Research Article

Optimizing the Utilization of Genetic Resources of Indonesian Native Freshwater Fish

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ABSTRACT

Indonesia has a long story in the documentation of the richness of fish genetic resources. Identifying and documenting the diversity of fish species showing the country has around 1700 species. However, Fishbase records only 1258 species (10% contribution to the world) indicating around unrecorded 442 species (26%) in the site. Significant pressures on fish genetic resources and its habitat, small new species documentation/loss of existing species, a decreasing percentage of species at the global level, and un-optimal utilization seems to be essential issues. To deal with these issues, the re-inventory of Indonesia's freshwater fish genetic resources needs to be conducted with concern on unrecorded data in FishBase and threatened species. The government needs to increase awareness on establishing fisheries status through the implementation of the Ecosystem Approach to Fisheries Management (EAFM) for better fisheries management programs. Improvement of preservation and utilization programs for potential native fish species is also essential to provide alternatives species for aquaculture development and its conservation and the last is habitat rehabilitation through nature reserves empowers rules and strengthens regulation. To achieve action plan targets, cross-sectoral coordination is needed in which institutions involved in policy authority, scientific authority, and management authority must synchronize their programs and actions.

Key words: conservation, inland fisheries, fish biodiversity, native species

