

Norhed Report from PhD of Economics component:

Project title: *Macro and Micro-level impacts of climate change on Vietnamese aquaculture: A case study in central and southern parts of Vietnam*

Project objective:

My Phd project concentrates on

-) Economic efficiency of shrimp farming under climate change
- Income source and household livelihood strategies of aquaculture household under the impact of natural disasters
- Shrimp farming households' perceptions and risk attitudes regarding climate change

Specific objective:

-) First paper aims to estimate shrimp farming inefficiency under the influence of variables related to climatic events, farming characteristics and socio economic factors, which shrimp production system are appropriate to cope to climatic events (drought, saltwater intrusion, irregular season)
-) Second paper tries to assess the income source, expenditure change, poverty status and household livelihood strategies for resilience capacity of aquaculture household under the impact of natural disasters in Vietnam.
-) Third paper highlights shrimp farming households' perceptions and risk attitudes regarding climate change in the Mekong Delta, Vietnam by identifying determinants that affect shrimp farmer's choice of adaptation measures to climate events. The adaptation methods applied to restrict the impact of climatic events focus on 5 types, namely changes in farming practices, changes in farm infrastructure, shifts to other occupations, and received support and others adaptive measures

Contents:

Methods: Details for methods have already presented in the approved research proposal.

Time schedule: This project build the farm level dataset on a survey of shrimp culture in the South, Central parts of Vietnam. Fieldtrips and Data collection were carried out from July 2016 to Aug 2017.

Output:

- Courses and credits for PhD program (done)
- 01 Research proposal (done)
- 01 survey design (done)
- At least 01 paper will be presented in the international conference (done)
- At least 01 paper will be published in journal (on going)
- 02 manuscripts will be prepared; at least 01 manuscript received the first reviewer feedback. (on going)

Activities have been done until 31st Dec 2017

1. The research proposal was approved by supervisors and rector of Nha Trang University.
2. First data collection was implemented completely. Doing data analysis are carrying out at Norway and used for writing 02 draft manuscripts. From the April to Aug 2017, many fieldtrips to central parts of Vietnam

(Ninh Hoa district, Van Ninh district, Ninh Thuan province) and southern part of Vietnam (Ben Tre province, Bac Lieu province, Ca Mau province) was done and used for the first of manuscript.

3. Return to Uit to work with supervisors, data analysis doing and seminar participation.
4. Complete mid term evaluation at Uit and received good feedback.
5. Paper 1 was accepted for presented in international conference in IIFET 2018
6. Several pictures from data collection that related to the Norhed project

Focus Group Discussion



Training remunerators at office



shrimp factory managers interviews



Training remunerators On site



GAP farming visit



Processing factory visit





Field trip at Ninh Hoa district
(Khanh Hoa province)



Field trip to Ninh Thuan province



Field trip to Ben Tre province



Field trip to Bac Lieu province



Fieldtrip to Ca Mau province



Field trip to Van Ninh district
(Khanh Hoa province)

Farmer interviews was done by PhD and remunerators in research areas (Bac Lieu and Ca Mau provinces)





Northern light economics seminar participation in UiT



Aurora excursion with economists and UiT professors on

6th Dec
2017



Budget

1. Travel expenses (visa + air ticket) between Tromso and Vietnam: 9600 NOK and 45000 NOK respectively: Use two times in 2015 and 2017 for studying course and working in Uit (17 months)
2. Conference, course participation: 25000 NOK (on going), PhD will use this budget line for IIFET conference in 2018
3. Social science data collection and analysis expenses: 134000 NOK. PhD used 84196.62 NOK for data collection and books and data analysis, approved by supervisors
4. Fellowship (18 months) in Vietnam: 45000 NOK. PhD received 14 months fellowship in Vietnam from July 2016 to Aug 2017

Tentative Activities in 2018

1. Submitting manuscript of paper 1 to Aquaculture Economics and Management journal and IIFET 2018 conference in Feb 2018
2. Presenting the paper 1 at IIFET 2018 conference in Seattle, US in July 2018
3. Writing manuscript of paper 2 and planning submit to journal in 2018
4. Doing more data collection for manuscript of paper 3 in PhD project.

PhD candidate

Le Thi Thanh Ngan