



#### DFM Cambodia

Scoping phase – October 2019 to March 2020

#### Research activities

Modality: On-the-ground support provided by CIRD (transport, translations, research support and workshop coordination)

Advised by: Kyoko, Derek, Melissa and Ben



Data sources and methods

Literature review and secondary data

#### Primary data:

- 58 semi structured interviews using DFM interview guides
- 18 KPIs
- Rapid survey of 40 traders in the Orussey market
- 10 in-depth discussions with female traders at Orussey market
- Photographs and video clips (Many)
- Diary (not systematic)

#### Sharing and triangulation

Presented at Future Forum-KES organised monthly Research Colloquium (February 2020)

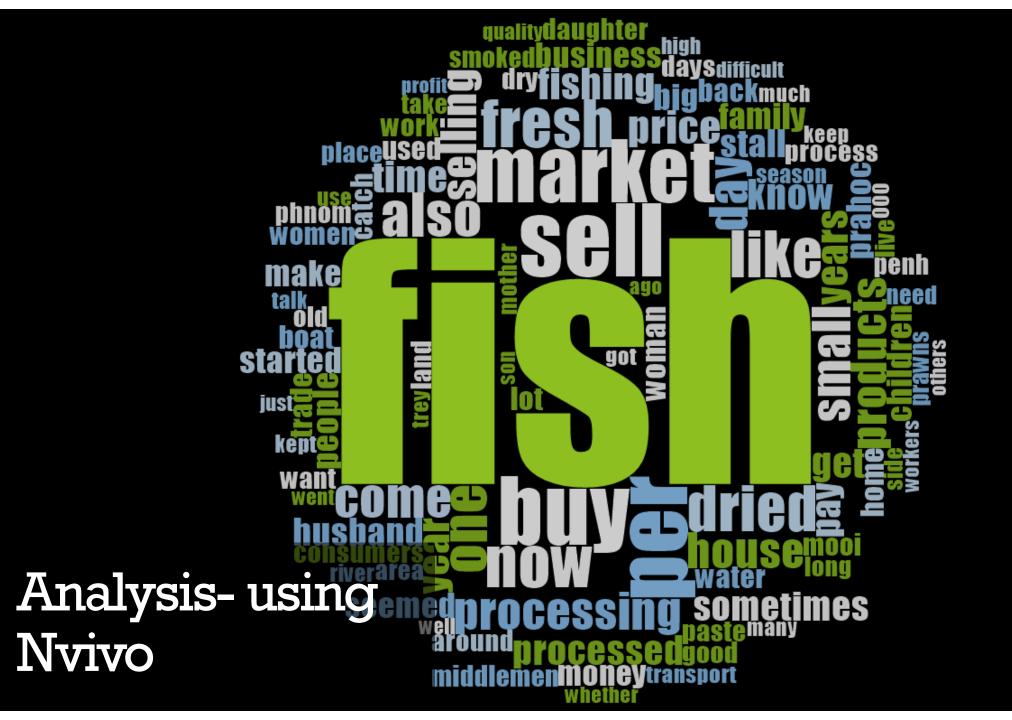
Scoping phase stakeholder workshop (March 2020)



#### Data storage: different methods



- Files interview notes, anonymized, saved by unique reference numbers (name of Province, value chain segment, nu- SR FP 01), stored in Drop Box (for now)
- A data monitoring sheet- Respondent details (including name and phone nu if provided) stored in an excel sheet, saved separately
- Literature- Zotero
- Photographs- Linked to locations and individual respondents
- Qualitative data: semi-structured interviews and in-depth interviews stored in Nvivo (ready for analysis)



#### Analysis- coding on Nvivo

₩ Node Ma	Business start up	12	16	2/22/2020 11:17 AM	GL	2/26/2020 7:53 PM	GL
	Buying and selling prices	18	27	2/22/2020 11:19 AM	GL	2/26/2020 7:46 PM	GL
	O Challenges in processing and trade	7	12	2/22/2020 11:56 AM	GL	2/26/2020 11:35 AM	GL
	Changes compared to past	13	22	2/22/2020 11:46 AM	GL	2/28/2020 3:12 PM	GL
	O Credit	12	14	2/22/2020 2:01 PM	GL	2/26/2020 3:32 PM	GL
	Demand info	15	29	2/22/2020 2:03 PM	GL	2/29/2020 4:42 PM	GL
	Family involvement	16	21	2/22/2020 12:03 PM	GL	2/26/2020 7:42 PM	GL
	Fish processing	0	0	8/20/2020 2:18 PM	GL	8/20/2020 2:18 PM	GL
	Fish processing methods	12	20	2/22/2020 4:10 PM	GL	2/26/2020 7:48 PM	GL
	- O Fish waste	1	1	2/24/2020 2:51 PM	GL	2/24/2020 2:51 PM	GL
	Fresh fish buying price	6	6	2/22/2020 11:42 AM	GL	2/26/2020 7:44 PM	GL
	Input and supplies	2	2	2/25/2020 11:59 AM	GL	2/26/2020 2:16 PM	GL
	Processing season	6	8	2/24/2020 2:06 PM	GL	2/26/2020 4:20 PM	GL
	O Quality	8	13	2/25/2020 9:14 AM	GL	2/28/2020 12:06 PM	GL
	O Volume processed	10	12	2/22/2020 11:40 AM	GL	2/26/2020 7:42 PM	GL
	Fresh fish production	0	0	8/20/2020 2:21 PM	GL	8/20/2020 2:21 PM	GL
	Euture plans for the business	16	18	2/22/2020 11:58 AM	GL	2/26/2020 4:15 PM	GL
	O Getting into business	6	7	2/22/2020 12:00 PM	GL	2/26/2020 2:39 PM	GL
	Government-NGO support	4	7	2/26/2020 12:09 PM	GL	2/26/2020 4:15 PM	GL
	Home and family	15	25	2/22/2020 11:57 AM	GL	2/26/2020 3:29 PM	GL
	O Identity	2	2	2/22/2020 4:05 PM	GL	2/26/2020 11:35 AM	GL
	Interactions with VC actors	3	5	2/26/2020 10:59 AM	GL	2/26/2020 4:02 PM	GL
	□ O Labour	16	26	2/22/2020 11:43 AM	GL	2/26/2020 3:36 PM	GL
	Wages	8	9	2/24/2020 2:28 PM	GL	2/26/2020 7:44 PM	GL
Sources	Land ownership	13	13	2/22/2020 12:16 PM	GL	2/26/2020 7:52 PM	GL
~	Location of buyers	8	12	2/22/2020 12:10 PM	GL	2/26/2020 4:02 PM	GL
Nodes	⊕ O Marketing	0	0	8/20/2020 1:33 PM	Gl	8/20/2020 1:33 PM	Gl
Classifications							
Classifications	Market management and rent	6	8	2/22/2020 11:18 AM	GL	2/25/2020 9:17 AM	GL
Collections	Market opening hours	4	5	2/22/2020 1:26 PM	GL	2/26/2020 8:31 AM	GL
	Number of traders in the market	3	3	2/22/2020 11:45 AM	GL	2/24/2020 3:06 PM	GL
<ul><li></li></ul>	Peak trading season	3	4	2/22/2020 11:16 AM	GL	2/24/2020 2:52 PM	GL
	Processed fish buying source	16	30	2/22/2020 11:43 AM	GL	8/20/2020 2:23 PM	GL
	Processed product buying sources  Volume sold	15	23	2/22/2020 2:09 PM	GL GL	2/29/2020 4:42 PM	GL
		<i>I</i>	,	2/22/2020 11:40 AM		2/26/2020 2:41 PM	GL
	Other livelihoods	6	9	2/25/2020 12:08 PM	GL	2/26/2020 7:52 PM	GL
<b>Folders</b>	Payment methods	1	1	2/24/2020 8:47 AM	GL	2/24/2020 8:47 AM	GL
Totacis	Personal consumption preferences	4	4	2/22/2020 12:19 PM	GL	2/26/2020 2:40 PM	GL
	» Profit	4	5	2/22/2020 4:06 PM	GL	2/26/2020 3:32 PM	GL /

#### Definition of 'dried' fish in Cambodia?





#### Does dried fish matter in Cambodia?





Estimated 6 million as temporary, permanent and seasonal

GDP contribution of fisheries 8-10%



## Food Culture Nutrition

3.55kg of fresh fish and 0.56 of Prahoc consumed per week per household

Fish and fish based foods provide 70-75% of protein intake for Cambodians



### Sustainable Development

Connectivity to the Mekong reduced by 31% and predictions for 4-40% of fish catch decrease



#### **Governance**

516 Community fisheries established by 2018

53% out of total full time fishers are women





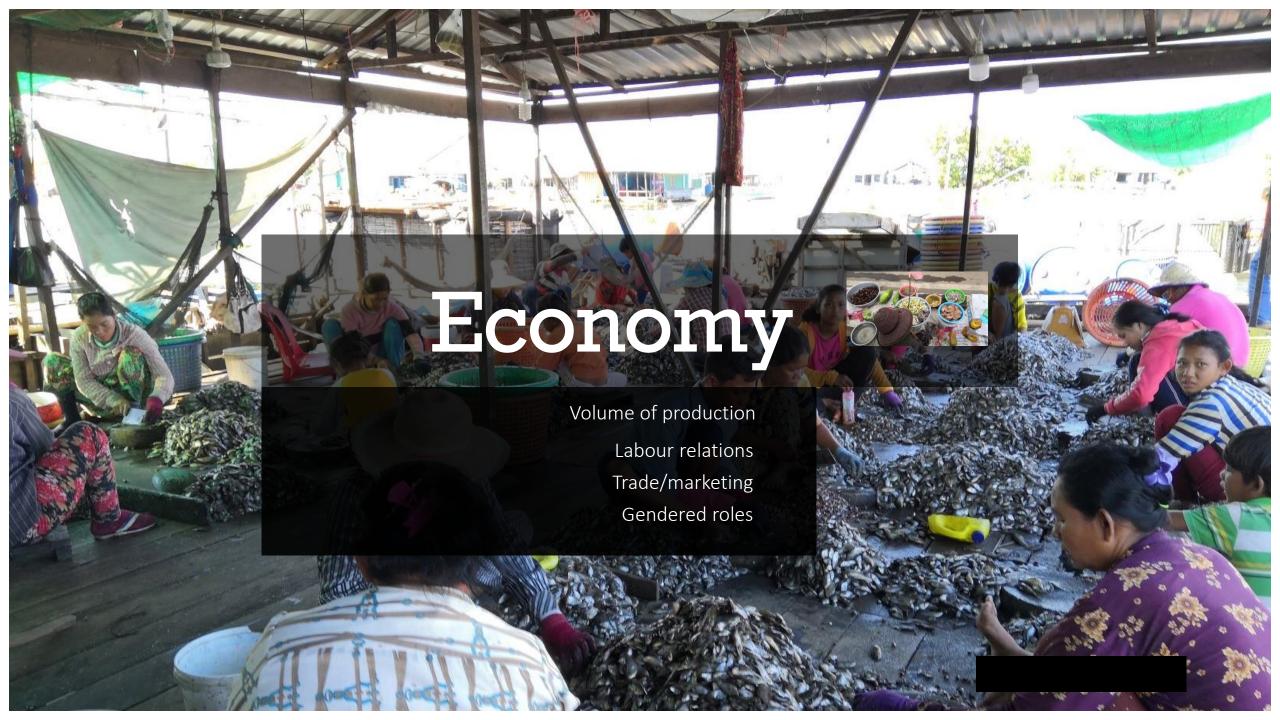






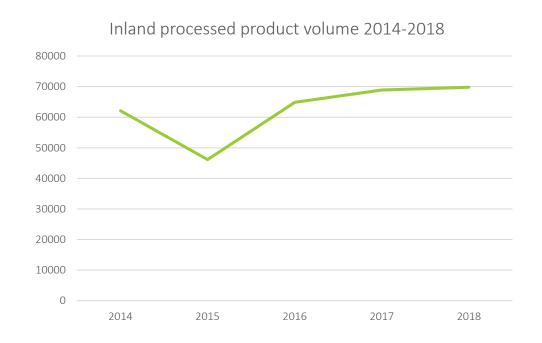
Canada

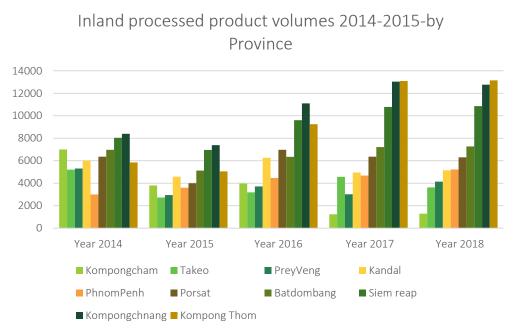




#### From published studies

- Value chains of specific fish species- Ex: Snakehead and low value fish
- Socio-economic characteristics of those who engage in fishing, fish processors and traders
  - Role played by women, gendered livelihood
  - Labour arrangements including family labour
  - Value added through processing
  - Costs involved in processing and profits generated at the household level
- Secondary data on volume of production, number of processors



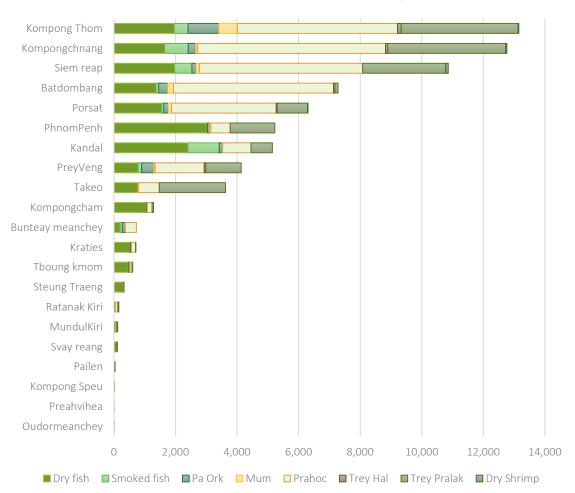




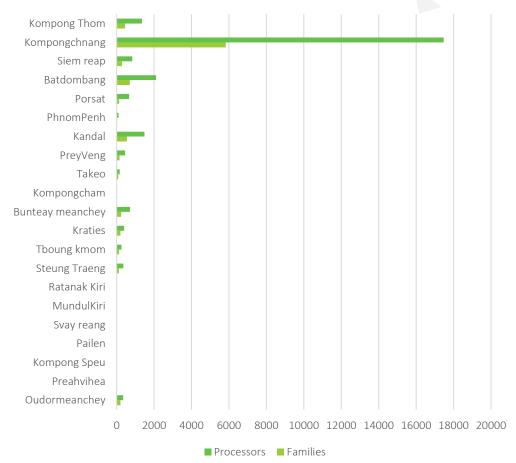
Source: Derived based on Fisheries Administration 2018

#### Secondary data





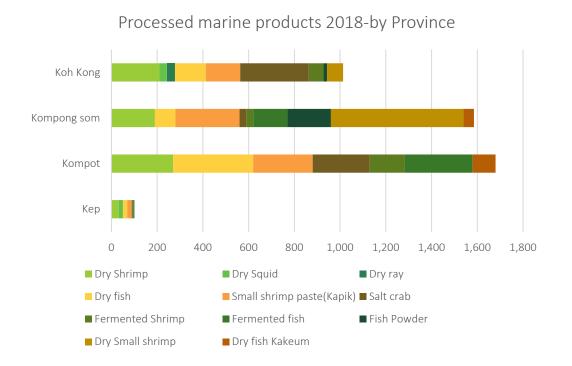
#### Number of inland processing families and processors-2018

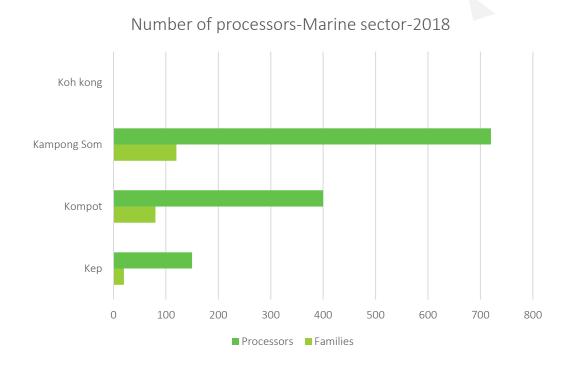


Source: Derived based on Fisheries Administration 2018

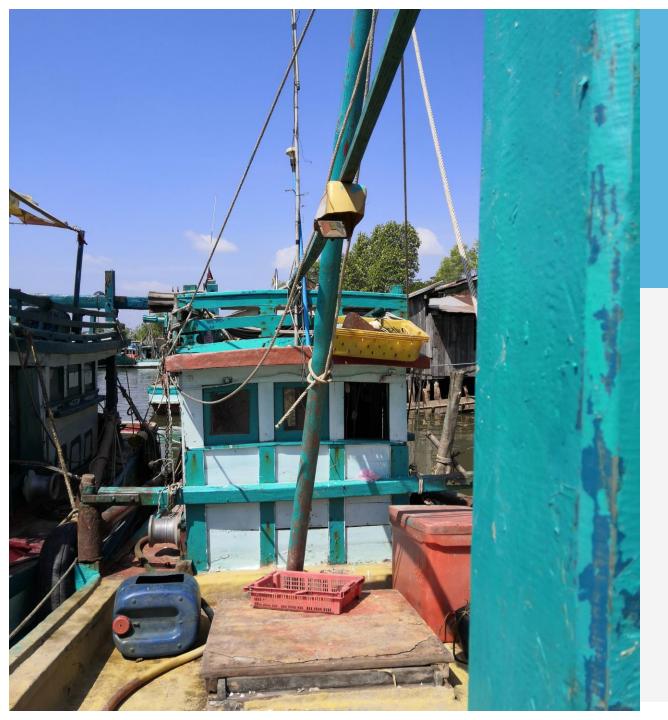


#### Secondary data



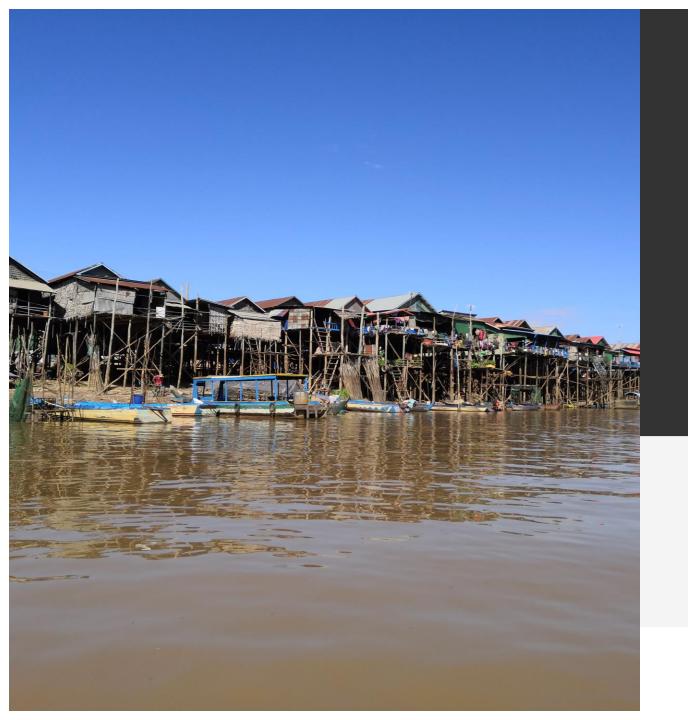






# Knowledge gaps and questions

- Marine fishing based products
- Commercialised processing plants
- Engagement of women and children
- Inter-generational knowledge, skills and contacts transfer
- Sourcing of fresh fish for processing
  - Proportions of wild fish, aquaculture and rice field fisheries
- Trade of processed fish- how do processed products flow within the country and crossborder



# Findings

Primary data

#### How is it being processed/dried?

Ex: Fermented fish-Mum







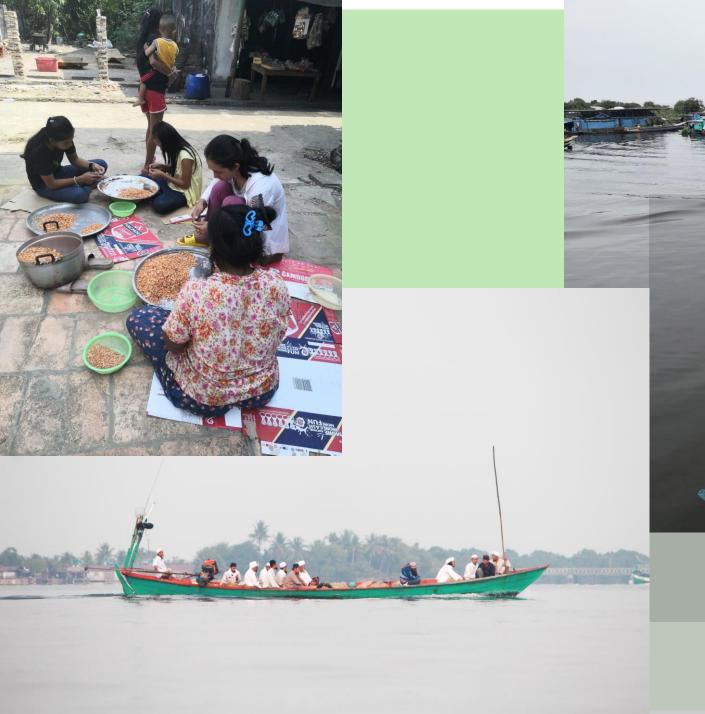
Cutting



Fermenting and storage

# Primary data analysis -Findings: Diverse range of actors in the value chain

Type of processor	Characteristics
Fishing families	'Worse off' households who use processing as a secondary income source for the family (ex: elderly women supporting themselves, and their family through fish processing). Processing happens at home, primarily by household member/s. Processed fish volume is less than 100kg per day during the peak season. Products are mostly sold to consumers in the village. (household/small scale)
	Households with a steady income from fishing or engaging in fishing but primary income being from another source such as remittances, engaging in processing as a secondary livelihood activity. Processing happens at home by household member/s mainly and in the peak season, with 1-3 hired workers. Products are traded within the village and sold to middlemen. (household/small scale)
Fishing cum farming families	Farming primarily in small islands on the water bodies, during the season.
Farming families	Subsistence purposes only
	Subsistence purposes mainly, but sells a certain proportion based on surplus production
Processing families	Households with no members involved in fishing or farming. (small to medium scale). Processing happens at home, involving household members and hired labour during peak season.
	Households with no members involved in fishing or farming, processing or semi-processing plants located in a separate location from their homes. (small to medium scale). Volume of production per day is 800kg-10Tonnnes per day during peak season. At least some of the fish species are sourced from Thailand/Vietnam and the rest from floating villages around the Tonle Sap lake. Products are sold to middlemen/traders within the Province and outside the Province, including Phnom Penh markets. (Ex: processors at Battambang Psar Prahoc)
Processing factories	Primarily in Phnom Penh and Sihanouk, employing 40-60 workers, 80% women





# Diverse groups

#### Range of labour arrangements

Type of processed product	Type of processing activity	Payment term	Payment value	Comments
Semi processed fish paste	Cutting head, gutting and cleaning	Per kilogram	300r (0.75USD)	Approximately 100kg processed per day per worker (BT PR 01)
Pa Ork	Mixing with salt	Per tonne	30,000r (7.50USD)	Approximately 3-4 tonnes processed per day per worker (BT PR 03)
Smoked fish	Cleaning fish and smoking	Per day	40,000r (10USD)	They work throughout the year
Dried prawns	Cleaning prawns	Per vat/container	9,000r (1.75USD)	8-10 vats of prawns cleaned per day per worker (KP PR 01)
	Cleaning prawns	For 2-3 hours per day	10,000r (2.50USD)	

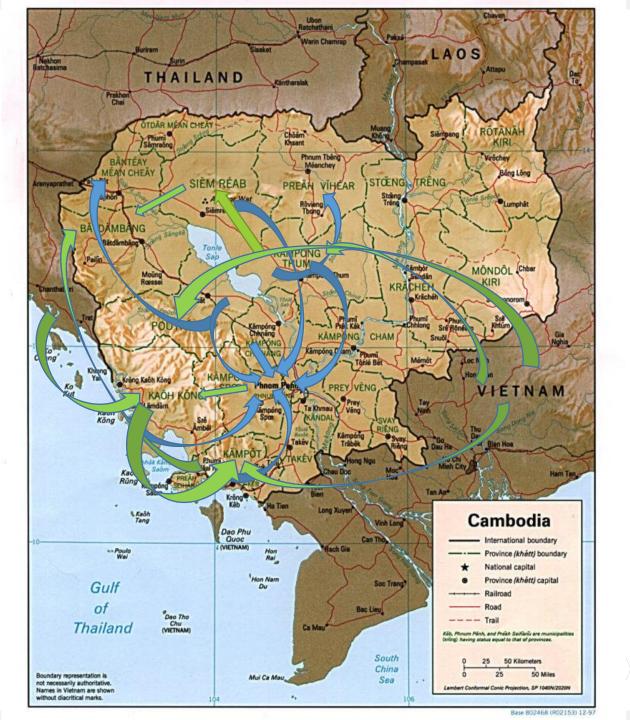
#### Qualitative data analysis- Semi structured interviews

The fish and the processed products exported from Vietnam are cheaper than what is produced here in Cambodia. The processed products (referring to 'Vietnamese Prahoc' which she buys from a Veitnamese woman who lives on the border) are cheaper from Vietnam because they mix the big and small fish together and make the products, they use mixed fish. But the Cambodian products are special, and they are more expensive. Therefore, it is difficult to sell the Cambodian products. The quality of the Vietnamese products is lower. (PR WS 02)



Processed fish selling sources (blue) and buying sources (green) by traders at provincial and district markets

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Rapid survey analysis: Processed fish buying routes (green) and selling routes (blue) by traders at the Orussey market







Exports and imports









