



THE FACE OF A COUNTRY IN FRACTIONS

Exploring land use with mathematics

Reproducible resources to support this activity.

STATEMENT-CARDS for Bolivia - Finland - Georgia - Kenya

<p>Finland is the only one of these countries whose proportion of water and wetlands is sufficient to fill its own square.</p>	<p>About half of Bolivia is forest.</p>	<p>Bolivia and Kenya are part of Europe.</p>
<p>Finland has the largest proportion of forests in relation.</p>	<p>Bolivia, Finland and Kenya each consist of approximately 10% of farmland.</p>	<p>Due to its proximity to the North Pole, it is particularly cold in Bolivia.</p>
<p>Finland has more forest area than Bolivia.</p>	<p>In Kenya, the highlands are mostly savanna.</p>	<p>Finland and Georgia have approximately the same proportion of arable land in relation to each other.</p>
<p>There is no farmland in Bolivia.</p>	<p>Bolivia and Georgia have approximately the same share of grassland.</p>	<p>Kenya consists of about half of rainforest.</p>

SOLUTIONS for Bolivia - Finland - Georgia - Kenya

<p>Finland is the only one of these countries whose proportion of water and wetlands is sufficient to fill its own square.</p> 	<p>About half of Bolivia is forest.</p> 	<p>Bolivia and Kenya are part of Europe.</p> 
<p>Finland has the largest proportion of forest land in relation.</p> 	<p>Bolivia, Finland and Kenya each consist of approximately 10% of farmland.</p> 	<p>Due to its proximity to the North Pole, it is particularly cold in Bolivia.</p> 
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<p>There is no farmland in Bolivia.</p> 	<p>Bolivia and Georgia have approximately the same share of grassland.</p> 	<p>Kenya consists of about half of rainforest.</p> 

 Yes

 No

 We do not know

STATEMENT-CARDS for Argentina – India – Ireland – Japan

<p>All countries except India and Ireland have a low proportion of water and wetlands, so no square can be filled with it.</p>	<p>Argentina has relatively less grassland land than Ireland.</p>	<p>Japan has the most farmland in proportion.</p>
<p>In India there is about the same amount of forest as farmland.</p>	<p>Ireland and Argentina have relatively fewer forests than India.</p>	<p>Japan and Ireland are islands.</p>
<p>There is no farmland in Ireland.</p>	<p>Germany would fit in India nine times.</p>	<p>More than half the area of Ireland and Japan consists of only one type of land use.</p>
<p>Argentina has less grasslands than Ireland.</p>	<p>In proportion, Ireland and Japan have about the same amount of farmland.</p>	<p>India produces the most bananas, millet and jute in the world.</p>

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<p>There is no farmland in Ireland.</p> 	<p>Germany would fit in India nine times.</p> 	<p>More than half the area of Ireland and Japan consists of only one type of land use.</p> 
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 Yes

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Japan

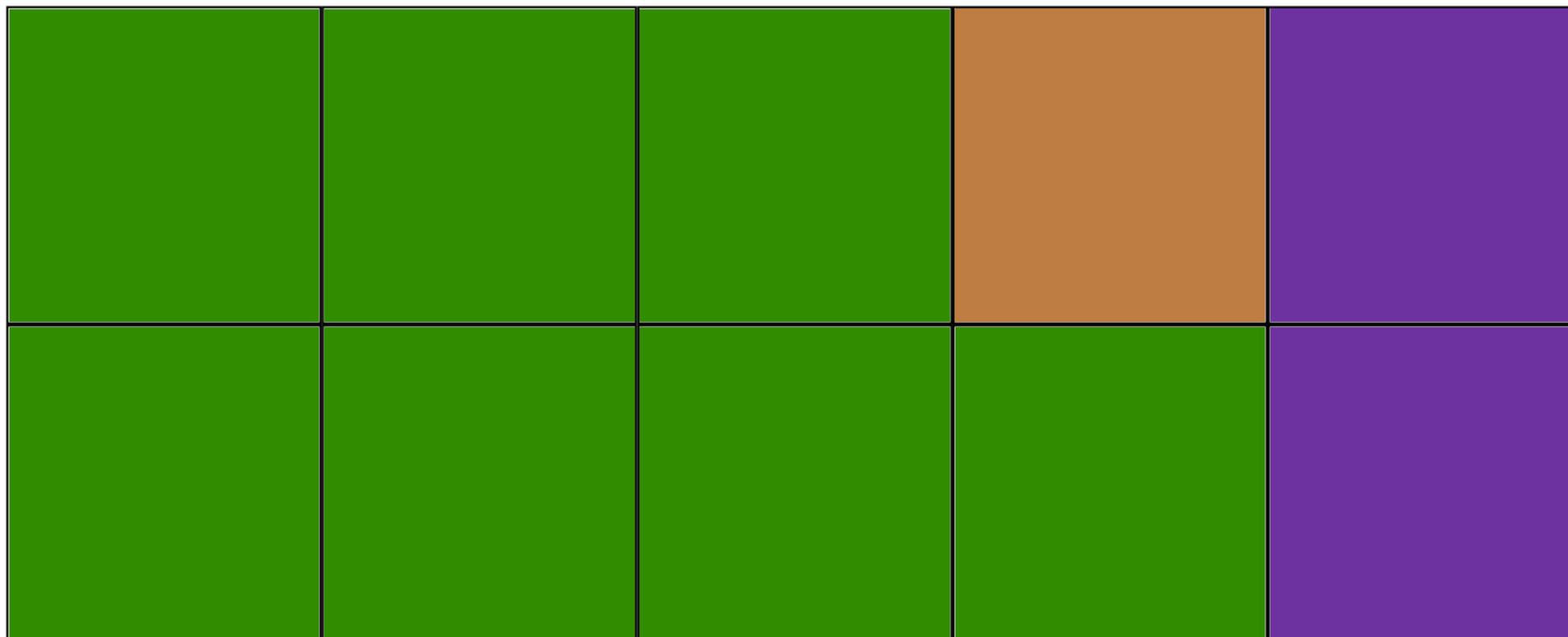
Forests

Grassland

Other

Farmland

Water and wetlands



Please note that these are rough approximations. Sources: <http://en.worldstat.info/>, <https://knoema.com/>, http://ec.europa.eu/eurostat/statistics-explained/index.php?title=Land_cover_and_land_use#Database

Finland

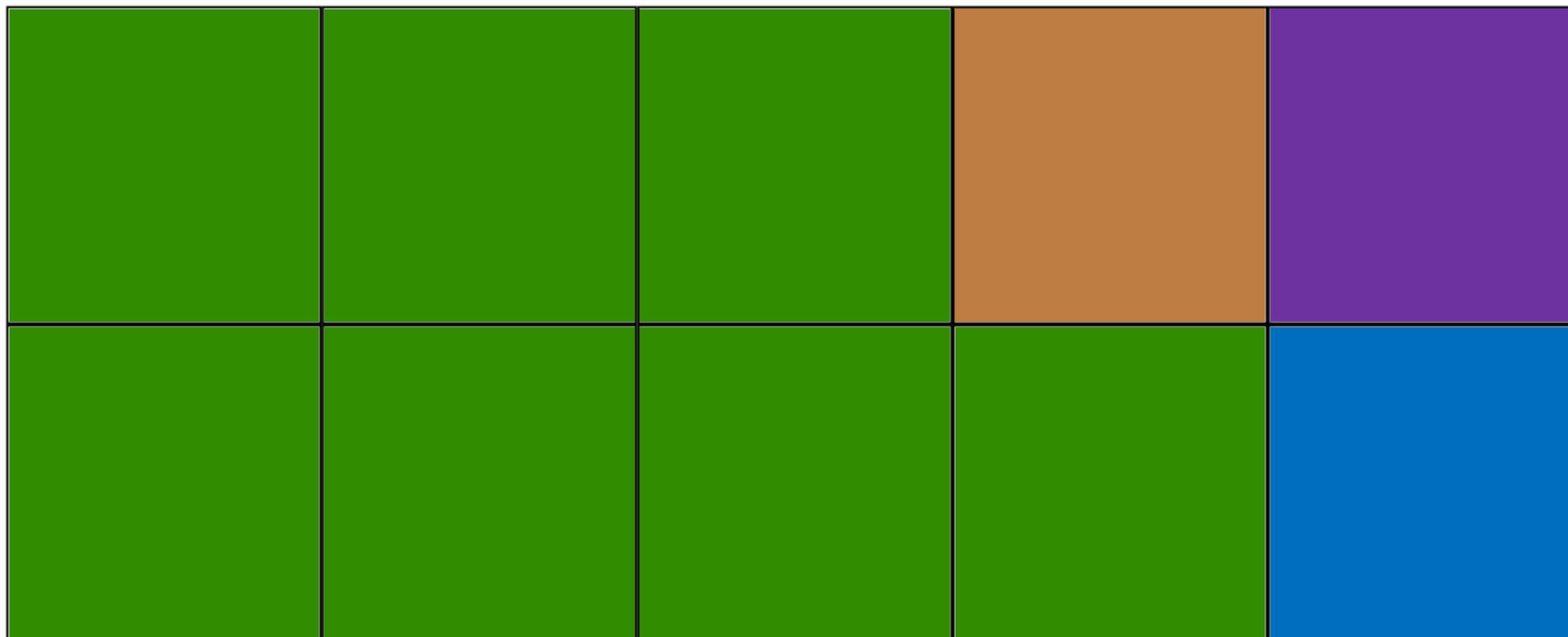
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Ireland

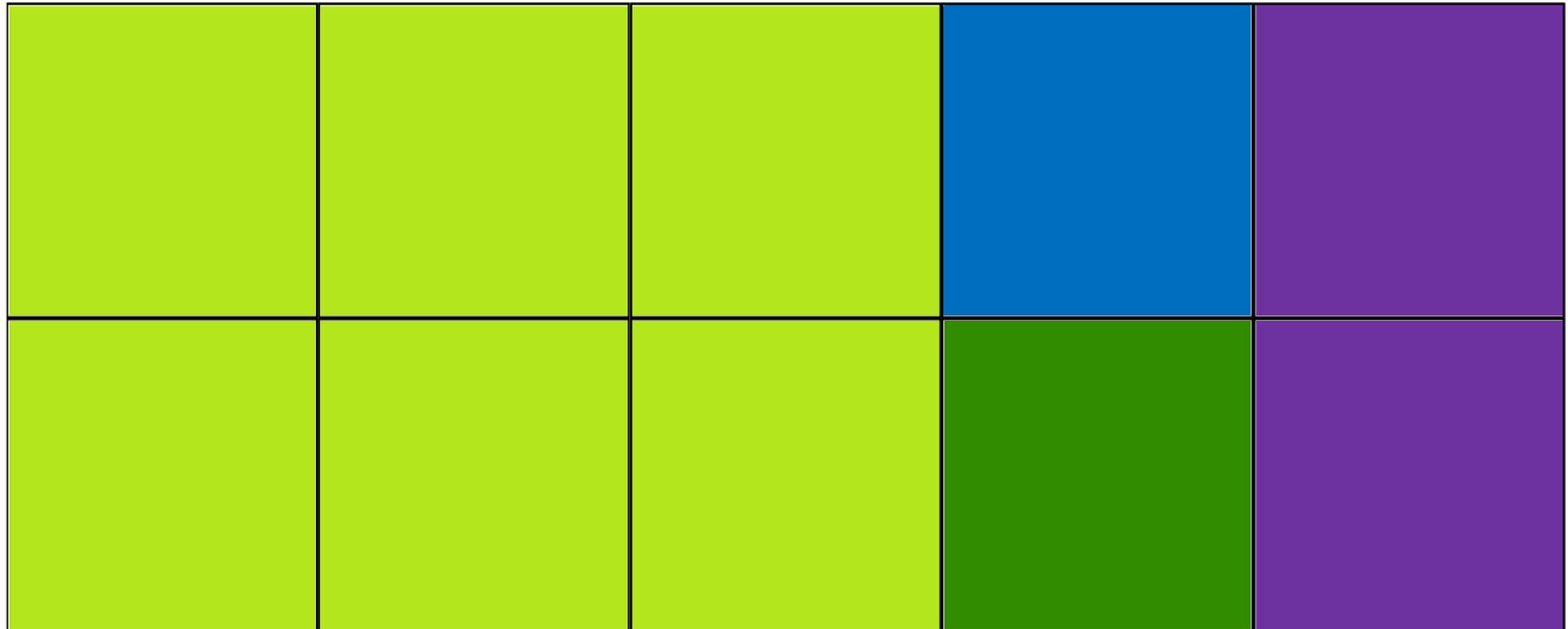
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India

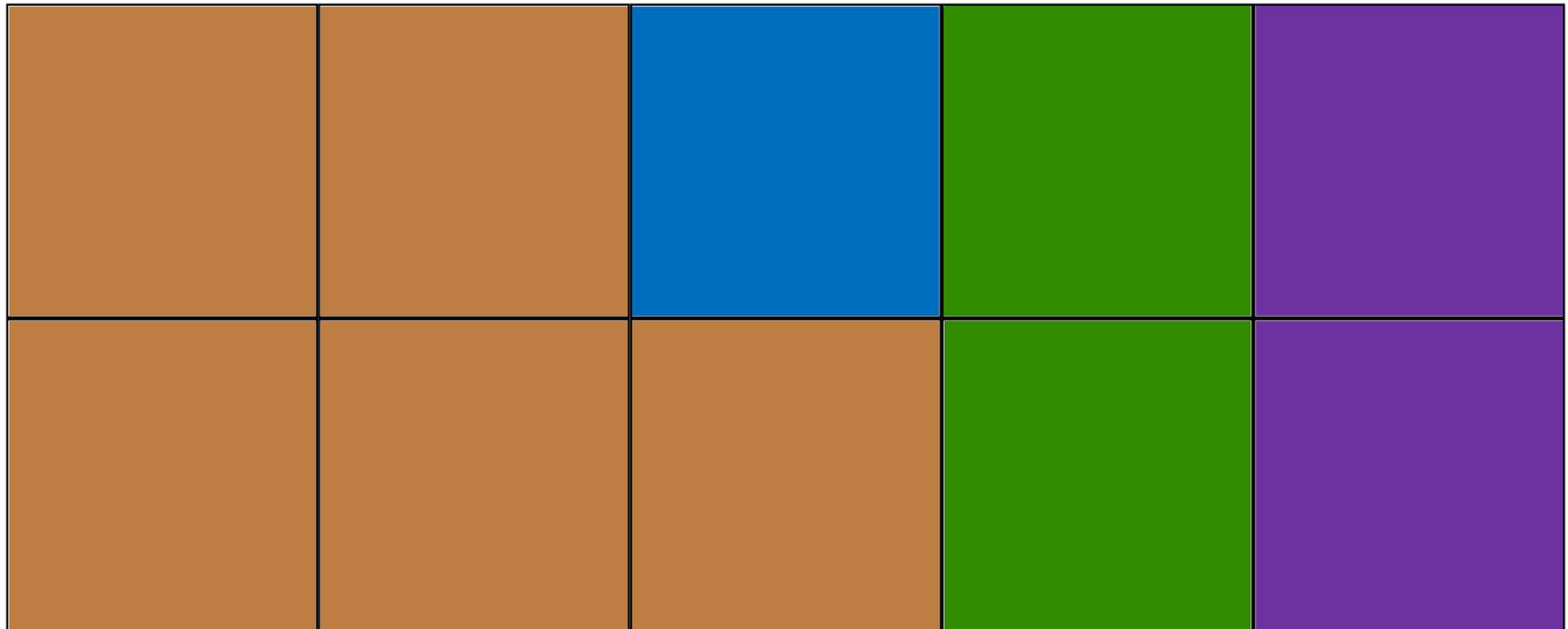
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Bolivia

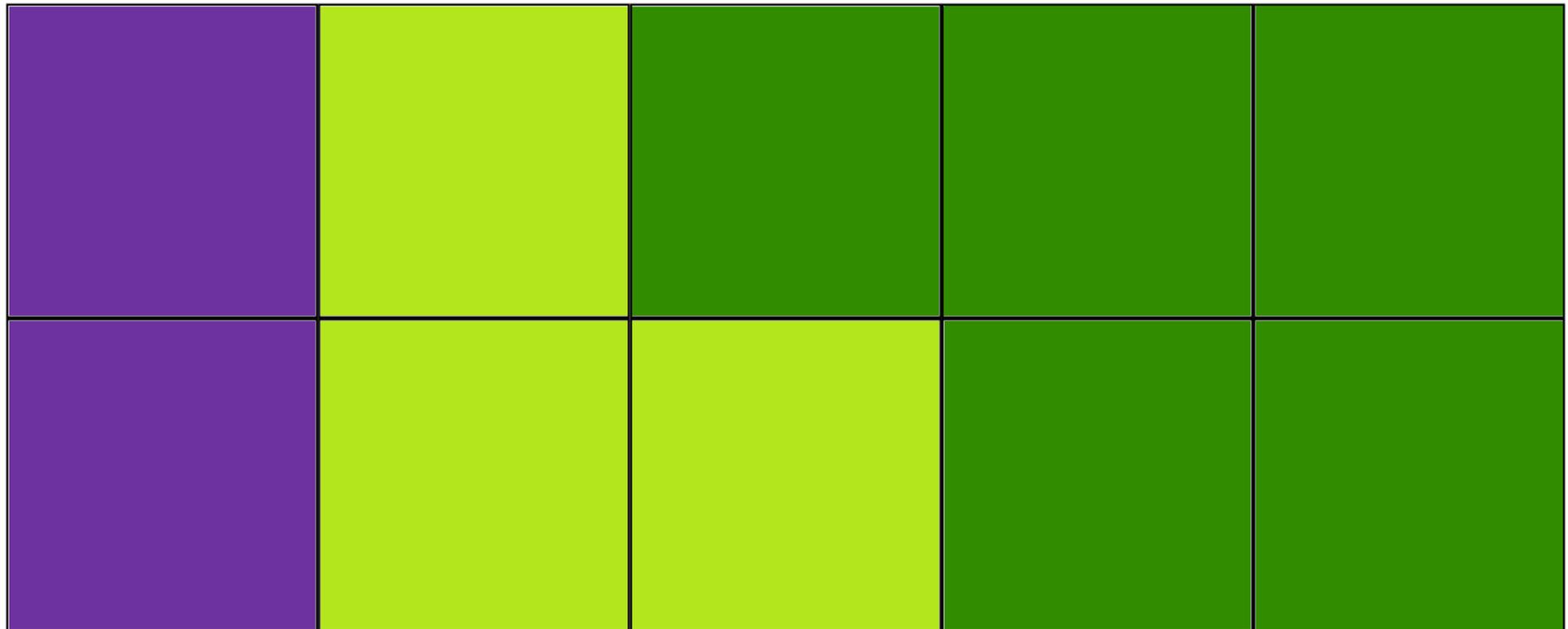
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Argentina

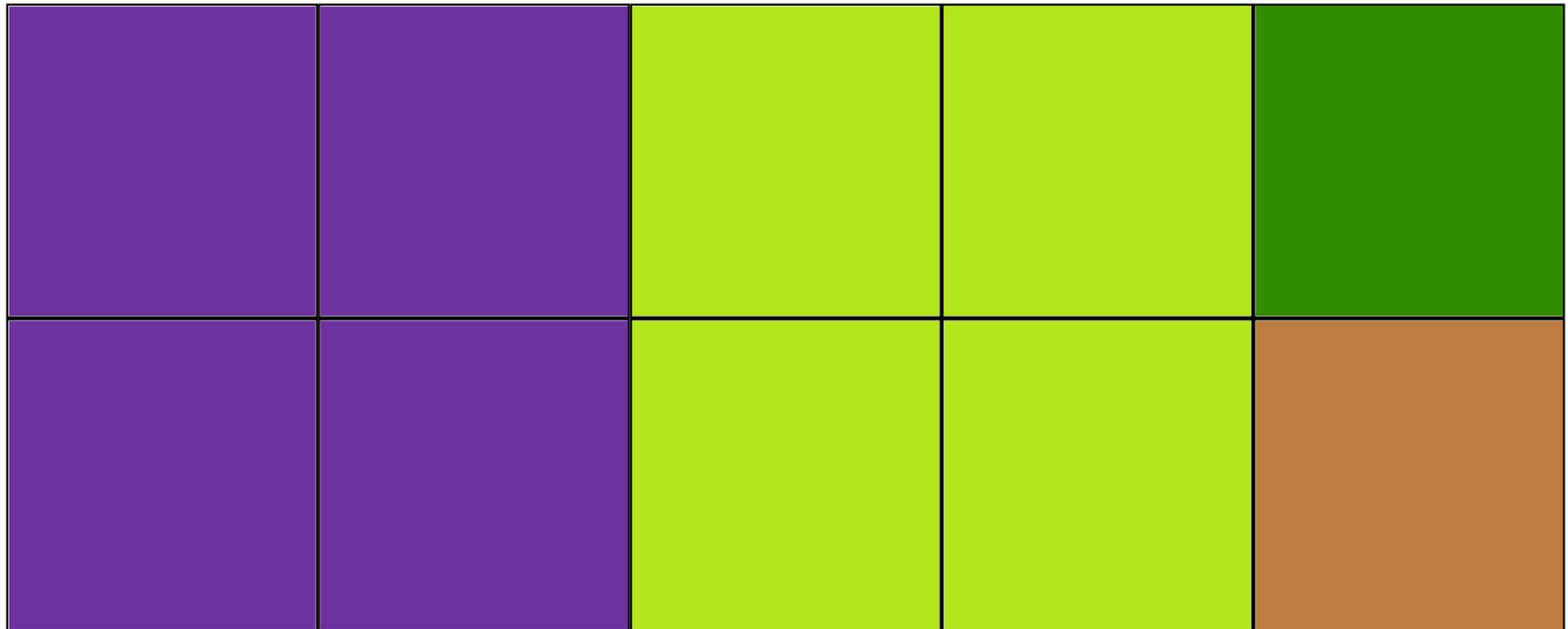
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Kenya

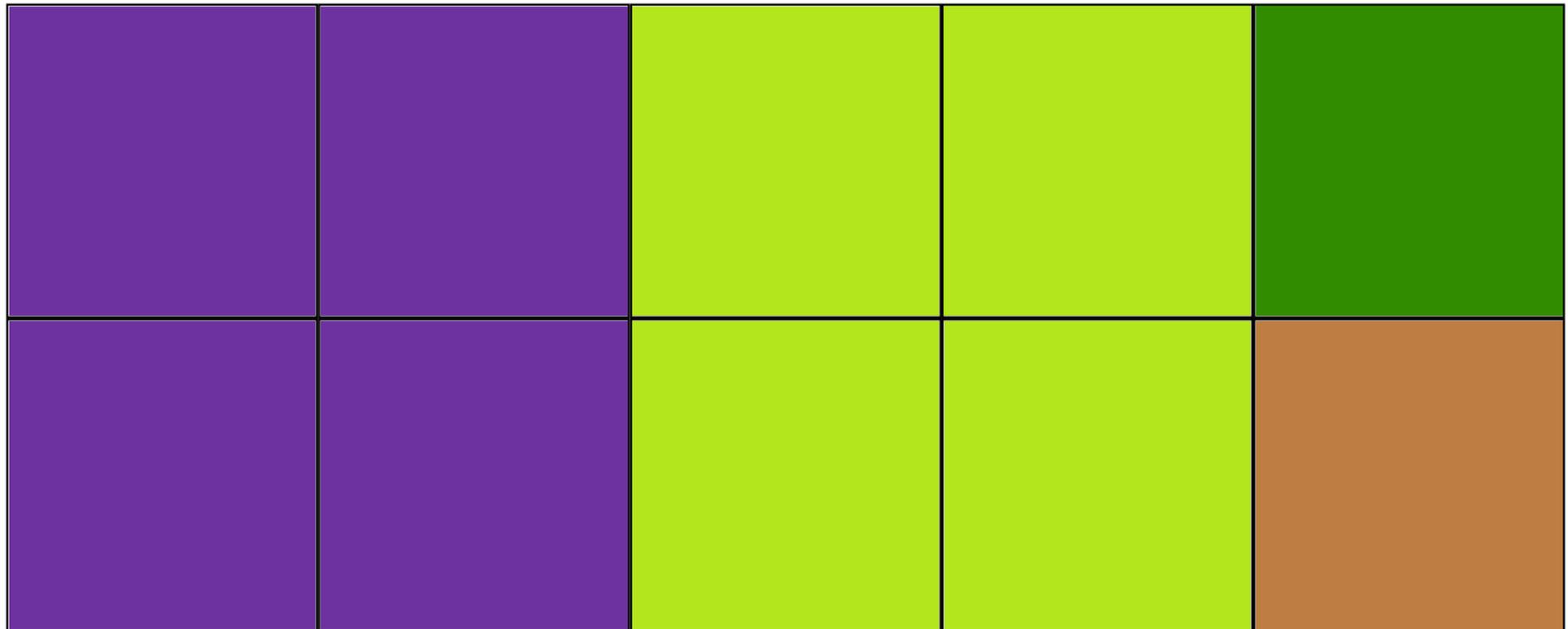
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Georgia

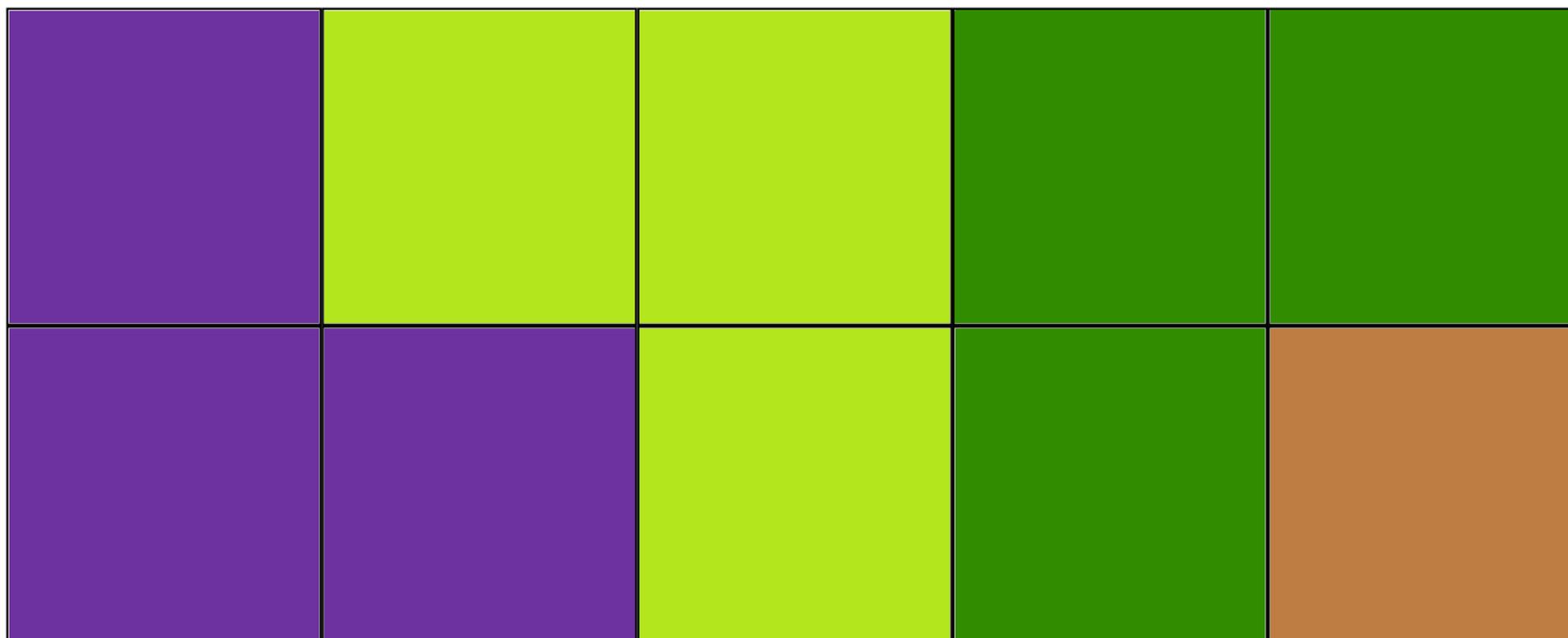
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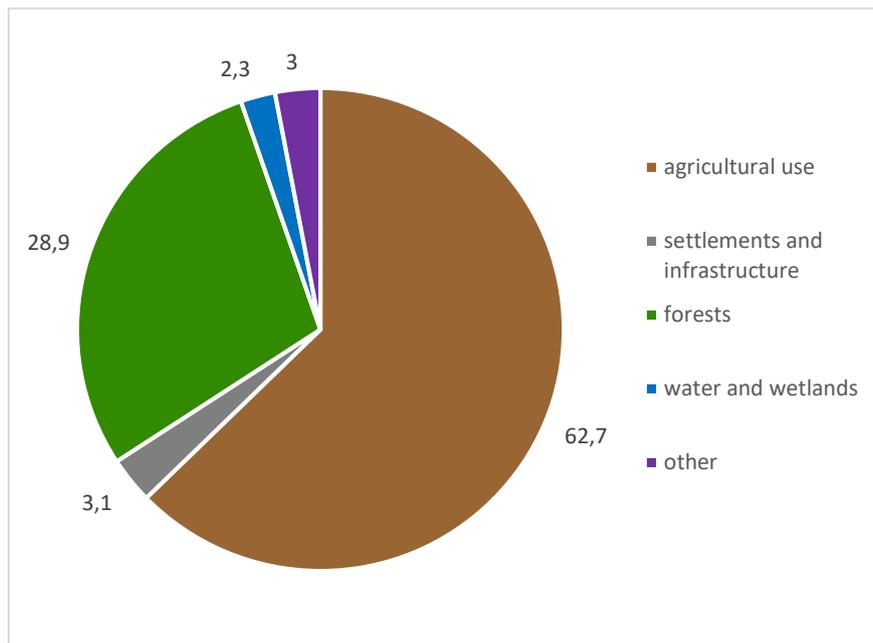
Greece

An overview of the country

Number of inhabitants: 11,160,000 (in 2017)

Land area: 131,961 km² (including inland waters, excluding sea area)

Land use in per cent



Agriculture in Greece

Greece is in the Mediterranean area. The climate is warm and dry in summer. There is more rain in winter than in summer. On the coast, it is not very cold in winter, but on the countryside, there are night frosts.

34.9% of the land area consists of pastures and meadows, which are used for the breeding of sheep and goats. Greece is famous for typical Mediterranean products such as wine, olives, and fruits all of which are grown on 8.6% permaculture area. That's more than in most European countries.

Cereals and vegetables are cultivated on the farmland. It makes up about 19.3% of the country.

Quellen:

www.wikipedia.de/griechenland

<http://en.worldstat.info/>, <https://knoema.com/>, http://ec.europa.eu/eurostat/statistics-explained/index.php?title=Land_cover_and_land_use#Database

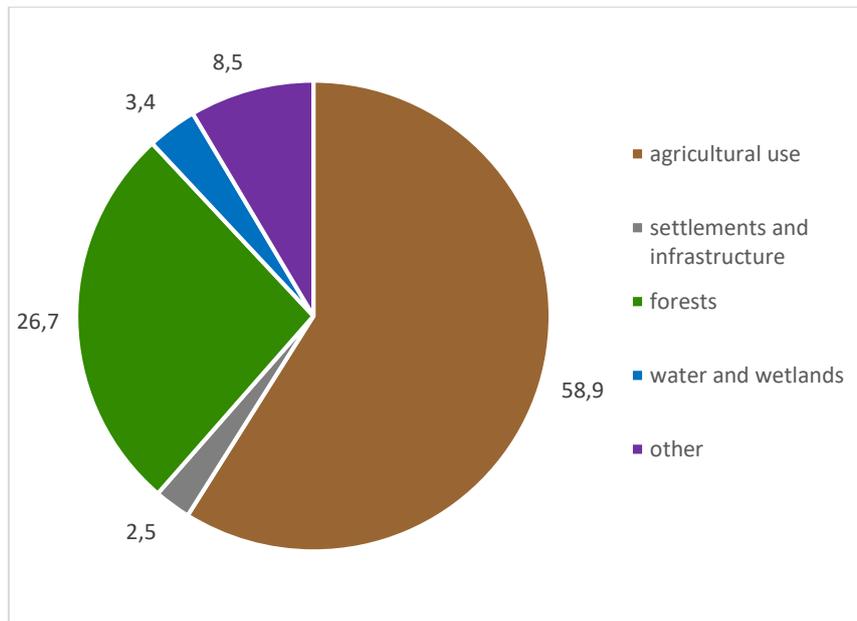
Romania

An overview of the country

Number of inhabitants: 19,586,539 (in 2017)

Land use: 238,390 km² (including inland waters, excluding sea area)

Land use in per cent



Agriculture in Romania

Romania lies between Central and Southeastern Europe and borders the Black Sea to the east. It is located in the temperate zone, which means that in most parts of the country, the summers are warm or hot and in winter, there is frost.

19% of the land area consist of pastures and meadows. The most important animal species kept is cattle for meat and milk. Cereals, corn, sugar beets and sunflower seeds grow on the 35.9% farmland. A small percentage of permaculture (1.9%) produces for example grapes.

By the way: 54.9% of the Romanian population lives in cities. The largest city is Bucharest. There are also real European primeval forests in Romania.

Quellen:

<https://www.agrarheute.com/land-leben/agrarpromuktion-rumaeniens-zuletzt-leicht-gesunken-515255>

<http://www.balkaninsight.com/en/article/counrty-profile-romania>

www.wikipedia.de/rumaenien

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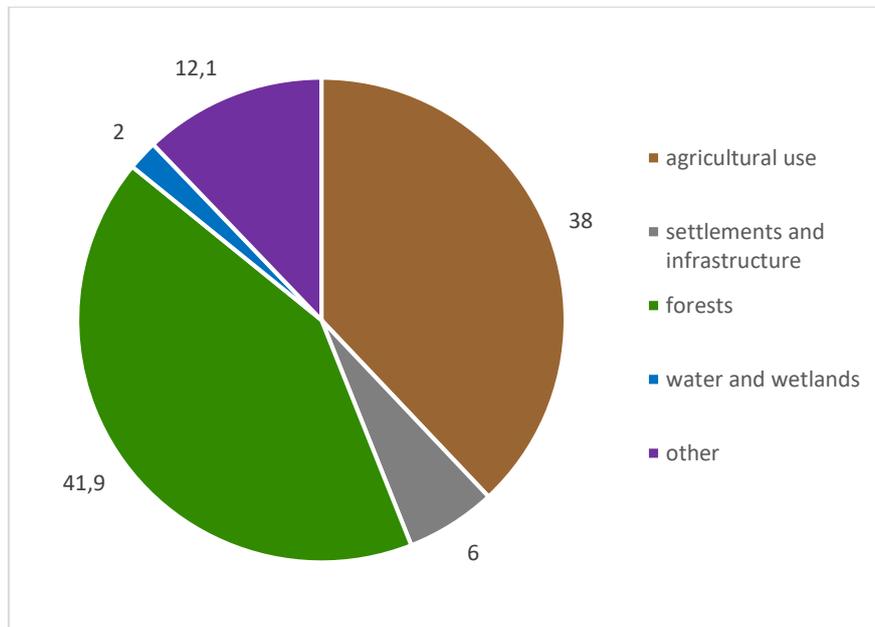
Portugal

An overview of the country

Number of inhabitants: 10,309,573 (in 2016)

Land area: 92,230 km² (including inland waters, excluding sea area)

Land use in per cent



Agriculture in Portugal

Although Portugal lies on the Atlantic Ocean, the climate is Mediterranean. That means, it is hot and dry in summer and cool and humid in winter. In the south, it gets very hot in summer.

15% of the working population in Portugal work in agriculture and 38% of the land area is used for agriculture. This means that 11.8% of the total area is farmland, where mostly crops and potatoes are planted. 19.8% are grasslands and 6.4% permacultures. Here Portugal is especially famous for its cork oaks, but also for its wine.

Quellen:

www.wikipedia.de/portugal

<http://www.portugal-live.net/D/essential/economy-agriculture.html>

<http://en.worldstat.info/>, <https://knoema.com/>, http://ec.europa.eu/eurostat/statistics-explained/index.php?title=Land_cover_and_land_use#Database

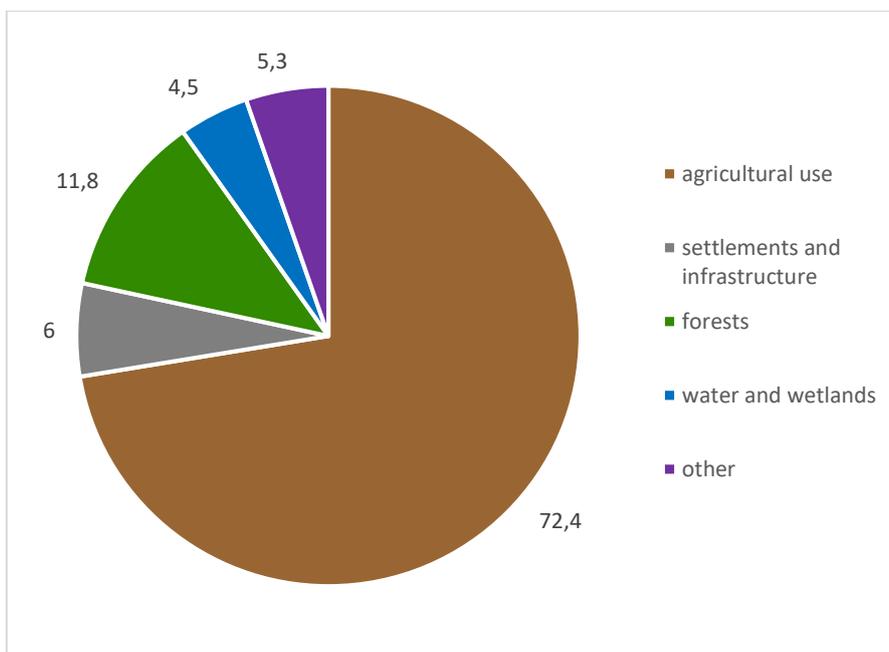
United Kingdom

An overview of the country

Number of inhabitants: 66,020,000 (in 2017)

Land area: 243,610 km² (including inland waters, excluding sea area)

Land use in per cent



Agriculture in the United Kingdom

The United Kingdom is located on the British Isles and consists of England, Wales, Scotland and Northern Ireland. It is located in the temperate zone. The summers are warm and the winters cool and humid.

Cereals, potatoes and sugar beets are cultivated on the 25% farmland of the total land area. Large areas of grasslands mainly feed cattle and sheep and account for 47.3% of the land area. Only a small proportion of 0.2% is permaculture area. In the UK there is less forest area than in most European countries, but especially many bogs and wetlands, about 3% of the total area.

Quellen:

https://de.wikipedia.org/wiki/Vereinigtes_K%C3%B6nigreich

https://de.wikipedia.org/wiki/Wirtschaft_des_Vereinigten_K%C3%B6nigreichs#Agriculture_und_Fischerei

<http://en.worldstat.info/>, <https://knoema.com/>, http://ec.europa.eu/eurostat/statistics-explained/index.php?title=Land_cover_and_land_use#Database

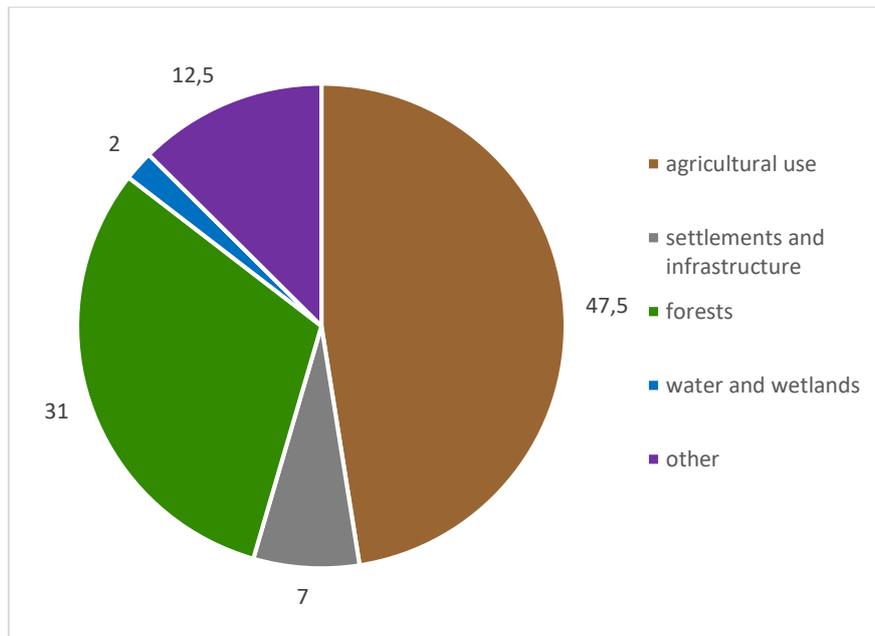
Germany

An overview of the country

Number of inhabitants: 82,521,653 (in 2016)

Land area: 357,410 km² (including inland waters, excluding sea area)

Land use in per cent



Agriculture in Germany

Germany is located in Central Europe and borders the North and Baltic Seas. It is located in the temperate climatic zone. The summers are warm and the winters cold and humid.

One third (33.3%) of Germany's total area is farmland. On this land, mainly wheat, corn, potatoes and sugar beet are grown. The small part of permaculture (0.6%) consists of viticulture and orchards. The most important animal species in Germany are cattle and pigs. To feed them, 13.7% meadows and pastures are available.

Quellen:

<https://de.wikipedia.org/wiki/Deutschland>
https://information-medien-agrar.de/webshop/mediafiles/PDF/104-117_info-Agriculture.pdf
<http://en.worldstat.info/>, <https://knoema.com/>, http://ec.europa.eu/eurostat/statistics-explained/index.php?title=Land_cover_and_land_use#Database



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