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Conflict Potential over Water Resources and Effects of the Water Management at the Bathi River

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Abstract

Water is one of the most substantial resources for life. It is under threat by different effects, which include, but are not limited to: Anthropogenic pollution, deforestation, higher demand and climate change. Communities affected by changing water patterns are exposed to higher stresses, which may lead to increased conflict potential. The township of Kimende, south of the Aberdare Ranges in Kenya has high precipitation and is not yet prone to water scarcity. The Bathi River, which springs north of the township, supports many adjacent farmers and is a tributary feeding the Athi-Galana River.

The willingness of investment is restricted to water abstraction, like e.g. pumps, but is not expanded to conservation, as e.g. by higher efficient irrigation techniques; this may lead to a situation where water scarcity becomes a hindering factor for economic growth. Illegal activities such as farming close to the stream and construction of dams without permits provide potential local conflicts between farmers. Forested areas between Kimende and Kagwe prevent from regional conflicts, since discharge increases significantly after the forest.

Local farmers report uniformly reduced discharge during the last years. Quality changes are mostly perceived as increased sediment load in the stream. The awareness of the connection between personal practises and environmental impacts increases with education.

Attempts to manage the water resources fail with the improper implementation and enforcement of laws and the poor acceptance of trainings and education by farmers. Key challenges lie in the communication between authorities and farmers to sensitize for individual impacts on the water resources.

Keywords: Bathi River, conflict, irrigation, Kenya, Kimende, management, water scarcity