

Sustainable animal feed		
Goal	Procurement of animal feed that does not contribute to the destruction of habitats	
	The EU imports about 35 million tonnes of soy (<i>Glycine max</i>), corresponding to about 35 % of the global soy trade, mainly from South America. Brazil, Argentina, Paraguay, Uruguay and Bolivia produce over 50 % of the world soy and about 80 % of the soy produced in these countries is exported (Lambin et al., 2003; Nepstad et al., 2009; Teillard et al., 2016; Wassenaar et al., 2007) (Figure 1).	
	The worldwide demand for soy is driven mostly by animal production systems: about 75 % of the soy produced in the world is used as animal feed (WWF, 2016). This is not expected to change given that, despite a slowing growth rate, the global demand for food resulting from livestock production is expected to continue to increase, particularly in South Asia and Africa, after a period of rapid growth in Latin America (FAO, 2015).	
	Soy production grew tremendously over the last four decades and is still increasing (Cattelan and Dall'Agnol, 2018), being one of the main drivers causing the loss of primary forests, areas of cerrado and unique wetlands in the Amazon, Pantanal and Mato Grosso regions.	
	The European CAP regulations (EC, 2013) do not apply to South American agriculture. There- fore, the best practice is to prioritize the certified production of fodder in Europe. Importing from other biodiversity-certified sources is an alternative, but local production is preferable as it prevents Greenhouse Gas (GHG) emissions from transport.	
Short description of the measure	Choosing not to import soy products from sources outside of the European Union also makes it easier to avoid genetically modified (GMO) varieties. More than 90 % of the soy produced in South America consists of GMO varieties (Trase, 2018). Currently, the use of 17 GM soybean varieties, for food or animal feed production, is allowed in the European Union (EU, 2019). However, products containing GM products for human consumption require compliance with the EU's labelling and traceability rules.	

Figure 1 – More than 50 % of the world soybean production comes from South America. Photo credits: © pixabay.com

Quality elements of soundly im- plemented bio- diversity measures	 Livestock are fed exclusively with pastures or locally produced fodder; Any imported feed comes from biodiversity-friendly certified producers inside the European Union; Any imported feed coming from locations outside the European Union comes from biodiversity-friendly certified producers.
Effects on biodi- versity (ecosystems, species, soil bio- diversity)	Avoidance of deforestation and ecosystem destruction driven by animal feed demand.
Other positive effects/benefits for the farmer	Livestock reared in pastures and fed primarily with grass species produce milk or meat with higher levels of omega-3 fatty acids; vitamins A, E, 82, and 89; carote- noids; and phenolics (Duru et al., 2017).
Indicator/key data	 Availability of enough area of local pastures to feed the livestock; Local production of animal fodder; Documents attesting a biodiversity-friendly certified source for any imported feed.
References	 Cattelan, A.J., Dall'Agnol, A., 2018. The rapid soybean growth in Brazil. OCL - Oilseeds fats, Crop. Lipids 25, D102. Duru, M., Bastien, D., Froidmont, E., Graulet, B., Gruffat, D., 2017. How products from grass-fed cattle contribute to nutritient intake and consumer health. FOURRAGES 230, 131–140. EC, 2013. REGULATION (EU) No 1307/2013 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 17 December 2013 establishing rules for direct payments to farmers under support schemes within the framework of the common agricultural policy and repealing Council Regulation. Off. J. Eur. Union L 347, 608– 670. EU, 2019. EU Register of authorised GMOs [WWW Document]. EU Regist. Genet. Modif. food Feed. URL https://webgate.ec.europa.eu/dyna/gm_register/index_en.cfm FAO, 2015. The second report on the state of the world's animal genetic resources for food and agriculture. FAO Commission on Genetic Resources for Food and Agriculture Assessments, Rome, Italy. Lambin, E.F., Geist, H.J., Lepers, E., 2003. Dynamics of land-use and land-cover change in tropical regions. Annu. Rev. Environ. Resour. 28, 205–241. Nepstad, D., Soares-Filho, B.S., Merry, F., Lima, A., Moutinho, P., Carter, J., Bowman, M., Cattaneo, A., Rodrigues, H., Schwartzman, S., McGrath, D.G., Stickler, C.M., Lubowski, R., Piris-Cabezas, P., Rivero, S., Alencar, A., Almeida, O., Stella, O., 2009. The end of deforestation in the Brazilian Amazon. Science (80). 326, 1350–1351.



Further information: Knowledge Pool

This Action Fact Sheet belongs to the training package for product and quality managers of companies and was developed within the project LIFE Food & Biodiversity (Biodiversity in Standards and Labels of for the Food Industry). The main objective of the project is to improve the biodiversity performance of standards and sourcing requirements in the food industry by helping standard organisations to integrate efficient biodiversity criteria into their schemes and motivating food processing companies and retailers to include comprehensive biodiversity criteria into their sourcing guidelines.

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