Rural Electricity Access
by
MOLFRD

Department of Rural Development

Ministry of Livestock, Fisheries and Rural Development

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- In order to escalate the rural development and poverty reduction activities, on August 8, 2013, Ministry of Livestock, Fisheries was reorganized as the **Ministry of Livestock, Fisheries and Rural Development (MOLFRD)** and assigned as the Focal Ministry.
- **Vision**: In Line with MDG, to develop rural area, to improve socioeconomic life of rural populace and to narrow down the development gap between urban and rural areas.
- **Policy**: (1) Sustainable rural development,
  (2) Food Security,
  (3) Food Safety.

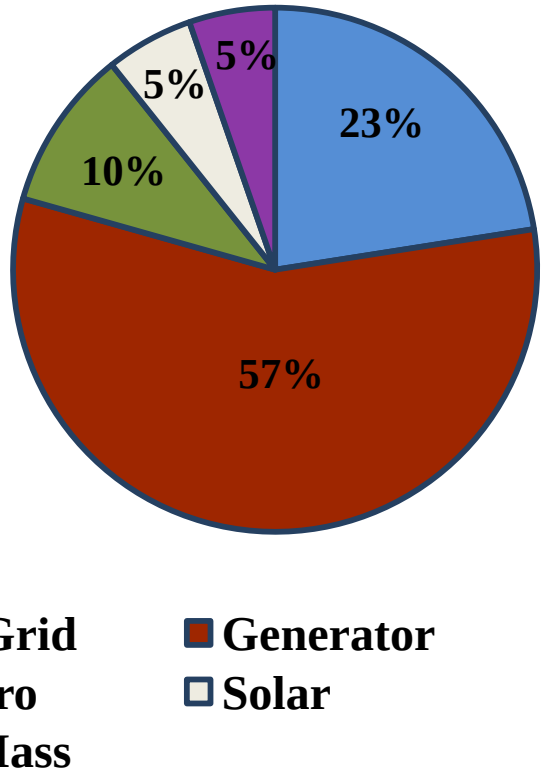
- DRD is main implementer for Rural Electrification both Off-grid and On-grid
- On-grid is implemented in Rural Area by cooperating with MOEP
- DRD is responsible on all rural Infrastructures First priority is Rural Electrification
- Policies and laws are really needed to make a successful plan
- Laws and regulations for Rural Electrification are started drawing
- The Myanmar Electrification Law will be enacted soon

Relevant Ministries on Myanmar Rural Electrification

- Ministry of Livestock, Fisheries and Rural Development
- Ministry of Electrical Power
- Ministry of Industry
- Ministry of Science and Technology
- Ministry of Agriculture and Irrigation

Current Situation of Rural Electrification in Myanmar

- 23034 villages out of 64917 villages are electrified in Myanmar up to 2013~2014 Fiscal Year
  - National grid - 5178 villages, (23%)
  - Generator - 13086villages, (57%)
  - Mini-Hydropower - 2295villages, (10%)
  - Solar system - 1251 villages, (5%)
  - Bio-mass/ gas -1224villages, (5%)



from 2014~2015 to 2015~2016

(30)Month plan - 20000 villages

Long-term - Goal Universal Access in Myanmar by 2030 in line with MDG

Potential Sources of Rural Electrification

Solar Energy

- Myanmar can get abundant sunshine especially in central dry zone and potential for solar energy is around 51973.8 Tera Watt-hour per year.
- 36% of the total area of the country receives high annual solar radiation in the range of 18-19 MJ/m2-day.
- Sun shine all year round, especially in the Central Myanmar Dry Zone Area

Wind Energy

- Myanmar has abundance for providing rural electrification with coastal strip 2832 km and other feasibility onshore projects for wind energy.

Biomass Energy

- Agricultural Wastes
- Energy Crops
- Industrial Wastes
- Municipal Wastes
- Animal wastes

Micro-hydro Energy

Hydropower potential of Myanmar

No.	Region (State or Division)	Number of Sites	Potential (MW)
1	Kachin State	51	20778
2	Kayah State	8	954
3	Kayin State	22	7075
4	Chin State	12	7
5	Sagaing Division	30	2848
6	Taninthayi Division	23	735
7	Bago Division	15	543
8	Magway Division	13	370
9	Mandalay Division	14	1424
10	Mon State	10	303
11	Rakhine State	14	769
12	Shan State	91	13414
	Total	303	40220

The most suitable places to implement for hydropower including smalland micro scale are Kachin State (Northern part), Shan State (East part) and Kayin State (Southeastern part) in which rural communities are living most.

Rural Electricity Access

DRD under Ministry of Livestock, Fisheries and Rural Development (MLFRD) as the leading Ministry

Two Ways of Rural Electrification in Myanmar

- Grid Electrification
  - Extend distribution from the Grid
  - Implement by the local or villages themselves programs
  - Ministry of Electric Power involves only in constructing the project
- Off- Grid Electrification
  - Diesel Generator
  - Solar
  - Mini- Hydropower
  - Bio-Gas/ Mass

Present Policies and Institutional Structure for Electricity Access

To promote off-grid rural electrification as the following:
(a) Organizing rural electrification committee,
(b) Conducting rural development committee in village & township,
(c) Surveying the community needs,
(d) Allocating the budget according to the parliament's decision, and
(e) Cooperation with private sectors – UN agencies, INGO, NGO – to achieve the electrification target.

Implementing System to Develop Rural Electrification System

- Getting the international investment grant and loan;
- Cooperating with NGO, INGOs and donors;
- Improving allotment of the government budget;
- Cooperating with the private and public partnership, and
- Cooperating between government and people as forming the committee from the village community.

Promotion of Rural Electrification to Fulfill in 3Es

Possible Solutions for Electricity access in the rural areas

- Main potential areas are hydropower and biomass energy. Myanmar has abundant renewable energy sources. Solar, wind, geothermal and oceanic energy potentialities can also be exploited.

- Large-scale hydro electric power will surely continue to be developed as a main power source. Micro-hydropower development will also continue for electrifying small villages.
-Solar power its initial investment cost is high, but it is good potential for community size projects.
- Wind power, it has a poor prospect since favorable sites for wind power generation are very few, but can be used with solar system in hybrid applications.
- Biogas can produce from municipal and agricultural waste and disseminate as the Biogas Technology in order to implement the low cost family size biogas plant for cooking and lighting in rural area.
- More development works with appropriate technologies are required in renewable energy application.

Conclusion

- The department of rural development (DRD) will be implemented in rural electrification (Off-Grid) according to the Government's guide line not only Union Budget but also international assistances, private sectors and cooperation as well as our goal of improvement of socioeconomic life of rural populace will be achieved in high momentum.

- Given the proper training in operation and maintenance to end users or local technicians will be provided to successfully electrify rural areas. And also, better energy statistics will be supplied for better analysis of energy saving potential in rural areas.

Thank You for Your Attention