



WORKING DOCUMENT

EVALUATING RDP EFFECTS ON THE COMPETITIVENESS OF AGRICULTURE IN A CHANGING CONTEXT

WORKING PACKAGE 3

THEMATIC WORKING GROUP NO 8

'EX POST EVALUATION OF RDPs 2014-2020: LEARNING FROM PRACTICE'

MARCH 2021

Disclaimer: This document has been prepared by evaluation experts based on good practice available from the current programming period. This document is non-binding and only intended to facilitate the work of evaluators and managing authorities in the context of preparing for the expost evaluation of the RDPs 2014-2020.

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The Evaluation Helpdesk is responsible for the evaluation function within the European Network for Rural Development (ENRD) by providing guidance on the evaluation of RDPs and policies falling under the remit and guidance of DG AGRI's Unit C.4 'Monitoring and Evaluation' of the European Commission (EC). In order to improve the evaluation of EU rural development policy the Evaluation Helpdesk supports all evaluation stakeholders, in particular DG AGRI, national authorities, RDP managing authorities and evaluators, through the development and dissemination of appropriate methodologies and tools; the collection and exchange of good practices; capacity building, and communicating with network members on evaluation related topics.

Additional information about the activities of European Evaluation Helpdesk for Rural Development is available on the Internet through the Europa server (http://enrd.ec.europa.eu).

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INTRODUCTION

This Working Document is one of the outcomes of the Working Package 3, 'Assessment of RDP effects on fostering the competitiveness in agriculture' which analyses the emerging issues related to the evaluation of RDP's effects related to competitiveness in agriculture in a changing context and aims to facilitate the exchange of current practices in a view to improve the quality of evaluations when preparing for the ex post evaluation of RDPs 2014-2020.

This document addresses challenges in preparing and conducting the assessment of RDP impacts in the ex post evaluation. These impacts may have been influenced by multiple intervening, confounding or external factors related to a changing socio-economic, environmental, or even (as recently experienced) health context that at the same time influences the programmes intended effects.

This Working Document includes practical <u>suggestions and checklists</u> to be considered in the tender specifications and <u>examples</u> of evaluation elements such as programme-specific evaluation questions, judgement criteria and additional indicators. It has been prepared by evaluation experts taking into account feedback of evaluation stakeholders discussed during a focus group (13 November 2020) and the Good Practice Workshop, 'Assessing the contribution of RDPs to a competitive and viable agricultural sector' (10 December 2020).

All guiding questions, checklists and examples of evaluation elements in this document are not mandatory and they are considered as recommendations aimed to improve the assessment of competitiveness in view of the ex post evaluation of RDPs 2014-2020.

The drafting of this document has been carried out in the context of the Evaluation Helpdesk's Thematic Working Group (TWG) 'Ex post evaluation of RDPs 2014-2020: Learning from practice'.

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1. EVALUATING THE EFFECTS OF RDPS ON THE COMPETITIVENESS IN AGRICULTURE IN A CHANGING CONTEXT

An important challenge for assessing the effects of an RDP in the ex post evaluation will be taking into consideration all of the multiple intervening, confounding or external factors which may influence the programme's effects. External factors have considerable capacity to generate unanticipated outcomes in terms of the policy's uptake. For example, confounding factors that stem from other programmes funded by ESI funds, national funding or other investment programmes as well as the socio-economic consequences caused by COVID-19 and the EU's response with providing recovery efforts for rural development under the Next Generation EU, can influence the RDP's interventions, targets and results. These factors should be taken into account in the ex post evaluation and could also be relevant in future CAP evaluations in the post 2020 period. Although contextual changes concern all policies, this working document focuses primarily on the rural development policy and its effects concerning the competitiveness in agriculture.

Furthermore, these contextual changes may influence the preparation of and implementation of the evaluation of the RDP's impacts on competitiveness (e.g. the specification for tendering and contracting the ex post evaluations, defining its scope and selecting the approaches and methods used as well as the associated data collection).

To address these identified challenges, the Working Document focuses on the guiding question: What are the consequences of the contextual changes for preparing and conducting the evaluation of RDP's effects on the competitiveness in agriculture?

More specifically:

- How can contextual changes be dealt with in the evaluation of the RDP's effects on competitiveness?
- What needs to be considered when planning the evaluation (e.g. what should be considered for the assessment of contextual changes in the tendering specifications)?
- Will the recovery programme affect the assessment of competitiveness at the stage of the ex post and what will need to be specifically considered?
- What is the scope for revising the RDP's intervention logic (IL) to consider contextual trends in the programme area and other intervening factors?
- What needs to be specifically considered when preparing the evaluation in terms of additional
 judgment criteria, indicators, data-sources and evaluation methods to enable a robust
 assessment of competitiveness with consideration to these contextual changes?
- What needs to be specifically considered when managing and running the evaluation? How
 can contextual changes caused by COVID-19 be considered when running the evaluation to
 assess net effects?

2. UNDERSTANDING THE POTENTIAL EFFECTS OF CONTEXTUAL CHANGES



GUIDING QUESTION: How can contextual changes be dealt with in the evaluation of the RDP's effects on competitiveness?

When designing the evaluation of the RDP's effects on competitiveness, it is important to understand the interaction of direct and indirect effects and the potential influences from external factors on the implementation and outcomes of RDPs along the value chain (from production to consumption). Understanding these factors are crucial and will help to define/refine the objectives of the evaluation and the questions that policy makers will need to answer for improving policy in the future.

One can start by identifying and mapping the potential effects of contextual changes along the different stages of the value chain as shown in Figure 1 (non-exhaustive list of potential effects).

Figure 1. Potential effects of contextual changes along the value chain



Investments in improving the productivity of farms may become misallocated or at least not achieve their targets

Financial difficulties for individual farms may disrupt investment behaviour

Increased costs for inputs

Decision to shift from one type of production to another (e.g., from cattle for milk to cattle for meat, to respond to market/ consumption changes)

Changes in some sectors due to low demand and price reductions because of a crisis

Fewer intermediaries between 'farm and table' may positively affect income of some agricultural producers Efficiency gains from investments in processing processes may vanish completely or not reach targets

Decrease of product variety to produce higher volumes of one type of product to meet increased consumption

Additional opportunities benefiting small-medium companies as local food supply chains are primarily serviced by small (or mid-size) farms, food, and beverage companies Restrictions in the movement of goods

Increased distribution costs

Changes in distribution channels (e.g. increase of on-line orders) and a reorientation of food distributors caused by shifts in consumer demand and reduction of food eaten in restaurants

Increased friction and imbalances on agricultural markets will affect distribution channels

Shifts in consumption patterns (e.g. strong preference for 'healthier food' and local products, reduction of demand for food eaten in restaurants, stockpiling of some food products)

Reduced purchasing power

Fluctuations in the spatial dimension of consumption (e.g., increased consumption in local markets)

Changes in the use of products and services (e.g. less outward looking tourism services, more local tourism and generally more effects on the hospitality industry)

More packaged products (safer)

Cross-cutting effects (affecting all stages of the value chain):

- ⇒ Changes in employment arrangements, availability of temporal/seasonal workers, irregular contracts, worker mobility
- Changes in the share of sectors along the value chain, depending on how they are affected by a crisis
- Reorganisation of the delivery model of some measures, notably LEADER which relies on the partnership principle, which may not be functional in times of crisis
- Changes in agri-food systems along the value chain may negatively affect established cooperation links

The above contextual changes may affect both macro-economic conditions as well as specific sectors or individual beneficiaries. It should also be noted that any changes in the final stage (consumption) of the value chain will have effects on the first stage (production) (e.g., changes in consumption patterns will naturally influence production patterns (supply and demand principles). An example can be the current health crisis (COVID-19) which will have further specific (direct or indirect) effects on the implementation of RDPs (see following non-exhaustive list of such potential effects).



Likely COVID-19 related (direct or indirect) effects on the implementation of RDPs

- Delays in the delivery of projects that cannot be implemented due to restrictions and lockdowns.
- General uncertainty may cause potential beneficiaries not to apply and actual beneficiaries to reduce the scope of their projects.
- COVID-19 has highlighted the needs in rural areas. Additional needs may emerge among farmers to adapt their machinery and processes to new safety rules (e.g. workers protected, respecting social distancing rules) especially for labour intensive activities. Labour intensive sectors/branches may see dramatic increases in production costs.
- Mobility restrictions affecting the movement of workers and the availability of seasonal and part-time workers that are needed in some primary sectors may have a strong negative impact on yields and turnover in labour intensive branches.
- Restrictions for travelling abroad

 negative effects on know-how transfers in capital intensive branches.
- · All coordination and knowledge sharing measures and activities may become affected, e.g.:
 - EIP operational groups
 - cooperation projects and other cooperation activities and support networks (e.g. workshops and other types of exchanges, activities of national rural networks)
 - LEADER projects
 - training provision (when courses are suspended)
 - advisory services.

Since many of the above activities cannot be implemented in a face to face modality, a shift to online formats may be a solution. However, this may not work for everyone, since not everyone has access to or is familiar with the required online tools.

 Restrictive social distancing requirements, mandatory isolation or quarantine may have a strong impact on the profitability of projects in agri-tourism.

Finally, contextual changes will affect the control mechanisms of RDP projects (e.g., there will be a substantial increase in the costs of checks and controls), due to restrictions on site visits for monitoring and control purposes. This could prevent the collection of necessary evidence (e.g., claimants are requested to submit geo-tagged photographs, on site measurements and pictures) for demonstrating compliance and requesting reimbursements.

This knowledge will need to be transferred into the design of the evaluation cycle (from planning to preparing and running the evaluation).

3. PLANNING THE EVALUATION WITH CONSIDERATION FOR CONTEXTUAL AND FUNDING CHANGES



GUIDING QUESTION: What needs to be considered when planning the evaluation (e.g. what should be considered for the assessment of contextual changes in the tendering specifications)?

When planning the evaluation, key considerations include the objectives and purpose of the evaluation, the evaluation topics, and activities and the timeline and resources required. These considerations should form part of the tendering specifications. Any contextual changes, whatever their source (economic, environmental or public health crises) may affect the planned implementation of the RDP and therefore have to be considered and reflected in the evaluation activities (already when preparing the tenders for the ex post evaluation). This means that in addition to responding to the common evaluation questions, additional topics or questions may need to be added and addressed/answered.

Figure 2. Considerations when planning the evaluation.



The following table offers a **checklist** of elements linked to the contextual changes which should be considered in the tender specifications:

What should be considered in the tender specifications

Objectives and purpose of the evaluation

- ☐ The focus of the ex post evaluation should be the assessment of achievements and the impacts of the programme interventions in the context of an evolving rural development (RD) policy. An emphasis on results-oriented recommendations and a contribution towards the implementation of the CAP objectives in order to improve the current and future interventions should also be considered.
- The ex post evaluation should serve to provide evidence of the **EU added value after adjusting the RDP to changes** in external economic, social and other conditions (including those caused by the COVID-19 crisis) and reflect on the adequacy and effectiveness of the changes in the strategic direction of rural development policy undertaken by the Managing Authority in a given programming area.
- It is expected that evaluators will assess the **validity of the existing programme intervention logic** in terms of its suitability to cope with the challenges caused by the changing contextual conditions which may affect the implementation of the RDP (including COVID-19). An important part of this evaluation should be an assessment of the coherence of the actions planned to stimulate competitiveness in the agricultural sector in view of the changing external economic, social and other conditions caused by the COVID-19 crisis.
- Furthermore, evaluators may assess the effectiveness of the **operational management of the programme**, including the timely adjustment to new contextual conditions, setting up new or revised targets, functioning of communication channels, etc.

Evaluation topics and activities The evaluation of the effectiveness and efficiency of measures or groups of measures that deal with addressing contextual changes (e.g. measures to address the COVID-19 crisis or the post COVID-19 socio-economic crisis). Evaluation of the relevance and coherence of measures (i.e. are the measures appropriate to address the new context? Do they work in synergy in view of the new context?). Specific sub-topics of competitiveness could be assessed (e.g. the effects of certain contextual changes on the different stages of the agri-food value chain, as described in Figure 1 above). Evaluation of the operational management of the programme including any adjustments to the new contextual conditions, setting up new or revised targets and functioning of communication channels. Adequate reflection should also be given to the needs of the agricultural and food sectors resulting from the changing contextual conditions. Assessment of the scale of impact of COVID-19 (in relation to what was originally planned). This means that one should not underestimate what the RDP can do (e.g. RDPs can make a difference in local communities by adapting and responding to the crisis). Assessment of the adaptability /resilience of RDPs (supported beneficiaries may become more resilient, may have developed alternative solutions and/or sustainable transition paths). Assessment of sustainability, effects of crises on the environment. This may in addition to the evaluation broaden the scope to for also including sustainability as another dimension of competitiveness. **Evaluation elements and methods** Review the intervention logic to make sure it reflects the amendments in the programme (always a first step of an evaluation, but even more so if there have been important contextual changes like an economic/health crisis). Consider adding new programme-specific evaluation questions to reflect the effects (direct and indirect) of the programme's potential adjustments (new measures, reallocation of funds, adjusted implementation (cancelling or postponement of activities), etc.) caused by exceptional circumstances. Include in the tender requirements the desirable methodological approaches that are suitable in situations where the context prevents the use of conventional methods (e.g. quasi-experimental approaches using secondary data instead of new personal surveys). The evaluator should have the required capacity to implement these methodological approaches. Where possible, include online surveys so as not to lose the qualitative aspect of evaluation. **Evaluation period and resources** Emphasis the coverage of the ex post evaluation, which is extended by 2 years (i.e. what years should the evaluation evidence cover, given the new deadlines for payments or commitments?). Consider the possibility and plausibility for analysing the evaluation period in two sub-periods. First, from the start of the programme until 2020 and second, the whole period. Then one can compare the trends to observe major changes that may be due to contextual changes. Take into account the implications of any adaptation in the evaluation methodologies and data

work.

collection systems for budgetary and human resources. Costs of the evaluation may increase if more expensive methodologies (e.g. comprehensive macro or sectoral models) have to be used or reduced costs could occur if quasi-experimental methods are used and less time is spent on field



GUIDING QUESTION: Will the recovery programme affect the assessment of competitiveness at the stage of the ex post and what will need to be specifically considered?

The EU has introduced the European Union Recovery Instrument (EURI) in response to the COVID-19 crises to support among other things agriculture and rural development. These EURI funds may require additional planning for the ex post evaluation of competitiveness.

Considerations for the ex post evaluation stemming from the EURI

- □ The EURI will provide additional funding to finance measures to address the impact of the COVID-19 crisis on agriculture and rural development. These additional resources should be programmed and monitored separately from the support for rural development, while at the same time still following the rural development Regulation (1305/2013). As a consequence, EURI funds for rural development measures will be 'flagged' by Member States and evaluators may seek to assess their contribution to the achievement of the EURI objective to 'tackle the adverse economic consequences of the COVID-19 crisis'.
- □ EURI funding may also influence the revision of targets for 2025. Therefore, as suggested above, evaluations may seek to assess the contributions of these additional funds for the relevant measures towards the achievement of the revised targets.
- There are no additional monitoring and evaluation requirements specified for the EURI, however, Member States may choose to add evaluation activities under their Technical Assistance budget.
- ☐ The future SFC template for the ex post evaluation may include fields for reporting on EURI resources which have been flagged as contributing to rural development measures.

³ Article 1 (2) of Regulation (EU) No 2020/2094 (EURI Regulation)

Article 1 (2)(g) of Regulation (EU) No 2020/2094 (EURI Regulation)

² Article 7 (12) of Regulation (EU) No 2020/2220 (Transition Regulation)

4. REVIEWING THE INTERVENTION LOGIC



GUIDING QUESTION: What is the scope for revising the RDP's intervention logic (IL) to consider contextual trends in the programme area and other intervening factors?

The review of the intervention logic is the first step in any evaluation and even more so in the coming ex post evaluation. The revision of the IL should take into consideration the timing and the scope of change in the **socio-economic context** stemming from the current health crisis and other important macroeconomic or sector specific factors influencing competitiveness of the agricultural and food sectors **as well as corresponding changes in RD policies**. Additionally, this injection of additional funding to mitigate some of the effects of the current health and economic crisis will have consequences on the introduction and implementation of RDP measures. These consequences need to be reflected in the revised intervention logic. In this regard, the revision of the intervention logic may almost acquire the form of a quasi ex ante exercise.



What you need to check when reviewing the intervention logic

- Appraise if the intended direct and indirect effects on the farming and non-farming sector in rural areas are still valid taking into account the effects of new funding that has been injected into certain areas.
- Analyse the intervention logic before and after any adjustments are made due to contextual changes, including in the assessment of the rationale if no adjustments were made despite contextual changes.
- Examine the RDP's external coherence with EU objectives reflected in the Transition Regulation, in particular those linked to the Union's environmental and climate commitments.
- Examine the relevance of RDP objectives and interventions in addressing renewed needs for a competitive and viable agricultural sector affected by the crises.
- Analyse the revised assumptions for implementation of investment measures (e.g. some food industries may not implement some planned investments or employment targets will need to be revised).
- Examine the internal coherence between:
 - How programme objectives are affecting the competitiveness of agriculture and food sectors;
 - How inputs are planned (including the additional funding from the European Union Recovery Instrument);
 - How the combination of measures stemming from potential reallocations between measures and the activation of Measure 21 'Exceptional temporary relief to farmers and small and medium-sized enterprises (SMEs) activities in processing, marketing and/or development of agricultural products';
 - How expected outputs, results and impacts will change and therefore lead to a revision of targets.

5. PREPARING THE EVALUATION IN VIEW OF CONTEXTUAL CHANGES



GUIDING QUESTION: What needs to be specifically considered when preparing the evaluation in terms of additional judgment criteria, indicators, data-sources and evaluation methods to enable a robust assessment of competitiveness with consideration to these contextual changes?

When preparing the evaluation elements, notably the evaluation questions, judgment criteria and indicators, Managing Authorities will need to ask the following questions:

- To what extent do the existing evaluation questions allow for a sound assessment of competitiveness taking into account contextual changes?
- To what extent do the existing judgment criteria used in answering evaluation questions reflect these contextual changes?
- To what extent is the evidence collected by means of the existing indicators relevant for answering the evaluation questions given the contextual changes because of a crisis?
- What additional evaluation elements, or revisions of the existing ones, are needed to fully capture and assess the effects of the contextual changes for competitiveness?

The answers to these questions may lead to the inclusion of programme specific evaluation questions⁴, the adaptation/revision of existing judgment criteria and indicators or the development of additional ones. Any changes will typically lead to a modification of the RDP's evaluation plan and be further specified in the tendering documents (ToR) for ex post evaluation contract.

	Principles for deciding on revisions and/or additional evaluation elements
	Be careful not to focus too much on agricultural production as contextual changes affect all the steps in the value chain, including marketing, distribution and consumption (note that competitiveness of the whole agri-food sector is split between its value chain elements and the effects of the RDP should be shown for each of these elements).
	Capture changes along the value chain (e.g. behavioural changes that affect the production, marketing or consumption patterns and the decisions of producers and consumers).
	Consider indirect impacts that are often produced by contextual changes (e.g. the current COVID-19 crisis may have a positive indirect impact on the promotion of local markets).
	Capture changes in the measures, their definitions and eligibility criteria as well as changes to their combinations under the different focus areas.
	Capture changes in the profiles of beneficiaries.
	Focus on changes in trends of common indicators.

⁴ Programme specific evaluation questions can be used *inter alia* to support evaluation of programme specific policies, to address the evaluation of specific RDP related topics and to demonstrate the contribution of programme-specific interventions (Working Paper "Common Evaluation Questions for RDPs 2014-2020", June 2015).

Programme specific evaluation questions

(non) achievement?

The first decision therefore would be whether to develop programme specific evaluation questions for assessing competitiveness in view of any contextual changes. In this case, some examples of programme specific evaluation questions are provided in the box below.

To what extent were planned activities under the RDP disrupted by changing economic, social and other conditions caused by a crisis (e.g. COVID-19)? If yes, how significant has this been? Were expected results achieved or not? Has the adjustment of the RDP to changes in external economic, social and other conditions caused by a crisis (e.g. COVID-19) been adequate, coherent, effective, cost efficient and timely (e.g., speed of response)? What have been the critical factors for their

- Has the <u>adjustment of the RDP</u> to changes in external economic, social and other conditions caused by a crisis (e.g. Covid-19) brought about <u>growth in the competitiveness</u> of the supported agricultural and food sectors?
- □ To what extent have additional (planned for 2 years) resources, including launching of new measures (e.g. M 21), EURI funding and reallocation of funding between measures contributed, together with RDP resources to the achievement of the programme and CAP objectives?
- Is there any evidence of <u>unplanned/unanticipated</u> (primarily and secondary, positive and negative) <u>effects of additional resources</u> (as part of the EURI) provided in the framework of the RDP in response to changes in external economic, social and other conditions caused by a crisis (e.g. COVID-19)?
- ☐ What were the <u>effects of additional RDP funding</u> launched in response to changes caused by a crisis <u>on various farm types and sectors</u> (e.g. small, medium, large, specialised in crops/livestock/mixed)?
- □ What <u>lessons</u> can be learnt from the interventions undertaken by the Managing Authority in response to changes in external economic, social and other conditions caused by a crisis (e.g. COVID-19)? How best to approach a similar crisis in the future? How to improve the implementation and effectiveness of future RDP interventions?
- To what extent have RDP interventions contributed to <u>improving the economic performance</u> of supported beneficiaries <u>at the local level</u>? (this is an example of a question for Focus Area 6A and 6B, equivalent to the CEQ for FA 2A to take in account the effects on tourism for instance).

In order to answer some of these questions, Managing Authorities may consider splitting the evaluation period in two or three sub-periods in order to take into account the effects of the COVID-19 crisis. This will have implications on data collection and management of the ex post evaluation. This concept is analysed in Section 6, below.

Judgment criteria and indicators

Another decision would be whether to revise the existing evaluation elements in the CEQs. In this case, the following boxes offer examples of potential revisions to the evaluation elements for assessing competitiveness, focusing on CEQ 4, CEQ 5 and CEQ 6. The judgement criteria and indicators

proposed below are indicative examples and Managing Authorities and evaluators can choose their groupings depending on their specific intervention logic and evaluation needs.

CEQ 4: To what extent have RDP interventions contributed to improving the economic performance, restructuring and modernisation of supported farms in particular through increasing their market participation and agricultural diversification?

Key issues that could affect the ability to answer this CEQ: Delayed delivery or no delivery of certain investments related to economic performance, restructuring and modernisation. Barriers to market participation through restrictions in the movement of goods, increased distribution costs, changes in consumption patterns (more local), etc. Barriers to diversification for farmers through changes in consumption patterns (e.g. consumers preference for certain types of products/services). Considerations for judgment criteria may include: One option would be to revise the existing judgment criteria by considering contextual changes, for example: 'Farms have been modernised' despite contextual changes in the socio-economic framework

Another (not mutually exclusive) option is to add additional judgment criteria, for example:

- □ Supported farms adjusted their production profile to contextual changes in the socioeconomic framework caused by a crisis.
- □ Supported farms increased or maintained their investments despite contextual changes in the socio-economic framework caused by a crisis.
- □ Supported farms increased or maintained their gross value added despite contextual changes in the socio-economic framework caused by a crisis.
- □ Supported farms increased or maintained their labour productivity measured in terms of gross value added per annual work unit (GVA/AWU) in response to contextual changes in the socioeconomic framework caused by a crisis.
- □ Supported farms increased or maintained their employment despite contextual changes in the socio-economic framework caused by a crisis.
- Note that the revised judgement criteria would be applied by comparing economic development in the supported farms with their respective control groups which have NOT received support from the RDP

Considerations for indicators may include:

caused by a crisis (e.g. COVID-19).

Common indicators may be revised to look at changes in ratios in specific sectors, farm types and regions to reflect different consumption patterns:

□ Change in ratios of agricultural output on supported farms/AWU in specific sectors, farm types and regions.

Additional indicators may also be developed to look at changes in ratios in relation to investments and compare sectors, farm types and regions:

% net investment/value of total fixed assets in supported farms;

□ % gross investment/turnover in supported farms.
Additional indicators may also compare sectors, farm types and regions (affected more or less by the crisis) in relation to gross value added, fixed assets or family farm income:
☐ Gross value added/farm in supported farms.
☐ Gross value added/AWU in supported farms.
□ Value of total fixed assets in supported farms.
□ AWU per farm in supported farms.
□ Family farm income in supported farms.
CEQ 5: To what extent have RDP interventions supported the entry of adequately skilled farmers into the agricultural sector and in particular, generational renewal?
Key issues that could affect the ability to answer this CEQ:
□ Increased uncertainties linked to contextual changes in the socio-economic framework caused by a crisis (e.g. COVID-19) may slow down the planned generational renewal.
Considerations for judgment criteria may include:
Revisions to existing judgment criteria by considering contextual changes, for example:
□ 'Adequately skilled farmers have entered the agricultural sector' despite contextual changes in the socio-economic framework caused by a crisis.
☐ 'The share of adequately skilled young farmers in the agricultural sector has increased' despite contextual changes in the socio-economic framework caused by a crisis.
⇒ Note that the revised judgement criteria would be applied by comparing economic development in the supported farms with their respective control groups which have NOT received support from the RDP
Considerations for indicators may include:
% of adequately skilled farmers in the agricultural sector of the RDP territory - comparison between sub-sectors, farm types and regions.
Year of birth of the farm owner (e.g. FADN variable: C01YR) in supported farms - comparison between sub-sectors, farm types and regions.
The above indicators can be used to reflect contextual changes by splitting the evaluation period (see Section 6 below for the rationale regarding this split).
CEQ 6: To what extent have RDP interventions contributed to improving the competitiveness of supported primary producers by better integrating them into the agri-food chain through quality schemes, adding value to the agricultural products, promoting local markets and short supply circuits, producer groups and inter-branch organisations
Key issues that could affect the capacity to answer this CEQ:
□ Delayed implementation of measures most affected by a crisis, such as, training and advisory services (e.g. in the context of COVID-19 they may have been suspended), cooperation (e.g.

	affected by restrictions to mobility in the context of COVID-19), investments (e.g. may have become more costly in the context of an economic crisis).
	Difficulties for primary producers to integrate into the agri-food chain due to changes in consumption patterns.
	Changes in distribution towards short food supply chains due to a crisis (e.g. speeding up e-commerce adoption for food).
	Changing consumption patterns that may favour or discourage participation in local markets.
Consi	iderations for judgment criteria may include:
Revisi	ons to existing judgment criteria by considering contextual changes, for example:
	'Competitiveness of primary producers have improved' distinguishing between sectors affected by contextual changes following a crisis.
	'The added value of agricultural products of primary producers has increased' responding to changes in consumer behaviour (may analyse by sector or region).
⇔	Note that the revised judgement criteria would be applied by comparing economic development in the supported farms with their respective control groups which have NOT received support from the RDP
Consi	iderations for indicators may include:
Comm	non indicators may be revised to consider the additional support provided by the EURI:
	% of agricultural holdings receiving additional* support for participating in producer groups.
in mar	onal indicators may also be used, depending on the specific RDP context, to look at changes rgins, investments, GVA or labour productivity by splitting the evaluation period (see Section by for the rationale regarding this split):
	Margin of primary producers in the final price of agricultural products in local markets.
	% of primary producers investing in marketing/processing processes, by sector.
	GVA in supported holdings participating in quality schemes, local market schemes, producer group schemes.
	Labour productivity in supported holdings participating in local market schemes, producer group schemes.
	Number of local business units linked to local primary production.
	Number of local business units linked to local primary production. Relevance of food supply chains in the area (structure, turnover, added value, sustainability performance).

6. CONDUCTING THE EVALUATION IN VIEW OF CONTEXTUAL CHANGES



GUIDING QUESTION: What needs to be specifically considered when managing and running the evaluation? How can contextual changes caused by COVID-19 be considered when running the evaluation to assess net effects?

Although existing data sources and methods are already described in current guidelines and will remain by and large valid, some adaptations may be needed to take into account barriers to accessing data or for implementing certain methods as a result of contextual changes.

Tips for identifying data sources and methods in view of contextual changes

- □ Select cost-effective methods when the contextual changes imply a reduction of budgetary resources for evaluation.
- Select less labour-intensive methods (e.g., less in person interviews, focus groups) when contextual changes involve mobility restrictions or reduce the availability of human resources.
- Consider data collection methods that allow for virtual or online implementation (e.g., online surveys/questionnaires).
- □ Consider the possibility of restrictions of access to primary data and introduce options for collecting evidence from secondary data sources (e.g., databases, application forms, payment requests, EU/national/regional statistics).

In ordinary circumstances, in order to answer individual EQs programme evaluators apply relevant quantitative and qualitative methods, i.e. based on counterfactuals, facilitating an assessment of net effects of the given RDP by using data on the observed changes in values of the impact/result indicators collected both for programme beneficiaries supported under a specific Focus Area or RDP as well as for relevant control groups (i.e. similar non-beneficiaries), in two points in time:

- in year 2013, prior to the RDP 2014-2022, and
- in year 2025, after the RDP's completion (given that the ex post will take place in 2026).

By comparing the changes of indicators in the group of programme beneficiaries with the control group prior to the beginning of the programme and after its completion, evaluators can attempt to draw inferences about: a) the extent to which the **RDP's interventions** have contributed to improving the economic performance, restructuring and modernisation of the **supported farms** (CEQ 4) or b) the extent to which **RDP's interventions** have contributed to improving the competitiveness of **supported primary producers** by better integrating them into the agri-food chain through quality schemes, adding value to the agricultural products, promoting local markets and short supply chains, producer groups and inter-branch organisation (CEQ 6), and will answer other CEQs.

Given that most recent data to be used in the ex post evaluation will be available for the year 2025, the judgement on the success of the RDP's interventions will be based on their estimated effects measured by adequate result and impact indicators in comparison with effects caused by other RDP independent factors (e.g. prices, other interventions, changes in macro-economic conditions). Two situations therefore are possible:

- Normally, if the % contribution of RDP to the observed changes in impact indicators is positive and high, the RDP interventions are judged as successful.
- Contrary, if % effect of other RDP independent factors to the observed change of income
 indicators is high and positive, the RDP interventions are judged as not effective (because similar
 effects, measured in terms of impact indicators, could also have been obtained without the RDP).

Estimation of programme effectiveness (RDP planned effects vs. net effects) is important for assessing the most crucial factors that contributed to or prevented its success. In cases of high effectiveness, one should try to determine what were the most successful factors? And in cases of low effectiveness, one should try to determine what were the most prohibiting factors? Answers to these questions are usually provided by applying various qualitative techniques aiming at finding factors responsible for the *achieved* programme effectiveness.

Understanding the role of contextual changes for the impact evaluation

Some problems with the interpretation of programme effectiveness may arise if it is influenced by confounding factors, which may affect both programme beneficiaries as well as control groups.

In order to better understand the role of contextual changes when performing an impact evaluation a hypothetical situation can be used. This is where a satisfactory RDP's performance (e.g. measured in terms of its effectiveness and efficiency) is estimated just after the launch of the programme and suddenly deteriorates in the second-half of its implementation due to increased market uncertainties and disruptions (incl. changes in demand and/or supply chains) caused by new contextual macroeconomic factors (e.g. Covid-19)⁵. In such a situation it may happen that the **overall** programme's effect (estimated for the whole period 2013-2025) will be low or almost negligible. A small or negligible programme effect would immediately prompt numerous and justified questions: why was this the case? Possible answers may include an option that the RDP was **not appropriately designed**, or its **implementation was sub-optimal**. Another group of answers, however, may hint at the possibility that this was caused by external factors (i.e. programme **independent** (e.g. a change of macro-economic situation)).

Determining the **real** factors which caused a low or high programme effect is crucial for understanding the functioning of the policy. In this context it would be very important for the Managing Authority (and general public) to know whether the estimated low programme effects are linked to the programme itself (e.g. wrong targeting or oversights in the programme's implementation) or whether the key reasons of this low performance were beyond the RDP itself.

In principle, the evaluation should assess the extent to which the effects on programme beneficiaries are due to the contextual changes or due to the RDP programme itself. However, in practise (or in a hypothetical situation described above) such an assessment can only be carried out if a potentially confounding factor (i.e. change of a macro-economic context) is being controlled for.

Benefits of splitting the evaluation period

One possible practical solution to assess the **extent** to which observed changes in outcomes among programme beneficiaries are due to the RDP is to divide the analysed period in two sub-periods, i.e.:

- 2013-2019 or sub-period I (until breakout of Covid-19); and
- 2019-2025 or sub-period II (after breakout of Covid-19).

By dividing the period 2013-2025 into two sub-periods we note that in the first sub-period 2013-2019 causality between a decision to participate in the RDP and outcomes (e.g., farm profits) can be estimated **without a bias** by applying a standard quasi-experimental evaluation methodology based on Propensity Score Matching – Difference in Differences (PSM-DID).

Concerning the 2019-2025 sub-period, one must first verify that the contextual change (COVID-19) affected both programme beneficiaries and matched programme non-beneficiaries in a similar way⁶ (a common trend or shifter). If this is the case, then any difference between these two groups which did

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⁵ For example, a changing macro-economic situation would affect a decision of a potential programme beneficiary to participate in the given RDP, e.g. only risk friendly farms (or only the economically strongest farms) would decide to participate.

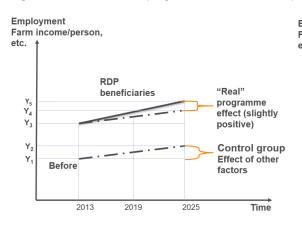
⁶ See below: Sub-title: 'Checking if evaluation leads to unbiased results'

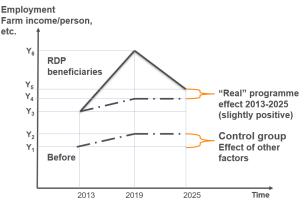
not originate from the RDP can be differentiated out by applying the DID method (together with matching), so the **causality** between RDP and outcomes can be established⁷.

The comparison of estimated programme effects in sub-period I with sub-period II will be very useful in instances where there are major differences between the net effects of the two periods. Such evidence would facilitate a qualitative examination of factors explaining this difference, as well as an interpretation of the total estimated RDP effect in the period 2013-2025.

Advantages from dividing the whole period into two sub-periods are illustrated in a hypothetical situation presented in Figure 3.

Figure 3. Distinction of programme effects between periods (impact evaluation)





Case A: Without the year 2019

Case B: Significance of the period 2019-2025

Total effect:

Figure 3A

Total programme effect (2013-2025) = $(Y_5 - Y_2) - (Y_3 - Y_1) = Y_1 - Y_2 - Y_3 + Y_5 =$ slightly positive

Figure 3B

Sub-period I. Programme effect (2013-2019) = $(Y_6 - Y_2) - (Y_3 - Y_1) =$ strongly positive

Sub-period II. Programme effect (2019-2025) = $(Y_5 - Y_2) - (Y_6 - Y_2)$ => negative

Total programme effect (2013-2025) = I + II => $Y_6 - Y_2 - Y_3 + Y_1 + Y_5 - Y_2 - Y_6 + Y_2 = Y_1 - Y_2 - Y_3 + Y_5 = (Y_5 - Y_2) - (Y_3 - Y_1) => slightly positive$

The major difference between Cases A and B is that case B also includes information on the year 2019. Case B shows that the net effects of the RDP in years prior to COVID-19 are high while after 2019 they become negative. By comparing the RDP's performance in these two sub-periods a policy maker can learn more about factors which caused an estimated small RDP net effect over the entire period 2013-2025, including external factors like COVID and 'internal' factors like amendments to the RDP.

Practical implications from dividing the evaluation periods

The proposed division into two sub-periods (i.e. before the breakout of COVID-19 and after) would require the collection of data on result and impact indicators not only for years 2013 and 2025, but also for 2019.

From a technical point of view, the simplest way to do this is just to collect additional data/information on result and impact indicators and all model covariates for the **year 2019** and to run the whole

⁷ In case of additional adjustments of RDP in response to a changing context the effects will be attributed to RDP.

counterfactual analysis three times (or two times, see below) (i.e. independently for years **2013-2019**; **2019-2025 and 2013-2025**). Splitting the evaluation period does not require additional variables or using other methods than PSM-DID:

- Analysis of the sub-period 2013-2019 would require data on model covariates collected for the year 2013 and data on result and impact indicators collected for the years 2013 and 2019.
- Analysis of the sub-period 2019-2025 would require data on model covariates collected for the year 2019 and data on result and impact indicators collected for the years 2019 and 2025.
- Analysis of the period 2013-2025 would require data on model covariates collected for the year
 2013 and data on result and impact indicators collected for the years 2013 and 2025.

RDP beneficiaries who received support in sub-periods I and II may or may not be the same⁸, the composition of control groups in these sub-periods should reflect it. Given that the major scope of the RDP evaluation is oriented towards the assessment of RDP measures implemented under specific focus areas (FA)⁹, it means that in each sub-period a construction of a control group must reflect the composition of the beneficiaries (i.e. their farm characteristics) who **received in a given sub-period** the RDP support under this FA.

The same principles apply for the construction of the FA-specific control group needed for carrying out the analysis of the whole period (2013-2025).

However, the analysis of the period 2013-2025 should be done on the basis of longer panel data collected for RDP beneficiaries and non-beneficiaries in the years 2013 and 2025.

Since an analysis of the period 2013-2025 is mandatory, a good extension would be to run the same analysis for the period of 2013-2019 only. By comparing these two results (i.e. 2013-2025 vs. 2013-2019) one would be able to draw conclusions on what happened in the period 2019-2025.

For example, if the net effects in 2013-2025 were positive but low, and in 2013-2019 they were high, this would imply that the net effects in 2019-2025 were negative. The same logic applies if the evaluator had chosen to analyse the periods 2013-2025 and 2019-2025 only. The caveat of the second choice is the necessity to collect data on model covariates in 2019 which is not required if periods 2013-2025 and 2013-2019 are selected.

Finally, it must be noted that programmes whose uptake is low up to 2019 do not have a **sufficient number of observations** to assess impacts quantitatively and therefore may be better off evaluating the whole period and not following the suggestion to split the periods.

Checking if the evaluation approach leads to unbiased results

The whole analysis becomes much more difficult if the contextual change affects programme beneficiaries and matched programme non-beneficiaries in a dissimilar way (i.e. the contextual change would appear as an unobservable time-varying factor (or no parallel trend)).

In this case, the estimation of programme effects in one period 2013-2025 or in the sub-period 2019-2025, may occur as biased and not reflect the effectiveness of the RDP alone. ¹⁰ If the sensitivity of RDP beneficiaries regarding their response to a contextual change in the situation is **higher or lower** in comparison with the RDP non-beneficiaries (in a positive or negative sense) many losses/gains in the estimated programme effectiveness can be attributed to an effect of the contextual situation and not necessarily to the RDP programme itself, thus the estimated programme effects will be biased. ¹¹

⁸ Information to be provided by the Paying Agencies

⁹ For example, answers have to be provided to both common and programme specific evaluation questions: To what extent have RDP interventions under Focus Area x contributed to....?

¹⁰ This situation is presented in Annex 1

¹¹ For more detail on the logic behind this, see Annex 1

The following steps provide an evaluator with an overview of how to assess whether a planned evaluation approach will lead to unbiased results.

Step 1. Split the whole analysed period 2013-2025 into two sub-periods 2013-2019 and 2019-2025 and apply a 'traditional' quasi-experimental evaluation methodology (e.g. PSM-DID) for the assessment of the programme effects (FA specific). This should be done for each sub-period 2013-2019, 2019-2025 and for the whole period 2013-2025.

Step 2. Perform a sensitivity analysis on the role of unobserved confounders (e.g. by applying the Rosenbaum bounding approach ¹²) for the obtained results from Step 1 for all three periods (i.e. the two sub-periods and the whole period). The Rosenbaum approach allows one to determine how much hidden bias would need to be present to render plausible the null hypothesis of no effect ¹³ or in other words how strongly an unmeasured variable must influence the selection process in order to undermine the implications of matching analysis ¹⁴. The results of this test should show if the estimated effects of the RDP in the period 2013-2025 and especially in subperiods 2019-2025 are sensitive or not sensitive to the presence of unobservables (hidden bias).

Step 3.

- ➡ If the sensitivity of the obtained results is low then the evaluator can apply a 'traditional' quasi-experimental evaluation methodology (e.g. PSM-DID) for the assessment of the programme's effects (FA-specific) in the sub-period 2019-2025 and independently also for the period 2013-2025. The statistical significance of the estimated effects will be high.
- ➡ If the sensitivity of the obtained results is high/very high then a statistical significance of the obtained results is low. This may occur due to a hidden bias (e.g. contextual changes in the situation) which has influenced the obtained results. In such a case an evaluator may apply more advanced evaluation methodologies (e.g. performing the causal analysis of RDP support by using a more flexible approach allowing for varying start dates and varying support duration ¹⁵; or supplementing it with some qualitative methods).

Applications of similar sensitivity analysis can also be found in:

¹² See: Rosenbaum (2002).

⁻ Aakvik, A. (2001), <u>Bounding a Matching Estimator: The Case of a Norwegian Training Program</u>. Oxford Bulletin of Economics and Statistics, Department of Economics, University of Oxford, 63(1), pp. 115-43;

DiPrete, T. and Gangl, M. (2004), <u>Assessing bias in the estimation of causal effects: Rosenbaum bounds on matching estimators and instrumental variables estimation with imperfect instruments</u>. Sociological methodology, 34, pp.271-310;
 Caliendo and Kopeing (2005);

⁻ Becker, S. and Caliendo, M. (2007), <u>Sensitivity Analysis for Average Treatment Effects</u>. Discussion Papers of DIW Berlin 659, DIW Berlin, German Institute for Economic Research;

Michalek, J. (2012), <u>Counterfactual impact evaluation of EU rural development programmes - Propensity Score Matching methodology applied to selected EU Member States, Volume 1 – A micro-level approach</u>. European Commission, JRC Scientific and Policy Reports, pp 1-95.

The bounding approach does not test the unconfoundedness assumption itself, because this would amount to testing that there are no (unobserved) variables that influence the selection into the programme, but instead this approach provides an evidence on the degree to which any significance results hinge on this untestable assumption.

¹³ Rosenbaum, P. (2002), <u>Covariance Adjustment in Randomized Experiments and Observational Studies</u>. Statistical Science, 17(3) 286-327.

¹⁴ Caliendo, M. and Kopeing, S. (2005), <u>Some Practical Guidance for the Implementation of Propensity Score Matching</u>, Discussion Paper 485, DIW Berlin, IZA Bonn.

The novelty of this tool is an extensive data preprocessing to include time information into the matching approach and the treatment effect estimation, see: Dettmann, E., Giebler, A., Weyh, A. (2019): flexpaneldid: A Stata command for causal analysis with varying treatment time and duration, IWH Discussion Papers, No. 5/2019, Leibniz-Institut für Wirtschaftsforschung Halle (IWH), Halle (Saale)

ANNEX 1 - THE ANALYSIS OF CAUSAL EFFECTS OF CONTEXTUAL CHANGES IN A IMPACT EVALUATION

A standard impact evaluation approach is based on a counterfactual analysis that compares what would have happened in the absence of the programme to actual outcomes occurring due to the programme. However, measuring what 'might have happened' is a challenging task. In order to obtain a valid measure of the programme's impacts one must use evaluation techniques that allow for a comparison to be **unconfounded with other factors** (e.g., external factors). One key approach is to use a comparison (control) group, which is a group of farms that closely resemble the farm characteristics of the RDP programme beneficiaries but that did not participate in the RDP programme. While the majority of these farm characteristics are **observable** for an evaluator (e.g., the farm's economic size, area, employment) in order to reduce the potential selection bias (and self-selection bias) the evaluator should identify the control group by applying matching techniques based on those **observables**. In a standard situation, the selection on **observable** farm characteristics **allows one to identify a causal effect between programme participation and outcome**.

The difficulty arises when in addition to observable farm characteristics there are certain unobservable factors for which data are not available, but which at the same time also affect the decision to participate in the RDP as well as its outcomes (e.g., output level). One group of unobservable factors are those which are time-invariant (i.e., constant over time) or are subject to so called 'parallel trend assumptions' (i.e. in the absence of the programme, the difference in the outcome over time for the supported and control groups would follow the same trend or the outcomes would move in tandem) 16. An example of time-invariant unobservable variables is a farmer's attitude towards risk which can be assumed to not change during the implementation of the programme. An example of parallel trend assumption can be the development of input or output prices which, in the absence of the RDP, would affect in a similar way both programme participants and the control group (i.e. both groups would follow the same trend). In such situation, in order to assess causality of the RDP on the outcomes the evaluator, in addition to controlling on observables, has to also control for selection on these timeinvariant unobservables. The advantage of a programme evaluator is that both groups of potential confounders (i.e. observable factors (farm's characteristics) and unobservable factors (time-invariant unobservables and those which follow a parallel trend assumption)) can be controlled through the application of a combination of matching techniques with the Difference in Differences method. In summary, if the unobservables are time-invariant, or are subject to a parallel trend assumption then differencing removes their effect, so estimating the impact using DID will be unbiased.

The real problem arises however, if a programme evaluator is confronted additionally with the presence of a contextual change (e.g. due COVID-19) which may not affect the RDP beneficiaries and non-beneficiaries in the same way (i.e. unobservable which is not time-invariant or not following the same trend). For example, a changing contextual situation due to COVID-19 can affect both a decision to participate in the RDP (e.g. it concerns *potential* RDP applicants after 2019, as well as outcomes (e.g. farm profits)), but its final effect on the RDP beneficiaries may be stronger/weaker than for non-beneficiaries (control group). Such a situation can occur when for example economic results of certain farms depend very much on an additional transfer of knowledge (e.g. workshops, seminars, study tours) which due to COVID-19 restrictions cannot take place. In such a case the RDP beneficiaries 'receiving support' from Measure 1 would be negatively affected by the contextual change.

The problem faced by programme evaluators is that when other time-varying unobservable factors affect both the decision of potential beneficiaries to participate as well as outcomes, then irrespectively whether an evaluator controls or does not control for observables (e.g. farm

¹⁶ If the pre-policy trends are the same for the supported and control groups, then it is safe to assume that they follow parallel trends

characteristics) and time-invariant unobservables (using DID) the causal effect of the RDP on outcomes (e.g. farm profits) cannot be uniquely determined.

It is therefore important to re-emphasize, that **no quasi-experimental design (e.g., DID-matching)** can control for potential time-varying (or not following the same trend) unobservable bias, so other methods have to be applied. For example, the Instrumental Variables (IV) methodology, when combined with panel data allows for handling a time-varying selection bias (i.e. by permitting unobserved factors to change over time). An overview of this and other methods applicable for impact evaluations of RDPs is provided in the guidelines 'Capturing the success of your RDP: Guidelines for the ex post evaluation of 2007-2013 RDPs' and 'Guidelines. Assessing RDP achievements and impacts in 2019' 18.

¹⁷ European Commission – Directorate-General for Agriculture and Rural Development – Unit C.4 (2014): <u>Capturing the success</u> of your RDP: <u>Guidelines for the ex post evaluation of 2007-2013 RDPs</u>. Brussels.

¹⁸ European Commission – Directorate-General for Agriculture and Rural Development – Unit C.4 (2018): <u>Guidelines. Assessing RDP achievements and impacts in 2019.</u> Brussels.

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