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COMBINED PROJECT INFORMATION DOCUMENTS / INTEGRATED SAFEGUARDS DATA SHEET (PID/ISDS)
APPRAISAL STAGE

Report No.: PIDISDSA20709

Date Prepared/Updated: 08-Feb-2017

I. BASIC INFORMATION

A. Basic Project Data

Country:	Maldives	**Project ID:**	P157801
		Parent Project ID (if any):	
Project Name:	Sustainable Fisheries Resources Development Project (Fourth South West Indian Ocean Fisheries Governance and Shared Growth Project) (P157801)		
Region:	SOUTH ASIA		
Estimated Appraisal Date:	10-Jan-2017	**Estimated Board Date:**	10-Apr-2017
Practice Area (Lead):	Environment & Natural Resources	**Lending Instrument:**	Investment Project Financing
Borrower(s):	Government of Maldives		
Implementing Agency:	Ministry of Fisheries and Agriculture		

Financing (in USD Million)

Financing Source	Amount
BORROWER/RECIPIENT	0.00
IDA Grant	1.50
IDA recommitted as a Grant	16.50
Financing Gap	0.00
Total Project Cost	18.00

Environmental Category:	B - Partial Assessment
Appraisal Review Decision (from Decision Note):	The review did authorize the team to appraise and negotiate
Other Decision:	
Is this a Repeater project?	No

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B. Introduction and Context

Country Context

Maldives and eleven other countries border the waters of the South West Indian Ocean (SWIO) ►(the island nations of Comoros, Madagascar, Mauritius and Seychelles; and seven mainland countries: France, Kenya, Mozambique, Somalia, South Africa, Tanzania and Yemen. Together these countries are members of the South West Indian Ocean Fisheries Commission (SWIOFC), a regional fisheries body. The SWIO marine fisheries are part of a larger marine ecosystem shared by all countries of the region. They are a regional public good, whose health and sustainability require regional coordination to limit the negative and enhance the positive externalities yielded by national activities, especially on the migratory fish species, such as tuna. Conservation and sustainable harvesting of the regional public goods in particular, and the shared ecosystem in general are central to the economy of the island countries in SWIO region.

Fisheries sector accounts for a substantial portion of Gross Domestic Product (GDP) of the SWIO countries. Seafood export from these countries was approximately US$2.7 billion in 2014. Local industrial fisheries (mainly shrimp) and tuna processing constitute a substantial part of employment, income and foreign exchange earnings. Aquaculture and recreational fishing (sport fishing and diving) are rapidly growing industries and growing source of revenues in several of these countries. Fisheries, especially small-scale and subsistence fisheries play an important role for the livelihoods of estimated 107 million people living within 100 kilometers of the coast in the SWIO countries. They are often among the most vulnerable communities with high exposure to climate change impacts. The fisheries sector is a major contributor to nutritional health and food security in the SWIO region, especially for poor coastal communities with limited alternatives to fish for animal protein, as well as essential nutrients, vitamins, minerals and trace elements.

Maldives, comprising of 26 atolls of 1,190 small coral islands of which 188 are inhabited by a local population of 338,434, has successfully built on its extraordinary natural assets to promote growth and socio-economic development. This was achieved mainly by developing a successful high-end tourism sector, whose sizeable rents have been redistributed to the population to address its development challenges. GDP per capita increased from US$268 in 1980 to US$7,681 in 2014 (highest in South Asia), mainly driven by tourism and non-tradable tourism related activities. Incidence of poverty in Maldives is in line with that of an upper middle-income country, and its human development index is second only to Sri Lanka among the countries in South Asia. The share of the population living with less than US$1.25 a day was 4.9 percent in 2010, whereas the corresponding share using the US$2 a day poverty line was 17.02 percent in 2010.

Despite this outstanding performance, the pace of poverty reduction has been below potential; and the level of inequality remains a major challenge. Limited job opportunities and skill-endowments, especially for women and youth might have played an important role in limiting contribution of growth to poverty reduction. In particular, lack of growth in fisheries is an important cause of the limited impact of growth to poverty reduction, especially in the atolls away from MalÃ©.

The World Bank►(s Systematic Country Diagnostic, 2015 (SCD) provides a snapshot of the inherent vulnerabilities of Maldives►(development program including immediate concerns about the fiscal, environmental and social sustainability. Due to its macro-economic vulnerability, given the small size, it is important to look for economic diversification away from tourism and

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heavy reliance on imports; and to promote an inclusive development of the labor market with particular opportunities for women and youth. There is a need to augment climate-proofing of the economy as climate change could cause annual economic losses of more than 12 percent of GDP by 2100. Emphasis on environment and natural resources management, especially preventing damage and pollution of the coral reefs is important to sustain and increase climate resilience of tourism and fisheries, the crucial components of the national economy.

Sectoral and institutional Context

An estimated 28 percent of the SWIO regional fish stocks are over-exploited or depleted (especially the high-value resources, such as shrimp, lobster, and sea cucumber). A further 40 percent of stock are fully exploited (SWIOFC, 2011) from overfishing by industrial vessels and artisanal fishers, and widespread use of destructive equipment and techniques (such as dynamite or beach seines). Critical ecosystems, already weakened by land-based pollution are further endangered by loss of biodiversity, and destruction of coral reefs and mangroves; and consequently the coastal resource base is acutely threatened. As a result, it was estimated that SWIO coastal states incurred annual losses of US$225 million in 2008. Furthermore, a weak investment and business climate, coupled with limited or underperforming infrastructure and services, significantly constrain industrial and artisanal private sector development.

As small-scale fisheries modernize, the limited potential of many coastal fisheries will require that fishing effort be reduced to become sustainable. This will generally translate into fewer vessels or jobs in harvesting operations, and require that attention be devoted to alternative livelihood opportunities in post-harvest value addition, aquaculture, and recreational fisheries or in other sectors. Reduction or elimination of destructive fishing is also a significant governance and social challenge.

The fisheries sector in the SWIO is already largely regional, with each country➢(s decision affecting other countries➢(activities. In particular, large national investments, such as ports, fishing fleets, or processing plants, are competing against each other. Regional coordination is therefore needed to avoid conflicts and suboptimal sectoral investments, and to promote equitable distribution of wealth. Furthermore, several technical aspects of the sector are regional in nature (e.g., monitoring, control and surveillance, safety at sea), and their implementation, at the least, has to be coordinated at a regional level. The countries also face common constraints with regard to their fisheries sector: weak governance, weak human and institutional capacity, and a fragile business environment. The SWIO countries will therefore benefit from addressing these challenges jointly. They already use regional platforms to share their experience in implementing more sustainable and economically viable fisheries policies and practices, including the Indian Ocean Tuna Commission (IOTC) and SWIOFC. Greater regional cohesion will enhance the countries➢(voice in international fora as well as in negotiating fishing-related agreements, where decisions made have significant impacts on the fisheries sector of the SWIO countries.

The SWIO countries have repeatedly called for attention to regional collaboration in the sector, recognizing the important contribution by the marine fisheries to regional and national goals: poverty reduction, food security, economic growth, balance of payments, and the value of natural capital. In response, major donors (the European Union, EU; France; the Global Environment Facility, GEF; and the World Wide Fund for Nature, WWF) and the World Bank have all supported regional fisheries programs in the recent past. Consolidating and expanding past projects and analytical advice, the World Bank committed in-principle to finance the multiple

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South West Indian Ocean Fisheries Governance and Shared Growth (SWIOFish) series of projects (SOP) in 2015. Three consecutive series of projects are expected: SWIOFish Phase 1 during 2015-21 (hereafter referred as the SWIOFish SOP); SWIOFish Phase 2 during 2022-27; and SWIOFish Phase 3 during 2028-32. Under the first series, the First South West Indian Ocean Fisheries Governance and Shared Growth Project (SWIOFish1) was approved in 2015 (covering Comoros, Mozambique, Tanzania and the Indian Ocean Commission). The second project covering Madagascar and the Indian Ocean Tuna Commission) and the third project covering Seychelles are expected to be approved in 2017. Maldives is the fourth planned project in the SWIOFish, to be followed by similar country-level projects in Somalia, Mauritius and Kenya (all expected to be approved in FY18).

At the national level, the fisheries sector is a critical contributor to the national economy and an important economic activity in all of Maldives➢(inhabited islands. In 2015, primary fisheries accounted directly for 1.4 percent of GDP {excluding manufacturing (3.5% of GDP); wholesale and retail trade (4.7%) and transport (8.7%) where fisheries has a major role} and 11 percent of employment. The sector generated US$140 million in export revenue in 2015 (and a high of US $161 million 2013), which is amost all of Maldives physical exports. Although the relative importance of the fisheries sector has declined since the late 1970s (due to the rapid growth of tourism), its role in the economy remains significant, including in providing food and nutrition security and as a source of livelihood and employment in remote islands without a major tourism facility. In the atolls away from MalÃ©, 30 percent of the household heads work in fisheries.

Although the country benefits from vast fishing resources spread over 923,000 square kilometer of exclusive economic zone (EEZ), the total fish catch has declined from 185,923 tons in 2005 to 127,350 tons by 2015; and direct employment reduced from around 14,000 in 2001 to less than 9,000 persons now. The bulk of fisheries catch (up to 95 percent) are skipjack and yellowfin tuna. The Maldivian tuna is considered a premium product due to high quality fish stocks, pristine water, and sustainable fishing methods. Reef fishes, which account for 5 (average) to 16 percent (in low ➢(tuna years➢( ) of catch are mainly used for domestic consumption and supply to resorts, but export is rising (especially for grouper, sea-cucumber and aquarium fish). The tuna fishery, especially the skipjack ➢(pole and line➢(fishery has been recognized as one of the most environmentally responsible fishery operations in the world (certified by the Marine Stewardship Council, MSC), a dimension that has helped maintain the higher than usual export prices in recent past.

Sustainable and diversified development of the fisheries sector is part of the Government of Maldives➢(vision, which encourages economic growth based on a diversified economy and aims at increased job opportunities. The Ministry of Fisheries and Agriculture (MoFA), with support from the Japan International Cooperation Agency (JICA), is preparing a Master Plan for Sustainable Fisheries to: (a) update and implement fisheries management plans including diversification; (b) strengthen the country➢(s monitoring, control and surveillance systems; (c) establish a better knowledge of the impacts of climate change on the fisheries sector; (d) reduce the excessive use of live bait in tuna fishery; and (e) address the heavy exploitation of export-oriented reef fishery.

The business-as-usual (BAU) scenario suggests that the fishery sector is threatened, and the income and jobs from the sector is at risk. The challenges of the fisheries sector are threefold. First, given the dependence of so many island people on fisheries, sustenance of capture fishery at

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about 120,000 tons and maintaining an export of about 60 percent of the catch are important for the national income and welfare of fishers and their families. Measures, such as compliance with the IOTC recommendations on improved surveillance and monitoring, or improved monitoring and generation of evidence to justify continuation of MSC certification, will be important to sustain exports and premium export prices. Operationalization of the Government of Maldives➢(decision to focus on all value-added processing of tuna, and a quality control limit for tuna fishing are also required. Other challenges include inefficient use of infrastructure, inadequate distribution, and lack of access to finance to invest in fisheries value chains.

Second, there is a need to ensure sustainability of live-bait and reef fishing. The high value tuna fisheries sector is dependent on live-baits and reef ecosystem. Excessive reef fishing as well as capture of live-baits (for tuna fisheries) is considered threats to coral reefs. Anecdotal evidence suggests that capture of groupers is already unsustainable. Diversification and consequent (partial) shift away from capture fishery is important on three accounts: (a) to minimize impacts on coral reefs, and to sustain the reef fish population, especially groupers; (b) ensure sustenance of the capture fishery to protect jobs and income of most of the households who are currently engaged in fisheries and associated vocations; and create alternatives for households who will not be able to continue in capture fishery; and, (c) to create dependable income and growth opportunities for communities and individuals who have gradually been excluded from the mainstay tuna fishing and related local processing operations, and who are involved in opportunistic reef fishing.

The opportunities for diversification are, however, limited. Mariculture appears to be the only substantial opportunity, for benefiting the communities, reducing the excessive pressure from reef or bait fishing; and providing meaningful employment opportunities for individuals, including women and youth currently outside the gainfully employed workforce. Some initial mariculture works had been experimented so far: with pearl oysters, Maldivian clownfish, and brown marbled groupers. A private aquaculture farm is producing sea cucumbers, producing the larvae in hatcheries before growing them in lagoons. The future development of mariculture, however, is hindered by limited availability of fingerlings/juveniles, feed, financing and appropriate technology.

Third, inclusive development of fisheries sector is important for substantive job creation. Towards this, mariculture, diversified capture of relatively deep-sea species and aquarium fishery appear to be ideal for Maldives. These have the potential to grow, and contribute to the reduction of unemployment among inhabitants of remote atolls. In implementing such a program, however, special attention needs to be given to the establishment of gender sensitive policy and regulatory framework, the establishment of benefit sharing mechanisms for the natural resources to be managed and, capacity building of atoll councils and small businesses.

While Maldives➢(fisheries sector represents an undeniable engine of inclusive growth for the country, its sustainability and future will depend on three important and interrelated factors: (a) better and more transparent governance over fishing through all aspects of the value chain including post-harvest processing; (b) ensuring that greater value is captured across the value chain and that wealth generation opportunities are shared with marine resources dependent communities, especially youth and women; and (c) improved livelihoods and meaningful income opportunities for communities in the remote atolls, who should squarely be at the center of future sustainable mariculture development efforts.

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Fisheries in Maldives is intricately connected with the wellbeing of the regional fishery stock. In spite of using sustainable fishing practices, the capture of tuna has come down from 184,000 tons to 127,000 tons ►(arguably due to the diminishing stock in the Indian Ocean as a whole. In recent years, Maldives was focusing on yellowfin tuna as one way of offsetting the reducing catch of skipjack tuna. In spite of practicing sustainable fishing in the Maldivian waters, the yellowfin tuna population in the Indian Ocean Region has shrunk, and the IOTC has now specified reduced quota for yellowfin catch. It is evident that these regional level issues have had implication at the national level. The tuna stock in the Indian Ocean is somewhat at risk, and it is expected that tuna catch will reduce further in the coming years.

The best option for Maldives is to work with other countries to ensure sustainable practices over all of the Indian Ocean Region. At the same time, Maldives needs to (a) augment its own systems, procedures, compliance mechanisms, and skills to retain the ►(environmentally sustainable►(branding to capture premium price in international markets, and (b) offer to share the knowledge of its own systems, procedures, compliance mechanisms, and the ►(environmentally sustainable►(fishing technology to the other countries. By demonstrating higher capture of value and premium price, Maldives can demonstrate to the other countries that conservation indeed pays.

Nevertheless, Maldives will need to grow, and this need threatens other parts of the ecosystem even if tuna fishing is at the current sustainable level. Maldives cannot afford to espouse the cause of conservation of tuna fishery (in its own waters and in the region) and at the same t ime destroy/ diminish reef fishery. Therefore, diversification into mariculture and consequent (partial) shift away from capture fishery (in particular for new entrants) is important on two accounts: (a) to minimize impacts on coral reefs, and to sustain the reef fish population, especially groupers; (b) to create dependable income and growth opportunities for communities and future generations, especially women who had been gradually excluded from the mainstay tuna fishing and related local processing operations, and youth who are involved in opportunistic reef fishing. The agenda of conservation of reef and waters, reef fishery, and development of mariculture as the best diversification option, therefore are closely linked to the regional conservation agenda.

As discussed above, a Regional IDA investment in Maldives is a crucial part of the SWIOFish SOP. SWIOFish1 and SWIOFish2 mention specific investment in Maldives. Maldives is currently co-chairing (and will take over as chair in 2017) the SWIOFC, and is participating in the SWIOFish Bureau meetings, the Scientific Committee Meetings, meetings of the Working Group on Fisheries Data and Statistics, meetings of the Working Party on Cooperation and Coordination in Tuna Fisheries; and the overall SWIOFC meetings including annual SWIOFC Sessions ►(all supported by SWIOFish1. Maldives also benefits from SWIOFish1 regional support to develop a National Observer Program, in line with the IOTC►(s recommendations, to eventually be able to participate in the SWIOFC Countries►(Regional Observers Program. Under SWIOFish2, Maldives will benefit from training by IOTC Secretariat►(s technical teams to better implement Maldives►(international fisheries obligations under the IOTC, such as the Port States►(Measures to combat Illegal, Unreported and Unregulated fishing.

In essence, an investment in sustainable fisheries resources development in Maldives will be beneficial to the countries in South-West Indian Ocean region, due to (i) economies of scale from

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shared infrastructure, technologies, and knowledge; (ii) positive externalities yielded by national activities to avoid the ►(tragedy of the commons►(scenario; (iii) addressing common constraints jointly through regional platforms and workshops; (iv) greater regional cohesion in the international fora as well as in negotiations of fishing-related agreements where decisions need to be collective and impacts are shared; and, (v) upgraded value-chain linkages by collectively helping their fisheries sector integrate into more competitive value chain.

C. Proposed Development Objective(s)

Development Objective(s)

To improve management of fisheries at regional and national levels including support to establish mariculture in targeted atolls in the Maldives.

Key Results

The project seeks to achieve the following key results:

(a) Compliance rate of SWIO countries with IOTC resolutions (Regional-level Indicator; same as SWIOFish2 indicator)

(b) Vessels complying with IOTC and European Union requirements on monitoring and reporting (Regional-level Indicator)

(c) Value of production from mariculture

(d) Direct project beneficiaries (of which share of female beneficiaries)

(e) Share of target beneficiaries with rating ►(satisfied►(or above on project interventions.

D. Project Description

The proposed project is the fourth in the SWIOFish SOP. As articulated in the SOP description, a central thrust of the SOP is that while the challenges are regional in nature, addressing them requires action at the national level, which will yield regional benefits, enhance ownership and efficiency, and strengthen national institutions to help enhance the overall health of fisheries in the region. The project components are directly linked to the wellbeing of the regional fishery stock. Other than ►(Project Management, Monitoring and Evaluation►(, the project will consist of two components ►(one will focus on improving the currently inadequately managed capture fishery, and the other one will support diversifying the fisheries economy so that sufficient jobs and income are created outside capture fishery to reduce stress on the regionally shared fish stock. Both components will build improved resilience in Maldives.

Component A: Augmentation of Institutional Capacity for Marine Fisheries Management. This component seeks to enhance the Government►(s capacity to implement a more effective monitoring of fisheries sector and internal control system of key marine fisheries value chains, and will focus on delivery of the Indian Ocean Regional agenda (as well as the intended adaptation agenda) of improving the overall fisheries management, marine zoning for long-term benefits, and a longer-term plan to establish and operationalize in-country skill and capacity building activities, essential for sustenance and growth of the fishery sector in Maldives. The four sub-components include: (A1) Development of key fisheries management and planning instruments including updating fisheries policy and legislative framework, zoning covering the entire Maldivian EEZ, and support to grouper fish management, coral reef and reef fishery management plans which are essential for regional conservation and improved compliance with

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IOTC recommended conservation and management measures; (A2) Development and implementation of fisheries management activities to ensure compliance with IOTC and EU requirements, including expanded MCS, vessel registration and monitoring systems, electronic observer systems and augmentation of related reporting systems for commercial marine fisheries; collaboration with the SWIO Sub-Regional Fisheries Monitoring Centers; and, support and facilitation to regional agencies and international actors on the common agenda of conservation and management measures; (A3) Support to long-term program for fisheries management including sampling programs for tuna and recreational fish species, stock assessments and conservation zone surveys which will contribute to regional assessments and subsequent actions; and preparation of protocols disease surveillance, and quality control of brood stocks and fish feed; (A4) Fisheries sector capacity building including short and medium-term training, development of curriculum and teaching aids, collaboration with National Geographic Information System (GIS), and development and operation of a fisheries management information system ►(all focusing on strengthening local and national skills that will contribute to national and SWIO Region agenda related to fishery management and consequent diversification into mariculture.

Component B: Support to Mariculture and Diversification of Fisheries. Potential economic growth from diversification of capture fishery and from mariculture are pre-requisites for sustenance of the capture fishery resources in the Maldivian EEZ. However, mariculture is nascent in Maldives; and to be able to develop this sector, research, demonstration and provision of extension services will play key roles in addition to the three primary inputs: seeds, feed and access to finance. The four sub-components, therefore, include: (B1) Development and demonstration of mariculture production and technology package, including completion and operationalization of, and preparation of medium-term operations plans and service standards for the Maniyafushi research and development facility (MRDF) as a center of excellence for the entire SWIO region; development and demonstration of technology packages for mariculture species; and market studies in support of mariculture choices; (B2) Promotion of mariculture out-grower schemes and seafood growth clusters, including assessment of carrying capacity and supporting community custodianship of the coral reef resources, start-up investments including training, advisory support and compliance monitoring in out-grower farms, technical support to small enterprises for establishing out-grower contractual arrangements between small producers and larger private sector aggregators, and studies to help develop gender actions in mariculture; (B3) Supporting design, construction and operation of a multi-species hatchery including breeder stock development programs and professional training plans; and, (B4) Scoping of long-term marine fisheries diversification studies including planning and scoping of studies related to technology packages and conservation plans for new marine species to be explored in future.

Component C: Project Management, Monitoring and Evaluation (US$2.15 million). This component would provide equipment, technical assistance, training, and incremental operating cost to strengthen the overall administrative capacity and capability of the Ministry of Fisheries and Agriculture and its Project Management Unit (PMU) to manage, implement, and monitor and evaluate project activities. Specifically, support will include staffing and operation of the PMU; establishment of adequate financial management and procurement management systems; implementation of the communication plan and grievance redress activities; monitoring and evaluation (M&E) and third party audits; preparation and implementation of specific environmental impact assessments as per the national laws; coordination with other ministries

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such as the Ministry of Environment and Energy and the private sector; special evaluation studies; and sharing of monitoring protocols, evaluation studies and specific experience of implementation of various aspects of fisheries management activities that are of interest with SWIO Region countries.

Component Name

Augmentation of Institutional Capacity for Marine Fisheries Management

Comments (optional)

Component Name

Support to Mariculture and Diversification of Fisheries

Comments (optional)

Component Name

Project Management, Monitoring and Evaluation

Comments (optional)

E. Project location and salient physical characteristics relevant to the safeguard analysis (if known)

Maldives is an island nation in the Indian Ocean oriented north-south off India's Lakshadweep Islands. The Maldives consists of 1,192 coral islands grouped in a double chain of 26 atolls. The country➢(s atolls encompass a territory spread over roughly 90,000 square km, making it one of the world's most geographically dispersed countries. Of the 1,192 islands, 188 are inhabited by the country➢(s population, with an average of 5-10 islands in each atoll being inhabited islands that have infrastructure such as housing, roads and other facilities built in. The country➢(s total land area is estimated to approximately 300 square km, with islands varying in size from 0.5 to 5.0 square km. A significant number of uninhabited islands in each atoll have also been converted to resorts and tourism facilities as well as house infrastructure such as industrial facilities and airports.

The atolls are composed of live coral reefs and sand bars, situated atop a submerged ridge 960km long that rises abruptly from the depths of the Indian Ocean. Maldives is noted as the country placed at the lowest elevation in the world, with maximum and average natural ground levels of only 2.4 m and 1.5 m above sea level, respectively. More than 80 per cent of the country's land is composed of coral islands which rise less than one meter above sea level. The islands consist of coral, sea grass, seaweed, mangrove and sand dune ecosystems which are of great ecological and socio-economic significance. Maldives is home to a number ecologically sensitive marine habitats in shallow and intertidal zones which have been designated as protected areas by the Ministry of Environment and Energy (MEE) and these regions and any activities in their vicinity are stringently monitored and managed.

Climatic conditions in the Maldives belong to the tropical-monsoon category with temperatures ranging between 24Â°C and 33Â°C throughout the year. Climatic conditions in the Maldives is

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predominantly affected by the large landmass of South Asia situated to the north. The presence of this landmass causes differential heating of land and water. These factors set off a rush of moisture-rich air from the Indian Ocean over South Asia, resulting in the southwest monsoon. Two seasons dominate Maldives' weather: the dry season associated with the winter northeastern monsoon and the rainy season which brings strong winds and storms. The shift from the dry northeast monsoon to the moist southwest monsoon occurs during April and May and the southwest monsoon Maldives in the beginning of June and lasts until the end of August. Annual rainfall averages 254cm in the north and 381cm in the south, with the southern region experiencing more rain.

The project focuses on the whole nation. The island of Maniyafushi where the project will finance the augmentation of the infrastructure of the Maniyafushi Research Centre, is an uninhabited island and the airport island located in South MalÃ© Atoll, where the physical infrastructure has already been set up. The establishment and subsequent operation of mariculture out grower farms (in the remote northern atolls, selected specifically to avoid any potential impacts corals and water quality).

F. Environmental and Social Safeguards Specialists

Mokshana Nerandika Wijeyeratne (GEN06)

Susrutha Pradeep Goonesekera (GSU06)

II. Implementation

Institutional and Implementation Arrangements

The Ministry of Fisheries and Agriculture (MoFA) has the mandate, jurisdiction and experience in managing fisheries, and will lead project implementation. The MoFA has implemented or participated in implementation of Bank-financed projects several years ago, not in the recent past. While MoFA has a large mandate, it has limited staff. A dedicated Project Management Unit (PMU) has therefore been established within MoFA, with adequate number of technical staff, including expert staff on mariculture development, extension, research, and market studies; environmental and social management; financial management, procurement, communication, monitoring and evaluation.

The responsibilities of MoFA including the Steering Committee include providing national policy and implementation framework; approval of the project and securing the required budget from the Ministry of Finance and Treasury (MoFT); approval of the project►(s overall annual action plans and annual budgets; and overall implementation oversight. MoFA will ensure that most of the project activities are duly executed by its regular divisions and field offices. MoFA has also prepared a Project Implementation Plan (PIP), which describes the project activities and their estimated costs, allocation of implementation responsibilities, procurement and financial management arrangements and plans, to guide implementation.

The PMU mimics the organizational structure of the MoFA. This is important because: (a) the actual execution of project activities will take place using the MoFA divisions and their field offices, and a clear coordination between the PMU and the relevant MoFA division is needed, as PMU staff will be deputed in those divisions and field offices; (b) an appropriate part of the additional expertise and staff recruited under the PMU will be absorbed in the respective MoFA divisions at closure of the project for long-term improvement of institutional capacity; (c) even if most of the staff will be

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recruited from market (including expatriate consultants given the shortage of qualified fisheries experts in Maldives), the organizational structure of the PMU will allow MoFA to depute permanent staff of regular divisions to the PMU in a manner that staff can make career progressions and based on performance can return to their parent divisions when the deputation is over.

The PMU will be responsible for project implementation, facilitating statutory clearances, including environmental permits; procurement of works, goods and services; and implementation of specific capacity building activities as per the PIP. PMU staff working on procurement, financial management, knowledge management, monitoring and evaluation will be located in MalÃ© while all other PMU functions, including fisheries management, fisheries compliance, marine research, and mariculture will be co-located with the MoFA divisions at MalÃ© or at the field (including at the offices of Island Councils) and/or the offices of MRC, MRDF, or the site of the multi-species hatchery. The PMU, through its marine research, fisheries management, and compliance cells, will support MoFA for its retained role in coordinating with IOC, IOTC, SWIO Region countries; and through its central cell, will provide research and logistics support to MoFA in its incoming role of chairing the SWIOFC.

The PMU will collaborate with and seek support and partnerships with a range of other agencies to strengthen the capacity of the main implementing actors. These will include international knowledge centers, including the World Aquaculture Alliance; academic and research institutes including the Maldives National University; private sector business houses and industries including the Maldives National Chamber of Commerce and Industry; civil society groups, atoll level community organizations and other government departments responsible for development and protection of marine resources (such as the Ministry of Environment and Energy).

III. Safeguard Policies that might apply

Safeguard Policies	Triggered?	Explanation (Optional)
Environmental Assessment OP/BP 4.01	Yes	The project was categorized as an Environmental Category B project, due to the potential, unless avoided, of direct and indirect impacts flowing from physical interventions such as (a) establishment of a multi-species hatchery; (b) augmentation of the infrastructure of the Maniyafushi Research and Development Facility (MRDF); and (c) establishment and operation of out grower farms for mariculture in different atolls. To avoid, mitigate and/or manage such potential environmental impacts, an Environmental and Social management Framework (ESMF) has been prepared, which provides detailed analysis of the scale of due diligence required (such as specific guidance site selection, preparation of environmental assessments, environmental management plans, etc.) as may be required, or generic but appropriate avoidance and environmental mitigation measures in the project. Specific standalone environmental impact assessments (and subsequent permits from the Ministry of Environment and Energy) will also be needed for the multi-species hatchery; augmentation of the infrastructure of the MRDF; and out grower farms for mariculture. The ESMF provides budgets to

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		prepare such environmental impact assessments (which contain the respective environmental management plans). A standalone EA (including the relevant environmental management plan) has already been prepared for the quality assurance, quarantine and disease control research laboratory of the MRDF (which a front-runner intervention) and has been annexed to the ESMF and disclosed accordingly.
Natural Habitats OP/ BP 4.04	Yes	This policy was triggered as all of the islands in Maldives are surrounded by coral reefs, with some reefs, island and waters around being legally protected; and it is important to avoid any significant impacts on these natural resources. As per the criteria included in the ESMF, the project design avoids any activity in and around of the protected marine or terrestrial areas. The ESMF has in place the due diligence measures to avoid or reduce the impacts on coral reefs, marine ecosystems and associated fauna and flora during the establishment and subsequent operation of mariculture out grower farms (in the remote atolls, selected specifically to avoid impacts on corals and water quality). The project will not involve the introduction of any non-native/naturalized species for the purpose of mariculture.
Forests OP/BP 4.36	No	There are no areas classified as forests in Maldives. Any potential impacts on island or sea vegetation (such as sea grass, seaweed) are covered through OP/BP 4.01.
Pest Management OP 4.09	No	This policy is not triggered as the project will not finance the purchase, use or promotion of any pesticides, herbicides or similar other synthetic chemicals.
Physical Cultural Resources OP/BP 4.11	No	No project-supported activities are expected in the vicinity of or will affect physical cultural resources, as defined by OP/ BP4.11. All sites of physical cultural resources value in the Maldives are already designated and mandated as protected areas where no physical interventions can take place. Measures for safeguard chance finds have been included as part of mitigation measures defined in the ESMF.
Indigenous Peoples OP/BP 4.10	No	This policy is not triggered as there are no identifiable indigenous communities in the project locations (islands and atolls).
Involuntary Resettlement OP/BP 4.12	No	No involuntary resettlement from land, livelihood or access to livelihood is expected in the project. Project activities such as capacity-building, research, MRDF, quality control and disease surveillance, establishment of household-level mariculture out-grower farms do not give rise to any involuntary resettlement from land, livelihood or access to natural resources. However, there remains a possibility of indirect impacts that could arise if the marine zoning, zoning plans, and conservation plans for reef fishes financed by the project proposes restrictions on

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		non-sustainable practices, establishment of new conservation areas if any, or increased level of enforcement of management regulations for existing conservation areas. In all such cases the short-term economic and/or livelihood interests of local communities currently engaged in activities that rapidly deplete resources including fish stock could be impacted. Although the OP4.12 explicitly provides exemption to actions such as natural resources management, or preparation of fisheries management plans, the ESMF contains a framework compliant with the principles of OP4.12, to specify that any activity which has the chance of adverse impact on citizens and communities, or any chance of restricting traditional access to natural resources will be excluded from the project (throughout during implementation), and the process of preparation of zoning and other fisheries sector conservation plans will employ participation and citizen engagement. The policies and priorities that drives preparation of any zoning plans and regulations, conservation plans and/or strategies in Maldives are to protect the rights, claims and access of Maldivian citizens to the territorial waters of Maldives. These principles are also be strictly adhered to by the project, and all such zoning plans and conservation regulations will require approval of the Atoll Councils. Therefore, it is not conceivable that any restriction of access to traditionally used natural resources will be restricted by zoning plans, regulations, conservation plans and enforcement supported by the project. Further, while the exact locations and potential impacts of all activities, especially the mariculture grow-out facilities, are not yet known, the ESMF and the site specific social assessments will guide these sets of activities.
Safety of Dams OP/ BP 4.37	No	This policy is not triggered as there will be no activities that invest on dams or water retention structures.
Projects on International Waterways OP/BP 7.50	No	This policy is not triggered as there will be no activities in international waterways or activities that will have impacts on international waterways.
Projects in Disputed Areas OP/BP 7.60	No	The policy is not applicable because there are no disputed areas in Maldives.

IV. Key Safeguard Policy Issues and Their Management

A. Summary of Key Safeguard Issues

1. Describe any safeguard issues and impacts associated with the proposed project. Identify and describe any potential large scale, significant and/or irreversible impacts:
While the project is classified as environmental category B, the project is expected to bring positive environmental benefits to the project areas as the entire design of the project is based on the need to conserve the marine resources, avoid and stop unsustainable capture and yields,

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comply with the best regional and international standards, and diversify into mariculture as an alternative to threatened reef fisheries. The project will not lead to potential large scale significant and/or irreversible impact as the impacts will be largely localized to project sites and can be managed via stringent due diligence and adherence to national and international sectoral standards. Specific standalone environmental impact assessments and subsequent permits from the Ministry of Environment will be needed for the (i) multi-species hatchery; (ii) augmentation of the infrastructure of the Maniyafushi Research Centre; and (iii) out grower farms for mariculture and it is through these assessments that site specific impacts will be identified.

The project will support the establishment of infrastructure such as training and research centers and laboratories as well as infrastructure to conduct mariculture activities such as fish cadges and/ or pens. These could, unless carefully managed and mitigated, lead to localized environmental impacts typical to civil works, such as the generation of construction wastes, generation of dust, noise, etc., and occupational and safety impacts that will be managed accordingly. The civil works contracts may involve the use of expatriate/ migrant/ non-local labor but no influx related issues are expected - two out of the three islands involved are uninhabited (therefore, there is no host community), and the work at the Airport Island/ Hulumale will be expansion of an existing small building to create the required laboratory facility.

The project will finance start-up investments into household-level aquaculture/mariculture production, for example, cage cultivation of native/naturalized fish species. Operations of the multi species hatchery, and the MRDF could also pose potential operational impacts. During mariculture operations, typical environmental impacts include eutrophication from feeds and effluents, release of antifouling chemicals and antibiotics, and impacts introduction of alien invasive species. The project, in conformity with the Maldivian national environmental regulations will support mariculture of native/naturalized species. Careful site selection of grow-out mariculture farms will avoid eutrophication, pollutant loading on undersea surfaces, and use or accumulation of synthetic pollutants. Other impacts include scenarios of fish escaping from farms may compete with wild stocks, or transfer of parasites and diseases, or genetic interaction between escaped farmed fish and wild fish stocks. However such site-specific impacts will be regulated, controlled and managed, especially through specific EA/EMP that will be undertaken, and incorporating stringent measures for mitigating and managing operational impacts in the design and operation of the grow-out mariculture farms. Mariculture is not entirely new to the Maldives; in the last decade two projects have been initiated in the islands, for which EAs were undertaken, and the recommended mitigation and management measures were undertaken. Similar EAs will be prepared for the grow-out mariculture farms, which will also comply with the requirements under Maldives➢(own regulatory framework.

While the project does not envisage any adverse social impacts, some of the Component 1 activities may lead to possible restrictions in access and increased cost to some fishers. Sub-Components A1 and A3 in particular seek to improve the regulatory and management practices of the fishing industry but, in doing so, may restrict access to fisheries resources and could reduce income for some fishers. However, given that any fishery management plan will, by its characteristic intent, will try to curb overexploitation of fish stock without exception, the management plans (sub-components A1 and A3) will need to adopt a transparent and participatory process of agreement on the actions to be included in the management plans.

Overall, there is no potential large-scale, significant and/or irreversible impacts likely from the project.

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2. Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area:

The social and environmental impacts of the proposed project is deemed to be positive and sustainable in the long term. The project is also expected to improve the overall socio-economic status of the communities, including youth and women, as a result of the potential opportunities via employment creation and livelihood activities.

3. Describe any project alternatives (if relevant) considered to help avoid or minimize adverse impacts.

No alternatives have been considered, predominantly as the fisheries sector, after tourism, is the main source of livelihood and income generation in the Maldives and the proposed project activities will provide the most environmentally sound management options of the sector in comparison to current practices.

4. Describe measures taken by the borrower to address safeguard policy issues. Provide an assessment of borrower capacity to plan and implement the measures described.

An Environmental and Social Management Framework (ESMF) in lieu of an overall project-specific Environmental Assessment (EA) and a Social Assessment (SA) has been prepared as details of all specific sites and design of the project➢(s physical interventions are not known. A standalone EA has already been prepared for the quality assurance, quarantine and disease control research laboratory, which is a front runner intervention and is annexed to the ESMF and disclosed accordingly. The ESMF outlines detailed guidelines of measures for environmental and social risk mitigation and institutional arrangements for conducting environmental and social assessment, instruction to the preparation of Environmental and Social Assessments (ESIAs), Environmental and Social Management Plans (ESMPs), and other such measures as well as implementation and monitoring.

All interventions will be subject to an environmental and social screening with the objective to: (a) determine the anticipated environmental and social impacts, risks and opportunities of sub-project; and (ii) determine if the anticipated impacts and public concerns warrant further analysis, and if so to recommend the appropriate type and extent of Environmental and Social Assessments needed as per the criteria set in the ESMF. The ESMF also provides the screening and selection criteria for household-level mariculture out-grower farms.

The ESMF takes the applicable safeguard policies into account as well as the national environmental requirements and World Bank environmental Health and Safety Guidelines, which serves as a guide to the level of environmental and social analysis and mitigation required for all interventions supported by the project that will have any potential to cause negative environmental and social impacts; and thereby ensure compliance with the World Bank➢(s safeguard policies and the relevant national regulations during implementation.

The implementing agency of the project, the MoFA, has not led implementation of any World Bank-financed project the recent years. Capacity within MoFA to manage environmental and social risks within a project setting is be limited. Therefore, in the Project Management Unit (PMU) set up for implementation of this project, staffing includes an Environmental and Social Officer with relevant technical and sectoral expertise to take up the role of environmental and social coordinator. S/he will report to the Project Director and will work closely with the assigned PMU team, the Ministry of Environment and Energy, the Island Councils, the Environmental Protection Agency, and will be responsible for ensuring the overall implementation of the ESMF.

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S/he will liaise with other agencies, contractors and consultants at the activity levels to implement the required mitigation and management measures. The E&S Coordinator will be responsible for monitoring and evaluation of implementation of the environmental and social management plans, and will prepare regular reports on compliance and status of performance indicators. The Island Councils will be the first level of contact for any grievance/feedback for the community, and the E&S Coordinator will work closely with the Island Councils to redress any grievance. The E&S Coordinator will lead to orient PMU and MoFA staff, consultants and contractors on the ESMF and on operationalization of the ESMF for each of the project activities.

The project will provide training in environmental and social management to improve institutional capacity. The cost for monitoring and supervising the implementation of environmental and social project regulations have been integrated into the overall project investment cost. In addition, the project will also provide capacity building to potential operators of out grower farms on maintaining a good mariculture environment, and mitigating and managing potential environmental impacts during the operation.

5. Identify the key stakeholders and describe the mechanisms for consultation and disclosure on safeguard policies, with an emphasis on potentially affected people.

The key stakeholders included fisherpersons, fishing vessel-owners, fisherpersons➢(associations, exporters and transporters involved in export of capture tuna and reef fishes, and relevant government officials. The MoFA organized elaborate discussions and consultations with these key stakeholder groups during November 2015 ➢(September 2016. The ESMF has been developed based on suggestions and recommendations from these key stakeholder groups. The project activities do not lead to adverse social or involuntary resettlement impacts, and consequently, there is no adversely affected person. The ESMF document was disclosed prior to appraisal of the project. Specific consultations at national, atoll and island levels will continue during implementation of the project, including during preparation of activity-specific environmental and social assessments.

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B. Disclosure Requirements

Environmental Assessment/Audit/Management Plan/Other	
Date of receipt by the Bank	17-Jan-2017
Date of submission to InfoShop	18-Jan-2017
For category A projects, date of distributing the Executive Summary of the EA to the Executive Directors	
"In country" Disclosure	
Maldives	17-Jan-2017
Comments: The Environmental and Social Management Framework (ESMF) is available in the website of the Ministry of Fisheries and Agriculture (http://www.fishagri.gov.mv/images/download/MSFDP/msfd-esmf-january-17-2017.pdf).	
If the project triggers the Pest Management and/or Physical Cultural Resources policies, the respective issues are to be addressed and disclosed as part of the Environmental Assessment/ Audit/or EMP.	
If in-country disclosure of any of the above documents is not expected, please explain why:	

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C. Compliance Monitoring Indicators at the Corporate Level

OP/BP/GP 4.01 - Environment Assessment	
Does the project require a stand-alone EA (including EMP) report?	Yes [×] No [ ] NA [ ]
If yes, then did the Regional Environment Unit or Practice Manager (PM) review and approve the EA report?	Yes [ ] No [ ] NA [ ]
Are the cost and the accountabilities for the EMP incorporated in the credit/loan?	Yes [ ] No [ ] NA [ ]
OP/BP 4.04 - Natural Habitats	
Would the project result in any significant conversion or degradation of critical natural habitats?	Yes [ ] No [×] NA [ ]
If the project would result in significant conversion or degradation of other (non-critical) natural habitats, does the project include mitigation measures acceptable to the Bank?	Yes [ ] No [ ] NA [×]
The World Bank Policy on Disclosure of Information	
Have relevant safeguard policies documents been sent to the World Bank's Infoshop?	Yes [×] No [ ] NA [ ]
Have relevant documents been disclosed in-country in a public place in a form and language that are understandable and accessible to project-affected groups and local NGOs?	Yes [×] No [ ] NA [ ]
All Safeguard Policies	
Have satisfactory calendar, budget and clear institutional responsibilities been prepared for the implementation of measures related to safeguard policies?	Yes [×] No [ ] NA [ ]
Have costs related to safeguard policy measures been included in the project cost?	Yes [×] No [ ] NA [ ]
Does the Monitoring and Evaluation system of the project include the monitoring of safeguard impacts and measures related to safeguard policies?	Yes [×] No [ ] NA [ ]
Have satisfactory implementation arrangements been agreed with the borrower and the same been adequately reflected in the project legal documents?	Yes [×] No [ ] NA [ ]

V. Contact point

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VII. Approval

Task Team Leader(s):	Name: Tapas Paul	
Approved By		
Practice Manager/ Manager:	Name: Abdelaziz Lagnaoui (PMGR)	Date: 08-Feb-2017
Country Director:	Name: Fabian Seiderer (CD)	Date: 15-Feb-2017

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