WOMEN PARTICIPATION IN AQUACULTURE DEVELOPMENT IN THE PHILIPPINES

Arlyn Arreglado Mandas
College of Fisheries
Mindanao State University
General Santos City
Philippines

Asian Pacific Aquaculture 2016
April 26-29, 2016
Grand City
Surabaya, Indonesia
In 2013, Philippines ranked:

- 7th among the top fish producing countries in the world (fish, crustaceans, mollusks, and seaweeds)
- 3rd in the world’s largest producers of seaweeds
- 11th in the total global aquaculture production
Total fish production, by sector in 2014

Quantity = 4,689,085 Metric Tons (MT)

- Commercial Fisheries: 1,107,221 MT
- Municipal Fisheries: 1,244,259 MT
- Aquaculture: 2,337,605 MT

Value = 241.944 Billion Pesos

- Commercial Fisheries: 66B
- Municipal Fisheries: 81.81B
- Aquaculture: 93.95 B
2014 Aquaculture production

- Brackishwater fishpond
- Freshwater fishpond
- Fish pen and fish cage in fresh and marine waters
- Mariculture of oyster, mussel and seaweeds
Major species produced in aquaculture in 2014

<table>
<thead>
<tr>
<th>Species</th>
<th>Quantity (MT)</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seaweeds</td>
<td>1,549,575.98</td>
<td>66.29</td>
</tr>
<tr>
<td>Milkfish</td>
<td>390,232.53</td>
<td>16.69</td>
</tr>
<tr>
<td>Tilapia</td>
<td>259,198.16</td>
<td>11.09</td>
</tr>
<tr>
<td>Shrimps/Prawns</td>
<td>50,820.76</td>
<td>2.17</td>
</tr>
<tr>
<td>Others</td>
<td>87,781.09</td>
<td>3.76</td>
</tr>
<tr>
<td>Total</td>
<td>2,337,608.52</td>
<td>100.00</td>
</tr>
</tbody>
</table>
Aquaculture production both in volume and value in 10 - year period

<table>
<thead>
<tr>
<th>Year</th>
<th>Volume of fish production (MT)</th>
<th>Value of fish production (in'000 Php)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>1,895,847.30</td>
<td>49,169,787.90</td>
</tr>
<tr>
<td>2006</td>
<td>2,092,275.80</td>
<td>55,671,892.80</td>
</tr>
<tr>
<td>2007</td>
<td>2,214,826.20</td>
<td>61,597,274.20</td>
</tr>
<tr>
<td>2008</td>
<td>2,407,697.90</td>
<td>81,669,480.60</td>
</tr>
<tr>
<td>2009</td>
<td>2,477,392.00</td>
<td>81,493,357.50</td>
</tr>
<tr>
<td>2010</td>
<td>2,545,967.10</td>
<td>82,857,454.50</td>
</tr>
<tr>
<td>2011</td>
<td>2,608,119.80</td>
<td>85,996,428.00</td>
</tr>
<tr>
<td>2012</td>
<td>2,541,965.40</td>
<td>92,289,924.70</td>
</tr>
<tr>
<td>2013</td>
<td>2,373,386.50</td>
<td>93,731,169.90</td>
</tr>
<tr>
<td>2014</td>
<td>2,337,605.00</td>
<td>93,949,010.00</td>
</tr>
</tbody>
</table>
Areas where development is apparent

- Volume of production
- Culture system
- Species cultured
- Technical know-how
- Seed production system
- Market
Major driving forces for aquaculture development

- Increased demand
- Availability of inputs and technology
- Increased government attention and support
- Profitability
- Established market
Aquaculture is an important tool for food security and poverty alleviation

In 2002, an estimated 226,195 aquaculture operators were recorded.
Aquaculture in the Philippines is dominated by men and women are a minority.

Women involvement is in various stages in aquaculture operations especially in rural aquaculture.

In most commercial farms, women are given challenging roles requiring greater responsibilities.
Niche of women in aquaculture

Farm owner
Farm manager
Farm technician
Farm laboratory analysts
Technical sales representatives (Feed, probiotics and other aquaculture inputs)
Researchers
Extension workers
Educators
Consultants
Causes of less number of women involvement in aquaculture

- Limited opportunities
- Low confidence of women to assume greater responsibilities
Recommendations to encourage more women involvement in aquaculture

- More rigid training in the university
- Capacity/capability enhancement of faculty teaching aquaculture
- Promote gender equality and sensitivity in the academe and aquaculture companies
Conclusion

Aquaculture in the Philippines is flourishing and contributes to food security and poverty alleviation.

Participation of women in aquaculture in terms of number is low but they occupy high impact niches.

The manner the students were trained in the university affects their confidence to assume greater responsibilities and roles in aquaculture.
Acknowledgement

World Aquaculture Society- Asian Pacific Chapter