

SUSTAINABLE DEVELOPMENT AS ONE THE MOST IMPORTANT CHALLENGE OF THE EUROPEAN AND GLOBAL FOOD ECONOMY



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Sustainable development is “development that meets the needs of the present without compromising the ability of future generations to meet their own needs”

(United Nations General Assembly, 1987, p. 43)



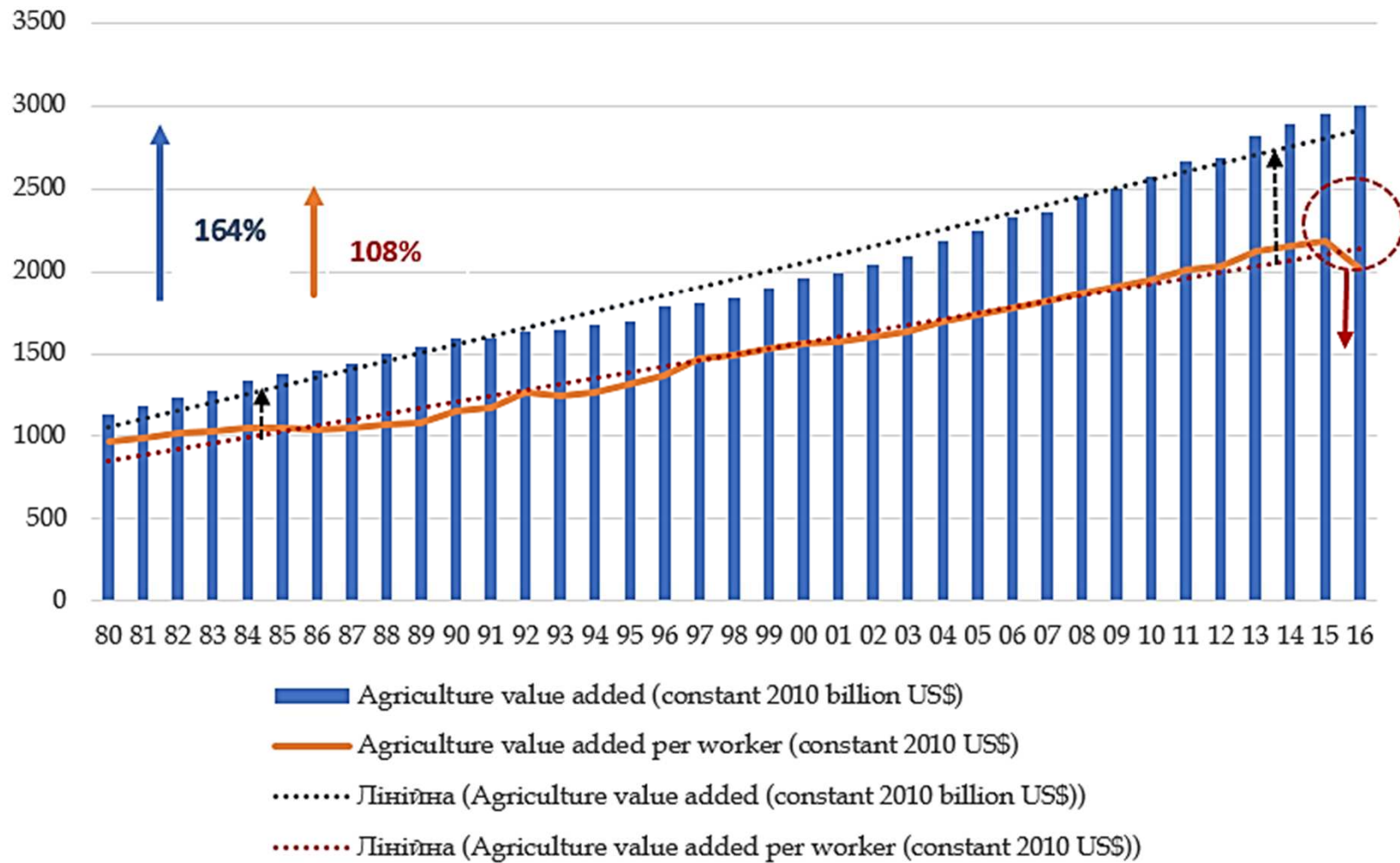


Figure 1. Agriculture value added and labor productivity in agriculture (agriculture value added per worker) in the world 1980-2016 (constant 2010 US\$).

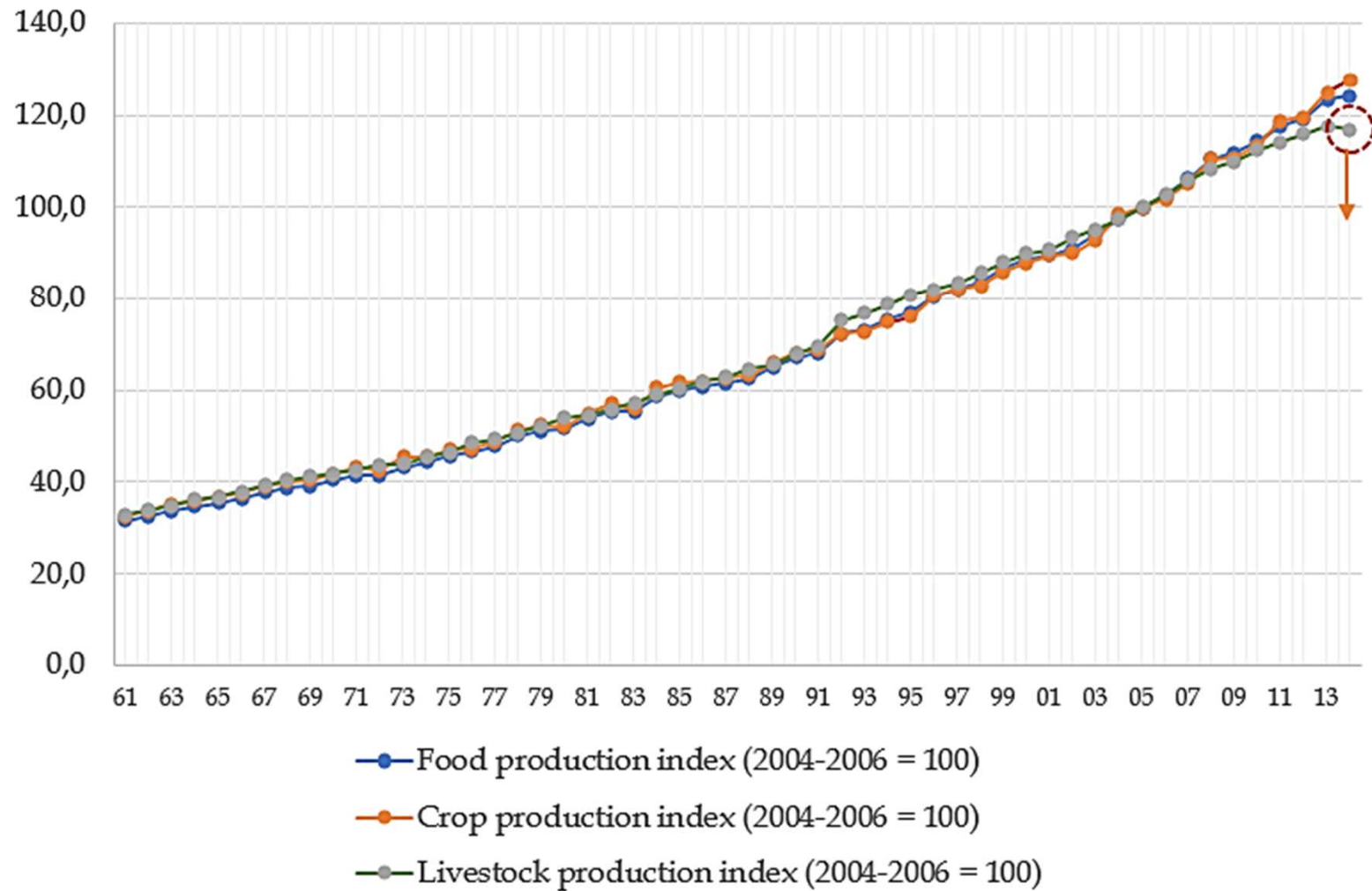


Figure 2. Food, crop and livestock production index in the world in 1961-2014 (2004-2006=100)

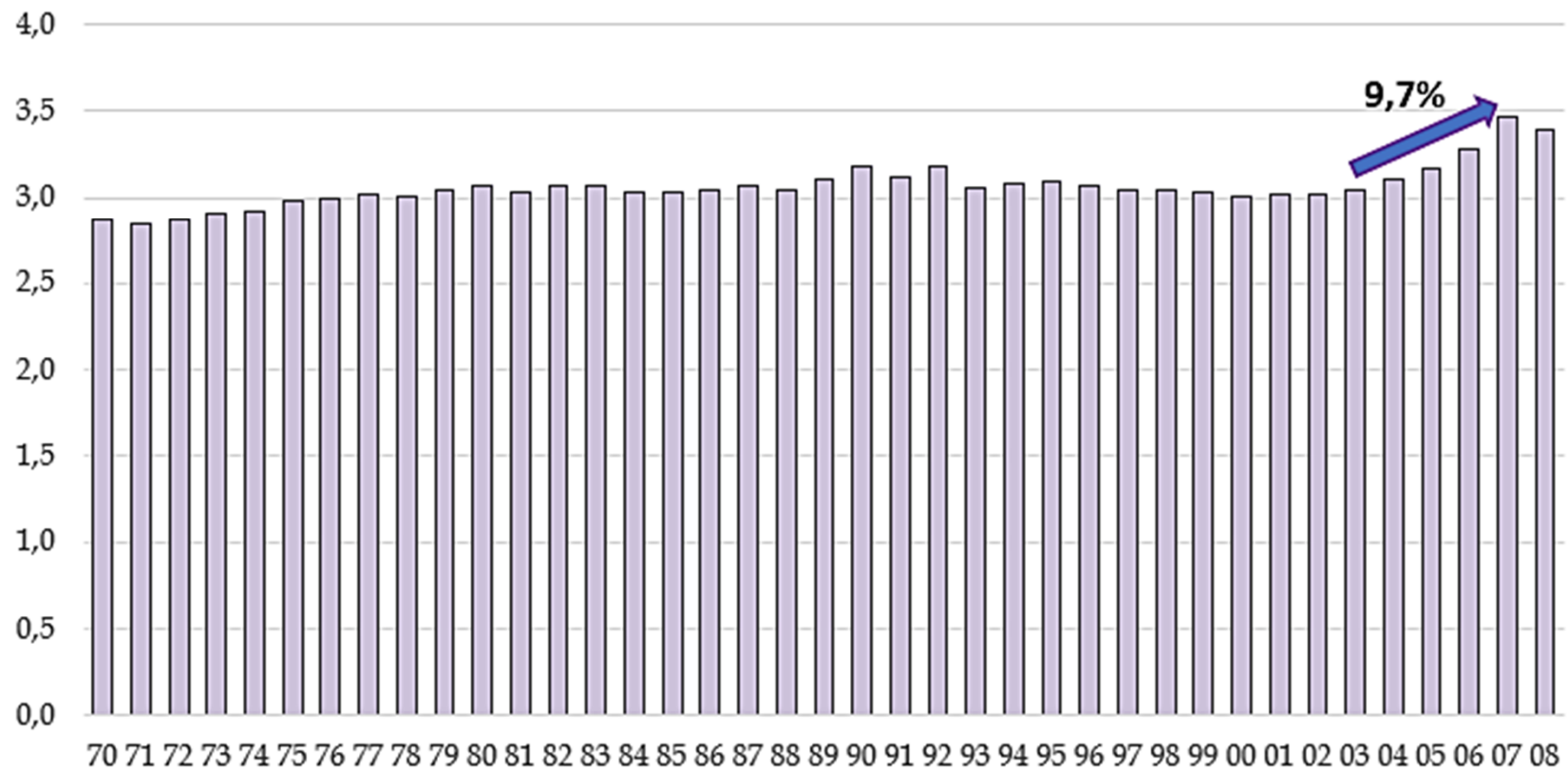


Figure 3. Agricultural methane emissions in the world (billion metric tons of CO2 equivalent)

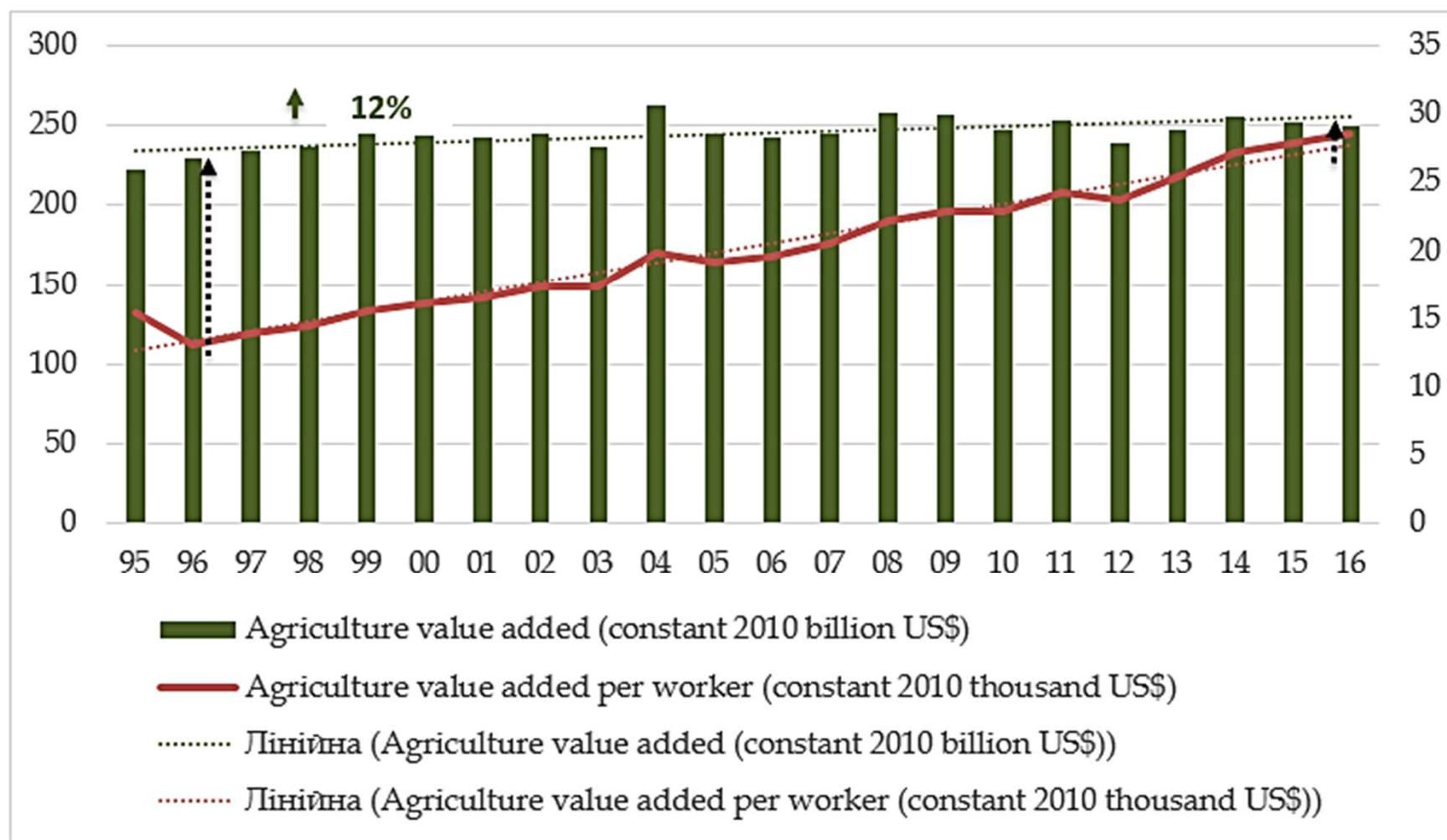


Figure 4. Agriculture value added and labor productivity in agriculture (agriculture value added per worker) in the EU 1995-2016 (constant 2010 US\$).

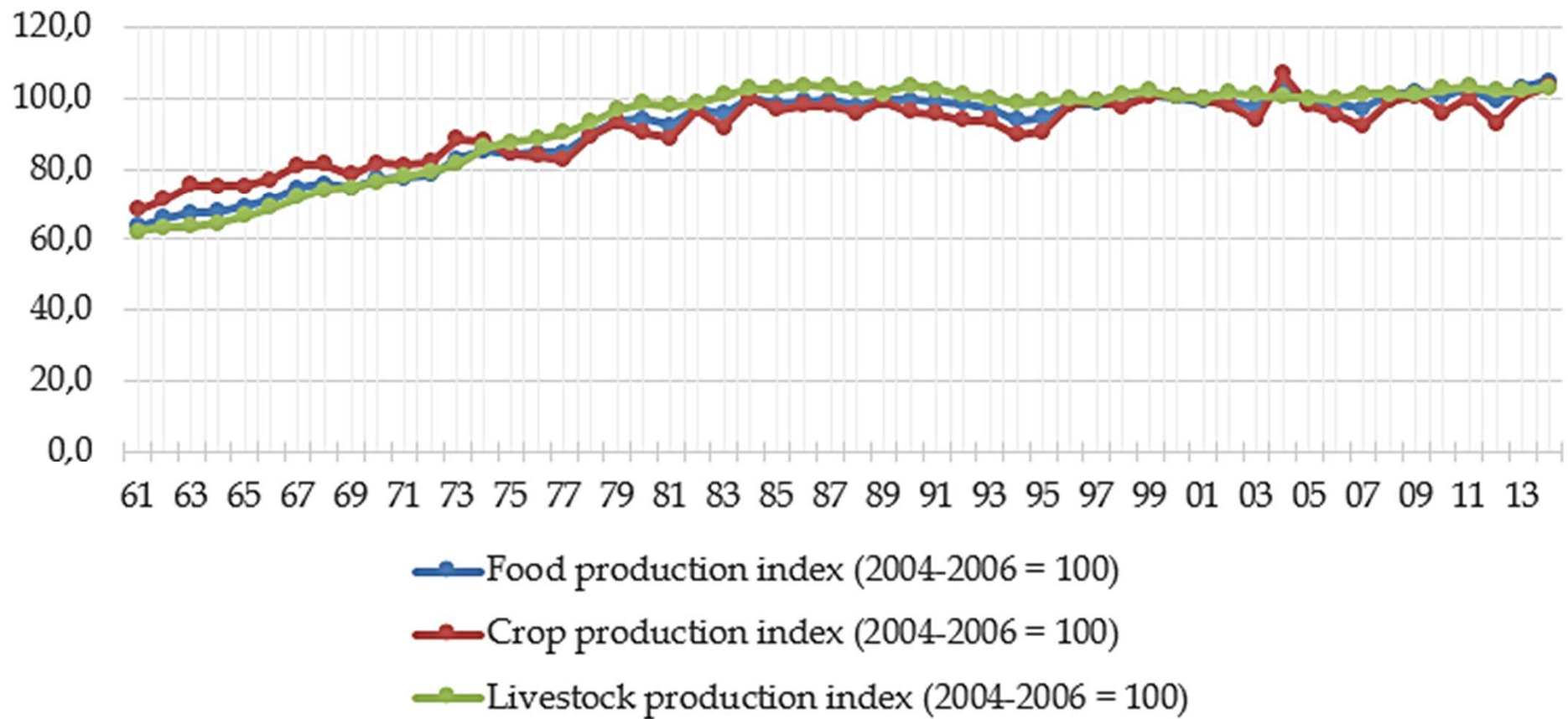


Figure 5. Food, crop and livestock production index in the EU in 1961-2014 (2004-2006=100)

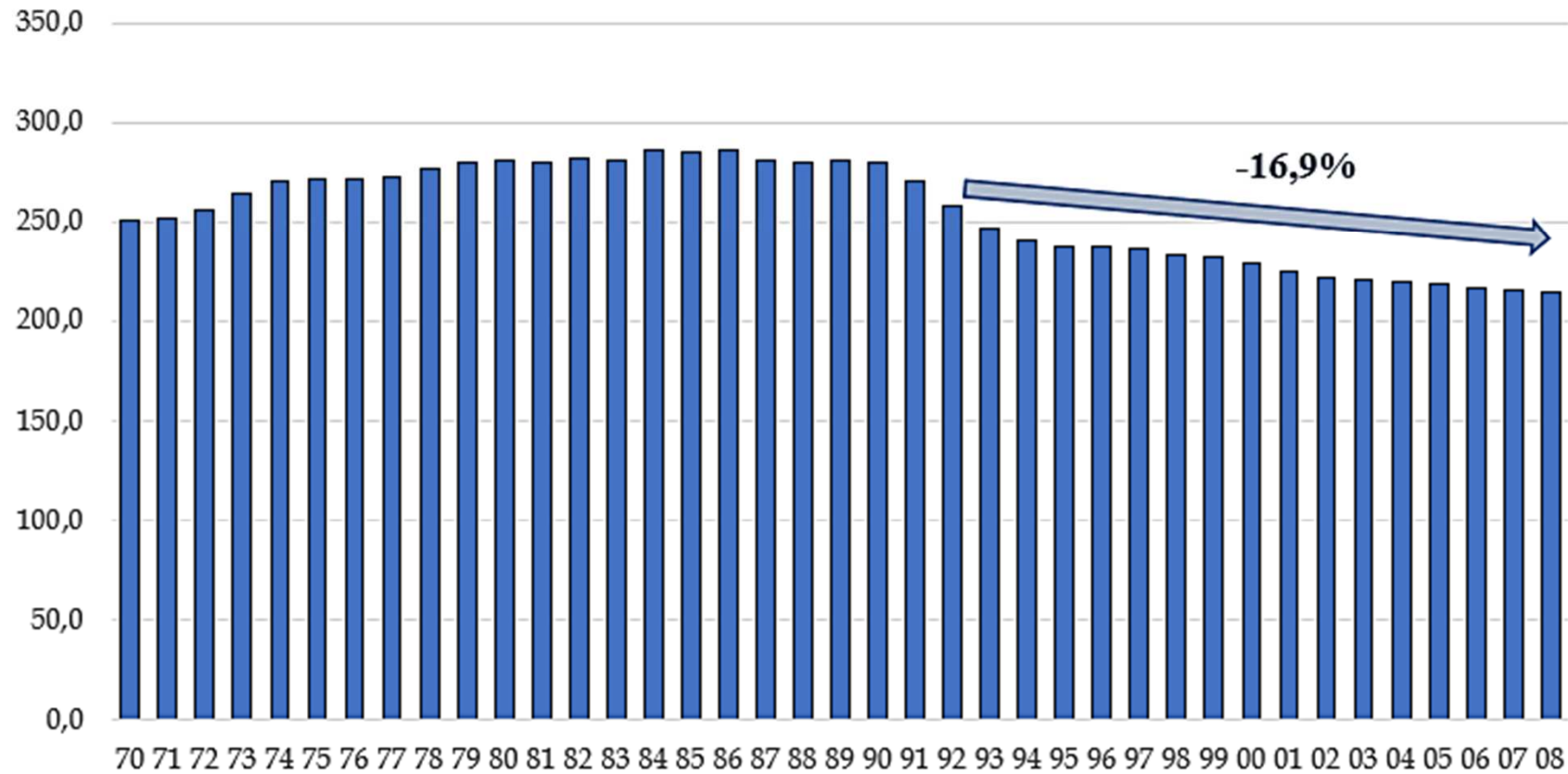


Figure 6. Agricultural methane emissions in the EU (million metric tons of CO2 equivalent)

Table 1

Environmental changes in EU-28 agriculture (2001-2016)

Indicator	2001	2004	2007	2010	2012	2013	2014	2015	2016
1. Gross nutrient balance on agricultural land by nutrient (kg per hectare)									
- Nitrogen	-	54	58	51	52	51	-	-	
- Phosphorus		4	4	2	2	2	-	-	
2. Ammonia emissions from agriculture (NH ₃) (kg per hectare)	20,9	20,7	20,9	20,3	20,3	20,4	20,7	21,0	
3. Estimated soil erosion by water (% of the non-artificial erosive area)	-	-	-	5,26	5,16	-	-	-	
4. Area under organic farming (% of utilised agricultural area)	-	-	4	5,2	5,62	5,65	5,79	6,21	6,69
5. Nitrate in groundwater (mg NO ₃ per litre)	19,2	19,3	20,4	19,3	19,1	-	-	-	-

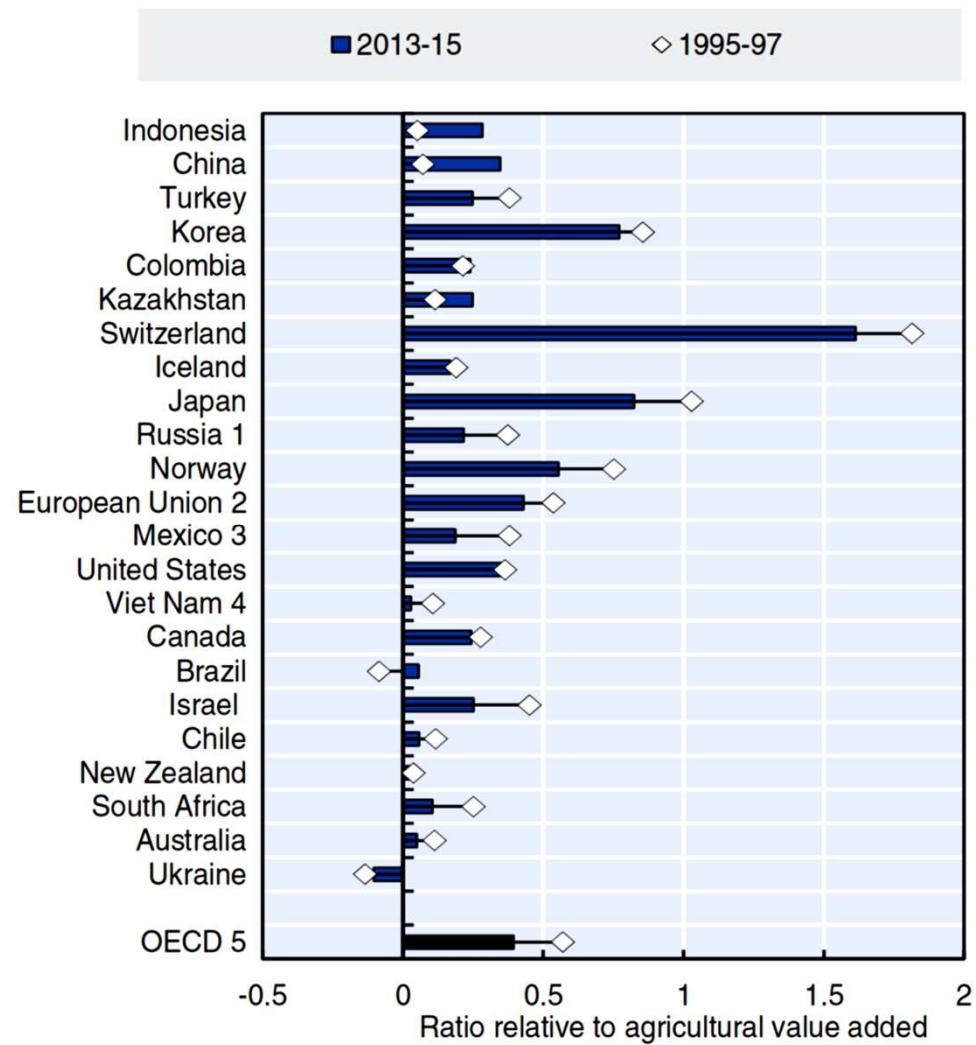


Figure 7. Total Support Estimate by country, 1995-97 and 2013-15

Source: OECD (2016), *Agricultural Policy Monitoring and Evaluation 2016*, OECD Publishing, Paris. http://dx.doi.org/10.1787/agr_pol-2016-en

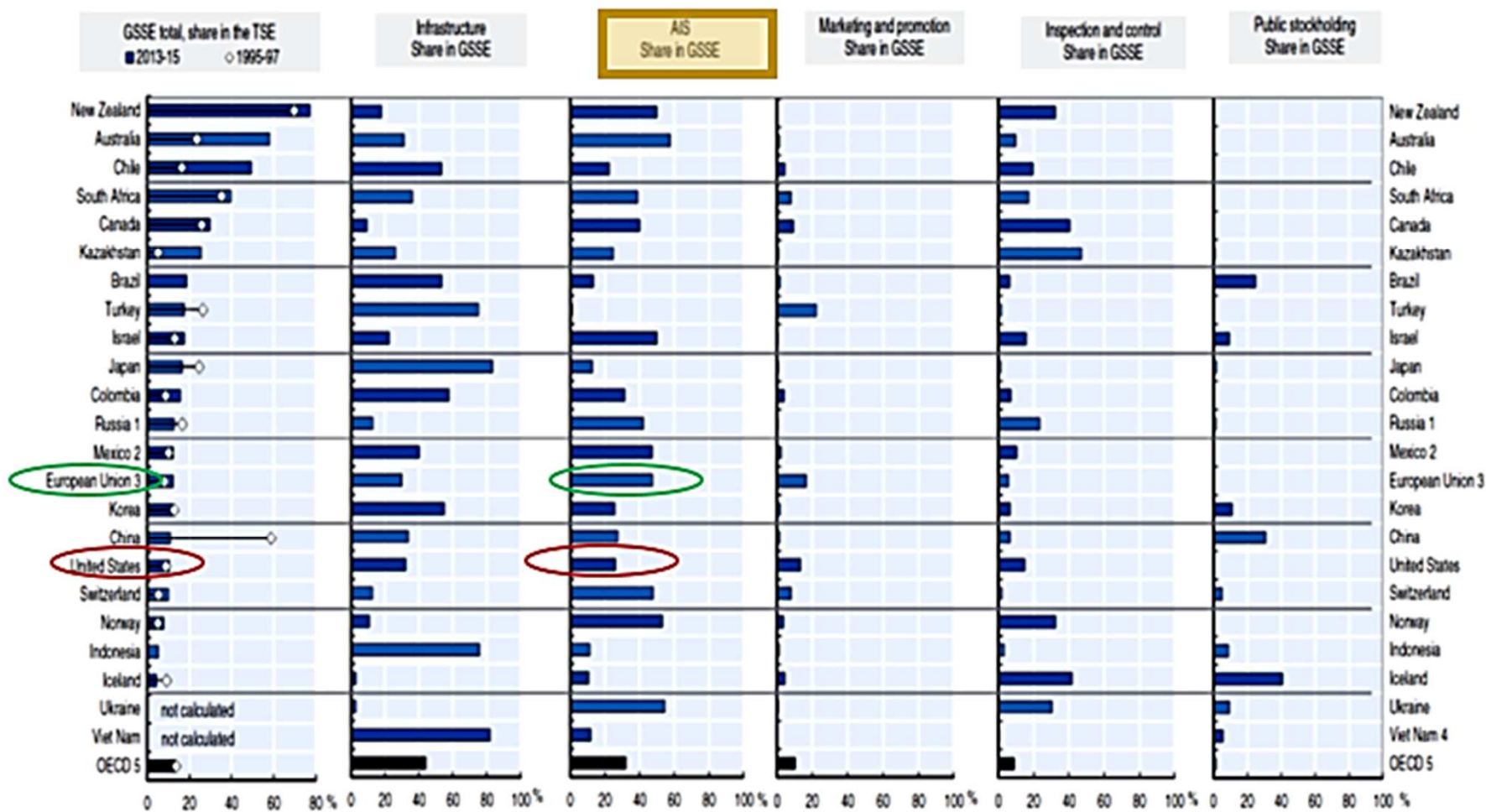


Figure 8. General Services Support Estimate: share in TSE and composition

Source: OECD (2016), *Agricultural Policy Monitoring and Evaluation 2016*, OECD Publishing, Paris. http://dx.doi.org/10.1787/agr_pol-2016-en

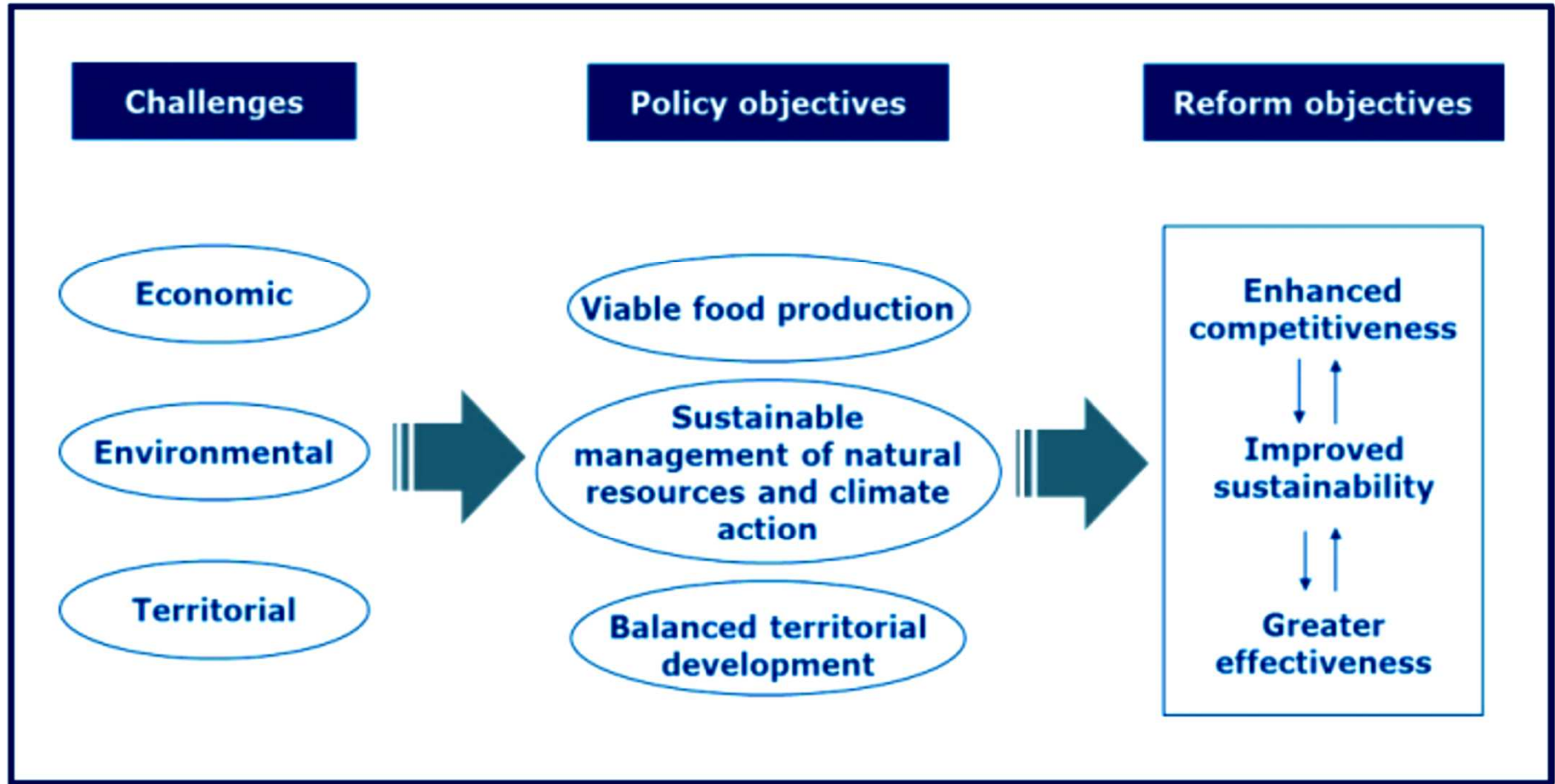


Figure 9. The CAP post-2013: From challenges to reform objectives

Source: https://ec.europa.eu/agriculture/sites//.../files/.../05_en.pdf

Table 2

Government support to agricultural research and development (Euro per inhabitant)

Indicator	2007	2010	2013	2016	2016/ 2007 (%)
EU-28:	6,3	6,5	6,1	6,4	105
- Germany	5,9	9,4	8,9	10,9	increased in 1,9 times
- France	3,7	4,8	4,7	7,1	increased in 1,9 times
- Italy	7,4	5,6	4,8	3,9	53
- Netherlands	12,3	10,6	8,9	5,2	42
- Finland	19,2	18,6	17,8	14	73
- Slovakia	1,9	2,5	2,2	1,6	84
- Poland	0,5	-	1,8	1,2	increased in 2,4 times
United States	5,6	6,4	5,1	7,6	136
Japan	6,3	8,4	6,0	7,1	113

Thank you for attention!