

SENERGY AND TEN MERINA SOCIAL SUPPORT PROGRAM



BEST FOR...

- Positive engagement with local community stakeholder
- Partnering with local community groups to embed sustainable economic and social initiatives
- Reducing carbon emissions and increasing access to green electricity

■ PROVIDING ELECTRICITY TO MORE THAN 440,000 PEOPLE IN SENEGAL.

68,000 TONNES OF CO₂ PER YEAR OF EMISSIONS AVOIDED.

97.7% INCREASE IN POSTNATAL AND ANTENATAL CONSULTATIONS IN ONE OF THE HEALTH CENTRES THAT RECEIVED SUPPORT FROM THE PROGRAMME.

300,000 EUROS INVESTED IN AGRICULTURAL PROGRAMMES.

900 WOMEN CURRENTLY BEING FUNDED THROUGH SENERGY PV SA'S SUPPORT PROGRAM.

300 YOUNG PEOPLE EMPLOYED ON THE SITE DURING CONSTRUCTION.

DEVELOPMENT OF A COMMUNITY SUPPORT PROGRAMME: EMPOWERING THOSE WITHIN THE IMPACTED AREA

As a long-term investor, Meridiam is contributing to Senegal's objectives and plans to diversify their energy mix. In addition, maintaining social cohesion through the implementation of a community support programme has become an underlying mission of the project.

The construction of photovoltaic solar power plants in Santhiou Mékhé and Mbouky confirmed the commitment of the project companies (SPV) to their concrete ambitions for sustainable development. **Meridiam's involvement in the financing of Senegalese public infrastructure projects has proved crucial to the socio-economic development of the area impacted.**

"A project is only accepted by the people when they take ownership of it. It was a great opportunity to create

an infrastructure in our community that would have a direct impact on the entire territory of Senegal. In addition to financial compensation, a livelihood restoration plan has been implemented by the project company" said the Mayor of the Municipality of Merana Dakhar, Mr. Aymérou Gningue.

The current Senegalese legislation includes an expropriation procedure under which the state can assign land to a public utility project with fair and prior compensation. As part of the solar power plant construction and operation, the total amount of compensation for landowners amounted to 734,000 euros. However, through the application of the Performance Standards 1 and 5 of the International Finance Corporation, a wider compensatory development programme for the affected communities has also been implemented.⁽¹⁾

This support programme was developed in the settlement area through a participatory and inclusive approach.

"The baseline established following the household survey identified the ecosystem of the affected

communities. We then discussed with the local people to understand their development priorities with the cooperation of the town halls and the administrative authorities. Cheikh Jeylani Diop, CEO of the Project Companies.

Close consultation with the neighbouring populations of the solar power plants, the municipalities of Méouane, Mérina Dakhar and the relevant technical services, has resulted in the design of a series of priority activities for the restoration of livelihoods. A committee to monitor the activities of the solar power plants and the commitments of the project companies ensures the implementation of these actions in coordination with the relevant stakeholders.

Mr. Massamba Gueye, Chairman of the Monitoring Committee of Senergy PV SA explains: "Our organization was born from the first discussions on the installation of the solar power plant. We felt it necessary to form a structure representing all populations that would serve as an interface between the project and the affected communities. In addition, a grievance



⁽¹⁾ IFC Performance Standards are:

- Performance Standard 1 – Assessment and Management of Environmental and Social Risks and Impacts
- Performance Standard 2 – Labour and Working Conditions
- Performance Standard 3 – Resource Efficiency and Pollution Prevention
- Performance Standard 4 – Community Health, Safety and Security
- Performance Standard 5 – Land Acquisition and Involuntary Resettlement

mechanism process provides a communication channel for those affected by the project, allowing their expectations to be taken into account and the accompanying programme to be adjusted following feedback.

The installation of the photovoltaic solar power plants in Santhiou Mékhé and Mbouky necessitated the acquisition of sites with an area of 82 ha and 64 hectares respectively. Farmland was previously made up of rain-fed fields operated by several generations of market gardeners. “Senegalese agriculture is dominated by family-type farms that occupy about 95% of the country’s agricultural land” (Hathie and Ba, 2014, 200). Despite agriculture’s heavy reliance on rainfall, data collected at the Tivavouane weather station indicated that the annual precipitation cycle observed in the study area was characterized by a long dry season of more than nine months.

“Before the plant was built, we were in seasonal agriculture. At the end of the rainy season, we

were active in other low-income economic areas such as trade.” Gora Diakhaté, President of the 33 PAP GIE (Project Affected People Economic Interest Group) at the Mbouky solar power plant. The installation of market gardening perimeters was therefore at the heart of the programme to support the financial empowerment of the affected communities. **By moving from a subsistence system to a trading system, intensive agriculture becomes compatible with the objectives of the project and the economic ambitions of producers.**

Diagnostic studies prior to the implementation of this activity showed that yields obtained with 0.1 ha of irrigated land are often higher than yields on a 1 ha rainfall area.

For example, Senergy PV SA has made a 14-hectare agricultural field at Santhiou Mékhé available to the 66 PAPs of the solar power plant. The eleven landowners affected were compensated by the project company, who also included them in the income



TECHNICAL OVERVIEW OF SOLAR POWER PLANTS



The solar power plants located in the municipalities of Méouane and Mérina Dakhar (Tivavouane, Thiès) have been in operation since 2017 and **each have a production capacity of 29.5**

MW. With an estimated annual joint production of 100 GWH, Meridiam has made a major contribution to achieving the goal of universal access to electricity and diversification of the Senegalese energy mix.

The solar power plants are each equipped with 92,000 photovoltaic modules and 12 inverters of 2 MVA. They cover a total area of 137 hectares and avoid the emissions of more than 68,000 tonnes of CO2 per year.

Meridiam Infrastructure Africa Fund and Senegal’s Sovereign Fund for Strategic Investments (FONSIS) have established, as majority investors, the project companies Senergy PV SA and Ten Merina Ndakhar SA for the implementation, construction and operation of the Santhiou Mékhé and Mbouky solar power plants.

The Senegal National Electricity Corporation (Senelec) as a sole buyer has a proven financial strength and experience in managing public-private partnerships for long-term investors. Project companies have a 25-year purchase contract that will **provide electricity to more than 440,000 people in Senegal.** ■

loss compensation program. In addition, Ten Merina Ndakhar SA has developed a 10 ha agricultural area derived from the 82 hectares repurposed for the Mbouky solar power plant. Similarly, a hydrogeological study was conducted to determine the location of the most productive boreholes used to supply water to the micro-irrigation system of the market garden perimeters.

The PAPs also received capacity-building training in agricultural techniques and organizational financial management for seven months. Community empowerment and self-reliance remain Meridiam's primary objective in this livelihood restoration program.

As a result, the project companies have been working with their consultant E-S OSIEC SAS to implement the activities of the functional market garden perimeters since 2019. In addition, an agricultural engineer monitors and manages the farm. **Working capital is also made available to the Economic Interest Group for the purpose of achieving financial autonomy and transferring exclusive management to PAPs.**

The implementation of this agricultural activity by Senergy PV SA and Ten Merina Ndakhar

SA required an estimated overall budget of 303,000 euros.

The diversification of two agricultural campaigns has resulted in the affected farmers being able to market garden products such as tomato, okra, chilli, onion, eggplant and peanuts.

Similarly, there has been a significant increase in the participation of affected communities in the activities of the market garden since the first year of operation. Their strong presence at thematic meetings and committees stimulates their involvement in decision-making, and their ownership of this part of the programme.

The installation of solar power plants has contributed to the creation of new economic opportunities. This goal has been achieved on the one hand through a long-term partnership with the Operational and Maintenance team and, on the other hand, through the awarding of the land for PAP sites. As a result, the total turnover of EIG reached 35,000 euros in November 2020.

The financial empowerment of vulnerable social groups in the area is central to the plan to ensure the long-term success of the project companies.

"The basic objective of our community contribution was not to place people in permanent assistance, but rather to empower them through technical and financial support and the development of a capacity-building programme, so that they could take ownership of the social investments made by the project companies," says Mr Cheikh Jeylani Diop.

According to a social and anthropological study, it was concluded that women and young people would be considered vulnerable social groups as a result of the chosen solar power plant location.

Senergy PV SA and Ten Merina Ndakhar SA have therefore introduced a programme to finance groups through the development of a credit line.

The establishment of a collaboration with the local mutual savings and credit agency, MEC Fadec Kajoor has made it possible to facilitate access to financing the income-generating activities of small businesses through microcredits/loans with a very low interest rate. The support programme is implemented by the project companies in two phases according to the needs of the targeted vulnerable groups.

"Prior to the financing of microcredits, local women had a reputation for being economically

LOCAL EMPLOYMENT AND ADDITIONAL SUPPORT



The local economy of the project area affected has been boosted by the project. In addition to the positive benefits of the support programme, the increase in the annual budget of Méouane and Mérina Dakhar resulting from taxes paid by companies has led to the realization of the objectives of the Local Development Plan of the two municipalities.

Similarly, one of the initiatives of the MOUs is the prioritization of local employment in the implementation of solar power plant activities. During the construction phase, the majority of the labour came from the surrounding villages. More than 300 young people were employed on the site, which subsequently reinforced the ownership of the project in the area.

CSR policies have provided additional support to the area since the establishment of solar power plants with the periodic distribution of basic necessities, the strengthening of the education system (provision of school supplies and school repairs) and the electrification of surrounding villages. ■



active despite the difficulty of the economic conditions and realities of the area,” said Ms. Binta Diakhaté, the representative of the women’s groups in the villages impacted by the Mbouky solar power plant. Indeed, they showed social cohesion and firm experience in diversifying their income-generating activities.

In the first phase of the implementation of the funding program, **Meridiam partnered with Empow’Her, a non-governmental organization focused on gender equality through economic empowerment from women’s entrepreneurship.** Women in the communities affected by the projects received training adapted to the socio-economic context for seven months. They have been introduced to basic tools in financial and organizational management while becoming aware of the benefits of saving and investing.

An initial endowment of 15,000 euros has been made available to the six groups in the support programme. Semi-annual funding was disbursed for a total amount of 6,7000 euros for the beneficiaries. In addition, more than 900 women are currently being funded through Senergy PV SA’s support program.

A collaboration between Mérina Dakhar Town Hall and Ten Merina Ndakhar SA was established during the implementation of this project. A guarantee fund of 15,000 euros, deposited with the mutual by each party, allows more than 200 local women to benefit from the funding. Since the beginning of this activity, 29,000 euros have been disbursed.

The financing of these groups has significantly increased women’s

financial capacity and access to raw materials for their economic activities. Indeed, the average half-yearly growth rate of savings for women’s groups in both localities is 8% for Senergy PV SA and 5% for Ten Merina Ndakhar SA.

The second phase of the project companies support programme will be to fund young people from affected communities. Training in financial management and access to credit began in November 2020.

Strengthening the health system of the Santhiou Mékhé and Mbouky solar power plant are also a priority area of community contribution for the project companies.

“Infant mortality and pregnancy-related complications are a significant problem in the area. Before the construction of the maternity ward and the Mekhé Village health post, the nearest health centre was more than seven kilometres away. As a result, the majority of women gave birth at home.” said Ms. Yvonne Dione, the Chief Nurse of Mekhé Village Post Office.

Infant and maternal mortality in Senegal is even higher in rural areas, with rates of 9 and 459 deaths per 100,000 live births respectively (ANSD, 2014). **Funding for the construction of two maternity units in the municipalities of Mérina Dakhar and Méouane during the operation of solar power plants was at the heart of Meridiam’s health autonomy support programme in the locality.**

Close collaboration with the Thiès Medical Region and the town halls of the two municipalities has

helped to determine the exact need for reform and development of the health map.

The inventory of health facilities in the Commune of Méouane shows the existence of six health posts and four health boxes authorized to address reproductive medicine. However, the quality of paediatric and obstetric care remains an obstacle to the socio-economic development of the area.

The commitments made by Senergy PV SA to those affected by the project in the July 2015 Memorandum of Understanding ensured that construction of the Mekhé Village maternity hospital would begin during the first five years of operation of the Santhiou Mékhé solar power plant. However, in its participatory approach and the inclusion of neighbouring communities in the development, **Senergy PV SA was able to**





deliver the maternity hospital well within the five year period.

The maternity hospital in Mékhé Village, inaugurated in October 2019, has a direct impact on thirteen villages in the Municipality of Méouane.

A substantial increase in reproductive medicine services provided by the Mékhé Village health post was observed at the end of the first year of operation of the annex building. A 34.6% increase in the number of antenatal and postnatal consultations is recorded at the Mékhé Village health post. This statistic has increased from 234 consultations in 2018-2019 to 315 consultations in 2019-20. Similarly, the number of births reached 145 during this period, an increase of 19.8%.

The Mérina Dakhar Health Post is located at the centre of 60 villages making it the busiest health infrastructure in the Mekhé Health District. The construction of the maternity ward in 2018 allowed Ten Merina Ndakhar SA to participate in improving the reproductive health of the area.

The number of births has increased by 71.3% since the inauguration of the maternity hospital in Mérina Dakhar. Similarly, a 97.7% increase in postnatal and antenatal consultations was recorded by the Health Station.

"Beyond the locality, women come to us from all over the place, within a 15 km radius because of the quality of care," says Ms. Adji Mbayangue Sambe, the midwife at The Motherhood of Mérina Dakhar.

The involvement of affected communities in the development of the support programme is the key to the success of the initiative. "Despite the loss of our generational land holdings, we rejoice in the impact of building this solar power plant across the country. The approach taken by the project company is commendable and we remain willing to support it in its activities that contribute to national development. Mr. Pape Diop, the representative of the young people impacted by the Senergy PV SA project." ■

REPLICATING THE PROGRAMME ON OTHER SCALING SOLAR PROJECTS

Each infrastructure project funded by Meridiam is backed by a programme to support communities in the area of influence. Taking into account the local social and environmental context and applying the right type of interventions are of paramount importance in the development of community initiatives.



As part of Meridiam's second investment project in Senegal's electrical empowerment, a Resettlement Action Plan (RAP) has been developed for the benefit of neighbouring communities. The 56 PAPs of the 25 MWc and 35 MWc photovoltaic solar power plants in Kael (Diourbel) and Kahone (Kaolack) will benefit from an accompanying programme adapted to the conditions of their localities.

In an inclusive approach, the RAP was developed in consultation with beneficiaries and local authorities. The support programmes identified (farms, livestock, credit mutuals, etc.) will be carried out using the same approach, notably through the empowerment of host communities, in addition to the ongoing support of administrative and local authorities. ■

