

Mekong River Commission

Fisheries Programme 2011-2015

Programme Document

After an extensive consultation process, this Project Document was agreed on, in principle, by the MRC Joint Committee. However, some details of the documents and its work plans will be further developed in an Inception Phase during the period January – June 2011.

Table of Contents

Ab	breviatio	Summaryons and Acronyms	5
1.	Backg	round	8
	1.1	Status of Mekong Fisheries	8
	1.2	National and Regional Fisheries-Related Initiatives	9
	1.3	Key Achievements and Lessons Learned by the Fisheries Programme	10
	1.4	Need for the Fisheries Programme 2011-2015	12
	1.5	Roadmap and Process of Consultations for Programme Preparation	13
2.	Contex	xt and Rationale	14
	2.1	Regional Relevance	14
	2.2	Stakeholders and Target Beneficiaries	15
	2.3	Cross Cutting Issues	15
	2.4	Relations to the MRC Strategic Plan	17
	2.5	Regional and National Priorities	18
3.	Objec	tive and Programme Design	19
	3.1	Programme Goal, Objective and Outcomes	19
	3.2	Outputs and Activities	21
	3.3	Key Features of the Programme	22
	3.4	Risks and Assumptions	26
4.	Implen	nentation and Management	26
	4.1	Implementation Strategy	26
	4.2	Institutional Arrangements	27
	4.3	Programme Governance	30
	4.4	Programme Staffing	31
	4.5	Work Plan	32
	4.6	Monitoring, Reporting and Evaluation	37
	4.7	Programme Budget	37
5. I	List of R	eferences	39
		Design and Monitoring Framework	
		rogramme Activitiesob Descriptions for Key FP Staff	

Executive Summary

- 1. Fisheries in the Mekong River system are of immense importance to the people of the Lower Mekong Basin (LMB). They provide food, employment and income to millions of people. These factors in the early 1990s led to the development of a programme to heighten awareness of fisheries and their role in poverty alleviation in the region and to provide a basis for management of the fisheries resources and their environment in order to maintain their productivity for future generations. Activities of the MRC Fisheries Programme (FP) started in the mid-1990s, and continue to the present day.
- 2. Mekong fisheries are presently under pressure from a wide array of impacts from basin development. Such impacts, many of them negative, stem from construction of hydropower dams, expansion of irrigated agriculture, and infrastructure development. In 2008, a Mid-term Review by FP's main donors, the Danish International Development Assistance (Danida) and the Swedish International Development Cooperation Agency (Sida) recommended to extend support to FP beyond its present duration, that is, for the period 2011-2015. This period would focus on consolidation and institutionalisation of the information, lessons learned and processes initiated during earlier programme periods. It should clearly be seen as the final transition to a more streamlined and regionally focused but nationally rooted fisheries component of the MRC. Its main tasks would be the systematic anchoring and strengthening of the tools and processes developed, ensuring a progressive convergence towards sustainable processes for regional fisheries development, as well as anchoring of information developed during earlier phases based on an audience-oriented consolidation and 'distillation' of scientific data, lessons learned and outcomes.
- 3. A number of regional partners and initiatives are active in improving fisheries management and development in the basin. Among them are: the Southeast Asian Fisheries Development Center (SEAFDEC); Australian Council for International Agricultural Research (ACIAR); ASEAN Regional Fisheries Management Mechanism (FMM); Network of Aquaculture Centres in Asia-Pacific (NACA); WorldFish Center (WFC); Wetlands Alliance (WA); World Wide Fund for Nature (WWF); and several major universities, such as the Asian Institute of Technology (AIT), Kasetsart University, Thailand, Royal University of Phnom Penh (RUPP), Cambodia, Can Tho University, Viet Nam, and National University of Lao PDR (NUOL). FP 2011-2015 will, as in the past, collaborate with all of these institutions.
- 4. Recent national fisheries management and development is characterized by a renewed focus on inland fisheries in national policies and legislations. A key focus here is the emphasis on user participation in fisheries management, which has led to better fisheries regulations and higher compliance. However lack of knowledge is still an obstacle to improved management planning and implementation. National agencies are increasingly engaged in providing this information, and are supported in this by a number of regional initiatives through research and capacity development. With its increasing visibility as an important economic sector, fisheries are targeted to contribute to national socio-economic growths and development. Important policy directions to this end are focused on improving productive capacities; protection and conservation of critical habitats and resource enhancement; modernization of the traditional systems of extensive resource use and their equipments and techniques; fostering of community-based approaches; and promotion of the shift from subsistence to commercial production by professional fishers and fish farmers producing for the market.
- 5. The LMB development context, characterized by increasing pressure on the fisheries sector, the efforts undertaken by national governments and regional organizations towards sustainable fisheries management and development, and FP's achievements in tackling resulting problems as well as identifying remaining, and emerging, challenges described above, clearly points to an urgent need for a Fisheries Programme 2011-2015.

This was first expressed in 2008, when a Programme mid-term review, which was carried out by independent external consultants in close collaboration with riparian agencies, strongly recommended continuing support for FP during the period 2011-2015. The review team points out two priority areas for FP 2011-2015, namely the 1) systematic anchoring and strengthening of the tools and processes ensuring a progressive convergence towards sustainable processes for regional fisheries development, and 2) systematic anchoring of information developed by FP1 and 2 based on an audience-oriented consolidation and 'distillation' of scientific data, lessons learned and outcomes.

6. Throughout much of 2009 and early 2010, FP stakeholders both internal and external to MRC were consulted on the future directions of FP 2011-2015 in more than ten events, bringing together more than 350 stakeholders from MRC, NMCs, fisheries line agencies and fishing communities. The present document is therefore the result of a collective effort, which reflects the expectations and aspirations that representatives from the four MRC countries have with regard to a FP 2011-2015.

- 7. FP 2011-2015's relevance is well established within the scope, guidance and framework provided by the 1995 Mekong Agreement. It is also well linked to the MRC vision of sustainable development, to its contribution to achievement of the Millennium Development Goals for the member countries, and to the decision by the MRC member countries to use IWRM as its basic approach to basin planning and management.
- 8. A hallmark of FP 2011-2015 is its action across levels and scales in an increasingly diverse and complex environment. Thus, a wide range of stakeholders, with different needs and interests and contributing different skills and resources, will engage in programme planning and implementation.
- 9. Similarly, FP 2011-2015 will address a complex and diverse set of cross cutting issues, such as climate change, poverty alleviation, gender mainstreaming, environmental sustainability, rights-based management and development, and HIV/AIDS.
- 10. MRC has formulated a Draft Strategic Plan (SP) for the period 2011–2015. In doing so, it has concentrated on a number of strategic issues for the MRC. It so happens that these issues are also highly relevant for FP 2011-2015. They are: strategic goals; shift from a developing function to a monitoring and inter-state facilitation function; full riparianization; long- and medium-term financing needs of MRC in relation to its core functions; national execution of MRC projects and activities; cross-programme coordination within MRCS; strategic partnerships and coordination with other regional initiatives.
- 11. FP 2011-2015 is characterized by the two-pronged approach of 1) supporting member country agencies in applying improved methods and tools for regional cooperation in fisheries management and development; and 2) moving towards implementation of long-term core functions. In addition, it will address a number of regional and national priorities, such as improving national capacity for regional fisheries cooperation, filling information and knowledge gaps, and fostering communication and participation.
- 12. The goal of FP 2011-2015 is adapted from the Overall Goal of MRC¹: "Riparian governments and other stake-holders make effective use of the Mekong's fisheries resources to alleviate poverty while protecting the environment". The objective of FP 2011-2015 presents a key ingredient towards the achievement of this goal, which is the "Implementation of measures for sustainable fisheries management and development and improved livelihoods by regional and national organizations", both governmental and civil society.
- 13. Outcomes leading to the achievement of project objectives and goals are awareness raising and communication of knowledge accumulated in earlier programme periods as well as generated during FP 2011-2015 (outcome 1), generation of monitoring information and filling of information gaps (outcome 2), regional dialogue on coordinated knowledge uptake and implementation on national level (outcome 3), and capacity-development (outcome 4). While each of the four FP Programme outcomes feeds into MRC Goals 1-4, all four FP Programme outcomes contribute to increased efficiency of the MRC Secretariat to undertake core functions under full riparianization, that is 'SP Goal 5: Efficient organizational transition of MRC for implementation of its core functions and full riparianization of its Secretariat'.
- 14. The four FP 2011-2015 outcomes will be achieved through a total of 11 outputs, which are the direct results of 23 programme activities.
- 15. FP 2011-2015 presents four key features, namely, orientation towards MRC core functions, flexibility and responsiveness, IWRM, and a focus on capacity development.
- 16. MRC core river basin management functions have been defined to facilitate the transition of the MRC as a development organization to that of a river basin organization tasked with routine implementation of the 1995 Mekong Agreement. In a basin where fisheries are so important to the livelihoods and nutrition of millions of people, and where there is such high biological diversity, it is clear from other international rivers that there will be a long-term need for MRC to coordinate and convene fisheries research, and provide information to decision-makers in a form that is accessible. Fisheries activities are clearly among the core functions of the MRC as defined and recognised by Member Countries.
- 17. More specifically, FP 2011-2015 will contribute to MRC's core function as follows: Core function 1 (Data acquisition, exchange and monitoring) can be found in activities and outputs leading to Outcomes 2 and 4; Core function 2 (Analysis, modelling and assessment) in activities and outputs leading to Outcome 2; Core function 3 (Planning support) is a central function of FP 2011-2015, and can be found in activities and outputs leading to all of its Outcomes; Core function 4 (Forecasting, warning and emergency response) to be found in activities and outputs leading to Outcome 2; Core function 5 (Implementing MRC procedures) is part and parcel of activities and

2

¹ The MRC's Overall Goal is: Member countries manage water and related resources of the Mekong Basin in an effective, sustainable and equitable manner.

outputs leading to Outcomes 1, 2 and 4; Core function 6 (Promoting dialogue and coordination) in activities and outputs leading to FP Outcomes 1, 3 and 4; and finally Core function 7 (Reporting and Dissemination) to be found in activities and outputs leading to all FP Outcomes, and particularly to Outcome 1.

- 18. FP 2011-2015 will collaborate with a number of MRC programmes: it will continue to provide key information to the Basin Development Plan (BDP); it will support the Environment Programme (EP) and in particular the MRC Climate Change and Adaptation Initiative (CCAI), as climate change will impact significantly on LMB fisheries; it will make available all its data and information accumulated during earlier programme periods to the Integrated Knowledge Management Programme (IKMP), and further combine its expertise with the IKMP modelling component; it will cooperate closely with the Integrated Capacity Building Programme (ICBP) in capacity development of its staff, counterparts and collaborators in line agencies and user communities; it will strengthen its close links with MRC's Initiative on Sustainable Hydropower (ISH), to which FP has already provided a modelling tool for assessing cumulative effects of mainstream hydropower dams on migratory fish populations.
- 19. Four risks towards programme implementation have been identified and relevant strategies to their mitigation developed. These risks are: insufficient support to programme activities due to drastic expenditure reduction by national governments as a result of the world economic crisis; negative impacts from rapid industrialization and infrastructure development on sustainable aquatic resource utilization; threats to fisheries and aquaculture livelihoods and investments from climate change and related effects; ineffective MRC support to sustainable fisheries development resulting from unsuitable institutional arrangements.
- 20. National organizations, such as NMCs and national line agencies, and the Fisheries Programme of the MRC will implement FP 2011-2015. In other words, FP 2011-2015 is a joint undertaking of national partner organizations and MRC/FP. The role of the national partners is the coordination, facilitation and implementation of national level activities; the role of MRC is the regional coordination, guidance, assistance and capacity strengthening, as well as synthesis of outcomes and results.
- 21. In line with FP's focus on MRC core river basin functions, national counterpart organizations will gradually increase their responsibility for those that can be implemented at that level, allowing MRC/FP to concentrate on the regional dimension of coordination, monitoring and reporting responsibilities. In the longer term, and under an altogether different arrangement, these main functions of MRC/FP may be funded by budgetary contributions from MRC member country-governments. While this arrangement is expected to occur post-FP 2011-2015, FP 2011-2015 nonetheless will take steps to strengthen national capacities and ownership in that direction.
- 22. FP 2011-2015 is managed and executed by MRC through its Secretariat, in particular MRC/FP, which provides regional coordination, technical and scientific advice, reporting and capacity development. Its activities at the national level are implemented through relevant fisheries agencies, mainly fisheries research institutes, in the four member countries, coordinated by the four NMCs. FP 2011-2015 may implement specific activities engaging other national institutions, such as universities, and individual experts. A FP 2011-2015 Steering Committee (PSC) comprising representatives from national fisheries agencies and NMCs. Its main function is to oversee the strategic direction of FP 2011-2015 implementation. The PSC also reviews FP progress and impact, and may recommend adjustments necessary towards achieving programme objectives. The PSC may also recommend actions aiming at maximising the national uptake of FP 2011-2015 results.
- 23. More than in most other MRC programmes, FP activities are already at this early stage executed nationally. This national execution occurs through a historically strong and direct interaction between FP, national fisheries agencies and NMCs. There are two major implementation mechanisms, i.e., the FP 'Work Agreement' and the 'Programme Coordination Meeting' (PCM). Work Agreements, which are contracts guiding national programme execution, are primarily formulated by counterparts, but within the overall FP framework. This means, 'national execution' of FP does not only entail implementation of activities by national collaborators, but their planning as well. Furthermore, the general arrangement on national level includes a National Programme Co-ordinator (NPC) as the focal point for coordination and facilitation of Programme implementation. The NPC has a key role engaging with national organizations and experts as necessary and ensures that activities are implemented efficiently and without delay.
- 24. FP's stakeholder engagement mechanisms operate both formally and informally. More formally, such mechanisms exist on three levels, i.e., programme coordination mechanisms, yearly events, which allow for exchange of information and experiences in programme implementation as well as engagement in LMB fisheries and aquatic resources management and development with other MRC programmes, and other organizations involved in fisheries, and the TAB. On a more informal level there is frequent cooperation with more than 250 community organizations, some of them federated at district and provincial levels with more than 9,000 members have been supported by FP since the early 2000s.

- 25. A total of about ten professional FP core staff at MRC/FP will be responsible for operational activity coordination and implementation support and facilitation, and about 20 support staff in its various offices in the four riparian countries. In line with MRC's riparianization policy, there will be no internationally recruited staff beyond 2012. However, short-term international consultants will be contracted for assignments of up to one year. Compared with earlier programme periods, FP 2011-2015 staff composition demonstrates a strengthening of riparian expertise and participation in programme management and implementation, with a significant number of riparian specialists in senior management and technical positions.
- 26. A 6-months Inception Phase will initiate FP 2011-2015 implementation in January 2011, during which the FP 2011-2015 logical framework and implementation arrangements will be reviewed; a number of specific studies and surveys will be conducted; and the Programme Performance Monitoring System (PMS) will be revised. This will culminate in a regional Inception Workshop for discussion of and agreement on a Draft Inception Report to be submitted to the Programme Steering Committee (PSC) in June 2011.
- 27. The FP 2011-2015 work plan is characterised by an emphasis on activity implementation during the first three years of its duration, with a gradual reduction of activities during its latter half. Throughout its duration, FP 2011-2015 will proactively seek to transfer parts of its present responsibilities to other MRC programmes, as well as national line agencies and research organizations. Furthermore, it will demonstrate an increasing focus on MRC core activities.
- 28. A preliminarily selected set of indicators, identification of data sources and arrangements for data collection for the purpose of programme performance monitoring have been identified, which refer to both programme output progress as well as programme impact. This set of indicators, as well as the programme performance monitoring system as a whole, will be reviewed during the Inception Phase. Attention will be given to ensure that information on programme performance will serve as an appropriate input into the longer-term (that is, beyond 2015) MRC-wide Performance Monitoring System (PMS).
- 29. The total budget for FP 2011-2015 will be approximately US\$ 12.5 million, of which US\$ 10.3 million is from external contribution. The national contribution by riparian governments to the programme budget is expected to be 10% in 2011, increasing by 2% per year to 18% in 2015. Expenditure patterns follow the overall Programme work flow and are front-loaded, meaning most of the activities will take place in the first years resulting in about 70% of the total budget being required during the first three years of the programme period, while reduced MRC/FP core activities towards the end of FP 2011-2015, will require proportionally less funding.

Abbreviations and Acronyms

ACIAR Australian Council for International Agricultural Research

AIMS Aquaculture of Indigenous Mekong Species Component, MRC/FP2

ASEAN Association of Southeast Asian Nations

BDP MRC Basin Development Plan

CCAI MRC Climate Change and Adaptation Initiative
CDRI Cambodia Development Research Institute

CTA Chief Technical Adviser

Danida Danish International Development Assistance
DLF Department of Livestock and Fisheries, Lao PDR

DOF Department of Fisheries, Thailand EP MRC Environment Programme

FAO Food and Agriculture Organization of the United Nations

FiA Fisheries Administration, Phnom Penh, Cambodia

FIA Fisheries Impact Assessment
FMM Fisheries Management Mechanism

FP MRC Fisheries Programme
HCMC Ho Chi Minh City, Viet Nam

ICBP MRC Integrated Capacity Building Programme

IFRDC Inland Fisheries Research and Development Center, Udon Thani, Thailand IFReDI Inland Fisheries Research and Development Institute, Phnom Penh, Cambodia

IKMP MRC Integrated Knowledge Management Programme

IOI Immediate Outcome Indicator

ISH MRC Initiative on Sustainable Hydropower IWRM Integrated Water Resources Management

JC MRC Joint Committee

LARReC Living Aquatic Resources Research Center, Vientiane, Lao PDR

LMB Lower Mekong Basin

MAF Ministry of Agriculture and Forestry, Lao PDR

MARD Ministry of Agriculture and Rural Development, Viet Nam

MDG Millennium Development Goals
MRC Mekong River Commission

MRCS Mekong River Commission Secretariat
NCD National Component Director (FP)

NAFRI National Agriculture and Forestry Research Institute

NGF Regional Network on Gender and Fisheries

NMC National Mekong Committee

NPC National Programme Coordinator (FP)

OAAs Other aquatic animals
OI Output Indicator

OPD Operations Division (MRCS)

PNPCA Procedures for Notification, Prior Consultation and Agreement

POI Programme Objective Indicator

RB M&E Results-Based Monitoring and Evaluation System

RBO River Basin Organization

SEA Strategic Environment Assessment

SEAFDEC South East Asian Fisheries Development Center

Sida Swedish International Development Cooperation Agency

SP MRC Strategic Plan TA Technical Assistance

TAB Technical Advisory Body for Fisheries Management

TE **Technical Experts** US\$ United States Dollars WA Wetlands Alliance WFC World Fish Center

WWF World-wide Fund for Nature

Glossary

Lee (Lao) Trap Dai (Cambodian) Bag net

Definitions

Those who, as individuals and organizations, derive a direct benefit from activities and outputs pro-Beneficiary

moted and provided by the Programme.

Capacity development Capacity development has now largely replaced the term capacity building in the literature to reflect

> the desire to move away from the implication that development assistance is needed to build capacity from scratch, and to embrace the view that capacity development should strengthen existing structures. Capacity development initiatives should embrace some notion of sustainability, since once capacity is established it needs to be maintained over the long term. (MRC ICBP Project Document,

2009).

Fisheries co-manage-

ment

The sharing of management authority by resource users and governments. A formalised process of sharing authority and responsibility by government and organised user-groups in decentralised deci-

sion making on fisheries issues.

Fisheries governance A systemic concept relating to the exercise of economic, political and administrative authority. It

> encompasses: 1) the guiding principles and goals of the sector, both conceptual and operational; 2) the ways and means of organization and coordination of the action; 3) the infrastructure of socio-political, economic and legal instruments; 4) the nature and modus operandi of the processes; and 5) the poli-

cies, plans and measures. (Garcia, 2009).

Fisheries management The integrated process of information gathering, analysis, planning, decision making, allocation of

> resources and formulation and enforcement of fishery regulations by which the fisheries management authority controls the present and future behaviors of the interested parties in the fishery, in order to

ensure the continued productivity of the living resources. (FAO 1995).

Gender refers to roles, responsibilities, needs, interests and capacities of both men and women. These Gender

are influenced by social and cultural factors. Therefore the term "gender" is not synonymous with the

term "sex" which refers exclusively to biological differences.

Goal The higher-order objective to which a development intervention is intended to contribute.

IWRM IWRM has been defined in many ways and most definitions emphasize inter-disciplinary collabora-

tion and coordination within multi-objective settings. "Integrated Water Resources Management is a process which promotes the coordinated development and management of water, land and related resources, in order to maximize the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems" (Global Water Partnership Technical Advi-

sory Committee, 2000).

Knowledge Information that has passed through a process of application and utilization by its owner. That is,

'knowledge' can only result from actual use and practice.

To exercise "the right to regulate internal use patterns and transform the resource by making im-Management

provements" (Ostrom and Schlager 1996).

MRC core river basin 1) Data acquisition, exchange and monitoring; 2) Analysis, modelling and assessment; 3) Planning management functions support; 4) Forecasting, warning and emergency response; 5) Implementing MRC procedures; 6)

Promoting dialogue and coordination; 7) Reporting and dissemination.

Outcome The intended or achieved short-term and medium-term effects of an intervention's outputs, usually

requiring the collective effort of partners. Outcomes represent changes in development conditions,

which occur between the completion of outputs and the achievement of impact.

Result The output, outcome or impact (intended or unintended, positive and/or negative) of a development

intervention.

Results-based monitoring and evaluation

Results-based monitoring and evaluation (M&E) represents another level in the monitoring system in addition to monitoring activities and outputs which concentrates on monitoring results and which focuses specifically on the change processes a programme intends to initiate or has initiated in attitudes and practices of partner organizations or target groups. It measures the achievement of objectives and shows the linkages to the higher development goals. The objective of RB M&E is to improve the effectiveness and efficiency of programmes through learning on a programme level and by supporting learning on the institutional level, which enables improved decision-making and steering of programmes. RB M&E is about being accountable for the intended outcomes of the programme and improving institutional learning. (MRC ICBP Project Document, 2009).

Riparianization Riparianization is a process through which ownership of and increasing technical and management responsibilities of riparian staff strengthens commitment to the MRC by member states ('riparians

states'). As a consequence, qualified staff from MRC member countries will gradually replace inter-

national staff of the MRC Secretariat. (MRC ICBP Project Document, 2009).

Stakeholder A person with an interest or concern, without being directly involved with its management or impacted by its results. See also the following definition: A Person, group, or organization that has direct

or indirect stake in an organization because it can affect or be affected by the organization's actions, objectives, and policies. Key stakeholders in a business organization include creditors, customers, directors, employees, government (and its agencies), owners (shareholders), suppliers, unions, and the community from which the business draws its resources. Persons or organizations (e.g., customers, the performing organization, or the public), who are actively involved in the project or whose interests

may be positively or negatively affected by the performance or completion of the project.

Subsidiarity An organizing principle that suggests that matters ought to be handled by the smallest, lowest or least

centralized competent authority. The Oxford English Dictionary defines subsidiarity as the idea that a central authority should have a subsidiary function, performing only those tasks, which cannot be

performed effectively at a more immediate or local level (OED 2010).

1. Background

1.1 Status of Mekong Fisheries

The Mekong is one of the world's largest rivers with a basin that supports a population of about 60 million people (MRC 2010), for most of whom the staple diet is rice, fish, and other aquatic animals (OAA). Most people in the LMB are farmers with fishing as a secondary occupation. Based on altitude, hydrology, and landforms, the basin is divided into the Upper Mekong (located in China and Myanmar) comprising 20% of the catchment, and the Lower Mekong basin (LMB) in Lao PDR, Thailand, Cambodia and Viet Nam.

For about two-thirds of its length, the Mekong is a lowland system and about 60% of the LMB comprises tropical lowlands where most people live, and where extensive and diverse aquatic habitats support a wide range of species, which are caught and cultured. Rainfall patterns and the flow of the Mekong and its tributaries are predictable from year to year, and the rural economies depend upon the annual alternation of dry and wet seasons, which in particular supports "rain-fed" rice aquaculture, fishing, and collection of other wild products. Aquatic organisms are well adapted to the seasonal extremes, breeding and feeding in the vast area of seasonal wetlands where large quantities are caught each year, particularly as waters recede.

The inland fisheries of the LMB are among the world's largest, with surveys indicating that the total production is now in the order of 3.6 million tonnes per year. It is estimated that about 2.1 million tonnes is from capture fisheries and 1.5 million tonnes from aquaculture, of which about one million tonnes is exported. Commercial fishing and aquaculture employ several million people, and the LMB's fisheries are of particular importance for the millions of rural people for whom fishing is a secondary occupation that provides food security and supplementary income.

Official statistics show that aquaculture production and value have increased dramatically over recent years in Thailand and the Viet Nam delta, with much of the increase due to the culture of tilapia, catfishes and shrimp. Limited data also suggest that commercial catches overall may be stable, increasing slightly in Thailand and declining in Viet Nam. Cultured fishes now dominating sales (by weight) in city markets in Thailand and Lao PDR, are of equal importance to capture fisheries in the markets in the Mekong delta (Viet Nam), but in Phnom Penh as elsewhere in Cambodia capture fish comprise the bulk of sales. However, capture fish are typically more expensive than cultured fish, so the total value of sales of capture fish is comparable to or greater than the value of culture fish in city markets in all four countries. The continuing importance of capture fisheries is apparent despite little investment in their management and enhancement.

While there are some data for the commercial fish catches, conclusions regarding the status of the entire capture fishery are tentative at best because of the lack of national data for subsistence catches, which form the largest component of the catch.

Compared to other river basins the LMB remains relatively undeveloped from a hydropower perspective. Currently there are 30 hydropower dams in operation or under construction in the tributaries of the lower Mekong but only 4 on the mainstream – all in the upper basin in Yunnan Province, China.

However, during the last two years, renewed interest in mainstream hydropower projects has emerged, and there are at present proposals for 11 hydropower dams to be located on the mainstream between northern Lao PDR and northern Cambodia. In addition 64 hydropower dams on the Mekong tributaries are under consideration.

Globally, the construction of dams for hydropower, irrigation, and navigation has been a major cause of changes to freshwater ecosystems altering flows, interrupting ecological connectivity, and fragmenting habitats. The impacts of dams on river fisheries resources are varied, but often profound and most often related to flow modification, and barrier and passage effects.

The development of water resources in the Mekong River Basin is not only for hydropower but also for irrigation and flood mitigation, especially in the LMB. The type and scale of impacts of irrigation dams and reservoirs vary greatly depending on baseline conditions, the nature and size of the scheme, and management and mitigation measures adopted. However, it can be concluded from LMB experiences that irrigation dams which are small and shallow and weirs offer significant opportunities for conservation and enhancement of fisheries, because they provide dry-season refuges, potentially high productivity, an extended fishing season, and allow efficient fishing activities by small-scale fishers.

With the economic growth taking place throughout the LMB and the increase in population come investments in infrastructures that may impact on capture fish production by changing the hydrology of the natural systems. Infrastructures that impact on water flows are dams, weirs, dykes and embankment. Other man made structures such as

roads, canals and large-scale fishing gears may change flows and effluents from factories, and mines and sewers may degrade the river water quality.

The LMB countries' policy priorities for growth and infrastructure development are clear, as are their priorities for protection of the aquatic environment and sustainable rural livelihoods. Balancing these priorities involves conscious trade-offs.

Mainstream hydropower dams bring potential opportunities for economic development, mainly with improved electricity supply, foreign exchange earnings to support governments' development goals and improved navigation. However, the projects would inevitably be accompanied by major risks to existing uses of water and related resources of the Mekong basin. The question the Mekong countries are now assessing is whether the impacts can be adequately mitigated.

1.2 National and Regional Fisheries-Related Initiatives

1.2.1 National Fisheries Management and Development

The MRC member countries manage their fisheries according to their respective legislation, which may be specific or included in more general laws (for example laws on water, agriculture, forestry or biodiversity conservation) on natural resource management and utilization. However, the capacity to apply and enforce fisheries-related legislation is generally low, and the promotion of management systems, which may lead to higher compliance with rules and regulations and thus to better management results is high on the countries' priority list.

Over the last decade, riparian governments and line agencies responsible for the management of natural resources have increasingly involved end users in resource management. Users represent a significant resource for enforcement and regulation and defining operational rules. Their understanding and acceptance of rules ensures a high degree of compliance. There are long-standing traditions of fisheries management being undertaken by communities in many areas of the Lower Mekong Basin. Rules on fishing, often associated with spiritual beliefs, are established to sustain local resource levels and to ensure the equitable distribution of benefits. The rules established for traditional, community based fisheries management, whether documented or not, are often *de facto* recognized by provincial and national authorities and their enforcement is supported.

The growing political interest in promoting user participation in resource management has recently led to legislation favouring co-management arrangements whereby local fisheries are jointly managed by public authorities at various administrative levels, local fishers and other stakeholders. New legislative initiatives in Cambodia promote the establishment of community fisheries groups that will take part in the management, conservation, development and sustainable use of fisheries resources. Participatory fisheries management, or 'co-management' by members of fisheries agencies and user communities, has now become the preferred form of management in all four countries. While there are provisions supporting public participation in fisheries management in the legislations of all four member countries, 'community fisheries' and 'fisheries co-management' has only recently been officially sanctioned in the fisheries laws of Cambodia and Lao PDR.

The lack of knowledge of aquatic resources and their importance combined with negligence has, within a few decades, wiped out unmeasured riches for people living in other river basins and transformed rivers into little more than open waste water channels or dried out river beds.

Perhaps the first problem to address is the lack of information about the Mekong river system and the ecology that sustains its productivity. Reliable sector information is needed to preserve the fisheries sector and highlight its role in food security and income creation. The type of information needed depends on the stakeholders.

Biological and socio-economic surveys are the basis for the production of various kinds of information. These surveys are the basic material for development of local and regional fisheries management systems; impact assessments of water management projects; development of extension systems; and inputs to the creation of popular knowledge. Fisheries statistics are the basis for any assessment of the economic importance and overall impact of major policy decisions on the sector. Generation of these data requires a specially designed system involving routine collection of selected data and processing for specific aims and target groups. It is widely recognized that most of the current techniques for fisheries statistical data collection and processing do not provide accurate information and thus need further development support.

FP and other donor supported and national research projects have made substantial contributions to capacity building within the national research institutions. Staff of provincial and district fisheries authorities involved in field research activities have also benefited from capacity building. Through these programmes, considerable information and knowledge on aquatic ecosystems and the fisheries of the Mekong River and related topics have been

gathered. Processes have begun to archive data held by national institutions and provide better access for interested users.

With its increasing visibility, Mekong fisheries are even more targeted to contribute to national socio-economic growth and development. Modernization of fisheries is a recurrent theme. Policy priorities for alleviation of rural poverty through improved natural resource management and utilization commonly aim at environmental protection, management and protection of biodiversity, human resources development and people's participation. Strategies developed for policy implementation focus on improving productive capacities; protection and conservation of critical habitats and resource enhancement; modernization of the traditional systems of extensive resource use and their equipments and techniques; fostering of community-based approaches; and promotion of the shift from subsistence to commercial production by professional fishers and fish farmers producing for the market.

In their efforts towards sustainable management and development of their Mekong fisheries, the four countries collaborate with a number of regional initiatives (see below).

1.2.2 Regional Partners and Ongoing Initiatives

The Mekong Basin has become a major point of interest and "hotspot" for many fisheries-related organizations. FP maintains close contacts and cooperates frequently with most of them.

All four riparian countries participate in the 11-member Southeast Asian Fisheries Development Center (SEAFDEC)². Despite the fact that SEFDEC focuses on coastal fisheries development, it collaborates with FP in the regionalization of guidelines for improved fisheries management and the development of aquaculture for remote rural communities. More recently, FP and the MRC-supported Technical Advisory Body on Fisheries Management participate in the long-term establishment of a "regional fisheries management mechanism" (FMM) for the ASEAN countries, with the aim of moving regional cooperation beyond technical assistance into collective fisheries management and development. It is envisaged that the ASEAN FFM would provide a regional "umbrella", within which the TAB would play the role of a sub-regional management mechanisms for inland fisheries.

Similarly, all LMB countries are members of the *Network of Aquaculture Centres in Asia-Pacific (NACA)*, which is an intergovernmental organization that promotes rural development through sustainable aquaculture³. FP shares a number of common interests with NACA, namely the promotion of aquaculture of indigenous fish species and culture-based fisheries by local communities, and collaborates frequently in projects and events.

MRC and FP collaborate extensively with the *WorldFish Center (WFC)*, which is one of 15 centres supported by the Consultative Group on International Agricultural Research (CGIAR), in particular on the strategic environmental assessment (SEA) of hydropower development on the Mekong mainstream, and impacts of dams on fisheries. The *Wetlands Alliance (WA)* is an association of long established agencies creating new and innovative approaches to poverty-focused development initiatives⁴. FP and WA have recently worked together in investigations into climate change impacts on Mekong fisheries. The *World Wide Fund for Nature (WWF)* shares common interests with FP in such areas as community fisheries management and the conservation of endangered species such as the Giant Mekong Catfish.

A regional initiative of particular importance is the *Technical Advisory Body for Fisheries Management (TAB)*, which was established with the support of the MRC in 2000. The TAB is the world's first and only regional river fisheries organization. Its main functions are to act as a facilitation hub for communication on Mekong fisheries management cooperation; to promote the uptake of results from the MRC and other regional and international fisheries organizations into national policies and action plans; to guide, as its Programme Steering Committee (PSC), the MRC Fisheries Programmes. High-level representatives of all four riparian countries are members of the TAB. The TAB publishes the 'Mekong Management Recommendations' on key issues of regional fisheries management, and promotes capacity development.

1.3 Key Achievements and Lessons Learned by the Fisheries Programme

From the early 1960s, the Mekong Committee formulated plans, which were aimed at addressing the issue of impacts of dams on migratory fish, and mitigating measures such as reservoir fisheries and aquaculture development (Pantulu 1972). Following a "Review of the Fishery Sector in the Lower Mekong Basin", which was conducted in

² Current SEAFDEC member countries are Brunei Darussalam, Cambodia, Indonesia, Japan, Lao PDR, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Viet Nam.

³ Current NACA member governments are Australia, Bangladesh, Cambodia, China, Hong Kong SAR, India, Indonesia, I.R. Iran, Korea (DPR), Lao PDR, Malaysia, Myanmar, Nepal, Pakistan, Philippines, Sri Lanka, Thailand, and Viet Nam.

⁴ The WA regional partners are: Asian Institute of Technology (AIT), Coastal Resources Institute of Prince of Songkhla University (CORIN), WorldFish Center, and World Wide Fund for Nature (WWF).

1992, FP started as a series of projects organised under separate funding agreements with Danida in 1994. In 2000, under a new agreement with Danida, FP was transformed into a comprehensive sector programme.

FP Phase 1, which ran from 2001-2005, was largely concerned with raising awareness on the size, nature and condition of the LMB fisheries and developing the capacity of national agencies and the MRC to manage the fishery in a sustainable manner. From 2006-2010, the FP's second phase, jointly funded by Danida and Sida, continued most of Phase 1 activities with a particular emphasis on formulating, promoting and facilitating the implementation of a basin-wide strategy for the preservation and development of Mekong fish resources.

As a result, all countries now recognise fisheries as an important resource for people of the region. The economic and nutritional benefits of capture fisheries are considered alongside other uses of the river (such as hydropower development) in national and regional planning. This is a major turn around from the early 2000s, when fisheries were generally downplayed in developmental planning. This recognition by planning agencies, coupled with capacity-building measures, has led national and regional organizations to increasingly address aspects of sustainable fisheries management and development at all levels.

Continuous and persistent efforts by FP in the area of policy advice and knowledge creation and transfer have resulted in an improvement in management and development performance, involving all fisheries actors and stakeholders from local to regional levels. With recent revisions of the fisheries legislation in all riparian countries, comanagement (involving national agencies and local user groups) has become the major fisheries management approach, largely as a result of the demonstration of co-management activities by FP. Management performance of community organisations has improved, as evidenced by the satisfaction of user groups with local management initiatives and the spread of community groups, some of which have been organised at regional and national levels. Management by national agencies has been under-pinned by improved knowledge of managers of regional fisheries issues, including enhanced understanding of ecological drivers of fisheries production, and of the threats to fisheries arising outside the fisheries sector.

Policy makers and the general public have demonstrated an increasing awareness of and interest in the value of fisheries and threats to sustainability, which, among others, can be seen from the way fisheries are referred to in the mass media.

A singular contribution to this objective has been the report "Consumption and the yield of fish and other aquatic animals from the Lower Mekong Basin", which has been made widely available to specialized agencies and the public at large. The report, for the first time, presents a comprehensive overview of the size and importance of fish consumption and, thus, fish production, in the Lower Mekong Basin.

The importance of fish has been included in the Draft Lao Nutritional Strategy. It not only mentions the need to manage water resources with a view to maintaining fisheries resources to guarantee the food security of a large portion of the country's population. It also emphasizes the importance of fish as the major source of animal protein, which is an irreplaceable ingredient for physical human development. As such, fish is also a chief component of modern social and economic development and growth. This is an important uptake of fisheries information in Lao PDR, considering the pressures for water resource development in the country.

Cambodia has changed its official statistics for fisheries yield to those published by the FP in the "Consumption Report". Official recognition of the figures is a major success, as effectively it is an acknowledgment that previous figures grossly underestimated the yield of capture fish in the country. In its dealings with other countries on fisheries issues, Cambodia now uses the new data, and in so doing indirectly suggests other LMB countries should adopt the same approach.

Key high-level key stakeholders have promoted and/or participated in a number of regional coordination and cooperation events. Examples of this are events held in 2008, which discussed the importance of fisheries in water resources management and development in the LMB. As a result of a FP initiative, regional and national riparian organizations had the opportunity to hear leading international experts on dam impacts on fisheries during a meeting promoted by the FP. Hydropower developers and basin planners subsequently discussed the results from the gathering, and the central role of fisheries in water resource development is now recognized at all levels. This has also led to an increase in the numbers of projects, which include fisheries dialogue and coordination activities in their implementation.

Regional and national institutions have increased significantly their participation in relevant monitoring and survey activities, such as regionally coordinated work on critical habitats and larvae origin and distribution, in which all national fisheries research institutes are engaged. The resulting information is being used in designing management interventions.

FP, in close cooperation with riparian institutions, has also been instrumental in packaging this information and making it widely available, utilising policy mechanisms such as the TAB, and institutions of the MRC (such as the NMCs, and the JC).

Fishery sector line agencies have demonstrated an increased level of organizational performance in the regionally coordinated implementation of crucial monitoring and survey activities, as well as in the continuing support to and maintenance of innovative management measures, and their further streamlining and adaptation to national conditions. Riparian partners have demonstrated capacity to take over the decentralized management of subcomponents, through the formulation and execution of 'Work Agreements' by national counterpart organizations. Here medium-term planning (usually of a one-year period) is linked to day-to-day implementation, with quarterly reviews, reports and follow-up.

An increased number of community-based organizations have demonstrated the necessary technical, organizational and institutional capacity to actively participate in improved fisheries management at local and national levels (from 38 community-based user groups in 2006 to 150 in 2008, some of which are provincially and nationally organized and federated, or otherwise linked. Here again, FP played a catalysing role in providing opportunities and support for improving management performance, in addition to offering advice when requested, including on short notice. In this FP was able to fall back on a network of riparian fisheries co-management specialists, which it had formed during the period 2001-2004, and supported ever since. Members of this network have now progressed into higher positions in their respective agencies and organizations, and have become 'change agents' in the best sense of the word.

On Programme operational level, a number of important lessons were learned.

Work Agreements – a good process for working with partner institutions. FP established a system of "work agreements" (WAs) in 2006 to define the work being undertaken in conjunction with partner organizations. The WAs document the objectives and methodologies of work being undertaken, the funding, reporting, time lines and responsibilities of all parties. Effectively, the WAs are contracts developed mutually by the FP and the partner institute staff, although obviously the WAs do not have any legalities associated with them. It has been observed that the WAs have greatly improved the understanding of all parties involved in the work. The FP continues to improve the process. The *lesson learned* is that the involvement of counterpart staff in drawing up work agreements which clearly define roles, funding and expected outputs provides clarity for all involved, and ultimately more efficient use of resources.

Capacity development requires long-term commitment. Capacity development is a continuing, major focus of the Fisheries Programme. While this has unquestionably raised the standards of all counterpart staff (as evidenced by, for instance, the improving quality of papers submitted to the Mekong Fisheries Technical Symposium each year), there is still a large gap between regional scientific standards in the fisheries arena and international standards. The MRC is currently instituting its riparianization policy – this has entailed all management positions at the programme level being filled by national staff, and all international advisor positions to be disbanded by December 2012, after which international staff will be retained only for short-term specific tasks as needed. The *lessons learned* are that capacity building is a long term task, requiring continuous and sustained effort. Expectations of major changes in capacity in three to five year time scales are unrealistic. For MRC, careful management of international advisor positions is needed over the next few years if the current capacity development initiatives are to be fully realized and have lasting impact.

Built in programme flexibility to respond to emerging issues. During 2006 several proposals for dams on the mainstream of the Mekong were put forward, and the impetus for these only grew over the next two years. This development was not foreseen at the time of planning FP2. It has necessitated a wide-ranging response from MRC and several programmes including FP. The FP has developed a series of activities to generate information to fill knowledge gaps both immediately and into the future. The programme has only been able to do this because of the built-in flexibility in the programme, and indeed willingness of all involved to modify their plans in light of the new issues. The *lesson learned* is that programmes should be aware of the possibility of unforeseen issues arising, and be designed with flexibility to enable appropriate responses.

1.4 Need for the Fisheries Programme 2011-2015

The LMB development context, characterized by increasing pressure on the fisheries sector, the efforts undertaken by national governments and regional organizations towards sustainable fisheries management and development, and FP's achievements in tackling resulting problems as well as identifying remaining, and emerging, challenges described above, clearly points to an urgent need for a Fisheries Programme 2011-2015.

This was first expressed in 2008, when a Programme mid-term review, which was carried out by independent external consultants in close collaboration with riparian agencies, strongly recommended continuing support for FP during the period 2011-2015. The review states: "There is a need for a third phase of the FP, and that its main focus be on consolidation and institutionalisation of the information, lessons learned and processes initiated. In light of the progress made so far, the review team (RT) does not recommend that FP2 be extended, but that a framework for a third phase, leading to a more streamlined and regionally focused – but nationally rooted – fisheries component of the MRC, be developed."

The review team's report mentions two priority areas for FP 2011-2015:

- Systematic anchoring and strengthening of the tools and processes ensuring a progressive convergence towards sustainable processes for regional fisheries development. This includes that FP should "pro-actively pursue the mechanisms enabling and coordinating multiple arrangements, positions and relationships in the Mekong Basin one of such mechanisms being the Technical Advisory Body on Fisheries Management (TAB)".
- Systematic anchoring of information developed by FP1&2 based on an audience-oriented consolidation and 'distillation' of scientific data, lessons learned and outcomes. As the RT pointed out, "A very large amount of information has been generated by FP and its predecessors, so much that there is a serious risk its impact is diluted. There is a need not only to consolidate, distil and package this information for specific audience and purposes (such as policy makers, managers, technical staff, or for awareness building, etc.), but also to ensure the capacity to do so exists both within the MRC structure and the fisheries line agencies and that resources are prioritised to continuously generate these products".

Numerous regional stakeholders participating in several consultations for the preparation of a concept for FP 2011-15 (see below) supported similar views as those expressed by the Programme review, highlighting the following considerations to be taken into account for FP 2011-2015 objectives and overall strategy formulation:

- The contextual reality, which Mekong fisheries presently find themselves in (that is, the indications that planned hydropower dams will actually be built on the Lower Mekong mainstream), and the repercussions and consequences this may have for MRC and its Fisheries Programme;
- The need for active promotion of fisheries-related information uptake at the decision maker-level and endorsed by appropriate national and regional agencies and programmes, including those of the MRC;
- The need for fostering FP's critical role in overall integrated basin development planning and management, including, but not only, through consolidation of fisheries and other natural resources information to facilitate uptake by the BDP and other processes;
- The need to further develop recipient countries' resources to carry forward crucial inter-regional core fisheries management activities beyond 2011-2015.

These directions, which were strongly proposed by representatives of governments and civil society alike, informed most of the FP 2011-2015 preparation process during the period 2009-2010.

1.5 Roadmap and Process of Consultations for Programme Preparation

Throughout much of 2009 and 2010, FP stakeholders both internal and external to MRC were consulted on the future directions of FP 2011-2015 in a number of events, bringing together about 400 participants from MRC, NMCs, fisheries line agencies, fishing communities and their organizations, and national and international NGOs and research institutes. The roadmap for this consultative process was developed in early 2009, keeping in mind the need for extensive discussions of priorities as seen by the Programme's diverse stakeholder community. Important events on this journey were:

- 8 April 2009, Steering Committee Meeting, Vientiane, Lao PDR;
- 10-11 June 2009, FP Annual Meeting, Siem Reap, Cambodia;
- 30 September 2009, 17th TAB Meeting, Bangkok, Thailand;
- 8 November 2009, Technical Symposium, November 2009, Pakse, Lao PDR;
- 15-30 November 2009 and 20 January 10 February 2010, Vientiane, Lao PDR;
- 27 November 2009, FP 2011-2015 Brainstorming Workshop, IFReDI/FiA, Phnom Penh, Cambodia;

- 25 January 2010, Consultation Meetings, Vietnam National Mekong Committee (VNMC) and Ministry of Agriculture and Rural Development (MARD), Hanoi, Viet Nam;
- 2 February 2010, Preliminary Concept Note Presentation, Vientiane, Lao PDR;
- 3 February 2010, PC Meeting, Vientiane, Lao PDR;
- 23 February 2010, Logframe Meeting, RIA No. 2, Ho Chi Minh City, Viet Nam;
- 8 July 2010, 18th TAB Meeting, Vientiane, Lao PDR;
- 3 August 2010, Regional Consultation Workshop on FP 2011-2015, Vientiane, Lao PDR.

The present document is therefore the result of a collective effort, which reflects the expectations and aspirations that representatives from the four MRC countries have expressed with regard to FP 2011-2015. This consultative process will be continued into the FP 2011-2015 Inception Phase (see chapter 4.5.2 below).

2. Context and Rationale

2.1 Regional Relevance

Besides water, fisheries are a regional resource par excellence, which necessitates a regional approach to their sustainable management, utilization and development. Important elements of the fisheries system, such as fish stocks and the very medium fish live in, i.e. water, move throughout the basin and cross national boundaries; others are fixed, such as critical refuge or breeding and feeding habitats, which may influence regional fisheries well beyond their immediate limits.

The MRC Fisheries Programme is therefore well established within the scope, guidance and framework provided by the 1995 Mekong Agreement. It is also well linked with the MRC vision of sustainable development, to its contribution to achievement of the Millennium Development Goals for the member countries, and to the decision by the MRC member countries to use IWRM as its basic approach to basin planning and management.

Explicit references to fisheries and fish in the 1995 Mekong Agreement can be found in Chapter III, 'Objectives and Principles of Cooperation', where fisheries is mentioned as one of the MRC countries' 'areas of cooperation' (Article 1), and 'aquatic life' as being protected under the agreement (Article 3). Implicitly, all provisions related to environment and natural resources also apply.

While no Millennium Development Goal (MDG) explicitly refers to fisheries, a number of development goals and their targets are of relevance. Recognizing that water and aquatic resources are virtually free and play a vital role in ensuring food, income and livelihood security for many people across the LMB, fisheries play an important role towards the achievement of MDG 1 "End poverty and hunger", in particular its targets 1 ("Halve, between 1990 and 2015, the proportion of people whose income is less than \$1 a day") and 3 ("Halve, between 1990 and 2015, the proportion of people who suffer from hunger"). Furthermore, sustainable fisheries management and development contributes significantly to MDG 7 "Ensure environmental sustainability", with its targets 7a ("Integrate the principles of sustainable development into country policies and programmes; reverse loss of environmental resources") and 7b ("Reduce biodiversity loss, achieving, by 2010, a significant reduction in the rate of loss").

Trans-boundary fisheries issues that need to be addressed in an IWRM context to improve the prospects for Mekong fisheries sustainability are manifold and include:

- Fisheries production is under pressure from habitat fragmentation, floodplain reduction and blockage of migratory fish;
- Fisheries utilization is subject to inconsistent legislation, which may be counterproductive to conservation efforts in individual member countries;
- National fisheries management policies and capacities need to also emphasize regional aspects; at present they
 are mainly inward looking, centred on national interests and priorities, which, due to the moveable character of
 wild capture fisheries, prioritize (stationary) aquaculture.

IWRM processes frequently promote locally rooted coordinated development and management of water, land and related resources, in order to maximize the resultant economic and social welfare in a just and equitable manner, that is, with stakeholder participation and safeguarding aspects of good governance. This approach is fully congruent with FP's programme concept. FP will therefore both support IWRM based planning and management provid-

ing up to date fisheries information and knowledge, as well as apply IWRM approaches in the implementation of fisheries management and development activities⁵.

2.2 Stakeholders and Target Beneficiaries

A hallmark of FP is its action across levels and scales in an increasingly diverse and complex environment. Thus, a wide range of stakeholders, with different needs and interests and contributing different skills and resources, will engage in programme planning and implementation.

The <u>ultimate programme target population</u> are the poor fishers and farmers of the basin, for whose livelihoods fisheries play an essential role, as well as those who depend on fish and fisheries for their nutrition and food security. They will benefit both directly as well as indirectly, through intermediation of agencies of the riparian governments and their staff. They all will benefit through increased institutional, organizational and human capacity and improved co-operation at and between all levels to address fisheries issues in the basin.

The <u>immediate beneficiary groups</u>, which will interact directly with the Programme, are:

- National Mekong Committees and their secretariats, which are tasked with coordination between all agencies and stakeholders in the four MRC countries;
- Ministries and departments responsible for fisheries management and development of the four riparian countries (see Table 3);
- Policy- and decision-makers and planners in other national agencies involved with water developments;
- Fisheries managers and planners, that is, fisheries line agency staff, at all levels of their administrations;
- Fishers and other aquatic resource users organized in local-level user organizations.

The FP's main stakeholders are⁶:

- Members of NMCs and NMC Secretariats;
- Staff of national fisheries line agencies;
- Staff of national line agencies engaged in fisheries-related management activities (for example agencies dealing planning; water issues (such as hydropower, irrigation, watershed management);
- Representatives of local authorities and communities;
- Representatives of community-based organizations (CBOs);
- Members of the private sector (suppliers of products and services, including training, credit, etc.);
- Regional fisheries experts;
- Representatives of national and international NGOs;
- Members of research organisations and universities working with environment related activities relevant for the LMB;
- Staff of other MRC programmes;
- Representatives of regional and international organisations with competencies and programmes relevant to Mekong fisheries;
- Development partners supporting FP.

FP promotes participation of stakeholders at all levels in accordance with the MRC Stakeholder Participation Policy and the MRC Communications and Disclosure Policy. Stakeholders will be involved through, for example, 1) regular information provision through the FP newsletter *Catch & Culture* and other print materials; 2) attendance at regularly-held events promoting regional dialogue, such as symposia and fora; 3) participation in capacity-development events; 4) collaboration in pilot projects at local, trans-boundary and regional level; and others.

In order to reach all beneficiaries and stakeholders, programme publications are made available in English and summaries in riparian languages. Participation of non-English speakers at meetings and events is being made possible by using bi-lingual formats.

2.3 Cross Cutting Issues

Similarly complex and diverse are the cross cutting issues to be addressed by the programme.

⁵ Since 2004, FP has been implementing a locally rooted project in the 'basin' of a major irrigation canal in Soc Trang Province in the Mekong Delta in Viet Nam, promoting stakeholder-driven coordinated management of water resources for integrated development of rice and shrimp culture. This is possibly the first practical case of 'applied' IWRM in the MRC.

⁶ As of this date, FP has not yet carried out a structured stakeholder analysis for FP 2011-2015. This will be done during the programme's Inception Phase.

2.3.1 Climate Change

Impacts of climate change on the water resources of the Mekong River, and particularly on the Delta region, is an issue of increasing concern for the Governments and the people of the basin. Climate change affects many aspects of the basin including the hydrological regime, the environment, fisheries, agriculture, hydropower generation and the social well being of people living in the basin. Changes to climate and thus to rainfall and river flow will affect the natural ecosystems, such as wetlands, as well as economic activities within agriculture, fisheries and other sectors dependent on water availability and finally the livelihood of people. The possible impacts of climate change are superimposed on a set of other changes happening in the basin related to economic growth. Climate change-related activities, such as those initiated in 2009 in cooperation with regional partners such as the Wetland Alliance and the Environment Programme's Climate Change and Adaptation Initiative (CCAI), as well as monitoring of climate change impacts on fisheries, will continue under FP 2011-2015.

2.3.2 Poverty Alleviation

Despite great advances in poverty reduction on a national level, a large proportion of populations in the LMB are still living in conditions considered to be 'poor'. The water and aquatic resources are virtually free and play a vital role in ensuring food, income and livelihood security for many people across the LMB. Important poverty-related work areas of FP, which have been given high priority in the policies of the four riparian countries, are: environmental protection; management and protection of biodiversity; and human resource development. Furthermore, FP 2011-2015 will contribute to poverty-alleviation strategies promoted by riparian governments, which aim at increasing productive capacity through the modernization of the use of natural resources and a change from subsistence to commercial production.

2.3.3 Gender Mainstreaming

Mekong fisheries are equally important for women and men. Unlike other regions of the world, women not only play an important role in fish marketing, but also in fishing as such. More recently, women play an increasing role in fisheries management through their participation in community fisheries organization. FP has addressed this fact since its very inception, and has significantly contributed to gender mainstreaming in fisheries in the four riparian countries as well as in the MRC, in particular through its support to the Regional Network for the Promotion of Gender and Fisheries (NGF). This support and more directly gender-related activities such as studies on resource use by women, men and children will be a particular emphasis under FP 2011-2015.

2.3.4 Environmental Sustainability

Environmental sustainability is a FP priority issue. The FP approach to this is two-fold: 1) to support the enhancement of environmental sustainability and 2) to contribute to the avoidance or mitigation of loss of environmental resources in the Mekong Basin. Support to enhancement of environmental sustainability will be through information generation, awareness creation, development of human and institutional capabilities, reducing fishing pressure through activity diversification in fishing communities, and assisting national governments with fisheries management arrangements from local to central levels. It furthermore includes the conservation of critical habitats, and the physical enhancement of fish stocks. Avoidance or mitigation of resource loss is very much a task of information generation and provision, and presenting it to decision-makers in 'policy advice'.

2.3.5 Rights-based Management and Development

From a rights-perspective, FP activities are significant in two ways. It supports the *right to food*, which is a human right, through its emphasis on the importance of Mekong fisheries for food security in particular of poorer segments of society; important FP activities in this direction are in generating information on the extent and significance of aquatic resource use by local populations, including subsistence utilization, raising of awareness of these facts among decision makers, which, it is expected, will lead to their recognition and due consideration in policies and plans. It also supports the *right to participation* in resource use decision-making through its promotion of 'good governance in fisheries' through fisheries co-management. This management approach is participatory, more equitable, possibly more transparent due to broader involvement of actors and stakeholders, and with a better chance of safeguarding the interests of more vulnerable groups, such as minorities, women and children.

2.3.6 HIV/AIDS

The working practices in subsistence-dominated LMB inland fisheries were commonly not considered a major factor in the spread of HIV/AIDS. More recent information however points to the fact that Mekong inland fisheries may be more exposed to the disease as so far known. There are at least three facts to consider: a) migration of fishers over, at times, long distances is indeed a significant characteristic in most countries of the Mekong Basin; b) trucking of fish is part of the long-distance transport system in the region, which is particularly exposed to the dis-

ease; and c) the construction of reservoirs and operation of hydropower schemes brings large numbers of single men into previously remote areas, many of them staying on as fishers, once the impoundment is completed; these newcomers, as well as the surrounding host populations, are exposed to the spread of HIV/AIDS. FP 2011-215 will look into two main areas: a) study and analysis of links between fisheries and the spread of HIV/AIDS in the Mekong Basin, with particular emphases on the situation of migrating fishers operating in important seasonal fisheries; people involved in long-distance fish trading; and fishing populations around new reservoirs; and b) identification of suitable activities for mitigating impacts from HIV/AIDS on individuals, households and communities involved in seasonal fishing, trucking of fish and construction and operation of water infrastructures. The mitigating activities will be identified in close collaboration with existing national HIV/AIDS intervention programmes, with a view to benefit from each others' knowledge and information, and to link up with already ongoing projects. An initial study to explore this cross-cutting issue in more detail is planned for the Inception Phase of FP 2011-2015 (January – June 2011)⁷.

2.4 Relations to the MRC Strategic Plan

MRC has formulated a Draft Strategic Plan (SP) for the period 2011–2015. In doing so, it has concentrated on a number of Strategic Issues for the MRC⁸. Some of the issues are outlined below and, where possible, their relevance to FP 2011-2015 highlighted:

- <u>Strategic Goals:</u> In line with the 1995 Mekong Agreement, which provides the overall mandate for the organisation, there was a re-orientation towards more effective use of Mekong water and related resources for poverty alleviation, while protecting the environment in SP 2006-2010. SP 2011-2015 will continue with this, focusing on translating strategic plan orientation into a concrete implementation framework, within an overarching IWRM approach and prioritizing the seven MRC Core River Basin Management Functions (see Definitions, p. 5).
 - FP 2011-2015 relevance: As was pointed out above, the transition towards implementation is one of the major recommendations made by the RT for FP 2011-2015 in 2008. Furthermore, various incarnations of FP have worked towards more effective use of the Mekong and its water resources for fisheries, for example through such activities as improved management of reservoir fisheries, and others.
- <u>Shift from a developing function to a monitoring and inter-state facilitation function:</u> This addresses MRC's future role from a development agency to a trans-boundary agency for the Mekong Basin.
 - FP 2011-2015 relevance: FP 2011-2015 will continue the emphasis on the monitoring of status and trends, as well as impacts on fisheries and aquaculture in the Region (see Chapter 3 below). With regard to interstate facilitation, an important recommendation of the 2008 review team is an increase in truly (locally-and nationally-anchored) regional and trans-boundary work for FP 2011-2015. Apart from the implementation of already identified 'cross-border' initiatives in fisheries management cooperation, FP 2011-2015 will embark on the formulation of a regional fisheries management framework.
- <u>Full riparianization</u>: While riparianization means that qualified staff from MRC member countries will gradually replace international staff of the MRC Secretariat it also means an increase in ownership and commitment to the MRC by member countries, assuming ever more technical and management responsibilities, as well as contribute financially to it. An important ingredient into this process is the institutional and technical capacity development of MRC stakeholders.
 - FP 2011-2015 relevance: The Programme coordination has been riparianized since early 2009. The position of an international CTA is limited to 2012. Already at this point, the Programme implementation is largely riparianized through national and local execution by counterpart agencies and community organizations (see below). An important task for FP 2011-2015 will be the transfer of knowledge and information and sharing of 'lessons learned' particularly with incoming riparian staff, as well as MRC stakeholders and the wider public in general. Furthermore, FP 2011-2015 will place a major emphasis on human, technical and institutional capacity development (see Chapter 3 below).
- <u>Long- and medium-term financing needs of MRC in relation to its Core Functions</u>: Over the next decade
 or so, technical monitoring functions that are now mainly funded under the Technical Cooperation Budget
 will be considered routine functions of the MRC to be funded under the MRC's Regular Budget from con-

⁷ In doing this, FP 2011-2015 will follow the example of initiatives carried out with regard to HIV/AIDS and fisheries in Thailand and Viet Nam (under FSPS II).

⁸ Based on "Strategic Plan 2011-2015" (Draft 31 May 2010).

tributions by member countries. This may go hand in hand with the decentralization of some MRC core activities, or elements or parts of such activities, to national line agencies.

FP 2011-2015 relevance: An important issue discussed during regional consultations on FP 2011-2015 preparation has been the increased participation of member countries in funding FP activities and institutions, such as the TAB, for example. FP counterparts are fully aware that this is a major factor in guaranteeing FP sustainability in the future. FP 2011-2015 will address this by joint identification with national counterparts of suitable mechanisms, and capacity development for decentralization of core functions (or elements thereof) to national agencies.

• <u>National execution of MRC projects and activities:</u> Two important issues here are a) improving liaison and coordination of NMCs with relevant line agencies for MRC activity implementation, and b) the integration of MRC activities with member country planning.

FP 2011-2015 relevance: More than in most other MRC programmes, FP activities are now already executed nationally. However, this national execution occurs through a historically strong and direct interaction between FP and national fisheries agencies, and with little coordination by NMCs of these agencies' collaboration with MRC. FP 2011-2015 will take action to contribute to improving liaison and coordination of its activities by NMCs, wherever possible. With regard to integrating FP and member country planning, 'Work Agreements', that is, contracts guiding national Programme execution, are primarily formulated by counterparts, but within the overall FP framework. This means 'national execution' of FP does not only entail implementation of activities by national collaborators, but their planning as well. Also, plans for local-level activity implementation are 'upscaled' into overall district development plans. FP 2011-2015 will continue to support these efforts toward national execution through suitable capacity development activities. Measuring their impact in terms of usefulness to and uptake by national collaborators will be included in FP 2011-2015's Performance Monitoring and Evaluation System (PMS).

• <u>Cross-programme coordination within MRCS:</u> This relates mainly to a) FP's contribution to the production and uptake of sector plans to support the BDP process, as well as b) linking Programme-level outcomes to overall MRC-level outcomes.

FP 2011-2015 relevance: In the past, FP has shied away from developing a basin-wide sector plan, but rather supported the fisheries and water sector agencies in the Member Countries to take up regional issues and concerns in national strategies and plans. In fact, one of the main tasks of the TAB, as a regional organization supported by FP, is to promote the development of regionally oriented sector plans. However, in addition to this, the 2008 review team recommended a fisheries management and development framework for the Lower Mekong Basin to be elaborated during FP 2011-2015. FP has also undertaken considerable efforts to link its outcomes to those of the MRC and will continue to do so in its next phase. In Chapter 3, the linking and alignment of FP 2011-2015 objectives with those of the MRC Strategic Plan 2011-2015 is presented.

• <u>Strategic partnerships and coordination with other regional initiatives:</u> While such relationships are expected to strengthen the delivery of FP objectives, good analysis is required in order to capitalize on the synergies of the various organizations.

FP 2011-2015 relevance: In the past, FP has entered into a number of formal and informal partnerships with other regional and international fisheries development organizations (such as NACA and others), and maintains regular contact (on occasions such as its FP Annual Meeting or annual Technical Symposium on Mekong Fisheries) to allow information sharing and coordination between the organizations. FP 2011-2015 will review these partnerships, and, where necessary, redirect them. Furthermore, synergies and usefulness of these relationships will be part of FP 2011-2015's results-based M&E.

2.5 Regional and National Priorities

FP 2011-2015 is characterized by the two-pronged approach of 1) supporting member country agencies in applying improved methods and tools for regional cooperation in fisheries management and development; and 2) moving towards implementation of long-term core functions. In addition, it will address a number of regional and national priorities.

2.5.1 Improving National Capacity for Regional Fisheries Cooperation

More than in most other MRC programmes, FP's partner agencies are already consciously implementing their activities within a regional framework. Continuous capacity development of national institutions and line agencies

under FP 2011-2015 will enable them to be fully responsive to the requirements of regional environmental cooperation.

This includes sustainable fisheries monitoring programmes for national fisheries and their stocks and habitats as a whole, as well as for specific fisheries of regional significance, such as the fisheries of Southern Laos and that of the Tonle Sap. The ultimate goal would be to have full country implementation and operation of monitoring activities while the FP's regional contribution would focus on basin wide and trans-boundary analysis and synthesis of the results, supporting regional cooperation through an updated knowledge base on issues, trends and impacts relating to Mekong fisheries.

The second element will be the promotion of projects of trans-boundary fisheries management and development, where national agencies are responsible for implementation of activities such as adaptation of fisheries legislation, for example, while FP support facilitates cooperation between the participating member states, providing capacity building and technical assistance. Increased dialogue with the Upper Mekong Basin riparian countries is also requested covering sharing of data and information and implementing monitoring activities collaboratively.

2.5.2 Filling the Gaps

The knowledge on the basin's resources has increased substantially over the past decade or so, but while significant gaps persist, other information needs appear in the rapidly changing fisheries environment. Such needs may relate to the following issues, among others: Provisions for a monitoring programme in the vicinity of mainstream dams in the event that the notification process (PNPCA) reaches agreement on any specific project; a study on links between the spread of HIV/AIDS and certain issues of Mekong fisheries; migration studies and studies on fish passage; support to the dolphin initiatives through influencing legislation on gill net fishing; indigenous vs. non-indigenous fish culture (resources needed, sustainability, pollution risk, disease, credit requirement, link to poverty reduction, etc); implications of reduction in sediment and nutrient supply on coastal fisheries; consequences of destruction of critical habitats (sand mining, shoal removal etc.) for fisheries. While FP as a regional programme should take the lead in filling these gaps, it can only do so through efficient interaction and close collaboration with its national and regional partners.

2.5.3 Communication and Participation

While scientific information is important, it does not always reach and help decision makers and other stakeholders unless it is 'translated' to suit a particular context and deliver clear messages. Therefore frequent interaction and communication between information providers and information users is crucial. Capacity development clearly involves improved and increased dissemination of information to both specialists and the wider public to increase the understanding of the Mekong and its fisheries. Reports, newsletters, brochures and fliers in riparian languages, as well as other information products such as videos and comic books, will support this effort. Accessibility of information is a requirement for meaningful public participation in fisheries management decision-making. While the aim of participatory management is to improve the quality of and compliance with the decisions, participation in itself is an objective, a right and an intrinsic element of good governance. While provision of information, communication and facilitation of participatory processes are tasks of FP 2011-2015, they rely on the interest, uptake and participation of national audiences and organizations.

3. Objective and Programme Design

3.1 Programme Goal, Objective and Outcomes

The goal of FP 2011-2015 is adapted from the Overall Goal of MRC⁹: "Riparian governments and other stake-holders make effective use of the Mekong's fisheries resources to alleviate poverty while protecting the environment".

The <u>objective</u> of FP 2011-2015 presents a key ingredient towards the achievement of this goal, which is the "Successful implementation of measures for sustainable fisheries management and development and improved livelihoods by regional and national organizations", both governmental and civil society. The Design Summary (Table 1) below shows FP objectives (that is, programme objective and outcomes) and indicators, which were developed to monitor programme performance.

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⁹ The MRC's Overall Goal is: *Member countries manage water and related resources of the Mekong Basin in an effective, sustainable and equitable manner.*

Important outcomes leading to the achievement of project objective and goal are awareness raising and communication of knowledge accumulated in earlier programme periods as well as generated during FP 2011-2015 (Outcome 1), regional dialogue on coordinated knowledge uptake and implementation on national level (Outcome 2), generation of monitoring information and filling of information gaps (Outcome 3) and capacity-development (Outcome 4). The full Design and Monitoring Framework is included in Annex 1.

Table 1: Design Summary of FP 2011-2015

Objectives	Indicators
Programme Objective: Regional and national organizations successfully im-	POI 1 Proportion [%] of major water resources development plans and projects in the LMB, which adequately assess effects on fisheries.
plement measures for sustainable fisheries management development and improved rural livelihoods.	POI 2 Proportion [%] of major water resources development plans and projects in the LMB, which include adequate measures to mitigate effects on fisheries.
proved rural recimiodus.	POI 3 Extent to which appropriate fishery policies and strategies, legislations and regulations are in place and applied.
	POI 4 Extent to which fisheries extension systems respond to clients' needs.
	POI 5 Extent to which fishers are involved in fisheries management.
Intermediate Outcomes:	
1. Riparian organizations have a good, science-based understanding of the situa-	IOI 1.1 Level of coverage of socio-economic importance of fisheries and options for sustainable fisheries development in national and regional media.
tion of fisheries in the Lower Mekong Basin.	IOI 1.2 Level of awareness amongst policy-makers and senior public-sector managers of the value of the fishery, the threats to its sustainability, and options for sustainable fisheries management and development.
	IOI 1.3 Number and value of capture fisheries and aquaculture options/projects financed and implemented.
2. Riparian organizations monitor, provide and promote the use of information on status and trends in fisheries and	IOI 2.1 Number and quality of major fishery status and trends communication products produced by relevant agencies nationally and regionally, and level of dissemination of these products.
aquaculture management and development.	IOI 2.2 Perceptions of key national agencies' staff of adequacy of information on basin fisheries and its sustainable management and development, originating from relevant national and regional agencies.
3. Key stakeholders maintain a high level of regional and national dialogue, as well	IOI 3.1 Number and quality of regional and national events, which address sustainable fisheries management and development.
as dialogue between sectors and pro- grammes relevant to fisheries within a basin-wide IWRM framework, and guide the implementation of suitable measures to maintain fisheries sustainability.	IOI 3.2 Level of development of multi-stakeholder dialogue, coordination and monitoring processes addressing sustainable fisheries management and development nationally and at basin/sub-basin levels.
4. National and local agencies and fishing communities have the capacity necessary for improving fisheries manage-	IOI 4.1 Perceptions of key national agencies' staff of adequacy of information on basin fisheries and its sustainable management and development, originating from relevant national and regional agencies.
ment and development.	IOI 4.2 Number and quality of technical products, processes and/or projects aiming at sustainable fisheries developed, delivered and/or implemented by fisheries line agencies.

Figure 1 on page 29 shows the major relationships between FP 2011-2015 and the MRC Strategic Plan 2011-2015, which are fully aligned on all levels. Alignment of programme-level outcomes to overall MRC-level outcomes is essential for improved cross-programme coordination within MRC¹⁰. In addition to those shown, there are numerous other relationships and contributions between FP Outcomes and Strategic Goals¹¹. However, of particular interest is the linkage between FP's intermediate outcomes and specific, MRC-level goals:

Outcome 1: Riparian organizations have a good, science-based understanding of the situation of fisheries
in the Region' is expected to be a product from activities and outputs dealing mainly with the compilation,
packing and efficient dissemination and propagation of existing as well as emergent information and
knowledge on Mekong fisheries issues. Results from these efforts feed directly into 'SP SP Goal 1: Adoption of IWRM-based Basin Development & related sector strategies and guidelines for promoting sustain-

20

¹⁰ "Background Paper on MRC Strategic Plan 2011-2015: Some considerations for MRC's Strategic Directions (Draft 26 February 2010)".

¹¹ For example, Outcome 2 is not limited to contributing to Strategic Goal 2 only, but to Goal 3 as well.

able and equitable development', which relies on the generation and communication of sound and applicable fisheries science:

- Outcome 2: Riparian organizations monitor the status and trends in fisheries and aquaculture management
 and development, and provide and promote the use of this information' is a key outcome of FP 2011-2015,
 which evolves from activities and outputs of data collection on the status and changes in basin fisheries,
 with a particular focus on monitoring of impacts from water infrastructure development and climate
 change. As such, for fisheries-related issues and purposes, these efforts directly contribute to 'SP Goal 2:
 Operational basin-wide monitoring, impact assessment, modelling, forecasting, and knowledge management systems to support effective decision-making';
- Outcome 3: Key stakeholders maintain a high level of regional and national dialogue, as well as dialogues between sectors and programmes relevant to fisheries within a basin-wide IWRM framework, and guide the implementation of suitable measures to maintain fisheries sustainability' benefits to a large extent from activities and outputs related to the promotion of regional networking through such mechanisms as the FP Annual Meeting, Mekong Fisheries Technical Symposium, the TAB and the NGF. This networking is part and parcel of 'SP Goal 3: Efficient dialogue and coordination processes between basin countries and other stakeholders for effective regional co-operation'.
- Outcome 4: National and local agencies and fishing communities have the capacity necessary for improving fisheries management and development' is a consequence of FP 2011-2015 activities and outputs in the areas of human, organizational and institutional capacity development and 'learning'. It thus contributes to the achievement of 'SP Goal 4: Raised awareness and capacities development for IWRM policy adoption and implementation'.

While each of the four FP Programme outcomes feeds into MRC Goals 1-4, all four FP Programme outcomes contribute to increased efficiency of the MRC Secretariat to undertake core functions under full riparianization, that is, to 'SP Goal 5: Efficient organizational transition of MRC for implementation of its core functions and full riparianization of its Secretariat'.

3.2 Outputs and Activities

This section summarises the outputs associated with each of the four outcomes:

There are three outputs, which contribute to Outcome 1 "Riparian fisheries decision-makers have a good, science-based understanding of the situation of fisheries in the Region":

- Output 1.1. An Inception Phase is implemented, and an Inception Report, which will guide FP 2011-2015 implementation, is submitted and endorsed by the Programme Steering Committee (PSC).
- Output 1.2 Technical and scientific information is packaged; this includes information produced by FP as well as other organizations.
- Output 1.3. Effectiveness of fisheries communication is evaluated; this will be done in accordance with the methodology developed recently for the Results-based Monitoring & Evaluation System established at MRCS

FP 2011-2015 is based on earlier support periods to Mekong fisheries management and development, during which a considerable amount of information was accumulated. FP 2011-2015 will start from this existing knowledge, possible package and re-package it with a focus on improving its usability and user friendliness for ease of uptake for improved and sustainable fisheries management and development. This does not exclude responses to emerging information needs experiences by MRC as a whole, specialized MRC programmes or national fisheries agencies. In packaging this information, FP 2011-2015 will specifically address three major groups of stakeholders and knowledge recipients: 1) Technical and scientific specialists; and 2) non-technical policy- and decision-makers, and 3) the general public.

Outcome 2 "Riparian planning agencies monitor the status and trends in fisheries and aquaculture management and development, and provide and promote the use of this information" will be based on four outputs:

- Output 2.1 Information on Fisheries and Aquaculture Status and Trends (FST) and Fisheries Valuation (FV) is provided regularly; this includes information from national as well as regional levels.
- Output 2.2 Improved information on capture fisheries and aquaculture is available, and disseminated to basin planners and other concerned agencies.
- Output 2.3 Potential impacts on fisheries and aquaculture described, and suitable mitigating measures are identified and evaluated.

• Output 2.4 Impacts of climate change [CC] on fisheries and aquaculture are assessed.

Activities and outputs leading to Outcome 2 will provide important information on the present status of Mekong fisheries and aquaculture, for basin planners and decision makers as well as the interested public. Furthermore, information of trends and changes in fisheries status will be provided, with a particular focus on impacts from water development infrastructure, climate change and other factors external. Special efforts will be undertaken to harmonize ecosystem monitoring from an environmental and from a fisheries perspective; wherever possible such monitoring activities should be jointly implemented. Explorations of issues of climate change impacts on fisheries and their monitoring have been stressed as highly important topics by all stakeholders heard during Programme preparation. However, in addressing climate change issues, close coordination and cooperation with EP will be maintained, in order to avoid overlaps and duplication, as well as benefit from possible synergies.

Two outputs will lead to Outcome 3 "Key stakeholders maintain a high level of regional and national dialogue, as well as dialogues between sectors and programmes relevant to fisheries within a basin-wide IWRM framework, and guide the implementation of suitable measures to maintain fisheries sustainability":

- Output 3.1 Platforms for regional and international dialogue and consultation on sustainable Mekong fisheries management and development are maintained and functioning well.
- Output 3.2 A regional cooperation framework for fisheries management and development is drafted in close collaboration and interaction with the BDP.

Activities and outputs leading to this outcome basically focus on two aspects: 1) the importance, in addition to improved information, of good relationships between actors on all levels for sustainable fisheries management and development, which is being fostered by the many events held by FP 2011-2015 for that purpose; and 2) the need for an overarching, regional cooperation framework for basin fisheries management and development which may critically contribute to the BDP process. While the TAB and other regional partners and initiatives will play an important role in the formulation of such a regional framework, particular attention will be paid to national fisheries strategies existing in the four countries (such as Cambodia's 'Ten Year National Fisheries Strategy').

Outcome 4 "National and local agencies and fishing communities have the capacity necessary for improving fisheries management and development" will be the result of two FP 2011-2015 outputs:

- Output 4.1 Technical and administrative skills and knowledge of fisheries managers are developed.
- Output 4.2 Fisheries management institutions are strengthened.

Activities leading to these outputs are informed by the recognition that capacity development is multi-facetted and comprises several dimensions, from human to organizational and institutional capacities. Capacity development under FP 2011-2015 therefore covers these dimensions. Another 'lesson learned' in earlier support periods has been that regional fisheries management in the end is cooperation between local players across a common boundary. It is expected that implementing concrete examples of such regional fisheries cooperation on a pilot basis may lead to valuable insights and experiences.

Annex 2 presents an annotated list of the 11 outputs, which are the results of 23 activities, and their respective milestones.

3.3 Key Features of the Programme

FP 2011-2015 presents four key features, namely, 1) orientation towards MRC core functions, 2) flexibility and responsiveness, 3) IWRM, and 4) a focus on capacity development.

3.3.1 MRC Core Functions Orientation

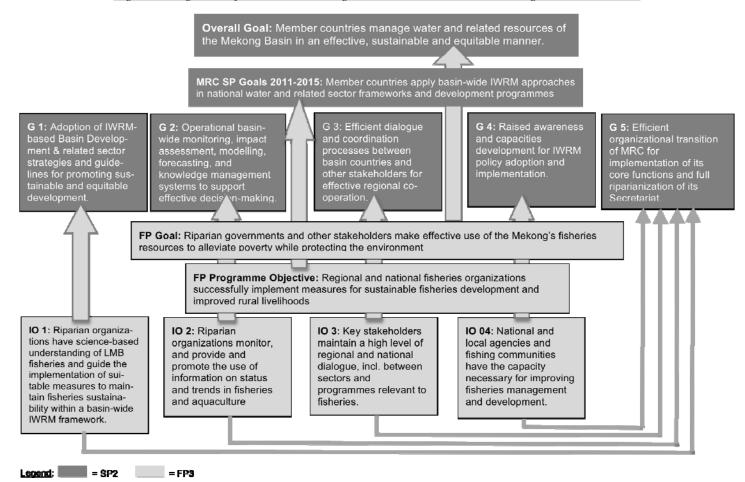
MRC core river basin management functions have been defined to facilitate the transition of the MRC as a development organization to that of a river basin organization tasked with routine implementation of the 1995 Mekong Agreement. In a basin where fisheries is so important to the livelihoods and nutrition of millions of people, and where it has such biological diversity, it is clear from other international rivers that there will be a long-term need for the MRC to coordinate and convene fisheries research, and provide information to decision-makers in a form that is accessible. Fisheries activities are clearly among the core functions of the MRC as defined and recognised by Member Countries.

Practically all FP 2011-2015 activities and outputs contribute to each of the seven core functions:

- Core function 1 Data acquisition, exchange and monitoring: This function provides the basis for information and knowledge generation for better fisheries planning and management. Programme activities and outputs leading to Outcomes 2 and 4 most prominently contribute to River Basin Management Function 1.
- Core function 2 Analysis, modelling and assessment: This function is central to investigating future development scenarios, as well as to the development of proposals for mitigation of impacts from water infrastructures and climate change. Within FP 2011-2015, mainly activities and outputs leading to Outcome 2 contribute to the core river basin management function 2.
- Core function 3 Planning support: FP 2011-2015 is demand-driven. This function comprises the FP response to needs by other MRC programmes and regional and national fisheries and fisheries-related organizations, carrying out reviews and assessments, identifying development options and strategies and provision of technical guidance. This indeed is a central function of FP 2011-2015, and activities and outputs leading to all of its Outcomes contribute to it.
- Core function 4 Forecasting, warning and emergency response: Projection of trends in and impacts on fisheries is a major task contributing to this core river basin management function, and is part of activities and outputs leading to Outcome 2.
- Core function 5 Implementing MRC procedures: FP 2011-2015's support to the implementation of five MRC procedures, in particular the procedures for Notification, Prior Consultation and Agreement (PNPCA) and Water Use Monitoring (PWUM), but also Data Exchange and Information Sharing (PDIES), are part and parcel of activities and outputs leading to Outcomes 1, 2 and 4.
- Core function 6 Promoting dialogue and coordination: Dialogue on a range of trans-boundary and regional issues and with a wide array of stakeholders on different levels is fundamental to many of the provisions of the 1995 Mekong Agreement. This ranges from the formulation and support to coordinated implementation of regionally negotiated guidelines and policies, to supporting solving cross-border differences and disputes over fisheries in key trans-boundary areas. This core river basin management function is carried out in activities and outputs leading to FP Outcomes 1, 3 and 4.
- Core function 7 Reporting and Dissemination: Implementation of MRC's agreements and procedures require that information and knowledge produced in fact reaches the decision makers. Again, effective reporting and dissemination is a core river basin management function to be found in activities and outputs leading to all FP Outcomes, and particularly to Outcome 1.

Moving towards implementation of core functions implies changing the focus from generating knowledge to packaging, dissemination and promotion of uptake of knowledge by riparian decision makers and implementers within a regional framework. These are key elements in particular of Outcomes 1 and 3, whereas Outcomes 2 and 4 provide flexibility to respond to emerging demands for specific information production and capacity development as needed in light of rapid changes in the basin in general and impacts on the fisheries sector in particular.

Figure 1: Alignment of FP 2011-2015 Logical Framework and MRC Strategic Plan 2011-2015



3.3.2 Flexibility and Responsiveness

In a situation of rapid change the flexibility in responding to emerging information and knowledge needs is important. While the overall focus for the next five years is on the consolidation of data and information and promotion of its uptake for sustainable fisheries management and development, FP 2011-2015 has to be available to provide answers to questions of urgency. A number of such urgent questions on widely differing aspects of Mekong fisheries have been identified during the programme formulation consultations, and most have been taken on board. Future priority areas will have to be negotiated and agreed upon within a shorter period of time, and undertaken at FP Steering Committee (PSC) meetings or similar events allowing stakeholder input on the programme agenda.

3.3.3 IWRM

For FP 2011-2015, integrated water resource management has four dimensions: Management across multiple levels (from local to national and regional); jointly by resource users and mandated managers; by and between different water-user sectors (including agriculture and hydropower); and integration of management-oriented activities between different MRC Programmes.

The future prospect for the implementation of core river basin management functions is a gradual shift in responsibility from regional to national and even local levels, such as the promotion of community-led fisheries management. At central level basin-wide guidance, overview, analysis and synthesis functions will be maintained, adding value to the national-level activities. An increased transfer of activities to national level may also support a stronger integration of efforts towards sustainable fisheries management at the local and national levels with the regional activities. The existing close collaboration with line agencies will be further strengthened for increasing decentralization of core functions presently held by FP and MRC as a whole.

Fisheries management and development have elements, which, according to the subsidiarity principle, should be implemented at the lowest possible level where capacity exists or can be developed (OED 2010). While regional assessments may inform regional management, and add value to national efforts, management implementation always occurs at the local level. In fact, local, national and regional elements are frequently closely interlinked. A case in point is the management of critical habitats, such as the deep pools of the Mekong mainstream and tributaries. Many of them are local habitats of regional significance, the communal management of which affects transboundary fish stocks. Developing local, national and regional capacities is therefore an important step towards effective regional fisheries management.

Efficient implementation of the core river basin management functions requires integration across key MRC programmes working towards a common objective, which is the overall goal of the MRC Strategic Plan 2011-2015, and with shared activities.

FP 2011-2015 will collaborate with a number of MRC programmes including:

- Provision of key information to the Basin Development Plan (BDP) in the development of basin scenarios;
- Support to Environment Programme (EP) and in particular the MRC Climate Change and Adaptation Initiative (CCAI);
- Provision of databases and statistical information to the Integrated Knowledge Management Programme (IKMP), and further combine its expertise with the IKMP modelling component;
- Utilization of Integrated Capacity Building Programme (ICBP) in capacity development of its staff, counterparts and collaborators in line agencies and user communities, and contribution to Gender Mainstreaming activities under ICBP;

Strengthening of close links with MRC's Initiative on Sustainable Hydropower (ISH), to which FP has already provided a modelling tool for assessing cumulative effects of mainstream hydropower dams on migratory fish populations.

3.3.4 Capacity Development

For FP 2011-2015, capacity development is a multi-facetted undertaking, which goes beyond human capacity (skills, expertise and facilities) and includes development of organizational and institutional capacities as well. The support to the TAB is an example of organizational capacity development, as is the promotion of user-led fisheries management organizations on village, water body, district and provincial levels. Support to improved legislation and codes of conduct as well as user-led management and action planning are examples of institutional capacity development. Close on-the-job interaction with staff of counterpart organizations will be, as before, the most important approach strengthening these agencies to take up important core fisheries management functions (or parts and elements thereof) in the region.

While capacity development will be an important focus during FP 2011-2015, efforts will be undertaken to increasingly transfer responsibilities for this area of activities to other programmes within MRC, in particular the Integrated Capacity Building Programme (ICBP), as well as to national fisheries agencies, extension services, and training institutions in the region.

3.4 Risks and Assumptions

Risks identified during programme preparation are presented in Table 2 below, together with the respective risk management strategies. Assumptions for programme implementation can be found in the Design and Monitoring Framework (Annex 1).

Table 2: Risks and Risk Management

Risks	Risk Management
1. The world economic crisis may lead to drastic expenditure reduction by national governments, threatening research and development efforts necessary to maintain Mekong fishery sustainability.	Prioritization of fisheries management and development activities. Identification of supplementary sources of funding for priority measures and activities.
2. Rapid industrialization in the LMB and hydropower may impact negatively on sustainable aquatic resource utilization and development.	Development of mitigation measures to compensate for negative impacts from basin development.
3. Climate change and related effects (such as sea level increase in the Mekong Delta and reduced lake levels in the Great Lake and others) may jeopardize fisheries and aquaculture investment and livelihoods.	Development of mitigation measures to compensate for negative impacts from climate change.
4. Unsuitable (institutional) arrangements under MRC may hamper effective support by the organization to sustainable fisheries development.	Improved communication with NMCs and other relevant institutions and increase coordination of FP activities through them.

4. Implementation and Management

4.1 Implementation Strategy

National organizations, such as NMCs and national line agencies, and the Fisheries Programme of the MRC will implement FP 2011-2015. In other words, FP 2011-2015 is a joint undertaking of national partner organizations and MRC/FP. The role of the national partners is the coordination, facilitation and implementation of national level activities; the role of MRC is in providing regional coordination, guidance, assistance and capacity strengthening, as well as synthesis of outcomes and results. As mentioned above, FP 2011-2015 will also collaborate with other regional organizations and initiatives in the joint execution of study projects and in capacity development of its counterpart staff.

In line with FP's focus on MRC core river basin functions, national counterpart organizations will gradually increase their responsibility for those that can be implemented at that level, allowing MRC/FP to concentrate on the regional dimension of coordination, monitoring and reporting responsibilities. In the longer term, and under an altogether different arrangement, these main functions of MRC/FP may be funded by budgetary contributions from MRC member country governments. While this arrangement is expected to occur post-FP 2011-2015, FP 2011-2015 nonetheless will take steps to strengthen national capacities and ownership in that direction.

FP 2011-2015 will not operate in isolation. Networking is seen as an important aspect of its implementation. This not only includes networking by FP with relevant national and regional organizations, but also strengthening of networks set up and supported by MRC/FP. These networks are the TAB, and the NGF. FP 2011-205 may furthermore explore the possibility of supporting a network of user organizations at different levels in the four countries. This would then provide MRC as a whole with a network to engage with on other planning and management matters, such as BDP processes, SEA, PNPCA and others.

FP Annual Meetings and the yearly Technical Symposia on Mekong Fisheries are good occasions for bringing network partners together to be briefed on priority issues, inform on opportunities for collaboration, and review each others' results and share knowledge and experiences.

Principles of good governance (such as transparency; public participation in decision making; observation of rights; and gender mainstreaming) inform FP 2011-2015 implementation. FP 2011-2015 is implemented in accordance with MRC's Public Participation Policy and the MRC Communications Strategy and Disclosure Policy and

the promotion of good governance in the environmental sector is pursued in all components. This allows for linking good governance issues to practical work, which is more likely to have an operational impact than dealing with issues of good governance in isolation of concrete activities.

4.2 Institutional Arrangements

4.2.1 Overall Approach

FP 2011-2015 is managed and executed by MRCS through MRC/FP, which provides regional coordination, technical, scientific and managerial advice and capacity development, and regional synthesis and reporting. Its activities at the national level are implemented through relevant fisheries agencies, mainly fisheries research institutes. Specific FP 2011-2015 activities may also be implemented by engaging other national institutions, such as universities, as well as individual experts. Activity implementation is coordinated and facilitated by the four NMCs.

A FP 2011-2015 Steering Committee (PSC) comprising representatives from national fisheries agencies and NMCs provides guidance for the overall direction and implementation of the programme fostering dialogue and bringing together resources from the national and regional level (see below).

4.2.2 Regional Level

At the core of FP 2011-2015 is the FP team and its permanent working linkages with each of the MRC programmes and MRCS senior management. An important institutional linkage and 'policy mechanism' is the TAB, which provides an efficient conduit between FP 2011-2015, the national water sector as a whole, civil society organizations concerned (such as NGF), and others.

The Operations Division (OPD) of MRCS has overall management responsibility for the implementation of FP 2011-2015. Co-ordination with other divisions and sections of the Secretariat is ensured through internal MRC coordination mechanisms. In implementing the core river basin management functions FP 2011-2015 closely coordinates its activities with the BDP, IKMP, the MIWRM-P and EP, while at the same time providing fisheries-specific inputs into other programmes as needed (in particular ISH and MIWRMP, and possibly others).

MRC/FP is responsible for the coordination, monitoring and timely implementation of all the activities planned in the annual work plan developed under the five-year Programme framework. The FP Coordinator supervises and manages the day-to-day operations of FP 2011-2015. A Chief Technical Advisor (CTA) supports the FP Coordinator technically and scientifically. Programme Officers covering key areas of the programme are responsible for their coordination and implementation support. Job descriptions for some of the programme positions are presented in Annex 5.

Regional working groups, bringing together counterparts working in specific technical areas, (such as fisheries management and governance; aquaculture of indigenous species; and fisheries ecology, valuation and mitigation), will continue. These working groups normally meet once a year to review progress made and exchange experiences in activity implementation as well as new ideas and innovations in their respective areas of interest.

4.2.3 National Level

On the national level, the arrangement includes a National Programme Co-ordinator (NPC) and a National Technical Coordinator (NTC), whose roles are complementary ¹².

Important functions of the NPCs, who are staff members of NMCSs, may be:

- To provide broad input into yearly Programme plans;
- To act as the overall focal point for inter-agency coordination and facilitation of Programme implementation;
- To assist in engaging with national organizations and individual experts as required;
- To monitor Programme progress on national level, and to facilitate necessary action for efficient and speedy activity implementation;
- To prepare reports for the NMC DG for submission to national governments and the MRC Joint Committee to keep them informed of the FP progress;
- To take responsibility for effective communication of Programme issues and results to government policy and decision-making authorities, and to promote the uptake of Programme outcomes by government agencies concerned.

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¹² Detailed TOR for both posts are yet to be developed.

Functions of NTCs, who are staff members of implementing agencies, may be:

- To provide specific fisheries input into yearly Programme plans;
- To coordinate, lead and supervise the day-to-day activities of Programme counterparts in the respective implementing agencies;
- To monitor the implementation of work agreements and to provide quarterly reports to FP/MRCS;
- To ensure that Programme activities and results become routine procedures and part of standard work plans of the implementing agencies concerned.

National working groups will be established in all four member countries¹³, bringing together counterparts involved in different technical areas to review progress made and exchange experiences From a Programme perspective, across their respective areas of interest.

4.2.4 Counterparts and Partnership Arrangements

More than in most other MRC programmes, FP 2011-2015 activities are already at this early stage executed nationally. However, this national execution occurs through a historically strong and direct interaction between FP, national fisheries agencies and NMCs.

There are two major implementation mechanisms, i.e., the FP 'Work Agreement' and the 'Programme Coordination Meeting' (PCM). Work Agreements, which are contracts guiding national programme execution, are primarily formulated by counterparts, but within the overall FP framework. This means, 'national execution' of FP does not only entail implementation of activities by national collaborators, but their planning as well.

The PCM is the major programme coordination mechanism for activity implementation. PCMs are held 3-4 times a year. The FP team, NPCs, NTCs, and others who are directly and practically involved in programme implementation attend these meetings, which are chaired by the FP Coordinator. Other meetings with coordination, information sharing and learning elements, which bring together MRC representatives around FP 2011-2015 issues, are the FP Annual Meeting, the yearly Technical Symposium on Mekong Fisheries, and meetings of the TAB 2-3 times per year.

During previous phases, a FP office was established in each of the member states on the premises of the main counterpart organization. Similarly, imprest accounts were established in each country for ease of disbursement of funds for programme implementation. All implementation arrangements will be continued and, wherever needed, improved in FP 2011-2015.

Table 3 identifies the main counterpart agencies in each LMB country and the 'focal agencies' in China and Myanmar.

Country **Counterpart Agencies Focal Points** Cambodia Fisheries Administration (FiA), with its units Inland Fisheries Research and Development Institute (IFReDI) and Dy. Director General Dy. Director General Community Fisheries Development Office (CFDO) To be identified/nominated. Universities Ministry of Agriculture and Forestry (MAF), with its units Lao PDR National Agriculture and Forestry Research Institute (NAFRI)/Living Dy. Director General Aquatic Resources Research Center (LARReC), and Department of Livestock and Fisheries (DLF) Dy. Director General To be identified/nominated. Universities Thailand Department of Fisheries (DOF) Director-General Ministry of Agriculture and Rural Development (MARD), with its units Viet Nam

Table 3: FP 2011-2015 Counterpart and 'Focal' Agencies

¹³ This is based on positive experiences made in Thailand with the so-called '3-Components' Meeting'.

references made in Thanana with

Country	Counterpart Agencies	Focal Points
	Research Institute for Aquaculture No. 2 (RIA No. 2) in Ho Chi Minh City, and	Director
	 Research Institute for Aquaculture No. 3 (RIA No. 3) in Nha Trang and its satellite office in Buon Me Thuot, Central Highlands 	Senior Fisheries Specialist
	Other Planning and Implementing Agencies and Universities	To be identified/nominated.
		To be identified/nominated.
China	Focal agency to be identified.	To be identified/nominated.
Myanmar	Ministry of Livestock and Fisheries, Department of Fisheries.	To be identified/nominated.

A number of universities in the LMB undertake capacity development and research, which makes them highly relevant as partners for FP 2011-2015. These are, among others, the Asian Institute of Technology (AIT); Kasetsart University, Thailand; the Royal University of Phnom Penh (RUPP), Cambodia; Can Tho University, Viet Nam; and the National University of Lao PDR (NUOL).

The participation of counterparts is significant. Table 4 summarizes information regarding counterparts who are regularly, if not full-time, involved in FP activities (as of mid-2010).

Other Govern-Community Fa-Counterpart Country Total ment Agencies cilitators Agencies Cambodia 5 36 Lao PDR 20 0 20 Thailand 32 0 32 Viet Nam 23 21 3 47 9 Total 106 21 135

Table 4: FP Counterparts¹⁴

4.2.5 Stakeholder Engagement Mechanisms

FP's stakeholder engagement mechanisms operate both formally and informally.

A more formalized engagement with stakeholders on national and regional levels occurs on at least three different levels:

- Programme coordination mechanisms, which enable close and regular interaction and collaboration with counterparts and counterparts' organizations. At present, such mechanisms are the Programme Coordination Meeting (PCM), and half yearly Coordination Meetings held by individual components;
- Yearly events, which allow exchange of information and experiences in programme implementation as
 well as engagement in LMB fisheries and aquatic resources management and development with other
 MRC programmes, and other organizations involved in fisheries (such as WorldFish Center, WWF, WA
 and others); and
- The TAB.

A more informal engagement with stakeholders and beneficiaries, which occurs through cooperation with a large number of community organizations, some of them federated at district and provincial levels, has been supported by FP since the early 2000s.

Table 5 presents an overview of cooperating community organizations and its members as of mid-2010.

¹⁴ Salaries of counterparts from counterpart agencies are paid for by their respective agencies. However, they act in specific activities as consultants as specified in the respective 'Work Agreements'. Counterparts from other, usually local government agencies receive salaries from these agencies. FP 2011-2015 pays an allowance to 'community facilitators' based in these communities.

Table 5: Cooperating Community Organizations and Their Members

Country	User Organizations	Regularly Participating Users
Cambodia	100	6,000
Lao PDR	9	700
Thailand	94	2,100
Viet Nam	50	900
Central Highlands	7	300
Mekong Delta	43	600
Total	253	9,700

4.3 Programme Governance

FP 2011-2015 governance is embedded within MRC's overall governance system. The CEO and the four Division Directors will provide the overall direction and oversight for FP 2011-2015 at the level of MRCS through the *Senior Management Meeting*. They are responsible for monitoring of progress towards achieving the outcomes, management of risks, overall coordination within MRCS and assessment of suggestions to adjust the implementation.

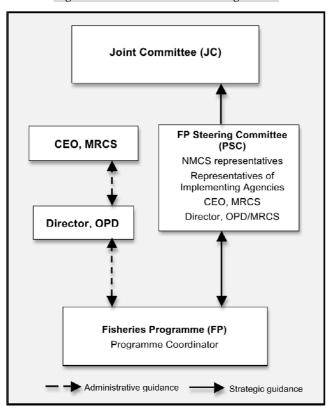
The MRCS Programme Coordination Meetings are institutionalised through the Technical Coordination Advisor in the Office of the CEO, responsible for regular meetings on aspects of coordination and rolling out of specific organisational policies. The Programme Coordination meetings will be used as the overall mechanism for integration with the key MRC Programmes.

The FP 2011-2015 Steering Committee (PSC) consists of high-level representatives of member-country fisheries agencies and NMCs. Its main function is to oversee the strategic direction of FP 2011-2015 implementation. The PSC also reviews FP progress and impact, and may recommend adjustments necessary towards achieving programme objectives. The PSC may also recommend actions aiming at maximising the national uptake of FP 2011-2015 results. Furthermore, the PSC reports on FP 2011-2015 outcomes and implementation to the MRC Joint Committee as required.

The PSC may consist of up to four members from each member country, of which one is a representative of the respective NMC, and two MRCS representatives (the CEO or his designated representative and the Director of OPD). The head of the country delegation will be at least at the Deputy Director General level. In addition, the chairperson of the NGF may participate as well. The PSC will meet on a regular basis, generally twice a year. A representative of the respective host country will chair the PSC meeting.

Figure 2 presents the FP 2011-2015 governance arrangements.

Figure 2: FP Governance Arrangements



4.4 Programme Staffing

Table 6 summarizes the proposed staffing for FP 2011-2015.

Table 6: FP 2011-2015 Staffing

Position	MRCS	Cambodia	Lao PDR	Thailand	Viet Nam	Total
FP 2011-2015 Coordinator	1	0	0	0	0	1
CTA						
Technical Experts	3	0	0	0	0	3
Programme Officers	4	0	0	0	0	4
(National Programme Coordinators) ¹⁵		(1)	(1)	(1)	(1)	(4)
Secretaries	2	2	1	1	316	9
Drivers	0	3	3	1	3	10
Total	11	5 (6)	4 (5)	2 (2)	6 (7)	28 (32)

Compared with earlier programme periods, FP 2011-2015 staff composition demonstrates strengthening of riparian expertise and participation in programme management and implementation.

FP core staff (Programme Coordinator [PC], Chief Technical Adviser [CTA], Technical Experts [TEs]) and Programme Officers [POs] are responsible for operational activity coordination and implementation support and facilitation, in conjunction with NPCs. The latter are appointed by the NMCs. The Terms of Reference (TOR) of PC, CTA and POs are attached in Annex 5, the TOR of NPC in Annex 6.

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¹⁵ This is a national position within each NMC, funded by FP.

¹⁶ The larger number of secretaries and drivers in the Viet Nam sub-programme is due to the fact that FP 11/15 will have two offices in Viet Nam (in Ho Chi Minh City [under RIA 02] and in Ban Me Thuot, in the Central Highlands [under RIA 03]).

In line with MRC's riparianization policy, there will be no internationally recruited staff beyond 2012. However, short-term international consultants can be contracted for assignments of up to one year. Since January 2009, FP's Programme Coordinator is a riparian national. Two Component Coordinator positions, which were headed by international staff before, have since been taken over by POs with significant increases in their workloads. An international Chief Technical Adviser was recruited in late 2009, and is expected to stay with FP until the end of 2012. Three technical expert positions for regional recruitment in fisheries ecology, aquaculture, and fisheries socioeconomics and governance, respectively, all based at MRCS will be new for FP 2011-2015.

Most of the existing positions will be maintained in present locations with possible minor changes in field staff depending on the location of activities. The PC is a regionally recognised senior professional with long experience in IWRM. The POs, one from each member country, should be senior professionals from fisheries line agencies or research institutions. Each of them should have a comprehensive network with national/regional professionals, as their main tasks are to liaise with line agencies and research institutions, undertake information dissemination and supervise the implementation of work agreements. The Technical Experts will have the responsibility for coordination and technical supervision of programme activities and collaboration with MRC programmes/initiatives on technical matters. To maintain continuity in the work of FP 2011-2015, the FP 2011-2015 personnel positions will be filled on a long-term basis.

4.5 Work Plan

Table 7 presents an overview of the FP 2011-2015 work plan. The table demonstrates a constant reduction of activity implementation from a load of 25% of all activities in 2011 to 12% of all activities in 2015. The table furthermore shows that in 2015, 70% of activities implemented are core activities (compared to 37% in 2011).

Table 7: FP 2011-2015 Work Plan

No.	Activity Description		2011			2012		2013		2014			2015			Milestones	
No.	Activity Description		201	11	2012		'	20	113	2014							
Outco	Outcome 1: Riparian fisheries decision-makers have a good, science-based understanding of the situation of fisheries in the Lower Mekong Basin.																
1.1	Output 1.1: An Inception Phase is implemented.																
1.1.1	Review of the FP 2011-2015 Programme Document and drafting of an Inception Report.																15/06/2011
1.1.2	Submit an Inception Report.																30/06/2011
1.2	Output 1.2: Technical and scientific information is packaged and disseminated effectively																
1.2.1	Develop and implement a communication strategy for the fisheries programme.																30/09/2011
1.2.2	Compile and publish information on regionally significant issues of fisheries.																30/06/2015
1.2.3	Disseminate fisheries information.						П		Ш								31/12/2015
1.3	Output 1.3: Effectiveness of fisheries communication is evaluated.																
1.3.1	Survey stakeholders' opinion on usefulness of packaged and shared information and knowledge.					L			J								30/06/2015
1.3.2	Document the uptake of FP-originated information and knowledge into practical action.																31/12/2105
Outco	ome 2: Riparian planning agencies monitor the status and trends in fisheries and	l aqu	acu	ltur	e m	anag	eme	nt and	l devel	opmen	t, and	l prov	ide ar	nd pro	mote	the u	ise of this infor-
2.1	Output 2.1: Information on Fisheries and Aquaculture Status and Trends (FST) and Fisheries Valuation (FV) is available regularly																
2.1.1	Develop/review responsibility transfer strategy																30/09/2011
2.1.2	Determine and describe trends in status of fisheries yield and value and key fishery indicators			-			_			-		-	-				30/06/2015
2.2	Output 2.2: Improved information on capture fisheries and aquaculture is available																
2.2.1	Implement additional capture fisheries studies																30/06/2014
2.2.2	Implement additional aquaculture studies/activities																30/06/2014
2.2.5	Develop regional codes of practice for movement of aquatic organisms.																30/06/2013
2.3	Output 2.3: Potential impacts on fisheries and aquaculture described, and suitable mitigating measures are identified and evaluated.																

No.	Activity Description		20	11		2	2012			2013	3		2014	,		201	15		Milestones
2.3.1	Implement work plan (as identified in Inception Phase).																		30/06/2015
2.3.2	Advise on future activities after 2015.																		30/06/2013
2.4	Output 2.4: Impacts of climate change on fisheries and aquaculture are assessed.																		
2.4.1	Monitor/predict trends in fisheries and aquaculture in relation to climate change																		30/06/2015
	me 3: Key stakeholders maintain a high level of regional and national dialogue WRM framework, and guide the implementation of suitable measures to maintain								sect	ors a	nd p	rogr	amm	es re	levai	nt to	fish	erie	s within a basin-
3.1	Output 3.1: Platforms for regional and international dialogue and consultation on sustainable Mekong fisheries management and development are supported, maintained and functioning well.																		
3.1.1	Prepare, deliver and/or support annual routine events on LMB fisheries																		30/06/2015
3.1.2	Support the TAB in becoming an effective 'regional fisheries management body'.																		30/06/2015
3.2	Output 3.2 : A regional cooperation framework for fisheries management and development is drafted.																		
3.2.1	Identify/implement pilot trans-boundary fisheries management activities.																		30/06/2013
3.2.2	Draft/submit a regional cooperation framework for LMB fisheries management and development									1	-		-	-					31/12/2014
Outco	me 4: National and local agencies and fishing communities have the capacity nec	essa	ry f	or in	ıpr	oving	fish	eries	man	agen	nent a	and (devel	pme	ent.				
4.1	Output 4.1: Human resources are strengthened.																		
4.1.1	Assess training needs and conceptualize and provide regionally focused capacity building																		30/06/2013
4.1.2	Develop and promote the use of methods, tools and guidelines																		31/12/2014
	Output 4.2: Fisheries management institutions are strengthened.																		
4.2.1	Develop, document and implement and review strategies for sustaining programme results																		30/06/2013
4.2.2	Address key local, non-routine management issues experienced in two or more riparian countries																		30/06/2014

= 'Core activities'; = 'Occasional/ad hoc activities'

4.5.1 Overall and Annual Work Planning

Table 8 summarizes key outputs and milestones of FP 2011-2015. A more detailed overall, 5-year work plan will be developed during the programme's 6-months Inception Phase (see below).

Table 8. Outputs and Key Products and Milestones of FP 2011-2015

Output	Key Products/Milestones
O 1.1 Inception Phase is implemented.	1. Necessary review and study activities are carried out by 31 May 2011.
	2. Inception Workshop held by 15 June 2011.
	3. Inception Report submitted by 30 June 2011.
O 1.2. Products of the Fisheries Pro-	4. A communication strategy is developed and agreed by 09/2011.
gramme products are effectively disseminated in a sustainable process.	5. Improved indicators of fisheries trends incorporated in State of Basin and national reporting by 1/1/2015;
	6. Knowledge sharing events conceptualized and supported by 06/2015;
	7. Uptake of 'lessons learned' promoted by 06/2015;
	8. Communication responsibility is transferred to the extent and in the way agreed by $12/2015$.
O 1.3. Technical and scientific information	1. Existing fisheries information compiled and reviewed by 12/2014;
on fisheries is packaged; this includes	2. Scientific and technical fisheries information published in various formats by 06/2105;
information produced by FP as well as other organizations	3. Fisheries monitoring results regularly reported by 06/2015.
outer organizations	4. Results from ongoing activities documented by 06/2015.
O 1.4. Effectiveness of fisheries communi-	1. Stakeholder surveys conducted by 06/2015;
cation is evaluated in accordance with the	 Stakeholder surveys conducted by 06/2013, Uptake of FP 2011-2015 results into national and regional action documented by
methodology for the MRCS Results-based Monitoring & Evaluation System.	12/2015.
O 2.1 Information on Fisheries and Aquaculture Status and Trends (FST) and Fish-	1. A draft plan for transfer of responsibility and funding of activities to agencies is formulated by 09/2011.
eries Valuation (FV) is provided regularly	2. Stakeholders sign-off on revised plan for transfer of responsibility by 12/2011.
at national and regional levels.	3. A system for generation and reporting of size and value of fisheries is in place by $06/2012$.
	4. Fisheries information is included in national surveys by 2014.
O 2.2 Improved information on capture fisheries and aquaculture is available for	1. Lower Mekong basin habitats and their fisheries and threats and opportunities are classified by 06/2012;
dissemination to basin planners and other concerned agencies.	2. Monitoring data are routinely analysed and reported to define trends in fisheries 06/2012.
concerned agencies.	3. Agencies take over routine provision of monitoring data by 12/2015.
	4. Trends in fisheries and aquaculture production in relation to climate change monitored and possibly forecasted/predicted by 06/2015.
	5. Economically feasible aquaculture techniques for indigenous fish developed by 06/2014.
	6. Protocols for fish stock enhancement in the MB and mitigation of external impacts developed by $06/2015$.
	7. Issues of aquaculture economics studied, described and suitable measures recommended by 06/2014;
	8. Work on regional code of practice for movement of aquatic species coordinated and contributed to by $06/2013$.
O 3.1 Platforms for regional and inter-	1. PC Meetings regularly held every 3-4 months.
national consultation on sustainable Me- kong fisheries management and develop-	2. Annual Meetings of FP 2011-2015 and yearly Technical Symposia on Mekong Fisheries regularly held;
ment are maintained and functioning well.	3. Six-monthly TAB Meetings and Annual NGF Meetings regularly held;
	4. Responsibility for some elements of regional consultation to be transferred to agencies clarified and agreed by 12/2013.
O 3.2 LMB-wide cooperation framework for fisheries management and development	Lessons learned from 'local trans-boundary/transborder/ crossborder' fisheries management presented to concerned agencies for uptake and promotion by 06/2015;
is drafted.	2. Basin-wide fisheries management issues and activities identified and activities towards their improvement implemented 06/2015;
	3. Recent international policy issues identified, brought to attention of policy makers and policy responses prepared by 06/2105;

Output	Key Products/Milestones
	4. TAB supported in becoming a 'Regional Fisheries Management Body' by 06/2015;
	5. Regional cooperation framework for Mekong fisheries management drafted by 06/2014.
O 4.1 Technical and administrative skills	1. Training needs assessed by 12/2011;
and knowledge of fisheries managers are	2. Regionally focused capacity development conceptualized and provided by 06/2015;
developed.	3. Methods, tools and guidelines developed and their use promoted based on regional experience and 'lessons learned' by 06/2015;
	4. Capacity development events delivered in collaboration with MRC/ICBP and national HR units of fisheries agencies by 06/2015.
O 4.2 Fisheries management institutions are strengthened.	1. Strategies for sustaining programme results in user organizations and government institutions developed and implemented by 06/2015;
	2. Key local trans-boundary management issues exemplarily addressed in two or more riparian countries by 06/2013;
	3. Opportunities and entry points for livelihoods improvement exemplarily analyzed, documented and suitable measures developed by 06/2015.
	4. Trans-boundary fisheries (co-) management promoted between neighbouring provinces in four riparian countries by 06/2012;
	5. Fisheries contributions to M-IWRP developed and implemented by 06/2013.

An annual work plan will be prepared for each calendar year for FP as a whole, as well as for each national sub-program. The 'Annual FP Work Plan' will be developed under the leadership and coordination of the FP Coordinator in close collaboration with the NPCs and NTCs, and will be submitted to the PSC for endorsement.

4.5.2 Inception Phase

FP 2011-2015 will start with a six-month-'Inception Phase' (IP) from 1 January -30 June 2011. Main activities to be carried out during the IP will be the following:

- Review of FP 2011-2015 logical framework and implementation arrangements
 - o Agreeing on reduced number of activities;
 - o Addressing the issue of FP 'core' (continuing) and 'occasional/ad hoc' activities;
 - o Preparing a road map for formulation of a solid plan (with timelines) for handing over responsibilities for running of core fisheries activities beyond 2015;
 - o Formulating of operational plans for implementation at regional and national levels for the period 2011-2013;
 - o Updating and amending of the logical framework and implementation arrangements;
 - o Drafting of an Inception Report, including a road map for formulation of a plan to implement core fisheries activities beyond 2015.

• Studies/surveys

- Identifying potential activities directed at the important crosscutting issue of HIV/AIDS (exploratory study);
- o Stakeholder analysis of FP 2011-2015 stakeholders.
- Programme Performance Monitoring System
 - o Reviewing the FP 2011-2015 performance monitoring system and selecting and formulating a limited/reduced number of indicators.

Prior to the end of the IP, a regional Inception Workshop will be held in mid-June 2011. During the workshop participants will review the programme logical framework and the implementation arrangements, and make amendments and changes as necessary, which will be written up in a report. This Inception Report will be guiding FP 2011-2015 implementation.

4.6 Monitoring, Reporting and Evaluation

4.6.1 Performance Monitoring

In preparing for FP 2011-2015, a Data Monitoring Management Plan (DMMP) has been developed, which includes a set of preliminarily selected indicators, identification of data sources and arrangement for data collection for the purpose of programme performance monitoring.

The indicators refer mainly to two levels of performance:

- On the level of programme output delivery, programme implementation progress and performance is measured;
- On the level of programme objectives (including goal and outcomes), the impact of programme implementation on the behaviour of basin decision makers, planners and implementers of fisheries-relevant projects in addressing issues of sustainable fisheries management and development is assessed.

The preliminarily selected indicators, as well as the programme performance monitoring system as a whole, will be reviewed during the IP and finally agreed upon at the Inception Workshop in June 2011. Attention will be given to ensure that generated input to the programme performance monitoring system will serve as an appropriate input into the longer-term MRC-wide Performance Monitoring System (PMS) and its annual performance assessment report¹⁷. That is, the agreed-upon performance monitoring system should be implementable beyond the end of FP 2011-2015.

Programme performance monitoring has been made an output under Outcome 1 and will be funded under it. A number of innovative approaches to monitoring data acquisition have been trialled, among them electronic surveys and other low-cost tools, and will be implemented during FP 2011-2015.

4.6.2 Reporting and Evaluation

Reporting

FP 2011-205 will report in accordance with the requirements of MRC and the donors. At present, theses are as follows:

- Three-monthly progress reporting for MRCS; and a
- Yearly progress report for the donors.

In addition, under the newly established MRC-wide Performance Monitoring System (PMS), an annual performance assessment report will become necessary.

Evaluation

An independent mid-term review and evaluation (MTR) of FP 2011-2015 will be carried out in 2013. Apart from a normal review of programme progress, the MTR will focus on the following key issues:

- Assistance to the Programme in identifying suitable actions for implementation during FP 2013-2015, aiming at ensuring the financial independence and sustainability of a fisheries component at MRC beyond 2015:
- Guidance to the Programme in developing a comprehensive plan on which core activities are to be continued beyond 2015 and how funds could be possibly raised by partner countries and from external sponsors. While the budget estimate for FP 2011-2015 is prepared keeping in mind experiences of implementation from previous FP periods, it nevertheless is influenced by the move towards a leaner MRCS, focusing, particularly in the second half of the programme period, on core functions of monitoring, reporting and support to regional management dialogue and cooperation.

4.7 Programme Budget

In keeping with a recommendation made in the Appraisal Report, 10% of the total budget has been allocated for contingencies to be available as a reserve towards the end of the Programme.

The summary budget is shown in Table 9 according to key budget lines.

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¹⁷ The MRC-wide PMS is presently under preparation. It is expected that the PMS will be available in early 2011, so that the programme monitoring system can be aligned with it as appropriate.

Table 9: Estimated Budget for FP 2011-2015 (in US\$)

Item	2011	2012	2013	2014	2015	Total
FP Personnel	663,000	695,000	541,000	568,000	590,000	3,057,000
Technical Assistance	416,000	378,000	303,000	227,000	95,000	1,419,000
Operations	1,772,000	1,676,000	1,497,000	1,190,000	640,000	6,775,000
Sub-total	2,851,000	2,749,000	2,341,000	1,985,000	1,325,000	11,251,000
Contingencies ¹⁸	317,000	305,000	260,000	220,000	147,000	1,249,000
Total	3,168,000	3,054,000	2,601,000	2,205,000	1,472,000	12,500,000
National	316,000	366,000	364,000	353,000	265,000	1,664,000
External	2,852,000	2,688,000	2,237,000	1,852,000	1,207,000	10,836,000

As can be seen, expenditure patterns follow largely¹⁹ the overall work flow (see Table 7 above) and are clearly front-loaded, which means most of the activities will take place in the first year resulting in about 70% of the total budget being required during the first three years of the programme period (or 25% in Year 1), while activities reduced to MRC/FP core activities towards the end of FP 2011-2015 will require proportionally less funding (or about 12% in Year 5). The contribution (in kind - that is mainly expenditure with counterpart salaries) by riparian governments to the programme budget is expected to increase over the five-year period and it is expected that external contributions will cover the balance.

The above-mentioned key inputs to the FP 2011-2015 budget comprise the following:

FP 2011-2015 personnel: This includes all full-time staff, that is FS Coordinator, CTA, Technical Experts and Programme Officers.

Technical assistance: Consultant companies and individual consultants may be contracted to undertake specific tasks. These include studies, impact and vulnerability assessments, preparation of guidelines and training and mentoring. Following the completion of the riparianization process international support is envisaged through increased recruitment of short-term consultants for specific and general tasks.

Operations include:

- Consultation and coordination meetings, such as PCMs, annual meetings and symposia as well as specific
 consultations and workshops related to programme activity implementation, as well as events for technical,
 partner and donor coordination;
- Capacity development events, such as training courses, exchange visits, study tours;
- Publications, such as technical reports, guidelines and manuals;
- Communication materials, such as videos, animated presentations on key issues (fish migrations and barrier effects, for example), the widely distributed newsletter *Catch & Culture*, brochures (such as the Mekong Management Recommendations) and fliers;
- Travel and logistics associated with meetings, training events;
- Documentation and secretariat expenses, such as costs of preparing documentation for meetings and the running of FP 2011-2015, and its decentralized programme offices.

Table 10 presents a budget distribution by outcomes, which is the main structuring principle of FP 2011-2015.

Table 10: FP 2011-2015 Budget Distributed By Outcome (in US\$)

Item	2011	2012	2013	2014	2015	Total
Outcome 1	849,000	509,000	509,000	509,000	509,000	2,885,000
Outcome 2	1,075,000	1,301,000	1,073,000	905,000	454,000	4,808,000
Outcome 3	565,000	566,000	566,000	452,000	339,000	2,488,000
Outcome 4	679,000	678,000	453,000	339,000	170,000	2,319,000

¹⁸ Set at 10% of total budget.

¹⁹ Expenditures with FP staff are determined by the MRC salary system, which foresees a yearly increase, and Programme staff numbers. There will be a drop in expenditure in 2013, after the departure of the internationally recruited CTA.

The table shows that

- Outcome 1, dealing mainly with documentation and communication, accounts for about 23% of the total budget;
- Outcome 2, dealing mainly with fisheries monitoring and production of specific fisheries information in support of other MRC processes, accounts for 38% of the budget;
- Outcome 3, dealing with regional dialogue and management cooperation accounts, for 20% of the budget;
- Outcome 4, dealing with management capacity building accounts for 19% of the budget.

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Annex 1: Design and Monitoring Framework

Goal and Objectives	Indicators	Source of Data	Risks
Goal: Riparian governments and other stakeholders make sustainable and effective use of the Mekong's fisheries resources to alleviate poverty while protecting the environment ²⁰ .	tion (overall and by small-scale sector). Economic volume and value of aquaculture production (overall and by small-scale sector) Household income and expenditure survey (overall and by small-scale sector)		1. The world economic crisis may lead to drastic expenditure reduction by national governments, threatening research and development efforts necessary to maintain Mekong fishery sustainability. 2. Rapid industrialization in the LMB and
Programme Objective: Regional and national organizations successfully implement measures for sus-	POI 1 Proportion [%] of major water resources development plans and projects in the LMB, which adequately assess effects on fisheries.	Review of key national agencies' plans and projects available with the NMCs and/or BDP.	hydropower may impact negatively on sustainable aquatic resource utilization and development.
tainable fisheries development and improved rural livelihoods.	POI 2 Proportion [%] of major water resources development plans and projects in the LMB, which include adequate measures to mitigate effects on fisheries.	Review of key national agencies' plans and projects available with the NMCs and/or BDP.	3. Climate change and related effects (such as sea level increase in the Mekong Delta and reduced lake levels in the Great Lake and others) may jeopardize fisheries and aquacul-
	POI 3 Extent to which appropriate fishery policies and strategies, legislations and regulations are in place and applied.	regies, legislations and regulations are in place and legislation and its application.	
	POI 4 Extent to which fishers are involved in fisheries management.	Fisheries agency reports; reports from other organizations (including fisher organizations); surveys/focus groups?	under MRC may hamper effective support by the organization to sustainable fisheries devel- opment.
Intermediate Outcomes:			
1. Riparian organizations have a good, science-based understanding of the situation of fisheries in the Region.	IOI 1.1 Level of awareness amongst policy-makers and senior public-sector managers of the value of the fishery, the threats to its sustainability, and options for sustainable fisheries management and development.	(Online) survey; focus groups (possibly on occasion of FP-promoted forums and meetings).	
2. Riparian organizations monitor, and provide and promote the use of information on status and trends in fisheries and aquaculture manage-	IOI 2.1 Number and quality of major fishery status and trends communication products produced by relevant agencies nationally and regionally, and level of dissemination of these.	Monitoring of major products of selected agencies; (Online) survey; focus groups (possibly on occasion of FP-promoted forums and meetings)	
ment and development.	IOI 2.2 Perceptions of key national agencies' staff of adequacy of information on basin fisheries and its sustainable management and development, originating from relevant national and regional agencies.	(Online) survey; focus groups (possibly on occasion of FP-promoted forums and meetings)	
3. Key stakeholders maintain a high level of regional and national dialogue, as well as dialogue between	IOI 3.1 Number and quality of regional and national events, which address sustainable fisheries management and development.	FP monitoring; event reports	

²⁰ Aligned with MRC SP 5-year goal: More effective use of the Mekong's water and related resources to alleviate poverty while protecting the environment.

40

Goal and Objectives		Indicators	Sou	rce of Data	Risks
sectors and programmes relevant to fisheries within a basin-wide IWRM framework, and guide the imple- mentation of suitable measures to maintain fisheries sustainability.	logue, coordination a	velopment of multi-stakeholder dia- and monitoring processes addressing s management and development in/sub-basin levels.	(Online) survey; focu of FP-promoted forun	s groups (possibly on occasion as and meetings)	
4. National and local agencies and fishing communities have the capacity necessary for improving fisheries management and development.	adequacy of informa	of key national agencies' staff of ation on basin fisheries and its sus- t and development, originating from regional agencies.	(Online) survey; focu of FP-promoted forun	s groups (possibly on occasion as and meetings)	
	esses and/or projec	quality of technical products, proc- ts aiming at sustainable fisheries d and/or implemented by fisheries	s (Online) survey; focus groups (possibly on occasion		
Outputc ²¹ Indicators			Source of Date		

Outputs ²¹	Indicators	Source of Data				
Outputs leading to Intermediate Outcome 1: Riparian organizations have a good, science-based understanding of the situation of fisheries in the Lower Mekong Basin						
O 1.1 An Inception Phase is implemented	O1.1.1 Inception Report produced.	Programme Progress Reports				
O 1.2. Technical and scientific information is packaged; this includes information produced by FP as well as other organizations.	OI 1.2.1 Number of TSI products produced; number of copies of TSI products distributed and number of recipient organizations [by category]	Programme Progress Reports; FP secretaries				
	OI 1.2.2 Target user's perception of usefulness of TSI products; and proportion (%) of target users rating TSI products [by information type/area] as 'good' or better.	(Online) surveys; focus groups				
O 1.3. Effectiveness of fisheries communication is evaluated; this will be done in accordance with the methodology	OI 1.3.1 RB M&E system up and running and periodically implemented, as planned.	Programme Progress Reports.				
developed recently for the Results-based Monitoring & Evaluation System established at MRCS.	OI 1.3.2 Information obtained through RB M&E used in improvement of fisheries communication.	Programme Progress Reports; FP information/communication products.				
Outputs leading to Intermediate Outcome 2: Riparian organizations monitor, provide and promote the use of information on status and trends in fisheries and aquaculture management and development.						
O 2.1 Information on Fisheries and Aquaculture Status and	OI 2.1.1 Number of FST and FV studies conducted and repo	orts produced; Programme Progress Reports;				

O 2.1 Information on Fisheries and Aquaculture Status and Trends (FST) and Fisheries Valuation (FV) is provided regularly; this includes information from national as well as regional levels.

OI 2.1.1 Number of FST and FV studies conducted and reports produced; number of copies of reports distributed to recipient agencies (by category); and number of downloads of reports from MRC websites.

Programme Progress Reports;
Programme and component secretaries; website monitoring.

OI 2.1.2 Assessment of usefulness of FST and FV reports by target users [average rating of quality; and number and proportion (%) of key agency

online survey.

The four Programme Outputs are aligned with the four goals of the MRC Strategic Plan 2006-2010: Goal 1: To promote and support coordinated, sustainable and pro-poor development; Goal 2: To enhance effective regional cooperation; Goal 3: To strengthen basin-wide environmental monitoring and impact assessment; Goal 4: To strengthen the Integrated Water Resources Management capacity and knowledge base of the MRC bodies, NMCs, Line Agencies, and other stakeholders.

Outputs ²¹	Indicators		Source of Data	
	staff making use of FST and FV reports in their own work].			
O 2.2 Improved information on capture fisheries and aquaculture is available and disseminated to basin planners and other concerned agencies.	OI 2.2.1 Assessment of usefulness of capture fisheries-related studies and reports by target users [average rating of quality; number and proportion (%) of key planning and development agencies making use of FE reports in their own work].		Online survey.	
	OI 2.2.2 Usefulness of new aquaculture techniques as perceivernment aquaculture staff and fish farmers; extent of use of species in fish culture.		(Online) surveys; focus groups	
O 2.3 Potential impacts on fisheries and aquaculture described, and suitable mitigating measures are identified and evaluated.	OI 2.3.1 Number of WMP/M studies conducted and reports number of copies of reports distributed to recipient agencie gory); number of downloads of reports from MRC websites.		Programme Progress Reports; Programme and component secretaries; website monitoring.	
	OI 2.3.2 Assessment of usefulness of WMP/M reports by [average rating of quality; number and proportion (%) of ke and development agencies making use of WMP/M in their own	ey planning	Online survey.	
O 2.4 Impacts of climate change [CC] on fisheries and aquaculture is assessed.	OI 2.4.1 Number of CC studies conducted and reports produced; number of copies of reports distributed to recipient agencies (by category); number of downloads of reports from MRC websites.		Programme Progress Reports; Programme and component secretaries; website monitoring.	
	OI 2.4.2 Assessment of usefulness of CC reports by target users [average rating of quality; number and proportion (%) of key planning and development agencies making use of CC information in their own work].		Online survey.	
	olders maintain a high level of regional and national dialogue implementation of suitable measures to maintain fisheries su		dialogues between sectors and programmes relevant to fisher-	
O 3.1 Platforms for regional and international dialogue and consultation on sustainable Mekong fisheries management and development are maintained and functioning well.	OI 3.1.1 Number of Programme [PC] and Component Coordi meetings held per year; number of participants [by category]; originating from meeting.		Programme Progress Reports; programme and component secretaries' data; agenda; minutes of PC and CC meetings.	
	OI 3.1.2 Number of events, such as FP Annual Meeting and Symposium [1-2 per year]; average number of participant management and development relevance; and actions origin deliberations.	ts; fisheries	Programme Progress Reports; FP secretary's data; agenda; minutes and/or event statements.	
	OI 3.1.3 Number of events of the Technical Advisory Body for Fisheries Management - TAB [1-2 per year]; average number of participants; average time spent on each of three major outputs; actions originating from meetings; and degree of work plan implementation.		Programme Progress Reports; TSG secretary's data; agenda; minutes of TAB meetings; TAB M&E-system.	
	OI 3.1.4 Number of events of the Regional Network for C Fisheries - NGF [at least 1per year]; number of participants actions originating from meetings; and member assessment of of network.	s in events;	Programme Progress Reports; FMG secretary's data; agenda; minutes of GIFN Annual Meeting; survey of network members (on occasion of Annual Meeting/online?).	
O 3.2 LMB-wide cooperation framework for fisheries management and development is drafted.	OI 3.2.1 Framework for regional fisheries management and d negotiated [FRMD].	levelopment	Programme Progress Reports; minutes of TAB and FP Annual meetings.	

Outputs ²¹	Indicators		Source of Data
	OI 3.2.2 Acceptance of FRMD by TAB.	OI 3.2.2 Acceptance of FRMD by TAB.	
Outputs leading to Intermediate Outcome 4: National and	local agencies and fishing communities have the capacity	necessary for i	mproving fisheries management and development.
O 4.1 Technical and administrative skills and knowledge of fisheries managers are developed.	OI 4.1.1 Participants' assessments of quality of CB events; l Lessons Learned in participants' own work.	evel of use of	(Online) surveys; focus groups
	OI 4.1.2 Users' assessment of quality of CB tools; level tools in users' own work.	of use of CB	(Online) surveys; focus groups
O 4.2 Fisheries management institutions are strengthened.	OI 4.2.1 Number of fishery co-management arrangements of different levels [community; district; province; etc.]; numinvolved [households; villages, districts etc.; number of fagement plans in implementation.	nber of units	Programme Progress reports; Work Agreement; Implementation Reports
	OI 4.2.2 Level of usefulness of co-management arrangements as perceived by co-managers [government/community]; main benefits identified by co-managers.		(Online) surveys; focus groups

Annex 2: Programme Activities

No.	Activity Description	\mathbb{C}^{22}	O^{23}	Milestones
1.	Outcome 1: Riparian fisheries decision-makers have a good, science-based understanding of the situation of fisheries in the Lower Mekong Basin.			
1.1	Output 1.1: An Inception Phase is implemented.		0	
1.1.1	Review of the FP 2011-2015 Programme Document and drafting of an Inception Report. This activity will include: Review the logical framework and implementation arrangements and suggest possible amendments (including on such issues as: additional, non-routine studies/activities to fill important information/knowledge gaps in capture fisheries and aquaculture; role of FP in fisheries EIA of dams and other impacts of developments in other sectors; key local, non-routine management issues experienced in two or more riparian countries; and others); Review of the FP 2011-2015 Programme Document and drafting of an Inception Report.		0	15/06/2011
	Study of specific issues (such as the link between HIV/AIDS and LMB fisheries).			
1.1.2	Submit an Inception Report. This activity will include: Elaboration and dissemination of a Draft Inception Report; Preparation and delivery of a regional Inception Workshop; Agreement on suggested amendments to the FP 21011-2015 logical framework and implementation arrangements; Submission of a Draft Final Inception report to the PSC.			30/06/2011
1.2	Output 1.2: Technical and scientific information is packaged and disseminated effectively; this includes information produced by FP as well as other organizations			
1.2.1	Develop and implement a communication strategy for the fisheries programme. This will include: Defining the objectives of communication; Defining our audiences and messages; The material we wish to use; The best ways to present that material; The best ways to disseminate the material; Meeting with and agreeing on how to transfer most of the communication responsibility to ICCS in the MRCS and to agencies.		0	30/09/2011

²² C = 'core activity'. Core activities are related to MRC 'core functions' as defined by MRC. Core activities have also been defined as such activities that MRC can finance without donor support. 'Fisheries core activities' are also understood as (routine) activities to be continued by MRC beyond 2015. While it is generally understood that MRC and its programmes should retain the responsibility for 'core activities' are also understood as (routine) activities to be continued by MRC beyond 2015. ties', 'decentralization of core activities' to national levels may include a sharing of responsibility for such activities between national agencies and MRC, where national agencies will take care of national execution and MRC of bringing results together on regional level.

23 O = 'occasional activity', also called 'ad hoc' activity. This type of activity is not a continuing routine activity, but is time bound and destined to address a specific, emergent or urgent issue in a once-off

fashion.

No.	Activity Description	C ²²	O^{23}	Milestones
1.2.2	Compile and publish information on regionally significant issues of fisheries. Areas covered: Including ecology and biology; socio-economics and livelihood; capture fisheries management and aquaculture development; fish handling, processing, marketing and food safety; impacts on fisheries from other sectors and their mitigation; impacts on fisheries and livelihoods from climate change and possible adaptations; lessons learned from fisheries management, and others. This activity may include the document preparation (editing and layout), translation and publishing tasks. Follow the steps to transfer responsibility as and to the extent defined in 1.2.1.	С		30/06/2015
1.2.3	Disseminate fisheries information. This activity includes the actual steps taken in accordance with 1.1.1 to provide the material to others, including within MRC, line agencies, developers, donors and the public. This includes: Production of fisheries papers and publications of all kinds; Contribution to MRC products from a fisheries angle, including 'State of the Basin' reports, BDP scenario assessment, future EIAs or SEAs and similar; and Promoting lessons learned via the TAB, SEAFDEC, NACA, and other external organisations. Follow the steps to transfer responsibility as and to the extent defined in 1.2.1.	С		31/12/2015
1.3	Output 1.3: Effectiveness of fisheries communication is evaluated.			
1.3.1	Survey stakeholders' opinion on usefulness of packaged and shared information and knowledge. This will be done in accordance with the methodology developed recently for the Results-based Monitoring & Evaluation System established at MRCS.		О	30/06/2015
1.3.2	Document the uptake of FP-originated information and knowledge into practical action. This will be done in conjunction with Activity 1.3.1.		О	31/12/2105
2.	Outcome 2: Riparian planning agencies monitor the status and trends in fisheries and aquaculture management and development, and provide and promote the use of this information			
2.1	Output 2.1: Information on Fisheries and Aquaculture Status and Trends (FST) and Fisheries Valuation (FV) is available regularly; this includes information from national as well as regional levels.			
2.1.1	Develop a documented strategy to transfer responsibility for elements of this output to National Mekong Committees, fisheries agencies, others in MRCS or other agencies: • Discussing and agreeing on the scope and defining the standard operating procedures for all long-term monitoring or survey activities; • Meeting and agreeing with stakeholders to develop and agree on the strategy, system, auditing process and schedule for transfer of responsibility; • Production and signing-off on documentation on the long-term fisheries monitoring plan for the elements to be transferred.		O	30/09/2011
2.1.2	Determine and describe trends in the basin-wide status of fisheries yield and value and key fishery indicators (such as resource abundance, biodiversity, etc.). This activity comprises: (1) Measures to institutionalise fisheries information in national data collection systems, which requires that the FP: Review the national censuses and surveys that are carried out by agencies in each country to determine how to incorporate key fisheries questions; Meet to discuss and agree on key questions regarding fisheries yield and value;	С		30/06/2015

No.	Activity Description	\mathbb{C}^{22}	O^{23}	Milestones
	 Discuss and agree with NMCs and other players regarding institutional arrangements and sustainability of fisheries elements in national surveys. (2) Long-term monitoring data on indicators of fisheries status and value, including: The dai fishery in Cambodia; The lee trap and gill net fisheries in Lao PDR; Fry/larvae in Cambodia and Viet Nam and possibly in Lao and Thailand; Catches by commercial fishers along the Mekong; Selected studies on important but poorly known aspects, such as production from rain-fed habitats and the role of brush-parks; Monitoring of market prices of key fishery species in each country; Analyses and reporting of all routine monitoring data. 			
2.2	Output 2.2: Improved information on capture fisheries and aquaculture is available			
2.2.1	Implement additional capture fisheries studies (as identified in Inception Phase); these are non-routine studies to fulfil important gaps in information. The studies are likely to include: Reviews of existing environmental or fisheries information, e.g. the impacts of dams on fisheries; Surveys of critical habitats. Abundance and migration patterns of fish up- and downstream of dam sites; Yield and value of fisheries in rain-fed rice-fields, reservoirs, the Viet Nam delta and highlands; Use of models to understand and predict relationships between fish catches and hydrology, nutrient flows and habitat.		0	30/06/2014
2.2.2	Implement additional aquaculture studies/activities (as identified in Inception Phase); these are non-routine activities to fill important gaps in information and knowledge. The work programme is likely to include: Identification and agreement on priority species based on agreed criteria; e.g. that they are rare/endangered or are commercially promising; Further develop culture techniques as required for the agreed species to achieve effect and economic feasibility; Develop and recommend protocols for fish stock enhancement and mitigation of impacts; Promote and propagate methods for culturing, raising and stocking indigenous fishery species; and Describe and document issues of aquaculture economics and make recommendations for improvements.		O	30/06/2014
2.2.5	Coordinate and contribute to development of regional codes of practice for movement of aquatic organisms. This activity comprises Study the genetic inventory of economically important species, vulnerable and endemic species in the LMB to identify whether fish distribute across the basin is of single or multiple stock. Develop code of practice for movement of aquatic organisms aiming on the issue of conservation of genetic integrity of natural fish stock. Output 2.3: Potential impacts on fisheries and aquaculture described, and suitable mitigating measures are identified and evaluated.		0	30/06/2013
2.3.1	Implement a work plan (as identified in Inception Phase). The work plan is likely to include reviews of existing information and input to or production of generic guidelines for mitigation and monitoring as well as input to other MRC programmes including the BDP and the ISH.	С		30/06/2015

No.	Activity Description	\mathbb{C}^{22}	O^{23}	Milestones
2.3.2	Advise on future activities after 2015.		О	30/06/2013
2.4	Output 2.4: Impacts of climate change on fisheries and aquaculture are assessed.			
2.4.1	Monitor and attempt to predict trends in fisheries resources and aquaculture production systems in relation to climate change, such as temperature, precipitation, flood discharge and drought (in collaboration with EP and IKMP). This activity comprises Compilation and review of information from other activities and other data including meteorology, hydrology etc. Modelling and analysis of relationships.	С		30/06/2015
3.	Outcome 3: Key stakeholders maintain a high level of regional and national dialogue, as well as dialogues between sectors and programmes relevant to fisheries within a basin-wide IWRM framework, and guide the implementation of suitable measures to maintain fisheries sustainability.			
3.1	Output 3.1: Platforms for regional and international dialogue and consultation on sustainable Mekong fisheries management and development are supported, maintained and functioning well.			
3.1.1	Prepare, deliver and/or support annual routine events aiming at discussing issues of Mekong fisheries management and development. They include: Preparation and delivery of FP Annual Meeting (agreement on venue; development of agenda; invitations; logistics; presentations by programme management; presentations by outside invitees; formulation of a meeting statement); Preparation and delivery of Technical Symposium on Mekong Fisheries (agreement on venue; invitations; logistics; presentations by counterparts and selected outside presenters of relevant research results; TAB-sponsored workshop; field trip) Supporting the Annual Gender and Fisheries Meeting (financial support to holding of the meeting; participation at the meeting); Follow-up by FP on activities proposed by NGF, promoting gender equity in Mekong fisheries management and development (such as the development of a regional gender and fisheries mainstreaming policy and strategy; and others). Preparation and delivery of TAB Meetings, with support of the of the TAB Support Group - TSG (agreement on venue; development of agenda; invitations; logistics; development of discussion materials); Follow-up on decisions made at the meeting, within the context of the TAB Work Plan (through TSG).	С		30/06/2015
3.2	Output 3.2: A regional cooperation framework for fisheries management and development is drafted.			
3.2.1	Identify and, if appropriate, implement pilot trans-boundary, crossborder and basin-wide fisheries management activities. This activity comprises Documentation, dissemination and promotion of uptake of 'lessons learned' from earlier cross-border activities and follow-up; Identification of basin wide fisheries management activities (such as development of protocols for trans-boundary movement of aquatic organisms in the Basin; etc.) Investigation of recent international/regional policy development (on such issues as fish processing for export and eco-labelling [World Trade Organization – WTO] and internationalization of aquaculture development under the ASEAN Free Trade Agreement [FTA]; possibly others); Presenting such issues to national line agencies and other concerned organizations in national and regional meetings;		O	30/06/2013
3.2.2	Support the TAB in becoming an effective 'regional fisheries management body'. • Contribution to initiatives aimed at regional and (sub-) regional fisheries management (such as SEAFDEC/ASEAN Regional Fisheries Management Mechanism, and the Regional Fishery Body Secretariats Network [RSN]);	С		30/06/2015

No.	Activity Description	\mathbb{C}^{22}	O^{23}	Milestones
	• Exploring conditions and modalities for setting up a 'self-funded regional FP/regional fisheries committee/regional agreement on fisheries';			
	Exploring conditions and modalities for setting up a regional Fisheries Information Centre; Only to the condition of th			
	Collaborating with upstream countries on fisheries issues.			
3.2.3	Draft a regional cooperation framework for fisheries management and development for consideration by TAB.		О	31/12/2014
	This activity comprises:			
	Bringing together results from the activities above;			
	Carrying out consultations with national and regional agencies and organizations.			
	• Drafting a regional fisheries cooperation framework (this may aim at improving a presently inefficient regulatory and policy framework, and may include aspects such as fisheries valuation; regional regulations, policies and strategies; and watershed/IWR management as a regional approach).			
4.	Outcome 4: National and local agencies and fishing communities have the capacity necessary for improving fisheries management and development.			
4.1	Output 4.1: Technical and administrative skills and knowledge of fisheries managers are developed.			
4.1.1	Assess training needs (TNA) and conceptualize and provide regionally focused capacity building to members of national fisheries agencies.		О	30/06/2013
	This activity will include:			
	 Assessing demand and needs for regionally-focused capacity development in such areas as communication with non-technical audiences; data analysis; fish taxonomy and fisheries monitoring and assessment methodologies; fisheries and environmental impact assessment and mitigation; and others. 			
	 Development of training contents, including training materials, and delivery of training and learning events; and evaluations; 			
	Meeting with and agreeing how to transfer capacity-development responsibility to ICBP/MRCS and line agencies and their extension systems.			
4.1.2	Develop and promote the use of methods, tools and guidelines based on regional experiences and 'lessons learned'.		О	31/12/2014
	This activity comprises			
	• Identification of subject matter areas where a need for methods, tools and guidelines exists (for example, national and regional monitoring and evaluation of fisheries status and trends; Mekong-specific environmental and fisheries impact assessment and mitigation [EIA/FIA]; monitoring and management of protected areas, including fish sanctuaries; and others);			
	Review of existing FP documentation for material to be used;			
	Development of methods, tools and guidelines;			
	Dissemination of methods, tools and guidelines and promotion of their use.			
4.2	Output 4.2: Fisheries management institutions are strengthened.			
4.2.1	Develop, document and implement strategies for sustaining programme results in user organizations and government institutions on local level (in such areas as: fisheries co-management; fisheries monitoring).		О	30/06/2013
	 Identification of key issues in fisheries co-management and fisheries monitoring; 			
	• Documentation of experiences and 'lessons learned' in FP-publications (possibly a Development Series issue on 'Co-managing Mekong Fisheries' and a 'Manual on Fisheries Monitoring');			
	 Development and implementation of exit strategies for fisheries co-management and fisheries monitoring (Detailed review of decentralization of respective tasks to counterpart agencies on national and local levels, as well as to user communities; identification of needs of government and community collaborators; closing of information and skill gaps); 			
	Detailed follow-up/monitoring of reduction of FP input.			

No.	Activity Description	\mathbb{C}^{22}	O^{23}	Milestones
4.2.2	Address key local, non-routine management issues experienced in two or more riparian countries (as identified in Inception phase).		О	30/06/2014
	This activity comprises	ļ		
	Identifying key management issues through electronic survey to counterparts (such as reducing excessive fishing capacity and gear impact through identification and development of supplementary or			
	 Alternative livelihoods, and gear control/regulation/reduction/ limitation; and also improving/sustaining productivity of fish habitats and stocks through suitable fish enhancement and mitigation of climate change impacts, and others, including in the Tonle Sap Great Lake); 			
	 Presenting results from survey to PC Meeting, discussion and decision key issues to be addressed; 	ļ		
	 Development of proposal on how to address the issues in question; 	ļ		
	Implementation of proposals.			

Annex 3: Job Descriptions for Key FP Staff

The Fisheries Programme (FP) Coordinator

- Heading the FP Team at the MRC Secretariat;
- Managing and coordinating all technical, administrative and financial activities to ensure the effective and efficient implementation of the program in full compliance with all applicable donor funding agreements, the Program document and MRCS procedures and standards;
- Managing the programme's budget and preparing report to the Director, Operations Division, and donors:
- Preparing progress reports (including financial reporting) and other routine reports in accordance with MRCS procedures and specific requirements of the program;
- Allocates and administers the use of the programme budget with the authorization from Division Director.
- Preparing Term of Reference and allocates budgets for employment of program staff and consultants, and oversees recruitment of staff and consultants;
- Coordinating and mobilizing the resource and personnel requirements for the main activities of FP;
- Providing FP-related information to the CEO, the NMCs, and other related MRCS programs;
- Undertaking promotion and dissemination of FP and its results among stakeholders and civil society;
- Undertaking liaison and exchange information with other FP-related international and regional projects, programs and initiatives;
- Maintaining regular communication with NMCs, and other FP-related line agencies in riparian countries; and
- Performing any other duty as assigned by the CEO and Director of Operations Division.

Chief Technical Advisor

- Supervises FP programme officers and specialists (both riparian and international) and consultants, particularly concerning technical aspects;
- Supports the Programme Coordinator in coordinating and implementing program activities, organize and facilitate in preparing the implementation plan;
- Drafts the inception report, progress reports, and completion report and other routine reports in accordance with MRCS procedures and specific requirements of the program;
- Drafts the Term of Reference for employment of program staff and consultants;
- Drafts, formulates and updates the EP implementation plans, projects/programs preparations etc.;
- Develops the FP training program and guides it in its planning and implementation;
- Guides and coordinate the establishment and improvements of FP databases, and link with IKMP;
- Advises on concept notes design and preparation, and check the quality of concept notes and TOR before submission to member countries for comments;
- Coordinates and communicates with senior management of MRC programs and stakeholders for knowledge sharing and dissemination of FP results and outcomes;
- Provides on the job training to POs on technical issues;
- Performs any other duty as assigned by the FP Coordinator and Director, Operations.

Programme Officer (4)

- Participates in planning, preparation, management and monitoring of FP work programme in his/her home country. This may include particular duties supporting the work of the Programme in the home country, such as developing and overseeing contracts, overseeing the implementation of Programme activities, facilitating smooth working arrangements with line agency partners;
- Provides high quality support to and assist the FP Manager, including but not limited to maintaining relevant fisheries information and documentation; ensuring correspondence particularly with the home country is appropriate and timely; participating in the operation of a fisheries network;

- Represents the MRC FP with a high degree of professionalism at internal and external workshops and meetings;
- Liaises with the relevant government institutions, and visits fisheries administrations, institutions and components in the Mekong Basin in order to maintain contacts and assist and support the implementation of component activities;
- Participates in the establishment of regional and international co-operation, research and study programmes related to the fisheries sector in the Mekong Basin;
- Participates in other regular activities under the MRC Secretariat, including activity co-ordination, meetings and professional training of others as requested by Management;
- Performs other related tasks as required.