

Enabling Institutions for Rural Electrification

A GVEP/WB/SENER Study

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Introduction

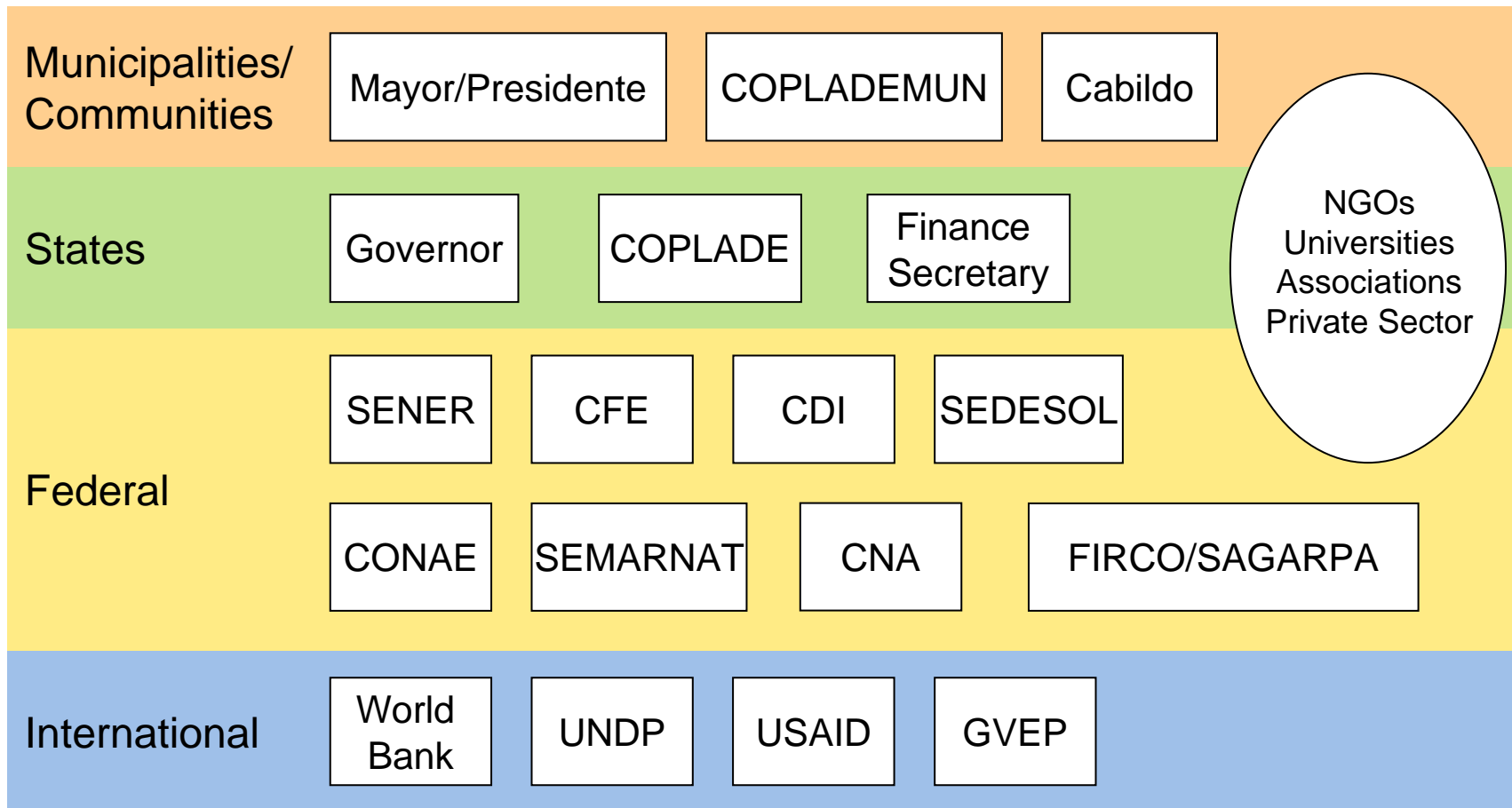
- 🔄 Analysis of experience and institutional setup in Chihuahua & Guanajuato
- 🔄 Evaluation of current institutional structure in four Southern States (Chiapas, Guerrero, Oaxaca and Veracruz)
- 🔄 Proposal for improved institutional design for implementation of pilot RE projects

Project Context - Issues

- 🌐 Rural access to electricity is limited
- 🌐 Rising cost & slowing rate of connection
 - \$2700/connection
- 🌐 Mixed experience with household PV
 - \$1000-2000/household
- 🌐 1996 policy of decentralisation



Institutional Context



Potential Modalities

4 (+ 1) Modalities

- 🌀 Modality 0 - No formal coordination
- 🌀 Modality 1 - Independent association (i.e. non-government entity)
- 🌀 Modality 2 - Working Group (i.e. government entity)
- 🌀 Modality 3 - Committee (presided by one government entity)
- 🌀 Modality 4 - Autonomous agency or commission

Analysis of Modalities

Modality	Main functions	Examples	Advantages	Disadvantages
<p>Current situation: One Government Entity, (no or informal cooperation)</p> <p>Finance: Part of State government (and budget-wise to the State entities it belongs to)</p>	<ul style="list-style-type: none"> • Advice on electrification policy and project planning • Planning of rural electrification projects 	<p><i>Chiapas:</i> Informal cooperation between State and federal entities responsible for electrification</p>	<ul style="list-style-type: none"> • Being informal, decisions can be made and implemented quickly 	<ul style="list-style-type: none"> • Cooperation depends much on relations between individuals and may be abolished quickly when supports ends • Municipalities are consulted through COPLADE, but is not clear how local views are taken into account • Working groups do not have independent budget or own staff • Non-government stakeholders are not involved
<p>1. Independent Association</p> <p>Finance: Not-for-profit (fee-for-services) plus support from donors/government for electrification projects</p>	<ul style="list-style-type: none"> • Assessment and electrification studies • Awareness creation and information • Attracting investment in rural electrification projects 	<p><i>Chihuahua:</i> GTERCH cooperation between Government and non-government stakeholders in independent organization (<i>asociación civil, AC</i>)</p>	<ul style="list-style-type: none"> • Cooperation on equal basis between Government and non-Government representatives • Definition of projects in workshops with municipalities/beneficiaries (bottom-up) • Having legal personality, the AC can have its own budget and dedicated staff 	<ul style="list-style-type: none"> • An AC cannot be directly used as a vehicle for transferring large federal or state government funds • Unclear link with the various State and Federal level government entities involved • Projects are decided on a case-by-case basis rather than as part of an overall rural electrification strategy
<p>2. One or more key government units, cooperating in a formal working group</p> <p>Finance: Part of State government (and budget-wise to the State entities it belongs to)</p>	<ul style="list-style-type: none"> • Policy development on rural electrification • Assessment and studies • Planning of rural electrification projects and matching of funds 	<p><i>Guerrero:</i> Responsibility within one government entity, but formation of specific, rural electrification 'working groups' (with a larger or smaller participation of stakeholders)</p>	<ul style="list-style-type: none"> • Formation of working groups between government entities that specifically deal with rural electrification and that can quickly be established by agreements between the participating organizations • Being small and informal, decisions can be taken quickly 	<ul style="list-style-type: none"> • Working groups have no firm legal basis and may be abolished when member support ends • Being advisory in nature, decisions are taken by the responsible government entity or small group of entities, not by the working group • It is not clear how and with what frequency non-government entities (or other government entities) will be involved • Municipalities are consulted through COPLADE, but is not clear how local views are taken into account • Working groups do not have independent budget or own staff

Analysis of Modalities

Modality	Main functions	Examples	Advantages	Disadvantages
3. Committee (presided by one government entity) (within State government apparatus) <i>Finance:</i> Part of State government budget	<ul style="list-style-type: none"> • Coordination between relevant departments on (rural) energy policy development • Assessment and studies • Planning of rural electrification projects and matching of funds 	<i>Guanajuato:</i> Responsibility of a government entity (SEDES) and 'energy committee' (CTEEV) for stakeholder consultation	<ul style="list-style-type: none"> • The Committee provides a forum for the relevant State and Federal entities as well as NGOs to exchange ideas and discuss project opportunities • Other government and non-government organizations are represented (although as non-voting members) 	<ul style="list-style-type: none"> • SEDES and the Committee deal with (renewable) energy in general and may focus less on electrification applications • It is still not clear which other entities will be consulted on rural electrification and how local views are taken into account (top-down approach)
		<i>Oaxaca:</i> Formation of a sub-Committee on energy under aegis of the responsible government entity	<ul style="list-style-type: none"> • The Committee has a legal foundation, being established by State Executive Branch • The Committee provides a forum for the relevant State and Federal entities as well as non-government organizations (although only as non-voting members) to exchange ideas and discuss project opportunities 	<ul style="list-style-type: none"> • The Committees deal with energy issues in general and may focus less on rural electrification (conventional or RETs) • In a large committee it may be difficult to reach consensus • Committee does not have independent budget or own staff • Municipalities are not represented and it is not clear how local views are taken into account (top-down approach)
		<i>Veracruz:</i> Formation of specific rural electrification 'committee' (CTEEV) under the responsibility of a government entity (SEDERE)	<ul style="list-style-type: none"> • The Committee is a forum for relevant State and Federal entities as well as non-government organization to exchange ideas and discuss project opportunities • Unlike SCSE and CTEEG, the Committee in Veracruz focuses specifically on rural electrification, not energy in general 	<ul style="list-style-type: none"> • Committee does not have independent budget or own staff • Municipalities are not represented and it is not clear how local views are taken into account (top-down approach)
4. Autonomous agency or commission <i>Finance:</i> Own budget; core finance from State government plus indirect (project-based) support	<ul style="list-style-type: none"> • Advice on (rural) energy policy • Assessment and electrification studies • Awareness creation and information • Planning and implementation of rural electrification projects 	<i>Rural Electrification Board / State Energy Agency:</i> Dedicated structure	<ul style="list-style-type: none"> • Being a separate entity within the State Executive branch, the Commission can act on its own, with its own budget and staff • Less dependent on political changes in Federal and State Government 	<ul style="list-style-type: none"> • Potential competition with other State entities on division of federal and state budgets (the commission can then be perceived as a competing rather than coordinating body) • Takes time and State-level political support to be established (approval by the State Congress)

Modality Pros and Cons

- 🔄 Flexibility vs. stability
- 🔄 Broad participation vs. efficient decision-making
- 🔄 Bottom-up vs. top-down approach
- 🔄 Tied to political office vs. independent of political system

Recommendations - Principles

- A. Mobilize existing expertise
- B. Involve non-government stakeholders (i.e. private sector and NGOs)
- C. Adapt proposed institutional structure to prevailing conditions and political will
- D. Design institutional structure to survive State elections

Recommendations – Principles, cont.

- E. Account for and mobilize a multi-level (i.e. federal, state, municipal) and multi-source (i.e. SEDESOL, CDI, and non-government entities) flow of funds
- F. Allow time for the structure to be adopted in light of socio-political reality
- G. Facilitate bottom-up initiatives

Evaluation of existing structures

- Rank modalities according to set of criteria (1=low, 2=high)

Criteria	A	B	C	D	E	F	G	Total
Modality 0	1	1	2	1	1	1	1	8
Modality 1	2	1	1	1	1	1	2	9
Modality 2	2	1	2	1	1	2	1	10
Modality 3	2	1	2	1	2	2	1	11
Modality 4	1	1	1	2	1	1	1	8

Key

Modality 0= no formal coordination

Modality 1= Independent Association

Modality 2= Working Group

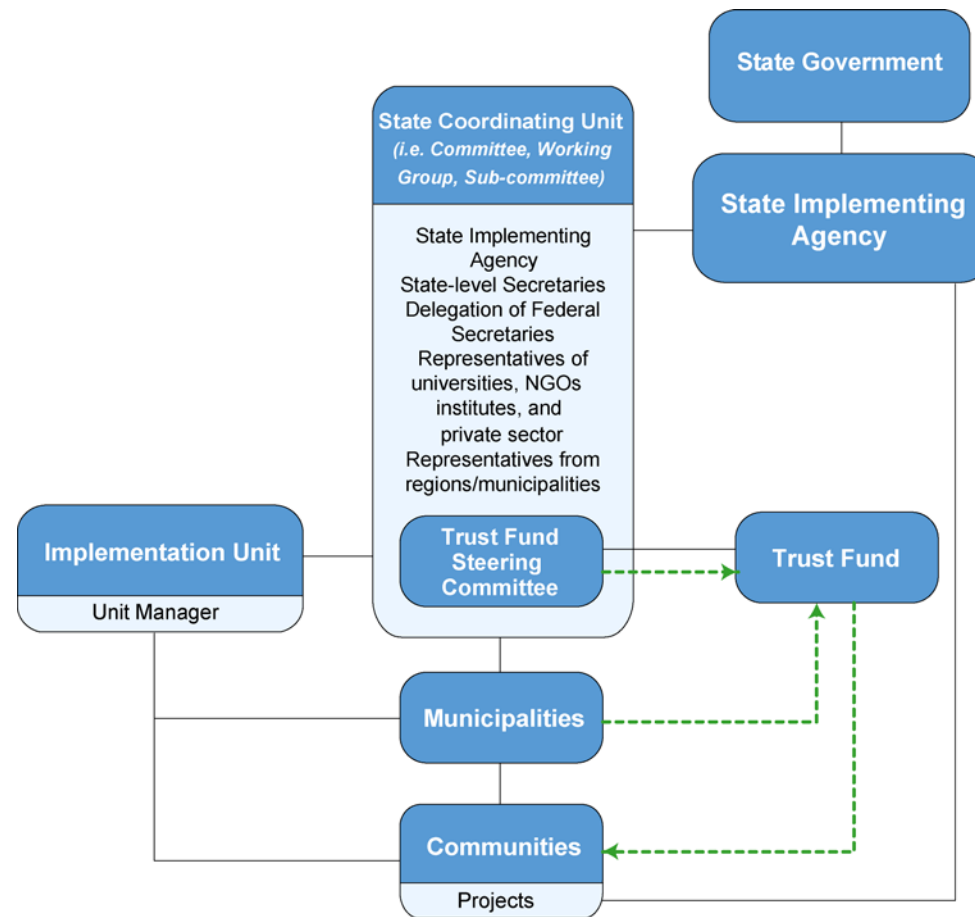
Modality 3= Committee

Modality 4= Autonomous government entity

Results of Evaluation

- 🌀 Recommendation: inter-sectoral committee (Modality 3) dedicated to RE (similar to 3 States)
- 🌀 Committee should include:
 - Key State government entities (i.e. COPLADE, relevant State Secretariats) with one vote each
 - Delegations from Federal agencies (i.e. CFE, SEDESOL, CDI) with one or more voting rights for the block
 - Representatives from municipalities and non-government stakeholders as non-voting members

Recommendations - Structure



Recommendations – by State

- Two elements of model's structure were modified to account for local conditions in each State

	Coordinating Unit	Implementing Agency (chair of CU)
Chiapas	Form a new Working Group	Secretary of Planning & Finance
Guerrero	Form a new Working Group	COPLADEG
Oaxaca	Designate portion of existing SCSE	COPLADE
Veracruz	Formalize the CTEEV	SEDERE

Recommendations - Process

- 🔄 State Coordinating Units should be established (or formalized)
- 🔄 Define their roles and responsibilities
- 🔄 Establish procedures for project development
 - Outreach and awareness
 - Pre-investment screening and studies
 - Project design and development
 - Evaluate project applications
 - Tendering for project installation
 - Project monitoring

Conclusions

A new approach to rural electrification is needed...

- 🔄 Decentralizing decision-making to the States, supported by Federal and international institutions
- 🔄 Harnessing the potential of the private sector and NGOs, in coordination with local NGOs that are able to navigate the social issues
- 🔄 Responding to expressed needs of the targeted communities (i.e. demand-driven approach)

Conclusions cont.

- 🔄 Ensuring sustainability by developing RE projects that communities can operate and maintain
- 🔄 Developing a framework for coordination between layers of government and between government and non-governmental stakeholders
- 🔄 Serving as a catalyst for productive activities that stimulate economic development in communities

Summary

- 🔄 Institutional model must account for local realities
- 🔄 Make only minimal and necessary changes to existing structures
- 🔄 Establish a Coordinating Unit dedicated to RE and comprised of various entities, with core administrative and technical team
- 🔄 Establish legal status for CUs

Summary

- 🔄 Federal agencies should provide critical support (financial and capacity building)
- 🔄 Federal level support should not come at expense of State sovereignty over decision-making

Thank you!

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