



Maps of Agricultural Statistics 2011/12 (2004 E.C)



Agricultural Sample Survey

The general objective of CSA's Agricultural Sample Survey (AgSS) is to collect basic quantitative information on the country's agriculture in order to provide key information essential for planning, policy formulation, monitoring, and evaluation of food security and other agricultural activities. The AgSS is composed of four components: Crop Production Forecast Survey, Meher Season Post Harvest Survey (Area and production, land use, farm management, and crop utilization), Livestock Survey, and Belg Season Survey.

This map reports many indicators that were calculated from data collected during the Meher season post-harvest survey from private peasant holdings. The 2011/12 (2004 E.C.) , Agss dealt with crop area, yield and production of all cereals, pulses and oilseeds and the most commonly grown vegetables, root crops and permanent (perennial) crops. The Survey covered the entire rural parts of the country except the non-sedentary population of three zones of Afar & six zones of Somali regions. A total of 2,290 Enumeration Areas (EAs) were selected, all in all the survey succeeded to cover 2,273 EAs (99.25 %) throughout the regions, with a total of 47,080 agricultural households were actually covered by the survey throughout all region in Ethiopia.

The agricultural data reported in the AgSS was collected from sedentary rural private peasant households by interviewing the selected agricultural holders and physically measuring their fields to obtain data on crop yields and other items of interest. Data were collected and measured using instruments such as measuring tape, compass, kitchen balance, scientific calculators, and GPS (Oromia region only) in order to assure timely and smooth acquisition of accurate data. The procedures for measuring area under crop and area of non-crop fields operated by the holders were performed for the selected households from each sampled EA.

Finally, data on agriculture have to be distinctly defined and identified, so that calculations of key variables and indicators are transparent and standardized. The purpose of using standard concepts and definitions is not only to provide quality data but also to ensure that the correct items are enumerated and measured accurately to reflect the agricultural situation. Standard concepts and definitions of data collection and reported variables can be found in the CSA website and in AgSS reports published on the website as well as in hardcopy.

Introduction to the Map

The map of Agricultural Statistics 2011/12 (2004 E.C.) comprises a wide –ranging collection of agricultural survey data of Meher production for different administrative levels. The maps provide information on crop area, production per hectare (yield) for the main cereal types (Teff, Wheat, Barley, Maize, and Sorghum), and livestock. This report provides spatially disaggregated information at the zone levels in rural areas of the country, allowing the user to explore the various indicators and geographical distribution.

This Document contains approximately 26 pages of maps, each page offering one map displaying zone level indicators. The maps were constructed primarily from data collected and processed by the Central Statistical Agency (CSA) of Ethiopia. The primary data sources for these maps are the agriculture sample survey 2011/12. A major objective of this report is to present spatially disaggregated data in order to supplement information reported in the annual AgSS and serve as a complement for the already existing comprehensive spatial database on agricultural indicators over time (from 2006/07 to 2011/12). Similar to the previous atlases, including the Atlas of the Ethiopian Rural Economy (2006), Ethiopia's Rural Facility and Service Atlas 2011, and the Population and Housing Census Atlas 2007(2010), published by the Central Statistical Agency and the International Food Policy research institute, this report is intended to provide useful information that will guide spatial targeting of interventions and investments aimed at advancing social and economic welfare across Ethiopia.



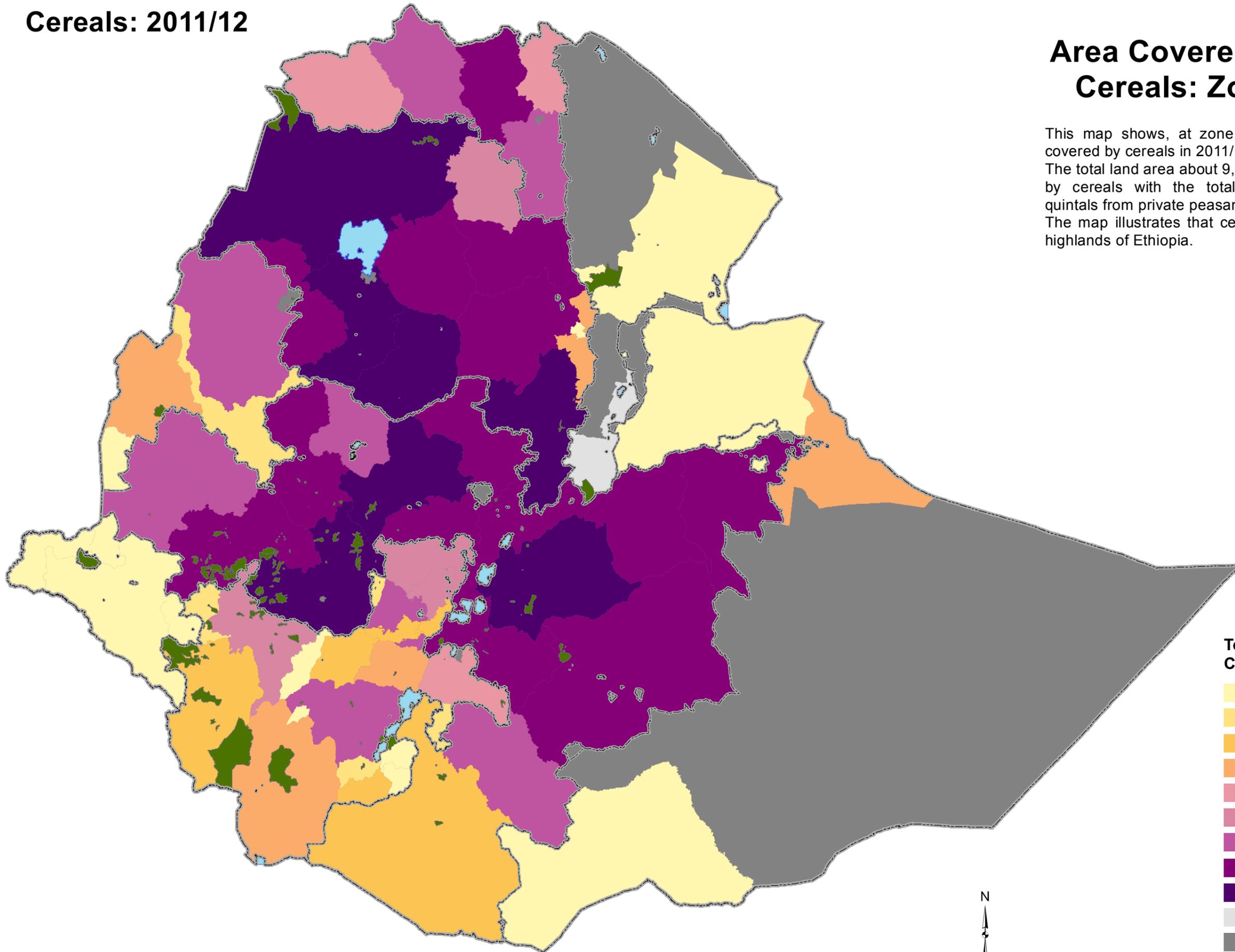
**Prepared By: CSA, Cartography & GIS Directorate,
www.csa.gov.et
Dec, 2012**

Area Covered by Cereals: Zone

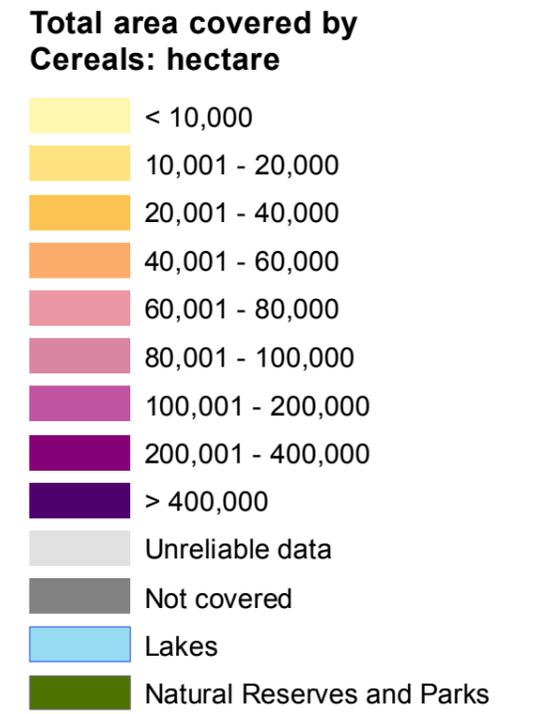
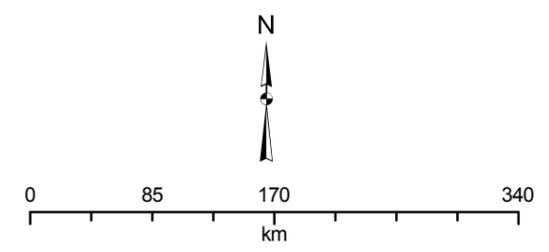
This map shows, at zone level, total area (in hectares) covered by cereals in 2011/12.

The total land area about 9,588,923.71 hectares are covered by cereals with the total production of 188,099,616,95 quintals from private peasant holdings.

The map illustrates that cereal cultivation dominates in the highlands of Ethiopia.

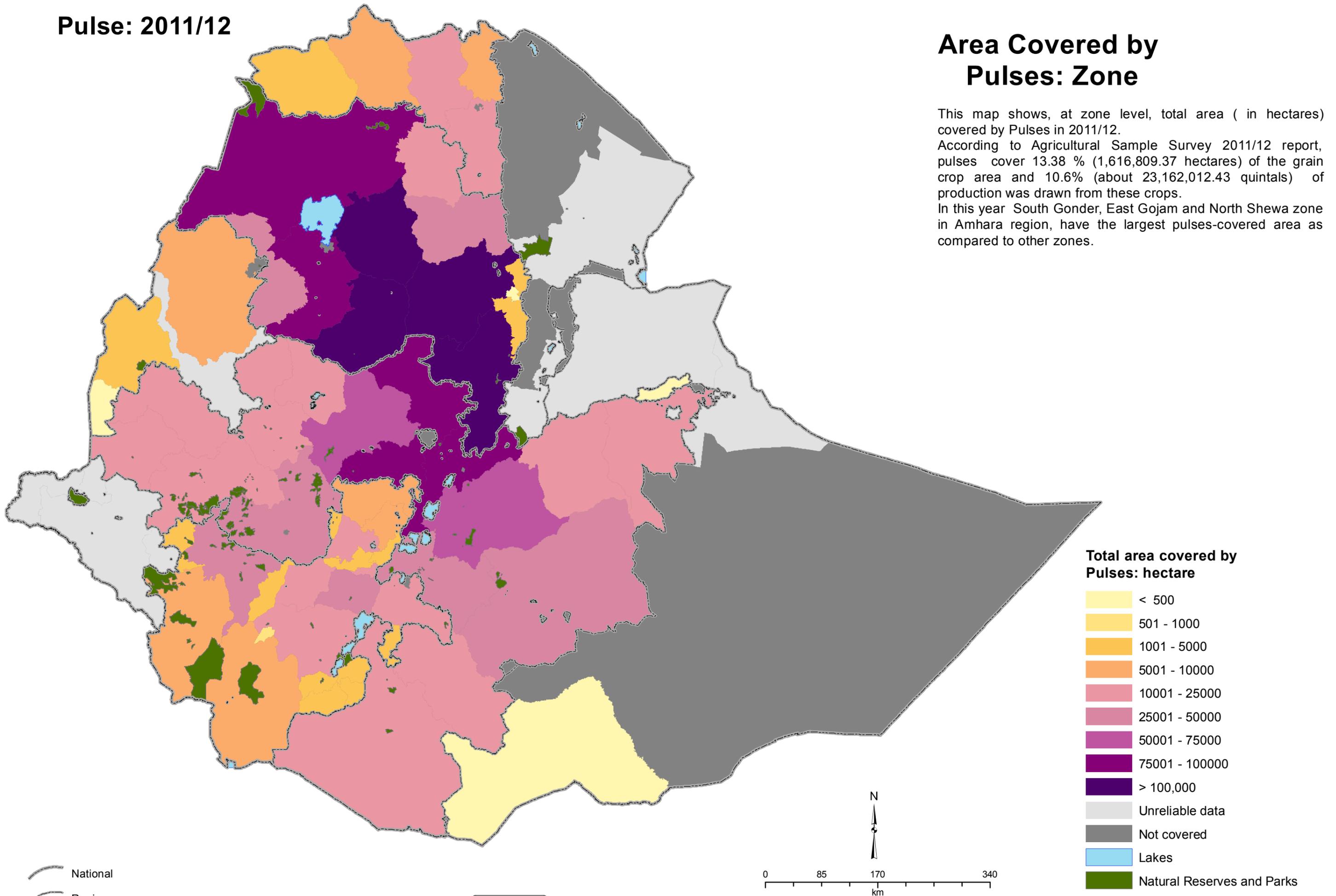


— National
— Region

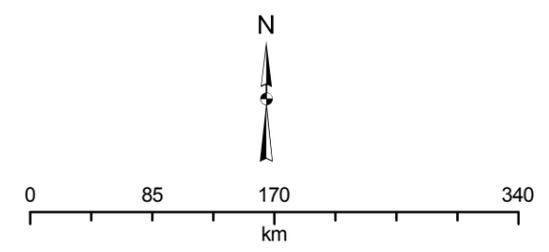


Area Covered by Pulses: Zone

This map shows, at zone level, total area (in hectares) covered by Pulses in 2011/12. According to Agricultural Sample Survey 2011/12 report, pulses cover 13.38 % (1,616,809.37 hectares) of the grain crop area and 10.6% (about 23,162,012.43 quintals) of production was drawn from these crops. In this year South Gonder, East Gojam and North Shewa zone in Amhara region, have the largest pulses-covered area as compared to other zones.



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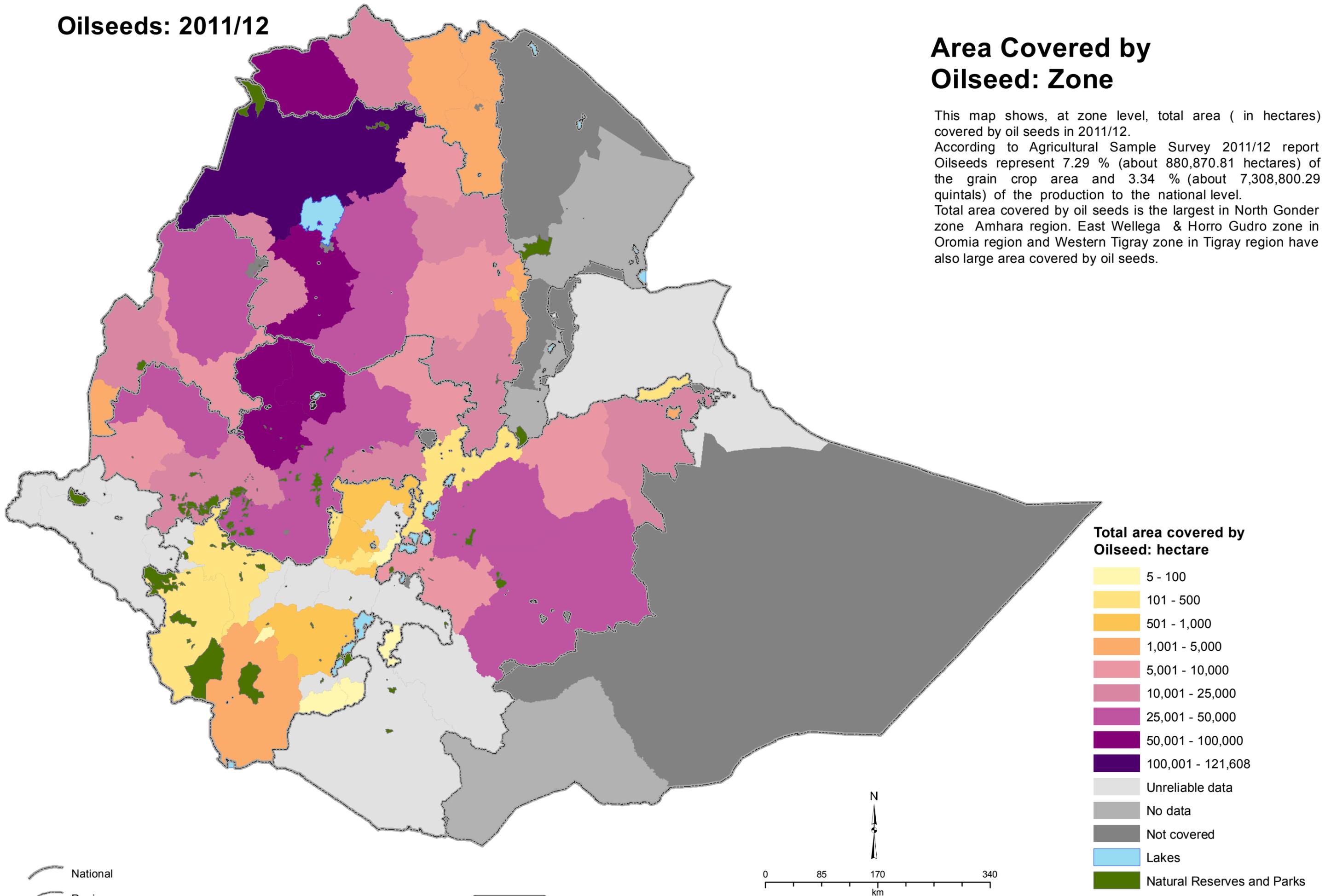
Oilseeds: 2011/12

Area Covered by Oilseed: Zone

This map shows, at zone level, total area (in hectares) covered by oil seeds in 2011/12.

According to Agricultural Sample Survey 2011/12 report Oilseeds represent 7.29 % (about 880,870.81 hectares) of the grain crop area and 3.34 % (about 7,308,800.29 quintals) of the production to the national level.

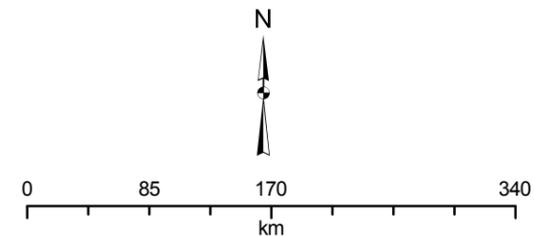
Total area covered by oil seeds is the largest in North Gonder zone Amhara region. East Wellega & Horro Gudro zone in Oromia region and Western Tigray zone in Tigray region have also large area covered by oil seeds.



Total area covered by Oilseed: hectare

- 5 - 100
- 101 - 500
- 501 - 1,000
- 1,001 - 5,000
- 5,001 - 10,000
- 10,001 - 25,000
- 25,001 - 50,000
- 50,001 - 100,000
- 100,001 - 121,608
- Unreliable data
- No data
- Not covered
- Lakes
- Natural Reserves and Parks

National
Region



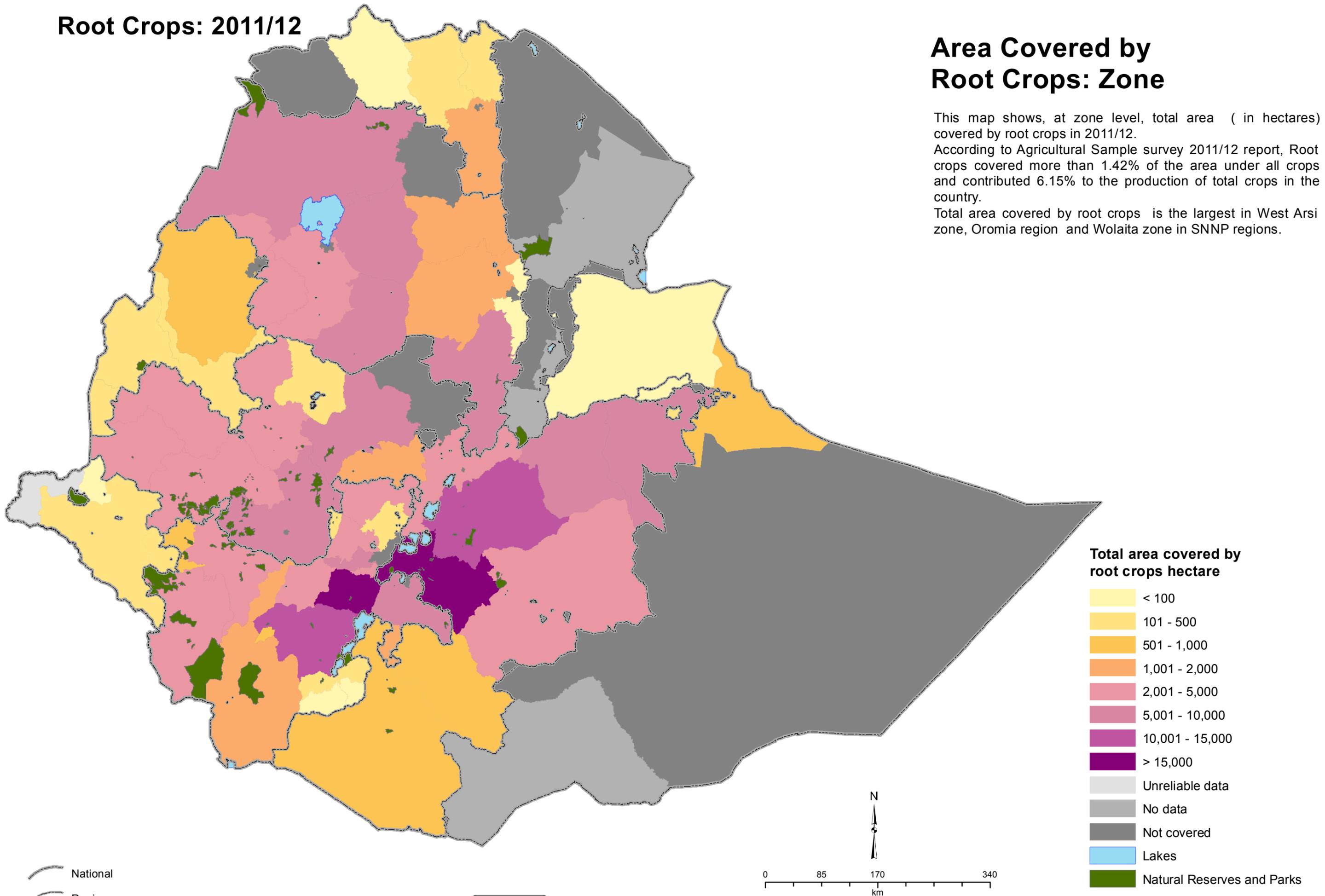
Root Crops: 2011/12

Area Covered by Root Crops: Zone

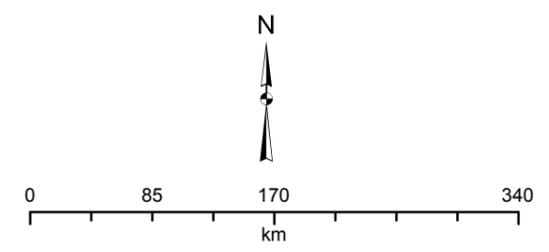
This map shows, at zone level, total area (in hectares) covered by root crops in 2011/12.

According to Agricultural Sample survey 2011/12 report, Root crops covered more than 1.42% of the area under all crops and contributed 6.15% to the production of total crops in the country.

Total area covered by root crops is the largest in West Arsi zone, Oromia region and Wolaita zone in SNNP regions.



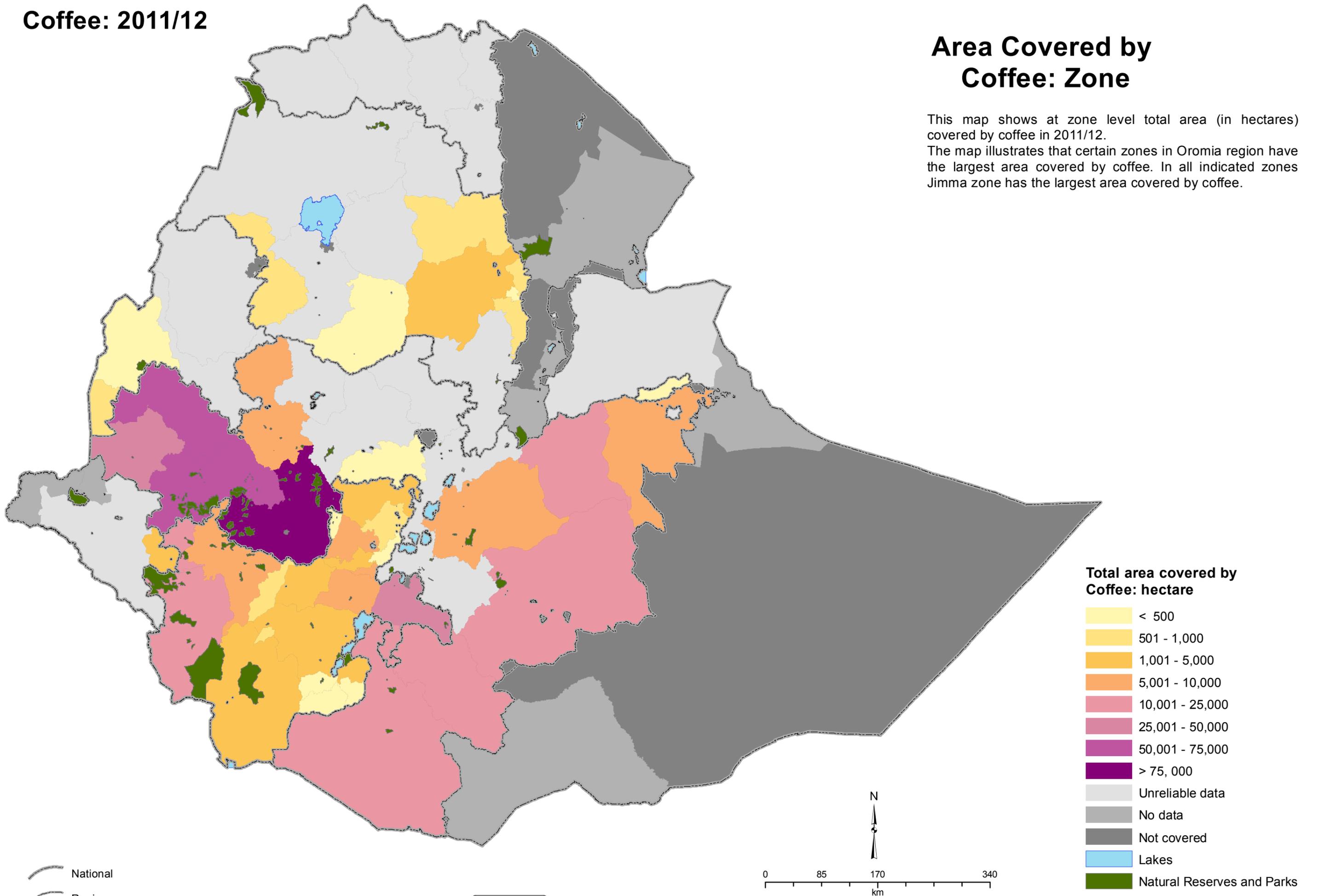
— National
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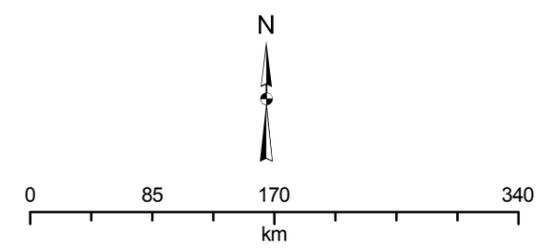
Area Covered by Coffee: Zone

This map shows at zone level total area (in hectares) covered by coffee in 2011/12.

The map illustrates that certain zones in Oromia region have the largest area covered by coffee. In all indicated zones Jimma zone has the largest area covered by coffee.



National
Region



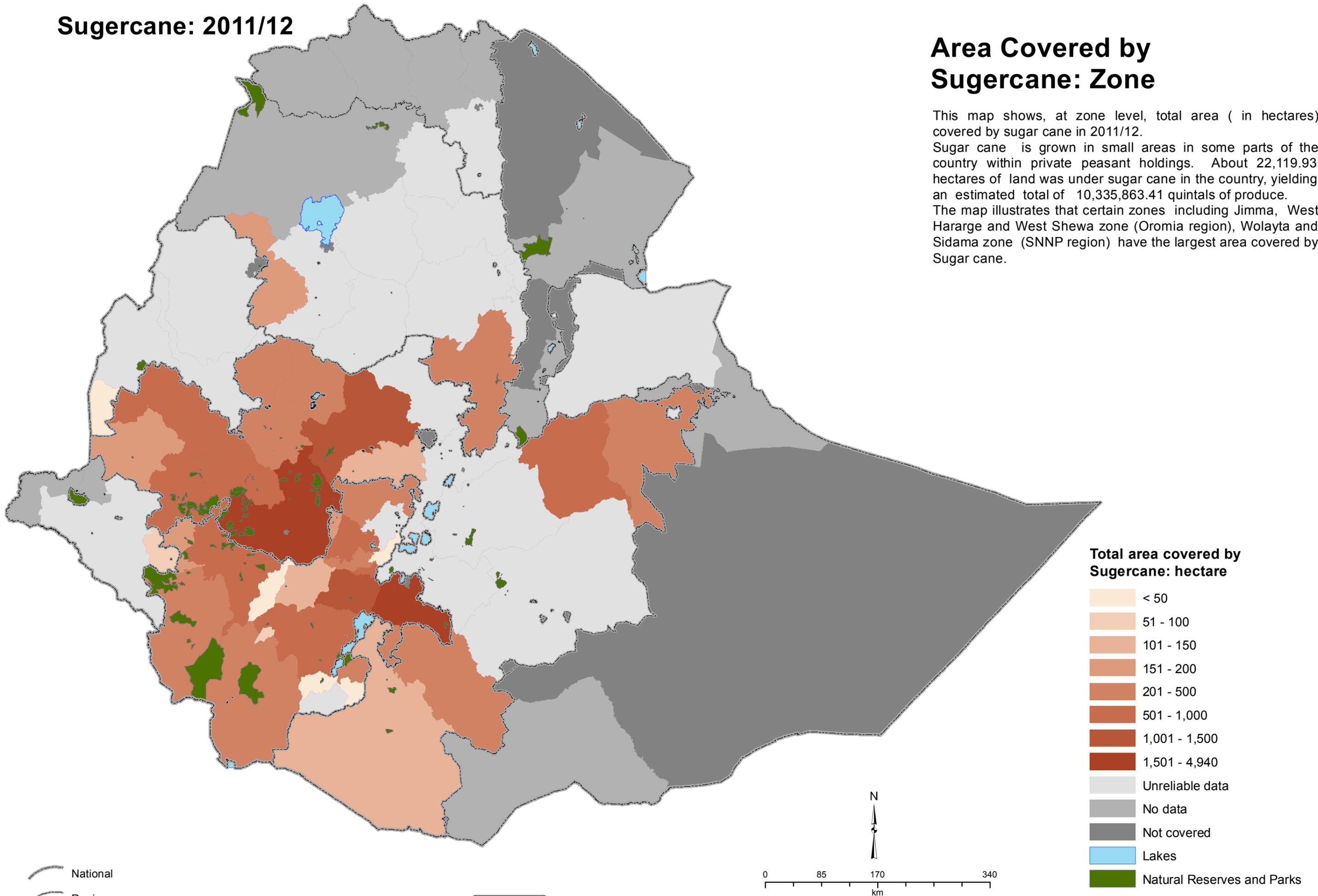
Sugercane: 2011/12

Area Covered by Sugercane: Zone

This map shows, at zone level, total area (in hectares) covered by sugar cane in 2011/12.

Sugar cane is grown in small areas in some parts of the country within private peasant holdings. About 22,119.93 hectares of land was under sugar cane in the country, yielding an estimated total of 10,335,863.41 quintals of produce.

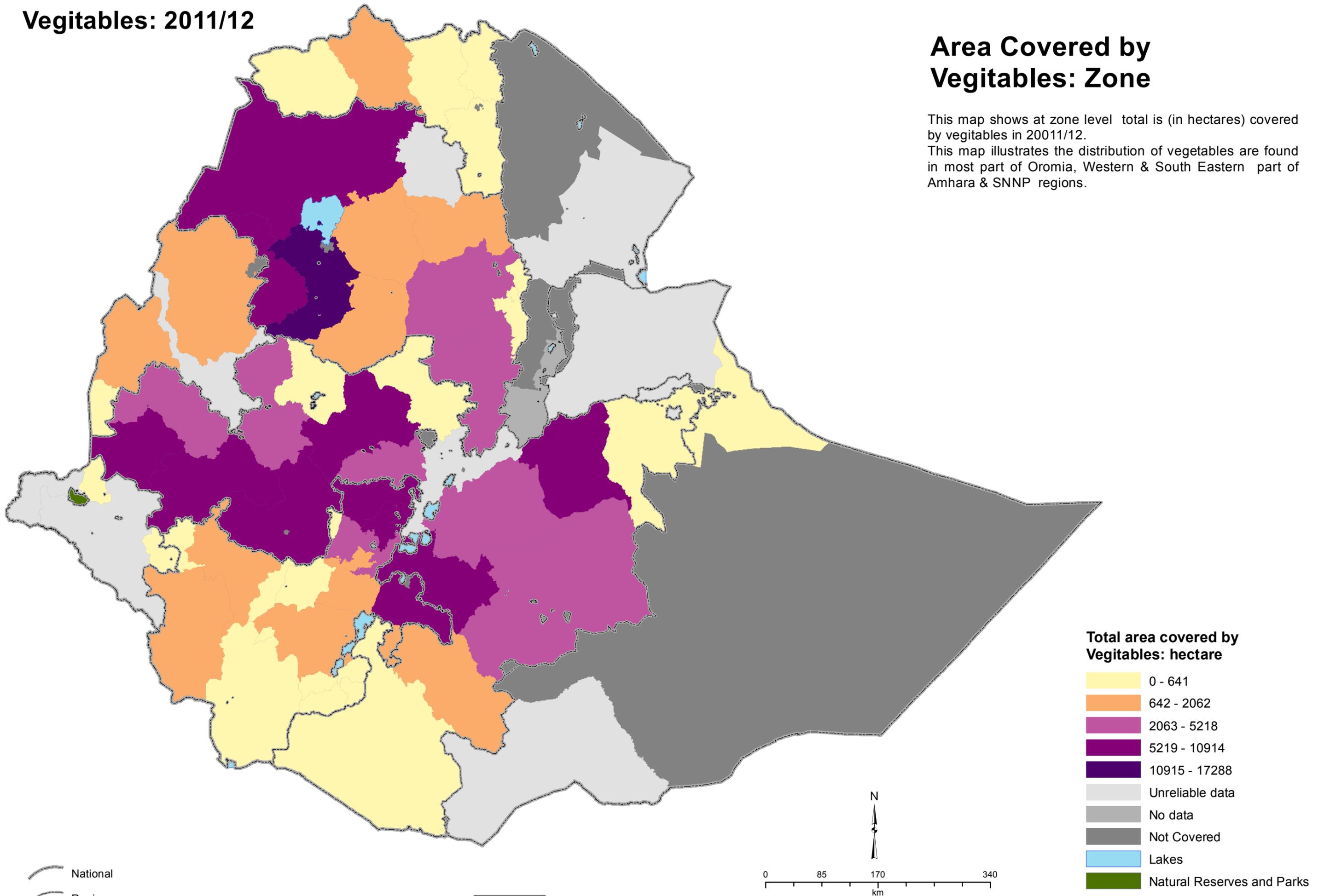
The map illustrates that certain zones including Jimma, West Hararge and West Shewa zone (Oromia region), Wolayta and Sidama zone (SNNP region) have the largest area covered by Sugar cane.



Area Covered by Vegitables: Zone

This map shows at zone level total is (in hectares) covered by vegetables in 20011/12.

This map illustrates the distribution of vegetables are found in most part of Oromia, Western & South Eastern part of Amhara & SNNP regions.



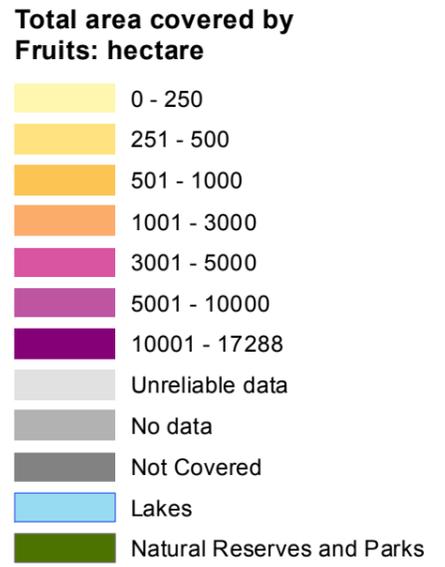
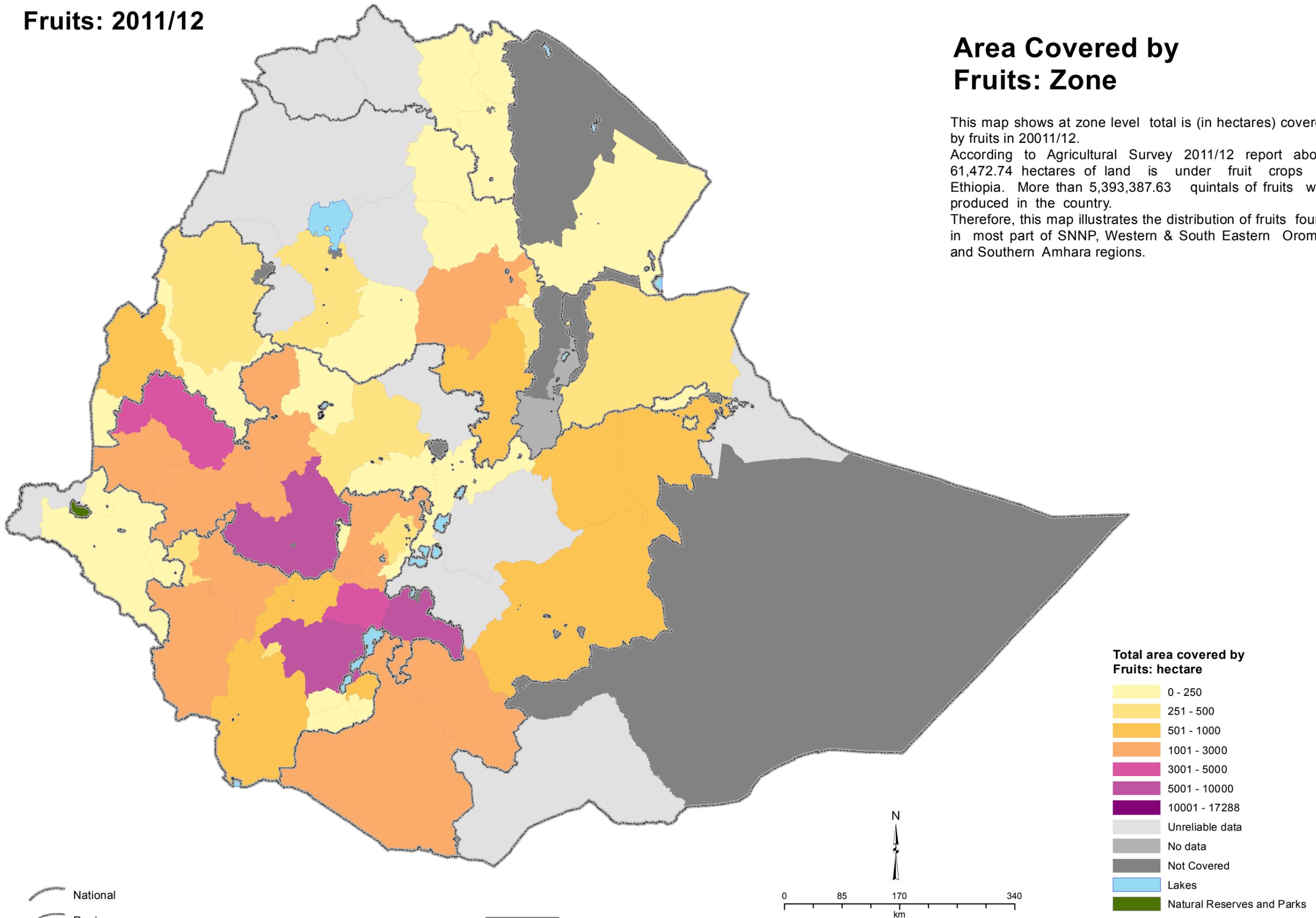
National
Region

Area Covered by Fruits: Zone

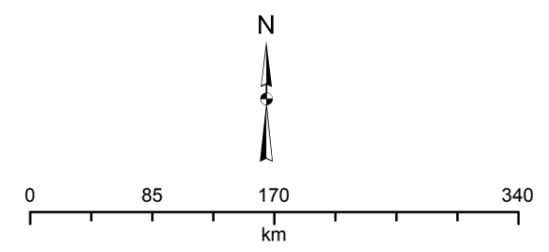
This map shows at zone level total is (in hectares) covered by fruits in 2011/12.

According to Agricultural Survey 2011/12 report about 61,472.74 hectares of land is under fruit crops in Ethiopia. More than 5,393,387.63 quintals of fruits was produced in the country.

Therefore, this map illustrates the distribution of fruits found in most part of SNNP, Western & South Eastern Oromia and Southern Amhara regions.



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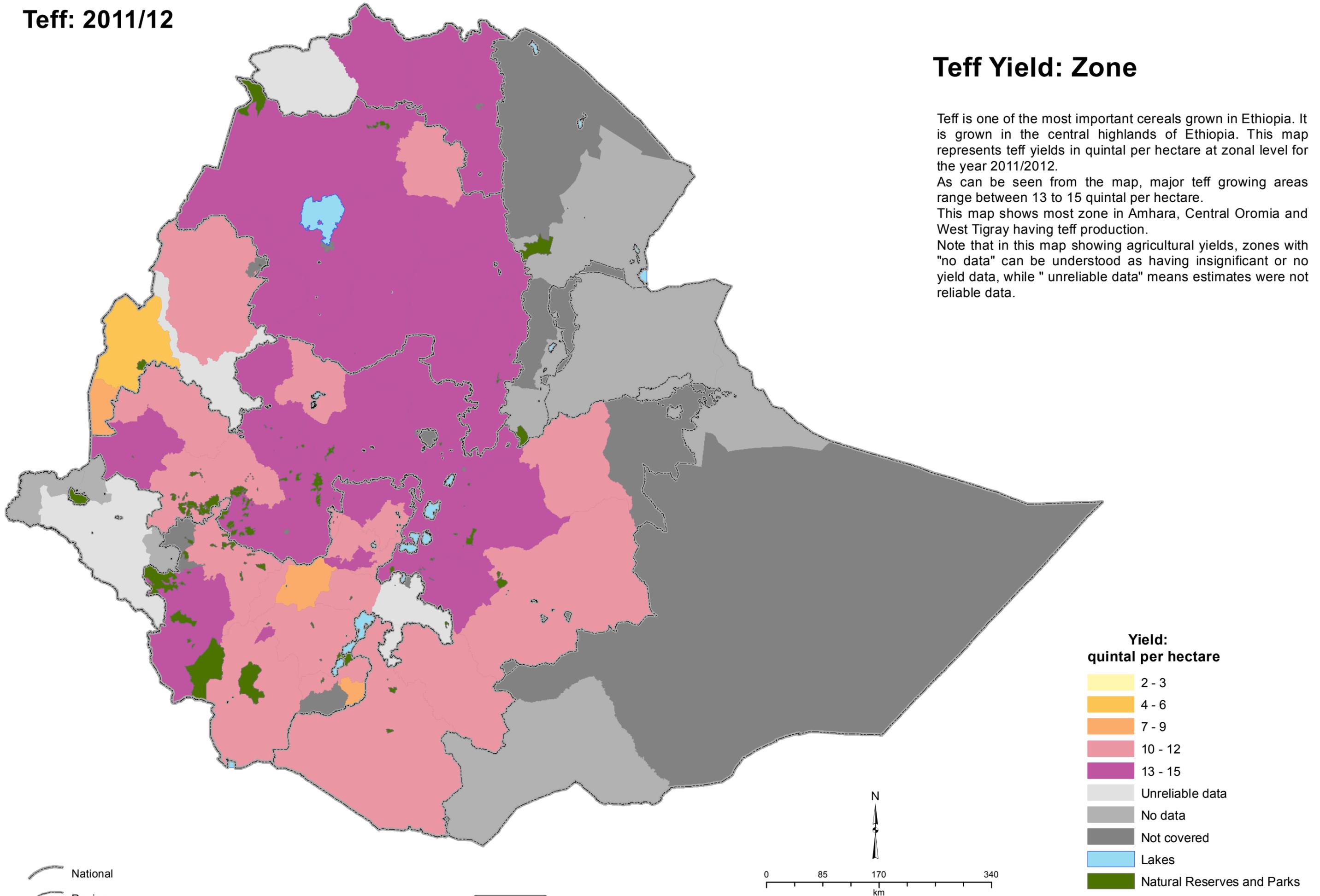
Teff Yield: Zone

Teff is one of the most important cereals grown in Ethiopia. It is grown in the central highlands of Ethiopia. This map represents teff yields in quintal per hectare at zonal level for the year 2011/2012.

As can be seen from the map, major teff growing areas range between 13 to 15 quintal per hectare.

This map shows most zone in Amhara, Central Oromia and West Tigray having teff production.

Note that in this map showing agricultural yields, zones with "no data" can be understood as having insignificant or no yield data, while "unreliable data" means estimates were not reliable data.

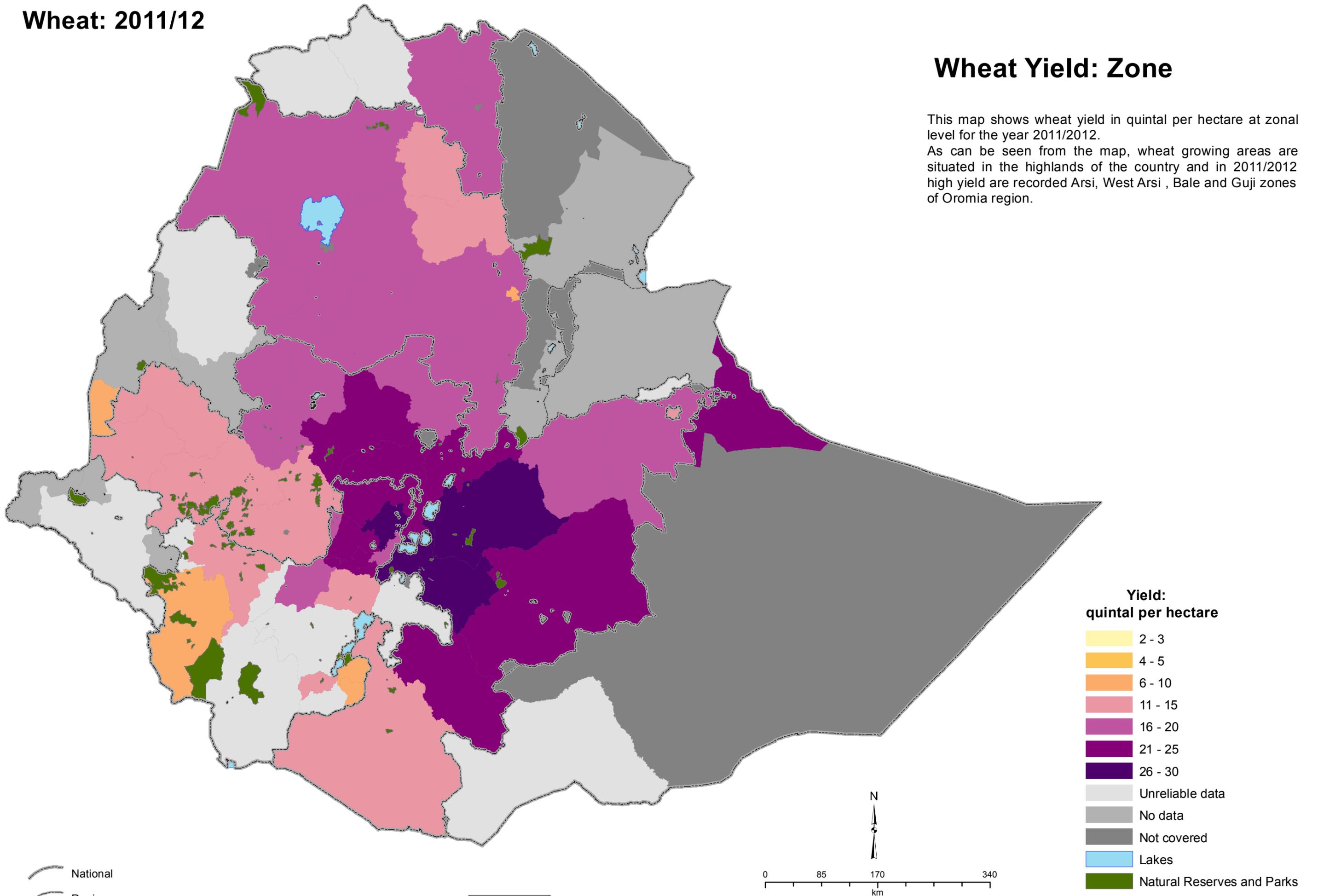


National
Region

Wheat Yield: Zone

This map shows wheat yield in quintal per hectare at zonal level for the year 2011/2012.

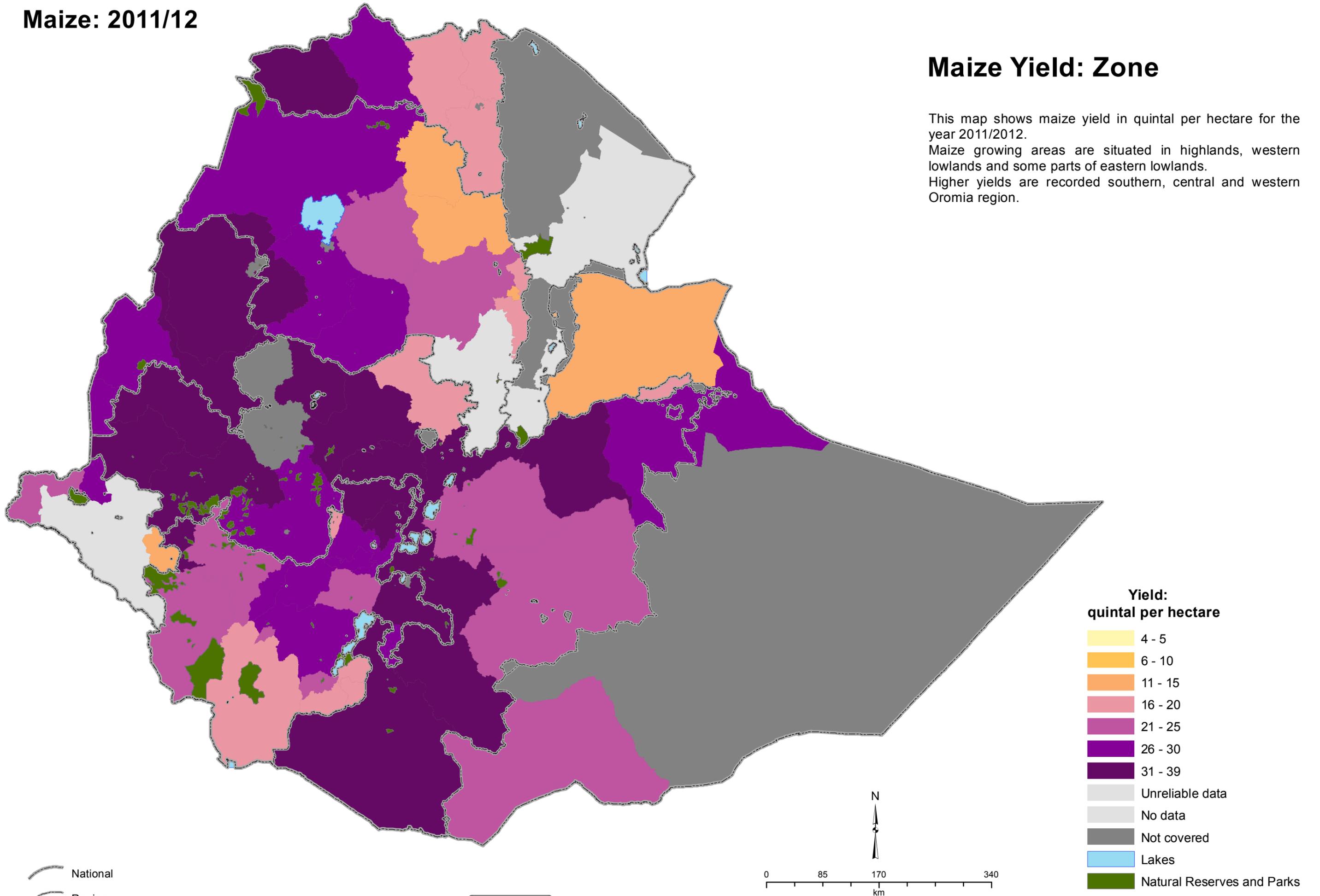
As can be seen from the map, wheat growing areas are situated in the highlands of the country and in 2011/2012 high yield are recorded Arsi, West Arsi, Bale and Guji zones of Oromia region.



National
Region

Maize Yield: Zone

This map shows maize yield in quintal per hectare for the year 2011/2012. Maize growing areas are situated in highlands, western lowlands and some parts of eastern lowlands. Higher yields are recorded southern, central and western Oromia region.



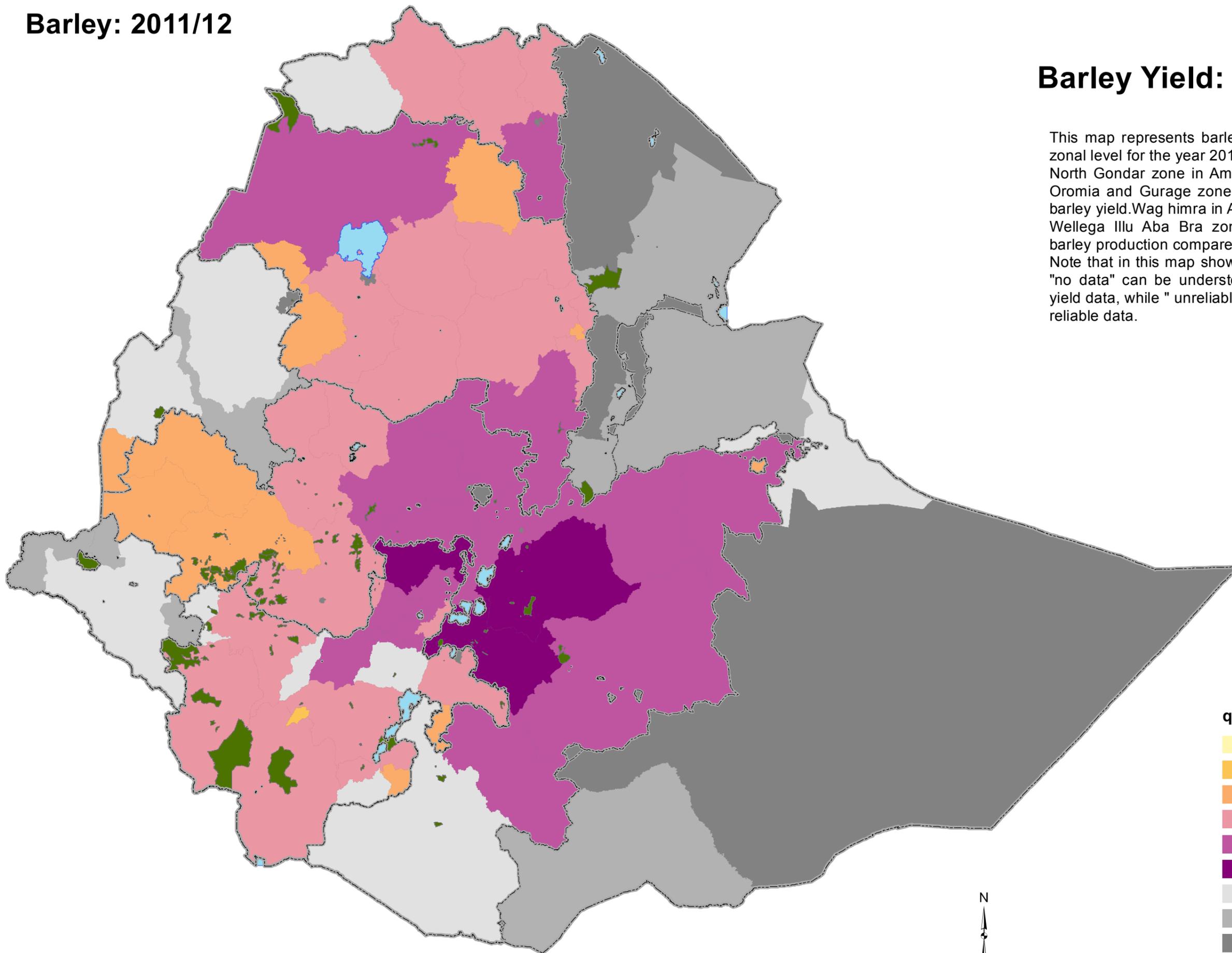
— National
— Region

Barley Yield: Zone

This map represents barley yields in quintal per hectare at zonal level for the year 2011/2012.

North Gondar zone in Amhara, Arsi and West Arsi zone in Oromia and Gurage zone in SNNP regions report greater barley yield. Wag himra in Amhara, West Wellega and Qelem Wellega Illu Aba Bra zones in Oromia region have less barley production compared to others.

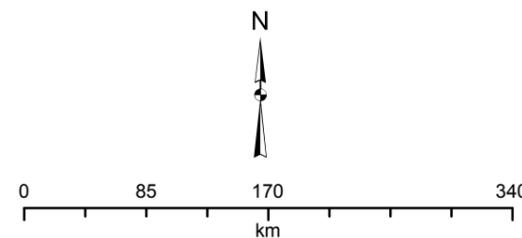
Note that in this map showing agricultural yields, zones with "no data" can be understood as having insignificant or no yield data, while "unreliable data" means estimates were not reliable data.



**Yield:
quintal per hectare**

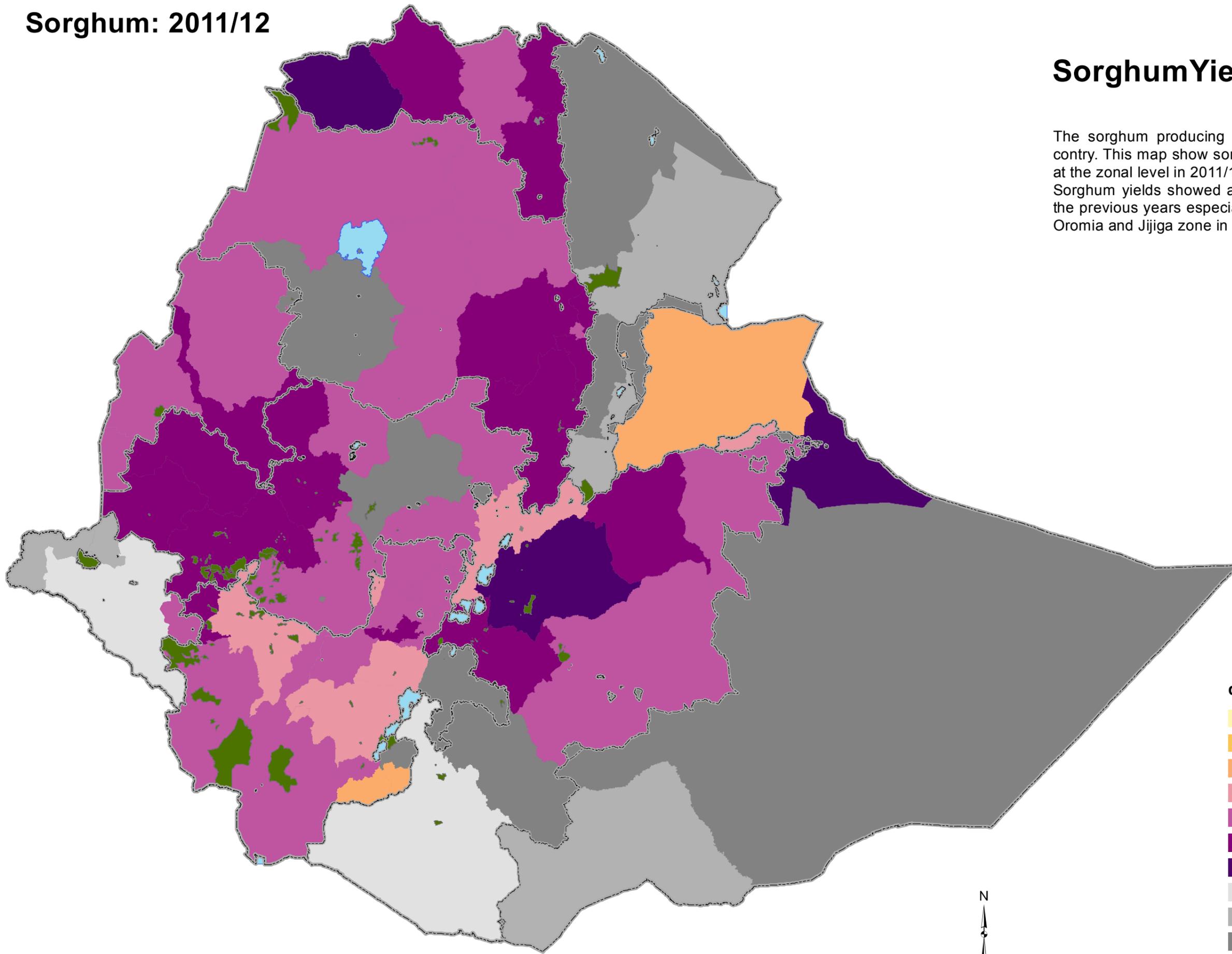
- 2 - 3
- 4 - 5
- 6 - 10
- 11 - 15
- 16 - 20
- 21 - 25
- Unreliable data
- No data
- Not covered
- Lakes
- Natural Reserves and Parks

— National
— Region



SorghumYield: Zone

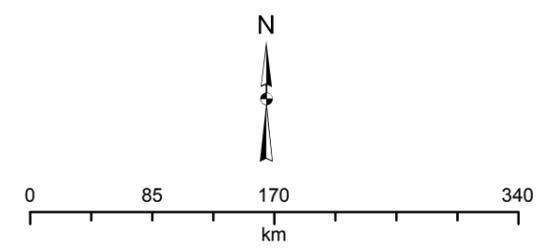
The sorghum producing areas are spread throughout the contry. This map show sorghum yields in quintal per hectare at the zonal level in 2011/12. Sorghum yields showed a relatively slight increment across the previous years especially in western Tigray, Arsi zone in Oromia and Jijiga zone in Somali regions



**Yield:
quintal per hectare**

- 2 - 3
- 4 - 5
- 6 - 10
- 11 - 15
- 16 - 20
- 21 - 25
- 26 - 28
- Unreliable data
- No data
- Not covered
- Lakes
- Natural Reserves and Parks

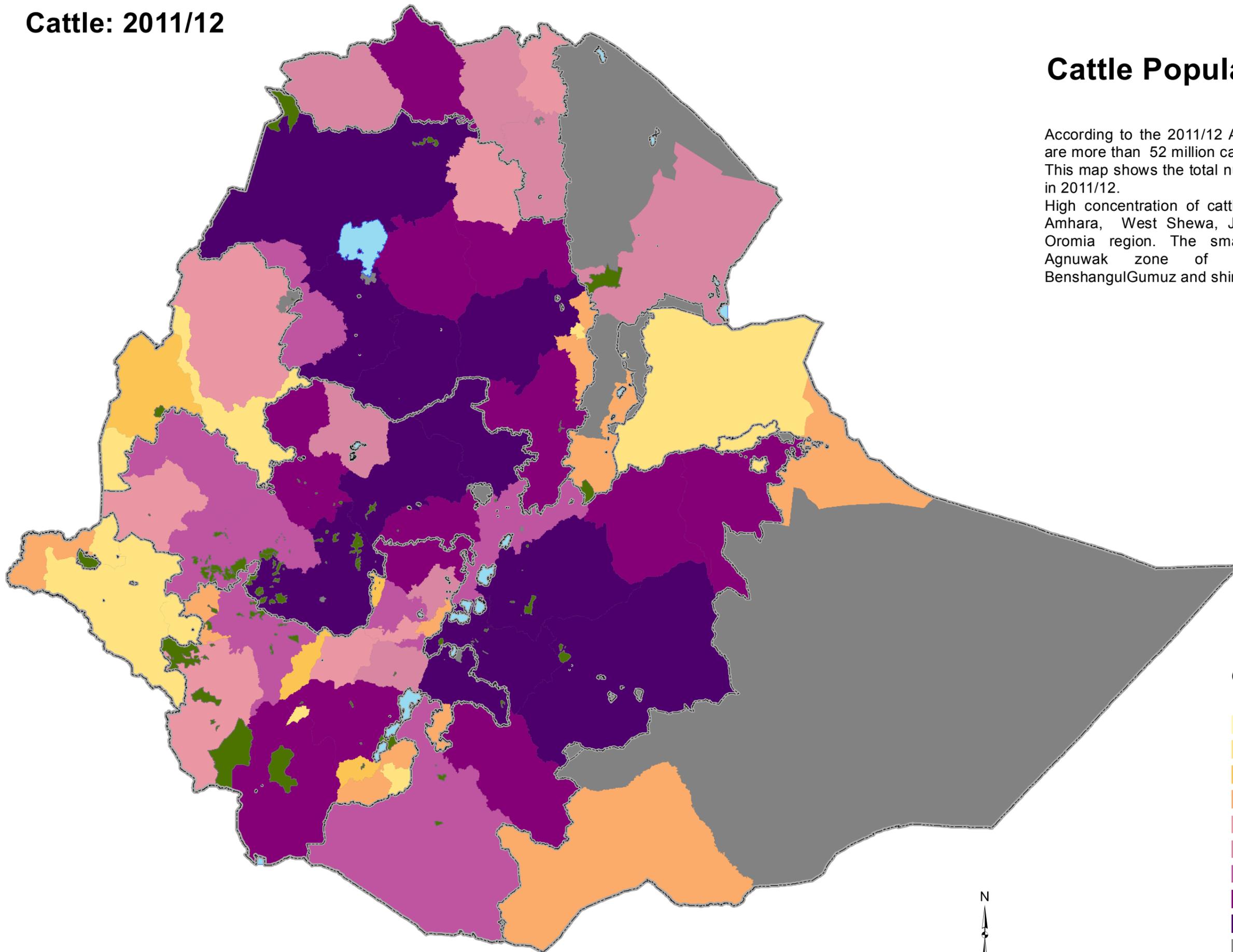
National
Region



Cattle Population: Zone

According to the 2011/12 Agricultural sample survey, there are more than 52 million cattle in Ethiopia. This map shows the total number of cattle at the zonal level, in 2011/12.

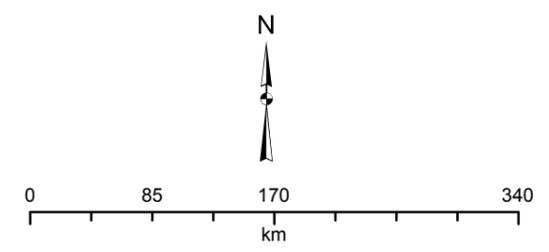
High concentration of cattle are observed in highlands of Amhara, West Shewa, Jimma, Arsi and Bale zones of Oromia region. The smallest number is observed in Agnuwak zone of Gambella, Kemashe in BenshangulGumuz and shinile zone in Somali regions.



Cattle Population: number

- < 10,000
- 10,001 - 50,000
- 50,001 - 100,000
- 100,001 - 300,000
- 300,001 - 500,000
- 500,001 - 750,000
- 750,001 - 1,000,000
- 1,000,001 - 1,500,000
- 1,500,001 - 3,000,000
- Not covered
- Lakes
- Natural Reserves and Parks

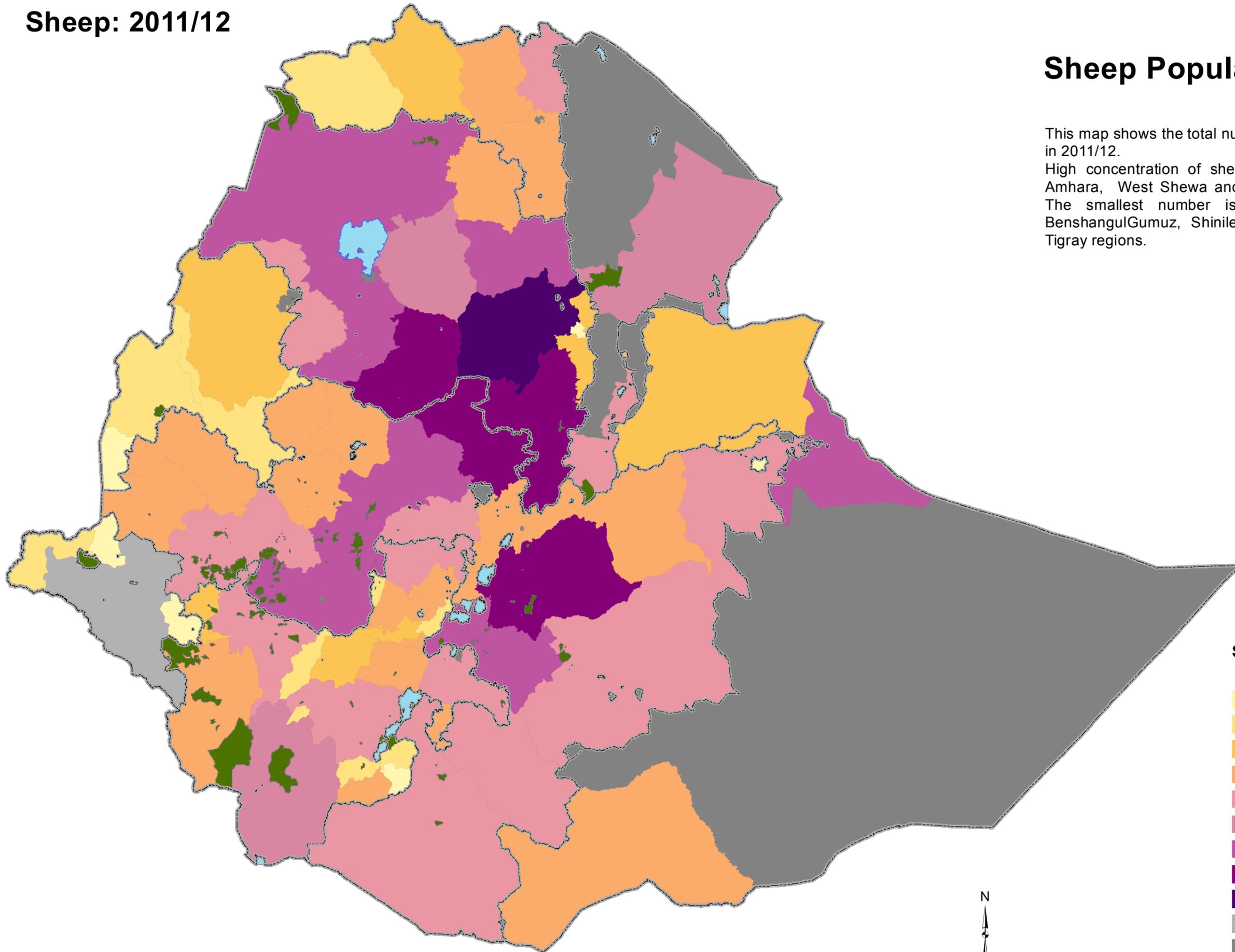
— National
— Region



Sheep Population: Zone

This map shows the total number of sheep at the zonal level, in 2011/12.

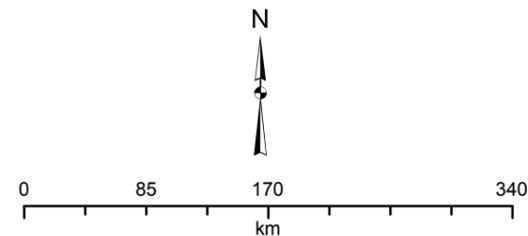
High concentration of sheep are observed in Souther of Amhara, West Shewa and Arsi zones of Oromia region. The smallest number is observed in Kemashe in BenshangulGumuz, Shinile zone in Somali and Western Tigray regions.



Sheep Population: number

- < 10,000
- 10,001 - 50,000
- 50,001 - 100,000
- 100,001 - 300,000
- 300,001 - 500,000
- 500,001 - 750,000
- 750,001 - 1,000,000
- 1,000,001 - 1,500,000
- 1,500,001 - 1,750,000
- No data
- Not covered
- Lakes
- Natural Reserves and Parks

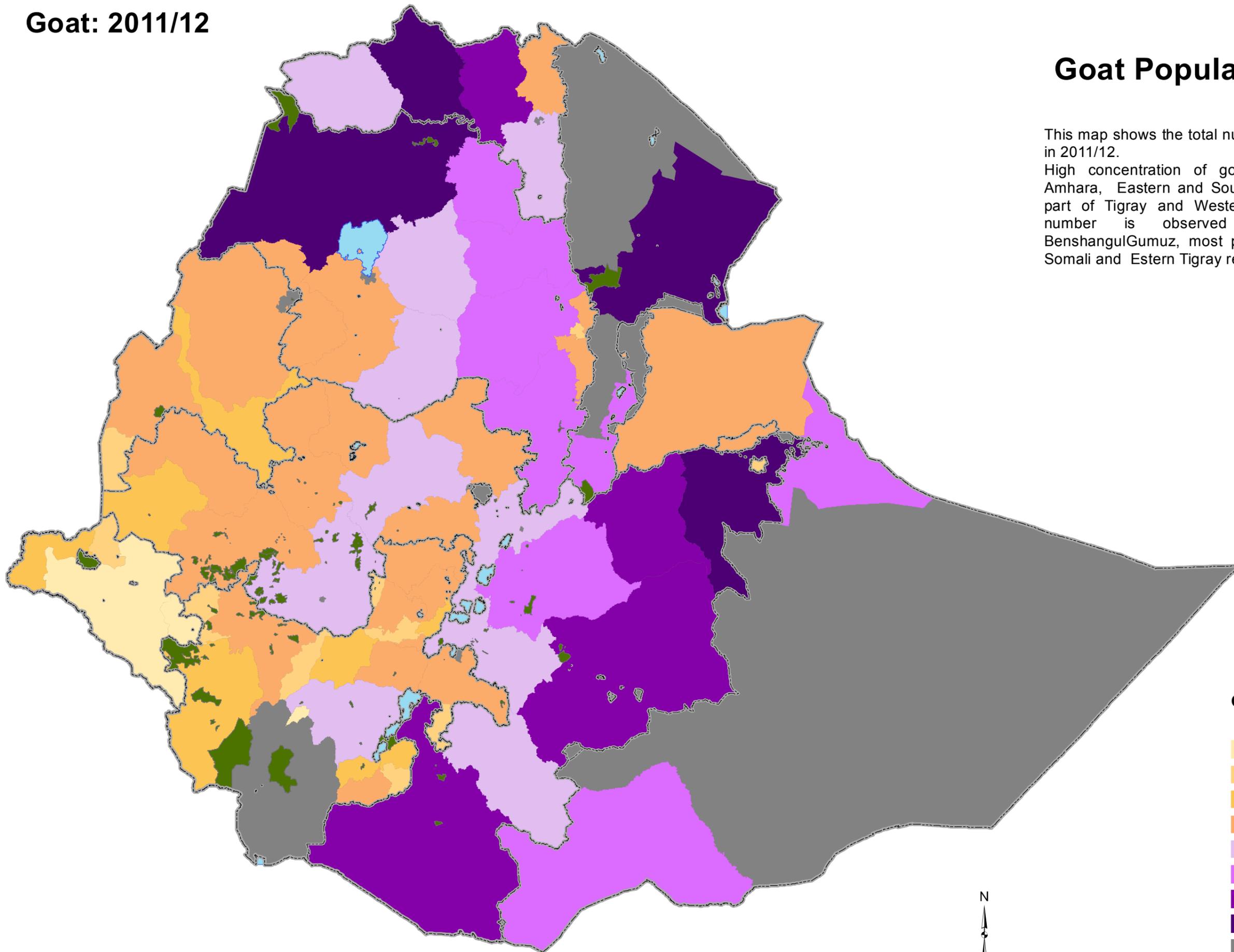
— National
— Region



Goat Population: Zone

This map shows the total number of goats at the zonal level, in 2011/12.

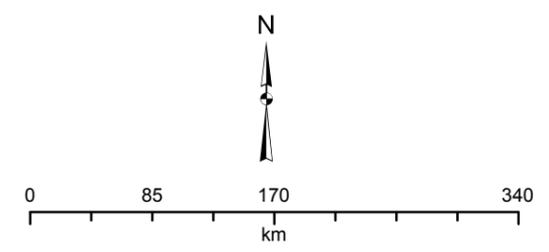
High concentration of goats are observed in northern Amhara, Eastern and Southern zones of Oromia, Central part of Tigray and Western Afar regions. The smallest number is observed in Western Oromia, BenshangulGumuz, most part of SNNP, Shinile zone in Somali and Eastern Tigray regions.



Goats Population: number

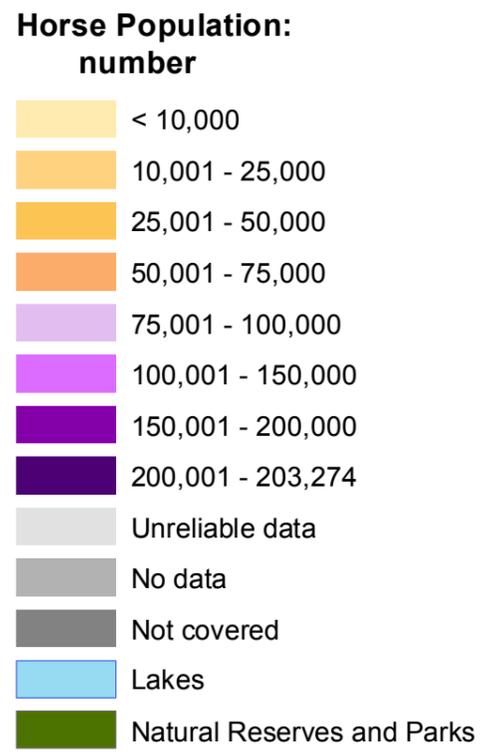
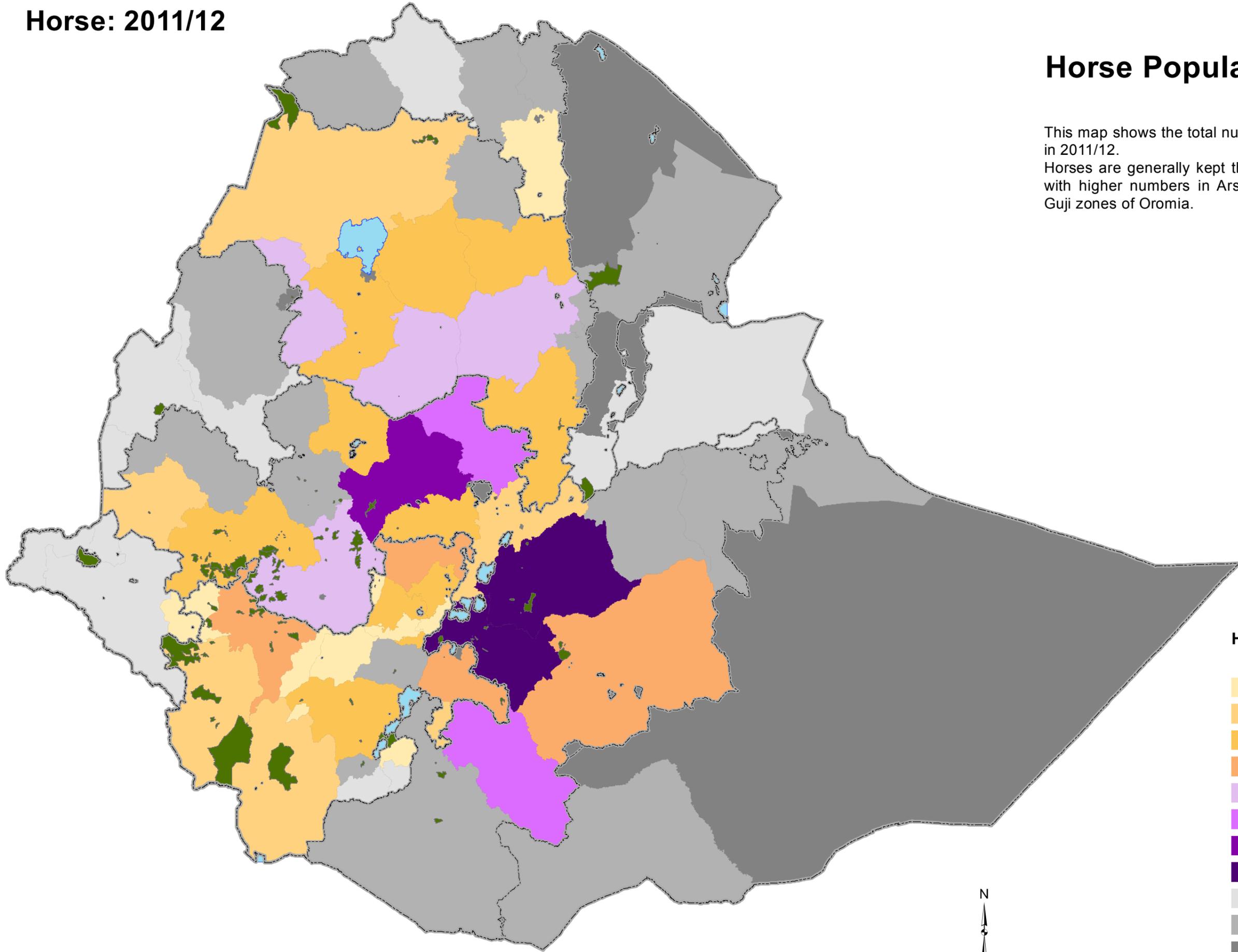
- < 10,000
- 10,001 - 50,000
- 50,001 - 100,000
- 100,001 - 300,000
- 300,001 - 500,000
- 500,001 - 750,000
- 750,001 - 1,000,000
- 1,000,001 - 1,600,000
- Not covered
- Lakes
- Natural Reserves and Parks

National
Region

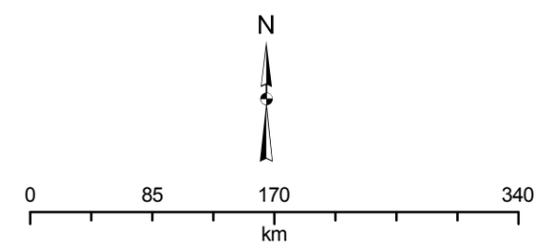


Horse Population: Zone

This map shows the total number of horse at the zonal level, in 2011/12. Horses are generally kept throughout the central highlands, with higher numbers in Arsi, West Arsi, West Shewa and Guji zones of Oromia.



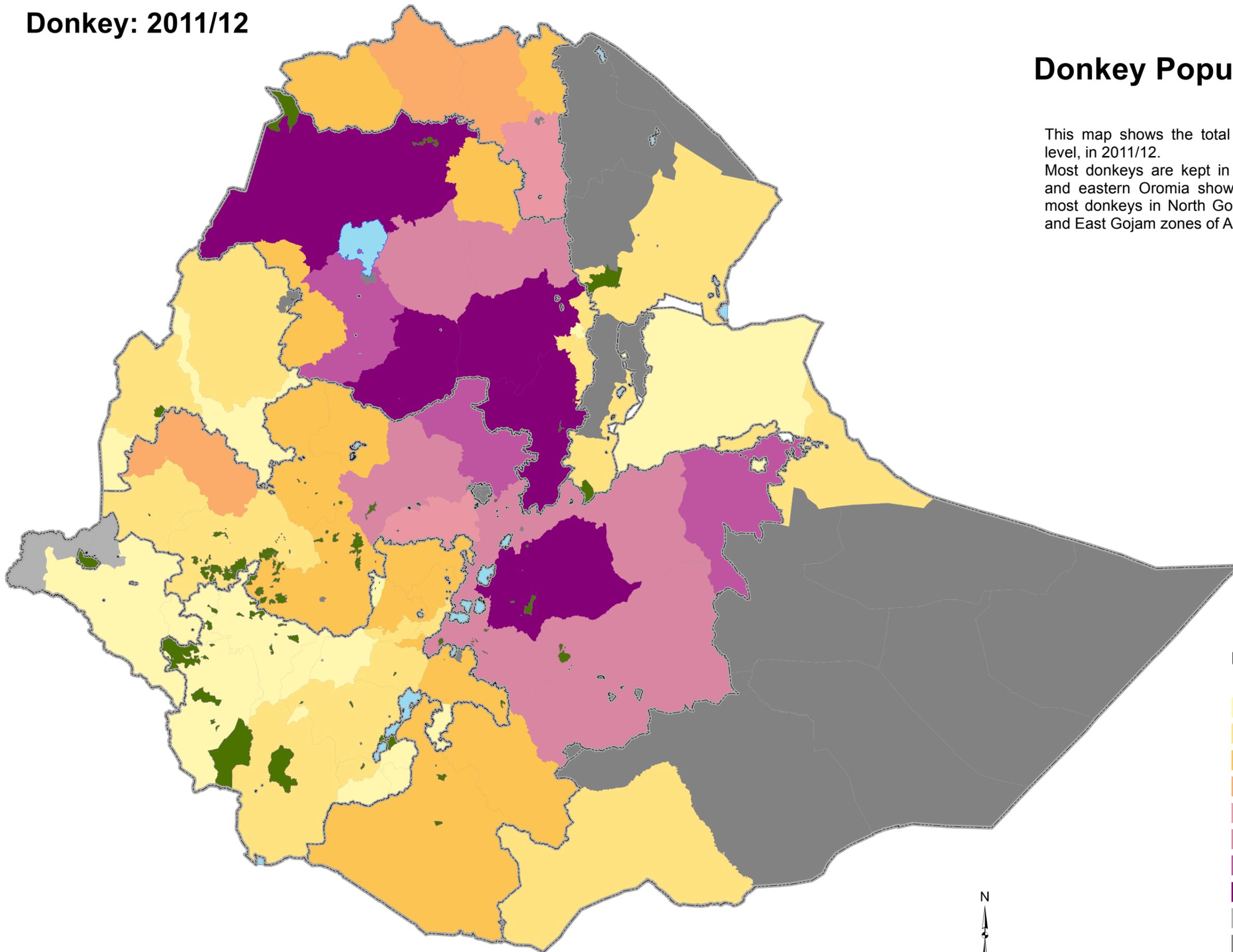
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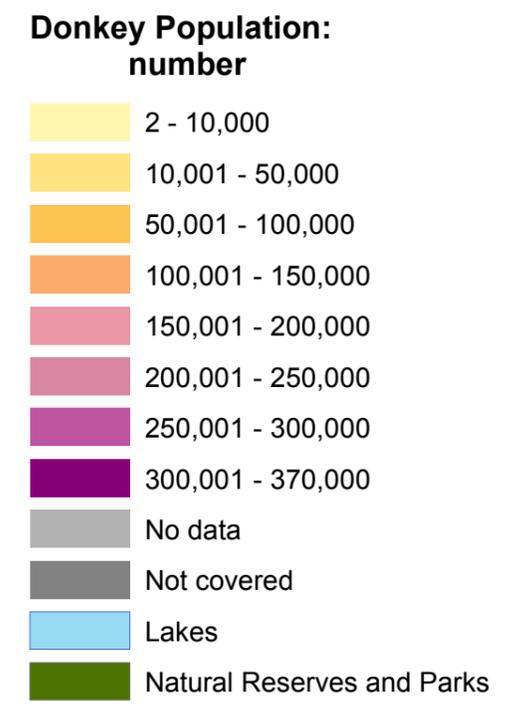
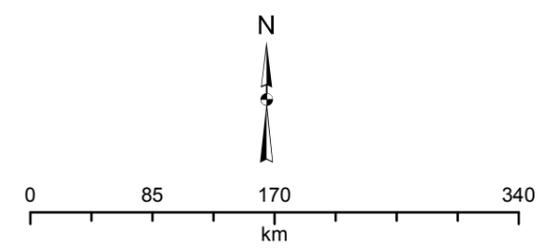
Donkey Population: Zone

This map shows the total number of donkys at the zonal level, in 2011/12.

Most donkeys are kept in the highlands. Parts of Amhara and eastern Oromia show high numbers of donkeys with most donkeys in North Gondar, North Shewa, South Wollo and East Gojam zones of Amhara and Arsi zone of Oromia.



National
Region

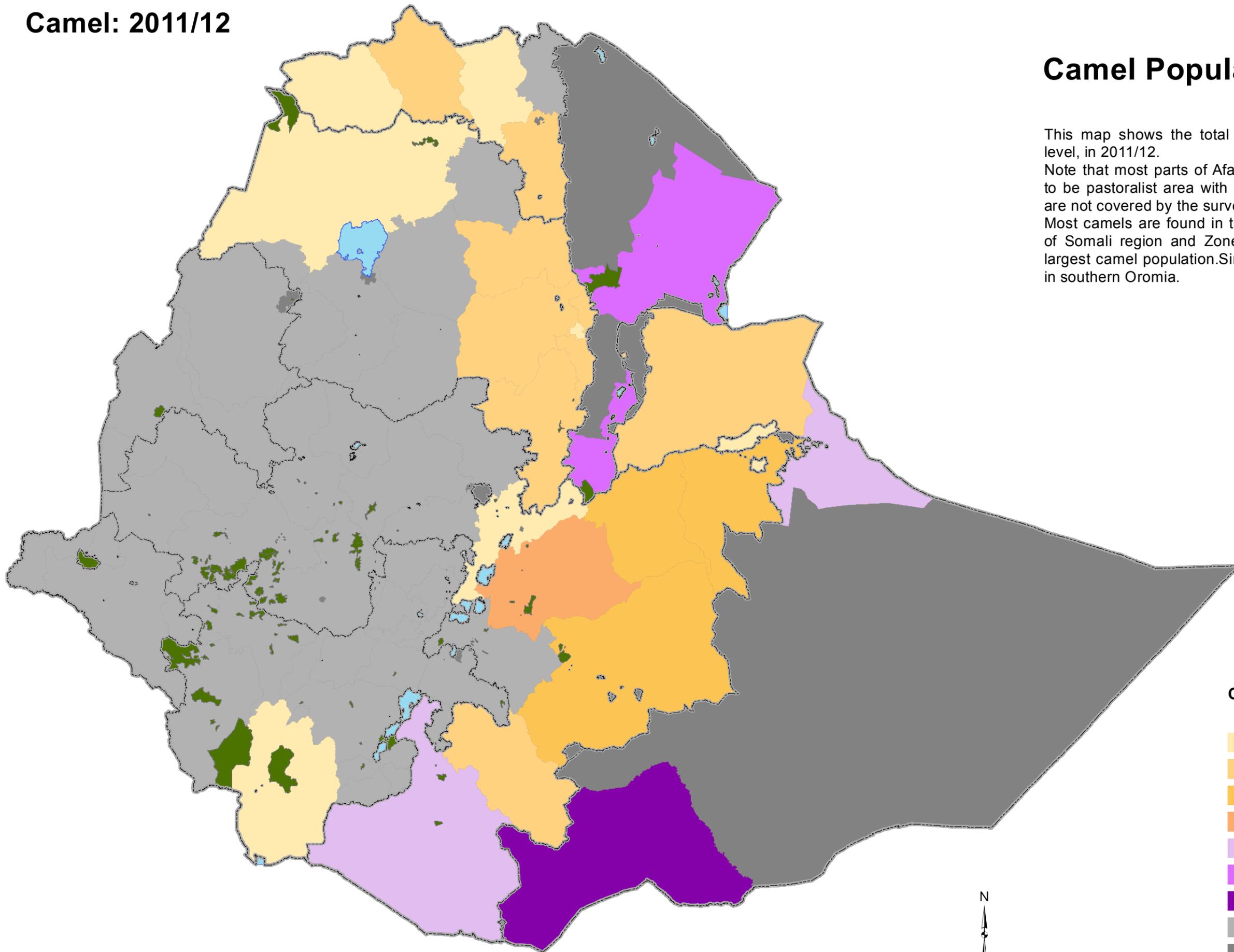


Camel Population: Zone

This map shows the total number of camels at the zonal level, in 2011/12.

Note that most parts of Afar and Somali regions are known to be pastoralist area with high numbers of camels, though are not covered by the survey.

Most camels are found in the eastern lowlands. Liben zone of Somali region and Zone 01 of Afar region showed the largest camel population. Similar camel population are found in southern Oromia.

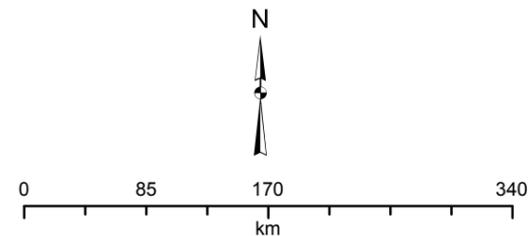


Camel Population: number

- 2 - 10,000
- 10,001 - 25,000
- 25,001 - 50,000
- 50,001 - 75,000
- 75,001 - 100,000
- 100,001 - 150,000
- 150,001 - 200,000

- No data
- Not covered
- Lakes
- Natural Reserves and Parks

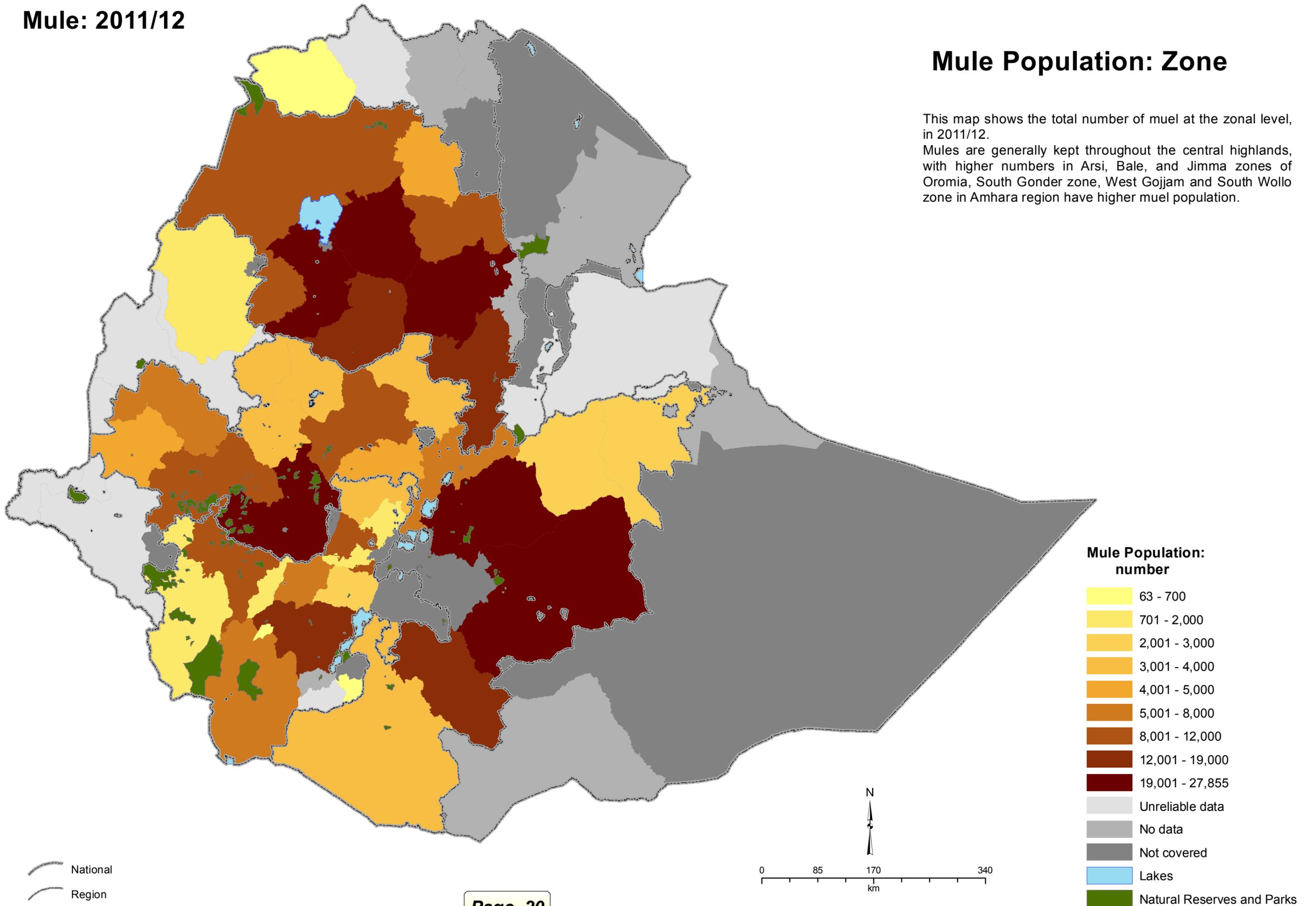
National
Region



Mule Population: Zone

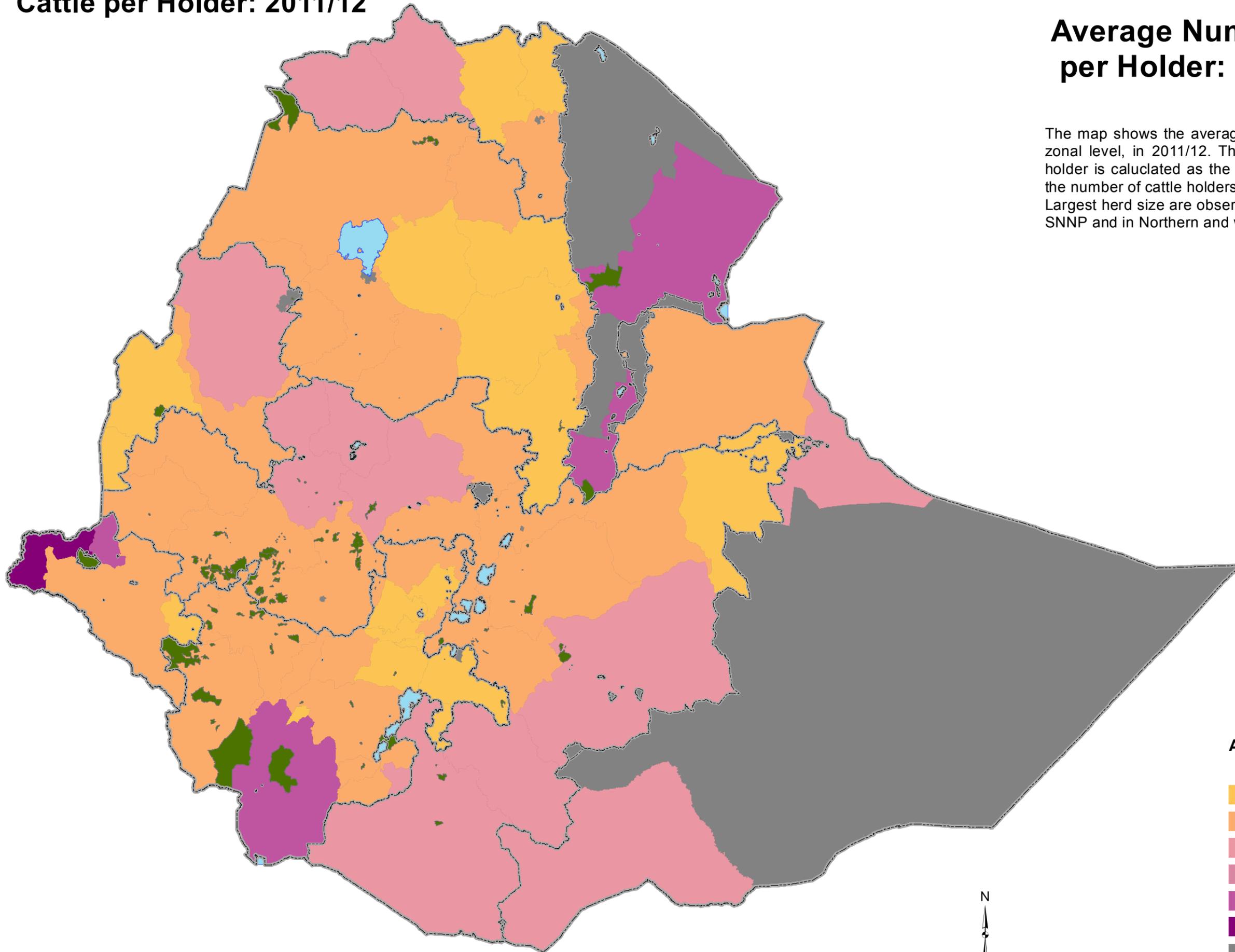
This map shows the total number of muel at the zonal level, in 2011/12.

Mules are generally kept throughout the central highlands, with higher numbers in Arsi, Bale, and Jimma zones of Oromia, South Gonder zone, West Gojjam and South Wollo zone in Amhara region have higher muel population.



Average Number of Cattle per Holder: Zone

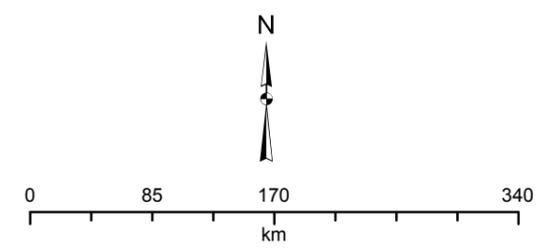
The map shows the average number of cattle per holder at zonal level, in 2011/12. The average number of cattle per holder is calculated as the total number of cattle divided by the number of cattle holders within each zone. Largest herd size are observed in zones of Afar, in Southern SNNP and in Northern and western of Gambella.



Average number of cattle per holder

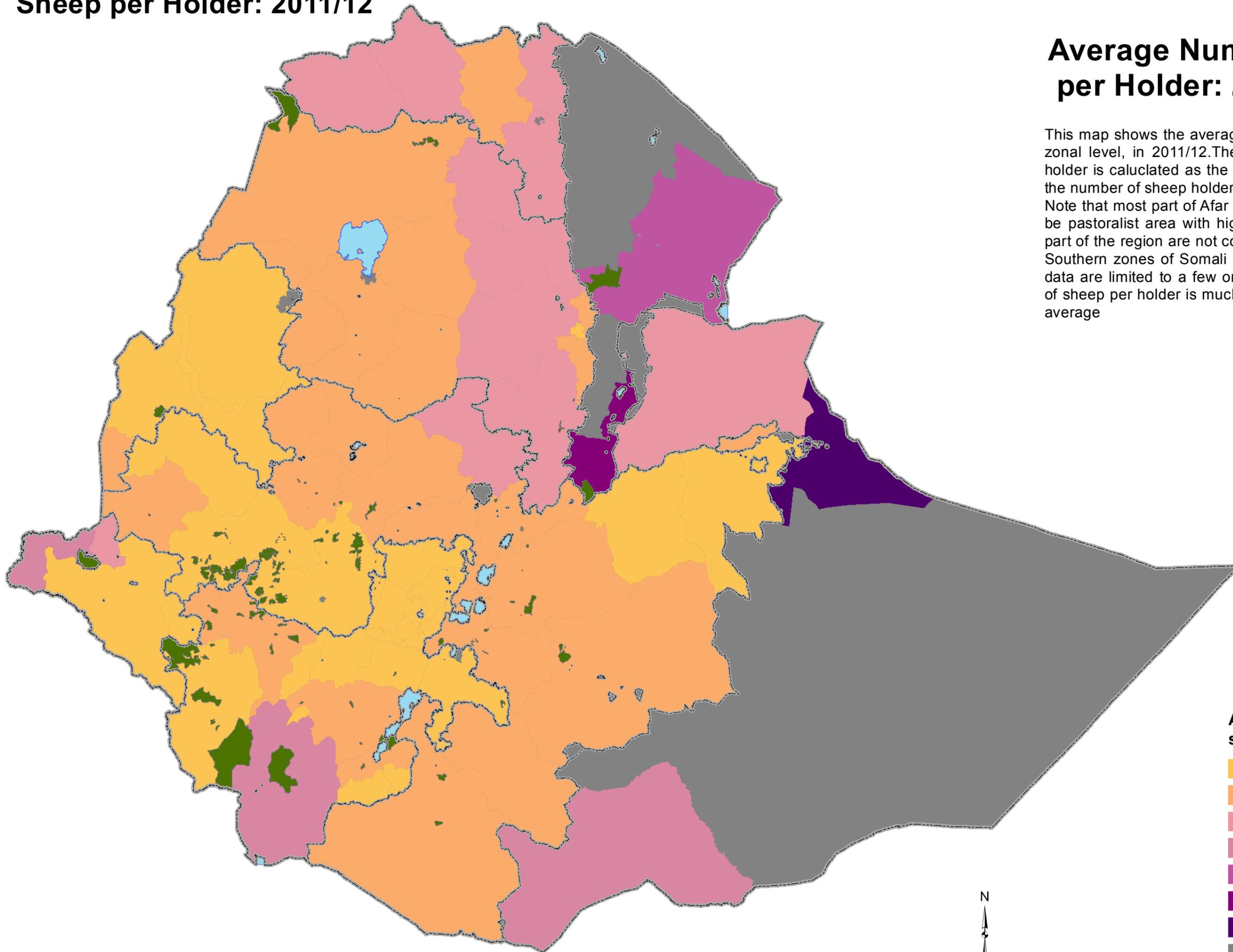
- 2 - 3
- 4 - 5
- 6 - 8
- 9 - 10
- 11 - 15
- 16 - 20
- Not covered
- Lakes
- Natural Reserves and Parks

National
Region

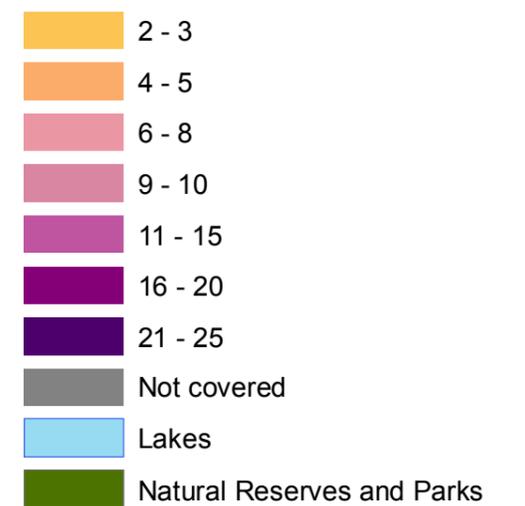


Average Number of Sheep per Holder: Zone

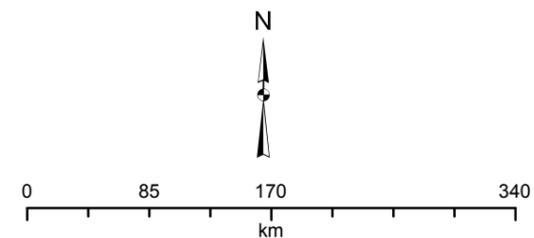
This map shows the average number of sheep per holder at zonal level, in 2011/12. The average number of sheep per holder is calculated as the total number of sheep divided by the number of sheep holders within each zone. Note that most part of Afar and Somali regions are known to be pastoralist area with high number sheep, even if ,most part of the region are not covered by the survey, northern and Southern zones of Somali and South East of Afar regions (data are limited to a few ones in both regions) the number of sheep per holder is much larger compared to the national average



Average number of sheep per holder



National
 Region

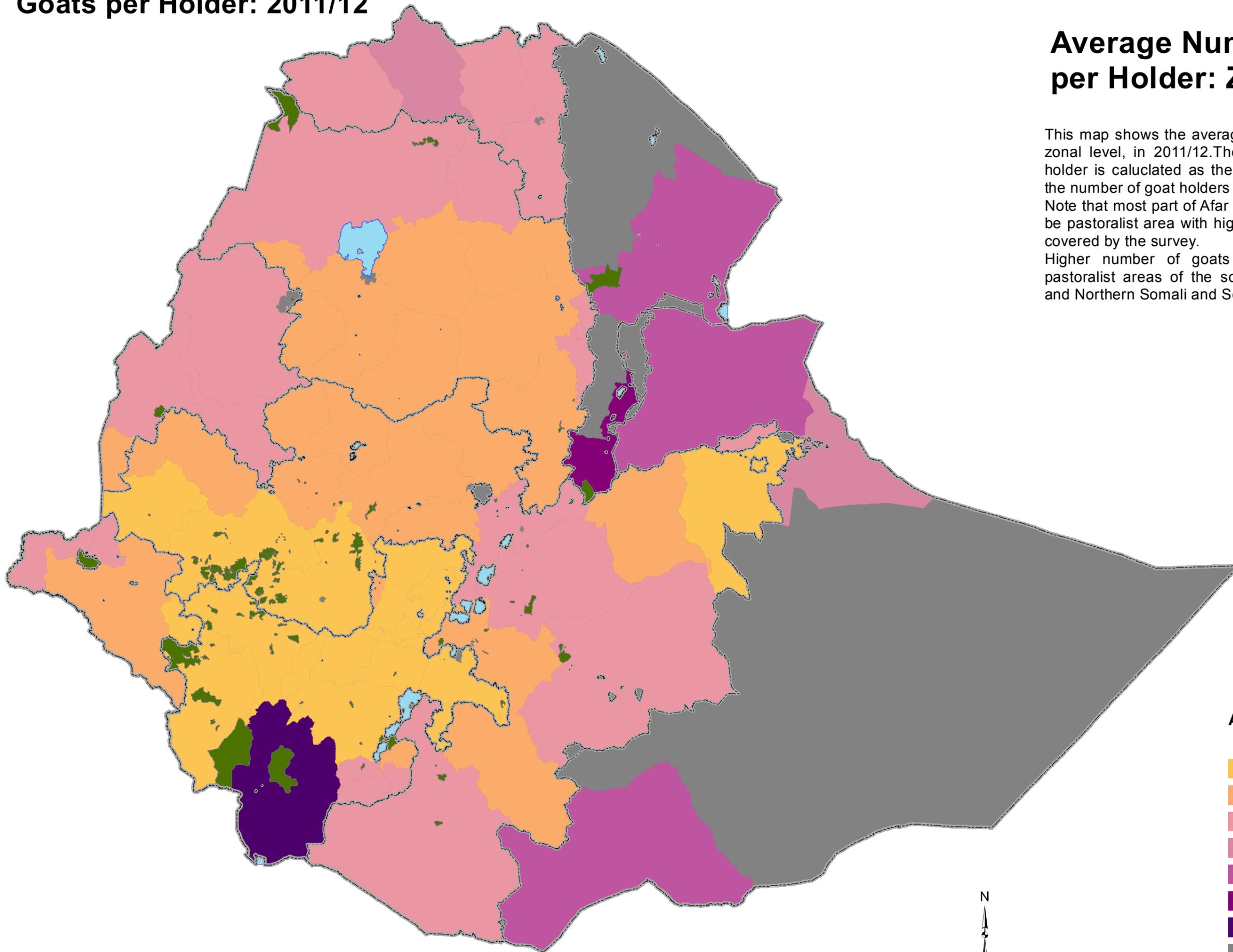


Average Number of Goats per Holder: Zone

This map shows the average number of goats per holder at zonal level, in 2011/12. The average number of goats per holder is calculated as the total number of goat divided by the number of goat holders within each zone.

Note that most part of Afar and Somali regions are known to be pastoralist area with high number goats, though are not covered by the survey.

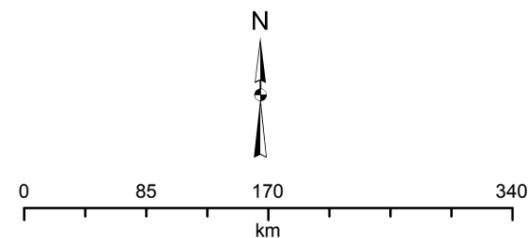
Higher number of goats per holder are found in the pastoralist areas of the southern zones of Afar, Southern and Northern Somali and Southern zone of SNNP regions



Average number of goats per holder

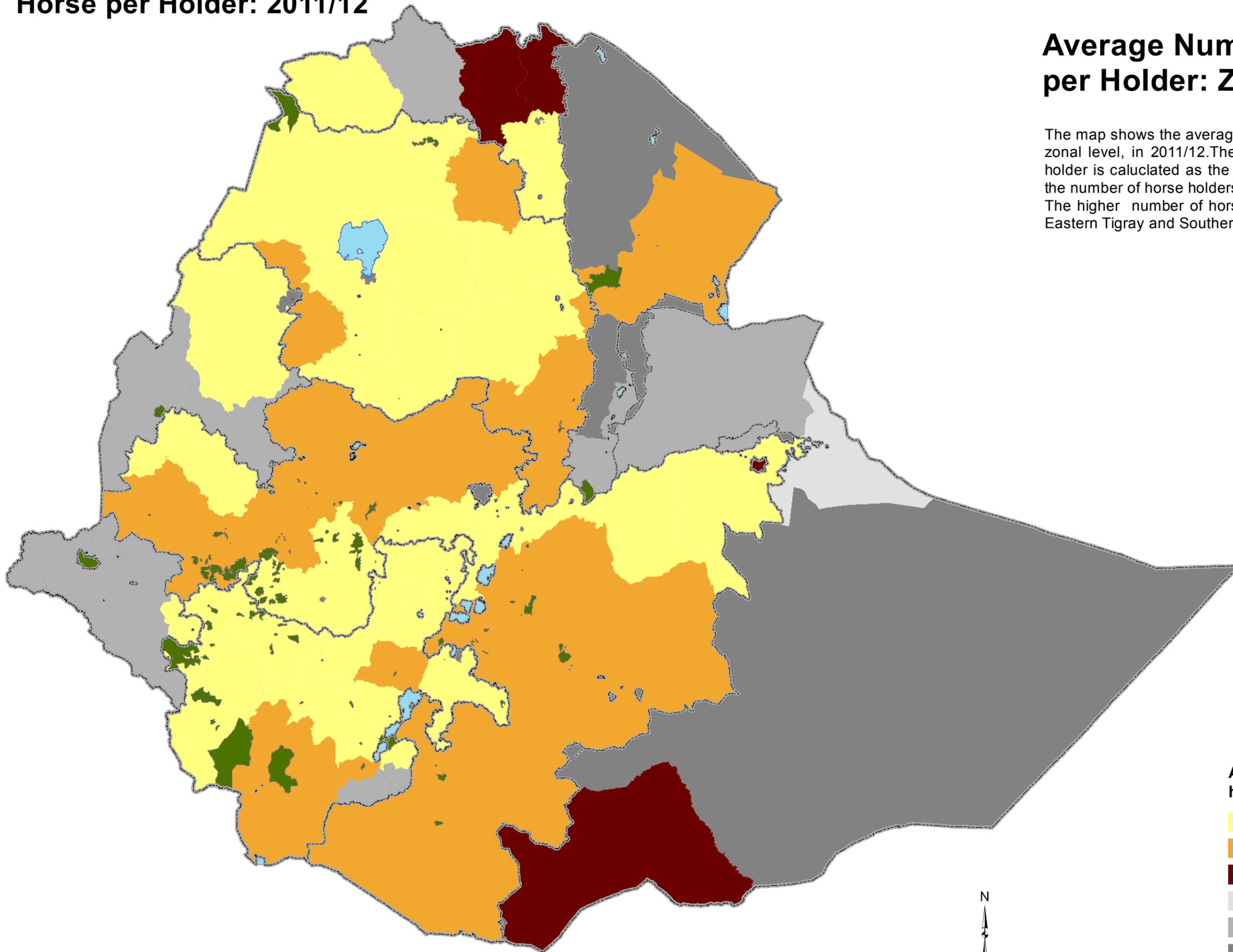
- 2 - 3
- 4 - 5
- 6 - 10
- 11 - 15
- 16 - 20
- 21 - 25
- 26 - 30
- National boundary
- Lakes
- Natural Reserves and Parks

National
 Region

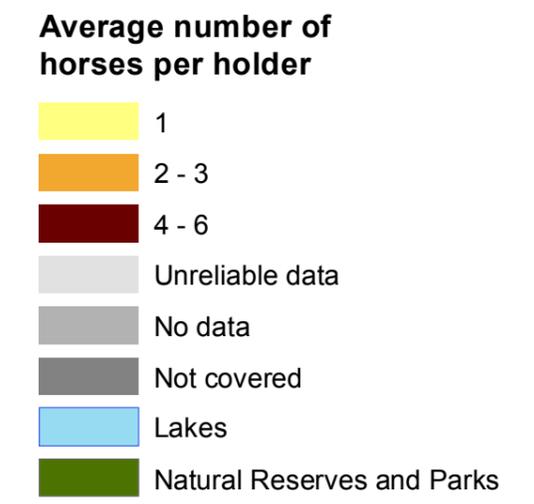
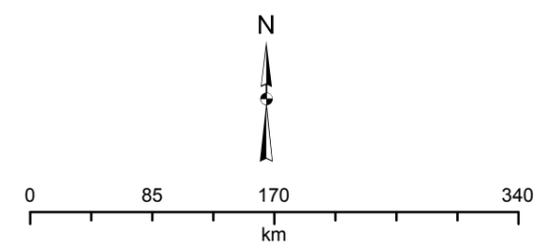


Average Number of Horses per Holder: Zone

The map shows the average number of Horses per holder at zonal level, in 2011/12. The average number of horses per holder is calculated as the total number of horse divided by the number of horse holders within each zone. The higher number of horses owned per holder is found in Eastern Tigray and Souther Somali region.

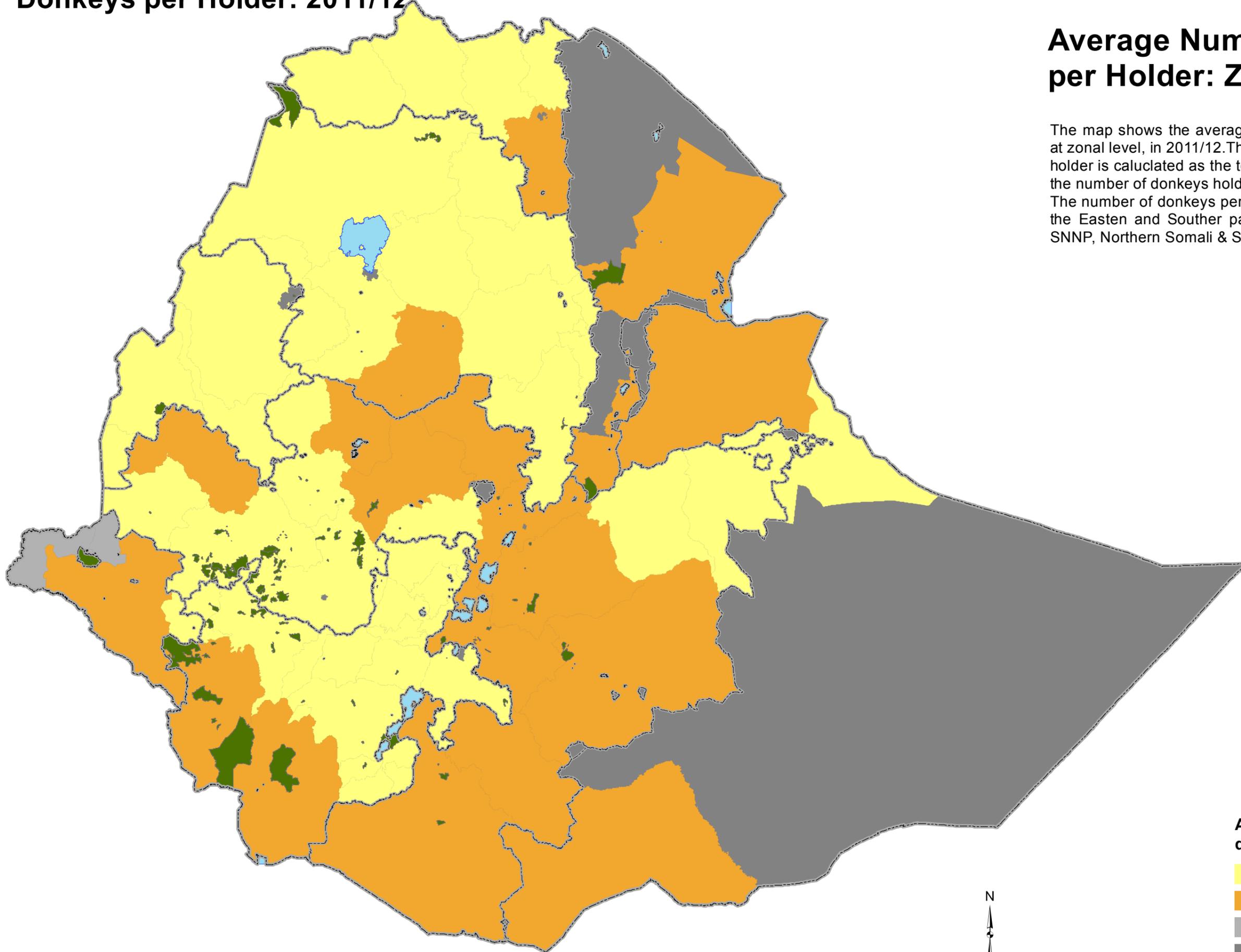


— National
— Region

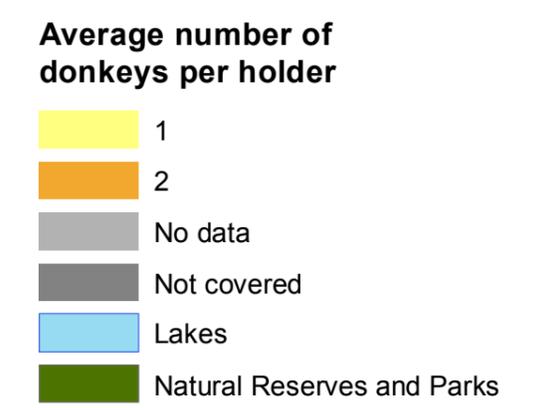
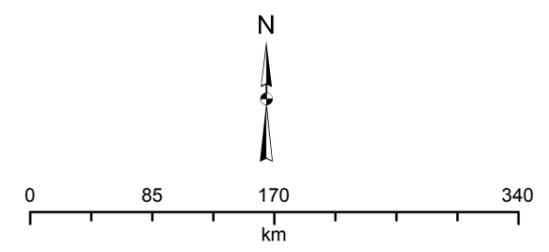


Average Number of Donkeys per Holder: Zone

The map shows the average number of donkeys per holder at zonal level, in 2011/12. The average number of donkeys per holder is calculated as the total number of donkeys divided by the number of donkeys holders within each zone. The number of donkeys per holder is highly concentrated on the Eastern and Southern part of Oromiya, Southern part of SNNP, Northern Somali & South Eastern of Afar regions.

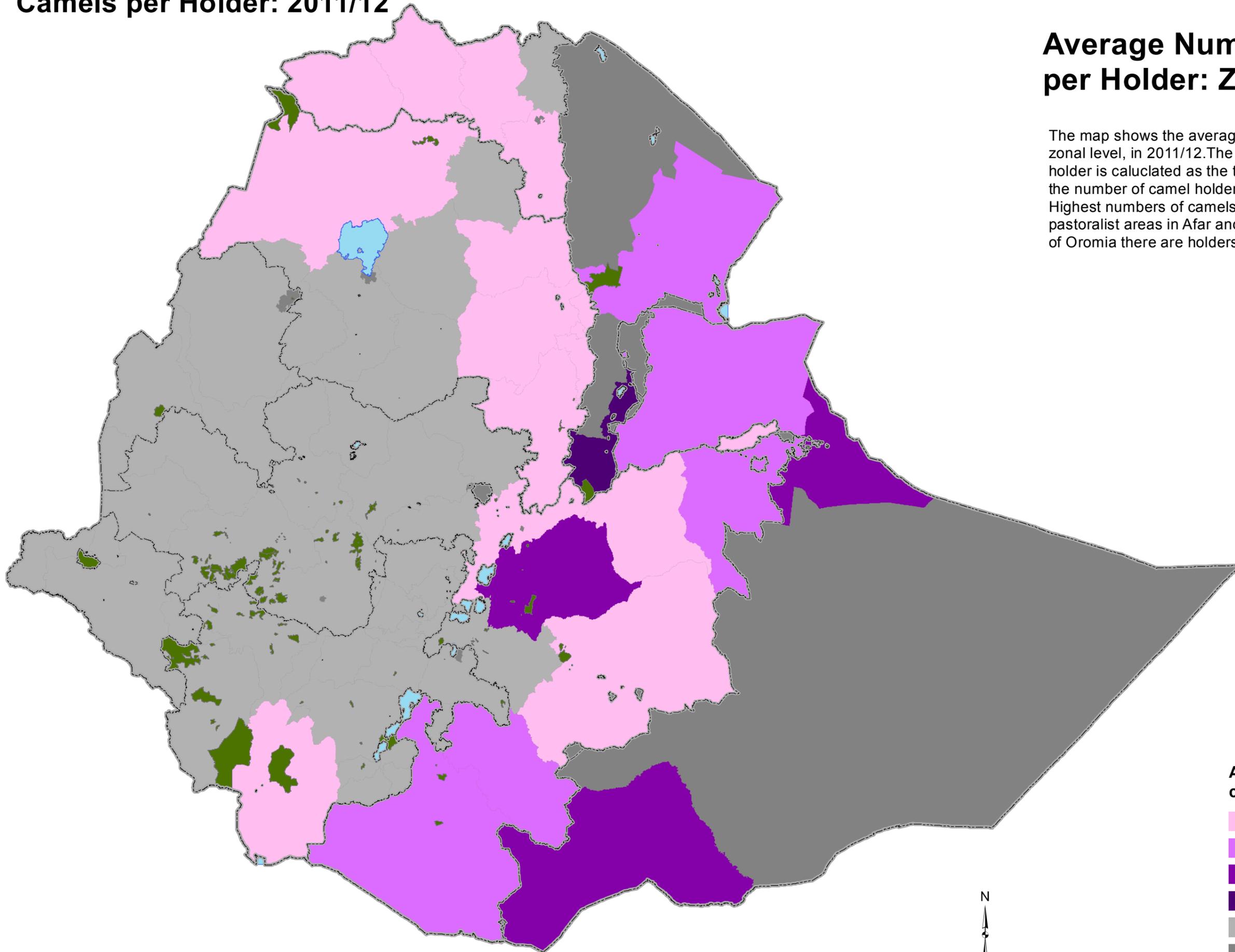


— National
— Region



Average Number of Camels per Holder: Zone

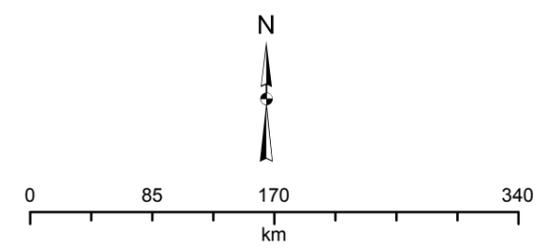
The map shows the average number of camel per holder at zonal level, in 2011/12. The average number of camel per holder is calculated as the total number of camel divided by the number of camel holders within each zone. Highest numbers of camels per holder are found in the pastoralist areas in Afar and Somali regions. In some zones of Oromia there are holders owning a camels.



Average number of camels per holder

- 1 - 3
- 4 - 5
- 6 - 10
- 11 - 13
- No data
- Not covered
- Lakes
- Natural Reserves and Parks

National
 Region





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