Sustainable Livelihoods Framework and Water-related Climate Change Adaptation Interventions (CCAIs) in Vietnam

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1. Brief introduction on my whole project

Problem statement

- Climate change water-related issues – the first priority for adaptation measures (GFDRR, 2011).
- A lot of CCAIs (current and on-going);
- Little knowledge about CCAIs impacts on grassroots levels.

Research objectives

Investigating the CCAIs' impacts

Developing indicators for M&E for CCAIs

Testing the Indicators

3

2. Method

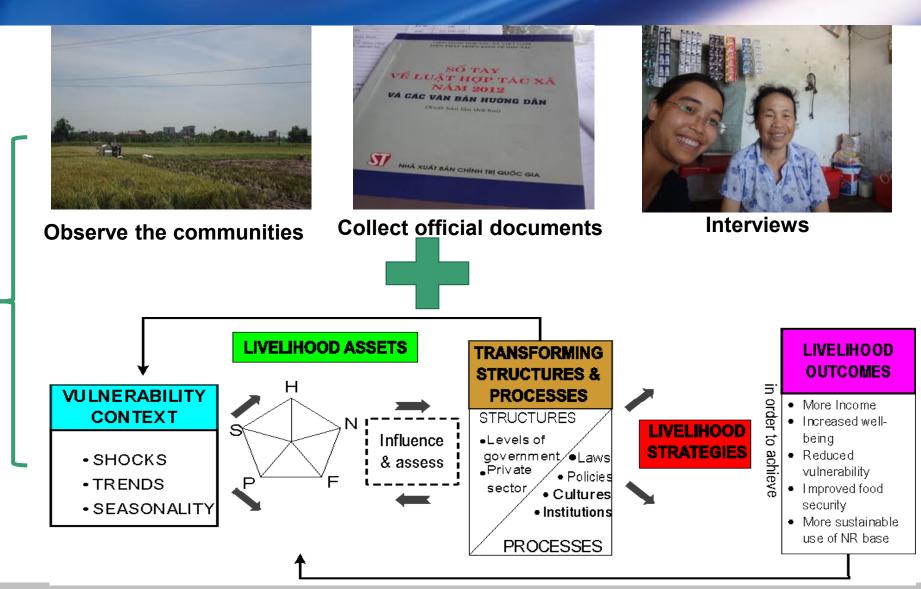


Figure 1: Sustainable Livelihoods Framework (DFID, 1999)

3. Area context

Figure 2: Map of Thai Binh





- Population: 7.435, Area: 6.8 Km²
- Located in the lowest elevation area;
- Most of the residents are involved in agricultural practices;
- Main income resource is not from agriculture production

(UBND xã Quốc Tuấn, 2016)

The main objectives of water-related CCAIs are to:

- Improve water-related infrastructure;
- Adjust local irrigation plans and cultivation schedules;
- Raise local residents' awareness of climate change and train them in advanced livelihood practices;
- Enhance the local engagement and participation in climate change adaptation.

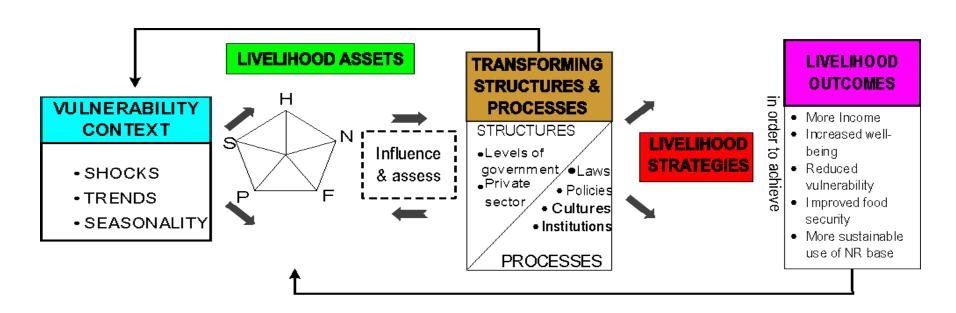


Figure 1: Sustainable Livelihoods Framework (DFID, 1999)

"..., the **floods are less** in both

quantity and

magnitude" [Farmer]

LIVELIHOOD ASSETS

"...less risks for the crop (e.g. pest epidemics, extreme cold and hot spells," [Farmer].

VULNERABILITY CONTEXT

- SHOCKS
- TRENDS
- SEASONALITY

TRANSFORMING
STRUCTURES &
PROCESSES
STRUCTURES

LIVELIHOOD STRATEGIES LIVELIHOOD

- More IncomeIncreased well
- Reduced
- Improved food security
- e "... instead of taking the

fresh water, my field was affected by brackish water.

[Farmer].

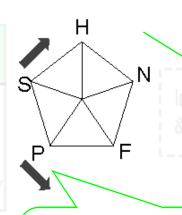
"The water level at Hong river is very low, so it will be not enough water for paddy rice at critical periods." [Farmer].

There are 3 sluices and 2 pump stations, which supports well for water irrigation operation [Officail].

"Now farmers just need to bring their hoes to extract or withdraw water" [Former official]

LIVELIHOOD ASSETS

"Our private pump is now **hardly** needed ..." [Farmer]



"There was a project to concrete the river banks. The workers broke the water supply pipes" [Farmer].

We still lacked of drinking water - storm water [Farmer].

"...with the ongoing storm information, I sometimes netted fishes as usual... I even caught more fishes and small shrimps than usual" [Fishman].

"Now, all farmers

followed the rice direct

seeding practices"

[Official].

LIVELIHOOD STRATEGIES

"... at the rice pollination phase, it requires a lot of water, but with small private pump, our field is just soaked a little. This is not enough." [Farmer].

"...have more time for entertainment and accumulate other knowledge" [Famer]

"...it saves time and costs for family and society" [Famer]

"... will be better for environment as we used fewer chemicals" [Famer]

LIVELIHOOD OUTCOMES

"...less fertilizer
needed" [Famer]

"I had to spend extra working days to recover the fields..." [Famer]

"We lost
around 20% of
our crop
productivity
[Official]

"I spent more
money for
money for
fertilizers and
herbicides" [Famer]

"...have good connection between the officials and local residents. We often hold the meetings. [Former official].

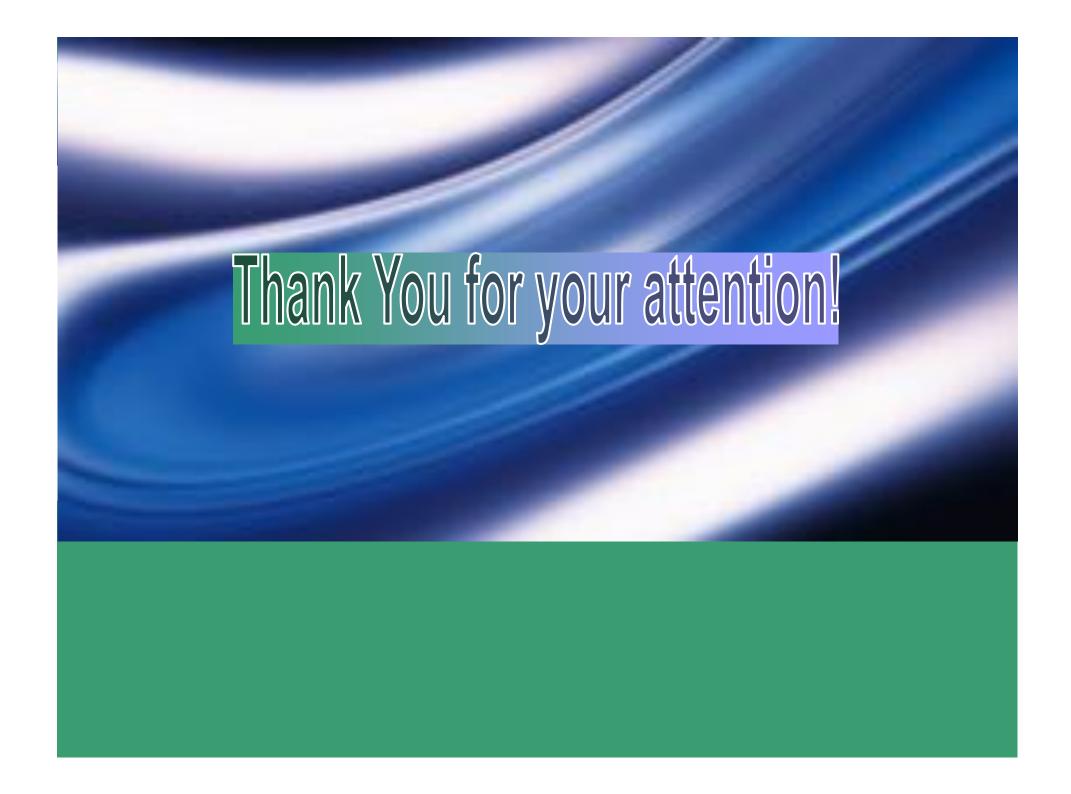
"... farmers are now willing to raise their voices . They are not like before." [Farmer].

TRANSFORMING STRUCTURES & PROCESSES

"I will not rock the boat which are the official irrigation plans, though sometimes they are possibly not suitable for local conditions and harm local livelihoods". [Official].

5. Conclusions

- Had both positive and negative effects on sustainable livelihoods. These effects could be categorised into "Livelihood outcomes" and "Vulnerability context". They also affected the ways the residents pursued their "Livelihood strategies" and accumulate "Livelihood assets";
- 2. Some **contradictions** amongst the impacts of water-related CCAIs on the local livelihoods..
- 3. Some **influencing factors** which are mostly related to the "**Institutional structures and processes**".
- 4. These preliminary findings form the basic of my next research step to **develop indicators**.



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