Conservation area management

Name	**Management effectiveness of conservation areas**
Unit of measurement	*Integrated Management Effectiveness Tool (IMET)* score - *percentage*
Type of indicator	Results/Effects
Area of interest	The tool has been implemented in more than 350 protected areas in Africa and South America. Scaling-up analyses have been published at national (DRC, Burundi, Gabon) and regional (Central Africa) levels. Aggregations on a landscape scale and for NaturAfrica regions are possible.
Overall objectives	ODD Aichi Post-2020   Target 1 Target 3 Target 4 Target 11
CAD code	41030
Political issues	Protected and conserved areas play an essential role in preserving biodiversity, protecting ecosystem services, combating climate change, preserving cultures and traditional knowledge, and promoting sustainable and balanced development. How well managed are protected and conserved area (PCA) systems within landscapes to make a significant contribution to building a resilient landscape? Well-managed PCAs provide a range of ecological, social and economic benefits that can help maintain ecosystem health and promote human well-being. This is a key question for measuring progress in the NaturAfrica programme and in achieving targets 3 and 11 of the Convention on Biological Diversity's (CBD) post-2020 Global Biodiversity Framework.
Use and interpretation	The IMET indicator can be used to analyse and evaluate : - Management methods for protected and conserved areas - Weak points in the management cycle of a protected area (PA) that need to be improved - The validity of a development and management plan and the adjustments that need to be made - Weak points to be improved and potential synergies to be developed in a network of protected and conserved areas (within a KLCD landscape).
Data source and availability	The IMET analysis helps to (1) improve and facilitate the updating of national biodiversity strategies and action plans and (2) estimate progress towards achieving targets 3 and 11 of the Global Biodiversity Framework. IMET data is collected by PCA managers and national supervisory institutions, with

contributions from other stakeholders involved in natural resource management and governance. These data collections are supported in Africa by a network of coaches and regional observatories, which ensure that the information is disseminated at regional level.

Data quality

Quality control is partly ensured by (i) the IMET tool through the multiplicity of questions for each subject of analysis, (ii) inclusive participation in the analysis, (iii) the internal system of evaluation statistics and cross-referencing of scores and (iv) the support of IMET coaches (one coach per APC and a second for the decision-makers) to ensure the objectivity and consistency of the analysis.

Base value

Exercise to be carried out before or at the start of the action. The IMET value is expressed in a numerical range between 0-100.
Initial values and trends in management effectiveness are already available for many protected areas in Central and West Africa, as well as for a number in East and Southern Africa, and can be used to calculate baseline values.

Example: Mbam et Djerem (2022) = 56.08
Mpem et Djim (2021) = 50.21
➔ *CAF 16 landscape average (2022) = 53.15*

Target

To be defined for each landscape as the average value of the AP IMET Indexes and the AMCE IMET Indexes.

The NaturAfrica action document forecasts a 70% improvement in IMET scores during the implementation period.

Update frequency

Annual or biennial

Methodology

The IMET analysis should be repeated every 2-3 years depending on the IMET Index score.

The methodology for assessing the effectiveness of PCA management is described in detail in the three "teaching kits" available on the Observatoire des Forêts d'Afrique Centrale website and the BIOPAMA website.

The key stages in organising an IMET assessment are :

1. Planning the exercise with HA managers
2. Collecting the information and other data needed to complete the form
3. Pre-filling by the coaches and the PA management structure
4. Logistical organisation and mobilisation of resources

Aggregation

All the IMETs collected can be aggregated in the network analysis tool known as "scaling-up", which enables several IMET assessments to be analysed semi-automatically in a structured way based on computerised statistical methods. In addition to aggregating IMET score averages for reporting purposes, scaling-up advances the management effectiveness of a set of protected areas on the basis of IMET indicator values. It makes it possible to compare protected areas and answer a number of questions, such as: what is the overall level of conservation of protected areas in a landscape? What are the most critical threats? What would be the best strategic interventions for conservation? Ultimately, it can produce a roadmap for further progress, which could include suggestions for

- Improvements needed in management policies ;
- Identifying operational priorities ;
- Management capacity-building activities ;
- Threat mitigation strategies ;
- Reinforcing and exploiting the strengths of the PAs;
- Management improvement strategies for the protected areas of a country, a particular network or a single protected area.

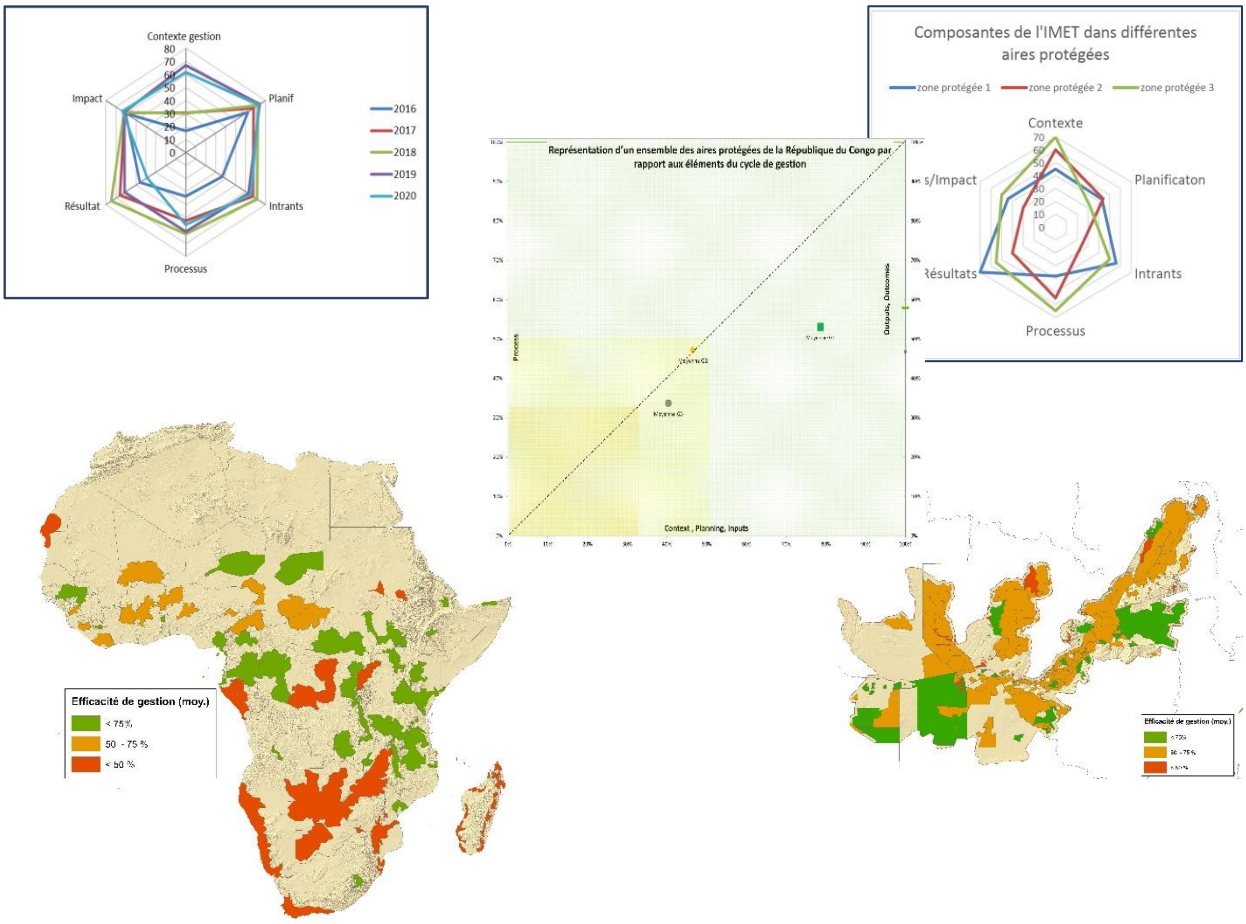


Figure 1: *Illustration of IMET analysis visualisations for a protected area (top left), a KLCD or network of PAs (right) and a continent (bottom left).*

Resources required

1 IMET coach

2-7 days of mobilisation of the protected area management team

2-10,000 €/year

Assumptions / Risks

The managers and institutions in charge of protected areas that have tried out the tool have very often adopted it from the management team of the protected area concerned. However, this has required major efforts on the part of the regional observatories and the BIOPAMA programme to demonstrate the relevance of the tool and popularise its implementation. These efforts must therefore be maintained, through the Centres of Excellence and the mobilisation of the

RACEGAP network of coaches, to ensure widespread dissemination in the KLCDs.

Integrity of protected areas

Name	**Territorial integrity of protected areas**
Unit of measurement	annual % of classified land invaded by human activities
Type of indicator	Results/Effects
Area of interest	All the PAs supported by the NaturAfrica programme are implementing measures to prevent and combat illegal invasions of their territory. Having a standardised mechanism, backed up by spatial observation, is of obvious benefit to the PAs, but also to the consolidation of networks within the KLCDs.
Overall objectives	ODD Aichi Post-2020   Target 1 Target 3 Target 4 Target 11
CAD code	41030
Political issues	To what extent are protected area systems intact and able to cope with the threats they face? These answers reflect not only the effectiveness of the fight against poaching, but also the commitment of the managers to the local populations and the sharing of the ecological, social and economic benefits provided by the PA. This is an essential question for measuring progress in the NaturAfrica programme and in achieving targets 3 and 11 of the Convention on Biological Diversity's (CBD) post-2020 global biodiversity framework.
Use and interpretation	This indicator can be used to : - Identifying and assessing threats to a protected area; - Anti-poaching and community development strategies ; - Identify the weak points in a protected area network (within a KLCD) ; - Assess the impact of different protected area management methods on the protection of these habitats;
Data source and availability	Numerous data collected in the field and from spatial observation can be combined to provide this indicator. However, the standardised methodology proposed here provides a common base of information on the level of threat to each PA. These basic services will have to be provided by the regional observatories, supported by the Joint Research Centre, and may be supplemented by field managers.
Data quality	The quality of the invasion data generated depends on the quality of the satellite images and auxiliary input data. Quality control must be ensured by the PA managers, in collaboration with the other players involved in monitoring and evaluation (TAs, regional observatories and the JRC).
Base value	Exercise to be carried out before or at the start of the action. The basic values for each targeted PA should be averaged over each landscape. The value is expressed

in %/year on the basis of an evaluation grid. Initial values are already available for some protected areas supported by the 11ème EDF in the DRC.

Target

To be defined for each landscape on the basis of the annual rates of each PA supported by the EU within the KLCDs landscapes.

Update frequency

Annual or half-yearly

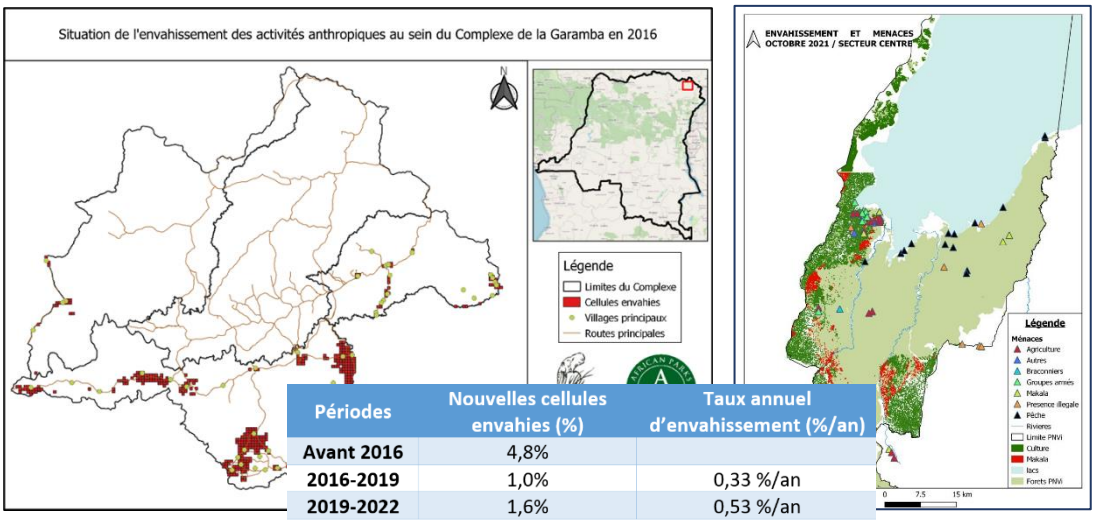
Methodology

The analysis of invasions will have to be repeated every year, and at least every year for the least equipped protected areas.

The standardised invasion assessment methodology proposed here provides a common basis for analysis for all PAs. It can be supplemented or replaced by other, more advanced methodologies using field data, depending on the operators' capabilities. An analysis protocol is appended to the report and the methodological sheets produced.

The key stages of the assessment are :

1. Satellite image acquisition and processing
2. Analysis of changes in land use
3. Assessing invasiveness using an analysis grid
4. Production of maps and statistics



Périodes	Nouvelles cellules envahies (%)	Taux annuel d'envahissement (%/an)
Avant 2016	4,8%	
2016-2019	1,0%	0,33 %/an
2019-2022	1,6%	0,53 %/an

Figure 1: *Illustration of information products on the indicator for monitoring the territorial integrity of PAs*

Aggregation

Average annual rates for protected areas supported by the EU can be averaged across KLCDs and the NAF programme. Comparative analyses can also include other protected areas to highlight the effects of EU support, management practices or other key factors.

Resources required

SMART implementation (already in place in most HAs)

1 GIS/remote sensing analyst (+ support for centres of excellence)

1-5k€/year

Assumptions / Risks

This standardised methodology depends on the satellite imagery available. Although satellite imagery is becoming increasingly available at finer and finer

resolutions. The cloud cover that is sometimes present over certain PAs may require the use of auxiliary field data (or radar images). Collaboration between all data providers is therefore necessary to achieve a complete assessment of the PAs supported by the EU.

Trends in wildlife populations

Name	**Population trends for key species (percentage)**
Unit of measurement	Average inter-annual rate of change in wild animal populations targeted by the NAF programme (%/year)
Type of indicator	Direct effects
Area of interest	All the protected areas (PAs) supported by the NaturAfrica programme are implementing conservation measures for a series of key species, representative of the natural habitats they occupy. It is essential to have an indication of the trends in these populations at landscape and programme level to ensure that conservation strategies are able to preserve the integrity and importance of the sites' biodiversity.
Overall objectives	ODD Aichi Post-2020   Target 1 Target 3 Target 4 Target 11
CAD code	41030
Political issues	To what extent are protected area networks and conservation measures (particularly anti-poaching measures) capable of safeguarding and restoring populations of emblematic and/or endemic wild animal species in Africa? Do efforts to support sustainable socio-economic development and the green sector, as well as good governance of natural resources on the periphery of protected areas, reduce the pressure on these populations? These questions bear direct witness to the effectiveness of the landscape approach promoted by NaturAfrica. It is also an essential question for measuring the progress made in the NaturAfrica programme and in achieving objective 1 of the Convention on Biological Diversity's (CBD) global biodiversity framework for the post-2020 period.
Use and interpretation	This indicator can be used to : - Identify and guide priority wildlife conservation measures - Assessing the threats to a protected area ; - Consolidate anti-poaching and community development strategies ; - Identify the weaknesses of a protected area network with regard to the protection of key and endemic species (within a KLCD);
Data source and availability	Wildlife inventories provide crucial data for protected area managers and have been carried out in most of the PAs targeted by NAF initiatives, in some cases for several decades.
Data quality	Data quality can vary according to the collection and sampling methods used, as well as the conditions (weather, safety, etc.) observed during the inventory. The completeness of inventory metadata plays a crucial role. Quality control must be ensured by the PA managers, in collaboration with the regional technical assistants.

Base value	Exercise to be carried out before or at the start of the action. This exercise can be carried out by means of inventories and/or extrapolation of available data if a recent detailed inventory has been carried out.
Target	To be defined for each landscape as the average value of the annual rates of each PA supported by the EU within the KLCDs landscapes.
Update frequency	Every 4 years
Methodology	The target species are chosen on the basis of their "umbrella" value (a 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 are documented at[1] . They vary enormously depending on the site, the period, the species to be surveyed 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.
Aggregation	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 with regard to the specific protocols put in place by the projects. Several analytical approaches have already been tried and tested[2] (see illustration in figure 1 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 in order 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 in order to calculate trends and their intensities.

[1] Ecological census techniques: a handbook, second edition, https://www.researchgate.net/profile/William-Sutherland-3/publication/273070581_Ecological_Census_Techniques_A_Handbook/links/5f493bd4299bf13c504b9e03/Ecological-Census-Techniques-A-Handbook.pdf

[2] Scholte P, Pays O, Adam S, Chardonnet B, Fritz H, Mamang JB, Prins HHT, Renaud PC, Tadjo P, Moritz M. Conservation overstretch and long-term decline of wildlife and tourism in the Central African savannas. Conserv Biol. 2022 Apr;36(2):e13860. doi: 10.1111/cobi.13860. Epub 2021 Dec 28. PMID: 34766386.
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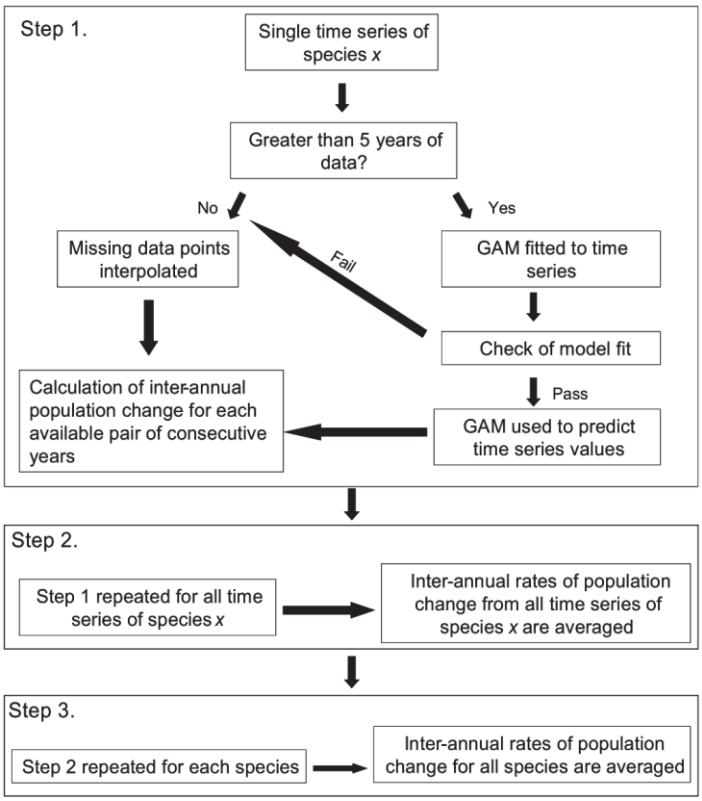

Figure 1: Methodology for aggregating multi-species and multi-method inventory data

Resources required

Technicians to be mobilised/trained
> 100 k€ /site

Assumptions / Risks

The limitation of methods for monitoring the conservation status of species is the assessment of the sampling error made during inventories. This error can sometimes be greater than the estimated population size, which can seriously affect the analytical aggregation models.

Collaboration between regional technical assistants and protected area managers must be close in order to ensure consistency in the methodological choices made for inventories and to ensure that field data (and metadata) are fed back.

For some species, population stabilisation and/or increase trends may be very slow. The models may not show any statistically significant positive change, even if the projects in the field show improvements in the conservation status of the species.

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Connectivity of protected areas[1]

Name	**Connectivity of protected areas (ProtConn)**
Unit of measurement	Percentage of territory covered by connected protected areas (%)
Type of indicator	Direct effects
Area of interest	The indicator is calculated and available in DOPA at country and terrestrial ecoregion level. Aggregations at landscape and programme level must also be calculated.
Overall objectives	ODD Aichi Post-2020   Target 1 Target 3 Target 4 Target 11
CAD code	41030
Political issues	What is the degree of connectivity of terrestrial protected area systems at country and ecoregion level? This is a key question for measuring progress in connectivity under the NaturAfrica programme and in achieving target 1 of the Convention on Biological Diversity's (CBD) post-2020 Global Biodiversity Framework.
Use and interpretation	The indicator can be used to assess : - How successful is the spatial arrangement of Protected and Conserved Areas (PCAs) and Other Effective Conservation Measures (OECMs) in ensuring the connectivity of protected land? - The distance separating countries or terrestrial ecoregions from the connectivity element of Aichi Target 11 (17%) and the target of 30% well-connected PCAs by 2030 of the new Global Biodiversity Framework (Figure 1). - The contribution of different categories of land (protected, unprotected, cross-border) to PA connectivity (Figure 2). - The places in the world where additional efforts are most needed to extend or strengthen the connectivity of PA systems. - Whether newly designated PAs provide effective connectivity gains in the PA system by acting as corridors or stepping stones between other PAs.
Data source and availability	DOPA provides indicator values at terrestrial ecoregion and country level. Area-weighted averages at regional level are also provided. Specific downloadable interactive maps with ProtConn values at ecoregion and country level for different years are available on the DOPA website

[1] This methodology sheet is directly adapted from the sheet available on the DOPA website: https://dopa.jrc.ec.europa.eu/dopa/documentation/en

(http://dopa.jrc.ec.europa.eu/en/mapsanddatasets).

Data quality The quality of the indicator provided depends on the data sets available as inputs, in particular satellite images and space observation products. The calculation of the indicator at global level can be refined by

Base value Exercise to be carried out before or at the start of the action. This exercise can be carried out by using the products available on the DOPA portal or by commissioning the centres of excellence to carry out the methodology established for the KLCDs.

Target To be defined for each landscape according to the expected results (support for the creation of a PA, sustainable management of connectivity areas between PAs, etc.).

Update frequency Biennial

Methodology The indicator takes into account the spatial layout, size and coverage of protected areas (PAs), and considers both the terrestrial area that can be reached within PAs and that which can be reached through connections between different PAs. The analysis includes all protected areas designated in the WDPA (polygons and buffer points) with a surface area of not less than 1 km2, with the exception of UNESCO biosphere reserves, and is carried out for a range of median dispersal distances (1 to 100 km) observed for most terrestrial vertebrates. The indicator is calculated using network analysis, with probability of connectivity and equivalent connected area as the underlying measures. For more details, see Saura et al (2017, 2018, 2019).

The method described above uses the following input data sets:

Protected areas: WDPA (UNEP-WCMC & IUCN, 2021)

Terrestrial ecoregions of the world: TEOW (2001). Terrestrial ecoregions of the world (Olson et al., 2001).

Country borders: Global Administrative Unit Layers (GAUL), 2015 revision (2017-02-02).

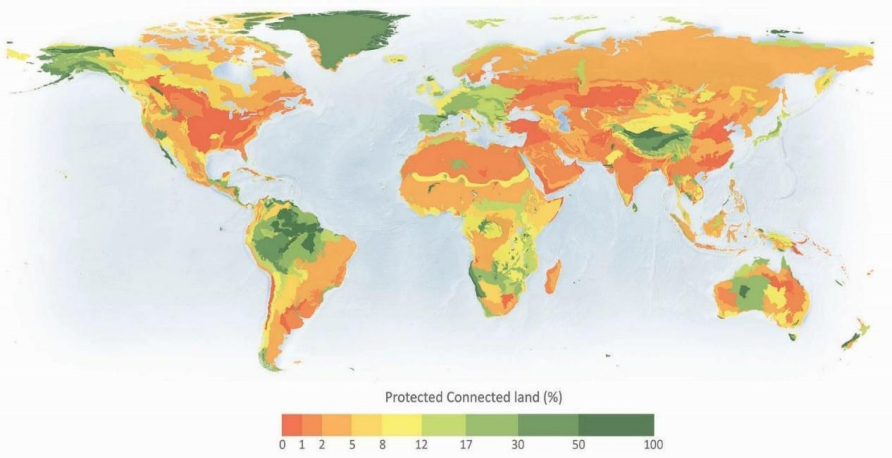

Figure 1: *Global assessment example: Protected connected land (% of ecoregion area) for the world's terrestrial ecoregions in June 2016 for a reference median dispersal distance of 10 km (Saura et al. 2017).*

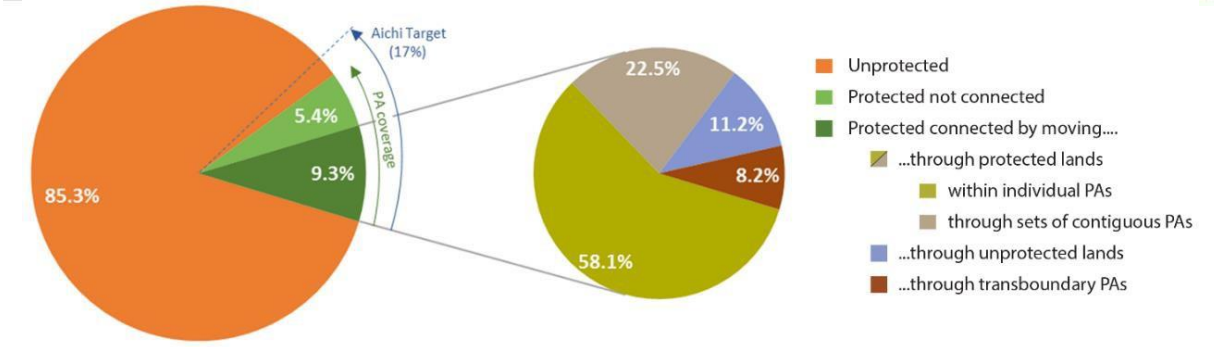

Figure 2: *Example comparing ProtConn to protected area coverage and showing the contribution of different land categories to ProtConn: Global average of the ProtConn indicator (dark green slice in the left pie chart) and its fractions (right pie chart) for the world's terrestrial ecoregions and a median species dispersal distance of 10 km in June 2016 (Saura et al. 2017). The global coverage of protected areas (sum of connected and unconnected protected land: 14.7%) and the 17% of the Aichi 11 target for the year 2020 are also shown in the left-hand pie chart.*

Aggregation

The average annual connectivity rates for protected areas in Africa, and more specifically within the KLCDs and regions identified by the NAF programme, can be presented in matrix form (as illustrated in Figure 1) or averaged over the areas of interest.

Resources required

1-5 Remote sensing experts (via centres of excellence in particular)
Established methodologies (see DOPA)
Available platforms

Assumptions / Risks

The current version of the connectivity indicator :

- Assumes that PAs are effectively conserved and managed to ensure sufficient levels of connectivity that allow the successful movement of species across protected land.
- Does not take into account the heterogeneity of the landscape matrix between PAs, due to the high variability of species responses; instead, it aims for a more general assessment for the range of median dispersal distances observed for most terrestrial vertebrates (1 to 100 km). The reference dispersal distance of 10 km is that used for the ProtConn indicator values in the DOPA.

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Integrity of natural habitats

Name	**Integrity of KLCD natural habitats**
Unit of measurement	Inter-annual rate of change in natural landscape habitats (%/year)
Type of indicator	Direct effect
Area of interest	The indicator is calculated for all KLCD landscapes, distinguishing between protected and unprotected areas.
Overall objectives	ODD Aichi Post-2020 
CAD code	41030
Political issues	What is the potential impact of the use and expansion of agricultural land in a landscape on the habitats, species and ecological processes found there? By identifying areas of low pressure, it is possible to highlight places that are likely to conserve ecosystems better. On the other hand, by identifying areas with a relatively high percentage of cultivated land, it is possible to suggest where it is a priority to implement measures that improve the compatibility of agricultural production with biodiversity conservation. These measures may include promoting less intensive farming practices or conserving remnants of natural vegetation within and between crops, which can help to provide habitat resources and facilitate the movement of species across otherwise impermeable landscapes.
Use and interpretation	The indicator can be used to : - Measuring the conversion of natural habitats into cultivated and exploited areas, the main source of deforestation and habitat loss on a global scale - Identify the fronts of agricultural pressure in order to set up programmes to promote more sustainable farming practices. - Measuring the conversion of natural habitats into areas for human use - Identify potential areas for the establishment of new protected areas and Other Effective Conservation Measures (OECMs)
Data source and availability	The Observatoire des Forêts d'Afrique Centre (OFAC) also provides this indicator at the regional, national, KLC landscape and protected area levels in Central Africa. DOPA Explorer provides values for similar indicators (agricultural pressure) for protected areas and a 10km buffer zone around them.
Data quality	The quality of the indicator provided depends on the land cover maps available as

input. On a global scale, the annual ESA CCI Land Cover dataset, available from 1992 to 2021 at 300m resolution, is used by the FOCA and DOPA.

Base value

Exercise to be carried out before or at the start of the action by the Centres of Excellence. This exercise can be carried out using the products available on the DOPA portal.

Target

To be defined for each landscape according to the expected results (support for the creation of a PA, sustainable management of connectivity areas between PAs, etc.).

Update frequency

Annual

Methodology

The indicator is calculated as the net result of the degradation and regeneration of natural vegetation, which are calculated as follows:

- *Degradation*: natural and semi-natural areas that have been converted to cultivated/managed land between two successive years.
- *Regeneration*: cultivated/managed areas that have been recovered by nature between two successive years.

The net result of these areas is then divided by the area of vegetation at time t to obtain an inter-annual rate of net loss of natural habitat in the landscape (%/year).

Classe	Nom LCCS	Classes	New_LAB
0	No data		
10	Cropland, rainfed	Cultivated/ Managed land	1
11	Cropland : Herbaceous cover		
12	Cropland :Tree or shrub cover		
20	Cropland, irrigated or post-flooding		
30	Mosaic cropland (>50%) / natural vegetation (tree, shrub, herbaceous cover) (<50%)	Mosaic natural / Managed land	3
40	Mosaic natural vegetation (tree, shrub, herbaceous cover) (>50%) / cropland (<50%)		
50	Tree cover, broadleaved, evergreen, closed to open (>15%)	Natural/ Semi-natural land	2
60	Tree cover, broadleaved, deciduous, closed to open (>15%)		
61	Tree cover, broadleaved, deciduous, closed (>40%)		
62	Tree cover, broadleaved, deciduous, open (15-40%)		
70	Tree cover, needleleaved, evergreen, closed to open (>15%)		
71	Tree cover, needleleaved, evergreen, closed (>40%)		
72	Tree cover, needleleaved, evergreen, open (15-40%)		
80	Tree cover, needleleaved, deciduous, closed to open (>15%)		
81	Tree cover, needleleaved, deciduous, closed (>40%)		
82	Tree cover, needleleaved, deciduous, open (15-40%)		
90	Tree cover, mixed leaf type (broadleaved and needleleaved)		
100	Mosaic tree and shrub (>50%) / herbaceous cover (<50%)		
110	Mosaic herbaceous cover (>50%) / tree and shrub (<50%)		
120	Shrubland		
121	Shrubland evergreen		
122	Shrubland deciduous		
130	Grassland		
140	Lichens and mosses		
150	Sparse vegetation (tree, shrub, herbaceous cover) (<15%)		
151	Sparse tree (<15%)		
152	Sparse shrub (<15%)		
153	Sparse herbaceous cover (<15%)		
160	Tree cover, flooded, fresh or brakish water		
170	Tree cover, flooded, saline water		
180	Shrub or herbaceous cover, flooded, fresh/saline/brakish water		
190	Urban areas	Cultivated/ Managed land	1
200	Bare areas	Natural/ Semi-natural land	2
201	Consolidated bare areas		
202	Unconsolidated bare areas		
210	Water bodies	Water/ Snow and ice	4
220	Permanent snow and ice		

Figure 1: transition from natural to cultivated and/or managed vegetation classes

Aggregation	Inter-annual rates will be calculated directly for landscapes, protected areas and unprotected areas of landscapes. Average annual rates for each region can be calculated by averaging the rates obtained for the KLCD landscapes that make them up, or directly calculated for all the regions.
Resources required	1-5 Remote sensing experts (via centres of excellence in particular) Methodologies already established (see FOCA) Available platforms
Assumptions / Risks	However, there is clear evidence that high agricultural land use pressure is generally correlated with clear negative impacts on many habitats, species and ecosystem processes. However, not all agricultural activities are detrimental, or equally detrimental, to biodiversity conservation. The indicator assumes that the land use maps will be updated annually as announced. A certain delay in making data available to the public may nevertheless occur with certain products.
References	Balmford, A., Green, R., & B. Phalan (2012). What conservationists need to know about farming. *Proc Biol Sci*. 279(1739): 2714-2724. http://dx.doi.org/10.1098/rspb.2012.0515 Bastin, L., *et al.* (2017). Processing conservation indicators with Open Source tools: Lessons learned from the Digital Observatory for Protected Areas. In: *Free and Open Source Software for Geospatial (FOSS4G)* Conference Proceedings: Vol 17, Article 14. August 14-19, 2017, Boston, MA, USA. http://scholarworks.umass.edu/foss4g/vol17/iss1/14 Cai, M. & D. Pettenella (2013). Protecting biodiversity outside protected areas: can agricultural landscapes contribute to bird conservation on Natura 2000 in Italy? *Journal of Environmental Engineering and Landscape Management*, 21(1): 1-11. https://doi.org/10.3846/16486897.2012.663089 Green, R.E., *et al* (2005). Farming and the fate of wild nature. *Science*, 307(5709): 550-555. http://dx.doi.org/10.1126/science.1106049 Buchhorn, M.; Smets, B.;Bertels, L.; De Roo, B.;Lesiv, M.; Tsendbazar, N.E., Linlin, L., Tarko, A.(2020): Copernicus Global Land Service: Land Cover 100m: Version 3Globe 2015-2019: Product User Manual; Zenodo, Geneve, Switzerland, September 2020; http://dx.doi.org/10.5281/zenodo.3938963

Sustainable use of natural resources

Name	**Increasing sustainable production and productivity in agriculture, livestock farming and fisheries**
Unit of measurement	Area of agricultural, forest and pastoral ecosystems where sustainable management practices have been introduced/supported with EU support (ha)
Type of indicator	Direct effect
Area of interest	The indicator is calculated for all KLCD landscapes.
Overall objectives	ODD Aichi Post-2020 
CAD code	41030
Political issues	The NAF programme aims to exploit the potential of protected areas as a lever for the sustainable socio-economic development of the landscapes in which they are located. The ever-increasing pressure of slash-and-burn agriculture on natural habitats is one of the greatest threats to protected areas and one of the major obstacles to the development of local economies. Measuring the progress made in implementing sustainable agricultural and pastoral practices is essential to guide EU support and implement the long-term strategic vision set out in the NaturAfrica programme.
Use and interpretation	The indicator can be used to : - Measuring the proportion of the agricultural sector that has adopted sustainable practices on its farms; - Identify the fronts of agricultural pressure in order to set up programmes to promote more sustainable farming practices. - Promoting sustainable agriculture to local authorities;
Data source and availability	The data will have to come from several sources, combining field data with spatial observation. In the field, the operators, with the support of the technical assistants (TAs) and regional centres of excellence (CoEs), will have to collect the data needed to geolocate and estimate the areas concerned, from the partners they support and the farmers operating in the landscapes. The centres of excellence, for their part, will have to make use of the satellite images available to provide detailed mapping of the cultivated areas concerned.
Data quality	The quality of the indicator provided depends on the land use maps and

geolocation data available.

Base value

Exercise to be carried out prior to or at the start of the action by the Centres of Excellence and field operators. This exercise involves planning the collection of data (areas declared, delimitation of crops, etc.) and active collaboration between the latter and the TAs and CoEs.

Target

To be defined for each landscape according to the results expected in this area (support for sectors, school fields, support for communities, etc.).

Methodology

The method used to calculate the indicator values may vary greatly depending on the technical and human capacities available to operators in terms of data collection and processing (particularly geospatial data).

At the very least, operators will have to list the agricultural, pastoral and forestry areas that are actively and sustainably managed in their area of intervention. The geolocation, type of crop and boundaries of the plots recorded are all very useful additional information for the detailed mapping that the centres of excellence will be able to produce.

Based on this field data and the high-resolution imagery available (in particular SENTINEL2 images and Planet monthly composites), the centres of excellence will be able to provide detailed, standardised measurement and mapping of sustainably cultivated areas in each landscape.

Aggregation

The areas collected by the various operators on the different landscapes can be added together at different scales, regardless of the collection methodology. Where available, measurements of estimation errors should be taken into account in the calculation. The centres of excellence will have to provide a standardised methodology for estimating areas by remote sensing using a supervised classification of land use distinguishing the following classes for farmed areas:

- Logging
- Crops
- Agro-pastoral areas
- Fishing zones (fisheries)

Assumptions / Risks

Collecting data to establish baseline and monitoring values requires a major effort in terms of planning and collecting data from farming communities and other operators, as well as mapping cultivated areas. These efforts must therefore be clearly budgeted and integrated into the operators' work plans.

The support of centres of excellence for estimating surface areas using remote sensing (fed by field data) will make it possible to support field operators and standardise and consolidate surface area estimates.

Performance of MSMEs - green jobs

Name	**More jobs in the green sector with EU support**
Unit of measurement	Number of green jobs (disaggregated by gender) created/supported by EU support (number) - GERF 2.13(b)
Type of indicator	Direct effect
Area of interest	The indicator is calculated for all KLCD landscapes.
Overall objectives	ODD Aichi Post-2020    Target 10
CAD code	41030
Political issues	The ambition of the NAF programme is to exploit the potential of protected areas as a lever for sustainable socio-economic development of the landscapes in which they are located. To achieve this, the local populations living in these landscapes must be able to work and invest in sustainable economic sectors. This indicator thus makes it possible to measure the EU's contributions to the implementation of African countries' strategies for green development and the fight against climate change.
Use and interpretation	**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 **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**.

Data source and availability	The data must be collected by those responsible for monitoring and evaluating operators receiving EU grants from a representative sample of micro, small and medium-sized enterprises carrying out economic activity in the KLCD.
Data quality	A standard data collection form is proposed below to ensure the same interpretation of the data to be collected and sufficiently precise and disaggregated information (particularly by gender) to feed the indicator at programme level
Base value	Basic study to be carried out in each landscape
Target	To be defined for each landscape according to the expected results.
Methodology	The data is to be collected in the form of surveys (see form below) from managers of MSMEs with an economic activity within the KLCDS landscapes, whether they receive 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.
Aggregation	Aggregation at KLCD, regional and programme level is done directly by summing the results obtained at site/project level.
Assumptions / Risks	The risk is that operators set up data collection processes that are too heterogeneous and/or not sufficiently granular to be able to aggregate the data at higher levels. The involvement of regional technical assistance in the design of data collection forms and support for data collection is essential to prevent this risk. Researchers must obtain free and informed consent from interviewees. To do this, a few instructions are given below.

PURPOSE OF THE STUDY[1]

You have been asked to take part in a study. Before you decide to take part in this study, it is important that you understand why the study is being carried out and what it involves. Please listen carefully to the following information. Please ask me if there is anything that is not clear or if you need more information.

The aim of this study is to monitor the evolution of investments (financial and human) in the green

[1] Directly inspired by the user guide for the BNS human well-beingassessment tool

sector with the support of the European Union and to determine whether our conservation work is responsible for the improvement or decline of this sustainable development around the green economy. You have been chosen at random from among the project beneficiaries or all the MSME managers in the intervention area.

STUDY PROCEDURES

I'm going to ask you a series of questions, and the survey will take 15 minutes. We will agree with you a convenient time to take part in the survey. We will present the results of the survey at a community meeting after the data has been collected and analysed. If you decide to take part, we will return every 2 years to ask the same questions: this will allow us to understand how your household's well-being varies over time. We will record your name and the GPS coordinates of your business to help you with the annual monitoring only: **both will never be shared.**

RISKS AND BENEFITS

You can refuse to answer any or all the questions and you can end your participation at any time if you wish. Participating in this study will help you to understand how conservation interventions impact on the sustainable development of your business and the wider economic sector in your region over the long term. Participation or non-participation will have no impact on the benefits you may derive from the EU projects in which you participate.

CONFIDENTIALITY

Your answers will be kept in a secure place to which only the person in charge of the survey will have access and will not be communicated to other members of your family, your community, or your representatives. The results of your survey will be used for reports and publications, but your name will be kept secret.

CONTACT DETAILS

If you have any questions about this study, please do not hesitate to call or send a message to the project coordinator and we will come and talk to you.

VOLUNTARY PARTICIPATION

Your participation in this study is voluntary. It is up to you to decide whether to take part in this study or not. If you decide to take part in this study, you will be asked to give your oral consent. Once you have given your consent, you are always free to withdraw at any time without giving any reason. Withdrawal from this study will not affect the completed relationship, and your data will be returned to you or destroyed.

Survey form

Amounts invested and number of jobs created (disaggregated by gender) in the green sector supported by the European Union in key landscapes for conservation and development

The purpose of this survey form is to evaluate the evolution of human and financial investment by micro, small and medium-sized enterprises (MSMEs) in the green sectors, with the support of the European Union. It is intended for managers of MSMEs, whether they are receiving support from the EU or not.

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*

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.*

Note: Informed consent should be given in local languages. Before starting the interview, please explain in detail the reason for your questions and ensure that the target audience agrees to contribute to the survey.

Name of interviewer:	
Date of survey:	
Company name:	
Type of company:	

( ) Micro ( ) Small ( ) Average	
Section 1: Personal information	
Name:	
Gender:	
Age:	
Position in the company:	
Company location:	
Section 2: Green jobs	
Are you aware of any development projects supported by the European Union in your region that aim to promote green jobs? ( ) Yes ( ) No	
Does your company receive support from the European Union to promote investment and job creation in the green sector?	
If so, can you give the name of the project or initiative?	
Have you taken part in green jobs activities supported by the European Union? ( ) Yes ( ) No	
How involved or aware are you of this project? ( ) Very involved ( ) Involved ( ) Not involved, but aware. ( ) Not involved and unaware	
Have these activities had a positive impact on your business? ( ) Yes ( ) No ( ) Don't know	
Do you think that the green jobs created or supported by the European Union have helped to improve living conditions in your community? ( ) Yes ( ) No ( ) Don't know	

How many green jobs do you think this project has created or supported in your company?
How many of these green jobs are held by men?
How many of these green jobs are held by women?
Section 3: Impact of green jobs
Can you give specific examples of green jobs created or supported by the European Union in your region?
How do you think green jobs can improve the lives of young people in your community?
Section 4: green investments
Section 5: Additional comments
Do you have any other comments, suggestions, or information to share about green jobs in your region and EU support?

Thank you for taking the time to complete this form. Your answers will help us to better understand the impact of European Union support on green investment and employment in the areas where NaturAfrica initiatives operate. Your contribution is invaluable!

Food safety

Name	**Food Consumption Score (FCS)**
Unit of measurement	Percentage of households with an acceptable food consumption score (%)
Type of indicator	Direct effect
Area of interest	The indicator is calculated for all KLCD landscapes. The SCA can be used at several scales. Once an assessment has been made at landscape level, it may be useful to use the tool at more local levels to tailor the community development strategy to specific needs.
Overall objectives	ODD Aichi Post-2020 
CAD code	43071
Political issues	Guaranteeing food security for the populations living in KLCDs landscapes is an essential prerequisite for any sustainable socio-economic development strategy. It is also an integral part of the Universal Declaration of Human Rights (article 25). There is therefore a need to ensure that the natural resource governance policies implemented in KLCDs and supported by operators effectively meet household food needs.
Use and interpretation	The Food Consumption Score (FCS) is a complex indicator of a household's food security situation, as it takes into account not only the diversity and frequency of meals, but also the relative nutritional importance of different food groups. It is easy to collect and calculate, and allows comparisons over time and space.
Data source and availability	The data will have to come from surveys carried out using collection tools (forms, tablets, Kobo Toolbox, etc.) in compliance with the standards established for the collection of data for the SCA indicator. Numerous guides and data collection tools are available online at[1] .
Data quality	Identifying the target groups beforehand is crucial to ensuring the quality of the assessment. We need to ensure that the groups are properly representative, covering the whole of the landscape influenced (directly or indirectly) by the protected area.
Base value	Exercise to be carried out by operators before or at the start of the action
Target	To be defined for each landscape according to the expected results.

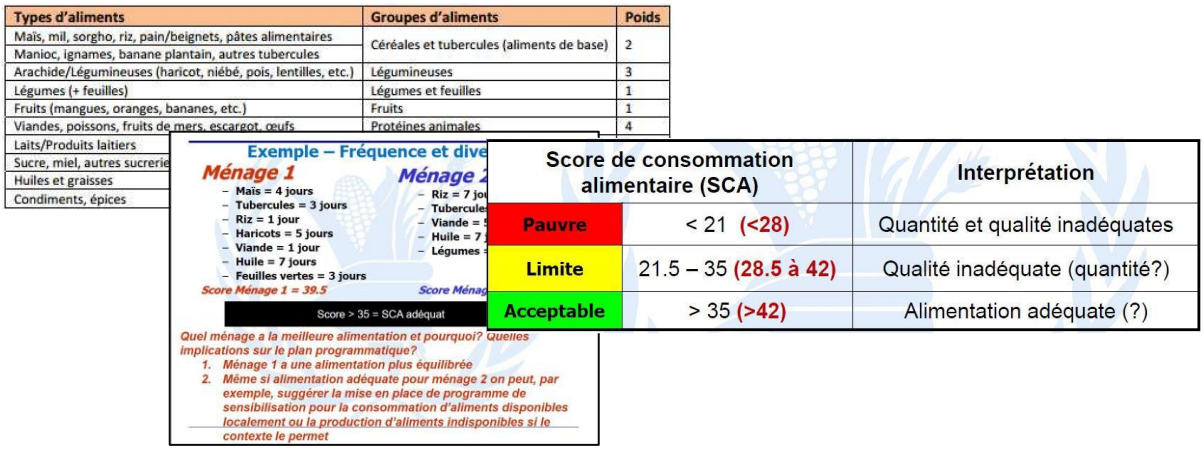
[1] https://thedocs.worldbank.org/en/doc/20f02031de132cc3d76b91b5ed8737d0-0050012017/related/Cours-06-final-vf-1.pdf

Update frequency

Biennial

Methodology

The FCS captures the number of different types or groups of food that people eat and the frequency with which they eat them. The result is a score that represents the diversity of food intake, but not necessarily the quantity, and it has been shown that these scores are significantly correlated with calorie consumption per person (IFPRI 2006, Coates et al. 2007).



Types d'aliments	Groupes d'aliments	Poids
Maïs, mil, sorgho, riz, pain/beignets, pâtes alimentaires	Céréales et tubercules (aliments de base)	2
Manioc, ignames, banane plantain, autres tubercules		
Arachide/Légumineuses (haricot, niébé, pois, lentilles, etc.)	Légumineuses	3
Légumes (+ feuilles)	Légumes et feuilles	1
Fruits (mangues, oranges, bananes, etc.)	Fruits	1
Viandes, poissons, fruits de mers, escargot, œufs	Protéines animales	4
Laits/Produits laitiers		
Sucre, miel, autres sucrerie		
Huiles et graisses		
Condiments, épices		

Score de consommation alimentaire (SCA)		Interprétation
Pauvre	< 21 (<28)	Quantité et qualité inadéquates
Limite	21.5 – 35 (28.5 à 42)	Qualité inadéquate (quantité?)
Acceptable	> 35 (>42)	Alimentation adéquate (?)

Figure 1 Illustration of the collection process for the SCA indicator

To determine the value of the indicator, the methodology is as follows:

1. Conduct individual interviews with a representative sample of the target household (preferably the people responsible for preparing the meals) to assess how many days in the last 7 days the household has eaten one of the 16 predefined types of food.
2. Calculate the sum of all the consumption frequencies of the types of food belonging to the same food groups (for example, maize and rice belong to the same food group.
3. To create new weighted scores for the food groups, multiply the value obtained for each food group by its "importance weight" as specified in the WFP SCA guidelines.
4. By adding up the scores for the food groups weighed, we calculate the food consumption score (FCS) for each respondent.
5. Based on the SCA value, indicate the percentage of households with a "poor" SCA (0-21 points), a "borderline" SCA (21.5 - 35 points) and an "acceptable" SCA (35.5 points or more). However, these thresholds are not valid in all contexts: it may be necessary to modify them according to the eating habits of the target population.
6. To calculate the percentage of households with an "acceptable" AUC, divide the number of households with an AUC greater than or equal to 35.5 by the total number of households surveyed. Multiply the result by 100 to convert it into a percentage.

Aggregation

The indicator provides values for each component of the household food security assessment (see Figure 2) for each group. An average for all the groups

interviewed can be expressed for the landscape to monitor changes within groups and between different landscapes.

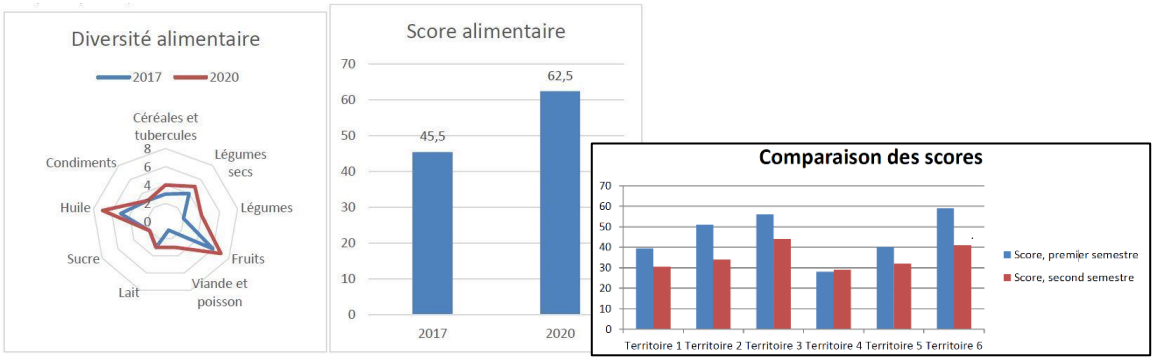


Figure 2 Illustration of potential aggregation of the SCA indicator at landscape level

Resources required

On-site mobilisation of the monitoring and evaluation team

Means of deployment to households

10aines k €/year

Assumptions / Risks

The FCS is a good indicator of a household's food security; however, it does not allow us to understand the quality of the diets consumed by a specific group of household members, such as children aged between 6 and 59 months. In addition, the score only reflects consumption over one week.

The SCA is subject to seasonal variations. Baseline and final data must be collected at the same time of year; otherwise, it is highly likely that they will not be comparable (i.e., they will provide largely useless data).

Do not collect data during periods of fasting, such as the period before Easter or Ramadan.

It is also important to have a representative sample of the different groups within the population and to be able to carry out the exercise over several time intervals on the same sample.

Competitiveness and social and environmental responsibility

Name	**Improving the competitiveness and social and environmental responsibility of SMEs supported by the EU**
Unit of measurement	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 of indicator	Direct effect
Area of interest	The indicator is calculated for all KLCD landscapes.
Overall objectives	ODD  Aichi  Post-2020 
CAD code	41030
Political issues	The ambition of the NAF programme is to exploit the potential of protected areas as a lever for sustainable socio-economic development of the landscapes in which they are located. To achieve this, the local populations living in these landscapes must be able to work and invest in sustainable economic sectors. This indicator thus makes it possible to measure the EU's contributions to the implementation of African countries' strategies for green development and the fight against climate change.
Use and interpretation	The indicator can be used to: - Measuring the share of the green sector in income-generating activities in landscapes. - Promoting sustainable development policies at local level. - Demonstrate the importance of driving and supporting "green" economic development strategies and going beyond anti-poverty programmes.
Data source and availability	The data must be collected by those responsible for monitoring and evaluating operators receiving EU grants from a representative sample of micro, small and medium-sized enterprises carrying out economic activity in the KLCD.
Data quality	A standard data collection form is proposed below to ensure the same interpretation of the data to be collected and sufficiently precise and disaggregated information (particularly by gender) to feed the indicator at programme level
Base value	To be defined for each landscape
Target	To be defined for each landscape according to the expected results.

Methodology	The data is to be collected in the form of surveys (see form below) from managers of MSMEs with an economic activity within the KLCDS landscapes, whether they receive 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.
Aggregation	Aggregation at KLCD, regional and programme level is done directly by summing the results obtained at site/project level.
Assumptions / Risks	The risk is that operators set up data collection processes that are too heterogeneous and/or not sufficiently granular to be able to aggregate the data at higher levels. The involvement of regional technical assistance in the design of data collection forms and support for data collection is essential to prevent this risk.

PURPOSE OF THE STUDY[1]

You have been asked to take part in a study. Before you decide to take part in this study, it is important that you understand why the study is being carried out and what it involves. Please listen carefully to the following information. Please ask me if there is anything that is not clear or if you need more information.

The aim of this study is to evaluate the evolution of the competitiveness and social and environmental responsibility of the MSMEs supported by the European Union and to determine whether our conservation work is responsible for the improvement or decline of this sustainable development around the green economy. You have been chosen at random from among the project beneficiaries or all the MSME managers in the intervention area.

STUDY PROCEDURES

I'm going to ask you a series of questions, and the survey will take 15 minutes. We will agree with you a convenient time to take part in the survey. We will present the results of the survey at a community meeting after the data has been collected and analysed. If you decide to take part, we will return every 2 years to ask the same questions: this will allow us to understand how your household's well-being varies over time. We will record your name and the GPS coordinates of your business to help you with the annual monitoring only: **both will never be shared.**

RISKS AND BENEFITS

You can refuse to answer any or all the questions and you can end your participation at any time if you wish. Participating in this study will help you to understand how conservation interventions impact on the sustainable development of your business and the wider economic sector in your region over the long term. Participation or non-participation will have no impact on the benefits you may derive from the EU projects in which you participate.

CONFIDENTIALITY

Your answers will be kept in a secure place to which only the person in charge of the survey will have access and will not be communicated to other members of your family, your community, or your representatives. The results of your survey will be used for reports and publications, but your name will be kept secret.

CONTACT DETAILS

If you have any questions about this study, please do not hesitate to call or send a message to the project coordinator and we will come and talk to you.

VOLUNTARY PARTICIPATION

Your participation in this study is voluntary. It is up to you to decide whether to take part in this study or not. If you decide to take part in this study, you will be asked to give your oral consent. Once you have given your consent, you are always free to withdraw at any time without giving any reason. Withdrawal from this study will not affect the completed relationship, and your data will be returned to you or destroyed.

[1] Directly inspired by the user guide for the BNS human well-being assessment tool

Survey form

Improving the competitiveness and social and environmental responsibility of SMEs supported by the EU

The aim of this survey form is to evaluate the evolution of the competitiveness and social and environmental responsibility of the MSMEs supported by the European Union and to determine whether our conservation work is responsible for the improvement or decline of this sustainable development around the green economy. You have been chosen at random from among the project beneficiaries or all the MSME managers in the intervention area.

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.*

***Sustainable production** is a concept that aims to reconcile economic development with environmental protection and social well-being. It is based on production practices that minimise negative impacts on the environment, promote the efficient use of resources, reduce greenhouse gas emissions, and prevent pollution. Sustainable production also seeks to ensure fair and safe working conditions for employees, and to promote ethical and responsible business practices. The main objective of sustainable production is to meet the needs of the present without compromising the ability of future generations to meet their own needs.*

***Market access** refers to the possibility for a producer, supplier, or service provider to enter a specific market to market its products or services. It is a key element of international trade and economic competitiveness. Market access can be hindered by trade barriers such as customs duties, quotas, technical regulations, or non-tariff barriers. Trade agreements and international negotiations often focus on reducing these barriers and facilitating market access to promote trade and stimulate economic growth. For companies, market access expands business opportunities, enables them to reach new customers and develop their business nationally or internationally.*

***Land tenure security** is the process by which rights of ownership and access to land are established, protected, and guaranteed. It aims to provide individuals and communities with legal recognition and stability in the ownership and use of land, natural resources and living spaces. Securing land tenure can involve legislative, administrative, and legal measures to register property titles, clarify customary land rights, protect the rights of occupants, and prevent land disputes. Effective land tenure security promotes social stability, economic development, environmental conservation, and*

sustainable investment in rural and urban areas. It is essential to support agriculture, housing, economic activities, and land-related human rights. ***Note**: Informed consent should be given in local languages. Before starting the interview, please explain in detail the reason for your questions and ensure that the target audience agrees to contribute to the survey.*	
Name of interviewer :	
Date of survey :	
Company name :	
Type of company: ( ) Micro ( ) Small ( ) Average	
Section 1: Personal information	
Name of operator :	
Gender :	
Age :	
Sector of activity :	
Telephone number :	
Address:	
Section 2: EU support	
Are you aware of any development projects supported by the European Union in your region that aim to promote green jobs? ( ) Yes ( ) No	
Have you received support from the European Union (EU) for your farming/pastoral/forestry/poultry farming/etc. activity? ( ) Yes ( ) No	
If so, can you give the name of the project or initiative?	

Section 2: Increasing sustainable production
As a farmer benefiting from EU support, have you been able to increase your agricultural production in a sustainable way? ( ) Yes ( ) No ( ) I'm not sure
If you answered yes, could you estimate the size of this increase? ( ) Less than 10%. ( ) Between 10% and 25%. ( ) Between 25% and 50%. ( ) More than 50%.
What are the main changes you have made to your farming practices to promote sustainability? (Please tick all that apply) ( ) Adoption of environmentally-friendly farming techniques ( ) Increased use of natural or organic fertilisers ( ) Improved management of water resources ( ) Soil conservation and erosion prevention ( ) Crop diversification ( ) Use of improved seeds ( ) Integration of renewable energy in agricultural operations ( ) Other (please specify) :
Section 3: Market access
As a farmer benefiting from EU support, have you been able to improve your access to markets for the sale of your agricultural products? ( ) Yes ( ) No ( ) I'm not sure
What are the main actions you have taken to improve your access to markets? (Please tick all that apply) ( ) Training in marketing and value chain management ( ) Access to storage and processing facilities ( ) Participation in producer groups or cooperatives ( ) Access to information on markets and consumer requirements

( )

Thank you for taking the time to complete this form. Your answers will help us to better understand the impact of European Union support on green investment and employment in the areas where NaturAfrica initiatives operate. Your contribution is invaluable!

Participatory governance of natural resources

Name	**Improving the participation of local communities in the governance of natural resources**
Unit of measurement	Score Natural Resources Governance Tool (NRGT) (number)
Type of indicator	Direct effect
Area of interest	The indicator is calculated for all KLCD landscapes. The NRGT can be used at several scales. Once an assessment has been made at landscape level, it may be useful to use the tool at more local levels and to allow local stakeholders to participate in local organisations.
Overall objectives	ODD Aichi Post-2020 
CAD code	41030
Political issues	The unsustainable use of natural resources is often observed in areas with little or no regulation, where the interests of individuals or small groups take precedence over the interests of society. Identifying and assessing the capacities (strengths and weaknesses) of the key groups of decision-makers governing access to and use of natural resources in a landscape is an essential prerequisite for territorial actions such as NaturAfrica. Indeed, improving management, reducing threats and pressures, and achieving long-term conservation objectives all require effective governance.
Use and interpretation	The indicator can be used to: - Helping to highlight weaknesses in the governance of natural resources. - Strengthening governance, the capacity of governance groups to regulate access to and use of natural resources within their jurisdiction. - Evaluate the level of support and participation of the different groups of decision-makers in actions for the conservation and sustainable management of natural resources. - Strengthen the capacity of different groups with formal or informal jurisdiction to govern the use of natural resources in a sustainable manner.
Data source and availability	The data should come from surveys carried out using the NRGT or a similar tool capable of providing an assessment score for the governance attributes identified in the NRGT.
Data quality	Identifying the target groups beforehand is crucial to ensuring the quality of the assessment. We need to ensure that the groups are properly representative,

covering the whole of the landscape influenced (directly or indirectly) by the protected area.

Base value Exercise to be carried out by operators before or at the start of the action

Target To be defined for each landscape according to the expected results.

Update frequency The NRGT can be carried out both at the start of a project and at any time during its implementation. The assessment should be repeated every 2 or 3 years to measure changes in governance attributes because of conservation efforts.

Methodology The tool does not ask whether a governance group is making and implementing the right decisions, or whether it has evidence that the natural resources under its jurisdiction are being used sustainably. Rather, it asks whether it has the authority, capacity, and power to govern natural resources sustainably and, if not, why not. The NRGT focuses not only on the governance of natural resources per se, but also on the organisational process of the groups assessed, which is more about the internal organisation of a governance group and how it operates. This is a function of natural resource governance, as communities need to organise themselves to be able to make the right decisions. Working with the group being assessed to improve its internal organisational capacity is essential to enable it to better govern natural resources.

The NRGT tool comes in the form of survey forms (Kobo Toolbox), and several guides and guidelines are available online[1] . The steps in the assessment process can be summarised as follows:

1. Identify and map the governance groups involved in the landscape.
2. Rank and select the most influential governance groups.
3. Create a data encoding form.
4. Conducting interviews with target groups
5. Analysing and presenting results
6. Developing and implementing a "governance" action plan

[1] https://library.wcs.org/Scientific-Research/Research-Publications/Publications-Library/ctl/view/mid/40093/pubid/DMX3837600000.aspx

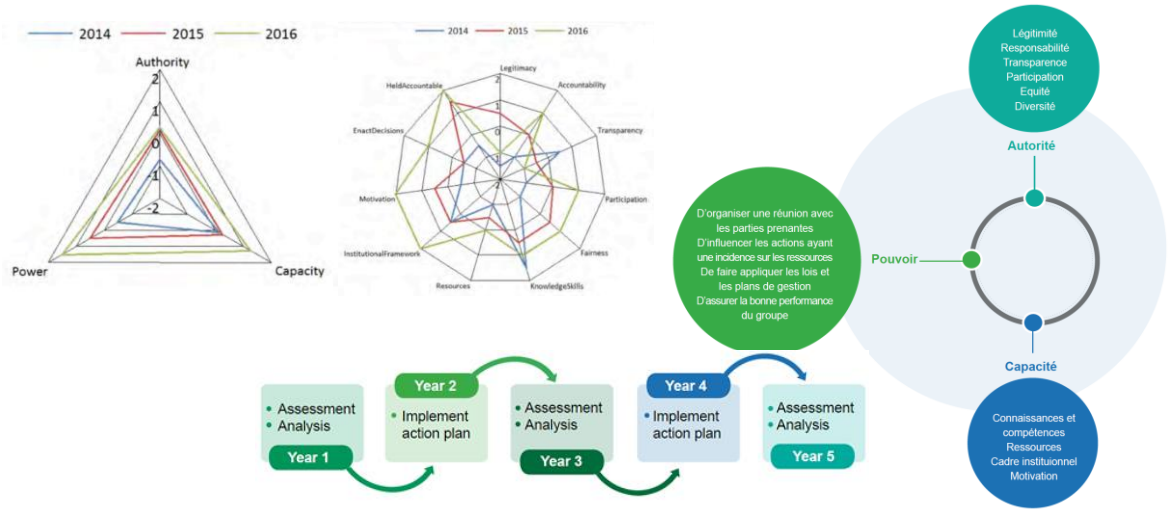


Figure 1 Visualisation tools and collection process for the NRGT indicator

Aggregation

The indicator provides values for each component of the governance assessment (authority, capacity, power) for each group. An average for all the target groups (groups selected at stage 2 of the process) can be expressed for the landscape to ensure a certain balance in the distribution of support actions for the target groups.

Resources required

On-site monitoring and evaluation team

Deployment resources for local decision-makers

5-10k €/year

Assumptions / Risks

Collecting data to establish baseline and monitoring values requires a major effort to identify target groups and plan the implementation of data collection.

In addition, as the tool is not currently integrated into the range of monitoring and evaluation tools used by certain operators, it will require some training/appropriation time at the outset. However, the tool is very simple and flexible so that it can be adapted to all the contexts encountered in the landscapes, and the necessary teaching material is available online. The regional technical assistance teams will need to provide the necessary support to ensure that the data collection and monitoring processes are properly designed.

Involving local people in conservation

Name	**Level of local commitment and support for environmental conservation**
Unit of measurement	Constituency for Conservation Index (%)
Type of indicator	Direct effect
Area of interest	The Constituency for Conservation Index (CCI) measures the level of commitment and support of the local population for environmental conservation in a KLCD landscape.
Overall objectives	ODD Aichi Post-2020 
CAD code	41030
Political issues	In situ conservation of endangered species cannot be achieved solely in classified areas.
Use and interpretation	The Constituency for Conservation Index is an index that quantifies the degree of participation, involvement and awareness of individuals, groups and organisations in protecting and preserving the environment. Once the data has been analysed, you can interpret the results of the CCI index. This may involve comparing levels of engagement between different regions, identifying factors that positively or negatively influence support for conservation, or tracking changes over time to assess the effectiveness of awareness-raising initiatives.
Data source and availability	The data must come from surveys carried out using standard collection tools (forms, tablets, Survey123, KoboToolbox, etc.). A standard form is proposed below. It can be enhanced with other questions depending on the context of the intervention.
Data quality	The preliminary work of identifying the target groups is crucial to ensuring the quality of the evaluation. It is important to ensure that the groups are representative, to avoid gender, location, and other biases, to cover a sufficient number of people and to cover the entire landscape of influence (direct or indirect) of the protected area.
Base value	Exercise to be carried out by operators before or at the start of the action
Target	To be defined for each landscape according to the expected results.
Update frequency	Biennial

Methodology

Variables and data sources:

Various variables and sources can potentially be used to collect the data required for this indicator:

- Participation rates in conservation programmes.
- Levels of public awareness of environmental issues.
- Levels of public support for conservation initiatives.
- Data on the activities of local groups, NGOs and government bodies involved in conservation.
- Public opinion surveys and interviews with local stakeholders.

Data collection methods:

The most used method of collecting data for the Constituency for Conservation Index is through surveys and questionnaires to assess people's knowledge, attitudes and behaviours in relation to conservation. Random sampling methods should be used to obtain data that is representative of the populations living in the KLCDs. Also ensure that each person interviewed signs an informed consent form. They can sign with an X to guarantee anonymity.

Other methods are also applicable, such as interviews and focus groups with representatives of local populations, documentary analysis (government reports and academic publications), or field observation (conservation behaviour and practices).

The survey form groups together a series of questions in different parts in order to assess the level of commitment of local people to conservation.

Data processing and analysis :

Once the data has been collected, it can be processed and analysed in a number of ways:

- Descriptive statistics: Use statistical techniques to summarise and describe the data collected, such as averages, percentages and standard deviations.
- Comparative analysis: Compare data collected in different regions or population groups to identify variations and trends.
- Qualitative analysis: Use qualitative analysis methods to interpret responses from surveys, interviews and field observations and obtain in-depth information about people's attitudes and behaviour.

Interpretation of results :

Interpretation may involve comparing levels of engagement between different regions, identifying factors that positively or negatively influence support for conservation, or tracking changes over time to assess the effectiveness of awareness-raising initiatives.

Aggregation

The indicator provides values for each component of the assessment of local people's commitment to conservation (see Figure 1) for each group. An average for all the groups interviewed can be expressed for the landscape in order to monitor changes within groups and between different landscapes.

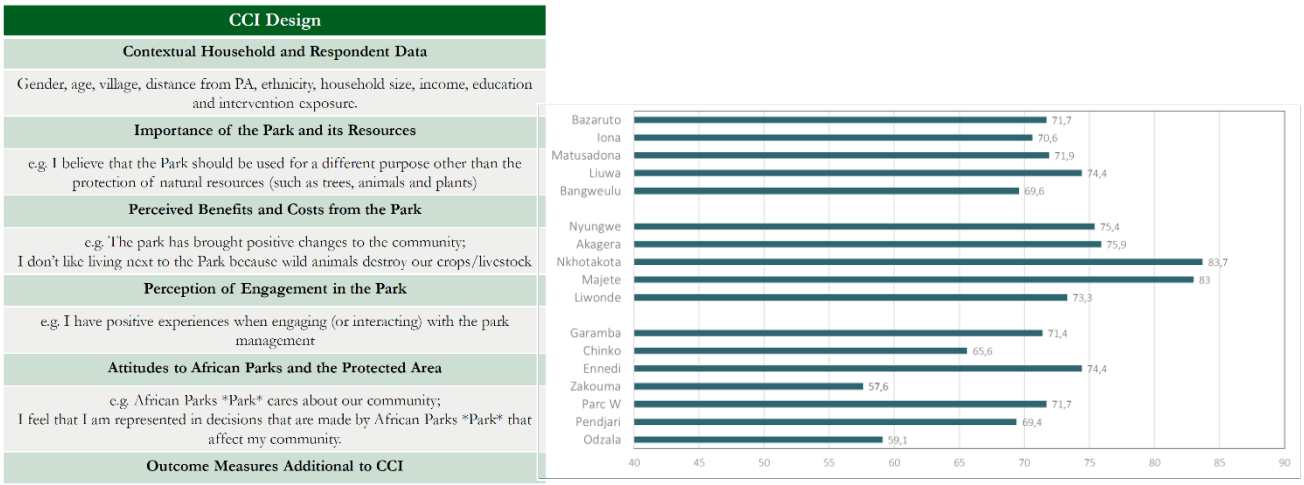


Figure 1: illustration of potential aggregation of the CCI indicator at the scale of a network of protected areas

Resources required

On-site mobilisation of the monitoring and evaluation team

Means of deployment to households

10 or so k €/year

Assumptions / Risks

It is important to take into account certain limitations and precautions when collecting and interpreting data for the "Constituency for Conservation Index" indicator. For example:

- Ensure that data collection methods are representative of the local population and are not biased;
- Be aware of possible biases in survey responses, such as socially desirable responses or cultural biases;
- The results of the index should not be interpreted as value judgements, but rather as measures of commitment and support for conservation.

Survey form

Involving local people in conservation

The aim of the survey is to collect data for the Constituency for Conservation Index of African protected areas. This form is directly inspired by the form created by the NGO African Parks, in collaboration with the African Leadership University.

Note: Informed consent should be given in local languages. Before starting the interview, please explain in detail the reason for your questions and ensure that the target audience agrees to contribute to the survey.

Name of interviewer :	
Date of survey :	
Section 1: Personal information	
Name :	
Gender :	
Age :	
Ethnic group :	
Occupation :	
Number of people in the household :	
How many years of formal education have you had?	_____ années
Distance between the village and the boundary of the protected area :	_____ Km
Do you work for the protected area (PA) :	YES / NO
Does a member of the household work for the HA?	YES / NO
How long have you lived in this village?	_____ années

Survey Instructions :

1. Ask the question and ask the respondent to choose **one of** the four answers. Make sure that only one answer is chosen.
2. Mark their answer **clearly with an X**.
3. Enter any comments in the last column (it is not necessary to include narrative comments for each question - if substantial comments are proposed, please enter them).

#	Question	I totally disagree	No agreement	Agreed.	I totally agree	Not applicable	Comments
	Purpose of the protected area						
13	Protecting natural resources (such as trees, animals and plants) is important.	I totally disagree	No agreement	Agreed.	I totally agree	Not applicable	
14	I support the government's decision to create national protected areas in the country.	I totally disagree	No agreement	Agreed.	I totally agree	Not applicable	
15	I think the protected area should be used for purposes other than protecting natural resources (trees, animals and plants).	I totally disagree	No agreement	Agreed.	I totally agree	Not applicable	
16	The success of the protected area depends on my actions	I totally disagree	No agreement	Agreed.	I totally agree	Not applicable	
17	I'd be happier if the protected area wasn't there	I totally disagree	No agreement	Agreed.	I totally agree	Not applicable	
18	I'm happier in the protected area today than I was five years ago.	I totally disagree	No agreement	Agreed.	I totally agree	Not applicable	
	Benefits and costs of the protected area						
19	Natural resources bring many benefits to my community	I totally disagree	No agreement	Agreed.	I totally agree	Not applicable	

20	I personally benefit from the protection of natural resources (trees, animals and plants).	I totally disagree	No agreement	Agreed.	I totally agree	Not applicable	
21	I benefit from the projects implemented by the protected area	Never	Rarely	Sometimes	Always	Not applicable	
22	The protected area has brought positive changes to the community	I totally disagree	No agreement	Agreed.	I totally agree	Not applicable	
23	The harvesting of resources (wood/ bushmeat/fish) is a cause for concern if it is carried out by people from outside my community.	I totally disagree	No agreement	Agreed.	I totally agree	Not applicable	
24	I don't mind living near wild animals because the protected area is important.	I totally disagree	No agreement	Agreed.	I totally agree	Not applicable	
25	I don't mind living close to wild animals because the protected area management helps us if we need it.	I totally disagree	No agreement	Agreed.	I totally agree	Not applicable	
26	I don't like living next to the protected area because the wild animals destroy our crops and livestock.	I totally disagree	No agreement	Agreed.	I totally agree	Not applicable	
	Engagement in the protected area						
27	I have positive experiences when engaging (or interacting) with protected area management.	Never	Rarely	Sometimes	Always	Not applicable	
28	I feel that the protected area is part of my community	I totally disagree	No agreement	Agreed.	I totally agree	Not applicable	
	Attitudes towards the PA manager						
29	Management of the protected area has improved since XXX's intervention.	I totally disagree	No agreement	Agreed.	I totally agree	Not applicable	
30	(XXX) cares about our community	I totally disagree	No agreement	Agreed.	I totally agree	Not applicable	
31	(XXX) informs us about decisions taken by community leaders that affect us	Never	Rarely	Sometimes	Always	Not applicable	
32	I feel represented in decisions taken by (XXX) that affect my community.	Never	Rarely	Sometimes	Always	Not applicable	

At the end of these questions, please ask the following free-form questions and enter the answers in the text.

#	Question	Answer
33	What would encourage you to give more support to the protected area?	
34	What single change would improve your life?	

Thank you for taking the time to complete this form. Your answers will help us to better understand the impact of European Union support on green investment and employment in the areas where NaturAfrica initiatives operate. Your contribution is invaluable!

Peaceful governance of natural resources

Name	**Reducing conflict linked to access to natural resources in the intervention areas**
Unit of measurement	Number of conflicts observed in intervention areas and KLCDs landscapes (number) centred on (i) access to natural resources and (ii) violence against women
Type of indicator	Direct effects
Area of interest	The indicator is calculated for all KLCD landscapes. A distinction is made between the areas in which the operators operate, and the other territories included in the landscapes.
Overall objectives	ODD Aichi Post-2020   Target 10
CAD code	15220
Political issues	Some landscapes are in the context of weak central states that have little influence in remote areas, 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.
Use and interpretation	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. Beyond the figures, the focus will be on the historical and contemporary trends observed to better understand the dynamics underway and guide the support strategies for dialogue and community development.
Data source and availability	The ACLED database will form the common core of information for all landscapes. ACLED is an event-driven data project designed for disaggregated conflict analysis and crisis mapping. The data is updated weekly and can be downloaded using the data export tool. This data can be supplemented by other public databases and by data collected by operators, where available, to gain a better understanding of the causes of conflicts.
Data quality	ACLED has 200 team members based in more than 50 countries and territories and has woven sprawling collection networks. The project has also put in place strict processes for checking and cleaning their datasets. In addition, ACLED has recently added a new component to identify political violence targeting women.

Nevertheless, these data sets need to be analysed jointly by regional technical assistants and field operators to correctly interpret the trends observed.

Base value Exercise to be carried out before or at the start of the action by the technical assistants.

Target To be defined for each landscape according to the expected results.

Update frequency Annual or half-yearly

Methodology ACLED data is freely accessible but will have to be processed by technical support. The processing stages are:

1. Exporting data.
2. Isolating landscape data.
3. Working with operators to define their area of operation.
4. Establish historical conflict trends in these areas and the whole of the territory covered by the KLCDs.
5. Categorise, with the help of operators, the causes of violence to identify those based on gender and those linked to access to natural resources.
6. Differentiate between conflicts taking place within the PAs and those outside.
7. Carry out these operations iteratively, on an annual or half-yearly basis, to assess the evolution of these threats to the governance of KLCDs.

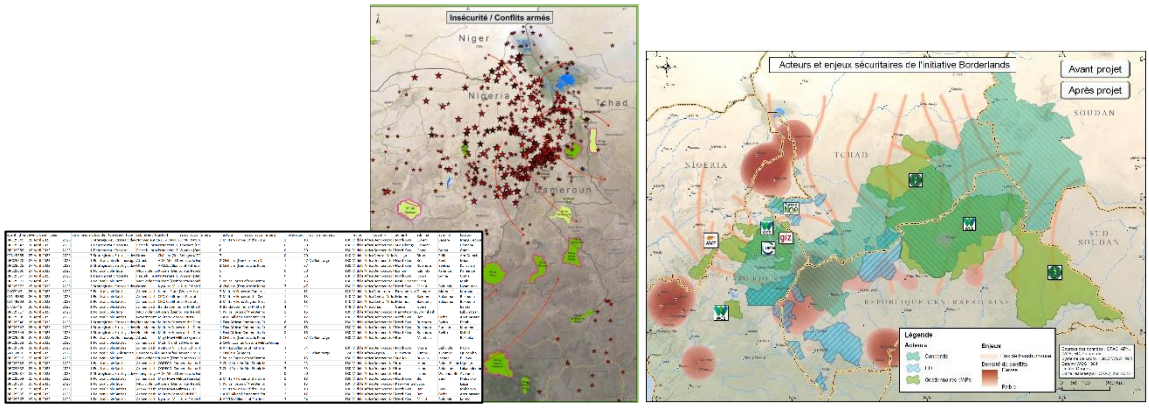


Figure 1 Conflict visualisation tools. From left to right: conflict inventory, conflict location, hotspot mapping.

Aggregation At the level of landscapes, regions, and the programme, consolidated data from ACLED, complementary public data bases and operators will be compiled for each year, and an analysis of recent trends will be carried out annually (or biannually) by the regional TAs.

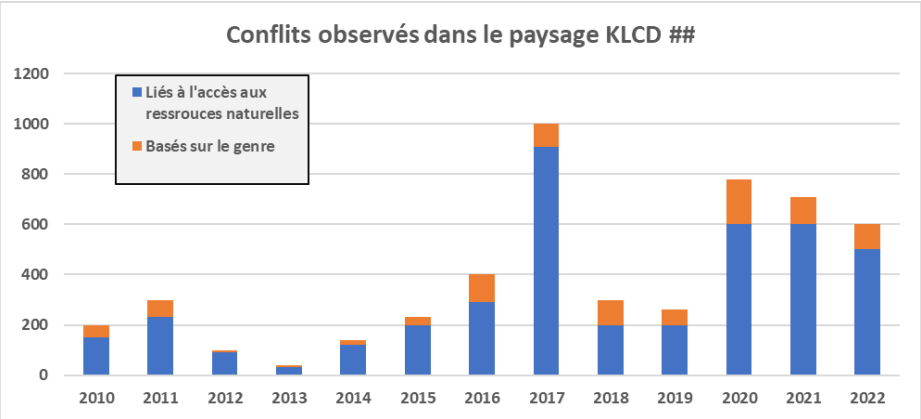


Figure 2 Illustration of analyses of conflict trends observed in a fictitious landscape.

Resources required	Mobilisation of regional technical assistants and project monitoring and evaluation teams.
Assumptions / Risks	The ACLED data provide a relevant basis of information for this indicator. However, they need to be consolidated with the knowledge and monitoring system of the field operators. In addition, the involvement of the latter is also essential in defining baseline values and targets and contextualising the analyses carried out during monitoring.

Sustainable financing of landscapes

Name	**Increased private investment to support the conservation of protected areas**
Unit of measurement	Amounts invested by innovative private sector mechanisms in the conservation of protected areas (Currency)
Type of indicator	Direct effects
Area of interest	The indicator is calculated for each protected area in the KLCDs[1] . A distinction is made between conservation and development actions, and according to funding sources.
Overall objectives	ODD Aichi Post-2020 
CAD code	41030, 43071, 15220
Political issues	Sustainable financing of protected areas is a key issue for African countries. Consolidating protected area networks, financing protected areas that have been "forgotten" by international partners, moving away from support based on projects with a limited lifespan (less than 5 years) and accessing innovative mechanisms (trust funds, climate financing, carbon, and biodiversity credits, etc.) are all challenges for achieving the Aichi targets and the new global framework for biodiversity post-st-2020.
Use and interpretation	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, in KLCDs or not.

[1] Where this is not possible due to the number of protected areas to be covered, a representative sample of protected areas, including all types of governance observed in the landscape, should be taken.

Data source and availability

Data on funds invested in KLCD protected areas is certainly the most difficult to collect. However, several sources of information can be used:

- Operators: contractual documents and other sources
- Inter-donor groups in beneficiary countries
- Regional observatories (example of the FOCA's PROJETS platform)
- National and decentralised state institutions
- JRC eConservation platform
- Trade unions and company federations in beneficiary countries

Data quality

The technical assistants will have to carry out an analysis of the budgets committed, the investment channels and instruments, the areas of intervention and other attributes to feed the system for monitoring the funding allocated to conservation.

Base value

Exercise to be carried out before or at the start of the action by the technical assistants for each protected area supported by the NAF initiatives, distinguishing the origin of the funds (see table 1).

Target

To be defined for each protected area supported by NAF initiatives, distinguishing the source of funds (see table 1).

Table 1Illustration of monitoring values for the sustainable financing of protected areas indicator

	Valeur de base	Valeur actuelle	Cible
Montants investis dans la Conservation et DD	xxx EUR	à définir	+ xxx %
Montants investis par l'UE	xxx EUR	à définir	+ xxx %
Montants investis par les Etats Membres	xxx EUR	à définir	+ xxx %
Montants investis par le secteur privé	xxx EUR	à définir	+ xxx %

Update frequency

Annual or biennial

Methodology

Data collection requires a proactive approach on the part of the regional technical assistants to collect the information available from the partners involved in conservation initiatives in the KLCDs. To this end, a standardised information form is proposed here (see below) to ensure the same interpretation of the data to be collected and sufficiently precise and disaggregated information to feed the indicator at programme level.

Aggregation

At the level of landscapes, regions, and the programme, consolidated data from ACLED, complementary public data bases and operators will be compiled for each year, and an analysis of recent trends will be carried out annually (or biannually) by the regional TAs.

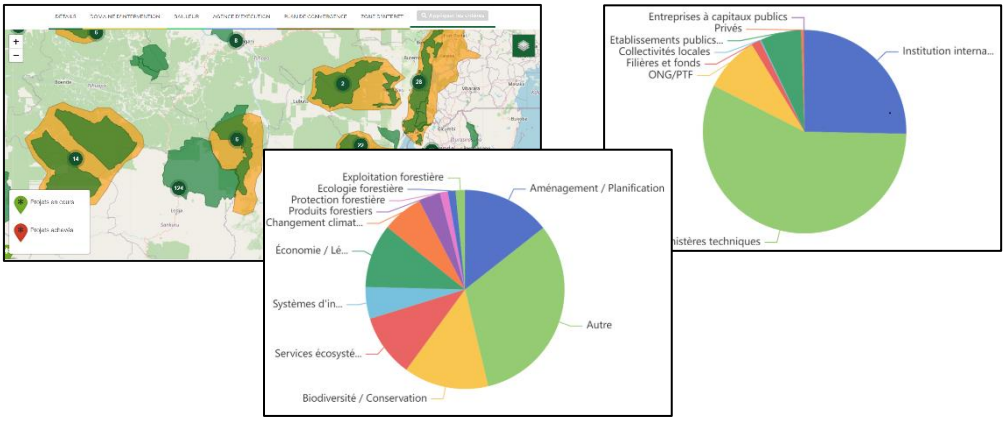


Figure 1 illustration of the visualisation and analysis tools available on the FOCA analytical portal

Resources required

Mobilisation of regional technical assistance, EU delegations, regional observatories and project monitoring and evaluation teams.

Assumptions / Risks

The main risk, which has already been observed in initiatives such as the Observatory or the EU's Environment & Sustainable Agriculture programme in the DRC, is the difficulty of accessing information from sources outside the EU. In order to mitigate this risk, TAs need to be able to offer an information service in return to data providers, in particular through analysis and promotion tools such as the one developed by OFAC's analytical portal in Central Africa.

Survey form

Sustainable financing of protected areas

The aim of this survey form is to assess the different sources and mechanisms of funding for protected areas located in priority landscapes for conservation and development identified by the European Union in Africa. It is being implemented as part of the NaturAfrica initiatives to assess the strategic efficiency of this approach in the adoption of a long-term territorial strategy, focused on the balance between conservation and sustainable development.

Section 1: General information	
Name of the protected area (PA):	
WDPA code (if applicable):	
Country:	
PA governance body(ies):	
PA management body(ies):	
Name of HA manager:	
Contact email address:	
Telephone number:	
Date filled:	

Section 2: sources of financing

What are the main sources of funding for your protected area? Please select all that apply:

( ) National public funding

( ) International public funding (official development assistance)

( ) National private funding (local private companies)

( ) International private financing (international private companies)

( ) Funding from non-governmental organisations (NGOs)

( ) Funding from foundations

( ) Financing through public-private partnerships

( ) Other (please specify):

What is the approximate share of private funding (national and international) in the total budget for your protected area?

( ) Less than 10%.

( ) Between 10% and 25%. ( ) Between 25% and 50%. ( ) More than 50%. ( ) I don't know
What is the approximate share of official development assistance (international public funding) in your protected area's total budget? ( ) Less than 10%. ( ) Between 10% and 25%. ( ) Between 25% and 50%. ( ) More than 50%. ( ) I don't know
Section 3: Details by source of funding (section to be duplicated for each source of funding)
General information

Title of the initiative:	
Acronym:	
Start date:	
End date:	
Website:	
Summary of the initiative:	
Budget	
Total budget (currency):	
Source of financing	

Type of financing: ( ) National public funding ( ) International public funding (official development assistance) ( ) National private funding (local private companies) ( ) International private financing (international private companies) ( ) Funding from non-governmental organisations (NGOs) ( ) Funding from foundations

( ) Financing through public-private partnerships
Financing instruments: ( ) Donations and grants ( ) Own funds ( ) Loans ( ) Climate Fund ( ) Biodiversity credits ( ) Trust fund ( ) Investment funds ( ) Carbon market ( ) Other. Please specify:
Activities
Area of expertise: ( ) conservation of biodiversity ( ) Ecosystem management ( ) Application of the law ( ) Community development ( ) Ecotourism and sustainable tourism development ( ) Capacity building for local managers and communities ( ) Scientific research ( ) Other. Please specify:
Partners

Institutional:	
Financial:	
Techniques:	
Search for:	

Human well-being

Name	**Family well-being - access to basic necessities**
Unit of measurement	Percentage of households with an acceptable human well-being score (*Well-Being Index (WBI) expressed as a percentage)*
Type of indicator	Direct effect
Area of interest	The WBI indicator is calculated for all KLCD landscapes. The WBI can be used at several scales. Once an assessment has been made at landscape level, it may be useful to use the tool at more local levels to tailor the community development strategy to specific needs.
Overall objectives	ODD Aichi Post-2020 
CAD code	43071
Political issues	Conservation organisations must be concerned about the well-being of local people because: a) the costs of conservation must not fall unfairly on those least responsible for biodiversity loss, and b) local communities must be the primary beneficiaries of sustainable use, as their management helps to protect intact ecosystems. Administrations, authorities or other local government representatives may also ask themselves what the standard of living is of the people living in the geographical area they manage. The BNS is an ideal tool for this, enabling them to understand where underdevelopment lies, and which villages and households are below the average standard of living. By asking communities to define the goods and services required for a family to meet its basic needs, this survey makes it possible to measure changes in well-being in a way that is rapid, easy to reproduce and, above all, meaningful at local level. The BNS is a credible way of showing the impact of conservation and development efforts on people's well-being, and of measuring progress towards achieving certain Sustainable Development Goals.
Use and interpretation	The BNS (Basic Necessities Survey), which provides the WBI indicator, is a means of assessing the well-being of families. It is based on the premise that some families lack basic necessities and that families themselves are in the best position to decide what is and what is not a basic necessity.
Data source and availability	The data will have to come from surveys carried out using collection tools (Kobo Toolbox already available to the public) in compliance with the standards established for the collection of data for the WBI indicator. Numerous collection guides and tools are available online at[1] .

[1] https://programs.wcs.org/socialscience/en-us/Resources/BNS-Resources

Data quality Prior identification of the villages to be surveyed, the households to be surveyed and strict adherence to the steps set out in the BNS survey practical guide will ensure the prerequisites for quality data collection.

Base value Exercise to be carried out by operators before or at the start of the action

Target To be defined for each landscape according to the expected results.

Update frequency Biennial

Methodology The survey is designed for and adaptable by users, who can easily collect data using the online survey collection software, Kobo Toolbox, and a mobile phone application. A standard analysis will automatically display the results in an online dashboard.

Details of the stages in the data collection procedure are shown in Figure 1 below.

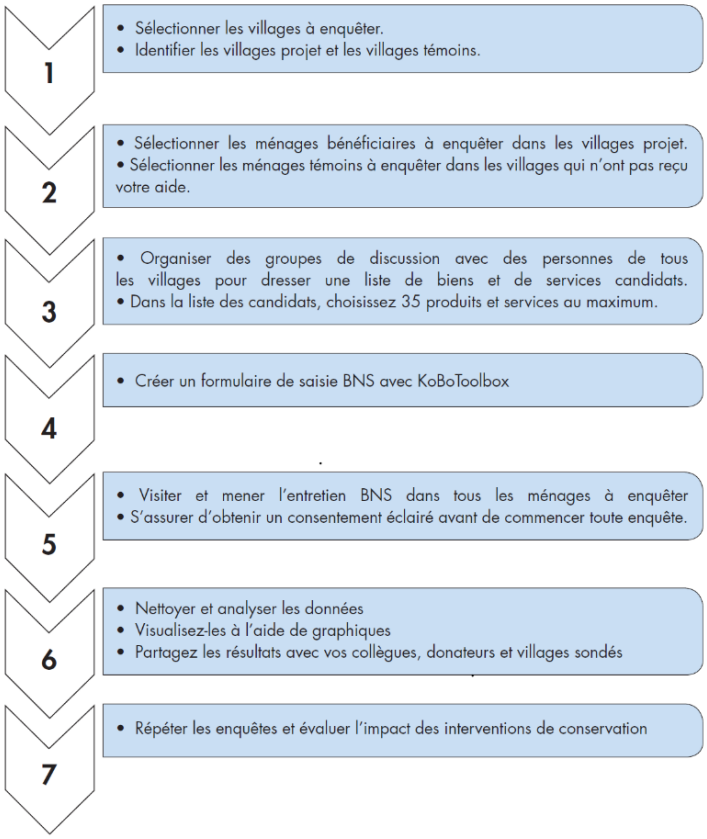


Figure 1 Illustration of the collection process for the SCA indicator. Source: WCS

Based on the BNS value, indicate the percentage of households with a "low" WBI (X<0.5), a "medium" WBI (0.5<X<0.75) and a "high" WBI (X>0.75). However, these thresholds provided here are indicative and are certainly not valid in all contexts: it may be necessary to modify them according to the eating habits of the target population.

To calculate the percentage of households with a 'high' WBI, divide the number of households with a WBI greater than or equal to 0.75 by the total number of households surveyed. Multiply the result by 100 to convert it into a percentage.

Aggregation

The indicator provides values for each household surveyed and village studied. An average for all the groups interviewed can be expressed for the landscape to monitor changes within groups and between different landscapes.

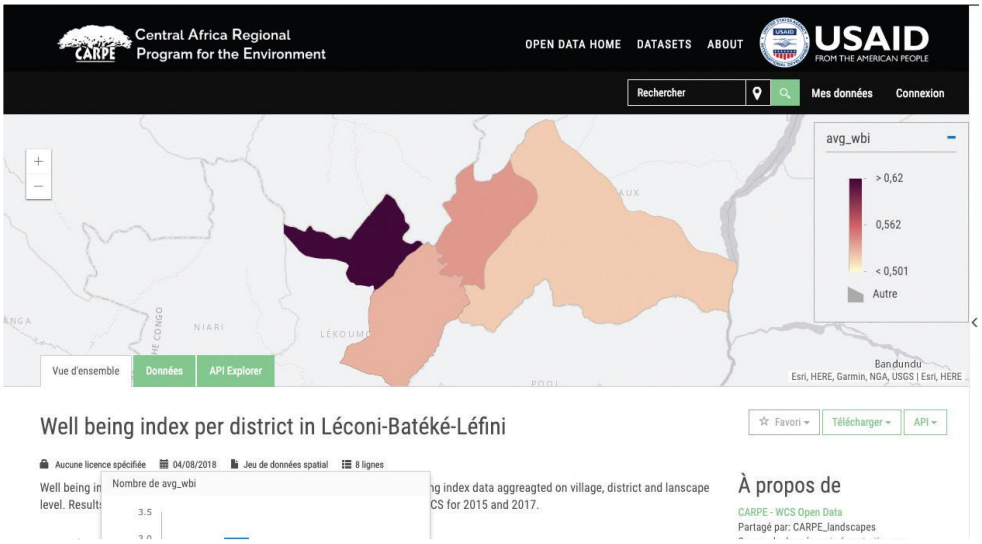


Figure 2 Illustration of potential aggregation of the well-being indicator for landscape-level monitoring. Source: WCS

Resources required

On-site mobilisation of the monitoring and evaluation team

Means of deployment to households

10 or so k €/year

Assumptions / Risks

The SNB's approach is not based on the assumption that people are fine if they earn more than 1 or 2 dollars a day, or that they live in poverty if they earn less. Rather, it is based on the understanding 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 (template forms, form validators, Wikipedia page, etc.) are publicly available. However, some operators have put in place their own set of indicators, and prior work needs to be done to popularise and harmonise them.