



**Establishment and Operation of a Regional System of
Fisheries *Refugia* in the South China Sea and Gulf of Thailand**

REPORT

STAKEHOLDER CONSULTATION WORKSHOP IN KEP PROVINCE

**KEP, CAMBODIA
22-24 AUGUST 2017**

Prepared by
FISHERIES ADMINISTRATION, CAMBODIA

SOUTHEAST ASIAN FISHERIES DEVELOPMENT CENTER
TRAINING DEPARTMENT



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1. Opening workshop

- 1) The stakeholder consultation workshop was organized by Fisheries Administration (FiA) of Cambodia collaborating with Kep Fisheries Administration Cantonment on 22nd to 24th August 2017 funded by SEAFDEC/UNEP/GEF Fisheries Refugia. At the first day (22nd August 2017), The workshop was conducted at meeting room of the Department of Agriculture, Forestry, and Fisheries in Kep province, participating 38 people from departments of environment, tourism, education, district and commune authorities, water bordering police, and NGOs (**Annex 1**).
- 2) **Mr. Theng Borin**, Director of Department of Agriculture, Forestry, and Fisheries in Kep province, Firstly, he expressed thanks to the teamwork from Fisheries Administration, especially **Mr. Leng Sy Vann**, Deputy Director of Department of Fisheries Conservation, relevant departments, water bordering police, and district and commune authorities in Kep province that take their opportunities to attend the workshop today. This showed efforts to join and protect fisheries resources to enhance an image of Kep province that is a tourism province and rich of fisheries resources. The teamwork from FiA will present fisheries refugia project that is a part of illegal fishing reduction and to enhance local livelihood too. He hoped that the workshop today provided inputs and got successful. The workshop was opened from now. (**Annex 1,2&3**)
- 3) At the secondary and third day, the workshop was conducted at Thmey village, Sangkhat Damnak Chorng Oeur, Damnak Chorng Oeur city, Kep province, participating 73 people from fishermen and community fisheries (**Annex 1,2&3**).
- 4) **Mr. Leng Sy Vann**, Deputy Director of Department of Fisheries Conservation, firstly expressed thanks to **Mr. Pheun Phalla**, Deputy Director of Kep Fisheries Administration Cantonment, community fisheries, and fishers attending the workshop today. Fisheries Refugia Project is 4 year-regional project that has been implemented by 6 countries such as Cambodia, Indonesia, Malaysia, Philippines, Thailand, and Vietnam. For Cambodia, the project has been worked in coastal provinces such as Kep, Preah Sihanouk, and Koh Kong. He added that this is the second-time visit of the project teamwork from FiA to Kep province and at the first time since early June. At that time, the project teamwork met and discussed with Director of Kep Fisheries Administration Cantonment, fishermen, and also visited site at Koh Po. He declared to open the workshop from now.

2. Summary of workshop objectives and purpose

- 5) **Ms. Chin Leakhena**, Deputy Director of Department of Administration and Litigation introduced and presented the workshop objectives and purposes, focusing on the discussion of selected sites, aquatic species in selected sites, connection between fish biology and its environment, problem setting, and threatening important fish species. Long-term results of the project included sustainable fishery resources management, increasing important fish species, marine natural balance, sustainable fishing fishermen, increasing local livelihood.

3. Overview of objectives of seafdec/unep/gef fisheries refugia initiative

- 6) **Mr. Leng Sy Vann** introduced and presented overview of objectives of SEAFDEC/UNEP/GEF FISHERIES REFUGIA INITIATIVE. His presentation focused on longer-term project goal, medium-term project objectives, and specific project objective. The longer-term project goals focused on transformational change in how the fisheries and environment sectors work together, medium-term project objectives focused on align with those of the fisheries component of the Strategic Action Programme for the South China Sea; and specific project objective focused on operational management of key threats to fish stock and critical habitat linkages. He added that the project of fisheries refugia has 4 components, including 1)

component 1: Identification and management of fisheries and critical habitat linkages at priority fisheries refugia in the South China Sea; 2) **component 2:** Improving the management of critical habitats for fish stocks of transboundary significance via national and regional actions to strengthen the enabling environment and knowledge-base for fisheries refugia management in the South China Sea; 3) **component 3:** Information Management and Dissemination in support of national and regional-level implementation of the fisheries refugia concept in the South China Sea and Gulf of Thailand; and 4) **component 4:** National and regional cooperation and coordination for integrated fish stock and critical habitat management in the South China Sea and Gulf of Thailand.

4. Background of strategic action program for south china sea and development of fisheries refugia initiative

- 7) **Mr. Leng Sy Vann** presented the Background of Strategy Action Program for South China Sea and Development of fisheries *refugia* initiative, focusing on GEF's role in addressing global environment problems, especially South China Sea and Gulf of Thailand. The GEF is established in 1992 in Brazil, and which has its mechanism to solve these problems happening through TDA (Transboundary Diagnosis Analysis) and SAP (Strategic Action Program). To address these issues, GEF setting its goal is to promote collective management of transboundary water system and implementation of full range of policy, legal and institutional reforms, and investment contributing to sustainable use and maintenance of ecosystem services. He added that so the Project of Establishment and Operation of Regional System of Fisheries *Refugia* in South China Sea and Gulf of Thailand has been developed in GEF-6 IW Strategy that is the project to help and solve global environment issues and also to ensure sustainable fishery resources uses. Therefore, Fisheries *Refugia* concept developed and what is the Fisheries *Refugia*? Fisheries *Refugia* are "Spatially and geographically defined, marine or coastal areas in which specific management measures are applied to sustain important species [fisheries resources] during critical phases of their life-cycle, for their sustainable use.". So far, the regional fisheries refugia sites are identified for 52 known spawning and nursery areas.

5. DISCUSSION OF WATCHING VIDEO CLIP ON FISHERIES REFUGIA INITIATIVE

- 8) **Ms. Chin Leakhena** introduced and presented Video Clip on fisheries refugia initiative prepared by SEAFDEC. She explained the importance of the video clip providing ideas and experiences done in Southeast Asia countries. And then she raised main points of the video, including pressure of fishing ground, blast fishing, seagrass and coral reef destruction, water pollution from factories and tourism sector development. In particular, Thai expert from SEAFDEC raised and worried about the capture of juvenile making impact of fish stock and brood stock at future. These make fisheries resources declined gradually. Therefore, fisheries *refugia* initiative plays main roles in ensuring food security, income, and enhancement of local livelihood with more than 270 million people living on SCS' s coastal to promote sustainable use rather than prohibiting fishing.

6. Results of workshop

A. Group discussion on identification of provincial program/project related to sustainable development

- 9) **Ms. Chin Leakhena** explained to participants from the relevant departments, district and commune authorities, provincial police and military police, water bordering police, and NGOs

(MCC & CORIN) about provincial sustainable development projects/programs. There are many provincial development projects/programs raised during the discussion. They included as follow:

- ✓ Sewage Filtered Project supported/funded by ABD has costed USD 1million to USD 1.5millions. That project has been started in 2017, that is implemented by Ministry of Tourism collaborating with Department of Tourism at Kep province. That project has targeted to work at Crab market in Damnak Chorng Oeur District, Kep province.
- ✓ Environmental Balanced Maintenance Project supported and funded by the Ministry of Environment (MOE). It is such evaluation project of MOE and has started in 2017 until now, collaborating with provincial department of environment that target to ensure clean water, wind, and land.
- ✓ Koh Tonsay (island) Investment Project has been invested by private sector. That project has been approved by Royal Government of Cambodia for 3 years ago, but it has not worked yet.
- ✓ Port Improved Project at Koh Tonsay (Island) has invested by private sector and it has still been discussed with competent departments, especially the department of public works and transport.
- ✓ Marine Fishery Conservation Project supported and funded by EU and is implemented by MCC. The project has started since 2015 until now at Koh Arches (island) in order to protect fisheries resources and to patrol illegal fishing done by fishermen.
- ✓ Crab Bank Project funded by SEAFDEC and implemented by CORIN since 2006 until now. That project has targeted to help fishermen skill in crab aquaculture and to enhance local livelihood through providing alternative livelihood such as crab culture etc.

B. Group discussion on priority fisheries specie and threat to fish life cycle and critical habitat linkage

- 10) Ms. Chin Leakhena explained to participants about how to do the matrix of priority fisheries specie and threat to fish life cycle and critical habitat linkage. There are many stages of fish life cycle such as spawning, juvenile, and adult. One stage of them was selected to discuss when the stage is easy to threat heavily. She added that two species are selected to discuss such as Blue Swimming Crab and Anchovy in Kep province. Then she was divided into 3 groups and each group used flipchart to write on the matrix.
- 11) In general, the discussion results from the relevant departments, district and commune authorities, provincial police and military police, water bordering police, and NGOs from MCC and CORIN showed in the matrix below (**Annex 4**):

SPECIES	LIFE-CYCLE STAGE	THREAT	IMMEDIATE CAUSE	ROOT CAUSE	MANAGEMENT ACTION
Blue Swimming crab	Juvenile	<ul style="list-style-type: none"> • Loss of habitat (i.e. sea grass) • Illegal fishing • Habitat destruction • Over fishing 	<ul style="list-style-type: none"> • Mesh net trap with long tailed • Purse sein trawler • Destructive fishing gear 	<ul style="list-style-type: none"> • High market demand • High price • Unsustainable • fishing gear using 	<ul style="list-style-type: none"> • Strengthening fisheries law enforcement • Fisheries law extension • Establishment of conservation area • Creating crab bank • Alternative livelihood provision

					<ul style="list-style-type: none"> • MFMA creation
	Spawning	<ul style="list-style-type: none"> • Mesh net trap with long tail • Purse seine trawlers • Unsustainable fishing gears 	<ul style="list-style-type: none"> • Illegal fishing 	<ul style="list-style-type: none"> • Illegal fishing • Effort fishing to catch more fish 	<ul style="list-style-type: none"> • Fisheries Law enforcement • Law extension • Conservation area development
Anchovy	Adult	<ul style="list-style-type: none"> • Illegal fishing • Habitat destruction 	<ul style="list-style-type: none"> •Purse seine net trawlers •Trawlers •Electro fishing 	<ul style="list-style-type: none"> • High market demand • High demand of anchovy in making fish sauce • High market demand in Vietnam 	<ul style="list-style-type: none"> • Fisheries law enforcement • Conservation area establishment • Strengthening collaboration with relevant institutions • Strengthening MCS • Deploy artificial box • Strengthening collaboration between bilateral transboundary
	Spawning From October to February	<ul style="list-style-type: none"> • Habitat loss (i.e. Coral reef) 	<ul style="list-style-type: none"> •Electro fishing •Pair purse seine net trawlers •Coral reef exploitation •Drop anchor 	<ul style="list-style-type: none"> • High demand of anchovy 	<ul style="list-style-type: none"> • Strengthening law enforcement • Extend, educate, and create communication network amount fisherfolk and stakeholders • Establish fisheries refugia

12) But the discussion results from fishermen generally showed in the matrix below (**Annex5**):

SPECIES	LIFE-CYCLE STAGE	THREAT	IMMEDIATE CAUSE	ROOT CAUSE	MANAGEMENT ACTION
Blue swimming crab	Spawning From December to January	<ul style="list-style-type: none"> • Destruction of spawning habitat • Loss of seagrass • Over fishing 	<ul style="list-style-type: none"> • Illegal fishing • Trawlers with mesh size net • Practicing inappropriate fishing gear 	<ul style="list-style-type: none"> • High price • High market demand 	<ul style="list-style-type: none"> • Strengthening law enforcement • Fisheries law extension

			<ul style="list-style-type: none"> • Long tailed trap with mosquito size net 		<ul style="list-style-type: none"> • Creation of conservation area • Creation of crab bank • Strengthening patrolling and monitoring
	Juvenile	<ul style="list-style-type: none"> • Habitat loss such as seagrass, coral reef, and seaweed 	<ul style="list-style-type: none"> • Practicing long tailed trap • Purse seine net trawlers • Unsustainable fishing gear using 	<ul style="list-style-type: none"> • Destructive fishing gear 	<ul style="list-style-type: none"> • Strengthening law enforcement • Fisheries law extension • Creation of crab bank
Anchovy	Adult	<ul style="list-style-type: none"> • Habitat loss • Loss of Spawning habitat • Over fishing • Destruction of habitat 	<ul style="list-style-type: none"> • Illegal fishing • Purse seine net trawlers 	<ul style="list-style-type: none"> • High market demand for making fish sauce 	<ul style="list-style-type: none"> • Strengthening law enforcement • Fisheries law extension • Creation of conservation area • Collaboration with relevant authorities to crack down illegal fishing • Strengthening bilateral transboundary • Banning to fish in August to October • Banning to fish inshore with depth of 3 meters • Law extension • Strengthening patrolling and monitoring
	Spawning From October to February at all places	<ul style="list-style-type: none"> • Habitat loss 	<ul style="list-style-type: none"> • Electro fishing • Purse seine net trawlers • Modern fishing gear 	<ul style="list-style-type: none"> • High demand of fish in Vietnam and nation • Fermented fish 	<ul style="list-style-type: none"> • Strengthening law enforcement • Extending, educating, and creating communication

	with stable and clean water			<ul style="list-style-type: none"> • Dried salty fish • High market demand for national and international level • High demand of fish in making fish sauce • High price • Make fish sauce tasty 	<p>network for fishermen and linkages, especially relevant authorities</p> <ul style="list-style-type: none"> • Creation of fisheries refugia for anchovy
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A. Group discussion on stakeholder analysis and engagement planning

- 13) **Ms. Chin Leakhena** explained to participants about how to do stakeholder analysis using the chart of X-axis talking about Interest and Y-axis talking about Influence. Scoring is from 0 to 10 meaning that the score is more and more higher, interest and influence are more and more stronger. Then she was divided into 3 groups to discuss this question and each group used flipchart and to write sticky notes on it.
- 14) In general, the discussion results from the relevant departments, district and commune authorities, provincial police and military police, water bordering police, and NGOs from MCC and CORIN showed in the matrix below (**Annex 6**):

Stakeholder Analysis		
Types of Stakeholder	Influence	Interests
Provincial Governor	10	10
District Governor	8	6-10
Commune Head	5-6	5-7
Police Post	5-6	5-6
Kep Fisheries Administration Cantonment	7	8-10
Department of Environment	2-6	2-7
Department of Tourism	5-7	5-7
Water Bordering Police	5-7	5-6
Military Police	5	1
NGO (MCC & CORIN)	5	10
Fish Traders	7	2
Fishing Gear Inventor	7	1

- 15) But the discussion results from fishermen generally showed in the matrix below (**Annex 7**):

Stakeholder Analysis		
Type of Stakeholders	Influence	Interests

Provincial Governor	10	10
District Governor	5	5
Commune Head	4-6	3-6
Police Post	5-6	5-6
Kep Fisheries Administration Cantonment	8	10
Department of Environment	2-6	2-6
Department of Tourism	5	5
Water Bordering Police	7-9	7-9
NGOs (MCC, CORIN&LI)	4-5	8-9
Community Fisheries	0-3	10
Fish Trader	1-9	1-4
Microfinance	2	9

B. Discussion of the collation of baseline information and data related to fish life cycle and critical habitat links, as well as fishing effort dynamics

- 16) **Ms. Chin Leakhena** introduced and explained to participants from relevant departments the project planned to collect the baseline information related to fish life cycle and critical habitat links as well as fishing effort dynamics. The information is very important for the project to prepare work plan for project implementation. Generally, fishermen from Ankol village and Koh Po Island have known clearly about spawning and nursing habitat for blue swimming crab and anchovy, that is the place for fisheries refugia development.
- 17) Plans for the baseline information collection will be conducted in Ankol village and Koh Po Island providing useful information for the fisheries refugia project at Kep province. In addition, the information of fishing effort dynamics consists of electro fishing, pair purse seine net trawler, long tailed trap with mosquito size net, and destructive fishing gear, that those fishing gears are applied at fishing ground of Koh Arches, Koh Po, Koh Bal, and Koh Tonsay because those islands are productive of fisheries resources.
- 18) Generally, based on discussion results showed that blue swimming crab spawns from December to January and Anchovy from October to February at Koh Po Koh Kbal, and Koh Tonsay (Island) where are their suitable spawning habitat and mostly, they are found to spawns at Koh Po. Therefore, Koh Po is selected to create fisheries refugia for blue swimming crab and anchovy with size of 2km X 2Km (see mapping with highlight in yellow color in **(ANNEX 3)**)

C. Discussion of planning socio economic survey in use assessment impact of area based management in the localities of fisheries refugia sites

- 19) **Ms. Chin Leakhena** introduced and explained to participants that the project will plan to conduct socio economic survey to evaluate the project impact assessment after end project. The survey will be possible at 4th quarter of this year and it is so useful for the project implementation specially to compare pre- and post-project.

D. Discussion of communication and use of media

- 20) **Ms. Chin Leakhena** introduced and explained to participants about communication and use of media at Kep province. According to the discussion result, there are many kinds of media communicated today such as Telegram, Facebook, and Messengers. Mostly, they have used

Facebook for communication in their workplace and private services and it also becomes a popular media at Kep province.

C. Close of the workshop

- 21) **Mr. Leng Sy Vann**, on behalf of Fisheries Refugia Project Teamwork from FiA expressed very much thanks to all participants from relevant departments, district and commune authorities, provincial police and military police, water bordering police, and NGOs from MCC and CORIN, and community fisheries, especially Kep Fisheries Administration Cantonment helping the workshop organization for 3 days, got fruitful results. The workshop was closed at 5:30pm.

ANNEX 1

Agenda for stakeholder consultation at kep province



Seafdec/unep/gef/cambodia project “establishment and operation of a regional system of fisheries refugia in the south china sea and gulf of thailand”

Provisional time table and agenda for stakeholder consultation at kep province

For Relevant Departments and NGOs	
1 st day: 22 August 2017 (Tuesday)	
08.00	Registration
08.30-08.45	Agenda 1: Opening of the Meeting by Dr. Kao Sochivi, Deputy Director General of Fisheries Administration and National Focal Point or Director of DFC, and National Scientific Focal Point
08.45-09.05	Agenda 2: Summary of workshop objectives and purposes
09.05-09.30	Agenda 3: Overview of Objectives of SEAFDEC/UNEP/GEF Fisheries <i>refugia</i> Initiative
09.30-09.50	Agenda 4: Background of strategic action program for South China Sea and the development of fisheries <i>refugia</i> initiative
09.50-10.10	Coffee break and group photo
10.10-10.50	Agenda 6: Identification of provincial programs/projects relating to sustainable development <ul style="list-style-type: none"> - Group of relevant departments - Group of NGOs
10.50-11.10	Presentation of the results of group discussion
11.10-12.00	Agenda 8: Discussion of priority fisheries species and threat to fish life cycle and critical habitat linkages <ul style="list-style-type: none"> - Group of relevant departments - Group of NGOs
12.00-13.30	Lunch
13.30-13.50	Presentation of the results of group discussion
13.50-14.20	Agenda 9: The collation of baseline information and data relating to fish life cycle and critical habitat links, as well as fishing effort dynamics
14.20-15.00	Agenda 10: Conduct stakeholder analysis and engagement planning <ul style="list-style-type: none"> - Group of relevant departments - Group of NGOs <i>Presentation of the results</i>
15.00-15.20	Coffee break
15.20-15.40	Agenda 11: The planning socio economic survey in use assessing impacts of area based management in the localities of fisheries <i>refugia</i> sites
15.40-16.00	Agenda 12: Communication and use of media
16.00-17.00	Agenda 13: Application of Aerial Visual Survey Technology in baseline setting and monitoring
17.00-17.30	Agenda 14: Presentation of 4-year project work plan
For Fisher folks and Its Stakeholders	
2 nd day: 23 August 2017 (Wednesday)	
08.00	Registration

08.30-08.45	Agenda 1: Opening of the Meeting by Director of DFC, and National Scientific Focal Point
08.45-09.05	Agenda 2: Summary of workshop objectives and background
09.05-09.35	Agenda 3: Overview of SEAFDEC/UNEP/GEF Fisheries <i>refugia</i> Initiative
09.35-11.00	Agenda 4: Discussion of priority fisheries species and threat to fish life cycle and critical habitat linkages - Group of fisher folks - Group of stakeholders
11.00-11.20	Coffee break and group photo
11.20-12.00	Continue agenda 4.....
12.00-13.30	Lunch
13.30-14.30	Presentation of the results of group discussion
14.30-15.30	Agenda 5: The collation of baseline information and data relating to fish life cycle and critical habitat links, as well as fishing effort dynamics
15.30-15.50	Coffee break and group photo
15.50-16.30	Continue agenda 5.....
3 rd day: 24 August 2017 (Thursday)	
08.30-10.00	Agenda 6: Conduct stakeholder analysis and engagement planning - Group of fisher folks - Group of stakeholders <i>Presentation of the results</i>
10.00-10.20	Coffee break
10.20-11.30	Agenda 7: The planning socio economic survey in use assessing impacts of area based management in the localities of fisheries <i>refugia</i> sites
11.30-12.00	Agenda 12: Communication and use of media
12.00-13.30	Lunch
13.30-16.00	Agenda 13: Application of Aerial Visual Survey Technology in baseline setting and monitoring
16.00-16.30	Agenda 14: Presentation of 4-year project work plan

ANNEX 2

List of Participants for Stakeholder Consultation Workshop on 22 to 24 August 2017 in
Kep Province

Name	Sex	Title	Organization	Telephone
1. Theng Borin	M	Director	Department of Agriculture Forestry and Fisheries	077 410103
2. Rin Marina	F	Staff	Department of Tourism	015 239392
3. Phu Srey	M	Chief of Ach Seah Post	Transboundary Police Office	015 705454
4. Sao Savuth	M	Chief of Angkoul Post	Soldier Office No. 430	012 793578
5. Tep Do Samnang	M	Chief of Koh Karang Post	Soldier Office No. 430	088 2999552
6. Keo Son	M	Chief of Koh Por Post	Soldier Office No. 430	097 6630007
7. Paul Ferber	M	Director	MCC	016 715444
8. Norm Sina	F	Project Field Coordinator	CoRiN	016 714081
9. Nget Sochivon	M	Paul Ferber	CoRiN	096 6050044
10. Thab Rathana	F	Staff	MCC	088 6252276
11. Hong Phon	M	Commune council	Pong Teok commune	092 268055
12. Pen Ngy Rithy	M	Commune council	Or Krasa	096 5144545
13. Sao Phanny	F	Deputy Governor of District	Kep	
14. Nhem Neon	M	Commune council	Prey Thom	097 8632683
15. Chan Song	M	1 st Vice Chief of the Commune	Kep	077 369928
16. Mey Lin	M	Commune council	Angkoul	012 539011
17. Soun Say	M	Deputy Director	Department of Education Youth and Sport	016 582282
18. Yong Bros	M	Deputy Director	Department of Planning	092 126584
19. Kim Sina Rath	M	Deputy Director	Department of Environment	077 315757
20. Kin Sopheak	M	Deputy Governor of District	Domnak Chang Aeur	096 5566915
21. Chork Sineath	M	Chief	Kep FiA Division	097 6956299
22. Sim Reach	M	Contract staff	Kep FiAC	015 396975
23. Pheun Phalla	M	Vice chief	Kep FiAC	012 947375
24. Pha Ra	M	Chief	Domnak Chang Aeur FiA Sangkat	0979888789
25. Sien Hov	M	Chief	Or Krasa	012622491
26. Tann So Chally	M	Staff	Kep FiAC	098 635018
27. King Sophanny	M	Vice Chief	Kep FiAC	012 494269
28. Kuch Virak	M	Chief	Kep FiAC	012 875557
29. Norn Rithy	M	Staff	Provincial Department of Agriculture Forestry and Fisheries (Kep)	
30. Buth Sina	M	Staff	Provincial Department of Agriculture Forestry and Fisheries (Kep)	
31. Lun Rasy	M	Vice Commander	Marine Transboundary of Kep	
32. Keon Sarum	M	Chief of office	Kep Police Commissioner	012 927868

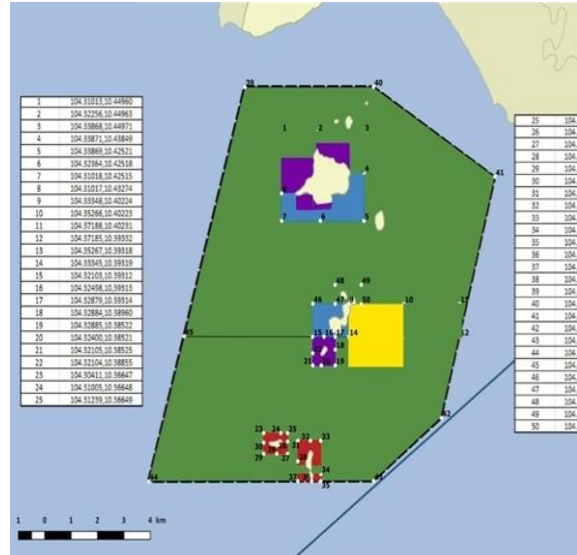
33. Chin Leakhena	F	Deputy Director of DAAL	FiA	078 686840
34. Leng Sy Vann	M	Deputy Director of DFC	FiA	017 446373
35. Horm Radong	M	Staff	MaFReDI	069578227
36. Tuch Srey Povpisey	F	Vice head of Administrative office, DFC	FiA	016 877729
37. Ngin Kamsan	M	Vice head, DFC	FiA	092 555446
38. Kim Sokha	M	Head of Fisheries Conservation Division	DFC/FiA	012 784687
39. So Narin	M	Committee	Kep CFI	
40. Rin Sinoun	F	Committee	Kep CFI	
41. Chap Thea	M	Fisher	Kep Village	
42. Choung Vuthy	M	Fisher	Kep Village	
43. Chork Ny	M	Chief of CFI	Kep CFI	
44. Meas Va	M	Committee	Angkoul CFI	
45. Aung An	M	Vice chief	Angkoul CFI	
46. Ngung Sam Nang	F	Chief of CFI	Angkoul CFI	
47. Pov Sun	M	Village head	Angkoul	
48. Phu Kang	F	Fisher	Phnom Leav Village	
49. Uy Phok	M	Fisher	Phnom Leav Village	
50. Mov Saran	M	Fisher	Kep Village	
51. Eam Dov	M	Fisher	Kep Village	
52. Choun Lan	M	Fisher	Kep Village	
53. Kong Vath	M	Fisher	Aum Peng Village	
54. Kao Keoun	M	Fisher	Aum Peng Village	
55. Phu Pov	M	Fisher	Leav Village	
56. Ou Phang	M	Committee	Or Krasa CFI	
57. Deang Ra	M	Fisher	Or Krasa Village	
58. Pov Sun	M	Fisher	Domnak Cham Bork Village	
59. Teng Chen	M	Fisher	Kep Village	
60. Chap Nhor	M	Fisher	Kep Village	
61. Say Savon	M	Fisher	Kep Village	
62. Hun Kha	M	Fisher	Kep Village	
63. Bo Kimlang	M	Fisher	Kep Village	
64. Prum Sitha	M	Fisher	Kep Village	
65. Yong San	M	Fisher	Thmey Village	
66. Nos Nel	M	Fisher	Kep FiAC	
67. Sok Roun	M	Owner of fish source factory	Kep Village	
68. Pheun Phalla	M	Vice chief	Kep FiAC	
69. Prak San	M	Head	Thmey CFI	097 7811281
70. Samreth Ny	M	Committee	Thmey CFI	
71. Hun Rum	M	Member	Thmey CFI	
72. Aong Seak	M	Committee	Thmey CFI	
73. Yib Matsen	M	Fisher	Thmey CFI	
74. Ha Mat	M	Fisher	Thmey CFI	
75. Chheng Phorn	M	Fisher	Thmey CFI	
76. Sub Kro Yeu	M	Fisher	Thmey CFI	
77. Mat Ou Meuth	M	Fisher	Thmey CFI	
78. Kob O Meuth	M	Fisher	Thmey CFI	
79. Uy Ky	M	Fisher	Thmey CFI	

80. Heang Veasna	M	Fisher	Thmey CFi	
81. Thay Bunnak	M	Fisher	Thmey CFi	
82. Meuth Layhon	M	Fisher	Thmey CFi	
83. Sim O Beythey Leus	M	Fisher	Thmey CFi	
84. Nos Yeb	M	Fisher	Thmey CFi	
85. Leb Meuth	M	Fisher	Thmey CFi	
86. Chea Chhay	M	Fisher	Thmey CFi	
87. Hak Los	M	Fisher	Thmey CFi	
88. Ngeav Channy	M	Fisher	Thmey CFi	
89. Mith Sao Das	M	Fisher	Thmey CFi	
90. Sos E Meuth	M	Fisher	Thmey CFi	
91. Cheam Sopheap	M	Fisher	Thmey CFi	
92. Neth Ong	M	Fisher	Thmey CFi	
93. Nos Sa Les	M	Fisher	Thmey CFi	
94. Math Sos	M	Fisher	Thmey CFi	
95. Cheam Lay	M	Fisher	Thmey CFi	
96. Mey Luy	M	Fisher	Thmey CFi	
97. Kao Sokhun	M	Fisher	Thmey CFi	
98. Cheav Kheng	M	Fisher	Thmey CFi	
99. Kheav Chan	M	Fisher	Thmey CFi	
100. Seth Phanny	M	Fisher	Thmey CFi	
101. Heang Theun	M	Fisher	Thmey CFi	
102. Heang Pheun	M	Fisher	Thmey CFi	
103. Pheun Phalla	M	Vice chief	Kep FiAC	
104. Sim Reach	M	Contract staff	Kep FiAC	

ANNEX 3

Participants' Pictures of Stakeholder Consultation Workshop on 22 to 24 August 2017 at Kep province





ANNEX 4

**Group Discussion on Threats to Fish Life Cycle and Critical Habitat Linkages from
Relevant Departments**

Results of Group Discussion: (G1)

SPECIES	LIFE-CYCLE STAGE	THREAT	IMMEDIATE CAUSE	ROOT CAUSE	MANAGEMENT ACTION
Blue swimming crab	Juvenile	– Loss of habitat (i.e. sea grass)	– Pair purse seine net trawlers – Modern fishing gear (i.e. long tailed trap)	– Illegal fishing	– Law extension – Strengthening law enforcement – Creating crab bank
Anchovy	Spawning From October to February	Habitat loss (i.e. Coral reef)	– Electro fishing – Pair purse seine net trawlers	High demand of anchovy	– Strengthening law enforcement – Extend, educate, and create communication network amount fisherfolk and stakeholders – Establish fisheries refugia

Results of Group Discussion: (G2)

SPECIES	LIFE-CYCLE STAGE	THREAT	IMMEDIATE CAUSE	ROOT CAUSE	MANAGEMENT ACTION
Blue Swimming crab	Spawning	– Spawning habitat loss – Seagrass loss – Over fishing	– Illegal fishing – Long tailed trap with mosquito size net – Purse seine trawlers – Unsustainable fishing gears	– High market demand for human consumption – High price	– Fisheries Law enforcement – Law extension – Conservation area development
Anchovy	Adult		– Illegal fishing – Purse seine trawlers	High market demand	– Fisheries law enforcement – Conservation area establishment – Strengthening collaboration with relevant institutions and transboundary

Results of Group Discussion: (G3)

SPECIES	LIFE-CYCLE STAGE	THREAT	IMMEDIATE CAUSE	ROOT CAUSE	MANAGEMENT ACTION
Blue swimming crab	Juvenile	<ul style="list-style-type: none"> - Habitat destruction - Over fishing 	<ul style="list-style-type: none"> - Practicing Distractive fishing gears (i.e. purse seine net trawlers) 	<ul style="list-style-type: none"> - Illegal fishing - Poor living level - Market demand 	<ul style="list-style-type: none"> - Alternative livelihood provision - MFMA creation - Increasing crab bank extension
Anchovy	Adults	<ul style="list-style-type: none"> - Big scale and mixed capture of fish - Habitat destruction 	<ul style="list-style-type: none"> - Purse seine net trawlers - Trawlers - Electro fishing 	<ul style="list-style-type: none"> - High demand of anchovy in making fish sauce - High market demand in Vietnam - Limited law enforcement 	<ul style="list-style-type: none"> - Strengthening MCS - Deploy artificial box - Strengthening bilateral transboundary

ANNEX 5

Group Discussion on Threats to Fish Life Cycle and Critical Habitat Linkages from Fishermen

Results of Group Discussion: (G1)

SPECIES	LIFE CYCLE STAGE	THREAT	IMMEDIATE CAUSE	ROOT CAUSE	MANAGEMENT ACTION
Blue swimming crab	Juvenile	<ul style="list-style-type: none"> - Habitat loss such as seagrass, coral reef, and seaweed 	<ul style="list-style-type: none"> - Practicing long tailed trap - Purse seine net trawlers - Unsustainable fishing gear at the depth of 0.5 to 1.5 meter 	<ul style="list-style-type: none"> - Destructive fishing gear 	<ul style="list-style-type: none"> - Strengthening law enforcement - Fisheries law extension - Creation of crab bank
Anchovy	Spawning From October to February at all places with stable and clean water	Habitat loss	<ul style="list-style-type: none"> - Electro fishing - Purse seine net trawlers - Modern fishing gear 	<ul style="list-style-type: none"> - High demand of fish in Vietnam and nation - Fermented fish - Dried salty fish 	<ul style="list-style-type: none"> - Strengthening law enforcement - Extending, educating, and creating communication network for fishermen and linkages, especially relevant authorities - Creation of fisheries refugia for anchovy

Results of Group Discussion: (G2)

SPECIES	LIFE-CYCLE STAGE	THREAT	IMMEDIATE CAUSE	ROOT CAUSE	MANAGEMENT ACTION
Blue swimming crab	Spawning	<ul style="list-style-type: none"> - Destruction of spawning habitat - Loss of seagrass - Over fishing 	<ul style="list-style-type: none"> - Illegal fishing - Trawlers with mosquito size net - Practicing inappropriate fishing gear 	<ul style="list-style-type: none"> - High price - High market demand 	<ul style="list-style-type: none"> - Strengthening law enforcement - Fisheries law extension - Creation of conservation area
Anchovy	Adult	<ul style="list-style-type: none"> - Habitat loss - Seagrass loss - Spawning habitat 	<ul style="list-style-type: none"> - Illegal fishing - Purse seine net trawlers 	<ul style="list-style-type: none"> - High market demand for making fish sauce 	<ul style="list-style-type: none"> - Strengthening law enforcement - Fisheries law extension - Creation of conservation area

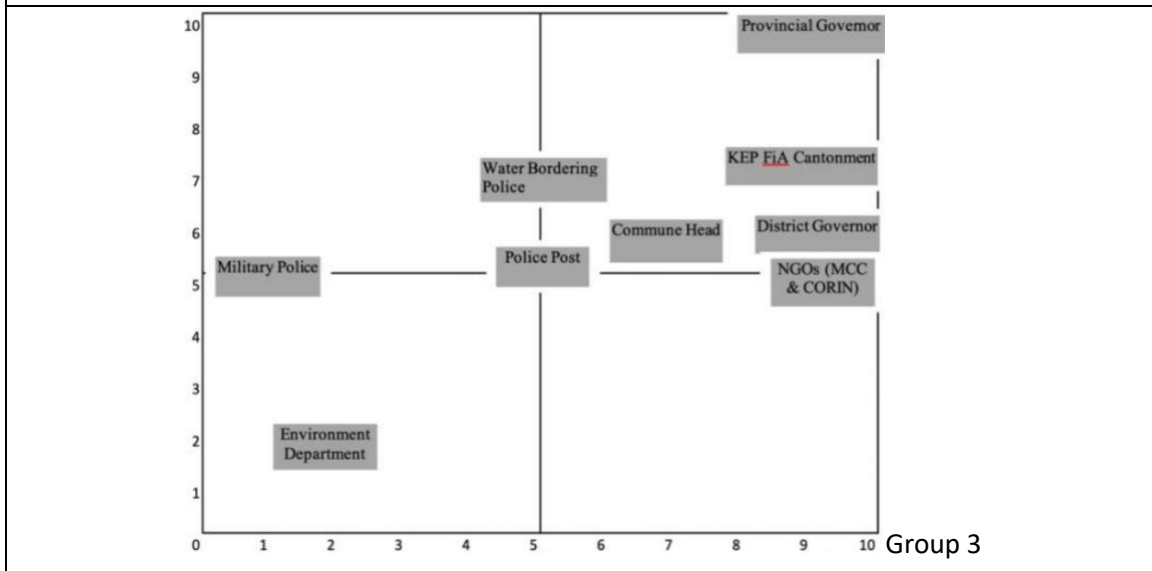
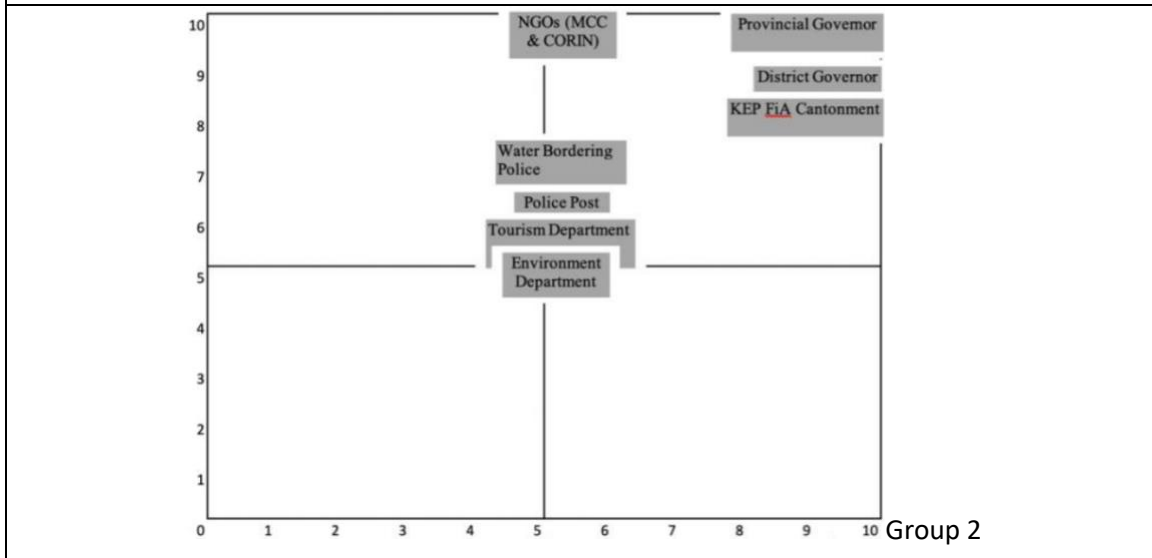
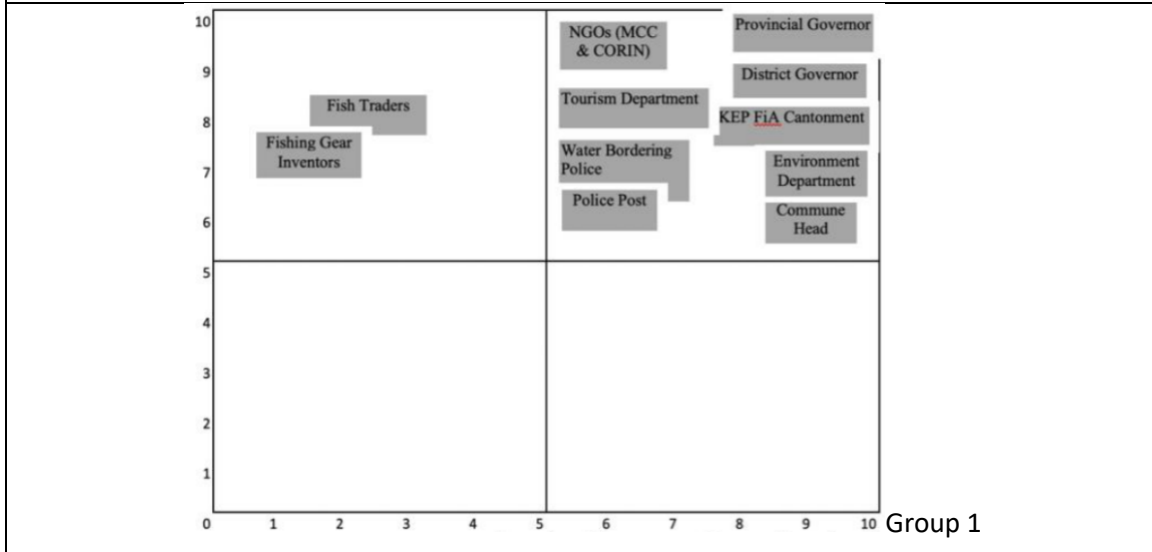
					<ul style="list-style-type: none"> – Collaboration with relevant authorities to crack down illegal fishing – Strengthening bilateral transboundary
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Results of Group Discussion: (G3)

SPECIES	LIFE-CYCLE STAGE	THREAT	IMMEDIATE CAUSE	ROOT CAUSE	MANAGEMENT ACTION
Blue swimming crab	Spawning On December to January	<ul style="list-style-type: none"> – Over fishing – Mixed fishing – Destruction of habitat 	<ul style="list-style-type: none"> – Long tailed trap – Mosquito size net – Purse seine net trawler 	<ul style="list-style-type: none"> – High market demand for national and international level – High price 	<ul style="list-style-type: none"> – Strengthening law enforcement – Law extension – Creation of crab bank – Strengthening patrolling and monitoring
Anchovy	– Adult	<ul style="list-style-type: none"> – Over fishing – Mixed fishing – Destruction of habitat 	<ul style="list-style-type: none"> – Purse seine net trawler 	<ul style="list-style-type: none"> – High market demand for national and international level – High demand of fish in making fish sauce – High price – Tasty fish sauce 	<ul style="list-style-type: none"> – Banning to fish in August to October – Banning to fish inshore with depth of 3 meters – Law extension – Strengthening patrolling and monitoring

ANNEX 6

Group Discussion of Stakeholder Analysis from Relevant Departments



ANNEX 7

Group Discussion of Stakeholder Analysis from Fishermen

