## **Crop production - Coarse grains**

Coarse grains are cereal grains other than wheat and rice that include maize (corn in the United States), barley, sorghum, rye, and oats. The global demand for these coarse grains is growing due to the requirements for fodder, food, for brewing and as biofuels. Three quarters of the quantities produced globally are maize.

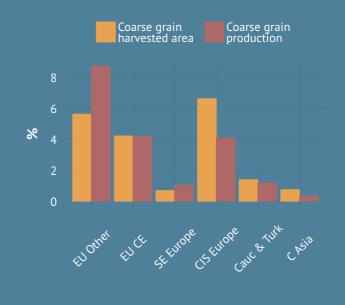
In 2010 the area planted with coarse grains accounted for 6.5 percent of the total global agricultural area. With the exception of Central Asia, this region is an important coarse grain producer with an above average share of area harvested. The region accounts for one fifth of the global total, both in terms of area harvested and in production.

In Central and Eastern Europe 25 percent of the total agricultural land is allocated to growing coarse grains (the highest share for any group of crops), with a four percent share in the global production. Poland is the main coarse grain producer in this sub-region. In comparison, the share of agricultural land allocated to growing coarse grains in EU other and EFTA is six percent, in the Caucasus and Turkey it is nine percent, and in CIS Europe it is 10 percent.

In 2010, 217 million tonnes of coarse grains were produced in this region. The biggest producers are France, Ukraine, Germany, Poland and the Russian Federation, which together provided almost half of the total quantity produced in the region.

Average coarse grain production in the region was 18 percent higher in the period 2001-2010 than it was between 1991-2000. This increase in production was principally due to meeting the growing demand for fodder in developing countries as a result of the respective increase in livestock numbers. Higher demand for biofuels is also a factor, even though this demand has leveled off recently. The increase in quantity produced has been most significant in the two sub-regions of South East Europe (by 243 percent) and the Caucasus and Turkey (by 117 percent).

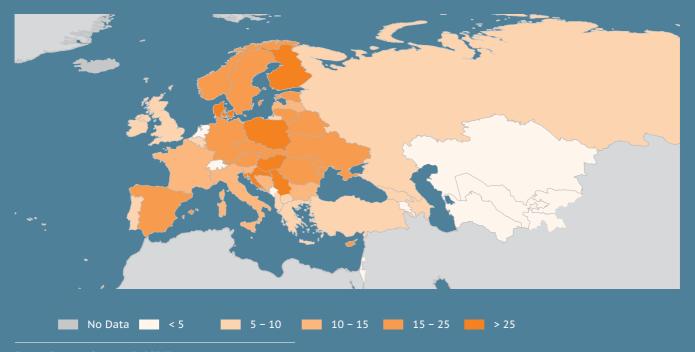
CHART 20: Area and production of coarse grain, share of world total (2010)



Source: Statistics Division (FAOSTAT)
Metalink: P3.FEED.FAO.ESS.CG.AH.SC, p. 103

- The region accounts for 20 percent of global coarse grain production
- The top coarse grain producer is France (27 million tonnes in 2010)
- Poland has the highest proportion of agricultural land used for growing coarse grains (37 percent)

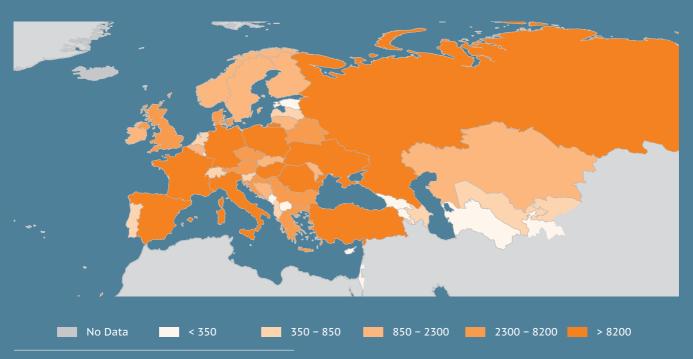
MAP 9: Coarse grains area, share of total agricultural area (%, 2009)



Source: Statistics Division (FAOSTAT)

Motalink: D3 EEED EAO ESS C6 AH SHI p. 10

MAP 10: Coarse grains production (thousand tonnes, 2010)



Source: Statistics Division (FAOSTAT) Metalink: P3.FEED.FAO.ESS.CG.QP, p. 103

## **Crop production - Oil-bearing crops**

Global demand for oil crops has increased significantly in recent years. Demand for the four most important oil crops (oil-palm, soybeans, rapeseed and sunflower seed) has been driven by food, fodder and industrial needs. More than five percent of the world agricultural area was covered by oil crops (2010 data).

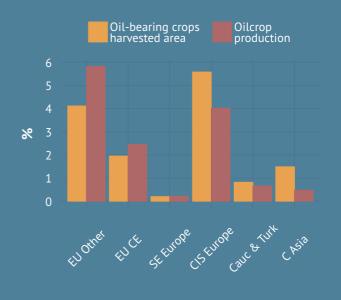
The region accounts for 14 percent of the total global harvested area, with the Caucasus and Turkey and South East Europe sub-regions accounting for four percent each. Central Asia accounts for one percent of this world total.

In CIS Europe, the share of oil crop area in the total agricultural area is 5 percent; and with 6.7 million tonnes (in 2010) CIS Europe produced four percent of the global oil crop production. In EU Central and Eastern oil-bearing crops account for nine percent of the sub-region's total harvested area, while in EU other and EFTA this figure is eight percent. EU supported policies on oil crops have been one of the main reasons for growth in the area and have resulted in high yields. Although these two sub-regions only account for six percent of oil-bearing crops in terms of area they produce eight percent of the total output.

The five biggest producers, namely, Ukraine, the Russian Federation, France, Germany and Spain, provided 60 percent of the region's total 23 million tonnes output in 2010.

Over the last two decades oil-bearing crop production has increased by 50 percent as a result of growing demand. Increases in production have been significant in CIS Europe and EU Central and Eastern, where the average production between 2001 and 2010 was twice the 1991-2000 average.

CHART 21: Area and production of oil-bearing crops, share of world total (2010)



Source: Statistics Division (FAOSTAT)
Metalink: P3.FEED.FAO.ESS.OS.AH.SC, p. 108

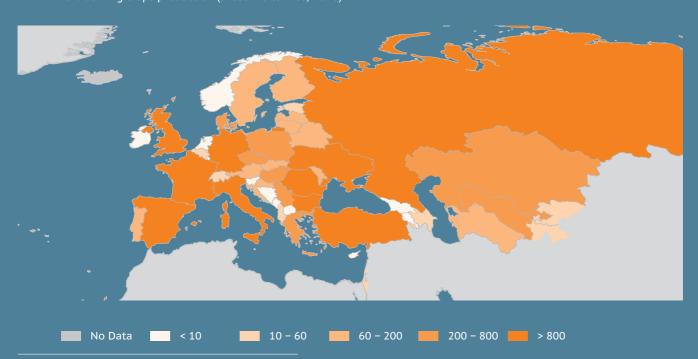
- The region accounts for 14 percent of global oil-bearing crop production
- The top oil-bearing crop producer is Ukraine (3.7 million tonnes)
- Bulgaria has the highest proportion of oilbearing crops to total harvested area (19 percent)

MAP 11: Oil-bearing crops area, share of total agricultural area (%, 2009)

Source: Statistics Division (FAOSTAT)

Metalink: P3.FEED.FAO.ESS.OS.AH.SHL, p. 108

No Data < 1



MAP 12: Oil-bearing crops production (thousand tonnes, 2010)

Source: Statistics Division (FAOSTAT) Metalink: P3.FEED.FAO.ESS.OS.QP, p. 108

		Tota	l cereals			W	'heat	
	;	area	proc	luction		area	proc	duction
•		p.a. growth		p.a. growth		p.a. growth		p.a. growth
	thousand ha	%	thousand tonnes	%	thousand ha	%	thousand tonnes	%
	2010	2000-2010	2010	2000-2010	2010	2000-2010	2010	2000-2010
WORLD	682 539	0.1	2 432 237	1.7	216975	0.1	650881	1.1
Central Asia	18717	1.8	25 484	2.8	16126	2.3	21040	2.9
Kazakhstan	15 068	2.1	12116	0.5	13138	2.7	9638	0.6
Kyrgyzstan	580	-0.0	1510	-0.3	375	-1.7	813	-2.4
Tajikistan	444	0.6	1207	8.3	343	-0.0	858	7.8
Turkmenistan	984	1.8	3 2 3 5	6.3	850	2.0	3 0 0 0	5.9
Uzbekistan	1642	0.2	7416	6.6	1420	0.5	6730	6.7
Caucasus & Turkey	13290	-1.2	35 213	0.2	8844	-1.3	21164	-0.6
Armenia	157	0.0	325	3.9	87	-2.0	184	0.1
Azerbaijan	955	4.1	1927	2.6	656	2.9	1272	1.0
Georgia	173	-5.6	220	-6.2	48	-5.7	48	-6.0
Turkey	12 005	-1.5	32 741	0.2	8 0 5 4	-1.5	19660	-0.7
CIS Europe	49 780	-1.3	107418	1.3	28 855	0.5	60844	2.8
Belarus	2 380	0.2	6730	4.0	603	2.9	1740	6.1
Republic of Moldova	885	-0.6	2386	2.3	328	-1.3	744	0.2
Russian Federation	32 331	-2.4	59 624	-0.8	21640	0.1	41508	1.9
Ukraine	14184	1.5	38 679	5.0	6284	2.0	16851	5.2
South Eastern Europe	3022	7.6	14661	11.7	862	4.2	2997	4.1
Albania	146	-2.0	694	2.1	74	-4.1	295	-1.4
Bosnia and Herzegovina	286	-2.4	1104	1.7	55	-6.2	145	-8.0
Croatia	550	-2.3	3017	0.9	169	-3.3	681	-4.1
Macedonia, FYR	162	-3.0	539	-0.5	80	-4.1	243	-2.1
Montenegro	5		16		1		2	
Serbia	1873		9291		484		1630	
EU Central & Eastern	22 051	-0.5	78103	2.6	8847	0.3	31607	1.7
Bulgaria	1917	0.7	7 0 2 7	4.8	1109	1.3	3 9 9 5	3.7
Czech Republic	1467	-1.2	6883	0.6	834	-1.5	4162	0.2
Estonia	274	-1.8	670	-0.4	120	5.7	324	8.3
Hungary	2586	-0.7	12304	2.1	1011	-0.1	3764	0.2
Latvia	531	2.7	1417	4.4	308	6.9	973	8.6
Lithuania	1038	0.6	2768	0.4	526	3.6	1708	3.3
Poland	8 4 2 4	-0.5	27120	2.0	2406	-0.9	9 488	1.1
Romania	5017	-1.2	16710	4.8	2153	1.1	5812	2.7
Slovakia	701 96	-1.5	2 6 3 3	1.8 1.4	350	-1.4	1228	-0.2
Slovenia		-0.8	571		32	-1.8	153	-0.6
EU other & EFTA	35 335	-0.8	205 600	-0.7 1.7	17314	-0.5	105717	-0.1
Austria	995	1.8	5 3 3 0	1.7	303	0.3	1518	1.5
Belgium	330	0.5	3 0 4 2	1.9	210	-0.2	1850	0.9
Cyprus	1 490	-3.6	57	1.7	7	1.9	15	4.0
Denmark	1 489 954	-0.2 -2.0	8772	-0.7 -3.1	764 211	2.0 3.5	5 0 6 0	0.8 3.0
Finland		-2.0	2 9 9 2	-3.1			724	
France	9259	0.2	65 676	-0.0 -0.3	5 4 2 6	0.3	38 207	0.2
Germany	6613	-0.6	44413	-0.2	3298	1.1	24107	1.1
Greece	917	-3.2	4499	-1.0	510	-5.1	1600	-3.7 1.0
Ireland	276	-0.0	2048	-0.6	1 965	-0.0	669	-1.0
Italy	3494	-1.7	18996	-0.8	1865	-2.2	6900	-0.8
Luxembourg	30	0.4	166	0.8 2.2	14	2.5 1.3	83	3.2
Malta	3 210	0.6 -0.4	15 1804	0.4	15/	1.3	13	3.2 1.8
Netherlands	325	-0.4 -5.6	1804	-3.5	154 60	-12.4	1370 112	-10.9
Portugal	5 984	-5.6 -1.3	19335	-3.5 -2.4	1907	-12.4 -2.1	5611	-10.9 -2.6
Spain	959				404			
Sweden	3008	-2.4 -1.1	4 3 3 3 20 9 2 9	-2.5 -1.4	1937	0.1 -0.7	2 184 14 878	-0.8 -1.2
United Kingdom	3008	-1.1	20929	-1.4	1937	-0.7	140/8	-1.2
Iceland	201	- 0.0	1145	. 1.2	72	0.6	202	0.7
Norway	301 152	-0.9 -1.8	1145 924	-1.3 -2.6	72 91	0.6 -0.5	293	-0.7 -1.1
Switzerland		-1.8		-2.6			524	-1.1
Israel	79	0.6	239	2.7	64	0.0	112	1.8

TABLE 6: Coarse grain and oil-bearing crops

	Coarse grains					Oil-bear	ring crops		
	area		production			area	production		
	p.a. growth		p.a. growth			p.a. growth		p.a. growth	
	thousand ha	%	thousand tonnes	%	thousand ha	%	thousand tonnes	%	
WORLD	2010	2000-2010 0.3	2010 1 109 340	2000-2010	2010 266 535	2000-2010 1.8	2010 168 445	2000-2010	
Central Asia	311912 2351	-0.5	3621	1.7	3967	3.0	799	3.4	
Kazakhstan	1836	-1.4	2104	-0.7	1690	12.3	299	12.6	
Kyrgyzstan	198	4.2	676	3.2	83	-1.4	36	2.0	
Tajikistan	86	5.4	273	17.0	172	-3.3	37	1.8	
Turkmenistan	69	2.3	90	10.3	640	1.1	104	-0.5	
Uzbekistan	161	3.1	479	7.7	1383	-0.8	322	0.3	
Caucasus & Turkey	4345	-1.2	13185	1.3	2 184	0.7	1111	1.1	
Armenia	70	3.4	141	13.7	0		0		
Azerbaijan	296	7.7	651	7.2	47	-8.3	16	1.8	
Georgia	126	-5.5	172	-6.3	10	-2.9	1	-2.4	
Turkey	3852	-1.5	12221	1.2	2127	1.1	1094	1.1	
CIS Europe	20695	-3.4	45 366	-0.5	14871	5.6	6770	7.1	
Belarus	1778	-0.6	4989	3.3	377	6.4	155	14.0	
Republic of Moldova	557	-0.1	1641	3.4	351	3.9	191	5.4	
Russian Federation	10490	-6.1	17056	-5.3	7 5 4 0	4.0	2745	4.5	
Ukraine	7871	1.2	21679	4.8	6603	7.8	3 680	9.5	
South Eastern Europe	2156	9.4	11638	15.3	537	13.2	366	18.5	
Albania	72	0.8	399	5.9	45	2.4	17	5.9	
Bosnia and Herzegovina	232	-1.2	959	4.9	5	0.3	2	2.7	
Croatia	381	-1.8	2336	3.0	120	1.7	76	4.5	
Macedonia, FYR	78	-2.0	270	0.9	12	-1.2	9	1.9	
Montenegro	4		14		3		1		
Serbia	1389		7 660		353		262		
EU Central & Eastern	13 177	-1.1	46371	3.2	5 2 0 7	4.9	4127	9.3	
Bulgaria	797	-0.1	2 9 7 6	6.5	939	5.3	867	16.6	
Czech Republic	634	-0.7	2721	1.4	490	1.7	440	2.0	
Estonia	154	-5.1	346	-4.5	98	13.0	50	13.0	
Hungary	1573	-1.0	8532	3.0	830	6.1	621	8.2	
Latvia	224	-1.0	444	-1.1	111	28.3	87	35.3	
Lithuania	512	-1.7	1059	-2.9	262	14.9	158	17.3	
Poland	6018	-0.3	17633	2.5	809	6.0	800	8.1	
Romania	2852	-2.6	10837	6.0	1392	2.7	907	10.4	
Slovakia	351	-1.5	1405	4.0	268	4.4	190	6.5	
Slovenia	17564	-0.2	418	2.3	7	24.2	7	32.0	
EU other & EFTA  Austria	17564	-1.2	96800	-1.3 1.9	10963	0.2	9811	2.6	
	692 120	2.6 1.8	3812	1.8 3.7	143	2.8 3.2	115 19	2.7 5.9	
Belgium Cyprus	28	-4.6	1192 42	1.0	25 10	3.2	4	-3.3	
Denmark	726	-4.6 -2.0	3712	-2.4	167	4.8	220	6.9	
Finland	743	-3.1	2268	-2.4 -4.4	158	11.6	68	9.7	
France	3809	0.0	27350	-0.3	2338	1.1	2557	1.8	
Germany	3315	-2.0	20306	-1.5	1506	2.2	2191	4.4	
Greece	373	-0.6	2670	0.7	1116	-0.9	459	-3.9	
Ireland	199	-0.0	1379	-0.4	8	11.3	9	10.7	
Italy	1382	-1.4	10458	-1.3	1474	-1.2	923	-1.0	
Luxembourg	16	-1.2	83	-1.0	5	4.6	6	6.6	
Malta	0	-3.0	1	-3.9	0	9.1	0	8.8	
Netherlands	57	-3.7	435	-3.0	5	-1.9	5	6.3	
Portugal	235	-3.3	842	-2.7	264	-4.6	62	-1.7	
Spain	3954	-0.9	12798	-2.5	2887	-1.3	2151	3.6	
Sweden	555	-3.9	2148	-4.0	128	8.1	114	8.8	
United Kingdom	1071	-1.6	6051	-1.8	697	3.9	873	6.7	
Iceland									
Norway	229	-1.4	852	-1.5	6	0.4	4	2.0	
Switzerland	61	-3.6	400	-4.3	27	4.2	31	4.2	
Israel	15	3.4	126	3.6	37	-2.3	30	-0.7	

## **Crop production - Sugar Beet**

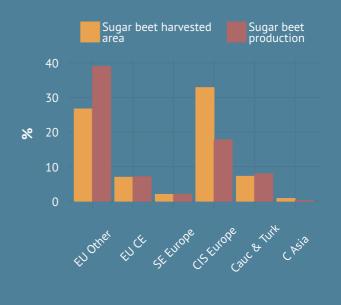
Most of the sugar consumed in the world is made from tropical sugar cane, and only some 30 percent is made of sugar beet, which is cultivated in the temperate zones. While sugar beet is still one of the significant crops in this region, production has dropped significantly in recent years as a result of changing EU support policies. In 2009, the area planted with sugar beet accounted for less than one percent of the total global agricultural land.

Europe and the United States are the largest sugar beet producers, with a 75 percent global share in both area harvested and production. In Central Asia and the Caucasus countries sugar beet production is less significant due to climatic conditions. However, seven percent of the total global area planted with sugar beet area is found in Turkey, which makes up eight percent of total world production. One third of the global area planted with sugar beet can be found in CIS Europe, and around 18 percent of global production comes from the Russian Federation and Ukraine. The other three sub-regions, namely, EU Central and Eastern, EU other and EFTA and South Eastern Europe, account for another third of the total global area, producing more than half of the total quantity. EU other and EFTA countries provide a remarkable 40 percent of total global production thanks to high yields.

In 2010, 169 million tonnes of sugar beet were produced in this region. The main producers, France, Germany, the Russian Federation, Turkey and Ukraine, produced almost two thirds of the regional total.

Over the last 20 years sugar beet production has declined and has been replaced by sugar cane. Average sugar beet production during the 2001-2010 period was 10 percent lower than that during 1991-2000. This decrease was most evident in the EU countries. The European Union changed its support policies, and as a result of the strict quota system, production in Central and Eastern Europe decreased by 20 percent.

CHART 22: Area and production of sugar beet, share of world total (2010)

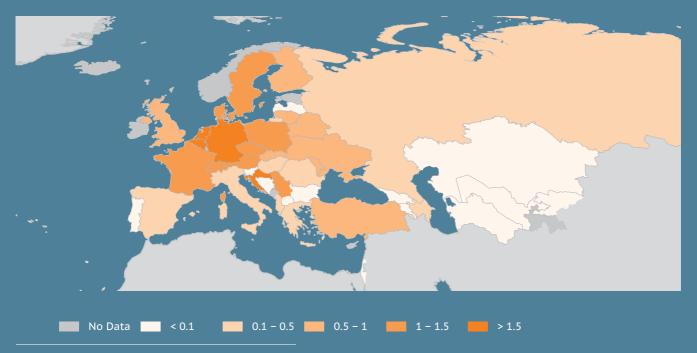


Source: Statistics Division (FAOSTAT)

Metalink: P3.REU.FAO.ESS.SU.AH.SC, p. 112

- The region accounts for around 75 percent of global sugar beet production
- The top sugar beet producer is France (32 million tonnes)
- Belgium has the highest proportion of sugar beet to total harvested area (4.3 percent)
- The highest sugar beet yield is in France (83 tonnes per hectare in 2010)

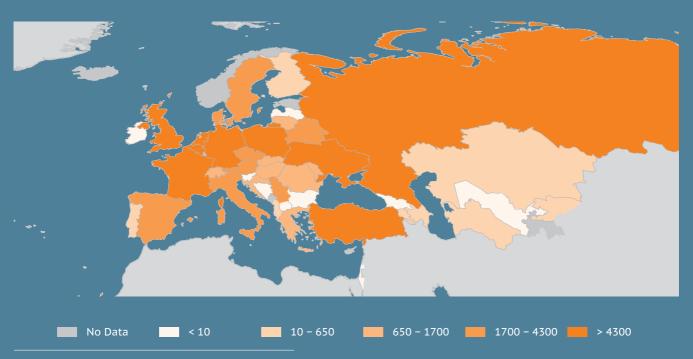
MAP 13: Sugar beet area, share of total agricultural area (%, 2009)  $\,$ 



Source: Statistics Division (FAOSTAT)

Metalink: P3 REU FAO FSS SU AH SHI n 112

MAP 14: Sugar beet production (thousand tonnes, 2010)



Source: Statistics Division (FAOSTAT)

Metalink: P3.REU.FAO.ESS.SU.QP, p. 112

## **Crop production - Roots and tubers**

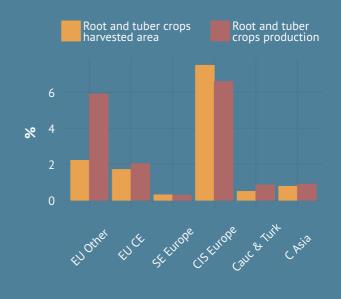
Roots and tubers have a long historical and traditional role in the food supply chain, but production trends have varied from region to region. In Europe production has decreased in recent years, while in Africa and parts of Asia it has increased. In the temperate zones, potatoes are the most important root crops, while in the tropical zones manioc is the most important. Root and tuber crops accounted for one percent of global agricultural area in 2010.

The region of Europe and Central Asia provides 17 percent of global production, with 13 percent of the total planted area. In the Netherlands and Belgium roots and tubers account for eight and five percent, respectively, of total harvested area. In Ukraine three percent of the total agricultural land is planted with roots and tubers, while in Belarus this share is four percent. However, these crops account for less than one percent of crop production in Central Asia and in the Caucasus and Turkey; only Armenia allocates about two percent of its harvested area to root and tuber crops.

In this region, 120 million tonnes of root and tuber crops were produced in 2010, with the Russian Federation and Ukraine accounting for 18 and 16 percent of the regional production, respectively. Germany, Poland and Belarus also produce significant amounts.

Over the last two decades production of roots and tubers in this region has grown by 12 percent when comparing the two ten-year averages, although trends are different between the sub-regions. In Central Asia, production increased by a remarkable 73 percent, in South East Europe by 46 percent, and in the Caucasus and Turkey by nine percent. However, it fell significantly: 32 percent in Central and Eastern Europe and 4 percent in EU other and EFTA. Production has not changed significantly in CIS Europe.

CHART 23: Area and production of roots and tubers, share of world total (2010)

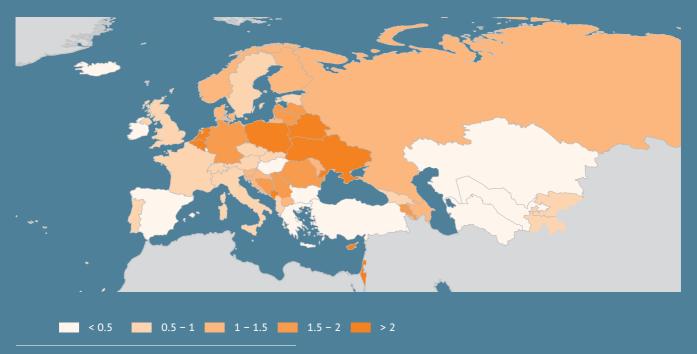


Source: Statistics Division (FAOSTAT)

Metalink: P3.FEED.FAO.ESS.RT.AH.SC, p. 110

- The region accounts for 17 percent of global production of roots and tubers
- The top producer of roots and tubers is the Russian Federation (22 million tonnes in 2010)
- Belgium has the highest proportion of roots and tubers to total harvested area (six percent)

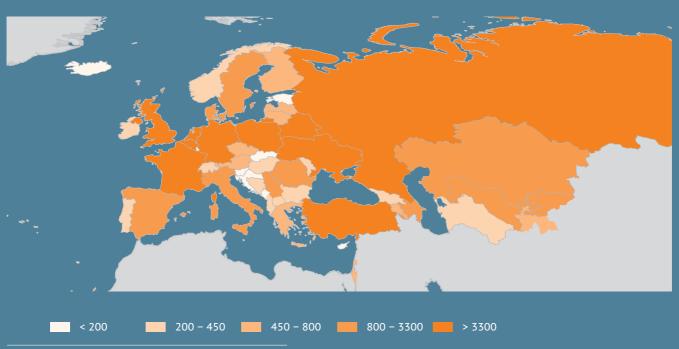
MAP 15: Roots and tubers area, share of total agricultural area (%, 2009)  $\,$ 



Source: Statistics Division (FAOSTAT)

Metalink: P3 FFFD FAO FSS RT AH SHI n 110

MAP 16: Roots and tubers production (thousand tonnes, 2010)



Source: Statistics Division (FAOSTAT)
Metalink: P3 FFFD FAO FSS RT OP p. 110