

## AFRICA: METHODS USED TO ESTIMATE PERCENT OF COMMUNITY LANDS

### Method #1: Official Data

This method is used for those countries where there is official information on the area of community lands denoted as a distinct land category; this includes eight countries (Botswana, Ghana, Malawi, Morocco, Namibia, South Africa, Swaziland, and Tanzania).

Note that:

- i. Designation of a category does *not* necessarily signal the desirable level of recognition of community-derived rights as real property interests.
- ii. In two of the eight cases there are additional areas within private lands which communities claim as part of their territories. In all eight cases, the area of TPA does not include TPA that communities claim as rightfully their property.

### Method #2: By Exclusion of Non-Community Land Classes

This method is used where there is no official data and applies to all countries in Africa other than the eight listed under Method #1. Method #2 involves GIS spatial analysis combined with expert knowledge to estimate area of community lands by excluding all other known non-community land uses including inland water bodies, urban area, terrestrial protected areas (TPA), and private rural land.

Baseline: The **total country area (minus major inland water bodies)** is the baseline. Data sources are: 1) Natural Earth, *Admin 0-Countries v. 2.0.0*, downloaded from [naturalearthdata.com](http://naturalearthdata.com), 2013 and 2) DeLorme Publishing Company, Inc., *World Water Bodies: Data and Maps for ArcGIS*, 2014.

The following areas were then subtracted from this baseline:

- a) The total area of **Terrestrial Protected Areas (TPA)**. Data source is: UNEP-WCMC, UNEP, and IUCN, *World Database on Protected Areas*, downloaded from [protectedplanet.net](http://protectedplanet.net), December 2013.
- b) The **total urban area**. Data sources are: 1) Schneider, A., M. A. Friedl and D. Potere (2009) A new map of global urban extent from MODIS data. *Environmental Research Letters*, volume 4, article 044003. 2) Schneider, A., M. A. Friedl and D. Potere (2010) Monitoring urban areas globally using MODIS 500m data: New methods and datasets based on urban ecoregions. *Remote Sensing of Environment*, volume 114, pages 1733-1746. Downloaded from <http://www.sage.wisc.edu/people/schneider/research/data.html>, March 2014.
- c) The total **private rural land area** as under registered statutory entitlements (excluding concessions) was calculated using one of two approaches:
  - 1) **Using official figures:**  
Official figures retrieved for 13 countries; figures from donor documents retrieved for 11 other countries; most of collective 24 countries are only *best estimates* by Governments of the privately titled rural sector; or
  - 2) **Using a standard estimated percentage of country area:**  
5% was used as the default for 14 countries in absence of reliable official estimates; 2% was used for 6 countries where titling and/or expansive pastoral lands without title known to dominate the country area; 10% was used for 4 countries known to have higher private titling rates.

Note that:

- i. No estimates were used from countries where official figures exist for community lands as per Method #1 above.
- ii. No attempt was made to estimate area of privately titled land in four countries.

GIS data collection and calculation for baseline and steps a and b outlined above were performed by K. Reyta, World Resources Institute (WRI).

General Notes:

1. **Estimates of community lands are conservative in Method #2.** For example, where privately titled rural land area is unknown and therefore estimated, a generous 5% of total country area is used in most cases, which is higher than the actual percentage for most countries. Also, community lands are not included as part of the total estimate where they may overlap with Terrestrial Protected Areas (TPA) despite the many cases where State ownership of an unspecified number of TPAs is actively challenged by communities who claim these areas are crucial components of wider community lands.
2. **Accuracy is mixed.** Official figures for relevant community lands data are inconsistently available or up to date. A mix of data sources are used for calculations, increasing inaccuracies. Estimates based on general knowledge of a country are used in some cases. However, precision is not the objective of this exercise. The objective is to provide a picture of the likely coverage of community lands by country and continent. As examined under different exercises, the proportion of the area officially recognised as community property is limited.
3. **Percentages apply strictly to lands.** Many coastal and lakeside communities claim rights to adjacent foreshore and waters. These estimates explicitly exclude both marine and permanent major inland water bodies.
4. **Estimates focus on community (non-indigenous) lands.** Estimates of lands held or used by peoples who self-identify as indigenous were not performed as a separate exercise due to the lack of data and difficulty in distinguishing this subgroup for Africa.
5. **Estimates include official and unofficial recognition.** The percentages represent community lands that are recognized by national law and those that are not.

Liz Alden Wily  
28 April 2015