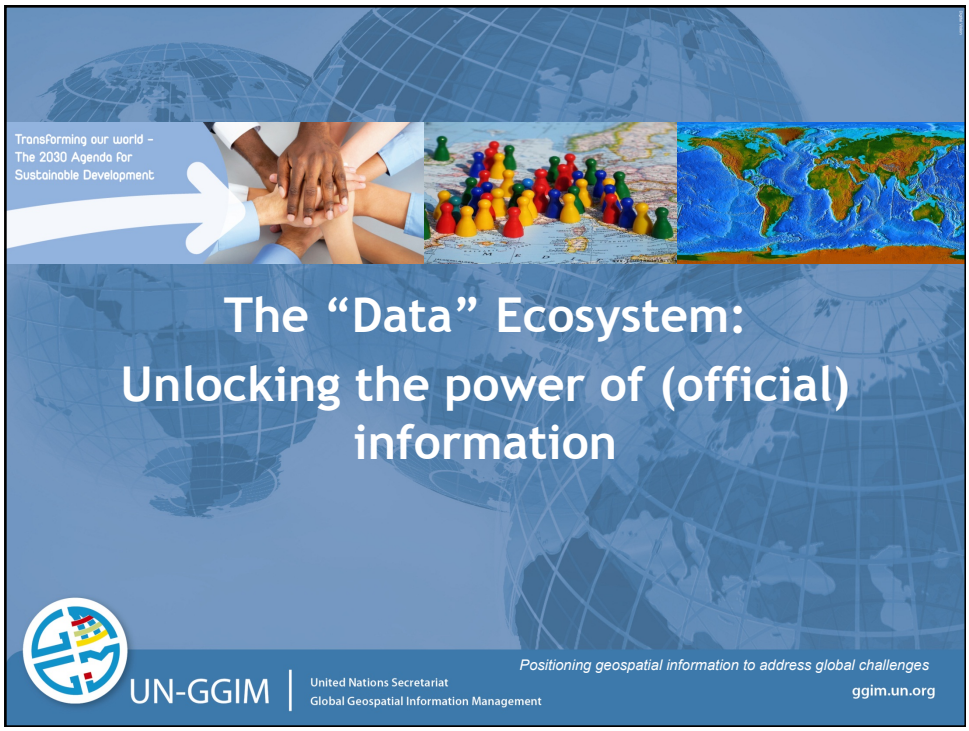
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The 2030 Agenda for
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The "Data" Ecosystem:
Unlocking the power of (official) information
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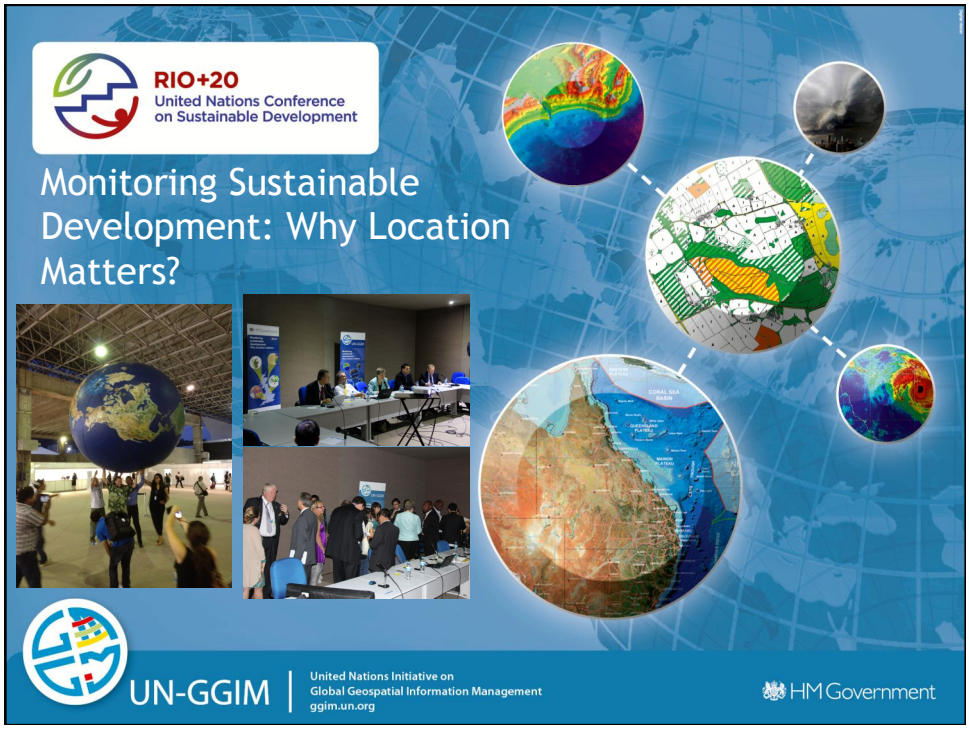
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Monitoring Sustainable Development: Why Location Matters?
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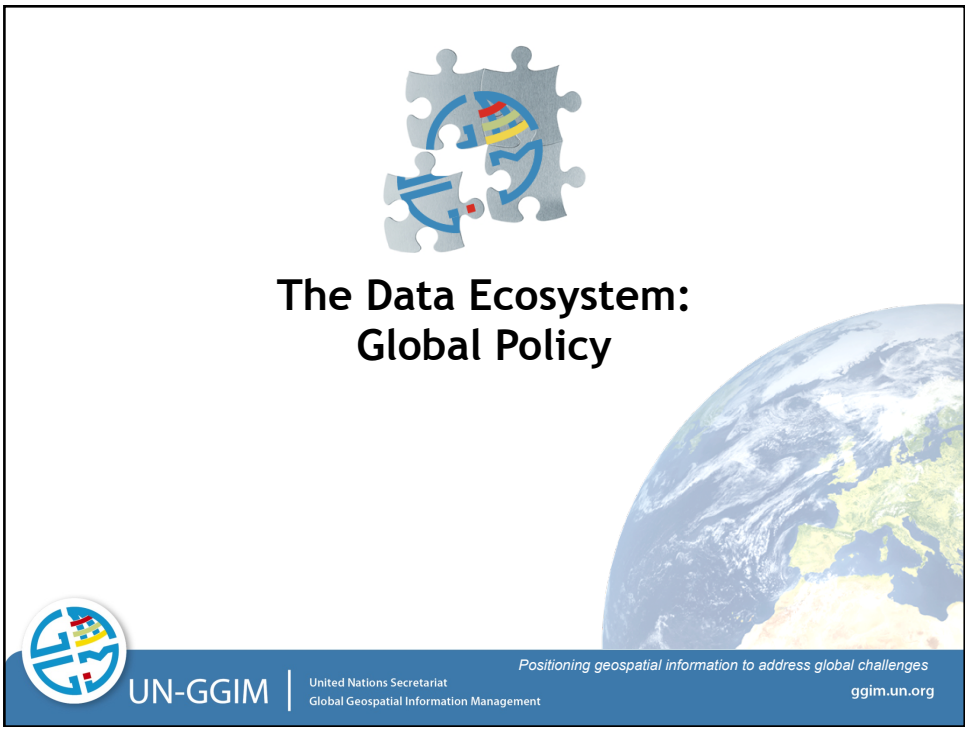
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Global Development Agenda
United Nations
Framework Convention on
Climate Change
UNITED NATIONS
PARIS CLIMATE
AGREEMENT
SIGNING CEREMONY
22 APRIL 2016
Sendai Framework
for Disaster Risk Reduction
2015 - 2030
UNITED NATIONS
SUSTAINABLE
DEVELOPMENT
SUMMIT 2015
25 - 27 SEPTEMBER
TRANSFORMING OUR WORLD:
THE 2030 AGENDA FOR
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FINANCING FOR
DEVELOPMENT
Addis Ababa Action Agenda
of the Third International Conference on
Financing For Development
(Addis Ababa Action Agenda)
HABITAT III
2016
ISLAND
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GLOBAL
CHOICES
Conference on
Small Island
Developing States
Apia, Samoa | 2014
HABITAT III
QUITO · OCTOBER 2016
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Transforming our World: The 2030 Agenda for Sustainable Development

Follow up and review:

76. We will support developing countries, particularly African countries, LDCs, SIDS and LLDCs, in strengthening the capacity of national statistical offices and data systems to ensure access to high quality, timely, reliable and disaggregated data.

We will promote transparent and accountable scaling-up of appropriate public-private cooperation to exploit the contribution to be made by a wide range of data, ***including Earth observations and geospatial information***, while ensuring national ownership in supporting and tracking progress.

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Data, monitoring and accountability:

17.18 By 2020, enhance capacity-building support to developing countries, including for least developed countries and small island developing States, to increase significantly the availability of high-quality, timely and reliable data disaggregated by income, gender, age, race, ethnicity, migratory status, disability, ***geographic location*** and other characteristics relevant in national contexts.

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The Data Ecosystem: Global Technology and Data

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Transforming our world –
The 2030 Agenda for
Sustainable Development
The global statistical community has laid the groundwork for the successful monitoring and realization of this new agenda.
17 SDGs
169 Targets
230 Global Indicators
Measuring and monitoring progress
Global population
Billion
Forecasts
Rural
Urban
1950 70 90 2010 30 50
Source: UN
FT
7 Billionth Baby
Fabella Memorial Hospital
de Vega Street, Manila
31 October 2011
We can count and measure statistics, but we cannot see them!
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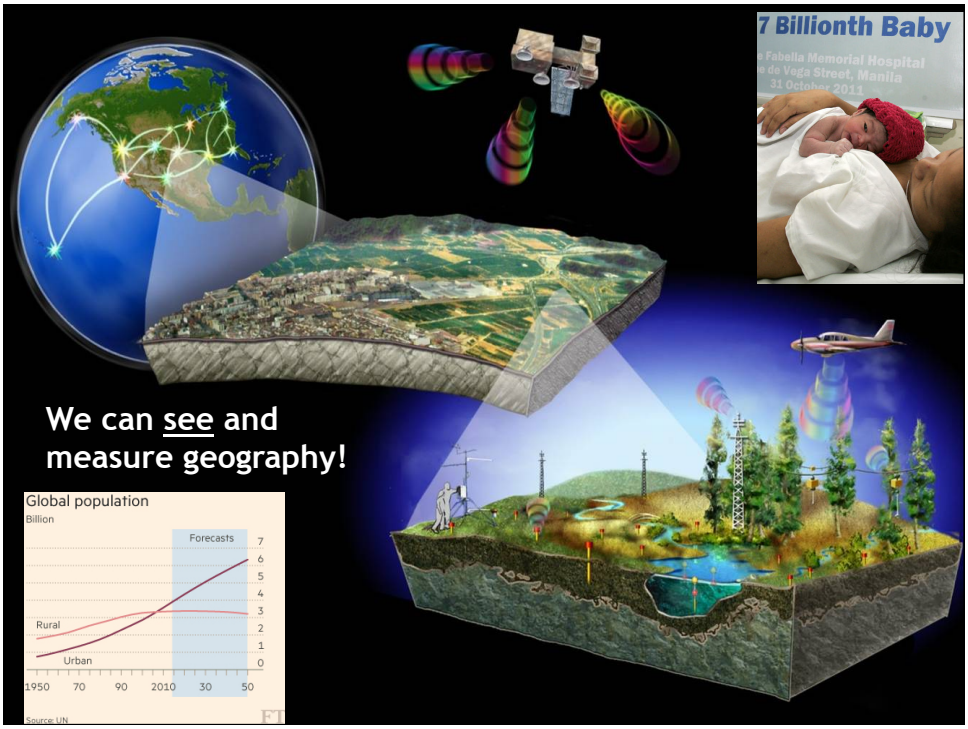
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1950 70 90 2010 30 50
Source: UN
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The Data Ecosystem: Global Reality!!

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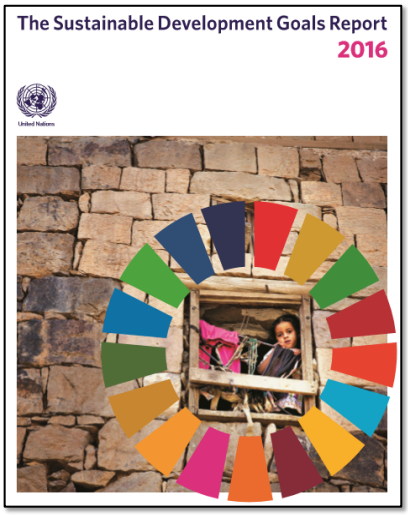
2030 Agenda: Goals, Targets, Indicators

How does the 2030 Agenda data ecosystem operate?

- What do the SDGs mean? Where do they apply? What data is needed? How do we get it? Is it sustainable?
- How do we realize the data ecosystem in the SDGs?
- Unlike the MDGs, with the SDGs we are all developing countries.
- Rich v Poor: Not just nations. Also data, technology, capacity, governance, institutional, methodologies, etc.
- Data disaggregation – what does it mean and at what level of geography?
- **How do we report on annual SDGs progress?**

Reporting Annual SDGs Progress

- Reporting conducted by IAEG-SDGs.
- Has been a statistical process that now requires a geographic lens.
- Requires methodologies to sample and collect data in a consistent and sustainable manner.
- Much experimental effort, but how to go into production mode and scale from local to global and vice versa.
- **Integration of national policies.**
- **Integration of national information systems and data.**
- When do we start?



http://unstats.un.org/sdgs/files/report/2016/secretary-general-sdg-report-2016--EN.pdf

Sustainable Development Goals Report 2016

Improving data quality and availability

143. Data of good quality are vital in order to make informed decisions and to ensure accountability for the implementation of the 2030 Agenda. Tracking progress on the SDGs requires the collection, processing, analysis and dissemination of an unprecedented amount of data and statistics at the subnational, national, regional and global levels, including those derived from official statistical systems and from new and innovative data sources.

147. New data sources and technologies for data collection will need to be explored, including through partnerships with civil society, the private sector and academia. The integration of geospatial information and statistical data will also be essential for the production of a number of indicators.

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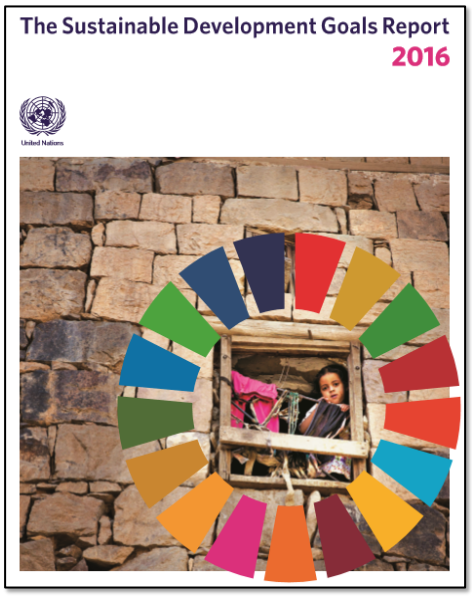
First account of where the world stands at the beginning of implementation of the 2030 Agenda

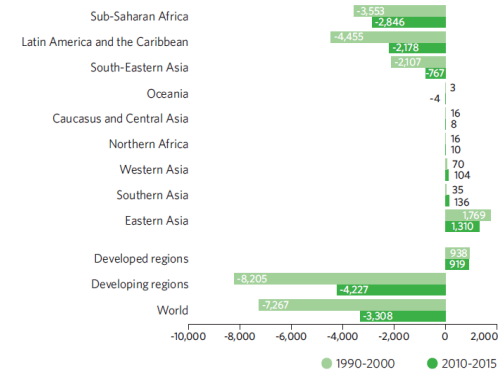


- **Explore the Report** with interactive charts and graphs for every Goal

15 LIFE ON LAND

Goal 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

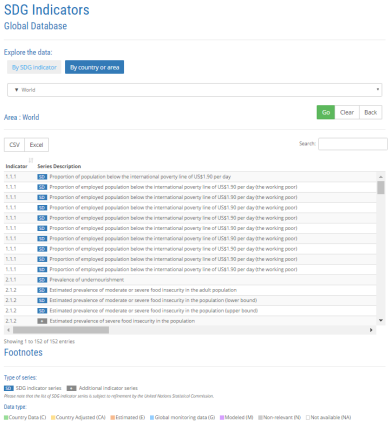
Annual net change in forest area, 1990-2000 and 2010-2015 (thousands of hectares)

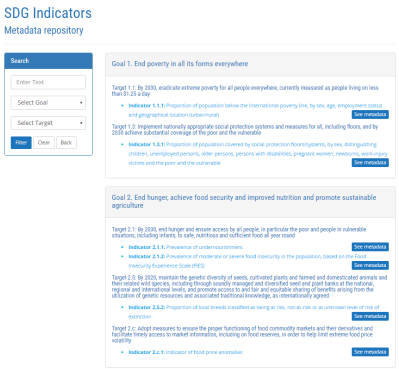


Net forest loss has decreased by more than half since the 1990s, but the loss of forests continues

Between 1990 and 2015, the world's forest area diminished from 31.7 per cent of the world's total land mass to 30.7 per cent. This loss was mainly due to the conversion of forests to other uses, such as agriculture and infrastructure development. Meanwhile, other areas returned to forests through planting, landscape restoration or natural expansion. As a result of these ongoing processes and efforts to slow deforestation, the global net loss in forest area declined from 7.3 million hectares per year in the 1990s to 3.3 million hectares per year during the period 2010-2015. Progress across regions is mixed: Latin America and the Caribbean, sub-Saharan Africa and South-Eastern Asia accounted for the largest losses in forest area, whereas Eastern Asia accounted for the largest gains.

SDG Website: http://unstats.un.org/sdgs/





- **SDG Indicators Global Database** with global, regional and country-level data
- **SDG Indicator Metadata** available

Tier Classification for Global SDG Indicators

Tier Classification Sheet (as of 21 September 2016)

Target	Indicator	Initial Proposed Tier (by Secretariat)	Possible Custodian Agency(ies)	Other Involved Agencies	Updated Tier Classification (by IAEG-SDG Members)	Explanation for Change in Tier (if applicable)
Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss						
15.1 By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements	15.1.1 Forest area as a proportion of total land area	**Tier I**	FAO	UNEP	**Tier I**	
	15.1.2 Proportion of important sites for terrestrial and freshwater biodiversity that are covered by protected areas, by ecosystem type	**Tier I**	UNEP-WCMC UNEP		**Tier I**	
15.2 By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally	15.2.1 Progress towards sustainable forest management	**Tier III**	FAO	UNEP	**Tier III**	
15.3 By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world	15.3.1 Proportion of land that is degraded over total land area	**Tier III**	UNCCD	FAO UNEP	**Tier III**	

Tier 1: Indicator conceptually clear, established methodology and standards available and data regularly produced by countries

Tier 2: Indicator conceptually clear, established methodology and standards available but data are not regularly produced by countries

Tier 3: Indicator for which there are no established methodology and standards or methodology/standards are being developed/tested

The updated tier classification contains **81 Tier I indicators, 57 Tier II indicators and 88 Tier III indicators.** In addition to these, there are **4 indicators that have multiple tiers (different components of the indicator are classified into different tiers)**.

Goal 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainable manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

Target number: 15.3

Indicator Number and Name: 15.3.1 Proportion of land that is degraded over total land area.

Agency: UNCCD (UN Convention to Combat Desertification)

Has work for the development of this indicator begun? Yes

"For some countries, data on land cover are being collected by National Statistical Systems; for most countries, land cover data is spread among different statistical fields (agriculture, environment, forestry, etc.) and related relevant agencies or ministries.

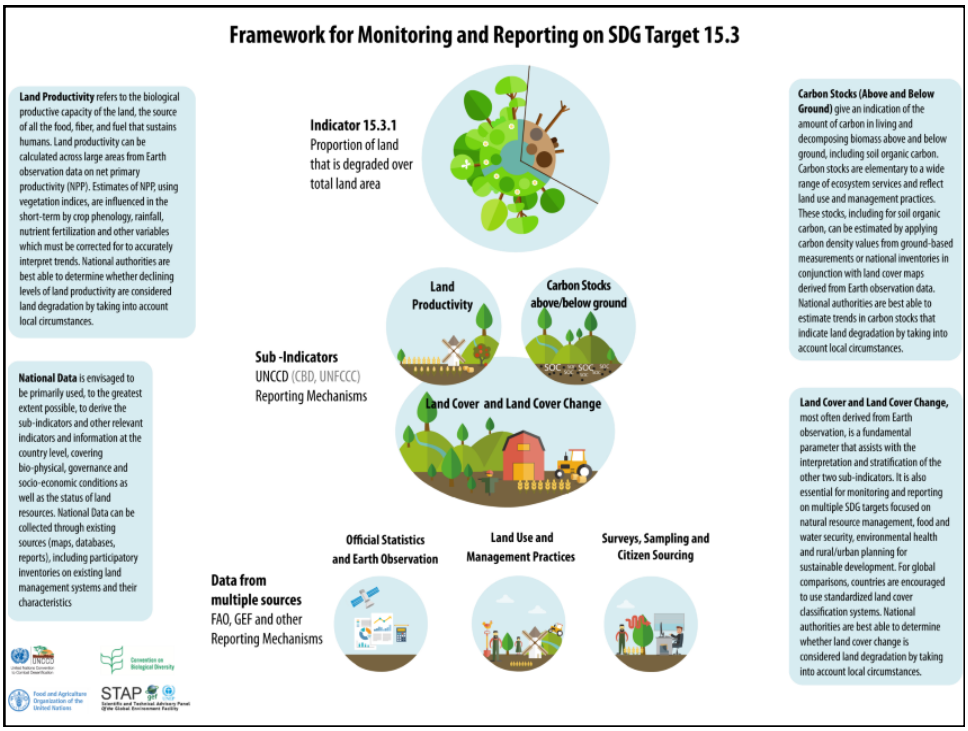
For the sub-indicators on land productivity and carbon stocks, data collection remains with specialized institutions at the national and regional levels."

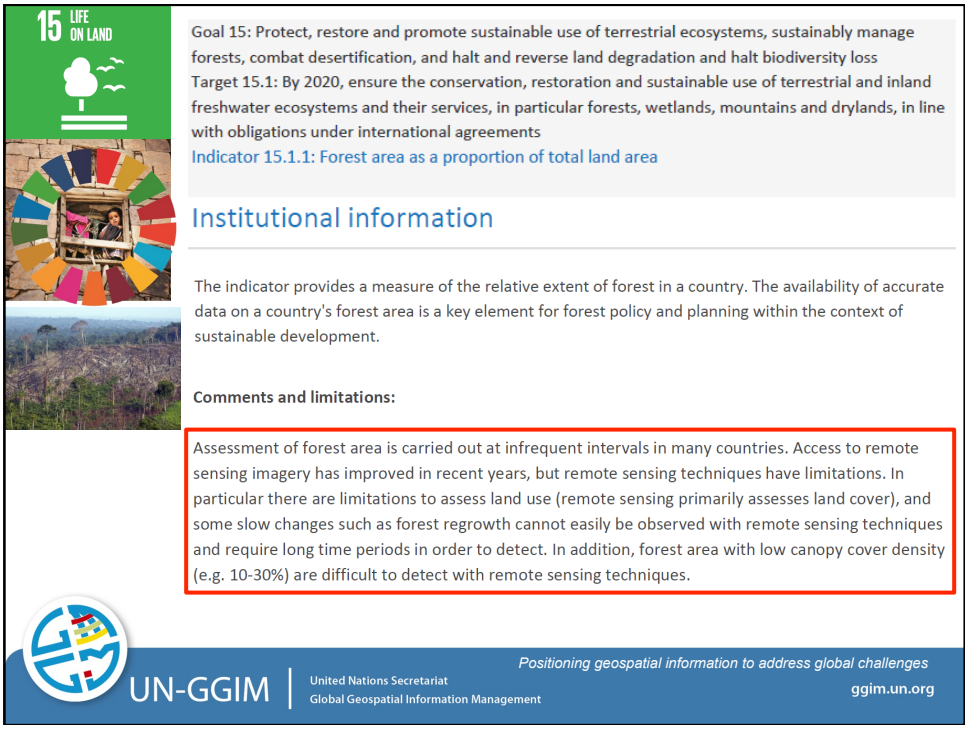
How do you plan to collect the data?

Send questionnaire(s) to country, Joint survey/compilation with national agency and international entity, Satellite images, remote sensing, UNCCD national reports

If the indicator involves multiple components from different data sources, please describe how each individual component of the indicator will be collected here.

The sub-indicators will require multiple data sources. National official data sources will be used to the greatest extent possible, complemented by default data derived from Earth observation and geospatial information. The three sub-indicators are part of the UNCCD's mandatory reporting which will begin in 2018.


Framework for Monitoring and Reporting on SDG Target 15.3
Land Productivity refers to the biological productive capacity of the land, the source of all the food, fiber, and fuel that sustains humans. Land productivity can be calculated across large areas from Earth observation data on net primary productivity (NPP). Estimates of NPP, using vegetation indices, are influenced in the short-term by crop phenology, rainfall, nutrient fertilization and other variables which must be corrected for to accurately interpret trends. National authorities are best able to determine whether declining levels of land productivity are considered land degradation by taking into account local circumstances.
National Data is envisaged to be primarily used, to the greatest extent possible, to derive the sub-indicators and other relevant indicators and information at the country level, covering bio-physical, governance and socio-economic conditions as well as the status of land resources. National Data can be collected through existing sources (maps, databases, reports), including participatory inventories on existing land management systems and their characteristics
Indicator 15.3.1
Proportion of land that is degraded over total land area
Sub -Indicators
UNCCD (CBD, UNFCCC)
Reporting Mechanisms
Land Productivity
Carbon Stocks above/below ground
Land Cover and Land Cover Change
Data from multiple sources
FAO, GEF and other Reporting Mechanisms
Official Statistics and Earth Observation
Land Use and Management Practices
Surveys, Sampling and Citizen Sourcing
Carbon Stocks (Above and Below Ground) give an indication of the amount of carbon in living and decomposing biomass above and below ground, including soil organic carbon. Carbon stocks are elementary to a wide range of ecosystem services and reflect land use and management practices. These stocks, including for soil organic carbon, can be estimated by applying carbon density values from ground-based measurements or national inventories in conjunction with land cover maps derived from Earth observation data. National authorities are best able to estimate trends in carbon stocks that indicate land degradation by taking into account local circumstances.
Land Cover and Land Cover Change, most often derived from Earth observation, is a fundamental parameter that assists with the interpretation and stratification of the other two sub-indicators. It is also essential for monitoring and reporting on multiple SDG targets focused on natural resource management, food and water security, environmental health and rural/urban planning for sustainable development. For global comparisons, countries are encouraged to use standardized land cover classification systems. National authorities are best able to determine whether land cover change is considered land degradation by taking into account local circumstances.
STAP


15 LIFE ON LAND
Goal 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
Target 15.1: By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements
Indicator 15.1.1: Forest area as a proportion of total land area
Institutional information
The indicator provides a measure of the relative extent of forest in a country. The availability of accurate data on a country's forest area is a key element for forest policy and planning within the context of sustainable development.
Comments and limitations:
Assessment of forest area is carried out at infrequent intervals in many countries. Access to remote sensing imagery has improved in recent years, but remote sensing techniques have limitations. In particular there are limitations to assess land use (remote sensing primarily assesses land cover), and some slow changes such as forest regrowth cannot easily be observed with remote sensing techniques and require long time periods in order to detect. In addition, forest area with low canopy cover density (e.g. 10-30%) are difficult to detect with remote sensing techniques.
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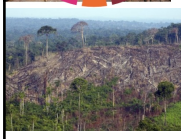

According to the FAO definitions, Forest is defined as: "land spanning more than 0.5 hectares with trees higher than 5 meters and a canopy cover of more than 10 percent, or trees able to reach these thresholds in situ. It does not include land that is predominantly under agricultural or urban land use". More specifically:

- Forest is determined both by the presence of trees and the absence of other predominant land uses. The trees should be able to reach a minimum height of 5 meters.
- It includes areas with young trees that have not yet reached but which are expected to reach a canopy cover of at least 10 percent and tree height of 5 meters or more. It also includes areas that are temporarily unstocked due to clear-cutting as part of a forest management practice or natural disasters, and which are expected to be regenerated within 5 years. Local conditions may, in exceptional cases, justify that a longer time frame is used.
- It includes forest roads, firebreaks and other small open areas; forest in national parks, nature reserves and other protected areas such as those of specific environmental, scientific, historical, cultural or spiritual interest.
- It includes windbreaks, shelterbelts and corridors of trees with an area of more than 0.5 hectares and width of more than 20 meters.
- It includes abandoned shifting cultivation land with a regeneration of trees that have, or are expected to reach, a canopy cover of at least 10 percent and tree height of at least 5 meters.
- It includes areas with mangroves in tidal zones, regardless whether this area is classified as land area or not.
- It includes rubberwood, cork oak and Christmas tree plantations.
- It includes areas with bamboo and palms provided that land use, height and canopy cover criteria are met.
- It excludes tree stands in agricultural production systems, such as fruit tree plantations, oil palm plantations, olive orchards and agroforestry systems when crops are grown under tree cover. Note: Some agroforestry systems such as the "Taungya" system where crops are grown only during the first years of the forest rotation should be classified as forest.

Total land area is the total surface area of a country less the area covered by inland waters, like major rivers and lakes.

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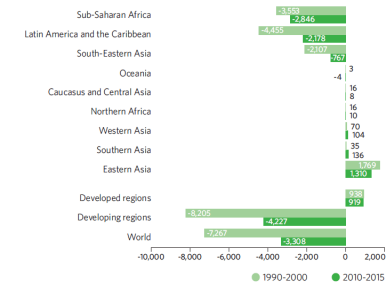
15 LIFE ON LAND

Annual net change in forest area, 1990-2000 and 2010-2015 (thousands of hectares)



Net forest loss has decreased by more than half since the 1990s, but the loss of forests continues

Between 1990 and 2015, the world's forest area diminished from 31.7 per cent of the world's total land mass to 30.7 per cent. This loss was mainly due to the conversion of forests to other uses, such as agriculture and infrastructure development. Meanwhile, other areas returned to forests through planting, landscape restoration or natural expansion. As a result of these ongoing processes and efforts to slow deforestation, the global net loss in forest area declined from 7.3 million hectares per year in the 1990s to 3.3 million hectares per year during the period 2010-2015. Progress across regions is mixed: Latin America and the Caribbean, sub-Saharan Africa and South-Eastern Asia accounted for the largest losses in forest area, whereas Eastern Asia accounted for the largest gains.

Indicator 15.1.1.
Forest area as a proportion of total land area

Country or Area	*1990*	*2000*	*2005*	*2010*	*2015*	*Unit*
Brazil	65.41	62.37	60.63	59.64	59.05	Percent (Units)
Democratic Republic of the Congo	70.74	69.36	68.68	67.99	67.30	Percent (Units)
Indonesia	68.98	57.84	56.94	54.95	52.96	Percent (Units)
Viet Nam	30.20	37.82	42.17	45.56	47.64	Percent (Units)

Source: http://unstats.un.org/sdgs/indicators/database/?indicator=15.1.1

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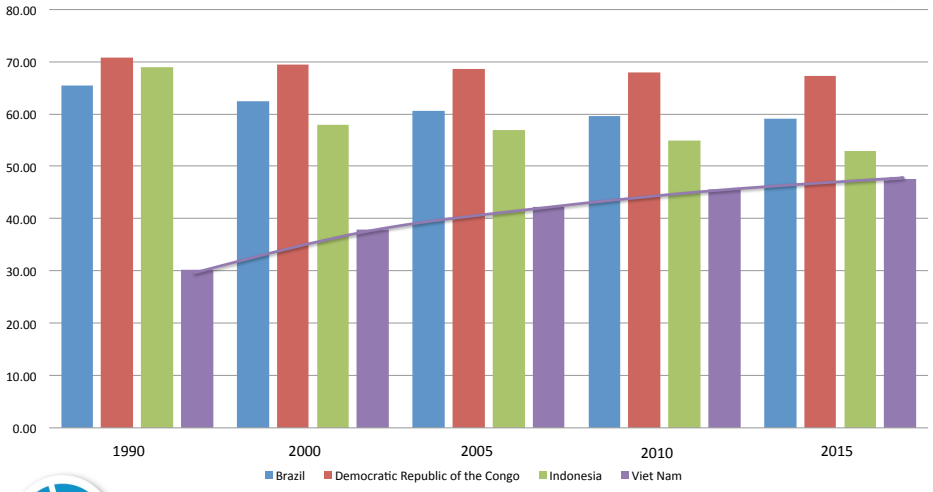
15.1.1 Forect area as a proportion of total land area



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FAO Forest Resource Assessment 2015

TABLE 3 **Top ten countries reporting the greatest annual net loss of forest area, 2010–2015**

	Country	Annual forest area net loss	
		Area (thousand ha)	Rate (%)
1	Brazil	984	0.2
2	Indonesia	684	0.7
3	Myanmar	546	1.8
4	Nigeria	410	5.0
5	United Republic of Tanzania	372	0.8
6	Paraguay	325	2.0
7	Zimbabwe	312	2.1
8	Democratic Republic of the Congo	311	0.2
9	Argentina	297	1.1
10	Bolivia (Plurinational State of)	289	0.5

TABLE 4 **Top ten countries reporting the greatest annual net gain in forest area, 2010–2015**

	Country	Annual forest area net gain	
		Area (thousand ha)	Rate (%)
1	China	1 542	0.8
2	Australia	308	0.2
3	Chile	301	1.8
4	United States of America	275	0.1
5	Philippines	240	3.3
6	Gabon	200	0.9
7	Lao People's Democratic Republic	189	1.0
8	India	178	0.3
9	Viet Nam	129	0.9
10	France	113	0.7

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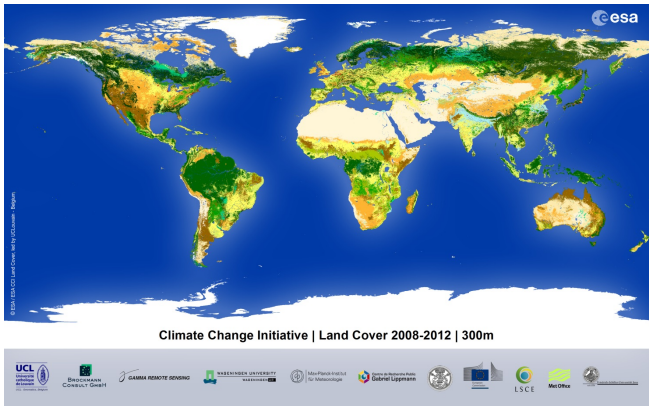
Goal 15: Life on land

Target 15.1 By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements

Indicator 15.1.1 Forest area as a percentage of total land area



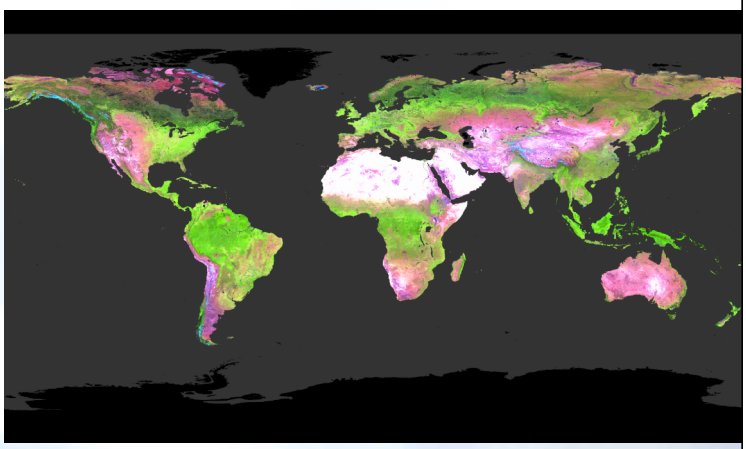
Climate Change Initiative | Land Cover 2008-2012 | 300m

27

Forest Cover from Earth-observing Environmental Satellites

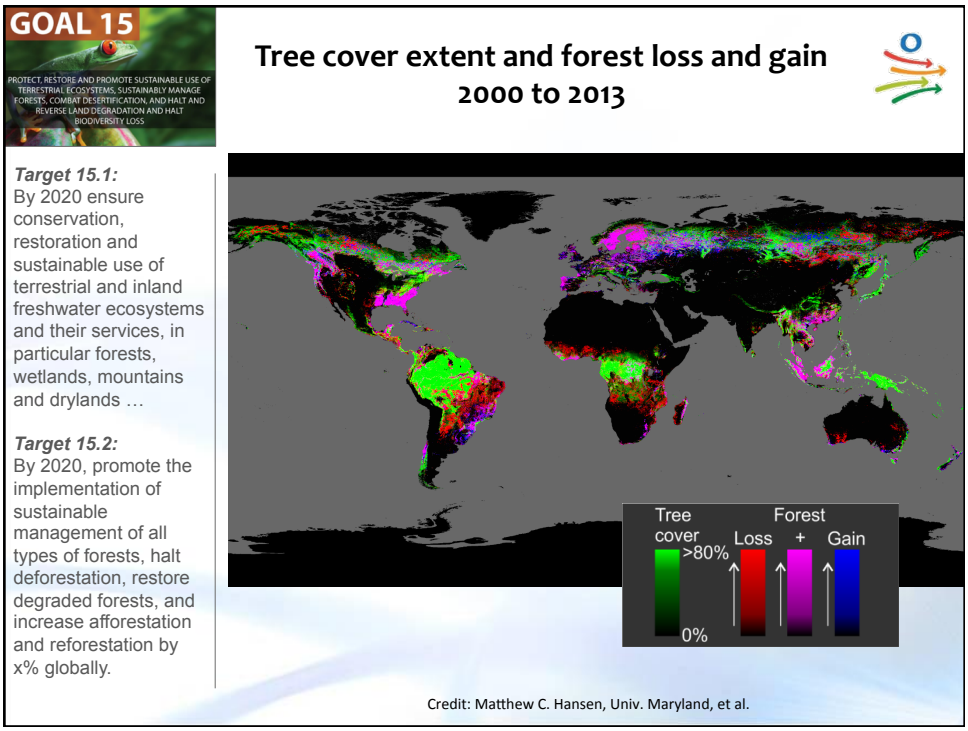
Target 15.1:
By 2020 ensure conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands …

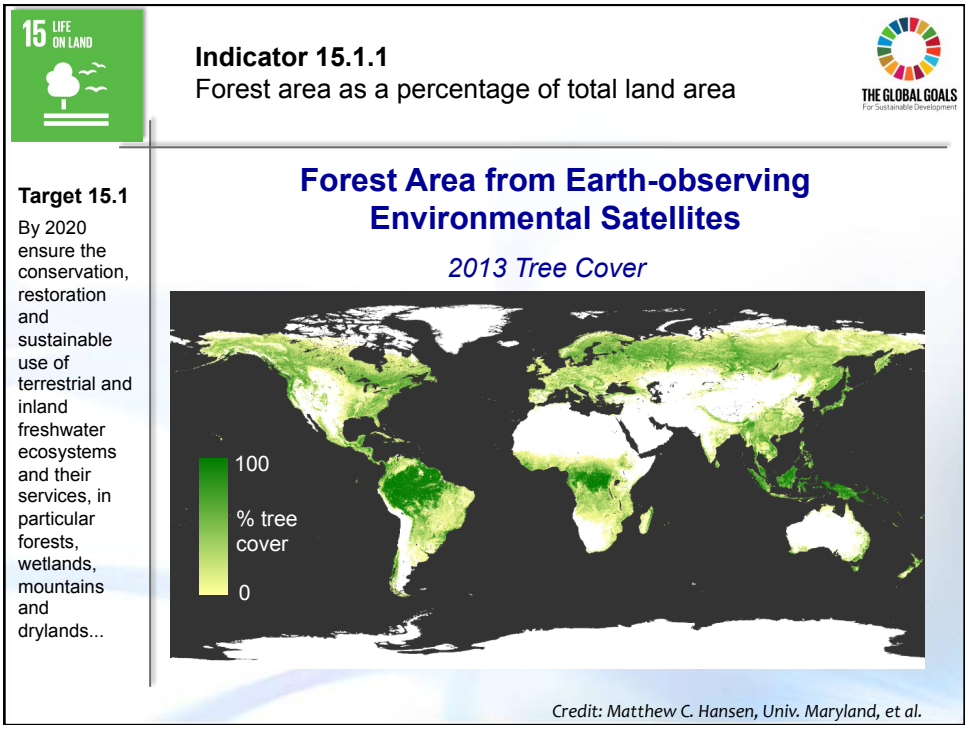
Target 15.2:
By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests, and increase afforestation and reforestation by x% globally.



Vegetation in greens
Soils in mauves

Credit: Matthew C. Hansen, Univ. Maryland, et al. Image for 2000.


GOAL 15
PROTECT, RESTORE AND PROMOTE SUSTAINABLE USE OF TERRESTRIAL ECOSYSTEMS, SUSTAINABLY MANAGE FORESTS, COMBAT DESERTIFICATION, AND HALT AND REVERSE LAND DEGRADATION AND HALT BIODIVERSITY LOSS
Tree cover extent and forest loss and gain 2000 to 2013
Target 15.1:
By 2020 ensure conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands …
Target 15.2:
By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests, and increase afforestation and reforestation by x% globally.
Tree cover
>80%
0%
Forest
Loss
+
Gain
Credit: Matthew C. Hansen, Univ. Maryland, et al.


15 LIFE ON LAND
Indicator 15.1.1
Forest area as a percentage of total land area
THE GLOBAL GOALS
For Sustainable Development
Target 15.1
By 2020 ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands...
Forest Area from Earth-observing Environmental Satellites
2013 Tree Cover
100
% tree cover
0
Credit: Matthew C. Hansen, Univ. Maryland, et al.

15 LIFE ON LAND

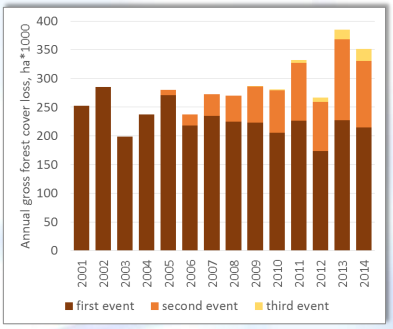
Indicator 15.1.1
Forest area as a percentage of total land area

THE GLOBAL GOALS For Sustainable Development

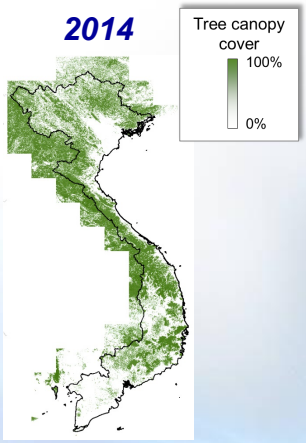
Target 15.1
By 2020 ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands...

Vietnam: Forest Cover Mapping

Total annual gross forest cover loss 2001-2014:
3.2 million ha.



2014



Credit: Matthew C. Hansen, Univ. Maryland, et al.

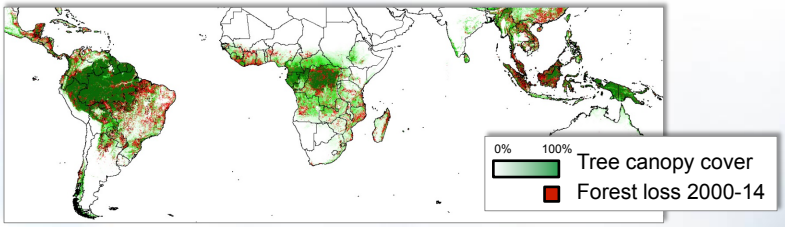
15 LIFE ON LAND

Indicator 15.1.1
Forest area as a percentage of total land area

THE GLOBAL GOALS For Sustainable Development

Target 15.1
By 2020 ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands...

Gross Forest Cover Change: 2000-2014



<< Annual loss shown using 3-year mean filter

Credit: M. Hansen, UMd, et al.

FAO Forest Resource Assessment 2015

TABLE 3 **Top ten countries reporting the greatest annual net loss of forest area, 2010–2015**

	Country	Annual forest area net loss	
		Area (thousand ha)	Rate (%)
1	Brazil **2.6m ha loss**	984	0.2
2	Indonesia **1.5m ha loss**	684	0.7
3	Myanmar	546	1.8
4	Nigeria	410	5.0
5	United Republic of Tanzania	372	0.8
6	Paraguay	325	2.0
7	Zimbabwe **0.8m ha loss**	312	2.1
8	Democratic Republic of the Congo	311	0.2
9	Argentina	297	1.1
10	Bolivia (Plurinational State of)	289	0.5

TABLE 4 **Top ten countries reporting the greatest annual net gain in forest area, 2010–2015**

	Country	Annual forest area net gain	
		Area (thousand ha)	Rate (%)
1	China	1 542	0.8
2	Australia	308	0.2
3	Chile	301	1.8
4	United States of America	275	0.1
5	Philippines	240	3.3
6	Gabon	200	0.9
7	Lao People's Democratic Republic	189	1.0
8	India	178	0.3
9	Viet Nam **3.2m ha loss**	129	0.9
10	France	113	0.7

Why is this so?

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The Data Ecosystem: Methodologies and Comparability

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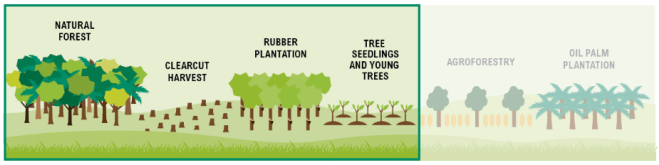
FAO FRA v Global Forest Watch Data methods and comparability

What is Considered a "Forest?"

FOREST RESOURCES ASSESSMENT (FRA) adopts a common definition of "forest" to monitor global forest area based on biophysical and land use criteria.



GLOBAL FOREST WATCH (GFW) monitors all forms of tree cover to detect loss and gain based on biophysical criteria, and uses the term "tree cover" instead of "forest".

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FAO FRA v Global Forest Watch Data methods and comparability

How is Forest Change Reported?

HERE ARE SOME EXAMPLES

BEFORE	CHANGE	AFTER	HOW IS "CHANGE" MEASURED? FRA	GFW
NATURAL FOREST	CLEARED FOR FARMLAND	FARMLAND	DEFORESTATION	TREE COVER LOSS
NATURAL FOREST	CLEARED FOR PLANTATION	TREE PLANTATION	NO CHANGE	TREE COVER LOSS
TREE PLANTATION	HARVESTED AND REPLANTED	TREE PLANTATION	NO CHANGE	TREE COVER LOSS
NATURAL FOREST	CLEARED BY NATURAL FIRE	REGROWING NATURAL FOREST	NO CHANGE	TREE COVER LOSS

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Data methods and comparability

When are the data from?

FOREST RESOURCES ASSESSMENT (FRA)
Released once every 5 years

AS OF THE **FRA2015**

87 COUNTRIES were using data **greater than 10 years old.**
58 COUNTRIES were using data **as old as 15 years.**
38 COUNTRIES were using data **as old as 20 years.**
14 COUNTRIES were using data **as old as 25 years.**

GLOBAL FOREST WATCH (GFW)
Updates every year

As of 2014, **all countries** of the world have updated data.

http://bit.ly/GFW-FRA

GLOBAL FOREST WATCH

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FAO FRA v Global Forest Watch
Data methods and comparability

What is the unit of analysis?

FOREST RESOURCES ASSESSMENT (FRA)

GLOBAL FOREST WATCH (GFW)

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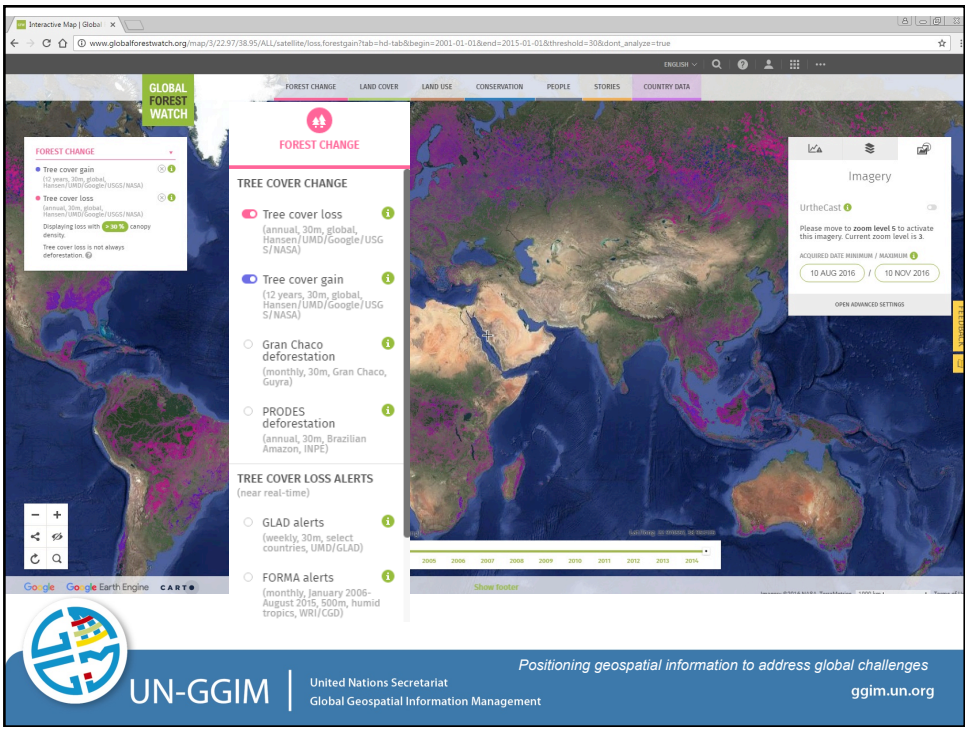
GLOBAL FOREST WATCH
FOREST CHANGE
LAND COVER
LAND USE
CONSERVATION
PEOPLE
STORIES
COUNTRY DATA
TREE COVER CHANGE
Tree cover loss
(annual, 30m, global, Hansen/UMD/Google/USGS/NASA)
Tree cover gain
(12 years, 30m, global, Hansen/UMD/Google/USGS/NASA)
Gran Chaco deforestation
(monthly, 30m, Gran Chaco, Guyra)
PRODES deforestation
(annual, 30m, Brazilian Amazon, INPE)
TREE COVER LOSS ALERTS
(near real-time)
GLAD alerts
(weekly, 30m, select countries, UMD/GLAD)
FORMA alerts
(monthly, January 2006-August 2015, 500m, humid tropics, WRI/CGD)
Imagery
UrtheCast
Please move to zoom level 5 to activate this imagery. Current zoom level is 3.
ACQUIRED DATE MINIMUM / MAXIMUM
10 AUG 2016
10 NOV 2016
OPEN ADVANCED SETTINGS
Google Earth Engine
CARTO
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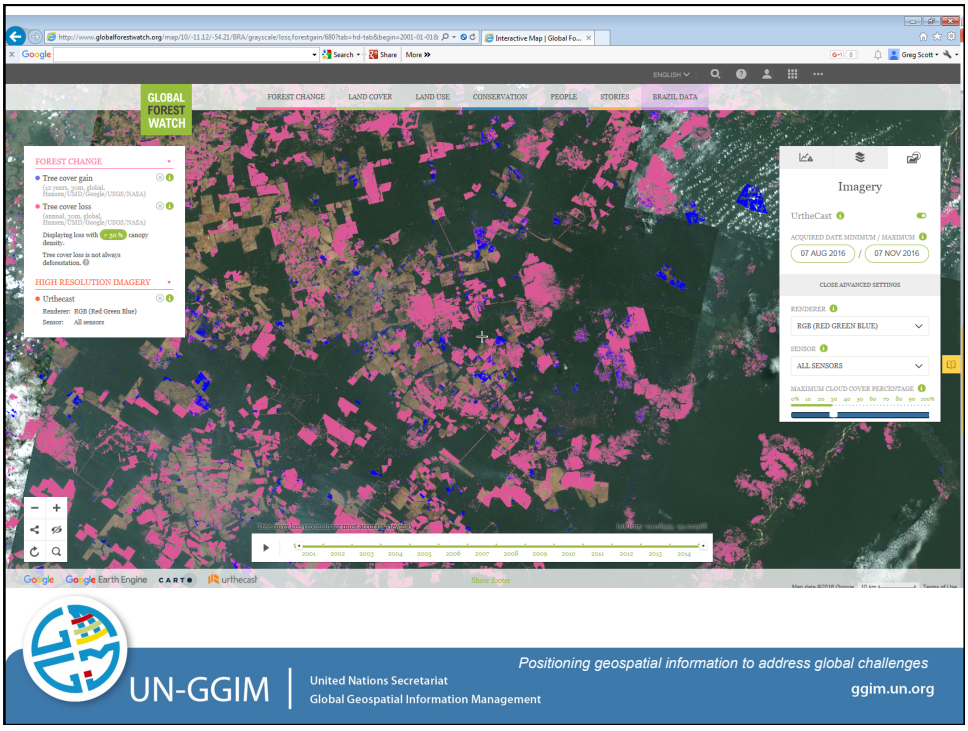
GLOBAL FOREST WATCH
FOREST CHANGE
LAND COVER
LAND USE
CONSERVATION
PEOPLE
STORIES
BRAZIL DATA
HIGH RESOLUTION IMAGERY
Urthecast
Imagery
UrtheCast
ACQUIRED DATE MINIMUM / MAXIMUM
07 AUG 2016
07 NOV 2016
CLOSE ADVANCED SETTINGS
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SENSOR
ALL SENSORS
Google Earth Engine
CARTO
urthecast
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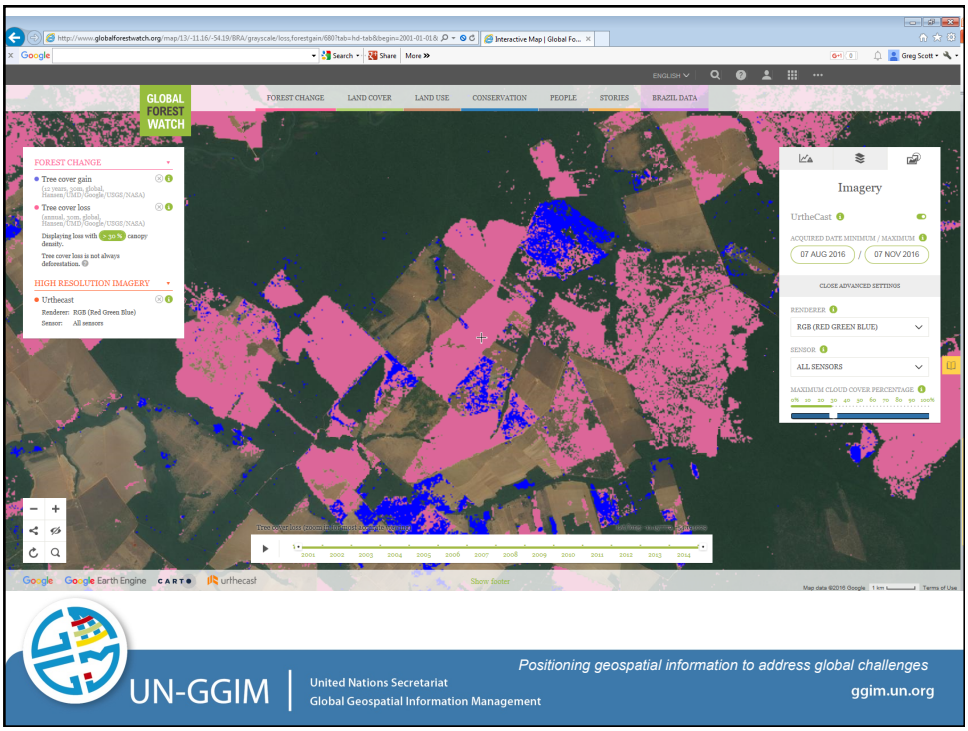
GLOBAL FOREST WATCH
FOREST CHANGE
LAND COVER
LAND USE
CONSERVATION
PEOPLE
STORIES
BRAZIL DATA
FOREST CHANGE
Tree cover gain
Tree cover loss
HIGH RESOLUTION IMAGERY
Urthecast
Imagery
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CLOSE ADVANCED SETTINGS
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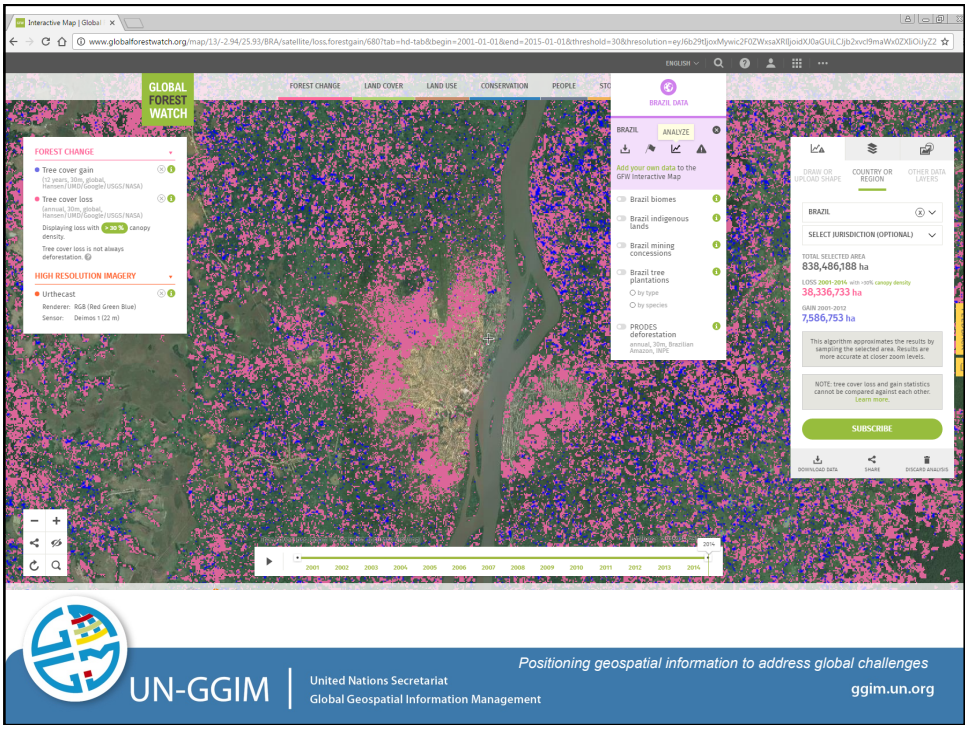
GLOBAL FOREST WATCH
FOREST CHANGE
LAND COVER
LAND USE
CONSERVATION
PEOPLE
BRAZIL DATA
FOREST CHANGE
Tree cover gain
Tree cover loss
HIGH RESOLUTION IMAGERY
Urthecast
BRAZIL
ANALYZE
Brazil biomes
Brazil indigenous lands
Brazil mining concessions
Brazil tree plantations
PRODES deforestation
SELECT JURISDICTION (OPTIONAL)
TOTAL SELECTED AREA
838,486,188 ha
38,336,733 ha
7,586,753 ha
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Indicators: Data methods and comparability

Assumption is that data inputs for indicators are correct...they are not!!

- Subjectivity of data and metadata is mixed. Some quantitative but some very qualitative.
- Periodicity of data – baselines, synthesis, annual, biennial, etc.
- More methodological work is needed on the indicators – includes considering data integration and disaggregation.
- Comparability – some data being provided is not well harmonized or does not have validation or quality assurance. We need consistent methods and comparisons.
- Need to review the indicators through a geographic lens, get the methodologies right, inform the statisticians, provide technical guidance, and then support country implementation.

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Indicators: Data methods and comparability

What is the accountability framework?

- National data need to contribute to regional and global estimates.
- Need better understanding of data flows so that comparisons can be made in a fulsome way.
- Some custodial agencies have no means to gather statistical data from NSOs.
- The role of custodial agencies. How do they work with NSOs? Need to ensure data sources are correct and valid.
- Countries need to have a role in the custodian (agency) relationship. At the end of the day, the data needs to be country led, owned and implemented. This will be important to enable countries to tie estimates (of progress, etc.) with capacity building.

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Indicators: Data methods and comparability

What is the accountability framework?

- An evolving concept of 'national' versus 'international' data. Some basic and agreed principles need to be determined in order to overcome issues and seek agreement where national data may be in conflict with international data, or where data is available internationally but not nationally. What is the 'quality assurance' culture? We need strong principles of comparability.
- We will need to work this through as countries are feeling intimidated by what is being proposed internationally. International data is becoming more relevant as a means to determine independent (national to global) data without the requirements for national aggregations.

SUSTAINABLE DEVELOPMENT GOALS

The fact is that no species has ever had such wholesale control over everything on earth, living or dead, as we now have. That lays upon us, whether we like it or not, an awesome responsibility. In our hands now lies not only our own future, but that of all other living creatures with whom we share the earth.

David Attenborough

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