Water Accounting – An innovative method to establish local water needs

For its work to bring safe water to the population of Burkina Faso’s Eastern region, The BARKA Foundation relies on the use of simple but effective methods to establish needs, monitor and document its own performance and ensure project success. Water accounting is one method which has proven extremely useful to BARKA and is particularly well adapted to this challenging environment. In line with BARKA’s mission to combine local and global solutions and low-tech and high-tech approaches, water accounting both relies on the skills of on the ground researchers and puts to use mobile phones, GPS, cloud-based servers, and cutting edge free and open source technology.

The use of water accounting allows us to gather detailed information on different communities’ water uses and needs, to visualize these on maps, and to choose the locations with the greatest needs for water, sanitation & hygiene education (WASH) interventions. As part of BARKA’s efforts to support local synergies and cooperation, the data acquired from its research is openly shared with other actors of the local development sector. Availability of such up-to-date info on rural water needs can be of great importance to BARKA’s and other organizations’ planning of future projects since good documentation on the regional and village levels is often sorely lacking in Burkina Faso.

BARKA staffer Idrissa Yoni travels to every water source in the village, collects information, and marks each water point via GPS coordinates.

In one village BARKA surveyed, the extreme need for water was documented in the photos above in which a person had to descend into the well in order to fill a bucket with the small amount of dirty water that remained. This water will be used for cooking, washing and drinking.
The process of water accounting consists of carrying out a survey of the target population (the investigation process), the uploading of the survey findings to the formhub (www.formhub.org) server, and the subsequent analysis of the collected data. During the investigation process, all the water points of a village are mapped using GPS. This mapping allows BARKA to see where the points of water access are in relation to the hamlets and village population and to determine where water is most needed.

An example of a map created using the method of Water Accounting: It shows the drinking water needs of Bouguy village.

Using the results of water accounting: Creating water points and raising awareness in rural communities

Water accounting makes it possible to determine several key elements of a holistic water system and its chief goal is to determine the ideal location for the building of new water points. However it is the face-to-face sensitization that BARKA implements on the ground with the community which leads to greater awareness of WASH issues and eventual behavior change.

Sensitization is also a key element in developing the awareness that safe drinking water is not free. Villagers are expected to contribute to the sustainability of their water points, including BARKA’s water projects. BARKA puts the village’s contribution of roughly US$500 to use by providing a village mechanic with training on how to properly maintain the well and even implement light repairs. However there are additional financial responsibilities which sensitization contributes to: villagers are taught about the need and importance of the collecting of small amounts of money from each water user to create a savings account which is used for future repairs and maintenance. Without this financial mechanism and the leadership of a water point committee and its association of water users, a well cannot be sustained by the village. Therefore this sensitization is a key ingredient to project success and the achievement of its goals.