Rural Electrification Agency Model - Mauritania

ICRA - IEA PVSDC Joint Workshop

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Content

1. Context

- Rural Electrification is a priority
- 3500 villages are concerned
- Critical rural depopulation in the country
- Rural electrification programme launched in 2000 by the Mauritanian Government
- First phase includes 3000 SHS and several mini-grids with the support of the French Development Agency (AFD).
- Extension activities will start with UNDP – GEF.

2. Institutional aspects

- A Rural Electrification Agency (ADER) has been created in 2000 under the Ministry of Energy
- After a long period of institutional strengthening of the local Agency, the PV installation phase was achieved in 9 months.
- Many candidates have been attracted by the “hire-purchase” mechanism over 2 years with a total guaranty on the service and a high subsidy level.
- The total contribution from the buyer is at the end 123 EUR, corresponding to about 30% of the actual cost price. (see next slide)
- 80% of them have chosen a 20Wp SHS instead of a 50Wp.

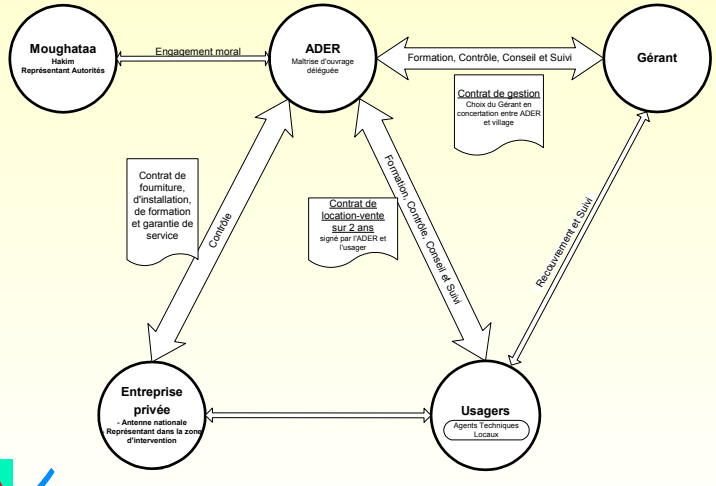
Mauritania Project synopsis

	RIM	BKF
SHS objectives	3000	700
System size	20 Wp (and 50 Wp)	40 Wp
Project start	Jan 2001	Jan 2000
Installation start	July 2003	Aug. 2002
Financial scheme	hire-purchase	credit
ASS warranty	2 years	3 years
Subsidy	70%	40%
Co-funding	AFD/FFEM/GRIM	AFD/FFEM
Installed SHS cost	350 €	512 €
Other costs	60 €	297 €
End-user contribution	123 €	485 €
Instalments	24 x 4 €	36 x 13 €
Purchasing power	35 €/month	-
Substituable energy bill	1 - 10 €/month	2 - 8 €/month
Project implementer	ADER	Ministry of Agriculture
Lender	-	1 nat. credit bank
Supplier	2 EC com.	1 EC com.
Installer	3 national com.	2 national com.
Recovery agent	local managers	local credit bank
Maintenance operator	local enterprise	local enterprise
Quality controller	ADER / Tech. Ass.	consultant team
SHS installed 31/03/04	> 2000	79

2. Institutional aspects (next)

- Three national enterprises shared the installations and the after-sales services in three different regions.
- Many actors involved usually generate communication and inter-relation problems (see next slide).
- Weakness of the private sector (in management and financing their activities)
- The dynamic local agency ADER in Mauritania was very helpful to control and encourage the private sector to comply with their contract.
- Priority is given to private companies and local operators but if anyone withdraw from the project, ADER is able to substitute.
- Training of end-users and local operators remains the most difficult part to implement efficiently.

Organisational scheme



3. Financial Aspects (1/2)

- To reach the financial equilibrium over the 2 years, the level of subsidy was raised up to 70% in Mauritania, and nearly 100% without the 2 years' guaranty
- What people effectively pay over the 2 years (30%) covers only the guaranty service and part of the follow-up cost.

3. Financial Aspects (2/2)

- High subsidy level has shown positive effects in terms of boosting the private sector, improving the quality awareness, increasing the demand, etc.
- Secondary effect of large programme subsidy policy on commercial sales worries private companies.
- It is the role of ADER Agency to gradually reduce the subsidy level in the next phases and get closer to the market of SHS sales at real prices.

4. Conclusions

- The identification and implementation of measures for ensuring the sustainability of the PV project in Mauritania have required innovative approaches and strong local partner involvement.
- The financial and organisational schemes had to be adapted case by case to the social, economic and political context of the country.
- The success in the long term requires to have a continuous mechanism of adaptation to the real circumstances.

Settlement

Trarza (Mauritania)

Domestic Installations

Adrar (Mauritania)