

GENDER IN AQUACULTURE & FISHERIES

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WOMEN IN SMALL-SCALE MARINE FISHERIES IN CAMBODIA

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Outline of presentation

1. Background information
2. Research methodologies
3. Roles of women in capture fisheries
4. Roles of women in distribution of marine fishery products
5. Summary
6. Recommendations



General introduction

Introduction

- Significant contribution of fishery sector to national economy (8-12%), nutrition, employment, poverty reduction
- Majority of fisheries production comes from freshwater
- Marine capture fisheries contribute 20% of total fishery production
- 141,244 people (13.2%) engage in coastal fisheries
- Men and women take complementary roles in fisheries including fishing and fishing related activities
- Many studies and researches have been conducted on fisheries
- However, women roles in fisheries seems to be ignored in such research documentations and reports
- Only men fisher needs have been taken into account for fishery and rural development

Introduction (Con.)

- Insufficient policy to support benefit of women in the sector
- Getting accurate fishery data from appropriate data collection is crucial for the establishment of a reliable management system and for setting rational regulations
- Necessary to collect accurate data/information on role and responsibility of women in small-scale marine fisheries, in fishing, and distribution of fishery products.



Research methodologies

1. Existing data/information collection

National reports, books, reports, records, datasets, journals & theses

2. Study areas/site selection

1. Kampot province

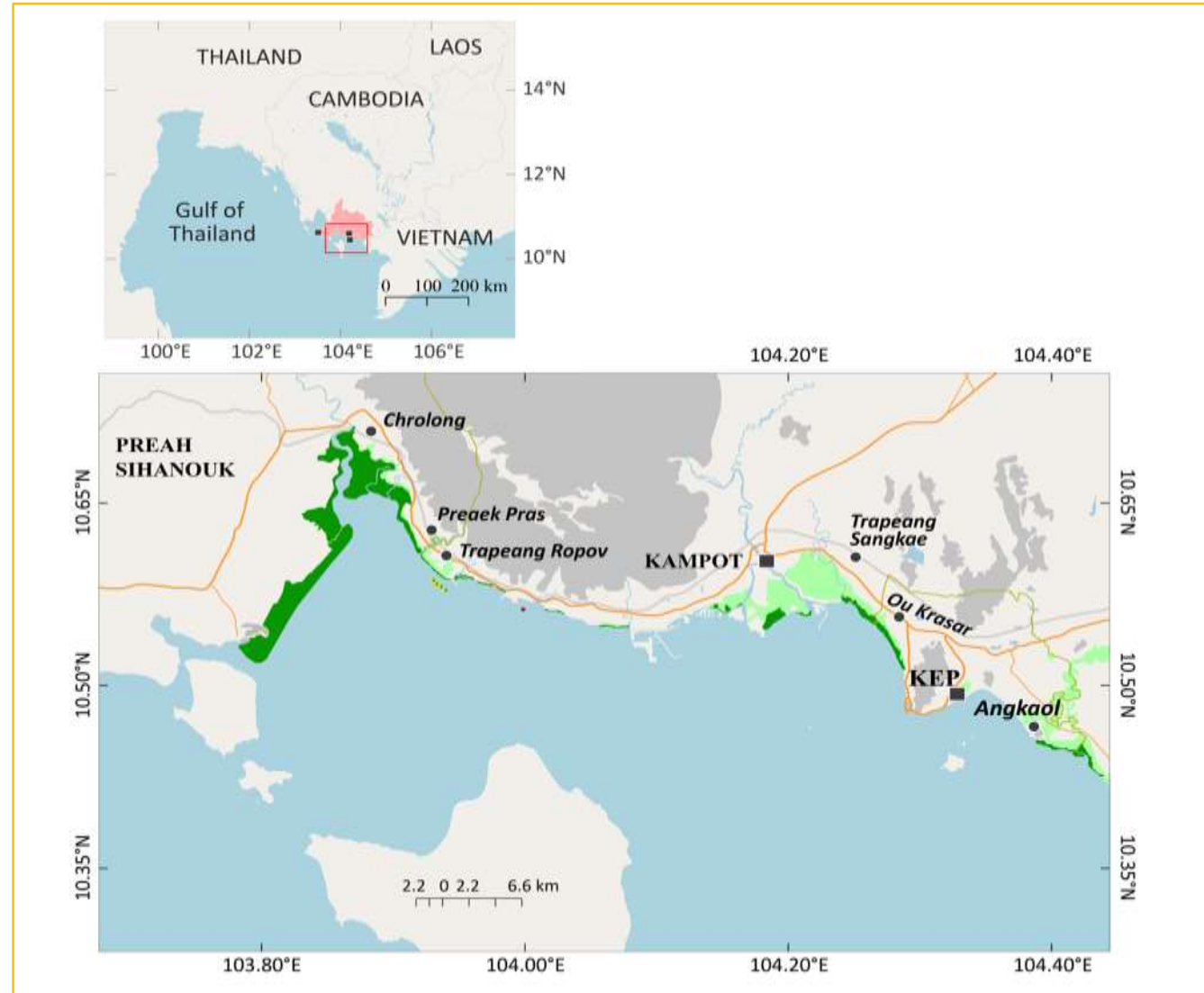
- ✓ Trapeang Ropov
- ✓ Trapeang Sangkae

2. Kep province

- ✓ Angkaol
- ✓ Ou Krasar

3. Preah Sihanouk province

- ✓ Preaek Pras
- ✓ Chrolong



Study Areas

3. Field survey

- ✓ HH interviews
- ✓ Focus group discussion
- ✓ Key informant interviews

4. Sampling sizes

- ✓ All intermediaries
- ✓ Fishers: 290 (Miyata, 2018)

1st: December 15, 2019 - January 8, 2020

2nd: December 1, 2020 - January 12, 2021

5. Data/information collected

I. Fishing

Duty of women in small-scale fishing before, during, and after fishing.

II. Distribution of fishery products

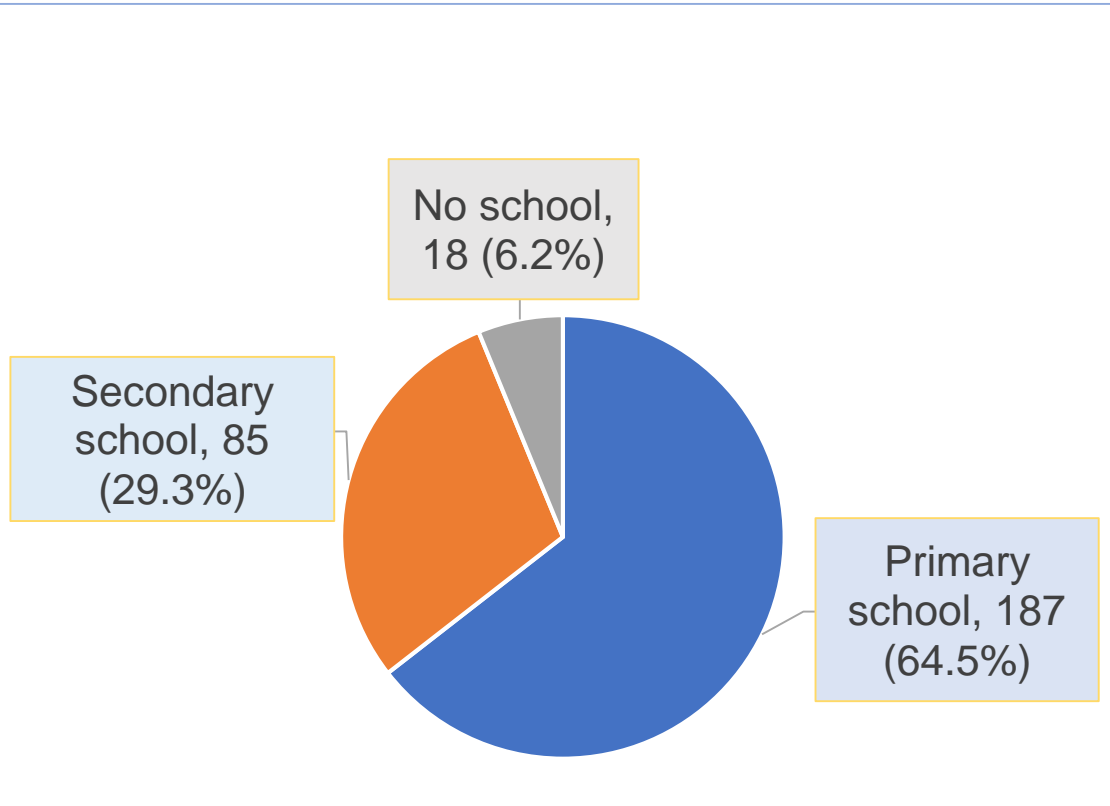
Role of women along the distribution channels.

III. Challenges of women participation in marine fishing



Results of the research

Education and occupation



Education of women



Respondents engage in fishing and fish processing

High dependency on fishery resources including aquatic plants & animals for income generation & nutrition



Roles of women in fishing

Before fishing

- ✓ Mending the fishing nets and fixing the gears



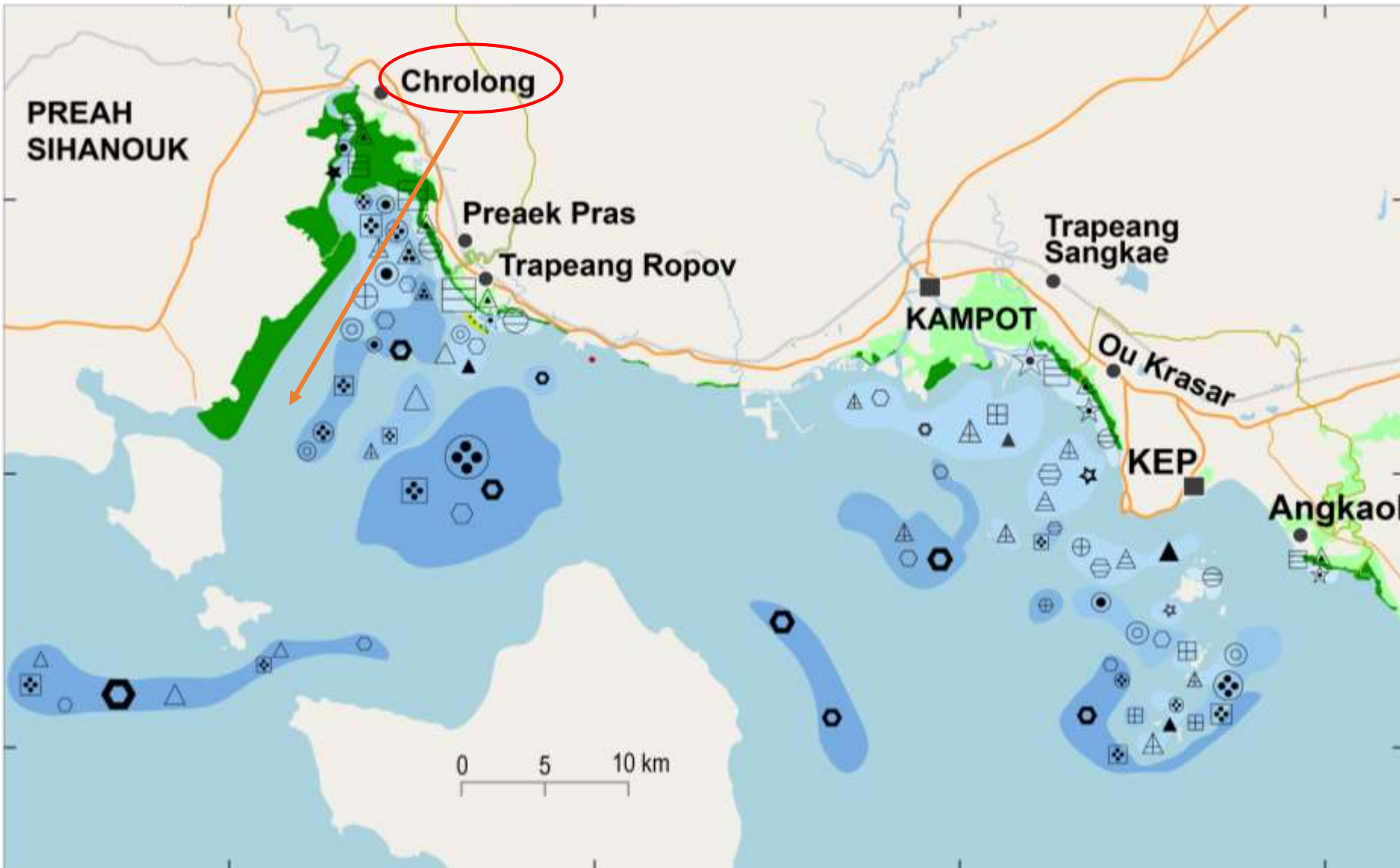
- ✓ Preparing foods and other tools for fishing

Fishing

- 12 of 22 type gears/methods are operated by women
- Women individually conduct hand collection in mangrove & tidal areas
- Work with husband to fish at fishing grounds <10 km from the landing sites & along the channel



Fishing (Con-)



Women from Chrolong using crab trap and gillnet join their husbands to fish at fishing grounds > 10 km away from the village

Fishing grounds in the six study villages

Fishing (Con-)

Fishing gears	T* (hrs)	No. labor	Fishing				Harvesting				Fishing gears	T* (hrs)	No. labor	Fishing				Harvesting			
			M	W	B	G	M	W	B	G				M	W	B	G	M	W	B	G
Hand collection	4-6	1	0	0		0	0		0	Crab trap	8-10	1-3	0	0			0	0			
Hand push-nets	3-6	1	0			0				Crab gillnets	8-10	2-3	0	0			0	0	0		
Beach seine	8	4-10	0			0				Indian threadfin gillnets	8-12	2-3	0	0							
Mullet gillnets	8-9	2-3	0	0		0	0	0		Mangrove crab trap	8-10	1	0								
Rabbitfish gillnets	8-10	2-3	0	0		0	0	0		Centipede fish trap	9-10	1	0								
Halfbeak gillnets	6-8	2-3	0	0		0	0	0		Mackerel gillnets (offshore)	10-12	2-4	0								
Small-winged set bag	24	1-2	0			0	0	0		Mackerel gillnets (inshore)	8-10	2-3	0	0							
Fresh water prawn trap	24-48	1-2	0			0	0			Spotted catfish gillnets	8	1-2	0								
Seabass gillnets	8	1-2	0			0				Squid tow longline	6-8	1-2	0								
Shrimp gillnets	8-10	2-3	0	0		0	0	0	0	Bottom longline for fish	6-8	1-2	0								
Trawler	6-13	3-4	0							Bottom longline for ray	8	1-2	0								
Octopus trap longline	8-9	1-2	0																		

Target species

- 32 marine products are target species
- Economical species include: shrimp, mantis shrimp, swimming and mud crabs, squid, cuttlefish, octopus, Spanish mackerel, grouper, Indian threadfin, seabass, fourfinger threadfin

Gear name	Main target species
Hand collection	Blood cockles, Pacific bean donax, mud crab, Tiger moon snail, Gould's razor shell, shrimp , common geloina, dog conch, eel, mantis shrimp , quadrate horn shell
Hand push-net	Shrimp, grouper, squid , krill, swimming crab , bay sillago, rabbitfish, cuttlefish, mantis shrimp , (mixed fishes)
Beach seine	Shrimp, squid, grouper, swimming crab, mantis shrimp, mud crab , (mixed fishes)
Crab trap	Swimming crab, mud crab , Singapore vinegar crab
Mangrove crab trap	Singapore vinegar crab, mud crab
Centipede fish trap	Shrimp , bay sillago, swimming crab, mud crab, squid (mixed fishes)
Crab gillnet	Swimming crab , crucifix crab, mud crab
Halfbeak gillnet	Halfbeak, bay sillago, mullet, wrasse
Indian threadfin gillnet	Indian threadfin, Spanish mackerel, grouper
Mackerel gillnet	Short mackerel, Spanish mackerel, fourfinger threadfin
Mullet gillnet	Mullet, halfbeak, bay sillago, fourfinger threadfin, croaker, wrasse, short mackerel, rabbitfish, chacunda gizzard shad
Rabbitfish gillnet	Rabbit fish
Seabass gillnet	Seabass, shark, fourfinger threadfin
Shrimp gillnet	Shrimp*
Spotted catfish gillnet	Spotted catfish, croaker, shark
Squid tow longline	Squid and cuttlefish
Bottom longline for fish	Spanish mackerel, fourfinger threadfin, shark, shrimp scad
Bottom longline for ray	Stingrays
Octopus trap longline	Octopus
Small-winged set bag	Banana shrimp , bay sillago, spotted catfish, swimming crab , (mixed fishes)
Fresh water prawn trap	Giant freshwater prawn
Trawl	Squid, cuttlefish, shrimp* , swimming crab , crucifix crab, grouper , mullet, rabbitfish, spotted catfish, (mixed fishes)

After landing...



Sorting marine products (shrimps) conducted by wife and fisher on the fishing vessel after landing

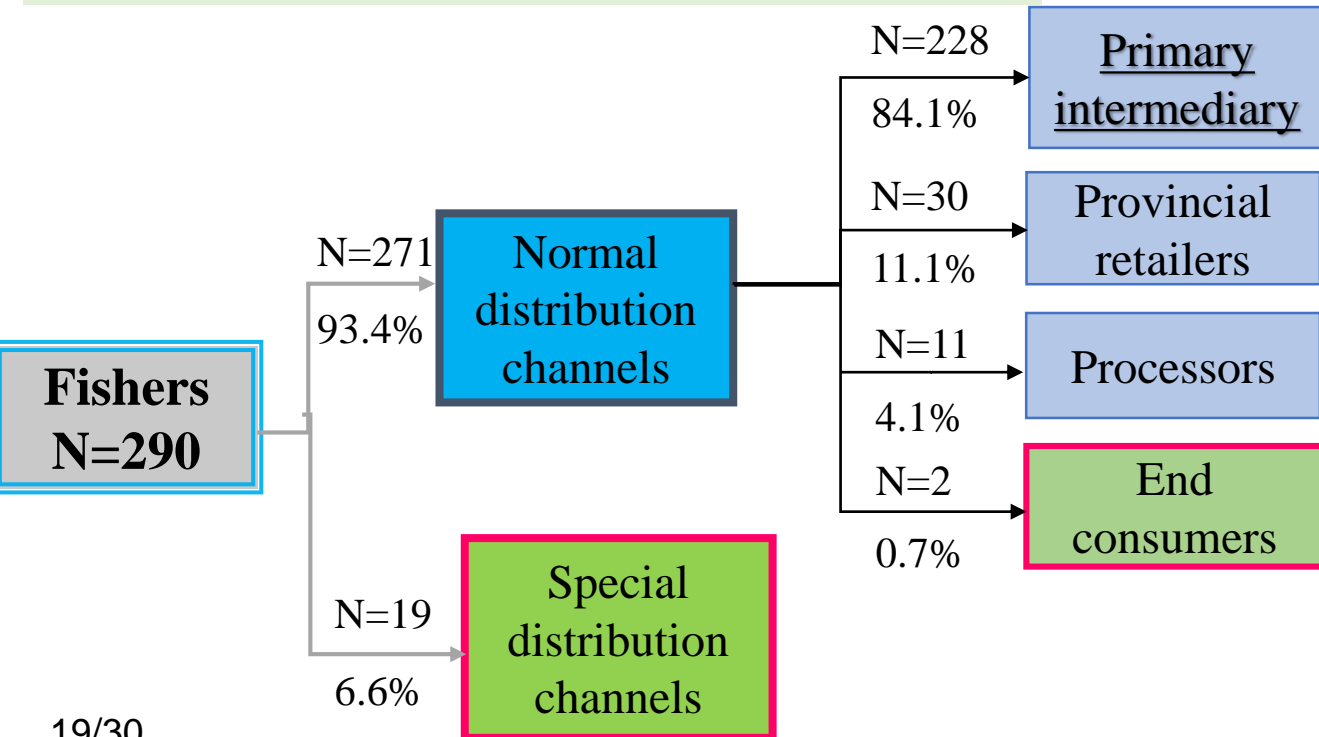


Role in distribution of fishery products

Distribution of marine products

Marine fishery products are sold directly to retail markets & end consumers

Two distribution channels, normal and special distributions



Normal distribution channels

Women intermediary plays a key role in collecting and redistributing fishery products in this distribution channel



Redistributing activities conducted by women intermediary at landing site

Distribution of products by relative of fisher



Wife and relatives of fishers sell marine products to retailer and intermediary at the landing sites

Wife of fisher assisted by the husband distributes marine products at the landing site



Special distribution channels

Women are the key distributors in the special distribution channel which brings much benefit to support their households

- Done by wife/relative of fisher at special market “Crab market”
- Target customer is tourist
- Benefit for fishers through this market: Improve livelihood (e.g, built new houses, vehicles & sent children to university)



Distribution of products by retailer

Women (retailer) take a major role to sell marine products to end consumer at roadside, in the house & in the villages

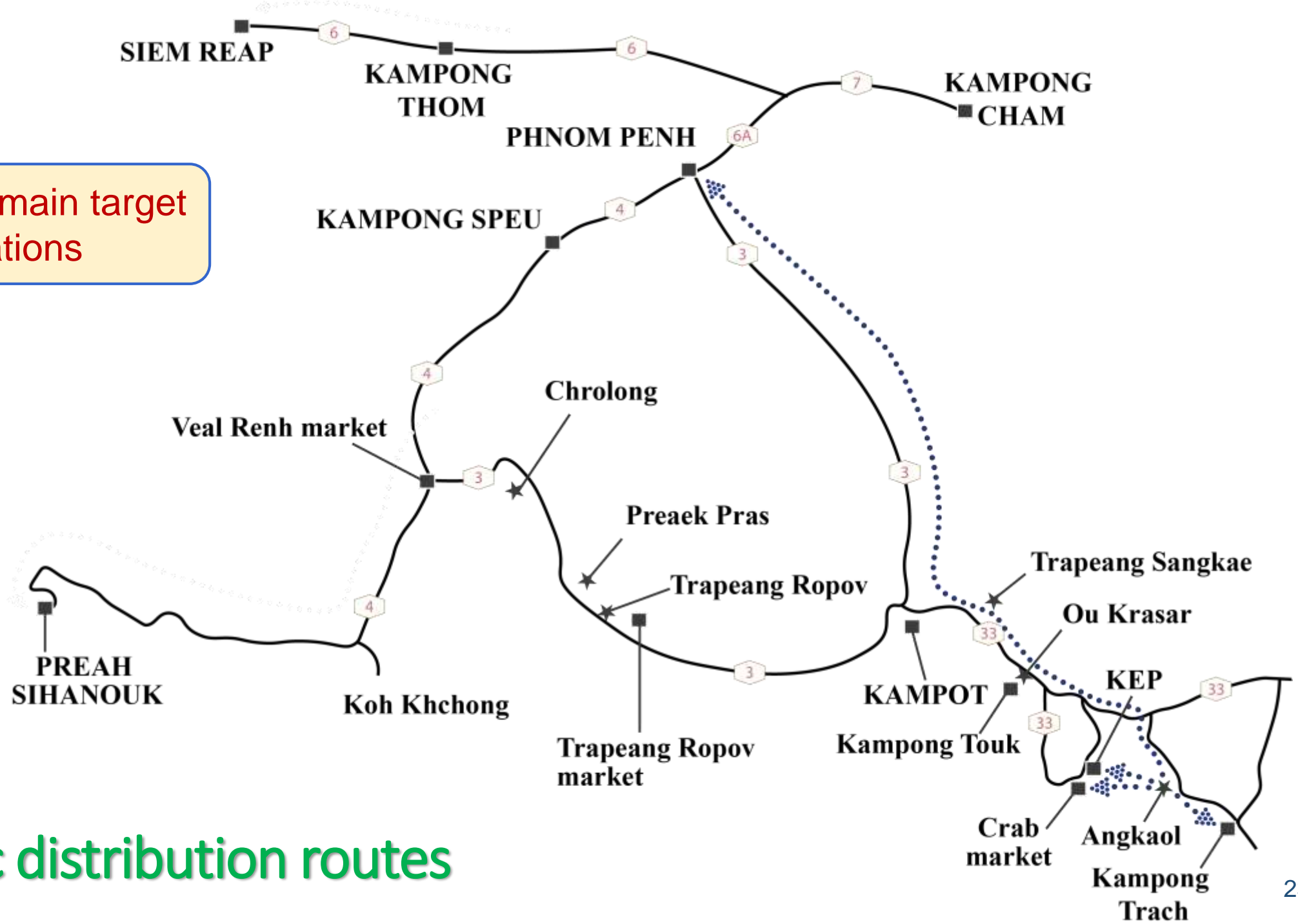


Retailer vends marine fishery products on roadside, in front of the house in the village



Retailer uses motorcycle to move around in the village to sell fishery products

11 areas are main target destinations



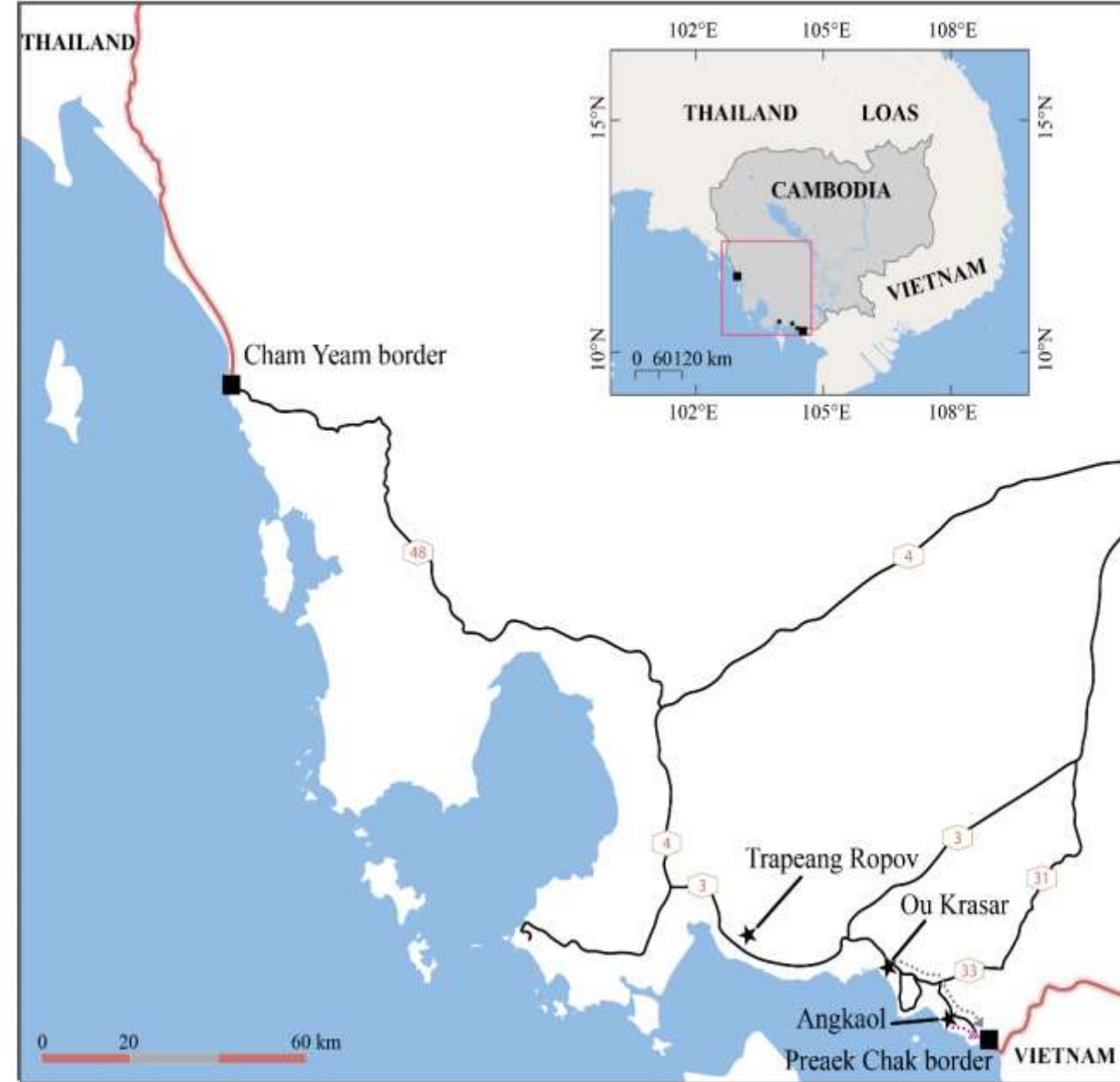
Domestic distribution routes

Cross-border distribution

Three selected products (shrimp, boiled crab meats & mackerel) were transported to cross-borders

- Trapeang Ropov products transported to Cham Yeam by intermediary
- Ou Krasar & Angkaol transported to Preaek Chak by intermediary

Ice in ice boxes is used to transport the fishery products



Cross-border distribution of marine fishery products from study villages. Study villages [★], destinations [■], main road [—], international boundary [—], distribution from Trapeang Ropov [.....], distribution from Ou Krasar [.....], and distribution from Angkaol [.....].

Processing marine products



Producing krill paste



Steam and peel the crab



Producing fish sauce



Dry the shrimp

Challenges of women in marine fisheries

Fishing

- ✓ Multi-roles at household
- ✓ Role in the community and society
- ✓ Unavailability of toilet on fishing vessel
- ✓ Traditional beliefs
- ✓ Roles in post-harvest

Distribution

- ✓ Most of fishers have no bargaining skill to sell fishery products
- ✓ No proper facility to preserve quality of marine products



Summary

Small-scale marine fishing

1. Women & girls have multiple roles in marine fishing & fishing related activities
 - ✓ They mostly conduct fishing near the shore, less than 10 km
 - ✓ Their multiple functions in the households & school, far offshore fishing is impossible
 - ✓ Some norms and faith ban them from engaging far offshore fishing
 - ✓ In contrast, they actively involve in selling and processing fish

Summary (Con.)

Distribution of marine fishery catches

1. Multiple roles of women intermediary in collecting & distributing marine fishery products ([this study](#)), similar to that of inland fisheries ([Nao et al., 2001](#); [Sok, 2005](#); [Seng, 2006](#); [Hori et al., 2009](#))
2. Key role of women in selling fish at roadside & houses ([this study](#)), similar to that of inland fisheries ([Hori et al., 2009](#))

Recommendations

1. Examination of women & girls routine work in fishing & fishing related activities should be undertaken in order to develop a plan to ensure their long-term benefits
2. Women intermediary should be encouraged to take a key role in rural development & management of marine fisheries
3. Women economic empowerment should be promoted in SS marine fisheries
4. The impact of direct selling by wife and relatives of fisher on communities & entire societies should be determined
5. Knowledge on a better handling of capture fish during and post harvest stages should be promoted for women group.

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**Thank you for
your kind
attentions!**

