

Brussels, 18.10.2019 SWD(2019) 389 final

#### COMMISSION STAFF WORKING DOCUMENT

#### **EVALUATION**

of the

Regulation (EU) No 1305/2013 of the European Parliament and of the Council of 17 December 2013 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD) and repealing Council Regulation (EC) No 1698/2005 concerning the forestry measures under Rural Development

{SWD(2019) 391 final}

EN EN

# **Table of contents**

1.	INTR	ODUCTION	3
	Purpo	ose and scope	3
2.	BAC	KGROUND TO THE INTERVENTION	5
	Descr	iption of the intervention and its objectives	5
3.	IMPL	EMENTATION / STATE OF PLAY	9
4.	MET	HOD	16
	Short	description of the methodology	16
	Data :	sources and issues arising	17
	Limita	ations and robustness of findings	18
5.	ANA	LYSIS AND ANSWERS TO THE EVALUATION QUESTIONS	19
	5.1.	Causal analysis: Drivers behind implementation choices	19
	Meth	od and limitations	19
	Drive	rs of managing authorities' programming of the forestry measures	20
	Drive	rs of beneficiaries' decisions to apply for forestry measures	25
	5.2.	Effectiveness	26
	5.3.	Efficiency	31
	5.4.	Coherence	34
	5.5.	Relevance	36
	5.6.	EU added value	38
6.	CON	CLUSIONS	39
AN]	NEX 1:	PROCEDURAL INFORMATION	43
AN	NEX 2:	STAKEHOLDER CONSULTATION	45
AN]	NEX 3:	METHODS AND ANALYTICAL MODELS	47
	A3.1	The methodology	47
	A3.2 I	Data sources and issues arising	48
	A3.3 I	Intervention logic	49
	A3.4	Analytical tools used	49
	A3.5 I	Establishing the counterfactual	49
	A3.6 I	Evaluation challenges and limitations	52
AN	NEX 4:	EVALUATION STUDY QUESTIONS	54
AN]	NEX 5:	LEVEL OF IMPLEMENTATION BY FORESTRY MEASURE	57

# Glossary

Term or acronym	Meaning or definition
CAP	common agricultural policy
CMEF	common monitoring and evaluation framework
EAFRD	European Agricultural Fund for Rural Development
EEA	European Environment Agency
EFA	ecological focus area
EQ(s)	evaluation question(s)
EU	European Union
FADN	farm accountancy data network
IACS	integrated administration and control system
LPIS	land parcel information system
LULUCF	land use, land-use change and forestry
RDP(s)	rural development programme(s)
SFC	shared fund management common system
WTO	World Trade Organisation

#### 1. Introduction

#### Purpose and scope

Apart from their role in the management of natural resources, forests provide key ecosystem services, such as sequestering carbon, protecting soil and water, preserving biodiversity and supplying energy and raw material for a low carbon economy, and are also used for recreational activities. Investing in the development of woodlands, forest protection and innovation in forestry and the forest-based sector contributes to the growth potential of rural areas. Moreover, many agricultural holdings are also forest owners, usually of smaller forest units, and for them forestry activities are an additional income source.

Forestry measures form an integral part of the Rural Development Regulation (EU) 1305/2013 and contribute to the economic, environmental and social development of rural areas. Sustainable forest management is one of the priorities of the European Union's (EU) rural development policy. Furthermore, the numerous ecosystem services provided by forest environments also contribute to meeting the commitments of the EU's Biodiversity Strategy, the 2015 Paris Agreement on climate change and the Bioeconomy Strategy.

In the 1990s, the first measures supporting forestry were introduced as part of the common agricultural policy (CAP). The EU aimed to promote the afforestation of agricultural land to limit the oversupply of agricultural produce and stabilise the market. Later, with the Agenda 2000 reform, the CAP's focus shifted more towards rural development. Forestry measures became part of the Rural Development Regulations.

After the adoption of the 2014-2020 CAP reform, forestry measures were included in Regulation (EU) 1305/2013 on the European Agricultural Fund for Rural Development (EAFRD). The specific measures related to forestry are set out in Articles 21-26 (measure 8) and Article 34 (measure 15) of this Regulation. The scope of the evaluation is not limited to measures 8 and 15 as implemented via national or regional rural development programmes (RDPs) but also looks at other rural development measures that can be beneficial to forestry.

The main purpose of the evaluation is to assess the effectiveness of forestry measures taken, i.e. the extent to which these forestry measures contribute to the objectives<sup>1</sup> and priorities<sup>2</sup> of rural development as presented in Regulation (EU) 1305/2013.

These objectives are to:

- foster the competitiveness of agriculture;
- ensure the sustainable management of natural resources and climate action;

Art. 4 under chapter II, Title I, Regulation (EU) 1305/2013.

Art. 5 under chapter II, Title I, Regulation (EU) 1305/2013.

• achieve balanced territorial development of rural economies and communities including the creation and maintenance of employment.

#### The priorities are to:

- foster knowledge transfer and innovation in agriculture, forestry, and rural areas;
- enhance farm viability and competitiveness of all types of agriculture in all regions;
- promote food chain organisation;
- restore, preserve and enhance ecosystems related to agriculture and forestry;
- promote resource efficiency and support the shift towards a low carbon and climate resilient economy;
- promote social inclusion, poverty reduction and economic development in rural areas.

Furthermore, the evaluation has assessed the efficiency, relevance, coherence, and EU added value of the forestry measures (8 and 15) and other measures that have an impact on the forest sector and CAP measures that complement forestry measures. For example, it has examined the ways in which the forestry measures interact with greening measures under the Direct Payment Regulation (Regulation (EU) 1307/2013) and with other rural development measures with an impact on the forest sector (e.g. training, cooperation etc.).

This evaluation is a part of a series of evaluations of various 2007-2013 and 2014-2020 rural development measures, which should help improve the implementation of RDP. It has also informed the preparation of the proposal for the post-2020 CAP. The forestry measures included under rural development are the main source of EU-level funding for forestry, which also makes these measures relevant for the implementation of the EU's Forest Strategy adopted by the Commission in 2013<sup>3</sup>. Therefore, the results of this evaluation have served as input for the Commission's report on progress in the implementation of the EU Forest Strategy<sup>4</sup> as well.

The evaluation focuses mainly on the 2014-2020 measures, but also includes results from the previous programming period for relevant long-term effects of the forestry measures.

Geographically, the scope of the evaluation covers the EU-28, not including the outermost regions where the context and challenges differ from those on the EU mainland.

-

<sup>&</sup>lt;sup>3</sup> COM (2013) 659 final.

<sup>&</sup>lt;sup>4</sup> COM (2018) 811.

#### 2. BACKGROUND TO THE INTERVENTION

#### Description of the intervention and its objectives

#### General description

The forest sector is not a part of the shared or exclusive competences of the EU; it falls outside of Annex I and Article 42 of the Treaty on the Functioning of the EU. Therefore, all competition rules are fully applicable to the forest sector, and it is not included in the World Trade Organisation (WTO) agreements.

Nevertheless, forests are strongly linked to other policy fields in which the EU has a shared competence with the Member States (for instance agriculture, environment, energy, climate action or cohesion policy).

#### Context and rationale

**Community support to forestry** dates back to 1989, when a scheme to develop and optimally utilise woodlands in rural areas was implemented under Council Regulation (EEC) No 1610/89. Council Regulation (EEC) No 867/90 introduced aid for improving the processing and marketing conditions for forestry products.

With the 1992 CAP reform, three measures were introduced to accompany the reform of market support for agricultural products. One of them regarded the afforestation of agricultural land in order to:

- accompany the changes to be introduced under the market organisation rules,
- contribute towards an eventual improvement in forest resources,
- contribute towards forms of countryside management more compatible with environmental balance, and
- combat the greenhouse effect and absorb carbon dioxide.

In 1998, the Comission adopted the first **EU Forestry Strategy** to better link the forest policies of Member States. Based on the subsidiarity principle and the concept of shared responsibility, it set up a framework for forest-related actions that support sustainable forest management, seeking coordination between Member States' forest policies and EU policies and initiatives relevant to forests and forestry.

The **Forest Action Plan**, set up by the European Commission in 2006<sup>5</sup> and covering the 2007-2011 period, pursued the same objective of supporting the multifunctional role of forests and improving sustainable forest management in the Member States, as well as allowing the EU to fulfil its international commitments relating to forests. It was designed as a tool 'towards better coordination of forest policy and related actions within the EU', to coordinate actions related to the forest sector running in parallel with

-

<sup>&</sup>lt;sup>5</sup> COM (2006) 302 final.

different policy areas and at different levels of implementation (e.g. international and national levels).

In 2013, the Commission adopted a **new EU Forest Strategy** to better tackle the new challenges that forests and the forest sector are facing, including the growing demands on forests and threats to them, as well as the increasing number of forest-related policies. This strategy is built on three key principles:

- sustainable forest management and the multifunctional role of forests, delivering multiple goods and services in a balanced way and ensuring forest protection;
- resource efficiency that optimises the contribution of forests and the forest sector to rural development, growth and job creation;
- global forest responsibility, promoting sustainable production and consumption of forest products.

Since 2000, the main instrument for support to forestry and the implementation of the Forest Strategy has been the co-financing of **forestry measures under the Rural Development Regulation**.

Council Regulation (EC) No 1257/1999 included forestry measures in the new fabric of integrated rural development, acknowledging that forestry is an integral part of rural development and forestry measures were to be adopted in the light of undertakings given by the EU and the Member States at international level, and be based on Member States' forestry plans. Furthermore, problems related to climate change had to be taken into account and support had to be granted for activities that maintain and improve the ecological stability of forests.

During the 2007-2013 programming period, the EAFRD put in place a structured set of measures to better integrate forestry into rural development. Out of 40 measures, 20 had direct or indirect relevance to forestry, and 8 specifically addressed it. A strong emphasis was put on sustainable forest management and most forestry measures were to contribute to biodiversity, water and climate change. During the 2014-2020 programming period, a quite similar but simplified set of measures supports the implementation of sustainable forest management. These forestry measures also meet the requirement to dedicate at least 30 % of the Rural Development Funds to climate change mitigation and adaptation and to environmental issues<sup>6</sup>.

Forestry measures serve several EU priorities, but are most relevant in addressing:

- Priority 2: 'Enhancing farm viability and competitiveness of all types of agriculture in all regions and promoting innovative farm technologies and the sustainable management of forests'.
- Priority 4: 'Restoring, preserving and enhancing ecosystems related to agriculture and forestry'.
- Priority 5: 'Promoting resource efficiency and supporting the shift towards a low carbon and climate resilient economy in agriculture, food and forestry sectors'.

\_

<sup>&</sup>lt;sup>6</sup> Set out in Article 59(6) of Regulation (EU) 1305/2013.

Two measures specifically target forest holders and projects in forest areas (see Table 1):

- Measure 8 ('M8'): Support for investments in forest area development and improvement of the viability of forests: a single measure for forest investments and management. This measure should cover the increase in forest resources through afforestation of land and the creation of agroforestry system that combine agriculture with forestry. It should also support forest restoration after natural disasters and relevant prevention measures. Investments made under this measure should focus on forestry technologies and processing, the improvement of the economic and environmental performance of forest holders by mobilising and marketing of forest products, and the improvement of ecosystem and climate resilience and the environmental value of forests.
- Measure 15 ('M15'): Dedicated to forest-environmental and climate services and forest conservation.

These measures, which are set out in Articles 21–26 and 34 of Regulation (EU) No 1305/2013, are both within the scope of this evaluation.

Table 1: Main forest measures of the rural development policy 2014-2020, and their equivalent in the 2007-2013 period

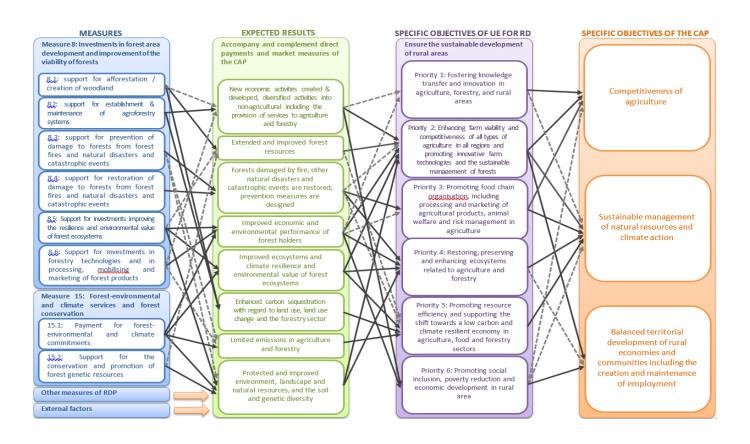
	2014-2020		2007	'-2013		
Article	Measure	Sub-measure	Measure	Article		
Art. 22: Afforestation and creation of woodland	<b>8.1</b> Support for afforestation and the		afforestation and the		<b>221</b> First afforestation of agricultural land	<b>Art 43:</b> First afforestation of agricultural land
und creation of woodiding		creation of woodland	<b>223</b> First afforestation of non-agricultural land	<b>Art. 45:</b> First afforestation of nonagricultural land		
<b>Art. 23:</b> Establishment of agroforestry systems	Measure 8	<b>8.2</b> Support for establishment and maintenance of agroforestry systems	<b>222</b> First establishment of agroforestry systems on agricultural land	<b>Art. 44:</b> First establishment of agroforestry systems on agricultural land		
<b>Art. 24:</b> Prevention and restoration of damage to	Investments in forest area development	<b>8.3</b> Support for prevention of damage to forests	226 Restoring	Art. 48: Restoring		
forests from forest fires and natural disasters and catastrophic events	and improvement of the viability	<b>8.4</b> Support for restoration of damage to forests	forestry potential and introducing prevention actions	forestry potential and introducing prevention actions		
<b>Art. 25:</b> Investments improving the resilience and environmental value of forest ecosystems	of forests	<b>8.5</b> Support for investments improving resilience and environmental value	<b>227</b> Support for non-productive investments	<b>Art. 49:</b> Non-productive investments		
Art. 26: Investments in forestry technologies and in processing, in		<b>8.6</b> Support for investments in forestry technologies and in		<b>Art. 27:</b> Improvement of the economic value of forests		
mobilising and in the marketing of forest products		processing, mobilising and marketing of forest products	<b>123</b> Adding value to agricultural and forestry products;	<b>Art. 28:</b> Adding value to agricultural and forestry products		
Art. 34: Forest- environmental and	Measure 15 Forest- environmental	<b>15.1</b> Payment for forest- environmental and climate commitments	<b>225</b> Forest- environment payments	<b>Art. 47:</b> Forest-environment payments		
climate services and forest conservation	and climate services and forest conservation	<b>15.2</b> Support for the conservation and promotion of forest genetic resources				

The *intervention logic* of the forestry measures is shown below in Figure 1. The columns show the measures, the expected results of their implementation, the objectives

of the Rural Development Regulations and those of the CAP itself. The expected results have been taken from the recitals of the relevant regulation.

The arrows between boxes show the logical link between each measure and its effects. The main effects are marked by solid arrows; the main secondary effects by dotted arrows.

Figure 1: Intervention logic for the forest measures in the RDP 2014-2020 (main sources: Regulation (EU) No 1305/2013 and Regulation (EU) No 1306/2013)

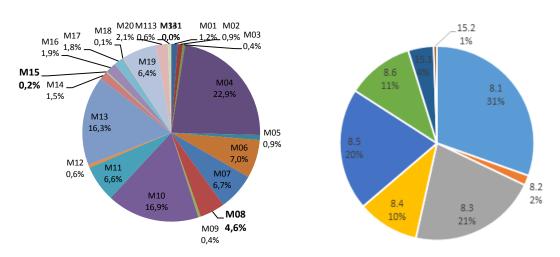


#### 3. IMPLEMENTATION / STATE OF PLAY

# Overview of planned rural development expenditure to address sustainable forest management

Funding for M8 and M15 represents 4.6 % and 0.2 % of total planned public expenditure at EU-28 level, respectively (4.6 % and 0.3 % of the total EAFRD contribution, respectively). This chapter describes the implementation choices made for M8 and M15 at RDP level, as well as the planned implementation of the corresponding sub-measures, in comparison to what was done in the previous programming period.

Figure 2: Share of each measure in the total planned public expenditure<sup>7</sup> at EU-28 level (left) and share of the M8 and M15 budget by sub-measure



Source: Financing plan 2014-2020, extracted in January 2016

#### Implementation choices of forest measures 8 and 15 at RDP level<sup>8</sup>

In their RDPs, most Member States or regions have chosen to implement the submeasures of M8 and M15. The RDPs that planned the highest budget for forestry measures are: Spain - Andalucía, Spain — Castilla-La Mancha, Spain - Galicia, Greece, Poland, Continental Portugal, and the UK - Scotland. However, some Member States or regions have not planned any funding for forestry measures, for example Germany - Bayern, Germany - Niedersachsen/Bremen, Rhineland-Pfalz, Finland (mainland and Åland), Ireland, Luxembourg and the Netherlands.

Of the 118 RDPs, 102 have planned expenditure for M8, with total planned expenditure amounting to EUR 6.823 billion; 22 RDPs have dedicated more than EUR 100 million to M8. The highest budgets are allocated by continental Portugal (EUR 524 million), Spain — Castilla-La Mancha (EUR 427 million) and Spain - Andalucía (EUR 413 million). Spain is the Member State in which M8 has been by far most implemented: the Spanish RDPs account for 53 % of public expenditure planned for M8 at the EU-28 level. The

EAFRD funding and the relevant national co-financing.

See also synopsis in Annex 5.

proportion of EAFRD funding in planned public expenditure varies significantly across regions (e.g. 100 % in UK - England, 54 % in UK - Scotland).

The level of implementation of M15 is much lower: 34 RDPs selected the measure, for a total planned expenditure of EUR 342 million. The highest budgets were allocated by Romania, Hungary, Italy - Campania, the UK - England and the UK - Scotland. Romania is a very specific case as it accounts for 30 % of public expenditure planned for M15 at the EU-28 level. Furthermore, 95 % of public expenditure planned for this measure is EAFRD-funded.

#### Allocation of measures by objective and focus area

For the 2014-2020 period, Member States had to choose measures that addressed the needs identified at RDP level and the EU's priorities for rural development. The RDPs are structured by EU priority and focus area: the identified needs, responding measures and allocated budget are described per focus area to highlight how the programme will address EU priorities<sup>9</sup>.

The following table shows that M8 and M15 are programmed mostly under Priority 4 and, to a lesser extent, under Priorities 5, 6 and 2. It is important to note that 10 managing authorities with responsibility for the economic, social and environmental aspects of agriculture and rural development added to the common framework a focus area 2C, focusing on the forestry sector<sup>10</sup>. This focus area is dedicated to measures supporting the competitiveness of sustainable forest management.

In 30 RDPs, M15 was chosen to address Priority 4. In three RDPs it is also programmed under focus area 5E: Italy - Umbria (EUR 5 million), Spain - Andalucía (EUR 11.1 million) and Spain - Madrid (EUR 0.09 million).

Table 2: Budget allocated to measures 8 and 15 (in million EUR), per focus area

	2A	2C+	3A	3B	P4	5B	5C	5E	5F+	6A	Total
M8	219.4	147.8	19.1	24.9	3407.6	1.1	172.8	2836.1	6.7	220.2	7055.7
M15					338.2			16.2			354.3

Source: shared fund management common system (SFC) database (extraction January 2017)

#### Share of the budget for forestry measures in the RDPs budgets

44 RDPs have planned to dedicate 5 % or more of their public expenditure to M8; in 40 RDPs this proportion equals less than 2 %. The Member States or regions which planned

Regulation (EU) No 1305/2013 (Art. 5) defines the six priorities for the EU's rural development policy for 2014-2020, broken down into 18 'focus areas'. These six EU rural development priorities also reflect the relevant thematic objectives of the common strategic framework, defined in Regulation (EU) No 1303/2013 (Art. 5).

Focus areas addressing the forest sector were added by Bulgaria, Croatia, Czechia, France -Alsace, France - Guyane, France - Lorraine, France - PACA, France - Rhône-Alpes, Lithuania, Romania and Slovenia.

to dedicate the highest share of their public expenditure to M15 are Italy - Campania (1.8 %), UK - Scotland (1.5 %), Hungary (1.2 %) and Romania (1.2 %).

# Implementation choices by sub-measure, in comparison with 2007-2014 achievements

*Measure 8.1 (Afforestation/creation of woodland):* 

50 % of expenditure planned under the RDPs is allocated to M8.1 (representing 60 RDPs from 20 Member States). As a comparison, 55 out of 90 RDPs implemented the similar M221 and/or 233 in the 2007-2013 period.

Table 3: Main indicators regarding support for afforestation

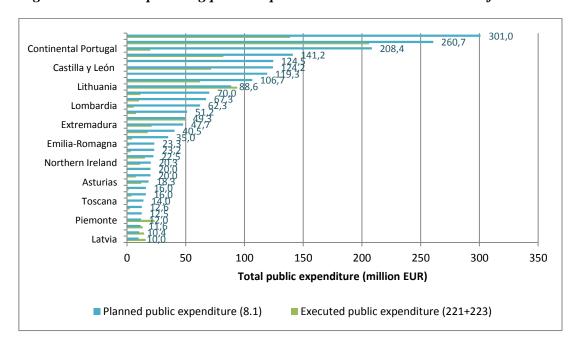
	Area afforested	Public expenditure
Planned for M 8.1 (2014-2020)	569 234 ha	EUR 2.263 billion
Executed for M 221 +223 (2007-2014)	288 209 ha	EUR 973 million

Source: SFC database (extraction January 2017) and 2007-2013 monitoring (final execution)

Poland and UK-Scotland allocated the highest budget to M8.1. They also had the highest achievements related to the 2007-2013 afforestation measure. Five Member States/regions planned to implement M8.1 but did not record any expenditure related to measure 221 or 223 in the previous period. On the other hand, seven Member States/regions did not programme M8.1 in the current period but had some expenditure related to the afforestation measure set for the previous programming period.

Regarding public expenditure, most Member States/regions set targets that were at least twice as high as the executed expenditure in 2007-2013 (see Figure 3).

Figure 3: 33 RDPs planning public expenditure above EUR 10 million for M 8.1



Source: SFC databases (2007-2013: final expenditure; 2014-2020: extraction January 2017)

#### *Measure 8.2 (agroforestry):*

In the 2007-2013 programming period, M222 supporting the establishment of agroforestry systems was planned in 16 RDPs and implemented in 8 RDPs. For the 2014-2020 period, the objectives of the EU-28 Member States/regions have significantly increased in this area: according to the SFC database, actions relating to M8.2 have been planned in 30 RDPs (though only 27 include targets in terms of area to be established in agro-forestry systems).

Table 4: Main indicators regarding support for the establishment of agroforestry systems

	Area established in agro-forestry systems	Public expenditure		
Planned for M8.2 (2014-2020)	72 529 ha	EUR 123.3 million		
Executed for M222 (2007-2014)	2 904 ha	EUR 2.1 million		

Source: SFC databases (2007-2013: final expenditure; 2014-2020: extraction January 2017)

Spain-Andalucía, Greece, Spain-Asturias and Spain-Extremadura allocated the highest budget to M8.2, though none of them recorded expenditure on the agroforestry measure (222) in 2007-2013 period. Hungary, continental Portugal, Spain - Azores, Belgium-Flanders and Italy - Veneto, all of which implemented M222 in the 2007-2013 period, set up targets that are significantly above the achievements of the previous period, both in terms of public expenditure and area to be established in agroforestry systems.

In the Member States/regions which have programmed M8.2, the share of RDP budget allocated to this measure is quite low overall (0.13 % on average). Even if more Member States/regions choose to support the establishment of an agroforestry system in 2014-2020 than in the previous programming period, the targeted level of implementation is quite similar.

*Measures 8.3 (prevention of damage) and 8.4 (restoration):* 

36 % of all RDPs allocated funding to M8.3 and 35 % to M8.4. Some RDPs having chosen both measures, a total of 45 % of the RDPs is covered by either one or both of those measures. As a comparison, 56 out of 90 RDPs (63 %) implemented the corresponding M226 in the 2007-2013 period.

Table 5: Main indicators regarding support for prevention and restoration measures

	No. of beneficiaries	Public expenditure
Planned for M8.3 (2014-2020)	21 469	EUR 1.586 billion
Planned for M8.4 (2014-2020)	N/A	EUR 759 million
M8.3+8.4	N/A	EUR 2.346 billion
Executed for M226 (2007-2014)	N/A	EUR 2.377 billion

Source: SFC databases (2007-2013: final expenditure; 2014-2020: extraction January 2017)

The Member States/regions which have allocated the highest budget to prevention and restoration are: Spain - Castilla la Mancha, Spain - Galicia, Greece, continental Portugal, and Spain - Andalucía.

From the Member States/regions with RDPs in the 2007-2013 period, four (Germany - Niedersachsen / Bremen, Italy — Friuli-Venezia Giulia, Italy - Trento and Poland) did not plan any expenditure for M8.3 and 8.4, even though they had implemented M226.

On the other hand, some regions planned for a very high level of implementation of M8.3 and 8.4<sup>11</sup>, although their level in this area was quite low in the previous programming period.

The Mediterranean countries allocated the largest share of RDP budget to M8.3 and M8.4, and this can be explained by their high fire hazards context. M8.4 was programmed in most RDP with a very low share of the budget, except in France - Aquitaine, Spain - Asturias and Italy - Toscana.

The targeted levels of implementation are quite similar to the achievement of 2007-2013.

*Measure 8.5 (non-productive investments):* 

69 % of RDPs foresee plans to implement M8.5. The budgets allocated to this measure are quite high, with the average planned public expenditure being EUR 18.6 million.

Table 6: Main indicators regarding support for non-productive investments in the forest sector

	Area concerned by investments	Area concerned by investments No. of operations P			
Planned for M 8.5 (2014-2020)	2 921 535 ha	93 693	EUR 1.507 billion		
Executed for M227 (2007-2014)	N/A	N/A	EUR 1.120 billion		

Source: SFC databases (2007-2013: final expenditure; 2014-2020: extraction January 2017)

Regarding the programming of M8.5, the choices made by Member States and regions are quite similar to what was done for its equivalent measure (M227) during the 2007-2013 period. Only four Member States or regions (Germany - Bayern, Germany - Niedersachsen/Bremen, Germany - Rheinland-Pfalz, Spain - Castilla y León) closed the measure for the current period, while it has been newly opened in six Member States or regions (Austria, Bulgaria, Italy - Valle d'Aosta, Latvia, Malta, Slovakia).

However, for most Member States and regions, the targeted level of implementation differs from that of 2007-2013. The difference between the public expenditure executed under the previous programmes and the expenditure planned for 2014-2020 is EUR 20 million more in 10 RDPs and EUR 20 million less in 3 RDPs.

Quite significant shares of RDP budgets have been allocated to M8.5 (1.5 % on average). In regions where this support for non-productive investments already existed in the

<sup>&</sup>lt;sup>11</sup> All of these regions are in the Mediterranean areas in which fire prevention is a high concern.

previous programming period, the budget share allocated is quite similar to the 2007-2013 level (executed public expenditure).

*Measure 8.6 (productive investments):* 

67 % of RDPs include plans to implement M8.6, with average planned public expenditure at EUR 10.3 million.

Table 7: Main indicators regarding support for productive investments in the forest sector

	No. of operations	Public expenditure
Planned for M8.6 (2014-2020)	13 898	EUR 825 million
Executed for M122 (2007-2014)	N/A	EUR 488 million
Executed for M123 (2007-2014)	N/A	EUR 274 million

Source: SFC database (extraction January 2017) and 2007-2013 monitoring (final execution)

In general, M8.6 covers the same type of operations as M122 and M123 did in the previous programming period.

The RDP for continental Portugal has allocated by far the highest budget to M8.6 (EUR 97 million). In terms of share of the budget, Spain - Pais Vasco stands out with 19.4 % of the RDP budget allocated to M8.6, the second highest rate being 4.5 % (Spain - Galicia).

In many RDPs, measure 8.6 was implemented with an average budget share of 0.9 % of the total planned public expenditure. However, no Member State or region allocated more than 5 % of their budget to this measure.

Measure 15.1 (Forest-environmental commitments):

25 % of RDPs have allocated budget to M15.1, with planned public expenditure being EUR 10.8 million on average.

Table 8: Main indicators regarding payments for forest-environmental commitments

	Areas under forest environment contracts	Public expenditure		
Planned for M15.1 (2014-2020)	1 402 743 ha	EUR 314.5 million		
Executed for M225 (2007-2014)	443 365 ha	EUR 140 million		

Source: SFC database (extraction January 2017) and 2007-2013 monitoring (final execution)

For the programming of M15.1, the choices made by Member States and regions are quite similar to what was done for the equivalent measure (225) in the 2007-2013 period. The targeted level of implementation is also quite similar to what was achieved in the previous period. The share of M15.1 in the RDP budgets is generally low: it is above 1 % in only three RDPs.

The share of the budget allocated to M15.1 is 0.12 % on average. Romania, Italy - Campania and UK - Scotland are the Member States/regions that give the highest importance to this measure in their RDPs.

#### *Measure 15.2 (genetic resources):*

Measure 15.2, which addresses the conservation of genetic resources in forests, was allocated funding in only 16 RDPs, with total planned public expenditure amounting to EUR 39.7 million. This is a new measure with no equivalent in the previous period. Small budgets have been allocated to it: the average planned public expenditure is EUR 1.4 million.

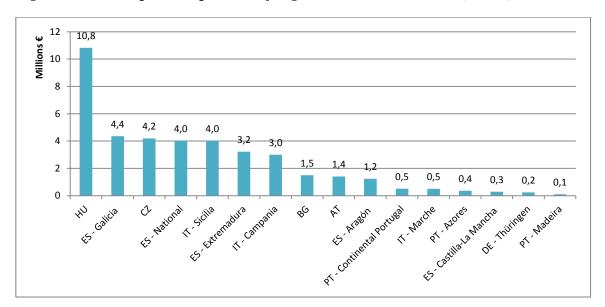


Figure 4: Planned public expenditure for genetic resources actions (M15.2)

Source: SFC database (extraction January 2017)

The Member States/regions which programmed M15.2 generally allocated a low share of their budget to this measure and no RDPs have set a high implementation objective for it, even though the subject covered is of great importance for sustainable forest management. This may be related to the fact that the measure is new in the 2014-2020 programming period.

Horizontal rural development measures to address forests:

The graph below shows the number of RDPs in which horizontal measures have been planned to benefit the forest sector, forest holders or to target wooded land. However, the budget allocated to forests in each measure is not available.

Figure 5: Number of RDPs in which the description of the measure clearly mentions support for forests, per measure and Member State



Source: Alliance Environnement, based on an analysis of RDPs

The horizontal sub-measures which address forests most frequently are sub-measures 1.1 (vocational training), 1.2 (demonstration activities), 2.1 (use of advisory services) and 4.3 (investment in forest roads).

Concerning the sub-measures related to the implementation of Natura 2000 in forests, M12.2 is planned for in 18 RDPs and M7.1, which should support the implementation of management plans in Natura 2000 forest areas, in 36 Member States/regions.

#### 4. METHOD

#### Short description of the methodology

This evaluation project was carried out by an independent external contractor and resulted in a final report<sup>12</sup>. The starting point for the evaluation was the development of an intervention logic for the forestry measures, focusing on their contribution to the general objectives of the CAP (see Annex 3: Methods and analytical models). Depending on the data availability, and due to the very short period of implementation of the evaluated measures, the evaluation was based both on the programming data of the 2014-2020 period and on implementation data of the previous period (2007-2013). This was made possible as the set of measures implemented in forests are very similar over the two periods.

\_

 $\frac{https://publications.europa.eu/fr/publication-detail/-/publication/c3ab0c4b-2d84-11e8-b5fe-01aa75ed71a1/language-en/format-PDF/source-88292898.$ 

Alliance Environnement: Final report:

#### Data sources and issues arising

From the start of this evaluation, it was clear that the availability of data regarding implementation of the 2014-2020 rural development measures would be limited, given that some RDPs were approved only at the end of 2015 and that there have been significant implementation delays in many Member States/regions. On the other hand, the similarity between the 2014-2020 and 2007-2013 forestry measures provided opportunities to get an insight into the effects of the policy on a larger time scale.

The common monitoring and evaluation framework (CMEF) financial output and result indicators for Pillar 2 were the main source of information on the implementation of the rural development measures. They were extracted from the SFC databases. For the 2007-2013 period, the final output of the measure could be used. For the 2014-2020 period, only targets were available. Hence, the analysis of the implementation choice and of the uptake of the measure was based on predicted uptake for the 2014-2020 period and on material from case studies. Data from the Farm Accountancy Data Network (FADN) were used to carry out analyses on the effect of the measures on the economic viability of farms in the evaluation question (EQ4) (see Annex 4 for the list of evaluation questions). However, the data cover only the previous programming period, as FADN data were only available up to 2014.

Eurostat, UNECE, FAO and Forest Europe data were used to set out the context of the choices made by managing authorities and beneficiaries (EQ1). To quantify the evolution of the indicators over the last programming period, updates of 2005, 2010 and 2015 have been used. The streamlining European biodiversity indicators (SEBI), European Environment Agency (EEA) and EU agri-environmental indicators<sup>13</sup> were relevant to this study (i.e. for EQ6). The JRC's geographic information system (GIS) database provided some relevant statistical as well as geographical information; however, only public data could be used<sup>14</sup>. The report on land use, land-use change and forestry (LULUCF) actions, submitted by Member States according to the LULUCF Decision, details the actions implemented to limit or reduce emissions and maintain or increase removals resulting from land use, land-use change and forestry at Member State level. However, the information they provide is quite different from one Member State to another. The environmental or socio-economic effects of the forestry measures (EQ6) were rarely investigated in existing studies. Hence the methodology behind EQ6 was largely based on the analysis of the effect of forest management practices that are similar to those which can be supported by the forestry measures. The literature review can be found in Annex 1 of the 'Evaluation study of the forestry measures under rural development — Final Report'15.

\_

https://ec.europa.eu/eurostat/web/agriculture/agri-environmental-indicators

GIS were also used to calculate some indicators (e.g. forest coverage and its expected evolution) at RDP level, based on data provided by the European Forest Institute.

https://publications.europa.eu/en/publication-detail/-/publication/89f7b518-2d86-11e8-b5fe-01aa75ed71a1

The RDPs<sup>16</sup> of the Member States/regions in the scope of this evaluation were reviewed, with two main objectives. The first one was to identify the needs of the forest sector and how they were linked to the implementation choices. The second was to produce a database of the horizontal rural development measures planned to address forest issues. Information was collected in a matrix. On this basis, a typology of the needs of the sector as well as statistical analysis on the occurrence of forest needs by type and on the implementation choices for the horizontal rural development measures were established. Case studies were a key source for obtaining insight into the implementation of the 2014-2020 forestry measures (see Annex 3 for the list of fourteen case studies). They provided the qualitative information necessary to analyse the factors accounting for local situations, as well as stakeholder opinions on support provided to forests through RDPs. A questionnaire survey was submitted to the managing authorities responsible for the RDPs. The purpose was to collect information regarding the implementation of the 2014-2020 forestry measures on an enlarged sample of Member States/regions, in order to complement and cross check the information collected in the case studies and in the RDP reviews. Additional interviews were held at EU level with organisations representing European farmers and forest owners, woodworking industries, state forest companies as well as agricultural, rural and forestry contractors, etc., in order to complete the views on the added value of the forestry measures. Information from different data sources has been used in the answer to each EQ, in order to ensure that the assessment was based on cross-checked evidence. The data sources and the analytical tools used are summarised in Tables 11 and 12 in Annex 3.2 and 3.4, respectively.

#### Limitations and robustness of findings

The main challenges related to establishing the results have to be seen against two facts. First of all, results of projects in forestry occur in the very long term, making it difficult to appraise properly, with reliable hypotheses, the effect of the implementation of the measure whose effects will really become visible within several decades. Furthermore, it should be considered that the 2014-2020 rural development measures have started to be implemented in 2015, and some have suffered significant delays.

Among the limitations and missing information or data, the main ones concerned are:

- geographical data at EU level to appraise the geographical distribution of the forests/stands concerned by the aid;
- financial and output indicators available at sub-measure level;
- financial data on the share of the budget dedicated to forest in the RD forest and horizontal measures;
- the difficulty to set up reliable counterfactual to really compare situations 'with support' and those 'without support';
- studies on the socio-economic effects of the forestry measures;

16

The review was based on the RDP versions as of May 2017.

 the lack of consensus among the authors on projections for the forest sector in the next 20 to 30 years.

Specific limitations related to the individual EQs are indicated in Annex 3. All these limitations inevitably weaken the robustness of the conclusions that can be drawn. Over the period of the evaluation, the methodological approaches were reviewed and adapted where necessary to ensure an appropriate analysis of those data which were available.

# 5. ANALYSIS AND ANSWERS TO THE EVALUATION QUESTIONS<sup>17</sup>

The questions were grouped according to the five criteria to be addressed in the evaluation: effectiveness, efficiency, coherence, relevance, and EU added value.

The starting point, however, was a causal analysis to obtain a clearer picture of the outset; to this end, the driving forces behind the individual implementation choices were scrutinised:

- firstly, at the level of the managing authorities regarding the selection and design of the forestry measures for their RDPs, and
- secondly, at the level of foresters, farmers, and other potential beneficiaries regarding their decisions on the uptake of these measures.

### 5.1. Causal analysis: Drivers behind implementation choices

 $EQ\ 1$  — Causal Analysis: What are the drivers behind implementation choices regarding the forestry measures and to which extent, (i) at the level of the Member States administrations, (ii) at the level of the beneficiaries?

#### Method and limitations

The main sources of data are:

- for the drivers of choice by managing authorities, the analysis of the RDPs and of the responses to the questionnaire survey sent to 100 RDP managing authorities of whom 61 replied, the case studies;
- for the drivers of beneficiaries' choices, the case studies.

The questionnaire survey of managing authorities offered a lengthy list of possible drivers and also the opportunity to comment further on the reasons for choices made.

The motivations of beneficiaries' decisions to apply (or not) for the forestry measures were explored in the 14 case studies through interviews with a range of stakeholders<sup>18</sup>. There are significant limitations to both the case studies interviews and the survey of managing authorities, especially for this EQ where the aim is to explore underlying

-

<sup>&</sup>lt;sup>17</sup> See compilation of the questions in Annex 4.

<sup>&</sup>lt;sup>18</sup> Including managing authorities, sector representatives, advisers and NGOs.

reasons which may be sensitive for some interviewees. The information is necessarily qualitative and variable in the quality and level of detail provided. It should be noted that for each of the case studies several different stakeholders were interviewed, including the managing authorities, so it is not surprising that there are differences in emphasis on the importance of specific drivers between the two sources.

The full results of the survey of managing authorities included in Annex 6 of the 'Evaluation study of the forestry measures under Rural Development — Final Report' 19 illustrates some of the drivers of and barriers to beneficiaries' choice of forestry measures.

#### Drivers of managing authorities' programming of the forestry measures

#### *Information from the analysis of the RDPs*

Information extracted from the needs assessment in all the 2014-2020 RDPs<sup>20</sup> was used to develop a typology of forest-relevant needs in three categories — social, economic and environmental (Table 9). In broad terms, social and economic needs tended to come from the forest sector, and environmental needs from local strategies and commitments, but fostering adaptation of forest ecosystems to climate change, protecting forests from natural disasters and increasing the use of bioenergy from forests featured in both categories.

Table 9: Typology of the needs of the forest sector mentioned in the RDPs

Social needs	Improve the level of training of forest holders and of Impoved as transfer			
Social ficcus	Improve the level of training of forest holders and of knowledge transfer			
	Stimulate innovation, applied research and experimentation in forestry			
	Reinforce cooperation and the structuration of the forest sector			
	Promote forests as natural/cultural heritage and develop forest tourism			
Economic needs	Improve the competitiveness of forest companies			
	Improve forest infrastructures for an improved mobilisation of timber			
	Increase the use of bioenergy from forest resources			
	Consolidation of forest land			
	Improve the market value of wood products			
Environmental needs	Foster the adaptation of forest ecosystems to climate change			
	Protection of the forest (from natural disasters)			
	Foster sustainable forest management (ecofriendly practices/plan preparation)			
	Protect/consolidate forest ecosystems (biodiversity, soils, water, etc)			
	Reinforce/ensure the protective role of forests			
	Promote the sequestration of carbon in forests			

## <u>Drivers identified in the questionnaire</u> survey of managing authorities

Afforestation/creation of woodland (M8.1)

The answers of 28 Managing Authorities in the questionnaire survey identified the objective to 'increase the area of forest to address environmental concerns and contribute to climate change mitigation' as the dominant factor in programming of M8.1. Consistency over the two programming periods was the second most important driver,

20

<sup>&</sup>lt;sup>19</sup>https://publications.europa.eu/en/publication-detail/-/publication/89f7b518-2d86-11e8-b5fe-01aa75ed71a1

Excluding those for the outermost regions.

associated with the need to ensure funding for commitments programmed during the previous period. Other drivers mentioned included protection of soils, enhancement of biodiversity, regional forestry programmes and Natura 2000 goals.

Establishment of agroforestry systems (M8.2)

Only 14 of the 61 managing authorities who responded to the survey provided answers on the drivers of programming M8.2 (at EU level it is programmed in 37 RDPs).

They identified addressing environmental concerns or complying with environmental commitments (protection of water soil, biodiversity, carbon sequestration) and encouraging agricultural diversification as important factors. Increasing timber production was not seen as a prominent driver of programming this measure.

Consistency over the two periods is fairly important, and a wide range of other environmental drivers were also mentioned, including restoring and maintaining traditional agricultural and forestry practices in the *dehesa-montado* systems, creating biodiversity habitats and connecting strips of predominantly native trees (including fruit trees), improving soil quality and micro-siting blocks and strips of trees to intercept rainfall run-off containing diffuse pollutants. The creation of ecological focus areas (EFAs) was also mentioned as a driver<sup>21</sup>.

Just over half of the 61 managing authorities who responded to the survey provided reasons for programming this measure. These included maintaining the protective role of forests, securing timber producing resources against fire and natural hazards and maintaining continuity with the previous period.

*Support for restoration of damaged forests from forest fire and natural disasters (M 8.4)* 

More than half of the 61 managing authorities who responded to the survey answered this question. The need to address important local risks of natural disaster (e.g. fires, storms) was of primary importance in the decision to programme M8.4 in 25 of these RDPs.

Support for investments improving the resilience and environmental value of forest ecosystems (M 8.5)

As might be expected, most of the managing authorities who responded to this question identified environmental and climate objectives as the main reason for programming M8.5. Increasing wood production/quality and improving sylvicultural management was a primary factor for 12 of them.

21

Ecological focus areas (EFAs) are areas that are targeted to bring benefits for the environment, improve biodiversity and maintain attractive landscapes within agricultural land (Recital 44 of Regulation (EU) 1307/2013). Since 2015, every farmer in the European Union who claims a direct payment and has more than 15 hectares of arable land has to have 5 % of his/her arable land covered by EFAs.

Support for investments in forestry technologies and in processing, mobilising and marketing of forest products (M8.6)

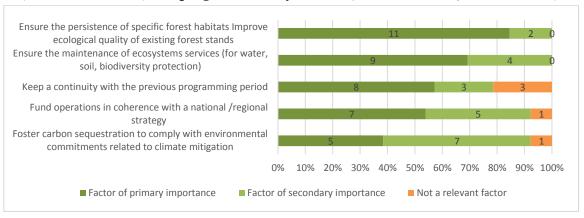
The economic target of M8.6 was clearly confirmed by the survey responses: 'increase the mobilisation of wood', 'support small wood companies, providing jobs in rural areas' and 'support the structuration and marketing of the sector' were of primary importance for all the respondent Managing Authorities implementing M8.6.

Payment for forest-environmental and climate change commitments (M15.1)

The managing authorities responding to this question, clearly stated that for them the main drivers are the maintenance and improvement of forest habitats and ecosystem services, although half of them also mentioned continuity with the previous programming period and coherence with national or regional strategies.

Climate mitigation was relevant for several of them (see Figure 6 below).

Figure 6. Q: The payment for forest-environmental and climate change commitments (sub-measure 15.1) was programmed in your RDP, in order to ... (13-14 answers)



Source: Alliance Environnement, survey of the managing authorities, September 2017

*Support for the conservation and promotion of forest genetic resources (M15.2)* 

At EU level, only 16 RDPs programmed M15.2, and 10 of the 61 managing authorities who responded to the survey answered this question. A wide range of factors have led to programming this new sub-measure, of which the cultivation and conservation of rare trees is the most cited. Other drivers included monitoring local forest genetic resources and setting up a national planning framework for the conservation of forest genetic resources.

#### Drivers of managing authorities/ decisions not to programme forestry measures

The managing authorities were asked why they had chosen not to programme some measures. Based on the replies (see table 10) it is possible to conclude that the most important factors were that other issues are more important to address in the RDP and/or that the measure doesn't address local needs. The latter is of concern, particularly for M15, given the possibility to tailor most of the sub-measures. Among the other reasons

not to programme some measures, the low demand from beneficiaries and the high administrative costs.

Table 10: Reasons for choosing not to programme forestry measures in the 2014-2020 RDPs

Reasons/measure	8.1	8.2	8.3	8.5	8.5	8.6	15.1	15.2
Other issues/sectors more important to address in the RDP	9	17	10	8	7	11	19	26
The measure does not address local needs	8	20	4	4	3	6	15	28
Other factors	3	5	5	3	4	4	5	8
Equivalent forestry measures for 2007-2013 were too much of an	6	3	2	3	3	1	9	9
administrative burden								
More relevant strategy chosen to meet local needs using State aid	3	5	4	6	3	3	4	8
Insufficient applicants for equivalent forestry measures in 2007-2013	6	4	0	1	1	3	6	10
More relevant strategy (other RDP measures) chosen to meet local needs	4	0	4	3	4	0	7	4

## Drivers identified in the case studies

The 14 case studies illustrate the range of different drivers behind managing authorities' choice, design and implementation of the forestry measures. Some are common to many or all of the case studies, others are quite clearly related to the context of particular case studies (for example, characteristics of the forest and agriculture sectors and policies, land-use systems, historic factors and, in some cases, recent external events including storm damage or outbreaks of pests and diseases).

Groups of drivers identified by the case studies are discussed below, illustrated by examples of their differing effects.

- Consistency, continuity and stability of funding opportunities: This was a significant driver in many of the case studies, especially where measures were perceived to have worked well in the past (Austria, UK-Scotland, Italy Campania). This driver influenced both the choice of measures and the relative budget allocations between measures.
- Maintaining and improving the contribution of the forestry sector to the national/regional economy was seen as important in several case studies (e.g. afforestation of marginal farmland in UK Scotland or providing employment in Bulgaria). Specific drivers include improving productivity, sylvicultural management and quality (Austria), competitiveness and technological efficiency (Spain Castilla-La Mancha), and in some cases increasing the forest area (Bulgaria, Germany Mecklenburg-Vorpommern and Lithuania). Several case studies indicated varying degrees of dependence of the sector on continued government support. In contrast, in Sweden state support to forest owners is allowed only if it does not affect the profitability of the business.
- Contribution of the sector to other policies: Sustainable forest management, multifunctional forestry and biodiversity management were important drivers of the choice of specific measures in some case studies but more rarely mentioned as drivers of the programme as a whole. Climate adaptation was a significant factor in many case studies (Austria, Slovakia), not just in those that had recently suffered catastrophic events. Climate mitigation and LULUCF were rarely

mentioned as drivers, except in Scotland where the government's climate mitigation strategy includes the objective of planting 10 000 ha of new forests per year. This has led to a very strong focus on M8.1, and reduced budgets for other objectives, including sustainable forest management. In Austria, multifunctional forest management is seen as a driver of rural development, and the use of environmental forest management is encouraged, for example for watershed protection and the maintenance of cultural landscapes.

- Demand from the forestry sector and other stakeholders influenced the continuation/adaptation of existing forestry measures and the introduction of new ones. Achieving consensus of the actors involved was a main driver in Italy Campania, and also in Austria where there was a shared consensus between forest owners and environmental non-governamental organizations (NGOs) on the need to support environmental/social forest priorities.
- Reduced RDP budget and/or share of the budget: there were several examples where a reduced RDP budget and/or a reduced share of overall budget allocated to forestry measures had an impact on programming decisions. In some cases, this was a consequence of underspending on forestry measures in the previous period but, in a few cases, it was suggested that the division of institutional responsibilities as well as political/sectoral influences resulted in a less favourable RDP allocation for the forest sector compared to the farming sector. In Greece, the financial crisis and austerity measures drastically reduced the RDP budget for 2014-2020.
- Major events external to the RDP had an impact on the choice and targeting of 2014-2020 forestry measures in two case studies. Restoration work after major storm damage (and improving resilience to future storms) was a driver in Slovakia and France Aquitaine.
- Technical, administrative and advisory capacity of managing authorities. The changes in the EAFRD regulations concerning forestry measures were relatively minor between the two periods, but when the managing authorities were choosing their forestry measures for 2014-2020 they were all coping with major changes in other aspects of programming the CAP<sup>22</sup>. It is not surprising that pressure on resources and workload acted as a disincentive to choosing new measures and innovative approaches in some managing authorities. In others, more specific problems were identified, including shortcomings of the advisory services and out-of-date skills (Bulgaria), an emphasis on agricultural advice at the expense of forestry advice, and problems associated with a new IT application system (UK Scotland).

Including significant changes in the programming framework and payment control requirements for the 2014-20-2020 RDPs, and in Pillar 1 CAP measures and the associated effects on RDP land management measures.

• Lack of uptake of specific measures and focus on certain types of beneficiaries. Where the uptake of specific measures (particularly new ones) had failed to meet targets in the previous programming period, some case studies showed that RDPs scaled back these measures for 2014-2020 and others removed them altogether (e.g. only covering existing commitments under measure 8.1 in Slovakia). In several case studies stakeholders commented on a programme focus on larger forestry operations and businesses, making it more difficult for smaller enterprises (including some municipalities) and small or communal forest owners to access support (Spain - Galicia).

#### Drivers of beneficiaries' decisions to apply for forestry measures

The main groups of drivers that are believed to influence beneficiaries' decisions are discussed below.

Experience of forestry measures in earlier programmes

This was a significant push factor in beneficiaries' decisions, in several case studies, particularly for forestry measures 8.1, 8.3, 8.4 and 8.6.

Economic or strategic effects on the business and 'profitability' of the measures

Beneficiaries' expectation of positive benefits for their business and/or income was a key driving factor noted in almost all of the case studies (but not necessarily for all measures or all beneficiaries). Several interviewees commented on the importance of 'profitability' in beneficiary decisions for several different measures, particularly 8.1 and 8.6. Support under 8.1 for afforestation of marginal farmland was seen as an opportunity for a medium to long-term return on investment in UK - Scotland, and in Hungary as a medium-term opportunity to take a crop of fast-growing species for pulp markets, with the option of returning the land to agriculture later. Measure 8.1 was attractive to owners of abandoned or unused farmland, while measure 8.2 provided a diversification opportunity for farmers with marginal land.

Administrative requirements and delays in implementation and payment

The complexity of the application process, required documentation and bureaucracy in general were seen as significant barriers in several case studies (Italy - Campania, Spain - Galicia, Austria, UK - Scotland, Slovakia, France - Aquitaine). It was also noted that the time taken to process applications could mean that when approval was obtained it was too late in the season to implement the measure.

#### Payment rates

The proportion of eligible costs covered by the support can be an incentive (e.g. 100 % of eligible costs for measures 8.3-8.5 in Slovakia, relatively high premiums for establishing recreational facilities in Hungary). Elsewhere lower rates acted as a barrier (50 % for public beneficiaries of 8.6 in Italy - Campania).

#### Availability of administrative or technical capacity

Several case studies noted that smaller beneficiaries (public and private) may lack the technical capacity or access to upfront financial resources to prepare project plans and forest management plans required as part of the application process (Spain - Galicia). Others may struggle with requirements to submit applications electronically. Unfamiliarity with new measures, lack of up-to-date management skills and poor-quality advice resulting in unsuccessful implementation were a disincentive for applicants. In contrast, in Slovakia the work of forest advisors and forest owners' associations in providing information on measure 15.1 and helping with applications was seen as a positive driver.

#### Control over land and property rights

This was a factor in some specific cases. In Austria, there is a fear among forest owners that opting for environmental measures risks losing control of their property rights (this is linked to an ongoing conflict about forest Natura 2000 designations). In Hungary, unmanaged forests have been a growing problem for many years, for reasons that are unclear but generally attributed to the unfavourable ownership structure which is dominated by common ownership.

Although financial considerations and business benefits such as resilience to the effects of climate change or opportunities for diversification are probably the most widespread drivers for beneficiaries, the availability (or lack) of information, support in applying for RDP schemes and up-to-date technical advice is also important, especially for smaller beneficiaries.

#### 5.2. Effectiveness

EQs 2 to 6 assessed the economic, societal, environmental and climate effects that are anticipated as a result of the implementation of forestry measures.

- EQ 2: To what extent have the forest measures resulted in changes in land use and in the creation of additional ecological focus area (landscape features, agro-forestry, etc.)?
- EQ 3: To what extent have the forestry measures influenced forestry production in terms of:
  - Quantity;
  - Quality;
  - Producer prices;
  - Geographical distribution?
- EQ 4: To what extent have the forestry measures impacted on the economic viability of the farm/forest holdings/owners as regards revenue and the levels of production cost in the holdings (forestry, farms or mixed) affected?
- EQ 5: To what extent have the forestry measures impacted on competitiveness of the sector?
- EQ 6: To what extent have supported forestry measures impacted on the environment and climate, i.a. on biodiversity conservation and restoration, forest soils, water regulation, and the health status of forest ecosystems, climate change mitigation and adaptation and on balanced territorial development including the development of the rural economy and societal deliveries?

The short implementation period for the current forest measures (2014-2017), coupled with major delays in implementing them in most RDPs, has severely limited this appraisal (EQ2 to EQ6). Nevertheless, potential effects could be estimated by taking into account the outputs of equivalent measures from the previous programming period, where these are sufficiently similar.

The effectiveness of the evaluated measure is presented firstly at sub-measure level, because each covers significantly different topics, followed by a global assessment of the whole set of forest measures, evaluating to what extent they support the multifunctionality of forests and sustainable forest management, which are key objectives of the EU Forest Strategy.

**Support for afforestation (M8.1)** has been programmed in half of the RDPs for 2014-2020 and represents 31 % of total public expenditure planned for forestry measures at EU-28 level (EQ2). Over the previous programming period, half the area afforested with support from the equivalent measure was broadleaved stands, slightly less than a quarter was coniferous stands and a quarter was mixed. Fast-growing species remained marginal, with less than 2 % of the area covered under this measure in the EU-28.

Support for afforestation proved to be a key measure affecting land use (EQ2) in the 2007-2013 period. The area supported corresponds to one third of the increase in the EU forest area recorded between 2007 and 2013. Furthermore, in some RDPs such as UK - Scotland and Spain - Galicia, this forestry measure played a very significant role in the afforestation of the region. In most cases, afforestation occurred on marginal agricultural land, and half of the area afforested with RDP support was in Spain, the UK, Poland, Hungary and Lithuania. The afforested area could result in an increment of 2.3 million m<sup>3</sup> of wood per year, which is not significant at the EU-level, but is significant in some Member States such as the UK or Spain.

The FADN data (EQ 4) showed that, in the 2007-2013 period, the size of the supported afforestation projects was close to one hectare in 50 % of sampled farms. Hence, they are often marginal both in the farm landscape and in their revenue. However, around 10 % of projects supported the afforestation of more than 20 ha. Under the 2007-2013 period the afforested area with M221 and M223 support was around 288 thousand ha.

Concerning the 2014-2020 period, the target of M8.1 of around 560 thousand ha provides insight into the potential contribution of M8.1 to land-use change in the forthcoming years. Considering a scenario where 2/3 of targets are achieved, M8.1 could contribute to the creation of 350 000 to 400 000 ha of additional forested area by 2020, which is 1.2 to 1.4 times what was achieved in the previous period. The case studies showed that, in some Member States/regions, this measure is a key factor supporting afforestation: for example, in Scotland, it was found that almost all planting is undertaken with the support of forestry measures. To a lesser but still significant extent, rural development measures were estimated to account for 55 % of the increase in forested lands in Lithuania.

M8.1 can provide society with significant public goods besides wood (EQ6). But it has also been shown that even if forests can be profitable, most farmers/owners would not be able to invest and then wait such a long time for the income. Therefore, to increase afforestation and consequently to develop the related ecosystem services, it is necessary to provide an incentive to afforest. This would also help to maintain an active forest sector in rural areas.

Support for the establishment of agroforestry systems (M8.2) has been programmed in only one quarter of the RDPs (and only 5 RDPs with concrete implementation on the previous programming period). This represents 2 % of total public expenditure planned for forestry measures at EU-28 level. This low uptake seems to be mainly caused by: (i) the significant change that agroforestry implied in the farming system, (ii) the very limited implementation of this measure in 2007-2013, (iii) a lack of familiarity with the measure in some Member States, and possibly (iv) the absence of an incentive in the premium calculation. Hence this measure has had little impact on land use or on the creation of additional ecological focus areas. In areas with a tradition of sylvi-pastoral production systems (i.e. in Spain, Portugal and Greece), this measure was often criticised for not supporting the restoration or maintenance of existing agroforestry systems (e.g. dehesas and montados). This sub-measure nevertheless appears to be an important potential tool for implementing new management practices. Agroforestry could provide new economic opportunities in marginal farming areas and deliver significant additional ecosystem services and biodiversity benefits (EQ6), and leads to better adaptation of farming systems to climate change.

In terms of creating EFAs, neither measure 8.1 nor 8.2 was implemented very much. In Spain and Romania, however, the areas declared as EFA-afforested areas represent a significant share of the area afforested with rural development support in the 2007-2013 period. Thus, M221 significantly contributed to the creation of EFAs in those MS (Spain: 93.48 %, Romania: 65.40 %). For M8.2, the contribution of its equivalent in the previous period (M222) to the creation of EFA was negligible.

Support for the prevention and restoration of damage to forests (M8.3 and M8.4) has been programmed in two thirds of the RDPs and represents 31 % of total public expenditure planned for forestry measures at EU-28 level. Out of all the forestry measures, these have the most significant effect as they concern huge areas of forest and also bring wider societal benefits, for example by improving the fire resilience of settlements in rural areas (through firebreaks, etc.). These two measures are of central importance to the forest sector and also support the continuity of forest ecosystem services plus adaptation to climate change. They have supported large scale implementation of forest surveillance systems and major restoration campaigns (557 000 ha were restored in the 2007-2013 period, mainly after significant storms). Furthermore, M8.4 has enabled restoration campaigns on a larger scale and, in some cases, fostered the use of specific species of interest from an environmental and climate perspective (e.g. in UK - Scotland), and helped to introduce improved seedlings with a

higher growth rate (e.g. in France - Aquitaine), thus raising production and carbon sequestration capacities.

Support for productive investment (M8.6) has been programmed in two thirds of RDPs and represents 11 % of total public expenditure planned for forestry measures at EU-28 level. It is a key measure for the forest sector. Support for investing in forestry technologies and the processing, mobilising and marketing of forest products has played an important and positive role in stimulating investment. Hence, this sub-measure has the most direct effect on the competitiveness of forest companies by supporting the purchase of machinery for harvesting and for sylviculture, and most RDPs targeted the support to SMEs with little means to buy such costly equipment. In consequence, it also played an important role in maintaining jobs in rural areas, by fostering forest production in disadvantaged areas. Furthermore, this measure had a direct effect on harvesting capacity (EQ5) and contributed to the introduction of sylvicultural practices with reduced environmental impact, particularly on soils (e.g. low-pressure tyres). The sylvicultural operations financed through this measure (planting, thinning, pruning, etc.) should lead to improvements in the quantity and quality of wood (EQ3) available in several decades' time.

Improving the resilience and environmental value of forest ecosystems (M8.5) and the management of environment and climate services and forest conservation (M15.1) are a key area of EU funding for sustainable forest management with a view to achieving the EU's biodiversity and climate priorities. M8.5 has been programmed in more than two thirds of RDPs and represents 20 % of total public expenditure planned for forestry measures at EU-28 level. M 15.1 has been programmed and allocated funding in just 25 RDPs and represents 4 % of the forestry measure budget at EU-28 level. It appears that the budgets and uptake targets for M15.1 management contracts are far below the scale of implementation required for Member States to meet their legal obligations under the Habitats and Birds Directives to restore and maintain the Natura 2000 habitats and species of forests and traditional agroforestry systems. Recent EEA data show that only 15 % of forest habitats of Annex I to the habitats directive are in favourable conservation status and the trends are poor. More generally speaking, the forestry measures have significant potential to safeguard and improve forest biodiversity, through appropriate design and targeting of these measures to identified local needs.

The potential synergy of using M 15.1 in conjunction with M12.2 (which compensates for legal restrictions in Natura 2000 and other nature reserves) is sometimes limited by problems, for example in defining the baseline for payments in Natura 2000 areas (e.g. in Italy - Campania.), and by the impact of insufficient RDP funding (e.g. in Germany — Mecklenburg-Vorpommern where the budget only allowed for M12.2 implementation). The evaluation has also shown the importance of supporting uptake through awareness raising and technical support (using M1 and M2 in particular).

**Support for the conservation and promotion of forest genetic resources (M15.2)** was introduced in 2014 and has not been implemented much so far (it is programmed in 14 RDPs and represents 1 % of total public expenditure planned for forestry measures at

EU-28 level). This is probably because of the short implementation period and the tendency of managing authorities to give priority to measures that were implemented previously. An assessment of the effect of this measure was therefore difficult to make. However, the case studies and the questionnaire survey of managing authorities showed that there are growing needs related to genetic resources, related to forest improvement and adaptation to climate change. In this context, this measure seems highly relevant and its importance may increase in the coming years.

Horizontal **rural development measures implemented in forests**, such as M1 (knowledge transfer and information) M.2 (advisory services), M4.3 (infrastructure), M12.2 (compensation payment for Natura 2000) and M16 (cooperation), played a significant role in complementing the forestry measures. The lack of specific monitoring data limited the quantified analysis of their contribution, but the analysis of the RDPs showed that, among the RDPs in which M8 is programmed, 70 % also opened at least four horizontal measures to address forests. The case studies showed that the horizontal measures have contributed to better access to wood through the building of forest roads, biodiversity management, setting up forest management plans, adopting of new practices and innovation.

The set of forest measures covers the three pillars of sustainability, allowing managing authorities and beneficiaries to set up activities for multifunctional forests and **sustainable forest management**. In addition, among the key impacts that the forestry measures are expected to deliver in both programming periods is the medium- to long-term contribution towards **climate action**, including: (i) increased carbon sequestration potential through afforestation and forest management; (i) prevention of future damage, and; (iii) contributing to resilient and sustainably managed forests, particularly where these help to stabilise and reinstate forest carbon sinks and improve future adaptation.

As regards in particular societal benefits, these include access to forests for recreational activities and safeguarding characteristic landscapes and cultural heritage. The case studies show forestry measures support for work on a range of relevant actions linked to this objective, for example investments in machinery, facilities and equipment to improve recreational use forests; investments in harvesting and processing a range of non-wood forest products (mushrooms, chestnuts, aromatic and medicinal plants).

The evaluation identified some possible improvements for a more effective implementation of the forestry measures. Payment rates for some measures, such as M 8.1, M 8.2, M 15.1 (area-based), are often too low to be enough of an incentive for forest holders to change their management practices or even production system. In addition, the forestry measure budget share is also often too small to achieve the targets set in the RDPs and at EU policy level.

#### **5.3.** Efficiency

EQs 7-9 assessed the administrative burden and cost associated with the forestry measures for three levels of stakeholders involved (e.g. Commission services, Member State/managing authority administrations and beneficiaries), as well as their proportionality.

- EQ 7: To what extent has the implementation of the forestry measures led to a change in administrative burden:
  - at the level of the beneficiaries;
  - at the level of the Member States administration;
  - at the level of the Commission services?
- EQ 8: To what extent have the forestry measures been efficient in achieving their objectives?
- EQ 9: To what extent have the related costs/burdens been proportionate to the benefits achieved?

The main limitations the evaluator faced in answering EQ7 were the difficulties related to distinguishing the following points:

- Firstly, the workload and the changes specifically connected to the forestry measures, from those concerning the whole RDP. Specific effort was made in the case studies to collect quantitative data on the workload exclusively created by the implementation measures at the level of the managing authorities and at the level of beneficiaries. Nevertheless, it was difficult for the managing authorities to make a distinction between these. Stakeholders' comments on control, monitoring and evaluation were often broadly formulated and were not specific to the forestry measures or to a specific level of implementation.
- Secondly, the administrative burden deriving from EU rules and procedures, from the
  one generated by national/local rules or by the national/local interpretation of EU
  regulations. Administrative burden was often generated by the conjunction of EU and
  local regulations and inconsistencies between them. As much as possible, the analysis
  distinguished between changes in administrative burden linked to the EU policy
  design from changes linked to the implementation choices made by Member States.

The main limit that was faced in answering EQ8 was that, given that financial details of the projects supported are not available at the EU level, the direct cost of the operations supported had to be estimated from indicators at the sub-measure and Member State/region level, without any distinction between the different types of operations.

The main limitations to the analysis concerning EQ9 have been the availability of data: there is little breakdown of the financial information on the concerned sub-measures and very little or no indicator allowing measurement of the proportionality.

Therefore a proper cost/benefit analysis could not be conducted.

As regards EQ 7, at the EU level there has been limited change in the administrative burden since 2007, but a further decrease is expected by the Commission services during the current programming period.

As regards the Member States/managing authorities level, the evaluation collected the number of full time equivalent involved in the administration, control and monitoring of the forestry measures, in the case studies areas and in the questionnaire survey. This included people working in the managing authorities, paying agencies and public advisory services, etc. This analysis showed that there are very significant differences from one Member State/region to another in terms of the work dedicated to forestry measures and that it was difficult to draw a conclusion on this particular point due to these highly different contexts.

To round out this information, the case studies and survey also investigated the trends in the evolution of the administrative burden: for 6 Member States/regions among the 10 with experience of implementing forestry measures over the two periods they showed a perceived overall increase in workload for the 2014-2020 period; interviews with managing authorities and other stakeholders (e.g. paying agencies and public experts) showed the same. In 3 other Member States/regions, the managing authorities considered that the workload was similar to the situation in 2007-2013. The survey also investigated the evolution of the administrative burden at sub-measure level. Generally speaking, it showed a rather negative evolution of the administrative burden. A high proportion of responding managing authorities indicated that the administrative burden was equal to or heavier than for equivalent measures in the previous period. However, like the case studies, the survey also showed that the administrative burden was reduced in a few cases.

Some developments, like the use of open calls, standard cost options and digitalisation, have a positive effect on administrative burden, but others (e.g reinforced control, systematic double-check) had a negative effect.

At the beneficiary level, the time spent by beneficiaries on the application process was summarised based on case studies. Even if these data cannot be strictly compared, as they do not all refer to the same application type, several case studies recorded that the workload related to applications was higher than one working month (Spain - Galicia, Lithuania, UK - Scotland). They also showed that, among the 11 Member States/regions implementing these measures in the case study areas, 9 stated that the workload increased and 2 considered that it had not changed between the two periods. The analysis showed that there was an overall increase in the administrative burden between the two periods. This is mostly related to increasing requirements in the application process (mentioned in 9 case studies) and to the introduction of systematic and annual controls (also mentioned in 9 case studies). The increased requirement to select projects based on traceable criteria, managed in most managing authorities through calls for projects, increased the

complexity and cost of applications. Also to be noted is the fact that the administrative burden is especially high for small forest holders without sufficient means to handle the situation (as mentioned in 10 case studies).

Several good practices and ways to reduce administrative burden have been identified<sup>23</sup>:

- the electronic submission of applications, which would facilitate the exchange of information between stakeholders and the way in which managing authorities and paying agencies manage applications;
- providing beneficiaries with information from the previous year or from other administrative procedures and/or pre-filling applications with this information, which would save time and help beneficiaries avoid mistakes (e.g. Spain Galicia);
- developing a common database through which applicants can obtain certificates from different authorities (e.g. Lithuania);
- the fact to base M8.5 entirely on flat-rate compensations, reduced costs and administrative burden for Paying Agencies and beneficiaries from all receipts submissions and controls (e.g. Sweden);
- The early publication of a clear planning of the calls for applications (e.g. France Aquitaine, UK Scotland), which increases beneficiaries' motivation and helps them to better organise the submission of their applications.

The beneficiaries' administrative burden in implementing the current forestry measures was found to be a major factor affecting efficiency, compared to the previous period.

For EQ 8, the methodology used consisted of calculating the direct costs of the forestry measures to investigate the relevant incentive and the extent to which the application led to a change in management or to a replication of activities that would have taken place anyway (deadweight effect). The direct costs of the operations were found to be fair, with various mechanisms involved, such as public procurements and a requirement ensuring the relevant calculation of standard scale<sup>24</sup> guaranteeing that the operations are conducted at market prices. The premiums of the area-based forestry measures generally did not provide enough incentive to motivate significant change in management practices, but they did help foster evolutions because the forest owners without support often do not have the capacity to bear the relevant costs. For some of the non-area-based measures, the EU support enable the operation to be run with more magnitude and in a more principled way. The deadweight effect of the forestry measures was on average low.

Regarding EQ 9, as administrative burden is especially heavy for small forest holders with low financial and/or technical capacities (see EQ7), the direct economic benefit of forestry measures is generally low for them. Some Member States/regions put a higher premium on small-scale activities (e.g. UK - Scotland) in order to take into account the

From the case studies.

<sup>&</sup>lt;sup>24</sup> Under Article 62 of Reg. 1304/2013.

scale effect. For beneficiaries, the cost burden has generally not been proportionate to the benefits obtained.

However, the analysis also showed that in some cases better results could have been obtained with the same budget if beneficiaries' administrative burden could have been reduced, as this generates significant indirect costs.

Certain eligibility and selection criteria have contributed to additional administrative burden, but some of them are critical to ensure that the effects of the forestry measures are in line with sustainable forest management (i.e. inclusion in forest management plans, locating the operation in target areas, using machinery with lower environmental impact, etc.). However, the use of competitive procedures for granting subsidies, though ensuring a transparent and egalitarian procedure, seems to lower the ratio between cost/burden and benefits. The use of such competitive procedures has weighed significantly on the indirect costs of the measures, while operations bringing mostly environmental benefits and non-significant economic benefits for the beneficiaries may not need to follow the same competitive procedures as fully economic measures.

To conclude on efficiency, the greatest impact of changes in administrative burden over the two periods fell onto beneficiaries, but also to a certain extent onto managing authorities, which led some of them to address their forest needs through State aid with simplified procedures and sometimes higher premiums<sup>25</sup>.

#### **5.4.** Coherence

EQs 10 -12 assessed the coherence of forestry measures internally (within the CAP) and externally (with other policies).

- EQ 10: To what extent have the forestry measures as part of the entire set of relevant CAP-measures dedicated to the environment/climate
  - delivered a coherent and complementary contribution to achieving the general objective of sustainable management of natural resources and climate action?
  - impacted on the other general CAP objectives (viable food production and balanced territorial development?
- EQ 11: To what extent have the forestry measures as part of the entire set of relevant CAP-measures dedicated to the environment/climate delivered a coherent and complementary contribution to achieving the objective of environmental/climate legislation and strategies, in particular the EU Forest Strategy, EU Biodiversity Strategy, Nature Directives, the Water Framework Directive, Nitrates Directive, the EU Soil Thematic Strategy, the 7<sup>th</sup> Environment Action Programme, the EU Bioeconomy Strategy, the LULUCF Decision (Decision No 529/2013/EU), and the EU 2030 Climate and Energy Framework.
- EQ 12: To what extent have the forestry measures been coherent and complementary with the interventions of the other ESI-Funds and other relevant EU-policies as research and innovation?

The evaluation shows that the forestry measures are coherent at EU level with other relevant CAP measures aimed at the sustainable management of natural resources, climate action, and balanced territorial development. This relates mainly to the

-

Source: case studies.

interaction between forestry measures, greening requirements under the Direct Payments Regulation<sup>26</sup> (i.e. the EFAs in the form of afforested/new agroforestry land with RDP support) and other RDP measures<sup>27</sup>. However, land under traditional agroforestry might not be eligible for CAP income support (depending on Member States' definition of eligible land) and the deployment of area-related rural development – forestry measures supporting environmental management. Also, the classification of land as either agricultural land or forest under RDP rules may hamper the implementation of appropriate forestry measures.

Indeed, if a traditional agroforestry system is defined by the Member State as agricultural land eligible for CAP direct payments, the land manager implementing appropriate environmental management may receive both CAP income support payments plus agri-environment-climate payments (the latter up to a maximum of  $\xi$ 900/ha/yr). Yet if the same land, under the same environmental management, is classified as non-agricultural land (even although it remains in agricultural use) there will be no income support payment and only the forest – environment-climate payment up to a maximum of  $\xi$ 200/ha/yr.

The forestry measures were found to be coherent with the objectives of the 14 key environment and climate policies reviewed with these policies, such as the EU forest strategy, biodiversity policies and climate policies featuring frequently in reference to the use of forest measures in RDPs as well as the reciprocal. For example, many of the 2014-2020 RDPs identify the contribution made by forest measures to national climate action plans, and the analysis of Member State reports on planned and ongoing LULUCF actions (submitted under Article 10 of the LULUCF Decision) suggest that EAFRD support and the forest measures are a key component of these actions<sup>28</sup>. Biodiversity policies were similarly well referenced: examples illustrating how forest management plans take biodiversity policies into account, for example by assessing compliance with Natura 2000 guidelines, were included in the case studies. The case studies included less explicit references to using forest measures to support soil and water policies, despite clear potential to use the forest measures for these objectives.

Long-term forest management can be necessary to achieve objectives that require sustained action over decades, such as maintaining and increasing carbon sinks, stabilising the provision of ecosystem services, alongside continued productivity and maintaining the biodiversity and economic viability of existing low-intensity systems. The decisions taken by Member States at the national and regional level therefore have a significant impact on whether the forestry measures have the potential to deliver

<sup>-</sup>

<sup>&</sup>lt;sup>26</sup> Regulation (EU) No 1307/2013 of the European Parliament and of the Council.

The other RDP measures aimed at the sustainable management of natural resources and climate action which could interact with forestry are M12.2 Natura 2000 compensation payments; M10.1 agrienvironment-climate; M4.4 non-productive investments; M16 co-operation.

See Paquel et al. (2017), Analysis of LULUCF actions in EU Member States as reported under Article 10 of the LULUCF Decision

 $<sup>\</sup>underline{http://ec.europa.eu/transparency/regexpert/index.cfm?do=\underline{groupDetail.groupMeetingDoc\&docid=10585}$ 

synergies or not, and land managers' decisions determine whether or not these potential synergies are realised in practice. It is worth noting that the delivery of multiple objectives is not guaranteed even if this is the intention, as not all environment and climate objectives can be delivered synergistically in all cases<sup>29</sup>. Choosing how and where to prioritise (or combine) different objectives is crucial to ensuring synergies (where possible) and avoiding conflicts.

As regards EU legislation, the forest measures are coherent with all ESI funds and associated research and investment programmes evaluated, and have potential synergies at the measure design level. For the 2014-2020 programming period, common rules ensure that the ESI funds are used in a more strategic and complementary way. Partnership agreements between the Commission and Member State authorities should ensure an overall high degree of coherence between the thematic priorities of the funds and the territory-specific development needs.

#### 5.5. Relevance

EQs 13/14 assessed whether and how the forestry measures as designed and implemented address the societal and sectoral needs related to forestry.

EQ 13: To what extent the examined forestry measures matched the existing needs in the sector, the priorities established at the EU, programme and/or national level? In answering this question, particular attention should be drawn to the Rural Development budget available in the programmes and the uptake of the measures therein.

EQ 14: To what extent is the intervention still relevant taking into account current and possible future needs? In answering this question it has to be addressed, how well the objectives of the forestry measures still correspond to the needs within the EU?

The method of analysis for this question was mainly based on a review of the main EU and Member State commitments that could relate to forests and particularly those relating to climate and biodiversity. This review allowed us to identify the areas in which forests could play a role in the future in order to match these needs. For this analysis, existing projections from modelling studies with alternative scenarios have been reviewed.

The forestry measures are highly relevant to addressing the EU priorities for rural development policy, and are in line with the priorities set up at national or regional level (EQ13). The analysis showed that several factors, such as the RDP framework itself and the need for Member States to address their international commitments, resulted in a strong focus of the forestry measures on the environmental and climate priorities for the rural development policy.

\_

Burrascano et al (2016) note the potential conflict between afforestation for climate purposes and impact on biodiversity objectives and that 'joined climate and biodiversity benefits are strongly context-dependent'; Hart et al (2013) note the broader challenge of balancing production with environmental objectives'...increases in the production of food, feed or timber, therefore must be accompanied by improved resource efficiency (to avoid reducing natural capital) and improved flow of environmental services from healthier ecosystems'.

The forestry measures provide managing authorities with a relevant set of instruments to address the needs of the forest sector, the most widespread of which are: (i) protection from the effects of natural disasters; (ii) building capacity among forest holders and stimulating innovation, and: (iii) improving infrastructure and harvesting capacities to increase local wood supply. The collaboration of the managing authorities with representatives of the sector in designing the forestry measures appeared as a key factor to ensure their relevance to addressing local needs. The analysis also showed that other rural development measures that complement the forestry measures are important as they provide a wider set of instruments for addressing sector needs. In particular, knowledge transfer and technical advisory (M1 and M2) were identified as key measures for improving the competitiveness of the sector, raising the environmental awareness of forest holders and contributing to the implementation of environmental measures such as M8.5 and M15.1. In the context of climate change, these measures will be of growing importance in raising the awareness of forest holders, and will support them as they adapt their stands and management practices to optimise carbon sequestration and sinks in forests while maintaining other ecosystem services.

Concerning the match between the forestry measures and future needs (EQ14), even with some uncertainty<sup>30 31</sup>, the projections over the next decades show that production would, on average, provide a good coverage of the sector needs in wood, even if some products (as now) will have to be imported (e.g. coniferous products or tropical wood). In terms of environment and climate, the literature and interviews confirm that, for the coming decades, the two main global challenges to the forest sector are adaptation to climate change and biodiversity, even if their role in other domains will of course remain (e.g. water regulation, soil conservation, etc.).

As regards climate change mitigation, forests are the most significant terrestrial carbon sink in the EU and are expected to remain so in the coming decades, yet the overall level of sequestered carbon in forests is expected to decrease towards 2030. This is due in particular to the changes needed in forest management to meet the expected higher demand for wood compounded by a progression in the age class of trees towards more mature stands with reduced growth and thus lower sequestration potential.

As regards biodiversity, the EU biodiversity strategy includes quantitative targets and legal obligations for Member States on the conservation status of Natura 2000 habitats and species; these are clearly not being met (EQ 6). The area of protected forests and other wooded land within the EU is likely to have to increase over next decades, if EU biodiversity policies and targets are to be achieved<sup>32</sup>.

Lauri Hetemäk et al, 2016. Future of forest-based sector – state of the art and research needs, 16p.

LULUCF discussions led to the conclusion of a very significant increase of energy use in most Member States.

Natura 2000 obligations and EU biodiversity strategy targets could be one reason, but it could also be regional conservation objectives, as mentioned in the Germany-Mecklenburg case study.

Finally, it is important to bear in mind that when a decision is taken and applied at EU level, which is a major wood producer, it also has an effect at the global level. This is particularly true for forest conservation, which can lead to some withdrawal of production within the EU and in consequence to importation of wood to cover EU needs. This means that protected forest in the EU could lead to some pressure on forests elsewhere.

#### 5.6. EU added value

EQs 15/16 assessed whether policy/actions/measures in the forestry domain should be implemented (also) at EU level.

- EQ 15: To what extent have the forestry measures created EU added value, e.g. for restoring and enhancing forest ecosystems, for climate change mitigation and adaptation including carbon sequestration, building networks for exchange of best practices, etc.?
- EQ 16: What is the difference that the EU financing made in implementing these measures compared to Member States acting on their own? In answering this question, it has to be considered to what extent do the issues addressed by the examined interventions continue to require action at EU level?

The analysis builds on: (i) the case studies, each of which has a section on EU added value; (ii) the questionnaire survey of managing authorities; (iii) a review of the literature in this area, and; (iv) interviews with organisations representing the forest-based sector. These interviews were carried out to collect supplementary information on areas of potential EU added value, including lateral measures, such as networks for the exchange of best practices. The analysis also took into account results from the preceding EQs on the efficiency and effectiveness of forestry measures (EQ 2 to 9) and on the coherence and relevance of the examined forestry measures (EQ 10 to 14). It focused on three judgement criteria and indicators<sup>33</sup>.

One limitation was the varied results in terms of reported EU added value across case studies, which made it difficult to provide a common view across all cases.

The general consensus among managing authorities and representative organisations is that the current framework of the Rural Development Regulation (2013-2020) has had an impact on forests and all case studies agreed that there is EU added value. Moreover, managing authorities indicate that the impacts noted could not have been caused by other initiatives. The case studies show that rural development policy has allowed some Member States to maintain forestry measures that would otherwise have disappeared, and other Member States to shift the availability of financing under specific measures that are not prioritised at national level (e.g. conservation status of species and habitats that depend on forests). Both demonstrate substantive EU added value (linked to the inherent flexibility of rural development policy), but of very different types. Managing authorities have however pointed out difficulties in understanding the new strategic programming

The impact of EU policy instruments on forests; how does rural development policy and other lateral measures affect (or not) forests; EU added value (or not) at the national level of RDP forestry measures 8 and 15.

framework, which made the design of national RDPs more complex as compared to the previous programming period.

The analysis of the case studies and interviews suggests that more could be done to improve networking and exchange of best practices, across and within Member States. Managing authorities often do not utilise the options available to them under the current M1.

The availability of EU funding has as such been quintessential in the uptake of specific forestry measures. Inputs from Managing Authorities as well as industry and other relevant stakeholders confirm that some of the forestry measures would not have been implemented or not to the same extent by Member States individually in the absence of RDP support.

#### 6. CONCLUSIONS

## Drivers behind implementation choices

Key drivers for both managing authorities and beneficiaries appear to be successful implementation in previous periods, continuity of well-established support, financial considerations, and simplicity of administration. The longevity of these factors across programming periods reflects the permanence of forestry as a land use, its importance in some rural economies, the long rotation cycle of many sylvicultural systems and the major changes required to improve forest resilience to increasing risks of pests/disease damage, storms, floods and drought/fire, as a result of climate change. Climate change mitigation was an important factor only for some measures (i.e. afforestation). The availability (or lack) of information, support in applying for RDP schemes and up-to-date technical advice are also considered to be important for the uptake of the measures, especially for smaller beneficiaries.

#### **Effectiveness**

The forestry measures can contribute significantly to delivering economic, environmental and social benefits in areas where these opportunities can be rare.

The effect of the whole set of forestry measures, including the horizontal rural development measures implemented in forests, is generally assessed as positive. However, this appraisal is limited by the short implementation period for the current forest measures (2014-2017), coupled with major delays in implementing the measures in most RDPs. It is also difficult to separate the effects of the forestry measures from other factors such as State aid and the operations funded by foresters on their own.

Benefits for the rural economy and society are difficult to assess but include some degree of maintaining employment within the primary sector as a result of RDP support.

Some elements were highlighted as important for more effective implementation of the forestry measures (e.g. payment rates for some measures and budget share).

#### **Efficiency**

It is not possible to reach a clear conclusion on efficiency. This is mainly due to the limitations above indicated to answer to the relevant EQs.

The increase of the administrative burden between the two programming periods, both for the managing authorities and the beneficiaries, explains the choice of managing authorities to address some of the needs through state aid and limits the uptake of forestry measures by the beneficiaries. Among the problems identified: the access of small holders to rural development support and the need for simplification of the application files. Several good practices and ways to reduce administrative burden have been identified.

A further element of reflection on the efficiency of forestry measures is the level of incentive provided by the premiums of the area-based forestry measures.

#### Coherence

The forestry measures are coherent at EU level with other relevant CAP measures aimed at the sustainable management of natural resources and climate action, and balanced territorial development. In the case of traditional agroforestry there is potential for lack of coherence due to member states' definition and classification of the relevant land.

In terms of external coherence, the evaluation shows that forests play a crucial role in delivering environment and climate objectives both at the EU and global level and, supported by forestry measures, are key components of achieving EU policy initiatives in this area.

#### Relevance

The forestry measures are highly relevant to addressing the EU priorities for rural development policy, and are in line with the priorities set up at national or regional level. Overall, the current rural development measures are aligned with and sufficiently comprehensive to match future needs. Nevertheless, the available budgets are not likely to cover all the needs, which will increase over the period and in the future in terms of carbon sequestration and biodiversity. Knowledge transfer and technical advisory (M1 and M2) were identified as key in addressing sector needs.

# EU added value

Even though there is room for improvement (e.g. reduction of red-tape and the administrative burden), it is clear that the EU Rural Development Fund has been important in Member States' uptake of forestry measures. In other words, there are forest measures that would either not have been funded to the same extent or not implemented at all without RDP support.

Since the selection of forestry measures is largely in the hands of EU Member States, the impacts associated with the EU forestry measures provide a mixed picture of EU and Member States added value due to varied national priorities.

#### Lessons learned

Long-term thinking is important when evaluating the effectiveness of forest policies and measures. Indeed, given that forest cycles and stand rotations usually span decades (and for some stands more than a century), all effects of the forestry measures should, in general, be appraised over very long periods of time.

The short implementation period for the current forest measures (2014-2017), coupled with major delays in implementing them in most RDPs, has severely limited the appraisal of the effectiveness (EQ2 to EQ6). Nevertheless, potential effects could be estimated by taking into account the outputs of equivalent measures from the previous programming period, where these are sufficiently similar. As regards the evaluation of EU added value, a limitation was represented by the varied reported EU added value across case studies. This made it difficult to provide a common view shared across all case studies. It was also very difficult to set up a single counterfactual situation (before and after and with and without forestry measures) mainly for reasons related to the fact that forestry measures are not compulsory and are very diversified (e.g. afforestation, investment in firebreaks, investments in the processing sector, etc.).

The evaluation provides evidence that the forestry measures as currently implemented are contributing to the objectives attached to them, in particular also with a view to the EU forest strategy. The rural development instrument is a suitable place for these measures, as it allows for their tailored design and acknowledges the important role of sustainable forest management in rural economic and social fabric and its essential contribution to the preservation of sustainable environmental resources (water, soil, biodiversity, etc.) and climate action. Nevertheless, stakeholders perceive the relevant administrative burden as high.

The Commission's CAP proposals for the post-2020 period<sup>34</sup> duly took into account the preliminary findings and conclusions of the evaluation, in particular as regards targeting toward environmental objectives, flexibility for Member States and simplification. Sustainable forestry is specifically addressed in one of the nine CAP objectives. The proposals comprise:

• extended ambition in terms of regulatory and support measures to pursue performance as regards environment and climate action,

\_

<sup>&</sup>lt;sup>34</sup> COM(2018) 392/393/394 final, of 1.6.2018.

- a new delivery model conveying increased responsibility for Member States to achieve the various commonly agreed objectives with an appropriate composition of the available interventions,
- the proper and continuous monitoring of achievements.

# **Annex 1: Procedural information**

#### 1. LEAD DG, DeCIDE PLANNING/WORKING PROGRAMME REFERENCES

Lead DG: Directorate-General Agriculture and Rural Development (DG AGRI)

Decide planning reference: 2017/AGRI/002

#### 2. ORGANISATION AND TIMING

This policy evaluation project was included in the DG AGRI evaluation plan for 2016-2020. It followed the better regulation guidelines for evaluations. The evaluation work was carried out through an external evaluation study, contracted through a service request under a framework contract. It was conducted in conformity with the DG AGRI procedure for organising and managing policy evaluations carried out by external contractors. The project was under the technical and contractual management of AGRI unit C.4 in charge of monitoring and evaluation.

The Commission set up an inter-service steering group in November 2016, with the mandate to provide information, prepare the terms of reference, monitor the work of the external study team, discuss and give advice on the approval of the final report and comment on the draft evaluation staff working document.

The steering group was composed of the Secretariat-General and 9 Directorate Generals of the Commission: Environment, Climate Action, Joint Research Centre, Regional and Urban Policy, Budget, Energy, Economic and Financial Affairs, Internal Market, Industry Entrepreneurship and SMEs and Agriculture and Rural Development. In the Directorate-General for Agriculture and Rural Development, 12 different units participated to the work of the group.

The evaluation roadmap had set out the context, scope and aim of the exercise; it presented the questions to be addressed under the five categories of effectiveness, efficiency, relevance, coherence, and EU added value. No feedback on the roadmap was received during the public consultation period.

The evaluation project carried out by the external contractor started in November 2016. The methodological approach was designed to enable as deep as possible an evaluation of the forestry measures under rural development. Over the period of the evaluation, the methodological approaches were reviewed and adapted if necessary to ensure an appropriate analysis of available data.

The evaluation had to cope with the fact that only a short time period elapsed since the start of the new programming period. This is in particular an issue given the long lifecycle of forests. The methodology is satisfactory, though it could have been more clearly explained in the final deliverable, in particular regarding the use of the

counterfactual. The judgement criteria are clear, but findings could have been explained more clearly.

The assessment of the entire set of RDPs came at a late stage in the evaluation process. It would have been more valuable if it had been carried out earlier. Given the timing of the evaluation, not much hard data were available on the current programming period. The assessments in the evaluation are to a large extent based on information from the case studies. The literature review is more focused on environment compared to the other aspects of forestry. Administrative burden for farmers was analysed based on a comparison with the previous programming period. More quantitative information could have been obtained. Conclusions, while largely acceptable, could have been more clearly substantiated. However, the limitations of the analysis were properly spelled out. The work of the contractor brought useful information<sup>35</sup>.

The final deliverable was received on 21 and 22 November 2017, and was accepted. The public consultation conducted in spring 2017 in preparation of the proposals for the post-2020 CAP also provided input (see Annex 2).

\_

Judgement on the quality of the report: <a href="https://ec.europa.eu/agriculture/forest/publications\_en">https://ec.europa.eu/agriculture/forest/publications\_en</a>.

# **Annex 2: Stakeholder consultation**

As a first step, the roadmap for the evaluation of the forestry measures under rural development [Reg. (EU) No 1305/2013] was published for feedback between 11 November and 9 December 2016. It included key aspects to be covered by the evaluation, such as: agreement with forest-related objectives; impact of the forestry measures as regards environment and climate benefits, economy of farms and forest holdings, effects on production potential, administrative burden on farmers/forest holders/owners. However, no feedback was received.

Further consultations sought information and feedback in relation to practical experience with the implementation and effects of forestry measures.

Target groups included in particular:

- public authorities responsible for implementing forestry measures in EU Member States, including paying agencies;
- bodies delivering advisory services;
- forest services;
- farmers, forest holders/owners and forest owners' organisations;
- relevant operational and focus groups established under the agricultural European Innovation Partnership;
- academia and experts;
- NGOs and other civil society organisations active in the field of forestry issues and protection of the environment.

These consultation activities were conducted in the form of surveys and interviews. In the framework of fourteen case studies, information was gathered via semi-structured interviews with about 250 key stakeholders. A questionnaire survey to the managing authorities of the RDPs was conducted in order to collect information regarding the implementation of the 2014-2020 forestry measures from an enlarged sample of 110 Member States/regions. This survey also questioned the administrative burden related to implementing the forestry measures and the added value of EU support. The consultation activities provided information on a large range of issues, in particular to understand the drivers that have guided the RDP designer in their choices on the allocation of funding to forests vs agriculture and to include or exclude rural development sub-measures (and potentially to prefer State aid over the EAFRD).

The public consultation on modernising and simplifying the common agricultural policy (CAP) was held from 2 February 2017 to 2 May 2017<sup>36</sup>. It was a wide consultation process that included a specific question concerning forestry in the relevant questionnaire:

In which of the following areas do you consider that the CAP should strengthen its support to sustainable forest management? (Six options)

- 1. Forest fire prevention and restoration
- 2. The mobilisation of forest biomass for the production of material and energy
- 3. Increase of the resilience and protection of forest ecosystems
- 4. Afforestation/reforestation
- 5. Prevention of natural disasters and catastrophic events in forests such as pests or storms
- 6. Agroforestry systems

Overall, respondents chose the following first three objectives: 'Increase of the resilience and protection of forest ecosystems' (24 %), 'Afforestation/reforestation' (22 %) and 'Forest fire prevention and restoration' (16 %).

For *farmers*, the first choice selected was 'Mobilisation of forest biomass for the production of material and energy' (23 %), followed by 'Afforestation/reforestation' (19 %) and 'Increase of the resilience and protection of forest ecosystems' (18 %).

For *citizens*, the first option selected was 'Increase of the resilience and protection of forest ecosystems' (30 %) followed by 'Afforestation/reforestation' (24 %) and 'Forest fire prevention and restoration' (24 %).

For *organisations*, the first option selected was 'Mobilisation of forest biomass for the production of material and energy' (21 %) followed by 'Increase of the resilience and protection of forest ecosystems' and 'Afforestation/reforestation' both with 19 %.

Other questions included in this public consultation also addressed issues of relevance to forestry, i.a. the CAP objectives related to environmental protection and climate change. An additional specific public consultation on this evaluation was deemed unnecessary, given the huge amount of information already provided. The evaluation was announced in the Standing Forestry Committee and the Rural Development Committee as these gather experts from national administrations who can provide in particular information on the management of forestry measures.

The Expert Group on Monitoring and Evaluating the CAP was requested to provide information on possible relevant activities at Member State level and in particular in case Member States have set up arrangements for collecting baseline data and for monitoring and evaluating forestry measures.

The results of this questionnaire have been published on https://ec.europa.eu/agriculture/consultations/cap-modernising/2017\_en.

The external contractor used the results of the surveys and interviews for the evaluation and the report was made available to the members of the Expert Group on Monitoring and Evaluating the CAP.

# **Annex 3: Methods and analytical models**

This annex provides a description of the methodological approach taken by the external contractor in the evaluation support study.

# A3.1 The methodology

Answers to the EQs are mainly based on the analysis of implementation data from the SFC databases (outputs of 2007-2013 and targets for 2014-2020) and statistical data from the Farm Accountancy Data Network (FADN), forestry databases, land use, land-use change and forestry (LULUCF) reports and the RDPs.

Literature reviews were used to appraise the effects of forest practices and operations on biodiversity, water, soils, and climate change mitigation and adaptation.

Fourteen case studies were carried out in Member States/regions (Austria, Bulgaria, France, Germany, Greece, Italy, Finland, Hungary, Lithuania, Slovakia, Spain, Sweden and the UK). These involved:

- the collection of statistical data at the national and/or regional level;
- documentary research, including literature reviews and interviews (face-to-face semi-structured interviews) with key stakeholders at national and regional level, including beneficiaries' representatives and government officials (see Figure 7).

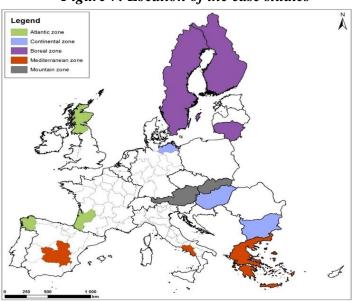


Figure 7: Location of the case studies

Source: Alliance Environnement

A questionnaire survey of managing authorities was used to find the main drivers behind forestry measure programming and implementation, as well as to appraise the administrative burden linked to the forestry measures and the EU added value. These data were analysed using a variety of tools and assessed when possible against counterfactual situations without the forestry measures.

# A3.2 Data sources and issues arising

Common monitoring and evaluation framework Pillar 1 output and result indicators were used to investigate the effect of the forestry measures on the creation of EFAs, in EQ2.

All the available LULUCF reports and relevant National Inventory Reports were reviewed to extract the data relevant for the purpose of the evaluation. For some Member States, they provided information on trends in land-use change and details on the existing and planned policies related to the LULUCF sector, including a quantitative or qualitative description of the expected effect of these measures on emissions and removals. These were used in answering EQ2, 6 and 14.

All information from case studies has been carefully interpreted in terms of its likely representativeness of their Member State/region and the EU as a whole, and what broad conclusions could therefore be drawn from them.

As regards the questionnaire survey of managing authorities, among the 110 surveyed Member States and regions, 61 authorities from 21 Member States submitted an answer. The results provided information on a wide range of issues, and in particular information that helped understand the drivers that guided each RDP designer in their choices. It also examined the administrative burden related to implementing the forestry measures and the opinion of the managing authorities regarding the added value of EU support in forestry.

The following table summarises the data sources used in each EQ.

Table 11: Details on the type of data sources used in each EQ

Sources	EQ 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Data on policy implementation		Х	Х		Х	Х		Х	Х				Х	Х		
FADN				Х												
Forestry and other databases, LULUCF reports		Х	Х											х		
Literature review, documentary research, models			Х			х	х	х		Х	х	Х		Х		
RDP review	Х												Х			
Case studies	Х	Χ	Х		Х	Х	Χ	Χ	Χ				Х	Χ	Х	Х
Questionnaire survey	Х						Χ								Х	Χ
Interviews at EU level															Х	Х

Some EQs substantially built on results from other EQs: this is the case for EQ9, EQ15 and EQ16 in particular, which have a dimension of conclusion.

# **A3.3 Intervention logic**

The starting point for the evaluation framework was the development of an intervention logic for the measures' contribution to the three CAP general objectives: 'competitiveness of agriculture', 'sustainable use of natural resources and climate action', and 'balanced territorial development of rural economies and communities including the creation and maintenance of employment'. The methodological approach combines theoretical and empirical approaches and includes a variety of methods, both quantitative and qualitative, to address the different types of analysis that are required to respond to the EQs.

#### A3.4 Analytical tools used

Both quantitative and qualitative analytical tools were used in this evaluation study.

Table 12: Analytical tools used in this evaluation study

Analytical tool	Type of tool	Purpose for which tool has been used	Relevant EQs
Descriptive statistics	Quantitative	Used to analyse the different aspects of the statistical distribution of relevant variables, including frequencies, percentages, mean values etc. Descriptive statistics were used to analyse data from policy implementation and forest databases, as well as to describe the results of the RDP review and the questionnaire survey.	EQ 1, 2, 3, 4, 7, 8, 9, 13, 15, 16
Comparison of averages through non- parametric statistical tests	Quantitative	Used to identify the effect of the forestry measures on farmers' revenue	EQ5
Stakeholder analysis	Qualitative	Used to analyse stakeholders' attitudes and responses to the measures	1, 9, 10, 13, 15, 16
Cost- effectiveness analysis	Mostly qualitative	Used to assess the efficiency of policy measures by comparing the costs associated with one policy with those of others with similar benefits.	EQ 8-9
Coherence and relevance matrices	Qualitative	Used to describe the coherence between policy measures and their objectives as set out in the intervention logic as well as the relevance of policy measures for identified objectives, priorities and needs.	11 to 13
Legislative analysis	Qualitative	To ensure that all analysis is accurate and robust and to inform the assessments of coherence, relevance and EU added value	Chapters 1 and 3
Modelling	Quantitative	To estimate the future wood production and needs of the forest sector	EQ14

#### A3.5 Establishing the counterfactual

Identifying the counterfactual is important to make it possible to analyse the difference (and its extent) between the activities and outcomes achieved as a result of the forestry measures and those that would have occurred without them being in place.

The forestry measures are not compulsory so there are Member States/regions in which they were not implemented. However, those Member States/regions could not so easily be taken as robust counterfactual, for two main reasons. First, managing authorities and beneficiaries choose to implement measures depending on their needs and on other drivers: in Member States/regions where the forestry measures have not been implemented, it may be that support is not needed due to the local natural, economic and

social situation, as for instance in Luxemburg or Malta, where the forest area is very limited. Second, some Member States/regions support, through State aid, operations that are similar to those eligible to the forestry measures: in this case the forestry measures haven't been implemented but similar activities were carried out with public support. In addition, given that forestry measures are very diversified (e.g. afforestation, investment in firebreaks, investment in the processing sector, agroforestry, payment for environmental services, etc.), it was very difficult to set up a single counterfactual situation (before and after and with and without forestry measures).

As forestry measures vary in terms of content, three batches of closely linked measures were set up and analysed to set up counterfactual situations:

- M 8.1 / M 8.2 supporting the creation of new forest lands;
- M 8.3 / M 8.4 supporting the prevention and restoration of damage to forests;
- M 8.5 / M 15.1 supporting sustaintable forest management and the environment.

Measure 8.6 was not included in this analysis as it can cover many different types of operations that are difficult to compare (from activities in forests, to support for forest sector companies), and that are not distinguished in the budgets.

Member States/regions with and without rural development measures in their RDPs could be identified for each of the three batches of measures presented above. Some key indicators were collected in each area, which provided information on the effectiveness of the forestry measures.

To make it possible to make better comparisons between Member States/regions with and without EAFRD forest measures, the following analyses were carried out for Member States/regions that did not implement such batches of forestry measures, in order to select real 'without' cases and identify sufficiently comparable situations:

- ➤ Identification and rejection of the Member States/regions with State aid equivalent to the three batches of measures.
- ➤ Selection of Member States/regions without such State aid.
- Analysis of a set of other indicators to narrow down the selection and find comparable Member States/regions. These indicators depended on the studied batches of measures. The full set used was:
  - o covered forest area (in hectares and as a percentage),
  - o proportion of private forests (as a percentage),
  - o GDP/inhabitant (in euro),
  - o proportion of coniferous/broadleaved/mixed forests (as a percentage),
  - o cumulative forest area burned from 2007 to 2012,
  - o forest area managed for ecosystem services, cultural and spiritual values in 2015 (in hectares),
  - o forest area designated for biodiversity conservation in 2015 (in hectares),
  - o forest area within protected areas in 2015 (in hectares).

The following table summarises the results of these analyses.

Table 13: Different steps of the analysis of Member States/regions to be used as counterfactuals for Member States/regions with forest measures implemented/batches of forestry measures

Zono	With EAFRD	Without EAFRD	1. No State	2. Analysis	3. DG
Zone	measures	measures	aid	of x	AGRI
				indicators	validation
		Batch 8.1/8.2			
Continental	AT Austria	IT — Bolzano	✓	×	
Continental	AT — Austria	IT — Trento	✓	×	
Continental	SK — Slovakia	SI — Slovenia	✓	✓	×
Continental	BG — Bulgaria	SI — Slovenia	✓	×	
Continental	BG — Bulgaria	IT — Bolzano	✓	×	
Continental	BG — Bulgaria	IT — Trento	✓	×	
Continental	HU — Hungary	SI — Slovenia	✓	×	
Continental	HU — Hungary	IT — Bolzano	✓	×	
Continental	HU — Hungary	IT — Trento	✓	×	
Continental	PL — Poland	DE — MV*	×		
Continental	DE — Sachsen	DE — MV	×		
Continental	DE — Schleswig-	DE — MV	×		
	Holstein				
Mediterranean	ES — CIM*	FR — Corse	<b>✓</b>	<b>✓</b>	×
Mediterranean	GR — Greece	FR — Corse	✓	✓	×
Mediterranean	IT — Campania	FR — Corse	<b>✓</b>	✓	×
Boreal	LT — Lithuania	SE — Sweden	✓	×	
Boreal	LV — Latvia	SE — Sweden	✓	×	
Atlantic	UK — Scotland	IE — Ireland	×		
Atlantic	ES — Galicia	IT — Valle d'Aosta	✓	×	
Atlantic	ES — Galicia	IT — Bolzano	✓	×	
		Batch 8.3/8.4			
Continental	AT — Austria	RO — Romania	✓	✓	×
Continental	AT — Austria	DE — Bayern	×		
Continental	SK — Slovakia	RO — Romania	✓	✓	✓
Continental	BG — Bulgaria	RO — Romania	✓	✓	✓
Continental	HU — Hungary	RO — Romania	✓	✓	✓
Continental	DE — MV	DE — Bayern	×		
Continental	DE — MV	DE — Rheinland-Pfalz	×		
Continental	DE — MV	DE — Saarland	×		
Continental	DE — MV	LU — Luxembourg	✓	×	
Continental	DE — MV	BE — Wallonia	✓	✓	✓
Atlantic	ES — Galicia	DE — Nordrhein-W	×		
Atlantic	ES — Galicia	NL — Netherlands	✓	×	
Atlantic	ES — Galicia	IE — Ireland	×		
Atlantic	ES — Galicia	BE — Flanders	✓	×	
		Batch 8.5/15.1			
Continental	AT — Austria	IT — Lombardia	×		
Continental	AT — Austria	PL — Poland	<b>✓</b>	×	
Continental	SK — Slovakia	SI — Slovenia	✓	✓	✓
Continental	SK — Slovakia	PL — Poland	<b>√</b>	*	
Continental	HU — Hungary	PL — Poland	✓	×	
Continental	DE — MV	PL — Poland	<b>√</b>	×	
Continental	DE — MV	BE — Wallonia	<b>✓</b>	<b>✓</b>	✓
Mediterranean	ES — CLM	GR — Greece	✓	✓	×
Mediterranean	IT — Campania	GR — Greece	✓	✓	×
Mediterranean	IT — Umbria	GR — Greece	✓	✓	×
Mediterranean	ES — Murcia	GR — Greece	✓	✓	×

Zone	With EAFRD measures	Without EAFRD measures	1. No State aid	2. Analysis of x indicators	3. DG AGRI validation
Mediterranean	ES — Valenciana	GR — Greece	✓	✓	✓
Mediterranean	ES — Aragon	GR — Greece	✓	✓	×
Boreal	LT — Lithuania	EE — Estonia	✓	✓	✓
Boreal	SE — Sweden	EE — Estonia	✓	×	
Atlantic	ES — Galicia	NL — Netherlands	×		
Atlantic	UK — Scotland	IE — Ireland	×		
Atlantic	UK — Scotland	NL — Netherlands	×		

MV = Mecklenburg- Vorpommern; Nordrhein-W = Nordrhein-Westfalen; CIM = Castilla La Mancha Source: Alliance Environnement, based on DG Competition and DG Agriculture database, RDPs (2007-2013 and 2014-2020), FAO's Forest Resources Assessment 2015, Eurostat, Official websites of managing authorities in charge of rural development

The managing authorities were asked to confirm the absence of equivalent State aid and those finally chosen were asked to provide information on the situations related to the observed measures and in particular on situations where beneficiaries had implemented actions in the same field without any support from rural development forestry measures nor from State aid, and the extent to which they did so.

#### A3.6 Evaluation challenges and limitations

Some general challenges are presented in Chapter 4 of this report. Other limitations are presented at the beginning of the answer to each EQ in Chapter 5 of the report.

Limitations as regards certain EQs:

EQ 1 — Causal Analysis (What are the drivers behind implementation choices regarding the forestry measures and to which extent (i) at the level of the Member States administrations, (ii) at the level of the beneficiaries?):

Significant limitations to both the case study interviews and the survey of managing authorities: the underlying reasons for choices may be sensitive for some interviewees; the information is necessarily qualitative rather than quantitative, and variable in the quality and level of detail provided.

EQ 2 — Effectiveness (To what extent have the forest measures resulted in changes in land use and in the creation of additional ecological focus area (landscape features, agroforestry, etc.)?):

The analysis is basically limited to the forestry measures' 'potential' to contribute to land-use change and the creation of EFAs; no evidence was obtained on actual and continuing changes. Geographical information on the area afforested, established as an agroforestry system and declared as an EFA, and the persistence of these land uses, is only available at Member State level. However, qualitative information from the case studies partly bridges this gap.

EQ 3 — Effectiveness (To what extent have the forestry measures influenced forestry production in terms of (i) Quantity; (ii) Quality; (iii) Producer prices; (iv) Geographical distribution?):

It was necessary to make many assumptions on the long-term effects (over decades) of the supported operations, the perspective of wood production and changes in management practices. These bear a high level of uncertainty. There was a lack of data on the geographical location of operations. Case studies provided some qualitative information.

The second main difficulty in answering this question related to assessing the relative proportion of operations concerned, compared to existing forests within the EU, as no forestry measure can change the forest sector very quickly. It is thus necessary to appraise this effect in a long-term perspective. Without assumptions, the effect would be systematically underestimated and considered as very marginal. In addition, it was impossible to assess the effect on producers' prices: the assumptions related to developments in wood markets in 2060 or beyond would be too uncertain to enable any conclusion.

# **Annex 4: Evaluation study questions**

# A. Causal analysis

- 1. What are the drivers behind implementation choices regarding the forestry measures and to which extent
  - at the level of the Member States administrations;
  - at the level of the beneficiaries?

In answering this question it has to analysed to what extent and why Member States/regions changed their RD programmes to withdraw RD forestry measures initially being part of their programmes.

#### **B.** Effectiveness

- 2. To what extent have the forest measures resulted in changes in land use and in the creation of additional ecological focus area (landscape features, agro-forestry, etc.)?
- 3. To what extent have the forestry measures influenced forestry production in terms of:
  - Quantity;
  - Quality;
  - Producer prices;
  - Geographical distribution?
- 4. To what extent have the forestry measures impacted on the economic viability of the farm/forest holdings/owners as regards revenue and the levels of production cost in the holdings (forestry, farms or mixed) affected?
- 5. To what extent have the forestry measures impacted on competitiveness of the sector?
- 6. To what extent have supported forestry measures impacted on the environment and climate, i.a. on biodiversity conservation and restoration, forest soils, water regulation, and the health status of forest ecosystems, climate change mitigation and adaptation and on balanced territorial development including the development of the rural economy and societal deliveries?

#### C. <u>Efficiency</u>

7. To what extent has the implementation of the forestry measures led to a change in administrative burden:

- at the level of the beneficiaries;
- at the level of the Member States administration;
- at the level of the Commission services?
- 8. To what extent have the forestry measures been efficient in achieving their objectives?
- 9. To what extent have the related costs/burdens been proportionate to the benefits achieved?

#### **D.** Coherence (internal, external)

- 10. To what extent have the forestry measures as part of the entire set of relevant CAP-measures dedicated to the environment/climate
  - delivered a coherent and complementary contribution to achieving the general objective of sustainable management of natural resources and climate action?
  - impacted on the other general CAP objectives (viable food production and balanced territorial development?
- 11. To what extent have the forestry measures as part of the entire set of relevant CAP-measures dedicated to the environment/climate delivered a coherent and complementary contribution to achieving the objective of environmental/climate legislation and strategies, in particular the EU Forest Strategy, EU Biodiversity Strategy, Nature Directives, the Water Framework Directive, Nitrates Directive, the EU Soil Thematic Strategy, the 7<sup>th</sup> Environment Action Programme, the EU Bioeconomy Strategy, the LULUCF Decision (Decision No 529/2013/EU), and the EU 2030 Climate and Energy Framework.
- 12. To what extent have the forestry measures been coherent and complementary with the interventions of the other ESI-Funds and other relevant EU-policies as research and innovation?

#### E. Relevance

- 13. To what extent the examined forestry measures matched the existing needs in the sector, the priorities established at the EU, programme and/or national level? In answering this question, particular attention should be drawn to the Rural Development budget available in the programmes and the uptake of the measures therein.
- 14. To what extent is the intervention still relevant taking into account current and possible future needs? In answering this question it has to be addressed, how well the objectives of the forestry measures still correspond to the needs within the EU?

#### F. EU added value

15. To what extent have the forestry measures created EU added value, e.g. for restoring and enhancing forest ecosystems, for climate change mitigation and adaptation including carbon sequestration, building networks for exchange of best practices, etc.?

16. What is the difference that the EU financing made in implementing these measures compared to Member States acting on their own? In answering this question, it has to be considered to what extent do the issues addressed by the examined interventions continue to require action at EU level?

# **Annex 5: Level of implementation by forestry measure**

Table 14: Synopsis — Targeted level of implementation for each forestry measure, per RDP (planned public expenditure)

	Public expendit	Targeted level of implementation of forestry measures									
Member State or region	ure (million										
	EUR)	8.1.	8.2	8.3.	8.4.	8.5.	8.6.	15.1	15.2		
AT	119.7										
BE — Flanders	13.6										
BE — Wallonia	4.5										
BG	72.3										
СУ	6.5										
CZ	95.9										
DE — Baden-Württemberg	18.2										
DE — Bayern	0										
DE — Berlin / Brandenburg	78.2										
DE — Hessen	14.1										
DE — Mecklenburg- Vorpommern	32.3										
DE — Niedersachsen / Bremen	0										
DE — Nordrhein-Westfalen	52.0										
DE — Rheinland-Pfalz	0										
DE — Saarland	0.6										
DE — Sachsen	32.5										
DE — Sachsen-Anhalt	29.2										
DE — Schleswig-Holstein	14.8										

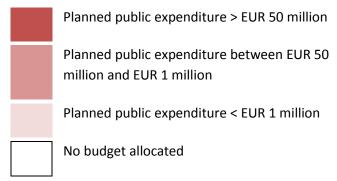
Member State or region	Public expendit ure	Targeted level of implementation of forestry measures								
Welliger State of Tegion	(million EUR)	8.1.	8.2	8.3.	8.4.	8.5.	8.6.	15.1	15.2	
DE — Thüringen	19.7									
DK	45.8									
EE	10.0									
ES — National	26.4									
ES — Andalucía	424.9									
ES — Aragón	96.1									
ES — Asturias	105.9									
ES — Baleares	7.0									
ES — Cantabria	24.2									
ES — Castilla-La Mancha	430.7									
ES — Castilla y León	196.7									
ES — Cataluña	71.0									
ES — Extremadura	147.3									
ES — Galicia	309.6									
ES — Madrid	26.1									
ES — Murcia	27.6									
ES — Navarra	26.6									
ES — País Vasco	58.2									
ES — La Rioja	39.7									
ES — Valenciana	59.7									
FI — Mainland Finland	0									
FI — Åland	0									
FR — Île-de-France	6.2									

Mambar State or region	Public expendit ure	Targeted level of implementation of forestry measures									
Member State or region	(million EUR)	8.1.	8.2	8.3.	8.4.	8.5.	8.6.	15.1	15.2		
FR — Champagne-Ardenne	13.1										
FR — Picardie	1.9										
FR — Haute-Normandie	5.3										
FR — Centre	3.0										
FR — Basse-Normandie	5.8										
FR — Bourgogne	6.3										
FR — Nord-Pas de Calais	2.6										
FR — Lorraine	12.8										
FR — Alsace	3.0										
FR — Franche-Comté	3.4										
FR — Pays de la Loire	2.4										
FR — Bretagne	10.1										
FR — Poitou-Charentes	3.8										
FR — Aquitaine	159.0										
FR — Midi-Pyrénées	17.4										
FR — Limousin	5.6										
FR — Rhône-Alpes	13.5										
FR — Auvergne	9.0										
FR — Languedoc-Roussillon	17.1										
FR — Provence-Alpes-Côte											
d'Azur	12.9										
FR — Corse	10.7										
GR — Greece	339.5										
HR — Croatia	92.9										

Member State or region	Public expendit ure	Targeted level of implementation of forestry measures								
	(million EUR)	8.1.	8.2	8.3.	8.4.	8.5.	8.6.	15.1	15.2	
HU — Hungary	261.1									
IE — Ireland	0									
IT — Abruzzo	13.0									
IT — Bolzano	22.0									
IT — Emilia-Romagna	51.1									
IT — Friuli-Venezia Giulia	24.0									
IT — Lazio	22.5									
IT — Liguria	47.9									
IT — Lombardia	103.3									
IT — Marche	38.0									
IT — Piemonte	41.8									
IT — Toscana	143.4									
IT — Trento	10.0									
IT — Umbria	85.4									
IT — Valle d'Aosta	4.8									
IT — Veneto	42.5									
IT — Molise	12.0									
IT — Sardegna	46.0									
IT — Basilicata	90.8									
IT — Calabria	100.7									
IT — Campania	206.1									
IT — Puglia	110.0									
IT — Sicilia	206.2									

Member State or region	Public expendit ure	Targeted level of implementation of forestry measures								
Welliser state of region	(million EUR)	8.1.	8.2	8.3.	8.4.	8.5.	8.6.	15.1	15.2	
LT	123.7									
LU	0									
LV	36.9									
MT	3.5									
NL	0									
PL	301.0									
PT — Continental Portugal	527.0									
RO	242.3									
SE	11.9									
SI	59.5									
SK	142.6									
UK — England	245.5									
UK — Northern Ireland	21.8									
UK — Scotland	332.4									
UK — Wales	72.8									

# Table legend:



Source: SFC database (extraction January 2017)