## Generic guidance in the design and implementation of an active TILV surveillance: 12 point checklist

## Checklist #s 1-3

Checklist #	Requirements/Considerations	Considerations
1. Aims/Purpose of surveillance program	Status of TiLV in the country <a href="http://www.fao.org/fishery/nems/41072/zh">http://www.fao.org/fishery/nems/41072/zh</a> Select from 3 scenarios	Scenario 1: Angola, Kenya, Nigeria Scenario 2: Egypt, Uganda Scenario 3: Ghana
2. Definition of population: pond, farm, location, region	<ol> <li>Description of tilapia sector: culture practices         (cultured period, systems, management.scale of         operation, etc.)</li> <li>No. of registered farms (hatchery, grow-out ponds,         cages) – database of farmers</li> <li>Species (esp. susceptible species but also be         cognizant of other species)</li> <li>Need some kind of enrolment/registration in the         surveillance project</li> <li>TiLV hotspots</li> </ol>	To be used in finalising the sampling frame (checklist no. 5) and to be used during field visits (Field survey nos. 1 and 2)
3. Clustering of disease	time (e.g. season, temperature), or animal subgroups (e.g. age, physiological condition)	African data will be very valuable but this well depend on the sampling frame (esp culture practices), costs, etc

## Checklist #s 4-5

Checklist #	Requirements	Considerations		
4. Case definition	Suspicion: A tilapia farming system in previous and ongoing production cyclesigns such as skin redness/erosions of abdomen swollen or scale protrusion/le(e.g. farmer answer "yes"" to the quest farm of interest)	Confirmation: Upon the collection of 30 moribund or sick fish samples, TiLV is confirmed by a positive test result using PCR and the histopathological signs of TiLV		
5. Sampling	Sampling frame:each country will prepare the population (#2), clustering (#3) and other details illustrated in a map Diagnostic team Surveillance team Requirement checklists (field and laboratory) Cost estimates	<ul> <li>Field survey materials</li> <li>6 sections in one field questionnaire form (hatchery, grow-out ponds, cages):</li> <li>1. Farm profile</li> <li>2. Farm technical details</li> <li>3. Clinical history (TiLV related questions and other environmental data))</li> <li>4. Field sample collection form: fish samples and water samples</li> <li>5. Socio-economic survey</li> <li>6. Other biosecurity-related questions</li> </ul>	<ol> <li>Laboratory requirements</li> <li>Select which laboratory for Level II (institute, livestock, university, hospitals)</li> <li>Fish and water samples (see no. 4 field materials)</li> <li>Procedure for sending samples to (1)</li> <li>Laboratory form for each laboratory test: Level II and Level III</li> </ol>	
	Considerations in implementation: National sensitization about the project; training of diagnostic and surveillance teams, enrolment of farmers, pilot testing, conduct of field interviews (structured or participatory, etc.)			

## Checklist #s 6-7

Checklist #	Requirements	Considerations			
6. Diagnostic testing	SoPs for Level II SoPs for Level III SoPs for Level III Diagnostic team Diagnostic laboratory Materials	Days 1-3 Training course Days 1-3 Training course Days 1-3 Training course	Cross reference to Checklist No. 5		
7. Methodology	<ul> <li>Invitation letter to participate and enroll farms</li> <li>Epidemiological Unit: A tilapia farm</li> <li>Unit of sampling: A mix of 30 moribund or sick tilapia from ponds at the farm.</li> <li>Total number of enrolled and participant farms: 40 to 60 tilapia farms; which should be visited twice (total field visits = 80 to 120, per country - at least 1+ve farm, at 2% Prev).</li> <li>1st and 2nd semesters, 2019 (pre/post hot season?)</li> </ul>				
	<ul> <li>Estimated goal for monthly field visits: approx. 3 tilapia farms per week (range of 2 to 4 farms)</li> <li>Timeframe of sampling: 8 months, starting in March 2019.</li> <li>Sampling proportional for the structure of the industry; only aquaculture settings. Predominant species(?)</li> <li>e.g., 20 growth out, 20 hatcheries and 20 cages</li> </ul>				