

Village Off-Grid Program

Quality Assurance

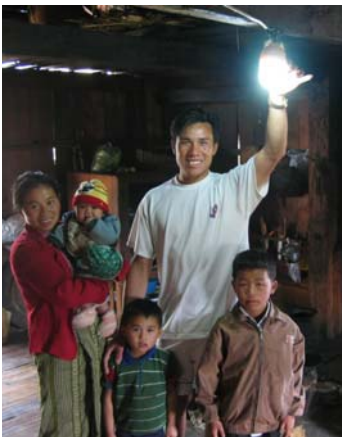
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Dr Bounthanong Phonethipasa

Off-Grid Advisers to MIH

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“Every night, light”



- Over 5,500 villagers in Laos have received electricity under the Village Off-Grid program.
- The motto printed on our price leaflets was “Every night, light”.
- Have we achieved this level of quality assurance?

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Installation quality



Install specs not always followed rigorously



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VEM and Pesco training



Notice the generator was replaced. Need for training.



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The five year test



Tapen village hydro has provided “every night, light for five years”

Robust equipment

Regular maintenance by VEM

Immediate repairs by VEM

What can we learn from this?

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The three year test



Over 5,000 solar home system users are paying between 1 and 5 dollars a month

No consumer defaults

98% repayment performance in five provinces

What can we learn from this?

“every night, light?”

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Elements of QA

Incentives for reliability

Training of actors at all levels

Continuous refresher and OTJ training

Maintenance and parts back-up chain

Specifications for hardware and installations

Selection according to technical bid evaluation

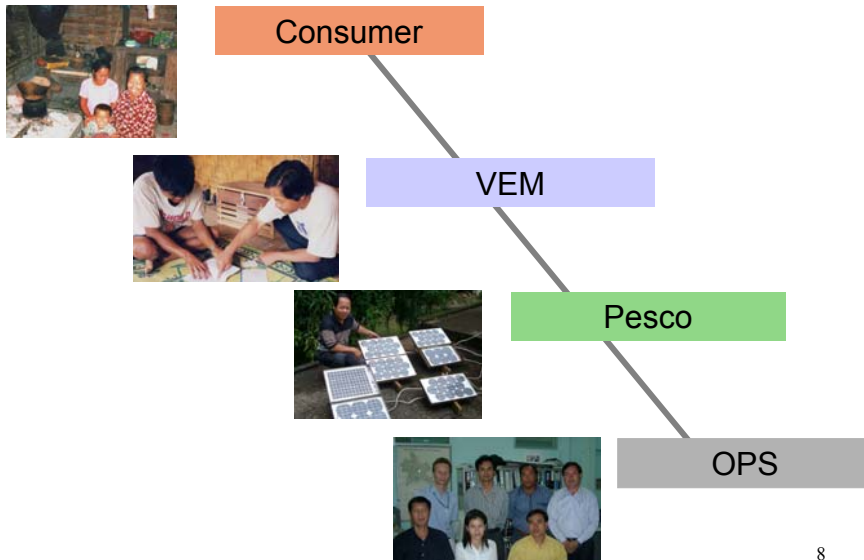
Effective inspections of installations

On-going spot checks and competence checks

Action on the basis of check results

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Back-up chain



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Rent-to-buy – hybrid sales and fee-for-service. Advantages of both?

Currently GoL buys the equipment with soft credit
OPS or VOPS selects Pescos

Provincial electricity service company (Pesco) helps
villagers select VEMs and technology, helps VEM
register customers, delivers the equipment, collects
payments, provides technical support

Customer (VEM or consumer) buys the equipment
by making monthly payments for 5 or 10 years

During HP period, the
payments are rental

If all payments
are made,
ownership is
transferred

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The ownership incentive



Customers look forward to ownership, and wish to keep their system in good working order.



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Incentive of improved income



Keeping the shop open at night. Weaving in the evening.



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Improved incomes

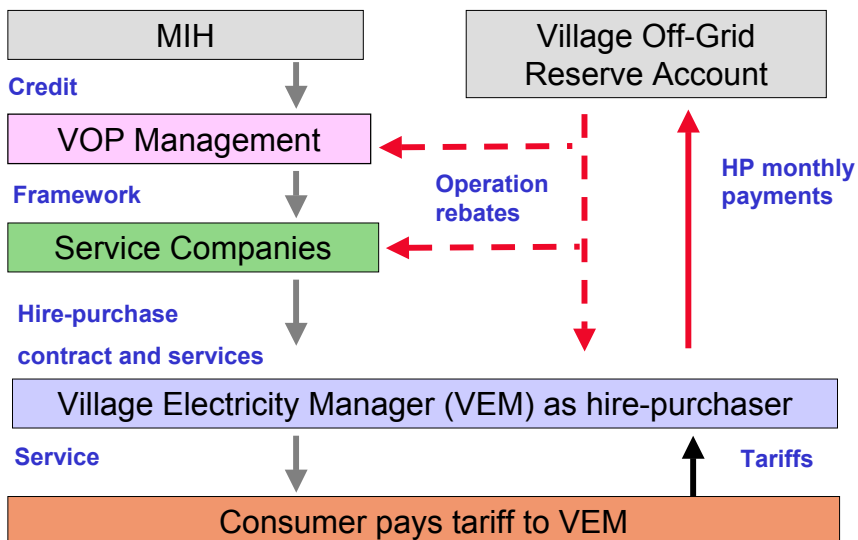


Ice-making, carpentry, charging batteries, refrigeration for restaurants. Net-mending, handicraft production in the evenings.

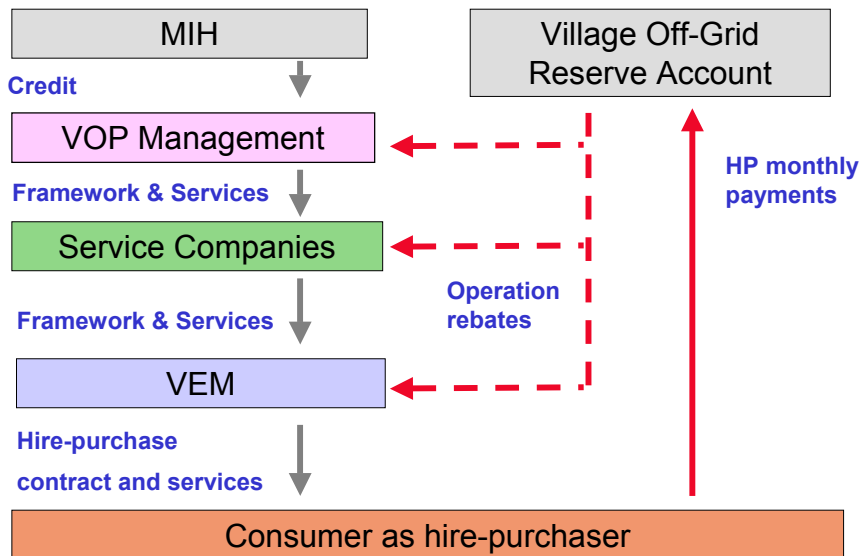


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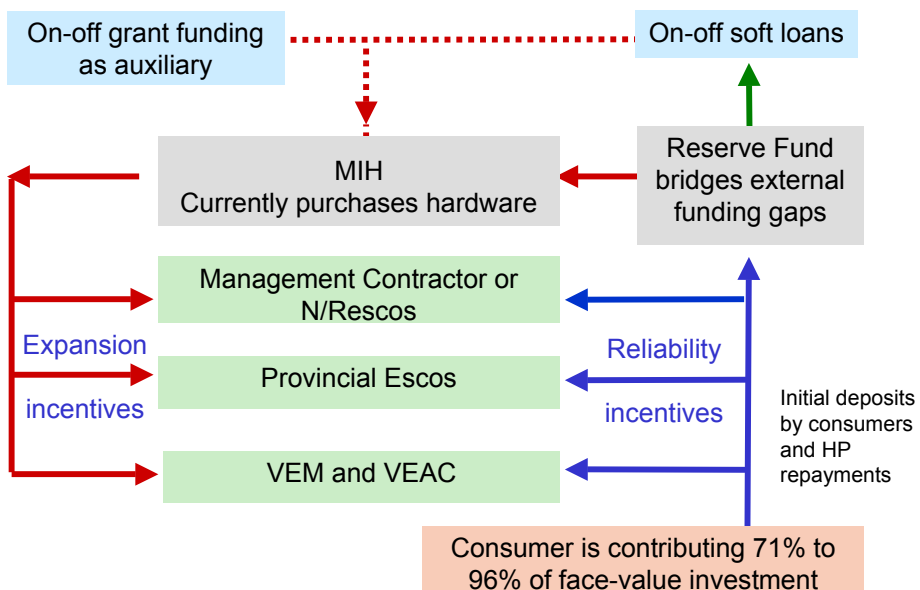
Rebate incentive for Village stations



Rebate incentive for household systems

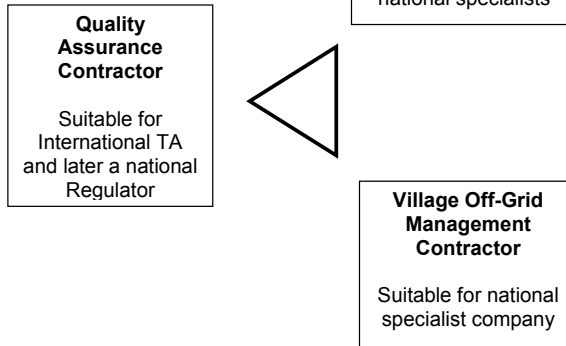


Reliability incentives: robust or vulnerable?



Regulation is key to QA: to ensure reliability incentives are effective, and standards kept

Fig: The triangular institutional structure recommended for an expanded and self-sustaining program



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The Quality Assurance Challenge

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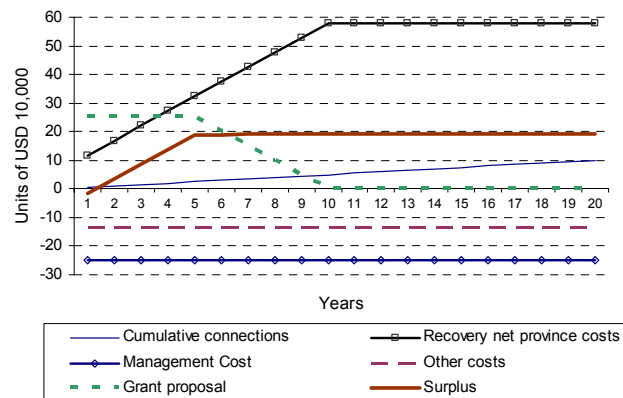


Village Off-Grid Program MIH

Thank-you

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20 year projection at 95% repay performance: Commercial sustainability assuming soft loans



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