Title: Intensity of Freshwater Use for Aquaculture in Different Countries

Authors: Claude E. Boyd and Li Li

Department of Fisheries and Allied Aquacultures
Auburn University, Alabama 36849 USA

Date: May 1, 2012

Abstract: The intensity with which 172 countries use freshwater for aquaculture was estimated by dividing annual, freshwater aquaculture production (tonne/yr) by annual total natural renewable freshwater (km$^3$/yr). The freshwater aquaculture production:renewable freshwater ratio (AFR) varied among countries from 0 to 15,000 tonne/km$^3$. Country-level AFRs were assigned to AFR classes as follows: no freshwater aquaculture, 0 tonne/km$^3$; low, < 100 tonne/km$^3$; medium, 100-1,000 tonne/km$^3$; high, > 1,000 tonne/km$^3$. The number of countries in each AFR class follows: no freshwater aquaculture, 35; low, 80; medium, 45; high, 12. There seems to be adequate renewable freshwater to allow considerable expansion of freshwater aquaculture – especially outside of Asia.

This abstract was excerpted from the original paper, which was published in Better Science, Better Fish, Better Life: Proceedings of the Ninth International Symposium on Tilapia in Aquaculture (2011) [Edited By: Liu Liping and Kevin Fitzsimmons] pg: 68-74