

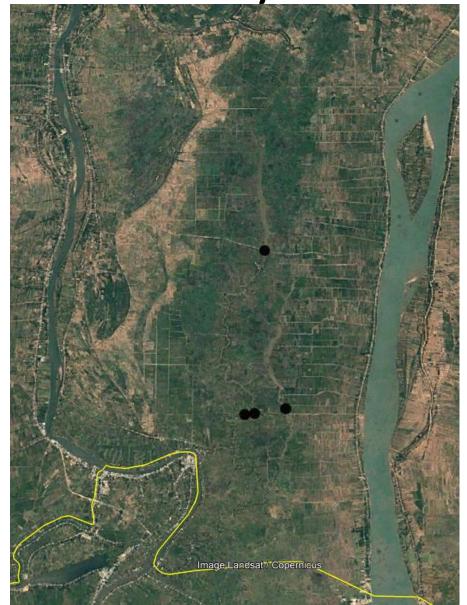




Institutional Arrangements in Cambodian Community Fisheries

Insights from Kandal Province Cambodia

The Study Area

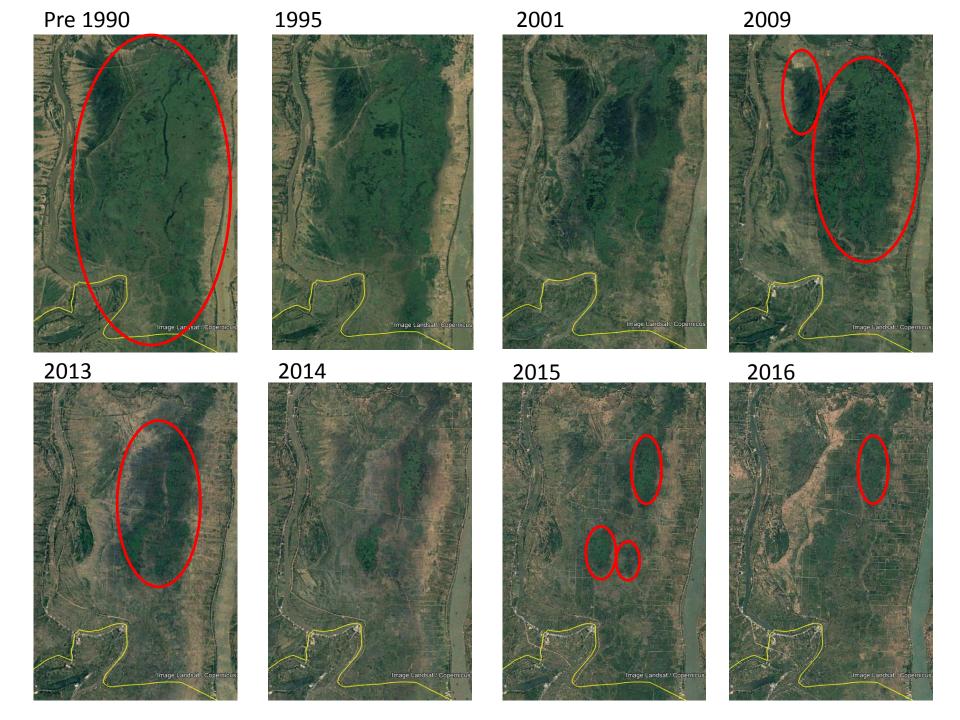


Trends in the study area

Road and irrigation infrastructure construction lead to a decrease in the number of adequate places for collective fishing systems

- Progressive clearing of land
- Shift to double rice cultivation
- Corn, vegetables & Chili cultivation







Diversity of Fishing Practices



















Community Fisheries









Community Fisheries

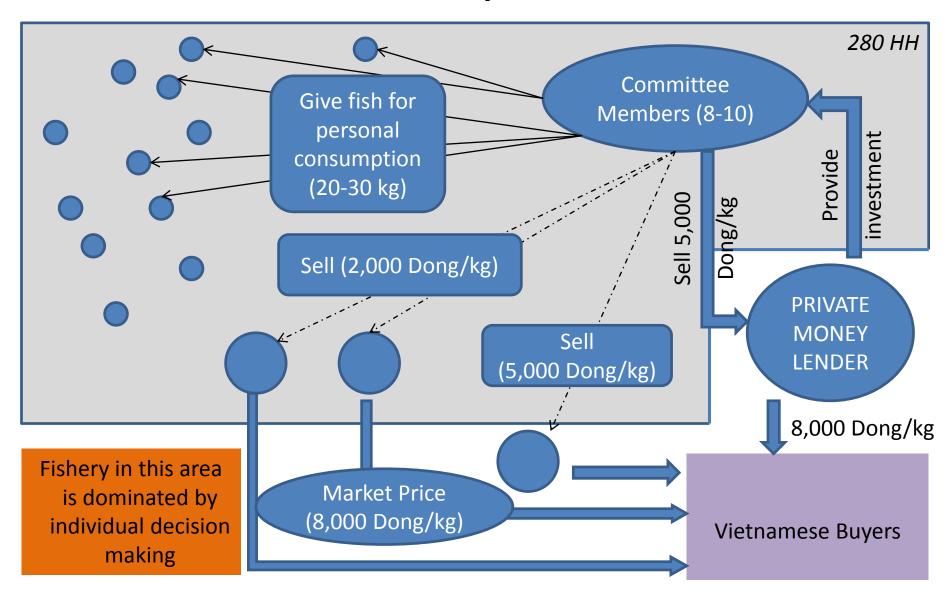
- Former fishing lots dismantled in 2011
- Formed in 2012 but not yet officially registered
- No delineation (both sanctuary/competency area)
- 2012-2015: Learning/Transition period (fishing lot owners/shareholders still involved in the management of fishing activities)
- 2015: New election of the committees and progressive establishment/implementation of rules
- Embedded in local politics dynamics
- Difficulty to enforce preservation activities
- Record keeping rather inadequate
- Complex relationship with fishery administration
- Institutional Bricolage (private/public)

Institutional bricolage in the face of uncertainty: Rotation & Quota System

- The fishing systems are installed in early November
- A rotation system is put in place and starts by the end of November/early December.
- An annual lottery defines the number the group will have in the rotation system

Complex sharing benefit and risk mechanism in a context of uncertain (fish and water) resources

Example 1

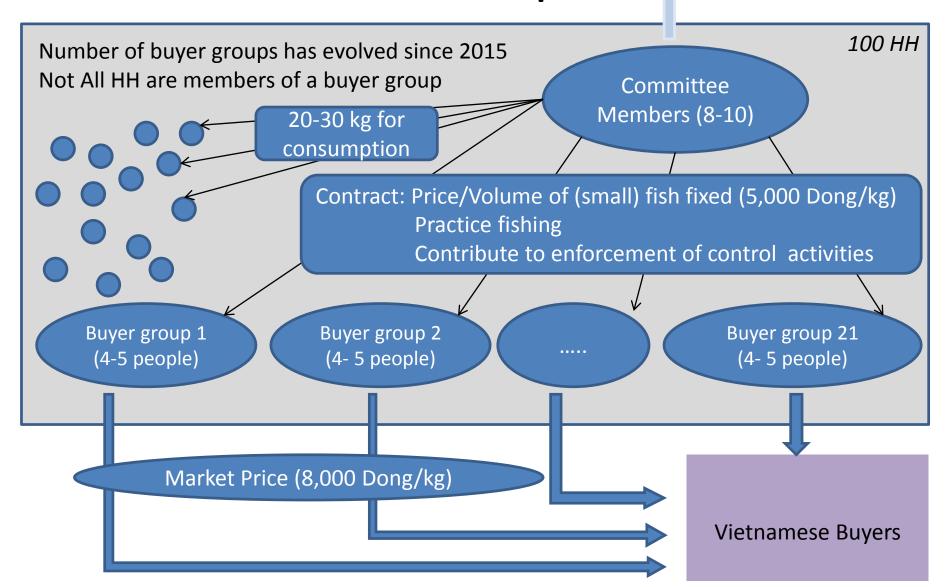


- Quota system for small fish (2T)
- Rotation system for big fish (24h)

Example 2

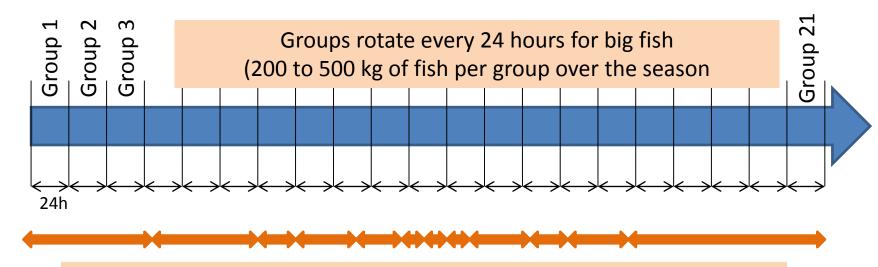
Vietnamese Buyers

Special Fish/Shrimps



Ex.2: Rotation & Quota System

In 2018-2019: 3 successive cycles



The group stay as long as they needs to reach their quota of 2 Tons (last year, it was 3 Tons given the lower number of groups). Reaching the quota might take a few hours (pick period) to almost a week

Small Fish Productivity in 2018-2019

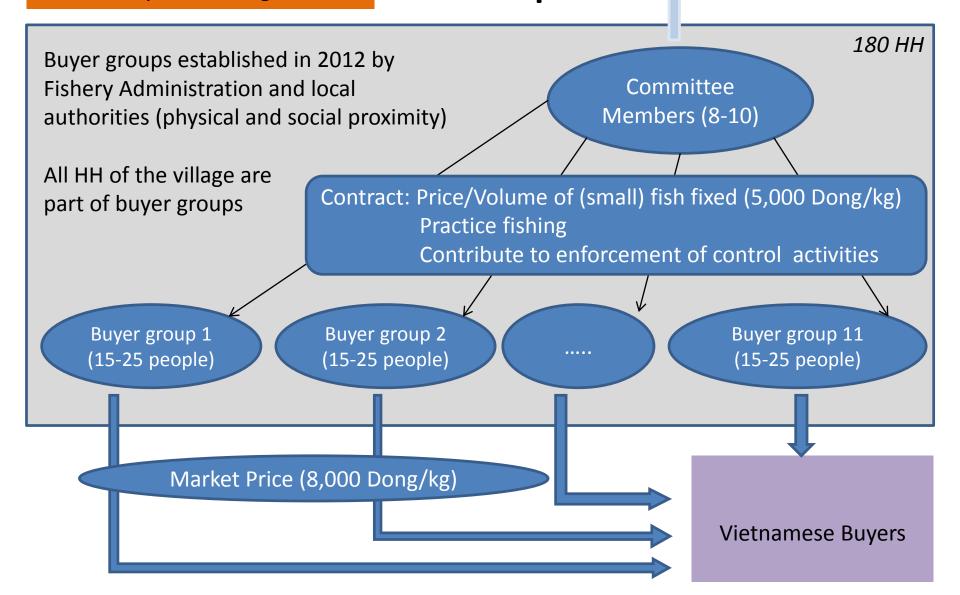
• 64 to 68 Tons of small fish (half of the groups reached twice their quotas; the other half three times) → 14500 USD for the FC Committee and 9,000 USD for the members of the group (e.g. 90 USD/individual)

Auction system for big fish

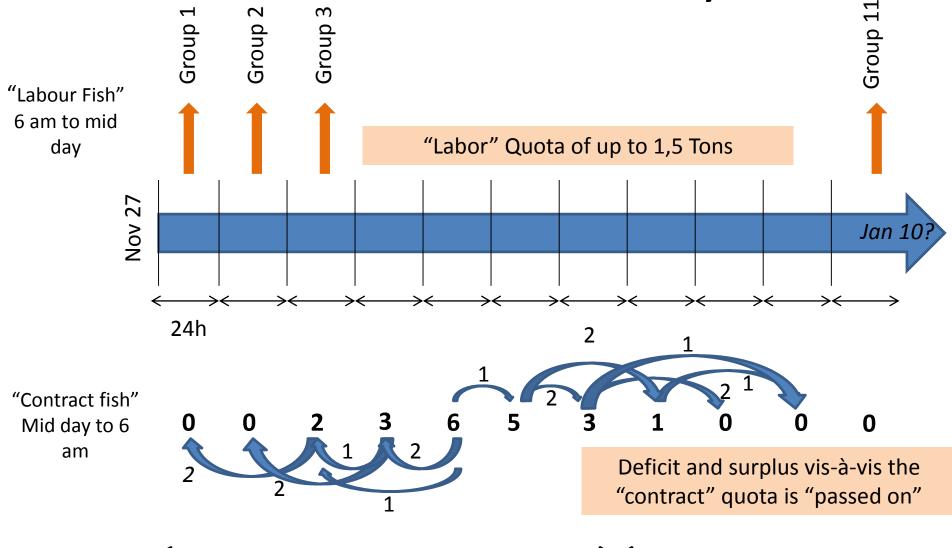
Example 3

Vietnamese Buyers

Special Fish/Shrimps

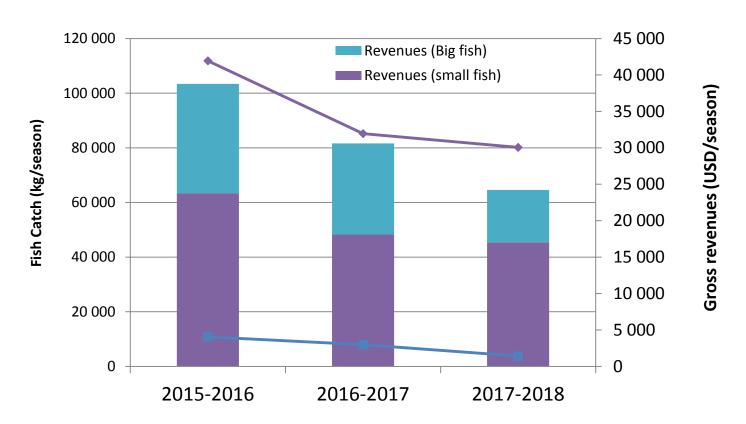


EX. 3 Rotation & Quota System



Week long auction for large fish (not all groups interested in auction system)

Ex. 3. Economics & Production



- 62 % of the benefits gained from the sale of fish is managed by the committee
- Revenues generated allow covering salary of committee members and incentives to farmers and FA staff and partly save to renew the system
- 38% of the benefits from the sale goes directly to community members (60 to 90 USD/Member HH for small fish)

Some key elements of comparison

- Required investment: About 10,000 USD in total for a system
 - Investment by private money lender in some case (who buys fish at preferential price)
 - 300 USD/group member EVERY YEAR since 2015 in Ex.2 (not clear if reimbursed)
 - 40 USD /group member in 2015 and 20 USD in 2017 in Ex 3(loan/reimbursed)

Economics

- In Examples 2 and 3, gross benefit per group member is between 60 and 90 USD/season for small fish & a similar amount for big fish.
- All group members get 25 USD/season in Ex. 3
- All community member can get 25-30 kg of fish/season Ex. 1 and 2 (often at pick period)
- Allowed to sell shrimp/'special fish' but privilege questioned by some groups in Ex 2
- Salary of 100-120 USD/month for a 3-5 month period
- Contribute to village and commune development fund, red cross, etc.

Productivity

- Small fish catch is higher in Ex 3 (when compared to Ex 2)
- Big fish catch is lower in Ex 2compared to Ex 3 (due to upstream illegal Sam Ras)
- Widespread individual fishing practices including some illegal
- Necessary involvement of (and payment to) FIA staff for control activities





