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|---------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Reference No. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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## SELF-ASSESSMENT GUIDE

|   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |            |           |
|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|------------|-----------|
| FULL Qualification  | <b>AQUACULTURE (TILAPIA CULTURE) NC II</b>   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |            |           |
| Units of Competencies Covered   | <ul style="list-style-type: none"> <li>• Conduct pre-operational aquaculture activities</li> <li>• Operate tilapia hatchery and nursery</li> <li>• Perform tilapia grow-out</li> </ul> |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |            |           |
| <b>Instruction:</b>   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |            |           |
| <ul style="list-style-type: none"> <li>• Read each question and check the appropriate column to indicate your answer.</li> </ul>          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |            |           |
| <b>Can I?</b>   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | <b>YES</b> | <b>NO</b> |
| <b>CONDUCT PRE-OPERATIONAL AQUACULTURE ACTIVITIES for Tilapia Hatchery and Nursery</b>  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |            |           |
| • Enumerate major activities to be done and give tools, materials or equipment required when preparing tilapia culture facilities *       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |            |           |
| • Gather needed materials and paraphernalia tools and nets  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |            |           |
| • Weigh appropriate amount of fertilizer and lime appropriate to area size  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |            |           |
| • Demonstrate proper broadcasting of fertilizer and lime  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |            |           |
| • Measure and record temperature, pH and salinity of culture water *  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |            |           |
| <b>for Tilapia Grow-out Operation</b>   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |            |           |
| • Clean needed tools and equipment  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |            |           |
| • Inspect and repair or replaces nets (if any)  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |            |           |
| • Calibrate equipment following manufacturer's manual (if needed) *   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |            |           |
| • Compute quantity of farm inputs according to work requirements  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |            |           |
| • Inspect and disinfect nets  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |            |           |
| • Prepare aquaculture facilities (ponds and tanks); and set-up cage *   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |            |           |
| • Install screens to prevent entry of unwanted organisms *  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |            |           |
| • Demonstrate preparation of pond by liming, fertilizing, tilling and drying processes *  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |            |           |
| • Check conditions (ex. water holding capacity, optimum pH of soil and water, presence of unwanted organisms) of aquaculture facilities * |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |            |           |
| • Install cages/structures with its components *  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |            |           |
| • Discuss measures against extreme weather conditions   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |            |           |
| • Practice proper storage of tools, equipment and farm inputs   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |            |           |
| <b>OPERATE TILAPIA HATCHERY AND NURSERY</b>   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |            |           |
| • Classify breeders by sex following established industry practices *   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |            |           |
| • Discuss how to apply prophylactic measures for breeders   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |            |           |

|   |  |  |
|---|--|--|
| • Discuss proper feeding practice for breeders according to good aquaculture practice   |  |  |
| • Separate eggs and fry from mouth-brooding breeders *  |  |  |
| • Transfer collected eggs and fry, according to industry practice   |  |  |
| • Grade different sizes of fingerlings according to industry practice *   |  |  |
| • Calculate amount of hormone and ethyl alcohol required to treat given quantity of feed  |  |  |
| • Discuss drying, packing, labelling and storing hormone treated feed following industry procedures                               |  |  |
| Calculate fry requirement for a given area *  |  |  |
| • Prepare daily feeding rate and schedule based on projected growth rate *  |  |  |
| • Discuss presence of diseases based on behavior of fish  |  |  |
| • Prepare needed materials and facilities for conditioning fingerlings for packing and transport                                  |  |  |
| • Demonstrate counting and packing of fingerlings considering fingerling size and travel time *                                   |  |  |
| <b>PERFORM TILAPIA GROW-OUT</b>   |  |  |
| • Discuss the quality (uniformity of size, ideal size and behaviour) of fingerlings   |  |  |
| • Calculate and discuss number of fingerlings required based on culture intensity and area *                                      |  |  |
| • Calculate the number of fingerlings by averaging actual counts based on samples   |  |  |
| • Demonstrate conditioning (acclimation) of fingerlings to receiving water environment prior to stocking                          |  |  |
| • Determine average body weight (ABW) of fishes and biomass based on the given raw data *   |  |  |
| • Compute daily feed ration and feed conversion ratio (FCR), based on biomass *   |  |  |
| • Identify factors to be considered when monitoring feed consumption  |  |  |
| • Check feed quality in terms of physical characteristics   |  |  |
| • Discuss water quality parameters based on fish behavior, water color and transparency   |  |  |
| • Discuss interventions to maintain optimum water quality *   |  |  |
| • Identify diseases based on appearance or symptoms   |  |  |
| • Discuss how to determine the presence of diseases or poor environment condition and recommends treatment or preventive measures |  |  |
| • Discuss proper disposal of dead fish following good aquaculture practices   |  |  |
| • Perform harvesting of fish from pond *  |  |  |
| • Classify fish by size   |  |  |
| • Discuss how to prepare fish for live market transporting  |  |  |

|  |  |             |
|--|--|-------------|
| • Prepare fish for chilled market  |  |             |
| • Prepare a stock monitoring form and feed monitoring form *   |  |             |
| • Practice safety and health while performing tasks  |  |             |
| I agree to undertake assessment with the knowledge that information gathered will only be used for professional development purposes and can only be accessed by concerned assessment personnel and my manager/supervisor. |  |             |
| <b>Candidate's Name and Signature</b>  |  | <b>Date</b> |

**NOTE: \*Critical aspects of competence**