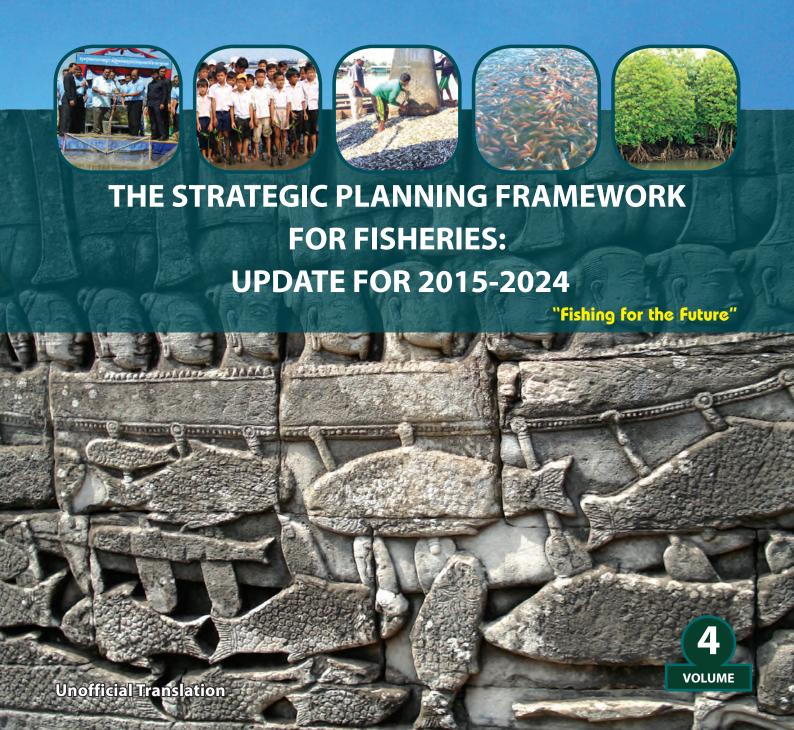


KINGDOM OF CAMBODIA

NATION RELIGION KING





Minister of Ministry of Agriculture, Forestry and Fisheries



The Strategic Planning Framework for Fisheries: 2010-2019 (SPF) was fully adopted by the Royal Government of Cambodia, and subsequently integrated into the "Rectangular Strategy" for Growth, Employment, Equity and Efficiency Phase III(RS III) and the National Strategic Development Plan 2014-2018 (NSDP). Further, the Strategic Planning Framework for Fisheries is closely linked to the Agriculture Sector Strategic Development Plan (ASDP), of which the fisheries programme represents the National Fisheries Management Plan.

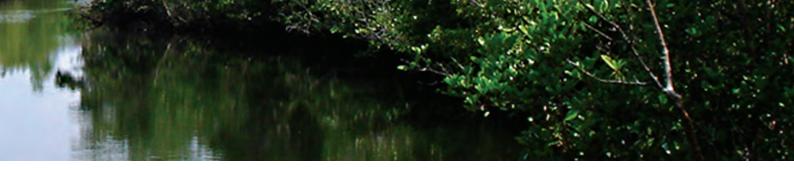
Since the adoption of the Strategic Planning Framework for Fisheries the Royal Government of Cambodia has implemented significant reforms in the fisheries sector. Foremost among these was the "Deep Reform" in 2012, which abolished the remaining 80 fishing lots. This encompassed a transfer of rights and responsibilities to fisheries communities to co-manage the nations fisheries and closely related natural resources. In support of the reform, the Fisheries Administration is working closely with fisheries communities aiming to establish and support more than 500 Community Fisheries.

Outside forces impacting the fisheries sector have intensified since the Strategic Planning Framework for Fisheries was adopted, including climate change, dam and road construction, land management and general economic development, including the establishment of the ASEAN Economic Community. There are also substantial policy changes in relation to gender, children and youth. A subtle but important shift in government policy is an increased emphasis by the RS III on commercialization and industrial development in the agriculture sector. While the Strategic Planning Framework for Fisheries is still essentially valid, the altered policy and economic environment made an update necessary.

The Strategic Planning Framework for Fisheries comprises three volumes, of which Volume 1 "Fishing for the Future" is the main document, and the principal target for the current update. Volumes 2 and 3 provide "Background information" and "Camcode: Cambodian code of conduct for responsible fisheries", respectively.

This 4<sup>th</sup> volume of the Strategic Planning Framework for Fisheries, covering the years 2015-2024, summarizes fisheries sector achievements, as well as the current potential and challenges, and includes an updated strategic approach towards achieving the vision for the Fisheries Sector. Importantly, the indicators





have been updated to allow appropriate monitoring of outcomes, and have been reorganized to match the current priorities for the sector.

The updated Strategic Planning Framework for Fisheries: 2015-2024 provides the necessary guidance to help all stakeholders to effectively contribute to the Royal Government's vision for the future, where the people of Cambodia and its future generations continue to benefit from abundant fisheries resources.

H.E. Dr OUK Rabun

Minister of Ministry of Agriculture, Forestry and Fisheries



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### **ABBREVIATIONS**

ASDP Agriculture Sector Strategic Development Plan

AEC Association of South East Asian Nations Economic Community

CamCode Cambodian Code of Conduct for Responsible Fisheries

CCCSP Cambodia Climate Change Strategic Plan
CCRF Code of Conduct for Responsible Fisheries

CFi Community Fisheries
CFR Community Fish Refuges

CITES Convention on International Trade in Endangered Species

EU European Union

FAO Food and Agriculture Organisation of the United Nations

FiA Fisheries Administration

GDP Gross Domestic Product

GGMP Green Growth Master Plan

GMP Good Manufacturing Practice

HACCP Hazard Analysis & Critical Control Points

ILO International Labour Organization

IPOA International Plan of Action

IUU Illegal, Unreported and Unregulated fisheries

JMI Joint Monitoring Indicators

M&E Monitoring and Evaluation

MARPOL International Convention for the Prevention of Pollution From Ships,

1973 as modified by the Protocol of 1978

MAFF Ministry of Agriculture, Forestry and Fisheries

MRC Mekong River Commission

NADS National Aquaculture Development Strategy

NGGR National Green Growth Roadmap
NGO Non-Governmental Organisation
NSDP National Strategic Development Plan

PBA Programme-Based Approach

REDD Reducing Emissions from Deforestation and Forest Degradation

RGC Royal Government of Cambodia



RS III Rectangular Strategy Phase III
SDG Sustainable Development Goals

SEAFDEC Southeast Asian Fisheries Development Center

SPF Strategic Planning Framework
SPS Sanitary and Phytosanitary

TWGFi Technical Working Group on Fisheries

Trade SWAp Trade Sector Wide Approach

UNCLOS United Nations Convention on the Law of the Sea



#### INTRODUCTION

F isheries is one of the most important sectors to the lives and livelihoods of people in Cambodia. In order to maximise, and to ensure the sustainability of, the contribution of the fisheries sector to national development, the Strategic Planning Framework (SPF) for Fisheries 2010-2019 was developed. This was part of a wide programmatic approach to the sector which was designed to guide donor investment in line with national priorities and developmental aims and to integrate the different components of the sector into an effective strategy which meshed seamlessly with the wider development process. The programmatic approach to fisheries in Cambodia has been one of the most successful achievements in fisheries in terms of increasing aid effectiveness in the sector and of supporting and strengthened national ownership of the development process.

This document reinforces the continued validity of the SPF to the development of fisheries in Cambodia and updates it to reflect policy and wider social, economic and environmental changes within the country and region.

As with any fishery, the outside forces that affect the sector have changed over time and the national government policy framework has evolved to accommodate wider forces affecting the country, the economy and people. The Rectangular Strategy Phase III and National Strategic Development Plan (NSDP) 2014-2018 define the new over-arching structure for development within which the SPF fits and the SPF provides the longer-term fisheries context to guide the development of the sector. This SPF update (Volume 4 of the SPF) incorporates the Deep Policy Reforms of the sector which have occurred and which released a further 80 fishing lots to small-scale fisheries and conservation areas. These changes, along with those associated with wider climatic changes, expansion of hydro-power, changing international obligations and increasing emphasis on the rights of women, the young and the poor in the development process, need to be accommodated in changes to the SPF in order to make it fit for purpose in coming years. This update of the SPF places those changes in context and provides a framework for the development of the sector over the next 10 years.

Volume 4 of the SPF starts with an outline of fisheries in Cambodia and how it has developed over the last five years since the SPF 2010-2019 was written. It then reviews the potential of the sector and the challenges that it faces. The third section lays down the fisheries sector strategic approach for the coming ten years. This is based on the Vision for the sector, the wider policy framework in which fisheries operates (discussed in more detail in Annex 1) and the areas of strategic focus for the sector. It outlines the









key elements of the strategic approach according to four development pillars for the sector: 1) Capture fisheries and management, 2) Aquaculture: inland and marine, 3) Fisheries value chain, and 4) Regulatory and services. The fourth section outlines how the strategy will be carried out and provides principles for implementation.



<sup>1</sup> Fisheries includes not only fish, but also a wide diversity of other aquatic animals (OAA) and plants that are used by the population for food, trade and inputs to other activities. OAAs make up a considerable percentage of the wild fisheries capture production and also have the potential for aquaculture development. Further, the Cambodia Law on Fisheries, Chapter 1, Article 2 states: "This law extends the implementation to all fisheries whether it be natural, artificial and aquaculture." Thus the term "Fisheries" is considered inclusive of aquaculture.





# FISHERIES SECTOR ACHIEVEMENTS 2009-2014

The fisheries of Cambodia remains one of the largest and most biologically diverse fisheries in the world, with over 30% of the country consisting or either permanent or seasonal wetlands. Fisheries continues to contribute significantly to employment and the livelihoods of the poor, to food security, to GDP and to foreign exchange balance.

Good governance remains at the core of achieving social justice and sustainable and equitable development in Cambodia. In line with this the Royal Government of Cambodia (RGC) has implemented fisheries reforms to promote small-scale fishing. The ultimate objective of the reform programme has been to strengthen the capacity, efficiency and quality of public services to raise public confidence in government and respond to the needs and aspirations of the people and business community.

As part of the reforms, the RGC has cancelled all fishing lots and has made all fishing areas available to small-scale fishers. The Fisheries Administration (FiA) has worked closely with communities to establish 516 Community Fisheries (CFis) for the management and sustainable use of natural resources within communities. Some 477 CFis belong to the inland fisheries, and 39 are marine, involving 156,628 family units (332,168 persons, including 33% women). There are now 328 CFis officially registered.

To ensure the sustainability of the fishery, its biodiversity and ecosystem integrity, an additional 50 conservation areas were established after the abolition of the fishing lots in the second stage of the fisheries reforms. Eight fisheries conservation areas totalling 22,500 ha had been established prior to the reforms and a further 97,503 ha have subsequently been added. FiA has worked closely with the communities to encourage community participation in planting the flooded forest covering an area of 2,200 ha so far. The communities along the coast has also engaged in a programme of releasing young crab to sustain wild stocks.34 crab banks have been established with 95 cages, and releases have significantly improved wild capture. Numerous endangered species and habitats are now receiving protection including Irrawaddy dolphin, coral reefs, sea grasses, seahorses and turtles.

The success of the community fisheries reforms in Cambodia have received international attention both regionally, with an ASEAN workshop show-casing the success of the reforms, and globally.



Operating in parallel with the community fisheries management and conservation efforts, the FiA also provides services to combat illegal fishing and protecting the flooded forest at national and sub-national levels, and working in conjunction with a number of other agencies such as the police, army and provincial and district authorities.

Fisheries continues to play an important role of national food security and to provide employment and income for the many rural people.In 2013, the annual inland and marine estimated catch quantities were 550,000 t (all sources including rice field fisheries) and 100,000 t, respectively. In addition, the production of aquaculture products was 80,000 t in 2013, an increase of 7.5% over 2012 (Table 1). Overall fish production (wild and farmed) increased by over 40% between 2009 and 2013, around 10%/year.

Inland fisheries production increases have been implemented by pursuing diverse approaches to the fishery including enhancing rice field fisheries and establishing Community Fish Refuge (CFRs) Ponds  $^2$ . FiA has supported the establishment of 820 CRFs across the country which have increased rice field fisheries production.

Table 1: Inland, Marine and Total Fish Production (tonnes) for the years 2009-2014.

SOURCE	2009	2010	2011	2012	2013	2014
Inland Production	390,00	405,000	445,000	509,000	550,000	505,005
Marine Production	75,000	85,000	91,000	99,000	100,000	120,250
Aquaculture	50,000	60,000	72,000	74,000	80,000	120,000
Total	515,000	550,000	608,000	682,000	730,000	745,255

Source: Ministry of Agriculture, Forestry and Fisheries

Aquaculture development includes fish, crocodiles and freshwater prawn. This sector has shown considerable growth in the last five years growing from 50,000t in 2009 to120,000t in 2014. Whilst the focus in the past has been on small-scale production systems there is considerable potential for more commercially oriented production systems to maintain the supply of fish. There is already interest from the private sector for large-scale aquaculture development in both coastal and inland areas.

<sup>&</sup>lt;sup>2</sup> Rice field fisheries refers to the capture of wild fish and other aquatic animals from the wet/flooded rice field agro-ecosystem and its supporting infrastructure of canals, channels or streams.









Whilst post-harvest fisheries has a long tradition in the private sector in Cambodia, FiA's support to post-harvest fisheries is a relatively new service that the Administration now provides. This is concerned with supporting the quality standards for fish product production, storage and use; and for promoting both domestic and export markets. FiA has supported the establishment of 16 fish product processing associations and has established production standards for key fish products such as Prohok, dried snakehead and frozen shrimp. In addition FiA has promoted the use of Hazard Analysis and Critical Control Point (HACCP) and other quality and safety standards throughout the fishery. FiA cooperates with other agencies to provide effective laboratory facilities and services for microbial analysis of fish to address quality standards for export markets.

These development efforts are supported by research from three key research institutes: 1) the Inland Fisheries Research and Development Institute, 2) the Marine Research and Development Institute, and 3) the Aquaculture Research and Development Institute. These research activities generate evidence to support the development and implementation of policy.

Fisheries in Cambodia is also part of a wider fishery of the Mekong River Basin and Cambodia works closely with the Mekong River Commission through its Fisheries Programme and Basin Development Plans to achieve greater harmony with its neighbours.



## THE POTENTIAL AND CHALLENGES OF FISHERIES IN CAMBODIA

The fisheries sector of Cambodia has many strengths that were identified in the development of the SPF in 2009. These include the vast fisheries resources of the Tonle Sap Lake and River, the Mekong River, and the coastal waters. In addition there are large areas of the country that are suitable for aquaculture both small-scale and larger commercial scale. The country is populated by a large number of skilled, flexible and dynamic fishers and fish processors and traders. They have demonstrated a willingness and an ability to engage with the Government's policy on community management of fisheries. In addition the FiA has grown in structure, capacity and achievement in its role of managing and developing the sector. This it does in partnership with a wide array of NGOs and development partners.

Recorded production of fish has been steadily increasing over recent years. However, it is now recognised that, while there may be some room for expansion of capture fisheries through better management, other development factors make it prudent to keep production within the sustainable level of 600,000 t from all capture sources – inland and marine.

Whilst there may be room for expanded catches from inland fisheries in the future, this expansion will only be known through further research. As such it is foreseen that aquaculture will play the major role in maintaining fish supply over coming years. The development of fish refuges as part of a wider programme of support to rice field fisheries will continue to assist in sustaining rice field fisheries and in the importation of fish may play a more significant role in offsetting seasonal shortfalls.

There is also considerable potential to increase the contribution of the fisheries sector to the national economy through improvement in the value chain. The expansion of regional markets and increasing demand, both domestically and for export, will create opportunities for the sector to grow. The effectiveness of the management regime and increased post-harvest quality control within the sector has supported increasing confidence in these markets for Cambodian products but strengthened enforcement of fish sanitary and phytosanitary measures will be needed. In addition the value chain can be enhanced in other ways through access to better markets, improve input supplies, enhanced fish utilisation and more efficient transportation and storage systems.







However, the fisheries sector is not without its problems and potential threats. Consultation with the private sector and Cantonment level staff, and reference to the NSDP has identified a number of challenges facing the fisheries sector. These are outlined under the four pillars of the sector:

#### Capture fisheries and management

- Community fishery groups do not have the budgets or capacity to implement their activity plans
  and most of community members are poor. Some community fishery groups are not adequately
  developing and their management is weak.
- The greater commercialisation of rice production systems is likely to lead to both increased chemical input to rice field fisheries and to physical changes to rice fields that limit fisheries opportunities.
- Illegal, unreported and unregulated (IUU) fishing and the use of illegal fishing gear remains high.
- Deforestation and its effects on coastal and inland fisheries habitats.
- The conversion of coastal habitats into developed areas, especially through urbanisation.
- Sand and gravel extraction and their effects on river and coastal sediments.
- There are adverse effects from hydro-dam construction in Mekong and its tributaries.
- The effects of climate change on the fishery are likely to be considerable but largely unknown.

#### Aquaculture

- The investment incentives for aquaculture development in the country are limited and regulation of aquaculture production and input supply systems are weak.
- Some illegal aquaculture practices, especially associated with snakehead, continue to increase.
- The knowledge of the production of more commercial aquaculture species and associated technical and disease issues is limited.
- Land and water availability for expanded aquaculture is poorly managed.
- Feed and seed supplies to aquaculture are limited and poorly regulated.
- Imports of inputs to the sector are poorly regulated.



#### Fisheries Value Chain

- Electricity costs for aquaculture intensification and fish processing are high.
- Lack of cross-border collaboration among key players and the lack of cross border trade regulation and regulation implementation.
- Sanitary and phytosanitary (SPS) measures are not well integrated into production chains, and laboratory testing and certification systems are not well developed.
- There are few incentives for the private sector to enter into commercial post-harvest activities.
- Skills in modern post-harvest techniques are limited amongst the private sector in Cambodia.
- Neighbouring countries already have established production and market systems which limit options for Cambodia's market access.

#### Regulatory and Services

- Illegal fishing activities continue, especially the use of electrocuting fishing devices, fishing nets, use of Samras, cutting of flooded forest within community fisheries and state fisheries domains, trawling within the inshore fishing area.
- There is widespread lack of understanding of the law and how it affects communities.
- There is limited law enforcement, compliance with regulations and a lack of awareness about the importance of fishery resources among fishers and other stakeholders.
- There are insufficient numbers of fisheries staff with the right skills and experience to address the current problems facing the sector.
- Equipment and funds to support the management, research activities, extension, conservation and protection of fishery resources are limited.

There are also existing and planned hydropower and irrigation developments within Cambodia which have the potential to affect the resource base. There will be increasing pressure to expand electricity production to fuel the small and medium sized enterprise growth foreseen in the Rectangular Strategy.

The damming of rivers and streams can result in loss of biodiversity, species and habitats. This cannot be safely offset by stocking with exotic species which displaces indigenous species and spreads disease. Stocking of indigenous species that can tolerate the lake environment is often a better alternative, but the resulting fauna will tend to be less diverse and the stocking of large reservoirs has important cost implications. In addition, restocking of water bodies is not without risk as this can affect ecosystem functioning, cause changes in fish community structure and loss of genetic integrity. Likewise the introduction of aquaculture into reservoirs can suffer from logistics and cost problems. These need to be understood and compensated for.









The NSDP recognises the changes at the national level which will affect the country in the near future and, as a consequence, impact upon the fisheries sector. These include the movement of Cambodia towards being a low-middle income country and the resultant loss of eligibility for certain types of development funding, the threats from the unstable world economy, the greater integration of Cambodia in to ASEAN Economic Community(AEC) and the reduction in barriers between nations, the importance of electronic connectivity for knowledge transfer, the need to invest in people to compete regionally, the importance of strengthening the currency and the need for environmental issues to become more centrally placed in policy. The encouragement of external investment through AEC will have both positive and negative effects. Greater ease of foreign investment may assist the fisheries sector to develop but it may also generate competition for local businesses. Likewise, the increased movement of labour under the AEC in 2015 may have direct competitive effects on the fish value chain. To address these constraints requires a more robust and resilient private sector in Cambodia - especially in the aquaculture and post-harvest sectors. The private sector generally faces poor and intermittent power supplies (which hydropower is designed to address), slow and bureaucratic procedures in government, weak trade access, low investment incentives and poor access to appropriate forms of credit.

Climate change is also a threat of unknown proportions which could affect flooding patterns, fish species behaviour, storm conditions for coastal communities and other forms of agriculture production.

Key to the future development of the fisheries sector is the recognition that the current level of fish production from natural resources cannot be maintained and the priority of the sector must lie in limiting negative impacts on the environment and seeking and developing production alternatives.

Recognising these constraints, yet building on the strengths and opportunities available to the sector, the RGC has revised and updated its Strategic Approach for the fisheries sectortaking into account, but also guiding, the Rectangular Strategy, NSDP and the Agriculture Sector Strategic Development Plan (ASDP). This was envisaged in the SPF: 2010-2019, which remains the key planning framework of the fisheries sector.



# THE FISHERIES SECTOR STRATEGIC APPROACH

The updated Strategic Approach for the fisheries sector covers the period from 2015 to 2024. It broadly follows on from the SPF 2010-2019 but reflects the changing policy, social, economic and environmental conditions in which the sector must operate. The Strategic Approach of the SPF 2015-2024reflects the Vision for the sector, the wider policy framework and the strategic focus of the sector.

#### The Vision for the Fisheries Sector

The over-arching policy framework guiding development in Cambodia, and fisheries in particular, is defined by a number of inter-linked and integrated policy structures. These guide and inform the development process. These are both international, such as the Sustainable Development Goals (SDG), United Nations Framework Convention on Climate Change, the Code of Conduct for Responsible Fisheries, and the Voluntary Guidelines for Securing Sustainable Small-scale Fisheries in the Context of Food Security and Poverty Eradication, and national such as the Vision 2030, Rectangular Strategy for Growth, Employment, Equity and Efficiency Phase III, the National Strategic Development Plan 2014-2018, the Cambodia Climate Change Strategic Plan 2014-2023 (CCCSP) and the Agriculture Sector Strategic Development Plan (ASDP).

This interaction with the wider policy framework is discussed in more detail in Annex 1. Through a process of review, evaluation and feeding back into the policy process, the outcomes of the development process in the fisheries sector also inform the wider policy framework at national and international levels. SPF takes a longer term perspective of the sector, much as Vision 2030 does, and creates the context and priorities which guide the way in which national policy for the sector in developed.

The SPF update is principally guided by the Vision for the sector which was defined in earlier fisheries policy documents and in the SPF 2010-2019:

Management, conservation and development of sustainable fisheries resources to contribute to ensuring people's food security and to socioeconomic development in order to enhance people's livelihoods and the nation's prosperity.



The SPF 2010-2019 envisaged that, whilst this Vision would remain constant, the circumstances in which fisheries development would take place, both nationally and globally, would change. There is also increasing uncertainty in the process of change reflecting the effects of climate change and wider economic forces. Key to the future of fisheries in Cambodia will be responding and adapting to this change in order to build a resilient sector and resilient communities.

The ways in which the wider policy framework influences and is influenced by the fisheries sector in outlined below.

#### SPF and the wider Policy Framework

Unpredictable change will play an important part in the development process in the coming years. There are many factors that influence fisheries in Cambodia and their effects are difficult to predict in advance. This uncertainty is not just affecting Cambodia. The effects of climate change and those of social and economic change (internationally and regionally) will affect countries in unpredictable ways. This requires a new approach to planning for the fisheries sector which accommodates change and uncertainty.

Fisheries sector policy and strategic approach also reflects the global **Sustainable Development Goals.** The sector contributes very significantly to these goals and is strongly influenced by them (See Annex 1).

The way the sector achieves these goals is influenced by the United Nations Food and Agriculture Organisation's (FAO) Code of Conduct for Responsible Fisheries and theirVoluntaryGuidelines for Securing Small-Scale Fisheries in the Context of Food Security and Poverty Eradication. These are reflected in the Cambodian Code of Conduct for Responsible Fisheries (CamCode - Volume III of the SPF) which guides how the sector should be developed.

The Code of Conduct for Responsible Fisheries also recognises the importance of Illegal, Unreported and Unregulated (IUU) fisheries and has developed an International Plan of Action (IPOA) for IUU fisheries. The IPOA-IUU is a voluntary instrument that applies to all States and entities and to all fishers.

Cambodia is also signatory to a diverse array of international agreements. Those which impact specifically on fisheries and the aquatic environment include:

- Convention on Biodiversity.
- Convention on Fishing and Conservation of Living Resources of the High Seas.
- Convention on the International Trade in Endangered Species of Wild Flora and Fauna (CITES).
- Climate Change-Kyoto Protocol, United Nations Framework Convention on Climate Change.



- Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal.
- Montreal Protocol on Substances That Deplete the Ozone Layer.
- Protocol of 1978 Relating to the International Convention for the Prevention of Pollution From Ships, 1973 (MARPOL).
- International Tropical Timber Agreement, 1994,
- Convention on Wetlands of International Importance Especially as Waterfowl Habitat (Ramsar).
- International Convention for the Regulation of Whaling.
- United Nations Convention on the Law of the Sea (UNCLOS) signed but not ratified.

These international agreements place obligations on Cambodia but also create opportunities for cooperation and for longer-term sustainability of the sector. In addition to international agreements, Cambodia has long standing relationships with the Southeast Asian Fisheries Development Center (SEAFDEC) and the Mekong River Commission (MRC) which inform and influence policy.

The MRC's Basin Development Strategy provides a cross-sectoral framework for cooperation in the region through a process of Integrated Water Resources Management. This strategy is based on the objectives of 1995 Mekong Agreement which are:

- To cooperate and coordinate in all fields of sustainable development, utilisation, management and conservation of the water and related resources of the Mekong River Basin, in a manner to optimise multiple uses and mutual benefits.
- To promote, support coordinate and cooperate in the development of the full potential of sustainable benefits and to prevent wasteful use with an emphasis and preference on joint and/or basin-wide development projects and basin programs through the formulation of a basin development plan.
- To protect the environment, natural resources, aquatic life and conditions, and ecological balance of the Mekong River Basin from pollution or other harmful effects.
- To utilize the waters of the Mekong River system in a reasonable and equitable manner.

It provides a structure for cooperation at the regional level and, through National Indicative Plans, coordination at the national level.

Integrated with the Basin Development Strategy is the MRC Fisheries Programme's Mekong Basin-Wide Fisheries Management and Development Strategy the goal of which is: Responsible and sustainable use of living aquatic resources. In achieving this the MRC supports the knowledge base for fisheries,









monitors the trends in the fisheries, promotes dialogue to achieve regional and cross-sectoral harmony within an Integrated Water Resources Management framework and supports effective fisheries management. The MRC Fisheries programme supports and strengthens the work of the FiA.

Cambodia's Vision 2030 takes the long-term perspective of development and encourages a focus on economic growth which is fair and sustainable. This is reflected in the SPF through a greater focus on economic growth than on production growth, and through enhanced governance and livelihoods. The Rectangular Strategy and NSDP both recognise the importance of the fisheries sector, emphasising the need to both ensure the sustainability of wild capture fisheries and to support the commercialisation of aquaculture production and of value chains to contribute to growth. This emphasis changes the focus of the sector from increased production to increased value. This acknowledges the limits to production of wild fisheries resources in the face of climate change, infrastructural development and crop intensification and encourages a greater emphasis on the quality and value of what is produced with a greater focus on aquaculture and value chain addition. The main driver of productivity increase will be through the sustainable intensification of aquaculture <sup>4</sup>.

To achieve this the NSDP recognises the need to enhance law enforcement and to build capacity within FiA, the private sector and the community especially in the face of climate change and regional economic change and infrastructure development. The legal framework governing the fisheries sector has its centre in the Law on Fisheries, 2006.

The importance of the fisheries sector is also recognised by Development Partners through the Joint Monitoring Indicators (JMIs). These are reflected in the sector outcome indicators and will need to be revised from time to time.

<sup>&</sup>lt;sup>4</sup> Sustainable intensification of aquaculture refers to: *improving fish supply for food and nutrition, increasing livelihood opportunities and contributing to blue growth of the economy through more efficient and sustainable use of aquaculture resources.* 









The Agriculture Sector Strategic Development Plan (ASDP) has a clear aim to increase agricultural productivity by 5% per year. The fisheries sector will play an important role in this. The increased contribution to growth within the fisheries sector will come primarily from sustainable intensification of aquaculture for increased productivity, some production increase from rice field fisheries and from improvement in the fish value chain. The sustainability of the natural resources will be achieved through better management of both wild capture fisheries and coastal and inland waters and aquatic habitats. This will maintain biodiversity and ensure the security of the natural heritage of the country.

#### The Fisheries Strategic Focus

The SPF: 2010-2019 included seven goals for the sector. These have now been combined with the three pillars of development of the SPF to link the sector more closely to the ASDP. Each of the development pillars of the SPF includes indicators and targets which reflect the wider strategic aims of the sector. The SPF update is a long-term strategic document covering the next 10 years. The ASDP covers a shorter time period and guides the outcomes of the 11 sub-programmes of the fisheries sector. ASDP fisheries programme represents the **National Fisheries Management Plan.** 

These three development pillars remain valid in the development of the sector going forwards but to ensure that the sector is managed effectively in the face of unpredictable change and that the need to respond quickly and effectively through improved service delivery, a fourth pillar has been added in recognition of the need to build capacity, both human and institutional, with in FiA and partner agencies to deliver this more ambitious programme. The four development pillars of the fisheries sector are now:

- Capture fisheries and management.
- Aquaculture: inland and marine.
- Fisheries value chain.
- Regulatory and services.



These four pillars are focussed on the potential outcomes that the SPF update aims to influence in the future. In this update of the SPF each pillar has 3 outcome indicators, each with targets for the years 2017, 2020, and 2024. These indicators of the SPF 2010-2019, which remain relevant, are now either incorporated into these outcome indicators or amalgamated with the indicators of the ASDP where they have become output indicators.

Taking into account the wider policy framework and the aims at the national and agriculture sector levels, FiA will work in these pillars to achieve the following results:

Pillar and Result	Indicators	Targets
Pillar 1. Capture fisheries and	1.1 Capture fisheries production from all	2017 -600,000t
management	sources	2020-600,000t
The availability of fresh water	Baseline: 600,000t	2024-600,000t
and marine fisheries production	1.2 Number of effective operational Commu-	2017- 100 CFi
maintained through sustainable	nity Fisheries	2020-200 CFi
management and conservation of natural resources, applying	Baseline:50CFis (2014)	2024-300 CFi
sound environmental principles	1.3 Total area under effective conservation (us-	2017-116,262ha
	ing area specific criteria)	2020-142,135ha
	Baseline: 26,674ha (2014)	2024-172,746ha
Pillar 2. Aquaculture: inland	2.1 Aquaculture production (20% annual in-	2017- 207,000t
and marine	crease).	2020-360,000t
Commercially viable and envi-	Baseline:120,000t (2014)	2024-740,000t
ronmentally sustainable aqua-	2.2 Number of registered, medium/ large scale	2017-20
culture contributing to food	commercial aquaculture operators that have	2020-35
security, socioeconomic devel-	adopted Good Aquaculture Practices	2024-65
opment, GDP and export earnings	Baseline: 8 (2014)	
	2.3 Aquaculture farm gate production value in	2017- \$414 million
	USD	2020- \$716 million
	Baseline: \$240 million (2014)	2024- \$1,486 mil-
		lion



Pillar 3. Fisheries value	3.1 Contribution of fisheries sector to	2017-8% of GDP
chain	national GDP Baseline: 8% to GDP	2020- 8%
The fisheries value chain standards, processes and	(2014)	2024- 8%
procedures are developed in support of food security, sustainable livelihoods, and equitable and profitable trade.	3.2 Increase in the export of regulated fisheries and aquaculture fish/products Baseline: 17,500t (2014)  3.3 Increase in number of medium/ large-scale fish processing companies that have been certified to comply with Good Hygiene Practices Baseline: 1 company (2014)	2017-30,000t 2020-50,000t 2024-100,000t 2017- 10 2020- 20 2024- 30
Pillar 4. Regulatory and	4.1 Aquaculture and fisheries are increas-	2017- 10% increase on baseline
services  The RGC policy, regulatory actions and services in the fisheries sub-sector are sufficient, appropriate and enabling	ingly seen as desirable technical careers.  Baseline: 40 students enrolled at key fisheries-related institutions (2014)	2020- 30% 2024- 50%
	4.2 Number of incoming official letters from line ministries to the DG of FiA, providing information or requesting FiA inputs, in relation to decisions, laws etc. with potential impact on/from fisheries sector  Baseline:436[2014]	2017- 20% increase over baseline 2020- 50% increase over baseline 2024- 70% increase over baseline
	4.3 Improvement in private sector/ community stakeholders' perception of fisheries policy and legislation implementation and impact.	2017- 20% increase over baseline 2020- 50% increase over baseline 2024- 70% increase over baseline

Baseline: 2015 M&E perception survey.



The four development pillars of the fisheries sector will contribute to the RGC's vision for the future of the fisheries sector. The indicators for these development pillars describe the situation that the RGC wishes to see in place over the coming decade. More specific outcomes around the different sub-programmes of the fisheries sector are defined in the ASDP's National Fisheries Management Plan and these will change in the coming years to recognise the uncertainties that the sector, the country and the region face.

The rationale and broad strategic approach for the four development pillars of the sector are outlined below.

#### Capture Fisheries and Management

In the past capture fisheries has been at the centre of fisheries development in Cambodia. In the future there remains some room for expansion of inland fisheries through better management of fisheries but this is likely to be affected by increasing pressure from agricultural intensification, infrastructural development and illegal fishing. Likewise, a more open economy under the AEC will create both opportunities and challenges. Climate change is likely to change flooding patterns and fish migrations, and affect the conditions under which rural people work. The emphasis of the SPF, in response to these challenges, is on improved management, enhanced governance, habitat conservation, more resilient livelihoods, enhanced rights and more adaptive planning.

Wild harvests will be maintained within sustainable limits and the programme of building community fisheries refuges as detailed in the SPF 2009-2019 will continue to sustain and, where possible, expand rice field fisheries productivity (see under Aquaculture section below). Research will continue to be carried out to further refine our understanding of the linkages between rice field fisheries and wild capture fisheries, and to refine predictions of rice field fisheries productivity. The enhancement of wild stocks of fish has been an important tradition in the sector and this will continue. To ensure that this is done safely, it will be implemented in accordance with relevance international guidance. This will involve, amongst other things, ensuring that stock enhancement is 1) in line with wider policy, 2) is ecologically safe, 3) will lead to desired productivity increases, 4) is economically and socially desirable, and 5) enhances the livelihoods of fisheries-dependent communities.

FiA, through the Technical Working Group on Fisheries (TWGFi), will work with other Departments in MAFF to achieve a balance between sustainable rice field fisheries and rice production intensification such that the highest levels of combined agricultural value addition is achieved.



The management of fisheries and the associated habitats, within a legal framework, is essential to the sustainability of the fishery, especially in the face of climate change and other regional infrastructural pressures on the environment. Community Fisheries (CFi) are at the centre of the Government's Deep Reforms which have extended the process of management of the fishing lots to the community. This not only enhances the governance of the sector but also contributes very considerably to the employment and food security of poor rural people. FiA, with support from the NGO sector, will focus on supporting communities to build the number of viable and operational CFis through their practical and legal establishment, election of committees and through the training of CFi staff. This will complement Cambodia's commitment to the implementation of FAO's Voluntary Guidelines for Securing Sustainable Small-scale Fisheries.

Key activities will include mapping and demarcating CFi areas so that the community and Government are clear which of the areas are for community management. CFi management plans will be developed, established in law and implemented through elected committees. CFi staff will be trained in the operation of the CFis such that they play a major role in the wider management and development of the fisheries. The identification, establishment and operation of conservation areas will be particularly important. The enforcement of regulations around the use of CFi will be enhanced and implementation streamlined. Information dissemination and uptake on fisheries legislation will be improved to ensure that communities are aware of their roles and responsibilities.

The role of women, as key participants in the sector, will be strengthened to play a more decisive role in fisheries management. The effectiveness of this management process will be evaluated, and lessons learnt and shared.

In addition, support will be provided to develop collaborative bodies which enable Community Fisheries to be represented and to have voice in policy decisions related to them.

In support of the management role of the CFis, FiAand NGOs will improve and enhance the effectiveness of the management and development of the fisheries domain and fisheries exploitation in order to sustain natural fisheries resources and contribute to the national economy. This process will ensure that critical habitats, such as flooded forest and mangrove, are identified, mapped and demarcated. Challenges such as inter-sectoral conflicts between increased agriculture productivity inputs to rice production and water quality for fish production and the maintenance of habitats will be resolved through greater engagement of line ministries within the TWGFi. Key indicators for the health of the fisheries domain will be identi-



fied and periodically monitored and evaluated. This knowledge will feed back into the adaptive planning adopted by the sector.

The reforestation of the flooded forest and coastal mangroves will be supported to provide a sustainable basis for fisheries resources to flourish. Development agencies will work closely with communities to establish and improve coastal and freshwater conservation areas. In particular new conservation areas will be established, managed and protected in line with the Deep Reforms of the sector and the subsequent release of waters from fishing lots.

Public awareness will be raised, in communities, nationally and in schools, of the importance of aquatic biodiversity and its conservation for the benefit of the economy, food security and livelihoods. Extension services will highlight the species that are endangered and help communities and the private sector to develop strategies to reduce pressure on theseresources. Awareness of the importance of these critical habitats will be raised to ensure that the regulations governing them are understood and followed. FiA will work with other agencies to ensure that the legal status of the fisheries domain remains appropriate to the needs of the fishery and in line with government policy. New laws will be developed and applied as needed. FiA will also work with other agencies to support communities to understand the importance of environmentally sustainable fishing practices and assist them with the uptake of those practices, including gender equality promotion and child labor eliminating in the fisheries sector.

FiA will, through research, generate the evidence needed to formulate and implement policy in relation to inland and marine fisheries. This will not only cover areas of production improvements and the environment, but also the socio-economic conditions of the fishers and how these should be improved in line with the Sustainable Development Goals. The roles of both women and children in the sector will be researched and appropriate legislation and/or policy will be formulated to ensure they are catered for fairly and to international standards such as the implementation of FAO/ILO Guidance on Addressing Child Labour in the Fisheries and Aquaculture Sector.

Better understanding of the dynamics of rice field fisheries and other forms of inland capture fisheries will enhance development and management strategies. Improved methods of estimating both the potential and actual harvests from all forms of fisheries will be developed in the short to medium term to enhance the management process. FiA will regularly update and improve the accuracy of catch statistics on the inland and marine fishery to provide policy makers with guidance on fisheries management strategies. It will monitor critical species and habitats to ensure that marine and inland ecosystems remains healthy. In addition it will work with communities to train them in monitoring and evaluating inland bio-ecology in order to improve natural resource management. FiA will also work with other development agencies and the communities to identify areas for potential refugia for threatened species and habitats thus ensuring

long-term biodiversity. FiA, in partnership with other agencies, will address the drivers of deforestation and degradation of flooded and mangrove forests and contribute to their sustainable management and conservation, through the implementation of Cambodia's National REDD+ Strategy <sup>6</sup>. FiA will also sup-

port the management of wild crocodile stocks and habitat, and cooperate regionally on their management

FiA will also contribute to wider regional policy development through research into trans-boundary issues such as the importation of fish, the source and quality of aquaculture inputs, fish disease and habitat change. FiA will work closely with Mekong River Commission (MRC) on these transboundary issues. FiA will implement research into the effects of hydro-electric and other infrastructure, such as roads, canalisation and culverts on the flooded forest and the associated fisheries. Generally, the development of fish friendly infrastructure designs will be supported. FiA will work closely with the MRC and other regional organisations to ensure that the effects of regional development strategies, on the fisheries, are well understood and documented, and that the sustainability of the fisheries is assured through alternative, more sustainable approaches.

FiA will also research the effects of climate change on the inland and marine fishery, from biological and socio-economic perspectives, and will advise government on options for both mitigating the effects of climate change and responding to them. In particular it will work with coastal and inland communities to enhance their resilience to climate change through diversified livelihoods, such as ecotourism, that strengthen local economies and make them less dependent on fisheries. Plans to address the effects of climate change and other external factors such as hydro-electric dam construction, will be developed and implemented.

In addition to generating new knowledge, FiA will disseminate that knowledge through peer reviewed journals, policy documents and information suitable for community extension purposes. It will maintain accessible and up-to-date libraries which supports effective knowledge management.

#### Aquaculture: inland and marine

and utilisation.

Aquaculture in the past has played a less pronounced role in the fisheries sector in Cambodia because the

<sup>6</sup> Reducing Emissions from Deforestation and Forest Degradation (REDD) is an effort to create a financial value for the carbon stored in forests, offering incentives to reduce emissions from forested lands and invest in low-carbon paths to sustainable development. "REDD+" goes beyond deforestation and forest degradation, and includes the role of conservation, sustainable management of forests and enhancement of forest carbon stocks.



inland capture fisheries have been so important. However, it is now recognised that there are limits to inland fisheries production and that new sources of fish production are needed to address the growing demand. For fish production to increase at the rate demanded by the growing population and regional markets, aquaculture will need to expand rapidly. In addition the growth in economic contribution of fisheries to GDP is most likely to come from value addition to a diversified and more commercially focussed aquaculture sector. However, this must be achieved in sustainable ways. FiA will adopt a programme of sustainable intensification of aquaculture across all levels of production.

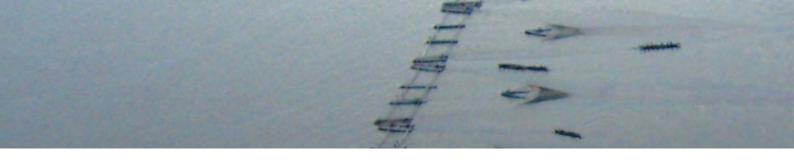
The promotion of aquaculture is outlined in the National Aquaculture Development Strategy (NADS). The goal of NADS is:a commercially viable and environmentally sustainable aquaculture sector contributing to food security and nutrition, socioeconomic development, GDP and export earnings.

NADS identified the following 7 strategic objectives to guide the development of the aquaculture sector:

- 1. To increase access to high quality seed for a range of species in demand in local, regional and global markets.
- 2. To increase access to sufficient and consistent supplies of high quality water, and to reduce flood risks.
- 3. To ensure widespread availability of sustainably sourced, reasonably priced, high quality feed suitable for a range of species.
- 4. To improve efficiency, profitability and sustainability of aquaculture production through increased knowledge, skill and organisation.
- 5. To maintain environmental quality and minimize loss from disease.
- 6. To increase the quality and value of production.
- 7. To facilitate access to credit as appropriate to the needs, potential and risks associated with aquaculture development.

The focus of NADS is on the development of a diversified aquaculture industry which includes both traditional small-scale fish farming, which involves some 40,000 households, and more commercially oriented small, medium and large sized farming enterprises. The commercial farms will provide the majority of the economic growth of the fisheries sector, overcoming years, through expansion and value addition. An action plan to turn this strategy into reality will be developed within the next year. A key part of this will be to assess and map the current status of aquaculture in the country to aid future planning.

Much of the production increase for domestic consumption will come from small/medium-scale aquaculture, which may also include expansion of aquaculture in OAAs. The techniques to support good aquaculture practices in small-scale production systems are established in Cambodia and will be extended to in-



creased numbers of households and businesses through partnerships between FiA and other development agencies. Improved feed and seed availability and quality will increase productivity. The management of land and water for aquaculture purposes will be improved to ensure both access to land and to year round water where possible. FiA will work with other agencies and the private sector to assist with increasing the availability of appropriate land and water resources for commercial aquaculture. It will explore options for low cost flood protection and work with international agencies to ensure predictable and regulated flows of rivers into Cambodia. The programme of Community Fish Refuges (CFRs) implemented under the last five years of the SPF will continue to ensure the productivity of rice field fisheries and to enhance wild capture fisheries (see Pillar 1).

Research will be implemented to better understand the role of women in fish farming and strategies for enhancing this will be developed. In addition, support will be provided to develop industry-wide collaborative bodies to represent the needs and aspirations of the different stakeholders in aquaculture and to ensure their voice is reflected in policy decisions.

The majority of growth in aquaculture will, however, come from small to medium scale commercial fish farms producing high value species addressing niche markets regionally and globally. To achieve this will require investment by the private sector in infrastructure and to achieve accredited production systems. Reflecting the diversity of habitat and environments in Cambodia, intensification is likely to take many forms and to involve a complex array of technologies to achieve this. This will require support from government to stimulate commercial investment and to identify and overcome investment constraints. An assessment of the factors constraining small and medium sized commercial production systems will be conducted to assist in planning a more supportive environment to stimulate private sector investment in fish farming. This will be through a participatory process where the private sector are encouraged and supported to engage in the planning of the detail of the expansion of the aquaculture sector. This will make a significant contribution to the economic growth in the fisheries sector and will be done in ways that ensure the sustainability of wild stocks of fish. Lessons will be learnt from a range of countries in the region including Thailand, Viet Nam, China and Bangladesh with a focus on South-South cooperation.

Large-scale production systems also offer opportunities for increased contribution to GDP. As the AEC develops so investment in Cambodia from neighbouring countries is likely to increase. In addition medium-scale farms may expand. This can be enhanced through an improved business environment and information on investment opportunities.

In addition to direct support, a supportive regulatory environment will be created which controls the









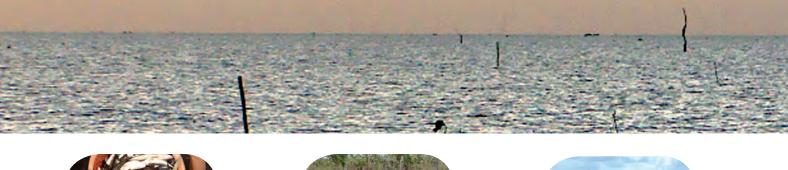
quality standards of inputs to aquaculture and products from aquaculture, especially those imported from neighbouring countries. FiA will establish systems of disease control within the aquaculture industry. It will monitor disease amongst farmed species and work with the private sector to ensure that outbreaks are recognised quickly and remedial actions taken. Research will be carried out to reduce the adverse effects of disease on national aquaculture production systems, including improved legislation and inspection services. This will be needed to ensure that the development of aquaculture in Cambodia is not disadvantaged by poor practices from other countries. FiA and other development agencies will play an important role in assisting the small and medium scale domestic private sector to engage in more commercial aquaculture production systems through increased guidance and support.

The availability and distribution of competitively priced and high quality seed and feed will be initially ensured through more effective disease and quality checks on imports.

In the longer term a national programme of broodstock development, management and distribution will be developed and promoted by FiA and other development agencies, for private sector uptake in the medium term. Wild resources will be enhanced through the release of genetically appropriate seed, fingerlings and broodstock into the wild. A diversified aquaculture base is important to address the uncertainties of the future. FiA will, where necessary, carry out research into marine and freshwater farm production techniques and equipment, and increase the production of sustainable supplies of broodstock and seed for key species.

The current practice of using seasonal low cost fish for feed in aquaculture reduces the availability of that fish for human consumption and new ways of addressing feed inputs will be researched and extended. In particular aquaculture development will ensure a high ratio of value added to the quantity of wild fish used in aquaculture feed. Low cost, locally produced feeds for aquaculture are important for viable commercial farmed fish production and research will be carried out to develop appropriate feeds for locally grown species.

FiA aquaculture staff will work closely with post-harvest specialists to identify market opportunities and









opportunities to enhance value chains. This will be particularly important as the effects of the AEC on investment and markets begin to affect Cambodia.

FiA will carry out research into the social, economic and environmental effects of different scales and forms of aquaculture development on poverty reduction in the sector, on the implications for national food security, and on critical marine and freshwater habitats, and will advise sector policy accordingly.

The expansion of aquaculture, to the levels envisaged by the ASDP, will require a greater role of fisheries extension staff in training the private sector in aquaculture techniques. FiA will build not only its own capacity in these new approaches but will extend that knowledge to the private sector to ensure their competitive advantage regionally.

#### Fisheries Value Chain

The majority of the fish harvested in Cambodia is consumed domestically or through low-value regional markets. It achieves relatively low selling prices due to limited value addition and poor handling and processing practices. The ability of Cambodia to continue to increase production from wild capture for economic growth and to address the nutritional needs of an expanding population, is limited by ecosystem production limits. Part of the potential growth in the fisheries sector lies in adding value to the fish production, especially from aquaculture.

Increasing the value (both economic and wider use-value to society) of fish production through value chain development is crucial to the sector achieving is growth targets and building better business models for commercial productivity will be of critical importance. In the aquaculture sector the quality of broodstock, seed and feed will be enhanced through improved import controls, better disease management, and feed development which will in turn achieve improved productivity and profitability. Integrating aquaculture with agriculture has the benefit of adding to both systems and has demonstrated its viability regionally. FiA will learn lessons from these regional experiences and apply them to the Cambodian situ-



ation where appropriate. Good aquaculture practices and wild fish sustainability will be important to differentiate Cambodian products in a very competitive regional market.

FiA will work with other line agencies and the private sector to ensure compliance with the requirements of the **Trade SWAp Road Map 2014-2018.** In particular FiA will ensure:

- Implementation of SPS standards (HACCP or GMP) among fishery product processors increases resulting in improved export competitiveness.
- Its recognition as the EU "competent authority" and can support Cambodian exporters targeting EU markets by 2018.
- A national fisheries association is established during 2015 to drive Private Sector collaboration, investment, and export-oriented industry reform.
- Trade facilitation and export guidelines are published in 2015, including on introducing SPS and HACCP compliance as well as improving industry practice in the Cambodian fisheries sector.
- A programme of certifying marine fishery product processors HACCP/GMP is delivered.
- Environmental guidelines are developed for fisheries processors and exporters.
- Negotiations are carried out to achieve VAT exemption on all exported fish products.
- Industry is supported to diversify the export market for fisheries products.

In addition FiA will work with other development partners and the private sector to ensure compliance with the ASEAN Sectoral Integration Protocol for Fisheries, in particular the Road Map for Integration of the Fisheries Sector.

It will be difficult for Cambodia to compete in mainstream mature fish markets where neighbouring countries have comparative advantage. FiA will research niche markets where Cambodian products could have an advantage and this will inform both aquaculture and processing plant development strategies. Central to this will be diversification of fisheries products and value addition where there are clear benefits, in domestic and export markets. Consultation with the private sector will identify areas where incentives and/or support can be provided to enhance appropriate private sector expansion. In particular FiA will work with other agencies to identify ways to streamline investment procedures and regulations. Lessons will be learnt from neighbouring countries within ASEAN and collaborative opportunities explored. Linked to this will be the development of legal instruments to ensure adequate safety and quality standards appropriate to market demands.



FiA will conduct a value chain assessment of the current fisheries sector and develop a strategic plan for value chain development based on future production and market opportunities and challenges. Information on market opportunities for wild capture and aquaculture production systems will be made regularly available to assist the private sector to fully develop market opportunities.

The potential role of low cost imports of fish to supplement domestic food security and to free up higher value domestically produced species for export will be researched as part of a wider food security strategy.

The quality of post-harvest practices in the fisheries sector will be of increasing importance as Cambodia enters a more open market within the AEC. Ensuring that national fish production for both domestic and for export consumption is of the highest appropriate quality and assured safety will be essential. Linked to this is a need for increased understanding of, and compliance with, the regulatory standards of key importing countries. A system for registering and, where appropriate, inspecting and regulating fish processing sites will be established and implemented. The potential role of fish imports to further address food security will also be researched and guidance provided to policy makers. In support of this legislation, FiA will develop the institutional capacity for providing effective services to enhance and maintain the safety and quality standards of fish produced in the country. FiA aims tobe established as the "competent authority" for fisheries quality assurance and will work with other government agencies, where appropriate, to provide and equip laboratory facilities for the analysis of fish quality control to meet the requirements of major importing markets such as the EU. FiA will work with the private sector at all levels to disseminate knowledge on safety, sanitation, processing technology, transportation, packaging and preservation of all fishery products. It will run training courses on sanitation and good practice throughout production chains.

FiA will work with other agencies to ensure that there is an adequate fish import and export monitoring system in place and operational.

FiA will develop a fisheries inspection service designed to both enhance the safety and quality of imported and exported fish products to ensure that standards are progressively improved to regional and international standards.

FiA will carry out research into the value chains of different fish and fish products, and how these will be affected by climate change.

In addition, support will be provided to develop industry-wide collaborative bodies to represent the needs and aspirations of the different stakeholders along the value chain and to ensure their voice is reflected in









policy decisions.

#### Regulatory and Services

To achieve its aims, FiA requiresthe regulatory framework, finances, staff and plans to do its work effectively and to ensure that the implementation, effects and impacts of those plans are monitored and evaluated. Monitoring and Evaluation (M&E) of the implementation of the SPF is crucial to its success and this will be a priority of FiA and development partners to achieve.

The NSDP and ASDP recognise the importance of controlling illegal fishing, trade, processing and habitat destruction, to the development of the sector. Regulation of fisheries is seen as a priority area within the sector and whilst CFi will contribute to improved management, this will take time to be established. FiA will disseminate information on laws and regulations across the sector. It will improve current legislation and ensure that rules are enforced and obeyed, especially in relation to habitat destruction, IUU fisheries, trade and fish processing. To achieve this it will work closely with other government agencies and with stakeholders in the private sector, and with neighbouring countries. A significant emphasis will be placed on building the capacity within FiA to reverse the trend in illegal activities across the sector through effective legislation and enforcement capacity. Support will also be provided to assist the private sector to better understand the regulations and the consequences of non-compliance.

The NSDP recognises the low levels of capacity within FiA to implement the complex and demanding roles of managing and developing the sector. New skills are needed to address the challenges that the fisheries sector faces. In addition the Sub-National Democratic Reform process means that the roles of staff within the sector have changed significantly in recent years. In the future these roles will evolve again as changes in government policy and changes in the pressures on the sector require new approaches, skills and knowledge to keep the sector moving in the right direction. A framework for human resource management and development will be developed in the near future. This framework will be implemented over coming years to provide a flexible, skilled and committed workforce. Key to future recruitment of people into both the government and the private sector in fisheries will be raising the profile of the sector as a

good career choice. This will encourage greater movement of people into technical training in the sector. The development of this framework will be done in ways that include the academic and trade-relating training institutions to ensure that training courses remain relevant to the sector's needs.

The **Gender Mainstreaming Policy and Strategy** in the Fisheries Sector (2007) will be updated to take into consideration changes in policy and in the sector. This will then provide the basis for 1) increasing gender awareness of FiA staff; 2) integrating gender into planning, monitoring and evaluation across the sector; 3) ensuring that women play a full and active part in the work of FiA; 4) working with other subprogrammes to ensure that rural women play an active role in the sector and benefit equitably from it, and 5) that knowledge sharing around gender issues between agencies involved in the sector is achieved. In addition the role of child labour in the fisheries sector will be assessed and appropriate strategies developed and implemented to ensure that the adverse effects of child labour are reduced in the sector.

In addition to efficient and effective staff, the implementation of the SPF requires an adequate and timely disbursed budget the use of which is accounted for in a transparent way. It is envisaged that the next ten years of SPF will require a budget in the order of \$150 million. The Programme-Based Approach to the sector ensures that such budgets are determined by FiA in line with the ASDP and NSDP. FiA will continuously monitor and review budgets in support of the implementation of the SPF. FiA will work with the government and donor funding agencies to ensure that the SPF is adequately funded to achieve all its components. The capacity to budget for development activities at national and cantonment levels will be developed across all departments. FiA will ensure that transparency and accountability are achieved through regular reporting of the budget expenditure against activities, outputs and outcomes.

In the long-term, the fisheries sectoral will aim to move towards greater self-financing and FiA in association with other ministries and the private sector will develop a strategy to achieve this. This will also include innovative approaches to the financing of private sector investment in the sector which needs to be stimulated and supported if production targets are to be achieved.

The development of the fisheries sector to achieve its targets and contribute to wider national development is a complex task requiring planning, coordination, support and management. The SPF lays down the framework for this to happen. FiA will turn the framework into beneficial, significant and measurable changes in the fisheries sector. This will require working closely with other sectors and ensuring that fisheries plans are fully catered for in the plans of other ministries. The TWGFi and other coordination institutions will play a major part in this.

FiA will complement the SPF through the production of annual work plans. Capacity to plan and moni-



tor development activities at national and cantonment levels will be developed across all departments. FiA will ensure that transparency and accountability are achieved through regular reporting of activities, outputs and outcomes.

FiA will work with donors, other government agencies, the NGO sector, the commercial private sector and communities to ensure that the SPF remains valid, current and achievable. The TWGFi will play a major role in this. The SPF will be periodically updated and revised to reflect necessary changes and to accommodate a much more adaptive planning role for the sector. A greater emphasis will be placed on the cross-sectoral interactions of policy and the need to develop more coordinated and cross-sectoral response to the challenges facing the sector. The TWGFi will play an increasing role in encouraging and supporting this cross-sectoral approach. Where policy conflicts emerge, FiA will assess these and identify the most appropriate direction for fisheries policy decisions to follow. In terms of regional considerations, a focus on closer integration within the AEC will be a high priority.

The importance of international agreements to the fisheries sector is increasing and becoming more complex. An assessment of current compliance with these agreements will be implemented by the TWGFi and guidance on improved compliance will be developed.

The role of transboundary cooperation between Cambodia and its neighbours will become more important. FiA, in partnership with the MRC through the **Mekong Basin-wide Fisheries Management and Development Strategy,** will play a much more significant role in ensuring the wider management of both the Mekong basin and the coastal areas. The importance of this will increase in the face of climate change, the need for hydropower development, the complexities of transboundary fish movement and fisheries management, and the need for economies of scale on shared technologies.

To enhance the efficiency and effectiveness of FiA's work the capacity to monitor and evaluate progress against targets will be enhanced as a priority. FiAwill monitor the achievement of the sub-programme outcome indicators and advise on changes to plans in order to achieve its wider aims. These M&E activities will be an important means by which the views of the private sector, communities and other line ministries can contribute their perceptions of the effectiveness of FiA and its policies.

FiA will also monitor progress towards the targets established by the NSDP and the JMIs. FiA will regularly report on the implementation of activities, the delivery of outputs and the achievement of outcomes within the sector. Training will be provided across the sector to implement monitoring effectively. FiA will prepare policy guidance and legislation as needed to address the requirements of the implementation of the SPE.

### IMPLEMENTING THE STRATEGIC APPROACH

RGC and Development Partner support to the fisheries sector will continue to be implemented through Programme-Based Approach. It will recognise the importance of change and will be adaptable and flexible to accommodate change. It will be guided by a set of priority guiding principles which complement and reinforce the CamCode. It will link into other planning processes in fisheries especially those under the ASDP. Its progress will be continuously monitored to ensure that it is able to address changes effectively and to ensure impact. The resources for implementation will be assessed annually and adjusted as needed.

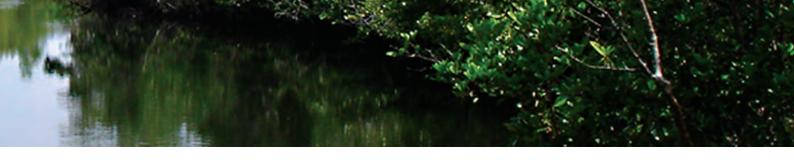
#### Programmatic approach

The FiA has been involved in developing a programme-based approach (PBA) to the fisheries sector for a number of years. This evolved because much of past support to the fisheries sector was poorly coordinated, donor-driven, inefficiently planned and implemented, and resulted in a partial process of policy implementation which had a significant distorting effect on policies. In addition the projectisation of external support to the sector was often accompanied by the formation of parallel institutions which lead to unsustainable project outputs and to a weakening of the administration.

The Government in its "Action Plan for Harmonisation and Alignment: 2004-2008" called for the implementation of the National Strategic Development Plan (NSDP) through more programmatic approaches and assigned the responsibility for this to the appropriate Technical Working Groups (TWG). Since then the FiA and the TWGFi has been moving the sector to a more Programme-Based Approach.

This PBA has the benefit of responding to policy formulation and implementation in a much more holistic way which reduces many of the distortions associated with projects. PBA is much more efficient in terms of staff development and deployment, procurement, reporting and financial management.

The use of PBA in fisheries has been very successful in turning the sector around and delivering on goals and outcomes. This approach will continue as the underlying means of operation of the sector over the life of the SPF.



#### Adapting to change

The implementation of the strategic approach to the fisheries sector will be faced with an increasing level of uncertainty. This uncertainty comes from not only climate change, but also from substantial regional and global economic change. This change makes the planning environment for fisheries less predictable. As such there is a need to adopt a much more adaptive planning and implementation process for the sector which can respond to change whilst retaining the long-term strategic focus.

#### Priority guiding development principles

Although the future for fisheries will always be, to an extent, uncertain this uncertainty can be offset by establishing and maintaining clear principles on how the strategy will be implemented. While the future may change, the principles should remain constant throughout the process.

Ten principles have been identified:

- 1. Building resilience through adaptive planning.
- 2. Being evidence-based, accountable and transparent.
- 3. Operating at multiple levels.
- 4. Addressing conflicting aims and ensuring institutional coherence.
- 5. Ensuring the viability and sustainability of ecosystem function.
- 6. Enhancing the legal rights and responsibilities of communities and individuals.
- 7. Addressing the needs, aspirations and preferences of the communities.
- 8. Understanding dependency in the sector and balancing exclusion with livelihood alternatives.
- 9. Addressing costs and benefits in sustainable and equitable ways.
- 10. Building capacity.

These principles are outlined below.

#### 1. Building resilience through adaptive planning

In all fisheries development and management systems, change is an inevitable part of the process. This change is becoming more pronounced over time as climate change, demographic change, economic change, regional infrastructural change and global political uncertainty interact at national and local levels.









As uncertainty increases the ability to predict, prepare for, cope with and adapt to change will be critical. The SPF provides a long-term view of the sector. This is linked to, and supported by, the ASDP which is more flexible and takes a shorter time perspective. The outcome indicators of the ASDP are capable of being adjusted as our knowledge of change increases. This will be translated into changes in the annual plans developed for the fisheries sector. In addition, adaptive planning requires greater engagement by the private sector and communities in understanding, monitoring and responding to change to become more resilient to it.

FiA will develop the systems and approaches to implement adaptive planning. This will include a more flexible planning process within FiA which builds on a strong knowledge base.

#### 2. Being evidence-based, accountable and transparent

Critical to the future development of the fisheries sector is that decisions for that development are able to respond to the changing nature of the sector based on strong evidence base. This knowledge base will be built on three instruments:

- Evidence generated from research.
- Evidence generated from monitoring and evaluation (M&E).
- Evidence generated from a participatory dialogue with communities and the private sector.

The types of knowledge from environmental, social and economic perspectives needed to develop policy, to legislate, to plan and to implement policy effectively, will be periodically defined within FiA and knowledge generated accordingly.

These will be combined to feed back to the ASDP to enable changes in emphasis of the sector's development and into annual plans to adjust implementation.

That knowledge will be shared within FiA and across the sector more widely on a regular basis to ensure that all participants are fully informed. In addition the knowledge will feedback to an annual review of the continued relevance of sub-programmes in the government's fisheries programme as part of the ASDP's review process.



#### 3. Operating at multiple levels

Cambodian fisheries cannot operate in isolation from other sectors of the economy, from neighbouring countries or from global forces. While the focus of development of the fisheries sector is often at the community level through community fisheries, more and more these are being impacted on by wider forces at different levels. There are also planning processes at local government levels and FiA will work with these lower level planning processes to ensure that wider fisheries policy and local development policies are coherent.

Factors operating at a regional level will also, increasingly, play a role in fisheries development. The Tonle Sap Lake and river do not operate in isolation from wider aquatic systems and these are being threatened by infrastructural changes beyond Cambodia's immediate control. The MRC plays a significant role in coordination between the different riparian states in the region. Likewise, changes in the AEC are likely to lead to changes in regional markets, investment funding, labour movements and demands for fisheries products and inputs. These changes will be monitored and appropriate standards and legislation will be enforced.

FiA will play a stronger role in understanding, through research, the potential threats of these multi-level changes, and in influencing regional decision-making processes in ways that are supportive of Cambodian fisheries.

#### 4. Addressing conflicting aims and ensuring institutional coherence

The fisheries sector benefits from clear aims and objectives. However, there will be times when the achievement of one aim reduces the effectiveness of achieving others. In addition the aims and objectives for the sector operate within wider social, economic and environmental context which will influence their achievement. Critical to the success of the SPF will be addressing trade-offs between objectives within the sector and this will be done with reference back to the how the Vision for the sector is best achieved.

Understanding the relationship of fisheries to other domestic sectors such as rice production, industrial development, land management, energy production and road construction will be critical to the efficient use of resources. In the future, achieving a balance between these and fish for food security and export in an integrated way will be a major challenge, especially in the face of climate change. Achieving this balance will affect how the sector can develop and prosper. Research will be carried out to understand the potential effects on the fisheries sector locally by wider cross-sectoral factors.



The ASDP will be particularly important as a means of ensuring institutional coherence within the agriculture sector but the FiA will contribute to other policies on the environment, climate change, gender, child labour and disaster risk management.

FiA will also work in close partnership with other ministries and with NGOs to ensure that the needs of the sector are understood and addressed. The TWGFi will play an important role in this coordination.

#### 5. Ensuring the viability and sustainability of ecosystem function

Fisheries cannot survive if the coastal, lake, flooded forest and river ecosystems are damaged. Maintaining the quality of these ecosystems is critical to the long-term survival of the fisheries sector. This requires a strong understanding of these ecosystem functions, the pressure that they are exposed to, the effects they experience and the remedial actions needed. A key role of FiA will be to work with NGOs, the private sector and communities to understand and support ecosystem function.

#### 6. Enhancing the legal rights and responsibilities of communities and individuals

One aspect of FAO's Voluntary Guidelines for Small Scale Fisheries is that of increasing and securing rights for small-scale fisheries. This is balanced by increasing responsibility to use those resources sustainably. At the core of the fisheries reforms in Cambodia has been increasing the rights and responsibilities in the management and development of community fisheries. This continues to be central to the way the fisheries will develop in the future. This partnership between the state and the community is essential to deliver the strategic approach and this will be progressively enhanced through the next ten years.

#### 7. Addressing the needs, aspirations and preferences of the communities

Key to enhancing the legal rights and responsibilities of communities is understanding their needs, aspirations and preferences. Without this collaborative approach, government and community are in danger of moving in different directions. Understanding the motives and needs of fishers is, above all, important for ensuring that there is coherence in the aims for community management of fisheries.

M&E and research will play a major role of engaging with communities to understand their needs and aspirations and this will be fed back into the policy and planning process. The role of gender in the fisheries sector will be an area of particular focus.









#### 8. Understanding dependency in the sector and balancing exclusion with livelihood alternatives

Fishers depend on fisheries resources in many and different ways. Some are full-time fishers and do nothing else, others are part-time or seasonal fisheries, some catch fish, others process and trade, some people depend upon the sector as a safety net when other activities are threatened. Being full-time or part-time may not affect the importance of the sector to their livelihoods. However, as populations increase and fishing efficiency improves, so more and more people will need to be excluded from the fishery in order that harvesting levels remain sustainable and livelihoods improve.

FiA will work with communities and other government and NGO agencies to develop viable, sustainable and beneficial livelihood alternatives for those people that are excluded. These will be closely linked to community aspirations, market opportunities and wider development agendas at national and local levels.

#### 9. Sustainably and equitably addressing costs and benefits

The cost of managing the policy reforms in fisheries has largely been paid for by the government with donor support. This cost has been a necessary burden for government given the cost has been largely in response to policy change. In addition the levels of poverty in the fishing communities would not have allowed direct payments for the rights to fish. The community has, however, paid part of the cost through the contribution of time and efforts to make community fisheries work. Furthermore, the role of fisheries management that is progressively being transferred to the community will reduce the cost burden on government.

As Cambodia moves towards becoming a middle income country the availability of funding for development from external sources is likely to decrease. While this is considered a positive step, demonstrating the progress the country has made, it also means that the fisheries sector will need to eventually achieve efficiencies in the support provided and seek greater funding from within the sector.

Increasing cost recovery is seen as an important part of the SPF over coming years. How this will be done



will be a matter of discussion and reflection over time which will include the communities and private sector that depend upon the fisheries. Considerations within that discussion will include: 1) the extent to which costs are proportional to the benefits which different groups receive from the fishery - this will mean an equitable spread of cost recovery across different groups; 2) consistency with cost recovery plans in other sectors;3) the existence of extenuating socio-economic considerations - particularly poverty; 4) the extent to which the management tasks are a consequence of internal factors or the product of other government/ international policies beyond users control; and 5) the cost-effectiveness of cost recovery means.

#### 10. Building capacity

The strategic approach to the sector requires some important shifts in the capacity of individuals and institutions in the fisheries sector to implement. Key to that capacity change will be building systems and approaches that are flexible and dynamic enough to accommodate change in the sector.

The NSDP recognises that too many positions within FiA remains unfilled and the SPF places emphasis on building a full complement of staff. However, it is essential that FiA staff also develop the skills, attitudes and knowledge to be flexible, adaptive and fully competent. The SPF places considerable emphasis on building that capacity over coming years.

This capacity building will also extend beyond FiA to cover community institutions and local government staff who will be essential to taking the sector forwards. Key to this will be the development of cooperative bodies within the private sector which ensure coordination, cooperation, communication and representation in decision making processes.

This capacity building will be a continuous process reflecting the changing nature of the sector

#### Planning for the sector

The over-arching strategic plan for the sector is the SPF. This volume of the SPF updates the original SPF in line with changes which have occurred in the wider economy and at the sectoral level.

The three year rolling plan for the sector, envisaged by SPF 2010-2019, has now been fully incorporated into MAFF's Programme and Sub-programme planning process under the ASDP. This will be revised periodically to address changes in the sector. It is envisaged that the SPF 2015-2024 will also be reviewed in 2019 and updated accordingly.





FiA will also produce annual Programme and Sub-programme plans which will be in line with and contribute to the development of the ASDP.

#### Monitoring, evaluation and reporting

Keeping the planning process relevant to change will be the primary role of the M&E system. This will be done in accordance with the M&E system established under the Ministry of Agriculture, Forestry and Fisheries.

M&E within the fisheries sector will operate at three levels:

- 1. The fisheries programme level concerned with the impact achieved with the sector as measured by the indicators of the four sector development pillars.
- 2. The sub-programme level concerned with the outcomes which the FiA has contributed to. These are concerned with the outcome indicators for each sub-programme as defined by the ASDP.
- 3. The activity level which FiA is responsible for delivering this is concerned with measuring the delivery of outputs by each sub-programme.

Monitoring will be done on an annual and quarterly basis and supported by periodic site visits. Resource trends will be monitored over the longer period of several years. Evaluation of impact will be done annually. Reporting by sub-programmes will be done on a quarterly and annual basis in line with MAFF's M&E procedures.

#### Resources for implementation

The budget for the implementation of SPF will be developed by FiA in association with MAFF and development partners.

The Royal Government will continue to provide direct funding to the Fisheries programme as defined by the ASDP. In the short to medium term Cambodia will depend on funding arising from development partners. However, over time the higher levels of fisheries economic contribution should allow for increasing resource rent extracted from the sector. This growth in revenues, and the general growth of the fisheries, can help support the Royal Government's overall economic ability to provide funding for the sector. However, the key driving principle behind the setting of actual future revenue levels will be to ensure that no undue burdens are placed on the people in the sector, so that food and nutrition security can be assured, poverty within the sector can be alleviated, and the fisheries achieve sustainable economic growth.

The Strategic Planning Framework for Fisheries: 2015 – 2024







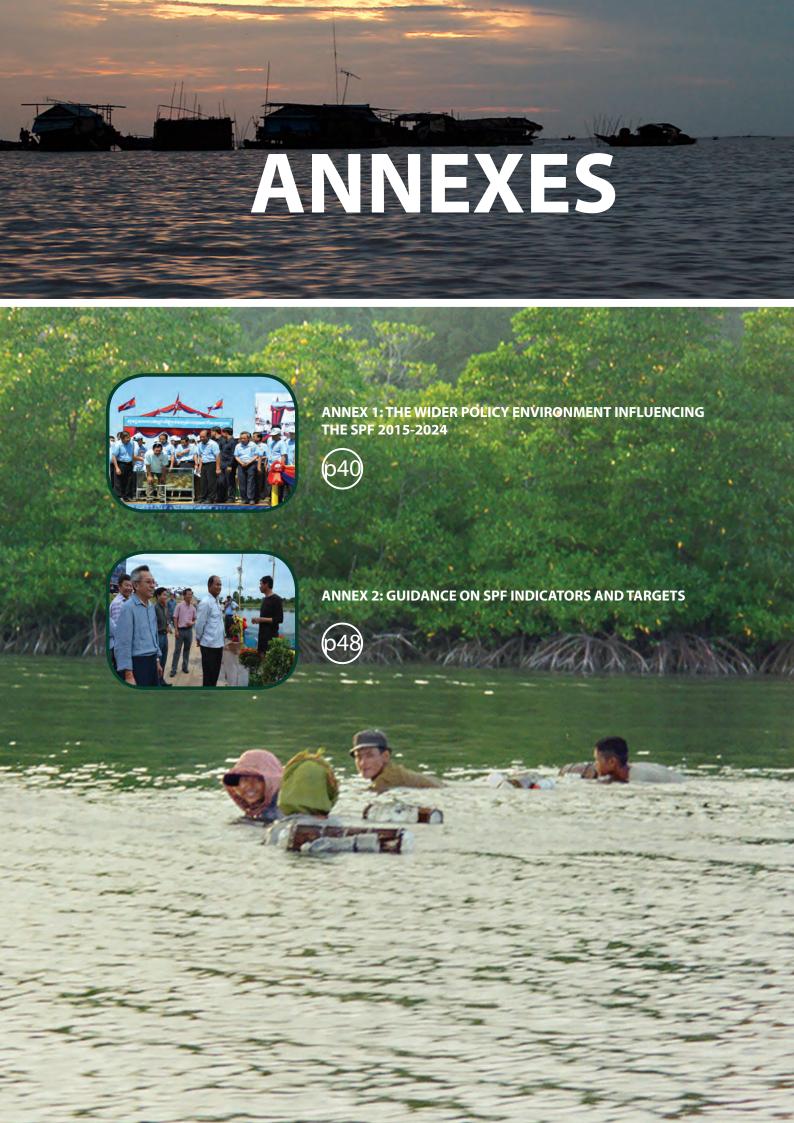


Overall budget management and control will be held by the FiA centrally through the Department of Planning, Finance and International Cooperation as guided by the existing planning and budgeting systems and procedures of Ministry of Agriculture, Forestry and Fisheries.

The projected financial requirement for the implementation of the SPF is shown in the table below. Projected annual budget for the implementation of the SPF in \$x1000

2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
\$8,517.65	\$18,360.62	\$15,929.22	\$15,427.97	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000

The figures for the period 2015-2018 are estimated for the ASDP and those from 2019 onwards are projected, but unconfirmed, estimates.



# ANNEX

#### THE WIDER POLICY ENVIRONMENT INFLUENCING THE SPF 2015-2024

The Strategic Planning Framework for Fisheries does not operate in isolation from other policies at national and international levels. SPF both influences these other policies and is influenced by them. An outline of the key influencing policies and their interaction with SPF is discussed below.

#### The Sustainable Development Goals

The Sustainable Development Goals focus on key elements which reflect the livelihoods of people in the fisheries sector in Cambodia. They address the poverty which afflicts so many of the people involved in fisheries. They address hunger, food security and improved nutrition and health all of which fish contributes directly to especially in Cambodia where fish plays such a key role in the diet. The need for both sustainable production and consumption of fish resources has never been more important. They also address education which is becoming an increasingly important part of fisheries where rational and sustainable fisheries management decisions need to be based on sound knowledge and information. They recognize the importance of gender equality and the empowerment of women which are crucial to the fair and sustainable development of fisheries in Cambodia.

They address the need use water resources effectively and to provide access to affordable, reliable, sustainable and modern energy. Both these areas impact directly on the future of fisheries in Cambodia with shared transboundary water resources and the increasing desire to use these resources to generate hydropower. These desires need to be balanced by the goals to achieve inclusive and sustainable economic growth, full and productive employment and decent work for all. This is particularly important to fisheries where work is often being degraded to the lowest levels as resources are depleted and where child labour is used at an unacceptable level. The need to integrate natural resources management and development in Cambodia with wider local development of diversified livelihood opportunities is increasing. It will be important to integrate fisheries with other forms of development to achieve a fair and balanced way forwards.

However, it is also recognised that innovation and industrialisation can be both inclusive and sustainable if done correctly and this will be a challenge for both better managed fisheries and aquaculture development in Cambodia over coming years. Well planned and sustainable fisheries and aquaculture can contribute to achieving the greater equality within and between nations and to reduce the need for the rural poor to seek livelihoods in the cities.

However, these potential benefits are threatened by climate change which can influence flooding patterns, fish species interactions, biomass production and disease. The SDGs recognise the importance of understanding, mitigating and responding to the effects of climate change. This not only means developing sustainable and low-carbon industries, conserving habitats and biodiversity, but also conserving and sustainably using marine and freshwater resources, and terrestrial ecosystems and forests. To do this needs societies that are peaceful and inclusive, where institutions for the management of resource-use occur at all levels and that partnerships for such inclusive development are enhanced.

#### The Voluntary Guidelines for Securing Sustainable Small-scale Fisheries in the Context of Food Security and Poverty Eradication and the FAO Code of Conduct for Responsible Fisheries

The Voluntary Guidelines for Securing Sustainable Small-scale Fisheries in the Context of Food Security and Poverty Eradication have been developed as a complement to the 1995 FAO Code of Conduct for Responsible Fisheries (CCRF). The Guidelines recognize that small-scale and artisanal fisheries encompass all activities along the value chain – pre-harvest, harvest and post-harvest – undertaken by men and women. They also recognize the important role that these small-scale fisheries play in food security and nutrition, poverty eradication, equitable development and sustainable resource1 utilization. Small-scale fisheries provide nutritious food for local, national and international markets and generate income to support local and national economies.

#### The objectives of these Guidelines are:

- a) To enhance the contribution of small-scale fisheries to global food security and nutrition and to support the progressive realization of the right to adequate food.
- b) To contribute to the equitable development of small-scale fishing communities and poverty eradication and to improve the socio-economic situation of fishers and fish workers within the context of sustainable fisheries management.
- c) To achieve the sustainable utilization, prudent and responsible management and conservation of fisheries resources consistent with the Code of Conduct for Responsible Fisheries (the Code) and related instruments.
- d) To promote the contribution of small-scale fisheries to an economically, socially and environmentally sustainable future for the planet and its people.
- e) To provide guidance that could be considered by States and stakeholders for the development and implementation of ecosystem friendly and participatory policies, strategies and legal frameworks for the enhancement of responsible and sustainable small-scale fisheries.

f) To enhance public awareness and promote the advancement of knowledge on the culture, role, contribution and potential of small-scale fisheries, considering ancestral and traditional knowledge, and their related constraints and opportunities.

The provisions for the *Guidelines* are reflected in the **Cambodian Code of Conduct for Responsible Fisheries** (CamCode) which is also a voluntary set of guidelines designed to specifically interpret the CCRF within the Cambodian fisheries context.

The Code of Conduct for Responsible Fisheries also recognises the importance of eliminating IUU fisheries and this has resulted in the International Plan of Action for the elimination of IUU fishing.

#### The Rectangular Strategy for Growth, Employment, Equity and Efficiency Phase III

The Rectangular Strategy Phase III reaffirms the government's mission to achieve sustainable development and poverty reduction. The Rectangular Strategy recognizes four priority areas one of which one is agriculture development which includes fisheries and aquaculture. In considering the development of the fisheries sector the Rectangular Strategy emphasises the need to balance development with conservation. It also emphasises the need to move from an extensive system of agriculture production to a more intensive one. The focus of development in fisheries is on both the expansion of aquaculture and the sustainable use of wild capture resources. In so doing it recognizes the need to further reform the fisheries sector and to address key issues such as climate change. The Rectangular Strategy also recognizes the importance of good governance and the role that the fisheries reforms play in this. These reforms have been deepened in recent years providing more resources for community management and for conservation. However, recognizing the importance of fish to national food security, improved incomes, and export promotion the Government aims to promote increased but sustainable production from capture fisheries and aquaculture and to facilitate its greater contribution to national growth through a value chain approach. To facilitate increased production the Government will focus on:

- 1. Further implementing Strategic Planning Framework for Fisheries 2010-2019 with the aim of boosting fish production to serve domestic consumption and export markets by relying on the key secotoral as defined by the SPF.
- 2. Enhancing research and development in areas such as fish breeding, fish health and feed production, and farming systems in the aquaculture sector.
- 3. Promoting the adoption of the law on fish health and production to provide the basis for the institutional arrangement and management of this sector, aimed at strengthening enforcement of sanitary standards for fish products, and strengthening and enforcing fish sanitary and Phytosanitary measures to prevent and combat the outbreak of fish diseases, and to protect public health.
- 4. Encouraging investments in medium and large-scale feed production to support fish farming, along

with improvements in the extension services system, breeding, credit and market access for fish farmers, incentives for private investment in processing of fisheries products, and facilitation of trade in fish and fisheries products.

The balance between development and conservation will require enhanced control of illegal fishing practices including tightened control of fishing gears and fishing period, elimination of overfishing, strengthening fishing communities' capacity for the management, use and conservation of fisheries resources, protection of biodiversity and aquatic animal habitats, control of freshwater and seawater quality through pollution minimization, protection and replanting of flooded forests and mangroves, demarcation of flooded forest and fisheries conservation zones, development of institutional and human capacity, and preparing research studies and their dissemination.

The Rectangular Strategy also recognises the increased and changing challenges that the fisheries sector is playing. To address this it recognises that the capacity of staff within the FiA needs to be enhanced in support of more effective institutions at the national local and community levels. Whilst recognising that current vacant staff positions need to be filled it also emphasises that staff need to increase the efficiency and effectiveness, that gender policies for the sector need to be fully implemented, and that partnership between departments, between administrative levels and with communities needs to be strengthened. ICT will also need to play a stronger role in dealing with a more unpredictable environment and economy.

The National Strategic Development Plan (NSDP) has been revised to reflect the policy changes in the Rectangular Strategy III and to create an implementation plan for the economy.

#### The National Strategic Development Plan (NSDP) 2014-2018

#### Vision for the Sector

The NSDP identifies the priority impacts for the countries development as growth, poverty reduction, stability and human development. The RGC's overall vision for the fisheries sector, in line with these impacts, remains:

Management, conservation and development of sustainable fisheries resources to contribute to ensuring people's food security and to socioeconomic development in order to enhance people's livelihoods and the nation's prosperity.

#### Developmental themes

The fisheries sector is linked to the wider national development of the NSDP through four broad developmental policy themes:

1. Governance: The Government continues to attach high priority to encouraging and supporting fishing communities to participate in the management of natural resources to both ensure the sustainability of those resources and to ensure the quality of the livelihoods of fisheries-dependent

- communities. This management will need to adapt in the face of the uncertainties of climate change and regional development strategies. The Government will also work in close cooperation with neighbouring countries to ensure the sustainable use of habitats and resources.
- 2. Conservation: The Government will further strengthen national resource conservation, especially promoting the linkage of conservation to eco-tourism. It will continue to take action against illegal encroachment of flooded forests, use of illegal fishing gears, and all anarchic activities preventing the conservation efforts. It will ensure conservation and protection through installing concrete poles within the conservation areas, demarking boundaries and installing poles to protect flooded-forests, protecting and conserving deep pools in the upper Mekong and sustainably managing important fish habitats. This will address both the resilience of communities and the resource base in the face of external change.
- 3. Production: The Government will promote the sustainable use of capture fisheries through community fisheries and rice-field fisheries, and the expansion and commercialisation of inland and marine aquaculture to both conserve wild fish stocks and maintain the available supply of healthy fish for local consumption.
- 4. Value addition: In order to ensure that the price of the fish reflects true economic value, and to ensure that the livelihoods of people engaged in fishing are at least at the national average, and improving, the Government will establish an efficient fish market mechanism and reduce losses in fish processing and wastage especially in small-scale fish processing. This will be based on a value chain approach to the sector.

#### **Specific Sector Goals**

Specific goals for the fisheries subsector have been defined by the NSDP as follows:

NSDP	Indicator	Unit	2014	2015	2016	2017	2018
Indicator 1	Indicator No.						
8.13	Aquaculture (15% increased)	Tons	97,800	112,500	129,400	148,800	171,170
8.14	Fish Production 00 (all sources)	00 Tons	752	790	829	870	910
8.15	Fishery Communi received capacity strengthening	ty No	100	100	100	100	100

Given, however, the results from recent research into rice field fisheries and inland wild capture fisheries, and the likely effects of rice intensification and infrastructural development, it seems unlikely that the expansion of all sources of fish production will be as rapid as previously predicted. Estimates of potential productivity are being developed and will be available shortly.

To achieve productivity increases the Government will create a policy, regulatory and sector-support environment which is appropriate and enabling. Within this support environment the NSDP also recognises the international context in which that must occur. As such it calls for a comprehensive strategy for regional cooperation to address issues facing fisheries in Cambodia, including climate change, upstream damming of rivers, and environmental degradation, developed and fully implemented. Furthermore, it will implement research which supports the formulation and implementation of policy to achieve national development goals. It will enhance the human and organisational capacity with FiA to deliver these aims and work with other sectors to achieve an integrated and sustainable way forwards.

#### Vision 2030 and Green Growth

Whilst the medium term perspectives on development are reflected in the RSIII and NSDP, the long-term perspective is captured by the Vision 2030 document. This Vision include Cambodia becoming a lower middle income country with a stable economy that is business friendly and economically diversified, and with more equitable wealth distribution. The SPF will contribute significantly to this through a greater commercial focus on the fisheries sector which is aimed more at GDP growth than production growth.

The Green Growth Master Plan (GGMP) has been prepared in line with the Government's efforts and strategies to achieve poverty reduction and sustainable development. The major objectives of the GGMP are to: (1) assess Cambodia's green growth potential, (2) create an institutional and legal system to efficiently and effectively implement and monitor green growth policies, (3) identify priority sectors for Cambodia's green growth, and (4) establish a holistic approach that presents strategic guidelines and action plans consistent with the NSDP and the National Green Growth Roadmap (NGGR).

To achieve the goals of the GGMP the government has set the following aims:

- 1. To promote economic growth and poverty reduction by implementing policies addressing the needs of all, including the underprivileged and future generations;
- 2. To ensure environmental sustainability.
- 3. To stimulate the green economy and create green jobs.
- 4. To protect Cambodia's natural heritages full of biodiversity.
- 5. To ensure that land and natural resources are used in an efficient manner to support sustainable and equitable socio-economic development for all Cambodian citizens.
- 6. To improve the health and the overall quality of life of the people through inclusive green growth.
- 7. To increase the resilience of the environment and of the population from adverse impacts.

The SPF is directly influenced by this through its commitment to both growth and poverty reduction in the fisheries sector, through ensuring environmental sustainability and protecting the natural heritage, though value chain development of production systems, through food security and through resilience of communities and the resource base.

#### **Climate Change Policy**

Fisheries sector policy is also influenced by the **Cambodia Climate Change Strategic Plan 2014-2023** (CCCSP). The Mission of the Climate Change Plan is "Creating a national framework for engaging the public, private sector, civil society organizations and development partners in a participatory process for responding to climate change to support sustainable development". The goals of the Plan include reducing vulnerability, shifting to a more green development path, and promoting public awareness and participation in climate change responses.

The Climate change plan fully acknowledges the vulnerability of both the fisheries sector and the communities involved in fisheries to the effects of climate change. CCCSP calls for the full integration of climate change effects and responses into sector and sector development plans. The uncertainty of the effects of climate change necessitate that the fisheries sector will not only need to build the resilience of the sector but also adopt a more adaptive planning process which is able to change in the face of an uncertain future. In addition it will need to understand the effects on climate change on the sector and put in place measures to monitor, evaluate and report back on these.

Important guiding principles for the fisheries sector will be 1) to adapt and mitigate in the face of climate change; 2) to recognise the need for inter-disciplinary approaches and cross-sectoral approaches; 3) to combine community, scientific and eco-system based approaches; 4) to ensure that responses are gendersensitive; and 5) to engage at the local, national and global levels.

A Climate Change Prioritized Action Plan for Agriculture, Forestry and Fisheries Sector 2014-2018 is currently being prepared by the MAFF Technical Working Group on Agriculture and Climate Change.

#### The Agriculture Sector Strategic Development Plan (ASDP)

The Overall Goal of the agriculture sector is to increase agricultural productivity by 5% per annum through enhanced productivity, diversification and commercialisation. To achieve this the Agriculture Sector Strategic Development Plan (ASDP) 2014-2018 is built upon four pillars:

- Enhancement of agricultural productivity, diversification and commercialisation.
- Promotion of animal production and animal health.
- Sustainable management of forest and fisheries resources.
- Strengthening institutional capacity, enhancing efficiency of support services and human resource development.

The fisheries sector, contributes to all of these pillars and does so across 11 sub-programmes. These sub-programmes are:

- 1. Strengthening of Community Fisheries management and development.
- 2. Fisheries domain management.
- 3. Promotion of aquaculture development.
- 4. Human resource development and law enforcement;
- 5. Inland fisheries research and development.
- 6. Marine fisheries research and development.
- 7. Research on aquaculture techniques.
- 8. Improvement of fisheries value chains.
- 9. Fisheries resource conservation and protection.
- 10.Implementation of the Strategic Planning Framework for fisheries.
- 11. Governance and operation of FiA.

The targets for the fisheries sector for the next four years are structured around these different sub-programmes in the ASDP.



2

## **ANNEX**

#### **GUIDANCE ON SPF INDICATORS AND TARGETS**

The indicators listed in the text of the SPF 2015-2024 are outcome indicators i.e. they are concerned with the changes that occur in the fisheries sector beyond the immediate control of the FiA and the TW-GFi. They are the consequences of the inputs, activities and outputs that are delivered by the FiA and its partners but rely on the wider group of participants in the sector, and in the economy more generally, to achieve. In the table below these indicators and targets are outlined in a little more detail to assist with their monitoring in coming years.

INDICATOR	NOTES
Pillar 1, indicator 1.1	All capture fisheries, including rice field fisheries and marine, have been combined. Whilst the wild capture fisheries catch varies from year to year, the target has been put at 600,000t. In order to ensure the sustainability of the stocks, wild capture fisheries should (on average) not expand beyond this level in future.
Pillar 1,	Whilst there are many CFis in existence, what is more important is their level
indicator 1.2	of effectiveness in the delivery of management and other community benefits. The assessment of the effectiveness of these CFis will be determined through a series of criteriaunder the following broad headings:  1. Participation of the community in fisheries resource management  2. The legal Framework of the CFi  3. The Role and Function of the CFi committee members  4. Implementation of the CFi plan  5. The operational network of the CFi  6. The available and use of financial resources  7. The wider livelihood quality of the associated community  8. The effectiveness of conservation under the CFi  FiA estimates that currently about 1/10th of CFi's can be classified as effective. The effectiveness criteria will be reviewed at a stakeholder workshop planned for June 2015. The agreed criteria will subsequently be incorporated in a monitoring tool, which will be used to establish the baseline for 2015. The tool will be used to monitor CFi's regularly and jointly by FiA and provincial staff.

## Pillar 1, indicator 1.3

The total area under effective conservation was selected to give a clear objectively verifiable indicator. It is necessary to include the word effective because otherwise the conservation areas may exist but not be useful. It is recognised that different conservation areas would require different criteria for their effectiveness to be assessed (these criteria would normally be part of the management plan for the area). This would require the areas and their respective effectiveness criteria being agreed by FiA and documented. A further issue is the connectivity between conservation areas. This will have a significant impact of the operation of the conservation areas. This should be covered by the use of the term "effective". If there is not good connectivity between conservation areas as well as other habitats critical for maintaining the life-cycle of target organisms, then there is not going to be effective conservation. More details of the types and areas of conservation could be captured in more detail in the sub-programme outcomes.

In this context Community Fish Refuge (CFR) ponds are also considered important, especially for sustaining capture fisheries associated with rice-fields. Although the individual areas of the CFR's are relatively small, success in their management is expected to contribute significantly to the targets of indicator 1.1.

## Pillar 2, indicator 2.1

Whilst aquaculture production as an indicator lacks reference to quality of production or its value, it does provide an important guide to the availability of fish in the sector. As aquaculture will become progressively more important over time, a record of production is needed to reflect the indicators of the NSDP.

The targets for this indicator are shown to rise in a linear manner, however, it is possible that such growth in the sector may follow a more exponential curve reflecting the slower establishment phase of the sector. On the other hand, given that the driver of this growth is the private sector, there may even be a more rapid initial growth as new investors come into the sector. Flexibility should be used in assessing progress accordingly.

## Pillar 2, indicator 2.2.

This indicator is being measured to give some idea of the increase in the contribution of aquaculture to growth. As such it is appropriate to only measure the number of medium/large scale commercial aquaculture operators to do this. The Cambodia Law on Fisheries Chapter 10 gives the size of aquaculture operations that require FiA permits, which will be used as thresholds for medium scale. These thresholds are as follows:

Inland Aquaculture (Article 53): Ponds with a total area  $> 5,000 \text{ m}^2$ ; Pens with a total area  $> 2,000 \text{ m}^2$ ; Cages with a total area  $> 15 \text{ m}^2$ 

Marine Aquaculture (Article 54): Cages with a total area > 20 m2; Shrimp field with a total area > 5,000 m<sup>2</sup>; Aquatic plant field with a total area > 5,000 m<sup>2</sup>; Other aquatic animal farming with a total area > 3,000 m<sup>2</sup>

It should be noted that the selection of medium/large scale operations for this indicator does not mean that small-scale aquaculture is unimportant. It will continue to play animportant role for rural household food security and livelihoods. Further, the contribution to production from small-scale aquaculture will be included in indicator 2.1.

## Pillar 2, indicator 2.3

The contribution of aquaculture to GDP in USD is an important measure of the contribution of aquaculture to the economy. The targets provided include no growth in the unit value of sector but this should increase significantly as more commercially oriented operators enter the sector. A comparison of the actual production unit value against the target value will provide a valuable insight into this change.

Pillar 3, indicator 3.1. GDP in Cambodia in 2014 was in the order of \$16 billion. Fisheries production was, taking an average market selling price of \$2/kg, equivalent to about 9% of GDP. This annual contribution is likely to fall slightly because of the rapid growth in GDP and the slow initial growth of aquaculture and is then likely to remain at a fairly constant 8% as both production and value chain increases allow the overall monetary value of the fisheries to expand along with GDP.

Dillon 2 in digets = 2.1	CDD in Combodia in 201/ 2022 in the anti-
Pillar 3, indicator 3.1.	GDP in Cambodia in 2014 was in the order of \$16 billion. Fisheries production was, taking an average market selling price of \$2/kg, equivalent to about 9% of GDP. This annual contribution is likely to fall slightly because of the rapid growth in GDP and the slow initial growth of aquaculture and is then likely to remain at a fairly constant 8% as both production and value chain increases allow the overall monetary value of the fisheries to expand along with GDP.
Pillar 3, indicator 3.2	Rather than focussing too much on factories exporting, this indi-
	cator is concerned with the increase in export of regulated fisheries
	and aquaculture fish/products. This both encourages exports but also
	encourages the exports to be done through the official systems.
Pillar 3, indicator 3.3	This indicator encourages a move both towards achievement of
	the Cambodia Trade SWAp indicators and compliance with AEC
	requirement. However, small-scale processors are equally important
	and in the medium- to long-term Good Hygiene Practices will need
	to be promoted also for these processors, who are supplying primarily
	the domestic market.
Pillar 4, Indicator 4.1	Indicator 4.1 is designed to reflect the perception of the public of the
	fisheries sector as a desirable career option, i.e. the future importance
	and role of the sector. FiA will select a number of training courses in
	different institutions and measure these on a regular basis to deter-
	mine the level of enrolment in those courses. These should not be
	limited to courses on fisheries biology but also address aquaculture,
	and to the extent possible, marketing and socio-economic courses
	related to the sector. The enrolment at the following fisheries-related
	institutions is enumerated:
	1. University of Agriculture, ChamkaDoung (20 students for
	2014/2015, ref. Mr. ChoukBorin, Dean of Faculty of Fisheries)
	2. Prek Leap University of Agriculture (10 students for 2014/2015)
	ref. Mr. Yen Sivon, administrative officer)
	Kampong Cham University of Agriculture (10 students for 2014/2015
	ref. Mr. HingSophanarith, Deputy director of Kampong Cham FiA
	Cantonment and Lecturer at Kampong Cham University of Agricul-
	ture)

Pillar 4, Indicator 4.2	Indicator 4.2 aims to assess the importance that other line ministries put on the involvement of FiA in decision-making processes that concern fisheries. The metric will be the number of official letters received by FiA which either informs FiA about decisions or requests FiA inputs for decisions.
Pillar 4, Indicator 4.3	This is designed to demonstrate how the community and the pri-
	vate sector view the implementation of policies by FiA and the De-
	velopment Partners and to provide an opportunity for their voice to
	feed back into policy. These perception surveys will be implemented by
	FiA M&E staff on an annual basis and will cover areas such as illegal
	fishing, CFi effectiveness, market support and aquaculture extension.
	Baseline studies will be implemented in 2015 and targets will reflect
	positive changes in those perceptions over time.
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#### **FISHERIES ADMINISTRATION**

Address #186, Preah Norodom Blvd, Sangkat Tonle Bassac, Khan Chamkar Mon, Phnom Penh, Cambodia. Fax: **(855) 23215 470** / Email: http: www.fia.maff.gov.kh Postal Address: P.O. Box 582

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