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COMMISSION STAFF WORKING DOCUMENT

Interim evaluation of PRIMA

Accompanying the document

REPORT FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT AND THE COUNCIL

Interim Evaluation of the Partnership for Research and Innovation in the Mediterranean Area (PRIMA)

{COM(2023) 285 final}

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| Glossary |
|----------|
|----------|

| Term or acronym | Meaning or definition |
|-----------------|---|
| AWP | Annual Work Plan |
| EC | European Commission |
| ERA | European Research Area |
| ERA-Net | European Research Area Networks |
| EU | European Union |
| EU PS | Participating EU Member States |
| FP | Framework Programme |
| GDP | Gross Domestic Product |
| H2020 | Horizon 2020 |
| IA | Innovation Action |
| КРІ | Key Performance Indicator |
| NFA | National Funding Authority |
| SM PS | Southern Mediterranean Participating States |
| PRIMA-IS | PRIMA Implementing Structure – PRIMA Foundation |
| PS | Participating States |
| PSIA | Participant States Initiated Activities |
| R&I | Research and Innovation |
| RIA | Research and Innovation Action |
| SDG | Sustainable Development Goal |
| SMEs | Small and Medium-sized Enterprises |
| SRIA | Strategic Research and Innovation Agenda |
| TFEU | Treaty on the Functioning of the European Union |
| TTG | Time to Grant |

| TTI | Time to Inform |
|------|-----------------------------|
| TTP | Time to Pay |
| TTS | Time to Sign |
| UfM | Union for the Mediterranean |
| WEFE | Water-Energy-Food-Ecosystem |

1. INTRODUCTION

Purpose and scope of the evaluation/fitness check

This Staff Working Document (SWD) assesses the public-public "Partnership for Research and Innovation in the Mediterranean Area" (PRIMA), which was established by the Decision (EU) 2017/1324 of the European Parliament and of the Council of 4 July 2017 (the Basic Act)1.

PRIMA is an initiative created under Horizon 2020 (H2020), based on Article 185 TFEU, which enables the EU to participate in research programmes undertaken jointly by several Member States. The main objective of the initiative (2018-2028) is to devise new R&I approaches to improve water availability and sustainable agriculture production in a region heavily affected by climate change, urbanisation and population growth.

Set up as a public-public partnership between the EU and non-EU Participating States from the Southern and Eastern Mediterranean, PRIMA currently consists of 19 participating states (PS):

- EU: Croatia, Cyprus, France, Germany, Greece, Italy, Luxembourg, Malta, Portugal, Slovenia, Spain
- associated: Israel, Tunisia and Türkiye
- Non-associated to H2020: Algeria, Egypt, Jordan, Lebanon, Morocco

It supports collaborative research by international consortia with a thematic focus on water, agriculture and the agro-food system as well as the interdependencies between these fields through the Water Energy Food Ecosystems (WEFE) Nexus.

The dedicated implementation structure, the PRIMA Foundation (PRIMA-IS), established in Barcelona, implements activities mainly in the form of calls for proposals in three sections:

- Section 1 calls: organised by PRIMA and funded exclusively by H2020
- Section 2 calls: also organised by PRIMA but funded by PS
- Section 3 calls: organised and funded by PS

The current SWD aims to support the European Commission (EC) in fulfilling its legal obligation from the Basic Act (Art. 14). It covers the period from the implementation of PRIMA in 2017 until March 2022 and mainly focuses on the partnership's 2018-2021 AWPs. The SWD is based on the assessment criteria of effectiveness, efficiency, relevance, coherence and added value to the European Union (EU) as well as transparency and openness. It assesses in particular:

- the progress towards the objectives of PRIMA;
- the Partnership's efficiency (in aspects such as implementation, governance, supervision and potential complexity);
- the coherence with other initiatives, actions and/or policies that have related objectives;

¹ Decision (EU) 2017/1324 of the European Parliament and of the Council of 4 July 2017 on the participation of the Union in the Partnership for Research and Innovation in the Mediterranean Area (PRIMA) jointly undertaken by several Member States, (OJ L 185, 18.7.2017, p. 1).

- the PRIMA's added value at EU and Mediterranean levels;
- the effectiveness of the Article 185 PRIMA Partnership approach in its domain/sector and its contribution to the general policy objectives of the EU and more specifically the Horizon 2020's objectives.

Since none of the projects was finished at the time of the assessment, the focus of the evaluation lies less on long-term impacts but more on the structure, implementation processes and the current progress of the Programme. In particular, it is evaluated whether there has been significant progress regarding the specific objectives, as these are not fully dependent on the exploitation of the results of the projects. Nevertheless, tentative aspects of outcomes and impacts are addressed to the extent possible.

The data collection and methodology is mainly covered by the Green Transition study, which is carried out as part of the 2019-2024 R&I FP evaluation strategy. This study follows the new evaluation approach that bundles and coordinates all evaluation studies on Horizon 2020/Horizon Europe. A qualitative and quantitative information, such as a desk review and targeted interviews with selected stakeholders were included. Feedbacks received from other stakeholders in the context of a call of evidence that run from 05/09/2022 to 03/10/2022 have been also considered.

To support the interim evaluation, the Commission contracted an external interim evaluation report², prepared by independent experts from a consortium including Technopolis, Austrian Institute for Technology, Kerlen, Fraunhofer, Science Metrix and ZSI Center for Social Innovation. It is based on various approaches and sources. The main input came from the PRIMA-IS. Its evaluation input report (PRIMA 2022) provided a detailed set of statistics, indicators and explanations of key developments. In addition, PRIMA-IS made available an assessment study that it had commissioned in preparation of this evaluation (CSES 2022).

All existing documents of PRIMA, e.g., Ex-Ante Assessment, Basic Act, Statutes, Website, PRIMA Intelligent Analytical Tool (available on the website), as well as relevant publications for evaluations for public-public partnerships, have been reviewed. Overall, quantitative assessments (e.g. also via publication analysis) have been performed and complemented, as far as possible, by qualitative insights. After analytical work, 15 interviews with diverse and key representative stakeholders of different types and geographical origins have been conducted.

2. WHAT WAS THE EXPECTED OUTCOME OF THE INTERVENTION?

Water provision and food systems in the Mediterranean area are unsustainably managed in many cases. This challenge is being exacerbated by climate change and has important downstream impacts including social and economic stress, instability and external migration.

One of the key reasons for the unsustainable management of water provision and food systems in the Mediterranean area is the lack of a set of common innovative solutions

² Evaluation study on the European Framework Programmes for Research and Innovation for addressing Global Challenges and Industrial Competitiveness - Focus on activities related to the green transition –RTD/2021/SC/023 - Interim Evaluation of the Partnership for Research and Innovation in the Mediterranean Area (PRIMA) (forthcoming)

that are adapted to the local realities of the region and easily transferable across it and have been fully piloted and demonstrated on the ground³.

These solutions are not forthcoming because the overall level of R&I investment in the Mediterranean area is not commensurate with the size of the regional challenge. Investment levels differ greatly between countries, moreover funding is not well focused on addressing the water and food challenge. Relevant stakeholders involved – for instance private sector ones – do not always have sufficiently strong R&I capabilities, and the R&I and collaboration efforts between EU Member States and Southern and Eastern Mediterranean countries are too scattered (mostly governed by bilateral agreements) to have any significant impact.

PRIMA was established to address the above-mentioned challenges. The drivers behind the inadequacy of R&I systems in the Mediterranean area to deliver the needed innovative and integrated solutions for the sustainable management of water provision and food systems, as identified in the Impact Assessment accompanying PRIMA proposals for a Decision of the European Parliament and the Council, are the following:

- Uneven R&I resources in the Mediterranean countries. For instance, average R&D intensities measured as percentage of GDP in the region are low: 1.29% for the EU Member States participating in the PRIMA Joint Programme (compared to 2% for the Member States overall) and 0.54% for the Southern and Eastern Mediterranean countries (excluding Israel, for which the R&D intensity is 4.21%).
- Limited coordination of R&I policy programming between Mediterranean countries. For instance, in the field of water and food, more than 17 different bilateral and 11 transnational R&I collaboration programmes have been identified as being in operation in the region in a not well-coordinated manner.
- Lack of long-term strategic R&I agenda and multi-stakeholder governance. For instance, even though of key importance for the rapid dissemination and valorisation of research results, less than 10% of research activities in the Mediterranean region are carried out by private actors.

As PRIMA's impact assessment stresses, PRIMA Joint Programme is also of great relevance for a broad range of key EU policies.

PRIMA fits clearly into the European Agenda on Migration and the Communication on establishing a new Partnership Framework with third countries under the European Agenda on Migration⁴. In this Communication, research is mentioned explicitly as one of the EU policies that may have a role to play in the wider context of the discussions on migration and in the dedicated agreements that the EU is expected to conclude with the most affected third countries. Given the importance of agro-food and water systems by boosting R&I that addresses related issues, PRIMA might likewise contribute to lowering migration pressure as it improves domestic living and working conditions. In addition, creating a trust-based relationship with the SM PS is very important for European policy. The introduction of PRIMA was regarded as suitable to improve EU-Southern Mediterranean relations. The partnership may thus contribute to the European objectives to tighten the bonds between the EU and its Southern neighbours.

³ <u>SWD(2016)332 PRIMA's Impact Assessment</u>

⁴a new Partnership Framework with third countries under the European Agenda on Migration adopted by the Commission on 7 June 2016 (COM(2016)385)

PRIMA also fits clearly into the EU's efforts to achieve the post-2015 Development Agenda and the Sustainable Development Goals (SDGs), and more specifically, SDG #2 "End hunger, achieve food security and improved nutrition and promote sustainable agriculture" and SDG #6 "Ensure availability and sustainable management of water and sanitation for all".

The implementation of the SDGs directly connects the PRIMA Joint Programme to EU sustainability policy. There are strong links between the content of the PRIMA Joint Programme and that of the Resource-efficient Europe Flagship Initiative, for its environmental dimension, and that of the European Neighbourhood Programme for Agriculture and Rural Development, for its international cooperation dimension.

Finally, PRIMA is relevant for the implementation of EU R&I policy, since the development of deployment of innovative solutions for the sustainable management of water and food systems, is a key element of Horizon 2020 and Horizon Europe and can support the Global Approach for International R&I Cooperation, thus contributing to the EU's objective for a stronger EU in the world.

According to Article 2 of the Basic Act, "the general objectives of PRIMA are to build R&I capacities and to develop knowledge and common innovative solutions from agrofood systems, to make them sustainable, and for integrated water provision and management in the Mediterranean area, to make those systems and that provision and management more climate resilient, efficient, cost-effective and environmentally and socially sustainable, and to contribute to solving water scarcity, food security, nutrition, health, well-being and migration problems upstream".

These overall objectives are in line with the priorities of H2020. From them follows a set of four **specific objectives**, which are listed in the same article:

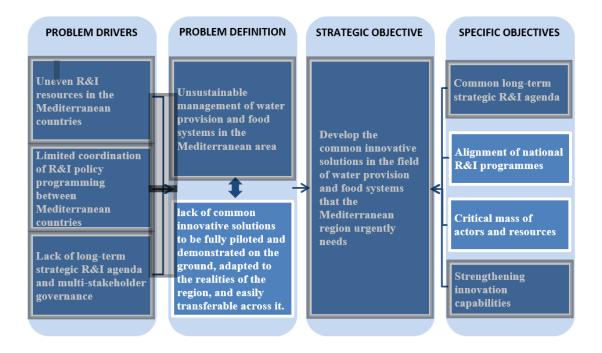
"(a) the formulation of a long-term, common, strategic agenda in the area of agro-food systems, to make them sustainable, and in the area of integrated water provision and management;

(b) the orientation of relevant national research and innovation programmes towards the implementation of the strategic agenda;

(c) the involvement of all relevant public and private sector actors in implementing the strategic agenda by pooling knowledge and financial resources to achieve the necessary critical mass;

(d) the strengthening of the research and innovation funding capacities and of the implementation capabilities of all actors involved including SMEs, academia, non-governmental organisations and local research centres".

The achievement of these objectives relies upon the establishment of long-term cooperation and upon end-user friendly and societally affordable solutions. The intervention logic reported in the PRIMA impact assessment illustrates the links between the general objective, the problem definition, problem drivers and the identified specific objectives.



PRIMA addresses the Mediterranean region's environmental, sustainability and socioeconomic challenges by contributing to the development of its R&I ecosystem and better regional coordination and integration. Like other Article 185 initiatives, PRIMA thus has a political perspective (policy alignment), and a programmatic and financial element (programme alignment supported by funding research and innovation activities with national and EU funds according to the AWPs).

Among the different EU Research and Innovation (R&I) partnerships, PRIMA constitutes a distinct initiative as one of its key intentions is to integrate Mediterranean Third Countries into the European Research Area (ERA). It aims to ensure transparency and equality for all the participating partners. Recital 27 of the Basic Act specifies that PRIMA-IS "should aim to provide, through the annual work plan, an appropriate share of its funding, approximately 25% of the Union financial contribution, reflecting the commitments of Mediterranean Partner Countries to PRIMA, to legal entities established in targeted third countries considered to be Participating States."

While not spelt out explicitly in the Basic Act, PRIMA features a significant component of science diplomacy, i.e., "the use of science for foreign policy purposes".

To summarise, with its overarching goal to contribute to the sustainability and stability of the region, PRIMA aims to achieve multiple objectives. These range from thematic goals to address societal needs in the Mediterranean area and specific objectives that address advances towards an integrated European and Mediterranean Research Area to science diplomacy goals for the collaboration with the EU's Southern neighbours.

In the context of PRIMA, the following Impact Assessments were conducted:

- EC (2015): PRIMA Programme Inception Impact Assessment
- EC (2016): IMPACT ASSESSMENT Accompanying the document Proposal for a Decision of the European Parliament and of the Council on the participation of the Union in the Partnership for Research and Innovation in the Mediterranean Area (PRIMA) jointly undertaken by several Member States {COM(2016) 662 final}

Points of comparison

The points of comparison is the impact assessment (SWD(2016)332 final) and the specific objectives set therein.

In particular, the evaluation compares the progress made with regards to three main problems identified in the impact assessment:

- Uneven R&I resources in the Mediterranean countries
- Limited coordination of R&I policy programming between Mediterranean countries
- Lack of long-term strategic R&I agenda and multi-stakeholder governance

In contrast to other Article 185 initiatives in H2020, PRIMA has no legal predecessor. While there have been partnerships between different national agencies in earlier ERA-Nets, and initiatives towards the Mediterranean area existed, the incorporation of PRIMA as a public-public partnership on the EU level was completely new. Key activities and expected outputs of the partnership included the set-up of efficient and trust-building structures and procedures in the first years of its establishment to pave the way for successful working.

As none of the projects funded by PRIMA has finished yet, the focus of the interim evaluation lies less on long-term impacts but the structure, implementation processes and the current progress of the Programme. In particular, it was evaluated whether there has been significant progress regarding the specific objectives, as these are not fully dependent on the exploitation of the achieved results in the projects. The specific objectives that PRIMA aims to tackle are:

- 1. the formulation of a long-term, common, strategic agenda in the area of agro-food systems, to make them sustainable, and in the area of integrated water provision and management;
- 2. the orientation of relevant national research and innovation programmes towards the implementation of the strategic agenda;
- 3. the involvement of all relevant public and private sector actors in implementing the strategic agenda by pooling knowledge and financial resources to achieve the necessary critical mass;
- 4. the strengthening of the research and innovation funding capacities and of the implementation capabilities of all actors involved including SMEs, academia, non-governmental organisations and local research centres.

The following table presents the baseline situation before the establishment of the PRIMA initiative and the criteria used to measure the progress towards the fulfilment of the above specific objectives

| Specific Objectives | Baseline | Criteria of success |
|---|--|--|
| Common long-term strategic R&I agenda | No single strategic agenda covering the water, agriculture and food areas in consistent and comprehensive manner – silo approach without exploring the interactions between those thematic areas | Elaboration of a consolidated Strategic Research and Innovation Agenda (SRIA) |
| Alignment of national R&I programmes | Numerous, fragmented, uncoordinated and overlapping national research actions and programmes - Governance and policies not facilitating international cooperation | Annual joint calls pooling PS national funds to support topics supporting the implementation of SRIA – National funding agencies are streamlining national administrative and financial procedures |
| Critical mass of actions and resources | Limited involvement of all relevant public and private stakeholders – limited resources for common strategic actions – low R&I intensity | Mobilisation of a wide range of stakeholders, including SMEs, beyond high education organisations, especially from Southern Mediterranean countries, in proposals - Approximately 25% of the Union financial contribution, to legal entities established in targeted third countries considered to be Participating States. |
| Strengthening innovation capacities | Inadequate funding and limited capacity for developing competitive proposals, coordinating and implementing successful proposals | Mix of Research and Innovation Actions (RIA) and Innovation Actions (IA) in the annual work programmes – More than 100 demonstration sites - Jobs creation |

3. How has the situation evolved over the evaluated period?

Current state of play

The Partnership for Research and Innovation in the Mediterranean Area (PRIMA) was established in 2017 by nineteen Participating States (PS) and the European Union (EU) through the Decision of the European Parliament and of the Council of 4 July 2017 Decision/(EU) 2017/1324.

The 19 PS in PRIMA includes: 11 EU Member States (Croatia, Cyprus, France, Germany, Greece, Italy, Luxembourg, Malta, Portugal, Slovenia and Spain), 3 Associated Countries of H2020 (Israel, Tunisia and Türkiye) and 5 Third Countries from the Southern Mediterranean area (Algeria, Egypt, Jordan, Lebanon and Morocco) with whom the Commision concluded Agreements for Scientific and Technological cooperation setting out the terms and conditions for the participation in PRIMA.

PRIMA is operated on the basis of a jointly formulated SRIA comprising operational objectives, R&I gaps identified, and main expected R&I results. The SRIA is implemented through a succession of AWPs that are are developed and implemented by PRIMA-IS, following the approval by the Commission.

PRIMA-IS was established with the partnership's inception in August 2017 by the PRIMA Participating States, as body governed by private law with a public service mission, under Spanish law. It is responsible for the partnership implementation. Figure 1 describes a simplified version of the governance structure of PRIMA.

PRIMA-IS supports the PRIMA Steering Committee and the Board of Trustees, which consists of one representative from each PS. The EC and the UfM participate as observers on the Board. In addition, a Scientific Advisory Board (also known as the Scientific Advisory Committee), consisting of different scientists, provides input for the best direction of R&I efforts.

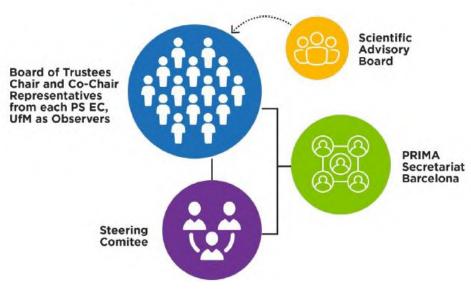


Figure 1 PRIMA-IS overview

Source: PRIMA (2022)

In line with its objective of science diplomacy, to build trust among the PS, PRIMA's governance follows the principle of equal footing. Therefore, it applies principles of co-decision, co-financing and co-management in the design/structure and operation of the governance bodies, in the evaluation panels' constitution, and within PRIMA secretariat staff. Approximately half of the staff comes from EU PS and the other half from the SM PS.

Strategic Research and Innovation Agenda / Annual Work Plans

The PRIMA programme is being implemented according to a long-term <u>Strategic</u> <u>Research and Innovation Agenda (SRIA)</u>, which provides the vision and strategic direction for the Implementation of the Programme and is the basis for setting out the PRIMA AWPs.

The SRIA defines three main thematic areas:

1. Management of Water: Integrated and sustainable management of water for arid and semi-arid Mediterranean areas

2. Farming Systems: Sustainable farming systems under Mediterranean environmental constraints

3. Agro-food value chain: Sustainable Mediterranean agro-food value chains for regional and local development.

In addition, these areas' interconnections have been addressed through the WEFE Nexus theme since 2019.

The programme is implemented via AWPs, which outline the calls for proposals and other activities envisaged for the upcoming 12 months. AWPs are elaborated by PRIMA-IS, different governing bodies and in collaboration with the EC.

The AWPs contain calls for each of the three thematic areas. Since 2019, there have also been calls addressing the WEFE Nexus issues. Here, inter-disciplinary research projects are funded that aim to deliver synergies across water, farming and agro-food, thus catering to the topics' deep interconnection.

Funding system

PRIMA's total budget is EUR494 million, with up to EUR220 million coming from H2020 and EUR274 million from national resources from the PS (to support Section 2 and 3).

The Basic Act further defines that the EU financial contribution and the PS' contribution to PRIMA should be equal – under a particular ceiling - to achieve a high leverage effect and ensure a stronger integration of the PS programmes.

To achieve its objectives, PRIMA has provided financial support mainly through grants to participants, in 3 sections, which differ in their origin of funding and management:

Section 1 grants are funded by financial means provided directly by the EU. While PRIMA-IS manages them, the evaluation and administrative processes follow the H2020 rules. These calls require only a single joint application to PRIMA's submission portal.

Section 2 grants are funded by the PS, who are represented in the successful project consortia. PRIMA-IS manages the evaluation, and the NFAs are not involved in the process, which independent scientific evaluators lead. However, after a successful evaluation by PRIMA-IS, the NFAs, corresponding to the beneficiaries participating in the winning consortia, take over the further administrative procedures that in accordance with national regulations. This, e.g., means some NFAs require two applications: one joint application for PRIMA and one application for the respective NFA, after the successful review by PRIMA.

Section 3 contains PS-led initiatives that have officially been evaluated by PRIMA-IS with the help of independent experts, as contributing to PRIMA's objectives. These are mainly Participant States Initiated Activities (PSIAs), which are national bilateral or multilateral research programmes implemented, managed and funded by the PS. PSIAs can be complementary to the activities funded through PRIMA calls for proposals. They either address research gaps not fully addressed by PRIMA projects or target

organisations such as small and medium-sized enterprises (SMEs) that in some PS are not eligible under Section 2 calls⁵. There is a specific procedure for the reporting of national programmes to PRIMA to ensure coherence with the goals of PRIMA and to confirm that programme implementation has taken place. In addition to PSIAs, Section 3 also consists of "*Other Activities*" implemented by PS supporting PRIMA. Activities include capacity building, brokerage events, dissemination activities, publishing reports, mutual learning workshops and knowledge hubs (such as the PRIMA Observatory on Innovation).

PRIMA is currently running efficiently and there are no delays in the implementation of the AWPs and calls. At project level, delays in the signature of some grant agreements of projects selected for funding may occur, in particular for Section 2, mainly because of additional constraints at national level or because of the lack of harmonisation of how NFAs handle project administration. The pandemic has negatively affected PRIMA as not only labs in the PS had to close down, but also the missing travel possibilities made project progress more difficult for the many projects that include field trials or demo sites across the countries. Consequently, PRIMA projects that should have finished in 2021 had to be extended.

Since all projects were still running at the time of the evaluation, the solutions to the societal needs PRIMA seeks to address are still to be awaited. Data collected from 53 projects that have passed their mid-term review indicate promising progress to achieve operational objectives.

PRIMA implementation

Directly after the setup of PRIMA-IS, the AWP and first calls were launched in 2018. In 2018-2021, four calls and the project submission selection have taken place, and 168 projects have been selected for funding (Table 1).

| | 2018 | | 2019 | | 2020 | | 2021 | |
|---|-----------|-----------|-----------|----------|-----------|----------|----------|----------|
| | Section 1 | Section 2 | Section 1 | Section2 | Section 1 | Section2 | Section1 | Section2 |
| Submissions | 484 | 396 | 309 | 178 | 335 | 161 | 313 | 140 |
| Number of Eligible proposals | 456 | 362 | 278 | 154 | 315 | 153 | 298 | 137 |
| Not admissible and ineligible proposals | 28 | 34 | 31 | 24 | 18 | 8 | 13 | 3 |
| Funded projects | 9 | 26 | 18 | 30 | 15 | 31 | 11 | 28 |
| Success rate ⁶ | 2.0 | 7.2 | 6.5 | 19.5 | 4.8 | 20.3 | 3.7 | 20.4 |

Table 1Submissions and funded projects in 2018-2021

⁵ PRIMA (2022): Input to the PRIMA Interim Evaluation. Report by PRIMA-IS

⁶ Success rate is defined as the number of proposals selected for funding divided by the number of all the eligible proposals evaluated

| Total number of partners | 103 | 215 | 169 | 248 | 183 | 268 | 150 | 235 |
|--------------------------------------|------|------|------|------|------|------|------|------|
| Total funding in M EUR | 18 | 27 | 28 | 27 | 33 | 31 | 32 | 29 |
| Average partners /project | 11 | 8 | 9 | 8 | 12 | 8 | 13 | 8 |
| Average funding /project in M EUR | 2.00 | 1.05 | 1.50 | 0.90 | 2.20 | 1.00 | 2.90 | 1.03 |

Source: based on PRIMA (2022i

Each year, there has been a high number of submissions. The interest is more elevated in Section 1 than in Section 2, because in Section 2 different NFAs with partly different funding rules are involved and project volumes are smaller.

Participation in calls has decreased in both sections over time. Potential explanations are, on the one hand, that the initiative was already known by the community when the first calls started and that these were rather broadly formulated. Conversely, in recent years, the topics have been more tailored. On the other hand, the interviews that took place during the interim evaluation stressed the challenges of the administrative procedures in Section 2 and the limited success rates that may have deterred potential applicants. Success rates differ between the two sections. The success rates for Section 1 are below 5%. Also, the success rate for Section 2 is rather modest but increased from around 6.6% in 2018 to about 20% in 2021.

Overall, there are 53 Section 1 projects and 115 Section 2 projects. Whereas there are significantly more Section 2 projects, the difference in accumulated project funding over the last four years is rather small. That is, Section 2 projects are considerably smaller than Section 1 projects. For Section 1 grants starting in 2021, the average funding has risen to around EUR 3 million. Section 2 projects are smaller: around EUR 1 million in 2021. The number of beneficiaries increased in both sections from 2018 and 2020 and declined a bit in 2021 (but above 2018). For both sections, it has been an explicit strategy of PRIMA to increase the average funding value because of efficiency considerations and to encourage participation in bigger projects.

At the time of the evaluation, all projects were still running. The total funding for PRIMA, including EU and national funding (including Section 3) is EUR 353 million from 2018-2021. The EU funds in Section 1 allocated to projects in 2018-2021 amount to EUR 110 million. In addition, the financial contributions allocated from PS to Section 2 calls from 2018 to 2021 total EUR 114 million. Section 3 funding amounts to EUR 129 million.

Participation by type of beneficiaries

Most beneficiaries come from the public sector. Higher education establishments represent the highest number of beneficiaries in PRIMA (Table 2). This category includes universities, institutes, laboratories and research councils, and accounts for 41.3% of all beneficiaries from 2018 to 2021. Other research organisations represent 28.8% of beneficiaries. Private for-profit organisations account for a bit less than 20%, most of them being SMEs. The majority of SMEs (57%) participate in Section 1, where

the share of private stakeholders is considerably higher than in Section 2 $(43\%)^7$. That is probably the case because in Section 2, not all PS reimburse costs for firms, and the budget-per-project is lower. The participation rate of private actors is the highest in the WEFE Nexus calls (only Section 1 calls) and agro-food calls. Most private for-profit stakeholders are from EU PS (~72\%).

| Year/section | Total | Higher education establishments | Research organisations | Public body | Private for- profit organisations | Other |
|----------------------|-------|---------------------------------------|---------------------------|----------------|---|---------------|
| | | I | Grand Total | | 1 | |
| Total (2018-2021) | 1571 | 649 (41.3%) | 453 (28.8%) | 51 (3.2%) | 297 (18.9%) | 121 (7.7%) |
| | 1 | | By year | | 1 | |
| 2018 | 318 | 130 | 101 | 12 | 62 | 13 |
| 2019 | 417 | 164 | 120 | 14 | 78 | 41 |
| 2020 | 451 | 179 | 138 | 11 | 91 | 32 |
| 2021 | 385 | 176 | 94 | 14 | 66 (| 35 |
| | | [| By section | | | |
| Section 1 | 605 | 174 (28.8%) | 144 (23.8%) | 30 (5.0%) | 176 (29.1%) | 81 (13.4%) |
| Section2 | 966 | 475 (49.2%) | 309 (32.0%) | 21 (2.2 %) | 121 (12.5%) | 40 (4.1%) |

Table 2 Participation by type of beneficiaries⁸

Source: CSES (2022)

National Participation

For the analysis of national participation, it is important to consider that a key participation rule for Section 1 and 2 projects is that at least three independent legal entities collaborate. Legal entities shall be established in three different PS, of which: (i) at least one is from an EU Member State, or third country associated with H2020, (ii) and at least one is established in a Third Country bordering the Mediterranean Sea.

⁷ PRIMA (2022): Input to the PRIMA Interim Evaluation. Report by PRIMA-IS

⁸ There is different information regarding the numbers of beneficiaries in PRIMA (2022), CSES (2022) as well as in PRIMA Intelligent Analytical Tool (available on Website). As most detailed relevant information was provided CSES (2022), this data was selected for the report. While the other sources differ in their number, the statements would be remaining the same. For the preparation of the final report PRIMA will be conducted to finally consolidate the numbers in Table 2.

Regarding the number of beneficiaries, Italy and Spain rank number 1, followed by Tunisia and France (Table 3). Non-EU PS participants represent 38% of all beneficiaries in Section 1 and Section 2 calls. Among the SM PS, Tunisia, Morocco, Türkiye and Algeria in this order have the highest number of beneficiaries.

The participation of countries differs only to a limited extent between the sections⁹. This is despite the significant difference in funding modalities: Section 2 is dependent on the amount committed by the PS, and hence to a considerable extent, the participation is more or less ex-ante defined, while Section 1 is based only on EU funding with open and competitive calls. The interviewees indicated that the similar performance of countries in both sections might relate to the prominence of the topics and cooperation among the Southern Mediterranean regions in some countries (e.g., Spain, Italy) and strong national activities to support national entities to participate in PRIMA.

The participation of countries differs only to a limited extent between the thematic areas, with farming having a slightly higher participation rate of SM PS.¹⁰

Coordinating entities are mainly from EU PS (~92.8%), probably due to their greater experience with H2020 calls and other transnational projects. Moreover, some non-EU countries may face operational difficulties due to their economic situation, such as limited operations in foreign currencies or administrative limitations. However, there has been a slight increase in coordination activities by SM PS.

| Country | Number of projects | Number of beneficiaries | Number of Coordinators | Received Funding in EUR million (Section 1+2) |
|-------------|--------------------|-------------------------|------------------------|--|
| | | EU Mer | nbers | |
| Croatia | 10 | 18 | - | 2.1 |
| Cyprus | 14 | 20 | - | 1.6 |
| France | 89 | 144 | 15 | 21.6 |
| Germany | 54 | 67 | 13 | 16.7 |
| Greece | 69 | 116 | 15 | 17.4 |
| Italy | 129 | 273 | 60 | 51.9 |
| Luxembourg | 2 | 2 | - | 0.3 |
| Malta | 7 | 9 | - | 1.9 |
| Portugal | 51 | 83 | 9 | 8.4 |
| Slovenia | 9 | 12 | - | 0.9 |
| Spain | 120 | 230 | 44 | 36.2 |
| Total EU PS | 554 (57.4%) | 974 (62.0%) | 156 (92.8%) | 159 (71.9%) |

Table 3 Participation by countries

⁹ PRIMA (2022): Input to the PRIMA Interim Evaluation. Report by PRIMA-IS

¹⁰ PRIMA Intelligent Analytical Tool 2018-2021. Accessible via https://prima-med.org/who-we-are/prima-in-numbers/

| | | Third Co | untries | |
|-------------|----------------|----------------|--------------|-----------------|
| Algeria | 62 | 85 | - | 7.4 |
| Egypt | 56 | 74 | 1 | 9.3 |
| Israel | 12 | 16 | 1 | 2.6 |
| Jordan | 17 | 21 | - | 2.6 |
| Lebanon | 31 | 40 | 1 | 5.6 |
| Morocco | 71 | 118 | 2 | 11.5 |
| Tunisia | 103 | 154 | 2 | 12.7 |
| Türkiye | 59 | 89 | 5 | 10.4 |
| Total SM PS | 411 (42.6%) | 597 (38.0%) | 12 (7.2%) | 62.1 (28.1%) |

Source: CSES (2022), PRIMA (2022)

Regarding financial contribution, SM PS received around EUR 62 million or 28% of total funds. Of these, EUR 35.9 million were obtained from the EU financial contribution budget (Section 1). This presents a share of around 32%, exceeding the target share foreseen in the Basic Act of 25%. In Section 2 calls (national funds), non-EU PS received approximately 23% of funds, corresponding to EUR 26.2 million in national funds. The fact that the shares of funding for SM PS are lower in Section 2 than in Section 1 reflects the lower national financial commitments of SM PS in Section 2.

Section 3 PS invested EUR 73 million in 13 PSIAs (Table 4). Mainly due to national Covid-19 containment measures, several of the PS programmes included in the AWPs were not implemented. From 2018 to 2021, 13 PSIAs out of 53 initially planned were launched, and 397 projects are running within the 13 PSIAs. According to PRIMA-IS, most PSIAs relate to R&I activities targeting private companies to foster competitiveness by developing new or improved products, processes, and services focused on fulfilling economic, environmental, and social challenges (PRIMA 2022).

| Country | Disbursed amounts in EUR |
|---------|--------------------------|
| Spain | 70 228 808 |
| France | 2 539 998 |
| Israel | 554 500 |
| Germany | 101 582 |
| Total | 73 424 888 |

Table 4Amounts disbursed to PSIAs by country

Source: PRIMA (2022)

Regarding national distribution, four countries contributed to the disbursed amounts. Spanish organisations paid most of the corresponding funding (EUR 70 million), accounting for 95.6%. In addition to these R&I activities, Malta and Türkiye have launched PSIAs (e.g., training workshops, mobility of researchers) in collaboration with other PS, aiming to strengthen participation and coordination of less represented PRIMA PS and, in particular, SM PS¹¹.

¹¹ PRIMA (2022): Input to the PRIMA Interim Evaluation. Report by PRIMA-IS

PRIMA-IS is not only implementing the transnational calls, managing the distribution of EU funding to beneficiaries via grant management, but also monitoring the projects selected from calls and coordinating operational reporting to the Commission.

PRIMA monitoring

To monitor efficiency, PRIMA-IS adopted a set of indicators from H2020, notably:

- Time To Inform (TTI), i.e., the number of days between call closure and the announcement of the results,
- Time To Grant (TTG), i.e., the number of days between the call deadline and the signature of grants,
- Time To Sign (TTS), i.e., the number of days between the informing of successful applicants and the signature of grants,
- Time To Pay (TTP), i.e., the number of days between the signature of grants and payment, e.g., pre-financing¹².

Moreover, there have been efforts and progress toward the improvement of the KPI system. However, current KPIs still leave room for improvement. In particular, it has to be ensured that the impact of projects will be monitored adequately, beyond the mid-term review or the end review of a project, i.e., some kind of regular monitoring or follow-up after the end of a project. A reference point could be the Annex V of the current Horizon Europe Regulation.

4. EVALUATION FINDINGS (ANALYTICAL PART)

4.1. To what extent was the intervention successful and why?

Effectiveness

The objectives of PRIMA are in line with the objectives of H2020 as well as the objectives set out in other EU policies and programmes and are visibly defined in the Basic Act. The PS have made clear financial commitments to PRIMA. They consist of either in-cash or in-kind contributions and are stated in the AWP. The documents reviewed suggest that PS's actual individual contributions can be considered as an appropriate pooling of resources to foster transnational R&I. On average, around 80% of the committed funds in Section 2 were allocated later by the PS to PRIMA¹³. Only in a few cases, the PS did not allocate the full committed amount. This was mainly because there were too few successful proposals with participants from the respective states.

¹² As other Art. 185 partnerships do not rely on the same indicators, the evaluation could not compare the efficiency of PRIMA to that of the latter. Despite the idiosyncratic nature of each partnership, it nonetheless seems advisable to liaise with other partnerships to devise a set of universal indicators in order to allow of comparison.

¹³ Whereas the committed amount primarily constitutes a non-binding declaration of intent, the allocation of actual funds is binding.

Moreover, PRIMA-IS stated to have invested large efforts to compensate for the missing funds.

The Commission concludes that PRIMA has managed to set up an effective dedicated implementation structure. Corresponding procedures constitute a crucial testimony to the programme's effectiveness. Moreover, the stakeholders acknowledged the efforts made by PRIMA-IS (and individual national Ministries before PRIMA was set up) to secure a political and financial commitment from the PS who participate in the programme today. In particular, gaining the trust of the SM PS, most of which are unused to working with the EU under similar conditions, has been a major achievement of the PRIMA-IS so far.

Regarding Section 1, the rather low success rates are an issue of concern as they imply high efforts for a large number of actors without guarantee of funding. This may discourage potential applicants in the future.

Considering Section 2, there is an issue that each year, one or more PS are 'too successful' insofar as national research teams form part of a large number of successful PRIMA grants. This means that PS risk running out of budget without being able to co-fund their share of all successful projects. Consequently, some successful PRIMA projects risk not being granted funding or losing partners who's PS cannot provide funding. As a result, some projects are awarded funds without the full consortium in place.. Section 2 poses also a particular challenge for more vulnerable PS, which have problems meeting their financial commitments, e.g. because of political instability and crisis. Consequently, realistic participation opportunities for beneficiaries from those countries are lower under Section 2.

As mentioned above, for PRIMA projects, as is the case for many R&I projects, a significant barrier to progress has been the Covid-19 pandemic. Consequently, all projects that should have finished in 2021 had to be extended. The pandemic has negatively affected PRIMA as not only labs in the PS had to close down, but also the missing travel possibilities made project progress more difficult for the many projects that include field trials or demo sites across the countries. Likewise, another relevant cause of delays in project progress has been the lacking harmonisation of how NFAs handled project administration under Section 2.

Data gathered for the 53 projects that passed the mid-term review (*Table* Table 5) indicates the "*Total number of peer-reviewed publications*" (104) and the number of products and solutions (81) are already at a high level given the early stage. Moreover, the large number of demonstration sites (123) presents a promising sign of future innovative solutions, for market readiness, and user involvement in PRIMA projects¹⁴. All this shows progress to achieve operational objectives.

¹⁴ CSES (Centre for Strategy & Evaluation Services) (2022): Study to assess the performance and impact of the PRIMA programme. Commissioned by PRIMA-IS for self-assessment

| Cross- cutting KPIs | Total number of publications | Number Guidelines | Number products | Number of prototypes/pilots | Number of solutions | Number of new Methods |
|------------------------|--|-----------------------------------|--------------------------|--------------------------------|---------------------------------|-----------------------------|
| Total | 104 | 5 | 38 | 8 | 43 | 10 |
| | Number of Jobs created (temporary jobs within projects) | Number of Start-ups Created | Number of Living Labs | Number of Demo Sites | Number of Platforms/ Hubs | Number of Databases |
| Total | 297 | 3 | 3 | 123 | 8 | 10 |

 Table 5
 Cross-cutting KPIs derived from projects having passed their midterm review

Source: PRIMA (2022)

PRIMA-IS has developed a set of KPIs to measure the contribution of PRIMA projects to the partnership's thematic goals. However, it is too early to interpret these outputs at the current implementation stage, as they can be expected at the end of the project (Table 6).

| Thematic area | Water mane | agement | Farming systems | | Agro-food value chain | WEFE Nexus |
|------------------|--|--|----------------------------------|---|---|------------------------------|
| Thematic KPIs | Non- Conventional Water Resources (NCWR) Applications | Innovative Irrigation Solutions applied in project sites | Agro ecological Principles | Local Breeds improved and/or conserved | Waste reduction & by-products valorisation solutions | Applied WEFE solutions |
| Total | 2 | 4 | 3 | 1 | 10 | 1 |

 Table 6
 Thematic KPIs derived from 53 projects passing their midterm review in absolute numbers

Source: PRIMA (2022)

Another PRIMA KPI that is related more to input but connected to societal goals is the percentage of the EU financial contribution under Section 1 to climate and biodiversity-related projects (Table 7). In line with PRIMA's thematic objectives, the share of funding for climate-related projects is high and in accordance with H2020 objectives which requires a climate-related expenditure of 35%

 Table 7
 Sustainable development and climate change, including information on climate change-related expenditure 2018-2021

| | 2018 | 2019 | 2020 | 2021 |
|---|-------|-------|-------|-------|
| % Percentage of EU financial contribution that is climate-related in PRIMA Projects | 32.2% | 35.4% | 42.6% | 34.4% |

Source: PRIMA (2022)

For achieving broad impact, communication and dissemination activities are important for the reputation and awareness of the programme and the diffusion of its results. Therefore, there have been significant communication and dissemination activities by the projects themselves¹⁵ and by PRIMA-IS, e.g., projects Websites, dissemination material, and social media presence.

¹⁵ PRIMA counts 676 events and activities for the projects.

According to the interviewed stakeholders, PRIMA has a positive reputation and is wellknown in the Mediterranean Area, particularly in the SM PS. However, the interviews indicate that the awareness of PRIMA and reception of dissemination and communication material differs between countries because the activities of the NFAs differ. Moreover, it appears to depend on the role of beneficiaries in projects to which extent they receive information, as coordinators receive more information than others and do not always distribute it in the consortia. Moreover, projects are involved to a different degree in those activities, e.g., the Nexus projects are very much involved in events due to their more general and socio-economic related subjects.

In addition to general (thematic) objectives, the **Basic Act provides a list of three specific objectives** (see chapter 2), which are cross-cutting. Complementary to the above general assessment, the achievement of the specific objectives is assessed as follows:

Specific objective 1 – Alignment¹⁶ of national R&I programmes

The interviews indicate that there is strong political support for the aims and objectives of PRIMA¹⁷. The SRIA constitutes the key strategic document that supports the activities of PRIMA, and it seems well aligned with national and international R&I priorities. The geographical scope of PRIMA is considered a strength since the region faces many common challenges, which are addressed in the SRIA and implemented in the AWPs. Many stakeholders value the flexibility that the SRIA grants, allowing them to take up current thematic developments and challenges in each AWP. From 2019 on, the topics have been formulated more specifically and detailing the direction of research. Hence, there is an orientation to specific needs for the common geographical area. The topics selected are considered appropriate by the national stakeholders and of high interest to the PS' national R&I agendas. Hence, there are indications of alignment toward the SRIA.

Moreover, the interviewees consider the implementation of PRIMA structures and procedures as an important achievement. Several NFAs changed their regulations or administrative procedures with regards to Section 2 (see Efficiency). Nevertheless, these changes do not only benefit PRIMA, but they would also be valid for possible other transnational activities as well. Beyond this evidence for aligning procedures, it proved more difficult to find indicators for the actual contribution of PRIMA to the alignment of national R&I policies and strategies. This issue has, however, also been reported for other Art.185 partnerships, so it appears to be rather generic than case-specific¹⁸. The interviews indicate that the degree of alignment may differ between PS because of the size and history of the domestic R&I systems and procedures. For example, countries with well-established R&I systems are more difficult to align. However, due to the close

¹⁶ Alignment here is meant here in a narrow sense according to the specific objective of PRIMA regarding the orientation of relevant national research and innovation programmes towards the implementation of the strategic agenda. ERA-Learn platform takes up a broader definition of alignment, however this is beyond the specific objective under subject here. <u>https://www.era-learn.eu/support-for-partnerships/additional-activities/copy_of_alignment/financial-alignment-case-studies</u>

CSES (Centre for Strategy & Evaluation Services) (2022): Study to assess the performance and impact of the PRIMA programme. Commissioned by PRIMA-IS for self-assessment

¹⁸ EC 2017: Evaluation of the Participation of the EU in research and development programmes undertaken by several Member States based on Article 185 of the TFEU, Commission Staff Working Document, SWD(2017)340 Final

involvement of the PS in the drafting of the SRIA, one may assume a certain level of alignment between the thematic areas of PRIMA and their political agendas.

Specific objective 2 – Critical mass

Overall, the PRIMA PS feature different scientific systems and baseline situations in terms of level of scientific excellence of their R&I actors. PRIMA has therefore, helped foster scientific integration across countries that, in the absence of PRIMA, would be unlikely to have cooperated as closely in the absence of a clear funding incentive and strategic framework to facilitate cooperation.

PRIMA thus contributes to the further completion of the ERA, notably by overcoming the insufficient cross-border cooperation in the Mediterranean area through the funding of cross-border projects, which can be expected to yield larger impacts than uni- or bilateral efforts alone.

As already outlined, PRIMA has funded so far 168 projects¹⁹ with 1571 beneficiaries at an overall volume of EUR 224 million. With this, non-EU actors participated in 42.5% of all projects and accounted for 38% of all beneficiaries. The obligation to include at least one EU and one SM PS in project consortia is usually easily fulfilled with two or more partners from each region. The SM PS can receive significant funding in Section 1 compared to the lower R&I budgets in these countries. However, the number of coordinators from SM PS is low. To tackle this problem, PRIMA supports beneficiaries from SM PS to train their cooperative research capacities, e.g., in terms of project coordination, the writing of high-quality proposals, or cross-country cooperation. Although assumed for the European research ecosystem, multilateral scientific cooperation tends to constitute a novelty for researchers from some countries. Therefore, their participation in PRIMA projects potentially prepares them to engage in more competitive calls in the future, such as those under the EU Research programs. It also constitutes a quality stamp important to R&I performing individuals and organisations.

This strong participation from SM PS is crucial for raising critical research mass, and the interviewees pointed out the strong scientific capabilities of SM PS beneficiaries. This can be expected to contribute to a scientific integration across the Mediterranean area, strengthening trust, inclusiveness and ownership. In addition, the gain in experience and the build-up networks, resulting from participation in PRIMA, promise to facilitate the access of Southern actors to transnational research funding programmes in the future.

The interviews also indicated that it was very likely that the established communities and networks would exist beyond the project's lifetime. For example, one NFA stated that some members of funded PRIMA consortia had already applied together to other binational funding programmes. While the analysed data shows much cooperation between EU and SM PS, it likewise indicates limited cooperation among SM PS. Some beneficiaries indicate that cooperation between actors in certain countries is difficult to achieve for political reasons. PRIMA-IS continues to support stronger cooperation among SM PS in the future.

¹⁹ Figures corresponding to Section 1 + Section 2 projects

Apart from projects under the umbrella of PRIMA, additional financial and in-kind resources are also made available to R&I activities through Section 3 projects to build critical mass. Yet, there is little formal evidence of the use and effectiveness of Section 3, as not all PS tend to report their PSIAs. A reasonable explanation seems to be that corresponding PS perceive the administrative process of reporting a PSIA as complex and laborious (see Coherence). The H2020 regulations mandate the adherence to certain provisions, like verifying the legal status of institutions to be funded. There are indications that this discourages NFAs from reporting or assigning funding to Section 3. Moreover, it is very difficult to assess to which extent PS, which reported their PSIAs would have conducted them without the existence of PRIMA as the EU PS mostly already had binational/ multinational funding programmes with Southern Mediterranean countries in the respective thematic areas. This limits the overall contribution of Section 3 as a strategic instrument in its present form.

Specific objective 3 - Strengthening of the research and innovation funding capacities and the implementation capabilities

PRIMA has implemented various projects aiming to develop innovative solutions through Innovation Actions and Research & Innovation Actions. Many of these potential solutions are piloted and tested in different Mediterranean countries, addressing joint regional challenges and making these solutions sustainable, inclusive and transferable beyond the Mediterranean area. Hence, PRIMA tends to improve the capacities and the performance of R&I actors to contribute to more climate-resilient solutions, e.g., reducing water scarcity or enhancing food security through improved agro-food production techniques²⁰.

In addition to research organisations, a significant number of projects also involve industrial partners²¹, who would have the capacity to transfer the outcomes of PRIMA projects into marketed products or services. However, the participation of SMEs very much depends on administrative and financing issues. Since some NFAs are not allowed to finance companies' R&I activities, participation by SMEs in Section 1 is larger than in Section 2. Hence, the extent to which industrial partners are involved stems less from the perspective of opportunities towards exploitable market results. This may be a disadvantage for technology transfer in later development stages.

Overall, PRIMA allows especially the SM PS to leverage their R&I capacities. By engaging in PRIMA, researchers from the SMPS gain access to the funding opportunities of Section 1, which the EU finances. Although funding under Section 2 is limited to national proportions, the section nonetheless allows researchers to participate in larger consortia than under national funding. In addition, as mentioned above, participants also gain experience in how collaboration works in EU programmes, thus increasing their chances for competing in other funding programmes, including Horizon Europe.

²⁰ CSES (Centre for Strategy & Evaluation Services) (2022): Study to assess the performance and impact of the PRIMA programme. Commissioned by PRIMA-IS for self-assessment

²¹ The high difference in private participation in section 1 and 2 makes it not straight-forward to assess the performance and to put in relation to other programmes. According to PRIMA-IS itself the participation rate is considered as reasonable: This SME participation is comparable to other EU R&I programmes (see for example the Interim evaluation of Horizon 2020), mainly when R&I funding involving private entities is still an emerging concept under development in several PRIMA PS. (PRIMA 2022, p.98)

Efficiency

The Commission concludes, on the basis of this evaluation, that the PRIMA programme has been successful in achieving an efficient implementation of the partnership. PRIMA principles and procedures appear to be seen as fair and efficient. Stakeholders hold PRIMA and the members of PRIMA-IS in high esteem. The PRIMA values of co-ownership, mutual interest, shared benefit and the principle of equal footing were considered particularly relevant to enable cooperation between the EU and its Southern neighbours as equal partners. The work of PRIMA-IS is largely judged helpful, efficient and responsive. Thus, the programme can be considered a relevant tool of science diplomacy that helps bring closer the EU and its Mediterranean neighbours, building a sense of trust and inclusiveness.

The work of PRIMA-IS can be considered rather efficient. Table 8 presents the values for the different indicators for Section 1 projects against H2020 target values. A ratio above 100 can be interpreted as full target fulfilment and, an improvement of PRIMA values as an increase in speed and efficiency. Except for TTS (Time to Sign), PRIMA performs better than the target values under H2020 (see table 8).

| Efficiency KPI 2018 in days | | 2019 | 2020 | H2020 target values |
|--------------------------------|-----|------|---------------------------|---------------------|
| TTI | 133 | 134 | 66 | 153 |
| TIG | 311 | 228 | 215 | 245 |
| TTS | 177 | 94 | 1 49 ²² | 90 |
| TTP (rounded) | 2.5 | 10 | 11 | 30 |

|--|

Source: PRIMA (2022)

The interviewed beneficiaries indicated that the management of Section 1 was straightforward and good to handle since the processes adhere to the application and selection rules of H2020. Moreover, some valued that the projects were smaller than most H2020 RIAs or IAs, so they allowed them to work in smaller consortia, making the approach more targeted and thus more efficient.

Conversely, the reviewed information suggests that efficiency potential remains for Section 2. This mainly results from divergences between PRIMA and national procedures. For instance, as laid out in chapter 3, some national provisions require the additional submission of documents or applications to NFAs after a positive project evaluation by PRIMA. These may even differ from those submitted in the first place, e.g., as some NFAs seemingly request submission in their official language(s). Similarly, national schedules may deviate from PRIMA schedules, e.g., concerning the processing of applications, which may lead to delays in project implementation. Such limited harmonisation implies additional administrative efforts for all involved partners, which means consuming resources. Nevertheless, although challenging, Section 2 is an important feature in PRIMA, which plays an important role in mobilising additional national resources.

²² The spike in TTS for PRIMA in 2020 is supposed to be an artefact caused by the COVID-19 pandemic.

Table 9 illustrates the efficiency gap between Sections 1 and 2, comparing the PRIMA TTS values for Section 2 to the H2020 target values and the PRIMA TTS values for Section 1.

| TTS efficiency values | for Section 1 | | | |
|-----------------------|---------------|-------|------|---------------------|
| Efficiency KPI | 2018 | 2019 | 2020 | H2020 target values |
| in days | | | | |
| TTS Section 2 | 552.5 | 356.5 | 195 | 90 |

94

177

149

90

Table 9Comparison of PRIMA TTS efficiency values for Section 2 to H2020 target values compared to PRIMA
TTS efficiency values for Section 1

TTS Section 1 Source: PRIMA (2022)

In response to the difficulties with Section 2, PRIMA-IS has been actively working to streamline procedures. It employed different activities, especially via regular Mutual Learning Exercise workshops where management, funding and procedural issues are presented, and solutions are proposed and sought with NFAs²³. Moreover, PS have proven being open to adaptations, as the cases of Egypt, Italy, Jordan, and Spain show. These countries have simplified their national administrative procedures in response to PRIMA needs. Table 8 indicates the success of the joint search for improvements.

This constant search for optimisation is another testimony to the overall efficiency of PRIMA.

Yet, the adaptation of national legal regimes to multi-, supra- or international necessities or the conference of national competencies to corresponding entities touches the very identity of states as autonomous actors. The more so as SM PS tend to feature a lower experience of the sort of cooperation relevant to the EU R&I landscape. Lastly, national regulatory set-ups do not necessarily follow efficiency considerations. Consequently, improvements for the efficiency of Section 2 can only be rather slow and incremental.

Concerning the different sections, there were indications that the efficiency of Section 3 could be higher as well. Notably, the procedures for reporting PSIAs to PRIMA-IS might exceed the resources of some NFAs. This may prevent them from reporting their PSIAs, lowering the use of Section 3 as a tool to assess the alignment of national policies.

Coherence

Concerning internal coherence, the gathered data suggest that PRIMA has managed to strike a balance in terms of the instruments applied and the topics addressed.

For the different funding instruments, there are indications that the use of RIAs and IAs constitutes "*a good mix*"²⁴ between basic research and research whose results could easily be translated.

Projects related to farming systems accounted for the majority of projects between 2018 and 2021 (Table 10). As agriculture and farming are important for communities across the Mediterranean region, the benefit of focusing on this sector is particularly significant. Thus, it appears reasonable to dedicate the most funding to strengthening its R&I

²³ Topics addressed so far: Eligibility check procedures alignment, how to secure commitments and payments, the synchronization of the signature of grants agreements to beneficiaries of the same consortium and starting dates, procedure to approve the extension time to projects requesting it

²⁴ CSES (Centre for Strategy & Evaluation Services) (2022): Study to assess the performance and impact of the PRIMA programme. Commissioned by PRIMA-IS for self-assessment

capacities, increasing stakeholder involvement and developing critical mass. Moreover, there have been indications of thematic links between projects under different topics. For example, agro-food projects may have a water management component, as water management projects sometimes consider farming systems. Hence, there are no hard boundaries between the thematic areas.

Moreover, the addition of Nexus projects that target the WEFE Nexus in 2019 can be seen as a further step to harmonise the PRIMA project portfolio aside from technoscientific silos.

| | | 2018 | 2019 | 2020 | 2021 | Total | Share in Total 2018-2021 in % |
|---------------------------|-----------|------|------|------|------|-------|----------------------------------|
| Number of | Farming | 15 | 20 | 23 | 23 | 81 | 48.2 |
| projects | Water | 12 | 10 | 9 | 6 | 37 | 22.0 |
| | Agro-Food | 8 | 15 | 12 | 8 | 43 | 25.6 |
| | Nexus | 0 | 3 | 2 | 2 | 7 | 4.2 |
| | Total | 35 | 48 | 46 | 39 | 168 | |
| Amount of | Farming | 19 | 23 | 28 | 30 | 100 | 44.5 |
| funding in EUR million | Water | 16 | 11 | 14 | 11 | 52 | 23.1 |
| (rounded) | Agro-Food | 11 | 16 | 16 | 12 | 55 | 24.4 |
| | Nexus | 0 | 4 | 6 | 8 | 18 | 8.0 |
| | Total | 46 | 54 | 64 | 61 | 225 | |

| Table 10 | Distribution of project numbers an | d funding volumes among the PRIMA topics |
|----------|------------------------------------|---|
| 1001010 | Distribution of project numbers un | a junaing volumes among the rannin topics |

Source. Data compiled from project lists provided by PRIMA-IS

Concerning external coherence, PRIMA shares links with an array of EU, multi- or international political and/or R&I initiatives and actors (Tables 11 and 12). While this means an opportunity for harnessing synergies on the one hand, it raises the necessity for active coordination to avoid unnecessary redundancies on the other hand. To do so, PRIMA-IS actively engages in a variety of activities to synchronize with the most important initiatives. Moreover, regarding the future, PRIMA-IS has taken steps to coordinate with the Horizon Europe initiatives of similar thematic focus, such as the EU Mission "*A Soil Deal for Europe*" or the new partnerships like the European Partnership Water Security for the Planet (Water4All). Lastly, PRIMA-IS has been in contact with relevant initiatives that could facilitate the translation of PRIMA results into practice, such as the EIT Food and the KIC Climate.

| Initiative Name | Initiative type | Thematic link with PRIMA | Type of activities PRIMA does coordinate with Initiative | Aim of activities |
|---|-----------------------------------|--|--|---|
| UfM | Political EU Mediterranean | The thematic focus on the Mediterranean Region | Joint workshops with UfM staff Co-organisation of conferences and major events (i.e. COP 27 Pavilion) | Better thematic coordination |
| IEMed (European Institute of the Mediterranean) | Political EU Mediterranean | The thematic focus on the Mediterranean Region | Joint webinars and conference | Better visibility for PRIMA |
| GWP (Global Water Partnership) | Political International | The thematic focus on water | Collaboration WEFE Nexus Conference | Better visibility for PRIMA |
| UNSDSN Mediterranean (United Nations Sustainable Development Solutions Network Mediterranean hub) | Political International | The regional focus on the Mediterranean | Joint meetings and webinars | Better visibility for PRIMA |
| ASCAME (Association of the Mediterranean Chambers of Commerce and Industry) | Political EU Mediterranean | The thematic focus on the Mediterranean Region | Collaboration for the MedaWeek participation | Better visibility for PRIMA and the funded projects |
| FAO (Food and Agriculture Organization) | Political R&I International | Activities addressing the same thematic area Sustainable Food Systems | Joint workshops with FAO within the SFS-MED (Sustainable Food Systems in the Mediterranean) | Better scientific coordination, regional focus in the Mediterranean |

 Table 11
 List of the most relevant political initiatives and actors, their thematic links to PRIMA, and the activities by PRIMA-IS to coordinate with them

| PRIMA-IS to coordinate with them | | | | | | | |
|---|------------------------|---|---|--|--|--|--|
| Initiative Name | Initiative type | Thematic link with PRIMA | Type of activities PRIMA does coordinate with Initiative | Aim of activities | | | |
| Water JPI (Water Joint Programming Initiative) | R&I EU | Activities addressing the same thematic area (water) | Water JPI activities are open to PRIMA partners, such as the Water JPI Workshop at the Cairo Water Week Contribution to SRIAs | Better scientific coordination in the definition of the priorities to be addressed in the AWPs to ensure complementarities and avoid duplications at the implementation level: to exchange best practices, avoid duplications and increase the impact | | | |
| Joint Research Centre | R&I EU | Activities addressing the WEFE nexus approach in the Mediterranean | Co-organisation of the WEFE Conference Active contacts within the Governing Board of the WEFE Nexus Community of Practice | Better scientific coordination | | | |
| EIT-Food | R&I Education EU | Activities addressing the same thematic areas (Food, water scarcity) | Training, sharing MOOCs Active contacts to identify potential cooperation opportunities in the fields of agriculture and water scarcity Joint webinars like the Rethinking Water Event | Build synergies in the area of education, training and capacity building Introducing and valorising EIT Online Courses on thematic related to food within the PRIMA community and network. Presenting to the PRIMA network of researchers of EIT Food's education/training programmes designed to strengthen the entrepreneurial skills of key professionals such as researchers and innovators or strengthen farmers' innovation and technology skills EIT could support research results of high TRLs produced by PRIMA projects to create start- ups and commercialise their output. | | | |
| EU Research FPs | R&I Political EU | Activities addressing the same thematic areas | Synergies and transfer of knowledge among PRIMA and H2020 projects (e.g., Fit4Reuse and HYDROUSA) | Better scientific coordination At the planning level: in the definition of the priorities to be addressed in the AWPs to ensure complementarities and avoid duplications At the implementation level: To encourage coordination, exchange | | | |

Table 12 List of the most relevant R&I initiatives and actors, their thematic links to PRIMA, and the activities by PRIMA-IS to coordinate with them

| Initiative Name | Initiative type | Thematic link with PRIMA | Type of activities PRIMA does coordinate with Initiative | Aim of activities |
|--|--------------------------------------|--|--|--|
| | | | | best practices, avoid duplications and increase the impact |
| Horizon Europe Missions | R&I EU | Activities addressing the same thematic area (climate change, inland water, soil health) | Collaboration in joint calls | Thematic coordination extends the activities of the HE Missions beyond EU borders |
| INTERREG-MED (European Cooperation Programme for the Mediterranean area) | R&I EU | Activities addressing the same thematic areas and same regional focus (Mediterranean) | Synergies and transfer of knowledge among PRIMA and INTERREG MED projects | Better scientific coordination to encourage coordination, exchange best practices, avoid duplications and increase the impact |
| ENI CBC MED (European Neighbourhood Instrument Cross-Border Cooperation Mediterranean) | R&I EU | Activities addressing the same thematic areas and same regional focus (Mediterranean) | Synergies and transfer of knowledge among PRIMA and ENI-CBC MED projects | Better scientific coordination to encourage coordination, exchange best practices, avoid duplications and increase the impact Transfer of PRIMA results through ENICBCMED capitalisation calls |
| CIHEAM (International Center for Advanced Mediterranean Agronomic Studies) | R&I EU Mediterranean | Activities addressing the same thematic area Sustainable Food Systems | Joint workshops with CIHEAM within the Sustainable Food Systems in the Mediterranean (SFS-MED) | Better scientific coordination, regional focus in the Mediterranean |
| ICARDA (International Center for Agricultural Research in the Dry Areas) | R&I and training International | Activities addressing the same thematic areas and same regional focus (Mediterranean) | Training workshops to increase capacity in writing R&I proposals Setting up of the PRIMA Monitoring, Evaluation and Learning Platform | build research and innovation capacities and develop knowledge and common innovative solutions for agro-food systems |
| LifeWatch ERIC (E-Science European Research Infrastructure for Biodiversity and Ecosystem Research) | R&I infrastructure EU | Activities addressing the same thematic area (biodiversity) | LifeWatch ERIC cooperates with PRIMA to tackle biodiversity and ecosystem research and sustainable management in a global climate change scenario. LifeWatch ERIC has been a valuable source of data for PRIMA projects and a place for storage and sharing of PRIMA data. | Collaboration among PRIMA projects and the E- infrastructure will increase the participation of more Mediterranean countries in LifeWatch ERIC, especially among young researchers. |

The reviewed information suggests that PRIMA is mostly complementary to the rest of the Mediterranean R&I ecosystem. For example, the EU research and innovation FPs constitute the most important initiatives regarding R&I. Yet, while they may address similar topics, they do not particularly cater to the needs of the Mediterranean region. While filling this gap, PRIMA has been building on activities from the FP at the same

time. Similarly, PRIMA complements the Water JPI²⁵, which focuses on all of the EU, including its non-Mediterranean member states. The same applies to other initiatives such as the Interreg Euro-MED 2021-2027 Programme or the ENI CBC MED Programme 2014-2020, whose foci, while in the Mediterranean, differ from the eligible actors or the funding conditions.

In addition, PRIMA contributes with its thematic focus to the wider EU policies such as the European Green Deal²⁶, the new EU Strategy on Adaptation to Climate Change²⁷, the Farm to Fork Strategy²⁸, the Circular Economy Action Plan²⁹, the Zero pollution Action Plan³⁰, the Soil Strategy for 2030³¹, and the EU Water Framework Directive (WFD)³².

In contrast to the multi- or international level, meaningful data about the degree of alignment between PRIMA and national/regional initiatives or policies are difficult to obtain. Nonetheless, the Centre for Strategy & Evaluation Services³³ reports that some countries support initiatives complementary to PRIMA. Moreover, the researchers point out that before the inception of PRIMA, the 4PRIMA Coordination and Support Action project, which ran from 2016 to 2018, specifically addressed the question of alignment of national strategies and research programmes on food systems and water use in the Euro-Mediterranean Area with the PRIMA priorities. For this purpose, the project involved major stakeholders in its activities to develop national strategies from the very beginning.

Overall, PRIMA has thus managed to establish internal and external coherence well.

Transparency and openness

Overall, PRIMA has developed transparent processes for consulting stakeholders and identifying priorities in each of its core activities. This includes the preparation of calls for proposals, the development of support actions and the organisation of networking and outreach activities.

National stakeholders are consistently consulted as members of the PRIMA governing bodies. In particular, regular Board of Trustees meetings provide the opportunity to all PS to participate in key decisions and put forward their opinions, priorities and concerns.

²⁵ Water Joint Programming Initiative: http://www.waterjpi.eu/

²⁶ https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal_en

²⁷ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions Forging a climate-resilient Europe - the new EU Strategy on Adaptation to Climate Change, COM/2021/82 final

²⁸ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions A Farm to Fork Strategy for a fair, healthy and environmentallyfriendly food system, COM/2020/381 final

²⁹ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions A new Circular Economy Action Plan For a cleaner and more competitive Europe, COM/2020/98 final

³⁰ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions Pathway to a Healthy Planet for All EU Action Plan: 'Towards Zero Pollution for Air, Water and Soil', COM/2021/400 final

³¹ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions EU Soil Strategy for 2030 Reaping the benefits of healthy soils for people, food, nature and climate, COM/2021/699 final

³² Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy, (OJ L 327, 22.12.2000, p. 1).

³³ CSES (Centre for Strategy & Evaluation Services) (2022): Study to assess the performance and impact of the PRIMA programme. Commissioned by PRIMA-IS for self-assessment

The funding authorities serving also as respective National Contact Points are consulted on a regular basis. As these institutions are in close contact with the project participants and other stakeholders in their country, they can bring in the perspectives and needs from different national backgrounds. Decision-making in the Board of Trustees follows a democratic approach ('one country – one vote') so that all PS are involved in the setting of priorities for the PRIMA Partnership.

PRIMA has identified the strategic research and innovation priorities through a participatory approach and consultations with a broad range of stakeholders, including academia, funding organisations, businesses, and civil society.

PRIMA-IS has launched several public consultations, allowing institutions and individuals to provide their inputs for identifying priorities and preparing PRIMA AWPs and related calls for proposals. These consultations were open for a month on the PRIMA website.

Based on the outcomes of the public consultations, the PRIMA Scientific Advisory Board propose priorities and topics to be included in the relevant AWPs.

PRIMA makes information on all processes and documents available through appropriate communication and web dissemination.

PRIMA also provides, through its website, information on the projects and their results and is working to connect its website to the PRIMA monitoring platform, providing information on budget, coordination, countries involved and relevant outputs of the projects (publications and list of demonstration sites). At this stage, all PRIMA running projects' webpages have been hosted on the PRIMA website for wider dissemination and promotion of the funded projects.

Regarding the openness towards new participants and mechanism to involve new members and a broader set of stakeholders, the underlying Article 185 initiative procedures allow countries to join PRIMA, and defines the conditions for the PRIMA membership. PRIMA is open to expanding the partnership and involving new members. PRIMA has an open membership policy and is actively reaching out to new potential partners across the Union and beyond. Even if the Partnership has been established relatively recently, it has already received expression of interest from several countries³⁴, and is planning to gradually engage a broader set of stakeholders across and outside Europe.

4.2. How did the EU intervention make a difference?

EU Added Value

Today, the added value resulting from the PRIMA partnership compared to what could have been achieved by individual PS acting independently at international, national and/or regional levels can be considered high to date and even higher for the future.

PRIMA plays a unique role in the Mediterranean R&I ecosystem and serves objectives not covered by other similar initiatives, as detailed under Coherence chapter. The

³⁴ Libya, Palestine, Montenegro and Bulgaria.

interviewed stakeholders indicated that PRIMA had a significant impact and sizable EU added value. If existing at all, alternatives to PRIMA funding take the form of national or European research funds. Because not all SM PS are associated to the latter, one may assume that actors from respective states would not have been able to execute their ideas at the same scale without PRIMA. Initiatives by individual countries would hence not have addressed the needs of the Mediterranean area as comprehensively as PRIMA.

Moreover, many PRIMA funded projects contain a clear component addressing Mediterranean needs and climate as well as economic conditions, which could hardly be investigated otherwise. The interviewees stressed that the partnership significantly contributed to building up additional cooperation and networks to address the specific needs of the Mediterranean. Moreover, they also pointed out that, whereas they differ in the socio-economic structure of their farming sectors, EU PS may nonetheless profit from the knowledge created in PRIMA projects gained from the SM PS as they share similar ecological features.

Apart from creating and transferring relevant knowledge at scale, PRIMA provides an added value to the EU through its application of the principle of equal footing. That is, by ensuring equal treatment and voice for all SM PS, the partnership has managed to develop into a potent tool of science diplomacy for the EU. Moreover, any progress towards higher political stability and sustainable development of the SM PS has positive political effects on the EU as well, as it helps to address climate change and lowers migration pressure. Furthermore, this added value may likewise last into the future as the interviewees highlighted that PRIMA had set the foundations for future collaborations between EU and SM PS. This relates not only to structures and procedures, but to a significant reputation, networks and knowledge capabilities for addressing the environmental, economic and societal needs in the Mediterranean Area that PRIMA has built up. In addition, many of the involved ministries and agencies, which are active in other research fields, have aligned procedures, at least to some extent, and built trust among each other. Hence, there is additional potential added value - next to the actual one - for the future also beyond PRIMA or by extending the current scope within PRIMA.

To analyse to which extent additional financial resources are mobilised, PRIMA-IS uses the leverage effect as an indicator. While also used by other partnerships, in the context of PRIMA, the factor measures the ability of PRIMA to attract additional financing from PS and to multiply H2020 budget resources (Section 1), including through additional activities (Section 2 and Section 3). According to the Basic Act, "*The Union financial contribution, including EFTA appropriations, shall equal the PS' contributions to PRIMA*". So, by 2028 a minimum of EUR 1 of in-kind and/or financial contributions by PRIMA and its funding bodies shall be leveraged for each euro of EU funding. The formula contains the actual financial and in-kind contributions divided by the EC contribution (Figure 6).³⁵

³⁵ The leverage effect is the ratio between the costs incurred by PS and the total amount of EU funding paid to PRIMA beneficiaries at the cut-off date of the data reported in the Annual Activity Reports. PS contributions take into account not only the direct financial contributions to beneficiaries from PS (Section 2 calls), but also the costs incurred by all funding bodies in the implementation of indirect actions (in-kind contributions of Section 2 calls), and the costs of other activities (in-kind contributions for Section 3 activities) (CSES 2022).

Figure 2 Formula for the calculation of the Leverage effect



Source: PRIMA (2021)

The Leverage ratio has remained broadly stable during the initial few years of programme implementation (Table 13) and in all years above the target of 1, meaning that PS contribution at least equals EU contribution. The decrease in 2020 results from the delay of payments to Section 2 beneficiaries in the wake of the Covid-19 situation. In return, a significant increase in payments can be expected once the sanitary and economic situation is stabilised.

To interpret the leverage effect, it has to be remarked that only spent funds are considered, while EU R&I partnerships often calculate those or similar indicators by allocated funds. Since these tend to be higher than the volumes that are ultimately disbursed for various reasons, PRIMA effectively applies a stricter measure of leverage. On the other hand, for the evaluated period PSIAs amount to around half of the PS contributions in 2018-2021. Nevertheless, the values can be regarded as promising, and it is very likely that the aimed goal that national funds are equal to the EU contribution will be exceeded.

| umoun | IS IN EUK) | | | |
|---------------------|-------------------------|-------------------------|--------------|-----------------|
| | PS disbursed, Section 2 | PS disbursed, Section 3 | EU disbursed | Leverage factor |
| 2018 | 20 233 270 | 6 419 151 | 17 201 751 | 1.55 |
| 2019 | 11 524 034 | 20 469 927 | 18 938 112 | 1.72 |
| 2020 | 8 160 779 | 13 876 980 | 21 347 935 | 1.07 |
| 2021 | n/a | 33 885 474 | 1 615 288 | n/a |
| total 2018- 2020 | 39 918 083 | 40 766 058 | 57 487 798 | 1.43 |

 Table 13
 Components of the leverage effect calculation over the first years of the initiative (calculated on disbursed amounts in EUR)

Source: PRIMA (2022)

4.3. Is the intervention still relevant?

Relevance

The future of the Mediterranean Basin's key natural resources (water, soil, coastlines, and biodiversity) continues to be threatened by a number of pressures acting simultaneously and in many cases chronically, including urbanisation, industrialisation, the expansion of intensive agriculture activities and aquaculture and the unsustainable exploitation of natural resources. The fragility of the region is further aggravated by its sensitivity to climate change. According to the 6th Assessment Report of the Working Group II of the Intergovernmental Panel on Climate Change, the Mediterranean ecosystems are expected to be among the most impacted ones by the consequences of the progressing climate change.

The Southern Mediterranean region is further facing governance, socio-economic, climate, environmental and security challenges, many of which result from global trends and call for joint action by the EU and Southern neighbourhood partners. Protracted conflicts continue to inflict terrible human suffering, trigger significant forced displacement, weigh heavily on the economic and social prospects of entire societies, especially for countries hosting large refugee populations, and intensify geopolitical competition and outside interference.

These challenges, as well as the effects of the Covid-19 pandemic, are putting natural resources and agriculture under enormous pressure. The Russian invasion of Ukraine has further destabilised already fragile agriculture markets, demonstrating the risks and serious consequences for food-importing countries in the South of the Mediterranean region. Together with rising food and energy prices, this is likely to increase poverty and instability in these vulnerable regions.

Therefore, the transformation to unpolluted natural resources and healthy, equitable, resilient and sustainable food systems needs to be a continued priority for Mediterranean societies.

President Ursula von der Leyen's "Geopolitical Commission" recognises the Mediterranean's particular role and stresses that it intends to collaborate closely with Mediterranean partners on the EU Green Deal so "*we can make the region a leader in climate solutions*." The EU, through a wide range of projects and programmes, supports its Southern neighbourhood partners in developing and implementing green policies. It promotes cooperation to fight pollution and climate change, offering to help its Southern neighbourhood partners implement the Paris Climate Agreement and its subsequent developments and works to share best practice and expertise.

Over the last few years, PRIMA has succeeded in establishing a trust-based and effective collaboration between Northern and Southern Mediterranean countries to develop common and innovative, sustainable, cost-effective and efficient solutions for sustainable food systems and integrated water management. As the main EU initiative in the Mediterranean to deliver on these key R&I challenges, PRIMA is bridging the R&I and socio-economic divide in the Southern and Eastern neighbourhood and enhancing health, peace and stability for the region's societies in the long term.

Now more than ever is the time for more collaboration to identify innovative solutions to safeguard water resources, increase food and nutrition security and strengthen the resilience, equity and sustainability of food and farming systems.

The reviewed information indicates that the specific objectives of PRIMA have been and remain relevant for the PS and the Mediterranean R&I ecosystem. Through its thematic and specific objectives and implementation, the partnership addresses key challenges of the Mediterranean region.

Stakeholder needs in the Mediterranean Area

The Mediterranean area features distinct conditions regarding its water and agro-food systems, which are heterogeneous across the PS. To start with, agriculture constitutes a major economic sector regarding its share in the GDP for several PS. In particular, agriculture is economically important to various SM PS (Figure 2).

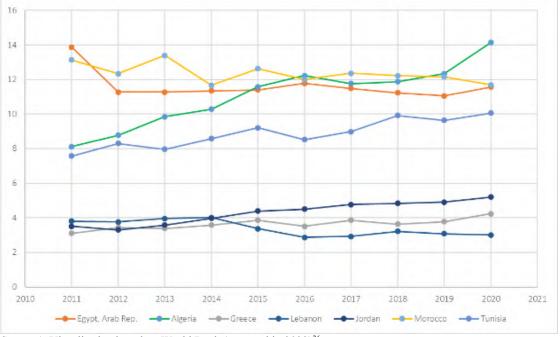


Figure 2 Development of the contribution of agriculture, forestry, and fishing to the GDP in %

Source 1: Visualisation based on World Bank (accessed in 2022)³⁶

Similarly, agriculture is also a major source of employment in some PS (Figure 3).

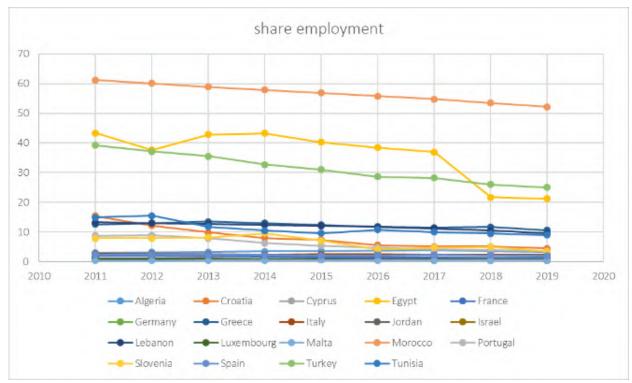
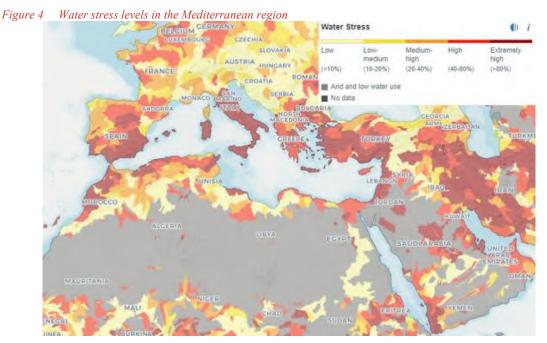


Figure 3 Development of the share of the population employed in agriculture, forestry, and fishing (in %)

Source: Calculation based on World Bank (accessed in 2022)³⁷

 ³⁶ ³⁶ Evaluation study on the European Framework Programmes for Research and Innovation for addressing Global Challenges and Industrial Competitiveness - Focus on activities related to the green transition -RTD/2021/SC/023
 Interim Evaluation of the Partnership for Research and Innovation in the Mediterranean Area (PRIMA) (forthcoming)

Closely related to the agro-food system, water constitutes another key challenge for almost all PS. Certain areas in the Mediterranean Area are subject to severe water stress³⁸ (Figure 4). Notably, this applies to PS such as Lebanon, Türkiye, Greece, and Spain.



Source: adapted from World Resource Institute (accessed in 2022)

Even under optimistic assumptions, researchers expect water scarcity levels in most PS to increase in the future (Figure 5).

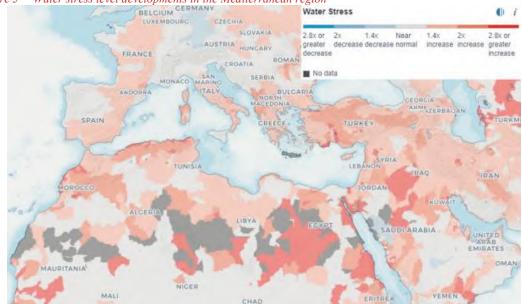


Figure 5 Water stress level developments in the Mediterranean region

Source: adapted from World Resource Institute (accessed in 2022)

³⁸ The ratio between the consumptive and non-consumptive withdrawal of water and the available renewable surface and groundwater supplies (World Resource Institute, no date provided).

Persistent water scarcity can be linked to negative ecological (e.g., the loss of soil moisture), social (e.g., the lack of access to quality drinking water), and economic (e.g., the decrease in agricultural incomes) consequences. The European Environment Agency (2021) estimates that about 20% of the European territory and 30% of the European population are affected yearly by water stress. Moreover, the World Bank (2017) indicates that the economies of SM PS are particularly vulnerable to increased water stress, with 71% of the GDP of the Middle East and North Africa region being exposed to it, compared to 22% worldwide. Similarly, some of the SM PS suffer from rather low food security levels: While the annual Global Food Security Index from autumn 2021 ranked PS from the EU in the upper percentiles (France 9th, Germany 11th, Italy 18th, Portugal 21st, Spain 24th, and Greece 27th), PS from outside the EU tend to rank considerably lower, with Türkiye holding the highest place among them (48th) and Egypt the lowest (62nd) (Economist 2022)³⁹. Moreover, the current situation with the Russia's invasion of Ukraine threatens food security in many countries. There is a common reliance among the Mediterranean countries on the agricultural sector and, in turn, on water sources. In particular, this is the case for SM PS. Present or future issues in the fields of agro-food and water management may therefore considerably contribute to social instability in these states. However, instability in the Southern Mediterranean region may ultimately translate into problems for societies within the EU as well by driving migration.

Since the challenges associated with water and agro-food systems tend to be complex and multidimensional, coordinated and joint efforts seem reasonable to address them. There has been, and continues to be, an array of political and R&I initiatives to address the various ailments of the Mediterranean region⁴⁰. This indicates the enduring need for tailored multilateral interventions. PRIMA is advantageously positioned to facilitate these political and R&I initiatives as it can directly feed relevant insights from its R&I projects into the policy arena.

Addressing the needs of PRIMA stakeholders and flexibility of operation

Almost all stakeholders regard the PRIMA SRIA as highly relevant for addressing the problems faced by the PS regarding climate change⁴¹. The interviewees indicated that the thematic areas lined out in the SRIA address the needs of the stakeholders and PS very well and that its main themes of food security, sustainable farming systems, and sustainable water management have become even more important since the inception of PRIMA. In addition, the SRIA identifies challenges and objectives on a rather broad level. This allows PRIMA to be operationally flexible (see, for example, the introduction of Nexus topics in the AWP2021⁴²). Many stakeholders value this agility because it enables the partnership to cater to current thematic developments and challenges in its annual AWPs. Most interviewees also regarded the specification of the objectives in the

³⁹ The index does not cover all PS, missing Croatia, Cyprus, Lebanon, Luxembourg, Malta and Slovenia. Being ranked 12th, Israel constitutes an exception among the non-EU PS.

⁴⁰ Corresponding examples are the European Neighbourhood Instrument Cross-Border Cooperation Mediterranean (ENI CBC MED) program 2014-2020 or the European Cooperation Programme for the Mediterranean area (INTERREG-MED), the UfM, or individual ERA-NETs.

⁴¹ A few interviewees nonetheless indicate the need to update the SRIA, which was devised in 2018.

⁴² See https://prima-med.org/wp-content/uploads/2021/10/AWP21.pdf and

https://prima-med.org/wp-content/uploads/2022/01/AWP22.pdf

calls as adequate. The high relevance that the R&I stakeholders attribute to the calls is reflected in the large number of proposals submitted each year, especially in the thematic area of farming. Moreover, this is also echoed by the considerable amounts that the PS have committed to PRIMA.

Beyond creating thematic knowledge to tackle some of the most pressing issues of the Mediterranean region, PRIMA can also be considered relevant in strengthening the cooperation between the SM PS. This is important since SM PS are not as actively involved in multilateral cooperation as the EU PS for example. Also, the interviewees indicated that many participants from SM PS consider participation in PRIMA particularly prestigious.

5. WHAT ARE THE CONCLUSIONS AND LESSONS LEARNED?

5.1. Conclusions

The evaluation faced certain limitations, as none of the projects funded by PRIMA has been finished yet. Therefore, the focus of the evaluation lies less on long-term impacts and more on the structure, implementation processes, and the current progress of the Programme. In particular, it is evaluated whether there has been significant progress regarding the specific objectives, as these are not fully dependent on the exploitation of the achieved results in the projects. In this context, it can be concluded that PRIMA has been successful.

The partnership addresses environmental, socio-economic and policy challenges that are crucial to the future development of a more circular and sustainable Mediterranean region. PRIMA contributes to key EU political priorities, objectives and initiatives such as the European Green Deal, in particular Farm to Fork and Biodiversity strategies, Bioeconomy Strategy, Climate Adaptation Strategy and the Circular Economy Action Plan, as well as the SDGs. At the same time, the partnership greatly contributes to strengthening the relations and the collaboration between the EU and its Southern neighbours. In some cases, it has even encouraged cooperation among the latter.

PRIMA-IS successfully established PRIMA as a platform to strengthen R&I and collaboration and is coherently embedded into the political landscape. While there have been significant implementation challenges and some shortcomings in the beginning, there have been continuous efforts to improve administration.

Regarding the funding structure, Sections 1, and 2 can be assessed overall as smartly designed and as a successful approach to achieve the multiple objectives of PRIMA. Yet, there is little formal evidence of the use and effectiveness of Section 3, as not all PS tend to report their PSIAs. A reasonable explanation seems to be that corresponding PS perceive the administrative process of reporting a PSIA as complex and laborious. Also, Section 2 faces some practical challenges like additional administrative procedures applied by some PS, or difficulties to fund national beneficiaries if many selected.

The structure largely fosters R&I capacities based on a strong competitive selection process. At the same time, the design of the partnership allows researchers from the SM PS to benefit considerably. For example, it strengthens their capabilities to apply for and

to manage transnational projects, as shown by their considerable participation, and funding received in Section 1 (both above the targets fixed), scientific co-publications, South-South cooperation. Similarly, there are indications that participants from EU PS likewise profit by being enabled to conduct scientific high-level transnational research and align their R&I activities to the needs of the Mediterranean Area. Moreover, PRIMA structures (e.g., the multi-party Board of Trustees), principles (e.g., the principle of equal footing) and activities (e.g., work of PRIMA-IS) have contributed to the establishment of trustful relationships between the EU and the SM PS. As PRIMA contributes to the improvement of the relations between the EU and its Southern neighbours, the partnership can be seen as a useful and successful mean of European science diplomacy and paves the way for a potential extension of PRIMA.

While it is too early to assess the ultimate contributions of the funded projects to the partnership's various objectives, especially due to the Covid-19 pandemic and initial administrative differences between the PS, the reviewed information suggests that they are nevertheless on track.

5.2. Lessons learned

The assessment also reveals some potential for improvement and corresponding recommendations concerning the programme.

Harmonising national administrative procedures regarding Section 2: While different stakeholders have invested significant efforts into improving the efficiency of administrative procedures, the process remains laborious for the potential beneficiaries, and difficulties arise (e.g., project partners could start their work at the same time, differences in funding eligibility, cuts of funding contributions). Hence, additional efforts by PS and PRIMA-IS are needed to further align procedures and to strengthen reliability and speed, such as common catalogues of eligible costs, more homogenous amounts of funding or harmonisation of reporting schedules. In addition, mechanisms to support those PS that face the greatest challenges in committing and disbursing funds would be helpful. While legally difficult, some support from other countries or the EU in section 2 may help overcome some challenges with this section.

De-risk the preparation of proposals for applicants: The rather low success rates of project proposals in Section 1 mean a risky investment for consortia partners and may lower the attractiveness of PRIMA in the long term. As an increase in funding is unlikely, other possibilities need to be considered (e.g., more tailored calls, further refinement of the call procedure in a two-stage call process).

Optimising PSIAs: PSIAs receive a different degree of awareness and importance from the PS, and in the longer term, the suitability of Section 3 for the strategic goals should be re-assessed by PRIMA and NFAs. In the short term, it may prove helpful to invest additional efforts into sensitising PS about the importance of PSIAs. Moreover, to unlock the full contribution potential of Section 3 towards an integrated research area, PRIMA may benefit from facilitating the reporting requirements of PSIAs as much as possible so that they cater better to the limited resources of NFAs. Another option for increasing the strategic relevance of the Section 3 would be a greater emphasis on exchange, networking and training (see also next recommendations).

Support community building and project exchange: To fully exploit synergies between the projects and to foster the building of longer-lasting communities, efforts should be intensified to boost the exchange between individual projects. Related activities should go beyond exchange between coordinators but address all relevant partners. Options could be, e.g., i) to organise webinars or events for projects that have either newly been funded or are in their early stages, to facilitate learning from those that are further advanced⁴³; ii) dedicated events for exchange between projects with similar challenges or thematic focus; iii) to support further activities across projects (e.g., support a common application for cross-projects Horizon Booster). Moreover, networking and brokerage events to enlarge the community and deepen interaction between the actors remain of high importance.

Capacity building: Since the inception of PRIMA, there have been different activities to support stakeholders from different countries which has led to some progress in their research and innovation systems. However, there is still untapped potential to enable even more active participation in PRIMA. This relates to the overall number of beneficiaries from SM PS, which could be higher, and to their roles in the projects. Therefore, additional capacity-building activities and support to better connect with the transnational community are needed to enable corresponding countries to intensify their participation. For example, this comprises additional training seminars for proposal writing, in-depth training on project coordination, etc.

Adjust KPIs: There have already been significant efforts and progress toward the continuous improvement of the KPI system. Nonetheless, current KPIs still leave room for improvement regarding their usefulness in judging the achievement of the specific objectives and the impact of projects. This concerns, e.g., the lack of KPIs to effectively measure R&I strategy alignment beyond the procedural level. Moreover, it has to be ensured that the impact of projects will be monitored adequately, beyond the mid-term review or the end review of a project, i.e., some kind of regular monitoring or follow-up after the end of a project.

Ramping up communication and dissemination: PRIMA-IS is aware that a key focus of future outreach activities should especially communicate project impacts as soon as these are available. This type of communication will be very relevant to sustain high political commitment in the long term. Moreover, there is a need for better internal communication within the project consortia.

Boosting Southern-Southern cooperation: While some progress has been made, a further increase in cooperation among the SM PS would be beneficial. Stronger cooperation could contribute to an improvement in the relationships between these countries. Hence, there should be increased efforts to bring corresponding communities together, e.g., by specific events to broker consortia participation among SM PS. Another option would be to adapt project evaluation criteria to favour proposals (maybe for

⁴³ CSES (Centre for Strategy & Evaluation Services) (2022): Study to assess the performance and impact of the PRIMA programme. Commissioned by PRIMA-IS for self-assessment

certain calls) where several participants from SM PS are actively interacting with each other⁴⁴.

 $^{^{\}rm 44}$ Not only in the same consortia but working together in concrete tasks and Work packages.

Lead DG

The European Commission's Directorate-General (DG) for Research and Innovation is the lead DG for this interim evaluation (PLAN/2022/1106).

Organisation and timing

The Commission published a call for evidence on the interim evaluation of the 'Partnership for Research and Innovation in the Mediterranean Area" (PRIMA)' on 22 July 2022 that was open for feedback until 2 September 2022.

Three partnerships based on Article 185 TFEU (the Active and Assisted Living Research and Development Programme (AAL2), Eurostars-2 and the Partnership for Research and Innovation in the Mediterranean Area (PRIMA)) had evaluations coming up by the end of 2022. In this context, DG Research and Innovation set up one inter-service steering group (ISSG) to oversee the three evaluations.

The ISSG was established on 4 July 2022 involving representatives from the Secretariat-General, DG for Research and Innovation, DG for Communications Networks, Content and Technology, DG for Agriculture and Rural Development, DG for Informatics, DG for Budget, DG for Competition, DG for Education, Youth, Sport and Culture, DG for Environment, DG for Migration and Home Affairs, DG for Maritime Affairs and Fisheries, DG for Structural Reform Support, the Joint Research Centre and the Executive Agency for Small and Medium-sized Enterprises. The ISSG contributed to the evaluation and ensured that it met the necessary standards. Two meetings were held.

Evidence, sources and quality

This evaluation report drew on the following sources of evidence:

- DECISION (EU) 2017/ 1324 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2017 on the participation of the Union in the Partnership for Research and Innovation in the Mediterranean Area (PRIMA) jointly undertaken by several Member States.
- EC (2015): PRIMA Programme Inception Impact Assessment.

- EC (2016): IMPACT ASSESSMENT Accompanying the document Proposal for a Decision of the European Parliament and of the Council on the participation of the Union in the Partnership for Research and Innovation in the Mediterranean Area (PRIMA) jointly undertaken by several Member States {COM(2016) 662 final}
- EC (2017): Evaluation of the Participation of the EU in research and development programmes undertaken by several Member States based on Article 185 of the TFEU, Commission Staff Working Document, SWD(2017)340 Final
- PRIMA (2022): Input to the PRIMA Interim Evaluation. Report by PRIMA-IS.
- CSES (Centre for Strategy & Evaluation Services) (2022): Study to assess the performance and impact of the PRIMA programme. Commissioned by PRIMA-IS for self-assessment.
- PRIMA: Networking analysis Funded Projects 2018-2021
- PRIMA Annual Activity Reports (2018, 2019, 2020, 2021)
- REGULATION (EU) No 1291/2013 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 11 December 2013 establishing Horizon 2020 the Framework Programme for Research and Innovation (2014-2020) and repealing Decision No 1982/2006/EC.
- European Environment Agency (2021): Water resources across Europe. Confronting water stress: an updated assessment.
- Fägersten, Björn (2022): Leveraging Science Diplomacy in an Era of Geo-Economic Rivalry. Towards a European strategy.
- Economist (2022): The Global Food Security Index. https://impact.economist.com/sustainability/project/food-security-index/. Accessed 31.03.2022.
- World Bank (2017): Beyond Scarcity. Water Security in the Middle East and North Africa. Hg. v. World Bank.
- World Bank (no date provided a): Development Indicators Data Bank. Indicator: Agriculture, forestry, and fishing, value added (% of GDP). https://data.worldbank.org/indicator. Accessed 01.04.2022.
- World Bank (no date provided b): Development Indicators Data Bank. Indicator: Employment in agriculture, female (% of female employment) (modelled ILO estimate). <u>https://data.worldbank.org/indicator</u>. Accessed 01.04.2022

- World Bank (no date provided c): Development Indicators Data Bank. Indicator: Employment in agriculture, male (% of male employment) (modelled ILO estimate). <u>https://data.worldbank.org/indicator</u>. Accessed 01.04.2022.
- World Resource Institute (date provided): Aqueduct Water Risk Atlas. <u>https://www.wri.org/applications/aqueduct/water-risk-atlas/#/?advanced=false&basemap=hydro&geoStore=0103742d088cc8b722ac444ed9163f79&indicator=bws_cat&lat=31.541089879585837&lng =28.037109375000004&mapMode=view&month=1&opacity=0.5&ponderation=DEF&predefined=false&projection=absolute&scenario=optimis tic&scope=baseline&threshold=25&timeScale=annual&year=baseline&zoom=4. Accessed 01.04.2022.</u>

The information has been quality assured.

External expertise

Expert advice has been widely used to prepare this Commission Staff Working Document. It mainly includes the Study report on the interim evaluation of PRIMA, commissioned by the EC. The contractor is a consortium including Technopolis, Austrian Institute for Technology, Kerlen, Fraunhofer, Science Metrix and ZSI Center for Social Innovation⁴⁵.

⁴⁵ Evaluation study on the European Framework Programmes for Research and Innovation for addressing Global Challenges and Industrial Competitiveness - Focus on activities related to the green transition –RTD/2021/SC/023 - Interim Evaluation of the Partnership for Research and Innovation in the Mediterranean Area (PRIMA) (forthcoming)

ANNEX II. METHODOLOGY AND ANALYTICAL MODELS USED

Study design

Independent experts from a consortium including Technopolis, Austrian Institute for Technology, Kerlen, Fraunhofer, Science Metrix and ZSI Center for Social Innovation, carried out a support study to provide input for this evaluation.

Limitations and reliability of data

The study report on the interim evaluation of PRIMA was largely conducted by using desk research and the analyses of administrative data and stakeholder interviews.

It covers the period from the implementation of PRIMA in 2017 until today and mainly focuses on the partnership's 2018-2021 AWPs. The overall purpose of the study is to review the current status and the achievements of PRIMA and to provide impulses to support PRIMA's implementation and inform possible mid-term adjustments.

The main input came from PRIMA-IS, which is the Dedicated Implementation Structure of PRIMA. Its evaluation input report (Prima 2022) provided a detailed account of statistics, indicators and explanations of key developments like changes in the implementation. In addition, PRIMA-IS made available an assessment study, which the foundation had commissioned concerning this evaluation (CSES 2022). Moreover, there has been extensive exchange on both reports and additional information that PRIMA has delivered.

Furthermore, all existing documents of PRIMA, e.g. Ex-Ante Assessment, Basic Act, Statutes, Website, PRIMA Intelligent Analytical Tool (available on the website), as well as relevant publications for evaluations for public-public partnerships, have been reviewed. Overall, as far as possible quantitative assessments (e.g. also via publication analysis) have been performed and complemented by qualitative insights.

Ultimately, 15 interviews with diverse and key stakeholders of different types and geographical origins have been conducted covering an adequate sample of interested parties.

However, the evaluation faces certain limitations, as none of the projects funded by PRIMA has been finished yet. Therefore, the focus of the evaluation lies less on long-term impacts and more on the structure, implementation processes, and the current progress of the Programme. In particular, it is evaluated whether there has been significant progress regarding the specific objectives, as these are not fully dependent on the exploitation of the achieved results in the projects.

Moreover, in contrast to other Article 185 initiatives in H2020, PRIMA has no legal predecessor. While there have been partnerships between different national agencies in earlier ERA-Nets, and initiatives towards the Mediterranean area existed, the incorporation of PRIMA as a public-public partnership on the EU level was completely new. Hence, key activities and expected outputs of the partnership included the set-up of efficient and trust-building structures and procedures in the first years of its establishment to pave the way for successful working. While this task required considerable effort, it was further complicated by the Covid-19 pandemic. In line with that, as no PRIMA project has been finished yet, it is not easy to assess the partnership's quantitative impact.

Nevertheless, tentative aspects of outcomes and impacts are addressed to the extent possible. As mandated by the Terms of reference for the "Green Transition" evaluation, the evaluation focuses on the assessment criteria effectiveness, efficiency, relevance, coherence, and added value to the European Union (EU).

Methodology, sources of information and data analysis

The methodology for the study report consists of various approaches and sources based on:

- Desk-based research;
- Interviews;
- Evaluation input report and assessment study;
- Analysis of funding and administrative data;
- Other quantitative methods.

The work carried out by the contractors is of good quality. Its content has been discussed with Commission services. The recommendations of the evaluation study will be taken up in discussions between the Commission and PRIMA-IS and their implementation will be followed up as part of the Commission's oversight of the PRIMA programme.

ANNEX III. EVALUATION MATRIX AND, WHERE RELEVANT, DETAILS ON ANSWERS TO THE EVALUATION QUESTIONS (BY CRITERION)

Evaluation Matrix

| Evaluation question | Criteria | Evidence-based answers |
|---|--|--|
| Relevance To what extent have the objectives of the partnership been, and are still relevant vis-à-vis of the needs and problems addressed by the FP? How flexible has the partnership been? | PRIMA relevance for the Mediterranean Area Needs of PRIMA stakeholders and flexibility of operation | The challenges associated with water and agro-food systems in the Mediterranean area are complex and multidimensional. Therefore, coordinated and joint initiatives are needed to address them. PRIMA is advantageously positioned to facilitate these political and R&I initiatives as it can directly feed relevant insights from its R&I projects into the policy arena. PRIMA continues to be relevant for the Mediterranean area since the sustainability of water, food and agriculture is still threatened by a number of climate, environmental and socio-economic pressures, including the current energy and food geo-political crisis. Findings from the Interim Evaluation study and insight from interviews indicated that the thematic areas lined out in the SRIA address the needs of the stakeholders and PS very well and that its main themes of food security, sustainable farming systems, and sustainable water management have become even more important |
| | operation | systems, and sustainable water management have become even more important since the inception of PRIMA. PRIMA can be considered relevant in strengthening the cooperation between the SM PS. This is important since SM PS are less used to multinational cooperation. Also, the interviewees indicated that many participants from SM PS consider participation in PRIMA particularly prestigious. |

| Evaluation question | Criteria | Evidence-based answers |
|--|---|--|
| Coherence How well do the different actions work together, internally (i.e. to the partnership, with other partnerships and with other FP activities), and with other EU interventions/policies (complementarities, synergies, overlaps)? Is PRIMA more effective in achieving synergies, compared to other modalities of the programme? | Internal coherence External coherence | The gathered data suggest that PRIMA has managed to strike a balance in terms of the instruments applied and the topics addressed. For example, agro-food projects may have a water management component, as water management projects sometimes consider farming systems. Hence there are no hard boundaries between the thematic areas. Moreover, the addition of Nexus projects that target the WEFE Nexus in 2019 can be seen as a further step to harmonise the PRIMA project portfolio aside from techno-scientific silos. PRIMA-IS has taken steps to coordinate with entities of the Horizon Europe FP of similar thematic focus, such as the EU Mission "A Soil Deal for Europe" or candidate partnerships like the European Partnership Water Security for the Planet (Water4AII). PRIMA-IS has been in contact with relevant initiatives that could facilitate the translation of PRIMA results into practice, such as the EIT Food and the KIC Climate. PRIMA also complements the Water JPI, the Interreg Euro-MED 2021-2027 Programme, or the ENI CBC MED Programme 2014-2020. Overall, PRIMA has thus managed to establish internal and external coherence well. |

| Evaluation question | Criteria | Evidence-based answers |
|---|--|---|
| Efficiency What is the relationship between the resources used by the partnership and the changes it is generating? How did processes cater for flexibility needs in implementation? How cost-effective has PRIMA been? How proportionate were the costs of application and participation borne by different stakeholder groups, taking into account the associated benefits? | Management of the 3 sections of implementation | PRIMA secretariat has managed to set up an effective Dedicated Implementation Structure (PRIMA-IS). The work of PRIMA-IS is largely judged as helpful, efficient, and responsive according to the evaluation study. The flexibility that the SRIA grants, allowing stakeholders to take up current thematic developments and challenges in each AWP is acknowledged. In particular, the interviewed beneficiaries indicated that the management of Section 1 was straightforward and good to handle since the processes adhere to the application and selection rules of H2020. Conversely, the reviewed information suggests that efficiency potential remains for Section 2. This mainly results from divergences between PRIMA and national procedures. In response to the difficulties with Section 2, PRIMA-IS has been actively working to streamline procedures (e.g. by employing different activities, such as Mutual Learning Exercise workshops where management, funding and procedural issues are presented, and solutions are proposed and sought with NFAs). Concerning the different sections, there were indications that the efficiency of Section 3 could be higher as well. Notably, the procedures for reporting PSIAs to PRIMA-IS might exceed the resources of some NFAs. While PRIMA is running to a high degree efficiently, improving KPIs is a point for PRIMA-IS to focus on further. |

| Evaluation question | Criteria | Evidence-based answers |
|--|---|--|
| Effectiveness What is the progress made towards the objectives of the partnership and those of H2020, including the contribution to EU priorities and Sustainable Development Goals? | Contribution to EU priorities and Sustainable Development Goals | With its thematic focus, PRIMA contributes to the wider EU policies such as the European Green Deal, the new EU Strategy on Adaptation to Climate Change, the Farm to Fork Strategy (the role in the area of R&I and sustainable food), the Circular Economy Action Plan, the Zero pollution Action Plan, and the EU Water Framework Directive (WFD). PRIMA is expected to contribute to the Sustainable Development Goals, in particular SDG 2 (Zero Hunger), SDG 6 (Clean Water and Sanitation), SDG 10 (Reduced Inequalities), and SDG 12 (Responsible Consumption and Production). |
| Were adequate systems put in place to produce and share lessons learnt from implementation and results achieved, for policy making and between FP interventions? To what | Financial commitments to PRIMA | The stakeholders acknowledged the efforts made by PRIMA-IS to secure a political and financial commitment from the PSs who participate in the programme today. Funding for Sections 2 and 3 that are dependent on national funding should continue to be ensured. |
| extent does the programme communication/valorisation strategy allow identifying, capitalising upon and (possibly) transferring good practices/results? | Communication and dissemination activities | There have been strong efforts by PRIMA-IS and PRIMA projects toward communication and dissemination. PRIMA has a positive reputation and is well known in the Mediterranean Area, particularly in the SM PS. To further sustain the high political commitment to PRIMA, communication and dissemination needs to be ramped up. |
| Includes also the partnership-specific question of how the partnership has helped foster the international positioning and visibility of the European R&I system, and an | Alignment of national R&I programmes | The SRIA constitutes the key strategic document that supports the activities of PRIMA and seems well-aligned with national and international R&I priorities. Many stakeholders value the flexibility that the SRIA grants, allowing them to take up current thematic developments and challenges in each AWP. |

| Evaluation question | Criteria | Evidence-based answers |
|--|--|--|
| assessment of the level of international cooperation at partnership and project level | Critical mass | PRIMA has helped to raise critical research mass and promote scientific integration across countries that, in the absence of PRIMA, would be unlikely to have cooperated as closely in the absence of a clear funding incentive and strategic framework to facilitate cooperation. PRIMA has funded so far 168 projects with 1571 beneficiaries at an overall volume of EUR 224 million. With this, non-EU actors participated in 42.5% of all projects and accounted for 38% of all beneficiaries. |
| | Strengthening of the research and innovation funding capacities and the implementation capabilities | PRIMA has implemented various projects aiming to develop innovative solutions through IAs and RIAs. In addition to research organisations, a significant number of projects also involve industrial partners, who would have the capacity to transfer the outcomes of PRIMA projects into marketed products or services. PRIMA allows especially the SM PS to leverage their R&I capacities. By engaging in PRIMA, researchers from the non-PS gain access to the funding opportunities of Section 1, which the EU finances. Although funding under Section 2 is limited to national proportions, the section nonetheless allows researchers to participate in larger consortia than under national funding. |
| EU added value What is the value resulting from the partnership that is additional to the value that could result from interventions carried out at regional or national level or with other forms | Added value of PRIMA partnership with regards to individual PS activities | PRIMA plays a unique role in the Mediterranean R&I ecosystem and serves objectives not covered by other initiatives. Many funded projects contain a clear component to Mediterranean needs and climate as well as economic conditions, which could hardly be investigated otherwise. PRIMA significantly contributed to building up additional cooperation and networks to address the specific needs of the Mediterranean. Apart from creating and transferring relevant knowledge at scale, PRIMA provides an added value to the EU through its application of the principle of equal footing. That is, by ensuring equal treatment and voice for all PS, the |

| Evaluation question | Criteria | Evidence-based answers |
|---------------------|----------|--|
| of implementation? | | partnership has managed to develop into a potent tool of science diplomacy for the EU. |

ANNEX IV. OVERVIEW OF BENEFITS AND COSTS [AND, WHERE RELEVANT, TABLE ON SIMPLIFICATION AND BURDEN REDUCTION]

The data presented in table underneath is based on the results of the first PRIMA interim evaluation conducted in 2022, covering first four calls launched in 2018, 2019, 2020 and 2021 for the implementation of the initiative. Since none of the projects was finished at the time of the evaluation, and only 58 (out of 168) reached the mid-term, only preliminary information is available.

With data on long-term and even short-term impacts of the Programme, still emergent (see above), an assessment of the relationship between resources used and the changes, which the Partnership is generating, is preliminary.

| Table 1. Overview of costs and benefits identified in the evaluation ⁴⁶ | | | | | | | | | | |
|--|-----------------------------------|--------------|-----------|--------------|---------|---|--|--|--|--|
| | | | Consumers | Businesses | | Administrations | | | | |
| | | Quantitative | Comment | Quantitative | Comment | Quantitative | Comment | | | |
| | Costs on research programme level | | | | | | | | | |
| | | | | | | | | | | |
| Administrative Indirect-management dedicated implementation structure cost (EC-level) | recurrent | | | | | Section 1 (H2020):up to 6% of total annual Programme budget, currently ~4.6% in commitments, 3.8% in disbursed | Section 2: Participating countries invested in-kind through NFAs working on the Programme; these efforts are quantified and accepted up to 6% in a similar way as for Section 1 and included in the national contributions. | | | |

⁴⁶ Where there is a prior impact assessment, the table should contain as a minimum the costs/benefits identified in the IA with the information gathered on the actual cost/benefit. As available, the table should include the monetisation (EUREUREUR) of the costs/benefits based on any quantitative translation of the data (time taken, person days, number of records/equipment/staff etc. affected or involved represented in monetary value – see Standard cost model, for example). For all information presented, it should be included in the comments section whether it relates to all Member States or is drawn from a subset. An indication of the robustness of the data should be provided in Annex II on Methodology and analytical models used.

| | | | | | anondina | |
|--|-----------|---|----------|--|--|---|
| | | | | | spending | |
| Support Actions Portfolio of services and activities to monitor the programme, and to strengthen the skills and knowledge of project beneficiaries and the wider community | recurrent | | | | Section 1 in commitments <3% of total annual Programme budget, 2% in disbursed spending | Participating countries also develop targeted capacity building actions under Section 3; these efforts are quantified and accepted, and included in the national contribution, but represent very limited amounts |
| Research projects 168 Grants funding transnational research and innovation projects (53 under H2020 Section 1 + 115 under Section 2) | recurrent | | | | Section 1: in commitments 93.6% of total annual Programme budget | Participating Countries contributions to Section 2+Section 3 should at least match the EU contribution |
| | | | BENEFITS | | | |
| Direct benefits | | | | | | |
| Contributing to SDG 2: achieve food security and improved nutrition, and promote sustainable agriculture | recurrent | Solutions for food security, nutrition, <u>rural</u> <u>transformation</u> and sustainable agriculture | | Developing resilience of small holders to climate related extreme events, increasing productivity and incomes Developing resilient agricultural practices for better | | Alignment of national programmes |

| | | | | | productivity while helping maintain ecosystems, strengthening capacity for adaptation to climate change, Maintaining genetic diversity of seeds, cultivated plants & farmed animals | |
|---|-----------|---|--|--|--|----------------------------------|
| Contributing to SDG 6 - clean water and sanitation (improving water quality by reducing pollution,. increasing water-use efficiency, implementing integrated water resources management, protecting and restoring water-related ecosystems | recurrent | | Improved water availability and quality Participation of local communities in improving water and sanitation management Increased awareness | | Development of business opportunities in the water sector | Alignment of national programmes |
| SDG 9. Facilitate sustainable and resilient infrastructure development in developing countries through enhanced financial, technological and technical support to | recurrent | Non-EU entities receiving~ 32% of the EU financial contribution. | | 18.9% of beneficiaries are private for profit organisations | Increased awareness of innovative solutions | |

| Mediterranean countries | | (well above indicative target of 25%) | | | | | |
|--|-----------|---|--|--|---|--|---|
| SDG 13 climate action | recurrent | | | | Strengthen resilience and adaptive capacity to climate | | Integrate climate change measures into national policies, strategies, and planning |
| Capacity building and transnational networking, knowledge exchange and best practices | recurrent | 8 Platform/Hubs across the 53/168 projects passed midterm. | | Organisation of capacity building events for Mediterranean participants. | | Section 2: Organisation of matching workshops for NFAs | Section 2: Coordination of NFAs efforts |
| Indirect benefits | | | | | | | |
| Better quality of life | | 104 publications (under 53 projects /168 that passed mid-term) | Indirect evidence of positive impact on better food and water quality | | | | |
| Support sustainability of food and water systems | recurrent | | Solutions for sustainable food and water production under development | 123 DEMO sites (under 53 projects /168 that passed mid-term) | Indirect evidence of positive impact on the relevant sectors | | |