2015

Ibrahim Index of African Governance

METHODOLOGY

MO IBRAHIM FOUNDATION

HOW WE CONSTRUCT THE INDEX

This document contains an overview of the framework and construction of the Ibrahim Index of African Governance (IIAG). For more information please contact the IIAG Research Team at research@moibrahimfoundation.org.

1. INTRODUCTION

The Ibrahim Index of African Governance (IIAG) measures the quality of governance in every African country on an annual basis. It does this by compiling data from diverse global sources to build an accurate and detailed picture of governance performance in African countries.

The broad aim of the IIAG is to better inform and sustain the debate on African governance by providing a transparent and user-friendly resource to:

- support citizens, governments, institutions and the private sector to accurately assess the delivery of public goods and services, and policy outcomes.
- encourage data-driven narratives on governance issues.
- help determine, debate and strengthen government performance.

The IIAG was created in recognition of the need for a quantifiable tool to accurately measure and monitor African governance performance, its progress over time and across countries, and as a means of supporting effective and responsive solutions to complex public policy challenges in developing countries. Policies need to be evaluated by their results, which can only be done if accompanied by robust data.

The IIAG was launched in 2007 and has evolved to be the most comprehensive assessment on African governance. The 2015 IIAG is the ninth iteration and builds on the work of the previous eight years. The IIAG is conceptually driven by the Mo Ibrahim Foundation (MIF) Board and the IIAG Advisory Council and is refined on an annual basis, offering a continually improving assessment of governance in Africa.

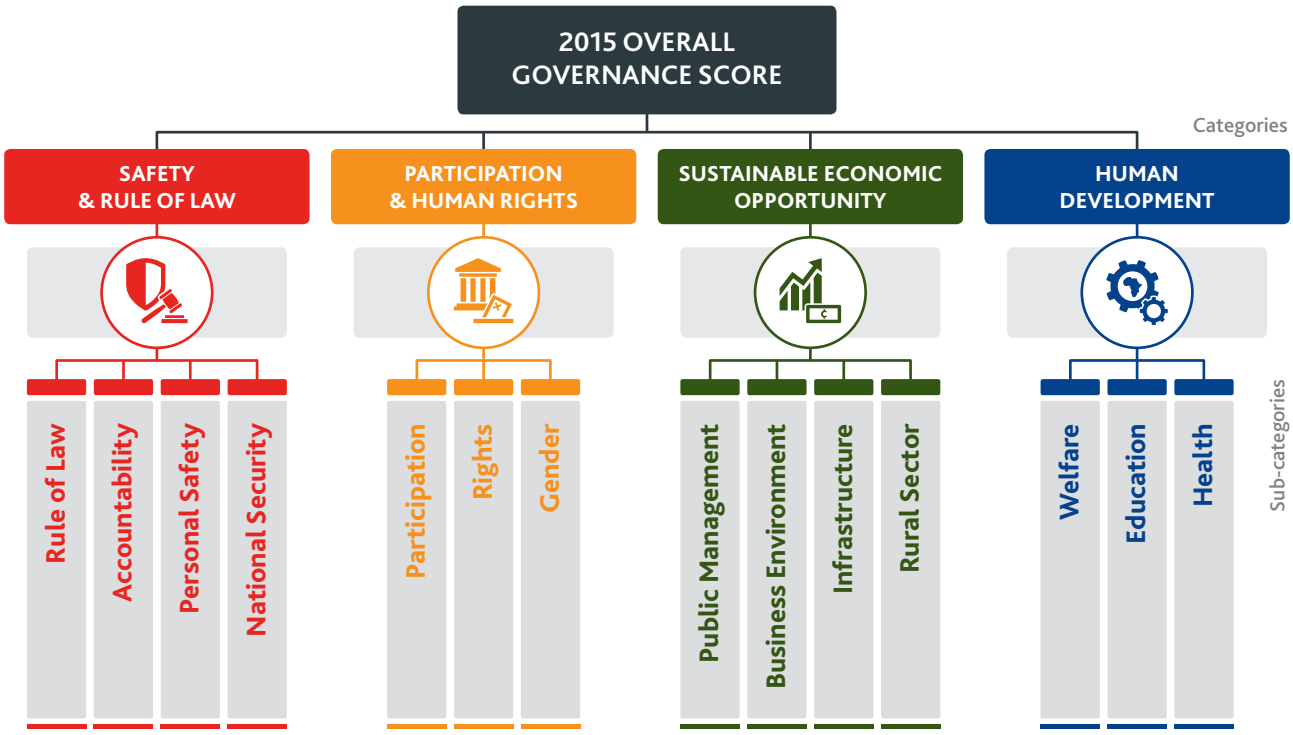
This annual refinement means that the IIAG data set is updated when practical improvements are identified. When new historical data are made available, or the structure of the IIAG is strengthened, the entire data set is updated back to 2000. ***Users of the Index should therefore always reference the most recent version of the IIAG data set.***

2. FRAMEWORK OF THE IIAG

Measuring Governance

MIF defines governance as the provision of the political, social and economic public goods and services that every citizen has the right to expect from his or her state, and that a state has the responsibility to deliver to its citizens. The IIAG focuses on outputs and outcomes of policy, rather than declarations of intent and *de jure* statutes and levels of expenditure.

The governance framework has been constructed by the MIF Board and the IIAG Advisory Council to have four overarching dimensions (or categories) which comprehensively cover the goods and services a citizen has the right to expect from his or her state: *Safety & Rule of Law, Participation & Human Rights, Sustainable Economic Opportunity* and *Human Development*. These categories are made up of a total of 14 sub-categories.



These four overarching dimensions, and the constituent sub-categories, represent the Foundation's definition of governance and provide a citizen-centric governance framework around which to organise underlying data and construct the IIAG.

The 14 sub-categories are populated with a number of indicators which measure a narrow governance concept. Each of these indicators captures an aspect of the sub-category topic.

This framework allows the user to analyse governance performance within both distinctive and broad governance concepts by providing measurements of governance performance at different tiers - at the overall governance level, category and sub-category level, and indicator level.

3. CONSTRUCTION OF THE IIAG

3.1 Criteria for Data Inclusion

As governance is not measurable directly it is necessary to determine the most suitable set of proxy indicators that appropriately reflect the Foundation's definition of governance. This underscores the importance of taking into account potentially diverse viewpoints and constructing an index which makes use of a variety of data sources and indicators.

The Foundation does not collect primary data, but rather collates data provided by respected external sources. The 2015 IIAG consists of 93 indicators from 33 data providers. A distinctive characteristic of the IIAG is that it is based on the aggregation of multiple types of third-party data, utilising Official Data (OD), Expert Assessments (EA), and Opinion Surveys (OS).

Once an indicator is determined to be a suitable governance proxy other inclusion criteria are applied. The data is

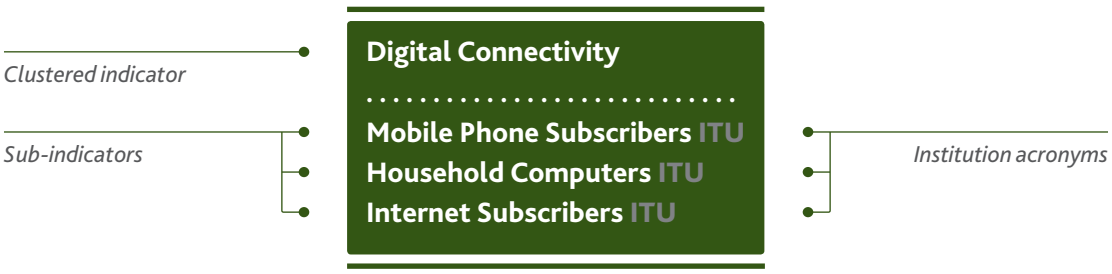
required to cover at least 35 of the 54 countries on the continent and provide at least two years' worth of data for these 35 countries since 2000. Further, the most recent data for these 35 countries can be no more than three years old. Lastly, new data releases should, as much as possible, be expected at least every three years.

Once an indicator meets these criteria for inclusion it is assigned to the sub-category in which it sits best conceptually. Assigning an indicator to one of the 14 sub-categories (and essentially to a category) is not straightforward as the dimensions of governance are not independent. As such, an indicator can be deemed suitable for multiple sub-categories. The IIAG Advisory Council plays an important consultative role regarding assigning indicators to sub-categories.

Clustered Indicators

Sometimes indicators measuring a specific governance concept are available from multiple sources. For example, data measuring freedom of expression that meet the criteria for inclusion are available from four different data providers: Bertelsmann Stiftung, Freedom House, Reporters sans frontières and Global Integrity. To improve the accuracy of the indicator measurement and to take into account potentially diverse viewpoints, each of these indicators become sub-indicators of a clustered indicator. The clustered indicator is the average of its underlying sub-indicators.

Further, some indicators measure a governance concept which is too narrow for inclusion as a stand-alone indicator. In this case, indicators are clustered to develop a measure of a broader concept. For example, the International Telecommunication Union database provides three indicators: *Mobile Phone Subscribers, Household Computers* and *Internet Subscribers*. These are clustered together to become sub-indicators of an indicator called *Digital Connectivity*.



The same inclusion criteria are applied to sub-indicators and stand-alone indicators.

3.2 Handling Missing Data

Some indicators included in the IIAG have missing data points over the time series. As this can have an effect on a country's aggregate scores, estimates are provided for missing data, following a statistical process called imputation.

As can be seen in the example below, in some cases an existing data point is reproduced in order to replace a missing value that occurs before or after it. In other cases, when there is more surrounding information to use, the missing data points are replaced with numbers that are incrementally higher or lower than the neighbouring data points.

Country A	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Raw data from source		85.1	84.8			82.8
Between data points		85.1	84.8	*84.1*	*83.5*	82.8
Outside data points	*85.1*	85.1	84.8	*84.1*	*83.5*	82.8

3.3 Normalisation

Since data utilised in the construction of the IIAG come from 33 separate data providers that present their data on different scoring scales, it is necessary to standardise all data. This is done through a statistical process called normalisation, which makes all of the indicators comparable.

The raw data for each indicator are transformed by the min-max normalisation method. This process allows all scores to be published in common units and within the same bounds of 0-100, where 100 is always the best possible score.

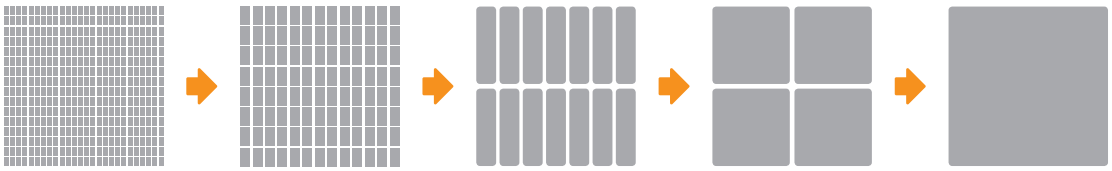
Country A	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Raw data from source (scoring scale of 1-6)	2	3	2.5	4	4	5
IIAG score after normalisation (scoring scale of 0-100)	25	50	37.5	75	75	100

The application of this normalisation method means that a score of 100 relates to the best possible score within the group of 54 African countries between 2000 and the latest data year.

3.4 Data Aggregation

The organisation of these measures of governance into the structure outlined earlier means that the IIAG is a composite index built on its underlying components. The IIAG uses a transparent, simple and replicable method of data aggregation. In order to provide an overall governance score, a simple average is calculated: from the underlying sub-indicators to the indicators, from the indicators to the sub-categories, from the sub-categories to the categories, and finally from the categories to the overall IIAG score.

The five levels of IIAG aggregation are:



The Foundation views the four overarching governance categories of equal importance and therefore the overall IIAG score is an unweighted average of the four component categories. However, given that the number of underlying indicators differs between sub-categories, and the number of sub-categories differs between some categories, there is for the time being a degree of accepted, implicit weighting.

4. ANALYSIS OF THE INDEX: MEASUREMENT ERRORS & UNCERTAINTY

The inherently unobservable nature of governance means that the IIAG is a proxy measurement. The existence of poor data quality introduced by measurement error or missing data, must be accounted for in order for the IIAG user not to be excessively confident about small changes over time, and slight score differences between countries. The Foundation publishes standard errors and confidence intervals alongside the composite IIAG and category scores to reflect uncertainty, which are available on the MIF website[1].

The standard errors and confidence intervals allow users of the IIAG to discriminate, to a certain degree, between changes in the value of the IIAG that can be confidently treated as actual changes in the state of governance and changes that might be due to noise, or are at least insufficiently sizeable to be able to ascribe a high likelihood to such change being significant. This allows users of the IIAG to make more sophisticated use of the governance information provided by the IIAG.

For further information please contact the IIAG Research Team at research@moibrahimfoundation.org.

[1] www.moibrahimfoundation.org