

Crop and animal production measures in Slovak agriculture

Ministry of Agriculture and Rural Development
Slovak Republic

Overview of Slovak Agriculture

Livestock 467 820 pcs
– Beef 144 875 pcs
– Dairy 144 875 pcs

Category	Year 1990	Year 2010	Decrease in pcs	Decrease in %	Year 2013
Cattle	1 563 070	467 125	1 095 945	70,1	467 820
Swine	2 520 524	687 260	1 833 264	72,7	637 167

Agricultural land 2 401 693 ha
Arable land 1 413 129 ha
Grassland 868 061 ha

Current state

Agricultural emissions in Slovakia in 2012 – 7.3% on total GHG emissions (without LULUCF)

Trend – decreasing (stagnation of agriculture, better environmental behaviour in agrisector, implemented CAP, national legislation - see slide Policy instruments)

Year	Emissions in Gg	
	CH4	N2O
1990	118,35	15,30
1995	84,12	8,57
2000	62,73	7,19
2005	55,17	6,063
2010	48,35	6,85
2012	49,24	6,71

Policy instruments (1)

Policy instrument	Objectivs
<i>Common Agricultural Policy</i>	
Cross-cutting tools, Good Agricultural and Environmental Conditions	Better soil management, reduced use of fertilisers and plant protection products, lower emissions, protection of peramanent grasslands, water protection
Integrated farming	Minimalised soil cultivation
Organic farming	Maintenance of biodiversity and natural state of soil and water
Good animal welfare	Stabling, care, fodder ...
Support of RES	Biogas plants

Policy instruments (2)

Policy instrument	Objectivs
<i>National legislation</i>	
Governmental Ordinance no. 488/ 2010 on support schemes in agriculture	GAEC, Animal welfare
Act. No 136/ 2000 on fertilisers and manure	Management of fertilisers and manure, certification, handling and utilization, soil tests
Notice no. 338/2005	Account of fertilisers/manure
Notice no. 245/2005	Certification and testing of fertilisers and manure
Notice no. 577/2005	Types of fertilisers, content, package, labeling, testing methods, risk components, limit values of these components for fertilisers, limit values for manure
Act 220/2004	Protection and utilization of agricultural land
Act 309/2009	Support of energy from renewable sources

Planned measures 2014-2020

- Planned measures – Rural Development Program 2014-2020
 - Protection of biotops of natural and non-natural grasslands (reduced use of nitrogen fertilisers, PPP, mild pasture, haying 1-2 per year) – *new measures, expected benefits in GHG reduction in general, no projections*)
 - Prevention from erosion – creating of buffer strips
 - Multifunctional field edges - bio strips on cropland (bio strips on cropland without fertilisers, mechanisation, PPP)
- LULUCF – Information on current and future LULUCF actions to the EC (june 2014)
- Building new biogas plants (current state - 92)

Main features

Activity	Emissions	Expected reduction
Soil cultivation	CO ₂ , N ₂ O	yes
Animal husbandry	CH ₄	?
Management of fertilisers/manure	NH ₃ , CH ₄ , N ₂ O	Yes
Biogas plants	-	Yes
Utilisation of plant protection products		Yes
Protection of biotops	-	Yes
Burning of field residuals - prohibited	-	yes

Achievements

Policy	Effectivness (emmissions)	Efficiency	Acceptability	Implementation	Impacts on society
CAP	+	+	+	+	+
GO 488/2010	+		+	+	+
Act 136/2000	+	+	+	+	+
Act 220/2004	+	+ -	+	+	+
Decreasing of agri production	+	-	-		-

Measures with the greatest benefit

(Major decrease of GHG due to stagnation.)

- development of biogas plants
- better manure management

Implementation of measures -

- No strategy on GHG reduction in agriculture
- The only incentives:
 - payments regarding RDP
 - feed-in tariff rates for renewable electricity from biogas plants