



***LIFE –
new solutions for the environment
and agriculture***

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LIFE Farming: environmentally sustainable agriculture

New solutions for the environment and agriculture

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Preliminary remarks on agriculture

- *Agricultural practices since WWII mainly due intensification and use of pesticides affect environment: water, soil, biodiversity, etc.*
- *Recent scientists reports show link between intensive agriculture and loss of biodiversity, e.g. reduction of 75% of insect biomass in Germany in last 27 years → leads to reduction of birds*

Alternative agriculture methods

- *Other practices are possible*
- *Solutions are developed and tested to move to environmentally sustainable agriculture*
- *LIFE programme plays a role: mitigating possible adverse effects on environment and climate through projects with demonstration and/or innovative character*

The contribution of LIFE: examples

- *Organic fertilisation in vineyards*
- *Reduced ammonia emissions in dairy farming*
- *Circular economy model in high quality dairy industry: production of cheese*
- *Adapting to climate change impacts in the Mediterranean islands' agriculture*
- *Mitigating climate change through a sustainable supply chain for the olive oil*
- *Demonstration of a new agro-silvo-pastoral land use to improve farm profitability in mountain areas*
- *Sustainable adaptation of typical EU farming systems to climate change*



VRT for organic fertilisation in vineyards



- *LIFE15 ENV/IT/000392 VITISOM LIFE*
- *Duration: 42 months–EU contribution 1,178,912€*
- *Apply VRT (variable rate technology) used in field crop management, to organic fertilisation in vineyards*
- *Expected result: optimised input of organic matter to increase properties of vine (vigour, quality and taste, ...).*
- *Cost effective method: increased soil fertility and wine production*

Reduced ammonia emissions in dairy farming

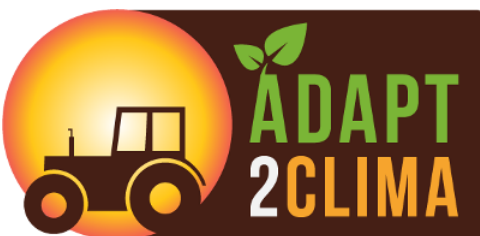
- *LIFE16 ENV/NL/000363 LIFE CMCD*
- *Duration: 3 years – EU contribution: 1,846,434€*
- *solution proposed: robots to separate faeces and urine at source*
- *creating sub-products that can be used as fertilisers or bedding material*
- *reducing drastically ammonia emissions compared to the situation with no separation*

Demonstrative model of circular economy process in a high quality dairy industry



- *LIFE15 ENV/IT/000585 – LIFE DOP*
- *Duration: 4.5 years- EU contribution 2,083,547€*
- *model applied to the production of Grana Padano DOP (Protected Designation of Origin) and Parmigiano Reggiano DOP*
- *re-use all waste products/materials generated along all phases of production chain*
- *greater resource efficiency; also reduces PM10, ammonia, NOx and CO2 emissions*
- *Manure transformed into biogas and fertilisers*





Adaptation to Climate change Impacts on the Mediterranean islands' Agriculture

- *LIFE14 CCA/GR/000928 - LIFE ADAPT2CLIMA*
- *Duration: 43 months – EU contribution: 898,236€*
- *development of adaptation strategies for agriculture through innovative decision support tool*
- *Tool aims to simulate impacts of climate change on crop production and effectiveness of selected adaptation options in decreasing vulnerability to climate change of 3 Mediterranean islands: Crete (Greece), Sicily (Italy), and Cyprus*

Mitigating climate change through a sustainable supply chain for the olive oil sector



- *LIFE15 CCM/IT/000141 - OLIVE4CLIMATE*
- *Duration: 3 years – EU contribution: 1,259,499€*
- *innovative cultivation approach includes sustainable production of olive oil and promoting the uptake of secondary products derived from integrated cultivation systems*
- *knowledge generated by the project will benefit various public groups: researchers, olive sector, general public*

Demonstration of a new agro-silvo-pastoral land use to improve farm profitability in mountain areas

- *LIFE15 ENV/ES/000506 – POLYFARMING*
- *Duration: 5 years – EU contribution: 672,863€*
- *Objective: to test an innovative and cost-efficient multifunctional agro-silvo-pastoral system, to stop the abandonment of multifunctional agriculture in the Mediterranean mountains*
- *The system includes integrated forest management, innovative management of cattle, multiple management of fruit trees optimised for livestock needs; and self-sufficient management of mountain orchards using forest resources*

Sustainable adaptation of typical EU farming systems to climate change



- *LIFE15 CCA/DE/72 - LIFE AGRI Adapt*
- *Duration: 40 months – EU contribution 1,295,347€*
- *Objective: to demonstrate how sustainable adaptation measures can help livestock, arable and permanent crop farms become more climate resilient*
- *The project develops and tests a common methodology (decision supporting tool) to test sustainable measures and management approaches in 120 pilot farms (29.600 ha)*
- *Promotion, training and awareness raising with stakeholders (farmers, their associations, technical consultants)*

Conclusion



- *LIFE is the only EU programme specific to the environment and climate change. LIFE has been contributing since 25 years thanks to more than 4500 projects implemented on the fields, to preserving and improving the EU environment*

Contribution of LIFE to sustainable agriculture

- LIFE contributed to sustainable agricultural practices up to 14 million eur for period 2014-16*

