

Solomon Islands and Timor Leste exchange knowledge in tilapia aquaculture

*A delegation made up of five officers from the Solomon Islands Ministry of Fisheries and Marine Resources (MFMR), the Mekem Strong Solomon Islands Fisheries (MSSIF) Programme and the Pacific Community (SPC) visited Timor Leste in April 2018 to examine the development of the country's Nile tilapia (*Oreochromis niloticus*) hatchery and farming systems.*

The group, which was led by Deputy Director MFMR and head of Aquaculture Division Mr James Teri, spent one week of studying the operations of a recently rehabilitated tilapia hatchery that is now producing Nile tilapia fingerlings for small scale farmers in rural Timor Leste.

The delegation was warmly welcomed by the Minister of Agriculture and Fisheries, Mr Estanislao da Silva in Dili during a courtesy visit on 9 April 2018. The Minister noted that this is not the first time that Solomon Islands and Timor

Leste have found commonalities in the fisheries sector. The relationship has been cemented during Coral Triangle Initiative activities, which kicked off in 2009.

MFMR Deputy Director, Mr Teri, expressed his thanks on behalf of the Solomon Islands delegation for the invitation to visit Timor Leste and the opportunity to learn from their experience gained over the last three years since re-establishing a small-pond tilapia aquaculture industry using the improved (GIFT)¹ strain of Nile tilapia supplied by WorldFish.



Billy Meu (centre) of Solomon Islands MFMR gains some tips about fish-egg washing steps from his Timor Leste counterparts Oscar Martins (left) and Marcos Martins (right) at Gleno Tilapia Hatchery in the highlands of Timor Leste (image: Tim Pickering).

¹ Genetic improvement through selective breeding has been used for millennia on crops and livestock, but up until the 1980s, little had been done to utilise this process for farmed fish. In response to the inadequate supply of tilapia seed and the deteriorating performance of the fish in many aquaculture systems in Asia, WorldFish and partners began the Genetic Improvement of Farmed Tilapia (GIFT) project to develop a faster-growing strain of Nile tilapia (*Oreochromis niloticus*) that was suitable for both small-scale and commercial aquaculture. Source : <https://www.worldfishcenter.org/content/genetically-improved-farmed-tilapia-gift>



Collection of eggs by Timor Leste hatchery staff members Bendito Alve (left) and Domingos Martins (right) from the mouth brooding tilapia fish, for egg incubation and hatching in the hatchery (image: Tim Pickering).

The Timor Leste Government has re-established its Nile tilapia industry with technical support from WorldFish through a New Zealand Aid funded project (2015–2019). WorldFish officers based in the Ministry of Agriculture and Fisheries in Dili kindly hosted the Solomon Islands delegation for the duration of their visit.

After visiting the Nile Tilapia hatchery in Gleno, which is southwest of Dili, Senior Aquaculture Officer Mr Billy Meu noted that ‘the challenges that Solomon Islands and Timor Leste face in terms of establishing a Tilapia farming industry are similar. The scale of production, the type of technology, the extent of aquaculture knowledge in the farming communities and even the community setting are similar to Solomon Islands’. The similarities mean that the delegation could gain a realistic view of how a planned quarantine and hatchery development will operate in Solomon Islands.

In late 2016, the Solomon Islands government cabinet approval was given for the importation of Nile tilapia by MFMR and the development of a fry production system to support rural farmers.

The New Zealand funded programme MSSIF as well as New Zealand funded programmes that are run by the Pacific Community’s Fisheries Aquaculture and Marine Ecosystems (FAME) Division are currently supporting the

initial stages of rollout in Solomon Islands. One of the lessons learnt from the Timor Leste visit is about how a donor model can be successfully applied in partnership with the responsible government ministry. While in Timor Leste, the Solomon Islands delegation was also able to refine and fine-tune their proposed design for the construction of a Honiara-based Nile tilapia hatchery.

The MFMR delegation returned to Solomon Islands expecting that the next stages of planning will proceed rapidly because of the new information that they can draw upon from Timor Leste. In coming years, as the Solomon Islands government hatchery begins operation, it is anticipated that further exchanges will take place between the two countries for training and capacity building purposes.

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