

Name	Title	Organization	Email
Socotra			
Salem Daheg	General Director of Hadibu District	Hadibu District	s.daheg@yahoo.com
Sheikheh Mubarak Sulaiman	President	* Environmental Protection Authority * Socotrian Women Empowerment Society	
Nowh Adham Ali Ahmed	Director	Soqotra Honey Centre Soqotra Bees Farming and Protection Corpatio	
Ahmed Addeb	Manager	Endemic Plants Nursery	
Abdullah Salem Ali	President	Homhil Society	
Mukhtar Al Hankasi	President	Socotra Archipelago Charity	Alhnkasi7@gmail.com
Eng. Essam Al Shagaf	Supervisor Engineer	Ministry of Public Works and Highways	
Ahmed Saeed	Director of EPA-Socotra	EPA	gamhem@yahoo.com
Abdulraqeb Al-Okaishi	Protection Authority Socotra Archipelago	Deputy Director Environmental	-
Sana'a			
Dr. Omar Al Saghair	National Coordinator	Small Grant Programme- Global Environment Facility	omar.alsaghier@undp.org
Eng. Omar Al Kurshomi	Minister	Ministry of Public Works and Highways	minister@mpwh-ye.net
Abdo Razzaz Saleh Khaled	Minister	Ministry of Water & Environment	asrazzaz@gmail.com
Abed Alkareem Al Eryani	Presidential Advisor	President Office	aleryani@gmail.com
Abdul-Rahman F. al-Eryani	President Environment Affairs Advisor	Prime Minister Office	af.eryani@gmail.com
Malek A. Abdulaziz	Coordinator	Socotra Conservation & Development Coordination Unit	malek_asaad@yahoo.com

Annex V: Photographs



Photo 1. Old dirt road near Di Hamri PA



Photo 2. Negative impacts of roads on biodiversity – Central Heher Mountains



Photo 3. Negative impacts of roads on coastal area – Eastern coast of Hala



Photo 4. Road in the Eastern plain of Momi



Photo 5. Road side erosion – Eastern plains of Momi



Photo 6. Meeting with local leaders in Homhil PA