



# IUCN mission to Niger for the conservation of the last wild addax and dama gazelles and the Termit and Tin Toumma National Nature Reserve: Report and Recommendations



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Cover photo: Addax in the Tin Toumma desert © A. Harouna / Noé  
Rear cover photo: Addax in the Tin Toumma desert © A. Harouna / Noé

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## **Executive summary**

In January 2020, an IUCN mission visited Niger at the invitation of the authorities for a consultation on saving addax and the future of the Termit and Tin Toumma National Nature Reserve. The mission was warmly welcomed by the authorities and it has proposed a series of recommendations.

In 2020, Niger is probably the last and the only country to have saved the addax in the wild (as also with the West African giraffe), except for some individuals intermittently crossing the border with Chad. Niger is also one of the last two countries to have conserved the dama gazelle in the wild. Thus, Niger has a global responsibility for saving the populations and the genetic heritage of these two charismatic species of large mammal.

For the dama gazelle, the conservation of the relict population could be assured by adopting new boundaries for TTNNR that reintegrate the totality of the Termit Massif into the reserve. The coherence of the massif's ecosystems should thereby be guaranteed, along with the protection of the important wildlife populations, as well as its unique cultural and archaeological heritage.

For the addax, the crucial challenge is to avoid the extinction of the species in the wild.

It should be emphasised that addax conservation and petroleum activities are not incompatible, provided there is effective total protection against poaching and excessive disturbance.

Saving the last individual addax requires synergy and close collaboration by all actors involved. The supervisory administration remains the main actor, with the support of local communities, the private sector, and NGOs. The oil companies clearly have a key role to play in their respective petroleum blocks, in line with their commitment to protecting the environment and their legal responsibility.

At the same time, urgent rescue measures should be taken as soon as possible in the current addax range. These measures involve: drastic improvement of operational capacity, safeguarding the last individuals and the conservation of their irreplaceable genetic diversity. Such measures include different options which can be combined or not, notably close protection with the aid of satellite collars, and capture of a nucleus of breeding individuals in Niger with the objective of securing the genetic heritage of Niger and the reintroduction of the species in the long term.

# **1. IUCN Mission**

## **1.1. Place and dates of the mission**

- Niamey, Republic of Niger;
- From Saturday 18 to Monday 27 January 2020.

## **1.2. Composition of the mission**

- IUCN-PACO (IUCN West and Central Africa Programme): Professor Aboubacar Awaïss;
- IUCN-SSC (Species Survival Commission – Antelope Specialist Group): Dr David Mallon and Dr Philippe Chardonnet.

## **1.3. Objective of the mission**

This was to provide support to the responsible Niger authorities and the principal actors involved to ensure (i) the protection of last wild addax individuals and dama gazelles and (ii) the future of the Termit and Tin Touma National Nature Reserve. The mission planned (i) to consult the high authorities of Niger, executives of the administration responsible and various actors involved and (ii) to propose recommendations.

## **1.4. Conduct of the mission**

The mission had the honour of being received by the Minister of the Environment, Urban Health and Sustainable Development, the Minister of State for Oil, and the Minister of State for the Interior, Public Security, Decentralisation and Customary and Religious Affairs. The Mission also met Her Excellency the Ambassador of the European Union in Niger, the Director of the French Development Agency in Niger, numerous officials from the Directorate General of Water and Forests, the Director General of the National Bureau of Environmental Evaluation, representatives of the oil company Savannah Petroleum, representatives of the NGOs Noé Conservation and Sahara Conservation Fund, and various other actors (see Annexes 1-2).

## **1.5. Acknowledgements**

The IUCN mission thanks the Nigerien authorities for the welcome they kindly provided. The mission greatly appreciated the efforts and efficiency of the authorities with which it collaborated. The mission was made possible through an IUCN-SOS Fund Rapid Action Grant, financed by the European Union. The IUCN Regional Programme for West and Central Africa also contributed to the funding of the mission, through the project on Regional Governance of Protected Areas in West Africa, also supported by the European Union.

# **2. Brief situation analysis**

## **2.1. The Republic of Niger**

Niger is firmly committed to the conservation of biodiversity and as such it is a signatory to several international conventions and accords, including (i) the Convention on Biological Diversity (CDB) which is aimed at all levels of biodiversity, (ii) the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES); (iii) Convention on Migratory Species (CMS) which deals with all aspects relative to the conservation of migratory species and the habitats on which they depend, (iv) the Convention on wetlands (Ramsar) et (v) the Convention to Combat Desertification. It has also joined AEWA, the agreement on the Conservation of migratory waterbirds of Africa and Eurasia, an independent international agreement developed under the aegis of the United Nations Environment Programme within the framework of CMS. These international commitments to conservation are operationalised in Niger by issuing appropriate legal texts and a proactive policy of implementing numerous

measures ranging from (i) national action plans and sustainable management of some charismatic or emblematic species to (ii) transboundary cooperation, while (iii) including sustainable management of ecosystems. The State has created vast Protected Areas to manage biodiversity among which are the Air and Ténéré National Nature Reserve (ATNNR; 77,360 km<sup>2</sup>) and the Termit and Tin Toumma National Nature Reserve (97,000 km<sup>2</sup>).

Niger is the last country in the world to have conserved the addax and dama gazelle in the wild, as well as the West African giraffe.

## **2.2. Termit and Tin Toumma National Natural Reserve (TTNNR)**

TTNNR was established on 6 March 2012 by Decree n° 2012-075/PRN/MH/E. Some coordinates demarcating the boundaries of the reserve were erroneous incorrect at this point, and they were corrected in Decree n° 2017-161/PRN/ME/DD of 3 March 2017. The reserve covers an area of 97,000 km<sup>2</sup>, close to 10 million hectares. Article 4 of the Decree stipulates possibility of management of TTNNR in collaboration with Non-governmental Organizations and local communities. On 11 December 2016, the representatives of 65 communities living inside the reserve signed the “Doungoumi Declaration” which includes an agreement to conserve fauna and destroy illegal wells.

The reserve is considered one of the most important sites for biodiversity conservation in the Sahelo-Saharan region and as one of the last strongholds of several threatened species. The reserve harbours the only current population of wild addax and one of the last four wild populations of dama gazelle, as well as other rare and threatened species such as: Barbary sheep, several large carnivores (e.g. Saharan cheetah, striped hyena), many small carnivores (e.g. sand cat, fennec fox, pale fox, various mustelids), several vultures (e.g. black vulture, Rüppell’s vulture, Egyptian vulture), several bustards (e.g. Arabian bustard, Nubian bustard), and many reptiles, such as spur-thighed tortoise etc.

Moreover, the Termit Massif has been designated as an Important Bird Area (IBA) because of its rich avifauna and its function as a migratory stopover site. In fact, in view of the marked aridity of the region’s climate, the complex of wetlands (*mares*) which it contains represents an internationally important site for birds in general and migratory species in particular.

## **2.3. The dama gazelle (*Nanger dama*)**

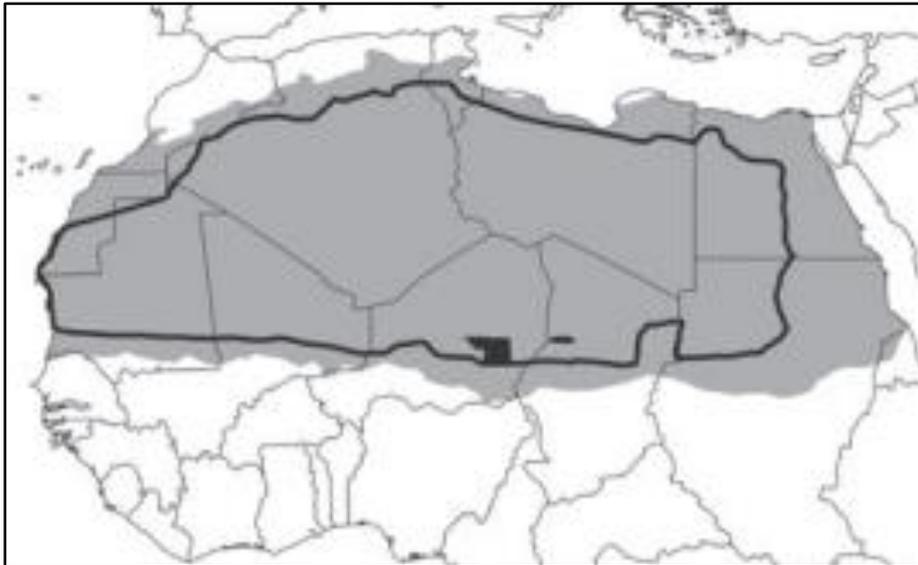
The historical distribution of the dama gazelle covered the whole Sahelian steppe zone from the Atlantic to the Nile. However, numbers of this species have been considerably reduced, to a point where today only four highly fragmented relict populations survive in the whole of Africa. The size of the global wild population is estimated to be between 85 and 120 adults. The dama gazelle is therefore one of the most highly threatened antelopes in the world. A global conservation strategy for the dama gazelle has been developed (Al Ain Zoo, IUCN SSC Antelope Specialist Group and Royal Zoological Society of Scotland 2019).

In Niger today, the dama gazelle is present at only two sites: (i) Mont Takoukouzat in the Air and Ténéré National Natural Reserve and (ii) the Termit Massif in the Termit and Tin Toumma National Natural Reserve. In these two sites, the dama gazelles are confined to rocky areas which probably constitute refuge habitat. Although the two reserves are contiguous, ranges of the two dama gazelle populations are located far from each other and are therefore completely isolated. The dama population in ATNNR is very small, conservation activities in the reserve are very limited, and the reserve has been invaded by gold miners, which illustrates the importance for the species of the TTNNR dama population. In this reserve, the dama population numbers about 40 to 50 individuals, which makes it one of the two most important populations of the species remaining in the world. The dama gazelles are confined to the Termit massif, especially its northern part.

The dama gazelle is the emblem of Niger's sports teams Niger, for example the national football team, "the Ménas".

#### **2.4. Addax (*Addax nasomaculatus*)**

The range of the addax once covered most of the Saharan zone. This species has also suffered a catastrophic decline: it has been estimated that its range has been reduced by 99.32%, which means that today only 0.68% of the historical range remains (Figure 1).

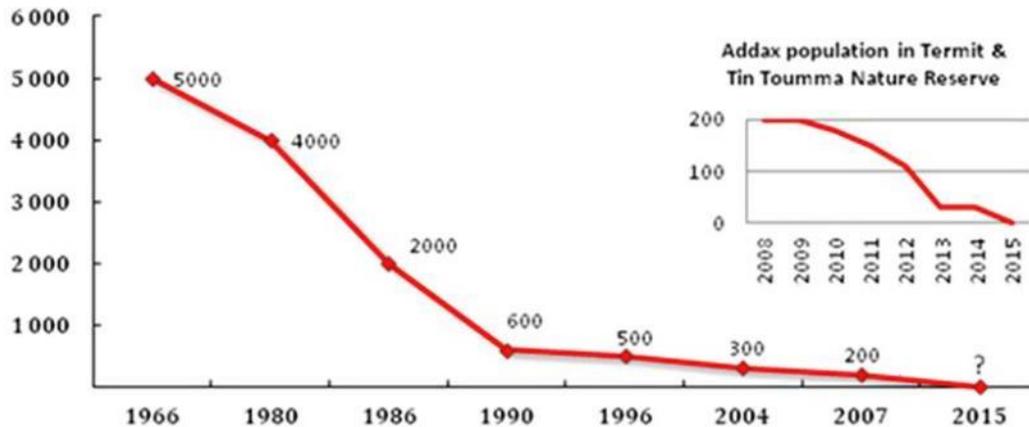


**Figure 1:** Saharan zone (dark grey), historical addax range (black line), and current range (black block) (From Durant et al. 2014).

In 1988, the Aïr and Ténéré National Nature Reserve (ATNNR) and an Integral Reserve or Addax Sanctuary were created to conserve the species. After the outbreak of an armed rebellion in the area in the 1990s, the decline of the species began. Despite the establishment in 2010 of the UGAP (management unit) at Iferouâne and the implementation of an ecological monitoring system since 2013, there has been confirmation of the presence of addax in the sanctuary for at least ten years. However, it is thought that the addax population may have moved into the Tin Toumma desert.

Thus, for at least 30 years, the only viable addax population in the world has occurred in the Tin Toumma desert in the TTNNR. During the hot season, they used the valleys in the eastern foothills of the Termit Massif where the presence of trees and other vegetation provided shade and fodder, and where groups of 30-40 were observed until 2007 (T. Rabeil, pers. comm.).

Despite all the measures that have been taken since 2002 to safeguard the addax, the situation has deteriorated considerably. A monitoring mission in 2007 observed 71 addax and estimated the number at 200-250 individuals. Since then, the number of direct (animals seen alive or dead) and indirect (footprints) observations has decreased dramatically (Figure 2).



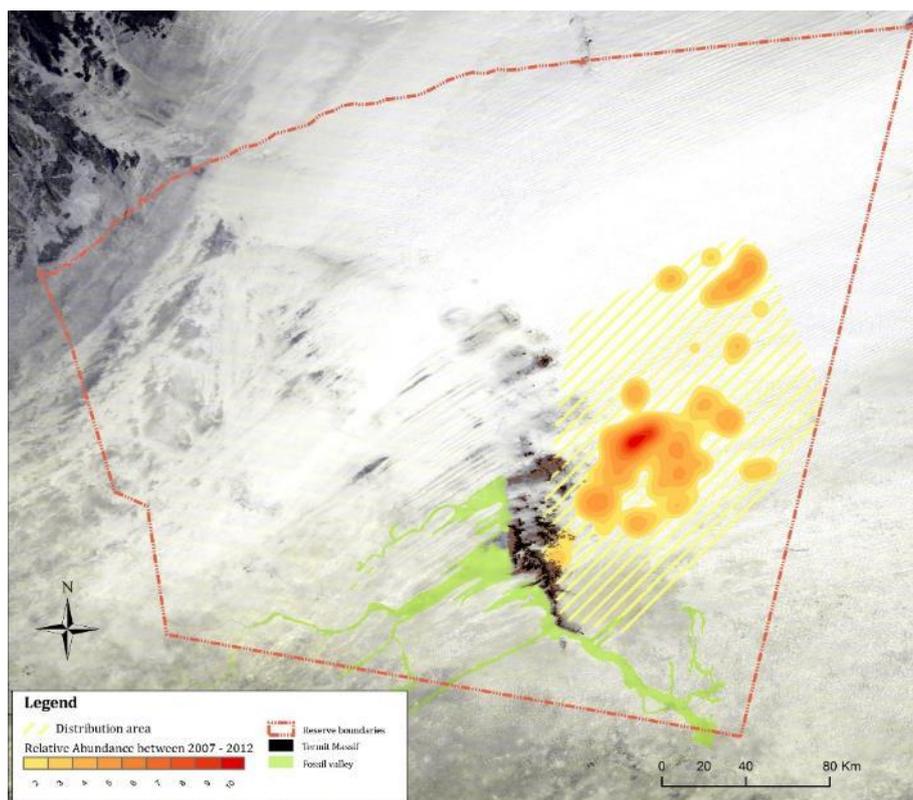
**Figure 2:** Collapse of the Niger addax population up to 2015 (Sources: Dolan 1966, Newby 1981, Newby & Grettenberger 1986, Beudels et al. 2005, Wacher et al. 2008, Rabeil et al. 2016)

In June 2015, no animals were observed during a thorough ground monitoring mission (Rabeil 2015). In April 2016, a census both by land (700 km of transects) and by air (3200 km overflow) observed only three live animals, while remains of addax and dorcas gazelles left by poachers were also found (Rabeil et al. 2016). In April 2017, a monitoring mission carried out by Noé's Corridor Project and the Niger wildlife authorities, with technical support from the Sahara Conservation Fund, recorded 6 addax including a young animal in the Tin Toumma Desert after an intense search. The last known sighting of live addax was in March 2019 when a dozen addax were observed in Tin Toumma north of Bilma during a field mission organised by Noé (Abdoulaye Harouna, pers. comm.). Figure 3 shows the distribution of addax in TTNNR in the period 2007–2012.

The addax population in TTNNR appears to have declined significantly and/or been dispersed. At the beginning of 2020, there may only be a few dozen addax left at most, illustrating the extreme fragility of its situation: the species is today on the very threshold of extinction in the wild. A regional action plan was drawn up in 2017 (DCFAP and DFCPR 2017).

In addition, DNA analysis of the Tin Toumma addax showed that this relict population contains 11 unique haplotypes (maternal lineages), far more than in any captive addax population worldwide. Such genetic variability is exceptional and irreplaceable.

There is no doubt that the decline in addax is linked to the large increase in human activities in the reserve. Since 2007, TTNNR and the adjoining areas have been subject to considerable disruption by the inception of oil exploration (see below), as well as increased poaching, whether by traffickers, smugglers, migrants or others on their journeys to and from Libya through the reserve, and/or by the armed forces accompanying employees of the oil sector.

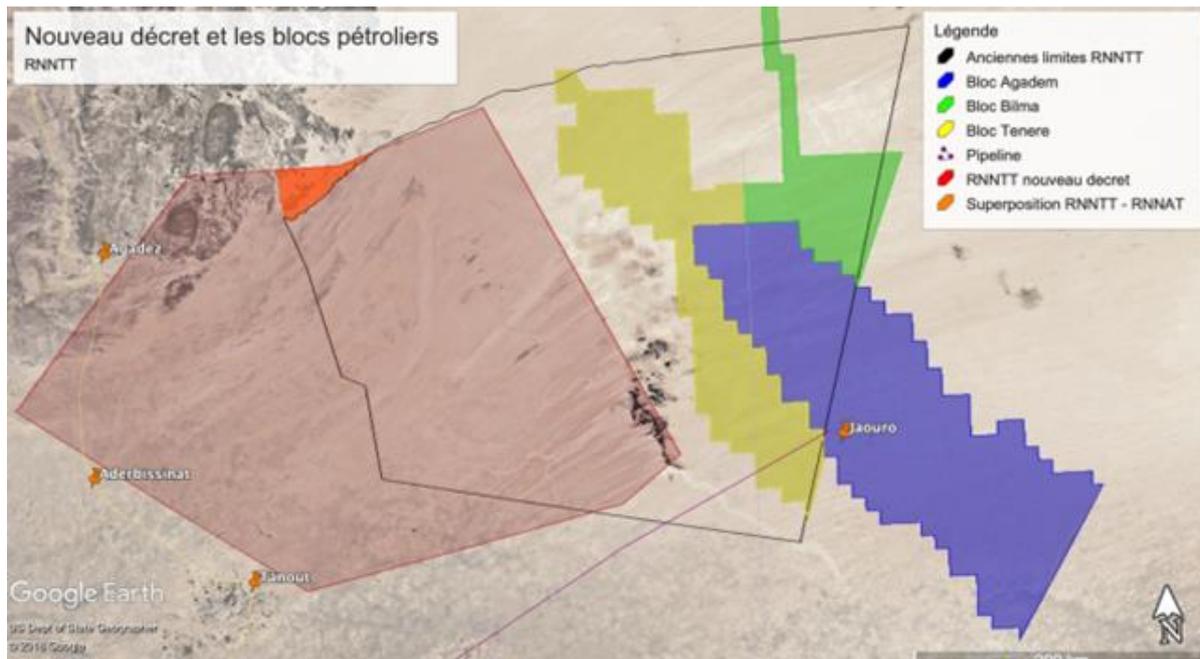


**Figure 3:** Distribution of addax in TTNR in 2007–2012 (map prepared by T. Rabeil)

## 2.5. Oil exploration and exploitation

Three oil blocks (Agadem, Bilma, and Ténéré) are located in the Tin Toumma desert. They overlap the eastern part of TTNR (Figure 4). On 23 November 2003, the State of Niger signed an agreement with the China National Petroleum Corporation (CNPC) on the exploration and development of the Bilma Block (60,884 km<sup>2</sup>) and the Ténéré Block (71,155 km<sup>2</sup>). Seismic surveys and exploratory drilling in both blocks began in 2005.

In 2008, the State of Niger signed a Production Sharing Contract (PSC) with the China National Oil and Gas Development Corporation (CNODC) in the Agadem block. The CPP was confirmed by Decree No. 2008-177/PRN/MME of 2 June 2008 for a period of 25 years (until June 2033). The contractual area covers 516,181 km<sup>2</sup>. The China National Petroleum Corporation (CNPC) is the affiliated concessionaire and main operator of the block. Savannah Oil (United Kingdom) is active in the southern part of the block. Phase I of the Agadem Integrated Project became operational on 28 November 2011. The project includes production wells and associated infrastructure, including roads and an airstrip, as well as a refinery in Zinder and a 462.5-km long pipeline linking Agadem to the refinery. The pipeline crosses the south-eastern part of the Reserve for nearly 100 km. It is planned to link this pipeline to the Benin pipeline to enable oil exports.



**Figure 4:** Original boundaries of TTNNR according to the Decree of March 2012 (black line), new boundaries according to the Decree of June 2019 (red line), and oil blocks (Map prepared by Noé)

A set of community projects has been developed. CNPC has drilled 29 water wells and built more than 40 water supply points in villages near the block and pipeline, financed the construction of clinics, and supported cultural development in the area.

In the PPC with CDNOC/CNPC, Article 36 "Environmental Impact Assessment", in Section 36.9 "Classified or Protected Areas", states that: "*The Contractual Area does not contain any boundaries subject to special classification or protection at national or international level. The State shall refrain from creating such boundaries in the Contractual Zones during the term of the contract*". This Article seems to have been overlooked when the reserve was created.

However, according to Article 17 of the 2012 Decree on the creation of the reserve, "*All research or mining and petroleum exploitation activities in the TTNNR are subject to the legal and regulatory provisions relating to environmental impact studies*".

In addition, CNPC is committed to the protection of the environment and biodiversity. ([https://www.cnpc.com.cn/en/environment/environ\\_index.shtml](https://www.cnpc.com.cn/en/environment/environ_index.shtml)):

- "*CNPC strives to protect biological habitats, biodiversity and ecological balance in and around its operating areas through various measures such as ecological operation and engineering construction.*
- "*We are dedicated to reducing the potential influence on the ecological environment and biodiversity during production and operation and take all necessary precautions to avoid environmental impact and work hard to restore the environment to its original state in the event of a negative impact*".
- "*We adopt strict management systems and environmental protection plans to ensure environmentally friendly operations to effectively protect the natural environment of various operating areas such as deserts, wetlands and nature reserves.*

CNPC has demonstrated its commitment to these principles by supporting environmental projects, particularly for wildlife conservation, in its areas of operation, notably in Ecuador and Kenya:

<https://www.cnpc.com.cn/en/environmentcase/201811/7039fda9b66b4bbe87bd2916cf14bcbf.shtml>.

## **2.6. Management delegation**

Order No. 0019/MESU/DD/SG/DGE/F/DFC/AP dated 5 September 2014 created the TTNNR Management Advisory Committee, which recommended delegation of the management of TTNNR to the French NGO Noé. The management of the TTNNR was delegated to the NGO Noé on 5 November 2018 for a period of 20 years, the letter No. 00992/MESU/DD/SG/DGEF dated 12 November 2019, confirming the "Partnership Agreement between the State of Niger and the NGO Noé for the delegation of management of the Termit and Tin Toumma Reserve". Financial support for the delegated management was provided by the European Union and the French Development Agency. Noé appointed a director of TTNNR in May 2019.

## **2.7. Reclassification of TTNNR**

To resolve the contradiction between the 2008 CPP and the Decree of March 6, 2012 designating TTNNR, CNPC wished that the said Decree be amended to declassify the part of the reserve overlapping the three oil blocks (see the minutes of the "Meeting on the issues raised between oil activities and the TTNNR of December 26, 2018"). Following Noé obtaining the delegated management of TTNNR, CNCP reiterated its request for declassification.

On 26 June 2019, the Council of Ministers of the Government of Niger announced the modification of the boundaries of TTNNR by Decree No. 2019-332/PRN/MESU/DD. The modification declassified approximately 50,000 km<sup>2</sup> of the eastern part of the Reserve, excluding from it the three oil blocks, as well as most of the Tin Toumma desert and about 65% of the Termit massif. To compensate for the declassification and to maintain the approximate original size of TTNNR new areas were designated to the west and north of the Termit Massif (Figure 4).

It transpires that the areas excluded from TTNNR are the most important for biodiversity, in particular:

- The main habitat of the addax, which occurs in the Tin Toumma desert, is largely inside the oil blocks, and is now outside the boundaries of the reserve;
- Most of the Termit massif, especially the northern part which is home to one of the four wild populations of the dama gazelle in the world, is also excluded from the reserve.

### 3. Conclusions

- In 2020, Niger is probably the only and the last country to have conserved addax in the wild (as with the West African giraffe), except for a few individuals occasionally crossing the border into Chad. Niger is also one of the last two countries to have been able to conserve the dama gazelle in the wild. Thus, Niger has a global responsibility to safeguard the populations and genetic heritage of these two charismatic species of large mammals.
- For the dama gazelle, the conservation of its relict population could be ensured by adopting new boundaries for TTNNR in order to reintegrate the entire Termit massif into the reserve. The coherence of the massif's ecosystems would thus be guaranteed, as well as the protection of the important wildlife populations and its unique cultural and archaeological heritage.
- For the addax, the crucial issue is to avoid the extinction of the species in the wild.
- It should be emphasised that addax conservation and oil activities are not incompatible, provided that there is full and effective protection against poaching and excessive disturbance.
- The rescue of the last addax individuals requires a synergy of actions and close collaboration of all actors involved. The supervisory administration remains the major actor, with the support of local communities, the private sector and NGOs. Oil companies obviously have a key role to play in their respective oil blocks in line with their commitment to environmental protection and their legal responsibility.
- At the same time, emergency rescue measures must be taken as soon as possible in the current area of addax distribution. These measures include: drastically improving operational capabilities, safeguarding the last individuals and preserving their irreplaceable genetic diversity. Such measures include various options that may or may not be combined, including close protection with the help of satellite collars, and establishment of a core group of captive individuals in Niger with the objectives of securing the Nigerien genetic heritage and reintroducing the species in the long term.

## 4. Recommendations

- **Future of the Termit and Tin Toumma National Nature Reserve and saving the dama gazelle**

### **Recommendation 1:**

IUCN recommends that, whatever boundaries of TTNNR may finally be selected, the Termit Massif, in its entirety, is included within the boundaries of a duly classified protected area to conserve its valuable population of dama gazelle, as well as all the associated biodiversity. The IUCN mission recommends also that a fixed operational base be established at the foot of the Termit Massif to increase the effectiveness of measures to conserve the ecosystem.

- **Saving the last wild addax**

### **Recommendation 2: Awareness and change of approach**

IUCN recommends that all partners/stakeholders take fully into account the very high risk of imminent extinction of the wild addax in Niger if new conservation methods are not used to supplement the methods used for 20 years which have not succeeded in stemming the continuing decline of the addax.

### **Recommendation 3: Synergy and collaboration**

IUCN recommends that saving the last individual addax is assured through a synergy of actions and close collaboration between all the actors involved. The administration of Eaux et Forêts (Water and Forests) has responsibility for leading the consultation framework with the support of local communities, NGOs and the private sector. The private sector has a key role to play in a joint programme to save the addax in the oil concessions.

### **Recommendation 4: Urgent programme**

IUCN recommends that the “urgent programme” already drawn up by the administration of Water and Forests be implemented as soon as possible. This programme focuses on increasing operational capacity to strengthen anti-poaching efforts and ecological monitoring. It is recommended that its objective should ensure effective protection against poaching in the whole addax zone, from the eastern boundary of TTNNR up to the frontier with Chad;

- In the oil blocks, conduct joint anti-poaching and monitoring patrols between Water and Forests staff, the armed forces, and the oil companies;
- In the addax zone outside the oil blocks, conduct joint anti-poaching and monitoring patrols between Water and Forests staff, the armed forces and community guards.

### **Recommendation 5: Immediate rescue measures (see also Annexe 3)**

IUCN recommends that a programme of “immediate rescue measures” be implemented without delay, using proven effective methods to:

- Save the last individuals and avoid the extinction of the last wild population (*in situ* measures):
  - Locate the remaining individuals through ground and aerial surveys, including drones;
  - Ensure the close protection of remaining individuals through satellite collars placed on a small number of adult animals;
- Secure the integrity of the genetic heritage (*ex situ* measures in Niger):
  - Establish a captive breeding nucleus of addax in Niger to preserve the genetic heritage and enable reintroduction;
  - Conduct a feasibility study on the reproductive capacity of the female addax at Kelle and its active integration into the captive addax breeding nucleus;

- Involve high authorities:
  - Involve commanders of the Armed Forces in the immediate rescue measures;
  - Put in place close transboundary collaboration with the Chadian authorities.

#### **Recommendation 6: Prioritizing the wild population**

IUCN recommends that efforts should focus first of all on saving the original addax in Niger before considering imports of captive addax whether for a population reinforcement or a future reintroduction.

#### **Recommendation 7: Roadmap**

IUCN recommends that all stakeholders participate in the development of a roadmap for the conservation of the addax at global scale, with a range of methods over the short-, medium- and long-term. This global framework will encompass all measures under way or planned, including:

- The immediate rescue plan in Niger;
- The recent reintroductions of addax in Chad and Morocco;
- The managed metapopulation of addax in Tunisia;
- The captive addax populations in North Africa, the Middle East, Europe and North America;
- Genetic and genomic analyses.

#### **Recommendation 8: Large international meetings**

IUCN recommends that saving the wild addax in Niger is brought to the attention of the international community, notably at the next IUCN World Conservation Congress and the 15th Conference of the Parties of the Convention on Biological Diversity.

## Annex 1: Schedule of the IUCN mission to Niger in January 2020

January 2020	Activities
Saturday 18	Arrival in Niamey at 16h05
	Make contact at the hotel with the mission focal point, Samaïla Sahaliou, Director of Wildlife, Hunting, Parks and Reserves
	Make contact at the hotel with Awaïss Aboubacar, IUCN PACO, member of the mission
Sunday 19	Working session of mission members
Monday 20	Meeting with the focal point and two officials
	Meeting with the Deputy Director General (Acting DG) of Water and Forests
	Meeting at W&F with most senior officials
	Audience with the Minister of the Environment with senior officials and the DG
Tuesday 21	Meeting at W&F with various actors involved in the mission
	Meeting with the focal point
	Meeting with Sahara Conservation Fund: Abdoul Razack and Cloé Pourchier
Wednesday 22	Working session of the mission team
	Meet Hassane Cissé, Director General of the National Office for Environmental Evaluation
	Meeting with the European Union: Assoumane Oumarou and Enrique de Loma-Ossario Friend
	Audience with the Ambassador of the European Union
	Meeting with Ali Abaggana, head of the Niger Fauna Corridor project
Thursday 23	Audience with the Minister of State for Oil and Pascal Ayi Kangni, DPESS/DGH
	Meeting with Abdou Malam Issa, former DG of W&F
	Audience with the Minister of State for the Interior, Public Security, Decentralisation and Customary and Religious Affairs
	Meeting with Noé Conservation: Abdoulaye Harouna, Pascal Legrandjacques and Paul Ignabaye
Friday 24	Meeting with Savannah Petroleum: Idriss Nalano Jika (Head of site) and Moussa Chetima (HSE Officer)
	Meeting with the French Development Agency: Director Jean-Christophe Maurin & Abdoul Kader Adamou
	Meeting with Ali Harouna, former DG of W&F
Saturday 25	Working session with the focal point
	Meeting with Thomas Rabeil, formerly working in TTNNR
Sunday 26	Working dinner with the focal point
Monday 27	Debriefing with the Secretary General of the Ministry and the focal point
	Meeting with Hamissou Halilou Malam Garba, advisor to the Minister of the Environment
	Depart from Niamey at 23h59

## Annex 2: Persons met during the Mission

Name	Affiliation
<b>Ministry of the Environment, Urban Health and Sustainable Development</b>	
M. Almoustapha Garba	Minister
Alassane Makadassou	Secretary General
Ibro Adamou	Assistant Director General of Water & Forests (E&F)
Samaila Sahailou	Director of Wildlife and Hunting
Ali Abdoulaye Gaziba	Head of the Division of Parks and Reserves
Issoufou Oumarou Magagi	Assistant DFC
Ali Lalouel Abbagana	Coordinator, Project Niger Fauna Corridors
Hamissou Halilou Malam Garba	Technical advisor
Abdou Malam Issa	Former DG of E&F
Ali Harouna	Former DG of E&F
<b>Ministère du Pétrole</b>	
M. Foumakoye Gado	Minister of State
Pascal Ayik Kangni	DPESS/DGH
<b>Minister of State of the Interior, Public Security, Decentralisation and Customary and Religious Affairs</b>	
M. Bazoum Mohamed	Minister of State
<b>National Bureau of Environmental Assessments (BNEE)</b>	
Hassane Cissé	Director General
<b>Oil companies</b>	
Idriss Nalano Jika	Savannah Petroleum, Head of site
Moussa Chetima	Savannah Petroleum, HSE
<b>NGO</b>	
Sébastien Pinchon	Noé Conservation HQ (Skype meeting 13.01.2020)
Abdoulaye Harouna	Noé Conservation Niger
Pascal Legrandjacques	Noé Conservation Niger
Paul Ignabaye	Noé Conservation Niger
John Newby	Sahara Conservation Fund, Special Advisor (Skype meeting)
Abdoul Razack Moussa Zabeirou	Sahara Conservation Fund, project officer
Cloé Pourchier	Sahara Conservation Fund, project officer
Thomas Rabeil	Wild Africa Conservation
Erik Mararv	African Parks Network (Skype meeting, 09.01.2020)
<b>Donor agencies</b>	
Dr Denisa-Elena Ionete	Ambassador of the European Union (EU)
Enrique De Loma-Ossorio Friend	UE, Team leader
Assoumane Oumarou	UE, in charge of programme
Jean-Christophe Maurin	Director of the French Development Agency (AFD)
Abdoul Kader Adamou	AFD, Chargé de mission
<b>Round table: DGEF, 19 January</b>	
Dr Boureima Boubacar	Project manager
Abdoulaye Hassane	CT/DGEF

Issoufou Oumarou Magagi	DFC/PR
Ali Abdoulaye Gaziba	DFC/PR
Maliki Alhouza	CP/DFC/PR
Saley Hamidine	CP DGEF
Dr Seyni Abdoul Aziz	Head of Hunting Division, DGEF
Nagoundaye Harouna	Focal point, RED/EF
Siddo Bouraima Abdoulaye	CP/DFC/PR
Maman Djibo	
Arfou Saley Baouna	Conservator, RNNK
Issoufou Ibrahim	CP/DFC/ PR
<b>Round table: participants, 20 January</b>	
Ali Abdoulaye Gaziba	DFC/PR DGEF
Salifou Mamen Bassirou	DEP/MSUDD DGEF
Abdoul-Razzack Moussa Zabeirou	SCF
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## **Annex 3: Immediate rescue measures for wild addax in Niger**

### **Summary of the operation**

#### **Final objective:**

To save the last individual Addax (*Addax nasomaculatus*) in Niger to avoid the extinction of the last wild population of the species and to secure the integrity of its genetic heritage.

#### **1. Phase 1: Preparation of the operation**

The operation has a number of prerequisites:

- Formal agreement by the supervisory authority in Niger to conduct the operation under its full authority and with a mixed team of Nigerien and international experts.
- Identification of partners and obtaining funding to carry out the operation.
- Development of a detailed plan for the operation.
- Assembling the best possible expertise for a successful operation.

#### **2. Phase 2: Implementation of the operation**

The operation should be conducted in the following stages:

##### **2.1. Establish a captive breeding facility to accommodate the captured addax in Niger**

- Identify a site in Niger that is suitable for the facility - Note that there is already a facility in Kelle for rearing ostriches, and an addax female is already on site;
- Identify a competent institution to manage the facility according to the best professional standards;
- Install infrastructure, acquire equipment and recruit/train personnel.

##### **2.2. Preparation of the capture operation**

- Identify the capture team: experts and staff;
- Prepare land and air transport: cars, trucks, aircraft (to search for and transport addax), helicopter (to capture and transport addax);
- Prepare fuel, water and food;
- Prepare equipment: addax capture and transport equipment, bush logistics.

##### **2.3. Implementation of the capture operation**

- Identify the capture area through the latest addax observations, direct and indirect;
- Transfer and establish the capture team in the capture area with vehicles and equipment;
- Locate addax with the light aircraft, an task that can last for many days;

- Note that if the operational base turns out to be too far away from the addax, it could be moved closer to the addax.
- As soon as a direct observation of addax is made by the aircraft, the helicopter will immobilize the addax individually;
- Two (2) distinct interventions may be carried out:
  - **Adult addax** (but not old): a maximum of two (2) adult individuals at the most per herd will be **fitted with radio collars and immediately released on site**; a maximum of four (4) adult individuals will be fitted with radio collars and released on site ;
  - **Subadult addax**: Subadult males and females will be taken to the operational base for transport to **the breeding facility**; a maximum of six (6) subadult individuals would be transported.
- Translocation: Captured subadult addax will be transported to the breeding facility by the most suitable method (land or air or combined) depending on the operational circumstances of the operation, in particular the distances between (i) the capture site, (ii) the site of the operational base and (iii) the breeding facility;

### **3. Phase 3: Follow-up operation**

#### **3.1. Close protection of addax equipped with transmitter collars**

The transmitters on the addax equipped with transmitter collars will ensure not only their close protection but also that of a large part of the relict addax population, whether the individuals are moving within or outside the RNNTT, the oil blocks or the wider landscape.

#### **3.2. Management of the addax in captivity**

Addax transported in the breeding structure should be managed according to the best possible professional standards in terms of welfare, health, food and nutrition, habituation, reproduction, genetics, etc.

#### **3.3. Genetic strategy**

The strategy for the management of the addax's genetic heritage will need to be carefully defined, in particular:

- Firstly, it is very important to protect the integrity of the original addax gene pool in Niger by avoiding the introduction of addax from breeding centres abroad; this implies doing everything possible to save the Nigerien addax before introducing addax from foreign sources;
- An import of addax from foreign sources could only be envisaged for them to benefit from of the genetic heritage of Nigerien addax. Exchanges should be established with existing addax collections abroad to this end;
- The addax female which is already in Kelle could be usefully incorporated into the addax gene pool management strategy. Consideration should be given to this.

### **3.4. Securing financing and management**

Funding and partnerships to manage addax monitoring must be secured over a sufficient period of time, which should not be less than five years.

### **4. Timetable of the operation**

- Approximate duration of the operation, once financing has been obtained:
  - Installation of the breeding structure: 6 months;
  - Preparation of the operation (personnel and logistics): 3 months;
  - Capture and translocation: 1 month (the shorter it is, the better).
- Period: The best time to catch is January and February.

### **5. Control and command of the operation**

All addax captured must remain the property of Niger.

Agreements could be made with addax collections in other countries if they are interested in benefiting from Nigerien genetics.

## Annexe 4: References

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## Annex 5: Photos of the mission



Members of the mission with H.E. M. Almoustapha Garba, Minister of the Environment, Urban Health and Sustainable Development



Member of the mission with H.E. M. Foumakoye Gado, Minister of State for Oil



Members of the Mission with H.E Dr Denisa-Elena Ionete, Ambassador of the E.U.

