

Thematic Group factsheet

«Resource Efficient Rural Economy»

«Improving the resource efficient management of soils and water»

Soils and water underpin the functioning of European ecosystems and the economy. Pressure on these natural resources is increasing and remains a central challenge to the sustainable development of rural areas. Managing soils and water more efficiently is therefore a strategic priority for Europe through its contribution to the UN Sustainable Development Goals, EU legislation and long term food security, as well as for those whose livelihoods depend on the effective functioning of rural land. Reinforced by the Cork Declaration, EU rural development policy has a key role to play in delivering these priorities [through RDPs](#).

To examine how to improve soil and water management via RDPs, the **Thematic Group** focused on the **motivation, knowledge and policy** challenges associated with taking action in these areas and some of the solutions to address these.

Soils and nutrients:

To encourage the resource efficient use of nutrients, reduce water pollution, prevent soil compaction and erosion and approaches to increase ecosystem resilience and improve productivity.

Soils and carbon:

To improve the carbon conservation and sequestration potential of soils, to improve soil health and contribute towards climate mitigation and adaptation.

Water availability:

To improve the efficient use of water in rural areas, reduce water demand and stress and address floods and extreme events.

Recommendations to improve the resource efficient management of soils and water through Rural Development Programmes.



Tailored advice packages for resource efficient actions on soils & water including the benefits & risks of implementation on farm businesses.



Proactive engagement with farmers on the benefits of resource efficiency through peer to peer engagement, demonstration farms, & increasing the ratio of advisors to farmers.



Compulsory training for advisors through continuous professional development to maintain up-to-date knowledge on best practice.



Support young & new farmers via better access to financial support & advice, & sharing ideas through cooperation (e.g. Operational Groups).



Targeted support to areas, groups & issues where improved resource efficiency is a priority. Focus funding towards priority actions.



Transitional support through financing & capacity building during the implementation of actions & changes to farm structure & practice.



Good governance frameworks to provide coherence during programming & implementation of environmental, economic & social objectives.



Multi-stakeholder engagement with farmers and other actors in the rural economy from the start of the RDP design process through to implementation.



Demonstrate long term impacts of resource efficiency on the environment & farm businesses through case studies & reliable indicators.



Flexible support systems & measures that allow practices to be adapted to the needs of the farm & outcomes sought, during implementation.



Piloting new approaches by using opportunities under the Cooperation measure & LIFE funding to test approaches that can be mainstreamed into RDPs.



Improved accessibility of RDP support to farmers by streamlining scheme and project application procedures.

How can farmers and managing authorities be encouraged to improve the resource efficient management of water and soils? In most cases, being more resource efficient will lead to economic and environmental benefits. This may be in terms of reduced costs for fuels or machinery, increased productivity through better functioning of soils, as well as improved public image resulting from increased environmental performance. Despite these potential benefits, many rural actors have so far been reluctant to improve the management of soils and water in a way that benefits their farms and the environment. The main reasons for this are linked to the perceived risks (compliance and permanent changes) of adopting new or different approaches; lack of understanding about the economic impacts on farm businesses; and potential need to invest time to become familiar with new practices compared with those with which they are familiar. The Thematic Group identified solutions to improve farmers' motivations to take action through improved design and implementation of RDPs.

Improving motivation and engaging farmers for resource efficiency

1. To help farmers to adopt new approaches, *schemes should be flexible enough to allow approaches to be tailored to work within the context of a specific farm, with the potential to adapt during implementation yet without undermining the schemes' objectives.*
2. To improve the implementation of actions on the ground, *tailored advice packages should be developed and linked to particular measures or actions specific to geographic areas and the farms in question;*
3. To engage those farmers who are more willing to make changes, *RDPs should target support towards lifelong-learning, encouraging all farmers willing to be more resource efficient;*
4. To support farmers and groups in making a significant shift in the way they manage their land for resource efficiency, *consideration should be given to the type of financial support and advice required through the transition period;*
5. To help farmers make informed decisions and understand the impact on their farm businesses – *long-term monitoring programmes and case studies should be developed to demonstrate the impacts on productivity and the environment of resource efficiency actions over time;*
6. To improve monitoring and reporting of the results achieved through applying resource efficient practices requires reliable indicators that can be measured within programming periods. *RDPs should be used to test and develop reliable indicators to monitor implementation.*
7. To help farmers access EAFRD support, *Managing Authorities should work with farmers to develop simpler ways of applying for schemes and projects.*

Engaging farmers and stakeholders from the outset of the process of measure design and implementation is important to ensure buy-in across the farming and rural sectors. The Thematic Group undertook a series of RDP case studies and through these found that motivation and willingness to adopt more resource efficient practices is generally higher in younger farmers, particularly those who have had more recent and up-to-date training and education (e.g. IF, FI, EL). With the average age of farmers in the EU increasing, generational renewal is an important opportunity to change the way land is managed and promote more resource efficient and climate friendly practices. The case studies (e.g. IT) also showed that it is not just young farmers that are willing to change, therefore ensuring support, encouragement and training is available to all farmers, young and old, is crucial.

Examples of supporting measures:

M1 – (1.1) Vocational training; (1.2) Demonstration activities; (1.3) Exchange visits

M2 – (2.3) Improving knowledge and training of advisors

M16 – (16.1) Operational Groups; (16.2 & 16.5) Joint actions to improve cooperation



What can and needs to be done to improve the resource efficient management of soils and water? Understanding how to improve the resource efficient management of soils and water varies considerably across the EU and between different rural actors. In the farming sector, resource efficiency is generally approached from a production perspective and often with a focus primarily on short term production effects. Yet farmers often take less account of aspects whose implications for productivity are longer term in nature, for example impacts of land management on delivering ecosystem services, such as building soil organic matter, or natural flood management. Knowledge of how to improve resource efficiency is geographically dispersed, such as good understanding of irrigation practices in the Mediterranean or flood management in the North. Transferring this knowledge to areas that are newly experiencing soil and water problems (e.g. as a result of climate change) is as important as developing new approaches/reviving traditional techniques. The Thematic Group identified some of the key ways to improve knowledge and its transfer through RDPs.

Developing and sharing knowledge to improve resource efficiency

1. To make resource efficiency a central part of farmers' decision making - RDPs should include *training/advisory packages associated with particular measures or actions* that convey the environmental and economic benefits/risks to the farm business.
2. To ensure farmers are aware of the long-term implications of soil and water management for the environment, tailored *advice packages should be developed and targeted to particular issues in particular areas*.
3. To ensure farmer advice and support is more proactive - *the ratio of scheme advisors to farmers should increase*.
4. To deliver better and more holistic advice, *advisors should undertake continuous professional development* to keep up to speed with new techniques, approaches, measures and priorities.
5. To help improve coherence between different policies and initiatives for resource efficiency, *RDPs should support specific advice packages that link objectives of different policies and the RDP measures* to achieve them.
6. To ensure advice reaches individuals who manage the land, *targeted educational packages for farm contractors and other actors should be developed in parallel to those of farmers*.
7. To aid in targeting advice and support to the right areas and issues, *better reporting of soil and water conditions at local and regional levels should be incorporated into RDP monitoring*.
8. To improve trust between advisors & farmers, *frequent visits/co-learning opportunities should be encouraged, as well as ensuring advice covers the benefits to farm businesses*.

Training the trainers: *The Thematic Group case studies found that providing the right advice and support to farmers was critical in improving motivation and delivering in practice. This requires advisors to maintain their knowledge of the most effective approaches to resource efficiency. Delivering this advice can be the role of both public and private advisors, such as machinery, seed and fertiliser suppliers. Targeting the advice to those who manage the land is crucial, including farmers as well as farm contractors who might have specific machinery to provide specific services (such as harvesting and bailing).*

Examples of supporting measures:

M2 – (2.2) Setting up of advisory services (2.3) Improving knowledge of advisors

M16 – (16.1) Operational Groups; (16.2 & 16.5) Joint actions to improve cooperation



How can different policies and delivery mechanisms be better aligned with RDPs to meet resource efficiency needs in practice? Improving resource efficiency of soils and water is an objective of a range of policy instruments, such as the Water Framework Directive and the Sustainable Use of Pesticides Directive. RDPs are a key tool to support the delivery of some of these priorities. Yet due to a variety of reasons such as implementation timing and inter-institutional factors, implementation synergies are not always realised in practice. Not all of these issues can be addressed through changes in the way RDPs are designed and implemented. Better coordination between environment and agriculture ministries (where these are separate) should be actively encouraged. In the design of other policies, consideration should be given as to how the RDPs can best be used to support implementation. Yet there are things that can be improved in the way RDPs are designed and implemented, such as improved targeting of measures, ensuring that measures, support and compliance rules are enabling not constraining, as well as opportunities for piloting new approaches to delivery as identified by the Thematic Group in addressing this policy/implementation gap.

Using RDPs to ensure policies work together for resource efficiency

1. To ensure coherence between different policies and priorities in an RDP, particularly where implementation timescales are different to those of programming periods, *RDPs should be updated when necessary and flexible enough to be ready to respond to new objectives.*
2. To ensure resource-efficiency is addressed in regions where it has been identified as a high priority,
 - a. *RDPs could be resource-efficiency proofed during the ex-ante evaluation process.* This would be a novel and challenging undertaking, but with significant potential benefits in the longer term.
 - b. *stringent sustainability criteria to be applied when implementing measures* - building on the example of rules for water as set out in the EAFRD
3. To improve flexibility for farmers to adapt to new and changing priorities as they arise, *M16.1 (EIP Operational Groups) working in synergy with M16.2 (pilot projects), and LIFE funding could be used to test results-based approaches for resource efficiency objectives* before being mainstreamed.
4. To enable different rural actors to work together to address issues relating to soils and water, *RDPs should make greater use of the cooperation measure (M16) to engage 'groups' of farmers within geographically defined areas; improve interaction between crop and livestock producers; and with the wider supply chain.*
5. To improve clarity for farmers and scheme advisors, when taking account of multiple resource efficiency priorities, *packages of RDP measures (and specific land management actions) should be designed to address resource efficiency within an RDP area. These should be accompanied by tailored advice and support.*

Targeting support: The Thematic Group case studies found that the effects of RDPs can become very diffuse if measures are not sufficiently targeted and tailored to the needs and priorities of the local area. Effective targeting can also help to increase coherence between related policies and objectives, such as spatial targeting of resource efficiency action in areas that require action under the Water Framework Directive. Focussing RDP effort through targeting with tailored packages of actions and advice should help farmers choose the most appropriate actions to address the issues faced.

Examples of supporting measures:

- M7 – (7.1) Protection of HNV and N2000 areas
- M8 – (8.1) Targeted creation of woodland; (8.2) Establishment of agro-forestry
- M10 – (10.1) Agri-environment climate payments targeted to specific areas
- M11 – (11.1 & 11.2) Organic farming
- M12 – (12.3) Payments targeted to river basin management plans
- M15 – (15.1) Forest-environment payments targeted to specific areas
- M16 – (16.5) Support for joint action in a specific area or for a specific objective

