Session 6: Statistics of Land Use



Reena Shah

United Nations Statistics Division Workshop on Environment Statistics

(Addis Ababa, 16-20 July 2007)



TABLE L 1:LAND USE

Priority	Category	Unit	1950"	1960"	1970"		1980"	1990"	2000"	2002"
!	Agricultural land (1) = (2)+(3)+(4)+(5)	km²								
	Arable land (2)	km²						····		
	Land under permanent crops (3)	km²								
	Land under permanent meadows and pastures (4)	km²								
	Fallow and other agricultural land (5)	km²								
!	Forest and other wooded land (6) = (7)+(8)	km²								
	Land under forest (7)	km²				1		····		
	Other wooded land (8)	km²								
!	Built-up and related land (9)	km²					•	····		
!	Wet open land (10)	km²					•	····		
ļ	Dry open land with special vegetation cover (11)	km²					•	····		
l	Upen land without, or with insignificant, vegetation couver (12)	km²								
!	Total land area (13) = (1)+(6)+(9)+(10)+(11)+ (12)	km²								
!	Waters (14)	km²								
!	Total area of the country (15) = (13)+(14)	km²		 						



1 - AGRICULTURAL LAND

This refers to the major classes of land use on agricultural holdings.

For classification the gross area is surveyed for each class. 'Agricultural land' includes land under scattered <u>farm buildings</u>, <u>yards</u> and their annexes, permanently <u>uncultivated land</u>, such as uncultivated patches, <u>banks</u>, <u>footpaths</u>, ditches, headlands and shoulders.

1 - AGRICULTURAL LAND =

+ 2 Arable land

+ 3 Land under permanent crops

+ 4 Land under permanent meadows and pastures

+ 5 Fallow and other agricultural land



6 - FOREST AND OTHER WOODED LAND

Land under forestry or no land use,

Land spanning more than 0.005 km2 (0.5 Ha.) with trees higher than 5 meters and a canopy cover of more than 10 percent, or trees able to reach these thresholds in situ.

Includes mangroves and forests on wetlands according to the above height and canopy coverage. (UNSD Q2004)

6 - FOREST AND OTHER WOODED LAND = + 7 Land under forest + 8 Other wooded land

9 - BUILT-UP AND RELATED LAND

- Land under <u>houses, roads, mines and quarries and any other facilities</u>, including
- their auxiliary spaces, deliberately installed for the pursuit of <u>human</u> <u>activities.</u>

Houses ~ Roads ~ Mines ~ Quarries ~ Waste tips ~ City parks

Human Activities



10 - WET OPEN LAND



Non-wooded sites either <u>partially, temporarily or permanently water-</u> <u>logged</u>.

- The water of which may be fresh, brackish or saline, on blanket or raised peatlands.
- The water may be either stagnant or running, and is usually shallow, especially if it is saline.

11 - DRY OPEN LAND WITH SPECIAL VEGETATION COVER

<u>Non-wooded land</u> which is covered by <u>low vegetation</u> (less than 2 meters).



Non-built up land the surface of which either is: <u>not covered at all</u> by vegetation or <u>scarcely covered</u> by some vegetation, which precludes its inclusion in other categories of the classification.



13 -TOTAL LAND AREA

(13) = (1)+(6)+(9)+(10)+(11)+(12)

Total land area excluding area under inland or tidal water bodies.

+ 1 Agricultural Land

TOTAL + 6 Forest And Other Wooded Land

LAND = +9 Built-up And Related land

AREA + 10 Wet Open Land

+ 11 Dry Open Land With Special Vegetation Cover

+ 12 Open Land Without, Or With Insignificant Vegetation Cover





National territory, which is covered by surface

waters.

The national territory is defined as the surface enclosed by all inland borders and, if applicable, the normal base-line (low-water mark) on the seaward side.



15 - TOTAL AREA OF THE COUNTRY

(15) = (13) TOTAL LAND AREA +(14) WATERS

Total area (of country) including area under inland water bodies, but excluding offshore territorial waters.



Sources of Land Use Statistics

Agricultural Land	Ministry of Agriculture
Forest & Wooded land	Department of Forest
Built-up & Related Land	Urban & Regional Planning
Wet open land	Ministry of Natural Resources,
	Ministry of Lands
Dry open land with special	
vegetation cover	
Open land without, or with	
insignificant, vegetation cover	
Waters	Department of Fisheries,
	Ministry of Natural Resources

Difficulties in Data Collection

- Different end purposes e.g. maps, statistics
- Incompatible data e.g. formats, definitions
- Overlaps in data collection efforts
- Different conditions for data access
- Difficulties in data integration and analysis
- Costs of land use/land cover data collection



Overcoming Data Difficulties

- Set up mechanism for coordination
- Adopt common technical standards
- Rationalize data collection efforts (who does what) taking present & future needs into account
- Develop protocols for data access/sharing/dissemination
- Reinforce national capacities