



**A Pilot Project on Capacity Building on Electricity
Reforms in Bangladesh, India and Nepal
(RESA Project)**

Final Consumer Survey Report-Nepal

Prepared by

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Executive Summary

A Pilot Project on Capacity Building on Electricity Reforms in Bangladesh, India and Nepal (RESA) is being undertaken by CUTS Centre for Competition, Investment & Economic Regulation (CUTS CCIER) in collaboration with project partners in Bangladesh, India (Rajasthan and West Bengal) and Nepal. The project, being supported by the Norwegian Agency for Development Cooperation (NORAD), was initiated in March 2008. The project intends to promote consumer participation to make the policy formulation and regulatory decision-making process more transparent and participatory; facilitate effective representation of consumers; and encourage regional cooperation.

South Asia Watch on Trade, Economics & Environment (SAWTEE), Kathmandu, with the support of community-based organisations (CBOs/CSOs) at local level, is undertaking the project in Nepal. In the inception, a baseline consumer survey was conducted to assess the awareness level of consumers and identify the key issues on which consumers need more information. Accordingly, territorial trainings, grassroots interface meetings (GIMs) were conducted in Nepal. The objective of the final consumer survey is to assess the impact of project activities in creating awareness among grassroots consumers and promoting their participation in the process of electricity reforms.

The findings of the consumer survey depict positive effects of increased consumers' awareness and participation in the electricity reform process as a result of the project activities. Consumers have highly appreciated the usefulness and significance of the meetings (GIM-I and GIM-II) conducted under the RESA Project and this has been clearly reflected in the change in their attitude and practice. It is noteworthy that the knowledge gained during the meetings has made the consumers prudent as 40 percent of them have switched to energy saving devices such as started using CFLs and 12 percent reported of deterring from electricity theft.

The consumers have also found remedies to the problems mentioned by them in the baseline survey as well as first phase of GIMs. Because of shortage of generating capacity, the prominent problem of consumers, i.e. load shedding is still prevalent. However, the information disseminated during the course of the project has helped consumers attain some respite from other problems like poor meter reading, billing and quality of service. The knowledge provided at the meetings on meter reading and procedures for filing complaint have made the consumers active in solving their problems. Besides, consumers' relationship with the utility officers has also significantly developed after face to face meetings and interactions. This has helped in deepening the relationship between the utility providers like Nepal Electricity Authority (NEA), Department of Electricity Development (DoED) and consumers.

The project was targeted to impart information regarding the regulatory reforms in the electricity sector of Nepal. Hence, at the end of two years more people are aware of the

roles and responsibilities of institutions like NEA, DoED and Electricity Tariff Fixation Commission (ETFC). At the same time they have also started gaining some knowledge about the legal aspects such as consumer rights and punishments regarding violation of laws relating to electricity. It has been revealed from the final consumer survey that at present 64 percent of the respondents are aware of the consequences of electricity theft.

Thus, RESA Project has been very successful in raising consumers' awareness level, bringing about a change in stakeholder perceptions and bridging the gap between the electricity officials and consumers. Hence, the project should be given continuity and the physical coverage of the project should be extended so that the consumers in other areas are also benefited.

List of Acronyms

DoED	Department of Electricity Development
CSO	Civil Society Organisation
ETFC	Electricity Tariff Fixation Committee
GIMs	Grassroots Interface Meetings
LIW	Local Inception Workshop
NAS	National Advocacy Seminar
NEA	Nepal Electricity Authority
RESA	Electricity Reform in South Asia
RG	Reference Group
RGMs	Reference Group Meetings
TBP	Territorial Base Paper
TTM	Territorial Training Manual
TTPs	Territorial Training Programmes

1. Introduction

1.1 Background

Energy is considered as a key driver for social and economic development of a country. According to the Economic Survey 2008-09, only less than 50 percent of the population of Nepal has access to electricity. Traditional sources such as firewood, dung etc. still account for 87.8 percent of total primary energy consumption in the country. Though Nepal has huge hydropower potential, however, the country has not been able to develop any significant capacity due to many hindrances such as lack of adequate investment, political instability, poor policy initiatives and so on.

Nepal Electricity Authority (NEA), a government owned enterprise, is responsible for the generation, transmission and distribution of electricity in Nepal. The Department of Electricity Development (DoED) under the Ministry of Water Resources regulates electricity sector and the Electricity Tariff Fixation Commission (ETFC) reviews and approves electricity tariff structure. Power structure restructuring, with the main objective of introducing competition, is undergoing in Nepal. At the policy level, the reform process started with the enactment of the Electricity Act, 1992 paving the way for private sector's participation in the electricity sector. However, the participation of the private sector has not been able to add any significant generation capacity in Nepal. Factors such as lack of conducive environment owing to the prolonged political instability and the conflicting motives among political actors are impeding private sector participation in the sector. Further, inconsistencies in legal and regulatory frameworks coupled with lack of transparency and accountability in the licensing process cause difficulties for the private sector. The lack of transparency of buy-back rates for hydropower projects and inadequate transmission and distribution networks make the sector non-lucrative for the private sector.

Surprisingly, electricity being a crucial energy component, it was not much talked-about issue among civil society organisations (CSOs), academia and the general public in Nepal. Consumer rights related to the electricity sector are almost not recognised in Nepal and the concept of consumers' participation in electricity sector is still to be adopted. As a result, people are suffering from problems such as inadequate power supply, poor service and so on. It was observed that most of the time, consumers' nominees were not appointed. However, after conducting some activities such as inception workshop, territorial trainings, a positive impact was seen on the awareness level of consumers and it also helped in sensitising the key actors such as policy makers, regulators and CSOs on the issues in electricity reforms process.

2. Survey Methodology

2.1 Scope

A final consumer survey was undertaken to assess the impacts of project activities in generating awareness among grassroots consumers/users and the scope for their further engagement in the process of electricity reforms. The survey was undertaken mainly with the same set of people who participated in the baseline survey as well as grassroots interface meeting. A sample size of 500 respondents was targeted in the final consumer survey.

2.2 Sampling Methodology

The survey was carried out in 10 districts where the baseline survey was undertaken in the year 2008 and mostly with the same respondents. It was decided, initially, to interview 500 respondents out of the total 700 respondents, i.e. 50 respondents out of every 70 respondents in each district.

It included respondents from all consumers categories-domestic, commercial, agricultural and industrial consumers.

3. Findings and Observations

3.1 Background Information about Respondents

i. Participated in Baseline Perception Survey

Out of the total 501 respondents, 94.01 percent (471) were the same respondents who also participated in the baseline survey. However, most of the respondents have participated in the GIMs conducted in the respective district.

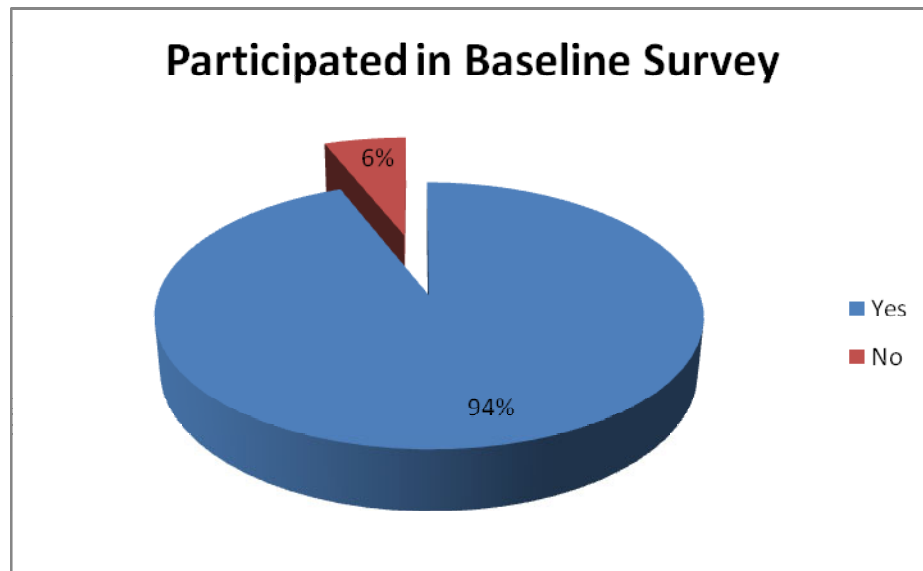


Figure: 1.1

ii. Educational Profile

About 32 percent of the respondents had received education below primary level and 14 percent were highly qualified (see figure below). The survey also categorised the respondents as 'uneducated' to assess the exact educational level of the respondents. Thus, seven percent of the respondents were uneducated, 22 percent had attended high school and above and 25 percent primary school and above. Overall, the survey has been successful in covering, almost, all categories of respondents in terms of education attainment.

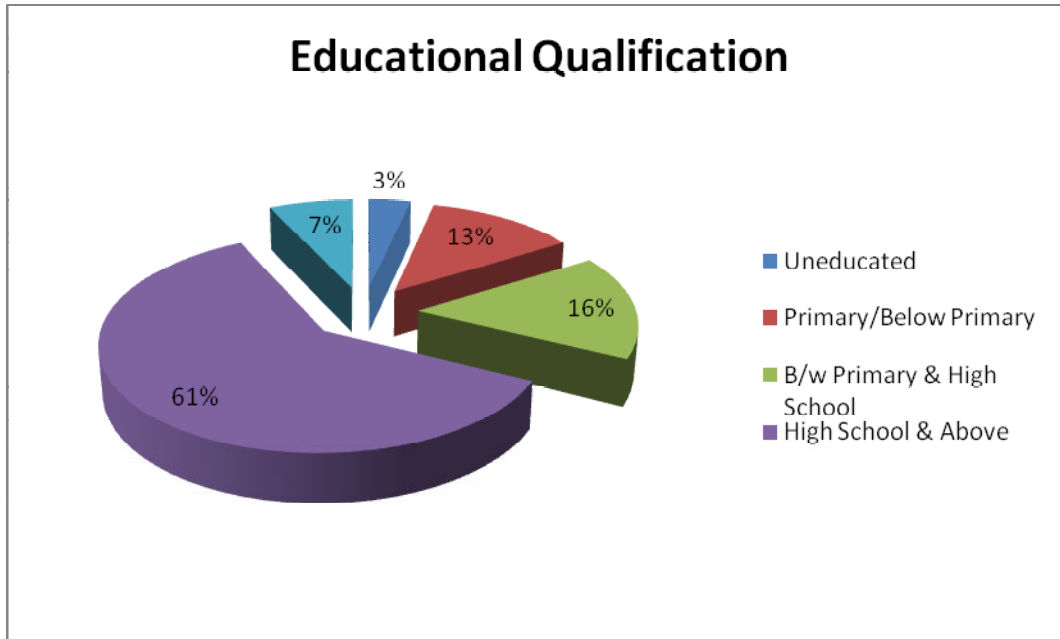


Figure:

1.2: Educational Level of Respondents

iii. Category of Respondents

A majority of the respondents use electricity for domestic purpose (59 percent) followed by commercial purpose (16 percent), industrial purpose (12 percent) and agricultural purpose (9 percent) respectively. At the same time four percent of them do not have access to electricity.

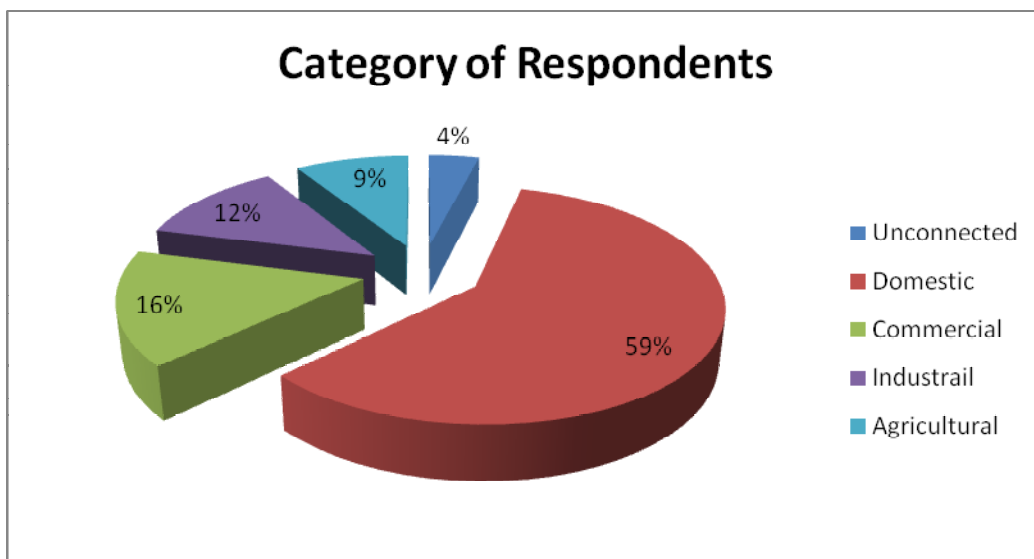


Figure: 1.3

3.2 Grassroots Interface Meetings

i. Attended meetings

Of the 501 respondents, most of the respondent, about 9 percent had attended meetings conducted under the RESA project. At the same time, a large number of people, i.e. 42 and 24 percent respectively had attended GIM I and GIM-II respectively. Similarly, 24 percent had attended both phase GIMs.

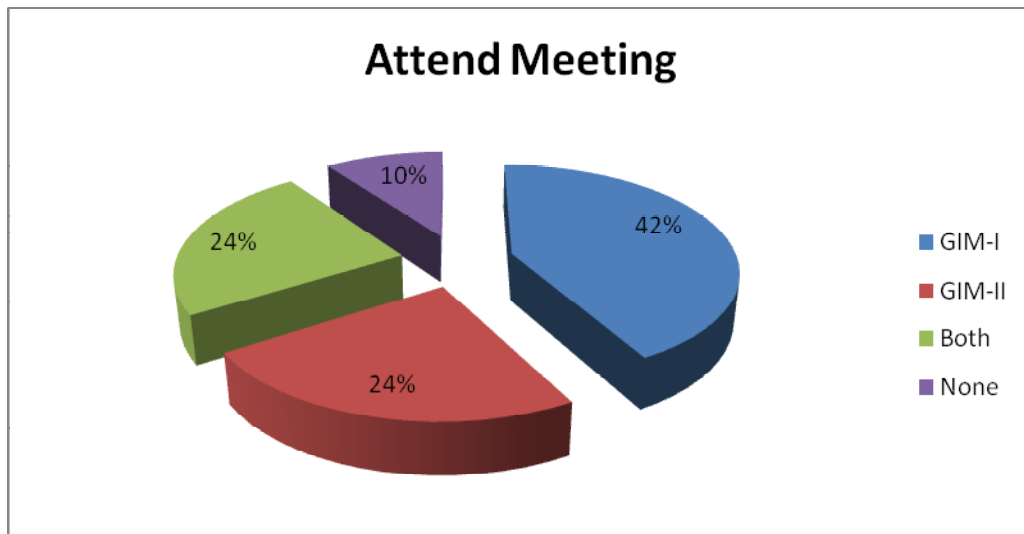


Figure: 2.1: Participation in GIMs

When the respondents were asked to share the factor that motivated them to participate in the meetings, it was found that the respondents (69 percent) were mostly motivated to attend the meetings to find answers to their systematic problems related to electricity sector and about one-fourth (27 percent) to know more about the electricity sector. Only four percent of the respondents were motivated to use the meetings as an opportunity to engage with officials from the utility companies. However, one percent of the respondents also attended the meetings out of curiosity and leisure.

None of the uneducated respondents reported of not attending any one of the two meetings. However, the number of uneducated respondents attending the second GIM has fallen sharply from 56 percent in the first GIM to 36 percent in the second GIM. This is different when compared to respondents of who have attained higher levels of education.

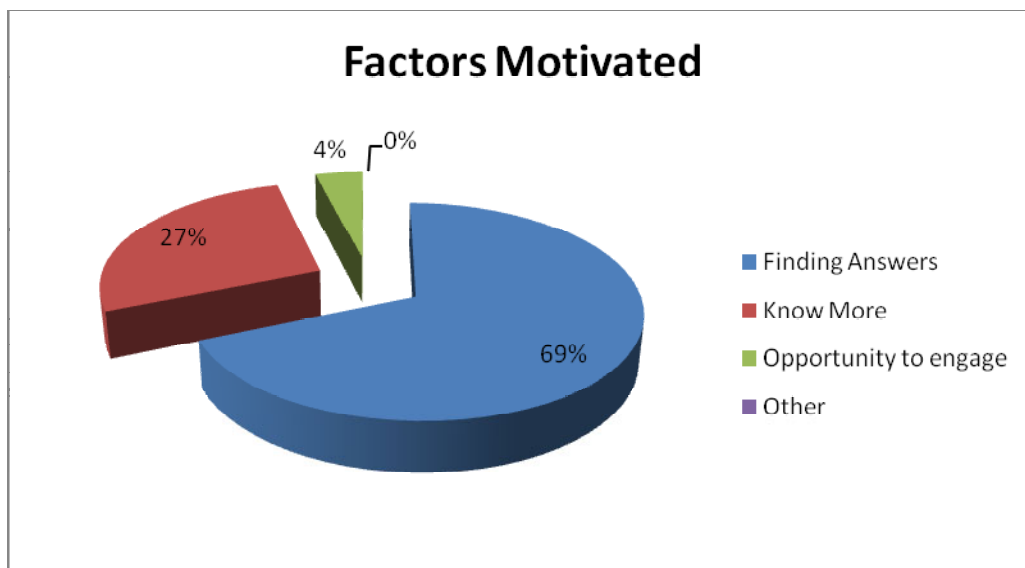


Figure: 2.2: Factors motivating for Participation

ii. Relevance of the Meetings

Most of the respondents found the meetings to be useful in varying degrees – 34 percent as very useful, 41 percent as useful and 25 percent as satisfactory – and not a single respondent regarded them as of being useless.

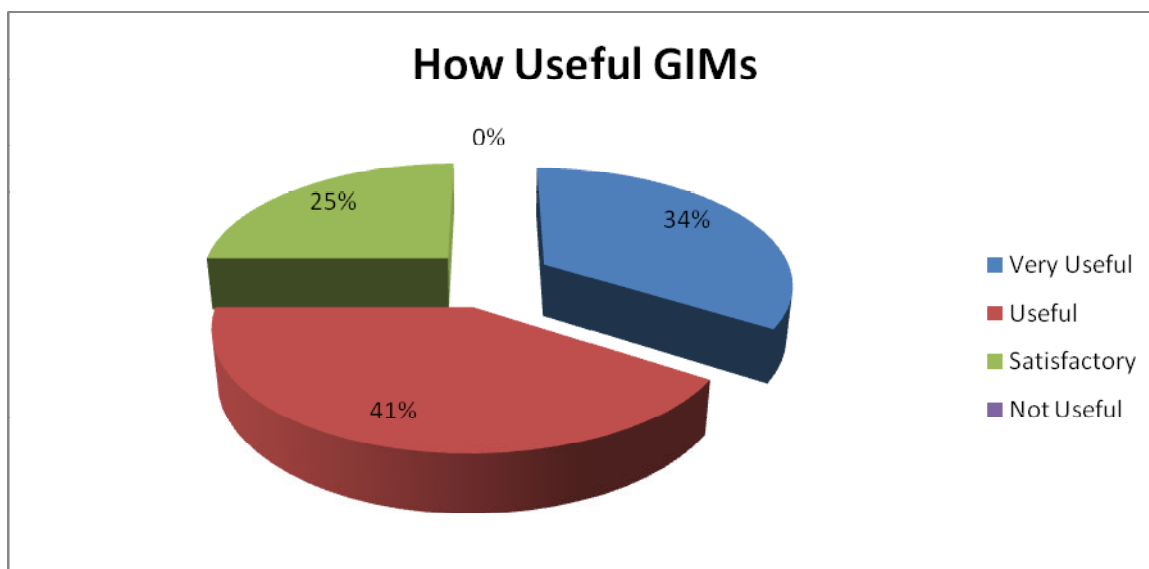


Figure: 2.3: Usefulness of the GIMs

According to the respondents, grievance redressal mechanism and curbing power theft and energy conservation were the most interesting sessions as both the sessions were preferred by an almost equal number of respondents, i.e 44 percent. Besides, energy reform was preferred by 12 percent of the respondents. It shows that the consumers are not very much in institutions and reforms but more interested in resolution of their day-to-day problems.

In the GIMs, they got adequate knowledge about meter reading procedure, consequences of electricity theft, energy saving devices and procedures to register their problems. They were also happy to get an opportunity to tell their complaints regarding electricity to the officials present in the meeting.

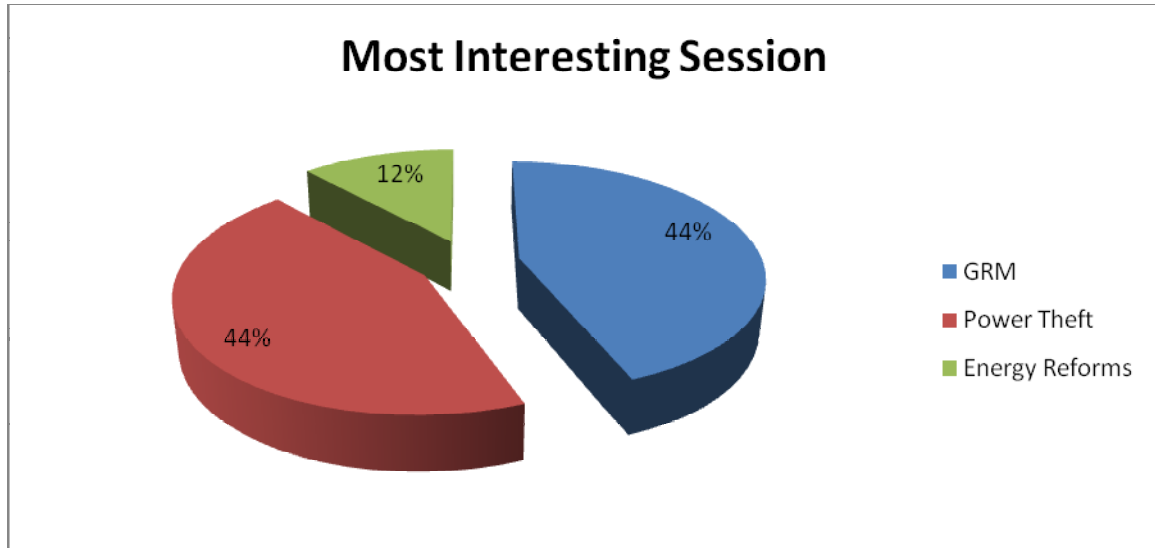


Figure: 2.4

At the same time, 64 percent of the people who attended the meetings found them to be helpful and 28 percent extremely useful as opposed to eight percent who did not find them to be useful. The degree of usefulness also depends upon the number of meetings attended as 34 percent of the consumers who attended both the meetings found it to be extremely helpful and none of them regarded them to be not helpful.

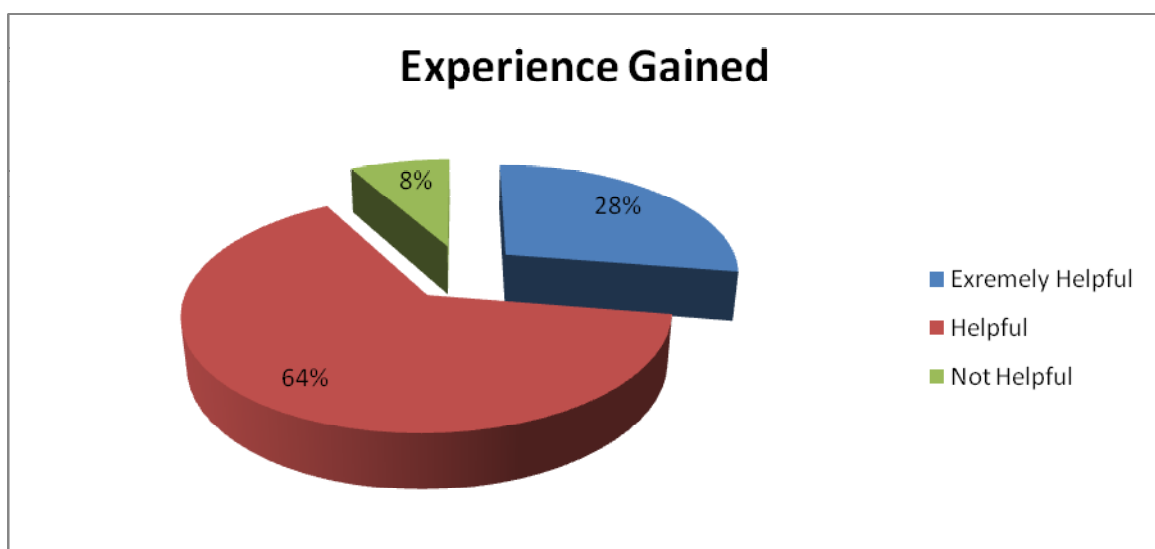


Figure: 2.5: Experience gained during GIMs

The respondents revealed that the officials in the NEA have become helpful after the interactions during the meetings and thus it has become easier for them to get good service and early redressal of problem of problems. At the same time they reported that they have become more conscious about the electricity appliances they have been using at home. They are taking steps for the regular maintenance of the appliances and have switched to using compact fluorescent light bulb (CFLs).

It is interesting to note that 99 percent of the consumers surveyed would like to attend such meetings again in future. Similarly, 100 percent of the consumers who attended both the meetings would like to attend such meetings again in future.

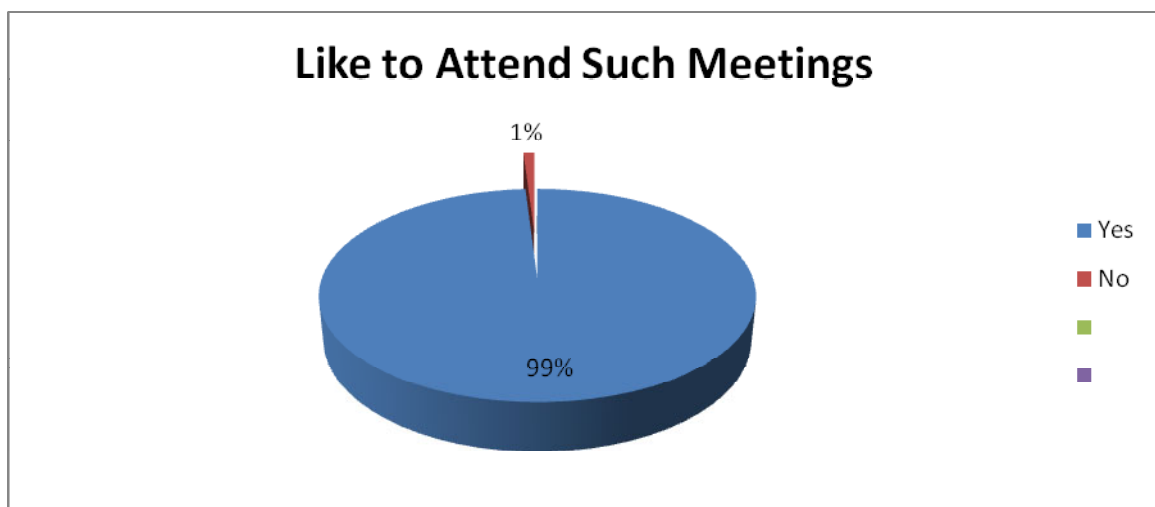


Figure: 2.6: Interest shown in attending GIMs in future

They regarded the meetings as good opportunity to gather more information about electricity and at the same time a platform to speak out the problems troubling them in front of utility providing officials.

Most of the respondents (59 percent) believe that their relationship with the utility officers have improved after the interactions during the meetings. The number of respondents who believe that their relationship with utility officers has increased is the same in case of the consumers who attended both the meetings also. Hence, it can be noted that only one interaction of the consumers with the utility officers was also capable of significantly improving the relationship among them.

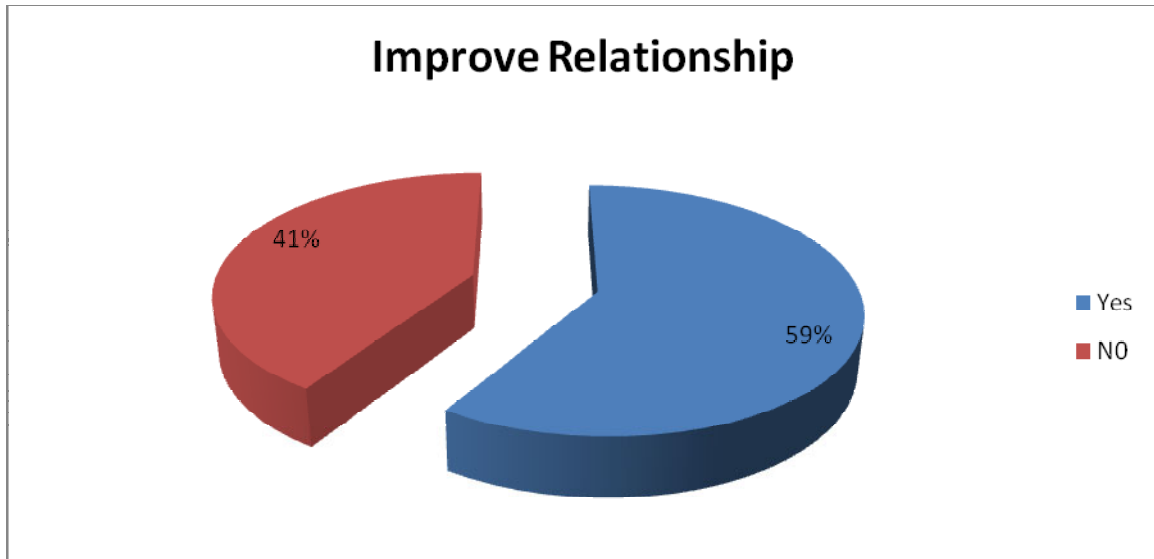


Figure: 2.7: Deepening the relationship between utility and consumer

They reported that the compliant redressal process has improved significantly after the interaction meetings. Similarly, they even find it easier and comfortable to deal with the utility officers after the interactions during the meetings.

iii. Local Partner Support

A total of 69 percent of the respondents are satisfied with the support provided by the local partner in seeking redressal of the problems shared during the GIMs.

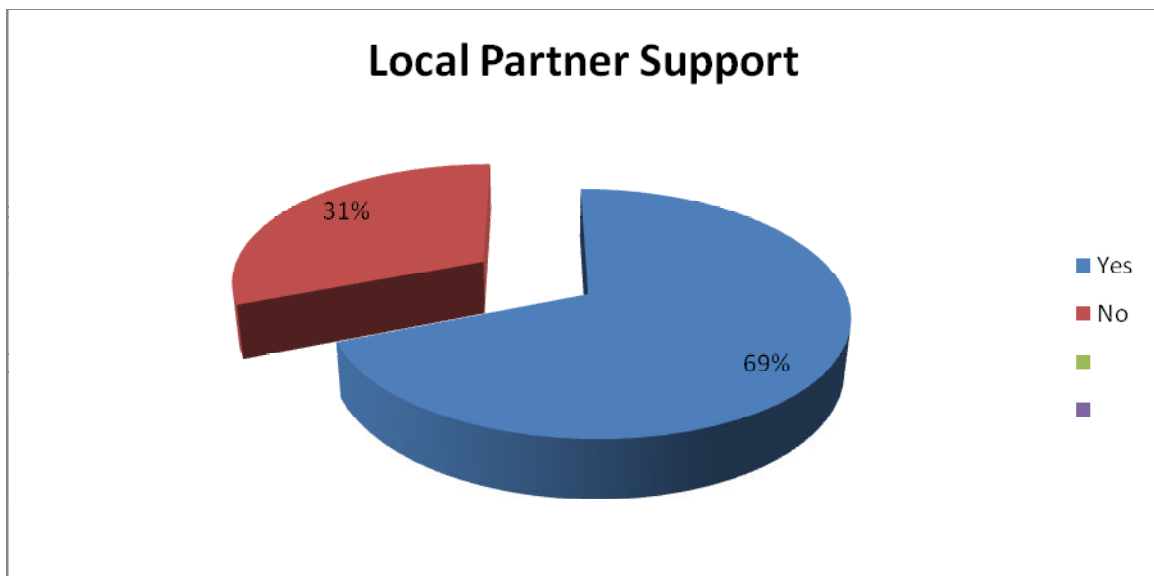


Figure: 2.8: Support provided by the local partner

According to the respondents the local partners have worked towards enhancing the relationship between consumers and NEA. They have successfully organised public hearings where the NEA officials and local consumers discussed their problems relating to electricity. They have also been disseminating useful information on electricity theft, accidents and safety measures relating to electricity through various channels, FM being one of them

iv. Awareness Level of Consumers

About 91 percent of the consumers surveyed are of the opinion that their level of awareness on the reforms issues has increased after attending the meetings.

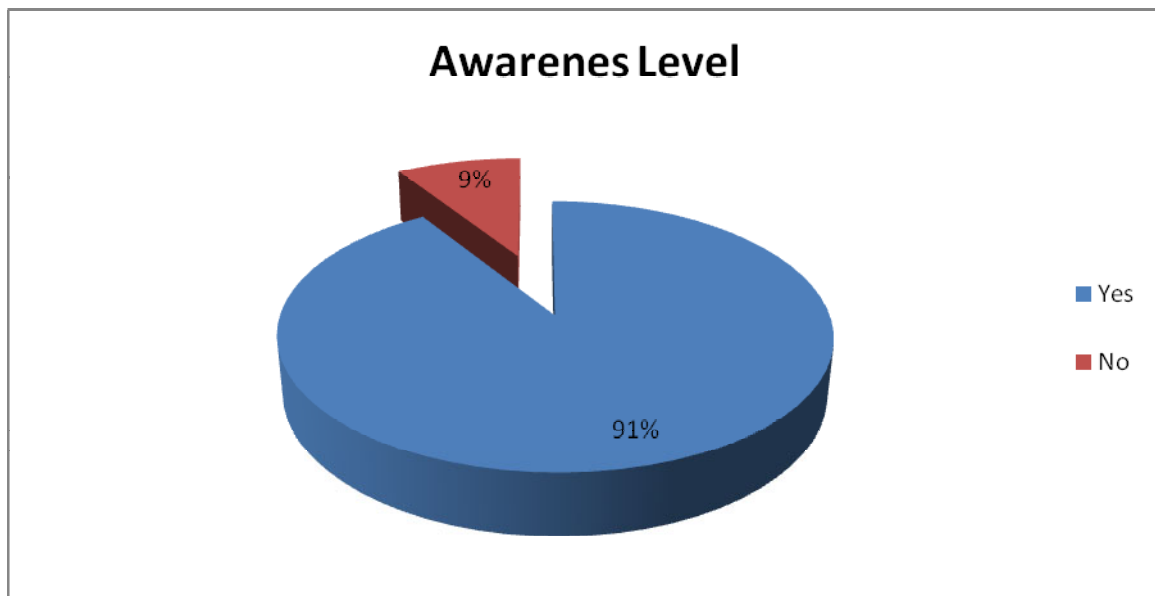


Figure: 2.9: Enhancement in Awareness Level on Reforms

The steps taken by the consumers after the meetings are evident of the fact that their level of awareness have actually increased. Thus, 39 percent of the respondents have started using CFLs and other energy efficient equipments and 21 percent said that they have stopped theft of electricity. They have also taken steps such as registering complaint, participating in public meetings organised by the government and regulatory body (see Figure 2.10). Similarly, six percent of the respondents under the category 'others' mentioned about helping family and friends to resolve their problems, being cautious while reading meter and paying electricity dues in time.

It is observed that the respondents who use electricity for industrial purpose have mostly taken steps like registering complaints for issues such as voltage fluctuations.

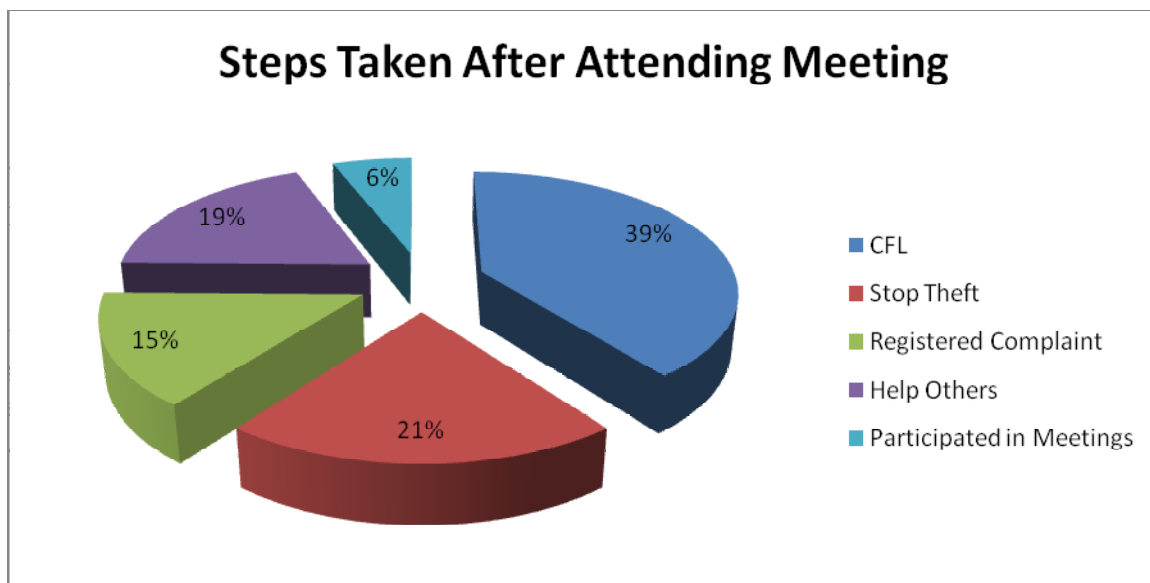


Figure: 2.10: Action taken after attending the GIMs

3.3 Reforms in Electricity Sector

i. Electricity Giving

It was recognised in the baseline survey that only one percent of the respondents feel that people are aware of the issues related to electricity reforms.

However, a large number of respondents (83 percent) knew that NEA is the institution which is producing, transmitting and distributing electricity in Nepal. Similarly, 10 percent of them think it is Department of Electricity Development (DoED), six percent it is Ministry of Energy and one percent thinks it is Electricity Tariff Fixation Committee (ETFC).

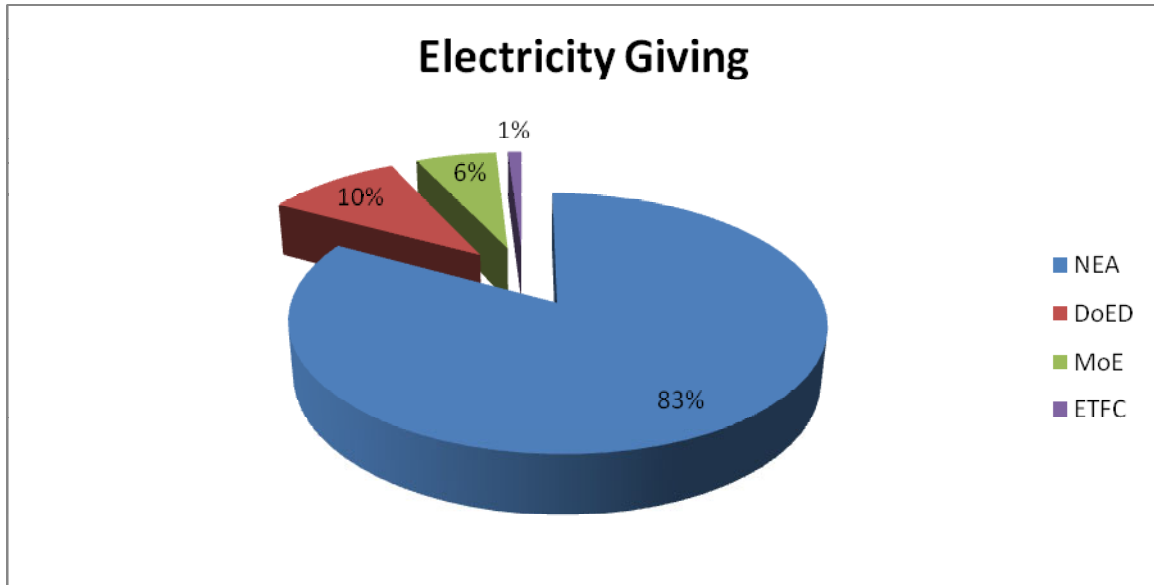


Figure: 3.1: Perceptions on Utility supplying electricity to consumers

ii. Key Functions of the DoED

When asked about the key functions of DoED, 25 percent of the respondents think it is regulating the electricity sector, 22 percent think it is providing technical support for developing power plants and seven percent consider it is granting license to private producers. However, 25 percent think it is all the above mentioned three, which is the right answer. However, in case of respondents who have attended both GIMs, 50 percent gave the correct answer.

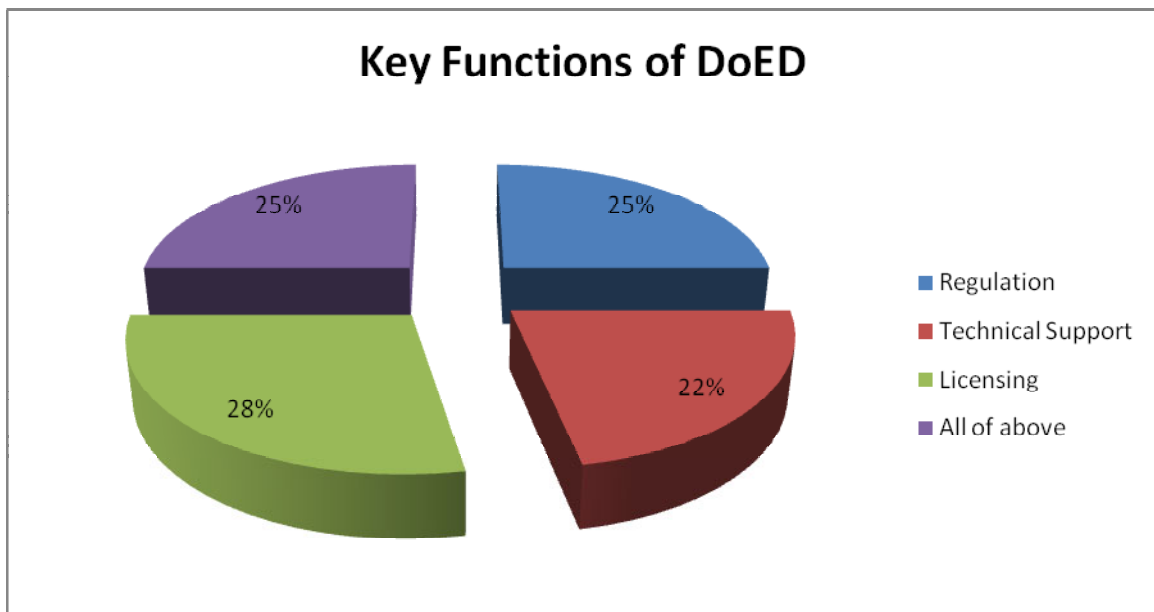


Figure: 3.2

iii. Generation Capacity

About 38 percent of the consumers surveyed thought that the installed electricity generating capacity in Nepal to be less than 600 MW as opposed to 41 percent of the respondents who were of the impression that is in between 600-700 MW. According to the Economic Survey 2009, the total electricity generated is 703 MW including 53.41 MW from thermal power stations and 100 KW from solar plants and remaining from hydro power plants. A small percentage (6 percent) of them also thinks it to be above 1000MW and 15 percent think it is between 700-1000MW. Thus, only less than half respondents know about existing capacity of electricity in Nepal.

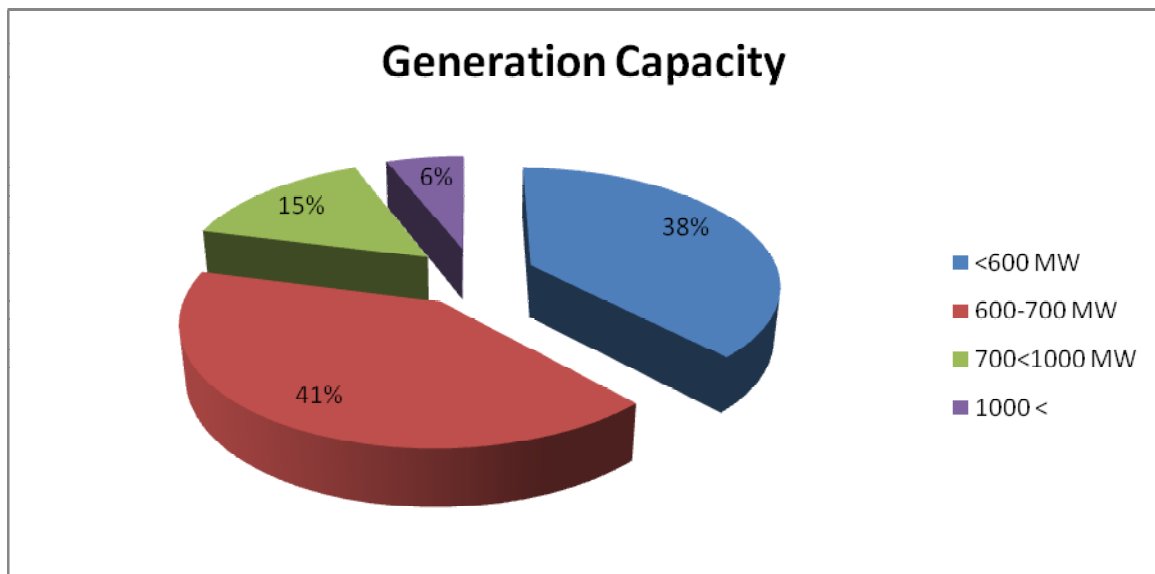


Figure: 3.4: Availability of electricity generation capacity in Nepal

iv. Complaint Registration

About half of the consumers surveyed think that consumers should file an application for the redressal of complaint in the office of Chief District Officer (CDO) if their complaint is not redressed properly in local office. Similarly, 10 percent of them think they should approach the District Court (DC) to get redressal of complaint and 11 percent think it is none of the two and 29 percent think it is all the two.

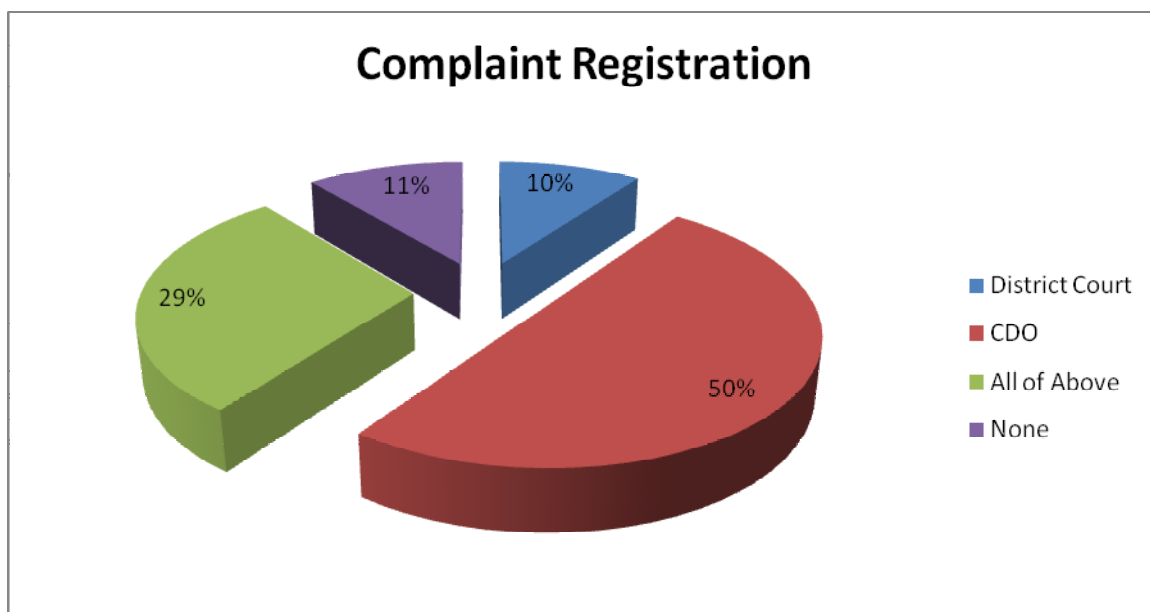


Figure: 3.5: Office for the Registration of Consumers' Complaints

v. Energy Consuming Devices

Regarding the awareness of consumers on energy saving devices, 79 percent of the respondents are aware that ordinary bulbs consume more energy than CFLs which is true. At the same time, one percent of the respondents are under the false impression that both of them consume the same level of energy. However, 19 percent of the consumers still living with the misconception that CFLs consume more energy than ordinary bulb.

Most of the uneducated respondents (64 percent) are also aware that CFLs are energy efficient. Although some are still not aware of this but none of them think that they both consume the same level of energy.

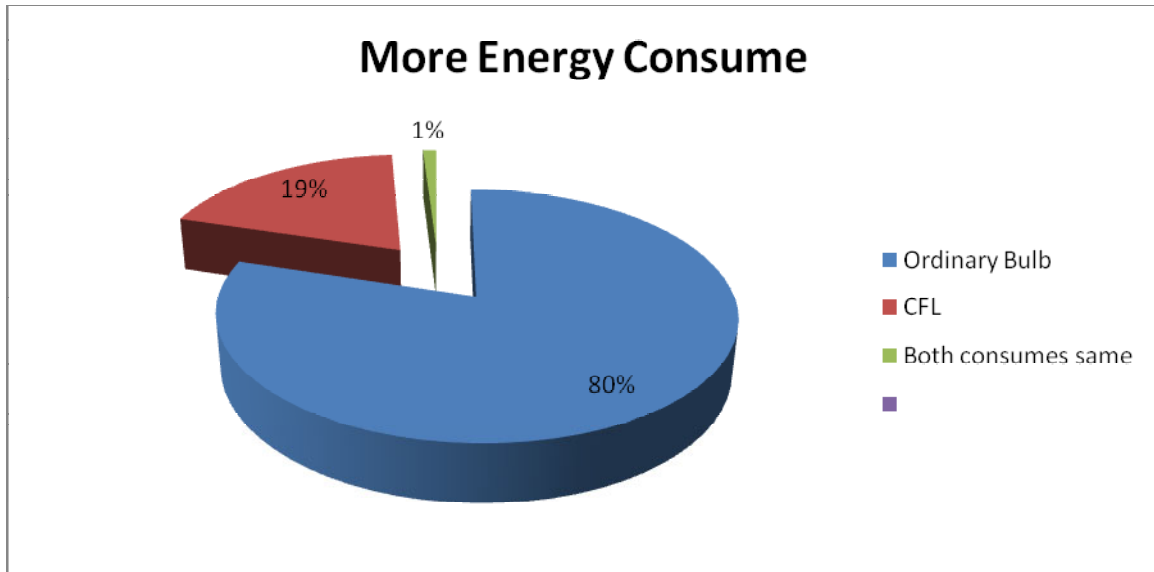


Figure: 3.6: Perception on Equipment Consuming more Energy

vi. Electricity Theft

Of the total consumers surveyed, 64 percent are not aware that theft of power is dealt under the principle of strict liability in Nepal as per the Electricity Act, 1999. Hence, 36 percent of the consumers surveyed are still ignorant about the laws against electricity theft. A large portion of the ignorant consumers are uneducated, i.e. 77 percent of the uneducated respondents. Similarly, it is sad to know that 62 percent of the respondents who have attended both the meetings are still ignorant on this issue.

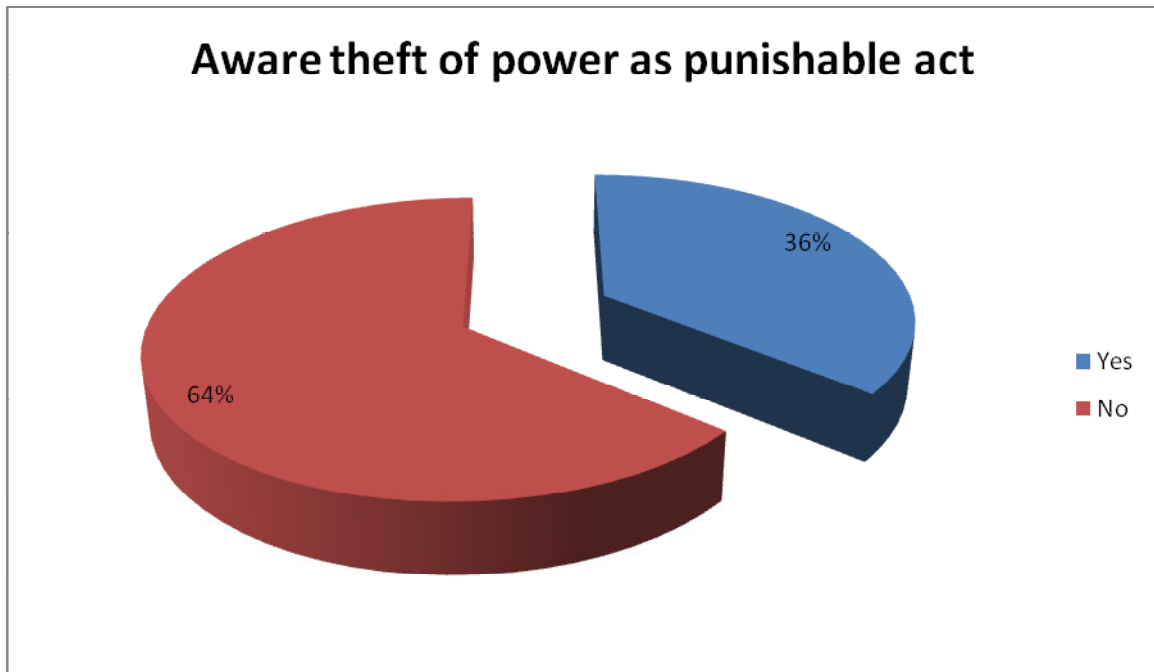


Figure: 3.7: Awareness about Theft related Punishments

4. Some Interesting Case Studies

In order to find the impact of RESA project the consumers were asked to share their success case stories (if any) regarding the changes brought out after being involved in the project activities. Some of the success stories collected have been mentioned below as cases.

Case 1. Saraswati Ghimire, a domestic consumer of Madanpokhara-5, Palpa while participating in the GIMs discovered that she was made to pay more than the actual specified installation charge for installation of electricity line. In the meetings she clarified the actual installation charges from the NEA representatives and filed a complaint immediately. She also noted that NEA meter readers used to come and write 20 units in bill, without noting the actual meter-reading. She was confused and could not make out why her electricity bill never dropped despite her cutting down the usage of electricity. After attending the meetings, she is able to read the meter herself and check whether NEA meter reader has mentioned correct reading or not. She further added that as a result of usage of CFL bulbs, the electricity bill was reduced significantly. Consequently, she is no more a victim of high charges of electricity.

Case 2. Kamala Thapa of Madanpokhara-7 had requested NEA to change the broken electric poll near her house several times. The high-tension electric wire was hanging and lying just a foot above her house which could lead to serious accident anytime. The NEA did not paid any attention to the problem, therefore she brought her problem before the NEA officials during GIM II. Soon after the GIM II, NEA replaced the broken electric poll to ensure safety of house. Now Kamala's house and neighbours are safe from possible accidents.

Case. 3. Because of continuous shortage, the small and cottage industries in rural areas are badly affected by the problem of load shedding. Mahabeer Prasad Agrawa of Birgunj runs mill in his village. Load shedding coupled with voltage fluctuations had affected his industry heavily. Despite of his repeated requests, NEA did not paid any attention to repair the old transformer in the village. Utilising the opportunity during GIM II, Agrawal raised the problem in the presence of local leaders, NEA officials and the public. As soon as GIM II finished, NEA replaced the old transformer. Consequently, he gets the voltage required to run his mill whenever power supply is available in the area.

Case 4. *"I used to be helpless even getting redressal of small problems related to electricity,"* says Laxman Pandey of Butwal. He complains about the NEA officials being unsupportive and creating unnecessary hassles. Thus, GIM I and II were good opportunity for him to empower himself. He got to know about basic electricity problems and the right place and procedures for registering complaints. Besides, he got an opportunity to directly interact with the NEA officials. He shares when an electricity pole near his house was caught by fire due to short circuit. Since, he knew who to call upon at this kind of situation through GIM-I and II he could get immediate service from NEA officials. He is grateful to the

people who organised GIM-I and II, the experts who made them aware and informed and the NEA official for saving the village from possible mishaps.

Case 5. Archana of Nepal knew about the economic value of CFLs and the subsidised rate being offered in its purchase by the NEA during the meetings being organised under the RESA project. She already knew about the energy saving part of CFLs but she had not been using those because ordinary bulbs are comparatively cheaper. Thus, she got to know that using CFL will not only lead to reduction in electricity bill but due to its durability one does not have to change it as frequently as an ordinary bulb. She has been using CFL bulbs at her home and also suggested her friend, who runs a garment, to do the same. The friend's factory uses lots of bulbs for lighting purposes. She informed that her friend is grateful to her for letting her know about CFLs as her electricity bill has been reduced significantly. Besides, she also mentioned of saving money by paying the electricity bills in time. She was not aware of the fine imposed on delay of payment by the NEA.

Case 6. Sujan Shrestha, Patan, feels ashamed to share that he used to be involved in electricity theft before knowing that it is an illegal act. He came to know that electricity theft is described as a serious crime and any people involved in it is subject to penalty during the meetings organised under the RESA project. After that he has stopped such illegal practice and also advised his family members and friends to deter from such crime.

5. Conclusions and Recommendations

The consumer survey shows very positive impacts of RESA project on consumers' knowledge, attitude and behaviour regarding electricity reform process. In the past two years, the activities undertaken as a course of the project have helped in raising the awareness level of consumers on key reform and regulation processes in the electricity sector. The consumers have been receiving the project activities enthusiastically and the impacts reported have also been significant.

Raising awareness among consumers on key issues is crucial issue in the process of demand side management (DSM). Prudent use of electricity helps in reducing electricity demand which is important especially for a country like Nepal which is facing acute power crisis. Besides, it is also important to ensure effective participation of consumers in securing regulatory reforms in electricity because only well aware citizens can ensure effective participation. These kind of activities such as informing and educating consumers and bridging the gap between utility providers and consumers will serve as foundations for electricity reform in Nepal. The project has been successful in reaching out to wide range of people from grassroots level to the policy makers. The process of raising awareness is long and at the same time it is not easy to measure its output immediately. However, the consumer survey has sketched out many indicators of how the project activities have been successful in raising the awareness level among consumers. Observing the willingness of the consumers to take part in the meetings and assessing the level of change in consumers' awareness, the outcome of the activities undertaken by the project is definitely noteworthy.

Taking into account the findings and observations of the final consumer survey the following points can be recommended:

- i. The RESA project should be continued and expanded to as to cover a large number of consumers.
- ii. Owing to the increasing level of consumers' awareness a common platform for regular interaction among the consumers, utility providers, policy makers, journalists and experts should be frequently organised.
- iii. NEA, DoED and ETFC should be urged to organise public hearings before deciding on important matters.
- iv. A mechanism should be designed so as to ensure effective participation of consumers, CSOs in the regulation of electricity sector.
- v. Consumers should be organised in a manner so that they can work towards securing their rights.