



Results-Framework Document (RFD)

for

Fisheries Division

(1st April, 2011- 31st March, 2012)

**INDIAN COUNCIL OF AGRICULTURAL RESEARCH
KRISHI BHAWAN, NEW DELHI – 110 114**

Section 1 Vision, Mission, Objectives and Functions

Vision

‘Fish for All’

Mission

To provide technological inputs for sustainable growth of Indian fisheries and aquaculture by interfacing research, education and extension initiatives through institutional and policy support and play an important role in providing the much required food, nutritional, socio-economic and livelihood security.

Objectives

- Assessment and monitoring of the fishery resources and the aquatic eco-systems to optimize fish production on a sustainable basis to provide food, nutritional, socio-economic security and livelihood.
- Development of eco-friendly and techno-economically viable aquaculture technologies and harvest & post-harvest technologies for production and productivity enhancement.

Functions

- To plan, coordinate, implement and monitor R & D programmes for increasing production and productivity from fishery and aquaculture sector on a sustainable basis and formulate guidelines and strategies for management and conservation of resource and play an advisory role for all the stakeholders.

Section 2 - Inter se Priorities among Key Objectives, Success indicators and Targets

Objectives	Weight	Actions	Success Indicators	Unit	Weight	Target / Criteria Value				
						Excellent	Very Good	Good	Fair	Poor
						100%	90%	80%	70%	60%
Assessment and monitoring of the fishery resources and the aquatic eco-systems to optimize fish production on a sustainable basis to provide food, nutritional, socio-economic security and livelihood.	30	Resources Assessment and eco-system monitoring	Number of explorations/ surveys carried out	Number	5	10	8	6	5	4
			Aquatic ecosystem health assessed and monitored	Number	2	3	2	1	0	0
			GIS based aquatic resource database developed	Number	2	2	1	0	0	0
		Culture based fisheries in reservoirs and wetlands	Production from reservoirs & wetlands improved	Kg/ha/yr	3	160	150	140	130	120
			Cage & Pen culture technologies and protocols developed	Number	2	5	4	3	2	1
		Mariculture and open sea cage farming	Mariculture technologies of commercially important cultivable marine finfish/shellfish species developed	Number	4	2	1	0	0	0
			Technologies for open sea cage farming, species diversification	Number	4	2	1	0	0	0
		Cataloguing and classification of fish biodiversity using classical and molecular tools	Fish biodiversity database updated, species added	Number	5	3	2	1	0	0
			Molecular DNA markers for species identification developed	Number	3	2	1	0	0	0
		Development of eco-friendly and techno-economically	59	Species diversification	Broodstock and seed production technologies for finfish/shellfish species developed	Number	5	2	1	0

viable aquaculture technologies and harvest & post-harvest technologies for production and productivity enhancement.	System diversification	Innovative aquaculture technologies improved	Number	4	2	1	0	0	0
	Research support for feed formulation for finfish and shellfish species	Efficient and cost-effective feed for different life stages of finfish/shellfish formulated	Number	4	2	1	0	0	0
	Disease diagnostic and control measures	Molecular techniques for disease diagnoses identified	Number	3	2	1	0	0	0
	Fish waste utilization for product development	Products from fish waste developed	Number	4	2	1	0	0	0
	Develop value-added products	Value added and ready to eat products developed	Number	4	2	1	0	0	0
	Identification of packaging material	New packaging material identified	Number	3	2	1	0	0	0
	Quality control and hygiene practices in fish processing	Protocols for quality control and food safety developed	Number	3	2	1	0	0	0
	Development of responsible fishing techniques	Fishing gear designs improved for diversified and conservational fishing	Number	2	2	1	0	0	0
Alternate materials for fishing craft & gear identified		Number	1	1	0	0	0	0	
Popularization of by-catch reduction devices		Number	2	1	0	0	0	0	
Commercialization of process & products		Process and products commercialized	Number	4	2	1	0	0	0

		Education and training in different aspects of fishing & fish processing technology	PG/Doctoral programmes conducted	Number of students	3	70	0	0	0	0
			Training and skill upgradation programmes conducted	Number of trainees	10	800	750	700	650	600
		Consultancy services	Analytical & advisory support to the industry	Number	4	5	4	3	2	1
			Consultancy services undertaken	Number	3	2	1	0	0	0
Efficient Functioning of the RFD System	11	Timely submission of RFD for 2011-12	On-time submission	Date	2	March 31 2011	April 3 2011	April 4 2011	April 15 2011	April 16 2011
		Timely submission of Results for 2011-12	On-time submission	Date	1	May 1 2012	May 3 2012	May 4 2012	May 5 2012	May 6 2012
		Finalize a Strategic Plan for RC	Finalize the Strategic Plan for next 5 years	Date	2	Dec. 10 2011	Dec. 15 2011	Dec. 20 2011	Dec. 24 2011	Dec. 31 2011
		Identify potential areas of corruption related to organisation activities and develop an action plan to mitigate them	Finalize an action plan to mitigate potential areas of corruption.	Date	2	Dec. 10 2011	Dec. 15 2011	Dec. 20 2011	Dec. 24 2011	Dec. 31 2011
		Implementation of Sevottam	Create a Sevottam compliant system to implement, monitor and review Citizen's Charter	Date	2	Dec. 10 2011	Dec. 15 2011	Dec. 20 2011	Dec. 24 2011	Dec. 31 2011
			Create a Sevottam Compliant system to redress and monitor public Grievances	Date	2	Dec. 10 2011	Dec. 15 2011	Dec. 20 2011	Dec. 24 2011	Dec. 31 2011

Section 3 – Trend Values of Success Indicators

Objective	Action	Success Indicator	Unit	Actual Value for FY 09/10	Actual Value for FY 10/11	Targeted Value for FY 11/12	Projected Value for FY 12/13	Projected Value for FY 13/14
Assessment and monitoring of the fishery resources and the aquatic eco-systems to optimize fish production on a sustainable basis to provide food, nutritional, socio-economic security and livelihood.	Resources Assessment and eco-system monitoring	Number of explorations/ surveys carried out	Number	-	10	8	20	25
		Aquatic ecosystem health assessed and monitored	Number	-	3	2	3	3
		GIS based aquatic resource database developed	Number	1	2	1	2	2
	Culture based fisheries in reservoirs and wetlands	Production from reservoirs & wetlands improved	Kg/ha/yr	150	160	150	180	200
		Cage & Pen culture technologies and protocols developed	number	1	5	4	5	5
	Mariculture and open sea cage farming	Mariculture technologies of commercially important cultivable marine finfish/shellfish species developed	Number of species	1	1	1	1	1
		Technologies for open sea cage farming, species diversification	Number of species	1	1	1	1	1
	Cataloguing and classification of fish biodiversity using classical and molecular tools	Fish biodiversity database updated, species added	Number	1	3	2	3	3
		Molecular DNA markers for species identification developed	Number	1	2	1	1	1
	Development of eco-friendly and techno-	Species diversification	Broodstock and seed production technologies for finfish/shellfish species	number	1	1	1	1

economically viable aquaculture technologies and harvest & post-harvest technologies for production and productivity enhancement.		developed						
	System diversification	Innovative aquaculture technologies improved	number	1	1	1	1	1
	Research support for feed formulation for finfish and shellfish species	Efficient and cost-effective feed for different life stages of finfish/shellfish formulated	number	0	1	1	1	1
	Disease diagnostic and control measures	Molecular techniques for disease diagnoses identified	number	0	1	1	1	1
	Fish waste utilization for product development	Products from fish waste developed	Number	0	1	1	1	1
	Develop value-added products	Value added and ready to eat products developed	Number	1	1	1	1	1
	Identification of packaging material	New packaging material identified	Number	0	1	1	1	1
	Quality control and hygiene practices in fish processing	Protocol for quality control and food safety developed	Number	0	1	1	0	1
Development of responsible fishing techniques	Fishing gear designs improved for diversified and conservational fishing	Number	2	1	1	2	2	
	Alternate materials for fishing craft & gear identified	Number	0	1	0	0	1	
	Popularization of by-catch reduction devices	Number	0	1	0	1	0	
	Commercialization of process & products	Process and products commercialized	Number	1	1	1	1	1

	Education and Training in different aspects of fishing & fish processing technology	PG/Doctoral programmes conducted	Number of students	70	70	0	70	70
		Training and skill upgradation programmes conducted	Number of trainees	700	800	750	1000	1200
	Consultancy services	Analytical & advisory support to the industry	Number	5	5	4	5	5
		Consultancy services undertaken	Number	2	2	1	4	5

Section 4 Description and definition of success indicators and proposed methodology

To enhance fish production and productivity on a sustainable basis from the available resources, and to address the issues and strategies to overcome the critical research gaps in realizing the full production potential from fisheries and aquaculture sector, the research activities have been consolidated and prioritized into two major objectives.

Objective 1 pertains to enhancing fish production from the open water systems through assessment and monitoring of fisheries resources of different aquatic eco-systems.

Objective 2 refers to increasing fish production through culture activities in different aquatic eco-systems and develop harvest and post harvest technologies for optimum utilization of the resources.

The action points and the success indicators under each objective have been identified depending on the priority and availability of the resources and the needs and requirements of the stakeholders.

It is expected that by undertaking these programmes, there would be an increase in fish production, conservation of resources, more opportunities for livelihood and employment generation, increase in foreign exchange earnings, , higher visibility of the research Institutes in public domain through Public-Private Partnership and commercialization of technologies, enhanced, HRD, capacity building and skill upgradation in the sector.

The Fisheries Division has undertaken several policy initiatives from time to time in the form of management reforms within the overall directions, guidance and framework of the ICAR. These strategies and restructuring initiatives are aimed at identifying priorities for focused research to achieve the set targets and ensure accountability in converting outlays into outputs & outcomes, better returns on investments, optimum utilization of resources to achieve the vision “**Fish for All**”.

Section 5 Specific performance requirement from other departments that are critical for delivering agreed results.

The Fisheries Division is working in close coordination and linkages with the Ministry of Agriculture; Ministry of Commerce; Ministry of Science & Technology; Ministry of Environment & Forest; Ministry of Earth Sciences; Ministry of Food Processing etc. through interface and participation in various committees and meetings addressing the researchable issues in fisheries and aquaculture for formulating the strategies and guidelines for policy interventions to facilitate increasing fish production and productivity. Support from all these agencies and organizations are essential for achieving the mission of providing required food, nutritional, socio-economic and livelihood security.

Section 6: Outcome/ Impact of activities of organization

S. No.	Outcome/Impact of Organization/RCs	Jointly responsible for influencing this Outcome/Impact with the following Organization (s)/ Departments/ Ministry	Success indicator	2009-10	2010-11	2011-12	2012-13	2013-14
1.	Increased fish production and productivity from open water systems on a sustainable basis	Ministry of Agriculture, Commerce, Science & Technology, Environment & Forest, Earth Sciences, Food Processing etc.	Percentage enhancement in productivity of reservoirs and wetlands	10%	15%	20%	25%	30%
2.	Increased fish production and productivity from aquaculture systems		Improvement in economically viable aquaculture technologies	2%	2%	2%	2%	2%
3.	Availability of specialized / trained manpower to support the fisheries & aquaculture sector through human resource development, capacity building and skill upgradation		Enhanced knowledge base in aquaculture through HRD in number of students passed out under various academic programmes	-	-	5%	5%	5%
			Percentage increase in persons trained under various training and skill upgradation programmes	10%	15%	20%	25%	30%