

# Alignment of Research and Conservation in the Protected Areas of Ten Central African Countries

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## CONTEXT











In protected areas, research is intended to support management and conservation decisions ('*science-policy interface*').

However:

- The sharing of research results is often insufficient, as is the dialogue among researchers, field managers and policy makers;
- Research in protected areas is rarely connected with the priorities of managers.

## STUDY AREA

Protected areas from 10 central African countries ~ 960,000 km<sup>2</sup>

	Burundi		Equatorial Guinea
	Cameroon		Gabon
	Central African Republic		Republic of Congo
	Chad		Rwanda
	Democratic Republic of Congo		São Tomé and Príncipe

## OBJECTIVES

We aimed to clarify how research is ...

- ... produced ...
- ... accessed ...
- ... and used ...

in central African protected areas.

## METHODS

We used **online surveys, focus groups** and **interviews**...

... to capitalize the experience of...

... **73 field managers** representing **42 protected areas**

## 1. RESEARCH ACTORS

**More than 70%** of protected areas:

- Welcome (inter)national students and researchers
- Have signed formal collaboration agreements with privileged partners for research

Protected area's managers

Supervision team in the field, infrastructure, logistical means, security support, etc.

Students & researchers

Restitution and valorization of research results + scientific support to achieve management objectives

## 2. RESEARCH TOPICS

**Only 20%** of protected areas have defined their priority research questions

Highest priority research questions are related to:

1. Animal biodiversity
2. Human aspects
3. Fight against illegal activities
4. Vegetal biodiversity

**61%** report that there are "**dormant data**" that are not used by anyone

**70%** are involved in the design of research protocols and

**49%** in writing scientific publications...

**BUT 82%** would like to be better involved in the design of research protocols and scientific publications

## 3. USE OF RESEARCH RESULTS FOR MANAGEMENT

**Biomonitoring** results are directly used by **90%** of protected area managers...

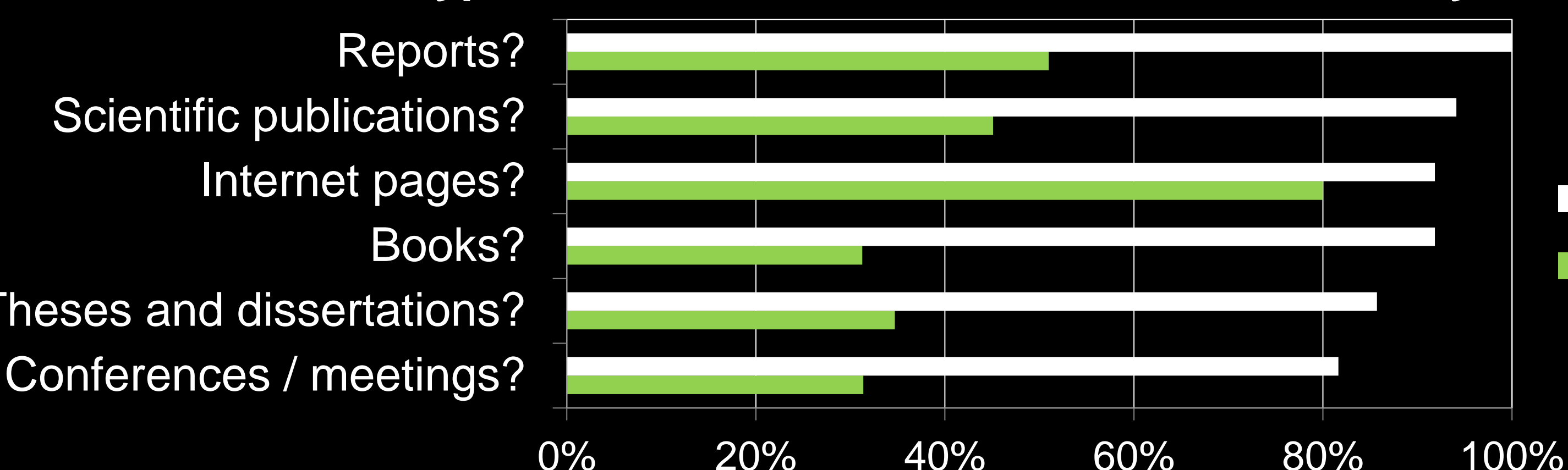
... while **only 45%** consider that **scientific research is produced quickly enough** to respond to management issues.

The main use of scientific research by managers consists in using tools developed by researchers, such as applications, GIS, databases...



## 4. ACCESS TO RESEARCH

Are these types of documents useful and accessible for your work:



**73%** of managers generally have access to the...  
**61%**

... **results** of research conducted in their protected area  
... **raw data**

## EXAMPLE APPLICATIONS

### Disease prevention

#### Odzala-Kokoua National Park (Congo) :

Sampling of urine, faeces, carcasses, parasites to monitor infections and inter-species transmissions (great apes and bats)

#### Lopé National Park (Gabon) :

Census of zoonotic diseases at the country level, serological samples to list the bacteria and viruses that the consumption of bushmeat can potentially transmit to humans

### Animal reintroductions

#### Scimitar-horned oryx in the Ouadi Rimé-Ouadi Achim Game Reserve (Chad) :

- Species classified as "extinct in the wild" since 2000 by the IUCN
- Reintroduction of 144 animals in 2016 → 382 individuals today

- Logistics, breeding, monitoring and scientific research (progress assessment, threat detection and management information)
- Monitoring: demography (population size, survival, reproductive success), space and habitat use
- Responses to threats: epidemics, bush fires, poaching
- Adaptation of release protocols and veterinary prophylaxis