Research Methodologies: Stacked Value Chains and other methods

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Stakeholder workshop on Dried/Processed fish matters in Cambodia
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SSHRC CRSH
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WorldFish

Why do research?

- **To generate information** for use by:

➢ Government – e.g. to design policies that reflect the situation on the ground; to support decisions about how to allocate resources.

➢ Development partners – e.g. to design projects that are relevant and effective.

➢ Value chain actors – e.g. to raise visibility, support advocacy, understand trends.

➢ Education – to train students, to change perceptions.

Why do research on processed fish?

- Extremely important for food and livelihoods, but overlooked, poorly understood, undervalued
- Value chains are often dynamic and rapidly changing – what was true 5 or 10 years ago may no longer be true today
- Understanding social and economic context necessary for effective interventions and policies to address challenges
- Research based on rigorous quantitative methods can be particularly convincing to politicians, policymakers, and donors
- To work with chain actors and communities to make the case that dried fish is important, and identify opportunities for improvement

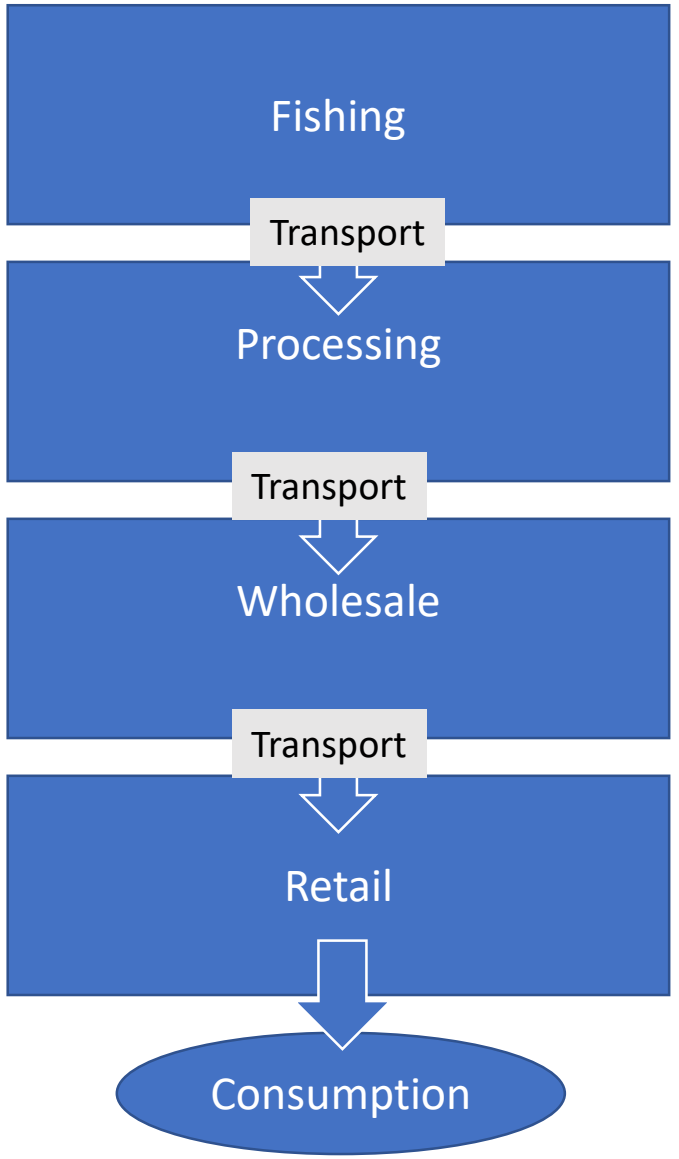
Value chains

- Value chains are **networks** of actors whose activities enable the production and distribution of goods or services to consumers

- Four main ‘segments’ of interest in DFM
  - Fishing
  - Processing
  - Wholesale (traders)
  - Retail

  (+ consumption)

Simplified value chain



DFM research on processed fish in Cambodia

- Phase 1: Qualitative scoping research (presented this morning)
- Phase 2: Various options
  - Stacked value chain survey (gold standard)
  - Targeted quantitative surveys of value chain actors
  - Follow up qualitative interviews
  - In depth qualitative studies on particular questions
  - Student research projects
  - Pilot interventions
  - Combinations of the above

Conventional value chain research

- Stakeholder consultations & key informant interviews (reproduction of conventional wisdom)
- Production focus
  - (“hidden middle” segments – processing, wholesale, retail)
- Non-representative samples (selection bias)
  - e.g. most attention in Cambodia on HH and SME fish processing, not large scale
- Cross-sectional studies (obscures rapid changes taking place)
- Bias toward export commodities & global VCs
  - In Cambodia seems to research bias towards inland (coastal neglected)

The ‘stacked’ approach to VC research

- Developed by Reardon et al. (2012), based on observation that representative surveys usually focus producers or retailers, but never whole chain
- ‘Stacked’ surveys: Representative surveys of actors in all main VC segments stacked on top of each other
- Because they are representative ‘large n’ surveys, stacked surveys generate data in a form policy makers often consider credible
- Often produce results that upend “conventional wisdom” (e.g. Myanmar aquaculture, maize; India potatoes; Tied credit – India, Bangladesh, China)
- The “Quiet Revolution”
- DFM is built around a “stacked” VC research methodology that provides a common basis for comparing dried fish VCs across 6 countries

Stacked value chain survey components

Phase 1

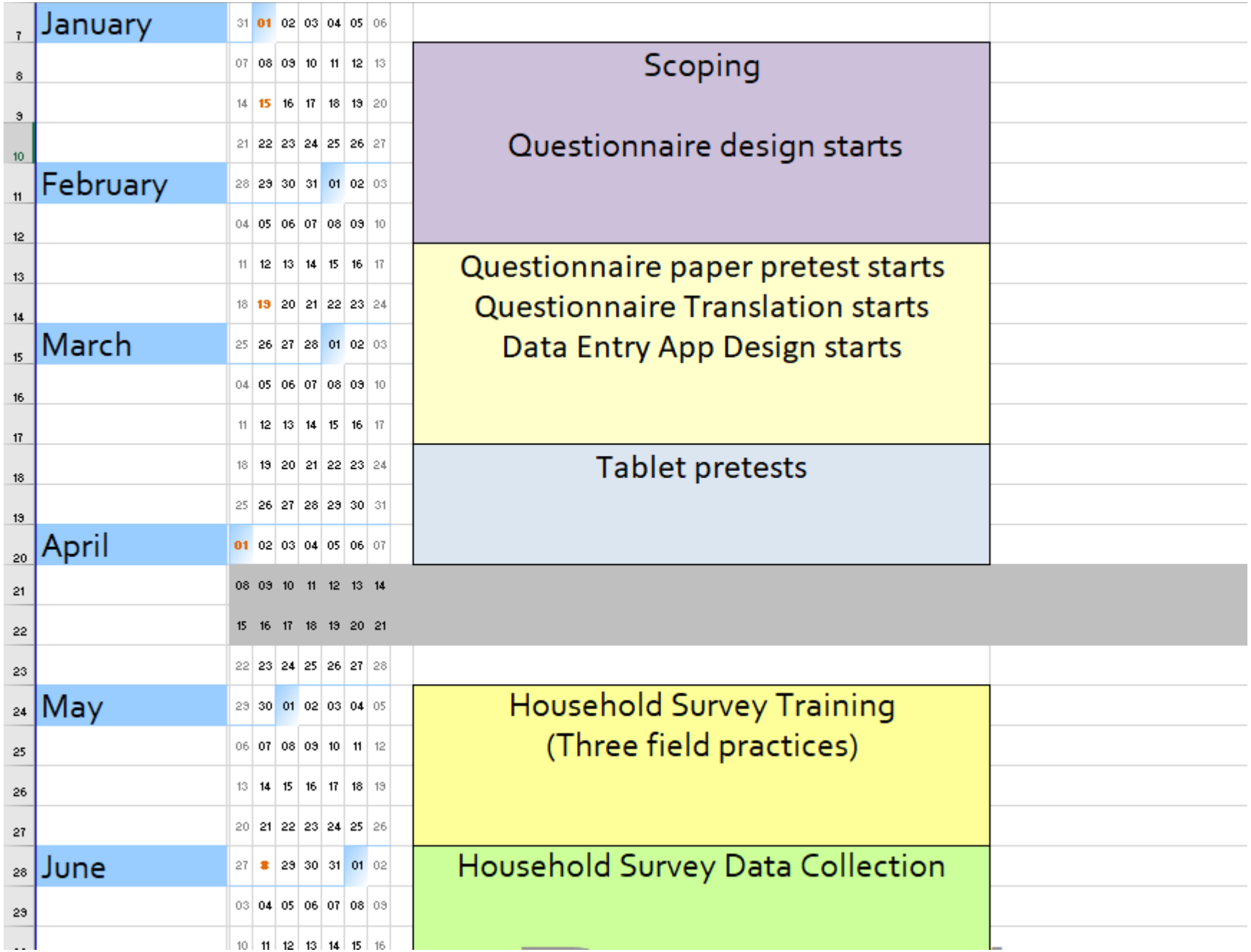
- Review existing literature
- Identification of issues important to donors, government, partners, other stakeholders
- Qualitative scoping research in field

Phase 2

- Develop research questions
- Design structured questionnaires for each VC segment (micro & meso)
- Design sampling strategy
- Survey pre-test, enumerator training, survey implementation
- Data cleaning & analysis
- Qualitative follow up research (if needed)
- Publications, outreach, interventions

- Flexible and adaptable approach – not fixed!

Example: Part of work plan for stacked value chain study in Myanmar



Research questions & sample design

- **Research Questions**

➢ Hypotheses to be tested using survey questionnaire

➢ Developed based on themes/gaps in literature, ongoing policy debates, own observations during scoping research.

  ➢ (e.g. changes in demand for Prahoc among younger generation; declining availability of wild fish; use of pesticides; increasing use of aquaculture fish for processing)

- **Sample design**

➢ Aim to collect data that is statistically representative of a population, usually by sampling a subset.

  ➢ (e.g. rural households in a particular area, traders in certain markets)

➢ Need to have information on the size of the entire population in question for sample to be representative (sample frame).

➢ Need to make decisions about what to include/exclude based on objectives of survey, sample frame, limitations of budget/time.

➢ Always comparing present with recent past (now & 5 years ago); own behavior; numbers of other VC actors

Other research possibilities

- Stacked value chain is the ‘gold standard’ but very resource intensive (financial, human, time) - many other approaches to consider, depending on interest and research capabilities
- Smaller quantitative surveys on focused particular VC segments, locations, or topics (cross-sectional, panel, or continuous)
  - (e.g. consumption patterns, fish prices, micronutrient composition, CPUE, livelihoods)
- Extended scoping research
  - (e.g. additional interviews with large scale processors, importers, exporters)
- In depth qualitative studies
  - (e.g. ethnographic study of changing food consumption practices)
- Participatory research and advocacy, piloting technical interventions
  - (e.g. upgrading food safety, packaging and branding)
- Combinations of the above
  - (e.g. extended scoping + small quantitative survey)