TECHNICAL ASSISTANCE FOR
B4LIFE FACILITY FOR CRISIS COUNTRIES
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Guidelines to support EU Delegations in the choice of indicators for monitoring actions inspired by NaturAfrica

Final report

Version 6.1

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1. Introduction

The European Commission's NaturAfrica programme (NAF) is an initiative that aims to protect Africa's biodiversity by promoting conservation practices and the sustainable use of natural resources. The NAF approach is based on the lessons learned from more than twenty years of implementation of numerous regional and national actions funded by the EU, and notably capitalised in 2016 in the strategic orientation document "Beyond Elephants".

It is structured around a territory (or "**key landscape for conservation and development**", KLCD in English) and articulated around **three pillars** or axes of intervention: **conservation**, **green economy,** and **territorial governance**. NaturAfrica's "landscape" component is complemented by a **cross-cutting component** (national or regional) incorporating information, training, and policy aspects.

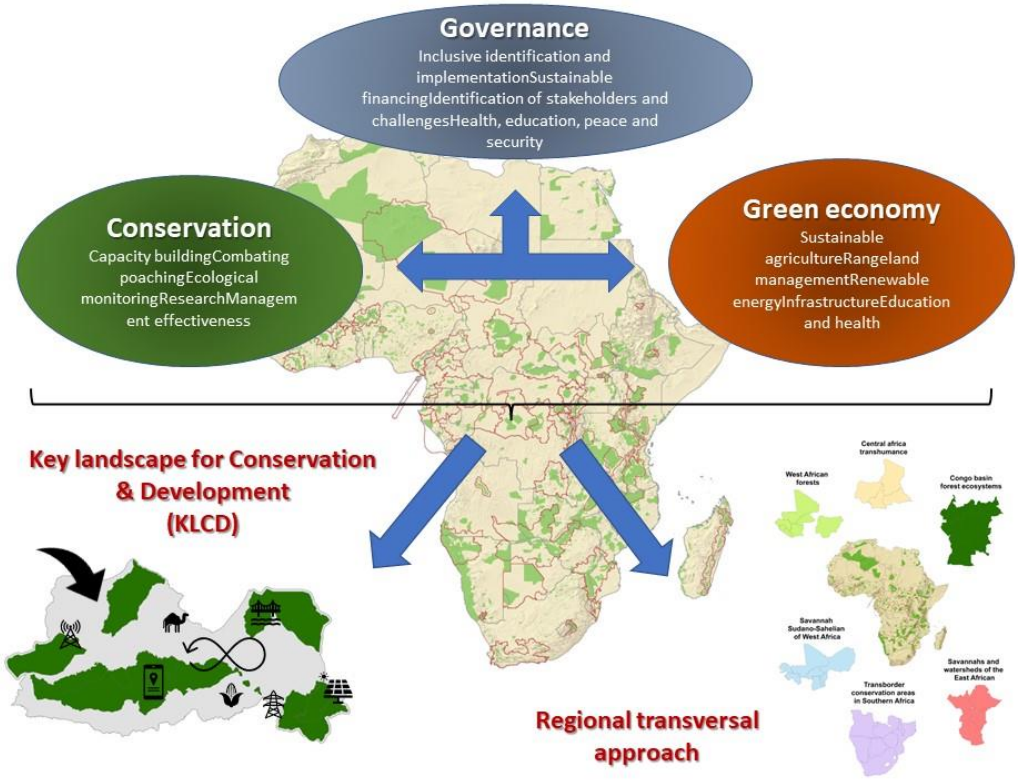


Figure 1 illustration of the NaturAfrica strategic approach.

This NaturAfrica (NAF) approach is implemented through regional funding (NAF regional envelope of EUR 160 million in commitment appropriations for the period 2022-2025, divided into 4 sub-regional programmes), and national initiatives (e.g., DRC, Chad, CAR, Cameroon) targeting one or more pillars of the landscape approach.

Each of these actions is naturally structured around a logical framework, which includes a general objective and, for actions carried out at landscape level, up to 3 specific objectives in principle, broken down into one or more territories, and focused respectively on the issues of conservation, the green economy and/or territorial governance.

The biomes and national contexts in which these actions contributing to the implementation of the NaturAfrica flagship initiative will take place are very varied, as are the profiles of the operators responsible for implementing them. This could result in a great deal of heterogeneity in the choice of

monitoring indicators for these actions, which will be negotiated between these operators and the EU Delegations concerned.

If this were the case, it would be particularly difficult for the EU to compare the many actions contributing to the implementation of the NAF initiative, limiting the possibility of **evaluating** their **strategic relevance**, assessing their tactical modalities, or providing a consolidated view at national, sub-regional or country level. For the EU to be able to effectively monitor, report on and capitalise on the results of this initiative, it is therefore crucial that a certain number of indicators for monitoring actions under the NAF initiative are homogeneous at continental level, or even identical within similar KLCDs (in terms of biomes and politico-socio-economic conditions).

To better negotiate these logical frameworks and indicators with NaturAfrica's prime contractors, the EUDs concerned would benefit from comparative analyses and recommendations on the available indicators, as well as the collection and analysis methods that underpin them.

2. Scope and objective of the study

The aim of this mission is to **formulate the guidelines** to be followed in setting up a monitoring and evaluation system **capable of demonstrating the relevance of the NAF approach** and assessing its efficiency at programme level as well as in the targeted KLCDs.

The information needs of the various EU bodies and their partners are many and varied. To **ensure a flow of information** capable of informing all these stakeholders, several **data providers have** been identified here to feed the NaturAfrica programme's monitoring and evaluation system: field operators, NAF regional technical assistants (TAs), regional observatories (supported by the *Centres of Excellence* initiative*)* and the Joint Research Centre (JRC). Capitalising on the achievements of the NAF approach inevitably depends on the intervention (and therefore the mandate) and close collaboration of these operators (see figure 2 below).

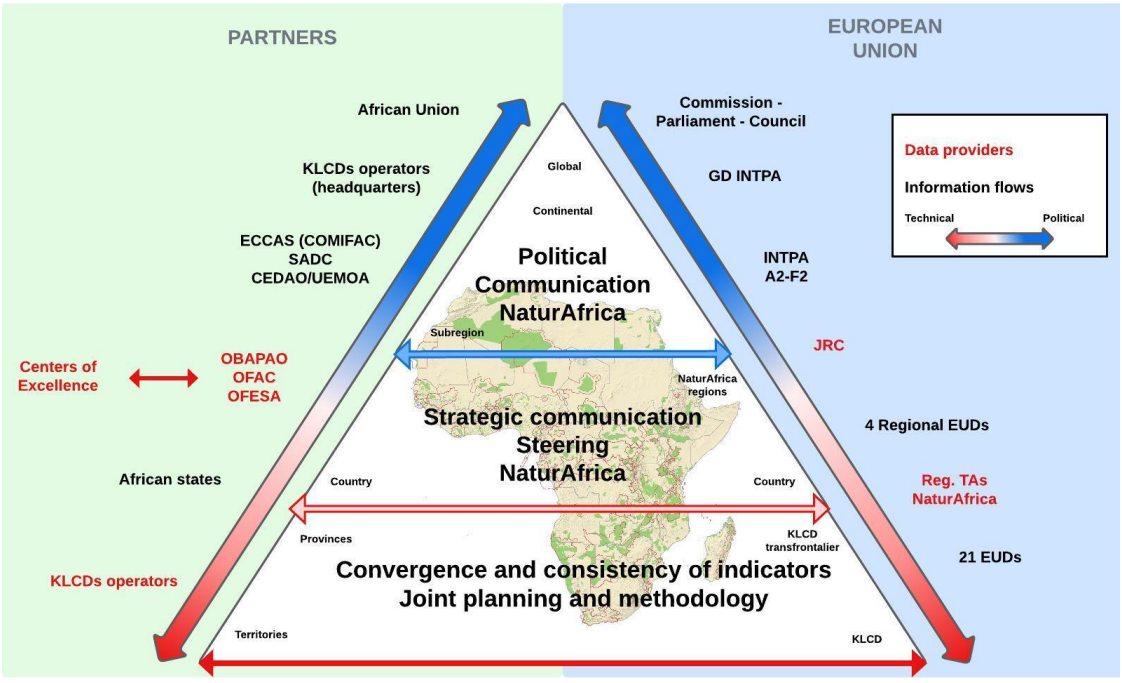


Figure 2 Information flow of the NaturAfrica monitoring-evaluation and capitalisation system.

The core of the system to be put in place lies in the capacity to inform and therefore, upstream, in the capacity to collect the necessary data. This mission therefore aims to carry out a **comparative analysis of the monitoring and evaluation indicators** used by the EU and its main contractors for their biodiversity conservation, green economy, and territorial governance actions, to **identify a common core** capable of meeting the challenges mentioned here above.

The aim of this study is therefore to provide the **arguments and tools necessary for the European Union Delegations (EUDs) in the** countries where the NAF approach is implemented to conduct negotiations with the contractors selected to formulate the intervention logic.

The analysis concentrates on indicators derived essentially from the logical frameworks of projects demonstrating an approach similar or consistent with the vision promoted by the NAF programme. These logical frameworks are organised hierarchically from actions to expected impacts. For the purposes of the study, we can group the links in this chain into 3 levels of analysis, as illustrated in figure 3 below.

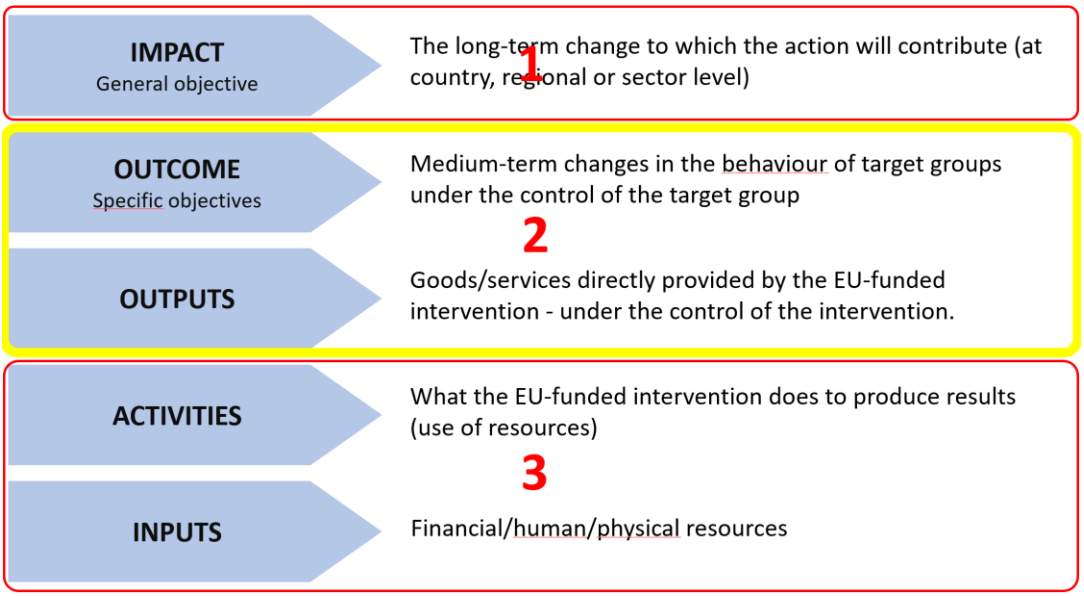


Figure 3 Log frame analysis perimeter.

Given the wide range of geographical and thematic areas covered by the projects under the "NaturAfrica" umbrella, and the need for coherent evaluation at programme level, this support mission is focusing on the selection of **indicators of the expected direct effects (level 2)** of each intervention.

3. Methodology

This analysis (i) draws up an inventory of the indicators most used by the EU and its main partners in the fields of conservation, the green economy and territorial governance, (ii) classifies these indicators according to each NAF intervention pillar, and (iii) studies their usability and relevance, to select a common core that can be used as a basis for designing intervention log frames.

The study also pays particular attention to the lessons learned from the experience of previous similar programmes (ECOFAC, E&AD, PAPBIO, PAPFOR) and from the technical assistance in charge of

monitoring and evaluation deployed in Central Africa. This support mission is divided into several phases, as detailed below.

3.1. Lessons learned from previous technical assistance

An initial phase of consultation with (i) experts who have been involved in implementing the monitoring-evaluation of national and regional EU programmes in support of biodiversity conservation and sustainable development or the green economy, and (ii) section managers in certain Central African EUDs. A particular focus was placed on the monitoring-evaluation of the ECOFAC6 and Environment & Agriculture Durable (EAD) programmes in the DRC, given their "landscape" approach aligned with the NAF vision.

These consultations enabled us to draw up a list of lessons learned that will help us to avoid certain mistakes when designing the intervention logics and monitoring-evaluation methods (see section 4 of this report).

3.2. Comparative analysis of monitoring and evaluation indicators

There are as many indicators and monitoring-evaluation systems as there are international cooperation projects in the fields of conservation, sustainable development and the green economy, or the management and governance of natural resources. Monitoring indicators relating to territorial governance are less common. However, not all of them are able to contribute to the objective here: to demonstrate the relevance of the NAF approach based on monitoring-evaluation data collected from field operators and centres of excellence or regional observatories.

In addition, the lessons learned detailed below indicate the need to lighten the monitoring and evaluation burden on field operators and to supplement field data with a range of spatial observation products. The inventory of indicators is therefore broken down into two distinct parts as follows.

3.2.1. Field indicators

The first part consists of drawing up a non-exhaustive but significant inventory of the monitoring and evaluation indicators available in the documents collected from the European Union delegations and its prime contractors.

This inventory of indicators is organised in such a way as to (i) isolate the relevant indicators to be integrated into level 2 of the NAF programme, (ii) compare the most used indicators and identify any inconsistencies between them, and (iii) group them according to NAF's three strategic axes. It should result in the formulation of a shortlist of indicators, for each axis, to be promoted in the formulation of the logical frameworks.

a. Information collected

To circumscribe the work and focus on the most relevant potential indicators for evaluating the NAF approach, the analysis of indicators focused on:

- The directory of development indicators on the Capacity4Dev portal[1]
- Action Documents (ADs) and logical frameworks supplied by the DUEs and prime contractors contacted.
- Guidelines and recommendation documents collected from international standards.

The data collected in these documents for each indicator are:

- The variable to be measured
- Collection and measurement methodology
- The potential source of data
- Collection frequency
- Geographic scope
- The resources needed to collect the data.

b. Selection criteria

The selection criteria for the indicators to be promoted in the logical frameworks for actions inspired by the NAF approach focus on the evaluation of:

- Relevance for assessing the efficiency and effects of interventions (see Figure 3 - Level 2).
- The possibility of aggregating these indicators at programme level.
- The technical, human, and financial resources required to collect the data.
- The extent to which operators have adopted the range of monitoring and evaluation tools available to them.
- Standardisation of data collection and measurement methodologies.

3.2.2 Sentinel indicators

The second part focuses on a review of the literature on spatial observation products capable of supporting the management of the 'landscape' vision integrating conservation, development, and territorial governance. Here too, a shortlist of products will be used as 'sentinel' or 'warning' indicators.

Sentinel indicators derived from spatial observation products provide valuable, objective information that can be used to steer action at landscape level. A sentinel (and/or warning) indicator:

- Is a type of "substitution" indicator (for the logical framework indicators collected in the field) used not to measure the result of an activity, but rather a major change in a key element in a complex system such as the KLCDs.
- Must be easily collected and communicated.
- Signals the need for further analysis and investigation.
- Support for adaptive and proactive project management.
- Not necessarily linked to a set objective.

a. Information collected

[1] https://europa.eu/capacity4dev/results-and-indicators

The literature review focused on ***around fifty space observation products***. This review is intended to be as comprehensive as possible, but the observation products made available to the public are constantly emerging, so this analysis will have to be repeated during the implementation of the programme.

For each product to be broken down into indicators, the training courses collected are:

- Title
- Description
- Potential supplier
- Spatial resolution
- Potential applications
- Accessibility
- Collection frequency
- Geographic scope
- Type of monitoring

b. Selection criteria

The selection criteria for indicators derived from space observation focus on assessing the **relevance** and **usability of the** indicator (i.e., the level of skills required by those responsible for monitoring and evaluation to process these data to meet the needs identified here) and the **availability of** the data needed to feed the monitoring and evaluation mechanism.

3.3. Interactions with stakeholders

To ensure full ownership by the DUEs and prime contractors of NAF projects, the results of this first phase were the subject of consultations with the DUEs, INTPA's F2 and A2 units, the B4Life-Crisis Facility and the relevant JRC departments.

An initial set of indicators was presented at a regional meeting of Central African DUEs in Douala from 14 to 17 March 2023, and the feedback received from participants has been incorporated into this report.

In addition, information sessions and outreach products will have to be held and provided to the main contractors to benefit from their feedback and prevent any reluctance or inertia when faced with the adoption of indicators imposed on them from outside.

3.4. Validation of selected indicators

The first two stages should result in a proposal for a limited number of indicators (a maximum of five per axis) to be promoted in the logical frameworks of NAF interventions. These indicators will have to be validated by INTPA-F2 and the B4Life Crisis coordinator.

3.5. Popularisation and dissemination

To overcome any inertia (or even resistance) that might persist in the adoption of this common core of indicators, in addition to the webinars (see above), produce several educational tools to present these

indicators (narratives, examples, tables, infographics and/or interactive devices, possibly in 2-3 languages) for the technicians concerned within the EU and its main contractors, and distribute them.

4. Results

4.1. Lessons learned from monitoring and evaluating landscape approaches

The "landscape" approach promoted by NAF represents a challenge in terms of monitoring and evaluation because of (i) the multi-sectoral integration that requires the involvement of a diversity of stakeholders, (ii) the attention paid to the governance of natural resources, (iii) the geographical perimeters, known as "KLCDs", whose boundaries are not official and may change as the issues evolve, and (iv) the large sums invested to bring about lasting change in the targeted landscapes.

A diagnosis of the logical frameworks of the projects implemented under the ECOFAC 6 and Environnement & Agriculture Durable RDC programmes was drawn up to identify the difficulties encountered and formulate a series of recommendations in the following section.

1. **Weaknesses in reporting design:** some logical frameworks do not include all the dimensions of the programme's vision in the choice of indicators. These errors are most often observed in the "governance" and "socio-economic development" components. This results in an inability to assess the efficiency of the programme's strategic approach.

→ ***Solution to be adopted:*** Improve the design of logical frameworks and harmonise monitoring indicators during the contract negotiation phases.

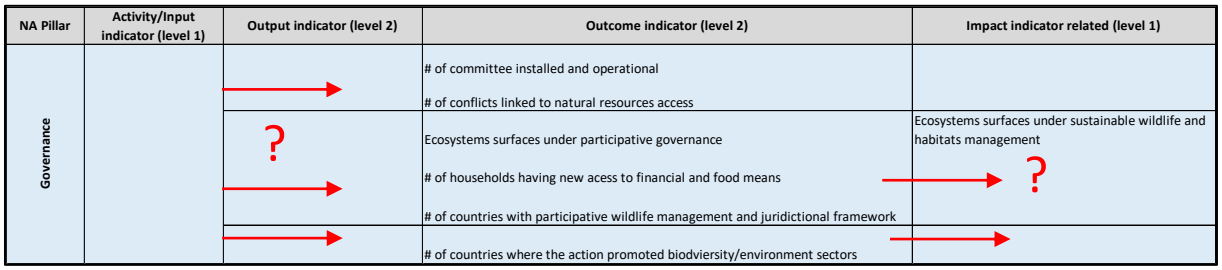


Figure 4 Illustration of gaps in the design of a logical framework.

2. **Delay in the deployment of technical assistance:** the contracting of technical assistance (TA), the unit mandated to monitor and evaluate the programme, can take place with a significant delay (up to 18 months) in relation to the start-up of field projects. However, most of the necessary data comes from the contracted operators. Several surveys and studies have been carried out to provide baseline values for certain indicators. If these have not been budgeted for, planned and organised, with the collaboration of the TAs), the collection of baseline data according to the TA's needs at the outset, the whole monitoring-evaluation system may suffer.

→ ***Solution to be adopted:*** Contract the TA before or at the start of the programme.

3. **(Lack of) legitimacy and subordination:** EU nature conservation programmes in Africa were originally structured in a pyramidal manner where field actors (projects), with few sources of funding, were subordinate to a programme management unit. In more recent horizontal

structures, grants are awarded directly to field actors, who have access to multiple sources of funding if they have a certain mandate, such as management delegations. As a result, the new co-ordination or technical assistance units operate without any real reporting relationship with the actors in the field, which can weaken relations and data feedback from the field, and lead to delays and/or blockages in monitoring and evaluation.

→ *Solution to be adopted:* provide TAs with resources (human, technical and financial) capable of providing a service to protected area managers to create relationships of mutual assistance and facilitate the exchange of *information.*

4. Delays in reporting: Operators are not all contracted at the same time or for the same periods, so there are inevitably delays in reporting indicators. These delays can significantly complicate the evaluation of the effects of the NAF programme during its implementation.

→ *Solution to be adopted:* mandate the TAs to structure and harmonise field actions and data collection for greater convergence towards the NAF approach.

5. Methodological rigour: the multi-sectoral complexity and large number of players involved in programmes such as NAF and its predecessors (ECOFAC6, EAD, PAPBIO, PAPFOR, APEF, etc.) can generate more complex monitoring-evaluation systems, whose methodologies become more difficult for field technicians to implement. If you want to measure indicators, you need the skills and resources to do so.

→ *Solution to be adopted:* Formulate recommendations on the methodologies for collecting field data while leaving the choice flexible, establish analytical aggregation models and couple this information with so-called "sentinel" indicators, not specifically linked to objectives, derived from space observation products.

6. Methodological flexibility: the complexity of the NAF programme's monitoring and evaluation system needs to be offset by flexibility in the choice of indicators. However, this flexibility must not mean abandoning harmonisation and methodological rigour in data collection.

→ *Solution to be adopted:* as above.

7. Overlapping of funding and reports: operators now often have several major donors at their disposal. The annual reports produced by the operators provide information on all the results obtained for a given year, some of which are the subject of financial support from other projects and/or donors. In most cases observed, it is not possible to objectively assess the contribution of specific support to the achievement of results. This can therefore distort the assessment of the efficiency of a project/programme's strategic approach.

→ *Solution to be adopted:* one solution would be to harmonise funding from different donors or from the same donor on the same technical document for planning interventions, such as a common logical framework or a territorial management and governance plan.

8. Scaling: The values produced by some indicators may provide too aggregated information on progress towards targets. The variables chosen should provide sufficiently detailed information to provide insight by site, gender, etc.

→ *Solution to be adopted:* the monitoring system must be structured in such a way as to combine the management indicators (by area, gender, etc.) with summary indicators capable of providing the strategic guidelines associated with the values of the sentinel indicators (e.g. economic development measured by area and gender and summarised by a material well-being indicator must be combined with the value of a sentinel indicator on forest cover or land use, etc., to ensure that the development promoted is not to the detriment of ecosystems).

4.2. Guidelines for monitoring and evaluating the NaturAfrica programme.

The guidelines formulated here should enable the NaturAfrica programme to be monitored and evaluated effectively, to guide implementation and to maximise the programme's impact on the ground. They are based on an analysis of the monitoring and evaluation processes of previous EU programmes like NAF and have also guided the selection of indicators to be promoted in the logical frameworks of projects inspired by the NAF approach. Two major issues weighing on monitoring and evaluation are set out here before detailing the list of other key elements of the guidelines.

4.2.1. Building on what already exists

The implementation of the NAF programme must be able to capitalise on the experience gained in terms of monitoring and evaluation from similar programmes that have preceded it (ECOFAC, PAPBIO, PAPFOR, EAD-CATCO, APEF, etc.), as well as the tools developed by the main project leaders identified. Thus, the indicators and methodologies promoted here are all recognised and tried and tested in the field. In addition, when existing and operational information systems, such as the regional observatories supported by the BIOPAMA programme, can provide certain information, it is necessary to mobilise them rather than multiplying redundant information flows.

In addition, the "Centres of Excellence" initiative in support of regional observatories (OBAPAO in West Africa, OFAC in Central Africa, OFESA in Southern and East Africa) should include in one of its strategic pillars the capitalisation of data produced, lessons learned, and "EU-funded" information systems set up by ECOFAC-EAD-APEF in Central Africa, and by their counterparts (PAPBio, PAPFor, etc.) in West Africa.

4.2.2. Coordination of information flows

Across the board, the lessons learned from the implementation of monitoring and evaluation systems for EU programmes using the NAF approach show us that one of the main challenges is the transmission of information, both from the field to the global level and vice versa. To avoid these difficulties, several safeguards need to be put in place. One of the problems encountered with operators in the field is that they say they do not have the financial resources available or have not budgeted for the monitoring and

evaluation required at programme level. However, it is imperative that all projects using the NAF approach allocate enough for data collection and that this amount is approved by the EU delegations.

It is essential, from the outset of projects, to establish a clear plan for collecting baseline values for each logical framework indicator, and then to apply the contractual obligations in terms of reporting on changes in these components. However, this contractual relationship ("stick") for results-based actions, which requires project managers to report on performance indicators, does not guarantee that monitoring and evaluation will be carried out properly, even when it is properly designed.

The NAF approach, although complex, should not lead to an overload of work on monitoring and evaluation for operators, a position that is already critical for most similar EU projects currently underway. On the contrary, the values for certain 'innovative' indicators such as sentinel indicators should be provided by the observatories and/or regional centres of excellence ('carrots'). In addition, the programme's technical assistance must be able to mobilise the technical expertise needed to collect certain thematic data, and thus support operators in the countryside when they need it.

Mandate data providers

This relationship between field operators and 'observers' (including NAF technical assistants and regional (RO) and global observatories (such as the JRC), all data providers, will not only benefit the monitoring and evaluation of NAF-inspired projects, but is also a major opportunity to support DUEs and protected areas in terms of ***information services*** (access to spatial observation products, monitoring the integrity of protected areas (PAs), pressure assessment, etc.). It is crucial for objectively assessing changes in the key components of intervention landscapes.

It is therefore necessary to commission (and therefore fund) the various data providers identified to supply the information required for monitoring and evaluating the NaturAfrica programme.

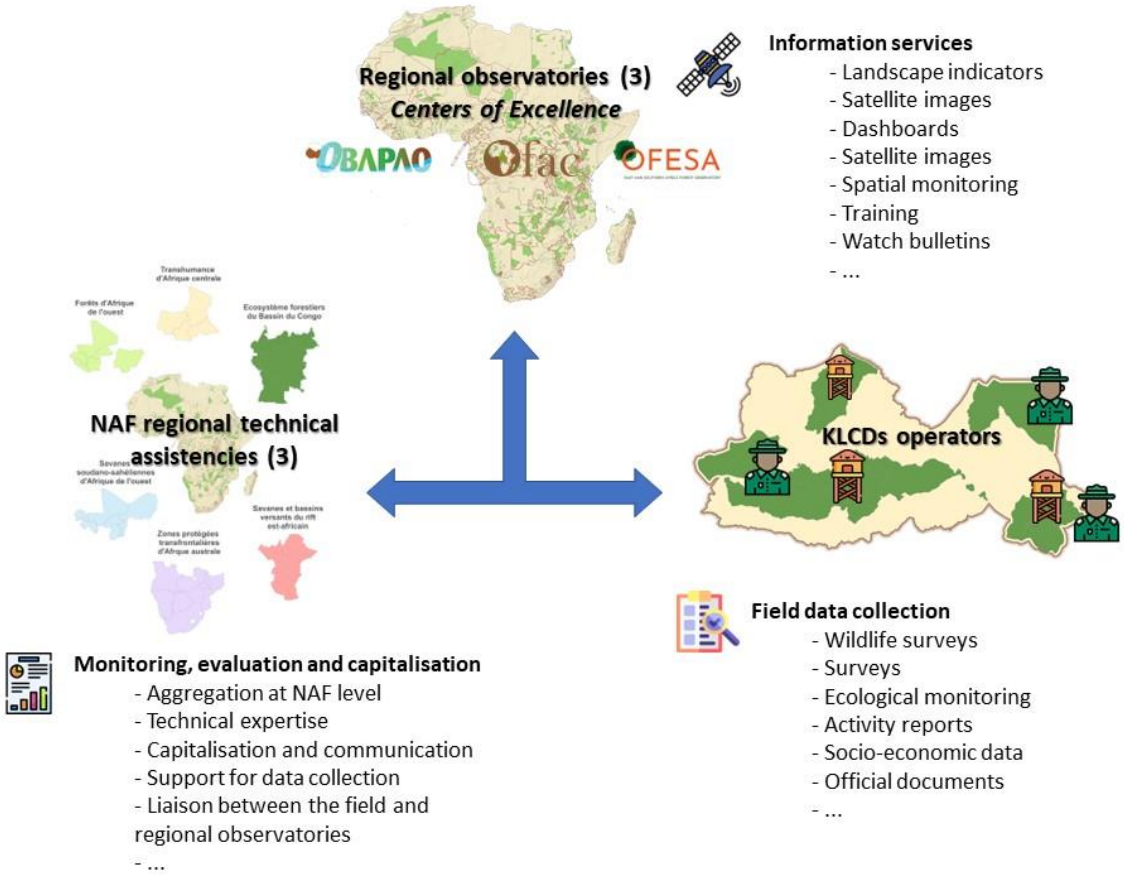


Figure 5 Roles of data providers for monitoring and evaluation of the NAF programme.

Setting up cross-functional coordination

At the time of writing, the information flows between the first two levels of the pyramid illustrated in Figure 2 are clearly identified, along with the actors responsible for them: the EU-funded operators in the KLCDs and the NAF regional technical assistance (see Figure 5 below).

At the third level of the pyramid, intended for high-level strategic and political communication (INTPA and the EU's governing bodies, as well as their partners), in the absence of a data coordination unit ("transversal technical assistance"), several players/platforms will have to play a crucial role in the production and aggregation of data from the regions and from space observation.

Coordination of monitoring and evaluation is therefore necessary between the various stakeholders in the Centres of Excellence (i) at JRC level (cross-cutting and thematic components) and (ii) in the three regions, as well as by including in the contracts the provision of a series of indicators identified here, as part of a wider range of information services for delegations, countries, protected areas, and other stakeholders in NaturAfrica-inspired projects.

At the time of writing this report, the formulation of this coordination of data for monitoring and evaluation remains open, even if one option is favoured (see figure 6 below), that of including a cross-cutting component in one of the three regional "Centres of Excellence" contracts.

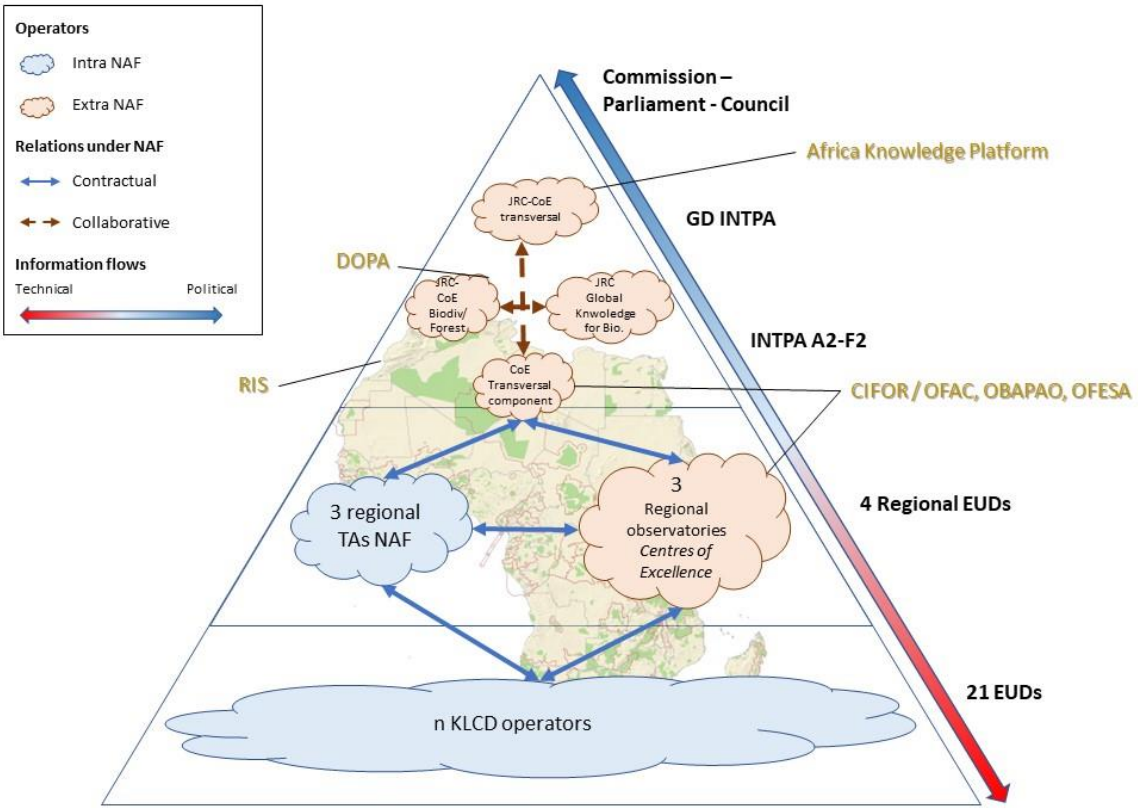


Figure 6 Cross-functional coordination of cross-functional information at NAF programme level.

Establishing "give and take" exchange frameworks

Frameworks for exchanges between these data providers need to be established as soon as possible, so that each stakeholder understands the needs of the others and the whole group is regularly updated on the issues affecting the landscape.

The **regional technical assistants** will naturally be in contact with the operators because of their contractual mission. It is important for them to do so as quickly as possible once they have been deployed, to support operators in establishing the basic values for the indicators and collecting the data needed for the logical frameworks. They will also have to act as transmission belts between the range of information services provided by the observatories and the demand for information and monitoring tools from operators in the landscapes.

Regional technical assistance	
Offer	**Request**
- Focal point for operators - Data centralisation - Catalysing exchanges between HAs and with regional observatories - Regional analyses	- Access to field data - Access to space observation products

Operators have expressed the need for support from TAs and observatories in monitoring components that go beyond their geographical and thematic scope. In return, they must collect the data required for monitoring in accordance with the planning and methodologies defined.

Field operators	
Offer	**Request**
- Field data collection - Access to protected areas	- Mobilising external expertise - Access to information services

The regional observatories, supported by the EU through the "centres of excellence" initiative, must provide a series of information services available to operators, in the appropriate formats, via web portals, but also "on demand" in collaboration with regional technical assistance.

Regional observatories	
Offer	**Request**
- Production of information services - Processing spatial imagery - Institutional liaison with countries and PAs - Regional analyses - Capitalising on results beyond the life of the project	- Access to field data - Feedback from TAs on the needs and experience of HAs

4.2.2. Key elements in implementing monitoring and evaluation

Then, more specifically, the guidelines for monitoring and evaluating the NaturAfrica programme are listed below:

1. Participatory formulation: it is essential that the selection of the indicators used in the logical frameworks, as well as the targets to be achieved for these indicators, be carried out in close collaboration with the prime contractors.
2. Adopt the three NAF strategic axes (Conservation, Green Economy, and Territorial Governance): throughout the chains of results expected from NAF-inspired initiatives, particular attention must be paid to the balance to be struck between conservation and sustainable socio-economic development. In addition, to anchor actions over time and maximise their impact, the issues of territorial governance and natural resources should be systematically considered in the rationale for intervention.

3. Set clear objectives: Define clear and specific objectives for each activity, each stage and for the programme. Objectives should be SMART (Specific, Measurable, Achievable, Realistic, Time-bound) to facilitate evaluation. In the case of long-term objectives, it would be advisable to define the benchmarks expected of short- and medium-term interventions.

4. Supporting technical assistance: The absence of subordination between the NAF programme TA and the field components means that a relationship of trust and multilateral collaboration must be established with the operators from the outset. This dynamic must be supported by the DUEs, the contracting authorities.

5. Baseline data: Collecting baseline values for indicators before the start of the programme (or at its inception) to measure the programme's progress and impact on the ground is an essential preliminary step that is often underestimated (or even neglected), and sometimes requires a heavy investment that must be capitalised on beyond the life of a project. This can include data on the ecological and socio-economic conditions of the target region and require significant technical/logistical/human/financial resources for deployment in the field. A simpler solution would be to define the baseline using statistical models based on analyses of existing data, even if these are insufficient. A surrogate baseline is used when a conventional baseline cannot be established due to a lack of data or resources.

6. Plan regular evaluations: Plan regular evaluations (at least three: a baseline evaluation after a latency phase, a mid-term evaluation, and a final evaluation over the life of a project/programme) to measure the progress and impact of the programme. Evaluations must be planned, include a clear methodology and be conducted impartially.

7. Ensuring data quality: Ensure the quality of the data collected, by using reliable, field-tested, standardised data collection methods and by regularly checking the data collected.

8. Involve stakeholders: Involve stakeholders throughout the design, evaluation, and monitoring process. Close and regular collaboration should be established rapidly with the programme's regional technical assistance. Stakeholders may also include programme beneficiaries, programme partners, experts, and local authorities.

9. Gender mainstreaming: Despite the contractual obligation to disaggregate by sex for all relevant indicators, the INTPA 2020 annual report reveals that 34% of relevant data is not broken down by sex. Particular attention should therefore be paid to the promotion of gender equality and the empowerment of women, and these components should be included in the monitoring and evaluation process.

10. Communicate the results: Regularly communicate the results of the evaluation and monitoring to all the stakeholders concerned, using appropriate channels and existing information systems. The results must be presented in a clear and concise manner to capitalise on the efforts made in the field and generate emulation among the target audiences.

11. Adjust the programme: Use the evaluation results to adjust the programme if necessary. Adjustments must be based on solid data and must be relevant to the programme's objectives. The transition from EDF to NDICI, with funding in multi-annual tranches, should facilitate these adjustments.

12. Multiple and divergent needs: the expectations of donors (EU, member countries) and beneficiaries (NGOs, political and land decision-makers, civil society, etc.) of the monitoring and

evaluation system implemented by the coordination units (or technical assistance) are numerous and sometimes divergent. The explanatory note on the launch of the Global Europe Performance Monitoring System (GEPMS) summarises the conflicts between expectations as follows: (i) communication >< accountability (contractual), (ii) accountability >< management and learning, and (iii) communication & accountability >< management and learning.

13. Information and training system: An initial information and training system is important to ensure that field operators receive the knowledge they need to carry out NAF monitoring and evaluation activities. It can also help operators identify problems or challenges that may arise during the monitoring process and develop strategies to deal with them. By providing adequate training, organisations can ensure that their monitoring systems are implemented consistently, resulting in more accurate and useful data for decision-making.

4.3. Shortlist of priority indicators

4.3.1. Conservation" theme

	Conservation area management	Territorial integrity of HAs	Trends in wildlife populations	Connectivity of protected areas	Integrity of natural habitats
Variable	IMET evaluation score (%)	% of classified territory invaded by illegal human activities	Average inter-annual rate of change in wild animal populations targeted by NAF programme (%/year)	Percentage of territory covered by connected protected areas (%)	Annual rate of loss of natural landscape habitat (%/year)
Type	Field	Sentinel / Field	Field	Sentinel	Sentinel
Methodology	Interactive Management Effectiveness Tool	% of territory classified as free from illegal activity	Camera-trap distance sampling Aerial and/or ground census Aggregation: GAM model	Voir fiche méthodologique / DOPA factsheet	See methodology sheet
Base value	*Exercise to be carried out at start-up* *the action*	*Exercise to be carried out at the start of action*	*Exercise to be carried out at the start of action*	Base value to be defined for each landscape	Base value to be defined for each landscape
ble (mid-term)	*to be defined*	*to be defined*	*to be defined*	*to be defined*	*to be defined*
Target	*70% improvement*	*Stabilisation or reduction (to be defined at startup)*	*Stabilisation or increase (to be defined) on start-up)*	*Stabilisation or increase (to be defined) on start-up)*	*Stabilisation or reduction (to be defined at startup)*
Source	Protected area manager (annual report) National supervisory authority Regional observatories	Protected area manager (annual report)	Manager of the protected iare (inventory report)	Project managers Regional observatories (OFAC, OBAPAO, OFESA, etc.) NAF Centres of Excellence EC Joint Research Centre	Regional observatories (OFAC, OBAPAO, OFESA, etc.) NAF Centres of Excellence EC Joint Research Centre
Frequency	Annual	Annual	Every 4 years	Every two years	Annual
Resources	1 IMET coach + management team 2-7 days of mobilisation 2-10,000 €/year	SMART implementation 1 GIS/remote sensing analyst €1-5k/year	Technicians to be mobilised/trained > 100 k€ /site	1-5 Expert TDs (ORs, JRC, Ats NA) Established methodologies Available platforms	1-5 Expert TDs (ORs, JRC, Ats NA) Established methodologies Available platforms
Permieter PA	X	X	X	X	X
Permieter KLCD (outside PA)				X	X
Logframe NaturAfrica indicator (Level 2)	1.1	1.3	1.1, 1.3	1.3	1.3
Logframe NaturAfrica indicator (Level 3)	2				
Sustainable Development Goals (SDGs)	15				

4.3.2. Green economy" priority

	Investment in the green sector	Food security	Performance of MSMEs - green jobs	Sustainable use of natural resources	Competitiveness and social and ecological responsibility
Variable	Amount invested in green projects (e.g. energy and material efficiency) by MSMEs or other investors as a result of EU-funded interventions (Currency) - **(OPSYS core indicator)**	food consumption score (SCA, in French) (score/percentage)	Number of green jobs (disaggregated by gender) created/supported by EU support (number) **- GERF 2.13(b)**	Area of agricultural, forest and pastoral ecosystems where sustainable management practices have been introduced/assisted with EU support (ha) **- GERF 2.2 / EURF 2.4**	Number of smallholders (disaggregated by gender) supported by the EU who have been able to increase their sustainable production, their access to markets and/or the security of their land (number) **- GERF 2.1**
Type	Field	Field	Outcome	Outcome	Outcome
Methodology	Accounting of activity reports	Field surveys of beneficiaries of NAF interventions	Accounting of activity reports	See methodology sheet	Field surveys of beneficiaries of NAF interventions
Base value	*Basic study to be carried out at start-up the action*	*Basic study to be carried out at the start of action*	*0 women* *0 men*	*to be calculated at the start of the action*	0 women 0 men
Target (mid-term)	*to be defined*	*to be defined*	*to be defined*	*to be defined*	*to be defined*
Target	*to be defined*	*to be defined*	*to be defined*	*to be defined*	*to be defined*
Source	Activity reports	Activity reports	Activity reports	Activity reports Centres of excellence / Regional observatories	Activity reports
Frequency	Annual	biannual	Annual	Annual	Annual
Resources	Operator monitoring and evaluation teams	On-site monitoring and evaluation team 1-5 k €/year	Operator monitoring and evaluation teams	On-site monitoring and evaluation team 1-5 TD experts (ORs, JRC, Ats NA)	On-site monitoring and evaluation team 1-5 k €/year
Perimeter PA	X	X	X	X	X
Perimeter KLCD (outside PA)	X	X	X	X	X
Logframe NaturAfrica indicator (Level 2)	1.2	1.2	1.2	1.3	1.4
Logframe NaturAfrica indicator (Level 3)	1				
Sustainable Development Goals (SDGs)	2, 5, 8, 9, 12, 13, 15				

4.3.3. Governance" theme

	Participatory governance of natural resources	Involving local populations	Peaceful governance of natural resources	Sustainable financing of landscapes	Human well-being (basic needs)
Variable	Score Natural Resources Governance Tool (NRGT) (number)	Conservation Constiuency index (CCI) (number)	Number of conflicts observed in the intervention areas and landscapes (i) linked to access to natural resources and (ii) based on gender	Amounts invested (number) in conservation and SD disaggregated by : - EU- other donors - Member States - private sector	Index of well-being - Basic Necessities Survey (BNS) (score/percentage)
Type	Field	Field	Outcome	Output/outcome	Output/outcome
Methodology	Standardised NRGT or CCI method See methodology sheet	Standardised CCI methods See methodology sheet	Collection of field data to monitor trends at landscape level (inside and outside PAs)	See methodology sheet	SNB survey forms See methodology sheet
Base value	*to be collected at the start of the action*	*to be collected at the start of the action*	*to be collected at the start of the action*	*to be defined*	*to be collected at the start of the action*
Target (mid-term)	*to be defined*	*to be defined*	*to be defined*	*to be defined*	*to be defined*
Target	*to be defined*	*to be defined*	*to be defined*	*to be defined*	*to be defined*
Source	Operator survey reports	Operator survey reports	ACLED, operators (cybertracker, informant networks, other intelligence tools/sources) and other databases	Activity reports from the Regional Observatories for Lenders and GIBE	Operator survey reports
Frequency	biennial (min. 1 survey every 4 years)	biennial (min. 1 survey every 4 years)	Annual or half-yearly	Annual	biennial (min. 1 survey every 4 years)
Resources	On-site monitoring and evaluation team Deployment resources for local decision-makers 5-10k €/year	On-site monitoring and evaluation team Household deployment resources 10aines k €/year	Mobilisation of the NAF TA and operators' monitoring and evaluation teams	Mobilising technical assistance Meetings with landlords and collaboration with observatories 1-5 k €/year	On-site monitoring and evaluation team Household deployment resources 10aines k €/year
Perimeter PA	X	X	X	X	X
Perimeter KLCD (outside PA)	X	X	X	X	X
Logframe NaturAfrica indicator (Level 2)	1.2			1.4	1.2
Logframe NaturAfrica indicator (Level 3)	1				
Sustainable Development Goals (SDGs)	2, 5, 12, 13, 15				

4.4. Role of data suppliers in the indicators selected

To give concrete form to the recommendations made in section 4.1.2, the figure below demonstrates, based on the list of indicators selected here, the need for effective involvement and collaboration between the various data providers, with cross-functional support from the Joint Research Centre.

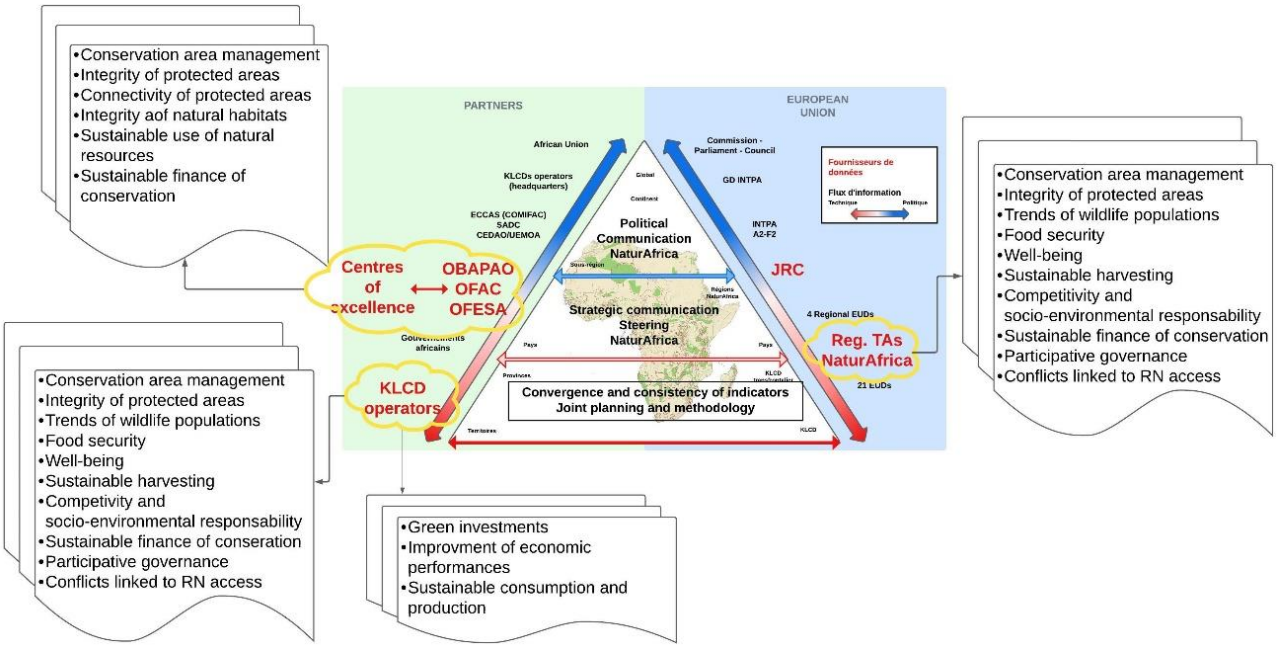


Figure 7 4.4 Role of data providers in providing information on monitoring and evaluation indicators.

4.5. Aggregation of indicators at NAF programme level: "conservation" axis

4.5.1. Management of conserved and/or protected areas

Protected and Conserved Areas (PCAs) are geographically delimited areas of land and/or sea that are recognised, designated, and regulated by competent authorities, whether governmental or community-based, national, or international. These areas are created with the principal aim of preserving biological diversity, maintaining essential ecological processes, protecting threatened species, safeguarding rare or fragile habitats, and conserving cultural and historical values associated with nature.

PCAs can take different forms, such as national parks, nature reserves, marine protected areas, buffer zones, world heritage sites, biological corridors, and community conservation areas, among others. Each type of protected area may have specific regulations governing the use of natural resources, authorised activities, and ecosystem management.

The IMET tool consists of a self-assessment exercise on the effectiveness of a PA's management. It is well established in Central and West Africa, where a network of coaches, RACEGAP, provides support to

PA managers. Numerous resources, such as a methodological guide called "COMIT"[2] , a scientific article[3] and numerous information products have already been published.

The assessment provides an overall score, in the form of a percentage, as well as scores for each component of the protected area management cycle:

- Knowledge and understanding of the management context.
- Planning.
- Human, technical, and financial resources.
- Management process.
- Results.
- Effects/impacts.

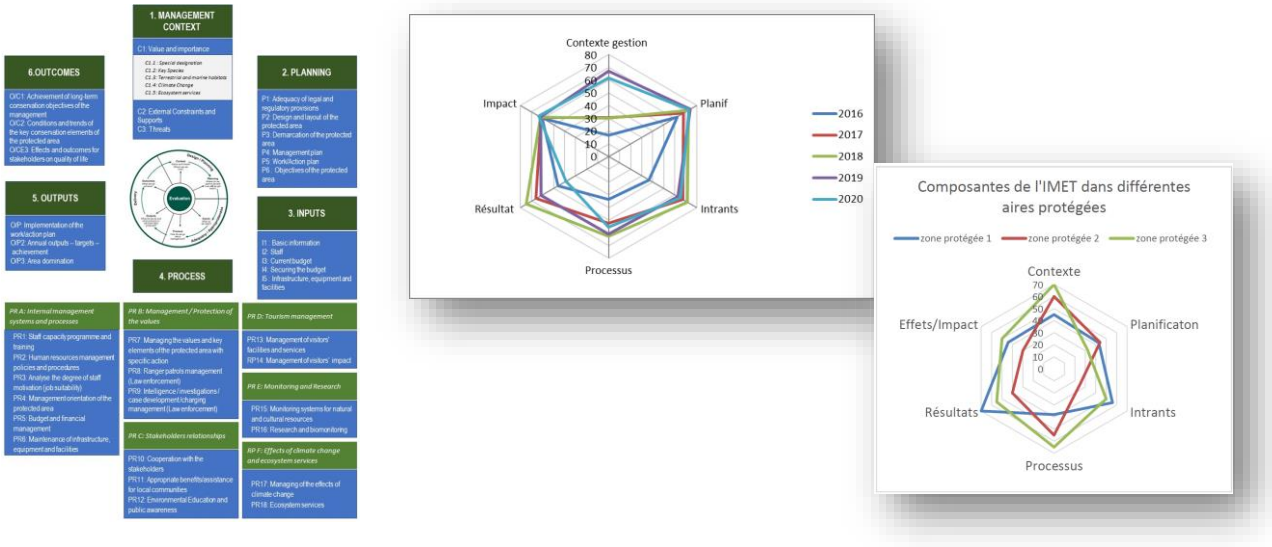
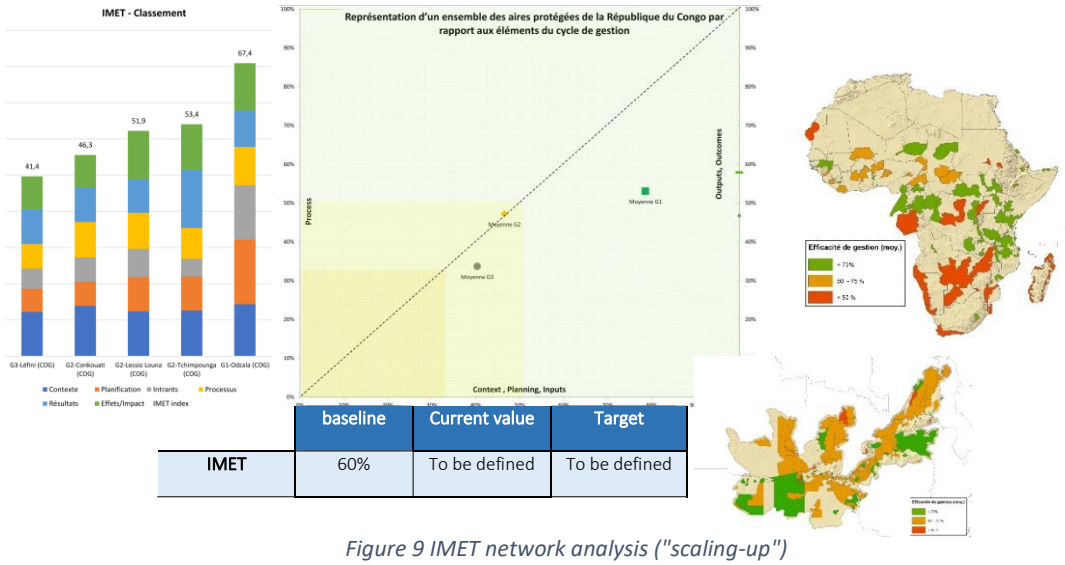


Figure 8 Illustration of the elements of the PA management cycle and IMET visualisation tools.

This score for each protected area can then be aggregated across a landscape, a country, a region, and the NAF programme. A scaling-up tool already exists for this purpose, which provides several visual analyses (see figure below) and has already been the subject of official reports by several Central African countries[4] . A table can therefore be quickly put together to support the steering of the programme and measure its effects on the management of the PAs.

[2] https://www.observatoire-comifac.net/monitoring_system/imet
[3] https://www.sciencedirect.com/science/article/pii/S0301479722022538
[4] Scaling-up analysis of Burundi's protected area network available online: https://storymaps.arcgis.com/stories/4f0a8bea531f4274b49ff1c77550fb5b



	baseline	Current value	Target
IMET	60%	To be defined	To be defined

Figure 9 IMET network analysis ("scaling-up")

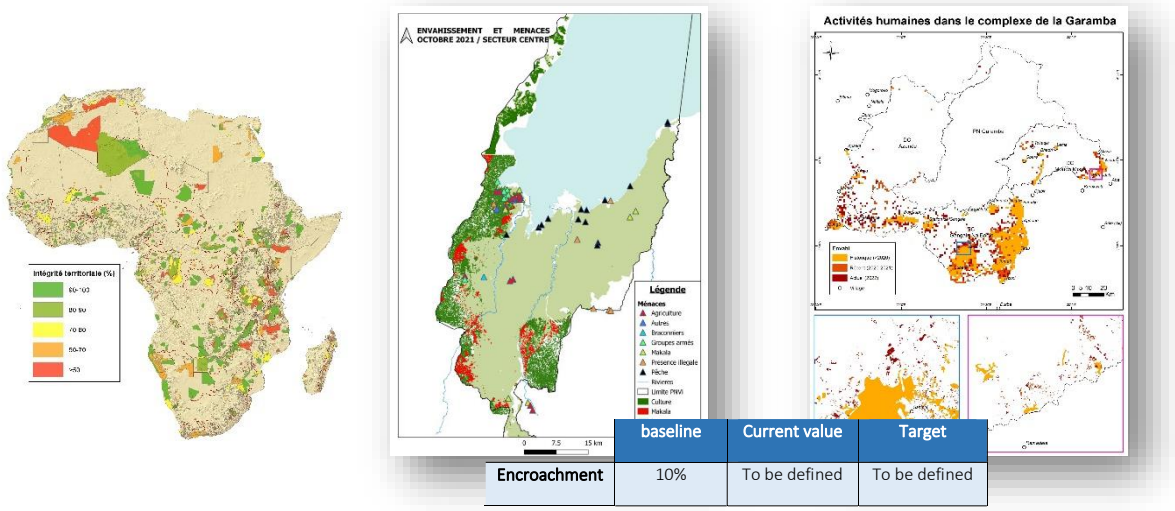
4.5.2 Territorial integrity of protected areas

A significant number of the protected areas targeted by the NaturAfrica programme are under considerable pressure, to the point where some are seeing their territorial integrity violated. It is therefore imperative for managers to be able to monitor all the habitats they cover in real time.

Depending on human, technical, and financial capacities, security conditions and the extent of the territory to be covered, the site manager deploys ground, air, and satellite resources. We can cite the suite of software and analysis tools provided by the SMART platform, which is well established in Africa.

To harmonise this monitoring across the programme, a standardised methodology for assessing invasions is set out here (see methodological guide in appendix), while ensuring that a multitude of potential data sources are integrated.

Like the IMET management effectiveness score, the indicator provides a percentage of invasiveness that can be aggregated at different scales. In addition, this methodology can be based on all the other data collected in the field.



	baseline	Current value	Target
Encroachment	10%	To be defined	To be defined

Figure 10Illustration of information products on the PA territorial integrity indicator.

Completing the indicator with reference values for all the PAs, regardless of their capacities, nevertheless requires close collaboration between the programme's technical assistance and the regional observatories and centres of excellence (point raised in section 4.2.1).

4.5.3. Trends in wildlife populations

As a central component of the NaturAfrica programme, safeguarding wildlife populations threatened by over-exploitation, poaching, habitat loss and other factors is a major challenge for monitoring and evaluation.

The target species are chosen based on their "umbrella" value (species "whose home range is large enough for its protection to ensure the protection of other species belonging to the same community"), the ease of data collection and the potential quality of the data (and metadata).

Numerous collection and sampling methods exist and have been documented. They vary enormously depending on the sites, the periods, the species to be inventoried and the logistical capabilities of protected area managers.

The lack of harmonisation of the different biodiversity monitoring methodologies (aerial, pedestrian, car, ULM; total count or sampling, etc.) and methods of expressing the number of individuals in populations (individual/Km², individual/Km linear, biomass/Km², etc.) and the estimation error (standard deviation, standard error, 95% confidence interval, etc.) complicates diachronic analysis whatever the scale of analysis. However, it is important to ensure that projects implement methodologies that have already been calibrated and adapted to the populations and environments they intend to monitor.

The choice of indicator cannot force the adoption of specific protocols. The harmonisation effort must be made at the level of regional technical assistance, and regarding the specific protocols set up by the projects. Several analytical approaches have already been tried and tested in this respect (see illustration in figure 11 below).

However, it is essential for the regional TAs to have access to the detailed monitoring methodologies and data (and metadata) that will be used to (1) analyse their suitability in relation to the objectives of monitoring the conservation status of the target species and (2) find the best model for diachronically aggregating the data to calculate trends and their intensities.

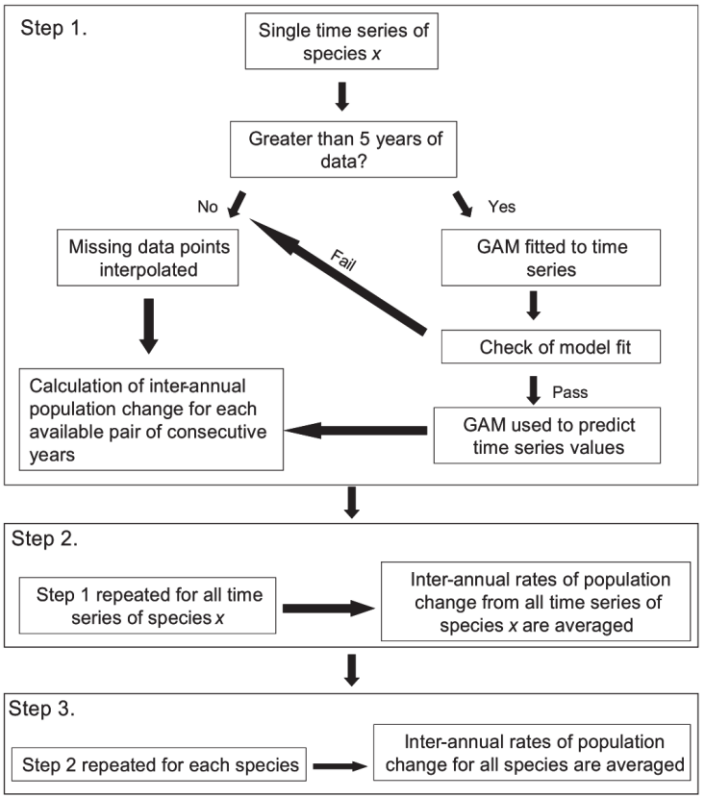


Figure 11 Methodology for aggregating multi-species and multi-method inventory data (Craigie et al., 2010).

Another possible approach, involving collaboration between protected area managers and centres of excellence, is to assess the *occupancy rate of the potential natural habitat*, which involves mapping the distribution of species subject to conservation measures in their natural habitats (see methodology sheet).

4.5.4. Connectivity of protected areas

This indicator measures the efficiency of the network of protected areas in ensuring the protection of target species. It can also be used to measure the efforts made to achieve target 3 of the new Global Biodiversity Framework for the post-2020 period.

The methodology for calculating this indicator, which will have to be implemented by the centres of excellence (in collaboration with the JRC), is published and available on the DOPA portal[5] , is scientifically

[5]https://dopa.jrc.ec.europa.eu/var/www/app/app/static/dopa/files/factsheets/en/DOPA%20Factsheet%20C1%20EN%20Connectivity.pdf

recognised and has been approved by the Biodiversity Indicators Partnership (BIP), mandated by the CBD (see methodology file in the appendix).

At programme level, this indicator provides a percentage of PA connectivity for each landscape, which can also be aggregated at regional level and for the entire area covered by the NAF programme.

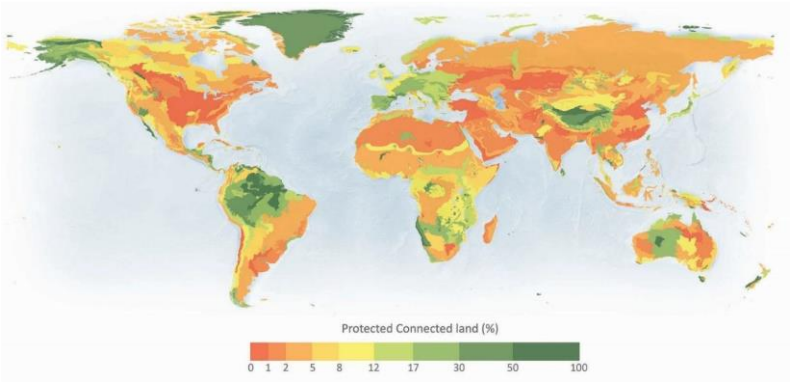
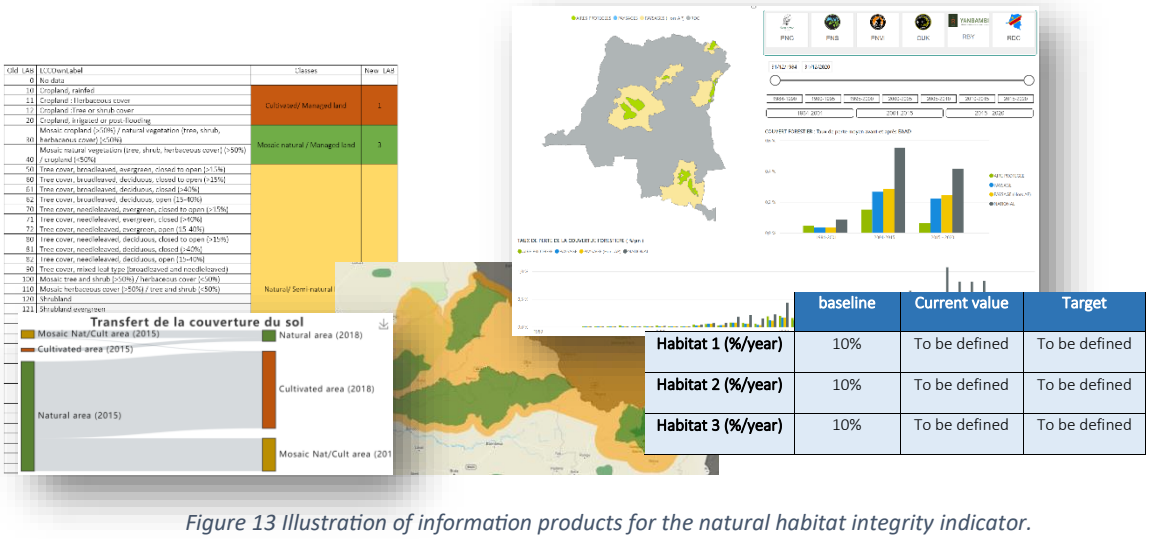


Figure 12 Connectivity of protected areas worldwide.

4.5.5. Integrity of natural habitats

Monitoring habitat integrity assesses the proportion of the various habitats present in KLCDs that have been converted to areas used or cultivated by man. The indicator is highly granular, as it can be broken down by habitat type, and can be applied to classified and unclassified areas of landscapes with different management objectives. Several sources, all derived from spatial observation, are available, but a standardised methodology is available in the attached methodology sheet.



	baseline	Current value	Target
Habitat 1 (%/year)	10%	To be defined	To be defined
Habitat 2 (%/year)	10%	To be defined	To be defined
Habitat 3 (%/year)	10%	To be defined	To be defined

Figure 13 Illustration of information products for the natural habitat integrity indicator.

4.6. Aggregation of indicators at NAF programme level: "green economy" axis

The NAF programme includes the economic component in its three pillars of action and is intended to be a lever for the socio-economic development of local populations in the KLCDs, not just focused on the fight against poverty. Several indicators, taken directly from the list of Global Europe Results Framework (GERF) indicators, are used to assess the impact of the NAF programme.

4.6.1. Competitiveness and social and environmental responsibility

This indicator is measured by the **number of smallholders** supported by the EU who have increased their **sustainable production**, **access to markets and/or security of tenure**: this indicator will be entered directly in the project activity reports. It will therefore be sufficient to aggregate the information at programme level. It is therefore essential that operators include these farmer surveys and other census mechanisms in their baseline studies, right from the start of their action.

4.6.2. Sustainable use of natural resources

This indicator is measured by the **area of** agricultural, forestry and pastoral **ecosystems** where **sustainable management practices** have been introduced/supported with EU support (ha). This indicator is already implemented by several operators and offers a degree of flexibility in terms of potential data sources: activity reports from field operators and spatial observation products. These different data sources will have to be combined at programme level by regional technical assistance, in collaboration with the centres of excellence (see methodology sheet).

STRATEGIC PRIORITY	SDG	LEVEL 2 INDICATORS	LEVEL 1 INDICATORS
Green Deal	2	**GERF 2.1** Number of smallholders reached with EU-supported interventions aimed to increase their sustainable production, access to markets and/or security of land [NDICI-Global Europe][SP]†	**GERF 1.1** SDG 2.3.2 Average income of small-scale food producers, by sex and indigenous status*
Green Deal	2	**GERF 2.2** Areas of agricultural and pastoral ecosystems where sustainable management practices have been introduced with EU support (ha) [SP][EFSD]†	**GERF 1.1** SDG 2.3.2 Average income of small-scale food producers, by sex

	baseline	Current value	Target
Number of smallholders	xxx	To be defined	To be defined
Areas (ha)	xxx	To be defined	To be defined

Figure 14 Competitiveness indicators and social and environmental responsibility.

4.6.3. Food security for local populations (food frequency and diversity)

The food security indicator, measured by the *Food Consumption Score (FCS)*, captures the quality and diversity of food consumed by local populations. The FCS is a standardised method already applied by many operators in the field, as it helps to guide the community development support strategy. Data collection, through surveys of local populations, is technically easy to carry out, but requires significant investment (in time, money, and human resources) and needs to be well planned from the outset.

The scores obtained for each site can be aggregated and averaged for each landscape and for the programme. It is important to note that this information, which is needed to establish baseline values for the indicators, is already available for some of the protected areas supported by the ECOFAC programme6.

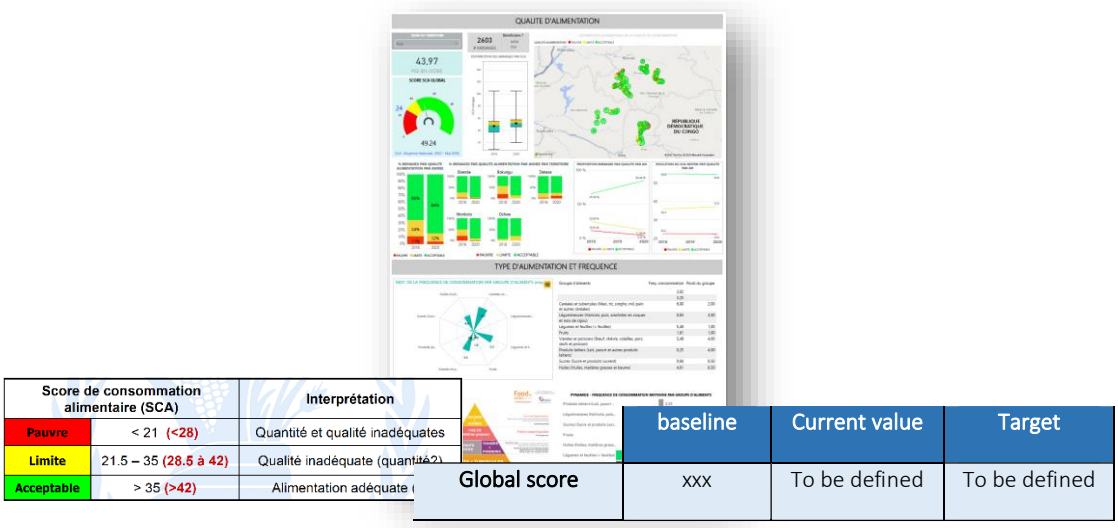


Figure 15 Illustration of food safety indicator (FSI) information products.

4.6.3. Other indicators for the "green economy" pillar

Indicators:

- *Increase in green investment* calculated as the amount, in €, invested in green projects (e.g., energy and material efficiency) by micro, small and medium-sized enterprises (MSMEs) or other investors, because of EU-funded interventions.

- *Improvement in green jobs* calculated as the number of green jobs (disaggregated by gender) created/supported by EU support.

These data are all to be collected in the form of surveys (see methodological sheet) from managers of MSMEs with an economic activity within the KLCDS landscapes, whether they benefit from EU support or not. These surveys, which must be designed and harmonised at programme level, may be combined with the collection of other data, be carried out using different methodologies specific to each landscape, and be repeated at mid-term and at the end of the action.

Green" jobs and investments refer to a type of employment or economic activity that contributes to the protection and preservation of the environment, while promoting sustainable development. The emphasis is on environmental, social, and economic sustainability. Here are a few characteristics to consider:

1. Positive environmental impact
2. Creation or support of jobs and/or sustainable activity (i.e., viable in the long term)
3. Respect for social standards and workers' rights
4. Innovation and use of clean technologies
5. Contributing to the ecological transition

It is important to note that the precise definition of a green job may vary according to national contexts, specific policies, and areas of activity. However, the common objective is to foster a sustainable economy while protecting the environment and improving people's quality of life.

Micro, small and medium-sized enterprises (MSMEs) are businesses that are defined according to specific criteria, such as the number of employees, annual turnover, or value of assets. The exact definitions of MSMEs may vary from country to country and from organisation to organisation, but in the context of NaturAfrica's intervention, we can define a criterion based on the number of employees:

- Micro-enterprises: Micro-enterprises are the smallest economic entities. They are often characterised by a very limited number of employees, or even a single person, and a relatively low annual turnover or asset value. The criteria commonly used to define micro-enterprises may include fewer than 10 employees.
- Small businesses: small businesses are slightly larger than micro-enterprises but are still relatively small structures. The criteria for defining small businesses can vary, but generally include a higher number of employees. For example, a small business may be defined as having fewer than 50 employees.
- Medium-sized businesses: Medium-sized businesses are larger than micro and small businesses, but still moderate in size. The criteria for defining medium-sized companies may include a larger number of employees. For example, a medium-sized company may be defined as having fewer than 250 employees.

It is important to note that the specific criteria for defining MSMEs may vary from country to country and from context to context. Some jurisdictions may also consider other factors such as ownership structure, participation in governance or financial independence in their definitions.

Aggregation at KLCD, regional and programme level is done directly by summing the results obtained at site/project level.

4.7. Calculation of indicators at NAF programme level: "Governance" axis

4.7.1. Participatory governance of natural resources

Two field-tested tools for assessing 'good governance' of natural resources have been selected here. Both involve conducting household surveys using standardised formats that can be adapted to the different contexts in which they are used (following the example of the CSA, CSI, BNS, etc.). There is therefore also an opportunity here to optimise data collection efforts by synchronising planning.

Natural Resources Governance Tool (NRGT) score

The NRGT uses a similar methodology to the CCI. It was designed by the NGO Wildlife Conservation Society and has already been tried and tested in the field. It can be used to assess the strengths and weaknesses of the natural resource governance bodies present around a PA and/or in the KLCDs, and how they have changed over time. The tool includes manuals, models and (rapid) data collection and reporting tools that are publicly available. This tool, which can be used from the outset, can be used to

guide the community development strategy and target interventions at vulnerable groups of decision-makers.

It provides a score (from 0 to 2) for each governance group (and for each governance capacity assessment pillar) that can be easily aggregated statistically at the scale of a protected area, a landscape, or the NAF programme.

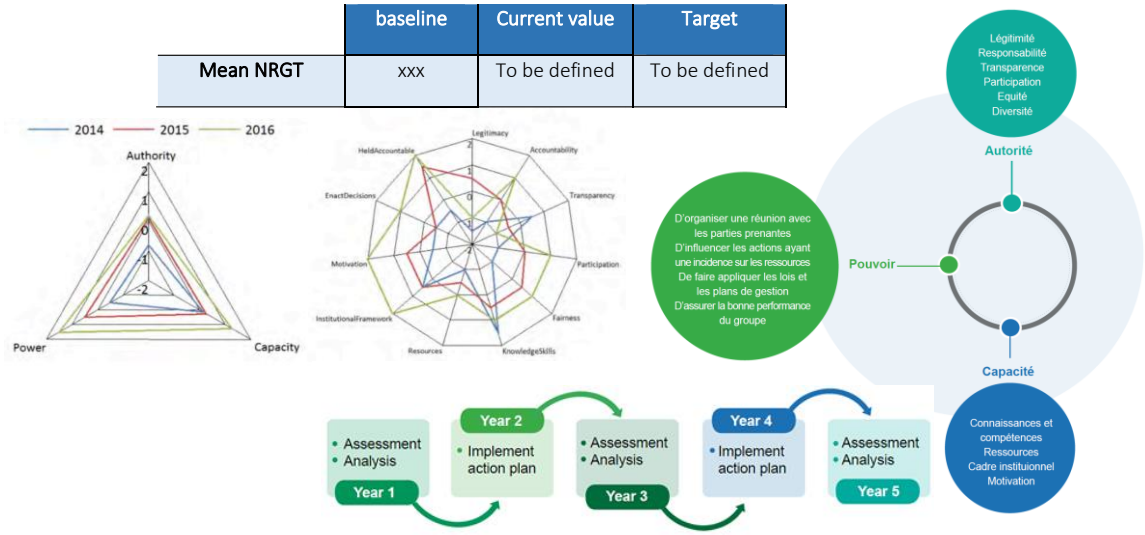


Figure 16 Visualisation tools and collection process for the NRGT indicator.

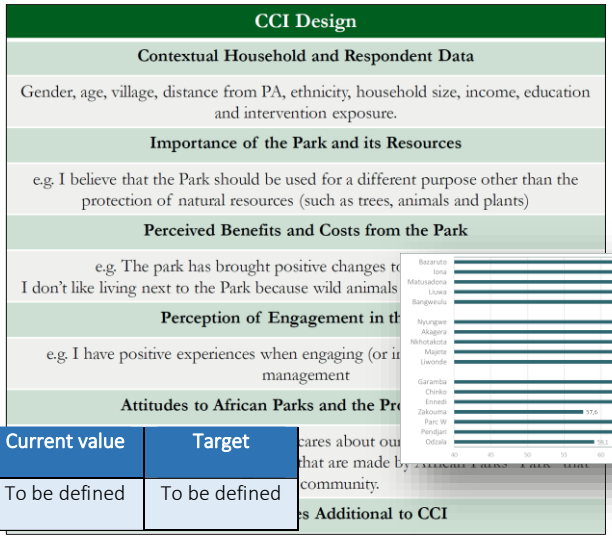
4.7.2. Involvement of local people in conservation

The Conservation Constituency Index (CCI) is an index that measures the support and commitment of people living in KLCDs to environmental conservation. It assesses the willingness of individuals to support and actively participate in conservation actions, such as the protection of species, the preservation of natural habitats and the promotion of sustainable practices.

This index considers various factors, such as people's attitudes towards the environment, their participation in conservation activities, their support for environmental policies and initiatives, and their commitment to concrete actions to preserve nature.

The "conservation constituency index" is used to assess the level of public interest and involvement in environmental issues, which can be useful for policymakers, conservation organisations and researchers in their efforts to raise awareness and mobilise the public in favour of environmental protection, and to lay the foundations for peaceful and participatory governance of natural resources.

The CCI provides an index from 0 to 100, which is calculated based on a field survey of representative groups of people living near a protected area and is easily consolidated at landscape and NAF programme level.



	baseline	Current value	Target
CCI index	xxx	To be defined	To be defined

Figure 17 CCI indicator on the involvement of local communities in PA management.

Collecting data for the conservation constituency index may involve a combination of qualitative and quantitative techniques. Here are some of the methods that could be used:

6. Questionnaire surveys: Questionnaires can be distributed to a representative sample of the population to obtain data on conservation-related attitudes, knowledge, and behaviour. Questions can cover environmental awareness, specific conservation concerns, previous involvement in conservation actions, etc.

7. Individual or group interviews: Structured interviews or focus groups can be organised to gather more detailed information about people's attitudes, motivations, and experiences of conservation. This allows a more in-depth understanding of the factors that influence engagement.

8. Document analysis: Researchers can examine documents such as government reports, environmental policies, awareness campaigns, social media, etc., to assess the level of public attention, support, and commitment to conservation.

Once the data has been collected, the calculation of the "conservation constituency index" indicator may vary depending on the specific methodology adopted. It may involve weighting the responses according to the importance attributed to different aspects of conservation, a rating scale, or other statistical or analytical methods for aggregating the data and establishing an overall index.

It is important to note that the precise methodology used for the conservation constituency index may differ from one study to another and will depend on the research objectives, the population studied and the resources available for data collection and analysis.

4.7.3. Well-being of local populations

The Basic Necessities Survey (BNS) well-being index is implemented through surveys, in a similar way to the SCA and CSI indicators. The BNS approach is not based on the assumption that people are doing well

if they earn more than 1 or 2 dollars a day, or that they are living in poverty if they earn less. Rather, it is based on the qualitative and quantitative ('qual-quant') assumption that people themselves are best placed to decide what constitutes well-being. The approach is based on the United Nations definition of poverty as the lack of basic necessities.

This approach has already been tried and tested in the field, and a methodological guide and other resources (form templates, form validators[6] , Wikipedia page, etc.)[7] are publicly available.

Standardised, tried, and tested, and easy to adapt to different geographical scales, this methodology provides a percentage well-being indicator (see figure below). It can be combined with other development indicators to optimise field surveys.

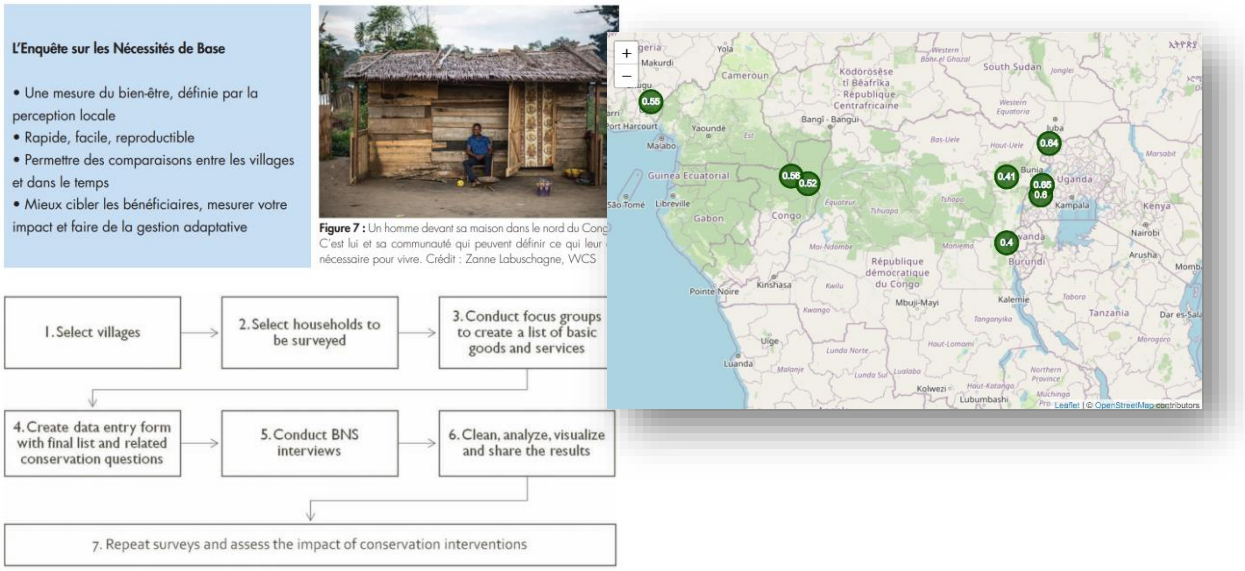


Figure 18 Illustration of the SNB collection process.

4.7.4. Sustainable financing of protected areas

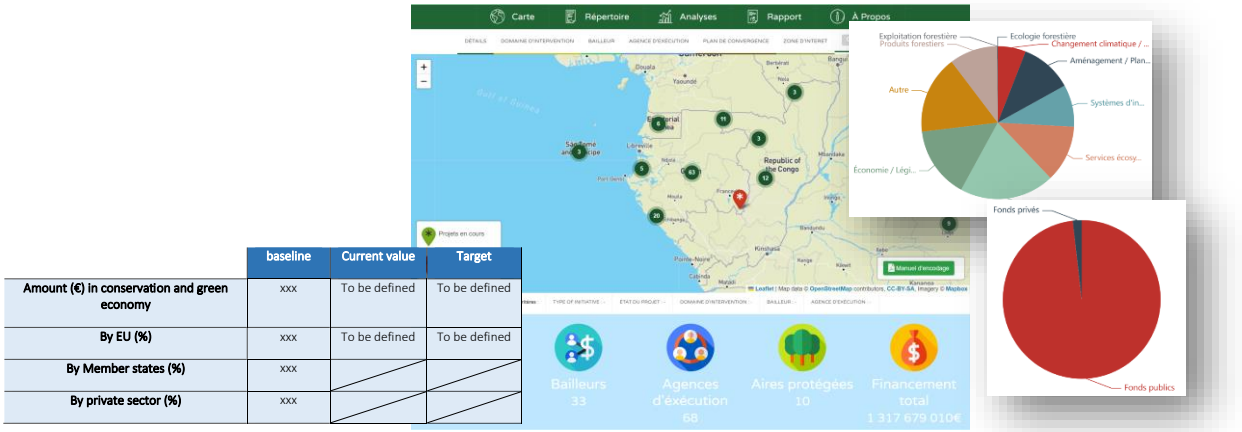
A major strategic component of NAF is to intervene at landscape level, with a critical mass of resources capable of driving long-term change in the issues at stake in each landscape. To achieve this, significant amounts are being invested within the programme to drive a long-term trajectory, and particular attention is being paid to innovative financing mechanisms for conservation, such as payments for ecosystem services and, including the voluntary market in carbon and biodiversity credits.

The EU's strong commitment to these landscapes should enable managers to access these sources of funding and encourage private sector players to invest in them. The indicator therefore consists of evaluating the amounts invested by the private sector in support of conservation in protected areas, whether supported by the EU or not, in KLCDs.

Evaluating the amounts invested in conservation by ODA and the private sector in KLCD landscapes can be tedious and requires a proactive approach to data collection on the part of the regional TAs, in

[6] https://en.wikipedia.org/wiki/Basic_Necessities_Survey
[7] https://programs.wcs.org/socialscience/fr-ca/Ressources

collaboration with the observatories and the JRC. A platform for recording nature conservation initiatives, eConservation, has been developed by the JRC, and another, which covers broader themes and includes a series of pre-formatted analysis tools, exists in Central Africa, within the OFAC web portal.



	baseline	Current value	Target
Amount (€) in conservation and green economy	xxx	To be defined	To be defined
By EU (%)	xxx	To be defined	To be defined
By Member states (%)	xxx		
By private sector (%)	xxx		

Figure 19 Indicators for monitoring the financing of KLCD landscapes.

4.7.5. Peaceful governance of natural resources

Some landscapes are in remote areas where weak central states that have little influence, where decentralised territorial entities have difficulty in dealing with the many conflicts observed. Yet these conflicts over access to natural resources are one of the major threats to biodiversity and protected areas in Africa.

Actions inspired by the NAF approach, through operators who often have a territorial management mandate, must provide support for the establishment of peaceful participatory governance of natural resources in these sensitive landscapes, and the protection of vulnerable groups.

Assessing the intensity of the conflicts observed in the intervention areas and in the landscapes is necessary to evaluate the effectiveness of the actions to implement the long-term multi-sectoral territorial approach sought by the NaturAfrica programme. In addition to the figures, the focus will be on the historical and contemporary trends observed to gain a better understanding of the dynamics underway and to guide the strategies for supporting dialogue and community development (see methodological sheet).

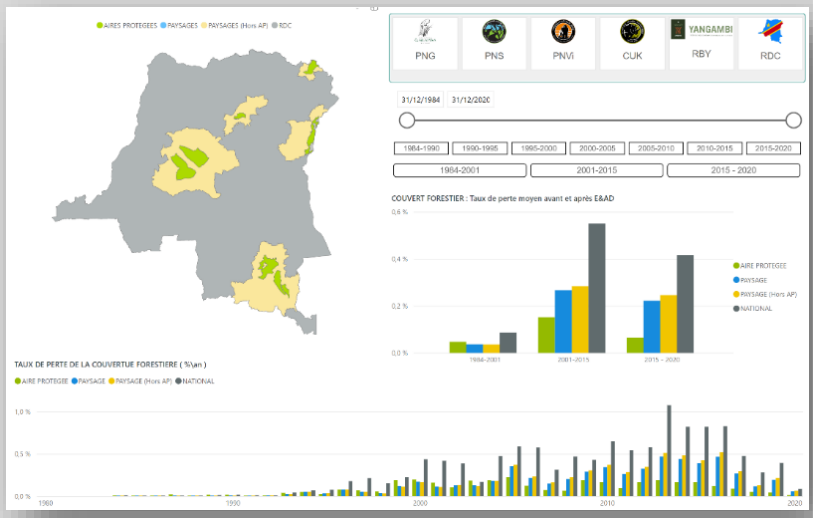
4.8. Additional sentinel indicators

As mentioned earlier in this report, many space observation products are available to the public on numerous web platforms. In addition to those included in the list of priority indicators, the analysis carried out here identifies an additional list of sentinel indicators, not specifically linked to field objectives, which could be made available to NAF stakeholders. These indicators have already proved their usefulness in the field with the technical assistance (CATCO) mobilised for the Sustainable Environment & Agriculture programme in the DRC under the 11ème EDF.

CATCO's experience with sentinel indicators

The CATCO has been experimenting with an advanced planning-monitoring-evaluation system that has suffered from a lack of data from the field, for various reasons that are included in the observation made here. It has therefore fed its information system with indicators derived from spatial observation of (i) forest cover, (ii) surface water, (iii) carbon, (iv) land degradation and (v) fires. It has been able to set up a coupled system of sentinel indicators with alerts and has developed tailor-made products for the various landscapes, as well as useful dashboards for steering the programme (see screenshot below).

This has made it possible to provide new information to the operators who, as a result, have strengthened (i) their capacity for spatial monitoring, (ii) their collaboration with technical assistance, (iii) their "landscape" strategy in their intervention, and (iv) their technical and operational capacities for monitoring-evaluation and management in general.



The role of centres of excellence

These sentinel and alert indicators could be supplied to the programme's stakeholders, particularly operators in the field, by the regional observatories and/or "centres of excellence" concerned by NAF. It is therefore essential that these indicators are designed in close collaboration between these 3 groups of players (operators, observatories, centres of excellence) and the European Commission's Joint Research Centre (JRC), which not only already supports these regional initiatives and institutions, but above all already provides many sentinel and alert indicators, through various platforms such as:

- eStation
- Africa Knowledge Platform
- Digital Observatory on Protected Areas (DOPA)
- BIOPAMA - Reference Information System (RIS)

The diagram below illustrates the production and transmission chains for information derived from space observation. It highlights certain key elements:

- The need to apply the information produced by the various JRC tools to the perimeters of the KLCDs.
- Training in the use of these tools.
- Popularising the tools and information generated to support the steering of the NAF programme and the governance and management of KLCD landscapes.

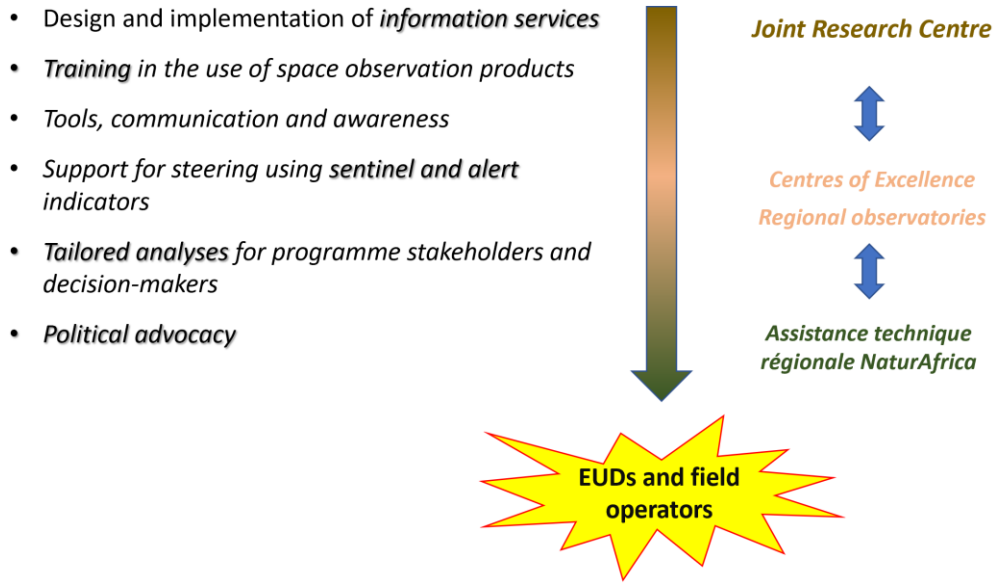


Figure 20 Information flows between the NAF TA, the centres of excellence and the JRC.

A list of sentinel indicators and all the metadata providing information on methodologies, suppliers, technical characteristics and level of usability and presumed usefulness are available in appendix 3. By way of example, a shortlist of potential indicators is presented here:

- Land use and changes
- Forest / Deforestation / Degradation
- Surface water and efficient use of rainwater
- Changes in carbon stocks
- Land productivity
- Lights
- Population density
- Agricultural frontages

5. Diffusion and use of the guidelines

This report sets out a series of observations and recommendations, as well as a limited set of indicators to be integrated into the intervention logic of projects inspired by the NaturAfrica approach. It is therefore essential that it be made available to all EU delegations in Africa prior to contract negotiations with the operators responsible for implementing these projects. In addition, particular attention must be paid to disseminating the report within the various sections potentially concerned by contracts inspired by the NaturAfrica approach, and not just the 'agriculture' and 'environment' sections.

In addition, the feedback meetings with the lead EUDs raised several questions about how to use the indicators selected in this study. The set of fifteen indicators presented here is intended to serve as a pool from which projects can select according to their strategic area(s) of intervention. There is no question here of imposing the integration of the 15 indicators in all the logical frameworks, but rather of ensuring that when an indicator is applicable to an intervention, it is applied rather than an alternative proposed by the operator.

Some EUDs have also expressed the need to seek technical assistance in analysing and revising the draft log frames produced by contract operators.

To respond to these concerns and ensure that the report is used efficiently by the EUDs in Africa as a tool to guide the management of NAF interventions, several subsequent actions can be implemented:

1. Organisation of popularisation webinars
2. Development of practical case studies
3. Implementation of calculation methodologies for establishing the basic values of certain indicators (sentinels in particular).
4. Translation of the report into brief practical guides.

6. Appendices

Appendix 1: Terms of reference for the assignment

Appendix 2: Summary table of logical framework indicators

Annex 3: Summary table of space observation products

Appendix 4: Methodology sheets for selected indicators