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## Assessment of Local Water Resources for Sustainable Development Goals

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Based on the framework of the Sustainable Development Goals (SDGs) – Targets - Indicators 2016-2030, the objective of this paper is to emphasize on water resources as a cross-cutting issue and at the center of sustainable development, presenting a specific analysis of the importance of a better knowledge of the hydrology - hydrometrics of country major and local basins as fundamental information for water resources sustainable management. This implies the review of specific indicators related to the knowledge at town level of water resources assessment and availability, fundamental to life, health, food security, energy, the environment, and human well-being.

There are limitations including the lack of accurate and complete data. Local sub-national variation in water resources and water withdrawal could be considerable, as at the level of local or individual river basins, and the lack of account of seasonal variations in water resources. Regional values may mask huge differences within regions and also within countries where people live in areas of serious water scarcity, although each country could have enough renewable water resources overall.

In order to ensure sustainable withdrawals and supply of freshwater to address water scarcity, and to implement integrated water resources management at all levels (targets 6.4 and 6.5 of the SDGs), a fundamental baseline is the assessment of available and exploitable water resources at local level, as well as its development feasibility.

Data on water resources availability is a key indicator that should be approached at local level, since in a majority of countries, i) most local and rural communities and towns do not count with the information regarding their water resources, ii) local information will contribute to improve the accuracy of information of renewable water resources at country level, iii) rural settlements are in general the most vulnerable, lacking services of drinking water and irrigation for food security, and iv) small variations on the estimations of available water resources would represent social, environmental and economic consequences on water resources management and sustainable development planning.

Based on the analysis of the ecohydrology of two case studies, it is demonstrated that there cannot be effective integrated water resources management (IWRM) at town level if there is a lack

of information on water resources availability.

Considering the limitations described in regard to goals-targets-indicators of sustainable withdrawals and supply of freshwater to address water scarcity, and the implementation of integrated water resources management, it is indispensable to count with adequate and reliable local hydrological - hydrometric data and monitoring systems that would contribute to partially control these limitations, assessing available water supplies for community planning.

In reference to Agenda 2030, countries must implement a complementary indicator, as the percentage of the population whose water sources are monitored by means of adequate measuring methods, providing information on surface water and ground water regimes that influence water availability.