REVERSE LINKAGE
DEVELOPMENT THROUGH SOUTH-SOUTH COOPERATION

SOLAR ENERGY
FOR RURAL
DEVELOPMENT

PROVIDING AFFORDABLE AND RELIABLE ELECTRICITY TO RURAL COMMUNITIES IN MALI

MOROCCO (PROVIDER)

MALI (RECIPIENT)

Office National de l’Electricité et de l’Eau Potable

المكتب الوطني للكهرباء و الماء الصالح للشرب
THE CHALLENGE

Solar irradiation in Mali is of the order of 5 to 7 kWh/m²/day and is well distributed across the national territory. This represents a promising potential for diversifying the country’s energy-mix and reducing the energy deficit.

Despite significant progress over the past decade, access to electricity in rural areas in Mali remains a developmental challenge due to core institutional, financial, capacity and knowledge barriers. Lack of electricity limits social opportunities, particularly for the poor, women and youth. Therefore, expansion of rural electrification is one of the priority objectives of the Government of Mali, which considers access to electricity as a major mean to alleviating poverty.

Consequently, Mali aims to develop a sustainable rural electrification business model to increase rural electrification from its current rate of less than 20% to 80%, as per the national development plan.

THE SUPPLY

Morocco’s National Office for Electricity and Potable Water (ONEE) is the main supplier of electricity in Morocco and has over 45 years of experience in the field of energy. It helped the country to meet its requirements of generating quality electricity at the best cost and using state-of-the-art technologies. The ONEE-electricity branch led the Global Program of Rural Electrification in Morocco, through which the country succeeded in attaining an impressive rate of rural electrification of more than 97%.

The ONEE-electricity branch is recognized as a regional resource center in electricity management and rural electrification. It is equipped with several labs for electricity quality control and efficiently uses various processes to manage and maintain the electrical networks in Morocco.

The ONEE-electricity branch provides training and expertise at the international level, including support for national utility operators in sub-Saharan Africa through knowledge exchange. ONEE’s expertise in the energy sector and its experience in the sub-Saharan region make it ideally placed to help Mali.
THE MATCHMAKING

The Islamic Development Bank (IsDB) is in continuous dialogue with the Government of Mali and is therefore familiar with the country’s challenges and the capacity gaps of the energy sector.

The IsDB has collaborated with ONEE for a long time and contributed to the funding of the Global Program of Rural Electrification. The Member Country Partnership Strategy for Morocco identified ONEE as a provider of expertise in rural electrification. A Memorandum of Understanding between the Moroccan Agency for International Cooperation and the IsDB was signed to facilitate the transfer of Morocco’s experience. Thus, the IsDB was able to match the needs of Mali with the expertise of Morocco and put the skills share into action.

Taking into consideration the needs of Mali, the IsDB connected the Malian Agency for the Development of Domestic Energy and Rural Electrification (AMADER) with ONEE. The IsDB then coordinated and funded a peer-to-peer consultation process to co-design customized solutions for rural electrification and sustainable development of the rural network facilities in Mali.

THE PROJECT

GOAL

The project aims to enhance Mali’s capacity for rural electrification by establishing a model that provides affordable and reliable electricity to rural communities through solar energy.

MAIN ACTIVITIES

- Designing, procuring, installing and commissioning two solar photovoltaic (PV) plants with a capacity of 2.43 MWp.
- Developing a distribution network composed of about 67 km of medium-voltage lines and 117 km of low-voltage lines to serve about 35,000 inhabitants in 24 villages, including consumer connections using prepaid meters.
- Supporting AMADER in project supervision and selection of rural electrification operators.
- Transferring knowledge from ONEE to develop AMADER’s expertise in project design, operation and maintenance, as well as control and monitoring.
The development of rural electrification is one of the priority objectives of the Government of Mali. The project will enable the introduction of utility-scale PV solar plants, use of prepayment meters and electrification of 24 villages with more than 35,000 inhabitants. Access to reliable electricity in the area will generate, among other things, direct employment opportunities for the community.

It will help AMADER to acquire experience for implementing such a project and also operating and maintaining the new assets, and this will enable future development of this new technology in the country.

By contributing to the project, Morocco is realizing its South-South Cooperation strategy – capitalizing on its expertise and know-how to help other member countries. ONEE will also strengthen its existing collaboration with its Malian counterpart and expand its reputation.

From the IsDB’s perspective, the project is in line with the Bank’s Energy Policy, which promotes renewable energy for access to electricity. At a broader level, the project represents an efficient and effective way of improving cooperation among the member countries.
The IsDB is matching Mali’s challenge with Morocco’s experience so that the two countries will cooperate to enhance the capacity of Mali in rural electrification.
It is at the center of the IsDB’s mandate to promote cooperation among its member countries.

In 1981, the Makkah Declaration of the Third Islamic Conference Summit called the OIC member countries to strengthen collaboration, to utilize and foster their talents, skills and technological capacities. The Bank responded and launched its Technical Cooperation Program in 1983. This has then been scaled up via what we call Reverse Linkage.

The structured skills swap under Reverse Linkage helps the recipient country diagnose and analyze a problem while the provider country shares its proven knowledge and expertise to find a solution.

The idea that all partners have something to gain from cooperation lies at the heart of Reverse Linkage.

The learning process is reciprocal, knowledge transfer is in both directions, and benefits are mutual.