Deployment of Open Data Kit for Information Management for Various Engineering Projects In Rural, Indonesia

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***Abstract*—Open data kit was used in an Engineering context as a data collection, storage and management tool for diverse data types from irrigation channels, weirs, saturated rice paddies and ephemeral stream catchments in the *Eastern Indonesian province of Nusa Tenggara Timur*. In the islands of West Timor and Flores, information was primarily used to report maintenance issues in the weir, primary, secondary, tertiary and quaternary channels. In Sumba, data was recorded for flow velocity and elevation in saturated zones and sedimentation in an ephemeral stream. Information regarding physical characteristics from groundwater wells was also collected to assess drinking water quality. Smart phone data input forms were developed progressively using Open data kit Build, according to the specific needs of each research project. It was found to be a very user-friendly and effective tool to use in the Engineering context. The features of Open data kit Build allowed us to modify the various forms in remote locations. Developing multiple choice input focused forms made data collection easier for farmers and local government workers. It virtually eliminated the need for hardcopy data, and allowed for versatility with respect to the nature of the multidisciplinary research.**

***IndexTerms*: Open data kit, irrigation channels, saturated zone, ephemeral stream, groundwater.**

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