ACTION FACT SHEET FOR PRODUCT MANAGER

Crop diversification and introduction of legumes

Goal	Increase crop diversity at farm level and introduce legumes
Short description of the measure	A diverse crop system will contribute to : ▪ Limit the development of weeds, pests, and pathogens (cycle disruption by alternating crop families) ▪ Optimize the supply of nitrogen by the introduction of legumes (nitrogen fixing plants) ▪ Valorise nutrient resources at different depth (complementarity of root system) ▪ Structure the soil ▪ Diversify the agricultural landscape (smaller plots) which lead to increase habitat mosaic favourable for biodiversity (wild species) ▪ Provide diverse nutrient resources during a large time scale
Quality elements of soundly implemented biodiversity measures	▪ The main crop is grown at a maximum of 75 % of the total UAA of the farm. ▪ The first two main crops make up a maximum amount of 90 % of the total UAA. ▪ Legumes and mixture with legumes are grown on at least 10 % of the farms'UAA. ▪ In temperate climate, the cultivation of four main crops as well as the cultivation of cover crops. ▪ In semi-arid regions, the cultivation of three main crops as weel as the cultivation of cover crops.

Peas (26/04)

Lentil (24/05)

Wheat (24/05)

Effects on biodiversity (ecosystems, species, soil biodiversity)	▪ Reduction of pesticide use (crop diversification) ▪ Reduction of nitrogen use (legumes) ▪ Cultivated biodiversity
Other positive effects/benefit for the farmer	▪ Positive effect on soil by increasing soil structuration and on climate change as the introduction of legumes decreases NH3 and N2O emissions ▪ The diversification of crop production can also lead to reduce the high workload period (winter / spring crops).

Indicator/key data	▪ Diversity of crop production (Nb) ▪ Share of legumes or mixture of legumes in the UAA (%) ▪ Share of the main crop in the UAA (%)
Reference	▪ Meynard J.M. (coord.), Messéan A. (coord.), Charlier A., Charrier F., Farès M., Le Bail M., Magrini M-B. 2013. Crop diversification : obstacles and levers. Study of farms and supply chains ▪ https://www6.paris.inra.fr/depe/content/download/3736/35824/version/1/file/Version+Anglaise+Diversification-8pages.pdf ▪ Greening - Diversifying crops : https://ec.europa.eu/agriculture/direct-support/greening_en

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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