



**Food and Agriculture Organization  
of the United Nations**

**PROJECT INCEPTION WORKSHOP**  
**GCP/RAF/510/MUL: Enhancing capacity/risk reduction of emerging Tilapia Lake Virus  
(TiLV) to African tilapia aquaculture**

23-24 October 2018  
Southern Sun Myfair Hotel  
Nairobi Kenya

## Introduction

Tilapia Lake Virus (TiLV) disease has been emerging as a significant disease of wild tilapia (2009 in the Sea of Galilee in Israel) and farmed tilapia in many countries through several reports. The earliest scientific publications of cases in Israel, Colombia and Ecuador were reported by Ferguson *et al.* (2014); Eyngor *et al.* (2014); Bacharach *et al.* (2016); del Pozo *et al.* (2017); and Tsofack *et al.* (2017). Thai scientists reported the situation and results of several studies in Thailand (Dong *et al.* (2017a, 2017b, 2017c); Surachetpong *et al.* (2017); Tattiyapong *et al.* (2017a, 2017b). The situation in Egypt was reported by Fathi *et al.* (2017) and Nicholson *et al.* (2017). The most recent scientific publications are that of Mugimba *et al.* (2018) in Lake Victoria (positive TiLV occurrence in Tanzania and Uganda), Behera *et al.* (2018) in India, and Koesharyani *et al.* (2018) in Indonesia.

The TiLV disease advisory (NACA, 2017), TiLV disease card (OIE, 2017), TiLV Factsheet (CGIAR, 2017), TiLV special alert (FAO, 2017a) and a literature review by Jansen and Mohan (2017) were also released. In addition, some countries (e.g. Israel, Thailand, Malaysia, Chinese Taipei, Philippines and Peru) have notified OIE (OIE 2017b,c,d; OIE, 2018), the occurrence of TiLV as an emerging disease.

All the above publications summarize the available scientific knowledge about TiLV in terms of causative agent, modes and risk of transmission, host range, clinical signs and diagnostics, geographic distribution as well as recommended actions and measures to take regarding TiLV. No information, however, is available on survival of pathogen outside host, stability of the agent, levels of mortality at different life stages, suspected aquatic animal carriers/ vectors, and possible treatments.

Tilapias are the second-most important farmed finfish worldwide (next to the cyprinids), with Nile Tilapia (*Oreochromis niloticus*), ranking 6th among the most important cultured species. Their importance is also due to their affordability, good source high quality protein and micronutrients, tolerance to high-density aquaculture and resistance to disease. The top 10 tilapia producers for 2015 (FAO, 2017b) were: China (1.8 million tonnes), Indonesia (1.1 million tonnes), Egypt (875 thousand tonnes), Bangladesh (324 thousand tonnes), Viet Nam (283 thousand tonnes), the Philippines (261 thousand tonnes), Brazil (219 thousand tonnes), Thailand (177 thousand tonnes), Colombia (61 thousand tonnes) and Uganda (57 thousand tonnes). In 2015, world tilapia production (aquaculture and capture) amounted to 6.4 million tonnes, with an estimated value of USD 9.8 billion, and worldwide trade was valued at USD 1.8 billion<sup>1</sup>.

Given the importance of farmed and wild-caught tilapia, especially as a widespread source of low-cost protein, TiLV represents a potential threat to food security in the developing world. TiLV has no known direct human health implications.

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<sup>1</sup> <http://www.fao.org/fishery/statistics/global-production/en>. 2 FAO Statistics and Information Branch, Fisheries and Aquaculture Department/FAO 2017, Fishery and Aquaculture Statistics. Global production by production source 1950-2015 (FishstatJ). In: FAO Fisheries and Aquaculture Department (online), Rome. Updated 2017; [www.fao.org/fishery/statistics/software/fishstatj/en](http://www.fao.org/fishery/statistics/software/fishstatj/en).

**Project Inception Workshop**  
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Nairobi, Kenya

## **Purpose**

The objectives of the Project Inception Workshop (PIW) are to:

- (1) introduce the project GCP/RAF/510/MUL: Enhancing capacity/risk reduction of emerging Tilapia Lake Virus (TiLV) to African tilapia aquaculture to participating countries and relevant stakeholders;
- (2) introduce the disease TiLV, current state of knowledge and risks to African tilapia aquaculture;
- (3) discuss project implementation mechanism; and
- (4) identify potential bottlenecks and/or risk in project implementation (especially at national level) and find ways in advance to avoid such risks.

## **Process**

This PIW will be held from 23-24 October 2018 (excluding travel time). The workshop will include four sessions that pertain to the four identified objectives. The PIW agenda is attached as **Annex 1**. Other useful information can be found in the link below:

<http://www.fao.org/fishery/nems/41072/en>

Information note is attached as **Annex 2**.

## **Participation**

The PIW will be participated by the following:

- Designated National Project Coordinators (or alternates): 1/country
- Nominated official delegates to the project: (2/country)
- Local representatives from host country (Kenya): 10
- International Consultants: 4
- FAO: ECTAD, FAORs, FIAA, RAF

A tentative list is attached as **Annex 3**.

## **Products**

The expected outcomes of the PIW are below:

- 1) enhanced knowledge about the project, objectives, scope, components, outputs and implementation plans
- 2) enhanced knowledge on various aspects of TiLV
- 3) detailed implementation plan: requirements, components, time-line, risks, responsibilities

## Annex 1: Detailed Program

Date	Program
<b>22 October 2018</b>	<b>Arrival of delegates</b>
<b>23 October 2018</b>	<b>Tuesday</b>
08:30-08:45	Registration
08:45-09:20	<b>Opening session (to be finalized by M VanDerKnaap)</b>
09:20-10:00	Group photo/Coffee break
10:00-10:50 10:00-10:20	<b>Session 1:</b> Introduction to the project GCP/RAF/510/MUL: Enhancing capacity/risk reduction of emerging Tilapia Lake Virus (TiLV) to African tilapia (M Reantaso)
10:20-10:40	Status of tilapia aquaculture in Africa and trends in tilapia trade (regional and international) (M VanDerKnaap)
10:40-10:50	Q&A
10:50-12:00 10:50-11:20 11:20-11:50 11:50-12:20 12:20-12:30	<b>Session 2:</b> Introduction to TiLV: current state of knowledge TiLV: Emergence and current distribution (W Surachetpong) TiLV: Pathology and diagnostics (K Tang-Nelson) TiLV: Prevention and control (W Surachetpong) Q&A
12:30-13:30	Lunch break
13:30-14:00 14:00-14:30 14:30-15:00 15:00-15:30	TiLV: Risks and risk management (M Reantaso) TiLV Diagnostics requirements (K Tang-Nelson) Aquatic animal disease surveillance (N Fejzic) Surveillance requirements (N Fejzic)
15:30-16:00	Coffee break
16:00-16:30 16:30-17:00 17:00-17:15 17:00-17:30	Socio-economic impact assessment methods and requirements (M Nagadya) FAO Emergency Management Tools (Charles Bebay/Baba Soumare) National Action Plans on TiLV (M Reantaso) Q&A
<b>24 October 2018</b>	<b>Wednesday</b>
08:30-12:00 10:00-10:15 (Coffee break)	<b>Session 3:</b> Project implementation mechanism <ul style="list-style-type: none"> <li>• First regional workshop: Intensive TiLV training course</li> <li>• Development of National Action Plans (NAP) on TiLV: diagnostics, surveillance, awareness raising, socio-economic impact assessment, etc.</li> <li>• National implementation of TiLV NAPs</li> <li>• Second regional workshop: surveillance data analysis and progress reporting on NAP on TiLV</li> <li>• International Technical Seminar on TiLV (2020)</li> </ul>
12:00-13:30	Lunch break
13:30-17:00 15:30-15:45 (Coffee break)	<b>Session 4:</b> Potential bottlenecks and/or risk in project implementation (especially at national level) and find ways in advance to avoid such risks.
17:00-17:30	<b>Closing session ((to be finalized by M VanDerKnaap)</b>
<b>25 October 2018</b>	<b>Departure of delegates</b>

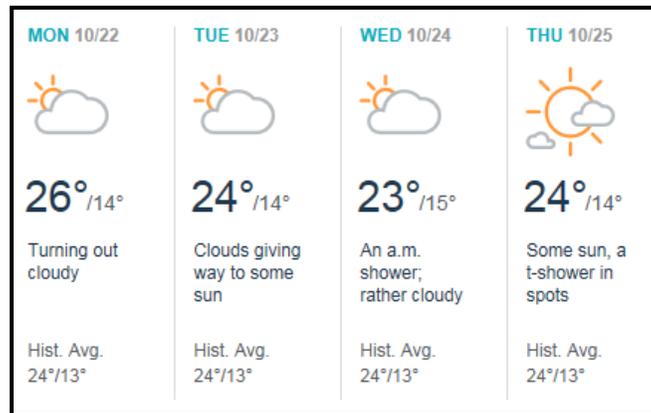
## ANNEX 2: Information note to participants

### Accommodation:

Southern Sun Myfair Hotel  
Address: Parklands Road, Parklands, Nairobi, Kenya  
Contacts: General Manager: Solomon Mugwe  
Tel: +254 20 3688000  
E-mail: <mailto:admin@southernsun.co.ke>  
Website: <https://www.tsogosun.com/southern-sun-mayfair-nairobi>

### Weather forecast:

In Nairobi, during the period 22-25 October 2018, the weather forecast is below:



### Airport transfer service

No airport transfer service will be arranged.  
The hotel is located 20 km from the Jomo Kenyatta International Airport (estimated time by car: 40 minutes)  
Taxi services are available at the airport.



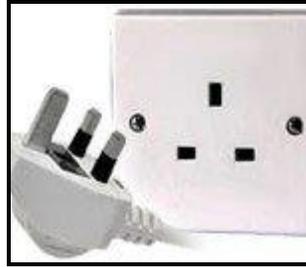
**Currency:**

Kenyan Shilling (KES)

Exchange rate: 1 USD = 100.95 KES

**Plug type in Kenya**

The power plugs and sockets are of type G (picture below). The standard voltage is 240 V and the standard frequency is 50 Hz.



**Local contacts:**

For further information, you may contact:

<b>Alice Jesse</b> Email: <a href="mailto:Alice.Jesse@fao.org">Alice.Jesse@fao.org</a>	<b>Martinus Van Der Knaap</b> Email: <a href="mailto:Martinus.VanDerKnaap@fao.org">Martinus.VanDerKnaap@fao.org</a>
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