Supplementary material

• Why did they modify the index?

To adjust the requirements for the study area, and because of the lack of available data.

• Why the study in low-impact catchments?

Because these systems are little studied and there is no enough information about them.

• What are the biogeographic, sociodemographic, and institutional components?

The biogeographic components are:

- Water consumption of irrigated vegetation.
- Available water storage in a reservoir.
- Water requirements of vegetation for optimum production.

The sociodemographic components are:

- Willingness to invest in irrigation
- Organization for irrigation
- Irrigation schedule

The institutional component is:

• Support of the institution in its period of government

Supplementary material

• What are the weights of each component?

The weights of each component have not yet been established

• How can MISI be improved?

Including another component which can be the technological component.

• How can MISI support the SGDs?

MISI can help improve irrigation efficiency and water management, promote sustainable and responsible agricultural practices.

• How MISI can be adapted to local and regional scales?

MISI may be adapted to multiple scales using secondary information as remote sensing.

• How useful is MISI for irrigation district management?

MISI allow objective comparisons depending on irrigation management level for a stepped improvements during consolidation of irrigation specialization.

• Why study low-impact irrigation systems the Tarqui River Basin?

Irrigation systems arround Andean cities present similar features as those shown in TRB. The study of these structures through MISI allow comparisons and trace a path to boost faible features and trenghten current positive aspects related to sustainable development.