



A1	A1: Management objectives and reference points	The fishery has not developed any objectives or target reference points to ensure that the total multi-species assemblage is maintained or restored to levels capable of producing the TRP (e.g. multi-species maximum sustainable yield (MMSY) as qualified by relevant environmental and economic factors).	The fishery has informally adopted objectives and target reference points to ensure that the total multi-species assemblage is maintained or restored to levels capable of producing the TRP.	Shift risk score to 8	1. Meet with CMFR to seek agreement on the use of multispecies MSA as the basis for setting Target and Limit Reference Points for the fishery. 2. Seek discussions with fisheries management agencies about the preparation of a management plan based on a multispecies MSA approach. Ensure that the plan has clear objectives which can be measured against indicators so as to track progress over time.	Meeting records Template prepared based on discussions	Regular from approval date	When plan is adopted	Consultants Fisheries agencies of Goa and Maharashtra CMFR	See Cells L5 and L6	See Cell M5	Follow up on management plan preparation	USD5000
A2	A2: Data and information	The fishery monitors indicators relating to total catch with a low degree of precision and regularly and collects some information that could be used to estimate the status of the fishery resources through trawls.	The fishery monitors indicators relating to total catch with a high degree of precision and frequency and collects sufficient data and information to formally assess the current status of the fishery resources.	Shift risk score to 17	Prepare a report on monitoring options and feed into management plan template. Include indicator species, keystone species and hub species but also measures of effort, fishing distribution (spatial)	Short report prepared Meetings records	Start date + 6 months	End of year 1	Consultants Fisheries agencies of Goa and Maharashtra CMFR	USD2000	1. Work with CMFR and stage government fisheries agencies to identify what data relevant to the fisheries are collected on a regular basis. 2. Work with CMFR and fisheries agencies to develop a list of data needs that will help monitor the overall catch and link to a multispecies MSA management approach	Work with fisheries agencies and CMFR to implement a suitable catch monitoring program and evaluate stock status (See Cells G2 and H2)	USD5000
A3	A3: Fishery resource information	The fishery resource status has been assessed using a scientifically sound methodology.	The fishery resource status has been recently assessed using a scientifically sound methodology.	Shift risk score to 17	1. Workshops with CMFR and fishery agency staff on the development of multispecies stock assessments, suitable reference points and management plan preparation for these types of fisheries 2. Use workshop outcomes to seek commitments to the preparation of suitable stock assessments on a regular basis	Workshop report	Upon approval	6 months to workshop and 12 months for agreement on stock assessments	Project manager Project team CMFR Fisheries agencies of Goa and Maharashtra	See Cell L5	See Cell M5	AIM would be to have first assessment undertaken	Estimated USD200 000 Year 3
A4	A4: Status of the fishery resource	The current status of the fishery resource with respect to a target reference point is unknown.	The current status of the fishery resource with respect to a target reference point is known with a level of certainty and is based on proxies.	Shift risk score to 8	nothing proposed in Year 1 beyond preparations as set out in M1.7					TBD	1. Work with CMFR and state agencies to develop fisheries management plans incorporating suitable target reference points. 2. Utilise the information obtained in A3 to estimate the status of the fishery resource against the Target Reference Point	Much of the work in Year 3 will be related to collecting and analysing data that will determine status against RPI, which may not be formally adopted by Year 3.	For Year 3 the cost will very much depend on what TRP is chosen and how the agencies choose to evaluate. It could be that there is a relatively modest cost (maybe USD 10000) to update the best model but at this stage there is far too much uncertainty to provide a workable cost estimate of this or other approaches
A5	A5: Management measures and their effectiveness	There are management measures in place to control total catch, but they are not effective.	There are management measures in place to control total catch, which are effective.	Management measures based on an MMSY approach have been devised and incorporated into the proposed management plans	nothing proposed in Year 1 beyond preparations as set out in M1.7					TBD	No work proposed	1. Discuss with fisheries agencies the design and adoption of management measures that suit the multispecies nature of the target fisheries 2. Incorporate these measures into the proposed fisheries management plans 3. Have an ongoing data collection plan that supports the evaluation of the success of the management measures.	Discussions with agencies may cost USD10000. At this stage the aim is to have the agencies do the data collection and analysis. The primary data are already collected by CMFR.
A6	A6: Management performance	The fishery has failed to achieve the objectives it has set in relation to the aggregate catch OR there are no such objectives.	The fishery is making progress to meeting the objectives it has set in relation to the aggregate catch.	Shift risk score to 8	nothing proposed in Year 1 beyond preparations as set out in M1.7					TBD	No work proposed	It may be feasible to evaluate progress by the end of Year 4 depending on the collection and analysis of the right data.	See Cell O18
Part B	High-risk species/species groups		Very high										
B1	B1: Management objectives and reference points	The fishery has not identified high-risk species/species groups and has not developed any objectives or limit reference points to ensure that these species or groups of species are not being fished east their FRP.	The fishery has identified some high-risk species/species groups and the fishery has informally adopted objectives or limit reference points for these species or groups of species.	Shift risk score to 8	Prepare a report on monitoring options and feed into management plan template. Include indicator species, keystone species and hub species	Short report prepared Management plan template prepared	Start date + 6 months	End of year 1	Project manager Project team CMFR Fisheries agencies of Goa and Maharashtra	USD2000 for report Workshop costs USD7000 See Cell L5 for Reference Points	See Cell M5 and workshop the design of objectives and limit reference points suitable for these species and ensure that these are incorporated into the proposed fisheries management plans		USD2000 for Year 2
B2	B2: Data and information	Monitoring does not include indicators that can be used for evaluating management performance or conducting stock assessments for high-risk species/species groups.	Monitoring includes some indicators that can be used for evaluating management performance or stock assessments for some high-risk species/species groups.	Shift risk score to 8	nothing proposed in Year 1 beyond preparations as set out in B1 and B2	Short report prepared Management plan template prepared	Start date + 6 months	End of year 1	Project manager Project team CMFR Fisheries agencies of Goa and Maharashtra	USD121, will be included in same budget	Work with fisheries agencies and CMFR to identify and adopt indicators of the status of high risk species and an associated monitoring program which could be adopted in the fishery management plans	Work with fisheries agencies and CMFR to incorporate indicators of the status of high risk species which could be adopted in the fishery management plans	USD4000 to continue work with agency staff
B3	B3: Assessment of high-risk species/species groups	The status of high-risk species/species groups has been recently assessed based on indirect evidence from indicators or proxies of stock status.	The status of high-risk species/species groups has been recently assessed based on indirect evidence from indicators or proxies of stock status.	Shift risk score to 8	nothing proposed in Year 1 beyond preparations as set out in B1 and B2					TBD	No work proposed	Work with CMFR and fishery agencies to evaluate the status of some high risk species	USD2000 Year 3
B4	B4: Status of high-risk species/species groups	The status of high-risk species/species groups with respect to the limit reference point is unknown.	The status of the high-risk species/species groups with respect to the limit reference point is known with a low level of certainty.	Shift risk score to 8	nothing proposed in Year 1 beyond preparations as set out in B1 and B2					TBD	No work proposed	Work with CMFR and fishery agencies to evaluate the status of some high risk species	Covered by estimates in CO4
B5	B5: Management measures and their effectiveness	There are no management measures in place aimed at preventing high-risk species/species groups falling below the FRP.	No management measures aimed at preventing species going below the Limit Reference Point. No LRP set	Shift risk score to 8	nothing proposed in Year 1 beyond preparations as set out in B1 and B2					TBD	No work proposed	Unlikely that there will be measures in place by Year 3	
B6	B6: Management performance	The fishery has failed to achieve the objectives it has set in relation to high-risk species/species groups OR there are no such objectives.	The fishery is making progress to meeting the objectives it has set in relation to high-risk species/species groups.	Shift risk score to 8	nothing proposed in Year 1					TBD	No work proposed	It may be feasible to evaluate progress by the end of Year 4 depending on the collection and analysis of the right data.	
Part C	Reduction component of the catch		Very high										
C1	C1: Management objectives (Catch of the reduction component)	The fishery has not developed any objectives for the total catch (see Part A) or for the reduction component of the catch to ensure that the reduction component of the catch is maintained at levels capable of producing less than the TRP (e.g. multispecies maximum sustainable yield (MMSY) of the reduction component as qualified by relevant environmental and economic factors).	The fishery has developed objectives for the total catch (see part A) but NOT for the reduction component of the catch to ensure that the reduction component of the catch is maintained at levels capable of producing less than the TRP (e.g. MMSY) of the reduction component as qualified by relevant environmental and economic factors).	Progress as per M1.7, A2 and B1		Meeting records	On approval	End year 1	Project manager Project team CMFR Fisheries agencies of Goa and Maharashtra	See Cell L5	See Cell M5	See Cell M5	USD4000 to continue work with agency staff
C2	C2: Management objectives (juvenile catch)	The fishery has not developed any objectives relating to the catch of juvenile high-value fish in the reduction component to ensure that the catch is having a minimal impact on total fish resource of the UoA.	The fishery has informally adopted objectives relating to the catch of juvenile high-value fish in the reduction component to ensure that the catch is having a minimal impact on total fish resource of the UoA.	Shift risk score to 6	Progress as per Progress as per M1.7, A2 and B1	Meeting records	On approval	End year 1	Project manager Project team CMFR Fisheries agencies of Goa and Maharashtra	See Cell L5	See Cell M5	See Cell M5	Covered by estimate in O28
C3	C3: Data and information (reduction component catch)	The fishery does not monitor any indicators relating to the catch of the reduction component nor collect sufficient data and information to assess the current status of the reduction component.	The fishery monitors indicators relating to the catch of the reduction component with a low degree of certainty and frequency and collects some information that could be used to estimate the status of the reduction component through proxies.	Shift risk score to 6	1. Review the existing information on the current catch of juvenile, higher value fish in the reduction component. 2. Work with industry to generate a more detailed understanding of what is included in the reduction component of catch, i.e. what species and volumes are used for fisheries 3. With government design a mechanism for monitoring selected components of the reduction component of the catch.	Short report on existing information Sampling plan developed and implemented for existing fisheries Meetings records	On approval	End year 1	Project manager Project team CMFR Fisheries agencies of Goa and Maharashtra	See Cell L21, will be included in same budget	1. If information is insufficient work with government/researchers to implement a research program (could be vessel based or fisheries plant based) 2. Work with governments to design suitable management objectives to incorporate into the proposed fishery management plans	Work with fisheries agencies and CMFR to incorporate indicators of the status of the reduction component which could be adopted in the fishery management plans	USD 10000, may require staff training and establishment of factory based data collection
C4	C4: Data and information (juvenile catch)	The fishery does not monitor any data on the catch of juvenile high-value fish in the reduction component	The fishery monitors indicators relating to the catch of juvenile high-value fish with a low degree of certainty and frequency.	Shift risk score to 6	See Cell G19		On approval	End year 1	Project manager Project team CMFR Fisheries agencies of Goa and Maharashtra	See Cell L21, will be included in same budget	Work with fisheries agencies and CMFR to identify and adopt indicators of the status of juvenile fish which could be adopted in the fishery management plans	Work with fisheries agencies and CMFR to incorporate indicators of the status of juvenile fish which could be adopted in the fishery management plans	USD4000 to continue work with agency staff
C5	C5: Assessment and status of the resource (reduction component)	There is no recent or reliable assessment of the status of the fish resources in the reduction component of the catch.	The status of the fishery resource in the reduction component is based on indirect evidence from indicators or proxies of stock status.	Shift risk score to 6	nothing proposed in Year 1		Year 3	Year 5	Project manager Project team CMFR Fisheries agencies of Goa and Maharashtra	TBD	No work proposed	1. Work with government to undertake a fishery resource assessment based on a suitable Multispecies/Aggregate Yield based approach It may be feasible to evaluate progress by the end of Year 4 depending on the collection and analysis of the right data.	USD2000 for Year 3
C6	C6: Assessment and status of the resource (juvenile catch)	There has been consideration of the possible impact of the catch juvenile high-value fish, but no assessment has been made.	The impact of the catch of juvenile higher value fish on the fishery resources in the UoA is known with a fair degree of accuracy.	Progress towards a change in risk rating	nothing proposed in Year 1		Year 3	Year 5	Project manager Project team CMFR Fisheries agencies of Goa and Maharashtra	TBD	Provide a short report based on a review of available literature, as the basis for working with fishers and government to better understand the implications of any catch of juvenile high value fish.	It may be feasible to evaluate progress by the end of Year 4 depending on the collection and analysis of the right data.	USD2000 for short report Other costs to be covered by Cell O32
C7	C7: Management measures and their effectiveness	There are no management measures in place to control the catch of the reduction component nor the amount of juvenile high-value fish taken.	There are management measures in place to control the catch of the reduction component and the amount of juvenile high-value fish taken but are not effective.	Shift risk score to 6	nothing proposed in Year 1		Year 3	Year 5	Project manager Project team CMFR Fisheries agencies of Goa and Maharashtra	TBD	No work proposed	1. Pending the results of previous assessments (C3) to C6) work with government and the fishing sector to evaluate mechanisms for reducing the take of juvenile high value fish species 2. Work with government to ensure that there are requirements for monitoring that work towards any management targets identified It may be feasible to evaluate progress by the end of Year 4 depending on the collection and analysis of the right data.	USD4000 for training persons for fishermen USD2000 for Year 2
C8	C8: Management performance (reduction component)	The fishery has failed to achieve the objectives it has set in relation to the reduction component OR there are no such objectives.	The fishery is making progress to meeting the objectives it has set in relation to the reduction component of the catch.	Shift risk score to 6	nothing proposed in Year 1		Year 4	Year 5	Project manager Project team CMFR Fisheries agencies	TBD	Work with government to ensure that there are management objective for the reduction and juvenile component included in the management plan	It may be feasible to evaluate progress by the end of Year 4 depending on the collection and analysis of the right data.	

