## Third Party Evaluator's Opinion on Rural Electrification Project

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## Impacts

In the three regions, the Northern Region, the Tensift Region and Ouarzazate Province, the connection of the beneficiaries to electricity in the villages had numerous positive consequences on economic, social and environmental level.

On economic level, a great majority of households have now refrigerators as well as other household appliances. As a consequence, the consumption of other substitution lighting means (gas, butane, batteries, etc.) decreased, except for radio batteries and flash lamps. Then in slightly above 25% of villages, new business and industrial activities as well as services have been created. This favored longer working hours (more than an hour and a half per working day), slowed down rural exodus (approximately by 5%) and the return of migrants to their villages of origin, mostly in provinces with nearby markets, easy access to roads and water availability. The development observed resulted nevertheless in an increase in land prices, mostly in villages with other available basic infrastructures and located nearby urban areas.

On social level, we noticed an increase in the schooling rate as well as a decrease in school dropouts, mostly for girls living in rural areas. This result is also due to the vicinity of schools to "douars" (villages) and the state of their equipment, mainly their sanitary equipment. As far as hygiene is concerned, health centers have been equipped with refrigerators, resulting in a greater availability of vaccines and other drugs requiring a cold storage. Some health centers, (more than 80%), have also been able to ensure and improve deliveries.

On environmental level, we observed an increase in constructions. Thanks to electricity, villagers favor now the building of masonry constructions, while maintaining kitchen and sanitary facilities outside these new constructions as before.

## **Sustainability**

In the three regions, the PERG electrification project allowed a great number of villagers to have electricity in their homes. Therefore, the subscription rate in the provinces of these regions is as follows:

North (Chefchaouen: 87%, Tanger-Asilah: 64%, Fahs-Anjra: 75%, Tetouan: 78%); Tensift region (Al Haouz: 88%, Chichaoua: 83%, Essaouira: 73%, EL Kelâa des Sraghnas: 82%, Marrakech: 92%); Province of Ouarzazate: 99%.

The connected subscribers are ONE customers. They pay mainly bills for their domestic consumption. For the time being, the consumption per Kilowatt remains not very cost-effective. The development of income-generating activities, observed since the introduction of electricity in the villages as well as through projects initiated thanks to the National Human Development Initiative (INDH) will increase at medium or long term the beneficiaries' consumption. The works carried out in the framework of PERG are part of ONE's assets. As a consequence, the operation, maintenance and extension network is periodically managed through the regional operation services of ONE. The taking over by the National Office for Electricity is a token for the sustainability of the electrification works implemented.