



FACTSHEET

HoB

2012

# Building the Resilience of Freshwater Sources



FACTSHEET 3

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In Sabah, Borneo's northernmost Malaysian state, water catchment areas deliver freshwater resources and other valuable ecosystem services that benefit both local communities and biodiversity conservation. Although water sources may originate within protected areas, such as Crocker Range Park, they are still vulnerable to climate changes and human disturbance. It is important that the forested Gravity Feed Supply (GFS) catchments, especially those on state land forest, are protected from pressure for conversion to other land uses.

Agriculture and deforestation are the two major threats to the river system in the upland sub-catchment of the Labuk basin (in the district of Tambunan), an area within, and connected to the boundary of the Heart of Borneo.

Extensive agricultural activities have resulted in surface run-offs and unsustainable use of agricultural chemicals, which may affect the existing GFS water supply. Introduction of exotic fish into the river, caused by the location of small fish ponds used in the *tagal* (community-based indigenous fisheries management) system near the river, potentially replaces indigenous fish species. In addition, climate change related threats such as the occurrence of low flow, droughts and flooding have affected the water quality in the area.

## Managing water catchments

WWF-Malaysia is working with government agencies, local communities, NGOs and local universities to address management issues of water catchment areas in the State of Sabah. This is with the aim to safeguard its resilience to deliver freshwater resources and other valuable aspects of the ecosystem that contribute towards local community livelihoods and biodiversity conservation efforts. The objectives of this project are to promote action for improved protection and management of the upland water catchment forest, to enhance conservation and restoration of key species (aquatic), and to enhance local community participation in catchment and natural resources management.



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## Building support for managing water catchments

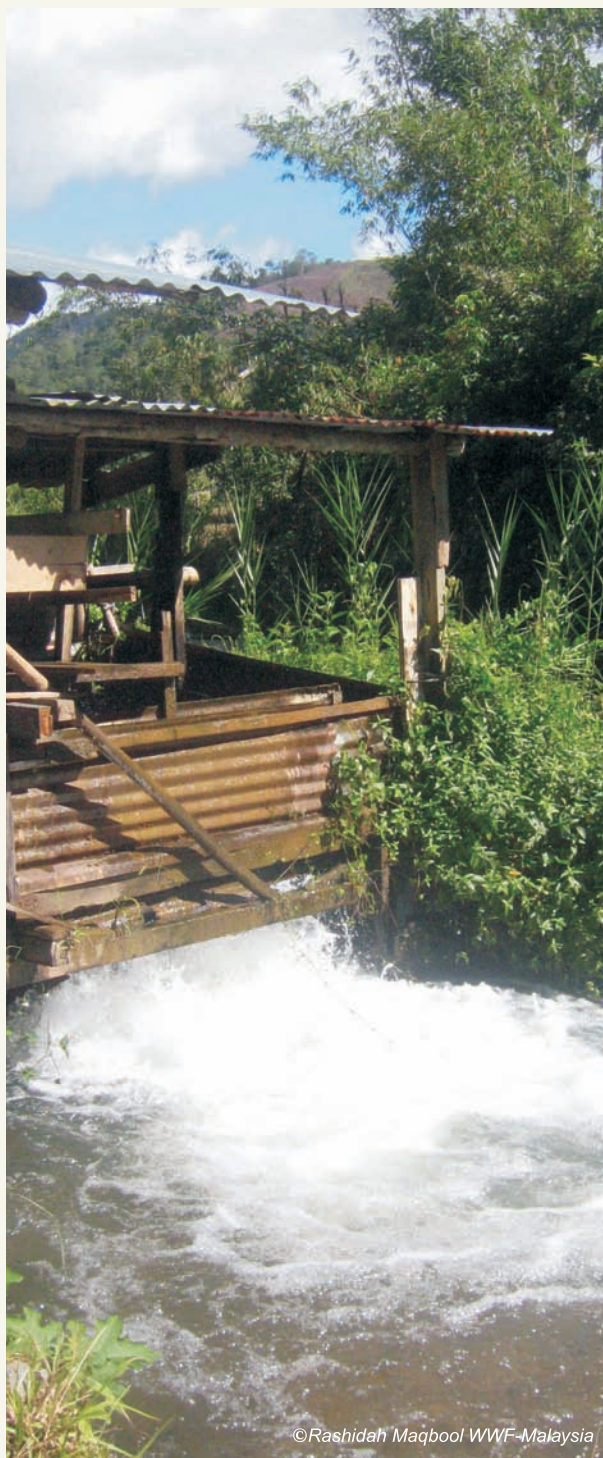
This project will contribute to the overall Heart of Borneo goal - 'promoting biodiversity conservation and protection through a collaborative approach to achieve sustainable resource management in HoB by 2020'.

The project is focused on:

- Improving protection and sustainable management of forests in water catchment areas to safeguard freshwater resources and other ecosystem services based on best practices, sustainable land use principles and ecosystem approaches;
- Enhancing management, conservation and restoration of fish species (particularly species of high conservation importance) within the project area; and
- Enhancing capacity and participation of local communities in catchment areas and natural resources management in the project area that will contribute to the communities' overall well-being.

The outputs of this project will:

- Be useful for advocating the protection of water catchments;
- Provide information and tools to help authorities and communities to further improve land use management of water catchments in the project area;
- Provide entry points for community engagement in terms of preparing them to adapt to higher incidences of lower river flows and floods, and community participation in conservation efforts in catchment areas;
- Benefit local communities in terms of enhanced capacity to undertake activities that are sustainable and compatible with their surrounding natural environment while at the same time able to derive socio-economic benefits;
- Contribute both directly and indirectly towards national and state level programmes for safeguarding the environment and its natural resources; and
- Improve the quality of life of interior communities.



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## Towards a Greener HoB

This project serves as a pilot field project under the broader HoB Initiative which is centred on maintaining freshwater ecosystems. It involves achieving sustainable management of freshwater resources, water catchment areas and forests, through active involvement by local communities and capacity development, which also enhances the ability of community members to participate in income generating activities.



### Why we are here

To stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature.

<http://www.panda.org>

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