Development of aquaculture in North Vietnam: influence on the living standards and gender division of family labor

Caulier Henri¹, Tran Thi Thap Hieu², Tran Thi Nang Thu², Nguyen Thi Dien², Philippe Lebaillly¹

¹ Gembloux Agro BioTech, University of Liège, Belgium.
² Vietnam National University of Agriculture, Hanoi, Vietnam

Introduction
The growth of Aquaculture sector in Vietnam has been impressive, with an average growth rate of 17% since 2000. The area of water surface for aquaculture has been doubled since 2000 and reached more than 1 million hectares. And this development is linked to very deep changes in the lifestyle of some households in coastal area. Indeed, many families converted the land from low productivity rice production to aquaculture. The aim of this operation was to increase their income. It changed their level of life and it also changed the way to organize the work in each farm. The aim of this study is to understand the influence of aquaculture development on the living standards and gender division of family labor.

Objective
This study was conducted to (1) describe and understand the division of family labor in aquaculture and (2) make a diagnose about economic situation of the households in aquaculture.

Methods
- Chose case study in hamlet 10, Hai Chau commune, Hai Hau district, Nam Dinh province. In hamlet 10, almost the people switched from rice production to aquaculture during the last decade.
- Interviewed 45/75 households that are practicing in aquaculture.
- Deep interviews about various information: exploratory research history, gender differentiation, village organization…
- We carried out 02 secondary qualitative surveys: 01 about the revenue and the other about rice production, as a reference.
- Group discussion using PRA (Participatory Rural Appraisal) techniques.
- Collection of some complementary data at the district and commune levels.

Results
- With the development of aquaculture, the level of life increased significantly in the village;
- Division of labor in other activities: Garden and raising animals, Selling production from garden and Housework: mainly women;
- Decision power in the family:
  - Wife: Daily expenses and Activities with low impact on revenue
  - Husband: Expensive expenses, borrowing money, strategic decision and business orientation.

Conclusions
Development of aquaculture helps:
- Rising of life standard;
- Maintaining gender gap;
- Social differentiation? Sustainability?

Table. Living standard of households that are practicing in aquaculture in hamlet 10, Hai Chau commune, Hai Hau district, Nam Dinh province

<table>
<thead>
<tr>
<th>Age Classes</th>
<th>Primary</th>
<th>Secondary</th>
<th>High school</th>
<th>Intermediate</th>
<th>University</th>
<th>Handicapped or mental illness</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-10</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>10-20</td>
<td>1</td>
<td>4</td>
<td>10</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>20-30</td>
<td>0</td>
<td>3</td>
<td>12</td>
<td>1</td>
<td>12</td>
<td>0</td>
</tr>
<tr>
<td>30-40</td>
<td>0</td>
<td>9</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>40-50</td>
<td>0</td>
<td>22</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>50-60</td>
<td>0</td>
<td>29</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>60-70</td>
<td>1</td>
<td>8</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>&gt;70</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>7</td>
<td>78</td>
<td>35</td>
<td>2</td>
<td>15</td>
<td>2</td>
</tr>
</tbody>
</table>

Fig.1. Division of labor in aquaculture in hamlet 10, Hai Chau commune, Hai Hau district, Nam Dinh province

Fig.2. Revenue in hamlet 10, Hai Chau commune, Hai Hau district, Nam Dinh province