Improvement of Intensive Fish Farming through Biofloc Aquaculture Technology in Rural Community of Cambodia

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Abstract

Fish intensification means increased stocking density bringing unfortunately negative environmental impact on fish growth and health due to organic waste remaining feed, faeces and metabolic waste is the main causes for environmental degradation. Biofloc aquaculture technology is applied to improve environment control over intensification or increased productivity while water is scarce or land area is limited and expensive. Proposed project is to enhance aquaculture intensification in Cambodia's rural community through introducing technique of biofloc-based highly intensive hybrid catfish (Clarias gariepinus x C. macrocephalus) culture added with beneficial bacteria, Lacto bacillus syrup for treating water quality under climate change context. The investigation will be focused on different intensive fish stocking rate in plastic ponds in order to find a suitable fish stocking to intensive culture for rural farmers. Fish experiment will be conducted mainly on FoF's Aquafarm, Royal University of Agriculture and on model fish farmer selected by project team for comparing any finding discovered in different locations and situations. Regarding the findings, a farmer manual will be produced and contributed to rural farmers through short-term training course directly in their communities. The proposed project will be done for two years within US$ 20,000.00 of total budget requirement. Project beneficiaries are rural fish farmers, Faculty o Fisheries's lecturers and BSc students, provincial fisheries officer, a doctoral student and relevant technical extension agents.