PROMOTING MORE AND BETTER JOBS IN THE MILKFISH INDUSTRY IN SOUTHERN MINDANAO – PHILIPPINES
MILKFISH SUPPLY CHAIN

Export Markets

Domestic - Supermarkets

Small Processors/ Large Processors

Fish Vendors

Fish Dealers

Milkfish Growers (Fish Pond)

Nursery

Feed Mills/ Distributors

Algae Suppliers

Other Input Suppliers
## THE CONTEXT

<table>
<thead>
<tr>
<th>Low farm productivity</th>
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<tbody>
<tr>
<td>Dominance of extensive culture – low stocking density and long culture period</td>
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<tr>
<td>Fragmented production/supply fluctuation</td>
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<tr>
<td>Inferior product quality/weak food safety compliance</td>
</tr>
<tr>
<td>High production cost</td>
</tr>
<tr>
<td>Vulnerability to climate change impact (fish kill, calamities, disease outbreak, etc.)</td>
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<table>
<thead>
<tr>
<th>Low skilled workers</th>
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<tbody>
<tr>
<td>Dominance of part-time/casual work</td>
</tr>
<tr>
<td>Permanent workers – below minimum wage (monthly income; profit sharing + rice allowance)</td>
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<tr>
<td>Long hours of work; women invisible workers in farms</td>
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<tr>
<td>Poor OSH implementation</td>
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# JOBS PER HECTARE OF FISH POND

<table>
<thead>
<tr>
<th>Function</th>
<th>Full Time Equivalent (FTE) / hectare of grow-out fish pond</th>
<th>Type</th>
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<tbody>
<tr>
<td></td>
<td>Semi-Intensive Stocking Density: 10,000</td>
<td></td>
</tr>
<tr>
<td>Nursery</td>
<td>0.07</td>
<td>0.02</td>
</tr>
<tr>
<td>Grow-out</td>
<td>0.56</td>
<td>0.25</td>
</tr>
<tr>
<td>Trading</td>
<td>0.05</td>
<td>0.02</td>
</tr>
<tr>
<td>Processing</td>
<td>2.00</td>
<td>0.67</td>
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</tbody>
</table>

Other nodes of employment: feed mills/ algae suppliers, logistics & transportation, ice plants/distributors, vendors
THEORY OF CHANGE

Production Push

- Logsistics/Ice
- Feeds
- Nursery
- Growers
- Fish Dealers
- Processors
- Vendors

Market Pull

- Skills Training
- Product Development
- Productivity Improvement
- Crop Diversification
- Alternative/Natural Feeds
- Effective Support Services
- Food Safety/Quality Improvement
- Behavior Change/Interfirm Cooperation

More and Better Jobs
‘GOOD ENOUGH’ GAqP OUTCOMES

<table>
<thead>
<tr>
<th>Annual Ave Yield/hectare</th>
<th>FTE/Hectare</th>
<th>FTE/MT</th>
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</thead>
<tbody>
<tr>
<td>1.8 MT</td>
<td>0.019</td>
<td>0.14</td>
</tr>
<tr>
<td></td>
<td>0.164</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.064</td>
<td></td>
</tr>
<tr>
<td>3 MT</td>
<td>0.022</td>
<td>0.10</td>
</tr>
<tr>
<td></td>
<td>0.211</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.064</td>
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</table>

- **Pond Preparation**
- **Rearing**
- **Harvesting**

Workers: More workers hired and/or workers hired for longer duration

Pond Owner: Lower labor input per MT of fish
‘GOOD ENOUGH’ GAqP

• Seeing issues such as productivity and food safety as a continuum

• Promoting small incremental improvements

• Focusing on small, doable aspects of GAqP rather than on certification

• Identifying motives of VCA actors to improve productivity, safety, and quality

• Seeing the role of VC actors in upgrading as the beginning of a long-term process in which actors reach higher standards gradually, as they became ready for it

• Letting the content and pace of upgrading be driven by VC actors and workers
**CHOICE OF FEEDS**

**Algae (almost always insufficient) + Bread crumbs/ Snack food rejects**

- Cheap but ...
  - Low feed conversion ratio
  - Longer culture period
  - Stunted growth
  - Water pollution
  - Marginal contribution to employment

**Algae (own production + outsourced) + Commercial natural feeds**

- Faster growth/higher yield and ROI
  - Better taste/
  - Perceived by consumers to be healthier
  - Self-employment (algae growers)
  - Wage labor (logistics/distribution/retail)

Affordable payment terms: TA to caretakers
DIVERSIFICATION OF MARKETS

<table>
<thead>
<tr>
<th>Fresh market:</th>
<th>Restaurants/Processors</th>
<th>Tuna Bait:</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 pcs: 1 kg – most saleable</td>
<td>Bigger Fish: 2 pcs: 1 kg</td>
<td>Fingerlings/ Shorter culture period</td>
</tr>
<tr>
<td></td>
<td>Smaller Fish: 7 pcs: 1 kg</td>
<td></td>
</tr>
</tbody>
</table>

With diversified markets and requirements, seasonality of wage labor minimized and capacity of downstream enterprises to offer regular employment increased.
FORMATION OF WORKER GROUPS

- Helped in building up capacity to acquire small equipment and tools that enabled them to demand higher payment and perform tasks more efficiently
- Accelerated learning process and adoption of improved practices/ access to training
- Harmonization of work standards and rates
- Improved bargaining position
- Facilitated even distribution of jobs/rotation of task assignments
- Access to social security
SUMMARY OF KEY POINTS

• Focus on interventions that address both systemic constraints to jobs generation and growth of enterprises across different functions. A focus on workers’ needs only would most unlikely result to significant increase in jobs generated.

• In markets that are competitive and growing, improving labor and firm/farm productivity can provide the impetus for the enterprises to hire more workers.

• Assisting firms to move into differentiated products or premium markets can improve their capability to offer better income and working conditions to the poor.
SUMMARY OF KEY POINTS

• At the very outset, it is important to understand where the jobs are and the opportunities for job creation and decent work promotion. Analysis of the FTEs at different functions in a market system and key tasks in each function can provide an understanding on how changes in practices and technology can support improvements in jobs generation.

• Compliance to labor standards/better working conditions is best promoted in relation to improving efficiency, labor productivity, and reducing reputational risks. Supply chain governance also in some ways affects compliance to labor standards.
Marian E. Boquiren
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