

**DEPARTMENT OF AGRICULTURE, FORESTRY, METEOROLOGY
AND FISHERIES**

FISHERIES DIVISION



**ASSESSMENT ON SALEAUMUA'S FRESH WATER LAKE FOR
TILAPIA (O.niloticus) CULTURE**

INTRODUCTION

An assessment for Saleaumua fresh water lake for a Tilapia culture was made on the 10 July, 1998 by Fisheries staff of the Fisheries Division. The main purpose of assessing the water at Saleaumua was to determine whether it was suitable for stocking with Tilapia fish (O. niloticus), a substitute source of food for the village. Assessment of water salinity, pH, temperature and dissolved oxygen content (DOC) was made in response to a request by the village matais.

POND STRUCTURE

The lake at Saleaumua is 105sq meters in area and approximately 1.3 meters in depth at the centre. The water is clear and is used by the village for plantation and farm purposes.

From observation and discussion with the villagers, it was confirmed that the lake is sited in the channel of a river flow. Therefore, when the river floods, the lake overflows as well. This would mean that Tilapia stocked inside the lake area would be washed away during heavy flooding.

The table below indicates the result of water assessment at Saleaumua.

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RESULTS OF ASSESSMENT

water depth	salinity	temperature	pH	dissolved O ₂	water colour
0.4-1.3 metres	0.2	24 ⁰	7	6.5	clear

CONCLUSION:

Measurements of the physical parameters (water depth, salinity, temperature, pH and DOC) indicate that water condition at Saleaumua is suitable for Tilapia culturing. However, the occurrence of lake overflow during flooding, would negatively affect the outcome of Tilapia culture.

For this reason, the establishment of a Tilapia (*O. niloticus*) fish farm cannot be supported for Saleaumua.

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