



Food and Agriculture
Organization of the
United Nations

The Islamic Republic of
AFGHANISTAN
LAND COVER ATLAS

The Islamic Republic of **Afghanistan**

LAND COVER ATLAS

The Land Cover Atlas of the Islamic Republic of Afghanistan was initially prepared in the framework of the FAO Government Cooperative Programme under the auspices of the project on "Strengthening Agricultural Economics, Market Information and Statistics Services". The project was formulated upon the request from the Government of the Islamic Republic of Afghanistan and funded by the European Commission. The Food and Agriculture Organization of the United Nations (FAO) provided technical assistance as the executing agency in close cooperation with all parties.

The programme aims at strengthening the human, physical and institutional capacity for analyzing, designing, monitoring and evaluating food security policies and programmes. Its overall aim is to build sustainable food security in the country. The availability of up-to-date and reliable land cover database is identified as one of the main requirements for this programme as this information has multiple uses and benefits including strengthening the national capacity to undertake consistent land cover assessments using standards, cutting edge technology and tools.

The main applications of the updated land cover database include:

- Support for improving food security through the establishment of new institutional and operational frameworks for agricultural assessment and monitoring.
- Strengthen government capacity in livelihoods and food security policy analysis and programming.
- Agriculture and Rural Development planning.
- Contribute to Agricultural Economics, Market Information and Statistics Services.
- Crop and livestock market information systems.
- Crop and livestock monitoring and forecasting systems.
- Natural resources monitoring systems.
- Nutrition information systems.

FAO has been working closely with the Government of the Islamic Republic of Afghanistan partners to:

- Build appropriate food security institutions.
- Assist the national institutes in formulation, design, implementation and monitoring of agriculture and rural development strategic plans.
- Collect, analyze and disseminate information on crop and livestock market prices, crop production and rangeland, nutrition, land cover, weather and its effects on crops.
- Promote capacity building activities contributing to food security by supporting the strengthening of policy and planning initiatives.

FAO, Land and Water Division (NRL) has recently completed a new land cover of the Islamic Republic of Afghanistan with the enrichment of the original 2010 database through the integral use of high resolution aerial photography supported under the auspices of FAO's Technical Cooperation Programme. TCP/AFG/3501.

The updated land cover information is available in standardized user-friendly digital format, ready to be integrated with other relevant geospatial data, such as political (administrative regions and their rural development priorities, security zoning including location of minefields), demographic (including resettlement plans for returning refugees), agronomic (including historical information on horticulture plantations and pastures), socio-economic (including poverty maps), topographic, pedologic, hydrologic, climatic, and natural disasters areas (including flood zones, areas affected by agricultural drought and pest infestations).

The land cover information will be used as a decision support product to assist numerous government institutions.

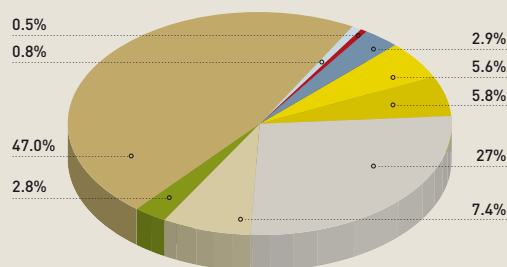
The ultimate beneficiaries are the Afghan people which suffers from significant food insecurity. They will benefit from better targeted programmes and policies to rehabilitate and further develop the agricultural sector, and hence reduce poverty and vulnerability to food insecurity. Through the provision of better information, short-term emergency assistance needs, and also longer term rehabilitation and development needs, will be fulfilled more efficiently and effectively, ultimately reducing food insecurity and vulnerability, and poverty.

The immediate benefits are the provision of improved, timely and reliable information for decision making in the Ministry of Agriculture, Irrigation and Livestock (MAIL), Central Statistics Organization, Ministry of Rural Rehabilitation and Development.



Photo: ©FAO / Giulio Napolitano

LAND COVER of the whole **Country**



AFGHANISTAN 2012 in percentage

*Classes represented by less than 0.30% are not showed on the graph.

LAND COVER LEGEND

BUILT-UP

- 1A: Urban
- 1B: Non-Urban

FRUIT TREES (2A)

VINEYARDS (2B)

IRRIGATED AGRICULTURE

- 3A: Intensively cultivated (2B)
- 3A1: Intensively Cultivated
- 3C: Active Karez System Ag

MARGINAL AGRICULTURE

- 3B: Poorly irrigated / Non a

RAINFED AGRICULTURE

- 4A: Flat lying Areas
- 4B: Sloping Areas

NATURAL NEEDLE LEAVED TREES

- 6A: Closed Needleleaved Trees
- 6B: Open Needleleaved Trees

6B1: Closed to Open Undiff

6C: High Shrubs

RANGELAND (7)

BARE AREAS

- 8A: Bare Soil / Rock Outcrop
- 8B: Sand Covered Areas
- 8C: Sand Dunes

MARSHLAND

- 9A: Permanent Marsh
- 9B: Seasonally Inundated Ve

WATER BODIES

- 10A: Permanent Lake
- 9B: Seasonal Lake

RIVER (11)

RIVER BANK (12)

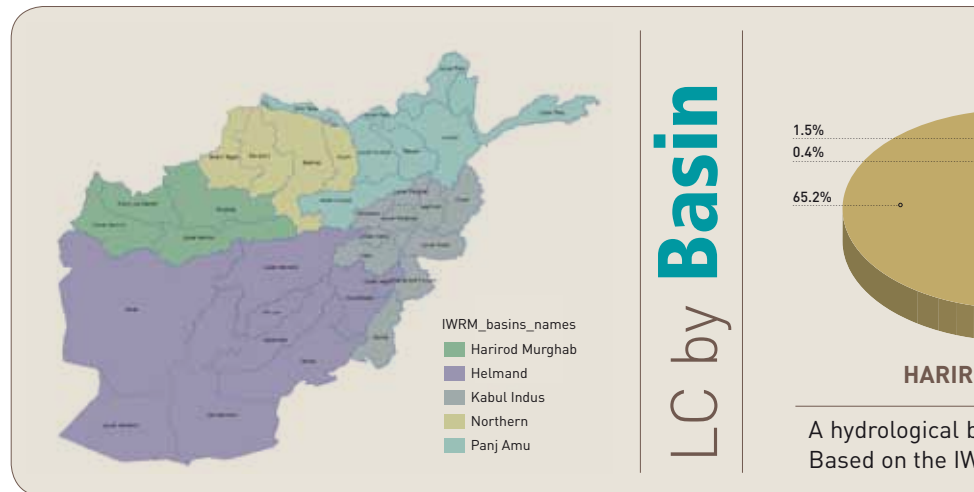
SNOW COVERED AREA (13)

AFGHANISTAN

	HECTARAGE	%
	306,855	0.48
	280,478	0.44
	26,377	0.04
	117,642	0.18
	82,450	0.13
ARAL LAND (Crops/Year)	2,490,480	3.87
(1-2 Crops/Year)	349,618	0.54
Agriculture	1,887,106	2.93
	253,756	0.39
ARAL LAND Active Karez	1,109,730	1.72
ARAL LAND	3,734,494	5.80
	906,273	1.41
	2,828,221	4.39
WOOD FORESTS	975,041	1.51
	83,277	0.13
	891,764	1.38
Terrestrial Trees	234,399	0.36
	571,605	0.89
	30,243,985	46.97
	22,183,289	34.45
	17,404,540	27.03
	2,008,008	3.12
	2,770,741	4.30
	410,796	0.64
	98,552	0.15
Vegetation	312,244	0.48
	408,835	0.63
	96,426	0.15
	312,409	0.49
	128,438	0.20
	897,906	1.39
	497,236	0.77

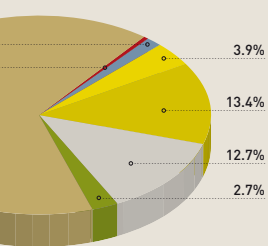
LAND COVER by Province

PROVINCE	Irrigated Agr. Land	Rainfed Agr. Land	Fruit Trees	Vineyards	Bare Areas
Badakhshan	55,957	310,786	8,741	0	840,425
Badghis	42,470	368,567	907	73	16,535
Baghlan	97,164	177,866	3,945	0	135,419
Balkh	266,006	271,690	4,222	585	74,062
Bamyan	59,343	15,984	1,946	0	137,354
Daykundi	49,026	10,007	6,291	5	168,852
Farah	241,479	52	420	1,032	3,532,202
Faryab	112,683	439,651	1,327	7,124	22,541
Ghazni	267,357	50,714	8,146	10,173	171,571
Ghor	66,349	98,514	1,280	0	193,797
Hilmand	342,172	555	1,957	949	3,436,966
Hirat	259,975	559,141	1,717	7,561	2,390,020
Jawzjan	186,258	139,448	339	557	12,904
Kabul	66,748	4,340	4,000	10,600	47,998
Kandahar	312,465	82,892	8,599	19,840	1,402,853
Kapisa	22,594	1,323	4,208	930	6,949
Khost	54,519	374	203	2	11,453

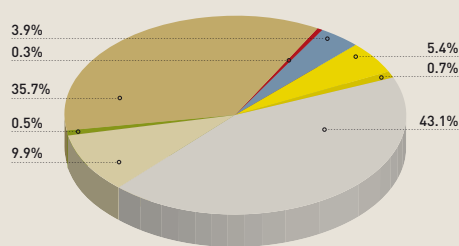


Sand Cover	Forests & Shrubs	Rangeland	Snow covered	Built-up	Waterbody & Marshland	TOTAL LAND (hectarage)
79	30,384	2,687,860	324,823	4,961	81,993	4,346,008
0	157,052	1,468,428	0	5,909	10,983	2,070,924
1,328	64,375	1,202,761	66,034	10,550	20,887	1,780,331
480.806	6,820	484,356	0	22,838	65,536	1,676,921
0	323	1,544,152	17,265	2,208	10,635	1,789,211
0	16,402	1,316,777	49	1,762	8,685	1,577,856
7	9,489	876,531	0	8,699	289,165	4,959,077
300.442	6,634	1,148,068	0	13,411	19,968	2,071,848
0	10,380	1,548,219	0	16,506	83,722	2,166,787
0	6,204	3,307,506	2,356	4,550	32,593	3,713,149
954,091	3,534	1,003,204	0	25,828	231,595	6,000,851
2,903	53,595	2,028,430	0	24,808	165,637	5,493,787
508,624	1,009	217,708	0	9,179	35,970	1,111,996
0	9,244	288,908	0	26,350	7,340	465,528
1,839,000	32,258	1,566,255	0	21,237	131,091	5,416,490
0	15,143	131,640	130	2,735	2,500	188,152
0	120,088	224,536	0	8,114	9,145	428,434

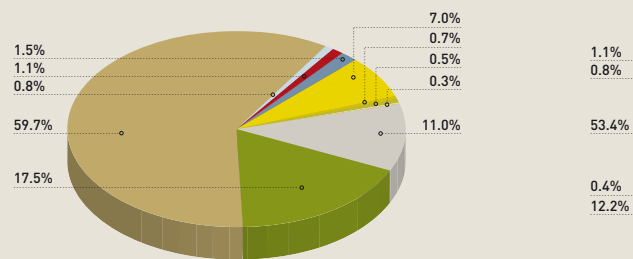
PROVINCE	Irrigated Agr. Land	Rainfed Agr. Land
Kunar	29,013	57
Kunduz	151,136	94,096
Laghman	21,876	32
Logar	46,540	12,153
Nangarhar	106,079	13
Nimroz	95,037	2
Nuristan	8,931	405
Paktika	149,147	9,645
Paktya	70,119	4,651
Panjsher	9,302	795
Parwan	38,226	8,165
Samangan	27,190	284,410
Sari Pul	44,245	322,067
Takhar	85,655	418,657
Uruzgan	51,127	1,647
Wardak	67,110	24,402
Zabul	99,913	21,392



MURGHAB



HILMAND



KABUL INDUS

A river basin can be defined as the extent of land from which surface water originating from precipitation, channelled in rivers and streams, drains down stream. In the VWRM division, Afghanistan is covered by 5 hydrological river basins, comprising 34 watersheds.

Fruit Trees	Vineyards	Bare Areas	Sand Cover	Forests & Shrubs	Rangeland	Snow covered	Built-up	Waterbody & Marshland	TOTAL LAND (hectarage)
308	4	12,775	0	316,258	116,808	0	2,231	7,371	484,824
1,521	213	65,344	223,210	3,006	191,670	0	11,384	48,775	790,355
700	4	68,803	0	97,619	183,915	2	2,444	8,156	383,550
861	1,053	82,870	0	16,646	270,151	0	5,717	3,509	439,500
4,286	281	244,879	0	70,594	271,049	0	13,576	28,962	739,720
13	385	3,157,980	466,487	784	9,792	0	4,339	369,069	4,103,889
424	1	55,423	0	231,907	579,163	16,854	169	5,394	898,671
2,022	732	223,281	1,672	305,640	1,173,886	0	8,643	32,032	1,906,700
732	285	18,927	0	107,220	316,615	0	4,666	4,271	527,486
1,450	0	8,634	0	3,110	319,797	25,474	465	3,959	372,987
7,121	6,373	63,146	0	991	411,924	12,235	6,075	4,176	558,971
1,459	561	78,593	0	11,906	877,603	0	4,505	5,032	1,291,259
2,037	7,398	45,658	0	5,432	1,085,825	0	6,809	7,297	1,526,768
3,815	105	79,416	0	26,953	530,743	23,506	12,319	53,780	1,231,949
10,560	23	158,827	0	15,727	826,184	0	4,175	17,931	1,086,200
8,727	72	70,788	0	931	868,185	8,508	4,906	4,357	1,057,985
13,358	5,529	367,294	99	23,385	1,165,336	0	4,790	33,922	1,735,018

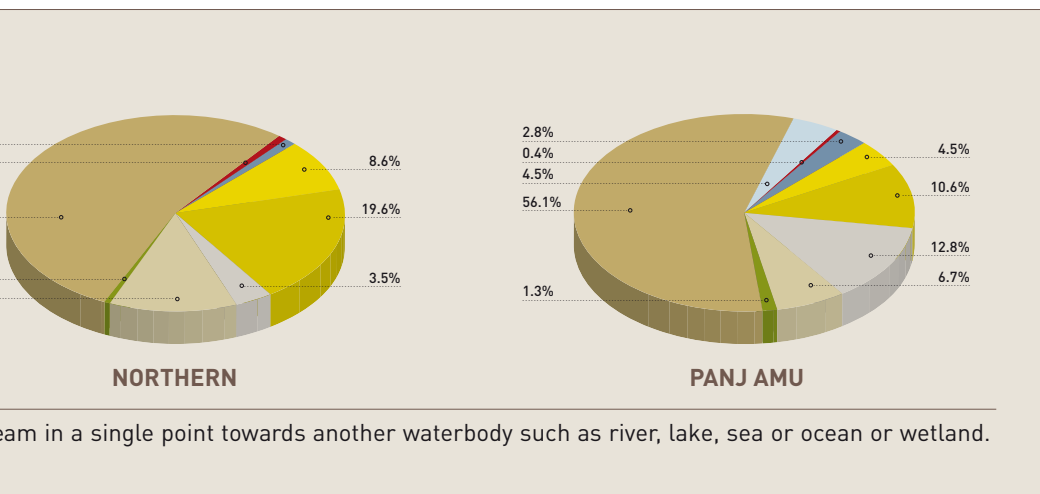
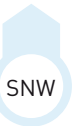
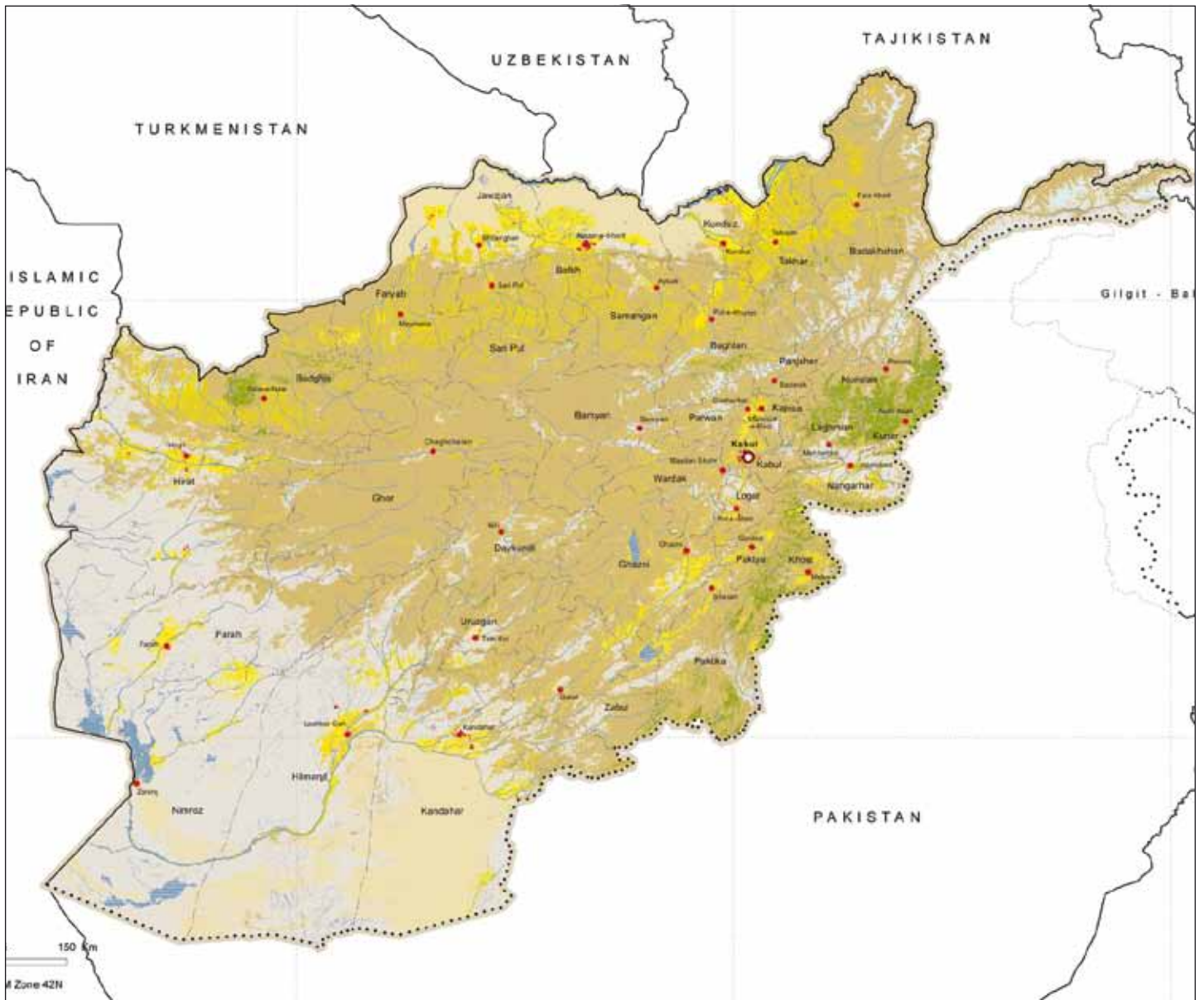


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eam in a single point towards another waterbody such as river, lake, sea or ocean or wetland.



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