Promoting the Transition to a Green Economy
ENRD Thematic Group on Resource Efficiency

Working document
Summary of relevant good practice examples
1. **Context and background**

The ENRD Thematic Group (TG) on Resource Efficient Rural Economy was set up in autumn 2016 and has concluded its planned work in July 2017. The work of the TG throughout the year concentrated on how to support the integration of resource efficient activities and thinking relating to soils and water into the implementation of rural development programmes. The focus of the work was on the use and management of soils and water and more specifically the sub-themes of soil nutrients, soil carbon, and water availability. In addition to these three sub-themes, the work of the TG identified three horizontal / cross-cutting guiding topics on which it focused the research efforts. These were the motivation gap; knowledge gap; and policy gap. To address these issues, three related but distinct strands of work were undertaken in the context of the TG activities:

1. **Framing background analysis of the content and focus of RDPs across the EU** with respect to resource efficiency, examining the design and implementation of measures;

2. **A comparative regional analysis** to investigate the approaches taken in different RDP regions to address resource efficiency, with reference to the broader policy and institutional setting;

3. **Identification and collection of good practice examples** where resource efficiency has been improved through the use of EAFRD and other funding and support through RDPs.

This document provides an overview of the third work strand, namely the identification and collection of resource efficiency relevant good practices. It presents the complete list of relevant projects along with a short collection of typical examples per thematic category.

2. **Summary information**

The collection of good practices was mandated by the members of the TG who acknowledged the existence of a large number of relevant projects examples from which the group could learn from. At the same time the TG pointed out possible limitations of this strand of work. TG members considered that although a very large number of examples and case studies does exist, they often do not contain the level of detail or specificity necessary to understand why and how initiatives developed and worked in practice. In this context, a thorough investigation of the good practice examples from different sources was undertaken. The objectives of this exercise were to:

- **Collate relevant projects** already available;
- **Identify possible success factors or bottlenecks;** and
- **Formulate possible recommendations for discussion** for the TG.

Overall, more than 100 relevant projects from 22 Member States were identified from the projects databases of the ENRD, EIP AGRI, LIFE and projects that were provided by the TG members. Out of these projects 40 were financed by the EAFRD, 49 were financed by the LIFE programme and 14 from other sources, including European research funding sources i.e. Horizon 2020 and its predecessor FP7, and private initiatives. Most the projects focused on water availability and soil nutrients (43 and 40 projects respectively), while 10 projects focused on soil carbon. Another 10 addressed simultaneously more than one of the three themes. In budgetary terms, the total value of the examined projects amounted to 142.5 mil EUR. The value of water availability related projects was 71.6 mil EUR, while 40.5 mil EUR concerned projects on soil nutrients. Projects addressing soil carbon issues amounted to 16.1 mil EUR projects and 14.3 mil EUR concerned projects addressing combinations of the three themes.

The below table presents information concerning the number of projects examined per theme, origin of funding, Member State distribution and budgetary data.
### Collected projects per Member State and theme and origin of funding

<table>
<thead>
<tr>
<th>Water availability</th>
<th>Soil nutrients</th>
<th>Soil carbon</th>
<th>Multiple objectives</th>
</tr>
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<tbody>
<tr>
<td>EAFRD</td>
<td>LIFE</td>
<td>Other</td>
<td>EAFRD</td>
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<td>FR</td>
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<td>IT</td>
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<td>Various MS</td>
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<td><strong>Total</strong></td>
<td><strong>16</strong></td>
<td><strong>20</strong></td>
<td><strong>7</strong></td>
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<td><strong>Total budget (mil EUR)</strong></td>
<td><strong>39.6</strong></td>
<td><strong>32.1</strong></td>
<td><strong>n.a.</strong></td>
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</table>

### 3. Findings deriving from the Examples

The projects which were identified through the screening process were systematically reviewed and some also discussed at the Thematic Group meetings. The findings derived from this work strand of the Thematic Group are shown below, organised into the three horizontal / cross-cutting topics on which the working approach was based.

**Motivation gap**

➢ Preference for easy and familiar solutions - The project LESELAM (FR) highlighted that discussions and interest among farmers were often not so much about new innovative techniques, but about sharing practice that already exists locally.
Complexity of tools - Project IES (ES) considered the current generation of irrigation simulation tools not adequate for the task. Some of them were too complex for use by farmers, or even technicians, whilst others were based on such simple models that the data produced can be used as no more than a reference.

‘Upscaling to commercial’ - The LIFE Seq-Cure project (IT) highlighted that although testing the use of wood/fibre and raw vegetable oil chains for biogas produced interesting results, the up-scaling to commercial production proved unfeasible due factors like technological limits or implementation costs.

Knowledge gap

Understanding and misconceptions - CropsforBetterSoil project (ES) pointed out that organic agriculture continues to be scarcely applied, especially in poor-soil areas mainly due to insufficient knowledge about optimal application techniques and the perception of low economic benefits unless supported by subsidies.

Awareness – The Erosion prevention project (ES) underlined the lack of knowledge among farmers with regard to the problems related with soil erosion and the need to use more suitable agricultural practices. The project DEMETER (BE) commented the need for raised awareness among policymakers on the principles and benefits of sustainable soil and nutrient management, which will help with the implementation of the Soil Framework Directive.

Importance of data - The work of the EIP Operational Groups ‘Valoriser les Potentiels céréaliers en climat méditerranéen’ (FR) emphasised that regional production potentials are still far from being fully exploited. This would require large amounts of regional related data that are not easily collected.

Policy gap

Policy delivery - Projects Aquor (IT) and ROEM-plus (ES) indicated the need for improved monitoring, assessment and dissemination of resource efficiency related results. Monitoring of changes requires time that exceeds projects duration according to the projects Aquabrava (SE) and WAMAR (ES). The project HydroSense (EL) mentioned the need for delineation of management zones and spatially-variable application systems. Project MANEV (ES) remarked that cost-effective solutions require integrated policies.

Role of the private sector – Projects from Spain (ROEM-plus, AQUAVAL) focused on the private sector’s role by commenting that the private sector could implement solutions when public authorities can’t deliver, while linking private entities with public administrations could accelerate the diffusion of technologies and methodologies.

Stakeholder engagement – A project on planting buffer strips in the Czech Republic, suggested that brokers could facilitate the uptake of resource efficient measures and be part of policy delivery systems. The project TRUST (IT) underlined that agreements could be established with stakeholders for the provision of monitoring data.
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<tr>
<th>N.</th>
<th>MS</th>
<th>Start</th>
<th>End</th>
<th>Theme</th>
<th>Project name</th>
<th>Description</th>
<th>Funding</th>
<th>Total Budget</th>
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<tr>
<td>9</td>
<td>FI</td>
<td>2015</td>
<td>2019</td>
<td>Water availability</td>
<td>Ravinnerenki project</td>
<td>The objective of this project is to promote nutrient recycling and water protection. The project promotes the best available measures for nutrient recycling, soil management and runoff water management.</td>
<td>EAFRD</td>
<td>n.a.</td>
<td><a href="https://pohjois-karjala.proagria.fi/hankkeet/ravinnerenki-6555">https://pohjois-karjala.proagria.fi/hankkeet/ravinnerenki-6555</a></td>
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<td>11</td>
<td>IT</td>
<td>2012</td>
<td>2014</td>
<td>Water availability</td>
<td>IRRINATE - IRRIFRAME</td>
<td>Irriframe is an expert system for Irrigation Scheduling, developed by the CER implementing the results of more than 50 years of research on plant/water relation and sustainable irrigation management. The project was supported and co-funded by the Emilia-Romagna Region with the aim to progressively reduce water use for irrigation.</td>
<td>EAFRD</td>
<td>€ 134 000</td>
<td><a href="http://enrd.ec.europa.eu/projects-practice/irrinate-irriframe-sustainable-irrigation-management-0_en">http://enrd.ec.europa.eu/projects-practice/irrinate-irriframe-sustainable-irrigation-management-0_en</a></td>
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<td>12</td>
<td>NL</td>
<td>2013</td>
<td>2015</td>
<td>Water availability</td>
<td>Moisture management</td>
<td>The project aims to respond on how to manage moisture availability by making maximum use of systems/methods which will hold water and can release it during a long period to the crop. Project activities include on farm experiments and developing new practices with farmers.</td>
<td>EAFRD</td>
<td>n.a.</td>
<td><a href="http://ec.europa.eu/eip/agriculture/en/content/moisture-management">http://ec.europa.eu/eip/agriculture/en/content/moisture-management</a></td>
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<td>13</td>
<td>NL</td>
<td>2012</td>
<td>2013</td>
<td>Water availability</td>
<td>Reconstruction of the Averloosche Leide canal</td>
<td>A canal stream was reconstructed to get extra water storage capacity and to improve the water quality and biodiversity in the surrounding area.</td>
<td>EAFRD</td>
<td>€ 1 300 000</td>
<td><a href="http://enrd.ec.europa.eu/projects-practice/reconstruction-averlosche-leide-canal_en">http://enrd.ec.europa.eu/projects-practice/reconstruction-averlosche-leide-canal_en</a></td>
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<td>14</td>
<td>PT</td>
<td>n.a.</td>
<td>n.a.</td>
<td>Water availability</td>
<td>New Technologies in Irrigation for Quality Wheat Production</td>
<td>The objective of this project was to validate different solutions that have been identified by researchers to improve the efficiency of some productions factors, namely water and nitrogen. Also, to work on the selection of new varieties with high genetic yield potential and technological value for bread and pasta industries, adapted to the Mediterranean pattern of the cereal production areas of Portugal.</td>
<td>EAFRD</td>
<td>n.a.</td>
<td><a href="http://ec.europa.eu/eip/agriculture/en/content/novas-tecnologias-de-produ%CC%81o-de-trigo-de-qualidade-em-regadio">http://ec.europa.eu/eip/agriculture/en/content/novas-tecnologias-de-produ%CC%81o-de-trigo-de-qualidade-em-regadio</a></td>
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<td>15</td>
<td>PT</td>
<td>n.a.</td>
<td>n.a.</td>
<td>Water availability</td>
<td>Information system for maize irrigation in Alentejo, Sorraia and Tagus Valley</td>
<td>Corn farmers identified the need to obtain information on watering needs to increase the effectiveness and efficiency of water use, maximizing cost / benefit ratio.</td>
<td>EAFRD</td>
<td>n.a.</td>
<td><a href="http://ec.europa.eu/eip/agriculture/en/content/implementa%C3%A7%C3%A3o-dum-sistema-de-informa%C3%A7%C3%A3o-para-reg-a-do-milho-para-t%C3%AAs-regi%C3%B5es-alentejo-regi%C3%A3o">http://ec.europa.eu/eip/agriculture/en/content/implementa%C3%A7%C3%A3o-dum-sistema-de-informa%C3%A7%C3%A3o-para-reg-a-do-milho-para-t%C3%AAs-regi%C3%B5es-alentejo-regi%C3%A3o</a></td>
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<td>16</td>
<td>SE</td>
<td>2011</td>
<td>2013</td>
<td>Water availability</td>
<td>Water preservation project ‘AQUABRAVA’</td>
<td>This LEADER-funded project created several small wetlands and helped raise awareness of and interest in water protection among landowners. It also contributed to increasing the amount of available water in the island of Gotland.</td>
<td>EAFRD</td>
<td>€ 154 554</td>
<td><a href="http://enrd.ec.europa.eu/projects-practice/water-preservation-project-%E2%80%98aquabrava-%E2%80%99_en">http://enrd.ec.europa.eu/projects-practice/water-preservation-project-%E2%80%98aquabrava-%E2%80%99_en</a></td>
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<td>29</td>
<td>IT</td>
<td>2010</td>
<td>2013</td>
<td>Water availability</td>
<td>WIZ</td>
<td>Development of decision-support tools to facilitate drinking water planning.</td>
<td>LIFE</td>
<td>€ 1 896 540</td>
<td><a href="http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=search.dspPage&amp;n_proj_id=3692">http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=search.dspPage&amp;n_proj_id=3692</a></td>
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<td>30</td>
<td>IT</td>
<td>2010</td>
<td>2012</td>
<td>Water availability</td>
<td>WATACLIC</td>
<td>Demonstrating the effectiveness of fiscal and communication activities to reduce water and energy consumption in urban areas.</td>
<td>LIFE</td>
<td>€ 767 545</td>
<td><a href="http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=search.dspPage&amp;n_proj_id=3499">http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=search.dspPage&amp;n_proj_id=3499</a></td>
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<td>33</td>
<td>LV</td>
<td>2010</td>
<td>2012</td>
<td>Water availability</td>
<td>HydroClimateStrategy</td>
<td>Development of an integrated strategy for the city of Riga to adapt to the hydrological processes intensified by climate change phenomena.</td>
<td>LIFE</td>
<td>€ 662 240</td>
<td><a href="http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=search.dspPage&amp;n_proj_id=3413">http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=search.dspPage&amp;n_proj_id=3413</a></td>
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<td>37</td>
<td>DE</td>
<td>n.a.</td>
<td>n.a.</td>
<td>Water availability</td>
<td>WAgriCO</td>
<td>Developing teaching material regarding water protection, integrating water protection into the vocational education of farmers. Overall, the aim is to strengthen the implementation of the WFD, and through the teaching material help farmers to understand the legal framework and how to implement it.</td>
<td>Other</td>
<td>n.a.</td>
<td><a href="http://www.wagrico.de/">www.wagrico.de/</a></td>
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<tr>
<td>38</td>
<td>EE</td>
<td>2015</td>
<td>2015</td>
<td>Water availability</td>
<td>Safe use of sewage sludge and sewage sludge for the production of high-efficiency biomass in high-speed energy shale</td>
<td>The project aimed to enable an efficiency increase in Short-Rotation-Plantation (SRP) biomass production up to 3 times throughout Europe, by reusing wastewater and sewage sludge for irrigation and fertilisation, and to enable the safe and efficient application of wastewater and sewage sludge in SRPs.</td>
<td>Other</td>
<td>n.a.</td>
<td><a href="http://ec.europa.eu/eip/agriculture/en/content/reovee-ja-%C3%A4%C3%A4kmud-a-ohitu-kasutuse-v%C3%85malused-%C3%85rg-e-efektiivsusega-biomassi-tootmiseks">http://ec.europa.eu/eip/agriculture/en/content/reovee-ja-%C3%A4%C3%A4kmud-a-ohitu-kasutuse-v%C3%85malused-%C3%85rg-e-efektiivsusega-biomassi-tootmiseks</a></td>
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<td>39</td>
<td>IT</td>
<td>2013</td>
<td>2015</td>
<td>Water availability</td>
<td>FIGARO</td>
<td>The objective of the FIGARO project is to significantly reduce the use of fresh water on farm level through developing a cost-effective, precision irrigation management platform.</td>
<td>Other</td>
<td>n.a.</td>
<td><a href="http://www.figaro-irrigation.net/fileadmin/user_upload/figaro/docs/D8_2-8_3_Final1_2.pdf">www.figaro-irrigation.net/fileadmin/user_upload/figaro/docs/D8_2-8_3_Final1_2.pdf</a></td>
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<td>40</td>
<td>IT</td>
<td>2015</td>
<td>2015</td>
<td>Ongoing</td>
<td>LIFE ReQpro</td>
<td>The LIFE ReQpro project will contribute to the protection of water resources through efficient reclamation and reuse of wastewater for irrigation of agricultural land, substituting surface water and groundwater resources. This objective will be achieved by</td>
<td>Other</td>
<td>n.a.</td>
<td><a href="http://ec.europa.eu/eip/agriculture/en/content/life-reqpro-modello-di-recupero-e-riutilizzo-">http://ec.europa.eu/eip/agriculture/en/content/life-reqpro-modello-di-recupero-e-riutilizzo-</a></td>
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<td>41</td>
<td>IT</td>
<td>n.a.</td>
<td>n.a.</td>
<td>Water availability</td>
<td>In.Te.R.R.A.</td>
<td>A two years of experimental field activity carried out in two different demo-places in Southern Italy. Municipal wastewater treatment plants were used to irrigate different vegetable crops with treated wastewater and conventional water pumped from wells, for comparing the effects of the different water sources on soil and vegetables.</td>
<td>Other</td>
<td>n.a.</td>
<td><a href="http://ec.europa.eu/eip/agriculture/en/content/interra-tecnologie-innovative-il-reimpiego-irriguo-delle-acque-reflu">http://ec.europa.eu/eip/agriculture/en/content/interra-tecnologie-innovative-il-reimpiego-irriguo-delle-acque-reflu</a></td>
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<td>42</td>
<td>IT</td>
<td>n.a.</td>
<td>n.a.</td>
<td>Water availability</td>
<td>HydroTech and BlueLeaf projects</td>
<td>The main objective of the project is to develop a decision support system (DSS) for irrigation management at farm level.</td>
<td>Other</td>
<td>n.a.</td>
<td><a href="http://ec.europa.eu/eip/agriculture/en/content/progetto-hydrotech-blueleaf">http://ec.europa.eu/eip/agriculture/en/content/progetto-hydrotech-blueleaf</a></td>
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<td>43</td>
<td>Multiple</td>
<td>n.a.</td>
<td>n.a.</td>
<td>Water availability</td>
<td>APMed</td>
<td>The project focused on how water restriction can be managed in apple and peach orchards. Research has been carried out i) to gain knowledge of the genetic ability of apple and peach trees to survive in water stressed environment and ii) to better define irrigation thresholds to reduce water use while maintaining high fruit quality.</td>
<td>Other</td>
<td>n.a.</td>
<td><a href="http://ec.europa.eu/eip/agriculture/en/content/apmed-managing-water-scarcity-apple-and-peach-orchards-mediterranean-environment-profitable">http://ec.europa.eu/eip/agriculture/en/content/apmed-managing-water-scarcity-apple-and-peach-orchards-mediterranean-environment-profitable</a></td>
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<tr>
<td>45</td>
<td>BE</td>
<td>2016</td>
<td>2018</td>
<td>Soil &amp; nutrients</td>
<td>SOCROSense</td>
<td>The aim of SOCROSense is supporting pioneer farmers who have experience with the use of GPS close-sensing techniques, focused on soil and crop sensors. Together with actors from research institutes an analysis shall be made on how data of sensors can be used by farms and exchanged between farmers.</td>
<td>EAFRD (EIP AGRI) 2014-2020</td>
<td>€ 33 400</td>
<td><a href="http://ec.europa.eu/eip/agriculture/en/content/socrosense-soil-and-crop-sensing-technologies">http://ec.europa.eu/eip/agriculture/en/content/socrosense-soil-and-crop-sensing-technologies</a></td>
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<td>46</td>
<td>BE</td>
<td>2016</td>
<td>2017</td>
<td>Soil &amp; nutrients</td>
<td>Controlled Traffic Farming</td>
<td>Controlled traffic lanes prevent soil structure damage and soil compaction in the seedbed between the tracks. This results in optimal growing conditions for soil life and roots and better water storage capacity of soils. This project will support farmers to implement CTF on their specific farm.</td>
<td>EAFRD (EIP AGRI) 2014-2020</td>
<td>€ 33 250</td>
<td><a href="http://ec.europa.eu/eip/agriculture/en/content/controlled-traffic-farming">http://ec.europa.eu/eip/agriculture/en/content/controlled-traffic-farming</a></td>
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<td>N.</td>
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<tr>
<td>51</td>
<td>FI</td>
<td>2016</td>
<td>2018</td>
<td>Soil &amp; nutrients</td>
<td>Teho-lanta</td>
<td>The objective of this project is to increase efficiency in use of poultry manure and sustainability. The project examines the possibilities of energy use, more precise use of nutrients, technologies and life cycle assessment.</td>
<td>EAFRD 2014-2020</td>
<td>n.a.</td>
<td><a href="http://www.maaseutu.fi/fi/kaytannnon-oivalluksia/hankkeet/Syvut/sivekkaiden_lanta_hyotykayttoon.aspx">www.maaseutu.fi/fi/kaytannnon-oivalluksia/hankkeet/Syvut/sivekkaiden_lanta_hyotykayttoon.aspx</a></td>
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<td>54</td>
<td>FR</td>
<td>2015</td>
<td>2018</td>
<td>Soil &amp; nutrients</td>
<td>Coteaux pentus</td>
<td>The main purpose of this operation is to evaluate the technical and economical feasibility of the “banquette” earthenwork to mechanize grassing in substitution of chemical herbicides.</td>
<td>EAFRD (EIP AGRI) 2014-2020</td>
<td>€ 73 077</td>
<td><a href="http://ec.europa.eu/eip/agriculture/en/content/coteaux-pentus">http://ec.europa.eu/eip/agriculture/en/content/coteaux-pentus</a></td>
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<td>55</td>
<td>FR</td>
<td>2016</td>
<td>2020</td>
<td>Soil &amp; nutrients</td>
<td>GUAYUL-LR</td>
<td>The project supported guayule crop field trials on four locations of different climatic conditions and types of soil on former vine land. It also supported knowledge transfer to farmers towards increasing their interest on the crop which reduces soil erosion and risks of fires, the production of seeds and supply with guayule biomass to an extraction plant and a feasibility study.</td>
<td>EAFRD (EIP AGRI) 2014-2020</td>
<td>€ 227 319</td>
<td><a href="http://ec.europa.eu/eip/agriculture/en/content/implantation-de-parcelles-de-guayule-de-culture-de-guayule-parthenium-argentatum-en">http://ec.europa.eu/eip/agriculture/en/content/implantation-de-parcelles-de-guayule-de-culture-de-guayule-parthenium-argentatum-en</a></td>
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<td>57</td>
<td>FR</td>
<td>2015</td>
<td>2019</td>
<td>Soil &amp; nutrients</td>
<td>Système innovant de conduite des grandes cultures avec des légumineuses</td>
<td>Two experimental fields were set in order to evaluate the agronomic impact of the drought in Herault and water excess in Gard. Rotation systems on chick peas are tested in Herault while seeding systems with permanent cover of leguminous crop are tested in Gard.</td>
<td>EAFRD (EIP AGRI) 2014-2020</td>
<td>€ 225 478</td>
<td><a href="http://ec.europa.eu/eip/agriculture/en/content/syst%C3%A8me-innovant-de-conduite-des-grandes-cultures-avec-des-l%C3%A9gumineuses">http://ec.europa.eu/eip/agriculture/en/content/syst%C3%A8me-innovant-de-conduite-des-grandes-cultures-avec-des-l%C3%A9gumineuses</a></td>
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<td>58</td>
<td>FR</td>
<td>2015</td>
<td>2017</td>
<td>Soil &amp; nutrients</td>
<td>Patate douce (Ipomea batatas)</td>
<td>Testing different potato varieties for two different markets (fresh consumption and transformed in chips or beer) to respond to the changing demands of the consumer market for local ecological and/or organic products.</td>
<td>EAFRD (EIP AGRI) 2014-2020</td>
<td>€ 131 737</td>
<td><a href="http://ec.europa.eu/eip/agriculture/en/content/patate-douce-ipomea-batatas-culture-de-diversification-en-languedoc-roussillon">http://ec.europa.eu/eip/agriculture/en/content/patate-douce-ipomea-batatas-culture-de-diversification-en-languedoc-roussillon</a></td>
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<td>59</td>
<td>FR</td>
<td>2015</td>
<td>2018</td>
<td>Soil &amp; nutrients</td>
<td>Zéro herbicides en cultures pérennes méditerranéennes</td>
<td>The project is about evaluating and promoting an innovative weed management system, using under row cover crops. Cover crops naturally protect the soil and require less intervention.</td>
<td>EAFRD (EIP AGRI) 2014-2020</td>
<td>€ 469 000</td>
<td><a href="http://ec.europa.eu/eip/agriculture/en/content/%C3%A9r%C3%A9c%C3%A9ralier-en-climat-%C3%A9diterran%C3%A9en">http://ec.europa.eu/eip/agriculture/en/content/%C3%A9r%C3%A9c%C3%A9ralier-en-climat-%C3%A9diterran%C3%A9en</a></td>
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<td>60</td>
<td>FR</td>
<td>2015</td>
<td>2017</td>
<td>Soil &amp; nutrients</td>
<td>Bioferm</td>
<td>The project will contribute to the sustainability of mixed agricultural production systems joining agriculture and husbandry by offering innovative technological itineraries for local production of alimentary resources and animal fodder.</td>
<td>EAFRD (EIP AGRI) 2014-2020</td>
<td>€ 101 853</td>
<td><a href="http://ec.europa.eu/eip/agriculture/en/content/gestion-conservatoire-des-biomasses-des-nutriments-et-de-la-fertilit%C3%A9-des-sols-dans-les">http://ec.europa.eu/eip/agriculture/en/content/gestion-conservatoire-des-biomasses-des-nutriments-et-de-la-fertilit%C3%A9-des-sols-dans-les</a></td>
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<td>61</td>
<td>FR</td>
<td>2015</td>
<td>2017</td>
<td>Soil &amp; nutrients</td>
<td>Fighting against soil erosion in Mayotte (LESELAM)</td>
<td>A cooperation project brought together local farmers, inhabitants and public services managers to jointly define and promote soil preservation technics adapted to the local environment.</td>
<td>EAFRD 2014-2020</td>
<td>€ 1 100 000</td>
<td><a href="http://enrd.ec.europa.eu/projects-practice/fighting-against-soil-erosion-mayotte-leselam_en">http://enrd.ec.europa.eu/projects-practice/fighting-against-soil-erosion-mayotte-leselam_en</a></td>
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<td>63</td>
<td>NL</td>
<td>2015</td>
<td>2015</td>
<td>Soil &amp; nutrients</td>
<td>Mechanistic modelling of the vertical soil organic matter profile</td>
<td>The aim of this thesis is to develop a dynamic and mechanistic representation of the vertical SOM profile that can be applied for large scale simulations as a part of global ecosystem and earth system models.</td>
<td>EAFRD (EIP AGRI) 2014-2020</td>
<td>n.a.</td>
<td><a href="http://ec.europa.eu/eip/agriculture/en/content/mechanistic-modelling-vertical-soil-organic-matter-profile">link</a></td>
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<td>65</td>
<td>UK</td>
<td>2016</td>
<td>ongoing</td>
<td>Soil &amp; nutrients</td>
<td>Cover crop management</td>
<td>Different cover crop management strategies could have different impacts on soil biology, both positive and negative. The operational group is seeking to compare the impact of different methods of cover crop management on soil biology.</td>
<td>EAFRD (EIP AGRI) 2014-2020</td>
<td>€ 122 000</td>
<td><a href="http://ec.europa.eu/eip/agriculture/en/content/cover-crop-management-improved-soil-biology">link</a></td>
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<td>69</td>
<td>ES</td>
<td>2012</td>
<td>2016</td>
<td>Soil &amp; nutrients</td>
<td>ROEM-plus</td>
<td>Demonstration of an innovative approach for the management and reduction of surface water eutrophication in rural areas.</td>
<td>LIFE</td>
<td>€ 1 933 584</td>
<td><a href="http://ec.europa.eu/environment/life/project/Projects/index.cfm?FuseAction=search.dspPage&amp;n_proj_id=4219">link</a></td>
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<td>72</td>
<td>FI</td>
<td>2010</td>
<td>2013</td>
<td>Soil &amp; nutrients</td>
<td>GISBLOOM</td>
<td>Development of an integrated model for monitoring, forecasting and control of environmental and socio-economic impacts of eutrophication and algal blooms in river basins districts.</td>
<td>LIFE</td>
<td>€ 3 060 856</td>
<td><a href="http://ec.europa.eu/environment/life/project/Projects/index.cfm?Fuseaction=search&amp;dspPage&amp;n_proj_id=3719">link</a></td>
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<td>73</td>
<td>FR</td>
<td>2006</td>
<td>2010</td>
<td>Soil &amp; nutrients</td>
<td>ArtWET</td>
<td>Mitigation of agricultural nonpoint-source pesticide pollution and phytoremediation in artificial wetland ecosystems.</td>
<td>LIFE</td>
<td>€ 3 878 621</td>
<td><a href="http://ec.europa.eu/environment/life/project/Projects/index.cfm?Fuseaction=search&amp;dspPage&amp;n_proj_id=3099">link</a></td>
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<td>74</td>
<td>IT</td>
<td>2015</td>
<td>Ong</td>
<td>Soil &amp; nutrients</td>
<td>LIFE HelpSoil</td>
<td>The project seeks to achieve the testing and the demonstration of Conservation Agriculture techniques combined with innovative management practices of agricultural soils. The aim is to strengthen the ecological functions of the soils (carbon sequestration, increase of fertility and edaphic biodiversity, protection against erosion); favour efficiency in the use of irrigation water, increase the efficiency of fertilization; reduce the use of pesticides for the control of plant pests and diseases.</td>
<td>LIFE</td>
<td>n.a.</td>
<td><a href="http://ec.europa.eu/agriculture/en/content/migliorare-i-suoli-e-il%E2%80%99adattamento-al-cambiamento-climatico-attraersi-sostenibili-tecniche">link</a></td>
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<td>75</td>
<td>IT</td>
<td>2010</td>
<td>2014</td>
<td>Soil &amp; nutrients</td>
<td>AQUA</td>
<td>Demonstration of innovative practices for reducing the environmental impact of nutrients (N, P) from intensive farming in water bodies.</td>
<td>LIFE</td>
<td>€ 2 634 689</td>
<td><a href="http://ec.europa.eu/environment/life/project/Projects/index.cfm?Fuseaction=search&amp;dspPage&amp;n_proj_id=3645">link</a></td>
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<td>76</td>
<td>PL</td>
<td>2012</td>
<td>2015</td>
<td>Soil &amp; nutrients</td>
<td>Biorewit</td>
<td>New soil improvement products for reducing the pollution of soils and waters and revitalizing edaphic systems.</td>
<td>LIFE</td>
<td>€ 1 863 195</td>
<td><a href="http://ec.europa.eu/environment/life/project/Projects/index.cfm?Fuseaction=search&amp;dspPage&amp;n_proj_id=3918">link</a></td>
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<td>78</td>
<td>PL</td>
<td>2009</td>
<td>2010</td>
<td>Soil &amp; nutrients</td>
<td>Lake recult. in Gniezno</td>
<td>Improving water quality in Jelonek and Winiary lakes by inactivation of phosphorus in bottom sediments.</td>
<td>LIFE</td>
<td>€ 431 861</td>
<td><a href="http://ec.europa.eu/environment/life/project/Projects/index.cfm?Fuseaction=search&amp;dspPage&amp;n_proj_id=3260">link</a></td>
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<td>79</td>
<td>DE</td>
<td>n.a.</td>
<td>n.a.</td>
<td>Soil &amp; nutrients</td>
<td>Making Sense</td>
<td>A partnership for developing decision support systems on soil fertility and crop fertilization, based on: physical, chemical, biological processes; Soil &amp; Crop sensor data; Weather data; Soil and Crop models.</td>
<td>Other</td>
<td>n.a.</td>
<td><a href="http://ec.europa.eu/eip/agriculture/en/content/making-sense">http://ec.europa.eu/eip/agriculture/en/content/making-sense</a></td>
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<td>80</td>
<td>DK</td>
<td>n.a.</td>
<td>n.a.</td>
<td>Soil &amp; nutrients</td>
<td>Billund biorefinery</td>
<td>Billund BioRefinery is a project that aims to educate and show the way to a more sustainable cycle with better utilization of wastewater and utilization of energy and nutrients in wastewater and organic waste.</td>
<td>Other</td>
<td>n.a.</td>
<td><a href="http://www.billundbiorefinery.dk">www.billundbiorefinery.dk</a></td>
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<td>81</td>
<td>Multiple</td>
<td>2015</td>
<td>2019</td>
<td>Soil &amp; nutrients</td>
<td>LANDMARK</td>
<td>LANDMARK is a European Research Project for the sustainable management of land and soil in Europe. It aims to respond to the issue on how to ensure that soils can continue to deliver as expected, in terms of primary production (agriculture and forestry); water purification and regulation; carbon sequestration; provision of functional and intrinsic biodiversity; provision and cycling of nutrients.</td>
<td>Other</td>
<td>n.a.</td>
<td><a href="http://ec.europa.eu/eip/agriculture/en/content/landmark-land-management-assessment-research-knowledge-base-eu-h2020-project">http://ec.europa.eu/eip/agriculture/en/content/landmark-land-management-assessment-research-knowledge-base-eu-h2020-project</a></td>
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<td>82</td>
<td>n.a.</td>
<td>2015</td>
<td>2015</td>
<td>Soil &amp; nutrients</td>
<td>Maintenance of soil fertility and organic substance</td>
<td>The long-term goal of this project is to develop strategies to keep soil fertility and organic matter at an equal level in order to maintain productivity and soil quality can be guaranteed.</td>
<td>Other</td>
<td>n.a.</td>
<td><a href="http://ec.europa.eu/eip/agriculture/en/content/maintenance-soil-fertility-and-organic-substance">http://ec.europa.eu/eip/agriculture/en/content/maintenance-soil-fertility-and-organic-substance</a></td>
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<td>83</td>
<td>NL</td>
<td>2009</td>
<td>2013</td>
<td>Soil &amp; nutrients</td>
<td>Teelt de grond uit</td>
<td>The project focused on developing cost effective closed cultivation systems for outdoor horticulture that comply with European regulations for water quality. It investigated cost effective ways with minimal emission from fertilisers and pesticides.</td>
<td>Other</td>
<td>n.a.</td>
<td><a href="http://ec.europa.eu/eip/agriculture/en/content/teelt-de-grond-uit">http://ec.europa.eu/eip/agriculture/en/content/teelt-de-grond-uit</a></td>
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<td>93</td>
<td>FI</td>
<td>n.a.</td>
<td>n.a.</td>
<td>Soil carbon</td>
<td>BioVakka Vehmaa biogas / digestate</td>
<td>Biovakka was established in 2002 by 21 farmers who wanted to find a way to increase pig production in the region and to develop a solution to manage the large quantities of pig manure in an environmentally-friendly way.</td>
<td>Other</td>
<td>n.a.</td>
<td><a href="http://ec.europa.eu/eip/agriculture/sites/agri-eip/files/field_core_attachments/nw_biovakka_20151208_en.pdf">http://ec.europa.eu/eip/agriculture/sites/agri-eip/files/field_core_attachments/nw_biovakka_20151208_en.pdf</a></td>
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<td>94</td>
<td>Multi</td>
<td>n.a.</td>
<td>n.a.</td>
<td>Multiple</td>
<td>Evaluation de methodes alternatives de DESHERBAGE EN MARAICHAGE</td>
<td>The project aims to develop proposals of new efficient ecologically acceptable weed control technics with less inputs of pesticides, water, fertilizers etc.</td>
<td>EAFRD (EIP AGRI)</td>
<td>€ 87 942</td>
<td><a href="http://ec.europa.eu/eip/agriculture/en/content/evaluation-de-methodes-alternatives-de-desherbage-en-maraichage">http://ec.europa.eu/eip/agriculture/en/content/evaluation-de-methodes-alternatives-de-desherbage-en-maraichage</a></td>
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<td>96</td>
<td>ES</td>
<td>2012</td>
<td>2015</td>
<td>Multiple</td>
<td>sigAGROasesor</td>
<td>Development and demonstration of customised advanced GIS advisory tools for the sustainable management of extensive crops.</td>
<td>LIFE</td>
<td>€ 2 995 848</td>
<td><a href="http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=search.dspPage&amp;n_project_id=4257">link</a></td>
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<td>97</td>
<td>ES</td>
<td>2010</td>
<td>2015</td>
<td>Multiple</td>
<td>The Green Deserts</td>
<td>Demonstration of new planting techniques for tree cultivation in desertified environments to face Climate Change.</td>
<td>LIFE</td>
<td>€ 2 074 518</td>
<td><a href="http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=search.dspPage&amp;n_project_id=3654">link</a></td>
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<tr>
<td>98</td>
<td>IT</td>
<td>2013</td>
<td>2016</td>
<td>Multiple</td>
<td>Climate change-R</td>
<td>The project aims to reduce greenhouse gases emitted into the atmosphere by agriculture in Emilia-Romagna region, also giving value to aspects such as water and energy savings, reduced use of chemicals in agriculture, the introduction of advanced power management techniques on farms and livestock manure management.</td>
<td>LIFE</td>
<td>€ 1 800 000</td>
<td><a href="http://agricoltura.regione.emilia-romagna.it/climatechanger">link</a></td>
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<td>99</td>
<td>IT</td>
<td>2011</td>
<td>2015</td>
<td>Multiple</td>
<td>ZeoLIFE</td>
<td>Testing an innovative integrated zeolitic cycle for reducing the nitrogen content in livestock effluents and agricultural soils, and improving the yield and economisation of irrigation water and fertilisers.</td>
<td>LIFE</td>
<td>€ 2 150 839</td>
<td><a href="http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=search.dspPage&amp;n_project_id=3957">link</a></td>
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<td>100</td>
<td>IT</td>
<td>2010</td>
<td>2013</td>
<td>Multiple</td>
<td>SUMFLOWER</td>
<td>Development and demonstration of a sustainable management system for floriculture and ornamental horticulture production.</td>
<td>LIFE</td>
<td>€ 1 769 416</td>
<td><a href="http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=search.dspPage&amp;n_project_id=3745">link</a></td>
</tr>
<tr>
<td>101</td>
<td>IT</td>
<td>2009</td>
<td>2012</td>
<td>Multiple</td>
<td>RE-WASTE</td>
<td>Valorisation of olive mill waste waters by recovering high added value bio-products.</td>
<td>LIFE</td>
<td>€ 1 546 500</td>
<td><a href="http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=search.dspPage&amp;n_project_id=3247">link</a></td>
</tr>
<tr>
<td>102</td>
<td>SE</td>
<td>n.a.</td>
<td>n.a.</td>
<td>Multiple</td>
<td>REVAQ</td>
<td>Revaq is a certification scheme aimed at reducing the flow of hazardous substances into sewage treatment plants, creating a sustainable nutrient recycling.</td>
<td>Other</td>
<td>n.a.</td>
<td><a href="www.svensktvatten.se/vattenjanster/avlopp-och-miljo/kretslopp-och-uppstromsarbeten/revaq-certifiering/">link</a></td>
</tr>
<tr>
<td>103</td>
<td>DE</td>
<td>n.a.</td>
<td>n.a.</td>
<td>Multiple</td>
<td>Projekt Lebenswandel am Scharmbecker Bach</td>
<td>Local river catchment protection: the main aim is to increase the ecological conditions, increase biodiversity, raising awareness of the local population, individuals can act as sponsors, restoration activities.</td>
<td>Other</td>
<td>n.a.</td>
<td><a href="www.biologische-station-osterholz.de/">link</a></td>
</tr>
</tbody>
</table>