SFC2021 Programme for EMFAF

CCI	2021MT14MFPR001
Title in English	EMFAF Programme: Fostering socio-economic growth and environmentally
	sustainable blue investment in Maltese Fisheries and Aquaculture
Title in national	MT - Programm EMFAF: Inrawmu tkabbir soċjo-ekonomiku u investiment
language(s)	blu, ambjentali u sostenibbli fis-Sajd u l-Akkwakultura Maltin
Version	1.1
First year	2021
Last year	2027
Eligible from	01-Jan-2021
Eligible until	31-Dec-2029
Commission decision	
number	
Commission decision date	
Non substantial transfer	No
(Article 24(5) CPR)	

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1. Programme strategy: main development challenges and policy responses Reference: points (a)(i) to (viii) and point (a)(x) of Article 22(3) and point (b) of Article 22(3) of regulation (EU) 2021/1060 (CPR)

1.1 Economic, Social, Territorial, demographic disparities and Inequalities

Malta as the smallest island state in Europe with the highest population density, is affected by inherent limitations due to Malta's size, which often lead to constraints on investments and sectors. Malta's population has reached 1,595.1 persons per km2 which is significantly higher than the EU-27 average[1] of 109 persons per km2 and therefore is more comparable to the realities faced by small urban cities. As an Island State, Malta is also strongly affected by peripherality, including higher per-unit transport costs[2]. Gozo is also affected by an additional level of insularity and has reached a population density of 486/km2.

The employment rate in Malta increased steadily over the years from 2014 to 2021. Despite the pandemic, in December 2021, unemployment stood at 3.4% which is lower than the 4.3% registered in the same month of 2020 [3]. Malta has advanced in its socioeconomic performance due to strong and consistent economic growth, despite the challenges posed by COVID-19. In 2020, in response to the socioeconomic repercussions of COVID-19, Malta's growth rate stood at -8.2%, indicating a contraction in comparison to the EU-27's growth rate of -5.9% [4]. Malta's positive economic performance was disrupted in the first half of 2020 with a decrease in contribution from the domestic side of the economy. Efforts and measures launched by Government in response to the pandemic safeguarded a stable labour market.

Population decline and ageing are among the main challenging trends for the future[5]. The demographics of the fisheries sector evidence an aging population and a shortage of young individuals joining the industry which unless addressed, could have important socio-economic implications due to their impact on productivity, growth and shortage of workers. A primary issue identified relates to the lack of attractiveness of the sectors and the failure to entice young individuals to undertake a fishing (or related) profession. Limited catches, declining fish stocks and consumers' attitudes and perceptions are also a threat to fisheries and aquaculture.

1.2 Challenges identified in CSRs and national strategies, market failures and investment needs

Malta's economy is highly exposed to international market forces whereby the island's economic development model has relied on an export-oriented strategy. Instances of market failure are more prevalent in Malta due to the lack of physical and human resources, higher unit costs given the distance from main economies, limited economies of scale and difficulties in developing sufficient critical mass. Market failure is also evident where public support is required to address coastal infrastructural challenges, including in the maritime and environment sectors. The provision of services by the private sector through infrastructure and equipment would be unlikely to meet the characteristics required by public policy and is also limited by the lack of commercial entities offering such services.

The EMFAF Programme focuses on actions under Priorities 1 and 2, with the aim to maximise the contribution towards ensuring the recovery and resilience, green and digital tansition of the sectors, whilst protecting food systems, food security and supply of affordable fish resources, thus ensuring sustainable and inclusive blue growth to boost the economy, improve people's health and quality of life, protect and conserve aquatic biodiversity. Actions relating to conservation and management, enhanced control,

enforcement and data collection reflecting GFCM's recommendations are also foreseen.

Initiatives foreseen will aim to contribute to CSR 3 (EC, 2019) on focusing investment-related economic policy on research and innovation (R&I), natural resources management, resource and energy efficiency, sustainable transport and inclusive education and training[6], primarily through R&I actions, actions targeting the sustainable development of the fisheries and aquaculture sector, and conservation and restoration efforts. R&I actions will be in line with *Malta's Smart Specialisation Strategy* [7] which identifies marine and maritime technologies as a specialisation area. Initiatives aimed at improving fishers' social and economic standing, access to training as well as improving the work environment will also contribute to the European Pillar of Social Rights. Such efforts will also contribute to CSR 2 (EC, 2020) on ensuring the adequacy of unemployment protection for all workers and strengthening the quality and inclusiveness of education and skills development [8]. Support for investments on board fishing vessels through technologies targeting energy efficiency under Priority 1 will aim to contribute to CSR 4 (EC 2022) through energy efficiency and decarbonisation measures.

The Programme will overall contribute to EU's objectives related to the Common Fisheries Policy (CFP) [9], the European Green Deal, the EU Biodiversity Strategy for 2030, the EU's Farm to Fork Strategy and the Strategic Guidelines for the Sustainable Development of EU Aquaculture.

The Maltese Fisheries Sector

The Maltese fishery is relatively a small industry, primarily artisanal type, frequently described as a multispecies/multi-gear fishery with most of the fishers switching from one gear to another throughout the year. This sector comprises predominantly of small-scale coastal fishing (SSCF) vessels (circa 93% in 2019) which contribute to a quarter of the Gross Value Added of the fishing industry [10].

The Maltese fishing fleet capacity shows a declining trend since 2008, with the number of vessels in 2021 being 14% less than the average between 2008 and 2018. In terms of GT and kW fishing capacity has also decreased by 21% and 7% respectively, for the same period [11].

The fisheries sector in Malta is predominantly male oriented with 2020 data evidencing that 98% of the sector's official workforce were male [12]. Contributing factors are associated with the limited attractiveness of the sector, type of work, access to assets and barriers to sustaining entrepreneurship. The predominance of male workers is in line with other sectors with similar conditions. The limited attractiveness of the sector when compared to Malta's diverse local market and economic opportunities remains a challenge to attract workers altogether.

Total income from the fleet stood at about €14.2 million in 2020 representing a 7% decrease over the previous year [13]. A review of the sector's profitability illustrates a decline in profitability (net profits) of 75% when compared to the previous year.

The adverse impacts on the sector of the storm which had occurred in 2019, remained prevalent also in 2020, with some enterprises in both the SSCF and LSF remaining inactive due to works still being required on their vessels. Negative impacts of the COVID-19 pandemic also attributed to decreased fish landings, interrupted exports, drop in fish consumption demand due to partial/fully closure of restaurants and hotels resulting in excess supply and leading to price drops [14]. Further negative impacts are also

registered as a result of the military aggression of Russia against Ukraine. This further stresses the need for EMFAF to remain flexible to cater for unexpected environmental, climatic, public health impacts, or market disruption and to strengthen the resilience of the sector.

The above reflects the need to address the challenges faced including an ageing fleet and its declining trend, especially with reference to the SSCF, its economic viability and vulnerabilities to potential threats as described hereunder.

Key Characteristics and Challenges

- Mostly composed of an ageing SSCF fleet
- Number of inactive vessels and potential negative economic performance as recorded between 2009-2016 may result in unbalanced fleet capacity, impacting the fishing community especially taking into account COVID-19/ health crisis implications
- Limited attractiveness of the sector for workers
- Limited species are targeted due to market-driven preferences
- Limited innovative practices
- Limited adaptive capacity to market shocks and climate change

The Maltese Aquaculture Sector

Since its introduction in the late 1980s, this sector has grown and is deemed a valid economic sector. The Maltese aquaculture industry is entirely dependent on marine resources and has two main sectors: tuna penning, which relies on captured wild fish and is referred to as "capture based species" (CbS), and the farming of "closed cycle species" (CCS) such as sea bream, sea bass and meagre (cultured from eggs produced in hatcheries).

Out of a total of 299 people employed (FTE) as at 2020 in the aquaculture industry, female employment (FTE) in the sector stood at 5%. Similar barriers as those related to the fishing sector apply. According to the latest annual census conducted [15], during 2020, the total output value generated by the Maltese aquaculture industry rose by $\[\in \]$ 2.4 million, i.e., 1.4% over that registered in 2019. Concurrently, the intermediate consumption of the industry, which takes into account the main operating expenses incurred by the operators, fell by $\[\in \]$ 50.6 million, that is 27.3% when compared to the preceding year.

As a result, the industry's Gross Value Added settled at a net positive balance of \in 44.1 million. Meanwhile, the gross fixed capital consumption of the industry's fixed assets fell marginally by \in 0.3 million to a total of \in 4.4 million while the expenditure on the compensation of employees increased by \in 0.6 million to \in 10.1 million. The industry attained a Net Operating Surplus of \in 29.6 million.

Although positive trends were recorded in 2020 over the decline in 2019 in terms of fish sales, output remains significantly lower than that recorded in 2018[16]. In 2019, especially, these were negatively impacted by high production/ intermediate consumption costs, together with additional impacts recorded due to COVID-19. Further negative impacts may also be registered as a result of the military aggression of Russia against Ukraine.

Key Characteristics & Challenges

- Limited species cultured and few farms specialising in closed-cycle species
- Established aquaculture enterprises
- Small workforce base
- Limited research and innovation targeting sustainability of the sector especially on climate change, environmental impacts and/or aquatic disease

Marine and Coastal Environment

Malta's coastal and marine environment is of importance due to the rich biodiversity it contains, but also due to the ecosystem services it provides to support various coastal activities. These activities include recreation, tourism, shipping, and fisheries, all of which make use of aspects of the coastal and marine environment. The estimated cost of environmental degradation (4%) [17] is seen to be most harmful to the fishing and aquaculture sector when observed by unit of economic activity.

In recent years, the EU has undertaken various initiatives aimed at managing stocks, with endeavours such as quotas or catch limits (expressed in tonnes or numbers) that are set for most commercial fish stocks [18], including for tuna and tuna-like species in the Mediterranean as well as the eastern Atlantic Ocean.

Safeguarding healthy commercial fish and shellfish populations is one of the 11 descriptors for achieving Good Environmental Status (GES) as required by the Marine Strategy Framework Directive 2008/58/EC. The Common Fisheries Policy (CFP) has the objective to conserve fish stocks and reduce overfishing by restoring and maintaining populations of fish stocks above biomass levels capable of producing maximum sustainable yield thereby providing EU citizens with a long-term stable, secure and healthy food supply.

The General Fisheries Commission for the Mediterranean (GFCM) also plays a decisive part in coordinating governmental efforts to effectively manage fisheries at the regional level by adopting binding recommendations relating to, amongst others, the regulation of fishing methods, fishing gear and minimum landing size, as well as the establishment of spatial protection measures, fishing effort control and of multiannual management plans for selected fisheries. EMFAF actions will enable attainment of the five main targets of the GFCM 2030 Strategy focusing on productive, sustainable and responsible fisheries and aquaculture to achieve food security, among others, by supporting the implementation of multiannual plans relevant for the Maltese fisheries sector and future measures to achieve the GFCM targets.

The EU Biodiversity Strategy for 2030 highlights the importance of healthy fish stocks for the long-term prosperity of fishers and the health of the oceans and biodiversity reflecting the importance to maintain or reduce fish mortality at or under Maximum Sustainable Yield levels to achieve a healthy population age and size distribution for fish stocks. Such approach is also congruent with the Farm to Fork Strategy [19] that highlights the necessity for a shift to a sustainable food system and ensuring that the food chain has a neutral or positive environmental impact. Measures addressing the conservation of fish stocks, control and enforcement and the analysis and provision of scientific data are critical in this regard. This is also congruent with the Malta MedFish4Ever Declaration that indicates the importance of preserving food security among others in line with the Johannesburg Declaration on sustainable development and Sustainable Development Goal 14 to 'Conserve and sustainably use the ocean, seas and marine resources for sustainable development'.

Nature Protection and Biodiversity

European seas and their natural capital need to be better protected and conserved, and more sustainably managed, in order to be healthy, clean and productive [20] with Europe's marine ecosystems continuing to display symptoms of degradation and loss of resilience which will be exacerbated by the effects of climate change and other anthropogenic activities including overexploitation.

The EU Biodiversity Strategy for 2030 supports the conservation of habitats and species and the restoration of priority habitats by setting the target to achieve protection of 30% of the EU seas, strictly protected a third of this area and effectively manage all protected areas, while defining clear conservation objectives and measures, and monitoring them, by 2030. Within this context, Malta has designated 18 marine protected areas, amounting to approximately 4,100km2 with an area equivalent to approximately 35% of the Malta's Fisheries Management Zone (FMZ), thus significantly contributing to the targets of the EU Biodiversity Strategy 2030. Furthermore, the draft *National Biodiversity Strategy and Action Plan 2030* [21] and the draft Malta's *Conservation Objectives & Measures: For Malta's Marine Natura 2000 sites (2021)* [22] address the need to safeguard and conserve Malta's biodiversity and ecosystem services. Furthermore, the *Prioritised Action Framework (PAF) for Natura 2000 in Malta (2021-2027)* [23] also outlines a series of measures needed to implement the EU-wide Natura 2000 network and its associated green infrastructure.

Climate change

Being a small island, Malta is prone to the effects of climate change, including sea level rise, coastal erosion and extreme events such as storms and floods. The *State of the Environment Report* (2018) [24] and the *Prioritised Action Framework (PAF) for Natura 2000 in Malta (2021-2027)* outline that the impacts of ongoing climate change on coastal and marine resources can lead to changes in the marine species composition that can disrupt ecosystems and their habitat. The efforts towards decarbonising the economy through mitigating measures and use of cleaner forms of energy are also relevant. In this respect, the Programme will also support the decarbonisation of the sectors and biodiversity conservation and restoration measures, in line with the principles of the European Green Deal.

Marine Litter

In general, public litter from recreational use of beaches, fishing activity and the shipping industry are considered to be the main sources of litter on the coastline and in the marine environment. The presence of litter in the marine environment has increased drastically and poses a severe risk to marine ecosystems, to biodiversity and to human health. Marine litter has a damaging effect on activities such as tourism, fisheries and shipping harming the environment as well as generating adverse economic, health and aesthetic impacts.

The Single-Use Plastic Products Strategy for Malta 2021-2030 [25] is based on the EU's strategy for plastics in a circular economy and highlights the detriment of single use plastics and marine litter for Malta. In line with these strategies including the Prioritised Action Framework (PAF) for Natura 2000 in Malta (2021-2027), addressing marine litter is deemed key in Malta's journey towards an improved environment. The EMFAF Programme will build on preventive measures for the reduction of plastics in line with Malta's laws restricting the placing on the market of single use plastic products [26].

Research

Considering the everchanging context of the marine environment in the face of experienced and/or potential weaknesses and threats, the importance of research for better decision-making and the adoption of mitigating measures is even more crucial for fisheries and aquaculture. as also highlighted in *Malta's Smart Specialisation Strategy 2021-2027*.

Key Characteristics & Challenges

- Pressures on biodiversity resources and impacts resulting from user-conflict and competition for space/resources
- Climate change impacts and decarbonisation
- Marine litter
- The need for an enhanced research base

On the basis of the identified key characteristics and development challenges and in line with *Malta's Sustainable Development Vision for 2050* [27], *Malta's Integrated Maritime Policy* [28], Malta's draft *National Biodiversity Strategy and Action Plan to 2030 (2020)*, Malta's draft *National Strategy for the Environment 2050* [29], Malta's draft *Conservation Measures and Objectives for Malta's Marine Natura 2000 sites* (2021) and *Malta's Multiannual National Plan for the Development of Sustainable Aquaculture (MNPSA)*, the EMFAF Programme will achieve the following objectives:

- a) increased resilience and green transition through actions targeting responsible and sustainable fishing and aquaculture activities as reflected under Priorities 1 and 2.
- b) enhanced valorisation and promotion of high quality low-carbon local seafood products as linked with Priority 2 and complemented with training/advisory actions under Priority 1;
- c) increased coastal and marine biodiversity protection and restoration through actions targeted under Priority 1 and as complemented with enhanced marine environmental monitoring and/or enforcement actions under Priority 1 and 2;
- d) increased efforts to enhance the quality of landings whilst improving port infrastructure and reducing marine litter through targeted actions under Priority 1; and
- e) enhanced focus on research, improved data collection and innovation in the fisheries and aquaculture sector as described under Priorities 1 and 2.

Malta shall continue to strongly support measures that ensure that fish stocks are fished at Maximum Sustainable Yield (MSY) through enhanced reliable data and scientific advice, control, and enforcement and targeted conservation measures.

Interventions targeting public infrastructure are deemed opportune as they contribute in the short term to increased efficiency and safety for fishers whilst also contributing in the medium term, with public capital playing an important role to improving the productivity and competitiveness of the sector. Such investment will also serve to enhance the implementation of the landing obligation by providing better access to landing sites and storage of unwanted catches.

The Programme will support actions that improve the link between funding and policy objectives, the sustainable exploitation of fisheries as well as the protection and enhancement of the environment and natural resources by minimising the negative impacts on the marine environment. In relation to fisheries,

it seeks to tackle specific challenges faced by SSCF. With reference to aquaculture, the approach is that of making aquaculture more competitive and sustainable including through research and innovation actions in line with *Malta's MNPSA 2022-2030* as highlighted throughout this Programme. This is also reflected in the planned aquaculture operation of strategic importance on the *domestication of aquaculture species to promote species diversification*.

1.3 Contribution to Climate, biodiversity ambitions

Operations under EMFAF are expected to contribute over 60% to climate change ambitions out of the financial envelope thus exceeding significantly the minimum regulatory requirements under the Fund. With reference to environmental objectives, over 70% of EU support [30] is foreseen to contribute to the environment. Over 20% of Malta's allocation is foreseen to contribute towards biodiversity related actions which shows the strong efforts made towards this important sector [31].

1.4 Lessons learnt and simplification measures

The EMFAF Programme takes into account *EMFF 2014-2020 Interim Evaluation Report* recommendations [32] and stakeholder feedback obtained for 2021-2027 with the aim of building on lessons learnt, including inter alia:

- Limiting factors for increased fishers' participation: socio-economic characteristics/nature of the local fisheries context, limitations imposed by regulatory frameworks.
- The need for advisory services to assist the SSCF to improve its overall performance and competitiveness and to promote sustainable fisheries.
- The need for continuous training and skills development to improve fishers' efficiency, effectiveness or to identify diversification activities to increase their income and quality of life [33].
- The need for flexibility and timely action to cater for unexpected circumstances.
- The need for further reduction of administrative burden through simplification, where possible.
- The need for an enhanced integrated result-oriented approach.

The EMFAF Programme aims to follow and improve, as necessary, on initiatives undertaken in the previous programme to simplify project implementation for beneficiaries, for example in terms of simplification of applications for fishers, whilst still addressing admissibility and selection criteria including eligibility and reporting requirements. With regard to simplified costs options (SCOs), SCOs between the Member State and the Commission services are not foreseen at intial programming stage. At the beneficiary level SCOs have been developed for staff costs related to data collection operations under this Programme, as approved by the Audit Authority in line with established practices, whereas SCOs for compensations will be developed during programme implementation, in line with Article 39 of the EMFAF Regulation. Further programme-specific or EU level SCOs may be considered during programme implementation.

Complementarity and synergy with other forms of support [34]

Synergies between funds under the Common Provision Regulation (CPR) and other EU and national funding instruments will be sought to ensure coordination between different actions and maximise the

impact of resources. EMFAF resources will complement other EU Funds and Programmes by acting as the main fund targeting the fisheries and aquaculture sectors and the respective target groups directly. EMFAF measures will complement ERDF, RRP, CF and JTP interventions, primarily in relation to the energy efficiency measures, decarbonisation of ports, investments in TEN-T seaports and support for biodiversity and greening. Synergies will also be ensured with the ESF+ Programme which provides overarching training and educational support whilst interventions in control will build on wider efforts undertaken in border management under the BMVI. EMFAF support may complement cross-border and transnational programmes in areas related to the green transition and risk management, including in coastal areas.

EMFAF will complement the CAP Strategic Plan in initiatives aimed towards the ambitions of the EU's Farm to Fork Strategy and the Biodiversity Strategy in particular by fostering sustainable practices and exploring ways to reduce the reliance on chemicals and antimicrobial resistance (AMR), amongst others, in aquaculture production. The EMFAF Programme and the CAP SP will also contribute to improved dietary consumption, greater consumer awareness, whilst facilitating shorter supply chains and increasing environmental and climate ambition in food production. Support under the Technical Support Instrument will be explored in relation to the blue economy sector, amongst others.

EMFAF resources will be complemented by investments in the Blue Economy and maritime sector through RES pilot initiatives and investment in TEN-T ports under the ERDF, investment in blue skills and jobs under the ESF+, investments in the decarbonisation of ports areas under the JTF and biodiversity initiatives under the ERDF, CAP SP and LIFE Programme amongst others. Synergies between LIFE and EMFAF initiatives are also outlined under the PAF. Initiatives under Horizon Europe and ERDF Priority 1, will complement EMFAF and Malta's S3 implementation initiatives with respect to research and innovation initiatives with EMFAF supporting the rolling out of novel technologies and innovative products, processes and services, while also promoting data collection and data processing. EMFAF actions related to marine ecosystem preservation and restoration investments, zero pollution as well as climate neutrality under Priority 1 will complement Horizon Europe actions under the EU mission: Restore our Ocean and Waters by 2030 and contribute to the Mediterranean sea basin lighthouse.

EMFAF initiatives will also be complemented by activities foreseen under the WestMED Initiative [35] which Malta is actively supporting through the ERDF funded Italia-Malta Interreg Programme 2021-2027. Initiatives under WestMED will foster good governance principles and more effective exploration of opportunities in the West Mediterranean to develop the Blue Economy in a sustainable manner. Initiatives under this EMFAF Programme are also linked with the three main goals of the initiative: a) enhancing safety and security, b) promoting sustainable growth of the blue economy and job creation, and c) conserving ecosystems and biodiversity as well as the Common Priorities (CP) identified in Axis II of the Roadmap for the WestMED Initiative [36].

Taking into account the importance of available data and data complementarities, publicly funded research data will be made available in line with regulatory parameters and may be complemented by promotion and dissemination actions including through the use of European Data Spaces, as applicable.

A holistic approach is being adopted at programming stage whereby the programming of all EU funded plans and programmes is coordinated within the same Division, enabling a clear delineation of interventions at programming stage with a view to maximise the use of EU funds and their impact while also ruling out overlaps or double funding. Such initiatives across EU Plans and Programmes will complement initiatives supported through national funds as outlined in Malta's National Reform Programme, sectoral strategies, action plans and other strategic documents.

1.5 Strategic Environmental Assessment

A copy of the SEA environment report is being transmitted with this programme.

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1. Programme strategy: main development challenges and policy responses

Table 1A: Priority justification

Policy objective	Priority	Justification
2. Greener Europe	1.Fostering sustainable fisheries and the restoration and conservation of aquatic biological resources	Strengthening economically, socially, and environmentally sustainable fishing activities whilst restoring and conserving marine resources
		This Programme seeks to incorporate interventions that ensure the fisheries sector is economically viable and resilient to external shocks and to competition from third countries.
		Furthermore, interventions under this Priority are congruent with the principles of the European Green Deal, the EU Biodiversity Strategy, and the need for protecting and restoring the marine environment.
		Malta is not a resource-rich country. Its key resources of fresh water, limestone, soil, and land (particularly coastal land) are in short supply. One resource that is in relatively large supply is the sea, but its use is intensive. Coastal and marine waters provide a number of services; however, Malta is wholly dependent on imports for all other natural resources.
		The current patterns of overuse of resources and generation of waste are no longer an option. Indeed, it is increasingly being recognised that efficient and sustainable use of resources will be key to securing resilience, economic growth in the future, bringing economic opportunities, boosting competitiveness, and providing the impetus for the green economy.
		Employees' wellbeing may be tackled through interventions that focus on modernisation and innovation and onboard investments targeting safety amongst others.
		Another aspect pertaining to resilience of the sector revolves around efforts that focus on the promotion of skills, knowledge, innovation and capacity building also reflecting prioritised SSCF support in line with Article 8 of the EMFAF Regulation to ensure a sustainable and competitive artisanal fishing sector also in relation to greater knowledge and preparedness for the prevention of accidents, especially at sea

Policy objective	Priority	Justification
		and in harbour. This too shall seek to alleviate local fishers' safety and the costs caused by accidents - issues which adversely affect such individual's profit. Business development and innovation is another area closely linked to fishers' income, resilience and quality of life. The Programme thus focuses on quality and value and encourages interventions that seek to add value to fishery products across the value chain.
		In terms of the need to focus resources towards education and capacity building and in view of the limited skills, limited health and safety training given to small-scale coastal fishers and limited female and/or new entrants participation in the industry, high priority investment needs are therefore identified to further promote equal access to quality and inclusive education and training that promote lifelong learning, notably flexible upskilling and reskilling, and innovative solutions. Investments targeting improvement in port and landing infrastructure will complement by addressing resilience. Such focus areas are congruent with the European Pillar of Social Rights that focuses on delivering new and more effective rights for citizens including the right to training and life-long learning and with Country Specific Recommendation 2 (EC, 2020).
		In terms of capacity building, it is equally imperative to ensure that public officials have the skills and knowledge Here training targeting both public officials and fishers/ operators ought to be considered. In terms of the former, there is the need to further equip such target audience with skills and knowledge to transpose and enforce legal obligations. Investments targeting enhancing governance capacity will thus be also directed to this cluster and also seek to provide them with the necessary expertise to enhance awareness amongst stakeholders in the fisheries sector on the implementation of the CFP and related rules.
		Interventions aimed at diversification of activities in the broader sustainable blue economy shall target the three pillars that form an integral part of <i>Malta's Sustainable Development Vision for 2050</i> :
		• Enhancing economic growth: by seeking ways and means of assisting the sector to prosper, also in the medium and longer term;
		Safeguarding the environment, with diversification also aiding in terms of sustainability of the sector and tackling the issue of overexploitation of fish stocks.

Policy objective	Priority	Justification
		 Social cohesion and wellbeing: this is being targeted through interventions that seek to ensure an adequate income for fishers and in so doing provide support to employability and labour mobility in coastal communities which depend on fishing and aquaculture. This will include the diversification of activities within fisheries and into other sectors of the maritime economy.
		Another aspect that relates to ensuring sustainability of the fisheries sector, especially SSCF, and the attainment of a decent return relates to support for investments on board professional fishing vessels. This may include actions that could aid the overall quality of the product (such as improvements of cold-chain management and on-board handling / storage beyond the minimum requirements) and interventions targeting the environment by enhancing fishing vessels' energy efficiency under Specific Objective 1.1[1] as described in Section 2. Investments in equipment improving size selectivity or species selectivity of fishing gear and/or equipment that eliminates discards by avoiding and reducing unwanted catches of commercial stocks aims to target conservation related measures and contribute to the implementation of the landing obligation.
		Similarly, actions targeting the replacement or modernisation of engines in line with Article 18 of the EMFAF Regulation for vessels of balanced segments aims to contribute to climate neutrality whilst increasing the vessels energy efficiency and reducing energy costs thereby contributing towards decarbonisation and the green transition.
		Another area that may be targeted relates to collective organisation and integration efforts that comprise the participation of SSCF in decision-making and advisory processes through interventions aimed at increasing social dialogue and cooperation activities. Such involvement is highly opportune in maximizing long-term community benefits to deal with the threats of fisheries mismanagement, livelihood insecurity and poverty.
		Linked to the above is the need for improved business and operational planning, all to the benefit of the sector's profitability and sustainability of the sector. In this respect, such interventions as those related to advisory services aim to improve the overall performance and competitiveness of operators and to promote sustainable fisheries.

Policy objective	Priority	Justification
		The need to further invest in port/landing infrastructure should be addressed in order to improve efficiency, health and safety as well as product quality and in so doing adds value for the fishers' livelihood. This will address various current weaknesses identified pertaining to existing harbour infrastructure and limited berthing capacity (amongst others). Interventions targeting public infrastructure shall also enhance the implementation of the landing obligation by providing better access to landing and storage of unwanted catches and provide longer term benefits in terms of economic growth and increased productivity.
		The acquisition of knowledge contributes to the sustainability of the fisheries sector. This forms an integral part of the European Green Deal that maps out a new, sustainable, and inclusive growth strategy to boost the economy, improve people's health and quality of life, and care for nature, whilst leaving no one behind.
		Actions shall thus seek to address the need for enhanced environmental and socio-economic research base of fisheries whereby further investment is required in relation to knowledge targeting resilience and sustainability of the sector.
		The sustainable development of the SSCF and coastal communities depend on the region's ability to manage fish stocks through multiannual fisheries plans, technical measures, closing areas and other specific conservation measures. Particularly on the southern shore, technical assistance and capacity building are needed to design and implement specific plans and measures. Efforts targeting the sustainability of the sector are congruent with the Green Deal and the Farm to Fork Strategy and follow GFCM recommendations. Due consideration ought to be given to ensuring that conservation measures are not detrimental to fishers' standard of living and demand fishers' active collaboration. Within such context, contributing to the fair standard of living in cases of temporary cessation of fishing activities should be considered.
		Building on 14-20 EMFF experience, temporary cessation measures targeting the swordfish fishery through an additional closure period beyond those stipulated in Regulation (EU) 2019/1154 [2] may

Policy objective	Priority	Justification
		thus be targeted.
		Another aspect that should be targeted relates to fostering efficient fisheries control and enforcement, as well as reliable data for knowledge-based decision making, with the identified need for increased compliance with data collection, traceability, monitoring, control, and surveillance requirements. These challenges are also highlighted in the <i>Ministerial Declaration on a Regional Plan of Action for Small-scale Fisheries in the Mediterranean and the Black Sea</i> [3]. Ensuring adequate data collection, collective research efforts and exchange to reinforce scientific knowledge on fish stocks and ecosystems are also among the priorities of the <i>Malta MedFish4Ever Ministerial Declaration</i> . Enhanced fisheries management data and knowledge, monitoring, control and enforcement are necessary in order to ensure the economic, social and environmental sustainability of fishing activities.
		This is congruent with the FAO voluntary guidelines [4] for securing sustainable small-scale fisheries in line with Article 8 of the EMFAF Regulation on Responsible Fisheries and Sustainable Development in relation to its guidelines on Governance of tenure in small-scale fisheries and resource management and more specifically in relation to ensuring an enabling environment and supporting implementation.
		The improvement, development and implementation of the EU Fisheries Control System shall be on the basis of Article 36 of Regulation (EU) No 1380/2013 and as further specified in Council Regulation (EC) No 1224/2009 and in Council Regulation (EC) No 1005/2008. Moreover, the introduction of new rules and regulations governing fishing activities in line with the new Control Regulation, the CFP and ancillary regulations, requires that the competent authority invests further in technological resources, patrol vessels, equipment and Fisheries Control Officers training to ensure that Malta is adequately prepared and equipped to transpose and enforce such obligations, and which affect both large-scale and small-scale fisheries.
		Data collection shall be undertaken in line with the CFP (Article 25(2)) and Regulation (EU) 2017/1004 of the European Parliament and of the Council of 17 May 2017 pertaining to the collection, management and use of data in the fisheries sector and support for scientific advice regarding the CFP and repealing Council Regulation (EC) No 199/2008 [5]. As noted in the FAO guidelines, "States should establish systems of collecting fisheries data, including bioecological, social, cultural and

Policy objective	Priority	Justification
		economic data relevant for decision-making on sustainable management of small-scale fisheries with a view to ensuring sustainability of ecosystems, including fish stocks, in a transparent manner." Digitalisation and innovative solutions may be targeted to enhance the impact of these actions.
		Safeguarding the seas and longevity of the sector through sustainability are indeed the overarching principles of this Programme. In this light, this Priority focuses on interventions that enable the achievement of common objectives shared by the EU Habitats Directive, Birds Directive and the Marine Strategy Framework Directive, namely the achievement of Favourable Conservation Status or protection of habitats and species for which Marine Protected Areas have been designated, while concurrently contributing to the achievement of Good Environmental Status GES in Malta's marine waters as a whole.
		The continuous efforts towards conservation of biodiversity and, wherever relevant, the restoration of ecosystems to a favourable conservation status is key for the sustainable use and management of land and sea resources. The needs identified in Malta's draft <i>National Biodiversity Strategy and Action Plan</i> and Malta's draft <i>Conservation Measures and Objectives for Malta's Marine Natura 2000 sites</i> (2021) [6] are congruent with the EU's Biodiversity Strategy that aims to ensure that Europe's biodiversity will be on the path to recovery by 2030, in line with the 2030 Agenda for Sustainable Development and with the objectives of the Paris Agreement on Climate Change.
		Endeavours will thus be directed towards conservation and restoration of the habitats and species within Marine Protected Areas, avoiding their deterioration and seeking the maintenance or restoration of habitats and species to a favourable conservation status as defined by Article 2 of the Habitats Directive. In parallel, the implementation of other management measures as defined by Malta under the MSFD processes contributes to an overarching management framework targeting achievement of good status for Malta's marine waters thereby addressing resilience and contribution towards green transition ambitions.
		Linked to this are efforts to address various pressures on the marine environment on a national scale. Consequently, actions shall seek to address the passive collection of marine litter, with the possibility of also focusing on the prevention of entry of litter (including Abandoned, Lost or otherwise Discarded

Policy objective	Priority	Justification
		Fishing Gear, and Single Use Plastics) into the marine environment taking into account the needs also identified in Malta's draft <i>Conservation Objectives & Measures: For Malta's Marine Natura 2000 sites</i> (2021), <i>Malta's Long Term Waste Management Plan 2021-2030</i> [7] and <i>Malta's Single Use Plastic Strategy for 2021-2030</i> .
		The COVID-19 pandemic and the military aggression against Ukraine have shown the need for the Programme to be flexible where possible. In this regard, the Programme also aims to target Malta's particular vulnerabilities related to small island Member States which could have devastating effects on the industry (such as threats from oil spills) and which, should the need arise, be addressed through appropriate crisis action supported by the Programme.
		[1] Excluding operations falling under Article 17 and Article 19 of the EMFAF Regulation. [2] REGULATION (EU) 2019/1154 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 20 June 2019 on a multiannual recovery plan for Mediterranean swordfish and amending Council Regulation (EC) No 1967/2006 and Regulation (EU) 2017/2107 of the European Parliament and of the Council https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019R1154&from=EN
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		[6] Environment and Resources Authority (2021), Conservation Objectives & Measures: For Malta's Marine Natura 2000 sites 2021 https://era.org.mt/wp-content/uploads/2021/07/MPA-Conservation-Objectives-Measures-2021-including-annex-Final_reduced-size.pdf
		[7] Ministry for the Environment and Climate Change and Planning (2021). Long Term Waste Management Plan 2021-2030
2. Greener	2.Fostering sustainable aquaculture	Looking towards the sustainable growth of the aquaculture sector and its potential development

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Policy objective	Priority	Justification
Europe	activities, and processing and marketing of fisheries and aquaculture products, thus contributing to food	for the future
	security in the Union	The aquaculture sector is as an important maritime sector for Malta [1]. Furthermore, as highlighted in the <i>Aquaculture Strategy for Malta 2014-2025</i> , the industry has considerable socioeconomic value and potential, specifically contributing to:
		Enhancing the overall diversification of the economy, especially in primary food production;
		Employment generation;
		The provision of fish for the local retail and foodservice sectors;
		The provision of valuable export earnings; and
		Contributing towards the EU trade deficit for fisheries products in a positive manner.
		Stakeholders have identified the positive impact of past Programmes, by assisting the sector to invest in modernising and innovative solutions. The impetus to carry on was also highlighted to enable the sector to remain competitive and resilient. Such a stance (competitiveness) is in line with the EU Key Horizontal Priorities (resilience, green transition and digitalisation).
		Furthermore, <i>Malta's Multiannual National Plan for the Development of Sustainable Aquaculture</i> 2022-2030 specifically identifies how building resilience and competitiveness are one of the four objectives to achieve the European Green Deal (EGD) vision.
		The aquaculture industry is also identified at an EU level as a potential sector for the provision of a sustainable food system (SFS) in ensuring environmental, social and economic sustainability particularly with regard to the provision of access to a sufficient supply of food in a sustainable manner by reversing the loss of biodiversity and reducing the environmental and climate footprint of the food system.
		Conversely, primary challenges faced by the sector relate to the physical characteristics of the Maltese Islands, together with the intense competition from various sectors for coastal space and national

Policy objective	Priority	Justification
		objectives to achieve and maintain good environmental status. Furthermore, aquaculture activities may be a cause of concern to the coastal and marine environment due to the risk of accumulation of waste generated from fish and feed, the growth of pathogens and associated diseases infecting wild flora and fauna, accumulation of pharmaceuticals with lateral effects on biodiversity within the vicinity, over-fishing of wild species, introduction of alien species and adversely affecting tourism and recreation.
		For the industry to perform and grow sustainably, improving operational management is fundamental, with particular focus on:
		 Enhancing efficiency/ enhanced innovation / research;
		Reducing environmental impacts/ environmental monitoring; and
		 Promoting competitiveness also through the provision/ modernisation of aquaculture- related equipment/ facilities targeted to enhance the R&I potential in view of needs and actions identified in this Programme and in the MNPSA.
		Within this Priority, a primary focus relates to ensuring the sustainability of the aquaculture industry by reducing the adverse environmental impact of aquaculture on the marine environment. This is in line with the <i>Aquaculture Strategy for the Maltese Islands - Towards Sustainability 2014 - 2025</i> and the <i>Multiannual National Plan for the Development of Sustainable Aquaculture 2022-2030</i> that identify the need for further development in the industry to work within the limits of the environmental carrying capacity of the coastal zone and marine areas. This will ensure that the industry is operating effectively yet within the scope of national objectives for achieving and maintaining good environmental status and good ecological status of coastal and marine waters. Malta's <i>MNPSA</i> identifies several actions in need of being targeted in this regard including assessing and monitoring the state and trends of farmed aquatic genetic resources and their wild relatives in Malta.
		Another area of focus for the aquaculture industry relates to the need for the introduction of pioneering new-culture species (both for food and non-food) and innovative systems that allow the sector to remain sustainable, proactive, and competitive. In an ever-competitive industry, it is imperative that local entities strengthen their competitiveness, and seek ways and means to distinguish themselves, be it through the provision of innovative products, the notion of superior quality offering/s or by tapping into

Policy objective	Priority	Justification
		high value niche markets. Furthermore, it is equally important that entities do not miss out from access to potential markets of interest. This too is an area of focus, as identified in Government's strategic direction for the industry, which identifies aquaculture development and growth as one of the pillars for the further development of the sector.
		Government's policy in relation to the industry's development, growth and resilience also highlights the need of ensuring a stronger emphasis on research. Research and development, human resource development, fish product diversification and improving the image of aquaculture are all priorities that should not be overlooked if further progress is to be achieved for the sector.
		With reference to research and development, the Aquaculture Strategy shows that marine-based research installations should preferably be located off-shore: research installations closer to shore will be directed towards designated Aquaculture Zones. As for ancillary activities requiring a coastal location, it is Government strategy to direct such installations towards designated fishing ports, as highlighted in the <i>Aquaculture Strategy for the Maltese Islands (2014 - 2025)</i> , while food-processing and administrative operations will be directed towards areas designated for similar activities.
		The main emphasis for R&I will be the development of alternative species with the aim of diversifying the species produced by Malta's aquaculture industry. The development and testing of alternative tuna feeds that reduce reliance on baitfish could also improve the sustainability and competitiveness of the capture-based species component.
		These identified needs (and subsequent interventions) are in line with the WestMED initiative that was adopted by the European Commission in April 2017 and subsequently endorsed by the Council of the EU in June 2017. The initiative focuses on the sustainable development of the blue economy in the western Mediterranean region. More specifically in relation to promoting diversification of aquaculture, the use of multitrophic marine farming systems and the promotion of sustainable and certified aquaculture farms (Art. 23-25) are highlighted as priorities.
		Another area which could be explored relates to the algae industry which the EU highlights as part of

Policy objective	Priority	Justification
		the sustainability strategy for the sector and is also highlighted in the MNPSA.
		Malta's Aquaculture Strategy and the Multiannual National Plan for the Development of Sustainable Aquaculture 2022-2030 specifically indicate the need to understand both the current status of inshore and coastal waters, as well as the potential risks to their well-being, well-aware that aquaculture could be of environmental concern to the marine environment due to:
		 risk of accumulation of waste generated from fish and feed, with negative effects on benthic habitats, water quality and biodiversity as well as inshore waters;
		 growth in pathogens and associated diseases and, in the case of offshore cages, with added infection potential of sea flora and fauna;
		accumulation of pharmaceuticals with lateral effects on biodiversity in the vicinity;
		 over-fishing of wild fish as a feed source;
		introduction of alien species; and
		detracting impact on tourism and recreation due to close proximity.
		Another aspect to be addressed relates to the development of knowledge exchange and capacity building (also through collective interest in pilot projects) and support for the acquisition of skills and the promotion of human capital in the aquaculture sector. More specifically, as noted in the <i>MNPSA</i> , investing in the training of officers to support professional skills development, knowledge transfer including but not limited to disease surveillance and notification is crucial.
		These identified needs as drawn up from the SWOT are in line with the <i>Aquaculture Strategy for the Maltese Islands – Towards Sustainability 2014 – 2025</i> and <i>Malta's MNPSA 2022-2030</i> which, among others, focus on the following important areas:
		Strengthening the aquaculture administrative framework;
		Appropriate locations for Aquaculture Zones;
		Sustainable growth of aquaculture that limits user conflict on land and at sea;

Policy objective	Priority	Justification
		 Aquaculture operations to maintain the good quality of the coastal environment; and Promoting innovation in the aquaculture industry in Malta.
		Linked to both research and limited space, as well as public acceptance and co-existence with other economic activities, is the need to consider diversification of aquaculture and the use of multitrophic marine farming systems and the promotion of sustainable and certified aquaculture farms including organic certification. These needs have been identified as priority areas of intervention by all WestMED countries. In relation to organic aquaculture, as highlighted in the <i>MNPSA</i> the government is seeking ways of encouraging and facilitating the successful application of organic aquaculture in line with EU Organic Action Plan [2]. Such direction is also in line with the EU Farm to Fork Strategy and the EU Organic Action Plan.
		The promotion of marketing, quality and value-added fisheries and aquaculture products, as well as processing of these products should also be addressed.
		The SWOT has identified the need to enhance the competitiveness of local fisheries and aquaculture products through marketing activities.
		Under both the European Fisheries Fund (2007 - 2013) and the European Maritime and Fisheries Fund (2014-2020), the Department of Fisheries and Aquaculture undertook projects that revolved around a promotional campaign, that sought to increase per capita fish consumption. These projects were effective [3], with per capital fish consumption increasing to 18kgs [4] from 6.58kg [5] in 2006.
		As for awareness on sustainable fish consumption, it is evident that more efforts need to be undertaken. In this respect, the research <i>Nesploraw Flimkien it-Teżori tal-Baħar!/ Exploring the Treasures of the sea together!</i> that was part funded though the EMFF (2014 - 2020) showed how over half of the respondents (55%, and 61% prior to the campaign) did not know which species of fish should be avoided locally in order to ensure sustainability. Also, there is still a general lack of knowledge of sustainability (with a third (33%) of the sample not knowing what they could do to assist conservation

Policy objective	Priority	Justification
		efforts towards sustainable fisheries in Malta).
		Another positive impact of awareness raising on the importance of fish consumption relates to locals' wellbeing. Fish constitutes an alternative healthy food source with many health benefits. In this regard, efforts that result in positive spin-offs related to human health as well as the economic survival of the fishing community are encouraged.
		Marketing efforts could also contribute towards increasing the sustainability of the sector by promoting aquaculture products, underutilised species or the utilisation of current discarded species.
		Last but not least the COVID-19 pandemic and the military aggression against Ukraine have shown the need for the Programme to be flexible where possible. In this regard, the Programme also aims to target emerging needs in light of exceptional events causing a significant disruption of markets, to be addressed through appropriate crisis action supported by the Programme.
		In conclusion, the above-mentioned strategies and identified areas for intervention are in line with the CFP and the Integrated Maritime Policy, whereby the Fund acts as a key enabler for sustainable fisheries and the conservation of marine biological resources, for food security through the supply of seafood products, for the growth of a sustainable blue economy and for healthy, safe, secure, clean and sustainably managed seas and oceans. Such actions shall aim to contribute towards the resilience of the sector and the ambitions of the European Green Deal giving due consideration to digitalisation and innovative solutions, where applicable.
		[1] Aquaculture Strategy for the Maltese Islands. Towards Sustainability 2014 - 2025. Ministry for Sustainable Development, Environment and Climate change.
		[2] Communication from the Commission to the European parliament, the Council, the European Economic and Social Committee and the committee of the regions on an action plan for the development of organic production SWD (2021) 65 final of 25.03.2021.

Policy objective	Priority	Justification
		[3] Research was conducted through CATI were an independent market research entity sourced individuals that formed part of the Maltese and Gozitan population through a random digit dialling sample approach. The sample size of 406 respondents provided a margin of error level of +/-5.0% with 95% confidence limits. In addition to this, data was weighted according to the latest Census available.
		[4] Post campaign research for the department of fisheries and aquaculture promotional campaign EMFF 4.3.1 - Exploring Together the Treasures of the Sea! (Research conducted by Misco in Q1 and Q4 2018).
		[5] EFF Operational Programme Promotional campaign tender.
5. Europe closer to citizens	3.Enabling a sustainable blue economy in coastal, island and inland areas, and fostering the development of fishing and aquaculture communities	Community-Led Local Development (CLLD) under the EMFAF Programme is not foreseen.
		This is mainly due to the local characteristics of the fishing and aquaculture sectors which do not have the critical mass required to justify such an approach. This also takes into account the administrative requirements to implement a CLLD, which would not be in proportion to the implementation of the measures that can be supported also in view of the small nature of the Programme.
		Existing institutional coordination mechanisms and sectorial organisation already contributing are in place and facilitated by Malta's small size. In this regard, such established practices are deemed more relevant within the Maltese context.
		In addition, the needs identified under this Priority are deemed to be broadly captured by other priorities which will overall contribute towards the resilience and development of both sectors.
2. Greener Europe	4.Strengthening international ocean governance and enabling seas and oceans to be safe, secure, clean and sustainably managed	Investment in Priority 4 is not foreseen under this Programme.
		With regard to enhancing marine knowledge with respect to MPAs, Malta is already contributing significantly to the Biodiversity Strategy ambitions whereby Malta has already designated MPAs covering approximately 35% of its territory. This is aready exceeding the ambtion, at EU level, of

Policy objective	Priority	Justification
		having a 30% of the sea protected in the EU. Thus, actions, going beyond the management of existing MPAs supported under SO 1.6, are not foreeen.
		On engagement in international governance matters, Malta is already engaged through other fora as described in the SWOT analysis.
		Moreover, with reference to the needs identified for enhanced maritime surveillance and common information sharing, Malta has looked closely at potential initiatives contributing to CISE however, in view of the relatively early stage of implementation of CISE in Malta, it is deemed premature to commit to this initiative at initial programming stage, also taking into account the limited Programme budget and other more pressing needs identified in the SWOT.

1. Programme strategy: main development challenges and policy responses

Table 1A: SWOT analysis & needs

Priority	SWOT analysis
1.Fostering	Strengths
sustainable fisheries and	A wide variety of species and Local Biological Resources available to fishers
the restoration and conservation of aquatic biological	The Maltese fishery is a relatively small industry of a typical Mediterranean artisanal type, that is frequently described as a multi-species and multi-gear fishery, with the majority of the fishers switching from one gear to another several times throughout the year. The Maltese fleet is known to land a variety of species, often exceeding 80 species in number. The use of local biological resources also provides the country with a degree of self-sufficiency and reduces the sector's dependency on the importation of foreign produce and resources [1].
resources	Traditional artisanal fishing, experienced and knowledgeable fishers
	The complement of local fishers comprises predominantly of individuals that have been involved in the sector for a number of years and have, over the years, acquired invaluable knowledge of the local seas within which they operate. Fishers' wealth of knowledge and experience is extremely valuable for research and management of fisheries, particularly in the case of small-scale fisheries and where scientific data is often scarce.
	Dedicated units within the Department of Fisheries and Aquaculture (DFA) tasked with fisheries control and data collection responsibilities.
	The DFA regulates and manages both the capture fisheries and the aquaculture policy and works to develop the potential of the European Fisheries economy and to secure a safe and stable supply of sustainable fisheries to ensure that Malta and its fisheries sector comply with the rules and regulations established under the CFP.
	The Management Unit has the role to coordinate and facilitate the analysis of new regulations proposed by the EC and for carrying out reporting for the purpose of data collection, analysis, and coordination as required by DG MARE.
	The DFA performs public consultations on crucial areas, such as the establishment of management plans for various fisheries, with interested entities and stakeholders, to ensure that the needs of all those involved are met.
	In terms of monitoring and control, the Fisheries Monitoring Centre (FMC) monitors fishing vessels 24 hrs per day 365 days a year through

various means including the Vessel Monitoring System (VMS) for vessels above 12 metres and the Automatic Identification System (AIS) (for vessels above 15 metres) as per Article 9 -10 of Council Regulation (EC) No 1244/2009, respectively. Electronic logbooks are installed on the fishing fleet above 12 metres for the FMC to monitor fishing vessels catches prior to a pre notification for landing.

For SSCF operating within the 25 nautical mile (FMZ), the General packet radio service (GPRS) is used.

The FMC also deals with the remaining fishing fleet not equipped with a tracking device by coordinating landings of catches and vessels inspections with Fisheries Protection Officers of the DFA.

Cooperation with third parties for control and safety at sea and across the coastal area

The FMC also liaises with the Armed Forces of Malta (AFM), Transport Malta (TM), other Coastal Member States, the European Fisheries Control Agency (EFCA) and the European Commission with regards to fisheries related issues. The AFM in particular assists through operations in the maritime domain that relate to the protection and surveillance of Malta's territorial seas, Fisheries Conservation and Management Zone as well as maritime borders. Other operations relate to control of illegal operations at sea such as smuggling and trafficking as well as enforcement of maritime law, fisheries protection, and maritime safety missions.

In an average year, AFM maritime assets deliver around 500 days of patrol time at sea while aviation assets deliver well in excess of 1,000 flight hours in support of maritime operational and training activities.

Fisheries Management Plans

In line with Article 19 of Council Regulation 1967/2006 concerning management measures for the sustainable exploitation of fishery resources in the Mediterranean, there are currently three management plans in place within the 25 NM Maltese FMZ: lampara purse seine fishery, bottom otter trawler fishery and lampuki FAD fisheries. These have been developed taking into account biological, economic, and social objectives and were implemented by 2016 for the vessels operating within the 25 NM FMZ. These plans focus on ensuring the sustainability of the fishing stock through better monitoring of Maltese vessels, ensuring financial stability for fishers and safeguard artisanal fishing activities. The three Management Plans are currently under revision.

Cooperation with Mediterranean Countries

The Mediterranean Sea provides the fishing sector with jobs for over 300,000 people. 80% of its fleet belongs to small-scale fishers (with vessels under 10m long), who fish a quarter of the total catches.

In view of identified risks relating to fish stocks over-exploitation, in 2017, Malta was one of the countries involved in the *Malta MedFish4Ever Declaration*, in line with the EU's international commitments under the Sustainable Development Goals (Goal 14: 'Conserve and sustainably use the ocean, seas and marine resources for sustainable development'). This Declaration sets out a detailed 10-year work programme, based on ambitious but realistic targets, that include adequate data collection of all key Mediterranean stocks that should be scientifically assessed on a regular basis and eliminating illegal fishing by 2020 by ensuring that all States have the legal framework and the necessary human and technical capabilities to meet their control and inspection responsibilities. Other commitments include supporting sustainable small-scale fisheries and aquaculture by streamlining funding schemes for local projects, such as fleet upgrade with low-impact techniques and fishing gear, social inclusion, and the contribution of fishers to environmental protection.

Marine Protected Areas (MPA)

Malta has designated 18 MPAs within its national territory and the Fisheries Management Zone. These MPAs cover an area of over 4,100 km2 which is equivalent to approximately 35% of the Malta's territorial waters and Fisheries Management Zone (FMZ). These existing MPAs contribute significantly to the ambitions of the Biodiversity Strategy 2030 for the protection of 30% of the sea in the EU and its management.

Malta's MPA network comprises of Special Areas of Conservation (SACs), designated for the protection of marine habitats and species pursuant to the EU Habitats Directive, and Special Protected Areas (SPAs) designated for the protection of seabirds under the EU Birds Directive.

ERA (2021) [2] notes that out of the nine (9) marine habitat types listed in Annex I to the Habitats Directive, requiring SAC designation, four (4) natural habitat types have been identified as occurring in Maltese waters, which are:

- Posidonia beds;
- Sandbanks which are slightly covered by sea water all the time;
- Reefs; and
- Submerged or partially submerged sea caves.

Five (5) SACs in inshore/ coastal waters and five (5) SACs in offshore waters have been designated for the protection of these four (4) marine habitat types. The inshore or coastal SACs incorporate all four (4) habitat types mentioned above while offshore SACs are mainly designated for the purpose of protecting reefs and sea caves.

In respect of species listed under Annex II of the Habitats Directive, Malta has designated three (3) offshore areas for the protection of the loggerhead turtle and three offshore areas for the protection of the bottlenose dolphin. These protected areas also contribute to the protection of other dolphin species occurring in Maltese waters, including the common dolphin (Delphinus delphis) and the striped dolphin (Stenella coeruleoalba).

Eight Special Protection Areas (SPAs) have been designated for the protection of breeding seabirds in Malta:

- Yelkouan shearwater (Puffinus yelkouan);
- Scopoli's shearwater (Calonectris diomedea); and
- European Storm-petrel (Hydrobates pelagicus).

Apart from the MPA procedures under the EU Habitats and Birds Directive, Malta implements the EU Marine Strategy Framework Directive (MSFD) within waters where Malta exercises jurisdictional rights. Such management processes undertaken through the MSFD Programme of Measures contribute to the management of the marine environment beyond MPAs.

- [1] The state of Malta's biodiversity of food and agriculture. Country Report. http://www.fao.org/3/CA3495EN/ca3495en.pdf
- [2] Environment and Resources Authority (2021), Conservation Objectives & Measures: For Malta's Marine Natura 2000 sites 2021.

Weaknesses

Shared Stocks

Of the main exploited species, the most important fisheries in Maltese waters are bluefin tuna (BFT), dolphin fish and swordfish. These fisheries are operated on a seasonal basis, according to the particular targeted species' migratory behaviour or habits.

These species are shared with other EU and non-EU countries, both in the Mediterranean as well as the eastern Atlantic Ocean and are thus vulnerable to fishing effort.

Another aspect relates to locals' reluctance to consume other fish species that are currently available. Reasons for this vary, though some are perceived to be an ideal animal feed and consequently not sought for local consumption. As a consequence, fishers end up selling such stocks at minimal prices to the aquaculture industry as feed.

Increasing pressures on Marine Ecosystems

Despite efforts, with more than 85% of the scientifically assessed stocks fished beyond safe biological limits, the future of fisheries in the Mediterranean is at stake, putting increasing pressure on fishers as sub-optimal yields become an increasing threat to employment, further jeopardising stability of food supply and regional security [1].

To mitigate depleting fish stocks, the EU has undertaken various initiatives aimed at managing stocks such as quotas or catch limits set for most commercial fish stocks. Efforts are however required, particularly in the context of the GFCM 2030 Strategy.

Malta's Annual Report on efforts to achieve a sustainable balance between fishing capacity and fishing opportunities for the year 2021 notes that regionally, the stock of hake was in overexploitation and overexploited, whilst the stock status of deep-water rose shrimp was in overexploitation with relatively intermediate biomass. A management plan to address this issue was devised at GFCM level, including Malta, Sicily and Tunisia, which all exploit the same stock (Recommendation GFCM/40/2016/4). It should be noted that Malta's percentage catch for these stocks is 1.8% and 0.3% for deep-water rose shrimp and hake respectively and that Malta already reduced its trawling fleet by approximately 30% since 2011.

Control and enforcement Limitations

In 2019 the Department of Fisheries and Aquaculture (DFA) undertook a Risk Profile of the Fisheries Control Unit, focusing on three distinct areas: strategic, operational and control. Based on a rating system to determine the risk level (in terms of impact and likelihood), the study evidenced that in terms of 'control over access to waters and resources' the more efforts are needed to ensure that 'Fishing activities were in line with valid fishing authorisation'. A high-risk score was achieved for 'Establishment of NCP for each multiannual plan, including specific inspection benchmarks defined in accordance with risk management'. Other areas comprised of 'surveillance' and 'inspections' with such functions rating high on the risk factor grid.

The enhancement of the competent authority is necessary taking into account the parameters of the new Control Regulation, the CFP and ancillary regulations. Upgrades need to be undertaken on the current Vessel Monitoring System whilst investment in further technological resources, equipment and training, amongst others, are also needed.

Lack of spatial organisation of fisheries in Malta's 25-mile nautical mile zone

SSCFs often practice in areas targeted by trawler fishers, leading to intensified cumulative fishing effort and conflicts between the different sectors. Such initiatives would complement the provisions enacted through the GFCM Regional Plan of Action for SSF 2018-2028.

Limited profitability

For several years, the industry has experienced poor returns, which has led to the decline of young individuals entering the sector. The latest figures indicate that it is only recently that the economic situation of the sector has improved [2]. While this is encouraging, the sector needs to be sustained to ensure this trend persists in the short- medium term. Low economic performance weakens the fleet performance with potential long-lasting impacts on the industry and communities.

The COVID-19 pandemic presented many challenges, such as logistical disruptions of supply chains, labour shortages, loss of certain markets and change in consumer patterns. Such challenges have invariably adversely affected fishers' income.

The attainment of a decent livelihood for fishers is one of the targets of the GFCM 2030 Strategy "Target 4: Livelihoods: decent employment and engaged fishers towards profitable fisheries".

Decrease in SSCF employment

In 2020, employment stood at 987, a decrease of 5% over the previous year. This equates to 524 FTEs. 78% of the total jobs were employed in small-scale fishing operations. The SSCF sector is of fundamental importance to the social and economic aspects of the Maltese Fishing Fleet. Total employment within the industry derived from the LSF, recorded a 21% decrease in 2020 over the previous year.

Ageing fishing sector

Data shows that the average age of vessels is 31 years which adversely affects industry. Demographics of SSCF also show that this is characterised by middle-aged fishers reaching retirement age in the span of 15 years.

Male dominated industry

Maltese fisheries and aquaculture are predominantly male oriented. This can be attributed to many factors including the competitiveness of the labour market, women's role and tradition as primary care givers, time and labour burdens of the sector and the preference for other careers.

Loss of traditional skills and knowledge

The lack of young individuals entering the sector jeopardises the possibility that traditional skills and knowledge pertaining to artisanal fishing are passed on from one generation to the next which can lead to fishing culture and heritage being lost.

Lack of Innovation

To date, innovation (comprising of altering current fishing gear practices) has been limited with fishers relying on the same gear used traditionally. The outcomes of a research study undertaken under the EMFF OP (2014-2020) to improve gear selectivity of the Maltese otter board trawling fleet show that alternative gear may result in reduced discards and there is scope to instigate change in the current modus operandi so that fishers use alternative fishing gear.

In line with the EU's Biodiversity Strategy 2030, other endeavours relating to sustainable, low impact fishing gear ought to be carried out.

The current modus operandi of fishers indicates limited environmental awareness and instances of localised impacts. This is also evidenced in the lack of innovation in the sector regarding fish catches and storage, particularly in terms of limited investment in quality raw materials used and the potential to increase fish' longevity.

Limited Human Resources

A review of the current human resources within the DFA shows that staff turnover within the various units places a strain on the system resulting in lost knowledge, skills, and experience. Additional resources/expertise would help improve the services provision, reduce the administrative burden, and aid the department's efforts in more critical responsibilities.

Reluctance to adapt to change

Another aspect relates to reluctance to adapt to change and respond to changes in economic conditions. This presents a prevalent stumbling block for fishers seeking alternatives (including diversification) to ensure adequate returns.

Limited research of the local fisheries context

To date fisheries has always been analysed in terms of its catches and income with the primary focus being on ensuring a decent return for fishers and due consideration to the marine environment. Data and studies related to the socioeconomic impacts, the adverse impacts derived from alien species' intrusion and destruction of native species as highlighted in Malta's *National Strategy for Preventing and Mitigating the Impact of Invasive Alien Species (IAS)* in the Maltese Islands [3], as well as on how coastal infrastructure will be affected by climate change, in particular through coastal erosion and sea level rise, remain limited.

Limited Infrastructure

a. Berthing Capacity & Port/ Landing Infrastructure

Berthing capacity, although improved recently, remains limited. Further improvements are required in port/landings infrastructure to address quality of landings, health, safety and working conditions including impacts related to climate change and enhance the implementation of the landing obligation by providing better access to landing and storage of unwanted catches.

b. Port infrastructure for waste management

Improved port infrastructure for waste management of marine litter remains necessary to reduce marine litter and improve the marine environment.

Limited Knowledge/Skills Sharing & Social Dialogue

Noting the characteristics of the fisheries sector, enhancing and transferring the knowledge base and upskilling is key to creating and sustaining the industry's competitive advantage as this depends on the knowledge of market demands and the potential returns on investments in upgrading.

The aim should be on building mutually beneficial relations among the various stakeholders while maintaining priority on improving the livelihoods of SSCF.

Lack of business & operational planning

There is a general lack of knowledge among operators in the sector, particularly SSCF, with regard to business and operational planning which adversely affects the overall performance and competitiveness of operators and limits their quality of life.

Lack of investment/ diversification

Linked to the above is the limited initiative to invest in new/ alternative processes and ways of conducting business and/ or identifying/ carrying out alternative efforts that would be economically viable, competitive and sustainable and provide increased efficiency, effectiveness and/ or added income for the fisher. Improvements in efficiency and on board fishing vessels could contribute towards changing fishing practices as well as introducing innovative changes in fishing technology and foster sustainability, both in terms of fish stocks and return on investment.

Data Collection Weaknesses

While taking note of the advances made throughout the years targeting effectiveness and enhanced reliability of data, the following weaknesses have been identified taking note of the characteristics of the local sector:

- a. Data and knowledge gaps in certain fleet segments, mainly due to lack of coverage with the Control Regulation
- b. Insufficient data for many economically less important species and for small pelagics
- c. Regional assessment methods poorly developed for shared stocks which are lacking age data
- d. Limited data available supporting ecosystem-based fisheries advice
- e. Dependency on industry cooperation for data collection at sea, self-sampling and supply of socioeconomic data
- f. Risk of financial and human resources constraint to implement requirements of the new EU-MAP

- [1] Ministerial conference on the sustainability of Mediterranean fisheries Malta, (30 March 2017). Malta MedFish4Ever Ministerial Declaration.
- [2] Scientific, Technical and Economic Committee for Fisheries (STECF). The 2021 Annual Economic Report on the EU Fishing Fleet (STECF 21-08). European Commission.
- [3] National Strategy for Preventing and Mitigating the Impact of Invasive Alien Species (IAS) in the Maltese Islands.

Opportunities

Recovery of BFT and Swordfish stocks and associated fishing opportunities on the basis of conservation measures and control mechanisms

Although the main commercial fish species in the Mediterranean and Black Sea are still over-fished, pressure has reduced over the past years, raising hopes for the recovery of fish stocks. The percentage of overexploited fish stocks decreased by 10% - from 88% in 2014 to 78% in 2016 [1].

As a consequence, Maltese tuna fishers had their catch quota increased, with the country's national catch quota for the 2019 tuna fishing season set at 353 tonnes, an increase of 34 tonnes over the amount legally caught in 2018 [2]. The increase in quotas provided an opportunity for increased support for the SSCF sector [3], which employs most fishers and causes least environmental damage, reducing bycatch and discards, and introducing more long-lasting impacts such as significantly reducing fishing or establishing fisheries restricted areas. It should be noted that such opportunities shall be managed through established conservation measures and controlled through specific mechanisms in line with the relevant regulatory framework.

Building on lessons learnt from the 14-20 EMFF Programme, Malta notes that swordfish stocks may benefit from an additional closure period targeting the closure of fishing activities for swordfish for the period 1 December – 31 December. This conservation measure is considered as an additional measure to the closed swordfish season stipulated in Regulation (EU) 2019/1154 [4]. Moreover, as the financial assistance provided through temporary cessation was aimed at owners of fishing vessels operating in the swordfish fishery, a decrease in the general fishing effort on other fish stocks also resulted.

Low Carbon Green fisheries

The opportunity to focus on 'low carbon, green fisheries' takes into consideration EU principles of the European Green Deal, EU Biodiversity Strategy, Farm-to Fork Strategy and the Commission Communication on Transforming the EU's Blue Economy for a Sustainable Future [5]. This approach targets environmentally responsible, sustainable fishing practices and supply chain linkages to ensure the quality of life of fishers in the medium and longer term, and indeed the survival of the sector.

Decarbonisation and making the fisheries sector more sustainable is also an opportunity to safeguard the cultural and social implications associated with the industry, in the knowledge that the sustainability of the sector cannot happen if environmental degradation and natural resource depletion continue unabated as also stated in Malta's Sustainable Development Vision for 2050 [6].

Complementarity and Synergies with EU Strategies, Policies and EU Funding Programmes, Plans and Initiatives

Investments undertaken through other funding streams including interventions implemented under the EMFAF direct management Programme, Horizon Europe, the RRP, the ERDF, LIFE, and JTF can complement EMFAF actions in line with the specificities of the related fund/plan and as applicable. In this regard, apart from complementarity, synergies may be sought with these funds and programmes to ensure a more coordinated and integrated approach with increased focus on results to better address the needs and sustainability of the blue economy. The EMFAF Programme will complement and not duplicate the more long-term research activities under Horizon Europe.

This integrated approach would complement the EC's new approach for a Sustainable Blue Economy in the EU [7] which aims to ensure that the blue economy forms an integral part of the European Green Deal in light of decarbonisation, zero pollution, circularity, and biodiversity[8].

Enhanced Protection and restoration of aquatic biodiversity and ecosystems in line with the EU Biodiversity Strategy

MPAs play a key role in the protection of marine biodiversity and ecosystems. It is important for Malta to ensure effective management of the existing designated MPAs (18 sites) to ensure the achievement of Favourable Conservation Status of the habitats and species, as defined by the Habitats Directive and the protection of seabirds in accordance with the requirements of the Birds Directive. Management processes

for MPAs are defined by conservation objectives and implemented through conservation measures [9] that seek the maximum contribution of the sites in question to the achievement or maintenance of good status. Such stance is also in line with the objectives of the *Prioritised Action Framework (PAF) for Natura 2000 in Malta*. This will help to maintain and improve the provision of a wide range of ecosystem services and related socio-economic benefits provided by coastal and marine ecosystems [10]. Moreover, restoration of priority habitats such as Posidonia meadows may also contribute to both mitigation of climate change impacts as well as climate change adaptation in view of their role as carbon sinks and protection of coastal erosion.

Good Environmental Status (GES)

In line with the main goal of the Marine Strategy Framework Directive, there is scope to achieve GES in Malta's marine waters. The Directive defines GES as: "The environmental status of marine waters where these provide ecologically diverse and dynamic oceans and seas which are clean, healthy and productive". Article 3 GES ensures that the different uses made of the marine resources are conducted at a sustainable level, ensuring their continuity for future generations; ensuring ecosystems, including their hydro-morphological (i.e. the structure and evolution of the water resources), physical and chemical conditions, are fully functioning and resilient to human-induced environmental change; the decline of biodiversity caused by human activities is prevented and biodiversity is protected. Furthermore, it seeks to guarantee that human activities introducing substances and energy into the marine environment do not cause pollution effects and that noise from human activities is compatible with the marine environment and its ecosystems.

Cooperation

The opportunity exists to further network and cooperate with international/ national organisations for the achievement of the Green Deal, and the sustainability of the sector in such areas as:

- Support and contribution to the development of scientific knowledge and advice through enhanced regional cooperation in data collection activities;
- Contribution to sustainable fishing activities that are economically viable and promote employment within the Union; and
- Promote and support actions necessary to eradicate illegal, unreported and unregulated fishing.

These objectives are also in line with the CFP and also in line with the Malta MedFish4Ever Ministerial Declaration.

Interrelationship between fisheries and aquaculture

There is the opportunity to better understand the interrelationship between these two sectors and attain a better understanding of the behaviour and distribution of local fish populations around fish farms and consequently determine whether/ to what extent fish farms act as

ecological hotspots.

- [1] New report raises hopes for Mediterranean and Black Sea fisheries (Food and Agriculture Organisation of the United Nations, 2018) http://www.fao.org/news/story/en/item/1174274/icode/
- [2] COUNCIL REGULATION (EU) 2019/124 of 30 January 2019 fixing for 2019 the fishing opportunities for certain fish stocks and groups of fish stocks, applicable in Union waters and, for Union fishing vessels, in certain non-Union waters

https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019R0124&from=EN Accessed on 13/01/20

- [3] In previous years the entire fishing quota was shared among large operators that were set up to catch blue fin tuna. This time round however, the authorities have come out with a system that saw 63 of the large operators allowed to catch 299 tonnes, and another 52 operators with boats no longer than 12 metres, allowed to catch an additional 40.5 tonnes. In this way, for the first time, smaller operators were legally allowed to fish for blue fin tuna.
- [4] REGULATION (EU) 2019/1154 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 20 June 2019 on a multiannual recovery plan for Mediterranean swordfish and amending Council Regulation (EC) No 1967/2006 and Regulation (EU) 2017/2107 of the European Parliament and of the Council.
- [5] COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS on a new approach for a sustainable blue economy in the EU Transforming the EU's Blue Economy for a Sustainable Future.
- [6] Ministry for the Environment, Sustainable Development and Climate Change, 2019. Malta's Sustainable Development Vision for 2050. https://meae.gov.mt/en/Public_Consultations/MSDEC/Documents/Malta%27s%20Sustainable%20Development%20Vision%20for%202050.pdf
- [7] European Commission, 2021. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on a new approach for a sustainable blue economy in the EU Transforming the EU's Blue Economy for a Sustainable Future (COM/2021/240 final)

https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2021:240:FIN

- [8] https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12659-Green-Recovery-for-the-Blue-Economy-tentative-[9] Ibid
- [10] Socio-Economic Benefits of the EU Marine Protected Areas. Institute for the European Environmental Policy (2016) https://ec.europa.eu/environment/nature/natura2000/marine/docs/Socio%20-Economic%20Benefits%20of%20EU%20MPAs.pdf

Threats

Depleting fish stocks

There are several reasons for the poor state of fish stocks including pollution, climate change and extensive overfishing which is deemed as one of the key causes[1].

According to scientific advice, the large majority of fish stocks assessed are shrinking and some are on the verge of depletion. Overall, only 9% of fish stocks assessed are fished at levels below MSY[2]. Despite recent improvements, the number of stocks whose status is unknown remains still large.

For fish stocks such as hake, red mullet, anglerfish and blue whiting, current fishing mortality rates have been more than six times higher than MSY. These species represent around 43% in volume of the total reported catches of the EU fishing fleet [3].

Over the past 50 years the Mediterranean has lost 41% of its marine mammals and 34% of the total fish population. Fishers themselves report that they catch less and less fish every year, with potentially serious repercussions on the industry's performance and on the economy of coastal communities.

Stock assessment limitations

Stock assessments that are not analysed via ecosystem-based assessment and do not take into account ecological parameters present limitations in terms of data evaluation, which may hinder the effective implementation of conservation/fisheries management actions.

Fleet balance assessment limitations

An analysis of Malta's Annual Report highlights the efforts to achieve a sustainable balance between fishing capacity and fishing opportunities for the year 2021. The Maltese Fleet Report analyses the biological, technical, and economical parameters up to 2021 using data collected through a census of the entire fleet and information collected through landing declarations and sales notes. In line with STECF's assessment, the Maltese Fleet Report shows overall signs of significant improvement for the Return on Investment (ROI) and Current Revenue vs Break Even Revenue (BER) over the previous years, however the sustainability status for the fleet segments with highest returns cannot be reliably determined due to the lack of sustainable harvest indicator values[4].

Reluctance to implement new technologies impacting data collection

Whereas new technologies aim to enhance the effectiveness and reliability of data collection activities to better address the changing context

and the needs of the local sector, reluctance to implement new technologies, such as remote electronic monitoring and application of new sampling technologies, may result in insufficient/untimely data collection, which may ultimately impact the effectiveness of implemented management, control and conservation actions.

Climate Change

Effects of Climate Change can cause temperature changes in sea water that can lead to the loss of biodiversity and affect marine life, including fish stocks, marine meadows and plants such as the Posidonia Oceanica. The latter is a protected species forming part of designated Marine protected sites in Malta and an important habitat to marine ecosystems [5]. Furthermore floods, rise in sea levels and storms can disrupt coastal fishing communities and fishing activities [6].

The *Malta Low Carbon Development Strategy* highlights the consequences of climate change and emphasises the importance of decarbonising the economy for the benefit of the marine environment through mitigating measures on land and sea that reduce GHG emissions and use cleaner forms of energy [7].

Competition from recreational and sports fishers

Recreational fishing (RF) is under scrutiny by the EU, with calls for its regularisation because of its impact on fish [8]. Category C vessels (MFC), licensed for RF, comprise 69% of the total fishing fleet [9].

RF in the Maltese islands is an important activity involving both hobby fishing and sport fishing.

A study on RF in the Mediterranean [10], indicates that RF plays an important economic, social and cultural role and is a flourishing activity in coastal areas. The study also indicates that recreational fishing generates pressure on the service sector in places where it is exercised. The same study also shows that recreational fishing is largely the domain of small-scale concerns operating in coastal areas and involves 10% of the total fisheries production in the area.

The research [11] aimed at collecting long-term data on the characteristics, trends, catches and impacts to fish populations of the recreational shore sport fishery at the national level. The study showed that (among others) recreational fisheries need to be taken into account when considering conservation measures for national, regional and global fisheries management.

Lucrative alternative career options for young people

For years, the fishing industry has experienced dwindling returns. This trend has countered efforts to encourage young fishers into the sector, who would rather turn towards more secure industries for employment or to make a living. Furthermore, Malta has experienced an unprecedented economic growth, with unemployment at record lows dropping to 3.4 % in late 2019 [12].

In terms of Malta's economic performance, the European Commission's Country Report for Malta also shows record annual real GDP growth rates of close to 7.8% between 2014 and 2018 [13]. Better employment opportunities, working conditions, job security and career prospects in other sectors could result in a poor perception of employment opportunities in the fisheries sector leading to a decline of young fishers entering the market.

Degradation of the marine environment and its impact on the industry's economic activity

Malta's *Water Catchment Management Plans* pursuant to the EU Water Framework Directive 2000/60/EC and Malta's *Programme of Measures* pursuant to Article 13 of the Marine Strategy Framework Directive 2008/56/EC, take into consideration a number of pressures and threats in Malta's coastal and marine environment, comprising but not limited to, the physical restructuring of the coastline or seabed; extraction of living resources by the fisheries industry; marine aquaculture farms; sea transport; unsustainable waste practices as well as other activities related to tourism, leisure and recreational / entertainment activities near the coast.

Biological pressures such as the introduction/ spread of non-indigenous species; the extraction of, or mortality/injury to wild species; physical pressures and impacts related to the loss/disturbance of the seabed; and hydrological changes have the potential to adversely impact the marine environment. These adversities may be further compounded by nutrient/organic enrichment, contamination, litter, underwater noise and climate change.

The Updates to Articles 8, 9 and 10 of the Marine Strategy Framework Directive (2008/56/EC) in Malta's Marine Waters [14] indicates that the expected loss in the output generated by the Maltese economy (as a consequence of the degradation of the marine environment) is assumed to amount to 4%. The same report notes that environmental degradation is seen to be most harmful to the fishing and aquaculture sector, with the estimated loss in output to be of 6.5% when observed by unit of economic activity.

Marine Litter, Loss of Biodiversity & Ecosystem Disruption

Within the context of the EU, it is estimated that between 80% to 85% of marine litter, measured as beach litter counts, is plastic, with single-use plastic items representing 50% and fishing-related items representing 27% of the total [15]. A significant proportion of the fishing gear placed on the market is not collected for treatment. Single-use plastic products and fishing gear containing plastic are therefore a particularly serious problem in the context of marine litter, and pose a severe risk to marine ecosystems, to biodiversity and to human health and damage activities such as tourism, fisheries and shipping [16].

Unfavourable conditions in the marine environment can cause habitat degradation and depletion of ecosystems that can lead to loss of marine biodiversity [17]. Weaknesses in this regard and related impacts on marine ecosystems, with regards to litter in the marine environment have been identified as in need of address through measures in the draft Malta's *Conservation Objectives & Measures: For Malta's Marine Natura 2000 sites (2021)* [18] and the *MSFD Programme of Measures*.

[1] European Commission, Common Fisheries Policy, Mediterranean Sea.

https://ec.europa.eu/fisheries/cfp/mediterranean en

- [2] European Commission, 2016, COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT AND THE COUNCIL Consultation on the fishing opportunities for 2017 under the Common Fisheries Policy [COM(2016) 396 final]. Retrieved from https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52016DC0396&from=EN
- [3] Mediterranean Sea. European Commission Fisheries https://ec.europa.eu/fisheries/cfp/mediterranean_en
- [4] STECF-21-16 on Assessment of balance indicators for key fleet segments and review of national reports on Member States efforts to achieve balance between fleet capacity and fishing opportunities
- [5] State of the Environment Report (ERA;2018). https://era.org.mt/en/Documents/Chapter3_ClimateChange-26 Nov 2018
- [6] Ibid
- [7] Ministry for the Environment, Climate Change and Planning (2021). Malta Low Carbon Development Strategy.
- [8] TVM News Article (January 2108) Recreational fishing under scrutiny by European Union.

https://www.tvm.com.mt/en/ news/recreational-fishing-under-scrutiny-by-european-union/

- [9] Ministry for Agriculture, Fisheries and Animal Rights, Malta (2022) Annual Report on efforts to achieve a sustainable balance between fishing capacity and fishing opportunities for the year 2021 in accordance with Article 22 of Regulation (EU) No 1380/2013 on the Common Fisheries Policy.
- [10] First Central Mediterranean Scientific Field Study on Recreational Fishing Targeting the Ecosystem Approach to Sustainability (2019). Sandra Agius Darmanin and Adriana Vella.

https://www.frontiersin.org/articles/10.3389/fmars.2019.00390/full

- [11] Ibid
- [12] NSO Newsrelease- Unemployment Rate: April 2020. Retrieved from

 $https://nso.gov.mt/en/News_Releases/Documents/2020/05/News2020_089.pdf$

[13] Malta Country Report 2020 (EU Commission, 2020).

https://ec.europa.eu/info/sites/info/files/2020-european_semester_country-report-malta_en.pdf

[14] https://era.org.mt/wp-content/uploads/2020/06/MSFD-Art.-17-Update-Malta_FINAL.pdf

[15] EU Commission, Our Ocean Seas and Coast, Descriptor 10 Marine litter.

https://ec.europa.eu/environment/marine/good-environmental-status/descriptor-10/index en.htm

[16] Directive (EU) 2019/904 of the European Parliament and of the Council of 5 June 2019 on the reduction of the impact of certain plastic products on the environment.

https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019L0904&from=EN

[17] Ibid

[18] Environment and Resources Authority (2021), Conservation Objectives & Measures: For Malta's Marine Natura 2000 sites 2021. https://era.org.mt/wp-content/uploads/2021/07/MPA-Conservation-Objectives-Measures-2021-including-annex-Final_reduced-size.pdf

Identification of needs on the basis of the SWOT analysis and taking into account the elements set out in Article 8(5) of the EMFAF Regulation

Taking into account the strengths of the sector and the opportunities that currently exist:

There is the need to prioritise SSCF support as this segment represents 93% of the Maltese fleet.

There exists the opportunity to take advantage of fishers' experience of local waters in order to preserve, transfer knowledge and skills in the sector and increase social dialogue with key stakeholders with the aim of improving sustainability of the sector. Linked to this is the opportunity to take advantage of the fact that the sector is predominantly artisanal, and the local waters comprise a wide variety of fish species.

The SWOT undertaken shows that there is increased need for the conservation and restoration of marine ecosystems which could include support related to the enhanced management, restoration and monitoring of marine Natura 2000 sites.

Improved coordination between Member States and/or national authorities and better systems for control and enforcement and data collection. This is required in order to implement a Union of fisheries control system as well as data collection, including support for scientific advice in line with the CFP.

Efforts towards intelligent fishing and low carbon fishing will further contribute to sustainability in the sector. Moreover, the industry must consider increased gear specificity and targeted sustainable fishing practices that are environmentally responsible and will preserve biodiversity and marine ecosystems.

Taking into account the strengths of the sector and its threats:

It is necessary to create new streams of income for fishers as well as to provide support to employability and labour mobility in coastal communities which depend on fishing and aquaculture. This should include diversification within fisheries into other sectors of the maritime economy. With individuals seeking more lucrative alternative careers, such efforts would increase the attractiveness of the sector and encourage the employability of young fishers. The consultation process also converged on the need to further invest in monitoring and control means, including electronic monitoring and reporting tools for small-scale fishing vessels.

Further research efforts (such as through floating laboratories) and with the direct involvement of fishers is another opportunity to involve key players in the sector, increase communication and engagement with the competent authorities and enhance collection of scientific data.

The review of the SWOT, with a focus on the opportunities and weaknesses of the sector highlights the need for:

Increased investment in the safety at sea and in harbour is necessary, in particular securing local fishers' safety as well as potentially alleviating the costs caused by accidents and facilitating the implementation of the landing obligation.

In relation to safety, control and enforcement at sea, these play a fundamental role as highlighted in the EMFAF Regulation. In this regard further investment in control and enforcement are therefore considered as essential.

In relation to control and enforcement, there is further scope for investments to target the DFA's governance capacity and efficiency in managing the fisheries and aquaculture sectors, also in relation to data collection obligations.

The introduction of new rules and regulations governing fishing activities in line with the new Control Regulation, the CFP and ancillary regulations, necessitate further investments in technological resources, means of control including patrol vessels, software and equipment. In this respect, the need to upgrade the current Vessel Monitoring System (for vessels over 12) and implement the system on all vessels over 10

metres should be addressed.

The SWOT also identified the need for further investment in human capacity and the provision of training. Here training targeting both public officials and fishers/ operators ought to be considered. In terms of the former, there is the need to further equip such target audience with skills and knowledge to transpose and enforce legal obligations as well as enhancing awareness amongst stakeholders in the fisheries and aquaculture sectors on the implementation of the CFP and related rules. The latter could benefit from training in commercial boat handling, as well as (but not limited to) technical / logistical support.

These needs are also in line with those outlined in the EC's Sea Basin Analysis (2020) on enhanced data collection, traceability, monitoring, control and enforcement requirements notably Challenge 1- Ensuring a sustainable management of natural resources, Challenge 2- Improving enforcement and control of fisheries and the provision of data and Challenge 3- Ensuring a balanced socio-economic outlook for the fisheries sector and strengthening resilience.

Research is another aspect that has been highlighted extensively in this report and also links with the importance of data collection for the sector and authorities to be in a position to take more informed decisions and consequently be more efficient and effective overall. Here, investments that seek to address the impact of alien species and innovative research project/s to assess local stocks of selected commercially important coastal fish species are of relevance.

Furthermore, it may be opportune to consider investments targeting on board fishing vessels aimed at improving health and safety as well as better working conditions which include port and landing infrastructure as well as addressing limited berthing capacity.

Further assistance to fishers is required in relation to EU related policies, the management of seas and coastal areas, and assistance with EU related funds. Such a gap was also identified during the review of the 2014 - 2020 programming period where it was noted that fishers could have benefited from advisory services in relation to strategic planning and diversification that can lead to increased efficiency and profitability.

The need to reverse the trend of an aging industry and the provision of an adequate quality of life for the fisher is also evident.

Efforts that focus on innovation, infrastructure and diversification would enable the fisher to be more competitive and in so doing increase income. Likewise, adopting more fuel-efficient vessels, engines & practices, including the adoption of renewable energy resources, to reduce fuel consumption and emissions could be considered. Efforts relating to the sustainability of the sector are encouraged and hence studies /

investments relating to gear selectivity and the uptake of same are deemed beneficial.

These actions would have a positive ripple effect on the sector, with due consideration to the environment and also on maintaining fishers in employment and potentially encouraging young fishers to enter the sector.

Related to the above is the need to better understand the economic and social status of communities through such research as community profiles that would provide a more holistic approach to understanding fishing communities in Malta, and the fisheries sector in general.

The need for further conservation measures is also highlighted noting the weaknesses and opportunities outlined and building on 2014-2020 EMFF experience on temporary cessation measures applied on the swordfish fishery.

Mitigating measures addressing marine litter include: Identification and mapping of areas with accumulated litter on the seabed, investment in infrastructure to enable the collection and adequate disposal of marine litter/discarded fishing gear; Establishing collaborations and compensation schemes for marine litter collection and increasing awareness as also noted in *Malta's Conservation Objectives & Measures:* For Malta's Marine Natura 2000 sites (2021) [1].

In addition, as noted also in the above-mentioned document, the need exists for actions targeting resilience and the green transition aiming to ensure and maintain good environmental status in line with Article 1(1) of Directive 2008/56/EC whilst also aiming to enhance the management, restoration, surveillance and monitoring of Natura 2000 areas.

This especially takes into consideration the needs identified in ERA's Conservation Objectives & Measures For Malta's Marine Natura 2000 sites (2021) whereby it is noted that "the designation of protected areas (SACs and SPAs) needs to be coupled to the implementation of management processes targeting the achievement of conservation objectives for the listed habitats and species" [2].

[1] Environment and Resources Authority (2021), Conservation Objectives & Measures: For Malta's Marine Natura 2000 sites 2021.
[2] Ibid.

2.Fostering sustainable aquaculture

Strengths

Well established entities

activities, and processing and marketing of fisheries and aquaculture products, thus contributing to food security in the Union

Since its introduction in the late 1980s, the aquaculture sector has grown from strength to strength and is today deemed to be a valid economic sector with a growth potential.

The two main sectors operating within the aquaculture industry are: Tuna penning (which contributed for 91% to the value added of the Maltese aquaculture industry in 2020), and the farming of "closed cycle species" (CCS) such as sea bream, sea bass and meagre, that are cultured from eggs produced in hatcheries (8% of the value added of the Maltese aquaculture industry in 2020). 1% of the value added of the Maltese aquaculture industry in 2020 is coming from other output/revenue.

Industry growth occurred notwithstanding increased competition, particularly from non-regulated countries which resulted in an uneven playing field that placed a strain on the local industry. Also, thanks to the previous OPs, aquaculture entities have invested in order to modernise and remain in the forefront in their field of competence.

Local entities strive to remain competitive and the solid international networks they have managed to build has in the past, enabled the sector to prosper. Notwithstanding the limitation presented by the local market, the entities have been capable of building solid international links, with the vast majority of produce currently being exported.

The fact that most entities are well established has ensured that they were able to weather the storm when adversities ensued. While output in 2019 and 2020 declined from 2018, a net operating surplus of about €29 million was recorded in 2020[1].

Producers Federation

Of the six (6) registered aquaculture producers, five (5) have teamed up to form the *Maltese Federation of Aquaculture Producers* - a federation that represents BFT farming. One registered producer is not involved in tuna farming. The above evidences the small scale of the local aquaculture sector with nonetheless 83% forming part of the said federation. The Federation is a member of the Federation of the European Aquaculture Producers (FEAP) and a founding member of the Bluefin Tuna Commission within FEAP.

In the MNPSA, one particular action focuses on the concept of encouraging future small-scale aquaculture producers to form a cooperative or federation. This factor, foreseen to be implemented outside of the scope of EMFAF, shall potentially contribute to strengthen, empower and increase the sustainably concept of such economic operators. Within this context, whilst acknowledging the importance of the role of POs, in view of the nature and small size of the sector in Malta, direct EMFAF support is not foreseen.

Impetus towards R&D&I

To ensure that Malta is well equipped to facilitate the research, development and innovation needed, as outlined in the MNPSA, Government intends to set-up a new aquaculture research centre within the planned Sustainable Development Hub which will be equipped with aquaculture analytical testing facilities. This centre, which is foreseen to be implemented outside the scope of this Programme, will have great occupational potential to support the planned expansion of Malta's aquaculture sector by promoting the development of skills for evaluating the nature and impact of bio-ecological interactions between species that are directly or indirectly affected by aquaculture and the importance of these for sustainable and responsible aquaculture management. Such efforts will be in synergy with actions fostering innovation under other funds, namely Horizon Europe and ERDF, whereby support for enterprises, investment in R&I infrastructures and support for European Partnerships is foreseen.

Experienced Offshore aquaculture

The size limitations of the Maltese Islands do not favour land-based fattening installations. However, the existence of a relatively larger maritime space favours offshore marine installations. Indeed, Malta is the largest tuna producer in the world, aided by its favorable position on tuna migratory routes and by the expertise in operating successfully offshore aquaculture.

Tuna is deemed the most feasible to farm in offshore zones outside the 50m/1nm limit (precisely at 6km/3.2nm away from coast). In this respect, the experienced offshore sector provides scope for expansion and greater economies of scale with the potential of continuing to play a major role in BFT.

Advantageous geographical position (for BFT)

The geographical position of Malta plays a beneficial role for the tuna industry. It's location in the middle of the Mediterranean Sea, which results to be a good position for the migratory route of wild stocks of Atlantic BFT, shortens the towing time of live tuna from fishing grounds to the farming sites.

Sheltered bays and good water quality suitable for aquaculture production

The Maltese coast lines, which present numerous sheltered bays, together with a good water quality, offer good sites suitable for CCS aquaculture production.

Management of Aquaculture zones

The eventual establishment of an Aquaculture Zone in the South East of Malta saw the transformation of the operations management model from that of individual farms to one involving the potential of grouping a number of different operators. The existing cage sites are in approved maritime spaces that cater for the minimisation of user conflicts and thereby acknowledged as sites suitable for aquaculture

development [2]. From a maritime spatial planning perspective, a national board is tasked with addressing related matters noting the importance of better utilisation of space.

Socio-Economic Value

The aquaculture industry has considerable socioeconomic value and potential to contribute in several ways including to the overall diversification of the economy, especially in primary food production, and serving as a valuable provider of fish for the local retail and foodservice sectors. As also noted in the Farm-to-Fork strategy and the *Malta MedFish4Ever Ministerial Declaration* ensuring food security and availability of affordable food is critical. Furthermore, the sector provides valuable export earnings and contributes towards the EU trade deficit for fisheries products.

Multiannual National Plan for the Development of Sustainable Aquaculture 2022 - 2030

Malta's Plan is based on EC's Strategic Guidelines for a more sustainable and competitive EU Aquaculture (2021 - 2030) with the aim of addressing the challenges and opportunities of the EU's aquaculture sector taking into consideration the needs of the local sector, namely: i) building resilience and competitiveness; ii) participating in the green transition; iii) ensuring social acceptance and consumer information; and iv) increasing knowledge and innovation.

Malta has the vision of upgrading and expanding the aquaculture industry with the aim of creating jobs and opportunities that are green and sustainable, and a market climate that is viable and attractive for small to medium-sized enterprises and budding start-ups [3].

The MNPSA includes the following actions:

- Commercial Aquaculture Development Scheme, directed to research and business development, to support capital investment by aquaculture enterprises, mostly SMEs, to sustainably grow production and value, to reduce the impact of aquaculture on the environment and to improve safety and working conditions in aquaculture sites.
- Measures, mostly in the form of grants and tax credits, in coordination with Malta Enterprise, which is the country's economic development agency, for potential start-ups and business entities.

Regulatory & Administrative Procedures

In 2017 Malta introduced two new policies to regularise the application and operational processes of new and existing aquaculture enterprises (S.L. 425.12) and to regulate the harvest of the BFT (S.L. 425.13) [4].

The MNPSA also targets to enhance the administrative and regulatory capacity of the Aquaculture Directorate in relation to control, offences, penalties and enforcement measures, compliance and reporting obligations by making the necessary amendments in the current legislations and transposing the existing SOPs into law.

Government is committed to explore ways on how to simplify and facilitate procedures and review the National Aquaculture Policy with due consideration also to providing support for fish farming entrepreneurs and facilitating the successful application of organic aquaculture in line with the EU Organic Action Plan.

Aquaculture Board

As indicated in the *MNPSA*, and taking on the EU aquaculture guidelines, Malta intends to set up an Aquaculture Board, that brings together public authorities with responsibilities for aquaculture to facilitate the planning, licensing and monitoring of aquaculture activities in a timely manner. This public entity will also encourage the involvement of relevant stakeholders at various stages as deemed necessary. Integration efforts are deemed highly opportune to address local consumer and environmental concerns and aid mitigate user conflicts while facilitating participation in local decisions.

Multiannual Aquaculture Strategy for Malta

The Aquaculture Strategy for the Maltese Islands Towards Sustainability 2014 – 2025 presents a long-term path towards growth and investment in aquaculture and pinpoints the direction as to how the sector can develop, what opportunities for growth exist and how these can be achieved through operational parameters.

In line with the EU's Strategic Guidelines for Sustainable Development of EU Aquaculture, the Strategy provides the framework for improved integration efforts in decision making related to maritime spatial planning and environmental management. It also lays the foundations for improved action by all concerned, from Government's side to enhance its enabling role as well as its regulatory functions as well for operators who have a blueprint up to 2025 indicating what is expected of them if Malta is to become an integral player in sustainable aquaculture in Europe and the Mediterranean. The focus on a coordinated approach that engages all parties is congruent with the strategic guidelines for the sustainable development of EU aquaculture.

Awareness raising Campaigns

Promotional campaigns have been implemented under the EFF 2007 - 2013 and the EMFF 2014-2020 OPs, seeking to increase per capita fish consumption whilst also creating awareness on the health benefits of fish consumption and enticing the consumption of currently under-utilised fish species. An initiative relates to *Nesploraw Flimkien it-Teżori tal-Baħar!/ Exploring the Treasures of the sea together!* campaign

funded through EMFF. Post campaign research data shows that 71% of respondents consumed fish once a week or more often, as opposed to 66% prior to the campaign. The same study highlighted that 88% of Maltese households consume fish. Furthermore, about 18kgs of fish is consumed per capita per year [5].

As noted in the *Special Eurobarometer 515 Report* [6], about 81% of Maltese respondents participating in the study on EU Consumer habits regarding fishery and aquaculture products reported that they eat fresh products (including live) at least once a month.

- [1] STECF- The EU Aquaculture Sector Economic report 2020 (STECF-20-12), EC.
- [2] Ibid
- [3] Malta's Multiannual National Plan for the Development of Sustainable Aquaculture 2022 2030.
- [4] In 2020 amendments were issued to ensure clarity in the interpretation of the law.
- [5] Post campaign research for the department of fisheries and aquaculture promotional campaign EMFF 4.3.1 Exploring Together the Treasures of the Sea! (Research conducted by Misco in Q1 and Q4 2018).
- [6] EC (2021). EU Consumer habits regarding fishery and aquaculture products.

Weaknesses

Staff turnover

Staff turnover adversely effects entities operating in the sector in view of the resultant loss of knowledge, skills and expertise. For the private sector, this shortage may have a direct impact on the revenue and profitability of entities operating in the sector. In relation to the public sector, staff turnover will impact the timely implementation of actions targeted by Malta's *MNPSA*.

Small domestic market

The relatively small number of buyers in the local market and locals' adverse perception of aquaculture is a weakness that requires operators to turn to international markets where there is demand.

Furthermore, there is a lack of marketing strategies aimed at promoting the use of sustainable fisheries (farmed or fished) resulting in insufficient awareness of different fish species and products by consumers and unsustainable practices. Related to this is the lack of awareness about the importance of the Farm to Fork concept and that farmed fish and seafood generate a lower carbon footprint than animal

production on land.

Poor public perception of aquaculture

The rapid growth of intensive aquaculture production has raised concern, with the environmental impact caused by the industry being one of the primary factors adversely effecting locals' perception of the industry, largely due to issues associated with tuna farming in particular the use of baitfish and the associated smell and oil slicks that can result.

Disposal of offal has also occasionally been an issue. Even though incidences may be infrequent, they have a disproportionate negative effect on public opinion, and damage the image of the aquaculture industry as a whole. To-date, the industry has made significant efforts to use the offal produced by the tuna sector for value-added production of fishmeal and fish oil. These activities are commercial and operational and although the effect that this has on public perception needs to be determined, it helps to reduce the volume of offal that is discarded. Nonetheless, it is worth noting that there is also a view, for example in the diving community, that impacts all farms, including those for seabream and seabass, on water quality and/or benthos are unacceptable [1].

It is to be noted that transparent environmental monitoring plans and reporting and collection by competent authorities of data on environmental indicators may positively contribute to improve social acceptance of the sector as also highlighted in the *Commission's Sea Basin Analysis*.

Other factors which also adversely impact locals' perception relate to human health and social issues.

Research on the subject shows that apart from objective knowledge, personal experience, preconceived ideas, and the demographic and regional context strongly influence perceptions of aquaculture. The strongest consumer concerns, however, are those relating to health and safety aspects [2].

Marketing strategies and education initiatives are envisaged in the MNPSA to improve public perception, build trust and address issues on food security and to aid consumers understand and appreciate the health and environmental benefits of aquaculture products intended for human consumption.

Dependence on imports resulting in high intermediate consumption costs

The relatively small size of the industry does not provide the necessary economies of scale for local entities to embark on financially viable projects that focus on the production of equipment and raw materials that are necessary for the industry to operate. As a consequence,

operators in the sector have to import almost all equipment, feeds, and juvenile fish supplies.

This places local aquaculture entities at a disadvantage when competing with international entities in view of the increased costs pertaining to such imports. In this respect, it should be noted that in accordance with the latest NSO data, 2020 saw a 21% increase in expenses related to fish feed supplies amounting to 78% of total production costs over 2019 [3]. This is expected to be further exacerbated by the impacts of the military aggression of Russia against Ukraine causing a significant disruption of markets with strong increase in fish feed prices that adds to current soaring prices for energy, or to shortages of key raw materials.

Price takers

Related to the lack of competitiveness caused from the need to purchase from overseas, and the associated transport costs, another weakness that arises from such a situation is the power suppliers exert on purchasers. Suppliers have considerable power and have the ability to place pressure on local aquaculture businesses by raising prices, lowering quality, or reducing availability of their products.

Lack of Investment in non-food aquaculture development

As indicated earlier the aquaculture sector mostly focuses exclusively on two main streams: Tuna penning, and the farming of "closed cycle species" (CCS) such as sea bream, sea bass and meagre.

To date, the opportunities related to non-food aquaculture development are still being explored.

Limited diversification, research, and innovation

There has been limited change in the operations of the sector over the past years - be it in terms of processes; or the modernisation of aquaculture facilities related to research and equipment or focus on land-based Recirculating Aquaculture Systems (RAS) (more details provided below); or the focus on adding-value to fishery and aquaculture products targeting alternative sectors/ markets - such as non-food aquaculture development [4] (highlighted above) or the consideration of new species, potentially also through collaboration/partnerships.

R&I play an important role with considerable potential for the sector's competitiveness at a national and regional level as highlighted by both *Malta's MNPSA 2022-2030* and *Malta's Smart Specialisation Strategy 2021 - 2027*.

Research and development (such as, but not limited to new species, alternative feeds solutions, alternative protein sources for feed development, and domestication of aquaculture species) play an important role for the industry to establish itself as being at the forefront

when it comes to innovation. To date the initiatives in this regard have been limited. As a result there is considerable reliance on the limited national number of species currently available.

In relation to research, investments in equipment for the conduct of innovative research and studies has also been limited.

To date, the amount of processing is minimal. Improvements to the industry's value chain can contribute to safeguarding the sector and its' sustainability, both in terms of fish stocks and return on investment for the fishers.

Current market conditions are restricting the livelihood opportunities for small-scale fishers and market traders. The constraints to market access include weak bargaining power and poor marketing strategies, monopolies among traders, limited product-holding infrastructure, difficulties meeting quality standards and lack of market information.

The current modus operandi is limiting fishers' income. There is the need to find ways to address these issues in order to increase the return received by fishers and to better sustain fisheries resources [5].

Promoting value added could result in higher profits, more stable market conditions, job creation, diversification of products and markets, and down-stream economic benefits through industry support sectors.

Linked to the above is the provision of products that meet customers exigencies for convenience. Any packaging in this respect ought to support the use of innovative and sustainable packaging solutions using environmentally friendly, re-usable and recyclable materials, and contribute to food waste reduction.

Limited investment in land based recirculating aquaculture systems (RAS)

To date limited investment has been undertaken locally in RAS.

A report on recirculating aquaculture systems by World Fishing and Aquaculture analyses the ever-increasing investment in recirculating aquaculture systems demonstrating that there is scope to further consider the possibilities proposed by RAS[6].

RAS have been a part of the seafood landscape for several years, with a relatively low success rate to date, though the latest wave of land-based production innovations is being primed to change the face of fish farming.

Among the potential advantages of land-based RAS are cost effectiveness and reduced environmental impact. Indeed, almost all the environmental problems linked to aquaculture are addressed in closed land-based systems, such as alien species, spreading of pollutants/medicine/disease and nutrients losses. Other identified advantages, among others, relate to the optimal growing conditions, consumption optimisation, biosafety health, and production monitoring[7]. It is envisaged that under the new Programme such initiatives will aim to build on efforts undertaken during the 2014-2020 period.

Reduce use of antimicrobials and limited investment in organic aquaculture

The shift towards more sustainable practices is ever more necessary in view of the 2030 targets for sustainable food production, more particularly reducing the sales of antimicrobials by 50% in aquaculture. Furthermore, there is the target to promote and encourage conventional producers to move to organic production and organic certification, for a significant increase in organic aquaculture.

This is a threat for the local sector in view of local entities' current reactive approach in terms of initiatives with limited investment in innovation. There is the need for local entities to be prepared and take a proactive approach and seek ways and means of how to convert such exigencies into opportunities.

- [1] An Aquaculture Strategy for Malta: Preparatory study and recommendations prepared for the Ministry of Resource and Rural Affairs, Government of Malta Final draft report March 2012.
- [2] Food and Agriculture Organisation of the United Nations, Globefish-Information and Analysis on World Fish Trade, Preconceptions and Misconceptions of aquaculture: a global view.

http://www.fao.org/in-action/globefish/fishery-information/resource-detail/en/c/379676/

- [3] Newsrelease Aquaculture 2020. National Statistics Office November 2020.
- [4] In line with the Aquaculture's Strategy, there is scope to further investigate the potential for the development of non-finfish aquaculture and develop environment friendly or integrated aquaculture systems (such as pharmaceutical, cosmeceutical, ornamental and nutraceutical applications, as well as biofuel production, conservation efforts and academic purposes, among others).
- [5] Enhancing small-scale fisheries value chains in the Mediterranean and Black Sea. Thematic session IV part 1. Mohamed Naji; http://gfcmsitestorage.blob.core.windows.net/contents/SSF/2013/Documents/FullVersion/BPIV_Part1.pdf
- [6] World Fishing and aquaculture, Informing the global fishing trend since 1952, Is RAS ready to shine? (2020).

https://www.worldfishing.net/news101/Comment/analysis/is-ras-ready-to-shine

[7] A guide to Recirculation Aquaculture. An introduction to the new environmentally friendly and highly productive, closed fish farming

systems. Jacob Bregnballe. FAO (2015) http://www.fao.org/3/a-i4626e.pdf

Opportunities

Identify any small-scale aquaculture operators

It would be opportune (as also highlighted in Malta's MNPSA) to identify any small-scale aquaculture operators, which are not yet registered.

Subsequently, and dependent on the outcome, undertake integration efforts to facilitate collaboration between the Government and relevant stakeholders when it comes to the development of the aquaculture sector. The operators would benefit from such synergies in terms of cost reduction, access to EU funding programmes, best practice and sharing of ideas and resources.

Utilise advances in technology, research and innovation

The growth of sustainable aquaculture is imperative to easing pressure off wild fisheries populations. The Maltese aquaculture is a valid economic sector with a positive growth potential and its expected expansion is based on the potential identification of new aquaculture zones to be used for CCS and other novel species and on reaching the CCS production target of 5,000 tonnes, in addition to the tuna farming production, until 2030. It is expected that the industry will increase direct and indirect jobs up to 25% by 2030 with a Gross Value Added of €70 million to the Maltese economy.

In this regard, there has been a lot of innovation and technology developed recently geared toward the longevity and sustainability of the industry with technology identified to be one of the opportunities to enable the sector to diversify [1].

Such a stance is also congruent with Malta's MNPSA 2022-2030 that identifies as one of its pillars: Increasing competitiveness through R&I.

The Plan specifically emphasises the need for research "to ensure sustainable development and innovation in aquaculture pertinent to the areas of food, climate, environment and economic development - Farm to Fork, Circular Economy and Blue Growth".

Opportunities in the biotechnology field (turning fish waste into a resource and producing new commercial products). Such innovation/s would result in a positive ripple effect on the environment through the reduction in the volume of fish waste being dumped at sea or not being reused and a greater implementation of circular economy protocols [2].

Amberjack production presents a great opportunity for the sector in view of Malta's advantages in the knowledge of breeding techniques of

this species. Nonetheless, focus should not revolve exclusively on this species and research on other species ought to also be carried out.

In this regard there could be opportunities for applied research and regional cooperation through synergies with other endeavours being undertaken such as that with *Malta's Smart Specialisation Strategy*.

In this regard, transnational cooperations can be established between industry, scientific and development bodies in order to be able to make green alliances and allow innovative products and investment in innovative aquaculture technologies and make trials of such technology under commercial conditions to improve performance and competitiveness, whilst also assisting measures to improve long term environmental sustainability.

Similarly, the sector may benefit from research endeavours already undertaken, taking also into consideration complementarities with other funding streams [3] addressing Green Deal priorities and R&I on food, bioeconomy, natural resources, agriculture, fisheries, aquaculture and the environment; as well as focus on the use of digital technologies and nature-based solutions for agri-food.

In relation to R&I, the EU is instigating research relating to microbiome, food from the oceans, urban food systems, as well as increasing the availability and source of alternative proteins such as plant, microbial, marine and insect-based proteins and meat substitutes.

Notwithstanding its limitations (such as: limited species cultured with few farms specialising in closed-cycle species and small workforce base) the local aquaculture sector has managed to remain competitive, investing further in R&I.

Furthermore, such efforts could offer opportunities to develop environmentally friendly practices and/ or sustainable initiatives.

International best practices, EU Initiatives & Networks

Latest available data on the sector evidenced that during 2019 the industry registered a net operating loss of €29.7 million. Whereas this trend seems to have changed in 2020 in terms of fish sales, output in the aquaculture industry remains significantly lower than that recorded in 2018 (about 25% less) [4].

Consequently, the sector needs to seek ways and means to remain competitive. There is the opportunity for the sector to gain insight from best practices adopted in other Member States that could be beneficial to the local aquaculture industry and/or entities operating within this sector.

By way of example, the Farm to Fork Strategy, which is at the heart of the European Green Deal, maps out a new, sustainable and inclusive growth strategy to boost the economy, improve people's health and quality of life. Within such a framework, "the Commission will ensure tailored solutions to help SME food processors and small retail and food service operators to develop new skills and business models, while avoiding additional administrative and cost burdens. It will provide guidance to retailers, food processors and food service providers on best practices on sustainability. The Enterprise Europe Network will provide advisory services on sustainability for SMEs and foster the dissemination of best practices" [5].

Focus on the algae industry

Malta's Multiannual National Plan for the Development of Sustainable Aquaculture 2022-2030 identifies the need to identify opportunities leading to market development and possibly to further diversification.

Within this context, the Farm to Fork Strategy indicates that the algae industry is an opportunity worth tapping into "as algae should become an important source of alternative protein for a sustainable food system and global food security" and that the Commission "will also set out well-targeted support for the algae industry..." [6].

Likewise, Malta's MNPSA 2022-2030 specifically notes, "Considering the increased demand on algae and algae-based products for nutritional purposes, pharmaceutical products, biofuels, and others. Malta will be evaluating the potential of cultivating algae as highlighted in the Farm to Fork Strategy and in the Aquatic Advisory Council recommendations" [7].

Europe-wide efforts on Communication on EU Aquaculture as well as efforts at local level

The envisaged EU wide communication campaign involving all stakeholders in relation to EU Aquaculture is an opportunity to further drive home the message to support local aquaculture in line with the Green Deal that promotes the short supply circuits.

Likewise, at a local level, efforts have been embarked upon to improve the image of aquaculture. These include:

- 1. Addressing the negative impact of BFT production through changes in baitfish feeding practices;
- 2. The adoption of the Code of Conduct for European Aquaculture (published by the Federation of European Aquaculture Producers) ensuring the highest standard of quality food production while maintaining environmental integrity and consumers' demands; documented by the Aquaculture Operations Regulation LN 157/2017 [8].

Other efforts undertaken (as highlighted in *Malta's Multiannual National Plan for the Development of Sustainable Aquaculture 2022-2030*) that invariably positively impact individuals' perceptions on the sector relate to:

The utilisation of an independent entity to conduct a review of the Environmental Monitoring Programme twice yearly; and the considerations for the setting of environment quality standards in line with the environmental monitoring plan.

Moreover, the MNPSA also highlights the potential for enhanced integration efforts through the early involvement of local stakeholders in the planning of sustainable development of an aquaculture thus ensuring stakeholders` contribution within the Public Aquaculture Entity.

Build on lessons learnt from EFF and EMFF marketing strategies

There is an invaluable opportunity to build on lessons learnt in previous programming periods and continue to support Malta's fisheries and aquaculture sectors to foster sustainable fisheries and aquaculture, contribute to food security in the Union, restore and protect marine biodiversity, enable the growth of the sustainable blue economy and strengthen international ocean governance.

Tap into new markets

As indicated above, the sector's lack of profitability overall further highlights the need for entities to consider alternative ways to increase their output. In this regard, the island's geographic position in the middle of the Mediterranean and its close proximity to North Africa places local entities at an advantage should they seek to expand their network to other potential emerging markets of interest.

- [1] Planning for aquaculture diversification: the importance of climate change and other drivers. FAO technical workshop (2016).
- [2] Malta Council for Science & Technology (2021) Malta's Smart Specialisation Strategy 2021 2027.
- [3] Such as under Horizon 2020, for calls targeting the Green Deal priorities; Horizon Europe in relation to R&I on food, bioeconomy, natural resources, agriculture, fisheries, aquaculture and the environment as well as the use of digital technologies and nature-based solutions for agri-food.
- [4] Aquaculture 2020 News Release 210/2021 (NSO, 2021).
- [5] European Commission (2020). Farm to Fork Strategy. For a fair, healthy and environmentally-friendly food system.
- [6] Ibid
- [7] Seaweed I First General Recommendation January 2021 (AAC 2021-02).

[8] Malta's Multiannual National Plan for the Development of Sustainable Aquaculture 2022 - 2030.

Threats

Development of coastal areas

The increased development of coastal areas has affected the natural processes of coastal erosion and accretion and may have led to accelerated erosion and shoaling of sand, to the detriment of the existing coastal habitats as well as coastal uses, which could result in further threats to livelihoods and assets [1].

As a non-renewable resource, sustainable use of land is necessary, and it must be ensured that the various human activities and interventions which affect the natural and built environment are not detrimental to each other or to the natural and built environment.

With respect to coastal areas, two primary pressures that are threatening coastal areas relate to:

- Development along the predominantly urban coast the construction of wharves, quays, breakwaters, jetties and seawalls amongst other coastal infrastructure has modified the coastline for urban and/or marine related purposes. The natural element is very limited in this type of coastal environment; and
- Activities undertaken to improve the coast such as the number of maritime projects undertaken to refurbish and upgrade the existing port infrastructure.

Climate Change

A factor that poses a major threat to the industry relates to climate change.

The Strategic Environmental Assessment (SEA) report [2] shows the risks of climate change on the sector.

By way of example, warmer climate will result in increased frequency of water borne diseases and make the habitat amenable to new species that in turn could disrupt the prevailing ecosystem, particularly if invasive species arrive.

ERA's *State-of-the-Environment Report 2018* on climate change presents this subject in detail identifying key concerns due to an expected increase in sea surface temperature and sea level, together with an increase in storm surges, resulting in coastal floods, changes in alkalinity and salinity and increased pollution from freshwater and land-based pollutant runoff. Additional potential impacts include the impairment of the sea's ability to act as a sink for atmospheric carbon dioxide, and changes in general sea circulation. Changes in sea temperature may already have initiated with alternations in some marine communities becoming more evident. This includes the increased occurrence of

certain alien marine species normally associated with subtropical marine environments. Warmer waters could also threaten Posidonia oceanica meadows and result in a serious negative effect on biodiversity [3].

These changes in climate are and will continue to subject fish to different stresses and physiological effects, affecting growth and development, which may further increase their susceptibility to diseases and infections. Furthermore, veterinarians are also concerned about new and emerging diseases and parasitic infection [4].

A four-year research project run by Climefish [5] showed that one of the biggest challenges facing the future world-aquaculture industry is the access to proteins, minerals and omega 3 fatty acids for fish stocks as these were already fully exploited. With climate changes likely to also reduce the agricultural production of soy, corn and other ingredients, which constitute the main source of fish feeds, there is an urgent need for the aquaculture industry to search for innovative and sustainable resources to solve this urgent challenge.

As the adverse effects of climate change occur over a period of time, and are not instantly noticeable, a core challenge to aquaculture comes from understanding and anticipating the effects of gradual change as opposed to extreme events. A project shall be launched which shall be financed through EMFAF to specifically focus on these global phenomena.

Marine Litter and Pollution

According to a study by the French Institute for Sea Research and Exploration (Ifremer) [6], the Mediterranean Sea is the most polluted European sea.

A primary issue affecting all oceans relates to marine litter, where, within the context of the European Union, it is estimated that between 80% to 85 % of marine litter, measured as beach litter counts, is plastic. From this single-use plastic items represent 50% and fishing-related items represent 27% of the total.

Plastic pollution may cause risks to wild stocks and create potential health risks from harvested products. Marine litter can also result in economic losses to aquaculture producers (UNEP 2009) as a result of damage to vessels and equipment, removal of debris and staff downtime [7].

Competition from unregulated and International (Non-EU) Entities and decrease in Unit price

Results from the latest STECF aquaculture report (STECF, 2021) show that in Malta, the Gilthead seabream, which accounts for the 9% of total production volume, remains the lowest average price per kilogram. The trend in the prices of Gilthead seabream remains practically unchanged in Malta. In comparison, Turkey and Greece are the world Gilthead seabream leading producers with 34% and 25% of the volume and 29% and 28% of the value produced, respectively [8].

Low priced imported fish

As noted above, a primary threat to local entities relates to the cost of imported produce that is frequently outcompeting local landings, with the variance in economies of scale (compounded by the mergers and acquisitions that took place particularly in 2019 and the beginning of 2020). At the same time, bigger companies and international company groups drive hard price bargains all to the detriment of local entities.

Fraud

Food fraud is a concern that may jeopardise the sustainability of food systems. There is concerted effort at EU level to scale up the fight against food fraud. Enhanced traceability of food products can go a long way in assisting Member States, Europol, and other bodies in their efforts to combat such fraud.

Based on the Farm-to-Fork approach, at a local level, government intends to re-assess the current legislation to include regulatory guidelines for the control of aquaculture products with special emphasis on traceability and labelling claims such as for organic cultured produce [9].

- [1] State of the Environment Report. Environment and Resource Authority (2018).
- [2] Environmental Report Strategic Environmental Assessment of the European Maritime and Fisheries Fund (EMFF) Operational Programme (December 2014) PWC.
- [3] State of the Environment Report. Environment and Resource Authority (2018).
- [4] Climate change and impacts on aquaculture https://climefish.eu/climate-change-and-impacts-on-aquaculture/
- [5] A Project that is financed by the European Union's 2020 Horizon research and innovation Programme.
- [6] Déchets marins en Méditerranée : une hausse modérée et une mission en cours Retrieved from https://wwz.ifremer.fr/Espace-Presse/Communiques-de-presse/Dechets-marins-en-Mediterranee-une-hausse-moderee-et-une-mission-en-cours
- [7] Economic impacts of marine litter. KIMO (2009).
- [8] Scientific, Technical and Economic Committee for Fisheries (STECF) The EU Aquaculture Sector Economic report 2020 (STECF-20-12). EUR 28359 EN, Publications Office of the European Union, Luxembourg, 2021, ISBN 978-92-76-36192-3, doi:10.2760/441510, JRC124931.

[9] Malta's Multiannual Plan for the Development of Sustainable Aquaculture 2022 - 2030.

Identification of needs on the basis of the SWOT analysis and taking into account the elements set out in Article 8(5) of the EMFAF Regulation

The aquaculture sector faces a number of challenges (as highlighted in the SWOT), that necessitate it to consolidate its presence in its current international markets of interest, strengthen its presence in the local market and potentially also tap into other new markets (both with its current offering and through research and innovation).

Linked to the above, is the need for the sector to seek ways and means for increasing its competitiveness and resilience. It is necessary for the sector to seek new and innovative culture species (both for food and non-food) and systems that allow Malta to remain proactive and competitive. Another prerequisite for the sector to remain competitive relates to the need to improve access to, and if economically viable, local production of competitively priced inputs such as juveniles, feed, equipment including research-related equipment, and other materials thereby alleviating reliance on imported feed and fingerlings. Research efforts and other studies relating to the potential sustainability of such alternatives could aid in this regard. Linked to this is the need to cater for emerging needs in light of exceptional events causing significant disruption of the markets by compensation to operators of the fishery and aquaculture sector for their income foregone or additional costs.

Taking into account the ambitions of the green transition including the focus on innovative solutions, another area for consideration relates to organic aquaculture and algae species with the Farm to Fork Strategy specifically indicating algae as a primary focus that needs to be maximised by the sector. This need is congruent with related identified action to be targeted as outlined in the MNPSA on promoting and encouraging organic aquaculture and microalgae and macroalgae cultures to produce algae-based products for cosmetic, nutritional and application purposes, and as protein source in feed development.

The EU's intent to limit the use of antimicrobials is another area that will require industry players to act pro-actively so as to convert this into an opportunity, whilst maximising benefits that could derived from actions in this area.

Potential research related areas of focus identified in *Malta's MNPSA 2022-2030* linked to the green transition, resilience and innovation comprise:

- Research on BFT feed conversion ratios and growth rate. Such a project shall be financed via EMFAF.
- Studying and identifying low trophic level culture, such as algae and alternative fish feed.

- Research on the cultivation of aquaculture species, feed and rearing technologies.
- Research on improving the feed efficiency. Feed Conversion Factor and growth rates of farmed species, such as tuna, in order to maximise profit and lower the environmental impact.
- A project shall also be launched and will be financed via EMFAF funds to focus on the identification of alternative feeds, including algae species and the domestication and production of baitfish with the intention to mitigate dependencies of wild fish stocks as a protein source for the Aquaculture industry in Malta.
- Research to mitigate the impact of climate change.

The above demonstrates the sector's need not to remain static, and this could constitute a major threat to the industry's competitiveness and indeed survival in the medium and longer term. Consequently, there is the need for the sector to seek ways and means of increasing its competitiveness, productivity, and operational efficiency. In this respect, the development of RAS for niche high value species with local demand e.g., sea bass, sea bream, meagre, amberjack, and the like ought to be considered.

Taking into account both the industry's strengths and the threats it faces, this highlights the need for the sustainable growth of aquaculture which will take into account the adverse environmental impact of aquaculture on the marine environment.

Another area of focus relates to the need for marketing and awareness raising targeting both the fisheries and aquaculture sector. Past similar endeavours have proved beneficial. These efforts need to be twofold: aimed at raising locals' positive perceptions on the sector (in terms of sustainability and healthy eating) and on increasing awareness on Maltese fish species, their diversity, seasonality, and sustainability. In line with the Farm to Fork Strategy, awareness on the sustainability of the sector in terms of conservation and the limited carbon footprint of aquaculture need to be considered.

The ultimate aim is to enable fishers to be flexible in their approach and target seasonal as opposed to market-sought fish products which will reduce the impact of overfishing on the marine environment. This will enable fishers to diversify their catch and not remain reliant on the three main species. These efforts will also have a positive ripple effect on the recovery of stocks and the sustainability of the sector.

The EU's focus on aquaculture and organic aquaculture, in view of its positive implications on the Green Deal and EU's biodiversity strategy, represents an opportunity for the local sector to consider tapping into these areas. This approach could have a positive impact on the sector's attractiveness in terms of income, and employment retention.

Furthermore, there is the need to consider options for the processing of by-products or catches that cannot be used for human consumptions.

The strategy for the aquaculture industry has shown the need to undertake further efforts to enable Malta to become a centre for aquaculture expertise and a 'knowledge bridge' between the EU and MENA countries. This approach would invariably strengthen the local sector's competitiveness.

Sector support for the introduction of pioneering new-culture species (both for food and non-food) and innovative systems that allow the sector to remain sustainable, proactive, and competitive is required. This approach is in line with the strategy to promote aquaculture as a key maritime sector as well as one of the key areas of focus highlighted in the Aquaculture Strategy for the Maltese Islands – Towards Sustainability 2014 – 2025.

Furthermore, the European Green Deal makes reference to the need "to identify new innovative food and feed products, such as seafood based on algae". In relation to the latter, the Farm to Fork Strategy specifically mentions that "algae should become an important source of alternative protein for a sustainable food system and global food security".

In an ever-competitive industry, it is imperative that local entities strengthen their competitiveness, and seek ways and means to distance themselves, be it through the provision of innovative products, the notion of superior quality offering/s or by tapping into high value niche markets. Furthermore, it is equally important that entities do not miss out from access to potential markets of interest.

Another need that was also highlighted, and indeed forms an integral part of the *Aquaculture Strategy for the Maltese Islands – Towards Sustainability 2014 – 2025* and the *Multiannual National Plan for the Development of Sustainable Aquaculture 2022-2030* relates to ensuring a stronger emphasis on research. Linked to research is the need for actions that further encourage the industry to work within the limits of the environmental carrying capacity of the coastal zone and marine areas. Such limitations might include:

- Risk of accumulation of waste generated from fish and feed, with negative effects on benthic habitats, water quality and biodiversity as well as inshore waters;
- Growth in pathogens and associated diseases and, in the case of offshore cages, with added infection potential of sea flora and fauna;
- Over-fishing of wild fish as a feed source;
- Introduction of alien species; and
- Detracting impact on tourism and recreation due to close proximity.

This approach will ensure that the industry is operating effectively within the scope of national objectives for achieving and maintaining good environmental and ecological status of coastal and marine waters. Furthermore, research efforts could also address a major challenge that relates to the implementation of the Marine Directive that requires the attainment of the necessary scientific knowledge of the elements that define the state of the marine environment. These actions would also have a positive impact on the sustainability of this sector.

The need exists to monitor and reinforce the importance of labelling in relation to the sale of fishery and aquaculture products to enhance consumer green choices and also to possibly identify misleading information or fraud in line with the MNPSA 2022-2030.

Another area that should not be overlooked relates to the development of training and knowledge exchange of public sector officials in the field as noted in the *MNPSA*. This is all the more important in light of the above indicated needs, and the industry's strategic approach towards competitiveness through research and innovation. Integration efforts with the local communities in research endeavours and in the decision-making process are recommended. The need for enhanced involvement of the local stakeholders ensuring stakeholders contribution within the Public Aquaculture Entity, with the aim of improving resilience and sustainability of the sector is also reflected in the *MNPSA*.

With the objective of tackling the industry's weaknesses and threats, there is the need to:

Seek ways to better address the publics' poor perception of aquaculture as also linked to increased resilience and growth. Actions in this area could also contribute towards improving the image of the aquaculture industry and aid consolidate its place in the maritime growth planning.

3. Enabling a sustainable blue economy in coastal, island and inland areas, and fostering the development of fishing and aquaculture communities

Strengths

Organised and regulated sectors

Coastal land, as well as inshore sea space, is at a premium in Malta, and thus development of both is strictly controlled. The *Strategic Plan for the Environment & Development (SPED)* provides a number of objectives for development of the coastal zone and marine area, including identifying and designating predominantly 'urban' and 'rural' coastlines, seeking to maintain identified locations as strategic harbours for fisheries. This Plan is currently under review.

Moreover, although Malta does not have any producer organisations for the fisheries sector, there are two fishers' cooperatives and all Maltese and Gozitan professional fishers are affiliated to one or the other. These cooperatives offer various services to all professional and part-time fishers, such as fish sales (including exports), supply of flake ice, fishing tackle, bait and accessories, cold storage, insurance coverage, fish crate services and facilities for packing and processing of fish.

In relation to aquaculture, five out of the six registered aquaculture producers form part of the *Maltese Federation of Aquaculture Producers* which represents BFT farming.

These organisations contribute towards the sustainable development of the sectors bearing in mind, challenges encountered and the changing context.

Rich Natural and Cultural Heritage of the Marine Environment

As a small island state, Malta's coastal and marine environment is important due to its rich biodiversity and the ecosystem services it provides to support various coastal activities including fisheries. Furthermore, Malta's coastal and marine environment significantly contribute to its national identity being also a socio-cultural vital resource with direct implications on other sectors. The fishing industry for instance contributes significantly to the Maltese tourism industry, both in terms of provision of quality fish for consumption by tourists as well as the allure of the colourful traditional fishing vessels that have proved to be an important tourist attraction.

Malta's Integrated Maritime Policy (IMP) [1] & the Valletta Declaration [2]

In line with the EU's Integrated Maritime Policy drive towards a dynamic and coordinated approach to maritime affairs by enhancing the development of the EU's 'blue economy' while ensuring the health of seas and oceans. Malta's IMP vision is for Malta to be a centre for Maritime Excellence, with a programme of Maritime Initiatives that value and balance: economic growth; employment, social cohesion and quality of life; respect, protection and maintenance of Malta's Natural and cultural heritage, and the Marine Environment.

This policy framework is further strengthened through the 2017 Valletta Declaration (Declaration of the European Ministers responsible for the Integrated Maritime Policy on Blue Growth) whose aim is to support the blue economy concept as a marine-and maritime based economy which is well managed, sustainable and aims at reconciling ocean-related sustainable economic growth with improved livelihoods and social equity for current and future generations and the strengthening of transparent, reliable and more secure food systems, based on the conservation of marine ecosystems and biodiversity and on the sustainable use of resources.

[1] Integrated Maritime Policy (2015, Malta). Retrieved from https://economy.gov.mt/en/public consultation/documents/integrated%20maritime%20policy.pdf

[2] Malta, 2017, Valletta Declaration (Declaration of the European Ministers responsible for the Integrated Maritime Policy on Blue

Growth). Retrieved from https://www.eu2017.mt/Documents/Declarations/Valletta%20Declaration%20IMP%20Blue%20Growth.pdf

Weaknesses

Under the EMFAF Programme, the CLLD approach has not been applied to date due to lack of critical mass in view of the characteristics of the sectors, noting also that local fishing communities have not warmed up to the concept.

Limited collaboration & partnership

Whilst recognising the structures, policies, strategies and organisations in place aiming to address the sustainable development of the sectors as mentioned in this document, further collaboration between stakeholders including research institutions, environmental partners and other stakeholders of the blue economy is required to ensure effective address of certain threats and challenges such as climate change impacts and impacts related to limited space and external competition.

Opportunities

CLLD represents the pursuit of integrated and balanced development of local areas through a 'bottom-up' approach while considering the potential and capacities for active inclusion of the population in planning and decision-making concerning local development according to the principles of subsidiarity and participative democracy.

It represents an opportunity for communities, for the utilisation of local capacity. Such a stance invariably offers the opportunity for job creation and improve the quality of life of fishing communities.

Threats

Competition

As noted in the previous sections of this document, competition from other users including external competition from international entities resulting in cheaper imported fish and reduced local unit price impacts both the fisheries and the aquaculture sector.

Degradation of coastal ecosystems

Increasing pressures resulting from coastal development, over-exploitation and intensification of marine and maritime activities and pollution, impact marine biodiversity while also negatively impacting the resilience of coastal communities.

Identification of needs on the basis of the SWOT analysis and taking into account the elements set out in Article 8(5) of the EMFAF Regulation

As noted earlier on, taking into consideration issues related to limited space and competition from other users, it is important to integrate future land use development associated with fisheries and aquaculture into local planning approaches whilst also ensuring involvement of local stakeholders in the development of the blue economy of the future.

Potentially, community-led local development (CLLD) could assist in this regard with ensuring the acceptability and robustness of this process.

Increased local collaboration and partnership amongst the related stakeholders are necessary taking into account challenges encountered by the sector which may impinge on the livelihoods of fishing communities including that of the aquaculture sector.

Keeping in mind the challenges faced in relation to decreased income and external competition, encouraging diversification of activities, supporting the move towards enhanced efficiency, modernisation, and promoting lifelong learning is key to enhance the resilience of the fishing and aquaculture sectors.

Enhancing environmental protection through marine protection and restoration including mitigating climate change is also important in this respect.

4.Strengthenin g international ocean governance and enabling seas and oceans to be safe, secure, clean and sustainably managed

Strengths

Marine Protected Areas (MPA)

As also noted earlier on in this document, the existing designated Marine Protected Areas (18 sites) within the Fisheries Management Zone, covering an area equivalent to approximately 35% of the Malta's Fisheries Management Zone (FMZ) and thus contributes significantly to the ambitions of the Biodiversity Strategy 2030 for the protection of 30% of the sea in the EU and its management.

A Vital Economic Marine Sector characterised by research in the field

As recognised in *Malta's Smart Specialisation Strategy 2021-2027* (2021), Malta's marine sector is a crucial economic contributor, with 15.4% of Malta's total GDP dependent on the marine environment and offering opportunities in an array of areas. The importance of the sector from a socio-economic environmental perspective is also reflected in the vast research studies undertaken, whereby the

aforementioned *Smart Specialisation Strategy* notes that 14.78% of the University of Malta's publications on the priority areas identified in the strategy areas stem from the Maritime and Aquaculture sectors. It further notes that in this respect, 39 research projects relevant to the Marine sectors were carried out by MCAST students between 2016 to 2018 as also complemented by the participation of Maltese researchers in relevant fields of the EU's Horizon 2020 framework programme [1], and under the Interreg Italia-Malta Programme.

National Marine Monitoring Programme

With reference to marine knowledge on the state of the marine environment, the Environment and Resources Authority (ERA) is tasked with the technical implementation of the Marine Strategy Framework Directive 2008/56/EC.

A monitoring programme in line with the requirements of Article 11 of the said Directive has thus been developed following the compilation of the Initial Assessment of the status of marine waters, the initial definition of Good Environmental Status and the establishment of Environmental Targets. The programme is currently being updated. A *Programme of Measures (PoMs) pursuant to Article 13 of the Directive* is also being developed, identifying measures which contribute to the achievement or maintenance of Good Environmental Status.

This national marine monitoring programme also integrates monitoring requirements emanating from various marine-related policies, including requirements of the EU Water Framework Directive and the EU Nature Directives as applicable to the marine environment, and also those of the Barcelona Convention {Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean) and its relevant protocols.

Malta's monitoring programme adopts a risk-based approach that prioritises monitoring efforts in areas under higher pressures that are at risk and/or for ecological elements that are known to be more sensitive. The programme builds on existing monitoring procedures emanating from other policies (e.g. Common Fisheries Policies, Food Safety Regulations) to avoid duplication of monitoring effort [2]. The update of the national marine monitoring programme is ongoing.

It should be noted that under the 14-20 period, *EMFF project 8.3.1 Marine environmental monitoring: towards effective management of Malta's marine waters* was undertaken by ERA. This project aided Malta to update its Initial Assessment on the basis of the data collected through the implementation of the MSFD monitoring programme and other related data collection processes in accordance with Article 17 of the Directive[3]. Data gathered targets the development of better management practices to address identified pressures of the marine environment.

In relation to marine habitats and species, work has been ongoing through both national and EU funds, focussing on relevant marine invertebrates (e.g. Gibbula nivosa, Pinna nobilis) and migratory species, like marine turtles and cetaceans. In this respect, the *LIFE+ Malta*

SeaBirds Project focussed on seabirds, particularly Puffinus yelkouan, Calonectris diomedea and Hydrobates pelagicus melitensis; the LIFE MIGRATE addressed Caretta caretta and Tursiops truncatus; whilst LIFE BaHAR for Natura 2000 address the marine habitats types for which additional data was required, mainly caves, reefs and sandbanks. Whilst the data on seabirds added to earlier data, with the generation on new datasets on rafting zones, the data generated for the other species and habitats provided the baseline for further monitoring and led to the identification and designation of additional Natura 2000 sites and the setting up of relevant After-LIFE Plans. The scientific studies provided considerable information on additional migratory species, including other dolphins, whales and turtles.

Malta also participated in two Interreg projects: the *AMAre project*, under the Interreg MED Programme, which aimed, inter alia, to develop shared methodologies and geospatial tools for multiple stressors assessment, coordinated environmental monitoring, multi-criteria analyses and stakeholders' engagements in MPAs; and the *HARMONY project*, under the framework of Interreg V-A Italia-Malta Operational Programme (2014-2020), which aimed at assessing and monitoring the impact of a number of stressors operating on a number of priority marine habitats within selected MPAs in Malta and Sicily. The latter project also sought to streamline and to harmonise as much possible ongoing monitoring efforts conducted in Sicily and in Malta related to Descriptor 2 (Non-Indigenous Species) and Descriptor 5 (Seafloor Integrity) of the MSFD, which issues are also highly relevant to the implementation of the EU Nature Directives and the IAS Regulation.

Rich Biodiversity and Multiple coastal users

As a small island, Malta's coastal and marine environment is of importance due to the rich biodiversity it contains, but also because of the ecosystem services it provides to support various coastal activities. These activities include recreation, tourism, shipping, and fisheries, all of which make use of aspects of the coastal and marine environment.

Furthermore, the marine environment is also of utmost importance from a social and cultural aspect with Malta's coastal areas making a significant contribution to the country's national identity: for example, the coastal and marine environment is what gives Malta its island character.

Fishing and aquaculture are considered to be major users of the coastal and marine areas within the 25 nautical mile Fisheries Management Conservation Zone dedicated to sustainable fisheries (SPED, 2014) [4].

Strategic Plan for the Environment and Development

At a local level, the sustainable use and management of land and sea resources in an integrated manner is regulated by the Strategic Plan for the Environment and Development (SPED) which regulates Government's spatial plan. While such plan runs until 2020, its objectives are and will be of relevance for the forthcoming future. This Plan is currently under review.

Management of Aquaculture zones

The eventual establishment of an Aquaculture Zone in the South East of Malta saw the transformation of the operations management model from that of individual farms to one involving the potential of grouping a number of different operators. The existing cage sites are in approved maritime spaces that cater for the minimisation of user conflicts and thereby acknowledged as sites suitable for aquaculture development [5].

- [1] Malta Council for Science & Technology, 2021. Malta's Smart Specialisation Strategy 2021-2027.
- [2] ERA, Marine Monitoring Programme. https://era.org.mt/topic/msfd-monitoring-programme/
- [3] 2020, ERA, Update of Articles 8, 9 and 10 of the Marine Strategy Framework Directive (2008/56/EC) in Malta's Marine Waters- Second Assessment Report. Retrieved from https://era.org.mt/en/Documents/MSFD_Art.17_Update_Malta_FINAL.pdf
- [4] Planning Authority, July 2015, Strategic Plan for Environment and Development Retrieved from https://issuu.com/planningauthority/docs/sped_approved_doc__1_.
- [5] Ibid.

Weaknesses

Biodiversity loss

Biodiversity underpins sustainable development and is central to the achievement of environmental goals. There is growing concern about the unprecedented rate of global biodiversity loss. In this respect, direct drivers of biodiversity loss in the fisheries and aquaculture industry, include pollution, overexploitation of resources, climate change and biological invasions. Other (indirect) drivers which adversely affect biodiversity and the disruption of ecosystems relate to socio-cultural factors, such as lifestyle and consumer choices. Within this context, the draft *National Biodiversity Strategy and Action Plan to 2030* highlights the need to safeguard and conserve Malta's biodiversity and ecosystem services taking into account the EU's Biodiversity Strategy, well aware that biodiversity's benefits to the Maltese community are far reaching, including scenic, recreational, scientific, educational, cultural and socio-economic benefits.

Indeed, preserving seas and oceans is vital for a rapidly growing population. It is also of socio-economic interest: a sustainable blue economy boosts investments, jobs and growth and fosters research and innovation.

Knowledge-Gaps

The status of Malta's biodiversity is still not understood well enough. The status of 22% of Maltese species listed in the EC Habitats

Directive is still unknown [1]; a number of these (3) relate to the marine environment. In a recent updated report of the initial assessment carried out as part of the obligations under the Marine Strategy Framework Directive 2008/56 EC for Malta, it has been noted that although improvements have been made in reporting targets since 2013, further knowledge gaps still need to be addressed on important species and habitats in the marine environment [2].

Limited Coastal Space and strong competition from other users

The small size of the Maltese Islands and their high population density have resulted in a continuous and ever-increasing demand for uses of the coastal area. In fact, most of the current industrial and commercial activities are concentrated around the main harbour-city conurbation and along the coastline. Urbanisation has expanded around the coast and the demand for coastal recreation and tourism development continues to increase.

A primary limitation relates to the limited coastal space that results in a concentration of demand with different industries competing amongst each other, as well as in conflicts with the legitimate and increasing demands for environmental, landscape and cultural heritage conservation. This concentration of activities from different economic sectors along the coast results in problems of acute competition between stakeholders [3].

Apart from the aquaculture and fisheries sector, there are a number of economic sectors that directly and/or indirectly relate to the marine environment, namely: maritime transport, potable water production, energy production, land-based activities, coastal development, maritime transport and ports, and tourism and recreation. Each sector invariably impacts on the marine environment.

There is the physical damage that occurs as a result of activities including boating, construction of infrastructure, dredging, and dumping of dredge spoil; physical disturbance relating to noise pollution from maritime activities including port activities and boating, as well as marine litter. Interference with hydrological processes is also of concern. Of concern too are polluting activities that result in the release of hazardous substances including unsustainable ways of maritime transport, waste disposal and agriculture (diffuse land-based pollution source). Aquaculture also contributes to nutrient enrichment, though impacts are largely localised; as well as biological disturbance through the introduction of non-indigenous marine species is largely caused by maritime transport. Ship/boat strikes are another cause for concern for certain species of conservation importance including cetaceans and marine turtles.

Though the limited data available makes it difficult to quantify, the cumulative impacts from these activities are resulting in physical damage, pollution, as well as biological disturbance of the marine environment [4], thereby invariably threatening the longevity of the aquaculture industry.

The concentration of demand and activities along the coast results in these activities competing amongst each other, as well as in conflicts with the legitimate and increasing demands for environmental, landscape and cultural heritage conservation. This concentration of activities along the coast results in problems of acute competition between stakeholders [5].

Each sector invariably impacts on the marine environment. Fishing and aquaculture are considered major users of the coastal and marine areas within the 25 nautical mile Fisheries Management Conservation Zone dedicated to sustainable fisheries [6] and are also seen as the most adversely effected by environmental degradation of the marine waters in view of their reliance on marine waters, being the only sectors with 100% usage of the marine environment.

Though the limited data available makes it difficult to quantify, the cumulative impacts from these activities are resulting in physical damage, pollution, as well as biological disturbance of the marine environment [7], thereby invariably threatening the longevity of the aquaculture industry.

Development of coastal areas

The increased development of coastal areas has affected the natural processes of coastal erosion and accretion and may have led to accelerated erosion and shoaling of sand, to the detriment of the existing coastal habitats as well as coastal uses, which could result in further threats to livelihoods and assets [8].

[1] European Environmental Agency. Conservation status and trends of habitats and species. DAS-186-en Published 19 Dec 2019.

https://www.eea.europa.eu/themes/biodiversity/state-of-nature-in-the-eu/article-17-national-summary-dashboards/conservation-status-and-trends

- [2] Update of Articles 8, 9 and 10 of the Marine Strategy Framework Directive (2008/56/EC) in Malta's Marine Waters, Second Assessment Report March 2020. https://era.org.mt/en/Documents/MSFD_Art.17_Update_Malta_FINAL.pdf
- [3] PAP/RAC: Coastal Area Management in the Maltese Islands, Priority Actions Programme Regional Activity Centre, Split, 2005. http://discomap.eea.europa.eu/map/Data/Milieu/OURCOAST_032_MT/OURCOAST_032_MT_Doc1_MTCoastManagementUNEP.pdf
- [4] Current and future impacts on the marine environment. The challenge to achieve good environmental status. Malta Report. Nature Trust Malta (2015).
- [5] PAP/RAC: Coastal Area Management in the Maltese Islands, Priority Actions Programme Regional Activity Centre, Split, 2005.

 $http://discomap.eea.europa.eu/map/Data/Milieu/OURCOAST_032_MT/OURCOAST_032_MT_Doc1_MTCoastManagementUNEP.pdf$

- [6] Strategic Plan for the Environment and Development (MEPA 2015).
- [7] Current and future impacts on the marine environment. The challenge to achieve good environmental status. Malta Report. Nature Trust Malta (2015).
- [8] State of the Environment Report. Environment and Resource Authority (2018).

Opportunities

Knowledge sharing for enhanced maritime security

The amplification and coordination of information exchange is an enabler for informed decisions within the EU. Such a stance has led with the enhancement of information exchange being a key strategic objective of the EU - all the more so with the Common Information Sharing Environment (CISE) initiative. Nevertheless, within the Maltese context, the applicability of the initiative would be premature.

Threats

Human activities

Human activities exert environmental pressure which is threatening marine ecology and sustainable maritime activity. In particular, unless properly addressed, the growing demand for maritime transport, tourism, coastal development, fisheries and aquaculture, security, surveillance and so forth could pose a major threat to the marine environment and biodiversity.

As outlined in *Malta's 2nd Water Catchment Management Plan* [1] and *Malta's Programme of Measures pursuant to Article 13 of the Marine Strategy Framework Directive 2008/56 [2]*, the main pressures and threats in Malta's marine environment, include amongst others:

- Physical restructuring of the coastline or seabed through land reclamation linked to coastal development projects excluding reclamation for development of transport infrastructure; breakwaters and dredging of the seabed; depositing of dredged material; disposal of inert waste at sea
- Extraction of living resources by the fisheries industry comprising both industrial (trawlers, longliners and netters) and small-scale
- Marine aquaculture farms (including tuna penning)
- Transport comprising the construction / extension of quays, harbour wharves and jetties, slipways
- Anchoring and mooring by commercial vessels (bunkering, cargo handling, passenger handling, fisheries vessels) and shipping

- Unsustainable waste practices
- Tourism and leisure comprising beach replenishment [3]
- Recreational activities and other entertainment activities near the coast

Predominant anthropogenic pressures impacting the marine environment include:

- Biological pressures such as the introduction/spread of non-indigenous species and the extraction of, or mortality/injury to, wild species
- Physical pressures namely loss/disturbance of the seabed and hydrological change
- The input of substances nutrients/organic matter, synthetic substances/non-synthetic substances/radionuclides, hazardous substances in fish and seafood, litter and energy

Climate change

The *Malta Low Carbon Development Strategy (2021)* evidences the risks of climate change on natural ecosystems and coastal erosion. Being a small island, Malta is considered to be prone to natural hazards, making it highly susceptible to the effects of climate change, sea level rise, and extreme events.

An increase in sea level will accelerate beach erosion and will affect berthing areas and fisheries. Likewise, warmer climate and increased frequency of water-borne diseases will make the habitat amenable to new species that in turn could disrupt the prevailing ecosystem, particularly if invasive species arrive.

Additional identified potential impacts include the impairment of the sea's ability to act as a sink for atmospheric carbon dioxide, changes in general sea circulation, ocean acidification and warming.

Within this context and within the *National Biodiversity Action Plan to 2030*, a core pillar of the adaptation strategy is the continued conservation of biodiversity and ecosystems which in turn would lead to the achievement of long-term strategic goals for carbon neutrality and climate adaptation and mitigation through the protection of natural carbon sinks, the restoration of habitats, the implementation of nature-based solutions and green infrastructure, amongst others.

- [1] 2nd Water Catchment Management plan for the Malta Water Catchment District 2015-2021 (EWA; 2015).
- [2] Marine Strategy Framework Directive (2008/56/EC) Malta's Programme of Measures (ERA; 2017).
- [3] Loss/Disturbance depends on the substrate: disturbance where the substrate is sand or mud; loss in other cases such as seagrass meadows (Update of Articles 8, 9 and 10 of the Marine Strategy Framework Directive (2008/56/EC) in Malta's Marine Waters (page 174).

Identification of needs on the basis of the SWOT analysis and taking into account the elements set out in Article 8(5) of the EMFAF Regulation

Taking into account weaknesses and threats identified related to biodiversity loss and its continued degradation in the face of climate change impacts and alien species, and knowledge gaps, the SWOT reflects the continued need for sustainable sea and ocean management through the promotion of marine knowledge to increase the knowledge on the state of the environment.

More specifically in relation to marine spatial planning and the address of small island states' limitations including multiple user conflicts, the SWOT has evidenced the need to enable Malta to address both current and future related challenges through enhanced sustainable management and the integration of fisheries, aquaculture and the maritime sectors' development. In this regard, support for enhanced maritime spatial planning under Directive 2014/89/EU of the European Parliament and of the Council is deemed important. Support in this regard shall be undertaken through other funds separate from EMFAF including national if necessary.

In relation to maritime surveillance, the need for enhanced maritime information sharing amongst national authorities exists bearing in mind the objectives of EU's Maritime Security Strategy.

2. Priorities

Reference: Article 22(2) and point (c) of Article 22(3) CPR

2.1. Priorities other than technical assistance

ID	Title
1	Fostering sustainable fisheries and the restoration and conservation of aquatic biological resources
2	Fostering sustainable aquaculture activities, and processing and marketing of fisheries and aquaculture products, thus contributing to food security in the Union
3	Enabling a sustainable blue economy in coastal, island and inland areas, and fostering the development of fishing and aquaculture communities
4	Strengthening international ocean governance and enabling seas and oceans to be safe, secure, clean and sustainably managed

2.1.1. Priority: 1.Fostering sustainable fisheries and the restoration and conservation of aquatic biological resources Specific objectives

Specific objective

- 1.1. Strengthening economically, socially and environmentally sustainable fishing activities
- 1.2. Increasing energy efficiency and reducing CO2 emissions through the replacement or modernisation of engines of fishing vessels
- 1.3. Promoting the adjustment of fishing capacity to fishing opportunities in cases of permanent cessation of fishing activities and contributing to a fair standard of living in cases of temporary cessation of fishing activities
- 1.4. Fostering efficient fisheries control and enforcement, including fighting against IUU fishing, as well as reliable data for knowledge-based decision-making
- 1.6. Contributing to the protection and restoration of aquatic biodiversity and ecosystems

- 2.1.1. Priority: 1. Fostering sustainable fisheries and the restoration and conservation of aquatic biological resources
- 2.1.1.1. Specific objective: 1.1. Strengthening economically, socially and environmentally sustainable fishing activities
- 2.1.1.1. Interventions of the Funds

The related types of actions – point (d)(i) of Article 22(3) CPR and Article 6 ESF+ Regulation

Strengthening fishing activities from an economic, social and environmental perspective remains important for the 2021-2027 period. Such approach takes into account the needs and specificities of the sector, including SSCF and relevant strategies.

Investments on board fishing vessels

Support for investments on board fishing vessels remains critical to ensure that the fishing fleet is kept up to the date with modern technologies, supporting decarbonisation efforts through energy efficiency (EE) measures and fostering enhanced sustainability and resilience. Support will be directed at fleet modernisation, innovation and the use of the latest equipment and technology, to increase EE and/or, product quality. These actions aim to support conservation measures and add value across the value chain to improve fishing gear selectivity, eliminate discards and bycatch linked to the implementation of the landing obligation, and improve the sustainability of fishing activity, marine biodiversity and the regeneration of fish stocks. Actions will support inter alia hull and propeller improvements, improved fuel performance, LED lighting and alternative refrigerants, fishing gear reducing fuel consumption and improving catch efficiency, on board fuel control and monitoring. Other investments may be supported if consistent with the type of action. These will be in line with the WTO agreement on fisheries subsidies.

Investments in selective fishing gear may target trawling nets, gillnets and trammel nets and traps provided that such gear minimises unwanted catches and improves size/species selectivity as complimented by data collection and research actions under Priority 1 to improve fishing gear selectivity in specific fishing segments.

Promoting skills, knowledge, innovation, capacity building, collective interest and pilot projects

Actions will target the provision of enhanced knowledge for, *inter alia*, the prevention of accidents; food handling and on-board hygiene; minimising environmental impact, entrepreneurship; innovative solutions and technology developments targeting EE and decarbonisation, amongst others. Support may

include:

- Training, job creation measures and diversification activities
- Collective interest and pilot projects on fishing techniques, practices, and the blue economy, amongst others
- Training targeting new entrants/young fishers, spouses/partners and/or crew
- Awareness raising campaigns (other than the promotion of fisheries or aquaculture products)

The strenghtening of scientific knowledge and studies or dissemination of best practices may also lead to the establishment of knowledge sharing and collaboration networks involving fishers and researchers, thus bridging further the gap between pure research and applied research.

Support for advisory/consultancy services

Support for the development of sustainable SSCF will inter alia, include:

- Professional advice on environmental sustainability, including on ensuring resilience, reducing the negative impact of fishing activities on ecosystems, enhancing decarbonisation, fostering the green transition
- Professional advice on business planning to equip fishers not only with technical sectoral knowledge but also business acumen to foster competitiveness and long-term sustainability of the sector

Actions will be directed at business development and improvement and reduced environmental impact, amongst others, in line with the outcomes of the EMFF Interim Evaluation Report.

Diversification not related to commercial fishing activities

Diversification of fishing activities will target the development of complementary activities, which may include *inter alia* investments on board, angling tourism, restaurants, environmental services related to fishing and educational activities. Endeavours may also be aimed at the retrofitting of SSCF vessels for activities complementary to commercial fishing, thus increasing the potential for ancillary employment opportunities on land.

Improvement of key fishing port/landing infrastructure

Support is foreseen for fishing port/landing infrastructure with the aim of improving current port facilities and the limited berthing capacity [1] (amongst others) to increase efficiency and improve health, safety and product quality.

These actions aim to improve the infrastructure of fishing ports, auction halls, landing sites and shelters, thus increasing control and traceability of the products landed, energy efficiency, decarbonisation of port-related activities, contribute to environmental protection and improve safety and working conditions. Such investments will serve to enhance the implementation of the landing obligation by providing better access to landing sites and storage of unwanted catches and may include investments in automatic weighing and labelling machines including their respective housing structure. Fishers will weigh their catch directly at the landing site, hence simplifying the process of catch registration. The construction of a landing office with a cold room for the better preservation of fisheries products landed will support reduced fuel costs and cost effectiveness. This supports Malta's efforts and commitments on the landing obligation and discard plans in main designated fishing ports.

Investments in port infrastructure aimed at adapting to climate change, including the sustainability of fisheries, as well as risk prevention (including risk management and disaster resilience) targeting health, safety and resilience through disaster relief infrastructure will be considered.

Actions improving the research base of the local fisheries sector to increase sustainability and resilience

Enhancing knowledge through research is crucial to ensure the sustainability and resilience of fisheries considering the changing context, the needs and characteristics identified in Section 1, including those related to SSCF and considering environmental related pressures and climate change impacts. The Programme aims to enhance Malta's research base to strengthen decision-making in the field, supporting resilience, including policies and techniques applied within the sector. Actions will include amongst others:

- a) Study on trawling activity in the Fisheries Management Zone (FMZ) to increase knowledge on selectivity gears and identify investment priorities for the economic and ecological sustainable use of the existing trawling zones.
- b) Community Profiling of fishing communities in Malta based on STECF social indicators working group.
- c) Assessment of local stocks of select commercially important coastal fish species, particularly those at risk of over-exploitation to establish baseline stock assessments
- d) Study on trammel net fishery to investigate the socio-economic and ecological feasibility of the industry.
- e) Exploratory study of the role of fish farms as ecological hotspots by assessing the behaviour and distribution of local fish populations in these areas.

- f) Investigating the potential of invasive alien species in local fisheries. Experimental selective gear types will be tested locally to be adapted from fishing methods employed in the species' country of origin.
- g) Research supporting Malta's Management Plans for bottom otter trawlers and lampara fisheries.

Complementarities

Actions under this SO complement each other to enhance SSCF support and encourage participation in the sector. Investments on board fishing vessels to enhance the quality of fishery products and implement conservation related measures, may also be further complemented by marketing activities under Priority 2.

Diversification initiatives will complement the EMFAF 2021 flagship project aimed at boosting eco-tourism in the WestMED area.

SO 1.1 actions will complement but not overlap with data collection and research actions proposed under EMFAF Priority 1 SO 1.4 and SO 1.6. Complementarities are also foreseen with research actions under Horizon Europe and EMFAF Priority 2. As to EE measures, EMFAF actions complement Priority 2 actions and EE interventions under the RRP, ERDF and JTP. Training initiatives complement training under Priority 2 and interventions implemented under ESF+, more specifically the development of blue skills training and educational programmes.

Expected Results

- Increased number of fishers, especially SSCF benefitting from public support
- Increased number of modernised fishing vessels
- Improved resilience of fisheries including increased adaptation of the sector
- Improved knowledge of the local fisheries sector for enhanced decision-making complementing enhanced knowledge gathered through data collection activities
- Improved fishing port/landing infrastructure

[1] Interventions shall be targeted to benefit fishers in port areas primarily used by professional fishers.

- 2.1.1. Priority: 1. Fostering sustainable fisheries and the restoration and conservation of aquatic biological resources
- 2.1.1.1. Specific objective: 1.1. Strengthening economically, socially and environmentally sustainable fishing activities
- 2.1.1.1. Interventions of the Funds

The main target groups – point (d)(iii) of Article 22(3) CPR

The target groups are:

- Fishers (including SSCF) and sector related SMEs, fishery cooperatives, young individuals seeking to enter the sector, spouses/partners involved in fishing activities;
- General Public.

- 2.1.1. Priority: 1. Fostering sustainable fisheries and the restoration and conservation of aquatic biological resources
- 2.1.1.1. Specific objective: 1.1. Strengthening economically, socially and environmentally sustainable fishing activities
- 2.1.1.1. Interventions of the Funds

Actions safeguarding equality, inclusion and non-discrimination – point (d)(iv) of Article 22(3) CPR and Article 6 ESF+ Regulation

The Programme integrates the principles of equality, inclusion and non-discrimination which were mainstreamed in the preparation phase through the involvement of the relative partners in the consultation process including the relevant public authorities/regulators, civil society and NGOs.

The above approach combined a bottom-up and top-down approach thereby ensuring a multilevel governance, all-inclusive structure that comprised relevant entities responsible for promoting equality, non-discrimination and accessibility. These entities will continue to be consulted in Programme implementation.

Efforts undertaken in the previous programming period to safeguard equality, inclusion and non-discrimination will continue to be upheld in line with national practice. This includes the active involvement of the relevant authorities during the different cycles of the programme, including preparation, implementation, monitoring and evaluation. The participation in the EMFAF MC shall also contribute towards safeguarding equality inclusion and non-discrimination.

Measures aimed at safeguarding equality, inclusion and non-discrimination, promoting civil rights, equal opportunities, gender equality and family-friendly measures remain at the forefront of national policies. Such principles will be upheld in this programming period at national and local levels, through actions undertaken by the respective Ministries and entities, including the Ministry responsible for equality, the National Commission for the Promotion of Equality (NCPE) and the Commission for the Rights of Persons with Disability (CRPD).

Measures to safeguard equality, inclusion and non-discrimination will also be in line with the respective enabling condition and the relevant national legislation, strategies and/or action plans, as applicable. Such principles shall be addressed at project level, by means of their inclusion as selection criteria to encourage project promoters to factor them in project proposals, as applicable.

Programme actions addressing equality are reflected in specific training initiatives. Other planned actions, such as investments on board, consultancy services, knowledge sharing/collaboration networks and diversification are similarly non-discriminatory.

- 2.1.1. Priority: 1. Fostering sustainable fisheries and the restoration and conservation of aquatic biological resources
- 2.1.1.1. Specific objective: 1.1. Strengthening economically, socially and environmentally sustainable fishing activities
- 2.1.1.1.1 Interventions of the Funds

Indication of the specific territories targeted, including the planned use of territorial tools – point (d)(v) of Article 22(3) CPR

The Maltese territory. Territorial tools are not foreseen under this Programme.

- 2.1.1. Priority: 1. Fostering sustainable fisheries and the restoration and conservation of aquatic biological resources
- 2.1.1.1. Specific objective: 1.1. Strengthening economically, socially and environmentally sustainable fishing activities
- 2.1.1.1. Interventions of the Funds

The interregional, cross-border and transnational actions – point (d)(vi) of Article 22(3) CPR

Cross-border and transnational initiatives are not foreseen at this stage however, actions targeting training and collaboration/knowledge sharing networks do not exclude such possibility and may include partners from other Member States with the aim of exchanging knowledge, experiences and best practices.

- 2.1.1. Priority: 1. Fostering sustainable fisheries and the restoration and conservation of aquatic biological resources
- 2.1.1.1. Specific objective: 1.1. Strengthening economically, socially and environmentally sustainable fishing activities
- 2.1.1.1.1 Interventions of the Funds

The planned use of financial instruments – point (d)(vii) of Article 22(3) CPR

The use of financial instruments is not planned through this Programme. The primary issues identified in a study pertaining specifically to the introduction of *Financial Instruments in the Fisheries and Aquaculture sectors in Malta*[1] are deemed to outweigh potential benefits. Resort to FIs is not justified, also noting the small size of the market and the sector, which do not allow the attainment of the critical mass required.

The actions directly targeting fishers (investments on board, advisory services and diversification) are limited in number and funds allocated and thus do not justify the use of FIs. Moreover, the needs identified in relation to the improvement/ upgrading of port/landing infrastructure and training/networking actions, translated into specific actions which shall mostly be implemented by the public sector and therefore do not lend themselves to support from FIs. Consideration of the administrative burden required in the management of FIs would also not be proportional.

[1] Report on stakeholders' views on the introduction of Financial Instruments in the Fisheries and Aquaculture sectors in Malta. EuropeanFunds.info (2019)

- 2.1.1. Priority: 1. Fostering sustainable fisheries and the restoration and conservation of aquatic biological resources
- 2.1.1.1. Specific objective: 1.1. Strengthening economically, socially and environmentally sustainable fishing activities
- 2.1.1.1.2. Indicators

Reference: point (d)(ii) of Article 22(3) CPR and Article 8 ERDF and CF Regulation

Table 2: Output indicators

Code	Indicator	Measurement unit	Milestone (2024)	Target (2029)
CO01	Number of operations	number	16.00	47.00

- 2.1.1. Priority: 1. Fostering sustainable fisheries and the restoration and conservation of aquatic biological resources
- 2.1.1.1. Specific objective: 1.1. Strengthening economically, socially and environmentally sustainable fishing activities
- 2.1.1.1.2. Indicators

Reference: point (d)(ii) of Article 22(3) CPR

Table 3: Result indicators

ID	Indicator	Measurement unit	Baseline or reference value	Reference Year	Target (2029)	Source of data	Comments
CR03	Businesses created	entities	0.00	2021	16.00	EMFAF Managing Authority	
CR07	Jobs maintained	persons	0.00	2021	120.00	EMFAF Managing Authority	
CR08	Persons benefitting	persons	0.00	2021	225.00	Department of Fisheries and Aquaculture	
CR10	Actions contributing to good environmental status including nature restoration, conservation, protection of ecosystems, biodiversity, animal health and welfare	actions	0.00	2021	11.00	EMFAF Managing Authority	
CR11	Entities increasing social sustainability	entities	0.00	2021	2.00	EMFAF Managing Authority	
CR14	Innovations enabled (number of new products, services, processes, business models or methods)	number	0.00	2021	24.00	EMFAF Managing Authority	
CR21	Datasets and advice made available	number	0.00	2021	6.00	EMFAF Managing Authority	

- 2.1.1. Priority: 1. Fostering sustainable fisheries and the restoration and conservation of aquatic biological resources
- 2.1.1.1. Specific objective: 1.1. Strengthening economically, socially and environmentally sustainable fishing activities
- 2.1.1.4. Indicative breakdown of the programmed resources (EU) by type of intervention for EMFAF

Table 9: Indicative breakdown of the programmed resources (EU) by type of intervention for EMFAF

Code	Amount (EUR)
02. Promoting conditions for economically viable, competitive and attractive fisheries, aquaculture and processing sectors	5,180,000.00

- 2.1.1. Priority: 1. Fostering sustainable fisheries and the restoration and conservation of aquatic biological resources
- 2.1.1.1. Specific objective: 1.2. Increasing energy efficiency and reducing CO2 emissions through the replacement or modernisation of engines of fishing vessels
- 2.1.1.1. Interventions of the Funds

The related types of actions – point (d)(i) of Article 22(3) CPR and Article 6 ESF+ Regulation

Interventions will aim to reduce the carbon footprint of fisheries in line with the principles of the European Green Deal linked to decarbonisation and to target the needs identified in Section 1 of this Programme whilst noting the characteristics of the Maltese fishing fleet.

Support for engine replacement or modernisation

The replacement or modernisation of fishing vessel engines shall support the shift of the sector towards decarbonisation. By investing in more modern technology, the reduction of carbon emissions shall be directly affected, hence increasing Malta's efforts towards the promotion of a cleaner environment. As outlined earlier under Section 1, further efforts are necessary to achieve a better balance between enabling the sector to be more competitive and sustainable whilst reducing the impact on the marine environment. Within this context, support will be provided to vessels of balanced fleet segments in line with the conditions set out in the EMFAF Regulation [1] and the related Commission Implementing Regulation [2] which defines the energy-efficient technologies that may be used for new engines.

Whilst the Managing Authority may define requirements in the calls for proposals, in the case of SSCF vessels, the Programme is foreseen to support a new or modernised engine that do not have more power in kW than that of the current engine. This also applies to large-scale coastal fishing vessels of up to 24 metres in overall length, however, the replaced or modernised engine will also need to emit at least 20% less CO2 compared to the current engine. All replaced or modernised engines shall be subject to a physical verification in line with the relevant conditions and adopted procedures. As also noted in the EMFAF Regulation, the fishing capacity withdrawn due to these operations shall not be replaced.

The balance of fleet segments with fishing opportunitites is assessed in Malta's report on fishing capacity, referred to in Article 22(2) of Regulation (EU) No 1380/2013, as reviewed by STECF in accordance with the Commission Guidelines COM(2014)545. Taking into consideration the balance assessment of fleet segments refers to previous reference years and may change from one fleet segment to another, eligibility criteria will be determined based on the latest scientific assessment at calls of proposals stage in line with the requirements of the EMFAF regulation and resulting balanced segments.

Complementarities

Initiatives under this SO complement EMFAF energy efficiency initiatives under Priority 1 SO 1.1 and Priority 2 interventions targeting resource efficiency. Such operations shall also contribute to the reduction of the negative impacts on the marine environment in conjunction with operations implemented under Priority 1 SO 1.6. Holistically, these operations shall also complement energy efficiency, clean energy and decarbonisation interventions implemented under the RRP, ERDF, CF and JTF.

Expected Results

- Reduction in emitted carbon from Maltese Fishing Vessels
- A modernised, more energy-efficient fishing fleet
- [1] Article 18 of the EMFAF Regulation refers.
- [2] COMMISSION IMPLEMENTING REGULATION (EU) 2022/46 of 13 January 2022 implementing Regulation (EU) 2021/1139 of the European Parliament and of the Council establishing the European Maritime, Fisheries and Aquaculture Fund and amending Regulation (EU) 2017/1004 as regards the identification of energy-efficient technologies and the specification of methodology elements to determine the normal fishing effort of fishing vessels.

- 2.1.1. Priority: 1. Fostering sustainable fisheries and the restoration and conservation of aquatic biological resources
- 2.1.1.1. Specific objective: 1.2. Increasing energy efficiency and reducing CO2 emissions through the replacement or modernisation of engines of fishing vessels
- 2.1.1.1. Interventions of the Funds

The main target groups – point (d)(iii) of Article 22(3) CPR

The target groups are:

• Fishers including small-scale fishers, owning fishing vessels of balanced fleet segments.

- 2.1.1. Priority: 1. Fostering sustainable fisheries and the restoration and conservation of aquatic biological resources
- 2.1.1.1. Specific objective: 1.2. Increasing energy efficiency and reducing CO2 emissions through the replacement or modernisation of engines of fishing vessels

2.1.1.1. Interventions of the Funds

Actions safeguarding equality, inclusion and non-discrimination – point (d)(iv) of Article 22(3) CPR and Article 6 ESF+ Regulation

The Programme integrates the principles of equality, inclusion and non-discrimination which were mainstreamed into the preparation phase through the involvement of the relative partners in the consultation process including the relevant public authorities/regulators; civil society and NGOs.

The above approach combined a bottom-up and top-down approach thereby ensuring a multilevel governance, all-inclusive structure that comprised relevant entities responsible for promoting equality, non-discrimination and accessibility. Such entities will continue to be consulted during the implementation of the Programme.

Efforts undertaken in the previous programming period to safeguard equality, inclusion and non-discrimination will continue to be upheld in line with national practice. This includes the active involvement of the relevant authorities during the different cycles of the Programme, including preparation, implementation, monitoring and evaluation. The participation of the EMFAF MC shall also contribute towards safeguarding equality inclusion and non-discrimination.

Complementary measures aimed at safeguarding equality, inclusion, and non-discrimination, including initiatives aimed at promoting civil rights, equal opportunities and family-friendly measures were implemented within the public sector. Improving gender equality in matters pertaining to the labour market were also at the forefront of national policies. Such principles will be upheld under this programming period at both the national and local levels, through actions that shall be undertaken by the respective Ministries and entities, including the Ministry responsible for equality, the National Commission for the Promotion of Equality (NCPE) and the Commission for the Rights of Persons with Disability (CRPD).

Programme actions target both male and female vessel owners and are thus non-discriminatory. Measures to safeguard equality, inclusion and non-discrimination will also be in line with the respective enabling condition and the relevant national legislation, strategies and/or action plans, as applicable. Such principles shall also be addressed at project level, by means of their inclusion as selection criteria to encourage project promoters to factor them in their project proposals, where applicable.

- 2.1.1. Priority: 1. Fostering sustainable fisheries and the restoration and conservation of aquatic biological resources
- 2.1.1.1. Specific objective: 1.2. Increasing energy efficiency and reducing CO2 emissions through the replacement or modernisation of engines of fishing vessels
- 2.1.1.1. Interventions of the Funds

Indication of the specific territories targeted, including the planned use of territorial tools – point (d)(v) of Article 22(3) CPR

The Maltese territory. Territorial tools are not foreseen under this Programme.

- 2.1.1. Priority: 1. Fostering sustainable fisheries and the restoration and conservation of aquatic biological resources
- 2.1.1.1. Specific objective: 1.2. Increasing energy efficiency and reducing CO2 emissions through the replacement or modernisation of engines of fishing vessels
- 2.1.1.1. Interventions of the Funds

The interregional, cross-border and transnational actions – point (d)(vi) of Article 22(3) CPR

Cross-border and transnational initiatives are not foreseen under this Specific Objective.

- 2.1.1. Priority: 1. Fostering sustainable fisheries and the restoration and conservation of aquatic biological resources
- 2.1.1.1. Specific objective: 1.2. Increasing energy efficiency and reducing CO2 emissions through the replacement or modernisation of engines of fishing vessels
- 2.1.1.1. Interventions of the Funds

The planned use of financial instruments – point (d)(vii) of Article 22(3) CPR

The use of financial instruments is not planned through this Programme. The primary issues identified in a study pertaining specifically to the introduction of Financial Instruments in the Fisheries and Aquaculture sectors in Malta[1] are deemed to outweigh potential benefits. Considering the low uptake currently underway with grants, it is deemed superfluous at this stage to introduce financial instruments under this Programme. Resort to financial instruments is not justified considering the funds available under the EMFAF Programme and the small size of the market and the sector, which do not allow the attainment of the critical mass required.

The actions targeting fishers under this specific objective are limited in number and the funds allocated and thus do not justify the use of financial instruments. Consideration of the administrative burden required in the management of financial instruments for EMFAF would also not be proportional.

[1] Report on stakeholders' views on the introduction of Financial Instruments in the Fisheries and Aquaculture sectors in Malta. EuropeanFunds.info. (2019).

- 2.1.1. Priority: 1. Fostering sustainable fisheries and the restoration and conservation of aquatic biological resources
- 2.1.1.1. Specific objective: 1.2. Increasing energy efficiency and reducing CO2 emissions through the replacement or modernisation of engines of fishing vessels

2.1.1.1.2. Indicators

Reference: point (d)(ii) of Article 22(3) CPR and Article 8 ERDF and CF Regulation

Table 2: Output indicators

Code	Indicator	Measurement unit	Milestone (2024)	Target (2029)	7
CO01	Number of operations	number	1.00	4.00)

- 2.1.1. Priority: 1. Fostering sustainable fisheries and the restoration and conservation of aquatic biological resources
- 2.1.1.1. Specific objective: 1.2. Increasing energy efficiency and reducing CO2 emissions through the replacement or modernisation of engines of fishing vessels

2.1.1.1.2. Indicators

Reference: point (d)(ii) of Article 22(3) CPR

Table 3: Result indicators

ID	Indicator	Measurement unit	Baseline or reference value	Reference Year	Target (2029)	Source of data	Comments
CR18.2	Energy consumption leading to CO2 emissions reduction	litres/h	0.00	2021	20.00	EMFAF Managing Authority	

- 2.1.1. Priority: 1. Fostering sustainable fisheries and the restoration and conservation of aquatic biological resources
- 2.1.1.1. Specific objective: 1.2. Increasing energy efficiency and reducing CO2 emissions through the replacement or modernisation of engines of fishing vessels
- 2.1.1.1.4. Indicative breakdown of the programmed resources (EU) by type of intervention for EMFAF

Table 9: Indicative breakdown of the programmed resources (EU) by type of intervention for EMFAF

Code	Amount (EUR)
03. Contributing to climate neutrality	140,000.00

- 2.1.1. Priority: 1. Fostering sustainable fisheries and the restoration and conservation of aquatic biological resources
- 2.1.1.1. Specific objective: 1.3. Promoting the adjustment of fishing capacity to fishing opportunities in cases of permanent cessation of fishing activities and contributing to a fair standard of living in cases of temporary cessation of fishing activities

2.1.1.1. Interventions of the Funds

The related types of actions – point (d)(i) of Article 22(3) CPR and Article 6 ESF+ Regulation

In accordance with the EMFAF Regulation temporary cessation may be justified where due to conservation measures a reduction of fishing effort is needed or to mitigate certain exceptional circumstances. This is in line with EC's Sea Basin Analysis (2020), which also reflects the need for these types of actions as noted under *Challenge 1- Ensuring a sustainable management of natural resources* and *Challenge 3- Ensuring a balanced socio-economic outlook for the fisheries sector and strengthening resilience* [1]. This is also congruent to the GFCM recommendations, particularly Recommendation GFCM /30/2006/2 on the establishment of a closed season for the common dolphinfish fisheries using fish aggregating devices.

Compensation for temporary cessation of fishing activities

Actions targeting temporary cessation shall support cessation of fishing activities where due to conservation measures, based on scientific advice, a reduction of fishing effort is needed in order to achieve the objectives referred to in Article 2(2) and point (a) of Article 2(5) of the Common Fisheries Policy, including where relevant, conservation measures identified in Multiannual Plans/Management Plans. Currently there are three management plans in place within the 25 nm Maltese FMZ. These were developed in line with Article 19 of Council Regulation (EC) No 1967/2006 of 21 December 2006 concerning management measures for the sustainable exploitation of fishery resources in the Mediterranean Sea and include: lampara purse seine fishery, bottom otter trawler fishery and lampuki FAD fisheries. The two main objectives of management plans are to ensure the sustainability of stocks through better monitoring and to ensure financial stability for fishers. The three Management Plans are currently under revision.

Measures for the conservation and sustainable exploitation of marine biological resources shall be based on the measures identified below, or equivalent conservation measures adopted by regional fisheries management organisations, where applicable to the Union, may include amongst others:

- Multiannual plans;
- Targets for the conservation and sustainable exploitation of stocks and related measures to minimise the impact of fishing on the marine environment;
- Measures to adapt the fishing capacity of fishing vessels to available fishing opportunities;
- Technical measures including limitations or prohibitions on fishing activities, in certain periods as listed in Article 7(2)(c) of Regulation (EU) No

1380/2013;

• Commission measures in case of serious threat to marine biological resources, and/or Member States' emergency measures.

Temporary cessation of fishing activity may also be used to address natural disasters, environmental incidents or health crises, as formally recognised by Maltese competent authorities.

The MA will determine the eligibility requirements that will be outlined in the relevant calls taking into consideration amongst others:

- Commercial activities of the vessel concerned not in operation during at least 30 days in a given calendar year;
- Owners or operators of fishing vessels which are registered as active, and which have carried out fishing activities at sea for at least 120 days in each of the last two calendar years preceding the year of submission of the application for support;
- A maximum duration of 12 months per vessel during the programming period;
- All fishing activities carried out by the vessels and or fishers concerned are effectively suspended during the period concerned by the cessation. The competent authority shall satisfy itself that the vessel or fisher concerned has stopped any fishing activities during the period concerned by the extraordinary temporary cessation and that any overcompensation resulting from the use of the vessel for other purposes is avoided.

With the aim to build on lessons learnt from previous programming periods, and noting that only the swordfish stocks highlighted as being at risk according to the Malta's fleet balance report, at programming stage, the envisaged temporary cessation actions shall primarily target the closure of fishing activities for swordfish for the period 1 December – 31 December which is being considered as an additional measure to the closed swordfish season stipulated in Regulation (EU) 2019/1154 [2]. The financial assistance to be provided through temporary cessation is expected to be aimed at owners of fishing vessels operating in the swordfish fishery, envisaging also a decrease in the general fishing effort on other fish stocks therefore enhancing resilience. The vessel owners shall be the final beneficiaries of operations related to such support. Compensation methodologies shall be established by the Managing Authority (MA) at implementation stage.

The MA will work closely with the Department for Fisheries and Aquaculture (DFA) in this regard as the responsible authority for fisheries and aquaculture tasked with data collection, control and enforcement to ensure that other temporary cessation actions address conservation needs based on scientific advice. The MA, through the Monitoring Committee, may also revise the targeted schemes to take into account new realities that may emerge during the implementation of the Programme.

Complementarities

These actions will be complemented by other actions implemented under this Programme including actions addressing the protection and restoration of aquatic biodiversity and ecosystems under SO 1.6, Control and Enforcement actions and Data Collection actions under SO 1.4.

Any nationally funded schemes targeting temporary cessation as identified also through the adopted Management Plans and/or the Action Plan forming part of Annual Fleet Capacity Report will not overlap with any cessation scheme launched under this Programme. Furthermore, the appropriate mechanisms will be adopted in order to avoid the risk of overlap. Avoidance of any risk of overlap with state aid measures is ensured as outlined in the Programme under the applicable enabling conditions. Support to undertakings is provided in line with State Aid rules and MAs verify compliance with State aid rules, prior to the approval of projects, by consulting the State Aid Monitoring Board. Other monitoring mechanisms are also in place as outlined in the Programme.

Expected Results

- Improved marine environmental sustainability through targeted fisheries conservation measures
- Primary Objective: Decrease in fishing effort on Swordfish fishery;
- Secondary Objective: Decrease in the general fishing effort on the other fish stocks due to the cessation of fishing activities.

[1] REGULATION (EU) 2019/1154 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 20 June 2019 on a multiannual recovery plan for Mediterranean swordfish and amending Council Regulation (EC) No 1967/2006 and Regulation (EU) 2017/2107 of the European Parliament and of the Council. https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019R1154&from=EN

- [2] European Commission, 2020. Commission Staff Working Document -Regional Sea Basin Analyses, Regional challenges in achieving the objectives of the Common Fisheries Policy a Sea Basin perspective to guide EMFF Programming.
- [3] REGULATION (EU) 2019/1154 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 20 June 2019 on a multiannual recovery plan for Mediterranean swordfish and amending Council Regulation (EC) No 1967/2006 and Regulation (EU) 2017/2107 of the European Parliament and of the

Council. https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019R1154&from=EN

- 2.1.1. Priority: 1. Fostering sustainable fisheries and the restoration and conservation of aquatic biological resources
- 2.1.1.1. Specific objective: 1.3. Promoting the adjustment of fishing capacity to fishing opportunities in cases of permanent cessation of fishing activities and contributing to a fair standard of living in cases of temporary cessation of fishing activities
- 2.1.1.1.1 Interventions of the Funds

The main target groups – point (d)(iii) of Article 22(3) CPR

The target groups are:

• Fishers (including small-scale coastal fishers).

- 2.1.1. Priority: 1. Fostering sustainable fisheries and the restoration and conservation of aquatic biological resources
- 2.1.1.1. Specific objective: 1.3. Promoting the adjustment of fishing capacity to fishing opportunities in cases of permanent cessation of fishing activities and contributing to a fair standard of living in cases of temporary cessation of fishing activities

2.1.1.1. Interventions of the Funds

Actions safeguarding equality, inclusion and non-discrimination – point (d)(iv) of Article 22(3) CPR and Article 6 ESF+ Regulation

The Programme integrates the principles of equality, inclusion and non-discrimination which were mainstreamed into the preparation phase through the involvement of the relative partners in the consultation process including the relevant public authorities/regulators, civil society and NGOs.

The above approach combined a bottom-up and top-down approach thereby ensuring a multilevel governance, all-inclusive structure that comprised relevant entities responsible for promoting equality, non-discrimination and accessibility. Such entities will continue to be consulted during the Programme implementation.

Efforts undertaken in the previous programming period to safeguard equality, inclusion and non-discrimination will continue to be upheld in line with national practice. This includes the active involvement of the relevant authorities during the different cycles of the Programme, including preparation, implementation, monitoring and evaluation. The participation of the EMFAF MC shall also contribute towards safeguarding equality inclusion and non-discrimination.

Complementary measures aimed at safeguarding equality, inclusion and non-discrimination, including initiatives aimed at promoting civil rights, equal opportunities and family-friendly measures were implemented within the public sector. Improving gender equality in matters pertaining to the labour market were also at the forefront of national policies. Such principles will be upheld under this programming period at both national and local levels, through actions that shall be undertaken by the respective Ministries and entities, including the Ministry responsible for equality, the National Commission for the Promotion of Equality (NCPE) and the Commission for the Rights of Persons with Disability (CRPD).

Measures to safeguard equality, inclusion and non-discrimination will also be in line with the respective enabling condition and the relevant national legislation, strategies and/or action plans, as applicable. Such principles shall also be addressed at project level, by means of their inclusion as selection criteria to encourage project promoters to factor them in their project proposals, where applicable.

EMFAF Programme actions target both male and female vessel owners and are thus non-discriminatory.

- 2.1.1. Priority: 1. Fostering sustainable fisheries and the restoration and conservation of aquatic biological resources
- 2.1.1.1. Specific objective: 1.3. Promoting the adjustment of fishing capacity to fishing opportunities in cases of permanent cessation of fishing activities and contributing to a fair standard of living in cases of temporary cessation of fishing activities
- 2.1.1.1.1 Interventions of the Funds

Indication of the specific territories targeted, including the planned use of territorial tools – point (d)(v) of Article 22(3) CPR

This section is not relevant to the Maltese islands as Malta will not be adopting the Community-Led Local Development (CLLD) due to the characteristics of the fishing industry in the Maltese Islands which do not have the critical mass required to justify such an approach and whereby the administrative requirements would not be in proportion to the implementation of the measures planned and support provided.

- 2.1.1. Priority: 1. Fostering sustainable fisheries and the restoration and conservation of aquatic biological resources
- 2.1.1.1. Specific objective: 1.3. Promoting the adjustment of fishing capacity to fishing opportunities in cases of permanent cessation of fishing activities and contributing to a fair standard of living in cases of temporary cessation of fishing activities
- 2.1.1.1.1 Interventions of the Funds

The interregional, cross-border and transnational actions – point (d)(vi) of Article 22(3) CPR

Cross-border and transnational initiatives are not foreseen.

- 2.1.1. Priority: 1. Fostering sustainable fisheries and the restoration and conservation of aquatic biological resources
- 2.1.1.1. Specific objective: 1.3. Promoting the adjustment of fishing capacity to fishing opportunities in cases of permanent cessation of fishing activities and contributing to a fair standard of living in cases of temporary cessation of fishing activities
- 2.1.1.1.1 Interventions of the Funds

The planned use of financial instruments – point (d)(vii) of Article 22(3) CPR

The use of financial instruments is not planned through this Programme. The primary issues identified in a study on the introduction of *Financial Instruments* in the Fisheries and Aquaculture sectors in Malta[1] are deemed to outweigh potential benefits. Considering the low uptake currently underway with grants, it is deemed superfluous at this stage to introduce financial instruments under this Programme. Resort to financial instruments is not justified considering the funds available under the EMFAF Programme and the small size of the market and the sector, which do not allow the attainment of the critical mass required.

The actions targeting fishers under this specific objective are limited in number and the funds allocated and thus do not justify the use of financial instruments, taking into consideration also the nature of the proposed action. Consideration of the administrative burden required in the management of financial instruments for EMFAF would also not be proportional.

[1] Report on stakeholders' views on the introduction of Financial Instruments in the Fisheries and Aquaculture sectors in Malta. EuropeanFunds.info (2019)

- 2.1.1. Priority: 1. Fostering sustainable fisheries and the restoration and conservation of aquatic biological resources
- 2.1.1.1. Specific objective: 1.3. Promoting the adjustment of fishing capacity to fishing opportunities in cases of permanent cessation of fishing activities and contributing to a fair standard of living in cases of temporary cessation of fishing activities

2.1.1.1.2. Indicators

Reference: point (d)(ii) of Article 22(3) CPR and Article 8 ERDF and CF Regulation

Table 2: Output indicators

Code	Indicator	Measurement unit	Milestone (2024)	Target (2029)
CO01	Number of operations	number	1.00	2.00

- 2.1.1. Priority: 1. Fostering sustainable fisheries and the restoration and conservation of aquatic biological resources
- 2.1.1.1. Specific objective: 1.3. Promoting the adjustment of fishing capacity to fishing opportunities in cases of permanent cessation of fishing activities and contributing to a fair standard of living in cases of temporary cessation of fishing activities

2.1.1.1.2. Indicators

Reference: point (d)(ii) of Article 22(3) CPR

Table 3: Result indicators

ID	Indicator	Measurement unit	Baseline or reference value	Reference Year	Target (2029)	Source of data	Comments
CR08	Persons benefitting	persons	0.00	2021	94.00	Department of Fisheries and Aquaculture	

- 2.1.1. Priority: 1. Fostering sustainable fisheries and the restoration and conservation of aquatic biological resources
- 2.1.1.1. Specific objective: 1.3. Promoting the adjustment of fishing capacity to fishing opportunities in cases of permanent cessation of fishing activities and contributing to a fair standard of living in cases of temporary cessation of fishing activities
- 2.1.1.1.4. Indicative breakdown of the programmed resources (EU) by type of intervention for EMFAF

Table 9: Indicative breakdown of the programmed resources (EU) by type of intervention for EMFAF

Code	Amount (EUR)
04. Temporary cessation of fishing activities	280,000.00

- 2.1.1. Priority: 1. Fostering sustainable fisheries and the restoration and conservation of aquatic biological resources
- 2.1.1.1. Specific objective: 1.4. Fostering efficient fisheries control and enforcement, including fighting against IUU fishing, as well as reliable data for knowledge-based decision-making
- 2.1.1.1. Interventions of the Funds

The related types of actions – point (d)(i) of Article 22(3) CPR and Article 6 ESF+ Regulation

This Programme seeks to take full advantage of innovations and opportunities for digitalisation to modernise data collection and control and enforcement actions in line with national and EU policies.

Control and Enforcement

Investments in equipment and facilities or 'soft' investments, including the:

- Installation and development of technology enabling the gathering, administration, validation, analysis and exchange of data related to fisheries.
- Modernisation and purchase of patrol vessels, vehicles and equipment
 - o long-range fast Fisheries Patrol Vessels to enable patrols within and outside Maltese territorial waters
 - o heavy-duty commercial RHIBs for inshore and offshore patrols and fisheries surveillance activities
 - o specialised land vehicles to further support the control and enforcement actions, including the landing obligation, such as pickup trucks with crane, refrigerated truck to transport confiscated fish, and electric driven vans
- Development of innovative control and remote monitoring systems (Fisheries Integrated System)
- Real time monitoring of engine power to strengthen control efforts in fisheries and aquaculture.

Investments in equipment on board fishing vessels, including the purchase/development and on vessel installation of:

• Compulsory vessel tracking and electronic reporting systems (ERS) and automatic identification systems (AIS) for control purposes, including remote electronic monitoring systems used for controlling the implementation of the landing obligation.

- Computer hardware and software to ensure the traceability of fishery and aquaculture products.
- Devices for compulsory continuous measurement and recording of propulsive engine power.

Investment aims to upgrade the existing vessel monitoring system in line with the updated control regulation. A new VMS system will be installed in all vessels over 10m.

CCTV and real time monitoring of engine power will be installed on trawlers subject to implementation plans drafted in line with the new Control Regulation. Paper logbooks will be phased out in line with efforts to digitalise control and enforcement action, through the provision of electronic reporting devices tablets for all vessels to gradually implement the E-logbook on a larger scale.

Furthermore, the installation of CCTV cameras in designated ports and sites where automated weighing labelling stations (AWLs) are located, will enable increased monitoring and control capabilities and reporting of irregular and/or illegal activity. This investment will increase fisheries data reliability and validity.

Other investments addressing data gaps in the catch and effort commercial fisheries data include the *Integrated Fisheries Information System (IFIS)*, which will enhance the quality assurance of the currently reported catch data and enable automated cross-checks between the declared catch data sets, including landing declarations and sales.

The IFIS shall be linked to another database solely used for data aggregation, analysis and reporting purposes. This will enable the CA to capture, integrate, process and display real-time data from multiple sources, including VMS (Argos, Iridium, Inmarsat satellites), Satellite Radar (Imaging), AIS (satellite or terrestrial), Oceanographic/meteorological data and ERS/ Catch data. The system, which shall be compatible with Fisheries Language for Universal Exchange (FLUX), shall also integrate other relevant data generated by equipment used by CA, including electronic data gathering devices (e-logbooks) and AWLs. Such integration of data will enable the CA to generate reports on; vessels and their current status and positions, detected infringements per vessel/fisher, system and vessel alerts, fishing routes and missing positions and will increase transparency, traceability and enable the fulfilment of obligations under National and EU law.

Actions on effectiveness of control and enforcement include:

- Training/ exchange programmes of control and enforcement officials, stakeholder activities and awareness campaigns;
- Operational costs for participating in Joint Development Programmes (a minimum of 10 per year); and

• Programmes linked to the implementation of an action plan established in accordance with Article 102(4) of Regulation (EC) No 1224/2009, including any operational costs incurred.

Investments in VMS hardware and software as part of the new Fisheries Integrated System in line with *Action Plan C(2019)570* are foreseen. Operational capacity will be strengthened through new software to facilitate inter platform communication, improve the overall control function, data gathering and generation; and introduce specialised training by competent providers, including basic and advanced training in commercial boat handling is also foreseen including training of national observers for towing vessels, longline and trap including technical/ logistical support in the coordination activity for the ICCAT and GFCM obligations. Investments aimed at enhancing enforcement will include training at EFCA for control officials and seminars for stakeholders on the CFP.

Collection and processing of data for fisheries and aquaculture management and scientific purposes

Data collection actions shall address National Work Plans mentioned in Regulation (EU) No 2017/1004 and any subsequent regulation. These shall contribute to the best available scientific advice and provide information for studies and evaluations aiming to increase knowledge on the state of the marine environment and will include, amongst others:

- Collection, management and use of data for the purpose of scientific analysis and implementation of the CFP;
- National, transnational and subnational multiannual sampling programmes on stocks covered by the CFP;
- At-sea monitoring of commercial and recreational fisheries, including by-catch of marine organisms such as marine mammals and birds (as applicable);
- Research surveys at sea;
- Participation in coordination meetings including meetings of relevant regional fisheries management organisations or international bodies responsible for providing scientific advice;
- Improvement of data collection and management systems and the implementation of pilot studies to improve existing data collection and management systems.

Considering advances made in the previous years, data collection activities are facilitated through the use of software systems whereby, collected data is compiled and analysed more efficiently. Further enhancements are also envisaged, such as equipment and software to transition to a paperless solution for biometric data collection.

Starting from 2022-2024 data collection activities will fulfil the obligations under the relevant multiannual Union programme (EU-MAP) regulatory framework. These involve the gathering of data consisting of landings of fish aggregated by vessel length/gear, sales value, lengths of fish from market and onboard surveys, derived from fisheries independent surveys (MEDITS). An annual socio-economic survey targeting all active fishers, a monthly catch assessment survey for small-scale fisheries, a survey on recreational fisheries and a study on marine benthic habitats are also included. From MEDITS, oceanographic, meteorological, and sedimentology data, will be collected which would then be jointly analysed with the biological data. Data on marine habitats will also be collected to compile a data set on the impact of certain fishing gears on specific habitats.

In order to mitigate gaps in the scientific onboard observations data of certain métiers or target species, such as for swordfish and bluefin tuna, enhanced recruitment, training, deployment, and collection of data by the onboard observers is being undertaken. Moreover, as noted in Malta's endorsed national workplan, a survey-based data collection system on the recreational fisheries sector is being launched to determine, for instance, the population and the main target species of this sector.

Biological Sampling has been consistently increased from year to year to address the representativeness and accuracy of biometric data, which will also be in line with the established protocols emanating from the EU funded projects STREAMLINE and STREAM. With the outlined planned changes, the upcoming data sets are expected to provide a more holistic perspective of the fisheries and aquaculture industries in Malta. This would consequently lead to a more robust outcome from the analysis of economic performance trends of Malta's fleet segments, which would then be adopted in the respective revised management plans to ensure the socio-economic and ecological sustainability of this economic sector.

Complementarities

Such actions will complement research actions/activities proposed under SO 1.1, and SO 1.6 and actions under EMFAF direct management and Horizon Europe, amongst others.

Expected Results

- Enhanced collection, management, use and processing of data under the EU-MAP framework
- Enhanced control and enforcement activities through improved governance capacity and means of control
- Enhanced resilience of the fisheries and aquaculture sectors through actions implemented

- 2.1.1. Priority: 1. Fostering sustainable fisheries and the restoration and conservation of aquatic biological resources
- 2.1.1.1. Specific objective: 1.4. Fostering efficient fisheries control and enforcement, including fighting against IUU fishing, as well as reliable data for knowledge-based decision-making
- 2.1.1.1. Interventions of the Funds

The main target groups – point (d)(iii) of Article 22(3) CPR

DFA as the Competent Authority

DFA's Fisheries Resource Unit (FRU) is responsible for the collection, management, use of data and to provide support for scientific advice regarding the CFP. It is responsible for drafting Malta's EU-MAP for the collection, management and use of fisheries data, which data is made available to EC and other end users (including GFCM and ICCAT). The Compliance Unit complemented by the Armed Forces of Malta (AFM) and the Administrative Law Enforcement (ALE) are responsible for control inspection and enforcement.

Additional Target Groups

- Fishers and aquaculture operators; and
- Entities responsible for control & enforcement (such as AFM and ALE).

- 2.1.1. Priority: 1. Fostering sustainable fisheries and the restoration and conservation of aquatic biological resources
- 2.1.1.1. Specific objective: 1.4. Fostering efficient fisheries control and enforcement, including fighting against IUU fishing, as well as reliable data for knowledge-based decision-making
- 2.1.1.1. Interventions of the Funds

Actions safeguarding equality, inclusion and non-discrimination – point (d)(iv) of Article 22(3) CPR and Article 6 ESF+ Regulation

The Programme integrates the principles of equality, inclusion and non-discrimination which were mainstreamed into the preparation phase through the involvement of the relative partners in the consultation process including the relevant public authorities/regulators, civil society and NGOs.

The above approach combined a bottom-up and top-down approach thereby ensuring a multilevel governance, all-inclusive structure that comprised relevant entities responsible for promoting equality, non-discrimination and accessibility. Such entities will continue to be consulted during the implementation of the programme.

Efforts undertaken in the previous programming period to safeguard equality, inclusion and non-discrimination will continue to be upheld in line with national practice. This includes the active involvement of the relevant authorities during the different cycles of the Programme, including preparation, implementation, monitoring and evaluation. The participation of the EMFAF MC shall also contribute towards safeguarding equality inclusion and non-discrimination.

Complementary measures aimed at safeguarding equality, inclusion and non-discrimination, including initiatives aimed at promoting civil rights, equal opportunities, gender equality and family-friendly measures remain at the forefront of national policies. Such principles will be upheld under this programming period at both national and local levels, through actions that shall be undertaken by the respective Ministries and entities, including the Ministry for responsible for equality, the National Commission for the Promotion of Equality (NCPE) and the Commission for the Rights of Persons with Disability (CRPD).

Measures to safeguard equality, inclusion and non-discrimination will also be in line with the respective enabling condition and the relevant national legislation, strategies and/or action plans, as applicable. Such principles shall also be addressed at project level, by means of their inclusion as selection criteria in order to encourage project promoters to factor them in their project proposals, where applicable.

EMFAF Programme actions are non-discriminatory and are aimed at both male and female participants in the sectors.

- 2.1.1. Priority: 1. Fostering sustainable fisheries and the restoration and conservation of aquatic biological resources
- 2.1.1.1. Specific objective: 1.4. Fostering efficient fisheries control and enforcement, including fighting against IUU fishing, as well as reliable data for knowledge-based decision-making
- 2.1.1.1. Interventions of the Funds

Indication of the specific territories targeted, including the planned use of territorial tools – point (d)(v) of Article 22(3) CPR

The Maltese territory. Territorial tools are not foreseen under this Programme.

- 2.1.1. Priority: 1. Fostering sustainable fisheries and the restoration and conservation of aquatic biological resources
- 2.1.1.1. Specific objective: 1.4. Fostering efficient fisheries control and enforcement, including fighting against IUU fishing, as well as reliable data for knowledge-based decision-making
- 2.1.1.1.1 Interventions of the Funds

The interregional, cross-border and transnational actions – point (d)(vi) of Article 22(3) CPR

Data collection, control and enforcement have an element of cross-border and transnational cooperation, including actions targeting data collection training and data/knowledge sharing networks, European Working Groups meetings, European Fishery Control Agency (EFCA) trainings and Joint Action Plans. Actions will be implemented in line with the related National Work Plans, Control Programmes and Action Plans.

- 2.1.1. Priority: 1. Fostering sustainable fisheries and the restoration and conservation of aquatic biological resources
- 2.1.1.1. Specific objective: 1.4. Fostering efficient fisheries control and enforcement, including fighting against IUU fishing, as well as reliable data for knowledge-based decision-making
- 2.1.1.1.1 Interventions of the Funds

The planned use of financial instruments – point (d)(vii) of Article 22(3) CPR

The use of financial instruments is not planned through this Programme. Resort to financial instruments is not justified considering the funds available under the EMFAF Programme and the small size of the market and the sector, which do not allow the attainment of the critical mass required.

Moreover, the actions directly targeting fishers under control and investment (control means on board vessels, awareness) shall be implemented by DFA as the competent authority. Since these actions will be implemented by the public sector, these do not lend themselves to support from financial instruments.

- 2.1.1. Priority: 1. Fostering sustainable fisheries and the restoration and conservation of aquatic biological resources
- 2.1.1.1. Specific objective: 1.4. Fostering efficient fisheries control and enforcement, including fighting against IUU fishing, as well as reliable data for knowledge-based decision-making

2.1.1.1.2. Indicators

Reference: point (d)(ii) of Article 22(3) CPR and Article 8 ERDF and CF Regulation

Table 2: Output indicators

Code	Indicator	Measurement unit	Milestone (2024)	Target (2029)	
CO01	Number of operations	number	4.00	9.00)

- 2.1.1. Priority: 1. Fostering sustainable fisheries and the restoration and conservation of aquatic biological resources
- 2.1.1.1. Specific objective: 1.4. Fostering efficient fisheries control and enforcement, including fighting against IUU fishing, as well as reliable data for knowledge-based decision-making

2.1.1.1.2. Indicators

Reference: point (d)(ii) of Article 22(3) CPR

Table 3: Result indicators

ID	Indicator	Measurement unit	Baseline or reference value	Reference Year	Target (2029)	Source of data	Comments
CR12	Effectiveness of the system for "collection, management and use of data" (scale: 3=high, 2=medium, 1=low)	scale	2.00	2021	3.00	Pg. 88, Scientific, Technical and Economic Committee for Fisheries (STECF) -Evaluation of the 2020 Annual Reports for Data Collection and Data Transmission (STECF-21-09).	These operations consists of a framework where fisheries dependent and independent data are collected.
CR15	Control means installed or improved	means	0.00	2021	952.00	Department of Fisheries and Aquaculture	
CR19	Actions to improve governance capacity	actions	0.00	2021	10.00	Department of Fisheries and Aquaculture	
CR21	Datasets and advice made available	number	0.00	2021	40.00	Fishery dependent and independent data	Data calls submitted annually to the end users, such as GFCM, ICES, ICCAT and the Commission, as per their requirements.

- 2.1.1. Priority: 1. Fostering sustainable fisheries and the restoration and conservation of aquatic biological resources
- 2.1.1.1. Specific objective: 1.4. Fostering efficient fisheries control and enforcement, including fighting against IUU fishing, as well as reliable data for knowledge-based decision-making
- 2.1.1.4. Indicative breakdown of the programmed resources (EU) by type of intervention for EMFAF

Table 9: Indicative breakdown of the programmed resources (EU) by type of intervention for EMFAF

Code	Amount (EUR)
10. Control and enforcement	3,150,000.00
11. Data collection and analysis, and promotion of marine knowledge	3,150,000.00

- 2.1.1. Priority: 1. Fostering sustainable fisheries and the restoration and conservation of aquatic biological resources
- 2.1.1.1. Specific objective: 1.6. Contributing to the protection and restoration of aquatic biodiversity and ecosystems
- 2.1.1.1.1. Interventions of the Funds

The related types of actions – point (d)(i) of Article 22(3) CPR and Article 6 ESF+ Regulation

Actions aim to support the needs of the fisheries sector, including SSCF through various actions which are in line with those recommended in the EC's Sea Basin Analysis (2020) and aim to address resilience, aid in the green transition while implementing innovative solutions, where possible. Actions will contribute to the ambitions of the *Ministerial Declaration on a Regional Plan of Action for Small-scale Fisheries in the Mediterranean and the Black Sea* in relation to the involvement of SSCFs in plans for the disposal and recycling of recovered nets.

Actions addressing Marine Litter

Interventions that protect and restore aquatic biodiversity and ecosystems [1] through the provision of support to fishers for the passive collection of lost fishing gears and marine litter are foreseen. This aims to address marine litter by involving fishers in line with the ambitions of the *Single-Use Plastic Products Strategy for Malta 2021-2030*, EU's Strategy for plastics in a circular economy and the Single-use Plastics Directive (SUP) (EU) 2019/904. Focus may be placed on the prevention of entry of litter (including Abandoned, Lost or otherwise Discarded Fishing Gear (ALDG), and SUP's into the marine environment through actions related to port or other infrastructure amenities for adequate lost fishing gear and marine litter reception. Actions will be implemented in line with applicable state aid rules and the Port Reception Facilities Directive (EU) 2019/883. Complementarities with any national initiatives undertaken, such as the Lost Gear Response Initiative, will also be sought.

Actions addressing the achievement of Good Environmental Status and the conservation and restoration of marine Natura 2000 areas

Actions to achieve or maintain a good environmental status in the marine environment are foreseen taking into account conservation and other management measures identified by the Environment and Resources Authority, including amongst others:

- (i) the development and implementation of an awareness raising strategy and related campaigns in line with PAF measures for 'Natura 2000 related communication and awareness-raising measures, education and visitor access';
- (ii) measures targeting the management of non-indigenous species and light pollution (with respect to seabirds) in line with PAF section 'Site-related

maintenance and restoration measures within and beyond Natura 2000 sites';

- (iii) reintroduction strategy for *Steromphala nivosa* in line with PAF section 'Site-related maintenance and restoration measures within and beyond Natura 2000 sites';
- (iv) processes in line with PAF Section 'Site Administration and Communication with stakeholders' including capacity building.

These actions will seek the synergistic implementation of management processes within existing MPAs and, where relevant, studies to facilitate such management in the longer-term. To ensure a holistic approach to the management of the marine environment, MPA conservation measures will be implemented in synergy with the WFD and MSFD Programmes of Measures, where relevant, with the latter providing an overarching framework for site-specific conservation measures within existing MPAs. As part of this action, MPA management measures will be implemented in synergy with overarching measures to address pressures at both localised and national scales. An integrated and ecosystem approach will be sought, in collaboration with relevant stakeholders. Initiatives will engage the public in contributing to the sustainable use of marine resources. The action will enable Malta to progress towards the achievement of GES and of conservation objectives for marine habitats and species. Such management processes will contribute to the Biodiversity Strategy 2030 through the effective management of protected areas in the marine environment.

Actions will also target restoration measures for *Posidonia oceanica* meadows which constitute a priority habitat listed under the Habitats Directive 92/43/EEC. This habitat type is associated with a rich biodiversity and numerous ecosystem services including a key role in the life stages of commercial fish stocks. Seagrass meadows play an important role in mitigating climate change as these store substantial quantities of carbon. Stopping the continuing degradation and loss of these ecosystems is crucial, since they protect the coastline from erosion and sea level rise, therefore contributing to adaptation. Five MPAs have been designated in Malta's coastal waters targeting the achievement of favourable conservation status of Posidonia meadows in line with the objectives of the EU Habitats Directive. Yet this habitat type remains vulnerable to anthropogenic pressures and while its status is generally good at a national scale, there is a need to explore restoration techniques to address localised deterioration of this habitat type. This action will thus seek the implementation of restoration measures of Posidonia meadows in parallel to the implementation of the management regimes for existing MPAs. This will involve a research component and the implementation of feasible restoration techniques within selected areas identified in collaboration with stakeholders. coupled to the implementation of a pilot project and monitoring of the effectiveness of such measures. This action will engage the public and stakeholders in the protection of Posidonia meadows as a priority habitat associated with various ecosystem services through the regulation of activity as necessary. Other actions will include the monitoring of effectiveness of restoration techniques and the development of restoration plans on the basis of the outcome of the pilot implementation process. The restoration of *Posidonia* meadows as initiated through this action will not only be contributing to the achievement of the objectives of the Habitats Directiv

Other operations relate to actions engaging fishers in existing MPA management processes. This will provide a platform for the direct involvement of fishers in the implementation of management actions aiming towards a participatory approach for management of existing MPAs and addressing pressures arising from fisheries activity and other pressures which fishers can assist in addressing. The management processes that will be targeted by this action will include inter alia the active participation of fishers in employment of by-catch mitigation measures, spatial management processes targeting recovery of marine

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ecosystems, control of non-indigenous species and other processes targeting sustainable fishery, such as the use of selective gears. Fishers will also be involved in addressing pressures related to marine litter by exploring alternative designs to fishing gear and enhancing reporting schemes for ALDFG which are also in line with PAF related measures. The action will explore the contribution of fishers to other pressures on the marine environment such as the monitoring and control of non-indigenous species (NIS) which may contribute to reach GES under the MSFD descriptor 2. The engagement of fishers will deliver a management framework whereby the contribution of local actors ensures the effectiveness of management processes in achieving environmental and conservation objectives.

Programme actions will be implemented through an inclusive approach involving various stakeholders (including fishers and SSCF) in the participatory management of the marine space, including marine Natura 2000 areas. This collaborative approach will help to preserve, transfer and enhance knowledge gain, increase awareness of the needs and challenges and apply appropriate protection and restoration measures through increased social dialogue, collaboration and ownership thus enhancing sustainability on a socio-economic and environmental level. These contribute to PAF measures 'Site-related maintenance and restoration measures within and beyond Natura 2000 sites' and 'Natura 2000 - related communication and awareness raising measures, education and visitor access'

Actions will contribute towards the EU nature restoration targets including EU Biodiversity Strategy through the effective management of existing marine Natura 2000 sites, deemed as crucial for the actual conservation of habitats and species and through the restoration of priority habitats.

Complementarities

Actions under this SO shall be complemented by SO 1.3 conservation actions and conservation-related onboard investments targeting selective gear under SO 1.1. ERDF initiatives targeting green infrastructure/green ecological corridors and protection/conservation of biodiversity and interventions under the CAP SP which aim to foster biodiversity regeneration shall also contribute to biodiversity ambitions.

Expected Results

- Improved MPA management processes
- Improved conservation status of habitats and species
- Reduced marine pollution and enhanced GES of the marine environment

[1] Interventions are foreseen in line with Article 25(2)(a) and 25 (2)(b) of the EMFAF Regulation.

- 2.1.1. Priority: 1. Fostering sustainable fisheries and the restoration and conservation of aquatic biological resources
- 2.1.1.1. Specific objective: 1.6. Contributing to the protection and restoration of aquatic biodiversity and ecosystems
- 2.1.1.1.1. Interventions of the Funds

The main target groups – point (d)(iii) of Article 22(3) CPR

The target groups are:

- Public authorities/entities, including, as applicable, ERA, DFA competent authorities responsible for investments related to infrastructure, regional entities, competent authority for Planning, Wasteserv Malta, amongst others;
- Local Councils;
- Fishers including small-coastal fishers, fishing cooperatives and associations;
- Non-Government Organisations (NGO's) involved in marine/fisheries/nature protection;
- Entities and research institutions involved with research/ studies/ assessments in the marine environment and similar; and
- The general public.

- 2.1.1. Priority: 1. Fostering sustainable fisheries and the restoration and conservation of aquatic biological resources
- 2.1.1.1. Specific objective: 1.6. Contributing to the protection and restoration of aquatic biodiversity and ecosystems
- 2.1.1.1. Interventions of the Funds

Actions safeguarding equality, inclusion and non-discrimination – point (d)(iv) of Article 22(3) CPR and Article 6 ESF+ Regulation

The Programme integrates the principles of equality, inclusion and non-discrimination which were mainstreamed through the involvement of the relative partners in the consultation process including the relevant public authorities/regulators, civil society and NGOs.

This approach combined a bottom-up and top-down approach, ensuring a multilevel governance, all-inclusive structure that comprised relevant entities responsible for promoting equality, non-discrimination and accessibility. Such entities will continue to be consulted in implementation.

Efforts and initiatives undertaken in the previous programming period to safeguard equality, inclusion and non-discrimination will continue to be upheld in line with national practice. This includes the active involvement of the relevant authorities during the different cycles of the programme, including preparation, implementation, monitoring and evaluation. The participation of the EMFAF MC in accordance with the respective Terms of Reference shall also contribute towards safeguarding equality inclusion and non-discrimination.

Complementary measures aimed at safeguarding equality, inclusion and non-discrimination, including initiatives aimed at promoting civil rights, equal opportunities and family-friendly measures were implemented within the public sector. Improving gender equality are also at the forefront of national policies. Such principles will be upheld under this programming period at both the national and local levels, through actions that shall be undertaken by the respective Ministries and entities, including the Ministry responsible for equality, the National Commission for the Promotion of Equality (NCPE) and the Commission for the Rights of Persons with Disability (CRPD).

EMFAF Programme actions are non-discriminatory and are aimed at both male and female participants in the sectors.

Measures to safeguard equality, inclusion and non-discrimination will be in line with the respective enabling condition and relevant national legislation, strategies and/or action plans, as applicable. Such principles shall also be addressed at project level, by means of their inclusion as selection criteria to encourage project promoters to factor them in their project proposals, where applicable.

- 2.1.1. Priority: 1. Fostering sustainable fisheries and the restoration and conservation of aquatic biological resources
- 2.1.1.1. Specific objective: 1.6. Contributing to the protection and restoration of aquatic biodiversity and ecosystems
- 2.1.1.1.1. Interventions of the Funds

Indication of the specific territories targeted, including the planned use of territorial tools – point (d)(v) of Article 22(3) CPR

Malta has designated 18 Marine Protected Areas, amounting to approximately 4,100km2 with an area equivalent to approximately 35% of the Malta's Fisheries Management Zone (FMZ), thus significantly contributing to the targets of the EU Biodiversity Strategy 2030. This said area will be targeted through the proposed actions to be supported as linked to the Prioritised Action Framework (PAF) for Natura 2000 in Malta. Territorial tools are not foreseen under this Programme.

- 2.1.1. Priority: 1. Fostering sustainable fisheries and the restoration and conservation of aquatic biological resources
- 2.1.1.1. Specific objective: 1.6. Contributing to the protection and restoration of aquatic biodiversity and ecosystems
- 2.1.1.1.1. Interventions of the Funds

The interregional, cross-border and transnational actions – point (d)(vi) of Article 22(3) CPR

Cross-border and transnational initiatives are not foreseen at this stage however, actions targeting training and collaboration/knowledge sharing networks do not exclude such possibility and may include partners from other Member States with the aim of exchanging knowledge, experiences and best practices thus improving protection and restoration measures at the local level.

- 2.1.1. Priority: 1. Fostering sustainable fisheries and the restoration and conservation of aquatic biological resources
- 2.1.1.1. Specific objective: 1.6. Contributing to the protection and restoration of aquatic biodiversity and ecosystems
- 2.1.1.1.1. Interventions of the Funds

The planned use of financial instruments – point (d)(vii) of Article 22(3) CPR

The use of financial instruments is not planned through this Programme. The primary issues identified in a study pertaining specifically to the introduction of Financial Instruments in the Fisheries and Aquaculture sectors in Malta [1] are deemed to outweigh potential benefits. Resort to financial instruments is not justified considering the funds available under the EMFAF Programme and the small size of the market and the sector, which do not allow the attainment of the critical mass required.

It is foreseen that the main identified actions will overall be implemented by public authorities as the responsible authorities although in partnership with key stakeholders including fishers/fish cooperatives, aquaculture operators and NGOs. In this regard, since these will be implemented by the public sector, these operations do not lend themselves to support from financial instruments.

[1] Report on stakeholders' views on the introduction of Financial Instruments in the Fisheries and Aquaculture sectors in Malta. EuropeanFunds.info. (2019)

- 2.1.1. Priority: 1. Fostering sustainable fisheries and the restoration and conservation of aquatic biological resources
- 2.1.1.1. Specific objective: 1.6. Contributing to the protection and restoration of aquatic biodiversity and ecosystems
- 2.1.1.1.2. Indicators

Reference: point (d)(ii) of Article 22(3) CPR and Article 8 ERDF and CF Regulation

Table 2: Output indicators

Code	Indicator	Measurement unit	Milestone (2024)	Target (2029)
CO01	Number of operations	number	2.00	4.00

- 2.1.1. Priority: 1. Fostering sustainable fisheries and the restoration and conservation of aquatic biological resources
- 2.1.1.1. Specific objective: 1.6. Contributing to the protection and restoration of aquatic biodiversity and ecosystems

2.1.1.1.2. Indicators

Reference: point (d)(ii) of Article 22(3) CPR

Table 3: Result indicators

	ID	Indicator	Measurement unit	Baseline or reference value	Reference Year	Target (2029)	Source of data	Comments
(Area addressed by operations contributing to a good environmental status, protecting, conserving, and restoring biodiversity and ecosystems	km2	0.00	2021	4,100.00	Environment and Resources Authority	
(Actions contributing to good environmental status including nature restoration, conservation, protection of ecosystems, biodiversity, animal health and welfare	actions	0.00	2021		EMFAF Managing Authority/Environment and Resources Authority	

- 2.1.1. Priority: 1. Fostering sustainable fisheries and the restoration and conservation of aquatic biological resources
- 2.1.1.1. Specific objective: 1.6. Contributing to the protection and restoration of aquatic biodiversity and ecosystems
- 2.1.1.4. Indicative breakdown of the programmed resources (EU) by type of intervention for EMFAF

Table 9: Indicative breakdown of the programmed resources (EU) by type of intervention for EMFAF

Code	Amount (EUR)	
01. Reducing negative impacts and/or contributing to positive impacts on the environment and contributing to a good environmental status	525,000.00	
06. Contributing to a good environmental status through implementing and monitoring of marine protected areas, including Natura 2000	4,900,000.00	

2.1.1. Priority: 2.Fostering sustainable aquaculture activities, and processing and marketing of fisheries and aquaculture products, thus contributing to food security in the Union

Specific objectives

Specific objective

- 2.1. Promoting sustainable aquaculture activities, especially strengthening the competitiveness of aquaculture production, while ensuring that the activities are environmentally sustainable in the long term
- 2.2. Promoting marketing, quality and added value of fisheries and aquaculture products, as well as processing of those products

- 2.1.1. Priority: 2. Fostering sustainable aquaculture activities, and processing and marketing of fisheries and aquaculture products, thus contributing to food security in the Union
- 2.1.1.1. Specific objective: 2.1. Promoting sustainable aquaculture activities, especially strengthening the competitiveness of aquaculture production, while ensuring that the activities are environmentally sustainable in the long term
- 2.1.1.1. Interventions of the Funds

The related types of actions – point (d)(i) of Article 22(3) CPR and Article 6 ESF+ Regulation

Actions shall aim to strengthen knowledge and develop more targeted policies and approaches towards aquaculture and will be implemented by public authorities with results benefitting the private sector through the transfer of research in line with *Malta's Aquaculture Strategy*, *MNPSA*, *Smart Specialisation Strategy*, as well as the principles of the European Green Deal, EU Farm-to-Fork Strategy and the Bioeconomy Strategy.

Fostering environmental sustainability of the aquaculture industry

The development of aquaculture within current and any new aquaculture zones will comply with all provisions under relevant sectoral and environmental guidelines and legislation, including the *Aquaculture Strategy* and the *Aquaculture Operations Regulations* that specify environmental monitoring requirements, Maritime Spatial Planning Directive, Water Framework Directive (WFD) and Marine Strategy Framework Directive (MSFD). The development of aquaculture in these zones will operate within the framework of the Aquaculture Operations Regulations to maintain an ecosystem-based approach to conserve biodiversity, sustain ecosystem services, and provide nature-based solutions to climate change, while also creating opportunities for diversification of employment and increase in green jobs.

In this respect, there is also the need to maximise the potential of the limited coastal and marine space that results in intense competition for its use. The *Aquaculture Strategy* has contributed to the development of new aquaculture zones and will continue to guide designation of new zones following Directives under Maltese legislations for Development and Strategic Planning.

Efforts towards integration of the aquaculture sector to address the public's poor perception and social acceptance of the sector, are needed to ensure sustainability. Such efforts will improve the image of aquaculture, ensure a better marine environment and consolidate its place in maritime growth planning, including through Marine Spatial Planning, where applicable. The importance of strengthening the resilience of aquaculture to climate change and extreme weather events is also important. Interventions will include:

a. Assessments for the identification and mapping of the most suitable areas for developing potential land-based, inshore and offshore aquaculture in line

with the MNPSA and Malta's Aquaculture Strategy and Maritime Spatial Planning Directive;

- b. Improving sustainability of the aquaculture sector by supporting research and innovation on circularity initiatives to re-use offal waste and increasing feed efficiency. One shall also ensure that aquaculture facilities operate in an environmentally sustainable manner by carrying out evaluations of specific environmentally friendly aquaculture practices or operations to promote the maximisation and utilisation of available national marine resources and update conditions in the Environmental Monitoring Programme that stipulate the obligations to which operators need to adhere to;
- c. Improving governance and effective management by continuously monitoring in aquaculture zones the adoption of an Ecosystem-based Approach, among others, by ensuring cumulative pressures by aquaculture operations are compatible with Good Environmental Status (GES), conserving biodiversity and habitats and sustainable use of resources;
- d. Research to assess and monitor the state and/or trends of farmed aquatic genetic resources and their wild relatives in Malta;
- e. Conduct research to conserve endangered species, and as appropriate, encourage CCS production of endangered species and native species with potential for aquaculture;
- f. Actions related to climate change impacts, adaptation, risk prevention and resilience of the sector that support the decarbonisation by with emission reductions and promote use renewable energy systems, such as co-location of new aquaculture sites with offshore infrastructures.
- g. Actions aimed at valorising aquaculture by supporting decarbonisation of the sector, further minimising its carbon footprint and/or improving its environmental performance, including research activities for the development of land-based and cage-based integrated multi-trophic aquaculture (IMTA), and the aquaculture part of aquaponic systems to increase production and environmental sustainability, while contributing to lower vulnerability risks and increased resilience to climate change.

Increasing resilience and competitiveness of the sector through enhanced investment including R&I

In line with the *Aquaculture Strategy for the Maltese Islands 2014-2025*, support for investment in aquaculture including the introduction of new-culture species and to enable innovative systems is foreseen. Actions will also be pursued in the R&I areas in the aquaculture sector that will build on Malta's *Multiannual National Plan 2021-2030* which identifies the need for research and technologies. Targets in the *National Plan* aim to ensure transparency and early involvement of stakeholders in planning of specific research and innovation initiatives based on the needs of industry. The Programme interventions will be implemented and managed by public entities, with the aim to holistically support through research the industry's long-term requirements and

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sustainability.

Interventions will include:

- R&I investment on the diversification of aquaculture production and species cultured, including organic aquaculture and micro-algae species, among others. Appropriate techniques and technologies for the commercialisation of alternative marine finfish species, and lower trophic organisms, including microalgae amongst others;
- Public research equipment to support aquaculture product development, including experimental fish farming cages, scientific equipment and other equipment required to carry out innovative research and studies directly at sea, contributing to the objective under Article 26(1)(a) of the EMFAF Regulation. This shall foster a new research dimension to the Aquaculture Directorate whereby having the possibility to carry out such activities at sea, shall expand Malta's potential to carry out research on a wider spectrum of fish species. Such initiatives would require investment such as the purchasing of fish pans, vessel to reach the site and also carry research with, sensors to monitor different environmental variables, the installation of systems to integrate AI systems focusing on feed efficiency and growth;
- R&I initiatives leading to the uptake of new or substantially improved products, processes, or management and organisation systems in the sector;
- R&I activities related to reduced dependence on fish meal and oil, sustainable use of resources in aquaculture and improving biosecurity, animal health and welfare and public health;
- Technical or economic feasibility studies of innovative products or processes.

Public research equipment required is diverse, including setup specific equipment like localized pumps, filtration, RAS systems, UV sterilizers, analytical lab equipment required to conduct project specific studies and other scientific equipment deemed fit for the proper delivery of the project and its respective target indicators.

Actions will also support further research and development for sustainability, such as on aquaculture's impacts on marine and coastal ecosystems, and the development of innovative and environmentally friendly intensive and integrated aquaculture systems, including recirculating aquaculture systems (RAS) for niche high value species with local demand such as sea bass, sea bream, meagre and amberjack.

The actions highlighted above also aim to contribute to the Farm-to-Fork Strategy ambitions for increased targeted support for algae aquaculture and to the 50% EU target for the reduction in sales of antimicrobials used for farmed animals and aquaculture.

Knowledge and Exchange

Knowledge development will foster a skilled labour force in the aquaculture sector in line with the *Aquaculture Strategy for the Maltese Islands 2014-2025* and the MNSPA, including through:

- Support for vocational training and lifelong learning with potential areas of focus relating to innovative aquaculture practices research and diversification;
- Upskilling of public officers;
- Networking, exchange of experiences and best practices among aquaculture enterprises, responsible authorities, professional/research organisations and other key stakeholders to foster knowledge transfer and collective collaboration.

Complementarities

Actions will be complemented with aquaculture investments as outlined in the MNPSA and actions under SO 2.2 by increasing consumer awareness of sustainable aquaculture products and addressing issues on food security.

Expected Results

- Increased research and innovation aquaculture projects addressing sustainability, adaptation and resilience of the sector; and
- Enhanced knowledge and skills, including transfer and collaboration.

- 2.1.1. Priority: 2. Fostering sustainable aquaculture activities, and processing and marketing of fisheries and aquaculture products, thus contributing to food security in the Union
- 2.1.1.1. Specific objective: 2.1. Promoting sustainable aquaculture activities, especially strengthening the competitiveness of aquaculture production, while ensuring that the activities are environmentally sustainable in the long term
- 2.1.1.1.1 Interventions of the Funds

The main target groups – point (d)(iii) of Article 22(3) CPR

The target groups are:

- The competent authority implementing Malta's Multiannual National Plan for the Development of Sustainable Aquaculture (Department of Fisheries and Aquaculture);
- The Aquaculture Sector; and
- The general public.

- 2.1.1. Priority: 2. Fostering sustainable aquaculture activities, and processing and marketing of fisheries and aquaculture products, thus contributing to food security in the Union
- 2.1.1.1. Specific objective: 2.1. Promoting sustainable aquaculture activities, especially strengthening the competitiveness of aquaculture production, while ensuring that the activities are environmentally sustainable in the long term
- 2.1.1.1. Interventions of the Funds

Actions safeguarding equality, inclusion and non-discrimination – point (d)(iv) of Article 22(3) CPR and Article 6 ESF+ Regulation

Efforts and initiatives undertaken during the previous programming periods to ensure the implementation and monitoring of actions safeguarding equality, inclusion and non-discrimination will continue to be upheld in this programme in accordance with national practice. This includes the active involvement of the relevant authorities during the different cycles of the programme, including preparation, implementation, monitoring and evaluation. The participation of the EMFAF Monitoring Committee in accordance with the respective Terms of Reference is another important measure which shall contribute towards safeguarding equality inclusion and non-discrimination.

Complementary measures aimed at safeguarding equality, inclusion and non-discrimination, including initiatives aimed at promoting civil rights, equal opportunities and family-friendly measures were implemented within the public sector. Improving gender equality in matters pertaining to the labour market were also at the forefront of national policies. Such principles will be upheld under this programming period at both the national and local levels, through actions that shall be undertaken by the respective Ministries and entities, including the Ministry responsible for equality, the National Commission for the Promotion of Equality (NCPE) and the Commission for the Rights of Persons with Disability (CRPD).

Measures to safeguard equality, inclusion and non-discrimination will also be in line with the respective enabling condition and the relevant national legislation, strategies and/or action plans, as applicable. Such principles shall also be addressed at project level, by means of their inclusion as selection criteria in order to encourage project promoters to factor them in their project proposals, where applicable.

- 2.1.1. Priority: 2. Fostering sustainable aquaculture activities, and processing and marketing of fisheries and aquaculture products, thus contributing to food security in the Union
- 2.1.1.1. Specific objective: 2.1. Promoting sustainable aquaculture activities, especially strengthening the competitiveness of aquaculture production, while ensuring that the activities are environmentally sustainable in the long term
- 2.1.1.1. Interventions of the Funds

Indication of the specific territories targeted, including the planned use of territorial tools – point (d)(v) of Article 22(3) CPR

The Maltese territory. Territorial tools are not foreseen under this Programme.

- 2.1.1. Priority: 2. Fostering sustainable aquaculture activities, and processing and marketing of fisheries and aquaculture products, thus contributing to food security in the Union
- 2.1.1.1. Specific objective: 2.1. Promoting sustainable aquaculture activities, especially strengthening the competitiveness of aquaculture production, while ensuring that the activities are environmentally sustainable in the long term
- 2.1.1.1.1. Interventions of the Funds

The interregional, cross-border and transnational actions – point (d)(vi) of Article 22(3) CPR

Cross-border and transnational initiatives are not foreseen at this stage however, actions targeting training and collaboration/knowledge sharing networks do not exclude such possibility and may include partners from other Member States with the aim of exchanging knowledge, experiences and best practices thus improving sustainability and blue growth. As noted in the SWOT, actions identified under this Specific Objective *in relation to the promotion of diversification, use of multi-trophic aquaculture systems and promotion of sustainable and certified aquaculture farms and international knowledge networks* link with the priorities of the *WestMed initiative*.

- 2.1.1. Priority: 2. Fostering sustainable aquaculture activities, and processing and marketing of fisheries and aquaculture products, thus contributing to food security in the Union
- 2.1.1.1. Specific objective: 2.1. Promoting sustainable aquaculture activities, especially strengthening the competitiveness of aquaculture production, while ensuring that the activities are environmentally sustainable in the long term
- 2.1.1.1. Interventions of the Funds

The planned use of financial instruments – point (d)(vii) of Article 22(3) CPR

The use of financial instruments is not planned through this Programme. Resort to financial instruments is not justified considering the funds available under the EMFAF Programme and the small size of the market and the sector, which do not allow the attainment of the critical mass required as also identified in the *Report on stakeholders' views on the introduction of Financial Instruments in the Fisheries and Aquaculture sectors in Malta* [1].

It is also foreseen that these identified actions will be implemented by public authorities as the responsible authorities which operations do not lend themselves to support from financial instruments.

Notwithstanding the above, an ex-ante assessment for financial instruments will be undertaken during the first two years of implementation of the Programme (from the date of the Programme adoption) to take into account changing needs of the sector.

[1] Funds and Programmes Division, 2019. Report on stakeholders' views on the introduction of Financial Instruments in the Fisheries and Aquaculture sectors in Malta.

- 2.1.1. Priority: 2. Fostering sustainable aquaculture activities, and processing and marketing of fisheries and aquaculture products, thus contributing to food security in the Union
- 2.1.1.1. Specific objective: 2.1. Promoting sustainable aquaculture activities, especially strengthening the competitiveness of aquaculture production, while ensuring that the activities are environmentally sustainable in the long term

2.1.1.1.2. Indicators

Reference: point (d)(ii) of Article 22(3) CPR and Article 8 ERDF and CF Regulation

Table 2: Output indicators

Code	Indicator	Measurement unit	Milestone (2024)	Target (2029)
CO01	Number of operations	number	3.00	7.00

- 2.1.1. Priority: 2. Fostering sustainable aquaculture activities, and processing and marketing of fisheries and aquaculture products, thus contributing to food security in the Union
- 2.1.1.1. Specific objective: 2.1. Promoting sustainable aquaculture activities, especially strengthening the competitiveness of aquaculture production, while ensuring that the activities are environmentally sustainable in the long term

2.1.1.1.2. Indicators

Reference: point (d)(ii) of Article 22(3) CPR

Table 3: Result indicators

ID	Indicator	Measurement unit	Baseline or reference value	Reference Year	Target (2029)	Source of data	Comments
CR08	Persons benefitting	persons	0.00	2021	10.00	Department of Fisheries and Aquaculture	
CR10	Actions contributing to good environmental status including nature restoration, conservation, protection of ecosystems, biodiversity, animal health and welfare	actions	0.00	2021	3.00	Department of Fisheries and Aquaculture	
	Innovations enabled (number of new products, services, processes, business models or methods)	number	0.00	2021	5.00	Department of Fisheries and Aquaculture	
CR17	Entities improving resource efficiency in production and/or processing	entities	0.00	2021	1.00	EMFAF Managing Authority	
CR21	Datasets and advice made available	number	0.00	2021	6.00	Department of Fisheries and Aquaculture	

- 2.1.1. Priority: 2. Fostering sustainable aquaculture activities, and processing and marketing of fisheries and aquaculture products, thus contributing to food security in the Union
- 2.1.1.1. Specific objective: 2.1. Promoting sustainable aquaculture activities, especially strengthening the competitiveness of aquaculture production, while ensuring that the activities are environmentally sustainable in the long term
- 2.1.1.4. Indicative breakdown of the programmed resources (EU) by type of intervention for EMFAF

Table 9: Indicative breakdown of the programmed resources (EU) by type of intervention for EMFAF

Code	Amount (EUR)
02. Promoting conditions for economically viable, competitive and attractive fisheries, aquaculture and processing sectors	2,170,000.00

- 2.1.1. Priority: 2. Fostering sustainable aquaculture activities, and processing and marketing of fisheries and aquaculture products, thus contributing to food security in the Union
- 2.1.1.1. Specific objective: 2.2. Promoting marketing, quality and added value of fisheries and aquaculture products, as well as processing of those products
- 2.1.1.1. Interventions of the Funds

The related types of actions – point (d)(i) of Article 22(3) CPR and Article 6 ESF+ Regulation

Interventions under this Specific Objective [1] also aim to target the general and specific objectives of the *Open Method for Coordination* defined in the Common Fisheries Policy. In this regard, taking also into account the SWOT analysis and the needs identified in Section 1 of this Programme including the challenges identified in *EC's Sea Basin Analysis* (2020) vis-à-vis Challenge 5- Improving the value chain and marketing of fishery and aquaculture products, actions shall aim to enhance the resilience and competitiveness of the aquaculture industry [2], its sustainability, growth and employment through processing and marketing which actions are also applicable for the fisheries sector thus also addressing its sustainability and competitiveness.

This approach is also in line with the *Aquaculture Strategy for the Maltese Islands 2014-2025*, the Multiannual National Plan for the Development of Sustainable Aquaculture 2022-2030 on improving the national and regional competitiveness of the industry as well as Action 22 of the Ministerial Declaration on a Regional Plan of Action for Small-scale Fisheries in the Mediterranean and the Black Sea [3] on taking action to promote and valorise local and fresh fish.

In addition, actions under this specific objective will also aim to complement actions being taken under Specific Objective 2.1 Promoting sustainable aquaculture activities and actions identified in EU's Strategic Guidelines on Aquaculture on Communication on EU aquaculture to consumers and citizens whilst taking into consideration the principles of the European Green Deal, the Farm-to-Fork Strategy and the Bioeconomy Strategy on the efficient use of resources, safeguarding of marine ecosystems and the reduction of the carbon footprint.

Marketing Measures & Awareness-Raising Campaigns

Building on previous operations undertaken through the EFF 2007-2013 and the EMFF 2014-2020 OPs, this Programme seeks to undertake interventions that increase consumer awareness of local fish species, their diversity and seasonality thereby shifting local consumer purchases of fish species through increased knowledge awareness. These actions shall primarily be directed at marketing strategies to promote underutilised species in the fisheries sector and aquaculture products and/or the promotion of new/improved products or processes.

In this respect, interventions that will be supported will include promotional and awareness-raising campaigns to raise public awareness on:

- sustainable fishery and aquaculture products. Efforts shall be primarily directed at promoting undervalued and underutilised species in the fisheries sector, and farmed fish in the aquaculture sector. Efforts shall also target increasing public knowledge of consuming short supply chain produce including farmed species and related health benefits when consuming low trophic and organically cultured food including their low-carbon footprint;
- supply of quality aquaculture products while taking into consideration environmental protection, animal health and welfare;
- safe aquatic foods in national food-based dietary guidelines and other food and nutrition strategies
- fishery and aquaculture products obtained using methods with low impact on the environment including selective fishing gear or improved/new processing methods;
- organic aquaculture products within the meaning of Regulation (EC) No 834/2007;
- new aquaculture products with marketing potential; and
- the consumption of alien species captured in Maltese waters.

Furthermore, the campaigns will aim to foster ocean literacy, including amongst youths and children. This will include promotional campaigns aimed at improving public perception (starting from primary and secondary school students) to raise awareness about aquaculture and its contribution to society. Similarly, educational visits/open days held for both students and the general public will further aid to increase promotion of sustainable aquaculture and on activities undertaken by the Aquaculture Research Centre thus improving public perception of the sector. The proposed marketing measures shall aim to disseminate knowledge and inform the public about their rights when it comes to labelling requirements of sustainable seafood products in retail outlets and restaurants. This shall be done through the use of digital technologies, such as social media, TV/radio adverts.

This will aim to instil awareness on not only the fisheries and aquaculture sectors but also on the marine environment, biodiversity and sustainability at large. Awareness campaigns will also aim to bridge the gap between awareness and active preservation of the marine ecosystem through hands on experiences and demonstration activities. Such efforts will directly contribute to the WestMED Initiative which includes ocean literacy as one of its core priorities.

Compensation to operators of the fishery and aquaculture sectors in case of exceptional events

EMFAF support may be provided in the face of potential impacts and emerging needs resulting from exceptional events causing significant disruption of the markets as established by the EMFAF Regulation and the related Implementing Decisions. This may be applicable during the implementation of the Programme also in light of the consequences of the recent military aggression against Ukraine. Any emerging needs will also be considered during the implementation of the Programme. Support in such instances may include compensation for operators of the fishery and aquaculture sectors for certain forms

of income foregone or other mechanisms in line with the applicable State Aid rules.

Complementarities

Actions under this SO shall complement EMFAF interventions undertaken under SO 1.1 and SO 2.1 targeting fisheries and aquaculture sustainability measures, including research and innovation actions, diversification, and support for low-carbon fisheries and aquaculture activities/products. Interventions under Priority 1 targeting the sustainable development of the fisheries sector and restoration of biodiversity under SO 1.6 shall also complement by through increased awareness of the public at large.

Expected Results

- Increased public awareness and social responsibility on sustainable fishery and aquaculture products;
- Increased awareness of low carbon/ low impact fishing practices; and
- Enhanced economic resilience in the face of significant market disruption of the fisheries/aquaculture sector.
- [1] Article 26(1)(b) of the EMFAF Regulation refers.
- [2] Malta's Multinannual National Plan for the Development of Sustainable Aquaculture 2022-2030.
- [3] Ministerial Declaration on a Regional Plan of Action for Small-scale Fisheries in the Mediterranean and the Black Sea (2018, Malta).

- 2.1.1. Priority: 2. Fostering sustainable aquaculture activities, and processing and marketing of fisheries and aquaculture products, thus contributing to food security in the Union
- 2.1.1.1. Specific objective: 2.2. Promoting marketing, quality and added value of fisheries and aquaculture products, as well as processing of those products
- 2.1.1.1. Interventions of the Funds

The main target groups – point (d)(iii) of Article 22(3) CPR

The target groups are:

- General public;
- Fishers, including small-scale coastal fishers; and
- Aquaculture enterprises, aquaculture employees.

- 2.1.1. Priority: 2. Fostering sustainable aquaculture activities, and processing and marketing of fisheries and aquaculture products, thus contributing to food security in the Union
- 2.1.1.1. Specific objective: 2.2. Promoting marketing, quality and added value of fisheries and aquaculture products, as well as processing of those products
- 2.1.1.1. Interventions of the Funds

Actions safeguarding equality, inclusion and non-discrimination – point (d)(iv) of Article 22(3) CPR and Article 6 ESF+ Regulation

Efforts and initiatives undertaken during the previous programming periods to ensure the implementation and monitoring of actions safeguarding equality, inclusion and non-discrimination will continue to be upheld in this programme in accordance with national practice. Efforts and initiatives undertaken in the previous programming period to safeguard equality, inclusion and non-discrimination will continue to be upheld in accordance with national practice. This includes the active involvement of the relevant authorities during the different cycles of the Programme, including preparation, implementation, monitoring and evaluation. The participation of the EMFAF Monitoring Committee in accordance with the respective Terms of Reference is another important measure which shall contribute towards safeguarding equality inclusion and non-discrimination.

Complementary measures aimed at safeguarding equality, inclusion and non-discrimination, including initiatives aimed at promoting civil rights, equal opportunities and family-friendly measures were implemented within the public sector. Improving gender equality in matters pertaining to the labour market were also at the forefront of national policies. Such principles will be upheld under this programming period at both the national and local levels, through actions that shall be undertaken by the respective Ministries and entities, including the Ministry responsible for equality, the National Commission for the Promotion of Equality (NCPE) and the Commission for the Rights of Persons with Disability (CRPD).

Measures to safeguard equality, inclusion and non-discrimination will also be in line with the respective enabling condition and the relevant national legislation, strategies and/or action plans, as applicable. Such principles shall also be addressed at project level, by means of their inclusion as selection criteria in order to encourage project promoters to factor them in their project proposals, where applicable.

- 2.1.1. Priority: 2. Fostering sustainable aquaculture activities, and processing and marketing of fisheries and aquaculture products, thus contributing to food security in the Union
- 2.1.1.1. Specific objective: 2.2. Promoting marketing, quality and added value of fisheries and aquaculture products, as well as processing of those products
- 2.1.1.1. Interventions of the Funds

Indication of the specific territories targeted, including the planned use of territorial tools – point (d)(v) of Article 22(3) CPR

The Maltese territory. Territorial tools are not foreseen under this Programme.

- 2.1.1. Priority: 2. Fostering sustainable aquaculture activities, and processing and marketing of fisheries and aquaculture products, thus contributing to food security in the Union
- 2.1.1.1. Specific objective: 2.2. Promoting marketing, quality and added value of fisheries and aquaculture products, as well as processing of those products
- 2.1.1.1. Interventions of the Funds

The interregional, cross-border and transnational actions – point (d)(vi) of Article 22(3) CPR

Cross-border and transnational initiatives are not foreseen under this Specific Objective.

- 2.1.1. Priority: 2. Fostering sustainable aquaculture activities, and processing and marketing of fisheries and aquaculture products, thus contributing to food security in the Union
- 2.1.1.1. Specific objective: 2.2. Promoting marketing, quality and added value of fisheries and aquaculture products, as well as processing of those products
- 2.1.1.1. Interventions of the Funds

The planned use of financial instruments – point (d)(vii) of Article 22(3) CPR

The use of financial instruments is not planned at this stage. Resort to financial instruments is not justified considering the funds available under the EMFAF Programme and the small size of the market and the sector, which do not allow the attainment of the critical mass required as also identified in the *Report on stakeholders' views on the introduction of Financial Instruments in the Fisheries and Aquaculture sectors in Malta* [1].

It is also foreseen that identified actions will be implemented by public authorities as the responsible authorities, which operations do not lend themselves to support from financial instruments.

[1] Funds and Programmes Division, 2019, Report on stakeholders' views on the introduction of Financial Instruments in the Fisheries and Aquaculture sectors in Malta.

- 2.1.1. Priority: 2. Fostering sustainable aquaculture activities, and processing and marketing of fisheries and aquaculture products, thus contributing to food security in the Union
- 2.1.1.1. Specific objective: 2.2. Promoting marketing, quality and added value of fisheries and aquaculture products, as well as processing of those products

2.1.1.1.2. Indicators

Reference: point (d)(ii) of Article 22(3) CPR and Article 8 ERDF and CF Regulation

Table 2: Output indicators

Code	Indicator	Measurement unit	Milestone (2024)	Target (2029)	
CO01	Number of operations	number	1.00	1.00	\int

- 2.1.1. Priority: 2. Fostering sustainable aquaculture activities, and processing and marketing of fisheries and aquaculture products, thus contributing to food security in the Union
- 2.1.1.1. Specific objective: 2.2. Promoting marketing, quality and added value of fisheries and aquaculture products, as well as processing of those products

2.1.1.1.2. Indicators

Reference: point (d)(ii) of Article 22(3) CPR

Table 3: Result indicators

ID	Indicator	Measurement unit	Baseline or reference value	Reference Year	Target (2029)	Source of data	Comments
CR1	Entities increasing social sustainability	entities	0.00	2021	1.00	EMFAF Managing Authority	
CR1	Entities benefitting from promotion and information activities	entities	0.00	2021	1,530.00	Department of Fisheries and Aquaculture	

- 2.1.1. Priority: 2. Fostering sustainable aquaculture activities, and processing and marketing of fisheries and aquaculture products, thus contributing to food security in the Union
- 2.1.1.1. Specific objective: 2.2. Promoting marketing, quality and added value of fisheries and aquaculture products, as well as processing of those products
- 2.1.1.4. Indicative breakdown of the programmed resources (EU) by type of intervention for EMFAF

Table 9: Indicative breakdown of the programmed resources (EU) by type of intervention for EMFAF

Code	Amount (EUR)
02. Promoting conditions for economically viable, competitive and attractive fisheries, aquaculture and processing sectors	1,020,773.00

2.1.1. Priority: 3.Enabling a sustainable blue economy in coastal, island and inland areas, and fostering the development of fishing and aquaculture communities

Specific objectives

Specific objective

2.1.1. Priority: 4.Strengthening international ocean governance and enablin	g seas and oceans to be safe, secure, clean and sustainably managed
Specific objectives	

Specific objective

2.2. Technical assistance priorities

Reference: Article 22(2) and point (c) of Article 22(3) CPR

Type

Technical assistance pursuant to Article 36(4) CPR

- 2. Priorities
- 2.2. Technical assistance priorities
- 2.2.1. Priority: 5.1. Technical assistance pursuant to Article 36(4) CPR
- 2.2.1.1 Interventions from the funds

The related types of actions – point (e)(i) of Article 22(3) CPR

Technical assistance shall facilitate the implementation of the EMFAF 2021-2027 Programme on the basis of effective and efficient practices through clear, simple and transparent processes, and strengthened organisational capacity with the ultimate aim of reducing administrative burden, enhancing knowledge-transfer, improving outreach, communication and networking across key stakeholders.

In line with Article 36 (1) of the CPR, Malta may utilise technical assistance to support actions implemented for previous and subsequent programming periods, as well as actions necessary for the effective administration and use of the Fund.

Furthermore, technical assistance may be utilised for the capacity building of the partners referred to in Article 8 of the CPR, as well as to provide financing for carrying out functions such as preparation, training, management, monitoring, audit, evaluation, communication and visibility, and communication of the political priorities of the Union, visibility and administrative actions necessary for the implementation of this Fund, amongst others. For simplification purposes, technical Assistance for the EMFAF 2021-2027 programme shall be reimbursed pursuant to Article 36(4) of the CPR, on the basis of real costs incurred, in line with Article 51(b) of the CPR.

The aim of Technical Assistance shall be to optimise the Programme's delivery in line with regulatory requirements and procedures, including the absorption capacity of the Fund in order to maximise its potential.

More specifically, the EMFAF 2021-2027 Programme may support the following actions under Technical Assistance:

- Actions for preparation, management, monitoring, evaluation, information and communication, networking, complaint resolution, and control and audit.
- Actions for the reduction of the administrative burden on beneficiaries, including electronic data exchange systems and the development of SCO methodologies.
- Actions to reinforce the capacity of Member State Authorities and beneficiaries to administer and use the Fund.

- Actions to support the strengthening of the institutional capacity of partners in particular as regards small local authorities, economic and social partners and non-governmental organisations, in order to help them so that they can effectively participate in the preparation, implementation, monitoring and evaluation of the programmes. Support may take the form of inter alia, dedicated workshops, training sessions, coordination and networking structures or contributions to the cost of participating in meetings on the preparation, implementation, monitoring and evaluation of the Programme.
- Actions to support TA operations under the previous programming period (2014-2020) and those for the preparation of the programme post 2027.

Within this context actions under this Priority shall aim to reinforce the capacity within the entities involved in the management and control of the Fund to ensure efficiency and effectiveness in the overall implementation. This may cover staff costs for the management and control of the fund. The Authorities involved in the programming and management of the Programme shall thus be supported in strengthening their organisational capacity not solely through increased resources, where required, but also through enhanced development of existing resources with special focus on the acquisition of the relevant skills through training activities organised both locally and abroad, with the aim of ensuring effective monitoring and control procedures and attainment of results.

The Managing Authority shall on a periodical basis hold training events and or seminars addressing various issues on shared management which will be open not only to the authorities but also to the beneficiaries, as applicable. This will be complemented with the necessary capacity building measures including discussions with relevant bodies (in other MSs or EU Institutions) and networking including exchange of experiences (within the Member State as well as with other Member States). Such interventions shall aim to complement efforts to support the capacities of beneficiaries and local bodies in line with Article 37 of the CPR.

Actions related to the provision of external expert assistance such as expertise in the implementation of simplified cost options, monitoring and evaluation, and other external support necessary to improve programme delivery will also be supported. Technical Assistance shall also support any necessary roadmaps, studies, communication planning and activities, including publicity campaigns on the programme objectives and opportunities, evaluation plans and activities. In this regard, technical assistance will support EMFAF communication and visibility measures throughout the programming period to ensure that responsibilities, as defined in the legal framework Article 46 to Article 50 of the CPR in relation to visibility, transparency and communication are met by the MA and relevant stakeholders. Evaluations will be undertaken in line with Article 44 of the CPR and may include dedicated evaluations targeting horizontal principles, collective initiative and pilot projects, including if relevant the potential creation of POs and the CLLD approach in future programming periods.

Technical Assistance shall also assist aid the MA to achieve the requirements stated in Article 49 of the CPR and Section 7 of this Programme in line with the Communication Strategy, supporting the MA in the maintenance and development of a website with all the relevant information that could assist beneficiaries from application stage to project implementation and closure. Technical assistance shall also be used to further develop and support the EMFAF 2021-2027 electronic information system which can be accessed by the key stakeholders for EMFAF Programme and project management. Training would also be provided on the use of the above-mentioned system, as required. The electronic system shall record data in line with the applicable rules and shall serve to reduce administrative burden and speed up processes where possible.

Additional technical assistance pursuant to Article 37 of the CPR, through financing not linked to costs, may be requested to reinforce the capacity of national authorities/bodies/beneficiaries, amongst others. However, at programming stage, this is not envisaged.

The actions referred to above may concern previous as well as subsequent programming periods.

As noted above and as further explained below, TA will aim to address the following:

Administrative Capacity

During the implementation of previous programming periods stakeholders involved in the management, control and implementation of EU funds sustained their efforts towards ensuring that an adequate amount of human resource capacity is deployed to support the management, implementation and control requirements of the programme. However, resource challenges were experienced especially as a result of Malta's high employment rates. Through this programme, adequate capacity building measures for the MA and relevant stakeholders are foreseen to ensure a successful implementation of the Programme.

Governance

The Managing Authority (MA) has adopted an Anti-Fraud Policy and an Anti-Fraud Strategy to maintain high legal, ethical, and moral standards and adhere to the principles of integrity, objectivity, and honesty. Through these documents, the MA has adopted several specific measures, including:

- Risk Assessment Tools: The MA compiles a risk-assessment register which includes all the foreseeable risks and controls needed to mitigate such risks. These are live tools enabling a continuous process of identifying new risks together with mitigating control measures to reduce the incidence of these risks and their impact.
- Complaint Mechanism and Whistleblowing: The MA's Manual of Procedures, in line with the Anti-Fraud Strategy, includes an entire chapter on the reporting of irregularities and fraud, establishing clear procedures to be followed, including preventative and detective measures.
- Conflict of Interest: The Code of Ethics sets standards of behaviour for all the staff and namely covers conflict of interest and the confidentiality agreement, the acceptance of gifts or benefits and the use of official information, the use of official facilities and equipment, etc. Furthermore, all new recruits are requested to declare that they are free from conflict of interest and are requested to sign a Declaration of Integrity, Confidentiality, and Impartiality.

- 2.2.1. Priority: 5.1. Technical assistance pursuant to Article 36(4) CPR
- 2.2.1.1 Interventions from the funds

The main target groups – point (d)(iii) of Article 22(3) CPR

The Technical Assistance budget shall be managed by the EMFAF 2021-2027 Managing Authority based on the needs identified, and the types of actions described above. The main direct target groups shall include the Managing Authority, the Certifying Authority, the Audit Authority, the Strategy and Programming (Strategy and Implementation Division) as well as relevant partners. Indirectly, however the actions implemented through technical assistance as mentioned above shall serve to benefit EMFAF final beneficiaries through an overall strengthened capacity, improved practices and procedures.

2.2.1. Priority: 5.1. Technical assistance pursuant to Article 36(4) CPR

2.2.1.2. Indicators

Reference: point (e)(ii) of Article 22(3) CPR

Table 2: Output indicators

ID	Indicator	Measurement unit	Milestone (2024)	Target (2029)
CO01	Number of operations	number	1.00	4.00

- 2.2.1. Priority: 5.1. Technical assistance pursuant to Article 36(4) CPR
- 2.2.1.3. Indicative breakdown of the programmed resources (EU) by type of intervention

Reference: point (e)(iv) of Article 22(3) CPR

Table 9: Indicative breakdown of the programmed resources (EU) by type of intervention for EMFAF

Code	Amount (EUR)
Technical assistance	1,309,517.00

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3	Fins	ancing	n	lan
J.	T 1110	21101115	\mathbf{p}	ıuıı

Reference: points (g)(i), (ii) and (iii) of Article 22(3), Article 112(1), (2) and (3), and Articles 14 and 26 CPR

3.1 Transfers and contributions

Programme amendment related to	□ contribution to InvestEU
	☐ transfer to instruments under direct or indirect management
	☐ Transfer between ERDF, ESF+, Cohesion Fund or to another Fund or Funds

3.1 Transfers and contributions

Table 15A: Contributions to InvestEU (breakdown by year)

To InvestEU window	2021	2022	2023	2024	2025	2026	2027	Total
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3.1 Transfers and contributions

Table 15B: Contributions to InvestEU (summary)

Sustainable Infrastructure (a) Innovation and Digitisation (b) SME (c) Investment and Skills (d) Total (e=a+
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3.1 Transfers and contributions

Justification

3.1 Transfers and contributions

Reference: Articles 14, 26 and 27 CPR

Table 16A: Transfers to instruments under direct or indirect management (breakdown by year)

Instrument	2021	2022	2023	2024	2025	2026	2027	Total

Programme amendment related to

Reference: Articles 14, 26 and 27 CPR

Table 16B: Transfers to instruments under direct or indirect management (summary)

Total

3.1 Transfers and contributions

Justification

3.1 Transfers and contributions

Reference: Articles 14, 26 and 27 CPR

Table 17A: Transfers between ERDF, ESF+ and Cohesion Fund or to another Fund or Funds (breakdown by year)

Transfer to fund Category of region	2021	2022	2023	2024	2025	2026	2027	Total
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3.1 Transfers and contributions

Reference: Articles 14, 26 and 27 CPR

Table 17B: Transfers between ERDF, ESF+ and Cohesion Fund or to another Fund or Funds (summary)

ERDF more developed	ERDF transition	ERDF less developed	ESF more developed	ESF transition	ESF less developed	CF	AMIF	ISF	BMVI	Total
Elest more developed	EREST translation	Establ less de veloped	List more developed	Lor dunation	Lor less developed	· .	Amii		D V 1	10

3.1 Transfers and contributions

Transfers between ERDF, ESF+ and Cohesion Fund or to another Fund or Funds - justification

3.4 Transfers back

Table 20A: Transfers back (breakdown by year)

From InvestEU or other EU Instrument	2021	2022	2023	2024	2025	2026	2027	Total
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3.4 Transfers back

Table 20B: Transfers back (summary)

From InvestEU or other EU Instrument	Total
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3.5 Financial appropriations by year

Reference: point (g)(i) of Article 22(3) CPR and Articles 3, 4 and 7 JTF Regulation

Table 10: Financial appropriations by year

2021	2022	2023	2024	2025	2026	2027	Total
0.00	4,233,212.00	4,092,385.00	3,946,958.00	3,575,917.00	2,965,097.00	3,011,721.00	21,825,290.00

3.6 Total financial appropriations by fund and national co-financing

Reference: point (g)(iii) of Article 22(3) CPR

EMFAF programmes using technicalal assistance according to Article 36(4) CPR in accordance with the choice made in the Partnership Agreement.

Table 11A Total financial allocations by fund and national contribution

Priority	Specific objective	Basis for calculation Union support	Union contribution	National Public Contribution	Total	Co-financing rate
1. Fostering sustainable fisheries and the restoration and conservation of aquatic biological resources	1.1.1. Strengthening economically, socially and environmentally sustainable fishing activities. All operations except those supported under Articles 17 and 19	Public	5,180,000.00	2,220,000.00	7,400,000.00	70.000000000%
1. Fostering sustainable fisheries and the restoration and conservation of aquatic biological resources	1.1.2. Strengthening economically, socially and environmentally sustainable fishing activities. Operations supported under Articles 17 and 19	Public				
1. Fostering sustainable fisheries and the restoration and conservation of aquatic biological resources	1.2. Increasing energy efficiency and reducing CO2 emissions through the replacement or modernisation of engines of fishing vessels	Public	140,000.00	60,000.00	200,000.00	70.000000000%
1. Fostering sustainable fisheries and the restoration and conservation of aquatic biological resources	1.3. Promoting the adjustment of fishing capacity to fishing opportunities in cases of permanent cessation of fishing activities and contributing to a fair standard of living in cases of temporary cessation of fishing activities	Public	280,000.00	120,000.00	400,000.00	70.000000000%
1. Fostering sustainable fisheries and the	1.4. Fostering efficient fisheries control and enforcement,	Public	6,300,000.00	2,700,000.00	9,000,000.00	70.0000000000%

restoration and conservation of aquatic biological resources	including fighting against IUU fishing, as well as reliable data for knowledge-based decision-making					
1. Fostering sustainable fisheries and the restoration and conservation of aquatic biological resources	1.6. Contributing to the protection and restoration of aquatic biodiversity and ecosystems	Public	5,425,000.00	2,325,000.00	7,750,000.00	70.0000000000%
2. Fostering sustainable aquaculture activities, and processing and marketing of fisheries and aquaculture products, thus contributing to food security in the Union	2.1. Promoting sustainable aquaculture activities, especially strengthening the competitiveness of aquaculture production, while ensuring that the activities are environmentally sustainable in the long term	Public	2,170,000.00	930,000.00	3,100,000.00	70.0000000000%
2. Fostering sustainable aquaculture activities, and processing and marketing of fisheries and aquaculture products, thus contributing to food security in the Union	2.2. Promoting marketing, quality and added value of fisheries and aquaculture products, as well as processing of those products	Public	1,020,773.00	437,475.00	1,458,248.00	69.9999588547%
5.1. Technical assistance pursuant to Article 36(4) CPR	5.1. Technical assistance pursuant to Article 36(4) CPR	Public	1,309,517.00	561,222.00	1,870,739.00	69.9999839636%
Grand total			21,825,290.00	9,353,697.00	31,178,987.00	

4. Enabling conditions

Reference: point (i) of Article 22(3) CPR

Table 12: Enabling conditions

Enabling condition	Fulfilment of the enabling condition	Criteria	Fulfilment of criteria	Reference to relevant documents	Justification
1. Effective monitoring mechanisms of the public procurement market	Yes	Monitoring mechanisms are in place that cover all public contracts and their procurement under the Funds in line with Union procurement legislation. That requirement includes: 1. Arrangements to ensure compilation of effective and reliable data on public procurement procedures above the Union thresholds in accordance with reporting obligations under Articles 83 and 84 of Directive 2014/24/EU and Articles 99 and 100 of Directive 2014/25/EU.	Yes	LN 352 of 2016 – Public Procurement Regulations (https://legislation.mt/eli/ln/2016/352/eng? fbclid=IwAR12WxV0wrlgyoGAS32myH R90I30QKL9WK4fdQNaxXr-MPID6CB50W-lyzU) LN 351 of 2016 – Public Procurement of Entities operating in the Water, Energy, Transport and Postal Services Sectors Regulations (https://legislation.mt/eli/ln/2016/351/eng? fbclid=IwAR3BiHHVgWUepdcv_b3WpS Kz29G-fkneTzvMGj6eOlAlwww_SriXMFd0x8E) LN 411 of 2011 – Public Procurement of Contracting Authorities or Entities in the fields of Defence and Security Regulations	The Department of Contracts (DOC) is the single centralised public procurement institution for most functions on the national level. It is responsible for developing standard procedures and routines, for developing a procurement policy, preparing guidelines and instructions, the national contribution to EU advisory committees, the Maltese Public Procurement Network participation, collecting statistical data and advises Government on public procurement policy, amongst others. Arrangements are in place to ensure the compilation of effective and reliable data as per SL 601.03 (Articles 12)() (1)(a) 12(2), 13(n) and 14) and SL 601.05 (Articles 33 and 34(n)). Within this context, a monitoring report is prepared and submitted to the European Commission based on statistical quantitative data extracted from Government's e-Procurement Platform. Qualitative information is collated directly from each Ministry and relevant bodies. In addition, both articles mentioned in the regulations outline the roles that the office of the Director of Contracts must fulfil to ensure adherence to the public procurement regulations as laid down in the legislations.

Enabling condition	Fulfilment of the enabling condition	Criteria	Fulfilment of criteria	Reference to relevant documents	Justification
		2. Arrangements to ensure the data cover at least the following elements: a. Quality and intensity of competition: names of winning bidder, number of initial bidders and contractual value; b. Information on final price after completion and on participation of SMEs as direct bidders, where national systems provide such information.	Yes	(Refer to previous documents)	Arrangements are in place that enable the Department of Contracts (DoC) to extract information related to the names of the winning bidders, number of initial bidders and contractual value from the electronic Public Procurement System (ePPS). Following the adoption of the Public Procurement Regulations, Government enacted the ePPs to significantly reduce administrative burden in line with the concept of e-cohesion, as per the Common Provisions Regulation (EU) No 1303/2013. Even though the national system does not automatically disclose information on final price after completion of projects, a specific module entitled Open Contracting Data Standard (OCDS) is integrated within ePPS to enable the disclosure of data and documents at all stages of the contracting process by defining a common data model. This is aimed to increase contracting transparency, improve accountability and capture salient statistics with the scope of enhancing in-depth analysis of contracting data by a wide range of users. Information regarding the participation of SMEs as direct bidders can be extractable from the ePPS portal.
		3. Arrangements to ensure monitoring and analysis of the data by the competent national authorities in accordance with article 83 (2) of directive 2014/24/EU and article 99 (2) of directive 2014/25/EU.	Yes	Contracts Circular No 19/2016 – The New Public Procurement Regulations 2016 (https://contracts.gov.mt/en/Circulars/2016 /Documents/Circ19_2016.pdf)	The DOC is a single centralized public procurement institution for most functions on the national level. Complementing its monitoring and evaluation role are Ministerial Procurement Units which have been established within Ministries, as per

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Enabling condition	Fulfilment of the enabling condition	Criteria	Fulfilment of criteria	Reference to relevant documents	Justification
					Contracts Circular No 19/2016, to be responsible for procurement practices at Ministerial level while ensuring decentralisation of procurement practices. A separate Post-Contracts module titled the Contracts Register, includes information related to the contract signing and post-contract stage. The information contained within the Contracts Register can be made available through the aforementioned OCDS module. Thus, information pertaining to the full procurement cycle may be made available.
					In line with Article 83(2), procurement related information is consolidated in an EU Monitoring Report, prepared every three years for formal submission to the European Commission. This report gathers and systematises the collection of relevant procurement statistics across Government by the DOC via the ePPS, also addressing qualitative elements which are coordinated by this department through relevant Ministries.
		4. Arrangements to make the results of the analysis available to the public in accordance with article 83 (3) of directive 2014/24/EU and article 99 (3) directive 2014/25/EU.	Yes	Article 12(1a), 13(n) and 14 of LN 352 of 2016 and Article 33 and 34(niⅈ, o) of LN 351 of 2016 (https://legislation.mt/eli/ln/2016/351/eng?fbclid=IwAR3BiHHVgWUepdcv_b3WpSKz29G-fkneTzvMGj6eOlAlwww_SriXMFd0x8E)	The necessary arrangements are in place with regard to the publication of results in line with SL 601.03 Articles 12(1a), 13(n) and 14 and SL 601.05 respectively (Article 33 and 34(n), (i & ii), o)). The EU monitoring report is prepared every three years and includes data on procurement above the EU threshold, in line with the Directive. The information extracted from this report is already made available to the public through the ePPS. Any data concerning procurement below the EU threshold is published in the Government

Enabling condition	Fulfilment of the enabling condition	Criteria	Fulfilment of criteria	Reference to relevant documents	Justification
					Gazette.
		5. Arrangements to ensure that all information pointing to suspected bidrigging situations is communicated to the competent national bodies in accordance with Article 83(2) of Directive 2014/24/EU and Article 99(2) of Directive 2014/25/EU.	Yes	(Refer to previous documents)	Arrangements are in place to detect suspected bid-rigging situations by competent bodies. In this regard, the Director of Contracts, in line with Regulation 12(2) of the Public Procurement Regulations, which stipulates that in cases of misconduct involving violations or systematic problems, the Director shall be empowered to report the matter to competent authorities. A Compliance and Monitoring Unit has been set up within DoC that tackles initial investigations, that could be followed up by the Malta Police Force, the Internal Audit and Investigations Department and the National Audit Office, on a case-bycase basis.
2. Tools and capacity for effective application of State aid rules	Yes	Managing authorities have the tools and capacity to verify compliance with State aid rules: 1. For undertakings in difficulty and undertakings under a recovery requirement.	Yes	Art 57 and 58 of the Business Promotion Act (Chapter 325) (https://legislation.mt/eli/cap/325/eng)	The State Aid Monitoring Board (SAMB) is the national authority responsible for State aid issues. State Aid monitoring rules are
					implemented in line with Council Regulation (EU) No 1589/2015.
					The rules of procedure establish the reporting obligations to SAMB by State aid grantors of aid granted. The SAMB keeps regular contact with key State aid grantors and with the Managing Authorities (MAs) and Intermediate Bodies (IBs).
					Support to undertakings is proivded in line with State Aid rules. MAs verify

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Enabling condition	Fulfilment of the enabling condition	Criteria	Fulfilment of criteria	Reference to relevant documents	Justification
					compliance with State aid rules through the SAMB. MAs or IBs also verify whether applicants are undertakings in difficulty based on information submitted in applications for funding. The latter are also sent to Tax Authorities and the Malta Business Register for verification as well as other registers such as the Malta Association of Credit Management and VIES VAT number validation site. Regarding undertakings subject to an outstanding recovery order, checks and verifications would be made with the SAMB. The SAMB also guides the State aid grantors to carry out the necessary checks to ensure that undertakings in difficulty are excluded from benefitting from aid measures.
		2. Through access to expert advice and guidance on State aid matters, provided by State aid experts of local or national bodies.	Yes	Covenant between MAs and SAMB	As the National State Aid Authority responsible for State aid issues, the SAMB keeps regular contact with the respective Managing Authorities and Intermediate Bodies to provide them with the necessary guidance and support on State aid matters. This process facilitates compliance with
					the provisions of applicable rules and Regulations from formulation stage till actual implementation of State aid schemes. This process has been adopted in previous programming periods and will continue to be adopted under the 2021 – 2027 programming period. Dissemination of knowledge and technical

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Enabling condition	Fulfilment of the enabling condition	Criteria	Fulfilment of criteria	Reference to relevant documents	Justification
					expertise on State aid issues is provided to Government Ministries and agencies involved in State aid, prospective beneficiaries, the Managing Authority, intermediate bodies, and other local entities responsible for auditing and certifying the implementation of funds. A Covenant was finalised between the MAs and the State Aid Authority in Malta detailing coordination mechanisms related to EU funded projects.
3. Effective application and implementation of the Charter of Fundamental Rights	Yes	Effective mechanisms are in place to ensure compliance with the Charter of Fundamental Rights of the European Union ('the Charter') which include: 1. Arrangements to ensure compliance of the programmes supported by the Funds and their implementation with the relevant provisions of the Charter.	Yes	Covenant between MAs and Ministry responsible for Human Rights	With regard to arrangements to ensure compliance with the EU Charter of Fundamental Rights, the Managing Authorities and the Ministry responsible for Human Rights have finalised a covenant to formalize the arrangements required for ensuring compliance with the Charter of Fundamental Rights. Furthermore, a monitoring unit within the Policy Development & Programme Implementation Directorate under the responsibility of the Ministry responsible for Human Rights has been set up to ensure compliance with the Charter. The Unit in liaison with the Human Rights Directorate will be receiving requests from the Managing Authority/s to assess and ensure that project proposals are compliant with the Charter provisions during both the preparation and the implementation of the Programmes and operations supported by EU Funds.
		2. Reporting arrangements to the monitoring committee regarding cases of non-compliance of operations supported by the Funds with the Charter and complaints regarding the Charter submitted in	Yes	(Refer to previous document)	The Ministry responsible for Human Rights will be represented on the Monitoring Committees of applicable programmes to report on cases of non- compliance of operations supported by the

Enabling condition	Fulfilment of the enabling condition	Criteria	Fulfilment of criteria	Reference to relevant documents	Justification
		accordance with the arrangements made pursuant to Article 69(7).			Funds as well as complaints reported in accordance with Article 69(7) of the CPR. Furthermore, the Ministry will also form part of the Inter-ministerial Consultative Committee on EU Funds. Such provisions are stipulated in the agreement mentioned above. Furthermore, the Covenant also outlines the areas of cooperation between the MAs and the responsible entity for human rights throughout the programming period.
					With regard to reporting arrangements, the MA will inform the Monitoring Committees on: 1) The cases on noncompliance of operations supported by the Funds with the Charter and complaints regarding the Charter; 2) The assessment of the case/s; and 3) The action/s taken/to be taken. This report will be provided during the MC as part of the update on the implementation of the Enabling Conditions.
					Further information on the reporting arrangements to the Monitoring Committee can be found in the Covenant drafted between the MAs and the Ministry responsible for Human Rights.
4. Implementation and application of the United Nations Convention on the rights of persons with disabilities	Yes	A national framework to ensure implementation of the UNCRPD is in place that includes: 1. Objectives with measurable goals, data collection and monitoring mechanisms.	Yes	Malta's 2021 - 2030 National Strategy on the Rights of Disabled Persons (https://inclusion.gov.mt/wp- content/uploads/2021/09/Disability-Doc- ENG-SEP-21.pdf)	Malta's National Disability Strategy addresses aspirations stemming from the 2014 National Disability Policy and lays out a national plan to improve the quality of life of disabled persons and their families.
(UNCRPD) in				Equal Opportunities (Persons with Disability) Act (Chapter 413 of the Laws	The Strategy includes several actions as

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Enabling condition	Fulfilment of the enabling condition	Criteria	Fulfilment of criteria	Reference to relevant documents	Justification
accordance with Council Decision 2010/48/EC				of Malta) (https://legislation.mt/eli/cap/413/eng/pdf)	well as timeframes for every specific action in line with the requirement of this criterion.
					The Strategy will be implemented through a National Coordination Mechanism (Inter-Departmental Coordination Committee/Inter-Ministerial Administrative Committee on Disability) and consultations with stakeholders (Civil Society Participation Mechanism) as required by the United Nations Convention on the rights of persons with disabilities (UNCRPD). Implementation will be monitored through the Commission for the Rights of Persons with Disability's (CRPD) UNCRPD Monitoring Unit, and breaches addressed through CRPD's Directorate for Investigations, Compliance and Enforcement. As outlined under Objective 2 of the Strategy, a National Disability Register will be set up to facilitate data collection.
					The register will also be linked to an Integrated Disability Assessment system.
		2. Arrangements to ensure that accessibility policy, legislation and standards are properly reflected in the preparation and implementation of the programmes.	Yes	Accessibility Standards for All in a Built Environment Regulations - Legal Notice 198 of 2019 (https://legislation.mt/eli/sl/413.3/2019082 8/eng)	From a legal point of view, several measures have been developed to ensure compliance with accessibility policy, including the development of Accessibility Standards for all in the Built Environment Regulations, 2019 (Subsidiary Legislation 413.03).
					As to the preparation of the programmes, consultations with CRPD were held as part of the consultations on the programme

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Enabling condition	Fulfilment of the enabling condition	Criteria	Fulfilment of criteria	Reference to relevant documents	Justification
					objectives to ensure that the accessibility policy, legislation and standards are properly reflected in the preparation of the programmes in line with Article 9 of the CPR.
					A monitoring mechanism for the implementation of Article 9 UNCRPD covering the ESI Funds cycle was set up for the 2014 – 2020 programming period between CRPD and the relevant Managing Authority (MA). A similar monitoring mechanism will continue to be implemented during the 2021-2027 programming period, in line with the Covenant that is in place between the MAs and CRPD covering the 2021-2027 period.
		3. Reporting arrangements to the monitoring committee regarding cases of non-compliance of operations supported by the Funds with the UNCRPD and complaints regarding the UNCRPD submitted in accordance with the arrangements made pursuant to Article 69(7).	Yes	Covenant between MAs and CRPD	Reporting arrangements adopted for the 2021 – 2027 programming period will continue to build on the arrangements made in the 2014-2020 period, whereby project applications are sent to CRPD for vetting their compliance with the UNCRPD, and with necessary standards and procedures. In line with the Covenant, CRPD, the responsible entity, will be included as a member of the Monitoring Committee of applicable programmes to report on cases of non-compliance of operations supported by the Funds as well as complaints reported in accordance with Article 69(7) of the CPR. It will also form part of the Inter-Ministerial Consultative Committee on EU Funds.
					Further information on areas of cooperation between the MAs and CRPD throughout the programming period can be

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Enabling condition	Fulfilment of the enabling condition	Criteria	Fulfilment of criteria	Reference to relevant documents	Justification
					found in the Covenant.

5. Programme authorities

Reference: point (k) of Article 22(3) and Articles 71 and 84 CPR

Table 13: Programme authorities

Programme authorities	Name of the institution	Contact name	Position	Email
Managing authority	Funds and Programmes Division within the Ministry responsible for EU Funds	Anthony Camilleri	Director General Funds and Programmes Division	anthony.c.camilleri@gov.mt
Audit authority	Internal Audit and Investigations Department within the within the Ministry responsible for Internal Audit	Stefan Manicolo	Director General (IAID)	stefano.manicolo.1@gov.mt
Body which receives payments from the Commission	Strategy & Implementation Division within the Ministry responsible for EU Funds	Edwin Camilleri	Chief Coordinator (EU Certifying Authority)	edwin.a.camilleri@gov.mt
Body (other than managing authority) carrying out the accounting function	Strategy and Implementation Division, within the Ministry responsible for EU Funds	Edwin Camilleri	Chief Coordinator (EU Certifying Authority)	edwin.a.camilleri@gov.mt

5. Programme authorities

The repartition of the reimbursed amounts for the technical assistance pursuant to Article 36(5) CPR if more bodies are identified to receive payments from the Commission

Reference: Article 22(3) CPR

Table 13A: The portion of the percentages set out in point (b) of Article 36(5) CPR that would be reimbursed to the bodies which receive payments from the Commission in case of technical assistance pursuant to Article 36(5) CPR (in percentage points)

Reference: point (h) of Article 22(3) CPR

Malta is committed to ensuring that the principles of partnership and multi-level governance as set out in Article 8 of the Common Provisions Regulation and as further defined in Commission Delegated Regulation (EU) No 240/2014 are taken into account and promoted in the preparation and implementation of the EMFAF 2021-2027 Programme. In this regard, various stakeholders within government and non-government organisations including also local, regional, economic, social and environmental partners were involved in the consultation process of the Partnership Agreement and the EMFAF Programme.

Bilateral consultations were held across Government during the first half of 2019, regarding Malta's needs and policy developments as well as possible support for EU funding, including through the EMFAF 2021 – 2027 Programme. The consultation process was officially launched during the 5th Monitoring Committee organised by the EMFF Managing Authority in May 2019. Present for the Monitoring Committee were members representing different stakeholders in accordance with Article 3 of Commission Delegated Regulation (EU) No. 240/2014, including partners from competent regional, local, urban and other public authorities, economic and social partners, and bodies representing civil society (including environmental authorities/partners, entities/experts responsible for promoting equality and non-discrimination, and non-governmental organisations) as well as representatives from the European Commission. During the Monitoring Committee meeting members were invited to submit proposals that may be financed through the EMFAF Programme 2021-2027.

In Q4 2019, consultation sessions were held with sector participants and key stakeholders including i) fish cooperatives (Ghaqda Koperattiva tas-Sajd Ltd and National Fishing Co-operative) and the Federation of Maltese Aquaculture Producers; ii) fishers (full and part-time fishers), fish processors and aquaculture operators; iii) research institutions; iv) main governmental stakeholders, some of which are responsible for regulating, monitoring and controlling the fisheries and aquaculture sectors' and the maritime space, environmental authorities (Environment and Resources Authority, DFA, Transport Malta, Malta Marittima, Ministry for Gozo; Planning Authority); v) bodies representing civil society, such as environmental partners and non-governmental organisations (Nature Trust, Din l-Art Helwa) and bodies responsible for promoting social inclusion, gender equality and non-discrimination (NCPE). The aim of these sessions was to identify the strengths, weaknesses, threats and opportunities of the fisheries and aquaculture sectors in Malta which were then subsequently analysed taking into consideration the needs also identified throughout these consultation sessions to form the basis of the drafting of the programme. Further consultation was also carried out across Government, the private and public sector in 2020 to identify key strategies, related priority areas, and EMFAF actions targeting specific objectives.

Another consultation exercise was carried out in 2021 with the Malta Council for Economic and Social Development (MCESD), which is the formally established structure in Malta were social dialogue and public consultations take place. The Council is composed of the main socioeconomic partners in Malta representing the main employer bodies, trade unions and civil society, as well as the Government. In the same year, a wide public consultation was launched on the EMFAF document for public consultation.

Feedback was received from a number of organisations, including the public administration, social partners, non-government organisations and the private sector. A number of independent individuals also provided their input to the process. The submissions received are broadly reflected in the Programme whilst the main recommendations from the public consultation exercise include the following:

- The need for modernisation of onboard fishing vessels including engines;
- The need for actions targeting selective gear;

- Increased training opportunities;
- The promotion of fishery products;
- The need to address marine litter;
- Focus on enhanced management, restoration and monitoring of MPAs geared towards the sustainable use of marine waters;
- Enhanced data collection;
- Improving the marine environment and fostering initiatives contributing to the blue economy;
- Improving the tools, equipment, and technology to carry out control and enforcement;
- Enhanced focus on research in the aquaculture sector including alternative feed, close-cycle aquaculture, identification, and mapping of suitable aquaculture zones; and
- Ensuring social acceptance of the aquaculture sector through promotional activities.

The Monitoring Committee (MC) shall be set up within three months of the Programme approval to monitor the implementation of the Programme in line with Article 38-40 of the CPR, which composition shall reflect this multi-level governance approach. In accordance with Article 3 of Commission Delegated Regulation (EU) No. 240/2014, the members of the MC shall consist of partners from competent regional, local, urban and other public authorities, economic and social partners, and bodies representing civil society (including environmental authorities/partners, entities/experts responsible for promoting equality and non-discrimination, and non-governmental organisations).

Efforts and initiatives undertaken during the previous programming period to ensure the involvement of the relevant entities responsible for promoting equality, non-discrimination, and accessibility in the various stages of implementation of EMFF OP will continue under the EMFAF 2021-2027 Programme in accordance with national practice. The participation of the National Commission for the Promotion of Equality (NCPE) and the Commission for the Rights of Persons with Disability (CRPD) in the MC is envisaged, as entities responsible for promoting equality and non-discrimination in the implementation of the Fund. Furthermore, the entity responsible for the implementation of the Charter for Fundamental Human Rights will also be included in the MC in line with the commitments made in the horizontal enabling conditions.

The MC shall meet at least once a year to review the implementation of the EMFAF Programme including progress made towards achieving its objectives and examine issues that affect such performance. The MC shall be consulted at various stages in the implementation of the Programme in accordance with responsibilities outlined in Article 40 of the CPR, such as providing an opinion on the Programme amendments as proposed by the MA, amongst others. MC consultations may also be undertaken through written procedure in line with the applicable Terms of Reference. Partners are thus kept updated on-the-state-of-play of the implementation of the Programme and are also invited to provide feedback and provide their contribution accordingly. As per Article 40(1) of the CPR, MC members shall also examine the progress made in carrying out evaluations, syntheses of evaluations and follow-up actions pertaining to any findings and the implementation of communication and visibility actions.

Following the best practice applied under the EMFF (2014-2020) OP implementation, one-to-one/bilateral meetings and communication exchanges shall also be held with the relevant experts in particular with those partners who need to be consulted more frequently, in view of the implementation of specific programme objectives. Relevant partners shall also be involved in the implementation and monitoring of EMFAF operations through bilateral meetings during which feedback and input of the attending partners is taken into consideration.

The relevance of the partnership and multi-level governance shall also be reflected in EMFAF Application Forms, whereby in line with the applicable EMFAF selection criteria approved by the MC, additional points may be awarded for national synergies between institutes and public bodies and also for projects involving multiple collaborations. In addition, these forms shall consist of a specific section whereby details of project partners are to be provided in relation to roles being taken and envisaged activities being implemented with the aim of ensuring increased effectiveness and success of proposed operations.

7. Communication and visibility

Reference: point (j) of Article 22(3) CPR

Communication measures shall build upon the *Communication Strategy for Malta: ESIF (2014-2020)*[1], with the aim of building on lessons learnt, increasing transparency and visibility of the Fund.

The envisaged approach shall consider: the legal framework, defined objectives, Malta's experience in communicating EU Funds, the MA responsibilities, beneficiaries and other stakeholders, target audiences, key communication channels and messages, monitoring and evaluation indicators, budgetary allocation and timeframes.

Communication initiatives will be clear, concise and allow for necessary changes to ensure a strong impact and the widest outreach possible, including:

- An updated portal to act as the main point of information complementing actions via other media
 that will serve to target specific cohorts. The EU Funds website provides information on EU
 funded programmes a new website is being developed. The latter will be in line with the
 information policies on accessibility emanating from Malta's 2021-2030 National Strategy on the
 Rights of Disabled Persons and will include a VIG portal generating publicity material to assist in
 the creation of artwork and having branding consistency;
- The promotion of the implementation of the Programme priorities and its progress through digital/printed campaigns;
- Visibility of results by paying particular attention to operations of strategic importance, including campaigns/press events and will be target promoted through social media/TV throughout the 21-27 period;
- Assistance to beneficiaries in understanding publicity requirements;
- Consistency of messages and branding through the publication of VIGs and publicity kits in order to ensure appropriate and consistent recognition of the funds;

The main activities and responsibilities of the MA:

- Organising an information event for the launch of the Programmes;
- Organising an information event in 2026 on the progress of Programmes;
- Organising an information event for the closure of the Programmes;
- Promoting funding opportunities and ongoing of the Programme to different target groups;
- Communicating the benefits of EU funds through targeted activities with a special focus on green and smart issues;
- Displaying the EU flag at the MA premises;
- Publishing and updating the beneficiary online list;
- Promoting projects and programmes on the web and social media;
- Involving relevant stakeholders, as necessary;
- Using social media channels (incl. Facebook, Twitter and LinkedIn) in a dynamic, attractive and contemporary way, capturing Likes, ReTweets, Shares etc;
- Implementing quarterly media campaigns, and holding at least one physical event per year aiming for at least 35 publicity measures implemented until 2029;

• Assessing the impact of communication strategies through an evaluation in 2025 using tools that may include data collection, surveys or focus groups.

Three main target audiences have been identified as recipients of communication activities:

- the Public: a) the professional public and potential multipliers of information, including the media, research institutions, local councils, social partners and NGOs, economic operators (fishers, fish cooperatives, aquaculture operators) & b) the General Public including different age groups, specific sub-groups which particular programmes or measures are designed to benefit;
- Beneficiaries and Potential Beneficiaries, including public sector organisations, Ministries, departments, entities, authorities, local councils, NGOs and VOs private enterprises/individuals who may be eligible for funding
- Channels shall consist of print media, audio-visual media, online presence/digital media, promotional material, signage, participation in fairs and events, information sessions and meetings.
- In line with Article 49 of the CPR, information on the Programme's objectives, activities, funding opportunities and achievements will be made available online within six months of the Programme's adoption. Additional online information shall also include a timetable of the planned calls for proposals and a list of EMFAF operations selected for support which shall be updated in line with the said Article.

Monitoring and evaluation of communication activities shall be undertaken in relation to the achievement of output indicators which can be categorised as follows:

- a) number of publicity measures implemented by 2029
- b) number of research activities/evaluations carried out by 2029.

Communication networks shall be established in line with Article 48 of the CPR. A National Communication Coordinator has been nominated to act as a contact point for all CPR funds. The Communications unit covering all programmes is centralised within the SID within the Ministry responsible for EU Funds.

An indicative budget of circa 6.5% of the TA budget shall be allocated.

[1] Communication Strategy for Malta: European Structural and Investment Funds (2014-2020) (PPCD, 2015).

8. Use of costs, lump sums, flat rates and financing not linked to costs

Reference: Articles 94 and 95 CPR

Table 14: Use of unit costs, lump sums, flat rates and financing not linked to costs

Intended use of Articles 94 and 95 CPR	Yes	No
From the adoption, programme will make use of reimbursement of the Union contribution based on unit costs, lump sums and flat rates under the priority according to Article 94 CPR (if yes, fill in appendix 1)		
From the adoption, programme will make use of reimbursement of the Union contribution based on financing not linked according to Article 95 CPR (if yes, fill in appendix 2)		

Appendix 1

A. Summary of the main elements

		Estimated proportion of the final allocation within the priority to which the SCO will be applied in %		Type(s) of operation covered	Indicator triggering reimbursement		Unit of		
Priority	Specific objective		Code	Description	Code	Description	Unit of measurement for the indicator triggering reimbursement	(stanrd scale of unit, lump sums case	Amount (in EUR) or percentage (in case of flat rates) of the SCO

B. Details by type of operation

C. Calculation of the standard scale of unit costs, lump sums or flat rates
1. Source of data used to calculate the standard scale of unit costs, lump sums or flat rates (who produced, collected and recorded the data, where the data is stored, cut-off dates, validation, etc.)

Appendix 1

. Please specify why the proposed method and calculation based on Article 94(2) CPR is relevant to the	
ype of operation.	

3. Please specify how the calculations were made, in particular including any assumptions made in terms
of quality or quantities. Where relevant, statistical evidence and benchmarks should be used and, if
requested, provided in a format that is usable by the Commission.

4. Please explain how you have ensured that only eligible expenditure was included in the calculation of
the standard scale of unit cost, lump sum or flat rate.

5. Assessment of the audit authority(ies) of the calculation methodology and amounts and the
arrangements to ensure the verification, quality, collection and storage of data.

Appendix 2

A. Summary of the main elements

					Conditions to be fulfilled/results to	Indicator		Unit of measurement	Envisaged type of
Priority	Specific objective	The amount covered by the financing not linked to costs	Code	Description	be achieved triggering reimbusresment by the Commission	Code	Description	for the conditions to be fulfilled/results to be achieved triggering reimbursement by the Commission	reimbursement method used to reimburse the benficiary or beneficiaries

B. Details by type of operation

Article 22(3) CPR

Operation of Strategic Importance 1:

EMFAF Priority 1: Fostering sustainable fisheries and the conservation of aquatic biological resources

Conservation and restoration of marine Natura 2000 areas

The EMFAF programme shall contribute towards conservation and restoration of marine Natura 2000 areas under Specific Objective 1.6. This operation will seek the synergistic implementation of management processes within existing MPAs for a holistic approach to the management of the marine environment. MPA management measures will seek an integrated approach towards management of relevant economic and environmental sectors, in collaboration with all relevant stakeholders. The action will enable Malta to progress towards the achievement of good status in the marine environment and of conservation objectives for listed marine habitats and species. Such management processes will contribute to the ambitions of the Biodiversity Strategy 2030 through the effective management of protected areas in the marine environment.

Indicative timeframes for EMFAF Operation of Strategic Importance 1:

Planned Operation: MARINE PROTECTED AREAS: Management measures linked with existing MPAs, addressing opportunities and pressures on the marine environment

Estimated Start Date: Q4 2023

Estimated Completion Date: Q4 2029

Operation of Strategic Importance 2:

EMFAF Priority 2: Fostering sustainable aquaculture activities and processing and marketing of fisheries and aquaculture products

Research and development on domestication of aquaculture species to promote species diversification

In line with Malta's *Multiannual National Plan for the Development of Sustainable Aquaculture 2022-2030* which aims to improve the sustainability and competitiveness of the sector, support will be given to research, innovation and investment in the introduction of new-culture species to decrease reliance on the limited national number of species currently available. This operation falls under Specific Objective 2.1 of the EMFAF Programme.

Indicative timeframes for EMFAF Operation of Strategic Importance 2:

Planned Operation: Research and development on domestication of aquaculture species to promote species diversification.

Estimated Start Date: Q2 2024

Estimated Completion Date: Q1 2029

Appendix 4

EMFAF action plan for each outermost region

DOCUMENTS

Document title	Document type	Document date	Local reference	Commission reference	Files	Sent date	Sent by
Malta's Multiannual National Plan for the Development of Sustainable Aquaculture 2022-2030	Supplementary Information	12-Oct-2022	MT_EMFAF_MNPSA		Malta's Multiannual National Plan for the Development of Sustainable Aquaculture 2022-2030		
Legal Notice 411 of 2011 Public Procurement of Contracting Authorities or Entities in the fields of Defence and Security Regulations	Supplementary Information	12-Oct-2022	MT_EMFAF_LN 411 of 2011_G.1		Legal Notice 411 of 2011 Public Procurement of Contracting Authorities or Entities in the fields of Defence and Security Regulations		
Covenant between SAMB and MA	Supplementary Information	12-Oct-2022	MT_EMFAF_Covenant between SAMB & MAs_G.2		Covenant between SAMB and MA		
Covenant between the Managing Authorities and the Ministry responsible for Human Rights	Supplementary Information	12-Oct-2022	MT_EMFAF_Covenant_EU Charter HR_G.3		Covenant between the Managing Authorities and the Ministry responsible for Human Rights		
Covenant between the Managing Authorities and the Commission for the Rights of Persons with Disability	Supplementary Information	12-Oct-2022	MT_EMFAF_Covenant between MAs & CRPD_G.4		Covenant between the Managing Authorities and the Commission for the Rights of Persons with Disability		
SEA Final Report/Monitoring Report/Adoption Statement for the EMFAF Programme 2021-2027	Supplementary Information	12-Oct-2022	MT_EMFAF_SEA		SEA Final Report/Monitoring Report/Adoption Statement for the EMFAF Programme 2021-2027		
Indicators Report	Supplementary Information	28-Oct-2022	MT_EMFAF_IR		Indicators Report		
Indicators Report Annex I - Intervention Logic (IL)	Supplementary Information	28-Oct-2022	MT_EMFAF_Annex I_IL		Indicators Report Annex I - Intervention Logic (IL)		
Indicators Report Annex II - Indicators Methodology (IM)	Supplementary Information	28-Oct-2022	MT_EMFAF_Annex II_IM		Indicators Report Annex II - Indicators Methodology (IM)		
EMFAF Observations - MT Replies	Supplementary Information	28-Oct-2022	MT_EMFAF Observations - MT Replies		EMFAF Observations - MT Replies		