



# Subsidy for private sector MHP Case study in Rwanda

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# Private Sector Participation in Rwanda

## PSP-Hydro

### *Aim*

- “ To develop private entrepreneurship for building and operating micro-hydro power plants
  
- “ Call for proposals from private sector in 2005, 2007
  - . EnDev provides 50 % investment subsidy (not on running costs), technical assistance, business support, etc
  - . Entrepreneurs responsible for financial closure (equity of app15% and loans), construction, permits, etc
  - . Basic condition: new access is provided to rural households, social infrastructure, productive use
  - . But, interconnection to grid or larger productive use customer (tea factory) to increase viability
  - . Valuable support of MinInfra (permits, PPA, pricing)

# Tedious process

	submitted	Contract negotiations	Contracted	Commissioning expected (2009)
1 call for proposals (2005)	15	6	4	2
2nd call for proposals (2007)	5	2	1	1
total	20	8	5	3
Succes rate	15% (3/20)	38% (3/8)	60% (3/5)	

Consortia of local business men, NGOs, social institutions (hospital), local and foreign investors

## PSP Hydro projects

PD	Location	Capacity kW	Grid interconnection	Larger customers
Repro	Murunda	105 kW	Yes	No
Sogemr	Musarara	400 kW	Yes	Hospital
Enny	Nyaruguru	150 kW	No	Tea factory

## Main challenges

- “ Lack of own funds and collateral
  - . Additional partners and personal collateral proved a solution (in some cases)
- “ Unwillingness of banks to finance projects (mainly due to lack of experience with such type of projects)
  - . Very high collateralization
- “ Lack of expertise (technical and managerial)
  - . In house training and regional experts as needed
- “ (Civil) engineering design errors
  - . Intervention/support from national utility Electrogaz
- “ Financial fraud
  - . Receipt checks , financial and technical audits
- “ Little experience with regulatory frameworks for small IPPs (permits, PPAs, pricing)
  - . Ad hoc contracts and networks

## Further observations

- “ Grid interconnection and/or a large consumer (tea factory, hospital) is very welcome to increase project revenues and to make private financing successful
  - . risc: preference for grid interconnection conflicts with original target of providing access to households.
  - . How to develop a successful mix?
- “ Proper management and accounting systems are crucial
  - . New businesses
- “ All 3 successful projects propose new schemes provided financing (subsidies, loans) can be arranged. Next to that a EoI early 2009 provided 7 serious additional candidates

## Looking for a new financing model

### *Goal:*

- “ To increase private sector share, reduce subsidies
- “ To strengthen business support

### *Plan:*

- “ Involve venture capitalist partners (VCP)
  - . Equity (long term involvement)
  - . Debt
  - . Extensive business support (professionalize management and operations)
- “ EnDev provides technical support and lower (app 15%) subsidy (15 PD/15 EnDev/15 VCP/55 debt)

## Looking for a new financing model

### *Challenges:*

- “ Satisfying the high return demands of VCP (20-30%, ex royalty fees), because of foreign currency risks
- “ Shorter investment horizon (5-7 years), whereas break even hydro\$ 8+ years
- “ 15% subsidy probably too low to meet VCP demands. (30% probably better.)