

F-09: Multiple uses of water in irrigated areas: a case study of the Kirindi Oya Irrigation System

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As water scarcity intensifies, there will be an increasing pressure to transfer water from agricultural uses to municipal and industrial uses. It is not possible to predict the full impact of such actions with our current base of knowledge. Researchers, policy-makers, and agency staff involved with water resources have too long focused on only one water use, either irrigation or domestic use when in fact, people have been using water in irrigation systems for many purposes. The study in Kirindi Oya showed that the water is not only used for irrigating the field crop but also for livestock, fisheries, homegarden cultivation, domestic uses, industries and the environment. Agriculture, particularly paddy, is the largest consumer of water. Many other uses like fishing or bathing do not consume water, while others such as drinking water and curd pot making consume relatively small amounts of water. Because they draw their water directly from the irrigation system (canals and tanks) or indirectly (wells through groundwater recharge), there is thus a complementarity between these uses and field irrigation. However, within the irrigation use of water there is a conflict. On basis of a historical water right, old area farmers claim to have priority for water over farmers in the new area. This is often a source of conflicts because this water right is only informally agreed upon.

Going beyond the sectoral blinders will change our picture of irrigation systems and allow us to see the full spectrum of water uses. This has important implications for the management of water within the irrigation system, and also for broader water resource policy.