

The FIETS model

In the past, many technologies and services introduced in developing countries failed. Major reasons for failure were the prohibitive cost and level of complexity, and/or a lack of ownership. Below we describe the FIETS model, which tries to account for five dimensions of sustainability: the Financial, Institutional, Environmental, Technical and Social dimensions.



The 'FIETS'-model is further explained by main questions, which are related to the criteria and form an *indication* of what should be described by the applicant.

Financial sustainability

How are future operations & maintenance (incl. trainings, salaries and replacements) paid? Is budget set aside for this and who is the account holder? Who are paying: consumers, public sector or private investors? What local financial instruments are used: household contributions, recurrent tax revenues, fee systems, decentralized funds? Goal: make sure that the products/services can be delivered after the project period based on local revenues through one of the financial instruments.

Institutional sustainability

Is the ownership of the water facility clear? Who will be held responsible (person, community, water company or government) after the project period? How will they get sufficiently involved in the project to be able to take on this responsibility? Is it somebody's paid job to do operation and maintenance? Is there an organisation responsible for the quality control of the facility? Are all expected roles, tasks and responsibilities clearly defined and agreed? What about the gender balance in committees?

Environmental sustainability

Are sustainable water sources used, e.g. rainwater or groundwater? If yes, how does this effect the ground water level? Will the project result in additional waste streams? If so, how are these dealt with? Is the project anticipating on future (predicted) effects of pollution and/or climate change on the water situation in the region (e.g. water availability and quality)?

Technological sustainability

Is the technology choice appropriate for the local circumstances? Can the technology be locally manufactured? If not, can spare parts be obtained easily in case repairs or replacement is needed? Are the skills for operation and maintenance available or are trainings needed? If yes, what kind of trainings and for whom? Is the proposed technology affordable for local users, including costs of maintenance and replacement?

Social sustainability

How strong is the demand/need for this water facility? Are needs of women, vulnerable groups and/or the poorest included in this project? Do they also play a role in capacity building? Is the project aligned with socio-cultural values and local customs?
