

2015 and 2020 United Republic of Tanzania Land Cover Map



Source: UN. 2020. Map of the world[online][Cited July 2022]

The Tanzania Ministry of Natural Resources and Tourism through Tanzania Forest Services (TFS) Agency requested technical support to Food and Agriculture Organization of the United Nations (FAO) to undertake National Forest Monitoring and Assessment (NAFORMA II). The land cover maps of the United Republic of Tanzania are generated using the 2015 NAFORMA I legend and LCCS software. The samples were trained with cloud-based geospatial processing and modelling tools available from System for Earth Observation Data Access, Processing, and Analysis for Land Monitoring (SEPAL). 2015 and 2020 Landsat 8 imageries were classified using 2010 -2013 NAFORMA field survey. The 2015 and 2020 land cover dataset were prepared in support to NAFORMA II sampling design.

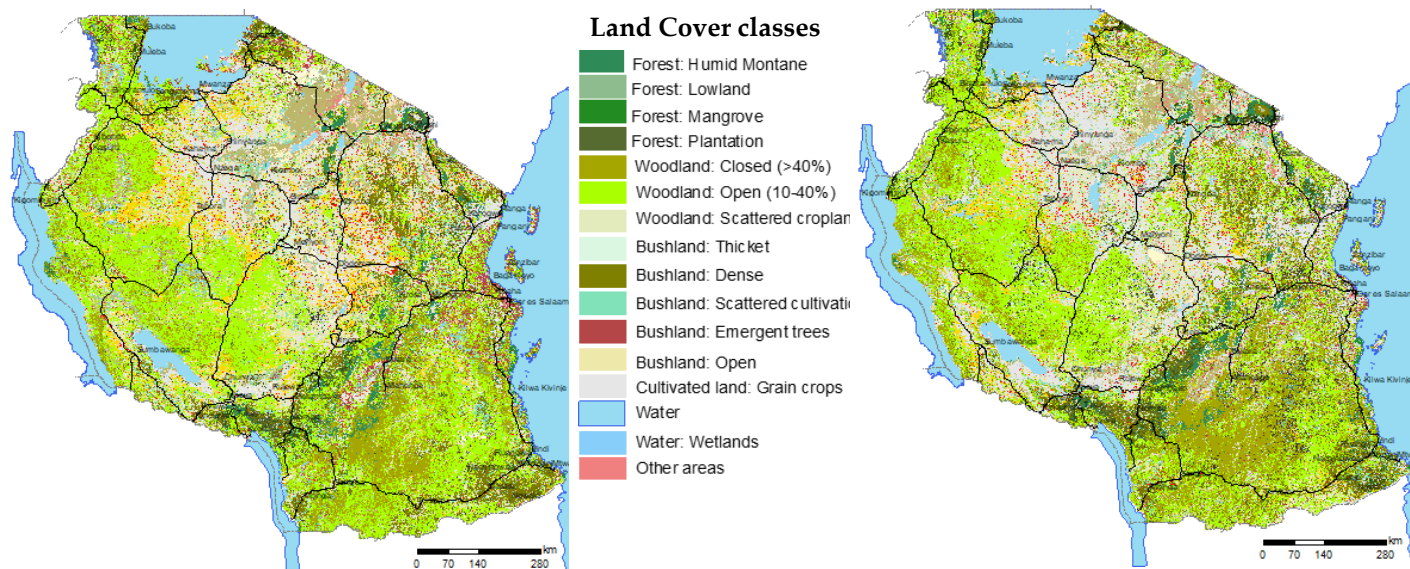


Figure 1: 2015 (left) and 2020 (right) Land Cover Map of the United Republic of Tanzania generated from NAFORMA I Legend

Table I: 2015 and 2020 Land Cover Classes

Vegetation Type	Area in (ha)			
	2015	Area%	2020	Area%
Humid Montane and Lowland Forest	1,741,426	2	1,669,691	2
Mangrove Forest	352,574	0	337,036	0
Plantation Forest	466,471	0	762,764	1
Woodland: Closed (>40%)	9,288,203	10	11,902,119	12
Woodland: Open (10-40%)	25,280,966	27	21,265,268	22
Woodland: Scattered cropland (Unspecified density)	4,648,557	5	3,042,707	3
Bushland: Thicket	689,582	1	1,857,781	2
Bushland: Dense	2,952,694	3	3,180,821	3
Bushland: Scattered cultivation	2,704,485	3	3,042,745	3
Bushland: Emergent trees	2,406,501	3	1,449,253	2
Bushland: Thicket with Emergent trees	928,049	1	1,637,824	2
Bushland: Open	7,006,451	7	3,869,661	4
Grassland: Wooded	2,761,909	3	838,662	1
Grassland: Bushed	457,577	0	270,072	0
Grassland: Scattered cropland	412,113	0	299,641	0
Grassland: Open	4,275,245	4	4,978,460	5
Cultivated land: Agro-forestry system	1,728,629	2	1,884,151	2
Cultivated land: Wooded crops	3,924,106	4	3,736,039	4
Cultivated land: Herbaceous crops	4,618,392	5	3,872,378	4
Cultivated land: Grain crops	9,396,828	10	17,074,785	18
Cultivated land: Mixed tree cropping	1,490,335	2	832,756	1
Open land: Bare soil	457,726	0	144,945	0
Open land: Coastal bare land	5641.47	0	1,821	0
Open land: Rock outcrops	296	0	1,981	0
Water: Inland water	5,942,318	6	6,374,403	7
Water: Wetlands	904,904	1	530,066	1
Other areas	357,759	0	437,730	0
Total	95,199,739	100	95,295,561	100

Key findings

Dominant land cover classes (top three);

- Woodland Open accounts for 27% to 22% of the total land in 2015 and 2020 respectively
- Woodland closed 10% to 12% in 2015 and 2020 followed by
- Cultivated land grain crops 10% to 18% in 2015 and 2020

Major land cover changes (top three);

- Cultivated land: Grain crops increased by 8% (7 677 957 ha)
- Woodland Open decreased by -5% (-4 015 698 ha)
- Open Bushland decreased by -3% (-3 136 790 ha)

Prepared by Sophia Gogo, Amit Ghosh, Rashed Jalal and Matieu Henry in support National Forest Monitoring and Assessment of Tanzania (NAFORMA II), Food and Agriculture Organization of United Nations, Dar es Salaam, United Republic of Tanzania.

The boundaries and names shown, and the designations used on these map(s) do not express any opinion whatsoever on the part of FAO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers and boundaries. Dashed lines on maps represent approximate border lines for which there may not yet be full agreement.