

Renewable Energy for Rural Livelihood (RERL) Alternative Energy Promotion Centre (AEPC) Government of Nepal





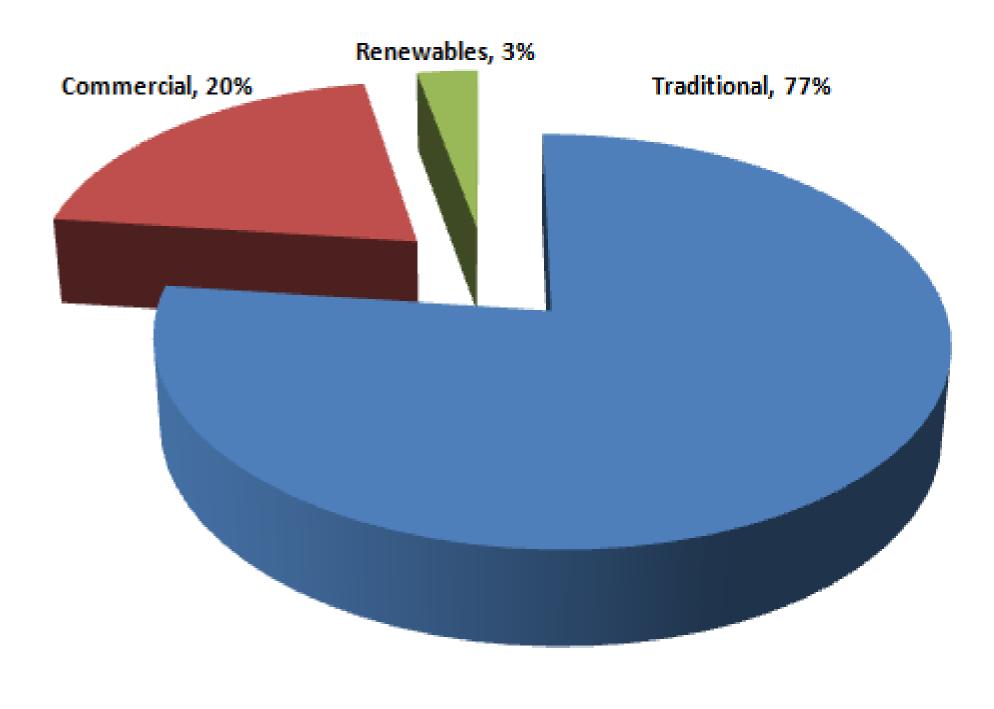
Innovative Approaches of Partnership

Satish Gautam
Senior National Advisor

Nepal: Energy Consumption Pattern

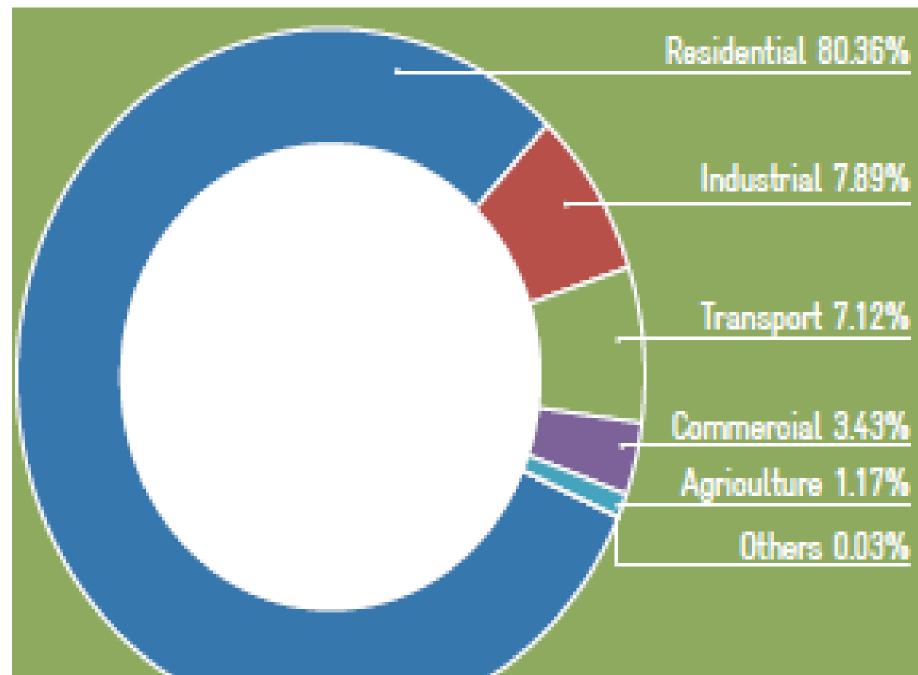
Energy Consumption by Fuel Type: 77%

contribution from traditional sources

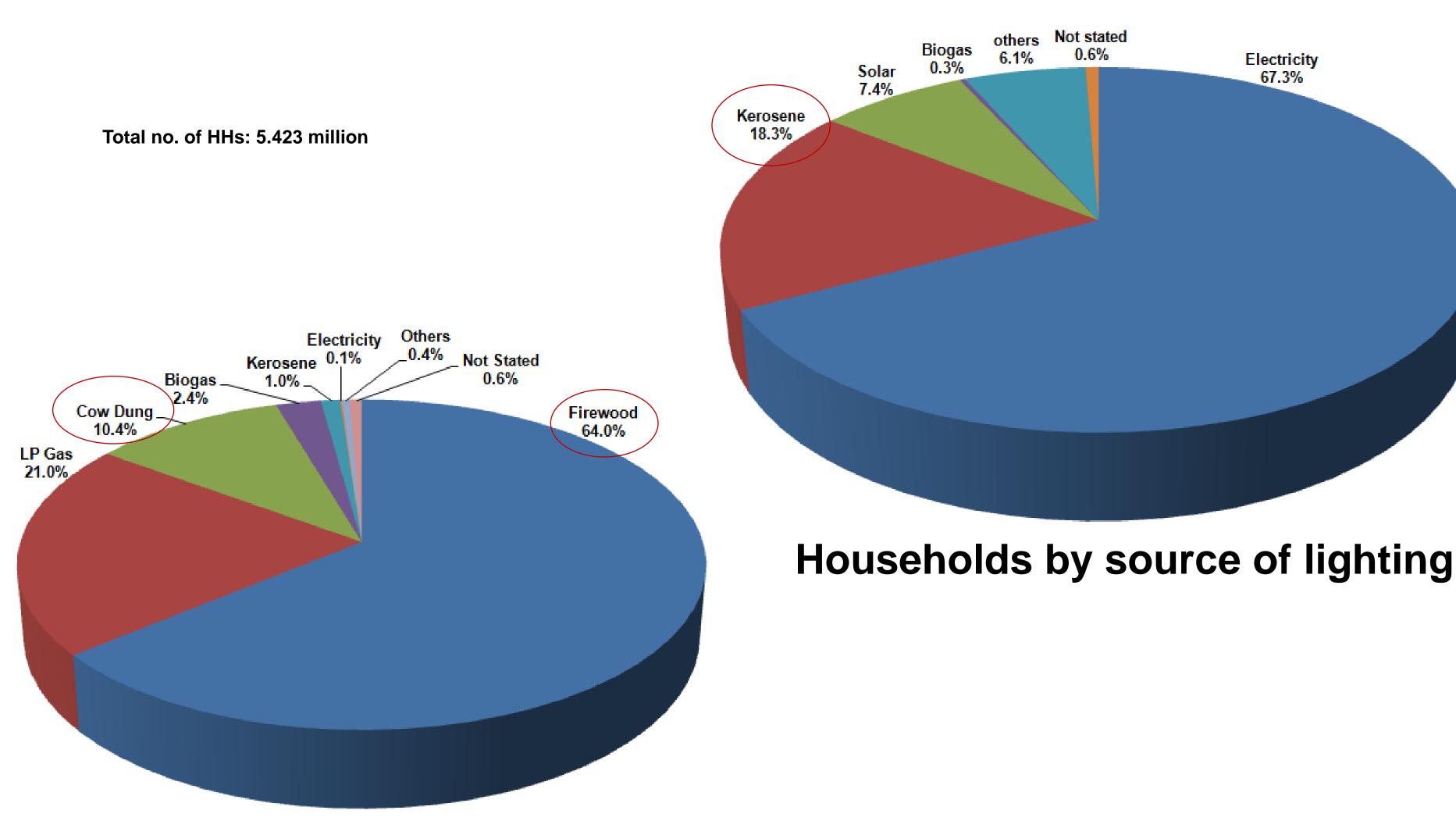


Energy Consumption by Economic

Sectors: 80% consumption in residential sector



Nepal: Energy Consumption Pattern

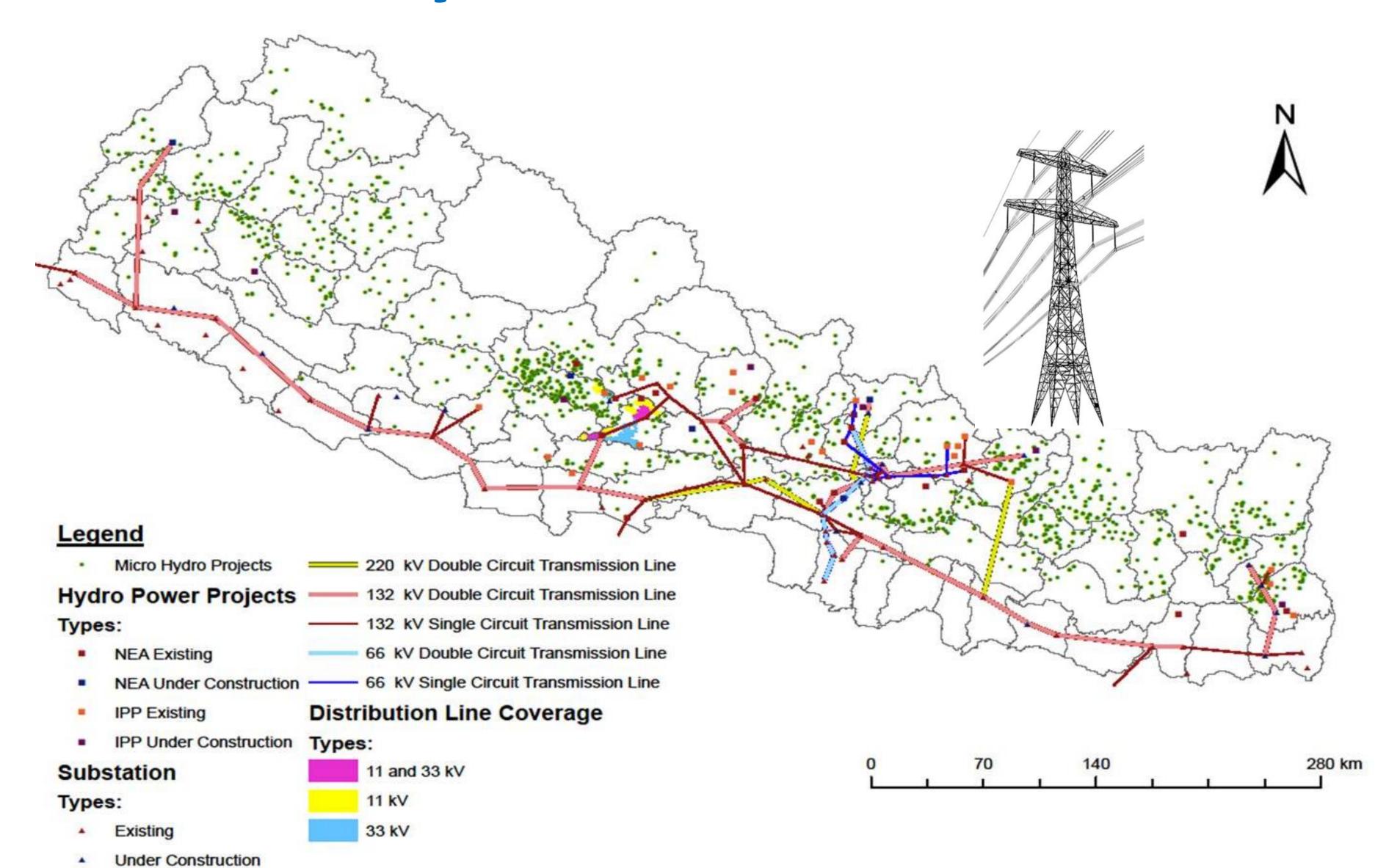


Households by cooking fuel

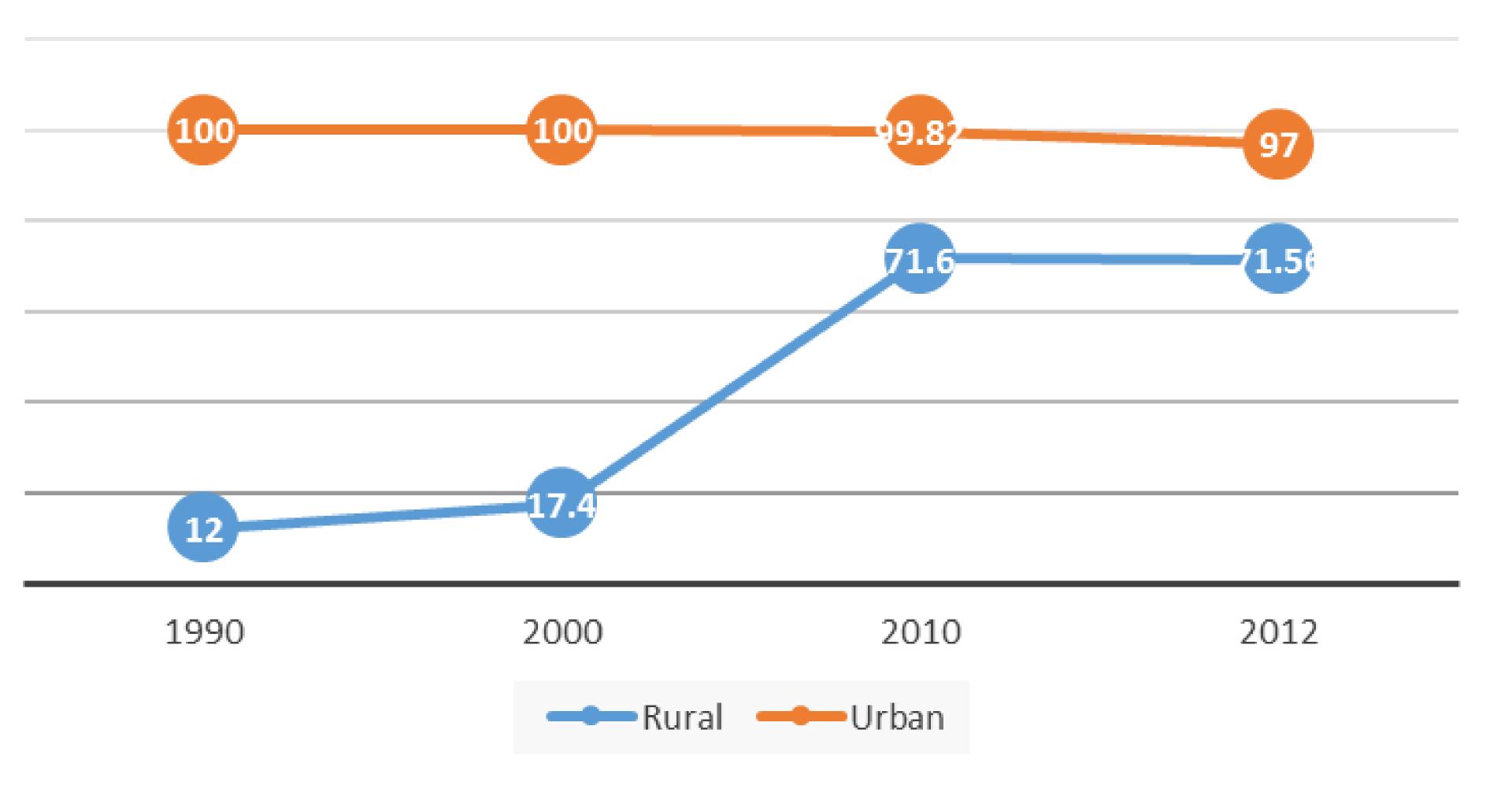
Electricity

67.3%

Electricity: 76.3% of population have access



Access to electricity, historical trend



Electricity Generation

Source	Capacity (MW)
Large Hydro	762.03
Mini & Micro Hydro (< 1MW)	37.78
Thermal plants	53
Solar PV systems	7.45
Total	860.26

^{~15%} of rural population has electricity access from RETs (26.3 MW from >1,000 MHPs & 700,000 SHS)

SUCCESSFUL MODEL FOR RURAL ENERGY

• Grassroots: Community organized and involved in planning, fund management, implementation, management of Micro Hydro and End-uses.

- District:
- Institutionalization in District Development Committee
 - Decentralized Energy Planning
 - Coordination and collaboration
 - Resource Mobilization and Allocation
 - Technical Assistance and Monitoring

- Central:
- Alternative Energy Promotion Centre
 - Planning & Policy
 - Coordination
 - Resource mobilization & Subsidy
 - Programme implementation

Community Organization

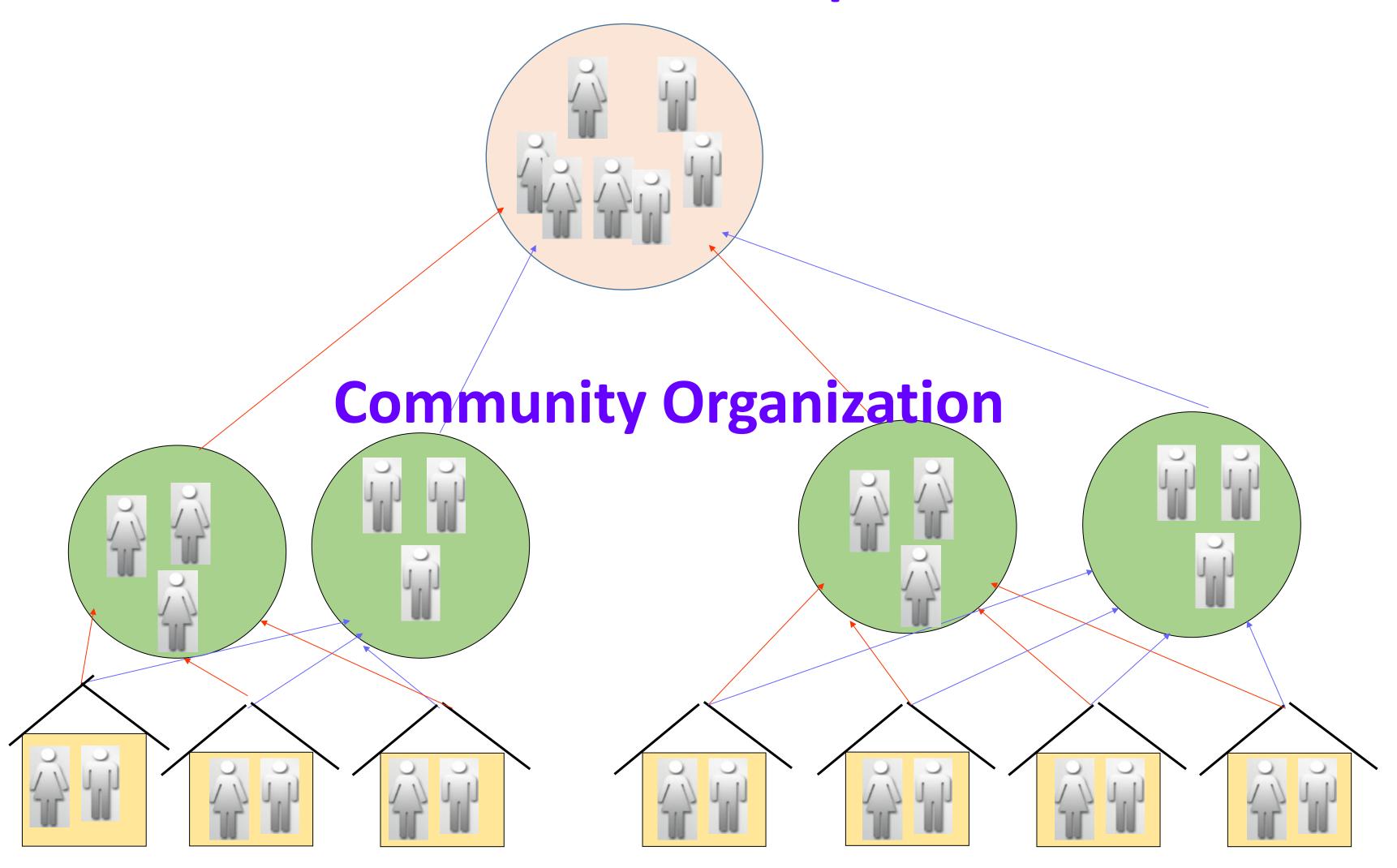
Participation & Transparency Inclusion & Consensus Decision





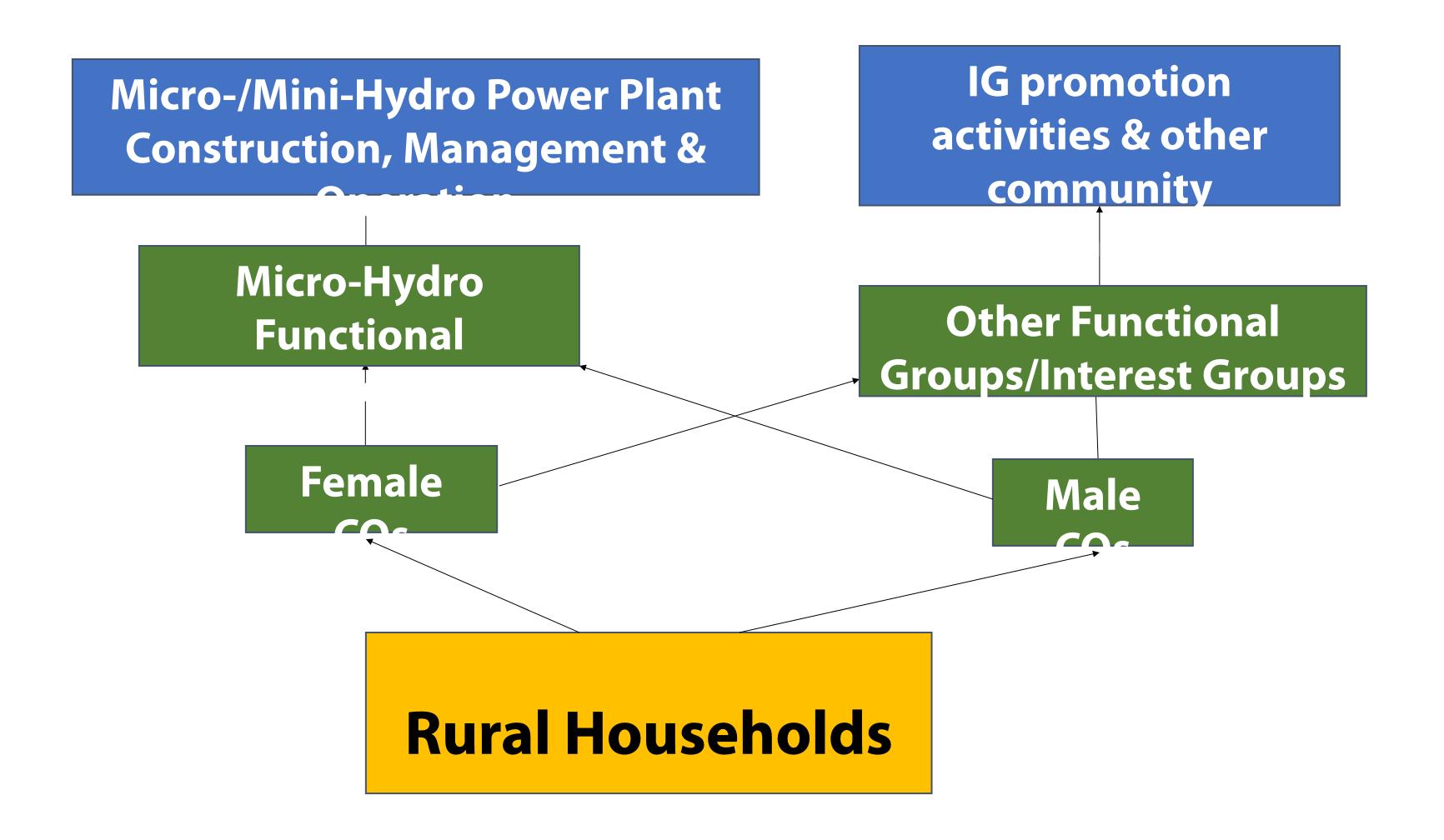
Partnership

Functional Group

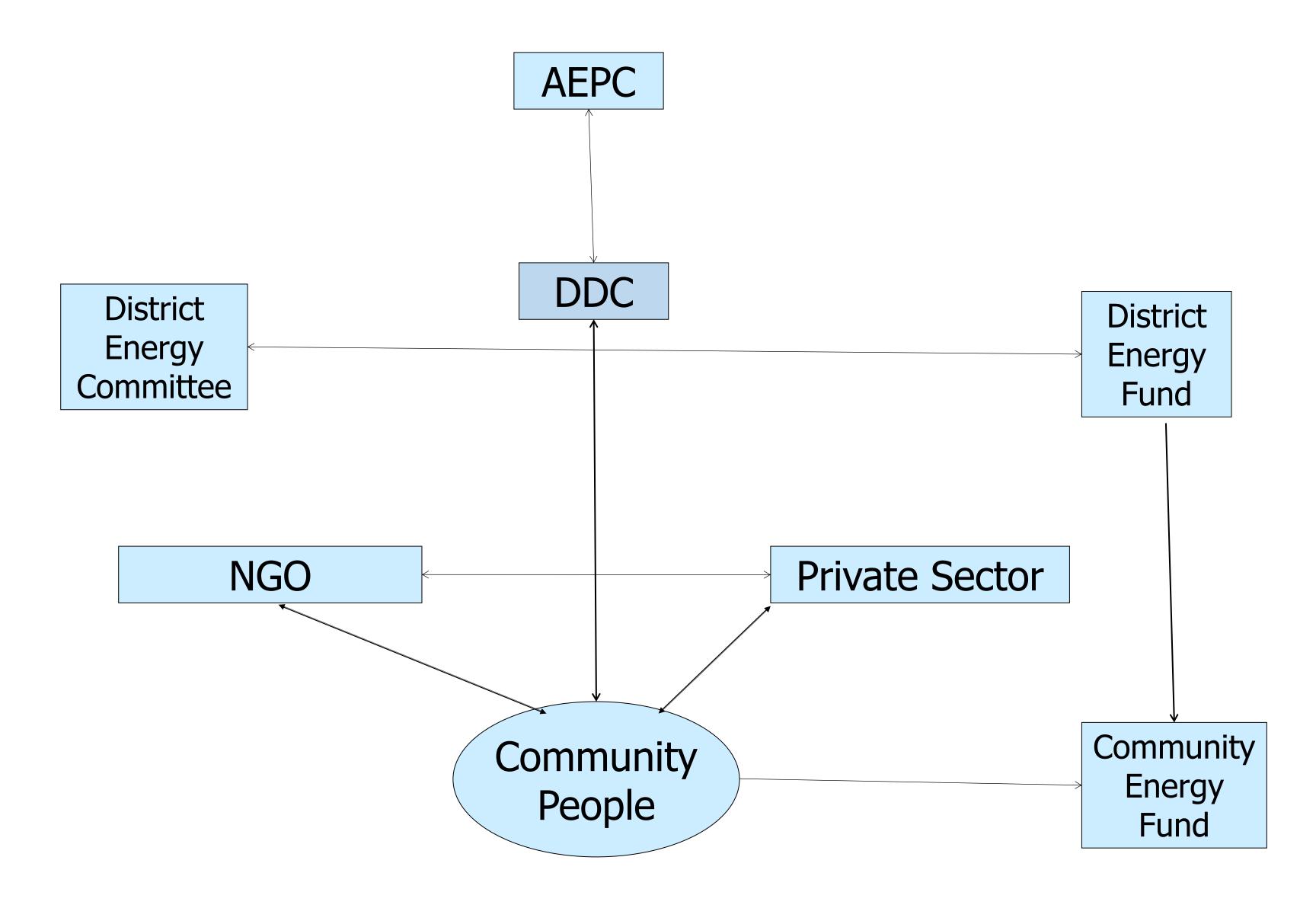


Households

Community Level Institutions



Partnership Model



PRIVATE PARTNER INVOLVEMENT

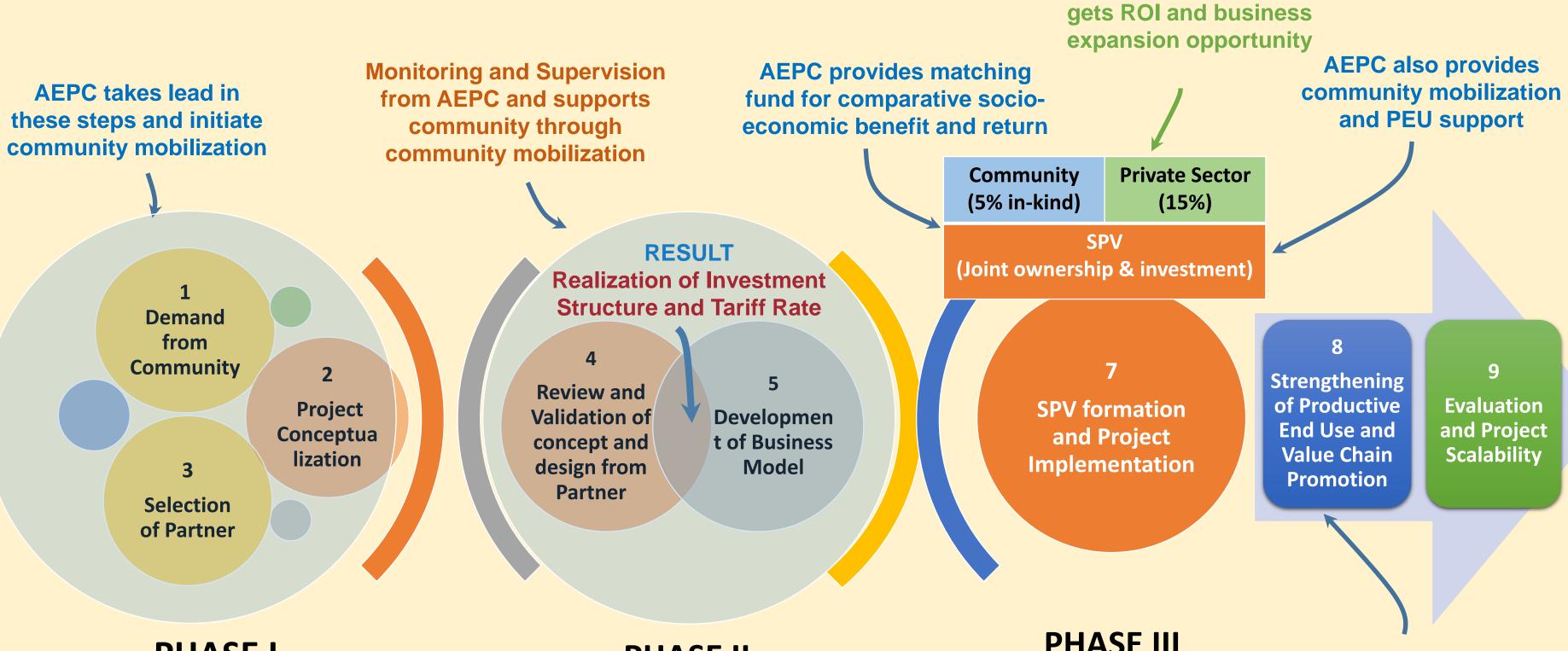


Government/Funding Agencies (Grant and policy oversight)

Alternative Energy Promotion Center (AEPC)

(A nodal government agency for the promotion and implementation of RE projects)

Brings innovation and



PHASE I

Community Mobilization and Partner Selection Important

PHASE II

Realization of Tariff and Tariff Setting are critical

PHASE III

Management Structure and Operational Instruments are important at this juncture

It requires long term engagement and followup support to ensure sustainability of the whole project

Implementation Approach



Energy utility 60% owned by the private sector and 40% owned by the community

Private sector investment

Ownership equity and investment amount are not linked - creating a greater incentive for private investment and financial sustainability Community engagement mechanism established

Responsible for managing community returns on investment

Revenues are used by the community mechanism for community development activities and/or to further subsidize the tariff rates

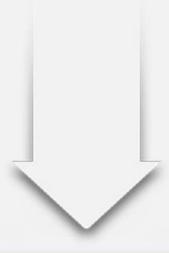
HOW IT WORKS

UN ESCAP

GOVERNMENT

Grant funding & policy oversight





Government grant
 purchases utility
 shares on the
 community's behalf

 Policy support

COMMUNITY MOBILIZER/NGO

Ensure community interests and collaborate with the private sector

ELECTRIC UTILITY COMPANY ESTABLISHED

PRIVATE SECTOR

COMMUNITY

Equity investment
Services provisions

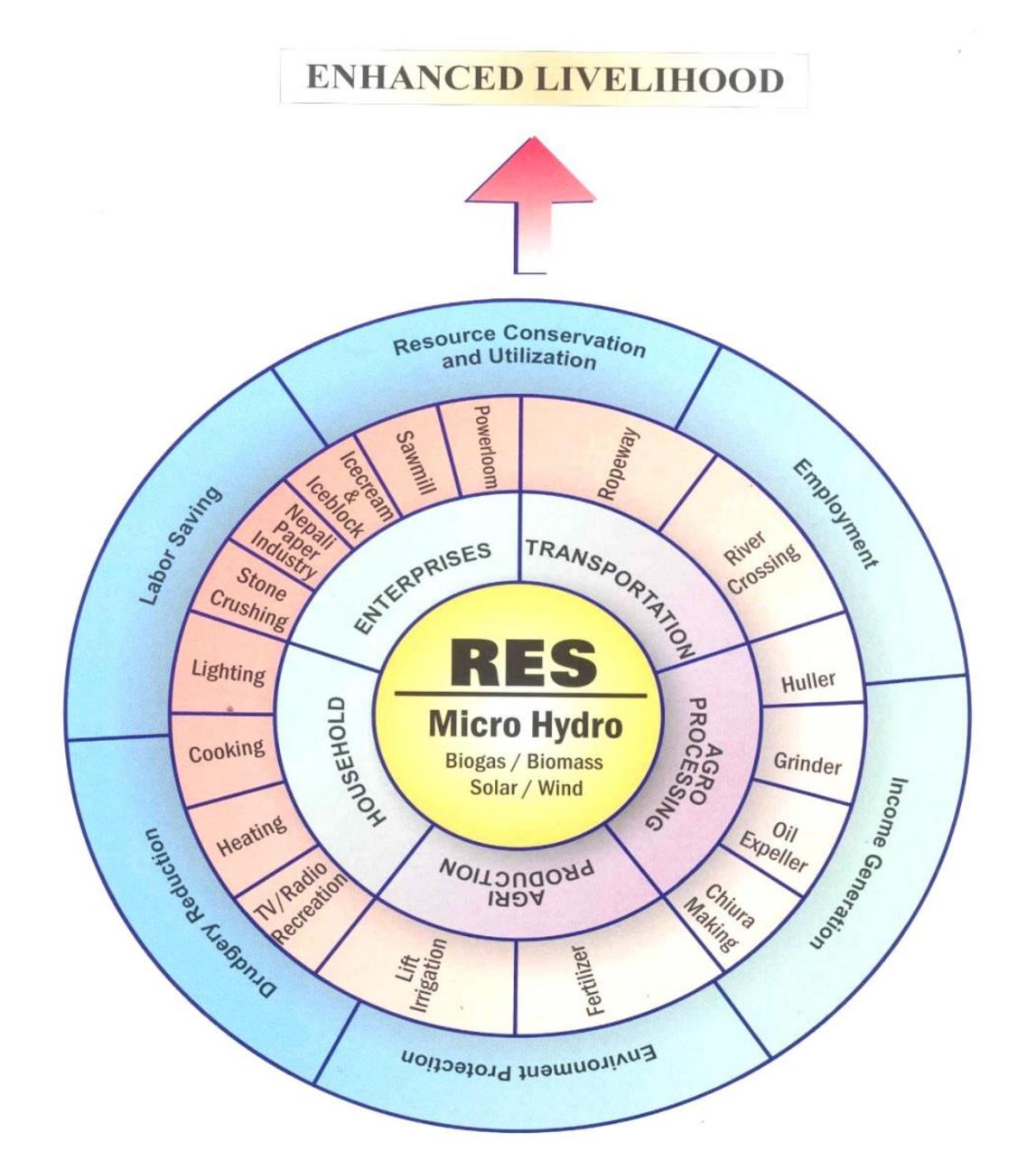
In-kind contribution

Co-ownership & ROI*

Community employment Co-ownership & ROI*

* Return on Investment

Renewable Energy & Livelihood



LABOR SAVING AND **DRUDGERY REDUCTION**

HEALTH AND SANITATION IMPROVEMENT

SOCIAL **CAPITAL BUILDING** & EMPOWERMENT

FUEL WOOD, BIOMASS. **KEROSENE & DIESEL CONSUMPTION REDUCTION**



BETTER EDUCATION



EMPLOYMENT & INCOME INCRIEMENT



MAJOR IMPACT

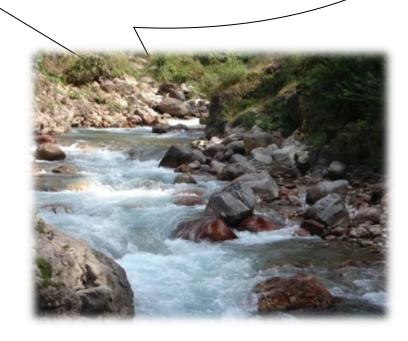
ENHANCED LIVELIHOODS



HRD & CAPACITY BUILDING



LOCAL RESOURCES (WATER, FOREST, LAND AND SKILL) **OPTIMIZATION**



Transportation of a Generator



Information Sharing



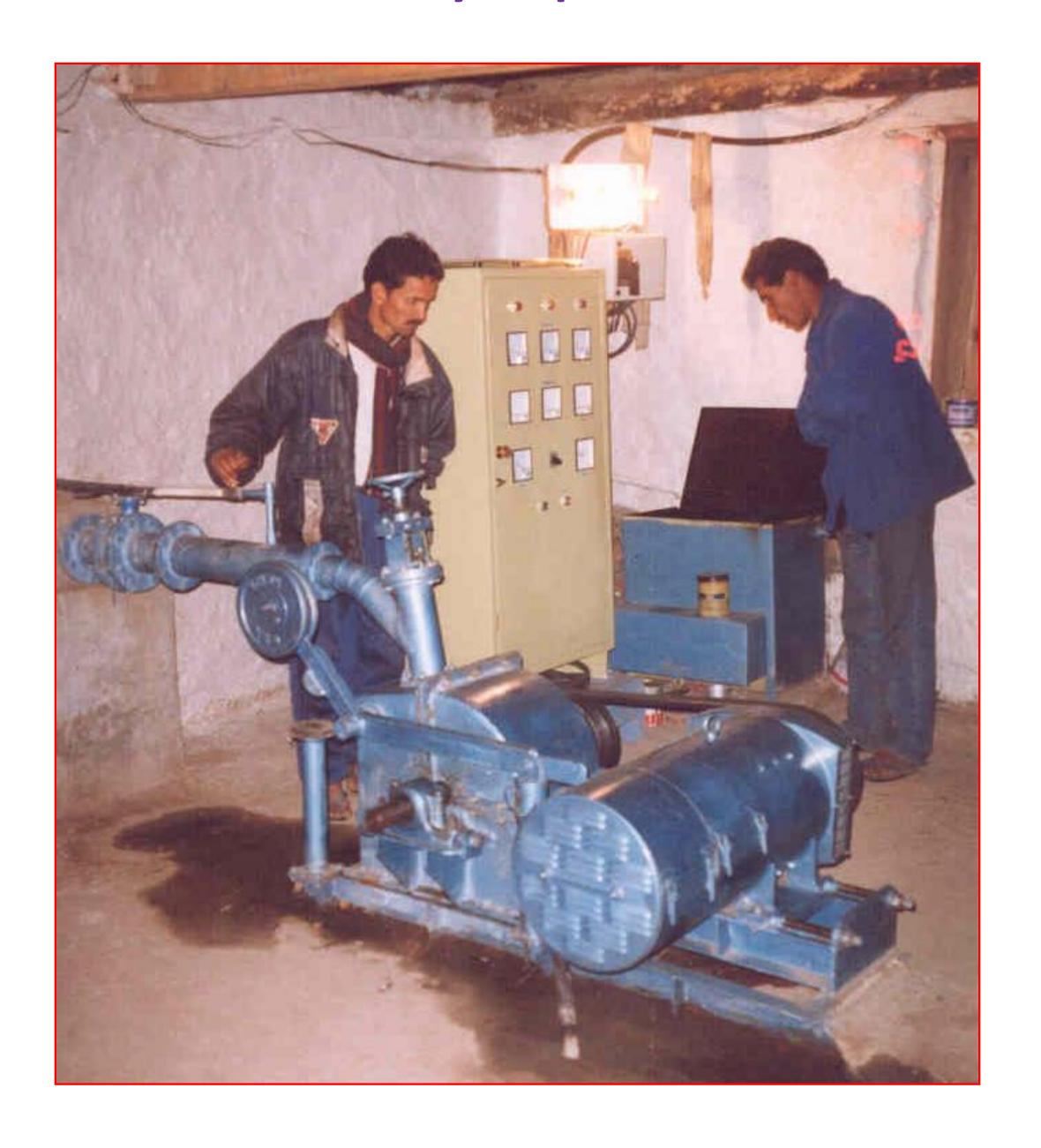
Public Hearing



Construction of Micro Hydropower Plant



Micro Hydropower Plant







Thank you