WILDLIFE ECONOMY INVESTMENT INDEX (WEII)

METHODOLOGY REPORT

V2
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CONTENTS

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DISCLAIMER

Although every attempt was made to collect data from as many sources as possible and to ensure the inclusion of all relevant indicators, there are some data gaps which have been found during the process. Attempt will be made in future iterations of the WEII to ensure that these data gaps are filled. The authors have taken care to ensure that the material presented in this report is accurate and correct. However, the authors do not guarantee the accuracy of the data or material contained in this report, and accept no legal liability or responsibility connected to its use or interpretation.

CHAPTER 1

Introduction

The methodology of the Wildlife Economy Investment Index (WEII) draws inspiration from various sources, including the Organisation for Economic Co-operation and Development (OECD) handbook on constructing composite indicators and other globally recognised indices such as the Global Competitiveness Index (Joint Research Centre-European Commission, 2008; Schwab, 2019). It involved four crucial stages with the goal of establishing a solid, resilient, and comprehensive basis for the WEII, guaranteeing its precision, significance, and usability. The initial stage was to establish the rationale for the WEII. This involved conducting thorough research, consulting with experts and stakeholders in the wildlife economy and investment domains and analysing various methodologies of existing economic indices. By recognising the need for a comprehensive and standardised tool to measure and evaluate the potential for wildlife economy investment on the continent, the case for a dedicated Index was established, outlining its objectives and intended outcomes. The next stage was to identify the core domains that would encompass the drivers of wildlife economy investment. This process required consideration of various domains, such as wildlife assets, wildlife management, ease of doing business, public sector capacity, and investment safety. These domains became what are herein called categories, forming the conceptual framework of the WEII and representing the multidimensional aspects that contribute to a thriving wildlife economy. These categories were further grouped into two overarching themes: the Wildlife Status and the Investment-enabling Environment, denoted as Sub-indices of the WEII.

Following this classification, the focus turned to identifying the specific indicators that could effectively capture the dimensions and nuances of each category. This involved an extensive search for reliable and relevant data sources, as well as scientific literature. The selection of appropriate indicators was crucial to ensure that the WEII would offer a comprehensive and accurate representation of wildlife economy investment potential across the continent. Having collected the relevant indicators, the subsequent stage involved arranging these indicators within each sub-category based on their commonalities and distinctions. This process required consideration of the definition and source of the data to avoid misclassification and redundancy. The final stage involved calculating the scores based on the indicators' raw data. This required applying statistical normalisation of raw data to ensure that all indicators from different sources and with different units could be added up and aggregated to constitute the final score.

During the development of the WEII v2, stakeholders were engaged to provide feedback and perspectives. Stakeholder workshops were held with participants from governmental, non-governmental, communities and private agencies involved in the wildlife economy. While these engagements did not result in changes to the methodology applied in WEII v2, they provided valuable insights to inform future revisions. The authors express their sincere gratitude to all those who contributed their time and expertise. The WEII v2 applies the same methodological framework as the WEII v1, with updated data, ensuring continuity and consistency for users between v1 and v2, while maintaining its reliability as a tool for policymakers, researchers, and conservation practitioners working in the wildlife economy.

CHAPTER 2

Index organisation

The WEII is organised around the concept of the wildlife economy, defined as the utilisation of indigenous wildlife, including both flora and fauna from marine and terrestrial ecosystems, as an economic asset to create value that aligns with conservation objectives and delivers sustainable growth and economic development (Snyman et al., 2021). Consequently, at its core, the WEII consists of two major Sub-indices: Wildlife Status and Investment-enabling Environment (see Table 1, Table 2 & Figure 1). The Wildlife Status Sub-index assesses the size and status of a country's wildlife (fauna and flora). It considers indicators related to wildlife assets, species richness, endemic species, ecological habitats, protected areas, key biodiversity areas covered by protected areas, wildlife management, and the effectiveness of wildlife management. Meanwhile, the Investment-enabling Environment Sub-index evaluates the conditions that facilitate investments in the country. It encompasses a broad spectrum of indicators, including ease of doing business, business operations, access to finances, access to markets, anti-corruption, public sector capacity, rule of law, infrastructures, labour market, social inclusion, investment safety, money growth, property rights, and security and stability. The systematic methodology of the WEII enables a comprehensive examination of a country's wildlife economy, covering diverse thematic aspects and offering valuable insights into both its areas of excellence and those in need of enhancement. With a specified number of indicators for each category and sub-category, the WEII offers a comprehensive overview of the data points considered in the assessment. Overall, it serves as a powerful tool for understanding and enhancing a country's performance in the wildlife economy, promoting sustainable and inclusive practices.

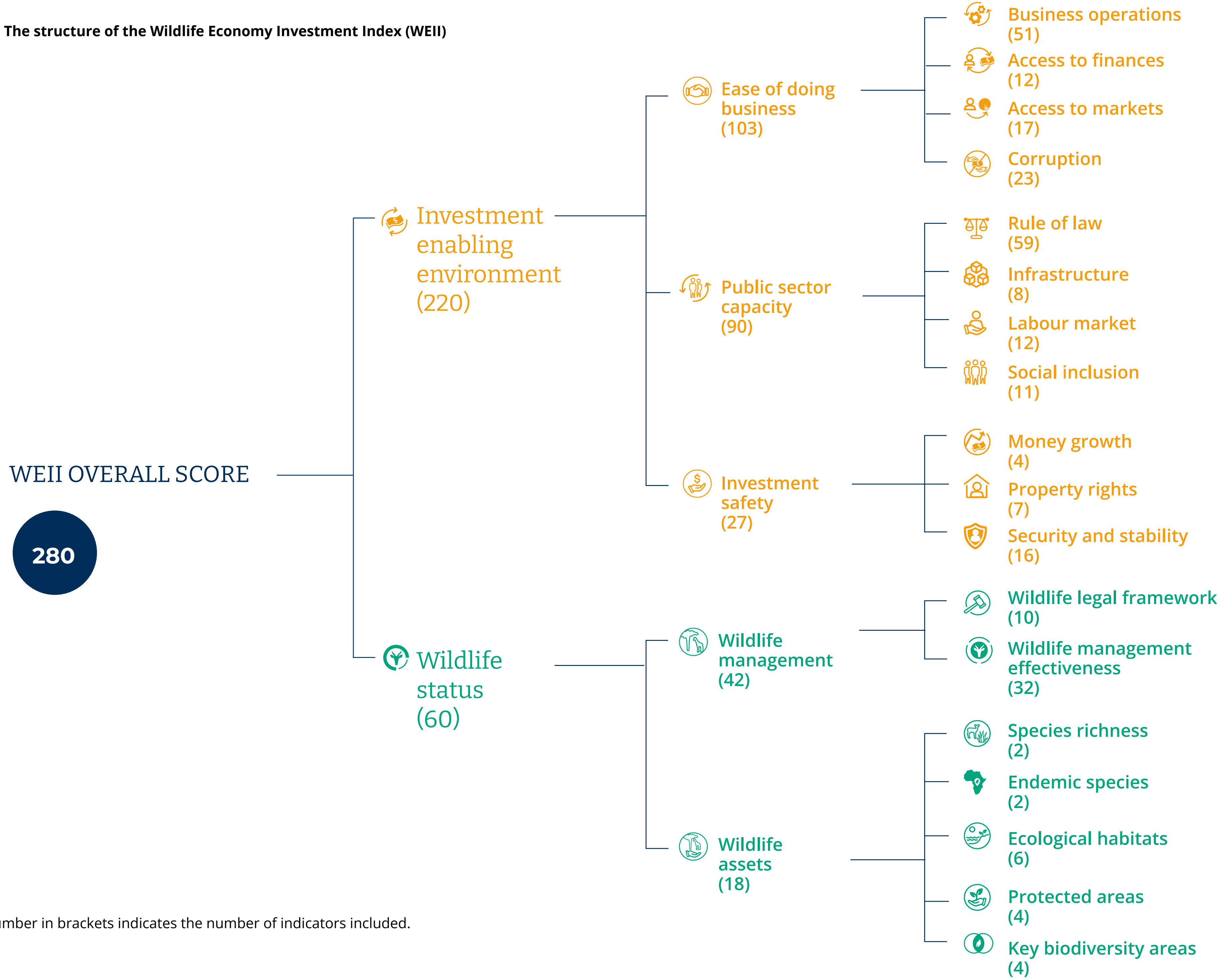
Table 1: Index composition

Index	Sub-indices	Categories	Sub-categories	Number of indicators	Total number of indicators
WEII	Wildlife Status	Wildlife assets	Species richness	2	18
			Endemic species	2	
			Ecological habitats	6	
			Protected areas	4	
			Key biodiversity areas covered by protected areas	4	
		Wildlife management	Wildlife legal framework	10	42
			Wildlife management effectiveness	32	
	Investment-enabling Environment	Ease of doing business	Business operations	51	103
			Access to finances (and other resources)	12	
			Access to markets	17	
			Anti-corruption	23	
		Public sector capacity	Rule of law	59	90
			Infrastructure	8	
			Labour market	12	
			Social inclusion	11	
		Investment safety	Money growth	4	27
			Property rights	7	
			Security and stability	16	
	TOTAL				**280**

Table 2: Description of the WEII components

Index component	Definition
Sub-indices	
Wildlife Status	The breadth of wildlife resources, the management of these resources and sustainable practices for their use and conservation.
Investment-enabling Environment	An overview of the conditions, policies, regulations, and institutional frameworks that influence and facilitate investment activities within a country.
Categories	
Wildlife asset	The variety and uniqueness of animal and plant species, the condition and extent of ecological habitats and protected areas.
Wildlife management	The existence, enforcement and efficiency of laws, regulations, and policies to ensure the protection, conservation, and sustainable management of wildlife.
Ease of doing business	The overall business environment and the level of efficiency and ease with which entrepreneurs and companies can conduct business activities within the country. It takes into account the absence of corruption as an important factor.
Public sector capacity	The governance and resource capabilities (including infrastructure) of a country.
Investment safety	The factors that instil confidence in investors, and encourage both domestic and foreign investments, contributing to economic development and growth.
Sub-categories	
Species richness	The number and variety of different animal and plant species present in a country.
Endemic species	The number of species that are found exclusively in a country and are not naturally occurring anywhere else.
Ecological habitats	Natural environments that provide specific conditions and resources necessary for the survival and reproduction of various species.
Protected areas	Designated regions that are managed and legally protected to conserve biodiversity and natural resources.
Key biodiversity areas covered by protected areas	Coverage by protected areas of specific areas that are identified as critical for the conservation of biodiversity due to their high species richness or unique ecological characteristics. However, this is contingent upon the country's funding to assess it.
Wildlife legal framework	International agreements, laws, regulations, and policies for wildlife protection and sustainable use that a country is a signatory to.
Wildlife management effectiveness	The extent to which wildlife management practices and strategies achieve their intended goals, including species conservation, habitat protection, and sustainable use.
Business operations	Ease of starting, running and closing activities and processes involved in businesses.
Access to finances (and other resources)	The overall availability and ease of accessing financial resources and infrastructure, as well as other necessary resources such as land.
Access to markets	The market accessibility and competitive advantage of businesses and individuals for selling products or services locally and internationally.
Anti-corruption	The level of corruption and the effectiveness of measures that limit bribery, corrupt practices, and misuse of public office in public and private institutions.
Rule of law	The principle that all individuals and institutions are subject to and accountable to the law, ensuring a fair and just system for all.
Infrastructure	The physical structures, facilities, and systems that support business activities, such as transportation networks, communication systems, and utilities.
Labour market	The extent to which the work environment is regulated, balanced, and harmonious.
Social inclusion	The extent to which all individuals and communities, regardless of their gender, social or economic status, have equal opportunities.
Money growth	The rate at which economic output and financial performance are increasing, as reflected in real GDP growth and returns on assets and equity.
Property rights	The legal rights and protection granted to individuals or entities regarding the ownership, use, and control of assets, such as land, resources, or intellectual property.
Security and stability	The presence of a safe and stable environment that fosters confidence and trust in business, including protection against crime, social unrest, and political instability.

Figure 1: The structure of the Wildlife Economy Investment Index (WEII)



*The number in brackets indicates the number of indicators included.

Data sources

Data were obtained from 34 datasets from 24 institutions including:

- Bertelsmann Stiftung,
- Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES),
- Fraser Institute,
- Freedom House,
- Gold Standard,
- International Labour Organization,
- International Monetary Fund,
- International Union for Conservation of Nature (IUCN),
- Joint projects of the African Union Commission, United Nations Economic Commission for Africa, and the African Development Bank,
- Joint project of the Yale Center for Environmental Law & Policy and the Center for International Earth Science Information Network (CIESIN) at Columbia University's Earth Institute,
- Mo Ibrahim Foundation,
- Ocean Health Index team,
- Organisation for Economic Co-operation and Development (OECD),
- Protected Planet,
- The Fund for Peace,
- The Heritage Foundation,
- Transparency International,
- United Nations (UN),
- V-Dem Institute,
- Verra,
- World Economic Forum (WEF),
- World Justice Project (WJP),
- World Bank, and
- World Resources Institute & African Leadership University, School of Wildlife Conservation.

The median contribution to the overall WEII dataset is three indicators (range: one to 39 indicators) per source (institution). The major contributions to the WEII dataset are from WEF with 39 indicators (14%), Mo Ibrahim Foundation with 35 indicators (12%), World Bank with 34 indicators (12%), Bertelsmann Stiftung with 32 indicators (11%), UN with 25 indicators (9%), V-Dem Institute with 25 indicators (9%), and WJP with 22 indicators (8%). Most sources contributed to two categories (range: one to four categories). A full list of WEII indicators, source, and definition is provided in WEII Appendix 1.

Inclusion and exclusion criteria

The inclusion and exclusion criteria applied in WEII v2 follow the same approach as those used in the WEII v1. The overall methodological steps and decision rules were applied consistently. As WEII v2 focuses on applying the established methodology with updated data, no revisions were made to the criteria, even where data availability or coverage may have changed since the development of the WEII v1. The criteria are therefore presented unchanged to support consistency and comparability between the two versions.

Inclusion criteria

The WEII team conducted extensive online research to gather relevant data, employing specific criteria to ensure the highest standards of data quality.

The criteria used included:

- **Relevance:** The data was carefully screened to ensure that it pertains to the specific categories covered by the WEII (see Creswell, 2014). This criterion helps maintain the focus and accuracy of the WEII by including only relevant data.
- **Validity:** The validity criterion ensures that the selected data accurately measure what they are intended to measure (see De Vaus, 2013; Trochim and Donnelly, 2008). Values and attributes of the data were thoroughly examined to ensure that they provide an accurate representation of the real and logical picture of the factor being covered by the specific indicator. This criterion helps ensure the reliability and integrity of the WEII's findings.
- **Reliability:** The reliability criterion assesses the methodology and source of the data. The data collection and processing methods were checked to ensure they were provided in a clear and consistent manner (De Vaus, 2013). It was also verified that the data were collected and published by recognised institutions known for their expertise and credibility. This criterion helps ensure that the data used in the WEII are trustworthy and dependable.
- **Accessibility**: The accessibility criterion ensures that the selected data are openly available to all non-commercial readers. Data that is accessible online and free of barriers was sought, allowing anyone to access and verify the source and authenticity of the data (De Vaus, 2013; Kitchin, 2014). This criterion promotes transparency and inclusivity in the WEII.
- **Recency:** The recency criterion focuses on using the most recent data that reflects the current situation. Data that were collected and published as close to the present as possible were prioritised. However, it is acknowledged that there is typically a time lapse between data collection and publication. This criterion ensured that the WEII reflects the most up-to-date understanding of wildlife, environmental and business indicators while considering the temporal aspects of data availability.

Exclusion criteria

Not all data fulfilling the above-mentioned criteria were retained. A number of them were dropped because of the following criteria:

- **Geographic coverage:** Data that covered less than half of Africa's countries were excluded to reduce bias in the aggregated data*. Specifically, the PADDD TRACKER data on the area of protected areas affected since the 1830s by downgrading, downsizing or degazetting were excluded because they were available for only eight (DRC, Egypt, Gabon, Ghana, Kenya, South Africa, Uganda, and Zambia), 18 (Angola, Congo, Côte d'Ivoire, DRC, Gabon, Guinea, Kenya, Malawi, Mali, Mozambique, Namibia, Nigeria, Rwanda, South Africa, Tanzania, Togo, Uganda, and Zambia), and eight (Burkina Faso, DRC, Rwanda, South Africa, Sudan, Tanzania, and Uganda) African countries respectively. In addition, the Environment Performance Index (EPI) data on the status of fish stocks, and the Climate Action Tracker data on built-up area per capita, were not incorporated into the WEII dataset due to their limited geographic coverage. The EPI data was accessible for only 25 African countries, and the Climate Action Tracker data was solely available for South Africa. Moreover, the WEII analysis could not utilise the Sustainable Development Goals (SDGs) indicator 11.3.1 data, which assesses the ratio of land consumption rate to population growth rate as data on this indicator are available for very few African cities. Furthermore, the WEII lacks data on Other Effective Area-Based Conservation Measures (OECMs). These OECMs play a vital role in achieving the global target of conserving 30% of the world's land and oceans by 2030. However, the Protected Planet records on the presence of marine OECMs was limited to only one country (South Africa), while coastal OECMs were found in Morocco and South Africa, and terrestrial OECMs were reported in Eswatini, Algeria, Morocco, and South Africa only. Additionally, valuable data from the United Nations Conference on Trade and Development (UNCTAD) on the proportion of the business sector workforce involved in the information and communication technology (ICT) sector and the value added in the ICT sector as a percentage of total business sector value added were also excluded from the WEII assessment because of limited geographic coverage. Lastly, the Travel & Tourism Development Index (TTDI) for 2021, another noteworthy and highly relevant dataset, was not included as it lacked data for 31 African countries. *An exception was made for the "Approval of democracy" indicator from the Bertelsmann Stiftung Transformation Index. This indicator was included despite covering fewer than 50% of African countries, with data available for 16 countries in WEII v1 and 14 countries in WEII v2.*

- **Regularly updated:** Data that were regularly updated were prioritised to track changes in countries' performance over time. Typically, data from the UN and international organisations (like SDGs) are updated once a year, providing more frequent information compared to data from independent organisations, which may have longer update intervals. For example, the human footprint data published by the joint project of NASA (National Aeronautics and Space Administration), Wildlife Conservation Society and International Earth Science Information Network was dropped for this reason. Similarly, data on law recognition of private ownership of natural forest, and law recognition of customary or traditional rights to natural forest from the World Resources Institute weren't considered. Moreover, the Wetland Extent Trends index and Biodiversity Intactness Index, were excluded due to their infrequent release (Dixon et al., 2016; Newbold et al., 2016).
- **Uniqueness:** Secondary data sources already incorporated into the WEII were excluded to avoid duplication. For instance, the "Anti-Corruption" indicator from the Chandler Good Government Index, which relies on the raw score of the Corruption Perceptions Index, was not considered. However, composite indicators that provided added value and utilised secondary data were included, such as the 39 composite indicators from the Ibrahim Index of African Governance, which draw extensively from the World Justice Project Rule of Law Index and the Varieties of Democracy (V-Dem) Project. Additionally, indicators measuring the same concept but employing different methodologies were deemed unique and retained in the WEII. As an example, the WEII incorporates 22 indicators from seven institutions that assess corruption perception across various sectors, employing different questionnaires, expert samples, and time frames.
- **Variability:** Indicators with uniform levels across all African countries were excluded as they did not contribute to distinguishing countries based on their performance. For example, variables related to the prevention of invasive alien species, national targets for biodiversity, and integration of biodiversity values into national accounting systems were not included, as all African countries were reported to have achieved these goals (CBD, 2010; UNSD, 2014).

CHAPTER 3

WEII score calculation

Data preparation

The production, organisation, and coding of each raw data source were carefully reviewed. Data from the UN and international organisations were generally compiled from national statistics reported by governments over time, while data from independent organisations were derived from surveys, expert judgement, or other data collection methods (UNDESA, 2019; United Nations, 2010). In WEII v2, data were extracted in Excel (.xlsx) or CSV formats and processed and wrangled using filters, formulas, and aggregation functions.

For each indicator, the most recent relevant data for African countries were carefully extracted from the raw datasets. In some cases, values were aggregated at the country level where raw data were reported at a more disaggregated scale. The dataset was then inspected for missing values, outliers, duplication, and spelling errors in country names.

i) Aggregation
Several indicators required aggregation to generate country-level values. For terrestrial, coastal, and marine protected areas (REP area), the Protected Planet raw datasets reported individual protected areas within countries, requiring the total area to be aggregated per country. For *Verified Carbon Units (VCUs)*, all values reported as "Quantity Issued" were aggregated per country. In WEII v2, issuance data cover the period from March 2009 to December 2025, compared to March 2009 to May 2023 in WEII v1.

Similarly, carbon credit data required aggregation of all reported "Quantity" values per country. For this indicator, issuance data span April 2008 to December 2025 in WEII v2, compared to April 2008 to May 2023 in WEII v1. *Official development assistance targeting the environment as a principal objective* was aggregated across years, using data from 2016 to 2024 in WEII v2, compared to 2016 to 2020 in WEII v1.

For indicators related to species imports, aggregation was required to count the number of distinct species imported per country based on CITES-listed trade. This included imports for reintroduction or reintroduction into the wild, as well as imports for zoos and botanical gardens. In WEII v2, CITES data covering the period from 1975 to 2025 were used, compared to data from 1975 to 2021 in WEII v1.

ii) Mixed-year data
For some firm-level and governance indicators from the World Bank Enterprise Surveys, data were drawn from different years across countries, reflecting the structure and availability of the underlying survey data. As in WEII v1, the year of observation is therefore not uniform across all countries for these indicators. This applies to the following indicators:

- *Days to obtain an operating licence*
- *Percent of firms identifying business licensing and permits as a major constraint*
- *Percent of firms identifying tax rates as a major constraint*
- *Percent of firms identifying access to finance as a major constraint*
- *Percent of firms choosing access to land as their biggest obstacle*
- *Percent of firms competing against unregistered or informal firms*
- *Percent of firms identifying practices of competitors in the informal sector as a major constraint*
- *Percent of firms expected to give gifts to get an operating licence*
- *Percent of firms expected to give gifts to secure a government contract*
- *Value of gift expected to secure a government contract (percentage of contract value)*
- *Percent of firms expected to give gifts in meetings with tax officials*
- *Percent of firms identifying corruption as a major constraint*
- *Percent of firms choosing political instability as their biggest obstacle*
- *If the establishment pays for security, average security costs (percentage of annual sales)*
- *Percent of firms identifying crime, theft, and disorder as a major constraint*

This approach ensures consistency with WEII v1 and allows the inclusion of the most recent available data for each country where survey years differ.

iii) Missing values
Missing values were retained where data were genuinely unavailable and did not logically represent zero. Where missing values corresponded to a true absence of activity or output, they were replaced with zero, consistent with the approach applied in WEII v1.

For protected area-related indicators, missing values were handled carefully to distinguish between data gaps, geographic inapplicability, and true absence. Values were retained as missing where protected areas or key biodiversity areas were not applicable (for example, marine or coastal indicators in landlocked countries) or where spatial extent data were not reported. This approach avoids conflating missing information with zero coverage.

For indicators where missing values indicate no recorded activity, such as Verified Carbon Units, carbon credits, wildlife seizures, and species imports, missing values were replaced with zero to reflect the absence of reported events.

Overall, the final WEII v2 dataset comprised 15,120 indicator values, of which 2,051 (approx. 13.6%) were missing. Sixteen countries had less than 5% missing values across all indicators.

iv) Outliers
As in WEII v1, outliers were examined and retained in the analysis after confirming their accuracy. The presence of outliers reflects substantial variation in country performance across several indicators.

Upper outliers were defined as values exceeding 1.5 times the interquartile range above the third quartile (see also Barnett and Lewis, 1994). In WEII v2, upper outliers were identified in 99 out of 280 indicators (35.36%). The median number of upper outliers per indicator was two, with a maximum of 11. Indicators with a relatively high number of upper outliers included destination of wildlife seizure (live equivalent) and number of bilateral investment treaties (11 each), origin of wildlife seizures (quantity in kg) and the Financial Markets Access Index (10 each), number of extinct plant species (10), origin and destination of wildlife seizures (live equivalent and quantity), Verified Carbon Units (VCUs), and the AfDB Composite Infrastructure Index (nine each). Additional indicators with notable upper outliers included protected area management effectiveness (marine cover), marine protected areas (REP area), endemic species counts, and surface water area indicators.

Lower outliers were defined as values falling below 1.5 times the interquartile range below the first quartile. In WEII v2, lower outliers were observed in 73 out of 280 indicators (26.07%). The median number of lower outliers per indicator was two, with a maximum of 11. Indicators with a higher number of lower outliers included absence of government violence against civilians (11), absence of non-state conflict (10), compliance with reporting obligations under the Minamata Convention (nine), absence of armed conflict (nine), and absence of violence against civilians and the Mountain Green Cover Index (eight each). Other indicators with notable lower outliers included competition policy, party system indicators, terrorism incidence, selected CPIA governance ratings, and participation in international environmental agreements.

v) Duplicates and country naming

As in WEII v1, duplicate entries were checked for and addressed during the data preparation stage to ensure that each country was represented only once for each indicator. Where necessary, duplicate records were removed to maintain data integrity.

Country names were standardised to ensure consistency across all datasets. Variations in country naming and spelling in the raw data were reviewed and aligned with a standard list of African countries used for the WEII. This process ensured consistent representation of countries across all indicators, including cases such as *Côte d'Ivoire*, *Cabo Verde*, *Eswatini*, and *Tanzania, United Republic of*.

Following these checks, datasets were combined into a single unified dataset with consistent country names and no duplicate country entries.

Data standardisation

Data standardisation is a critical step in the WEII, as it allows indicators drawn from different sources and measured on different scales to be compared and combined. As in WEII v1, WEII v2 applies a min–max transformation to normalise raw indicator values (Han et al., 2011). This approach rescales values to a common range, ensuring comparability across indicators while preserving relative differences between countries.

Raw data were first prepared for transformation by ensuring that all indicator columns were treated as numeric. A working copy of the dataset was then created for standardisation. Two transformation approaches were applied, depending on the direction of indicator performance.

For indicators where higher raw values represent better performance, a standard min–max transformation was used. This transformation rescales values to a 0–100 range, where the minimum observed value is mapped to 0 and the maximum observed value is mapped to 100, with all other values scaled proportionally between these bounds. This can be expressed as:

$$S_i = \frac{X_i - X_{min}}{X_{max} - X_{min}} \times 100$$

where S_i is the standardised value for country i, X_i is the raw value, and X_{min} and X_{max} are the minimum and maximum raw values observed for the indicator.

For indicators where higher raw values indicate poorer performance (for example, days to obtain an operating licence or measures of corruption), a reverse, or max–min, transformation was applied. This transformation inverts the scale so that lower raw values correspond to higher standardised scores, again on a 0–100 scale. It is computed as:

$$S_i = \frac{X_{max} - X_i}{X_{max} - X_{min}} \times 100$$

Indicators requiring the max–min transformation were identified in advance and consistently treated in line with WEII v1. These include indicators related to delays, costs, corruption, conflict, environmental degradation, and other factors where higher values reflect weaker performance.

Where an indicator showed no variation across countries (that is, where the maximum and minimum raw values were equal), standardised values were set to missing to avoid division by zero and to reflect the absence of discriminatory power.

Following transformation, indicator names were labelled to reflect the transformation applied (Min–Max or Max–Min), and validation checks were conducted to confirm that all designated indicators were transformed using the appropriate method and that no indicators were omitted or misclassified. The resulting standardised dataset was then exported for use in index construction.

N.B: Both WEII v1 and WEII v2 apply the same min–max normalisation approach; differences in formula notation reflect clarity of presentation rather than changes in computation or indicator treatment.

Winsorisation

Following data standardisation, a winsorisation procedure was applied to limit the influence of extreme values on the calculation of index averages. As in WEII v1, outliers were not removed from the dataset but were adjusted to reduce their influence while retaining all observations (Hawkins, 1980; Hubert and Vandervieren, 2008).

Winsorisation was applied to all standardised indicators using a symmetric percentile-based approach. For each indicator, values below the 0.5th percentile were replaced with the value at the 0.5th percentile, and values above the 99.5th percentile were replaced with the value at the 99.5th percentile. This approach constrains extreme values to the nearest non-outlying thresholds and limits the effect of extreme observations on aggregation (Barnett and Lewis, 1994; Wilcox, 2012).

The procedure was applied after min–max and max–min standardisation, ensuring that all values remained within the 0–100 range. Indicators with missing values were unaffected by the procedure, and indicators with no variation were retained as missing following standardisation. Validation checks confirmed that all winsorised indicator values remained bounded between 0 and 100 and that no indicators were omitted or altered beyond the specified percentile thresholds.

Overall, the application of winsorisation supports more stable index aggregation by reducing the influence of extreme values while preserving the full country sample.

Weighting

The weighting approach applied in WEII v2 follows the same structure and rationale as in the original WEII. The two Sub-indices, the Wildlife Status Sub-index and the Investment-enabling Environment Sub-index, were treated as equally important components of the WEII. Together, they capture both the condition and management of wildlife resources and the enabling environment required for investment in the wildlife economy.

Within each Sub-index, equal weights were assigned to all categories and their respective sub-categories. This approach ensures that each dimension of the wildlife economy is given the same importance in the overall assessment and supports balanced evaluation across ecological, governance, and investment-related factors.

The use of equal weighting is consistent with the approach adopted by several established composite indices, while differing from others that apply variable weights based on expert judgement. In the WEII, equal weighting reflects a deliberate methodological choice to treat all components as equally relevant to the development of a sustainable wildlife economy and to encourage countries to pursue progress across all areas rather than prioritising a limited set of indicators. Given stakeholder feedback on WEII v1 and v2, for WEII v3, this approach will be reassessed by the WEII Analytics Expert Group to ensure ongoing robustness.

Data aggregation

Data aggregation in WEII v2 follows the same structure and logic as in WEII v1. After standardisation and winsorisation, indicator scores were aggregated linearly through successive averaging steps to construct sub-category, category, sub-index, and overall WEII scores.

At the first level, standardised indicator scores were averaged within each sub-category to produce sub-category scores. Sub-category scores were then averaged to obtain category scores, category scores were averaged to produce sub-index scores, and the two sub-index scores were finally averaged to compute the overall WEII score.

This aggregation process can be expressed as:

$$WEII = \frac{1}{n}\sum_{i=1}^{n}\left(\frac{1}{m}\sum_{j=1}^{m}\left(\frac{1}{p}\sum_{k=1}^{p}\left(\frac{1}{q}\sum_{l=1}^{q}x_{ijkl}\right)\right)\right)$$

where x_{ijkl} represents the standardised score of indicator l within sub-category k, category j, and sub-index i, and n, m, p, and q denote the number of sub-indices, categories per sub-index, sub-categories per category, and indicators per sub-category, respectively.

At each aggregation level, averages were calculated using available (non-missing) values only. To limit bias arising from excessive missing data and to preserve comparability across countries, scores were set to missing where more than 50% of the underlying components at that level were missing. At the overall index level, the WEII score was set to missing where at least 50% of the sub-index scores were missing.

Country rankings and performance tiers

Countries were ranked based on their scores relative to other countries at each aggregation level, including sub-categories, categories, sub-indices, and the overall WEII. Ranking was performed using a standard competition ranking approach, where countries with identical scores receive the same rank and the next rank is incremented accordingly (for example, if two countries are tied at rank 1, the next country is ranked 3). This approach is consistent with WEII v1.

Countries with missing data exceeding 50% of the underlying components at a given aggregation level were excluded from ranking at that level. As a result, not all countries received ranks for every sub-category, category, or sub-index, depending on data availability. Countries missing a required proportion of data at the sub-index level were also excluded from the overall WEII ranking. This was only the case for São Tomé and Principe. In addition to numerical rankings, countries were grouped into performance tiers to support comparative interpretation. In WEII v2, tier classification was based on quantile-based thresholds derived from country ranks. Specifically, countries were grouped into upper, middle, and lower thirds using rank-based quantiles, where sufficient variation in ranks allowed for meaningful separation. Where quantile thresholds could not be computed due to limited variation or insufficient ranked observations, tier assignment was not applied.

While WEII v1 also reported country groupings, the use of explicit quantile-based thresholds in WEII v2 provides a more transparent and reproducible basis for tier classification. To ensure comparability between WEII v1 and WEII v2 in subsequent country-level comparisons, WEII v1 tiers were recomputed using the same quantile-based thresholds applied in WEII v2.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CHAPTER 4

Correlation analysis between WEII v2 and external indices and indicators

To examine the extent to which WEII v2 is associated with broader measures of governance, development, economic performance, tourism competitiveness, and state fragility, a series of correlation analyses were undertaken. The following external indices and indicators were included:

- Travel and Tourism Development Index (TTDI)
- Ibrahim Index of African Governance (IIAG)
- Corruption Perceptions Index (CPI)
- Gross Domestic Product (GDP) per capita
- Human Development Index (HDI)
- Fragile States Index

Data harmonisation and sample definition

For each comparator, country-level data were harmonised with WEII v2 using consistent country identifiers. Alignment procedures were applied to ensure comparability of country naming conventions across sources.

Analyses were restricted to countries with available data for both WEII v2 and the relevant comparator variable. The resulting paired samples vary slightly across indicators depending on data availability. The number of countries included in each analysis is reported alongside the corresponding statistical results.

Analytical approach

Linear association between WEII v2 scores and each comparator variable was assessed using Pearson product moment correlation coefficients. This approach provides a measure of the strength and direction of association between two continuous variables.

For each comparison, the following statistics were estimated:

- Pearson correlation coefficient
- Two-sided p-value
- Sample size

Statistical significance was evaluated using conventional thresholds, with p-values reported to allow full transparency in interpretation.

CHAPTER 5

Regional descriptive analysis

In addition to country-level results, a descriptive analysis was conducted to examine WEII v2 performance across regional groupings. Two regional classification frameworks were applied:

- Regional Economic Communities
- African Union regions

The objective was to identify regional patterns, relative strengths, and structural differences in wildlife economy performance across Africa.

Regional Economic Communities (RECs)

Countries were assigned to Regional Economic Communities based on the same classification applied in WEII v1, ensuring continuity and comparability across versions.

1. **CEN-SAD (Community of Sahel-Saharan States)**: Benin, Burkina Faso, Cabo Verde, Central African Republic, Chad, Comoros, Côte d'Ivoire, Djibouti, Egypt, Eritrea, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Liberia, Libya, Mali, Mauritania, Morocco, Niger, Nigeria, São Tomé and Principe, Senegal, Sierra Leone, Somalia, Sudan, Togo, Tunisia
2. **COMESA (Common Market for Eastern and Southern Africa)**: Burundi, Comoros, Democratic Republic of the Congo, Djibouti, Egypt, Eritrea, Ethiopia, Kenya, Libya, Madagascar, Malawi, Mauritius, Rwanda, Seychelles, Somalia, Sudan, Eswatini, Tunisia, Uganda, Zambia, Zimbabwe
3. **EAC (East African Community)**: Burundi, Democratic Republic of the Congo, Kenya, Rwanda, South Sudan, Tanzania, Uganda
4. **ECCAS (Economic Community of Central African States)**: Angola, Burundi, Cameroon, Central African Republic, Chad, Congo, Democratic Republic of the Congo, Equatorial Guinea, Gabon, Rwanda, São Tomé and Principe
5. **ECOWAS (Economic Community of West African States)**: Benin, Burkina Faso, Cabo Verde, Côte d'Ivoire, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone, Togo
6. **IGAD (Intergovernmental Authority on Development)**: Djibouti, Eritrea, Ethiopia, Kenya, Somalia, South Sudan, Sudan, Uganda
7. **SADC (Southern African Development Community)**: Angola, Botswana, Comoros, Democratic Republic of the Congo, Eswatini, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Tanzania, Zambia, Zimbabwe
8. **UMA (Arab Maghreb Union)**: Algeria, Libya, Mauritania, Morocco, Tunisia.

African Union regions

Countries were also grouped according to the African Union geographic classification, as applied in WEII v1.

1. **Central Africa**: Burundi, Cameroon, Central African Republic, Chad, Congo, Democratic Republic of the Congo, Equatorial Guinea, Gabon, São Tomé and Principe
2. **Eastern Africa**: Comoros, Djibouti, Eritrea, Ethiopia, Kenya, Madagascar, Mauritius, Rwanda, Seychelles, Somalia, South Sudan, Sudan, Tanzania, Uganda
3. **Northern Africa**: Algeria, Egypt, Libya, Mauritania, Morocco, Tunisia
4. **Southern Africa**: Angola, Botswana, Eswatini, Lesotho, Malawi, Mozambique, Namibia, South Africa, Zambia, Zimbabwe
5. **Western Africa**: Benin, Burkina Faso, Cabo Verde, Côte d'Ivoire, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone, Togo

For each regional grouping, unweighted regional averages were calculated across:

- Overall WEII score
- Both WEII sub-indices
- All five categories
- All 18 sub-categories

Average regional ranks were also computed to provide a relative performance perspective alongside score levels. These averages were derived from country-level WEII v2 results. The analysis is descriptive and does not adjust for differences in population size or economic weight. Results therefore reflect mean country performance within each grouping. Regional tables report average scores alongside average ranks in parentheses, and the highest-performing region is identified for each metric. This framework allows structured comparison of conservation performance, governance conditions, market access, institutional strength, and stability across regional contexts.

CHAPTER 6

Cluster analysis

Cluster analysis was undertaken to identify groups of countries with similar performance profiles across key WEII v2 dimensions. The objective was to detect structural patterns in the data and to group countries based on similarity in score composition. This approach supports comparative interpretation, benchmarking, and identification of potential areas for collaboration.

Methodological framework

A hierarchical agglomerative clustering approach was applied. This procedure begins by treating each country as an individual cluster and then iteratively merges countries or groups of countries based on similarity. The resulting hierarchical structure is represented using dendrograms, which illustrate how countries are grouped according to score proximity.

Similarity between countries was measured using Euclidean distance. Smaller distances indicate greater similarity in score profiles, while larger distances indicate stronger differentiation.

To determine the optimal number of clusters, a non-hierarchical partitioning procedure was applied. K-means clustering was used to test alternative cluster solutions. The average silhouette method was employed to assess cluster quality across a range of candidate cluster numbers. The silhouette score provides a measure of internal cohesion and external separation, indicating how well countries fit within their assigned cluster relative to other clusters.

For each analytical specification, the number of clusters corresponding to the highest average silhouette score was selected. Final cluster assignments were then derived using K-means with multiple initialisations to ensure stability of results. Hierarchical clustering outputs were retained for visualisation and structural interpretation.

Data preparation and scaling

Cluster analysis was conducted using standardised score components. Prior to clustering, variables were scaled to ensure comparability and to prevent components with larger numerical ranges from disproportionately influencing the distance metric.

Analyses were restricted to countries with complete data for the relevant components under consideration. Countries with missing values in any clustering dimension were excluded from that specific clustering exercise to preserve methodological consistency.

Interpretation and application

Cluster analysis does not rank countries. Instead, it groups countries with similar profiles. Countries within the same cluster share comparable score patterns across the selected components, though their absolute levels may still differ. Clusters can serve as reference groups for comparative assessment. Countries may benchmark themselves against peers with similar structural profiles rather than against continental leaders with substantially different characteristics. The analysis also highlights potential areas for cross-country collaboration. Countries within the same cluster may face comparable constraints or share similar strengths. Also, interaction across clusters may support knowledge transfer, especially where institutional or conservation systems are more advanced.

CHAPTER 7

WEII v1 and v2 comparative analysis

A comparative analysis was undertaken to assess changes in country performance between WEII v1 and WEII v2 at multiple analytical levels. The analysis focused on changes in scores, rankings, and performance tiers at the overall index level and at the sub-index level. All comparative analyses were conducted using Python to ensure transparency, consistency, and reproducibility of results.

Data preparation and comparability

Country-level results from WEII v1 and WEII v2 were compiled and harmonised prior to analysis. Country names were standardised to ensure consistency across versions, and datasets were merged using country identifiers common to both releases. Only countries with non-missing scores in both WEII v1 and WEII v2 were retained for comparison. Countries that did not meet the minimum data availability requirements in either version were excluded to preserve comparability of results.

To ensure consistency in performance tier comparisons, performance tiers for WEII v1 were recomputed using the same quantile-based thresholds applied in WEII v2. This step avoided inconsistencies arising from differences in tiering approaches between WEII versions and enabled a coherent assessment of tier movements across versions.

Index-level comparison

At the overall index level, changes in country performance between WEII v1 and WEII v2 were assessed using three complementary metrics:

Score change, calculated as the difference between WEII v2 and WEII v1 scores;

Rank change, calculated as the difference between WEII v1 and WEII v2 ranks, with positive values indicating an improvement in ranking;

Tier movement, based on quantile-derived performance tiers (upper, middle, and lower thirds).

In addition, countries were classified into qualitative change categories based on the magnitude of score change between versions. These categories included strong improvers, moderate improvers, stagnant countries, moderate decliners, and strong decliners. Symmetric thresholds were applied to distinguish substantive changes from minor score fluctuations (see Table 3).

Table 3: Change typology classification thresholds

Category	Threshold definition
Strong improver	x ≥ 1.0
Moderate improver	0.3 ≤ x < 1.0
Stagnant	-0.3 < x < 0.3
Moderate decliner	-1.0 < x ≤ -0.3
Strong decliner	x ≤ -1.0

Performance tiers were derived independently for WEII v1 and WEII v2 using score distributions in each version. Tier movements were then assessed by comparing countries' tier assignments across versions. This approach allowed identification of both absolute changes in performance and shifts across relative performance groups.

Summary statistics, tier mobility tables, and lists of top improvers and decliners were generated to support structured comparison of index-level changes.

Sub-index, category and sub-category comparison

The same comparative framework applied at the overall index level was extended to all lower levels of aggregation, including the two WEII Sub-indices, the five categories, and the 18 sub-categories.

For each aggregation level, country scores and ranks from WEII v1 and WEII v2 were harmonised and merged using consistent country identifiers. Only countries with non-missing values in both versions at the relevant level were retained to ensure comparability.

Changes in scores and ranks were calculated using the same definitions as at the overall index level. Score change was defined as the difference between WEII v2 and WEII v1 values. Rank change was calculated as the difference between WEII v1 and WEII v2 ranks, with positive values indicating an improvement in ranking.

Performance tiers were derived independently for each version using quantile-based thresholds applied to the score distribution at the relevant aggregation level. Tier movements were then assessed by comparing country tier assignments between WEII v1 and WEII v2. This ensured consistency in the interpretation of relative performance shifts across all levels of analysis.

Countries were classified into the same qualitative change categories used at the index level, based on the magnitude of score change. This allowed consistent interpretation of improvement, stagnation, or decline across sub-indices, categories, and sub-categories.

For each aggregation level, summary statistics, tier mobility tables, and lists of top improvers and decliners were generated to support structured comparison of performance changes between versions.

Static indicator exposure analysis

Not all indicators included in the WEII had updated data available for WEII v2. Of the 280 indicators used in the WEII, 75 indicators (26.8%) retained their WEII v1 values due to the absence of newer data. As all indicators carry equal weight within the WEII framework, the presence of unchanged indicators introduces an element of structural stability into Index scores between versions.

To better understand how data availability affects observed changes between WEII v1 and WEII v2, a static indicator exposure analysis was conducted. This analysis aimed to identify the extent to which different components of the WEII are influenced by indicators that remained unchanged between versions, and to assess the relative sensitivity of different parts of the WEII to updated data.

Each indicator was classified according to whether its underlying data were updated in WEII v2 or retained from WEII v1. Using indicator metadata, the proportion of unchanged (static) indicators was calculated across multiple levels of the WEII structure.

At the overall index level, the share of static indicators was calculated as the proportion of indicators that were not updated in WEII v2, providing a baseline measure of structural stability between versions. The analysis was then disaggregated to assess variation in static indicator exposure across different parts of the WEII. Specifically, the proportion of unchanged indicators was computed for:

- each sub-index;
- each category within sub-indices; and
- each sub-category within categories.

For each grouping, the static share was expressed as a percentage of total indicators in that group and ranked to identify components with relatively high or low exposure to unchanged data.

This analysis supports interpretation of the WEII v1–v2 comparison by clarifying where limited score movement may be driven by data availability rather than changes in underlying conditions. Components of the WEII with a higher proportion of unchanged indicators are mechanically less responsive to version-to-version change, while components with a higher share of updated indicators are more sensitive to updated data inputs.

CHAPTER 8

Limitations

As with the original Wildlife Economy Investment Index (WEII v1), a number of limitations should be acknowledged when interpreting the results of WEII v2. These limitations primarily reflect constraints related to data availability, data quality, and methodological choices that are inherent to the construction of composite indices.

Reliance on secondary data

As in WEII v1, a key limitation of WEII v2 is its reliance on secondary data drawn from existing international and institutional datasets. This reliance means that certain aspects of the wildlife economy are not captured due to the lack of consistently available and comparable data across African countries. In particular, indicators related to species abundance and viable populations, community- and privately owned conservation areas, watershed connectivity, ecosystem services, national budget allocations to wildlife and conservation, and businesses operating around protected areas are not included in the WEII.

In addition, many of the indicators used in WEII v2, especially those related to governance, business climate, and investment conditions, were not designed specifically to measure wildlife economy investment. Rather, they reflect broader economic, institutional, or environmental conditions that serve as proxies for investment potential in the wildlife economy. While this approach provides a reasonable approximation given current data constraints, it may not fully capture sector-specific dynamics.

The use of secondary data is, however, consistent with the practice of other well-established composite indices, such as the Human Development Index and the Biodiversity Intactness Index.

Data quality, reporting bias, and statistical capacity

As in WEII v1, much of the data used in WEII v2, especially data sourced from the United Nations system and multilateral institutions, is based on national statistics reported or validated by governments. This raises the possibility of selective reporting, delayed updates, or inconsistencies in data quality across countries. Although international frameworks such as the Fundamental Principles of Official Statistics and the United Nations National Quality Assurance Frameworks for Official Statistics aim to ensure impartiality and reliability, complete neutrality cannot be guaranteed.

Differences in national statistical capacity remain an important limitation. Existing evidence indicates substantial variation in statistical systems across African countries, which may affect the availability, frequency, and comparability of data used in the WEII. These disparities can influence both cross-country comparisons and changes observed between WEII versions.

Indicator availability and unchanged data in WEII v2

A limitation that is more pronounced in WEII v2 relates to the availability of updated data across all indicators. Of the 280 indicators included in the WEII, a subset retained their WEII v1 values due to the absence of newer data at the time of compilation. Because all indicators carry equal weight, the presence of unchanged indicators introduces an element of structural stability into the WEII and may limit observed changes between versions in certain components.

As a result, limited movement in scores, ranks, or tiers for some countries or components may reflect data availability constraints rather than unchanged underlying conditions. This limitation is especially relevant when interpreting comparisons between WEII v1 and WEII v2.

Uneven distribution of indicators across components

As in WEII v1, equal weighting is applied across sub-indices, categories, sub-categories, and indicators. However, the number of indicators varies substantially across components. For example, some sub-categories are represented by only a small number of indicators, while others include a much larger set. Consequently, the relative influence of individual indicators differs across sub-categories and categories.

This structural feature means that, although weights are formally equal, components with fewer indicators may be more sensitive to changes in individual indicators than those with larger indicator sets.

Transformation of categorical data

Both WEII v1 and WEII v2 apply min–max and max–min transformations to standardise raw data, which requires categorical indicators to be converted into numeric form. This conversion was carried out by assigning ordered numeric values to categorical responses, with higher values corresponding to better performance.

While this approach allows important qualitative governance and policy indicators to be incorporated into the WEII, it may simplify complex institutional realities. In addition, min–max transformation can result in loss of information about the original scale and may compress variation, particularly where outliers are present.

Aggregation assumptions

As in WEII v1, linear averaging was used to aggregate indicator scores into sub-category, category, sub-index, and overall index scores. This approach is transparent, easy to interpret, and consistent with recommendations from the European

Commission's Joint Research Centre and with practices used by other well-known indices.

However, linear aggregation assumes full compensability, meaning that strong performance in one indicator can offset weaker performance in another. While this assumption supports a holistic assessment and encourages balanced progress, it may mask trade-offs between dimensions or conceal underperformance in specific areas. In addition, averaging does not require normally distributed data, which may limit statistical interpretability in some contexts.

Interpretation of changes between WEII versions

Finally, changes observed between WEII v1 and WEII v2 should be interpreted with caution. Differences in scores, rankings, or performance tiers reflect a combination of updated data inputs, extended time coverage for some indicators, and structural features of the WEII, rather than causal effects or policy impacts. The WEII is designed as a comparative and diagnostic tool, not as a causal evaluation framework.

The limitations of WEII v2 largely mirror those of WEII v1 and include reliance on secondary data, potential biases in data sources, variation in national statistical capacity, uneven distribution of indicators across components, the transformation of categorical data into numeric form, and the assumptions inherent in linear aggregation. Additional considerations in WEII v2 relate to the availability of updated data for all indicators and its implications for interpreting changes between WEII versions. Recognising these limitations is essential for informed and responsible use of the WEII and supports ongoing efforts to improve data coverage and quality in future iterations.

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APPENDIX

WEII Appendix 1: List of indicators

Sub-index	Category	Sub-category	Source	Indicator name	Definition from the source
Wildlife Status	**Wildlife assets**	**Species richness**	IUCN Red list	Number of animal species	The list of EX - Extinct, EW - Extinct in the Wild, CR - Critically Endangered (includes CR(PE) and CR(PEW)), EN - Endangered, VU - Vulnerable, LR/cd - Lower Risk/conservation dependent, NT - Near Threatened (includes LR/nt - Lower Risk/near threatened), DD - Data Deficient, LC - Least Concern (includes LR/lc - Lower Risk/ least concern) animal species in each country. HERE, WE EXCLUDED EXTINCT SPECIES AND USED THE LIST AS A PROXY OF SPECIES RICHNESS AS IT CAPTURES LOWER-RISK ANIMAL SPECIES. CR(PE) & CR(PEW): The tags 'Possibly Extinct' and 'Possibly Extinct in the Wild' have been developed to identify CR species that are likely already extinct (or extinct in the wild), but require more investigation to confirm this. NOTE that these are not IUCN Red List Categories; they are tags that can be attached to the CR category to highlight those taxa that are possibly extinct. They are included in the above table to indicate a plausible upper estimate for number of recently extinct species on The IUCN Red List.
Wildlife Status	**Wildlife assets**	**Species richness**	IUCN Red list	Number of plant species	The list of EX - Extinct, EW - Extinct in the Wild, CR - Critically Endangered (includes CR(PE) and CR(PEW)), EN - Endangered, VU - Vulnerable, LR/cd - Lower Risk/conservation dependent, NT - Near Threatened (includes LR/nt - Lower Risk/near threatened), DD - Data Deficient, LC - Least Concern (includes LR/lc - Lower Risk/ least concern) plant species in each country. HERE, WE EXCLUDED EXTINCT SPECIES AND USED THE LIST AS A PROXY OF SPECIES RICHNESS AS IT CAPTURES LOWER-RISK ANIMAL SPECIES. CR(PE) & CR(PEW): The tags 'Possibly Extinct' and 'Possibly Extinct in the Wild' have been developed to identify CR species that are likely already extinct (or extinct in the wild), but require more investigation to confirm this. NOTE that these are not IUCN Red List Categories; they are tags that can be attached to the CR category to highlight those taxa that are possibly extinct. They are included in the above table to indicate a plausible upper estimate for number of recently extinct species on The IUCN Red List.
Wildlife Status	**Wildlife assets**	**Endemic Species**	IUCN Red list	Number of endemic vertebrate species	Total endemic vertebrate species in each country for groups where >80% of species in the group have been assessed (totals by taxonomic group). Endemics = species that are known to occur naturally within one country only. HERE WE INCLUDE FISHES, WHICH WERE COUNTED SEPARATELY ON IUCN LIST.
Wildlife Status	**Wildlife assets**	**Endemic Species**	IUCN Red list	Number of endemic plant species	Total endemic plant species in each country for groups where >80% of species in the group have been assessed (totals by taxonomic group). Endemics = species that are known to occur naturally within one country only.
Wildlife Status	**Wildlife assets**	**Ecological habitats**	SDGs Indicators	Forest area as a proportion of total land area (%) AG_LND_FRST	According to the FAO, Forest is defined as: “land spanning more than 0.5 hectares with trees higher than 5 meters and a canopy cover of more than 10 percent, or trees able to reach these thresholds in situ. It does not include land that is predominantly under agricultural or urban land use”. Land area is the country area excluding area under inland waters and coastal waters. Computation: (Forest area (reference year))/(Land area (reference year)) ×100
Wildlife Status	**Wildlife assets**	**Ecological habitats**	SDGs Indicators	Above-ground biomass stock in forest (tonnes per hectare) AG_LND_FRSTBIOPHA	Clearly a simple measure of forest area is insufficient to monitor sustainable forest management as a whole. Changes in the above-ground biomass stock in forest indicate the balance between gains in biomass stock due to forest growth and losses due to wood removals, natural losses, fire, wind, pests and diseases. At country level and over a longer period, sustainable forest management would imply a stable or increasing biomass stock per hectare, while a long-term reduction of biomass stock per hectare would imply either unsustainable management of the forests and degradation or unexpected major losses due to fire, wind, pests or diseases.

WEII Appendix 1: List of indicators

Sub-index	Category	Sub-category	Source	Indicator name	Definition from the source
Wildlife Status	**Wildlife assets**	**Ecological habitats**	SDGs Indicators	Mountain Green Cover Index ER_MTN_GRNCVI	The Mountain Green Cover Index (MGCI) is designed to measure the extent and the changes of green vegetation in mountain areas - i.e. forest, shrubs, trees, pasture land, cropland, etc. – in order to monitor progress towards the mountain target. MGCI is defined as the percentage of green cover over the total surface of the mountain region of a given country and for given reporting year. The aim of the index is to monitor the evolution of the green cover and thus assess the status of conservation of mountain ecosystems.
Wildlife Status	**Wildlife assets**	**Ecological habitats**	SDGs Indicators	Wetlands area (% of total land area) EN_WBE_WTLP	Wetlands are areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres.
Wildlife Status	**Wildlife assets**	**Ecological habitats**	SDGs Indicators	Lakes and rivers permanent water area (% of total land area) EN_LKRV_PWAP	A permanent water surface is underwater throughout the year whilst a seasonal water surface is underwater for less than 12 months of the year.
Wildlife Status	**Wildlife assets**	**Ecological habitats**	SDGs Indicators	Mangrove area (square kilometres) EN_WBE_MANGN	The data on mangrove cover, are sourced from Global Mangrove Watch, and are derived from imagery captured by JAXA ALOS satellites and Landsat.
Wildlife Status	**Wildlife assets**	**Protected Areas**	Protected Planet	Terrestrial protected areas (REP area)	Terrestrial national parks and equivalent reserves in recognition that they 'are valuable for economic and scientific reasons and also as areas for the future preservation of fauna and flora and geologic structures in their natural state'. IUCN definition: "A protected area is a clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long term conservation of nature with associated ecosystem services and cultural values." (Dudley 2008) CBD definition: "A geographically defined area, which is designated or regulated and managed to achieve specific conservation objectives" (Article 2 of the Convention on Biological Diversity). This definition is further expanded upon under Article 8 of the same convention.
Wildlife Status	**Wildlife assets**	**Protected Areas**	Protected Planet	Coastal protected areas (REP area)	Coastal national parks and equivalent reserves in recognition that they 'are valuable for economic and scientific reasons and also as areas for the future preservation of fauna and flora and geologic structures in their natural state'. IUCN definition: "A protected area is a clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long term conservation of nature with associated ecosystem services and cultural values." (Dudley 2008) CBD definition: "A geographically defined area, which is designated or regulated and managed to achieve specific conservation objectives" (Article 2 of the Convention on Biological Diversity). This definition is further expanded upon under Article 8 of the same convention.

WEII Appendix 1: List of indicators

Sub-index	Category	Sub-category	Source	Indicator name	Definition from the source
Wildlife Status	**Wildlife assets**	**Protected Areas**	Protected Planet	Marine protected areas (REP area)	Marine national parks and equivalent reserves in recognition that they 'are valuable for economic and scientific reasons and also as areas for the future preservation of fauna and flora and geologic structures in their natural state'. IUCN definition: "A protected area is a clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long term conservation of nature with associated ecosystem services and cultural values." (Dudley 2008) CBD definition: "A geographically defined area, which is designated or regulated and managed to achieve specific conservation objectives" (Article 2 of the Convention on Biological Diversity). This definition is further expanded upon under Article 8 of the same convention.
Wildlife Status	**Wildlife assets**	**Protected Areas**	Protected Planet	PAs connectivity	The degree to which protected/ conserved areas is geographically connected.
Wildlife Status	**Wildlife assets**	**Key biodiversity areas (KBAs) covered by Protected Areas**	SDGs Indicators	Average proportion of Freshwater Key Biodiversity Areas (KBAs) covered by protected areas (%) ER_PTD_FRHWTR	The indicator Proportion of important sites for freshwater biodiversity that are covered by protected areas, by ecosystem type shows temporal trends in the mean percentage of each important site for freshwater biodiversity (i.e., those that contribute significantly to the global persistence of biodiversity) that is covered by designated protected areas and Other Effective Area-based Conservation Measures (OECMs).
Wildlife Status	**Wildlife assets**	**Key biodiversity areas (KBAs) covered by Protected Areas**	SDGs Indicators	Average proportion of Terrestrial Key Biodiversity Areas (KBAs) covered by protected areas (%) ER_PTD_TERR	The indicator Proportion of important sites for terrestrial biodiversity that are covered by protected areas, by ecosystem type shows temporal trends in the mean percentage of each important site for terrestrial biodiversity (i.e., those that contribute significantly to the global persistence of biodiversity) that is covered by designated protected areas and Other Effective Area-based Conservation Measures (OECMs).
Wildlife Status	**Wildlife assets**	**Key biodiversity areas (KBAs) covered by Protected Areas**	SDGs Indicators	Average proportion of Mountain Key Biodiversity Areas (KBAs) covered by protected areas (%) ER_PTD_MTN	The indicator Coverage by protected areas of important sites for mountain biodiversity shows temporal trends in the mean percentage of each important site for mountain biodiversity (i.e., those that contribute significantly to the global persistence of biodiversity) that is covered by designated protected areas and Other Effective Area-based Conservation Measures (OECMs).
Wildlife Status	**Wildlife assets**	**Key biodiversity areas (KBAs) covered by Protected Areas**	SDGs Indicators	Average proportion of Marine Key Biodiversity Areas (KBAs) covered by protected areas (%) ER_MRN_MPA	The indicator Coverage of protected areas in relation to marine areas shows temporal trends in the mean percentage of each important site for marine biodiversity (i.e., those that contribute significantly to the global persistence of biodiversity) that is covered by designated protected areas and Other Effective Area-based Conservation Measures (OECMs).

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Sub-index	Category	Sub-category	Source	Indicator name	Definition from the source
Wildlife Status	**Wildlife management**	**Wildlife legal framework**	SDGs Indicators	Countries that are parties to the Nagoya Protocol (1 = YES; 0 = NO) ER_CBD_NAGOYA	The Nagoya Protocol covers genetic resources and traditional knowledge associated with genetic resources, as well as the benefits arising from their utilization by setting out core obligations for its contracting Parties to take measures in relation to access, benefit-sharing and compliance. The indicator is defined as the number of countries that have adopted the Nagoya Protocol.
Wildlife Status	**Wildlife management**	**Wildlife legal framework**	SDGs Indicators	Countries that have legislative, administrative and policy framework or measures reported to the Access and Benefit-Sharing Clearing-House (1 = YES; 0 = NO) ER_CBD_ABSCLRHS	The indicator is defined as the number of countries that have adopted legislative, administrative and policy frameworks to ensure fair and equitable sharing of benefits. It refers to the efforts by countries to implement the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity (2010)
Wildlife Status	**Wildlife management**	**Wildlife legal framework**	SDGs Indicators	Countries that are contracting Parties to the International Treaty on Plant Genetic Resources for Food and Agriculture (PGRFA) (1 = YES; 0 = NO) ER_CBD_PTYPGRFA	The indicator is defined as the number of countries that have signed the International Treaty on Plant Genetic Resources for Food and Agriculture (PGRFA). The objectives of the International Treaty are the conservation and sustainable use of plant genetic resources for food and agriculture and the fair and equitable sharing of the benefits arising out of their use, in harmony with the Convention on Biological Diversity.
Wildlife Status	**Wildlife management**	**Wildlife legal framework**	SDGs Indicators	National Biodiversity Strategy and Action Plan (NBSAP) targets alignment to Aichi Biodiversity target 9 set out in the Strategic Plan for Biodiversity 2011-2020 (1 = YES, 0 = NO) ER_IAS_NBSAP	This indicator aims to quantify trends in: Commitment by countries to multinational agreements relevant to alien species, specifically: if targets and objectives within national strategies for preventing and controlling invasive alien species are aligned with Aichi Target 9

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Sub-index	Category	Sub-category	Source	Indicator name	Definition from the source
Wildlife Status	**Wildlife management**	**Wildlife legal framework**	Ibrahim Index of African Governance (IIAG)	Promotion of Environmental Sustainability	This indicator assesses the extent to which economic policy considers environmental concerns and government environmental policies foster sustainability and pollution management.
Wildlife Status	**Wildlife management**	**Wildlife legal framework**	Ibrahim Index of African Governance (IIAG)	Environmental Policies & Regulations	This sub-indicator assesses the extent to which environmental policies foster the protection and sustainable use of natural resources and the management of pollution.
Wildlife Status	**Wildlife management**	**Wildlife legal framework**	Country Policy And Institutional Assessment / World Bank	CPIA policy and institutions for environmental sustainability rating (1=low to 6=high)	Policy and institutions for environmental sustainability assess the extent to which environmental policies foster the protection and sustainable use of natural resources and the management of pollution.
Wildlife Status	**Wildlife management**	**Wildlife legal framework**	WEF Global Competitiveness Index 2019	Environment-related treaties in force	Total number of ratified environmental treaties (0–29 scale, where 29 is best)
Wildlife Status	**Wildlife management**	**Wildlife legal framework**	World Resource Institute & Africa Leadership University	Law recognition of private ownership of wildlife (animals)	Based on WRI research as of November 2013 and updated by ALU report of March 2021, data correspond to the response to question "Does the law recognize any private ownership of the natural resource?" Some laws may have been amended since.
Wildlife Status	**Wildlife management**	**Wildlife legal framework**	World Resource Institute & Africa Leadership University	Law recognition of customary or traditional rights to wildlife (animals)	Based on WRI research as of November 2013 and updated by ALU report of March 2021, data correspond to the response to question "Does the law recognize customary or traditional rights to the natural resource?"Some laws may have been amended since.
Wildlife Status	**Wildlife management**	**Wildilife Management Effectiveness**	Ibrahim Index of African Governance (IIAG)	Enforcement of Environmental Policies	This indicator assesses the extent to which environmental laws and regulations are effectively enforced. It includes Effectiveness of Environmental Protection Authorities & Enforcement of Environmental Regulations
Wildlife Status	**Wildlife management**	**Wildilife Management Effectiveness**	Ibrahim Index of African Governance (IIAG)	Sustainable Use of Forests	This sub-indicator measures the extent to which primary forest loss and forest depletion are under control.

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Sub-index	Category	Sub-category	Source	Indicator name	Definition from the source
Wildlife Status	Wildlife management	Wildlife Management Effectiveness	Ibrahim Index of African Governance (IIAG)	Land & Water Biodiversity Protection	This indicator measures the extent to which terrestrial biomes and marine areas are protected.
Wildlife Status	Wildlife management	Wildlife Management Effectiveness	IUCN & Biodiversity Consultancy & Durell Institute of Conservation and Ecology	Biodiversity Offset Policies development score	Information on the status, scope and implementation of biodiversity compensation policies including offset places.
Wildlife Status	Wildlife management	Wildlife Management Effectiveness	Protected planet	Protected Area Management Effectiveness (PAME) _land_cover	Percentage of land area covered by protected areas where management effectiveness assessments have been conducted, per country, by vertue of Aichi Target 11.
Wildlife Status	Wildlife management	Wildlife Management Effectiveness	Protected planet	Protected Area Management Effectiveness (PAME) _marine_cover	Percentage of marine area covered by protected areas where management effectiveness assessments have been conducted, per country, by vertue of Aichi Target 11.
Wildlife Status	Wildlife management	Wildlife Management Effectiveness	Verra	Verified Carbon Units (VCUs)	Each VCU represents a reduction or removal of one tonne of carbon dioxide equivalent (CO2e) achieved by a project. VCUs are characterized by a number of quality assurance principles which are confirmed through the project validation and verification process and Verra's review and approval. VCUs are ultimately purchased and retired by an end user as a means of offsetting their emissions.
Wildlife Status	Wildlife management	Wildlife Management Effectiveness	Gold Standard	Carbon credits	1 carbon credit typically represents a reduction or removal of greenhouse gas emissions equivalent to one metric ton of carbon dioxide (or its equivalent in other greenhouse gases).
Wildlife Status	Wildlife management	Wildlife Management Effectiveness	Organisation for Economic Co-operation and Development (OECD)	Official development assistance (ODA) targeting environment as the "principal objective"	Aid in support of environment sustainability and aid to biodiversity, climate change mitigation, climate change adaptation and desertification (the so-called "Rio markers") from the Development Assistance Committee (DAC) Creditor Reporting System (CRS) database. The Rio markers/conventions are interlinked and mutually reinforcing. We used data on funds targeting environment as the "principal objective".

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Sub-index	Category	Sub-category	Source	Indicator name	Definition from the source
Wildlife Status	**Wildlife management**	**Wildlife Management Effectiveness**	UN Office on Drug and Crime	Origin of wildlife seizures (live equivalent)	A seizure is made when contraband is detected by law enforcement authorities. The quantity of seizures indicates both the presence of a problem and the initiative of the relevant authorities in addressing it. Countries that dedicate the most effort to fighting trafficking may have higher seizure totals than similarly situated counterparts. High-performing countries are often transit countries, neither the source nor the destination of the illicit flow. High levels of seizures are not necessarily an indicator of culpability, and are often precisely the opposite.
Wildlife Status	**Wildlife management**	**Wildlife Management Effectiveness**	UN Office on Drug and Crime	Origin of wildlife seizures (Quantity in Kg)	A seizure is made when contraband is detected by law enforcement authorities. The quantity of seizures indicates both the presence of a problem and the initiative of the relevant authorities in addressing it. Countries that dedicate the most effort to fighting trafficking may have higher seizure totals than similarly situated counterparts. High-performing countries are often transit countries, neither the source nor the destination of the illicit flow. High levels of seizures are not necessarily an indicator of culpability, and are often precisely the opposite.
Wildlife Status	**Wildlife management**	**Wildlife Management Effectiveness**	UN Office on Drug and Crime	Destination of wildlife seizure (live equivalent)	A seizure is made when contraband is detected by law enforcement authorities. The quantity of seizures indicates both the presence of a problem and the initiative of the relevant authorities in addressing it. Countries that dedicate the most effort to fighting trafficking may have higher seizure totals than similarly situated counterparts. High-performing countries are often transit countries, neither the source nor the destination of the illicit flow. High levels of seizures are not necessarily an indicator of culpability, and are often precisely the opposite.
Wildlife Status	**Wildlife management**	**Wildlife Management Effectiveness**	UN Office on Drug and Crime	Destination of wildlife seizure (Quantity in Kg)	A seizure is made when contraband is detected by law enforcement authorities. The quantity of seizures indicates both the presence of a problem and the initiative of the relevant authorities in addressing it. Countries that dedicate the most effort to fighting trafficking may have higher seizure totals than similarly situated counterparts. High-performing countries are often transit countries, neither the source nor the destination of the illicit flow. High levels of seizures are not necessarily an indicator of culpability, and are often precisely the opposite.
Wildlife Status	**Wildlife management**	**Wildlife Management Effectiveness**	Environmental Performance Index (EPI)	Climate change mitigation	A composite indicator of 10 variables (CO2 Growth Rate, CH4 Growth Rate, N2O Growth Rate, F-Gas Growth Rate, Black Carbon Growth Rate, Projected 2050 Emissions, CO2 from Land Cover, GHG Intensity, GHG per Capita) that measure countries' performance on the reduction of greenhouse gas emissions.
Wildlife Status	**Wildlife management**	**Wildlife Management Effectiveness**	Environmental Performance Index (EPI)	Waste management	A composite indicator of 3 variables (Controlled Solid Waste, Recycling, and Ocean Plastic)
Wildlife Status	**Wildlife management**	**Wildlife Management Effectiveness**	Environmental Performance Index (EPI)	Heavy metals	A measure of Lead Exposure

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Sub-index	Category	Sub-category	Source	Indicator name	Definition from the source
Wildlife Status	**Wildlife management**	**Wildilife Management Effectiveness**	Environmental Performance Index (EPI)	Agriculture	A composite indicator of Sustainable Nitrogen Management Index and Sustainable Pesticide Use.
Wildlife Status	**Wildlife management**	**Wildilife Management Effectiveness**	SDGs Indicators	Parties meeting their commitments and obligations in transmitting information as required by Stockholm Convention on hazardous waste, and other chemicals	Under the Stockholm Convention a Party has an obligation to report on the measures it has taken to implement the provisions of the Convention and on the effectiveness of such measures in meeting the objectives of the Convention. The national reports include statistical data on the total quantities of production, import and export of each of the chemicals listed in Annex A and Annex B or a reasonable estimate of such data; and to the extent practicable, a list of the States from which it has imported each such substance and the States to which it has exported each such substance. For each party, a percentage value is assigned to indicate how much of the required information has been submitted.
Wildlife Status	**Wildlife management**	**Wildilife Management Effectiveness**	SDGs Indicators	Parties meeting their commitments and obligations in transmitting information as required by Basel Convention on hazardous waste, and other chemicals	Parties to the Basel Convention have an obligation to present an annual national report as provided for by Article 13, paragraph 3 in order to enable monitoring of the implementation of the Basel Convention by its Parties. The reports are to contain, inter alia, Information regarding transboundary movements of hazardous wastes or other wastes in which Parties have been involved, including the amount of hazardous wastes and other wastes exported, their category, characteristics, destination, any transit country and disposal method as stated on the response to notification, the amount of hazardous wastes and other wastes imported. For each party, a percentage value is assigned to indicate how much of the required information has been submitted.
Wildlife Status	**Wildlife management**	**Wildilife Management Effectiveness**	SDGs Indicators	Parties meeting their commitments and obligations in transmitting information as required by Minamata Convention on hazardous waste, and other chemicals (%)	Minamata Convention on Mercury is an international treaty designed to protect human health and the environment from anthropogenic emissions and releases of mercury and mercury compounds. For each party, a percentage value is assigned to indicate how much of the required information has been submitted.
Wildlife Status	**Wildlife management**	**Wildilife Management Effectiveness**	Ocean Health Index	Coastal Protection	This goal aims to assess the amount of protection provided by marine and coastal habitats to coastal areas that people value, both inhabited (homes and other structures) and uninhabited (parks, special places, etc.). At local and regional scales data may exist on all these variables at a high enough resolution to map and calculate exactly which habitats are providing how much protection to which coastal areas. At global scales, such data do not exist and so we focused on EEZ-scale assessments, even though this scale does not allow one to account for the spatial configuration of habitats relative to coastal areas and human populations. Consequently, we assumed that all coastal areas have value (and equal value) and assessed the total area and condition of key habitats within each EEZ (without regard to their precise location relative to coastal areas). The habitats that provide protection to coastal areas for which we have global data include mangroves, coral reefs, seagrasses, kelp forests, salt marshes, and coastal sea ice (shoreline pixels with >15% ice cover).

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Sub-index	Category	Sub-category	Source	Indicator name	Definition from the source
Wildlife Status	**Wildlife management**	**Wildlife Management Effectiveness**	Ocean Health Index	Seafood harvest	This goal measures the amount of seafood sustainably harvested within an EEZ or region through any means for use primarily in human consumption and thus includes wild-caught commercial fisheries, mariculture, artisanal-scale and recreational fisheries. Importantly, seafood harvest using unsustainable fishing practices or catch levels is penalized as the goal aims to maximize the amount of sustainably produced seafood from wild or cultured stocks. Because we do not track where the fish go after being caught or produced, this goal does not aim to measure food security for the population of a given country, but instead measures the food provided from its waters.
Wildlife Status	**Wildlife management**	**Wildlife Management Effectiveness**	Environmental Performance Index (EPI)	Tree cover loss	We quantify tree cover loss by constructing a five-year moving average of the percentage of forest lost from the extent of forest cover in the reference year 2000. We define a forest as any land area with over 30% canopy cover. Data for this indicator come from Global Forest Watch. A score of 100 indicates virtually no tree cover loss, and a score of 0 indicates the worst levels of loss.
Wildlife Status	**Wildlife management**	**Wildlife Management Effectiveness**	Environmental Performance Index (EPI)	Grassland loss	Grassland loss is measured using a five-year moving average of percentage of gross losses in grassland areas compared to the 1992 reference year. Data are derived from a time series of annual global land cover maps for the years 1992–2015 released by the European Space Agency's (ESA) Climate Change Initiative. A score of 100 indicates virtually no grassland loss, and a score of 0 indicates the worst levels of loss. Annual land cover data come from the European Union's Copernicus Earth observation program.
Wildlife Status	**Wildlife management**	**Wildlife Management Effectiveness**	Environmental Performance Index (EPI)	Wetland loss	Wetland loss is quantified using a five-year moving average of percentage of gross losses in wetland areas compared to the 1992 reference year. Data are derived from a time series of annual global land cover maps for the years 1992–2015 released by the European Space Agency's (ESA) Climate Change Initiative. A score of 100 indicates virtually no wetland loss, and a score of 0 indicates the worst levels of loss. Annual land cover data come from the European Union's Copernicus Earth observation program.
Wildlife Status	**Wildlife management**	**Wildlife Management Effectiveness**	SDGs Indicators	Proportion of land that is degraded over total land area (%) AG_LND_DGRD	Land degradation is defined as the reduction or loss of the biological or economic productivity and complexity of rain fed cropland, irrigated cropland, or range, pasture, forest and woodlands resulting from a combination of pressures, including land use and management practices. This definition was adopted by and is used by the 196 countries that are Party to the UNCCD. From 2000-2015.
Wildlife Status	**Wildlife management**	**Wildlife Management Effectiveness**	SDGs Indicators	EN_WBE_MANGC_Mangrove total area change (%)	Annual and multi-annual changes in mangrove area (2000-2016)
Wildlife Status	**Wildlife management**	**Wildlife Management Effectiveness**	SDGs Indicators	Forest area annual net change rate (%) AG_LND_FRSTCHG	This indicator focuses on both the direction of change (whether there is a loss or gain in forest area) and how the change rate varies over time; the latter is important to capture progress among countries that are losing forest area but have managed to reduce the rate of annual forest area loss. From 2010-2020.

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Sub-index	Category	Sub-category	Source	Indicator name	Definition from the source
Wildlife Status	**Wildlife management**	**Wildilife Management Effectiveness**	IUCN Red list	Number of Extinct Animal species	A taxon is Extinct when there is no reasonable doubt that the last individual has died. A taxon is presumed Extinct when exhaustive surveys in known and/or expected habitat, at appropriate times (diurnal, seasonal, annual), throughout its historic range have failed to record an individual. Surveys should be over a time frame appropriate to the taxon's life cycle and life form.
Wildlife Status	**Wildlife management**	**Wildilife Management Effectiveness**	IUCN Red list	Number of Extinct Plant species	A taxon is Extinct when there is no reasonable doubt that the last individual has died. A taxon is presumed Extinct when exhaustive surveys in known and/or expected habitat, at appropriate times (diurnal, seasonal, annual), throughout its historic range have failed to record an individual. Surveys should be over a time frame appropriate to the taxon's life cycle and life form.
Wildlife Status	**Wildlife management**	**Wildilife Management Effectiveness**	CITES	Number of imported species for reintroduction or reintroduction into the wild	This indicator delivers from over 22 million records since 1980 of international trade in over 38,700 CITES-listed species – including roughly 5,950 species of animals and 32,800 species of plants
Wildlife Status	**Wildlife management**	**Wildilife Management Effectiveness**	CITES	Number of imported species for zoo and botanical garden	This indicator delivers from over 22 million records since 1980 of international trade in over 38,700 CITES-listed species – including roughly 5,950 species of animals and 32,800 species of plants
Investment-enabling Environment	**Ease of doing business**	**Business operations**	World Bank Entreprises Survey	Days to obtain operating license	The average wait, in days, to obtain an operating license.
Investment-enabling Environment	**Ease of doing business**	**Business operations**	WEF Global Competitiveness Index 2019	Time to start a business	Number of calendar days needed to complete the procedures to legally operate a business
Investment-enabling Environment	**Ease of doing business**	**Business operations**	WEF Global Competitiveness Index 2019	Cost of starting a business	Expressed as a percentage of GNI per capita
Investment-enabling Environment	**Ease of doing business**	**Business operations**	World Bank Entreprises Survey	Percent of firms identifying business licensing and permits as major constraint	Percentage of firms identifying business licensing and permits as "major" or "very severe" obstacle.

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Sub-index	Category	Sub-category	Source	Indicator name	Definition from the source
Investment-enabling Environment	**Ease of doing business**	**Business operations**	World Bank Entreprises Survey	Percent of firms identifying tax rates as major constraint	Percentage of firms identifying tax rates as a "major" or "very severe" obstacle.
Investment-enabling Environment	**Ease of doing business**	**Business operations**	WEF Global Competitiveness Index 2019	Burden of government regulation	Response to the survey question "In your country, how burdensome is it for companies to comply with public administration's requirements (e.g. permits, regulations, reporting)?" [1 = extremely burdensome; 7 = not burdensome at all]
Investment-enabling Environment	**Ease of doing business**	**Business operations**	Economic Freedom Index	Tax Burden	Tax burden is a composite measure that reflects marginal tax rates on both personal and corporate income and the overall level of taxation (including direct and indirect taxes imposed by all levels of government) as a percentage of gross domestic product (GDP). The component score is derived from three quantitative sub-factors:The top marginal tax rate on individual income,The top marginal tax rate on corporate income, and The total tax burden as a percentage of GDP.
Investment-enabling Environment	**Ease of doing business**	**Business operations**	Economic Freedom Index	Business Freedom	The business freedom score for each country is a number between 0 and 100, with 100 indicating the freest business environment. The score is based on four sub-factors, all of which are weighted equally: Access to electricity, Business environment risk, Regulatory quality, and Women's economic inclusion.
Investment-enabling Environment	**Ease of doing business**	**Business operations**	Economic Freedom Index	Monetary Freedom	Monetary freedom combines a measure of inflation with an assessment of various government activities that distort prices. Price stability without microeconomic intervention is the ideal state for the free market. The score for the monetary freedom component is based on two sub-factors:The weighted average rate of inflation for the most recent three years andA qualitative judgement about the extent of government manipulation of prices through direct controls or subsidies.
Investment-enabling Environment	**Ease of doing business**	**Business operations**	Economic Freedom Index	Trade Freedom	Trade freedom is a composite measure of the extent of tariff and nontariff barriers that affect imports and exports of goods and services. The trade freedom score is based on two inputs:The trade-weighted average tariff rate and A qualitative evaluation of nontariff barriers (NTBs).
Investment-enabling Environment	**Ease of doing business**	**Business operations**	Economic Freedom Index	Investment Freedom	It evaluates a variety of regulatory restrictions that typically are imposed on investment.
Investment-enabling Environment	**Ease of doing business**	**Business operations**	Ibrahim Index of African Governance (IIAG)	Business Regulatory Environment	This sub-indicator assesses the extent to which the legal, regulatory, and policy environments help or hinder private businesses in investing, creating jobs and becoming more productive.

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Sub-index	Category	Sub-category	Source	Indicator name	Definition from the source
Investment-enabling Environment	**Ease of doing business**	**Business operations**	World Bank's Logistics Performance Index (LPI)	Customs	The efficiency of customs and border management clearance
Investment-enabling Environment	**Ease of doing business**	**Business operations**	World Bank's Logistics Performance Index (LPI)	International shipments	The ease of arranging competitively priced international shipments
Investment-enabling Environment	**Ease of doing business**	**Business operations**	World Bank's Logistics Performance Index (LPI)	Logistics competence and quality	The competence and quality of logistics services
Investment-enabling Environment	**Ease of doing business**	**Business operations**	Country Policy And Institutional Assessment / World Bank	CPIA business regulatory environment rating (1=low to 6=high)	Business regulatory environment assesses the extent to which the legal, regulatory, and policy environments help or hinder private businesses in investing, creating jobs, and becoming more productive.
Investment-enabling Environment	**Ease of doing business**	**Business operations**	Country Policy And Institutional Assessment / World Bank	CPIA structural policies cluster average (1=low to 6=high)	The structural policies cluster includes trade, financial sector, and business regulatory environment.
Investment-enabling Environment	**Ease of doing business**	**Business operations**	Country Policy And Institutional Assessment / World Bank	CPIA financial sector rating (1=low to 6=high)	Financial sector assesses the structure of the financial sector and the policies and regulations that affect it.
Investment-enabling Environment	**Ease of doing business**	**Business operations**	Country Policy And Institutional Assessment / World Bank	CPIA fiscal policy rating (1=low to 6=high)	Fiscal policy assesses the short- and medium-term sustainability of fiscal policy (taking into account monetary and exchange rate policy and the sustainability of the public debt) and its impact on growth.
Investment-enabling Environment	**Ease of doing business**	**Business operations**	Country Policy And Institutional Assessment / World Bank	CPIA trade rating (1=low to 6=high)	Trade assesses how the policy framework fosters trade in goods.

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Sub-index	Category	Sub-category	Source	Indicator name	Definition from the source
Investment-enabling Environment	**Ease of doing business**	**Business operations**	Africa Regional Integration Index	Number of countries that require a visa	This indicator measures the number of countries whose citizens strictly require visas when travelling to each country in the region. The data is obtained from the AfDB Visa Openness Index
Investment-enabling Environment	**Ease of doing business**	**Business operations**	Africa Regional Integration Index	Regional inflation differential	The inflation rate differential is the difference between the inflation rate of the country and the target inflation rate of the region otherwise the minimum positive value of the region.
Investment-enabling Environment	**Ease of doing business**	**Business operations**	Fraser Institute	Legal enforcement of contracts	This component is based on the World Bank's Doing Business estimates for the time and money required to collect a debt. The debt is assumed to equal 200% of the country's per-capita income where the plaintiff has complied with the contract and judicial judgment is rendered in his favor. Zero-to-10 ratings were constructed for (1) the time cost (measured in number of calendar days required from the moment the lawsuit is filed until payment); and (2) the monetary cost of the case (measured as a percentage of the debt).
Investment-enabling Environment	**Ease of doing business**	**Business operations**	Fraser Institute	Freedom to own foreign currency bank accounts	When foreign currency bank accounts were permissible without any restric tions both domestically and abroad, the rating was 10; when these accounts were restricted, the rating was zero. If foreign currency bank accounts were permissible domestically but not abroad (or vice versa), the rating was 5.
Investment-enabling Environment	**Ease of doing business**	**Business operations**	Fraser Institute	Interest rate controls /negative real interest rates	Data on credit-market controls and regulations were used to construct rating intervals. Countries with interest rates determined by the market, stable monetary policy, and reasonable real-deposit and lending-rate spreads received higher ratings.
Investment-enabling Environment	**Ease of doing business**	**Business operations**	Fraser Institute	Tax compliance	This sub-component is based on the World Bank's Doing Business data on the time required per year for a business to prepare, file, and pay taxes on corporate income, value added or sales taxes, and taxes on labor.
Investment-enabling Environment	**Ease of doing business**	**Business operations**	Fraser Institute	Mean tariff rate	This sub-component is based on the unweighted mean of tariff rates.
Investment-enabling Environment	**Ease of doing business**	**Business operations**	Fraser Institute	Standard deviation of tariff rates	Compared to a uniform tariff, wide variations in tariff rates indicate greater efforts towards central planning of the economy's production and consumption patterns. Thus, countries with a greater variation in their tariff rates are given lower ratings.

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Sub-index	Category	Sub-category	Source	Indicator name	Definition from the source
Investment-enabling Environment	**Ease of doing business**	**Business operations**	Fraser Institute	Insolvency regulatory framework	Score on an index that measures the adequacy and integrity of the legal framework applicable to liquidation and reorganization proceedings. Scores range from 0 to 16, with higher values indicating insolvency legislation that is better designed for rehabilitating viable firms and liquidating non-viable ones.
Investment-enabling Environment	**Ease of doing business**	**Business operations**	Fraser Institute	Government ensuring policy stability	Response to the survey question "In your country, to what extent does the government ensure a stable policy environment for doing business?" [1 = not at all; 7 = to a great extent]
Investment-enabling Environment	**Ease of doing business**	**Business operations**	WEF Global Competitiveness Index 2019	Competition in services	Average of the scores of the three components of the following Executive Opinion Survey question: "In your country, how competitive is the provision of the following services: professional services (legal services, accounting, engineering, etc.); retail services; and network sector (telecommunications, utilities, postal, transport, etc.)?" In each case, the answer ranges from 1 (not at all competitive) to 7 (extremely competitive).
Investment-enabling Environment	**Ease of doing business**	**Business operations**	WEF Global Competitiveness Index 2019	Competition in professional services	Response to the survey question "In your country, how competitive are the provision of professional services (legal services, accounting, engineering, etc.) [1 = not at all competitive; 7 = extremely competitive]"
Investment-enabling Environment	**Ease of doing business**	**Business operations**	WEF Global Competitiveness Index 2019	Competition in retail services	Response to the survey question "In your country, how competitive are the provision of retail services" [1 = not at all competitive; 7 = extremely competitive]
Investment-enabling Environment	**Ease of doing business**	**Business operations**	WEF Global Competitiveness Index 2019	Competition in network services	Response to the survey question "In your country, how competitive are the provision of network sector (telecommunications, utilities, postal, transport, etc.)" [1 = not at all competitive; 7 = extremely competitive]
Investment-enabling Environment	**Ease of doing business**	**Business operations**	WEF Global Competitiveness Index 2019	Trade tariffs	Weighted average applied tariff rate, expressed in percentage points
Investment-enabling Environment	**Ease of doing business**	**Business operations**	WEF Global Competitiveness Index 2019	Complexity of tariffs	Measures the complexity of a country's tariff regime. The score ranges from 1 (very complex) to 7 (not complex)

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Sub-index	Category	Sub-category	Source	Indicator name	Definition from the source
Investment-enabling Environment	**Ease of doing business**	**Business operations**	WEF Global Competitiveness Index 2019	Border clearance efficiency	Assesses the effectiveness and efficiency of the clearance process by customs and other border control agencies in the eight major trading partners of each country. The scale ranges from 1 (worst) to 5 (best).
Investment-enabling Environment	**Ease of doing business**	**Business operations**	WEF Global Competitiveness Index 2019	Cooperation in labour-employer relations	Response to the survey question "In your country, how do you characterize labour-employer relations?" [1 = generally confrontational; 7 = generally cooperative]
Investment-enabling Environment	**Ease of doing business**	**Business operations**	WEF Global Competitiveness Index 2019	Flexibility of wage determination	Response to the survey question "In your country, how are wages generally set?" [1 = by a centralized bargaining process; 7 = by each individual company]
Investment-enabling Environment	**Ease of doing business**	**Business operations**	WEF Global Competitiveness Index 2019	Efficiency of legal framework in challenging regulations	Response to the survey question "In your country, how easy is it for private businesses to challenge government actions and/or regulations through the legal system?" [1 = extremely difficult; 7 = extremely easy]
Investment-enabling Environment	**Ease of doing business**	**Business operations**	WEF Global Competitiveness Index 2019	Market capitalization	The total value of listed domestic companies, expressed as a percentage of GDP
Investment-enabling Environment	**Ease of doing business**	**Business operations**	WEF Global Competitiveness Index 2019	Growth of innovative companies	Response to the survey question "In your country, to what extent do new companies with innovative ideas grow rapidly?" [1 = not at all; 7 = to a great extent]
Investment-enabling Environment	**Ease of doing business**	**Business operations**	International Monetary Fund	Consumer Price Index, All items	CPI is an index that measures the rate at which the prices of consumption goods and services are changing from month to month (or from quarter to quarter). The prices are collected from shops or other retail outlets. The usual method of calculation is to take an average of the period-to-period price changes for the different products, using as weights the average amounts that households spend on them.
Investment-enabling Environment	**Ease of doing business**	**Business operations**	WJP Rule of Law Index	Administrative proceedings are conducted without unreasonable delay	Measures whether administrative proceedings at the national and local levels are conducted without unreasonable delay.

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Sub-index	Category	Sub-category	Source	Indicator name	Definition from the source
Investment-enabling Environment	**Ease of doing business**	**Business operations**	WJP Rule of Law Index	Due process is respected in administrative proceedings	Measures whether due process of the law is respected in administrative proceedings conducted by national and local authorities in issue areas such as the environment, taxes, and labor
Investment-enabling Environment	**Ease of doing business**	**Business operations**	Bertelsmann Stiftung Transformation Index	Basic administration	To what extent do basic administrative structures exist?
Investment-enabling Environment	**Ease of doing business**	**Business operations**	Bertelsmann Stiftung Transformation Index	Social capital	To what extent have social self-organization and the construction of social capital advanced?
Investment-enabling Environment	**Ease of doing business**	**Business operations**	Bertelsmann Stiftung Transformation Index	Monetary stability	To what extent does the monetary authority pursue and communicate a consistent monetary stabilization policy?
Investment-enabling Environment	**Ease of doing business**	**Business operations**	Bertelsmann Stiftung Transformation Index	Fiscal stability	To what extent do the government's budgetary policies support fiscal stability?
Investment-enabling Environment	**Ease of doing business**	**Business operations**	Bertelsmann Stiftung Transformation Index	Output strength	How does the economy, as measured in quantitative indicators, perform?
Investment-enabling Environment	**Ease of doing business**	**Business operations**	World Bank	Exchange rate stability	Exchange rate, 2010 = 100
Investment-enabling Environment	**Ease of doing business**	**Access to finances (and other resources)**	World Bank Entreprises Survey	Percent of firms identifying access to finance as a major constraint	Percentage of firms identifying access/cost of finance as a "major" or "very severe" obstacle.

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Sub-index	Category	Sub-category	Source	Indicator name	Definition from the source
Investment-enabling Environment	**Ease of doing business**	**Access to finances (and other resources)**	Bertelsmann Stiftung Transformation Index	Banking system	To what extent have a solid banking system and a functioning capital market been established?
Investment-enabling Environment	**Ease of doing business**	**Access to finances (and other resources)**	Economic Freedom Index	Financial Freedom	Financial freedom is an indicator of banking efficiency as well as a measure of independence from government control and interference in the financial sector.
Investment-enabling Environment	**Ease of doing business**	**Access to finances (and other resources)**	Ibrahim Index of African Governance (IIAG)	Access to Banking Services	This indicator measures the extent to which the population has access to banks, ATMs and financial products as well as the prevalence and access to mobile money accounts and networks.
Investment-enabling Environment	**Ease of doing business**	**Access to finances (and other resources)**	International Monetary Fund / FAS dataset	Key Indicators, Geographical Outreach, Number of all microfinance institution branches per 100,000 adults	The number of deposit taking and non-deposit taking microfinance institutions and their branches for every 100,000 adults in the reporting jurisdiction.
Investment-enabling Environment	**Ease of doing business**	**Access to finances (and other resources)**	International Monetary Fund /Financial Development Index dataset	Financial Institutions Efficiency Index	It relies on three aspects of bank efficiency: (i) efficiency in intermediating savings to investment, as measured by the net interest margin (the accounting value of bank's net interest revenue as a share of its average interest-bearing assets) and lending-deposit spread; (ii) operational efficiency measures, such as non-interest income to total income and overhead costs to total assets; and (iii) profitability measures, such as return on assets and return on equity. As with the other dimensions, these are relatively crude measures of efficiency.
Investment-enabling Environment	**Ease of doing business**	**Access to finances (and other resources)**	WEF Global Competitiveness Index 2019	Domestic credit to private sector	The total value of financial resources provided to the private sector, expressed as a percentage of GDP
Investment-enabling Environment	**Ease of doing business**	**Access to finances (and other resources)**	WEF Global Competitiveness Index 2019	Financing of SMEs	Response to the survey question “In your country, to what extent can small- and medium-sized enterprises (SMEs) access finance they need for their business operations through the financial sector?” [1 = not at all; 7 = to a great extent]

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Sub-index	Category	Sub-category	Source	Indicator name	Definition from the source
Investment-enabling Environment	**Ease of doing business**	**Access to finances (and other resources)**	WEF Global Competitiveness Index 2019	Venture capital availability	Response to the survey question "In your country, how easy is it for start-up entrepreneurs with innovative but risky projects to obtain equity funding?" [1 = extremely difficult; 7 = extremely easy]
Investment-enabling Environment	**Ease of doing business**	**Access to finances (and other resources)**	Fraser Institute	Capital controls	The International Monetary Fund reports on up to 13 types of international capital controls.
Investment-enabling Environment	**Ease of doing business**	**Access to finances (and other resources)**	World Bank Development indicators	Lending interest rate (%)	Lending rate is the bank rate that usually meets the short- and medium-term financing needs of the private sector. This rate is normally differentiated according to creditworthiness of borrowers and objectives of financing. The terms and conditions attached to these rates differ by country, however, limiting their comparability.
Investment-enabling Environment	**Ease of doing business**	**Access to finances (and other resources)**	World Bank Entreprises Survey	Percent of firms choosing access to land as their biggest obstacle	Percentage of firms identifying access to land as a "major" or "very severe" obstacle.
Investment-enabling Environment	**Ease of doing business**	**Access to markets**	Bertelsmann Stiftung Transformation Index	Market organization	To what level have the fundamentals of market-based competition developed?
Investment-enabling Environment	**Ease of doing business**	**Access to markets**	Bertelsmann Stiftung Transformation Index	Competition policy	To what extent do safeguards exist to protect competition, and to what extent are they enforced?
Investment-enabling Environment	**Ease of doing business**	**Access to markets**	Bertelsmann Stiftung Transformation Index	Liberalization of foreign trade	To what extent has foreign trade been liberalized?
Investment-enabling Environment	**Ease of doing business**	**Access to markets**	World Bank Entreprises Survey	Percent of firms competing against unregistered or informal firms	Percentage of firms competing against unregistered or informal firms.

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Sub-index	Category	Sub-category	Source	Indicator name	Definition from the source
Investment-enabling Environment	Ease of doing business	Access to markets	World Bank Entreprises Survey	% of firms identifying practices of competitors in the informal sector as a major constraint	Percentage of firms identifying practices of competitors in the informal sector as major constraint. The computation of the indicator is based on the rating of the obstacle as a potential constraint to the current operations of the establishment.
Investment-enabling Environment	Ease of doing business	Access to markets	International Monetary Fund /Financial Development Index dataset	Financial Markets Access Index	Composite index of Percent of market capitalization outside of top 10 largest companies and Total number of issuers of debt (domestic and external, nonfinancial and financial corporations)
Investment-enabling Environment	Ease of doing business	Access to markets	Ibrahim Index of African Governance (IIAG)	Public Procurement Procedures	This indicator assesses the extent to which there are competitive bidding procedures for public procurement and companies found guilty of violating the law are excluded from participating in future bidding.
Investment-enabling Environment	Ease of doing business	Access to markets	Africa Regional Integration Index	Share of intraregional trade	This indicator is defined as the country's intra-regional trade (exports plus imports) as a proportion of the total intra-regional trade of the region.
Investment-enabling Environment	Ease of doing business	Access to markets	Africa Regional Integration Index	AfCFTA	This qualitative indicator measures whether the country has ratified, signed, or not signed the protocol on the agreement establishing the African Continental Free Trade Area (AfCFTA).
Investment-enabling Environment	Ease of doing business	Access to markets	Africa Regional Integration Index	Number of bilateral investment treaties	This indicator is the number of bilateral investment treaties that are in force, that is, the total number of bilateral investment treaties net of those that have not been ratified and/or have been terminated within the region.
Investment-enabling Environment	Ease of doing business	Access to markets	Africa Regional Integration Index	Free Movement of Persons Protocol	This indicator measures whether or not a country has ratified the AU Protocol on the Free Movement of Persons, Right of Residence and Right of Establishment
Investment-enabling Environment	Ease of doing business	Access to markets	WEF Global Competitiveness Index 2019	Distortive effect of taxes and subsidies on competition	Response to the survey question "In your country, to what extent do fiscal measures (subsidies, tax breaks, etc.) distort competition?" [1 = distort competition to a great extent; 7 = do not distort competition at all]

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Sub-index	Category	Sub-category	Source	Indicator name	Definition from the source
Investment-enabling Environment	Ease of doing business	Access to markets	Bertelsmann Stiftung Transformation Index	Credibility	To what extent does the government act as a credible and reliable partner in its relations with the international community?
Investment-enabling Environment	Ease of doing business	Access to markets	Bertelsmann Stiftung Transformation Index	Regional cooperation	To what extent is the political leadership willing and able to cooperate with neighboring countries?
Investment-enabling Environment	Ease of doing business	Access to markets	Ibrahim Index of African Governance (IIAG)	Accessibility of Public Records	This indicator assesses the extent to which different sorts of information of interest to the public and party financing information are accessible as well as the extent to which citizens have the right to request reliable and high-quality information.
Investment-enabling Environment	Ease of doing business	Access to markets	Ibrahim Index of African Governance (IIAG)	Equal Socioeconomic Opportunity	This indicator assesses the extent to which state jobs and business opportunities are equally accessible regardless of income level, social group or urban-rural location, as well as the extent to which there are institutions and programmes dedicated to the socioeconomic integration of youth.
Investment-enabling Environment	Ease of doing business	Access to markets	WEF Global Competitiveness Index 2019	Extent of market dominance	Response to the survey question "In your country, how do you characterize corporate activity?" [1 = dominated by a few business groups; 7 = spread among many firms].
Investment-enabling Environment	Ease of doing business	Corruption	World Bank Entreprises Survey	Percent of firms expected to give gifts to get an operating license	Percentage of firms expected to give gifts or informal payments to get an operating license. Spontaneous refusals to the question are treated as a "Yes".
Investment-enabling Environment	Ease of doing business	Corruption	World Bank Entreprises Survey	Percent of firms expected to give gifts to secure a government contract	Percentage of establishments that consider that firms with characteristics similar to theirs are making informal payments or giving gifts to public officials to secure government contract.
Investment-enabling Environment	Ease of doing business	Corruption	World Bank Entreprises Survey	Value of gift expected to secure a government contract (% of contract value)	Percentage of contract value expected as a gift to secure government contract. Only firms that have confirmed that they have secured or attempted to secure a government contract in the last 12 months were required to answer this question.

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Sub-index	Category	Sub-category	Source	Indicator name	Definition from the source
Investment-enabling Environment	**Ease of doing business**	**Corruption**	World Bank Entreprises Survey	Percent of firms expected to give gifts in meetings with tax officials	Percentage of firms expected to give gifts or informal payments during meetings with tax officials.
Investment-enabling Environment	**Ease of doing business**	**Corruption**	World Bank Entreprises Survey	Percent of firms identifying corruption as a major constraint	Percentage of firms identifying corruption as a "major" or "very severe" obstacle
Investment-enabling Environment	**Ease of doing business**	**Corruption**	Economic Freedom Index	Government Integrity	The score for this component is derived by averaging scores for the following three sub-factors, all of which are weighted equally:Perceptions of corruption, Risk of bribery, and Control of corruption including “capture” of the state by elites and private interests.
Investment-enabling Environment	**Ease of doing business**	**Corruption**	WEF Global Competitiveness Index 2019	Anti-Corruption Mechanisms	This indicator assesses the extent to which there is an anti-corruption policy in place contributing to the containment of corruption, there is a functioning anti-corruption body and corruption allegations are being investigated.
Investment-enabling Environment	**Ease of doing business**	**Corruption**	WEF Global Competitiveness Index 2019	Absence of Corruption in State Institutions	This indicator assesses the extent to which corruption is absent in the judiciary, the legislature and the executive.
Investment-enabling Environment	**Ease of doing business**	**Corruption**	WEF Global Competitiveness Index 2019	Absence of Corruption in the Public Sector	This indicator assesses the extent to which there are no illegal diversions of funds, and the extent to which bribery, embezzlement and theft is absent among public sector employees, the police and military and for administrative processes.
Investment-enabling Environment	**Ease of doing business**	**Corruption**	Country Policy And Institutional Assessment / World Bank	CPIA transparency, accountability, and corruption in the public sector rating (1=low to 6=high)	Transparency, accountability, and corruption in the public sector assess the extent to which the executive can be held accountable for its use of funds and for the results of its actions by the electorate and by the legislature and judiciary, and the extent to which public employees within the executive are required to account for administrative decisions, use of resources, and results obtained. The three main dimensions assessed here are the accountability of the executive to oversight institutions and of public employees for their performance, access of civil society to information on public affairs, and state capture by narrow vested interests.

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Sub-index	Category	Sub-category	Source	Indicator name	Definition from the source
Investment-enabling Environment	**Ease of doing business**	**Corruption**	V-Dem Institute indicators	Executive bribery and corrupt exchanges (C) (v2exbribe)	How routinely do members of the executive (the head of state, the head of government, and cabinet ministers), or their agents, grant favors in exchange for bribes, kickbacks, or other material inducements?
Investment-enabling Environment	**Ease of doing business**	**Corruption**	V-Dem Institute indicators	Executive embezzlement and theft (C) (v2exembez)	How often do members of the executive (the head of state, the head of government, and cabinet ministers), or their agents, steal, embezzle, or misappropriate public funds or other state resources for personal or family use?
Investment-enabling Environment	**Ease of doing business**	**Corruption**	V-Dem Institute indicators	Public sector corrupt exchanges (C) (v2excrptps)	How routinely do public sector employees grant favors in exchange for bribes, kickbacks, or other material inducements?
Investment-enabling Environment	**Ease of doing business**	**Corruption**	V-Dem Institute indicators	Legislature corrupt activities (C) (v2lgcrrpt)	Do members of the legislature abuse their position for financial gain?
Investment-enabling Environment	**Ease of doing business**	**Corruption**	V-Dem Institute indicators	Political corruption index (D) (v2x_corr)	How pervasive is political corruption? The index is arrived at by taking the average of (a) public sector corruption index (v2x_pubcorr); (b) executive corruption index (v2x_execorr); (c) the indicator for legislative corruption (v2lgcrrpt); and (d) the indicator for judicial corruption (v2jucorrdc). In other words, these four different government spheres are weighted equally in the resulting index. We replace missing values for countries with no legislature by only taking the average of a, b and d.
Investment-enabling Environment	**Ease of doing business**	**Corruption**	V-Dem Institute indicators	Executive corruption index (D) (v2x_execorr)	How routinely do members of the executive, or their agents grant favors in exchange for bribes, kickbacks, or other material inducements, and how often do they steal, embezzle, or misappropriate public funds or other state resources for personal or family use?
Investment-enabling Environment	**Ease of doing business**	**Corruption**	V-Dem Institute indicators	Public sector corruption index (D) (v2x_pubcorr)	We estimate the index by averaging two indicators: executive bribery (v2exbribe) and executive embezzlement (v2exembez).

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Sub-index	Category	Sub-category	Source	Indicator name	Definition from the source
Investment-enabling Environment	**Ease of doing business**	**Corruption**	Freedom House	Are safeguards against official corruption strong and effective?	Has the government implemented effective anticorruption laws or programs to prevent, detect, and punish corruption among public officials, including conflicts of interest? Is the government free from excessive bureaucratic regulations, registration requirements, or other controls that increase opportunities for corruption? Are there independent and effective auditing and investigative bodies that function without impediment or political pressure or influence? Are allegations of corruption involving government officials thoroughly investigated and prosecuted without prejudice or political bias? Are allegations of corruption given extensive and substantive airing in the media? Do whistleblowers, anticorruption activists, investigators, and journalists enjoy legal protections that allow them to freely and safely report abuses?
Investment-enabling Environment	**Ease of doing business**	**Corruption**	Corruption Perceptions Index	Corruption Perceptions Index	It scores and ranks countries/territories based on how corrupt a country's public sector is perceived to be by experts and business executives. It is a composite index, a combination of 13 surveys and assessments of corruption, collected by a variety of reputable institutions.
Investment-enabling Environment	**Ease of doing business**	**Corruption**	WJP Rule of Law Index	Government officials in the executive branch do not use public office for private gain	Measures the prevalence of bribery, informal payments, and other inducements in the delivery of public services and the enforcement of regulations. It also measures whether government procurement and public works contracts are awarded through an open and competitive bidding process, and whether government officials at various levels of the executive branch refrain from embezzling public funds.
Investment-enabling Environment	**Ease of doing business**	**Corruption**	WJP Rule of Law Index	Civil justice is free of corruption	Measures whether the civil justice system is free of bribery and improper influence by private interests.
Investment-enabling Environment	**Ease of doing business**	**Corruption**	WJP Rule of Law Index	Government officials in the police and the military do not use public office for private gain	Measures whether police officers and criminal investigators refrain from soliciting and accepting bribes to perform basic police services or to investigate crimes, and whether government officials in the police and the military are free of improper influence by private interests or criminal organizations.
Investment-enabling Environment	**Ease of doing business**	**Corruption**	WJP Rule of Law Index	Government regulations are applied and enforced without improper influence	Measures whether the enforcement of regulations is subject to bribery or improper influence by private interests; and whether public services, such as the issuance of permits and licenses and the administration of public health services, are provided without bribery or other illegal inducements.
Investment-enabling Environment	**Public sector capacity**	**Rule of law**	WJP Rule of Law Index	Government regulations are effectively enforced	Measures whether government regulations, such as labor, environmental, public health, commercial, and consumer protection regulations are effectively enforced.

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Sub-index	Category	Sub-category	Source	Indicator name	Definition from the source
Investment-enabling Environment	**Public sector capacity**	**Rule of law**	WJP Rule of Law Index	Publicized laws and government data	Measures whether basic laws and information on legal rights are publicly available, presented in plain language, and made accessible in all languages used in the country or jurisdiction. It also measures the quality and accessibility of information published by the government in print or online, and whether administrative regulations, drafts of legislation, and high court decisions are made accessible to the public in a timely manner.
Investment-enabling Environment	**Public sector capacity**	**Rule of law**	WJP Rule of Law Index	Government powers are effectively limited by the legislature	Measures whether legislative bodies have the independence and the ability in practice to exercise effective checks on and oversight of the government.
Investment-enabling Environment	**Public sector capacity**	**Rule of law**	WJP Rule of Law Index	Government powers are effectively limited by the judiciary	Measures whether the judiciary has the independence and the ability in practice to exercise effective checks on and oversight of the government.
Investment-enabling Environment	**Public sector capacity**	**Rule of law**	WJP Rule of Law Index	Government powers are effectively limited by independent auditing and review	Measures whether comptrollers or auditors, as well as national human rights ombudsman agencies, have sufficient independence and the ability to exercise effective checks on and oversight of the government.
Investment-enabling Environment	**Public sector capacity**	**Rule of law**	WJP Rule of Law Index	Government officials are sanctioned for misconduct	Measures whether government officials in the executive, legislature, judiciary, and the police are investigated, prosecuted, and punished for official misconduct and other violations.
Investment-enabling Environment	**Public sector capacity**	**Rule of law**	WJP Rule of Law Index	Government powers are subject to non-governmental checks	Measures whether an independent media, civil society organizations, political parties, and individuals are free to report and comment on government policies without fear of retaliation.
Investment-enabling Environment	**Public sector capacity**	**Rule of law**	WJP Rule of Law Index	Transition of power is subject to the law	Measures whether government officials are elected or appointed in accordance with the rules and procedures set forth in the constitution. Where elections take place, it also measures the integrity of the electoral process, including access to the ballot, the absence of intimidation, and public scrutiny of election results
Investment-enabling Environment	**Public sector capacity**	**Rule of law**	WJP Rule of Law Index	Civic participation	Measures the effectiveness of civic participation mechanisms, including the protection of the freedoms of opinion and expression, assembly and association, and the right to petition the government. It also measures whether people can voice concerns to various government officers, and whether government officials provide sufficient information and notice about decisions affecting the community.

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Sub-index	Category	Sub-category	Source	Indicator name	Definition from the source
Investment-enabling Environment	**Public sector capacity**	**Rule of law**	WJP Rule of Law Index	Freedom of opinion and expression is effectively guaranteed	Measures whether an independent media, civil society organizations, political parties, and individuals are free to report and comment on government policies without fear of retaliation.
Investment-enabling Environment	**Public sector capacity**	**Rule of law**	WJP Rule of Law Index	Criminal system is free of improper government influence	Measures whether the criminal justice system is independent from government or political influence.
Investment-enabling Environment	**Public sector capacity**	**Rule of law**	Ibrahim Index of African Governance (IIAG)	Effective Administration	This indicator assesses the extent to which there is an effective and professional public administration.
Investment-enabling Environment	**Public sector capacity**	**Rule of law**	Ibrahim Index of African Governance (IIAG)	Quality of Public Administration	This sub-indicator assesses the extent to which civilian central government staff is structured to design and implement government policy and deliver services effectively.
Investment-enabling Environment	**Public sector capacity**	**Rule of law**	Ibrahim Index of African Governance (IIAG)	Executive Compliance with the Rule of Law	This indicator assesses the extent to which the executive respects the constitution, the government complies with decisions by the courts and transitions of power are subject to the law.
Investment-enabling Environment	**Public sector capacity**	**Rule of law**	Ibrahim Index of African Governance (IIAG)	Impartiality of the Judicial System	This indicator assesses the extent to which the judicial system is impartial based on the independence of the courts, the autonomy of judges and the appointment of judges.
Investment-enabling Environment	**Public sector capacity**	**Rule of law**	Ibrahim Index of African Governance (IIAG)	Judicial Independence	This sub-indicator assesses the extent to which the high court, lower courts and judges are independent as well as the extent to which the appointment of judges is merit-based and independent.
Investment-enabling Environment	**Public sector capacity**	**Rule of law**	Ibrahim Index of African Governance (IIAG)	Enforcement of Justice	This sub-indicator assesses the extent of effective enforcement of civil and criminal justice.

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Sub-index	Category	Sub-category	Source	Indicator name	Definition from the source
Investment-enabling Environment	**Public sector capacity**	**Rule of law**	Ibrahim Index of African Governance (IIAG)	Equality before the Law	This indicator assesses the extent to which there is equality before the law and the extent to which civil and criminal justice systems are impartial and free of discrimination.
Investment-enabling Environment	**Public sector capacity**	**Rule of law**	Ibrahim Index of African Governance (IIAG)	Institutional Checks & Balances	This indicator assesses the extent to which there is a separation of powers and government powers are checked upon and limited by both the legislature and the judiciary as well as the extent to which public office holders are being sanctioned for abuse of office.
Investment-enabling Environment	**Public sector capacity**	**Rule of law**	Ibrahim Index of African Governance (IIAG)	Civic Checks & Balances	This indicator assesses the extent to which effective citizen complaint mechanisms exist and citizens have the right to petition and civic engagement as well to the extent to which cooperative associations, interest groups and civil society organisations (CSOs) are being consulted in policy making.
Investment-enabling Environment	**Public sector capacity**	**Rule of law**	Ibrahim Index of African Governance (IIAG)	Complaint Mechanisms & Petitions	This sub-indicator assesses the extent to which there are effective mechanisms for citizens to make complaints and there is a right to petition and civic engagement.
Investment-enabling Environment	**Public sector capacity**	**Rule of law**	Ibrahim Index of African Governance (IIAG)	Absence of Undue Influence on Government	This indicator assesses the extent to which the elected government has the effective power to govern and the government and the legislature determine the policies without undue influence from veto powers.
Investment-enabling Environment	**Public sector capacity**	**Rule of law**	Ibrahim Index of African Governance (IIAG)	Disclosure of Public Records	This indicator assesses the extent to which budget information is made publicly available in a timely manner, public officials and civil servants disclose their assets, and laws and judicial information are publicised.
Investment-enabling Environment	**Public sector capacity**	**Rule of law**	V-Dem Institute indicators	Executive respects constitution	Do members of the executive (the head of state, the head of government, and cabinet ministers) respect the constitution?
Investment-enabling Environment	**Public sector capacity**	**Rule of law**	V-Dem Institute indicators	Rigorous and impartial public administration (C) (v2clrspct)	Are public officials rigorous and impartial in the performance of their duties?

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Sub-index	Category	Sub-category	Source	Indicator name	Definition from the source
Investment-enabling Environment	**Public sector capacity**	**Rule of law**	V-Dem Institute indicators	Transparent laws with predictable enforcement (C) (v2cltrnslw)	Are the laws of the land clear, well publicized, coherent (consistent with each other), relatively stable from year to year, and enforced in a predictable manner?
Investment-enabling Environment	**Public sector capacity**	**Rule of law**	V-Dem Institute indicators	Compliance with high court (C) (v2juhccomp)	How often would you say the government complies with important decisions of the high court with which it disagrees?
Investment-enabling Environment	**Public sector capacity**	**Rule of law**	V-Dem Institute indicators	Compliance with judiciary (C) (v2jucomp)	How often would you say the government complies with important decisions by other courts with which it disagrees?
Investment-enabling Environment	**Public sector capacity**	**Rule of law**	V-Dem Institute indicators	Judicial accountability (v2juaccnt)	When judges are found responsible for serious misconduct, how often are they removed from their posts or otherwise disciplined?
Investment-enabling Environment	**Public sector capacity**	**Rule of law**	V-Dem Institute indicators	Executive oversight (C) (v2lgotovst)	If executive branch officials were engaged in unconstitutional, illegal, or unethical activity, how likely is it that a body other than the legislature, such as a comptroller general, general prosecutor, or ombudsman, would question or investigate them and issue an unfavorable decision or report?
Investment-enabling Environment	**Public sector capacity**	**Rule of law**	V-Dem Institute indicators	Public sector theft (C) (v2exthftps)	How often do public sector employees steal, embezzle, or misappropriate public funds or other state resources for personal or family use?
Investment-enabling Environment	**Public sector capacity**	**Rule of law**	V-Dem Institute indicators	Legislature questions officials in practice (C) (v2lgqstexp)	In practice, does the legislature routinely question executive branch officials?
Investment-enabling Environment	**Public sector capacity**	**Rule of law**	V-Dem Institute indicators	Legislature investigates in practice (C) (v2lginvstp)	If the executive were engaged in unconstitutional, illegal, or unethical activity, how likely is it that a legislative body (perhaps a whole chamber, perhaps a committee, whether aligned with government or opposition) would conduct an investigation that would result in a decision or report that is unfavorable to the executive?

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Sub-index	Category	Sub-category	Source	Indicator name	Definition from the source
Investment-enabling Environment	**Public sector capacity**	**Rule of law**	V-Dem Institute indicators	Clean elections index (D) (v2xel_frefair)	To what extent are elections free and fair?
Investment-enabling Environment	**Public sector capacity**	**Rule of law**	V-Dem Institute indicators	Range of consultation (C) (v2dlconslt)	When important policy changes are being considered, how wide is the range of consultation at elite levels?
Investment-enabling Environment	**Public sector capacity**	**Rule of law**	V-Dem Institute indicators	Engaged society (C) (v2dlengage)	When important policy changes are being considered, how wide and how independent are public deliberations?
Investment-enabling Environment	**Public sector capacity**	**Rule of law**	V-Dem Institute indicators	Freedom of academic and cultural expression (C) (v2clacfree)	Is there academic freedom and freedom of cultural expression related to political issues?
Investment-enabling Environment	**Public sector capacity**	**Rule of law**	Bertelsmann Stiftung Transformation Index	Effective power to govern	To what extent do democratically elected political representatives have the effective power to govern, or to what extent are there veto powers and political enclaves?
Investment-enabling Environment	**Public sector capacity**	**Rule of law**	Bertelsmann Stiftung Transformation Index	Monopoly on the use of force	To what extent does the state's monopoly on the use of force cover the entire territory of the country?
Investment-enabling Environment	**Public sector capacity**	**Rule of law**	Bertelsmann Stiftung Transformation Index	Association / assembly rights	To what extent can individuals form and join independent political or civic groups? To what extent can these groups operate and assemble freely?
Investment-enabling Environment	**Public sector capacity**	**Rule of law**	Bertelsmann Stiftung Transformation Index	Freedom of expression	To what extent can citizens, organizations and the mass media express opinions freely?

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Sub-index	Category	Sub-category	Source	Indicator name	Definition from the source
Investment-enabling Environment	Public sector capacity	Rule of law	Bertelsmann Stiftung Transformation Index	Separation of powers	To what extent is there a working separation of powers (checks and balances)?
Investment-enabling Environment	Public sector capacity	Rule of law	Bertelsmann Stiftung Transformation Index	Prosecution of office abuse	To what extent are public officeholders who abuse their positions prosecuted or penalized?
Investment-enabling Environment	Public sector capacity	Rule of law	Bertelsmann Stiftung Transformation Index	Performance of democratic institutions	Are democratic institutions capable of performing?
Investment-enabling Environment	Public sector capacity	Rule of law	Bertelsmann Stiftung Transformation Index	Commitment to democratic institutions	To what extent are democratic institutions accepted as legitimate by the relevant actors?
Investment-enabling Environment	Public sector capacity	Rule of law	Bertelsmann Stiftung Transformation Index	Party system	To what extent is there a stable and socially rooted party system able to articulate and aggregate societal interests?
Investment-enabling Environment	Public sector capacity	Rule of law	Bertelsmann Stiftung Transformation Index	Interest groups	To what extent is there a network of cooperative associations or interest groups to mediate between society and the political system?
Investment-enabling Environment	Public sector capacity	Rule of law	Bertelsmann Stiftung Transformation Index	Approval of democracy	How strong is the citizens' approval of democratic norms and procedures?
Investment-enabling Environment	Public sector capacity	Rule of law	Bertelsmann Stiftung Transformation Index	Implementation	How effective is the government in implementing its own policies?

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Sub-index	Category	Sub-category	Source	Indicator name	Definition from the source
Investment-enabling Environment	**Public sector capacity**	**Rule of law**	Bertelsmann Stiftung Transformation Index	Policy learning	How innovative and flexible is the government?
Investment-enabling Environment	**Public sector capacity**	**Rule of law**	Bertelsmann Stiftung Transformation Index	Policy coordination	To what extent can the government coordinate conflicting objectives into a coherent policy?
Investment-enabling Environment	**Public sector capacity**	**Rule of law**	Bertelsmann Stiftung Transformation Index	Anti-democratic actors	To what extent can reformers exclude or co-opt anti-democratic actors?
Investment-enabling Environment	**Public sector capacity**	**Rule of law**	Bertelsmann Stiftung Transformation Index	Civil society participation	To what extent does the political leadership enable the participation of civil society in the political process?
Investment-enabling Environment	**Public sector capacity**	**Rule of law**	WEF Global Competitiveness Index 2019	Judicial independence	Response to the survey question “In your country, how independent is the judicial system from influences of the government, individuals, or companies?” [1 = not independent at all; 7 = entirely independent]
Investment-enabling Environment	**Public sector capacity**	**Rule of law**	WEF Global Competitiveness Index 2019	Efficiency of legal framework in settling disputes	"In your country, how efficient are the legal and judicial systems for companies in settling disputes?" [1 = extremely inefficient; 7 = extremely efficient]
Investment-enabling Environment	**Public sector capacity**	**Rule of law**	WEF Global Competitiveness Index 2019	Strength of auditing and accounting standards	Response to the survey question “In your country, how strong are financial auditing and reporting standards?” [1 = extremely weak; 7 = extremely strong]
Investment-enabling Environment	**Public sector capacity**	**Rule of law**	Fraser Institute	Military interference in rule of law and politics	This component is based on the International Country Risk Guide Political Risk Component G, Military in Politics: “A measure of the military’s involvement in politics. Since the military is not elected, involvement, even at a peripheral level, diminishes democratic accountability.

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Sub-index	Category	Sub-category	Source	Indicator name	Definition from the source
Investment-enabling Environment	**Public sector capacity**	**Rule of law**	Fraser Institute	Integrity of the legal system	This component is based on the International Country Risk Guide Political Risk Component I for Law and Order: “Two measures comprising one risk compo nent. Each sub-component equals half of the total. The ‘law’ sub-component assesses the strength and impartiality of the legal system, and the ‘order’ sub component assesses popular observance of the law”
Investment-enabling Environment	**Public sector capacity**	**Rule of law**	Ibrahim Index of African Governance (IIAG)	Digital Rights	This indicator assesses the extent to which there are no internet and social media shutdowns, internet users' privacy and data are being protected as well as the extent to which people are free to express themselves online and there is no limited access to online content.
Investment-enabling Environment	**Public sector capacity**	**Infrastructures**	WEF Global Competitiveness Index 2019	Road connectivity	Score on the Road Connectivity Index, which measures average speed and straightness of a driving itinerary connecting the 10 or more largest cities that together account for at least 15% of the economy’s total population. The scale ranges from 0 to 100 (excellent)
Investment-enabling Environment	**Public sector capacity**	**Infrastructures**	WEF Global Competitiveness Index 2019	Quality of road infrastructure	Response to the survey question “In your country, what is the quality (extensiveness and condition) of road infrastructure?” [1 = extremely poor—among the worst in the world; 7 = extremely good—among the best in the world]
Investment-enabling Environment	**Public sector capacity**	**Infrastructures**	WEF Global Competitiveness Index 2019	Efficiency of air transport services	Response to the survey question “In your country, how efficient (i.e. frequency, punctuality, speed, price) are air transport services?” [1 = extremely inefficient, among the worst in the world; 7 = extremely efficient, among the best in the world]
Investment-enabling Environment	**Public sector capacity**	**Infrastructures**	Africa Regional Integration Index	AfDB Composite Infrastructure index	This indicator is calculated by the Africa Infrastructure Development Index of the African Development Bank based on four main categories: transport; electricity; ICT; water and sanitation. These categories are divided into 9 indicators having a direct or indirect impact on productivity or economic growth.
Investment-enabling Environment	**Public sector capacity**	**Infrastructures**	Ibrahim Index of African Governance (IIAG)	Transport Network	This indicator assesses the quality, coverage and efficiency of a country’s transport network including road, rail and air infrastructure. It also assesses the performance of the postal service.
Investment-enabling Environment	**Public sector capacity**	**Infrastructures**	Ibrahim Index of African Governance (IIAG)	Mobile Communications	This indicator measures the extent to which mobile phones and mobile internet are accessible and affordable.

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Sub-index	Category	Sub-category	Source	Indicator name	Definition from the source
Investment-enabling Environment	**Public sector capacity**	**Infrastructures**	SDGs Indicators	Proportion of individuals using the Internet (%) IT_USE_ii99	The indicator proportion of individuals using the Internet is defined as the proportion of individuals who used the Internet from any location in the last three months.
Investment-enabling Environment	**Public sector capacity**	**Infrastructures**	World Bank's Logistics Performance Index (LPI)	Logistics infrastructure	Trade and transport-related infrastructure
Investment-enabling Environment	**Public sector capacity**	**Labour market**	Economic Freedom Index	Labor Freedom	The labor freedom component is a quantitative measure that considers various aspects of the legal and regulatory framework of a country's labor market including regulations concerning minimum wages, associational rights, laws inhibiting layoffs, severance requirements, and measurable regulatory restraints on hiring and hours worked as well as the labor force participation rate as well as labor productivity as an indicative measure of employment opportunities in the labor market
Investment-enabling Environment	**Public sector capacity**	**Labour market**	WEF Global Competitiveness Index 2019	Hiring and firing practices	Response to the survey question "In your country, to what extent do regulations allow for the flexible hiring and firing of workers?" [1 = not at all; 7 = to a great extent]
Investment-enabling Environment	**Public sector capacity**	**Labour market**	WEF Global Competitiveness Index 2019	Active labour market policies	Response to the survey question "In your country, to what extent do labour market policies help unemployed people to reskill and find new employment (including skills matching, retraining, etc.)?" [1 = not at all; 7 = to a great extent]
Investment-enabling Environment	**Public sector capacity**	**Labour market**	WEF Global Competitiveness Index 2019	Internal labour mobility	Response to the survey question "In your country, to what extent do people move to other parts of the country for professional reasons?" [1 = not at all; 7 = to a great extent]
Investment-enabling Environment	**Public sector capacity**	**Labour market**	WEF Global Competitiveness Index 2019	Ease of hiring foreign labour	Response to the survey question "In your country, how restrictive are regulations related to the hiring of foreign labour?" [1 = highly restrictive; 7 = not restrictive at all]
Investment-enabling Environment	**Public sector capacity**	**Labour market**	WEF Global Competitiveness Index 2019	Pay and productivity	Response to the survey question "In your country, to what extent is pay related to employee productivity?" [1 = not at all; 7 = to a great extent]

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Sub-index	Category	Sub-category	Source	Indicator name	Definition from the source
Investment-enabling Environment	**Public sector capacity**	**Labour market**	WEF Global Competitiveness Index 2019	Labour tax rate	Labour tax and contributions are the amount of taxes (at any level—federal, state or local) and mandatory contributions on labour paid by the business, expressed as a percentage of commercial profits
Investment-enabling Environment	**Public sector capacity**	**Labour market**	Ibrahim Index of African Governance (IIAG)	Labour Relations	This indicator assesses the extent to which labour-employer relations are generally cooperative and workers are free to organise into trade unions.
Investment-enabling Environment	**Public sector capacity**	**Labour market**	WJP Rule of Law Index	Fundamental labor rights are effectively guaranteed	Measures the effective enforcement of fundamental labor rights, including freedom of association and the right to collective bargaining, the absence of discrimination with respect to employment, and freedom from forced labor and child labor
Investment-enabling Environment	**Public sector capacity**	**Labour market**	Fraser Institute	Hiring regulations and minimum wage	This sub-component is based on the "Employing Workers" section of the World Bank's Doing Business and uses the following components: (1) whether fixed-term contracts are prohibited for permanent tasks; (2) the maximum cumulative dura tion of fixed-term contracts; and (3) the ratio of the minimum wage for a trainee or first-time employee to the average value added per worker.
Investment-enabling Environment	**Public sector capacity**	**Labour market**	Fraser Institute	Hours regulations	This sub-component is based on the "Employing Labor" section in the World Bank's Doing Business, uses the following five components: (1) whether there are restrictions on night work; (2) whether there are restrictions on holiday work; (3) whether the length of the work week can be 5.5 days or longer; (4) whether there are restrictions on overtime work; and (5) whether the average paid annual leave is 21 working days or more.
Investment-enabling Environment	**Public sector capacity**	**Labour market**	Fraser Institute	Mandated cost of worker dismissal	This sub-component is based on the World Bank's Doing Business data on the cost of the advance notice requirements, severance payments, and penalties due when dismissing a redundant worker with 10-years tenure.
Investment-enabling Environment	**Public sector capacity**	**Social inclusion**	V-Dem Institute indicators	Social group equality in respect for civil liberties (C) (v2clsocgrp)	Do all social groups, as distinguished by language, ethnicity, religion, race, region, or caste, enjoy the same level of civil liberties, or are some groups generally in a more favorable position?
Investment-enabling Environment	**Public sector capacity**	**Social inclusion**	V-Dem Institute indicators	Political group equality in respect for civil liberties (C) (v2clpolcl)	Do members of all political groups enjoy the same level of civil liberties, or are some groups generally in a more favorable position?

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Sub-index	Category	Sub-category	Source	Indicator name	Definition from the source
Investment-enabling Environment	**Public sector capacity**	**Social inclusion**	V-Dem Institute indicators	Gender equality in respect for civil liberties (C) (v2clgencl)	Do women enjoy the same level of civil liberties as men?
Investment-enabling Environment	**Public sector capacity**	**Social inclusion**	V-Dem Institute indicators	Freedom of religion (C) (v2clrelig)	Is there freedom of religion?
Investment-enabling Environment	**Public sector capacity**	**Social inclusion**	Bertelsmann Stiftung Transformation Index	Equal opportunity	To what extent does equality of opportunity exist?
Investment-enabling Environment	**Public sector capacity**	**Social inclusion**	WJP Rule of Law Index	Equal treatment and absence of discrimination	Measures whether individuals are free from discrimination, based on socio-economic status, gender, ethnicity, religion, national origin, sexual orientation, or gender identity, with respect to public services, employment, court proceedings, and the justice system.
Investment-enabling Environment	**Public sector capacity**	**Social inclusion**	Ibrahim Index of African Governance (IIAG)	Socioeconomic Opportunity for Women	This indicator assesses the extent to which state jobs and business opportunities are equally open regardless of gender and the extent to which women receive equal pay, benefits and treatment as men in the workplace.
Investment-enabling Environment	**Public sector capacity**	**Social inclusion**	Country Policy And Institutional Assessment / World Bank	CPIA social protection rating (1=low to 6=high)	Social protection and labor assess government policies in social protection and labor market regulations that reduce the risk of becoming poor, assist those who are poor to better manage further risks, and ensure a minimal level of welfare to all people.
Investment-enabling Environment	**Public sector capacity**	**Social inclusion**	Country Policy And Institutional Assessment / World Bank	CPIA policies for social inclusion/ equity cluster average (1=low to 6=high)	The policies for social inclusion and equity cluster includes gender equality, equity of public resource use, building human resources, social protection and labor, and policies and institutions for environmental sustainability.
Investment-enabling Environment	**Public sector capacity**	**Social inclusion**	Country Policy And Institutional Assessment / World Bank	CPIA gender equality rating (1=low to 6=high)	Gender equality assesses the extent to which the country has installed institutions and programs to enforce laws and policies that promote equal access for men and women in education, health, the economy, and protection under law.

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Sub-index	Category	Sub-category	Source	Indicator name	Definition from the source
Investment-enabling Environment	**Public sector capacity**	**Social inclusion**	Country Policy And Institutional Assessment / World Bank	CPIA equity of public resource use rating (1=low to 6=high)	Equity of public resource use assesses the extent to which the pattern of public expenditures and revenue collection affects the poor and is consistent with national poverty reduction priorities.
Investment-enabling Environment	**Investment safety**	**Money growth**	International Monetary Fund	Real GDP annual growth (%)	Real GDP represents the total value at constant prices of final goods and services produced within a country during a specified time period, such as one year.
Investment-enabling Environment	**Investment safety**	**Money growth**	International Monetary Fund	Return on Equity	The quotient of net income and total capital and reserves (stock)
Investment-enabling Environment	**Investment safety**	**Money growth**	International Monetary Fund	Return on Assets	The quotient of net income and total (financial and non financial) assets
Investment-enabling Environment	**Investment safety**	**Money growth**	International Labour Organization	Annual growth rate of output per worker (GDP constant 2017 international $ at PPP) (%)	The series is part of the ILO modelled estimates and is harmonized to account for differences in national data and scope of coverage, collection and tabulation methodologies as well as for other country-specific factors. This indicator conveys the annual growth rates of labour productivity. Labour productivity represents the total volume of output (measured in terms of Gross Domestic Product, GDP) produced per unit of labour (measured in terms of the number of employed persons) during a given time reference period. The indicator allows data users to assess GDP-to-labour input levels and growth rates over time, thus providing general information about the efficiency and quality of human capital in the production process for a given economic and social context, including other complementary inputs and innovations used in production. For more information, refer to the Labour Market-related SDG Indicators (ILOSDG) database description.
Investment-enabling Environment	**Investment safety**	**Property rights**	Bertelsmann Stiftung Transformation Index	Property rights	To what extent do government authorities ensure well-defined rights of private property and regulate the acquisition, benefits, use and sale of property?
Investment-enabling Environment	**Investment safety**	**Property rights**	WEF Global Competitiveness Index 2019	Property rights	Response to the survey question "In your country, to what extent are property rights, including financial assets, protected?" [1 = not at all; 7 = to a great extent]

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Sub-index	Category	Sub-category	Source	Indicator name	Definition from the source
Investment-enabling Environment	**Investment safety**	**Property rights**	WEF Global Competitiveness Index 2019	Intellectual property protection	Response to the survey question “In your country, to what extent is intellectual property protected?” [1 = not at all; 7 = to a great extent]
Investment-enabling Environment	**Investment safety**	**Property rights**	WJP Rule of Law Index	The government does not expropriate without lawful process and adequate compensation	Measures whether the government respects the property rights of people and corporations, refrains from the illegal seizure of private property, and provides adequate compensation when property is legally expropriated.
Investment-enabling Environment	**Investment safety**	**Property rights**	Ibrahim Index of African Governance (IIAG)	Property Rights	This indicator assesses the extent to which well-defined private property rights are guaranteed and enjoyed by citizens.
Investment-enabling Environment	**Investment safety**	**Property rights**	Country Policy And Institutional Assessment / World Bank	CPIA property rights and rule-based governance rating (1=low to 6=high)	Property rights and rule-based governance assess the extent to which private economic activity is facilitated by an effective legal system and rule-based governance structure in which property and contract rights are reliably respected and enforced.
Investment-enabling Environment	**Investment safety**	**Property rights**	Economic Freedom Index	Property Rights	The property rights component assesses the extent to which a country’s legal framework al
Investment-enabling Environment	**Investment safety**	**Security and stability**	Worldwide Governance Indicators	Political Stability and Absence of Violence/Terrorism	Political Stability and Absence of Violence/Terrorism measures perceptions of the likelihood of political instability and/or politically-motivated violence, including terrorism.
Investment-enabling Environment	**Investment safety**	**Security and stability**	World Bank Entreprises Survey	Percent of firms choosing political instability as their biggest obstacle	Percentage of firms identifying political instability as a "major" or "very severe" obstacle.
Investment-enabling Environment	**Investment safety**	**Security and stability**	World Bank Entreprises Survey	If the establishment pays for security, average security costs (% of annual sales)	Average security costs as a percentage of total annual sales for all firms.

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Sub-index	Category	Sub-category	Source	Indicator name	Definition from the source
Investment-enabling Environment	Investment safety	Security and stability	World Bank Entreprises Survey	Percent of firms identifying crime, theft and disorder as a major constraint	Percentage of firms identifying crime, theft and disorder as a "major" or "very severe" obstacle.
Investment-enabling Environment	Investment safety	Security and stability	WEF Global Competitiveness Index 2019	Organized crime	Response to the survey question “In your country, to what extent does organized crime (mafia-oriented racketeering, extortion) impose costs on businesses?” [1 = to a great extent, imposes huge costs; 7 = not at all, imposes no costs]
Investment-enabling Environment	Investment safety	Security and stability	WEF Global Competitiveness Index 2019	Terrorism incidence	Assesses the frequency and severity of terror attacks. The scale ranges from 0 (highest incidence) to 100 (no incidence)
Investment-enabling Environment	Investment safety	Security and stability	Ibrahim Index of African Governance (IIAG)	Absence of Armed Conflict	This indicator measures the number of violent events in both state-based and non-state based conflicts as well as instances of non-state-based conflict within a country's territory.
Investment-enabling Environment	Investment safety	Security and stability	Ibrahim Index of African Governance (IIAG)	Absence of Non-State Conflict	This sub-indicator measures the number of non-state armed conflicts within a country's territory and the number of violent events inflicted by non-state actors.
Investment-enabling Environment	Investment safety	Security and stability	Ibrahim Index of African Governance (IIAG)	Absence of Violence against Civilians	This indicator measures the number of violent events against civilians by government forces as well as by non-state actors and assesses the levels of political violence in a country.
Investment-enabling Environment	Investment safety	Security and stability	Ibrahim Index of African Governance (IIAG)	Absence of Government Violence against Civilians	This sub-indicator measures the number of violent events against civilians perpetrated by government forces and the levels of political violence in a country.
Investment-enabling Environment	Investment safety	Security and stability	WJP Rule of Law Index	Crime is effectively controlled	Measures the prevalence of common crimes, including homicide, kidnapping, burglary and theft, armed robbery, and extortion, as well as people’s general perceptions of safety in their communities.

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Sub-index	Category	Sub-category	Source	Indicator name	Definition from the source
Investment-enabling Environment	**Investment safety**	**Security and stability**	WJP Rule of Law Index	Civil conflict is effectively limited	Measures whether people are effectively protected from armed conflict and terrorism.
Investment-enabling Environment	**Investment safety**	**Security and stability**	Bertelsmann Stiftung Transformation Index	Conflict intensity	How serious are social, ethnic and religious conflicts?
Investment-enabling Environment	**Investment safety**	**Security and stability**	Bertelsmann Stiftung Transformation Index	Cleavage / conflict management	To what extent is the political leadership able to moderate cleavage-based conflict?
Investment-enabling Environment	**Investment safety**	**Security and stability**	Bertelsmann Stiftung Transformation Index	Reconciliation	To what extent can the political leadership bring about reconciliation between the victims and perpetrators of past injustices?
Investment-enabling Environment	**Investment safety**	**Security and stability**	Fragile States Index	Fragile States Index	A composite index that measures the fragility of a country. High score corresponds to high fragility.

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