Guides for
Electric Cooperative Development and Rural Electrification

USAID
FROM THE AMERICAN PEOPLE

NRECA International Ltd.
Your Touchstone Energy® Partner

Glossary of Abbreviations

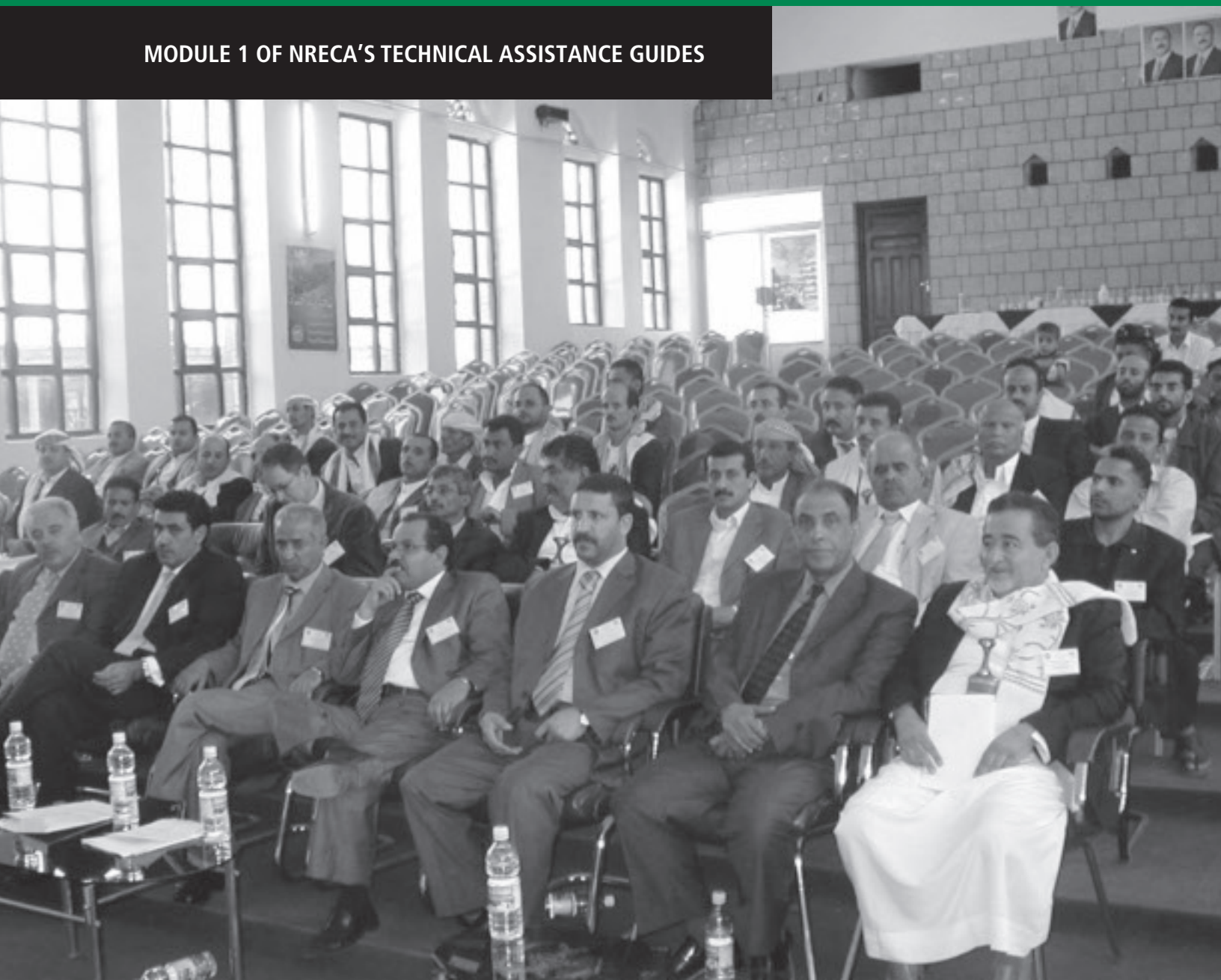
A	Ampere
AH	Amp-hour
AC	Alternating current
ACSR	Aluminum conductor, steel reinforced
A&G	Administrative and general
AWG	American wire gauge
CARES	Central American Rural Electrification Support Program
CCT	Correlated color temperature
CDA	Cooperative Development Authority (Philippines)
CEF	Fronteriza Electric Cooperative (Dominican Republic)*
CFC	National Rural Utilities Cooperative Finance Corporation, also known as NRUCFC (U.S.)
CFL	Compact fluorescent light bulb
CLARITY	Cooperative Law and Regulation Initiative
CONELECTRICAS	National Consortium of Electrification Companies of Costa Rica (Costa Rica)*
DC	Direct current
DISCEL	Electric Distributor of the Hydroelectric Executive Commission of Rio Lempa (El Salvador)*
EBIT	Earnings before interest and taxes
EBITDA	Earnings before interest, taxes, depreciation and amortization.
EEGSA	Electric Company of Guatemala, PLC (Guatemala)*
ESMAP	Energy Sector Management Assistance Program (World Bank)
FUNDAP	Foundation for Economic Development
G&T	Generation and transmission cooperative
GIS	Geographic information system
GPS	Global positioning system
HVD	High voltage disconnection
I	Electrical current, measured in amperes
ICE	Costa Rican Institute of Electricity (Costa Rica)*
IEC	International Electro-technical Commission
INDE	National Institute of Electrification (Guatemala)*
INE	National Institute of Statistics (Bolivia)*
IRR	Internal rate of return
ISPRA	National Institute for Protection and Environmental Research (Italy)
K	Kelvin
klmh	Kilo-lumen hour
kV	Kilovolt
kVA	Kilovolt-ampere
kVAR	Reactive kilovolt-ampere
kW	Kilowatt

kWh	Kilowatt hour
LED	Light-emitting diode
LPG	Liquefied petroleum gas
LVD	Low voltage disconnection
LVR	Low voltage reconnection
MRT	Single wire earth return*
MW	Megawatt
MWh	Megawatt hour
NEA	National Electrification Administration (Philippines)
NESC	National Electrical Safety Code
NGO	Non-governmental organization
NOAA	United States National Oceanic and Atmospheric Administration
NPV	Net present value
NRECA	National Rural Electric Cooperative Association International, Limited
OCDC	Overseas Cooperative Development Council
O&M	Operations and maintenance
PDB	Power development board
PUC	Public utility commission
PUE	Productive use of electricity
PV	Photovoltaic
PWM	Pulse width modulation
R	Electrical resistance
R&D	Research and development
RE	Rural electrification
REA	Rural Electrification Administration, an agency of the Department of Agriculture of the United States, now known as RUS
REB	Rural Electrification Board (Bangladesh)
RFP	Request for proposal
RFQ	Request for quote
ROE	Return on equity
RUS	Rural Utilities Services, an agency of the Department of Agriculture of the United States, previously known as REA
SWER	Single wire earth return
TAG	Technical assistance guide
UL	Underwriters Laboratory
USAID	United States Agency for International Development
USDA	United States Department of Agriculture
USTDA	United States Trade and Development Agency
V	Volt
W	Watt
WH	Watt-hour
Wp	Watts peak
WtP	Willingness to pay

*English translation of Spanish abbreviation

Legal and Institutional Enabling Systems for Sustainable Electric Cooperative Development

MODULE 1 OF NRECA'S TECHNICAL ASSISTANCE GUIDES



1

EXECUTIVE SUMMARY

This module reviews the elements of developing a workable legal and institutional enabling framework for electric cooperatives and provides documentary guidelines for complying with the enabling laws and related regulatory components. In addition, it provides details and documentary samples for the organizational structures and internal governing and operating systems of cooperatives, and the agencies formed to enable them.

Electrification experience worldwide has shown that the cooperative business format can work effectively as a scalable and replicable model for bringing electricity to more communities. This has been particularly true in rural areas where approaches using government-owned (para-statal) agencies or for-profit investor-ownership have been ineffective. However, this experience amply demonstrates that the legal and institutional foundation for enabling electric cooperatives is a key determinant of their long-term success or failure.

The legal/institutional architecture for electric cooperative development is complex. It has several tiers, starting with national government policy followed by the implementing laws or decrees, government regulation and oversight. It also includes internal governance and operating rules generally embodied in an organizational charter, bylaws, and written policies of the agencies that the laws create. The same goes for the rules, charter, bylaws, and policies of the cooperatives themselves. To promote good governance, transparency, effective and business-like decision-making, and a healthy degree of public awareness and understanding, these tiers must exhibit a common and consistent set of framework principles from top to bottom.

Adding to the complexity, electric cooperatives function simultaneously under two, and perhaps as many as three, legal systems, sometimes with inconsistent and even competing elements. One legal system corresponds to the cooperative business format, which is a system of private ownership where the customers are the shareholders. In a cooperative, the sole business purpose is to meet the user-owners' service interests, not to obtain a business profit.

The second legal system corresponds to their role as public service utilities that are by nature monopolies and therefore subject to third-party governmental regulation. An electric cooperative is a unique form of public-service utility. As established by cooperative bylaws, consumers elect a Board of Directors to represent and balance the consumers' and the business's interests, creating a certain degree of self-regulation.

A third legal framework is also possible. This framework would entail government establishment of a special rural electrification promotion agency, and this has indeed transpired in all of the world's largest rural electric cooperative programs. If such an agency exists, it can play a purely supportive enabling role in financing, and other needed aspects. However, it may also be endowed with legal powers to incorporate, license, and regulate electric cooperatives, largely displacing the need for the other two enabling systems.

In devising or reforming the enabling environment for electric cooperatives, any combination of the above-mentioned institutional and legal systems is feasible. The legal structure must ensure that cooperatives are established and

Electrification experience worldwide has shown that the cooperative business format can work effectively as a scalable and replicable model for bringing electricity to more communities.

developed with two basic principles in mind. The first is that the legal enabling environment must treat cooperatives in a consistent and logical set of enabling systems that does not allow any of the entities with oversight to be able to use their jurisdictional authority to serve their self-interest. This argues for dividing the oversight responsibilities among two or more entities.

The second principle is that cooperatives must be created as autonomous, private businesses responsible for their own financial survival. This argues for separating the legal incorporation of a cooperative from the laws that create the government's electrification support and oversight entities. Experience relating to this concern also argues for shifting responsibility for such functions as financing, organizational development, and procurement, as a matter of deliberate policy, from the support and oversight entities to the cooperatives over time. This suppresses the tendency of corrupt practices and bureaucratic self-perpetuation on the part of the responsible government authorities.

The laws should also guarantee that everyone who lives within the cooperative's defined territories should have the opportunity to receive electric service.

The recommended legal and institutional system involves the functional allocation of authority and responsibilities in three respects. First, electric cooperatives should derive their legal status as business entities from cooperative law. This law should embody the basic provisions that guarantee their autonomous and democratic nature along with other laws that grant them privileges to operate and compete effectively. This can be accomplished under a separate sub-chapter of an existing cooperative societies law, or by means of a separate electric cooperative law, as was done in the U.S.

Second, the primary responsibility for licensing and operational oversight of electric cooperatives should fall under the electric power sector or public utilities laws. These laws should incorporate special provisions for cooperatives along with regulatory modifications that allow for the special characteristics of non-profit, consumer-owned utilities. The laws should also guarantee that everyone who lives within the cooperative's defined territories should have the opportunity to receive electric service.

Third, the creation of a special rural electrification promotional/development agency, tasked with enabling rural electrification development, is recommended using a special law or executive decree. This agency must have the necessary authority and resource endowment to lead the development of its constituent utilities, but it should not have comprehensive and controlling legal authority over them.

INTRODUCTION

This module of the NRECA Technical Assistance Guides presents the key elements of the legal and regulatory enabling systems required for the development of a self-governing, independently operated, consumer-owned, private electric utility – an electric cooperative. The central themes that underlie appropriately chartered electric cooperatives are a set of governing principles, derived from a governing foundation common to all cooperatively organized businesses. These principles must be imbedded in the legal and regulatory architecture that forms the basis for the charter, bylaws and basic policies of a newly formed electric cooperative.

However, as a public service utility an electric cooperative must also abide by the basic laws and regulatory provisions governing electric distribution entities. Such laws and their technical provisions become embodied in the cooperative's procedures and operating systems. Furthermore, these technical provisions are also mirrored in the legal charters that allow the formation of electric cooperatives.

Indeed, electric cooperatives are substantially different from all other types of electric utilities. They therefore require a specially designed set of enabling systems to be successful. Therefore, as a general recommendation, a wholly unique

and self-standing statute should be developed for the legal enablement of electric cooperatives. This national or state statute should allow them to function effectively both as sustainable cooperative businesses and as regulated public utilities.

This module provides details for an enabling law, founding charter, and internal enabling systems for electric cooperatives, based on the experience of electric cooperative development in the United States. The U.S. case was the world's first and largest national system of electric cooperative development. Importantly, it illustrated the essential role of a specialized national rural electrification agency. This organization, originally called the Rural Electrification Administration, served as the institutional linchpin for promulgating comprehensive organizational development, supervision and capacity-building guidelines needed to assure that cooperatives were functioning properly.

Other electric cooperative development examples from several developing countries supplement the lessons of the U.S. experience. These examples illustrate the importance of key elements of the recommended enabling system. Further, because the basic system of laws and regulation in most developing countries differs from that of the U.S., examples show how similarly effective legal and institutional enabling systems can be drawn upto fit the legal system of other countries.

COOPERATIVE EXPERIENCE IN THE ELECTRIC UTILITY SECTOR

Worldwide, there are some 2,000 consumer-owned electric distribution utilities organized as non-profit cooperatives, of which about half are in the U.S. The 930 U.S. electric cooperatives, located in 47 states, serve roughly 17 million consumer owners and a total population of 42 million, covering 75% of the land-area of the country. Other countries where electric cooperatives exist in significant numbers include Argentina, Bangladesh, Bolivia, Brazil, Chile, Costa Rica, India, Italy, the Philippines, and Spain.

Most of these electric cooperatives formed to distribute electricity on the periphery of national grid systems, or as independent utilities powered by local generators in more isolated areas. Most came into being in areas with little or no electricity service. However, in some cases they emerged to replace failed electricity service systems, sometimes private, sometimes government owned, in smaller rural towns, with the idea of expanding service to the surrounding areas.

Electric cooperatives generally exhibit organizational and operational characteristics similar to all electric distribution utilities. They differ, however, in that the cooperative customers own the system that serves them, as illustrated in Figure 1.

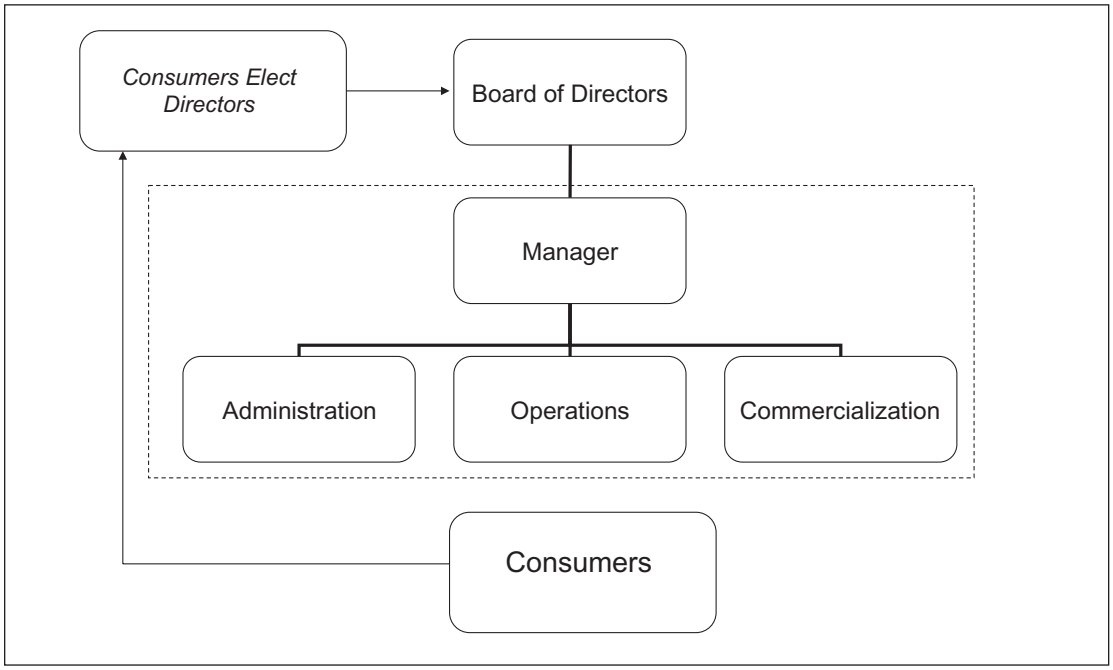
Worldwide, there are some 2,000 consumer-owned electric distribution utilities organized as non-profit cooperatives, of which about half are in the U.S.

Electric utilities are complex businesses. They require highly specialized technical know-how and extensive business development support. Whether the utility is organized as a cooperative or under some other corporate format, it needs professional managers, and well-trained, highly disciplined technical personnel. A typical electric cooperative operates with the following staff:

- The chief executive officer (or General Manager): may supervise a staff of over 100 people, and in the U.S. typically has an advanced educational degree.

- Administrative staff: address the various human resources functions of any large-scale business operation. Qualified administrative staff must include some who can deal with technologically advanced office equipment and administrative systems software, others with complex accounting systems, and still others with the legal expertise to deal with various kinds of contracting needs and regulatory proceedings. In addition, modern-day utilities require specialized communications personnel to conduct sophisticated public

Figure 1. Basic electric cooperative organizational structure



The electric cooperative model is rooted in the ground-breaking cooperative experience of a small group of weavers in the town of Rochdale, England.

information outreach and education programs. Finally, to be successful in today's rapidly evolving electricity utility market, a utility needs an effective public advocacy capability.

- Technical staff: skill sets spanning a diverse technical universe ranging from power-plant operations and maintenance in some cases, to the more common functions of distribution utilities, such as distribution construction planning and maintenance, materials management and warehousing, and operating and maintaining an inventory of vehicles ranging from pick-up trucks to trenching rigs and hydraulic-lift line trucks.

- Commercial staff: in charge of the billing, collections, and customer relations. This demands yet another set of skills and hardware/software capabilities.

Not surprisingly, training is one of the most important elements in the formation of a rural electrification program. From the Director in the boardroom to the lineman on the pole, all cooperative personnel require sufficient and continued training. Experience has shown that in even a setting with the most rudimentary technology, local populations can supply trainable people who over time can develop the skills to cope successfully with all of the above-mentioned functions.

The Cooperative System

The electric cooperative model is rooted in the ground-breaking cooperative experience of a small group of weavers in the town of Rochdale, England. In the mid-19th century these individuals formed the Rochdale Society of Equitable Pioneers and created a basic system of cooperative principles. Over the years since, their early ideas evolved into the following seven principles that are upheld by cooperatives and credit unions worldwide, adopted in September 1995 by the International Cooperative Alliance in Manchester, England:

1. *Voluntary and open membership:* Cooperatives are voluntary organizations, open to all persons able to use their services and willing to accept the responsibilities of membership,

without gender, social, racial, political or religious discrimination.

2. *Democratic member control:* Cooperatives are democratic organizations controlled by their members, who actively participate in setting their policies and making decisions. Men and women serving as elected representatives are accountable to the membership. In primary cooperatives,[1] members have equal voting rights – one member, one vote – and cooperatives at other levels are organized in a democratic manner.

3. *Members' economic participation:* Members contribute equally to, and democratically control, the capital of their cooperative. At least part of that capital is usually the common property of the cooperative. They usually receive limited compensation, if any, on capital subscribed as a condition of membership. Members allocate surpluses for any or all of the following purposes: (a) developing the cooperative, possible setting up reserves, part of which at least would be indivisible; (b) benefiting members in proportion to their transactions with the cooperative; and (c) supporting other activities approved by the membership.

4. *Autonomy and independence:* Cooperatives are autonomous, self-help organizations controlled by their members. If they enter into agreements with other organizations, including governments, or raise capital from external sources, they do so on terms that ensure democratic control by their members and maintain their cooperative autonomy.

5. *Education, training and information:* Cooperatives provide education and training for their members, electric representatives, managers and employees so they can contribute effectively to the development of their cooperatives. They inform the general public – particularly young people and opinion leaders – about the nature and benefits of cooperation.

6. *Cooperation among cooperatives:* Cooperatives serve their members most effectively and strengthen the cooperative movement by working together through local, national, regional and international structures.

7. *Concern for community:* While focusing on member needs, cooperatives work for the sustainable development of their communities through policies accepted by their members.

In today's developing countries, the basic laws governing cooperative sectors reflect these principles. As an example of a failed system, the Cooperative Societies Act, established in India in the 1950s, mandated that government own a share of every cooperative – a fundamental violation of Principles #3 and #4 concerning the cooperative membership's autonomous ownership and control. Such distortions may lead to the harmful influence of external political forces on cooperatives, as well as their continuing dependency on government. Equally important, distortions of the seven principles have contributed to a misunderstanding of cooperatives, by some, as virtual extensions of governmental policy and social program administration. In fact, both cooperative members and government must regard and respect cooperatives as independent private businesses to allow a healthy business culture to prosper.[2]

Both cooperative members and government must regard and respect cooperatives as independent private businesses to allow a healthy business culture to prosper.

[1]Cooperative industries tend to develop in two tiers of cooperatives, primary and secondary, where primary cooperatives are formed first, and then in turn develop secondary cooperatives to address common needs. In the electric sector, primary cooperatives are owned by individual electricity consumers at the retail level – they are "distribution cooperatives." Distribution cooperatives may develop and own secondary cooperatives for a wide range of possible purposes, such as providing a common basis to obtain wholesale power supply or capital financing.

[2]In the U.S., the term "cooperative" has gained increased public respect and understanding as a result of the business success of many large cooperative businesses that are well known to the public but were generally not known as cooperatives. In 2004, the 50 largest U.S. chartered cooperatives including the dairy products giant Land O' Lakes, Ace Hardware, and Sunkist Growers grossed $104 billion in revenues on a combined capital asset base of $193 billion. This group included four electric cooperatives.

Even without the problems of faulty law, in some cases cooperative enabling organizations have used their oversight powers to inject political influence in the inner workings of cooperatives. These organizations implement national cooperative laws, serve as the cooperative registrar, and supervise cooperatives on behalf of the government. Their inappropriate use of supervisory power has taken various forms, from political influence over investment decision-making to nepotism and other invasive actions. It is for these reasons, among others, that NRECA recommends the specially defined statutory foundation for the formation, development and oversight of electric cooperatives described in this module.

Electric cooperatives are private businesses, typically chartered under cooperative laws and regulations.

Cooperatives as Public Service Utilities

A variety of business forms exist in the electric utility sector, including government-owned (companies or authorities owned by national or sub-national jurisdictions, such as municipally owned utilities), private profit-seeking investor-owned utilities, and consumer-owned utilities organized as non-profit cooperatives. Note that in some countries, electric cooperatives are operated as outgrowths of agricultural or multi-purpose cooperative enterprises.

Ownership determines for the most part how electric utilities are defined, licensed, and regulated, including how tariff rates are determined. Electric cooperatives are private businesses, typically chartered under cooperative laws and regulations. In some countries, very small-scale community-based service associations have been formed that may be referred to as electric cooperatives. However, such organizations – including user associations of household solar home systems and small service associations that distribute electricity from small isolated generating plants – are not registered under established cooperative laws as private, consumer owned businesses and therefore do not meet the organizational or legal standard of electric cooperatives as discussed in this module. Likewise, in Vietnam and other countries, small grid-connected electric service associations have formed in rural areas as part of governmental decentralization movements, but these are more akin to local governmental entities.

In the United States, electric cooperatives are chartered as private corporations under several statutory forms. In 30 of the 47 states where electric cooperatives exist, they are legally formed under special electric cooperative acts. In the other 17 states, electric co-ops are incorporated under a general cooperative act (11 states), a nonprofit corporation act (3 states), or a business corporation act (3 states). State-level public utility regulatory commissions (PUCs) provide formal regulation. Their mandate includes adjudication of service territories, setting of safety and service standards, and balancing investors and consumers interests with regard to tariff-setting. In keeping with the unique character of cooperatives as consumer-owned utilities, PUCs regulate their tariffs in only 16 of the U.S. states that have electric cooperatives. The Federal Energy Regulatory Commission of the U.S. Government oversees interstate electricity trade, mainly high-voltage transmission systems.

Regulation of electric cooperatives in the U.S. is also indirectly provided by a specialized governmental rural electrification (RE) agency, the Rural Utilities Service (RUS), which was created in 1935.[3] RUS is organized under the United States Department of Agriculture (USDA), and was originally named the Rural Electrification Administration (REA). Its title was later modified to reflect the changing nature of electric cooperatives into multi-purpose businesses, including not only electricity but also telecommunications, natural gas distribution, and other member-determined service and product areas.

[3]REA was first established under an Executive Order by President Franklin Roosevelt and later re-established as a permanent agency by an Act of Congress. Its title was later modified to reflect the changing nature of electric cooperatives into multi-purpose businesses, including not only electricity but also telecommunications, natural gas distribution, and other member-determined service and product areas.

As one of its role, RUS functions as the primary source of financing for rural electric utilities. In addition, RUS provides a comprehensive set of operating standards and procedures for electric cooperatives. Its standards are enforced by the covenants of its loan contracts with cooperatives and other eligible rural utilities. The standards include specific instructions to borrowers in setting tariffs to meet the cost-of-service plus debt service coverage, along with other guidelines for meeting the basic technical and operating standards of electric utilities. The following sections explain how electric cooperatives in the U.S. adhere to the seven cooperative principles.

The following sections explain how electric cooperatives in the U.S. adhere to the seven cooperative principles.

Voluntary and Open Membership

Regulatory provisions require electric cooperatives to offer service to anyone in its state-granted service territory, subject to compliance with the cooperative's membership requirements. This principle receives further support in the borrowing eligibility criteria of the RUS, which that specify a principle of "area coverage." That is, those who borrow from the RUS must demonstrate a commitment to the goal of universal service without discrimination.

Democratic Member Control

Each cooperative member in good standing has the right to vote for democratically elected directors for limited-term seats on a single governing board. This board in turn retains the sole authority over the self-determination and business operations of the cooperative. These directorships typically have three-year terms and represent geographical districts, sometimes along with one or more additional "at-large" seats.

Members' Economic Participation

To receive service, electric cooperative members pay a nominal membership fee and usually a connection fee for the cost of a connection to the electric service line. The investment capital of a cooperative, however, is generally financed by external sources. As a non-profit enterprise, a return on equity is not factored into the tariff. Nevertheless, the cooperative operates with an annual revenue margin to render it eligible for financing and/or compliant with loan covenants. Over time, as the margins which are not applied to system expansion or other purposes approved by the board accumulate, they may be returned to the members in proportion to their energy use, typically on an annual basis. In some of the enabling acts for U.S. electric cooperatives, the sale of additional non-voting capital stock to members may be permitted, but this is rare.

Autonomy and Independence

Electric are cooperatives autonomous legal entities subject to external intervention only in two rarely occurring circumstances: as a result of prescribed administrative procedures or litigation in response to the cooperative's failure to meet its legal obligations, or by a vote of the membership. In the first instance, such intervention may include the RUS replacing an incumbent General Manager as the consequence of an egregious RUS loan covenant default. As an example of the second instance, in states where cooperatives are subject to public utility regulatory oversight, the membership may vote to invite PUC regulation when their confidence in the Board of Directors has eroded.

Education, Training and Information

Training and public education have a high priority in most cooperative laws, and in some countries, surplus revenues may be used only for this purpose. Training was a continuous emphasis of the RUS in the formative years of the US electrification program, and this embedded training as an important feature of electric cooperative administration. Public outreach and member communication take place especially during the developmental stages of a

Regulatory provisions require electric cooperatives to offer service to anyone in its state-granted service territory, subject to compliance with the cooperative's membership requirements.

cooperative. After formation of the cooperative, robust, open, and direct communications and public information sharing continue to lay the groundwork for transparency, good governance, and consumer trust.

Cooperation Among Cooperatives

In the electric utility business, scale is essential, particularly to achieve minimum economic thresholds and to compete effectively. Distribution cooperatives tend to be rural and are therefore at a disadvantage in numbers of consumers, consumption, and consumer density. In the U.S., electric cooperatives have overcome much of this disadvantage by organizing common-service or secondary cooperatives to address many commonly required functions. Secondary cooperatives have formed at the national, regional and State levels to provide financing; marketing services; bulk power supply and marketing services; bulk materials procurement, warehousing and transport; product manufacture including wood poles and transformers; engineering services and R&D; management search and placement services; training; and public advocacy.

In developing countries, electric cooperatives are particularly relevant for effective rural electrification development where governmental and utility privatization models have failed.

Concern for Community

In the U.S., only 10% of farms received electric service in 1935, when the RUS came into being. Electrification was therefore synonymous with economic and social development in disadvantaged rural areas. Member assistance and customer service have likewise become embedded corporate values in the electric cooperative industry. These values are manifested in the provision of direct consumer assistance for house-wiring, agricultural electric and other productive uses marketing and extension assistance, building efficiency assistance, and a growing list of member-demanded non-electric services, including rural development and industrial promotion financing and support. As another illustration of this principle, many U.S. electric co-ops today sponsor foundations that they fund for charitable giving purposes in their communities.[4]

The cooperative principles are in one way or another represented in the enabling laws, internal rules, regulations and/or institutional development patterns of the electric cooperative system in the U.S. For electric cooperatives to achieve long-term stability, these basic founding principles must remain inviolable and be consistently applied, from the broader enabling legislation and institutions down to the individual cooperative's internal governing and organizational systems. At the same time, the cooperative charter should permit and promote adaptability, giving cooperatives the latitude to adjust their constitutions to better address the inevitably changing dynamics of markets, economic patterns, demographic features, technologies, and management/operational best practices. Such adaptive change is generally not possible under the prevailing cooperative law in developing countries.

Key Power Sector Reform Issues and Cooperatives

In developing countries, electric cooperatives are particularly relevant for effective rural electrification development where governmental and utility privatization models have failed. These market failures generally correspond to the underlying question of ownership and motivation.

Government-owned electric utilities have generally failed to provide reliable service coverage with significant market penetration for various reasons. Over-bureaucratization and corrosive politicization, corruption, weak oversight, and lax enforcement of utility policies, and the inability of state-owned enterprises to attract financing as result of poor utility performance are typical reasons for such failures.

[4] A "Round-Up" program has been adopted by many of these cooperatives as the means of raising the funds – by inviting members to voluntarily allow the cooperative to round-up their monthly bills to the next full dollar amount.

Privatization – the transfer of ownership to profit-seeking investors – has proved problematic for the simple reason that financial returns in rural electric service provision tend to be poor because of the weak underlying economic and demographic conditions of rural areas.[5]

The electric cooperative model is uniquely capable of mobilizing an often overlooked source of private self-interest – the beneficiaries –whose motivation is to obtain electricity service at a cost that is reliable, widely available, and financially and operationally sustainable. Properly constituted cooperatives offer a corporate structure to capture this self-interest in a workable business format. However, the enabling framework for cooperative development is critically important for achieving the intended results. Prior experience with electric cooperative development points to several crucial lessons about important conditions for success.

Sustained Commitment from Government

The impetus for rural electric cooperative development stems from government's fundamental obligation to extend public infrastructure and services to disadvantaged populations. This obligation primarily entails the provision of long-term, low-cost capital for the infrastructure and services. However, it also requires the establishment of an effective administrative infrastructure to set up the enabling framework, including laws, regulations, institutions, and organizations, as well as making these elements work effectively.

These functions are best served by the creation of a competent central agency of the government. This agency should be empowered with a clear mandate and mission to promote rural electrification. It should also have the necessary financial and human resources to help establish cooperatives, guide and supervise their development, and see to the timely inputs of funding, technical assistance and organizational capacity-building for the cooperatives.

Vesting Control with the Cooperative's Membership

Too often, electric cooperatives have been subjected to excessive top-down control by governmental administrative and oversight agencies. Besides the aforementioned extreme case of partial government ownership and board representation mandated by law in India, there are many ways that enabling and supervising authorities of government abuse their powers to undermine the autonomy of electric cooperatives. Specific elements of the enabling legislation for establishing such authorities are critically important. First and foremost, government must limit itself to a facilitative role, with no direct involvement in the constitution or operation of the cooperatives. In particular, the legal chartering provisions for cooperatives, other than for their licensing and oversight, should be separated from the enabling legislation for specialized rural electrification authorities and agencies.

Too often, electric cooperatives have been subjected to excessive top-down control by governmental administrative and oversight agencies.

This was not done in two prominent cases: the Philippines and Bangladesh. Both cases subordinated the electric cooperatives so as to appear an extension of the enabling authority and thus an extension of the government. Placing the chartering authority for the legal establishment of cooperatives under the general law for cooperatives can help prevent this problem. Preferably, the chartering authority should be placed under a separate chapter of the law or an entirely new statute that delineates the particular rights, responsibilities, and institutional features that are unique to non-profit electric cooperatives. In addition, it should place limitations on the enabling agency's supervisory powers.

[5]A compendium of case studies carried out by the World Bank's Energy Sector Management Assistance Program (ESMAP) provides a review of lessons learned in various rural electrification experiences worldwide that point to a number of basic guidelines for successfully addressing the special requirements of sustainable rural electrification development. Several of these case histories involve experience with cooperative approaches and the factors that led to their successes as well as shortcomings. See Douglas F. Barnes, editor, *Meeting the Challenge of Rural Electrification: Strategies for Developing Countries* (Washington, D.C.: Resources for the Future, 2007).

Specific licensing and supervisory controls over the electric cooperatives, as well as the responsibility for developing their capacities to meet its rules and regulations, should reside with the supervising rural electrification agency. The legal, regulatory, and administrative definitions in the founding legislation of both the cooperatives and the supervising agency must stress the independent, private character of electric cooperatives.

Organizations must use a competitive selection system, based on prescribed position descriptions, together with compensation policies that attract strong candidates.

Quality of Leadership and Management

Leaders set the tone for how the business and operating culture of cooperatives evolve. In fact, they fundamentally influence the effectiveness of governance and management functionality in both the enabling agencies and the cooperatives. This is especially true for the leadership of the enabling authority, since it has both formal and informal powers to influence cooperatives on a day-to-day basis. Where leadership is prepared, competent, informed, and property motivated, results have been notably good. Sound operating practices and program execution discipline resonate from leaders to rank-and-file staff, and in turn to the constituent cooperatives. Where leaders do not possess these qualities, results have been poor.

Sustainable success requires emphasis and attention on the employment procedure for management personnel. Organizations must use a competitive selection system, based on prescribed position descriptions, together with compensation policies that attract strong candidates. Governing boards must include provisions to assure a strong democratic system of electing directors, along with the robust participation of cooperative members in their ownership role. This in turn ultimately requires effective membership outreach and education.

Standardization and Scale

The standardization of technical, organizational and procedural facets of electric cooperative development leads to economies of scale. Standardization is critically important given the economic and administrative challenges in rural electrification development. From the standpoint of cost control, standardization based on optimal technical standards (appropriate design for initial cost and durability) maximizes efficient use of scarce investment capital. It also enforces system construction discipline and further economies through program scale-up, allowing for bulk procurement, sharing of materials in disaster recovery, etc.

The same principle applies to institutional aspects of development, including standardization of sub-national laws and regulations, organizational structures, and operating procedures, so as to facilitate a patterned approach to program implementation. This standardization greatly facilitates the formation of cooperatives. It provides training to personnel on a common set of technical and procedural systems and promotes disciplined supervisory functions, including performance monitoring and benchmarking. The enabling legislation definitions, and the subsequent promulgation of the laws implementing regulations and administrative procedures, should emphasize economic and administrative efficiencies.

Assured Access to Markets and Inputs

Because of their economic, demographic, and geographic disadvantages, resulting in lower consumer density and lower revenue-to-investment ratios than urban-based utilities, rural electric cooperatives require special treatment in respect to their access to critical inputs that determine their basic economic viability and competitive welfare. These inputs include, primarily, affordable capital financing and wholesale power supply. They also imply important government responsibilities during the initial stages of electric cooperative development and operations. In the case of financing, long-term, low-cost debt financing must be available over a period of 20-40 years to enable the construction of distribution infrastructure.

Similarly, power supply may require the support of government in long-term financing of power generation facilities, or more likely, in arranging wholesale power contracts at discounted prices. These factors are true for any form of rural electrification development. For cooperatives, the laws, policies and regulatory provisions of the enabling system must assure their access to these vital inputs on terms that enable the cooperatives to meet the electricity needs of their members with reasonably competitive costs.

Government may also be called on to reduce other developmental barriers for cooperatives. This may include providing access to advisory and capacity-building assistance, allowing relief on import duties, supporting the development of related economic and productive infrastructure (such as agriculture extension services to help farmers to adapt to modern energy-dependent production and marketing systems), and providing access to new technologies such as off-grid electricity service systems.

Reducing Dependency on Government

Cooperative members and governing boards must view the cooperative as a private enterprise that is independently responsible for its financial welfare and survival. Given initial help from government in the form of low-cost capital financing, power supply, and capacity-building, cooperatives must ensure that they are geared to meet their financial obligations. Their obligations include recovering the full cost of electricity service. In addition, cooperatives must evaluate and adjust their governance and administrative conduct to comply with the provisions of electric cooperative law, utility licensing, and regulatory compliance.

Cooperatives must also develop, over time, independent capabilities in areas where they initially received government support and subsidy. Experience has shown that extended reliance on government support erodes the autonomy of cooperatives and weakens their performance. Looking to the long term, the enabling systems and policies of government must be fashioned to transparently support, and provide help and incentives for electric cooperatives to build their capacities. These facets of the enabling system enable both parties to work in a common effort to create new strategies and institutions to absorb the functional responsibilities that government agencies initially provide.

Electric Cooperative Case History

The following example of electric cooperative institutional and legal enablement provides helpful points of reference regarding the design of the enabling frameworks for future electric cooperative industries.

The Philippines

A public law, formally enacted in 1969, created the National Electrification Administration (NEA) to take over the rural electrification responsibilities of the government from several pre-existing programs and agencies. The law contained the authorizing elements for the establishment of the NEA and provided the legal authorization for the establishment of electric cooperatives. NEA provided organizational support, financing in the form of long-term loans, coordination with government agencies – specifically with the government's national power company for power supply. NEA also served as regulator with extensive authority over the development and business conduct of the cooperatives. Over approximately a 15-year period, NEA developed 119 electric cooperatives that today serve nearly 80% of the country's rural area, with approximately 8 million consumer-members nationwide. As in the U.S., Filipino electric cooperatives are governed by democratically elected boards and enjoy most of the autonomies of their American counterparts.

However, NEA's management style was heavy-handed during an earlier era of its tenure. It engaged directly in the governance and management of the cooperatives, resulting in

In the Philippines, NEA developed 119 electric cooperatives that today serve nearly 80% of the country's rural area, with approximately 8 million consumer-members nationwide.

a certain level of political influence in Board election and composition, as well as favoritism and corruption at the Board and management levels. This interference also led to poor operational and financial discipline.

In recent years, NEA has been restructured and downsized. It is now working to improve those cooperatives that still suffer from the harm created by its past excesses.

The key lesson of this example is that NEA's control over the cooperatives derives directly from the fact that the cooperatives' legal existence is inextricably tied to NEA's enabling legislation. By contrast, cooperatives in the U.S. can "opt out" from RUS oversight by simply repaying the RUS loans. A new electricity law in the Philippines has attempted to remedy this situation by granting electric cooperatives the option of dissolving their ties to NEA by re-registering themselves under the Cooperative Development Authority (CDA), the cooperative supervising agency in the Philippines. Most of the cooperatives have opted not to register with CDA, although the cooperative community is beginning to take strides in formulating new commonly owned agencies that will reduce their dependency on NEA in the future.

ENABLING SUCCESSFUL ELECTRIC COOPERATIVE DEVELOPMENT

Electric Cooperative Law and Regulation

National cooperative laws exist in most developing countries today. Usually, they cover the legal foundation and organizational features of cooperatives, societies, and other types of structured associations. These laws typically have a general section dealing with the basic authorities and responsibilities of the differing cooperative entities, along with separate chapters detailing the specific aspects of different cooperative/society types (by social and commercial sector). They also include enabling provisions for the government agency responsible for implementing the law. In many cases, the provisions dealing with oversight responsibility also prescribe that the relevant government ministries and functional authorities have responsibility for defining the specific "type" of cooperative.

Each cooperative type is defined within the related sector sections covering cooperatives – transportation, agricultural production and marketing, social services, public infrastructure and services, commerce, etc. In the case of electric cooperatives, authority may be delegated to the ministry or authorized agency concerning electricity, energy, public infrastructure, etc., depending on the prevailing organization of national government. In some countries, a relatively new legal construct such as the Law of Producer Companies in India, subordinated under the national corporation law, offers an alternative legal framework for the incorporation and regulation of member-owned associations, including cooperatives. This legal framework places such cooperative-style companies under the auspices of the administrative and judicial authority of securities and exchange agencies which may not grant the same privileges as cooperatives generally enjoy (e.g. exemption from different types of duties and taxes).

Another legal path entails the promulgation of a separate, stand-alone statute that enables and defines the chartering of electric cooperatives. This includes features that address the general cooperative provisions and the rights and responsibilities of electric cooperatives as public utilities.

Under any system that may be used for the legal chartering of electric cooperatives, regulation generally falls under the supervisory authority of PUCs that are organized in one of two ways:

- under the national electricity ministry (or its equivalent)
- as an independent regulatory body governed by appointed administrators or elected commissioners

In the U.S., the regulatory systems differ from state to state.

Given that electric cooperatives differ in substantial ways from other types of utility corporations, any PUC regulation of cooperatives should accommodate the following special conditions of cooperative enterprises.

Tariff Rate Regulation

Regulators review electricity retail tariffs under an established formula that differs from case to case. However, tariffs are generally determined on the basis of cost plus a prescribed rate of return on the utility's capital assets. The regulator's role is to balance the interest of the consumer to obtain the lowest possible price against the interest of the owner to maximize profit. A consumer-owned electric cooperative exists to provide service at cost, with no allowance for profit. Therefore, in most states in the U.S., PUCs recognize that a cooperative Board has the responsibility to represent the consumers' interest while assuring the cooperative's financial viability, and they do not apply rate regulation. However, the cooperative's charter must provide for the authority of the membership to voluntarily submit to the PUC's rate regulation if they so desire.

Services

Distribution utilities are natural monopolies. PUCs are therefore responsible to the consumers for ensuring that utilities meet the basic standards of service including quality (voltage), reliability (outages), and public safety. Cooperatives are bound by the same oversight requirements. Utility laws and regulations also limit most utilities to the provision of electricity service alone, so they do not take unfair advantage of their monopolistic position in the market.

Electric cooperatives, on the other hand, frequently expand into other services (electrician services, telecommunications, home security, natural gas distribution, and other services and products), subject to the demand and authorization of the membership and Board and as may be permitted by law. There are various reasons why this is justified, including not just the natural authority granted in democratic self-determination as well as the practical efficiency of maximizing a cooperative's administrative infrastructure in rural areas where such services may otherwise be uneconomical.

Service Territories

As noted, the legislation and regulations generally grant electric distribution utilities monopoly status within defined service territories. Territorial disputes between utilities are not uncommon, and cooperatives appeal to this regulatory authority to protect their territorial interest. This may occur, for example, where urban authorities extend their legal jurisdiction into suburban districts, creating conflicts between the municipal public utilities they own and operate and the incumbent electric cooperative. This encroachment can have a severe impact on the economic viability of cooperatives. Where this phenomenon may apply, preferential rule-making to protect the interests of the rural utility is recommended.

Competition

Competition among utilities to serve electricity generally exists only at the wholesale market level. In that arena, regulators at the state and federal level assure open access to power suppliers over privately-owned transmission facilities. At the retail level, electricity service is essentially monopolistic. Nevertheless, in some states electricity laws have been restructured to apply "open access" to the lower voltage networks, as well. This concept potentially applies to cooperatives, as to any other distribution utility but it has not proved significant in the U.S. Power suppliers and marketers are generally not interested in engaging at the retail market, except for larger users.

At the wholesale level, most distribution cooperatives have waived their opportunity to

A consumer-owned electric cooperative exists to provide service at cost, with no allowance for profit.

purchase in competitive markets. They instead opt to execute "all-requirements" contracts with the 66 Generation and Transmission (G&T) cooperatives they collectively own. "All-requirements" clauses grant the G&T the authority to provide 100% of the member distribution cooperatives' power supply needs. Put differently, a member distribution cooperative may obtain power supply only through its G&T. This gives the G&T the required legal and marketing strength to enter with confidence into power purchase agreements with other power producers, with power plant investment financing agreements as direct investors/owners, and for other functional purposes.

Electric cooperatives frequently expand into other services, subject to the demand and authorization of the membership and Board, and as may be permitted by law.

Financing

Cooperatives are generally independent of regulatory considerations regarding financing. However, electric cooperatives have an important provision for repatriating operating surpluses (also known as "capital credits") to the members. The charters, policies, and procedures of a cooperative must provide for this important function – which, among other things, reminds consumers that they are also the owners.

Utility regulatory frameworks are beyond the scope of this module.[6] One significant aspect of regulation, as it concerns cooperatives, is the value of establishing open hearings as a part of how regulatory bodies function. Through this process, PUCs invite the public to attend and comment at hearings and ruling procedures regarding such issues as tariff decisions, siting of utility facilities (e.g., transmission lines), service territory disputes and issues, etc. This empowers a cooperative member, like any utility consumer, with the added protection of having access to a formal adjudicative process to protest tariff rate decisions or other actions by a cooperative Board. For this reason as well, an internal process of periodic meetings for the membership with the Board and management should be encouraged.

[6]See the National Association of Regulatory Utility Commissioners at www.naruc.org.

General Legal/Regulatory Review

To ensure that the seven basic principles of cooperative law are adequately reflected, a systematic review of the prevailing legal framework for cooperatives is recommended. The Overseas Cooperative Development Council (OCDC) in the U.S. has recently put forward an evaluative model to guide the architects of cooperative laws in reforming the enabling frameworks for cooperative development.[7] Their framework, the Cooperative Law and Regulation Initiative (CLARITY), advocates the following seven principles:

1. Protect the democratic character of cooperatives and assure that control is vested solely with their members.

2. View cooperatives as private enterprises individually responsible for their financial welfare and survival.

3. Respect the voluntary nature of cooperative association and membership.

4. Protect and promote equitable sharing of responsibilities and benefits among members.

5. Maintain fair and equitable treatment of cooperative businesses within a larger industry or sector, in terms of incorporation, enforcement of laws and regulations, dispute resolution, and licensing.

6. Grant reasonable support through accommodations and incentives to facilitate cooperatives' access to markets for trade, capital financing, and bulk purchasing power.

7. Provide coherent, efficient and predictable operating environments (policies and regulations, etc.).

[7]*Enabling Cooperative Development: Principles for Legal Reform* (Washington, D.C.: United States Agency for International Development, 2006). This document can be accessed in English, Spanish, and Arabic from http://www.ocdc.coop/clarity/clarity_init.html.

The Electric Cooperative Charter, Bylaws and Governance Provisions

An electric cooperative's internal workings are laid out in three mutually consistent documents, which must generally follow the broader provisions of the basic enabling legislation for cooperatives. These three internal documents are the charter, the bylaws, and the board policies. Among other things, these documents define the system by which each document can be amended under the general authority of the cooperative membership and its Board of Directors.

A cooperative's Charter (also called Articles of Incorporation or Articles of Association) is the basic legal document that establishes how the cooperative is organized and governed. In addition, it may specify the responsibilities of a cooperative's members, responsibilities of the elected Directors, and the general functions of the co-op manager under the overall supervision of the Board. The bylaws follow the general provisions of the charter document. They give greater detail on the internal rules and regulations that govern electric cooperative membership and the duties and functions of the cooperative's Board and management.

The Board must also adopt a set of governance and administrative policies detailing the specific manner in which the cooperative's charter and organizational systems are carried out. Such policies may cover the following areas:

- Corporate governance and Board of Directors
- Employee relations
- Advisors consultants and agents
- Finance and accounting
- Operations
- Tariff rates
- Procurement and contracting
- Member, public, and governmental relations
- Community and economic development
- Electric rules and regulations
- Capital credits

The effective governance and operation of electric cooperatives depends on the clear definition of responsibilities and the effective exercise of these responsibilities between the three basic elements of the cooperative's organization – the members, the Board of Directors, and the cooperative's management. Effective governance relies on several important processes.

The Democratic Process Respecting the Rights of the Owners (Members)

The members provide the governing foundation for the cooperative. They exercise their rights by electing representative directors to the governing board. The Board of Directors, in turn, has the responsibility of supervising the management of the cooperative in keeping with the wishes of the members. They accomplished this by defining the mission and broader strategic purpose of the cooperative, through adopting policies, and by approving business decisions following prescribed procedures. The Board must refrain from entering the realm of management. Its role is to define basic goals and business direction for management and ensure that management applies the policies in accordance with procedure.

The Fiduciary Process and Supervisory Control of Resources and Accountability

The members have the responsibility to provide the capital of the cooperative. It is their elected Board's responsibility to assure that the cooperative's assets are adequately protected while being productively employed in the most effective manner. Management is responsible for presenting plans and actions for the Board's approval, demonstrating the appropriate employment of the cooperative's resources, and implementing approved actions. The Board's critical responsibility is to ensure that its policies,

The Board must also adopt a set of governance and administrative policies detailing the specific manner in which the cooperative's charter and organizational systems are carried out.

and the related operating procedures, are set up in a way that keeps management accountable in fulfilling its responsibilities.

The Decision-making Process and Implementation Oversight

Management, following established procedures, is responsible for developing the business and administrative actions concerning all aspects of the cooperative's business, including system construction and operation, human resources and administrative systems, power supply, regulatory compliance, etc . Where problems arise, management must inform the Board and offer solutions for the Board's consideration. And where problems are sufficiently serious to affect the cooperative's membership in significant ways (e.g. if power supply costs increase beyond expectations, necessitating a tariff rate increase), it is the Board's responsibility to ensure effective communication to the members on the nature of the problem and the steps planned to address it (e.g., reasons for the tariff increase and what the cooperative is doing to protect members from future cost increases). The Board then must fulfill its accountability to the membership to ensure that management undertakes all necessary actions accordingly.

Each of these processes relies fundamentally on good communication among all three elements – the elected Directors, management, and the membership – to maintain transparency and trust on the part of the members, as presented in Figure 2.

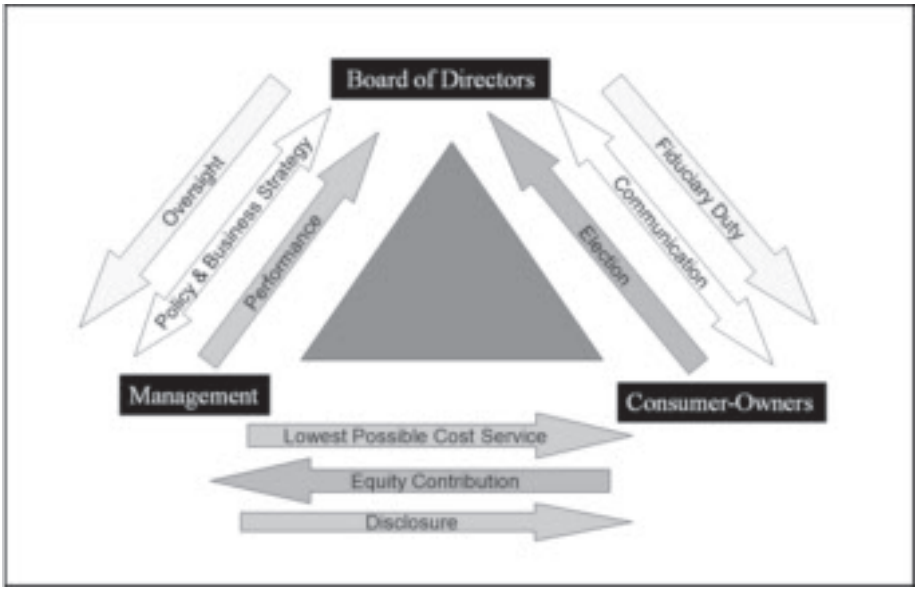
BUILDING INSTITUTIONAL CAPACITY FOR A SUSTAINABLE INDUSTRY

International experience demonstrates that electric cooperative development requires strong guidance and far-reaching vision to promote independent institutional and financial sustainability.

International experience demonstrates that electric cooperative development requires strong guidance and far-reaching vision to promote independent institutional and financial sustainability. This responsibility falls initially to the government, through the creation of a mission-driven enabling agency whose sole objective is promoting a sustainable rural electric utility industry. In countries where the cooperative model has been selected for rural electrification, various examples exist for such an agency, starting with the RUS in the U.S.

The central strategy for organizing a national rural electric cooperative development agency

Figure 2. The cooperative governance triangle



is to facilitate the establishment of the primary distribution cooperatives using a reliable, standardized pattern. However, this is not in itself a guarantee of long-term success. There also must be a responsible approach for incrementally transferring functional responsibilities from the rural electrification agency to its constituent cooperative utilities. In a second stage of institutional development, this process involves promoting policies and strategies that require the utilities to formulate secondary cooperatives or other privately organized common-service entities. These entities can then absorb those non-regulatory functional services, and can be administered on a financially self-sustaining basis.

Without a deliberate strategy for accomplishing this second stage, the agency never eliminates the cooperatives' dependency on government. In turn, the lack of independence has at times resulted in a self-perpetuating bureaucracy, increasingly vulnerable to fiscal abuse and politicization.

The Role and Structure of an Effective Supervising Agency

The legal formation of electric cooperatives, as noted, follows the specifications of prevailing law governing cooperative societies. However, the far more complicated problem is devising a suitable enabling structure for shaping electric cooperatives to meet the rigors of regulated public utilities, while shaping both the market environment and the internal workings of electric cooperatives so that they succeed as long-lasting businesses. This challenge represents the purpose and responsibilities of an effective rural electrification supervising agency, which may deal with various kinds of program implementing partners, not solely electric cooperatives.

The enabling agency (referred to as "Agency" in what follows) must be organized and equipped to deal with six key functions and responsibilities.

Financing

Consistent with the lessons learned from past rural electric cooperative experience, reviewed in previous sections, the Agency's most important function is to provide a source of long-term investment capital, in the form of a transparent, needs-driven government subsidy. The recommended package of financing for system construction involves a combination of long-term loans and initial operating grants. The long-term loans include covenants that enforce the operational standards required of successful rural utilities. The initial operating grants ensure that the cooperatives can procure and develop the needed personnel and operating systems (computers, operating equipment and facilities, etc.) during a development period that may last several years.

Licensing

The role of national rural electrification development agencies may include a direct regulatory function through their powers to license service providers.[8] This could involve a two-stage process. First, the Agency may invite proposals from prospective rural utility applicants (including but not necessary limited to cooperatives), awarding the exclusive right to serve to the winning applicant based on defined criteria. After making the award, the formal licensing of service providers would follow, including granting exclusive right to serve in the prescribed service territory.

In the case of cooperatives, member eligibility would follow the requirements established in the prevailing cooperative enabling laws regarding the initial steps in the formation of cooperatives. At the same time, the Agency would establish certifications regarding open and voluntary membership access, establishment of founding committees and Boards, and other provisions including conflict of interest limitations of Directors and senior management personnel.

[8]In the U.S., utility licensing is a function of the PUC.

Planning

The indispensable role of planning, starting with a comprehensive annual plan, is the foundation for assuring program discipline for both the Agency and its constituents. Other plans are required, including long-range service territory plans, which would be based on rigorous demand analysis and financial forecasts, and construction plans, which must be based on project feasibility studies and the disciplined application of appropriate technical designs and construction standards for distribution networks.

Tariff Setting

As part of the loan covenanting, each service provider must be required to furnish tariff plans based on published tariff-setting methodologies, which assure full cost recovery, including debt service, operating costs and power supply. It is vitally important that tariffs be set on an individual basis. That is, service providers having economically weaker demographic and demand characteristics typically must charge higher tariffs than those with greater consumer density and industrial usage. Subsidies to account for economic disparities among utilities are best accomplished through transparent, needs-based discounts for wholesale power supply, facilitated by government power supply authorities.

Service providers having economically weaker demographic and demand characteristics typically must charge higher tariffs than those with greater consumer density and industrial usage.

Load Promotion

Rural areas characterized by lower electricity consumption usually have a greater proportion of residential users than do more urbanized areas. Such communities require that the Agency devote particular effort to its borrower assistance programs. Assistance can include developing and implementing financing products, grant support for local economic development, agricultural extension services, and consumer assistance in the form of productive use equipment promotion, house wiring, and other load promotion assistance in the residential, commercial, and industrial sectors.

Training and Capacity Building

The Agency will have an abiding responsibility to see to the satisfactory organizational and human resource development of its constituent utilities through training their personnel, including technical and operating staff, management staff, and even elected Directors. Such training should be based on the specific technical design, operating standards and procedures that the Agency establishes for system construction and maintenance, administrative systems, governance requirements (e.g., Board member training), and customer services including use promotion.

Organizational Guidelines for the Supervisory Agency

This Agency must have certain key competencies. Moreover, its formulation must be sufficiently comprehensive, but also efficient. In addition, it must have the power to enforce discipline in its constituent utilities (cooperatives) without being intrusive. Finally, it must be geared to a mission that evolves over time.

The underlying organizational principles that are of particular importance for the Agency are the following.

Operational Structures and Systems to Effect Program Efficiency

Excessive bureaucracy hampers institutional performance and goal achievement. The Agency should operate as an enabling, rather than implementing, agency and should be sized to conform to this principle. Without owning, operating or maintaining the infrastructure, the Agency has the chief responsibility of developing effective service provider utilities. The utilities must meet economic, technical, and operational standards that assure effective use of resources and good business practices, including the principle of cost recovery.

Community Welfare and Fairness Considerations

The Agency's mission is to serve the economic and social welfare needs of its client rural populations. Therefore, the involvement of beneficiary communities in the design, development, and control of the Agency's client organizations is critically important. The Agency should also seek the adoption and maintenance of national and local policies to assure fair treatment of rural consumers, as well as the cooperatives' access to economic resources, organizational development assistance, and appropriate technologies. The goal is in maximization of rural energy services penetration and the fostering of local independent control.

Good Governance

The Agency should be autonomous, to render it free from the political control of either the legislature or a supervising ministry of government. The enabling legal statute should be worded so as to guarantee such autonomy. The Agency should itself be designed to operate as a model of good governance, from its governing Board down to its operating elements and functional responsibilities. To achieve this aim, the Agency's enabling legislation and internal regulations and guidelines should clearly delineate provisions requiring that all decision-making be based on business-like policies and procedures, similar to the way a private enterprise would conduct its business. Finally, these business culture norms should be transferred to the constituent utilities through the promulgation of licensing, organizational, and operating standards that are uniformly and rigorously applied by the Agency in fulfilling its supportive and supervisory roles.

Transparency

A key Agency goal is to win the confidence of its funding sponsors. It can accomplish this by demonstrating effective controls over funds management and procurement, with strong, built-in organizational oversight.

Competencies

The Agency's good performance requires people who are competent and diligent in performing their duties. This starts with proper recruiting systems, compensation that rewards performance, and training in its operating policies and procedures.

Promoting Independent Electric Cooperative Industries

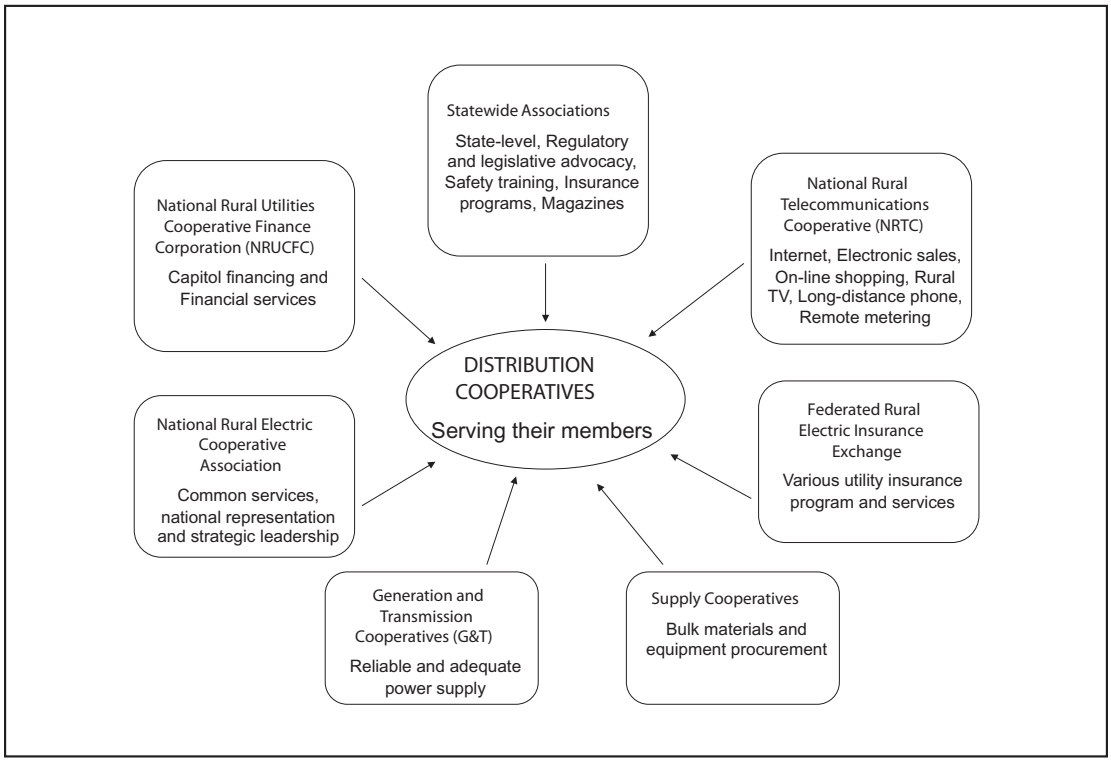
The general area of cooperative long-term institutional development at an industry-wide level is beyond the scope of this module, especially concerning the form, legal determination, and organizational design of secondary cooperatives to support an expanding and maturing group of electric distribution cooperatives. In the U.S., a wide range of related support agencies are today engaged in various common services activities for their members. Figure 3 illustrates some of the more important entities in the present-day U.S. electric cooperative industry.

Two of the nationally organized agencies that are predominantly responsible for supporting the primary interests of the U.S. cooperative industry are the following:

- National Rural Electric Cooperative Association www.nreca.coop. Formed in 1942 as a national association of electric cooperatives, the National Rural Electric Cooperative Association provides services to both primary and secondary electric cooperative entities in areas of policy development and public advocacy, training and conferences, employee benefits administration, technical research and development, and other functions. Comparable organizations now also exist in Brazil, Argentina, Costa Rica, and the Philippines.

The Agency should be autonomous, to render it free from the political control of either the legislature or a supervising ministry of government.

Figure 3. The U.S. electric cooperative industry



The legislation and the legal charters for enabling electric cooperatives must be consistent with the prevailing laws and business-culture norms of each country.

- National Rural Utilities Cooperative Finance Corporation (CFC) www.nrucfc.coop. CFC is a cooperatively organized financial lending and services corporation with approximately US$20 billion in assets. CFC's capital comes from participating member cooperatives, including both distribution cooperatives and secondary cooperatives, through the subscription of long-term capital certificates. These certificates are then leveraged by issuing bonds and other debt instruments in U.S. and internationally. RUS gave initial impetus for CFC by requiring all RUS borrowers to obtain a portion of their construction work plan financing requirements from other lending sources. It then entered into a mortgage-sharing arrangement with CFC. Some 50 electric cooperatives in the Philippines have recently formed a similar corporation.

Information on the organizational structures and services of these common-service cooperatives may be obtained by accessing the indicated websites.

CONCLUSION

The recommendations presented in this module offer general guidance in preparing the institutional and legal foundation that promotes successful cooperative electrification development. The legislation and the legal charters for enabling electric cooperatives must be consistent with the prevailing laws and business-culture norms of each country. The principles mentioned apply not only where electric cooperatives are planned as a new undertaking, but also where reforms of existing electric cooperative systems and laws may be needed to correct problems.

In either instance, getting the basics right is critical to the long-term success of rural electrification under a cooperative format. No amount of funding, technical assistance, or training, will correct problems that are rooted in flawed institutional, legal, and regulatory foundations.

In recapitulating the fundamentals for success, Figure 4 presents the basic institutional/legal

set-up for a well-functioning electric cooperative industry.

The three most important points to understand about the relationships in Figure 4 are these.

Autonomy

Electric cooperatives must be autonomous. Cooperatives that remain dependent on government for their basic sustenance over extended periods are often those who become vulnerable to bureaucratic control, politicization, and corrupt practices. Rarely have cooperatives prospered under the long-term influence of an interfering bureaucracy.

Electric cooperative autonomy depends essentially on their democratic nature, along with effective governance that should flow from democratic rule. Nevertheless, autonomy is also fundamentally tied to the institutions and laws under which cooperatives are legally constituted. The legal incorporation of cooperatives must not be accomplished under the same law that creates and empowers the governmental oversight agency that is responsible for supervising them. That creates an environment ripe for conflicting interests. Instead, adopt a separate statute for the formation of electric cooperatives, which allocates regulatory and oversight powers to separate government authorities, according to functional requirements.

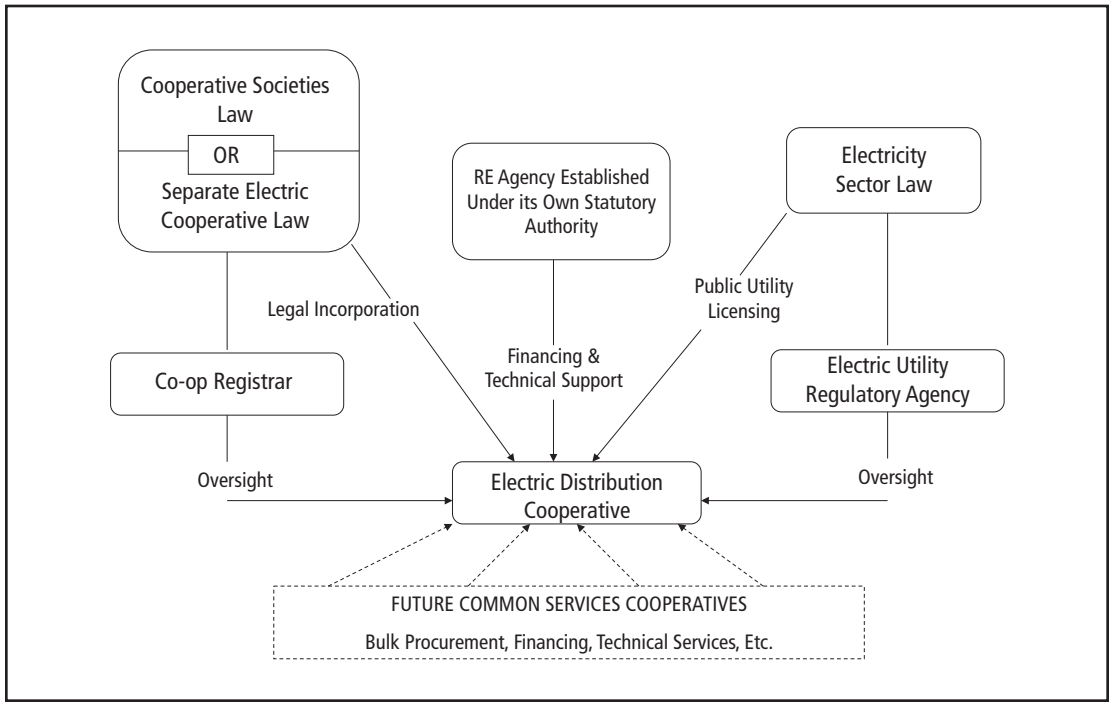
Private Enterprise

Electric cooperatives must be viewed and treated as private business enterprises. This principle must be implicit throughout the laws, charters, policies and procedures comprising the enabling framework for electric cooperatives. Cooperatives require the powers and responsibilities to operate, become financed, charge prices, and be regulated as businesses responsible for their own survival.

In addition, laws and regulations governing electric cooperatives must assure that they are treated equitably and fairly in the context of their larger sector industries, especially with respect to tariff setting and taxation. Over time,

Laws and regulations governing electric cooperatives must assure that they are treated equitably and fairly in the context of their larger sector industries, especially with respect to tariff setting and taxation.

Figure 4. Electric cooperative enabling framework



cooperatives should be led to formulate long-term business and organizational strategies to compete successfully for market resources in a fully evolved electricity sector, among other needs. These marketing resources include investment capital, power supply, and even market share. Rural utilities have effectively accomplished this through aggregation strategies, such as secondary cooperatives, common-service enterprises collectively owned as associations of individual electric cooperatives.

Guidance

Electric cooperative development programs require guidance, but not a heavy hand. Most of the more successful rural electric cooperative programs have benefited from long-term support provided by external sources. In most instances, support has come from a facilitative agency endowed with the government's authority and resources to help the cooperatives achieve organizational, operational, and financial success thresholds. Such an agency must be truly facilitative. Through its financing agreements with cooperatives, the agency can exert the needed influence to ensure that cooperatives adopt and follow healthy operational patterns and procedures. Otherwise, such an authority is exercising limited oversight. These functions are best handled by independent and impartial regulatory agencies with no self-interest in the operational decisions made by the entities subject to their jurisdiction.