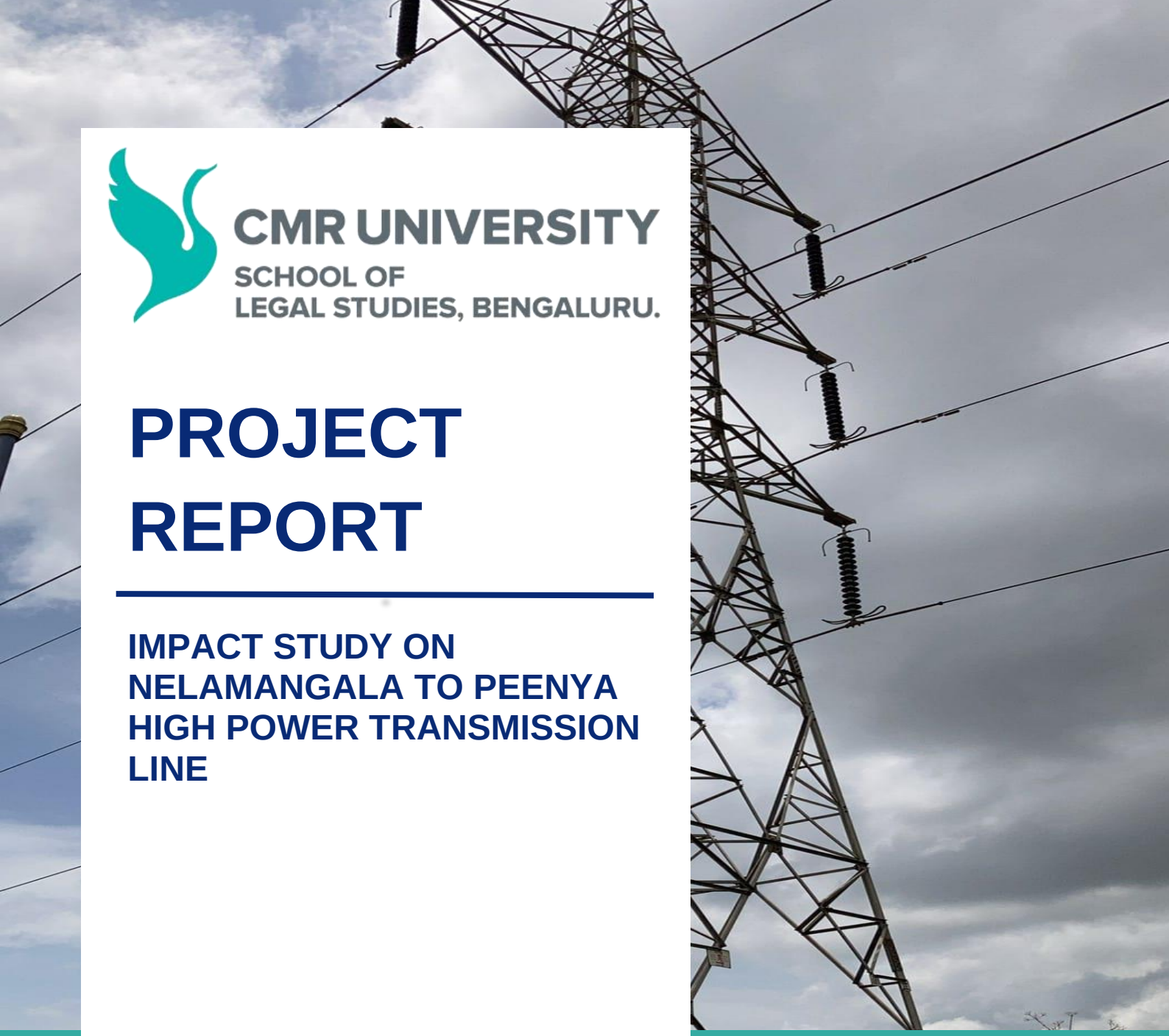


CMR UNIVERSITY
SCHOOL OF
LEGAL STUDIES, BENGALURU.

PROJECT REPORT

IMPACT STUDY ON NELAMANGALA TO PEENYA HIGH POWER TRANSMISSION LINE

JULY 2024

LEGAL SERVICES CLINIC, CMR UNIVERSITY – SCHOOL OF LEGAL STUDIES

In collaboration with

LEGAL AID TRUST

&

NELAMANGALA TO PEENYA GRAMA NIVASIGALA KSHEMABIVRUDDHI SANGHA

ABOUT THE PROJECT

The project aims to examine the social and economic impact of the Karnataka Power Transmission Corporation Limited (KPTCL)'s proposal and plan to upgrade the existing 220 KW DC line to a 400 KW line and another non-active electric line of 110KW to 220KW. It also aims to examine the range or scope of the said impact. The transmission line upgrade is part of a broader plan to establish a 2x500 MVA, 400/220kV substation in Peenya, replacing the existing 220/66kV SBT Peenya substation. The project included collecting data by conducting a survey in the vicinity of the three electric lines and preparing a survey findings report based on the information collected.

ABOUT THE SURVEYORS

The survey was organized by the Legal Services Clinic, CMR University – School of Legal Studies in collaboration with Legal Aid Trust & Nelamangala to Peenya Grama Nivasigala Kshemabivruddhi Sangha and was conducted by the students of the University led by the Legal Aid trust and with the assistance of members of the sangha and the local leaders.

LEGAL SERVICES CLINIC, CMR UNIVERSITY - SCHOOL OF LEGAL STUDIES

CMR University Legal Services Clinic intends to provide legal services to the socially and the economically backward sections of the society who have difficulty in accessing the judicial system. Legal aid clinic provides legal services to the people. The thrust is on the basic legal services to achieve Social, Economic and Political Justice that are enshrined in the Preamble of the Constitution of India and under the Directive Principles of State Policy. The legal services clinic is a great opportunity to understand the difficulties faced by people in distant villages lacking access to justice.

ABOUT THE SURVEYORS

LEGAL AID TRUST

Legal Aid Trust is an NGO registered under the provisions of Indian Trust Act 1882 established with a vision to "Encourage Legal Literacy, Awareness, and Education to uphold the ethos of Indian Constitution while ensuring Accessible and Affordable Legal Aid & Services".

NELAMANGALA TO PEENYA GRAMA NIVASIGALA KSHEMABIVRUDDHI SANGHA

Nelamangala to Peenya Grama Nivasigala Kshemabivruddhi Sangha is an association registered under the Karnataka Societies Registration Act, 1960 with the main objective of working for the welfare and development of the people living in the various villages between Nelamangala to Peenya. The various tasks under the broad objective includes, addressing the issues, take legal courses for any issue if necessary, working for better facilities for the people.

PURPOSE AND METHOD OF SURVEY

The primary purpose of the survey is the collect information and data about population residing in the vicinity of each line and who are likely to be affected by the upgradation. It also aims for the documentation of the grievances of the said population.

PURPOSE AND METHOD OF SURVEY

The survey was conducted by a total of 60 students who were divided into three groups of 20 students each to conduct survey along the three lines.

PURPOSE AND METHOD OF SURVEY

Each group of 20 students was further split into multiple small groups comprising of 2 to 4 students in one group who conducted the door-to-door survey by approaching houses, buildings and each and every available construction which fell in the vicinity of area which was likely to be impacted by the electric lines. The survey covers the existing buildings and constructions in that area but mostly does not include the empty plots or lands. However, it includes a few exceptions such as agricultural lands and other plots whose information was obtained.

ORIENTATION

The orientation for the survey project on the Nelamangala-Peenya high power transmission line impact study was successfully conducted at the Research Centre in CMR University OMBR Campus on 5th July 2024, 10:30 AM. The orientation was organized to provide a comprehensive overview and prepare students for their internship, set to commence on 7th July 2024. The attendees of the orientation included Mr. Girish Mundakode, Representative, Legal Aid Trust, Mr. Santhosh, Secretary, Nelamangala to Peenya Grama Nivasigala Kshemabhivruddi Sangha, Mr. Manjunatha, Local Representative, Ms. Vidya Selvamony, Faculty Coordinator, CMR School of Legal Studies, and around 60 Students from CMR School of Legal Studies

ORIENTATION

The orientation session commenced with the introduction by Mr. Santhosh, Secretary, Nelamangala to Peenya Grama Nivasigala Kshemabhivruddi Sangha wherein he provided an overview of the project explaining its significance and the reasons behind the transmission line upgrade. He highlighted the current status of the project and emphasized the necessity of the internship to gather critical data for the community's benefit.

ORIENTATION

The introduction was followed by a detailed presentation about the project by Mr. Girish Mundakode, Representative, Legal Aid Trust. He offered an in-depth understanding of the project's legal implications. He explained the purpose of the impact study in supporting the writ petition filed in the High Court of Karnataka which was to provide concrete evidence to bolster the case, ensuring that community concerns are addressed and justice is served.

ORIENTATION

The orientation session also included insights by Mr. Manjunatha, Local Representative wherein he shared his perspectives on the project's impact on local communities. He urged students to actively engage in the survey process, stressing the importance of accurate data collection to aid affected residents and strengthen the community's position.

ORIENTATION

The orientation concluded by a briefing by Ms. Vidya Selvamony, Faculty Coordinator, CMR University – School of Legal Studies wherein she guided the students on the basic etiquette and conduct expected during their internship. She emphasized the importance of professionalism, thoroughness, and respect for community members throughout the data collection and analysis process.

DAY 1

The first day of fieldwork commenced with a short briefing session that was conducted at the Aham Aathma Vidyalaya near Gruha Lakshmi Layout in Doddabidarakallu, Peenya after which the students dispersed to conduct the survey. The three different groups of students were also allotted the respective lines they would work along. They were also introduced to their respective local coordinators who would help the students navigate in the locality and complete the survey.

DAY 1

The areas covered on the first day of fieldwork included Doddabidarakallu, Gruhalakshmi Layout and certain area surrounding it which fell in the vicinity of the electric lines.

DAY 1

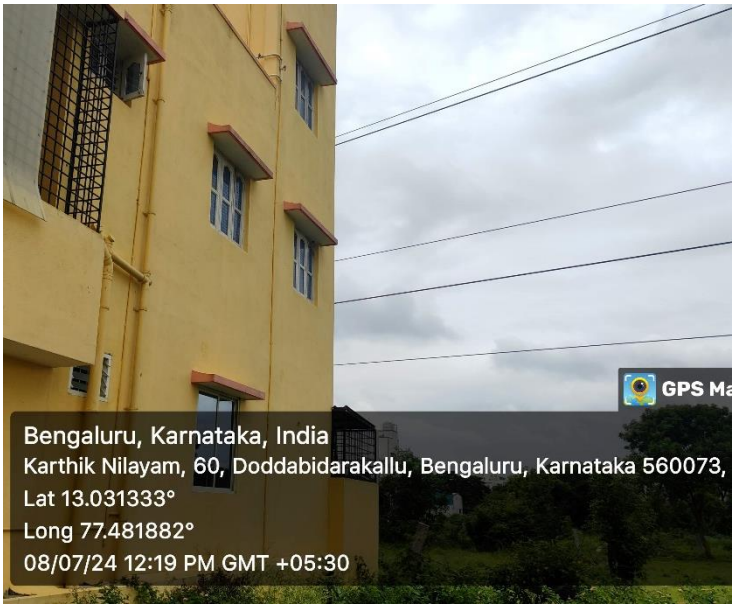
The students surveyed around a total of 137 properties, the majority of which were residential buildings, collecting relevant data, having conversations with the residents and noting down their grievances.

DAY 1

The residents reported that they felt overlooked and ignored by the government and expressed frustration with the lack of transparency in the project's implementation. The fundamental concerns and grievances of the residents were regarding potential health and safety risks associated with living in close proximity to high-voltage power lines, the devaluation of the property in the vicinity of the lines and the lack of any kind of information, communication or consultation about the project to them.

DAY 2

The students covered the locality surrounding Tippanahalli on Day 2 of the fieldwork. The student groups conducted the survey along the same lines they were allotted on the previous day and were helped by their respective local coordinators to navigate and communicate with the residents in that locality.



DAY 2

The students surveyed around a total of 179 properties, the majority of which were again residential buildings, collecting important information and noting down the grievances of the residents.

DAY 2

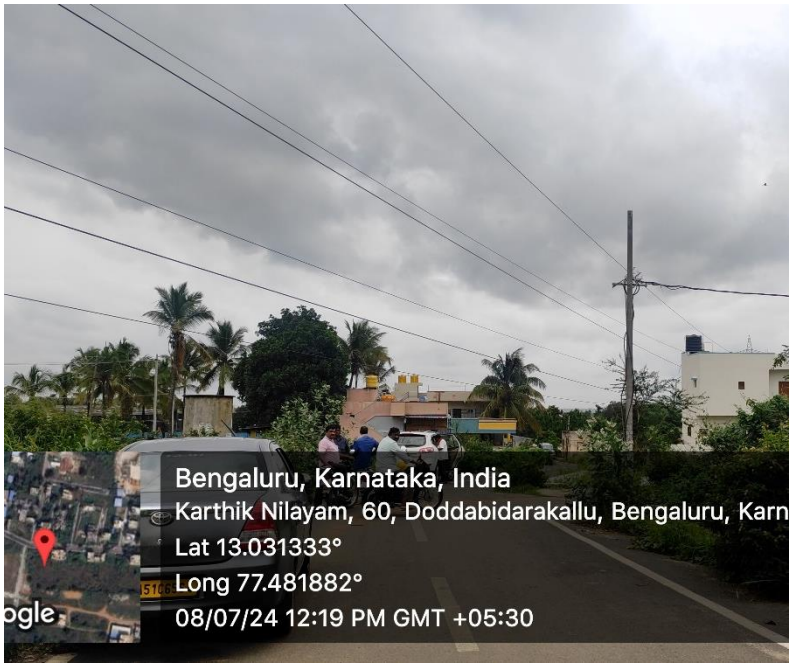
Residents in Tippanahalli were notably prepared for the survey, indicating awareness of our visit and purpose. The landowners had documents such as property deeds, khata certificates, tax receipts, and government IDs readily available, which facilitated the data collection process.

DAY 2

Many senior citizens who owned land expressed concerns about the project impacting their hard-earned properties. The conversations with the residents revealed a common sentiment of regret and helplessness, with residents questioning the government's decision to approve such a large project at the expense of individual property rights.

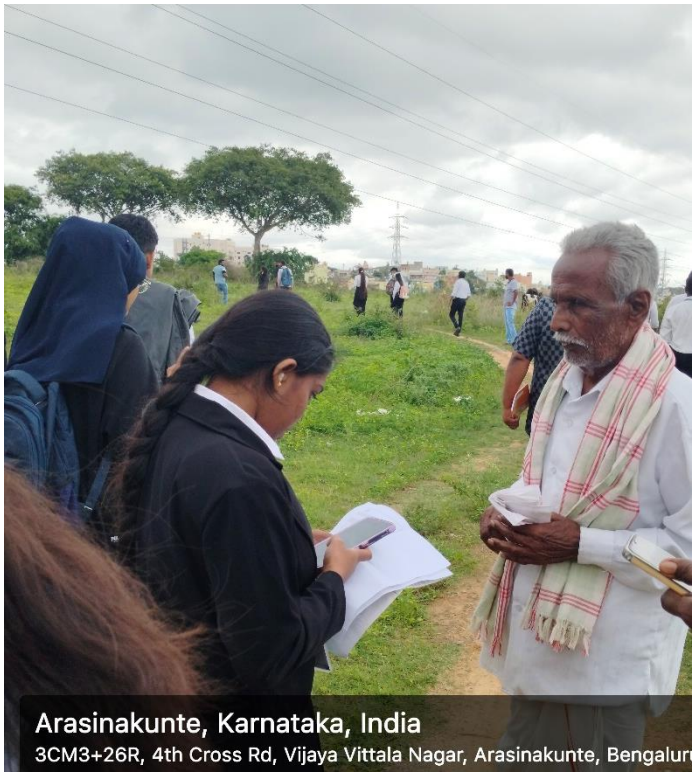
DAY 2

Consistent feedback from the residents highlighted frustration with the government's lack of transparency and consideration for the residents' well-being and property rights. The community expressed a need for fair compensation and safety measures to mitigate potential adverse effects of the transmission line upgrade.



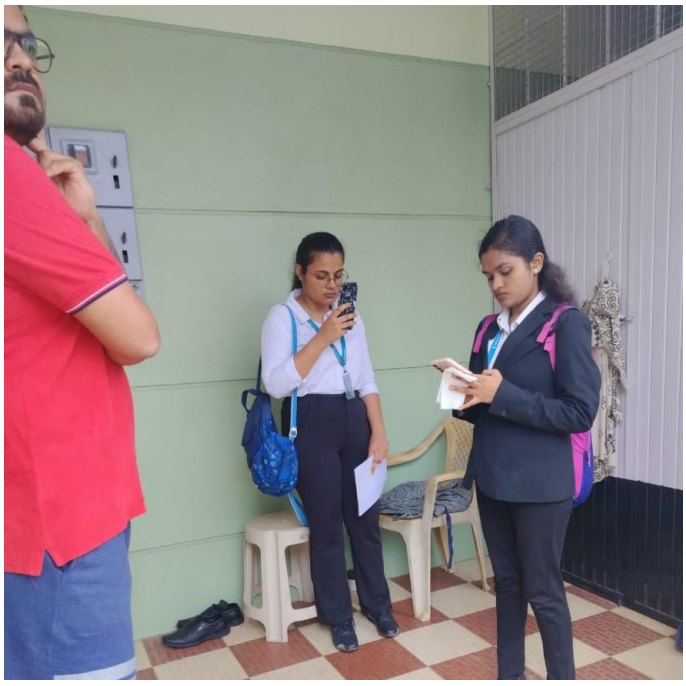
DAY 3

The students covered the areas surrounding Vijaya Vittala Nagar, Dasanapura, and Arasinakunte on Day 3 of the fieldwork continued conducting the survey along the same lines they were allotted on the first day.



DAY 3

The students conducted a survey of around a total of 93 properties, continuing the survey, gathering data from households and conducting interviews with senior citizens, who shared their struggles with bank and LIC loans used to build their homes. A YouTube news reporter also accompanied the group, documenting the interviews and capturing the voices of the affected residents.



DAY 3

The team encountered a field of transmission grids located dangerously close to the village, raising significant safety concerns.

DAY 3

Two members of each group measured radiation levels near the transmission lines, finding levels as high as 196 millivolts per meter, exceeding the high-frequency safety limit of 70 V/m. This level of radiation is harmful and poses health risks.

The students conducting the measurements experienced headaches, suggesting immediate adverse effects from exposure.

DAY 3

Residents expressed anxiety over potential health impacts, especially for children and the elderly. A widespread fear that the project will undermine the financial security of homeowners who have invested their savings in property development was noticed among the residents.

DAY 4

The students covered locality of Kadaranahalli on Day 4 of the fieldwork. The student groups conducted the survey along the same lines and were helped by their respective local coordinators in the said task.

DAY 4

The students covered a total of 82 properties, a mix of residential properties and open plots, conducting surveys and interviews with residents, and gathering data on their concerns and opinions about the project. The Community members shared insights into the local context, enhancing the team's understanding of the area's specific challenges and needs.

DAY 4

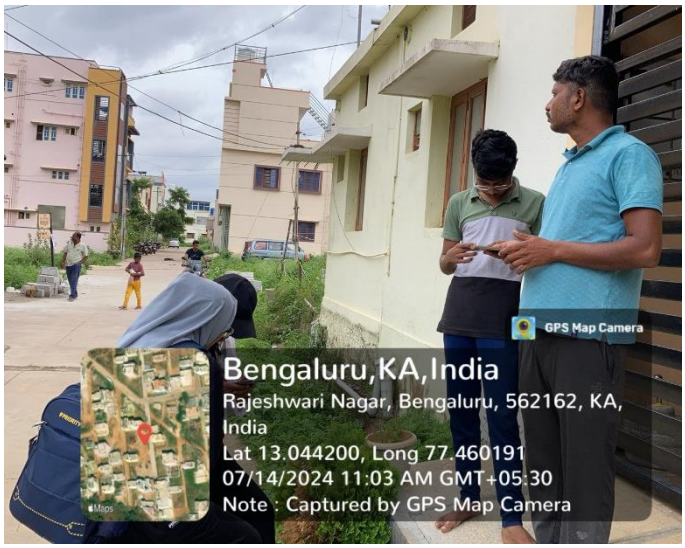
Residents expressed consistent concerns about health risks and potential property devaluation due to the transmission line upgrade. There was a common sentiment of frustration over the lack of consultation and transparency from the authorities.

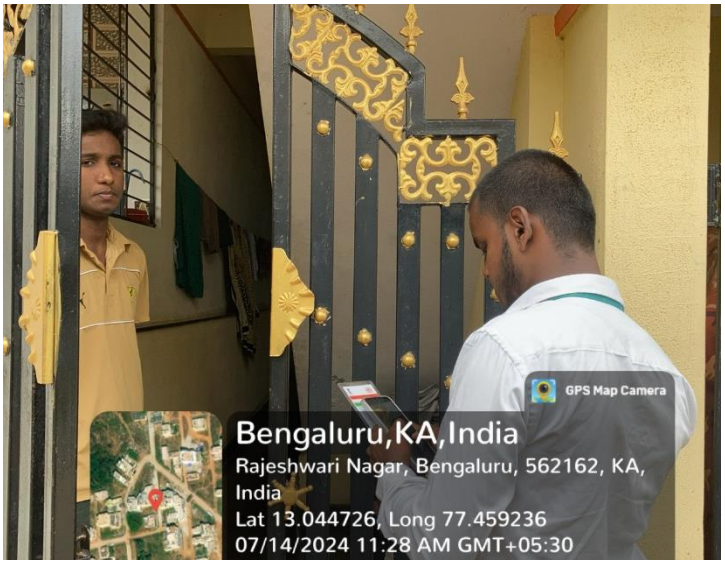
DAY 4

The small size of the village and the presence of many empty plots limited the number of interviews conducted. Despite these limitations, the data collected was valuable and reflective of the broader community concerns

DAY 5

The students focused on the area of Dombarahalli on Day 5 of the fieldwork. It was also a small village like the previous one comprising both residential properties and empty plots. The team was addressed a community leader who shared insights about the village's history and development, and the impact of the proposed transmission line project on the community





DAY 5

The students covered a total of 87 properties which included both residential properties and open plots. The small size of the village and the presence of many empty plots limited the number of interviews conducted. Despite this, the data collected was insightful and reflective of the broader community concerns.

DAY 5

The residents expressed apprehension about the potential health risks and property devaluation associated with the transmission line upgrade. There was a prevailing sentiment of being overlooked by decision-makers and a desire for greater transparency and involvement in the decision-making process.

DAY 6

The students conducted an awareness program where they provided information on how the potential were the health risks associated with living in close proximity to high-voltage power lines.

The students on Day 6 mainly focused upon covering the schools that were functioning in the vicinity of the electric lines and were not restricted to a particular area. Additionally, they also collected data from about 15 to 20 households and properties.

VISIT TO SCHOOLS

The students visited around 8 to 10 schools, which were in the impact zone of the electric lines, throughout the survey project and the majority of the schools were visited on Day 6 of fieldwork. They created awareness about the project and provided information to school children regarding high-tension lines and the effects and risks they may face both now and in the future.

VISIT TO SCHOOLS

The authorities of the schools highlighted irregularities in the approval process, claiming that community consent was fabricated by obtaining a single signature misrepresented as community-wide approval. They also pointed out government inconsistencies and biases in certain procedures. They cited the example of making the metro underground and not having similar consideration for electric lines.

VISIT TO SCHOOLS

Some of the notable schools include the Kanva Public School, Aham Aathma Vidyalaya, Siddhartha School, Mahapragna International School etc. All of these schools accomodated hundreds of children, with Kanva Public School alone accomodating more than 600 students. The strength of the children studying in the each of the other three schools was also similar. The school authorities expressing deep concerns about the health and safety of the students if the project proceeds

VISIT TO SCHOOLS

DATA COLLECTED

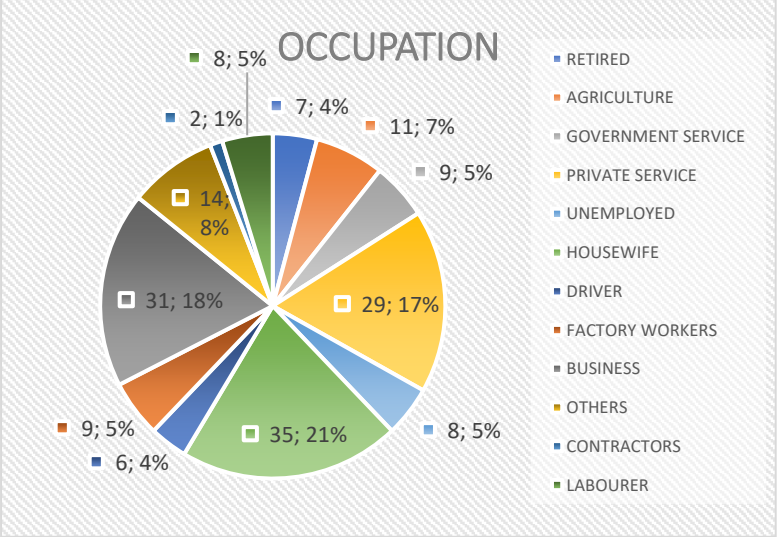
The primary data that was collected was concerning the nature of property, occupations and source of income of the residents, number and age of dependants on a property etc., which is organised and reported in the form of statistical data. The data collected represents the nature of lives that the project would impact. The statistical data for each electric line is reported separately. The data primarily aims to highlight the socio-economic conditions of the habitants and the population that is going to be impacted by the line upgrade project.

LINE 1

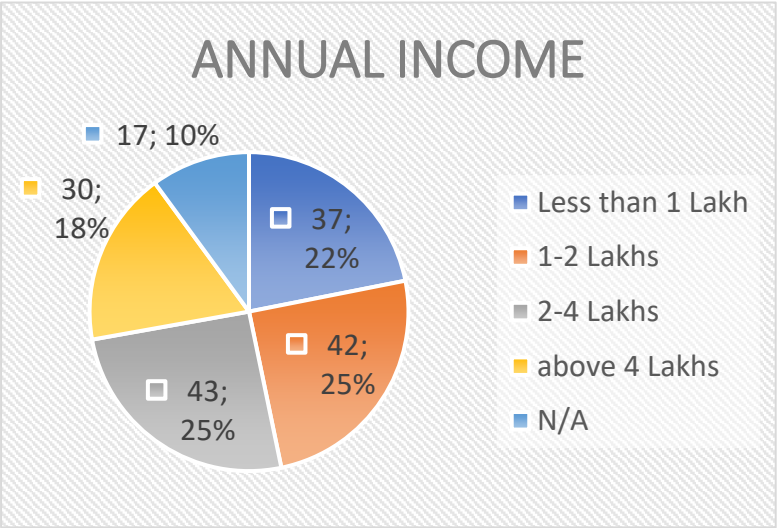
There were around 169 households in the vicinity of electric line 1 with a total population of around 750 individuals living in the impact zone. The information relating to the households in the close proximity of the first line is represented as follows.

OCCUPATION AND ANNUAL INCOME

RETIRED	7
AGRICULTURE	11
GOVERNMENT SERVICE	9
PRIVATE SERVICE	29
UNEMPLOYED	8
HOUSEWIFE	35
DRIVER	6
FACTORY WORKERS	9
BUSINESS	31
OTHERS	14
CONTRACTORS	2
LABOURER	8



LESS THAN 1 LAKH	37
1-2 LAKHS	42
2-4 LAKHS	43
ABOVE 4 LAKHS	30
N/A	17

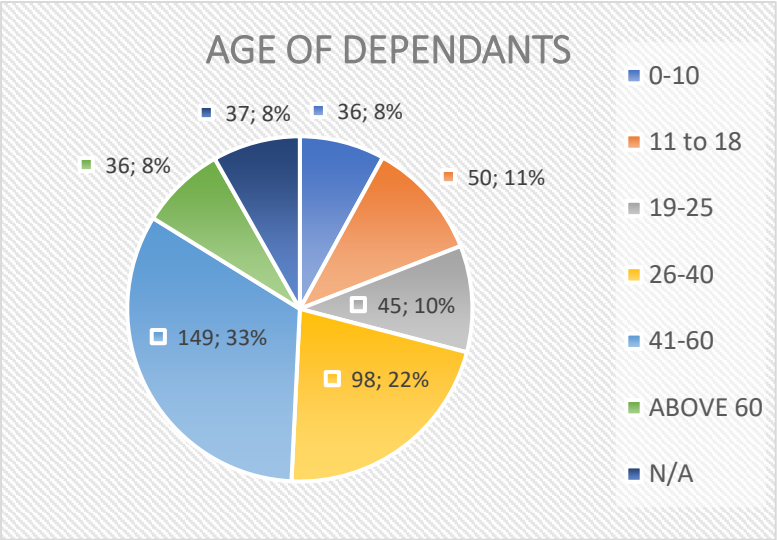


LINE 1

AGE OF DEPENDANTS

Out of the population of 700 from 169 households in the vicinity of Line 1, there were around 450 dependents whose age-related information was obtained during the survey.

0-10	**36**
11-18	**50**
19-25	**45**
26-40	**98**
41-60	**149**
ABOVE 60	**36**
N/A	**37**

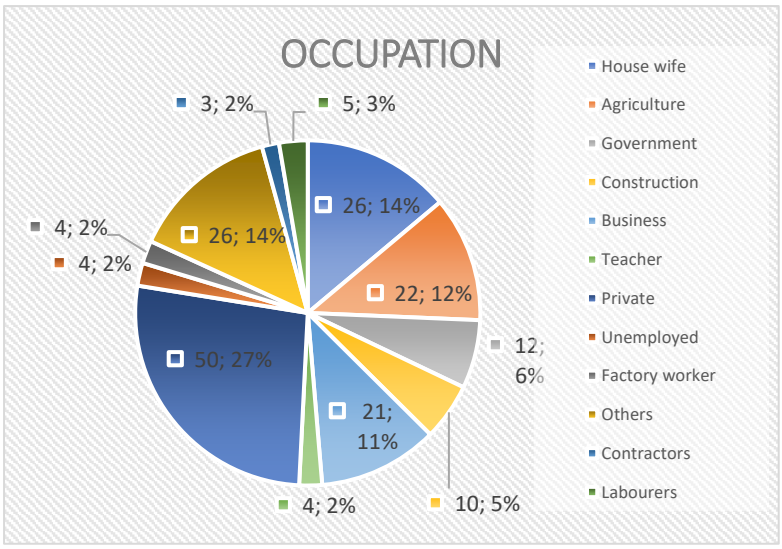


LINE 2

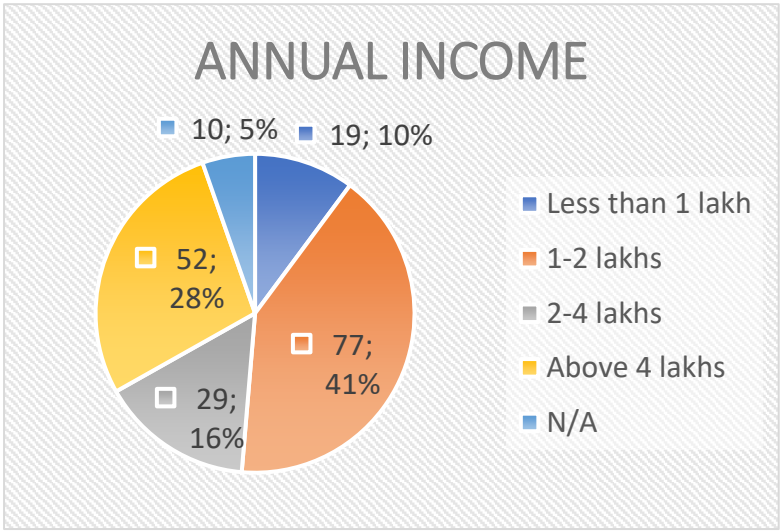
There were around 187 households in the vicinity of electric line 2 with a total population of around 650 individuals living in the impact zone. The information relating to the households in the close proximity of the second line is represented as follows.

OCCUPATION AND ANNUAL INCOME

HOUSE WIFE	26
AGRICULTURE	22
GOVERNMENT	12
CONSTRUCTION	10
BUSINESS	21
TEACHER	4
PRIVATE	50
UNEMPLOYED	4
FACTORY WORKER	4
OTHERS	26
CONTRACTORS	3
LABOURERS	5



LESS THAN 1 LAKH	19
1-2 LAKHS	77
2-4 LAKHS	29
ABOVE 4 LAKHS	52
N/A	10

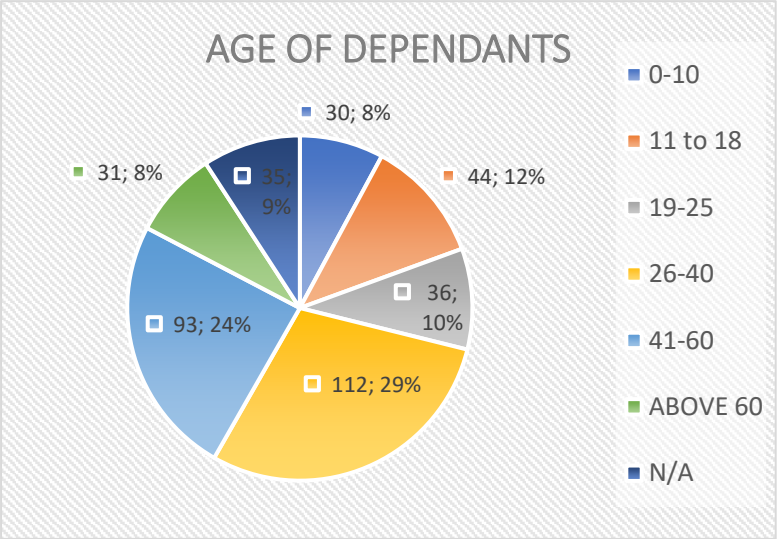


LINE 2

AGE OF DEPENDANTS

Out of the population of 650 from 187 households in the vicinity of Line 2, there were around 380 dependents whose age-related information was obtained during the survey.

0-10	**30**
11-18	**44**
19-25	**36**
26-40	**112**
41-60	**93**
ABOVE 60	**31**
N/A	**35**

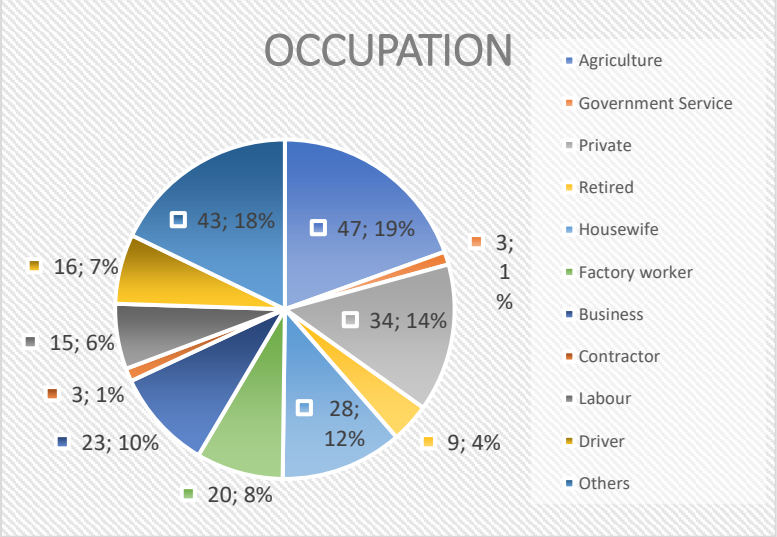


LINE 3

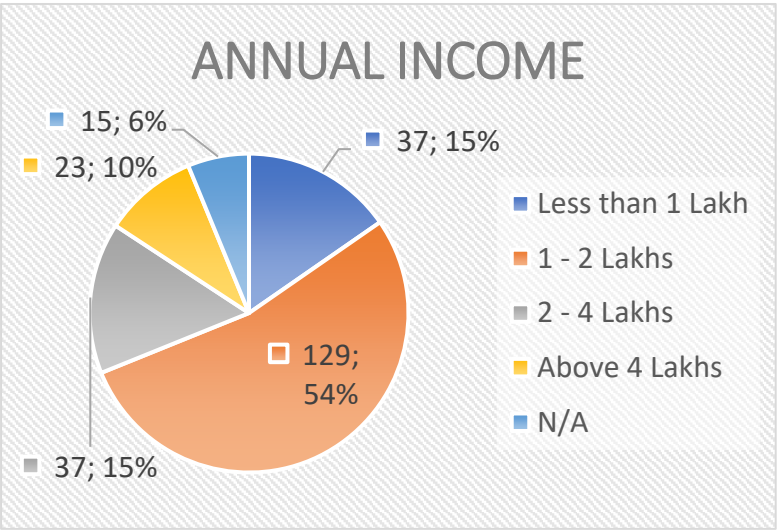
There were around 241 households in the vicinity of electric line 2 with a total population of around 800 to 850 individuals living in the impact zone. The information relating to the households in the close proximity of the third line is represented as follows.

OCCUPATION AND ANNUAL INCOME

AGRICULTURE	47
GOVERNMENT SERVICE	3
PRIVATE	34
RETIRED	9
HOUSEWIFE	28
FACTORY WORKER	20
BUSINESS	23
CONTRACTOR	3
LABOUR	15
DRIVER	16
OTHERS	43



LESS THAN 1 LAKH	37
1-2 LAKHS	129
2-4 LAKHS	37
ABOVE 4 LAKHS	23
N/A	15

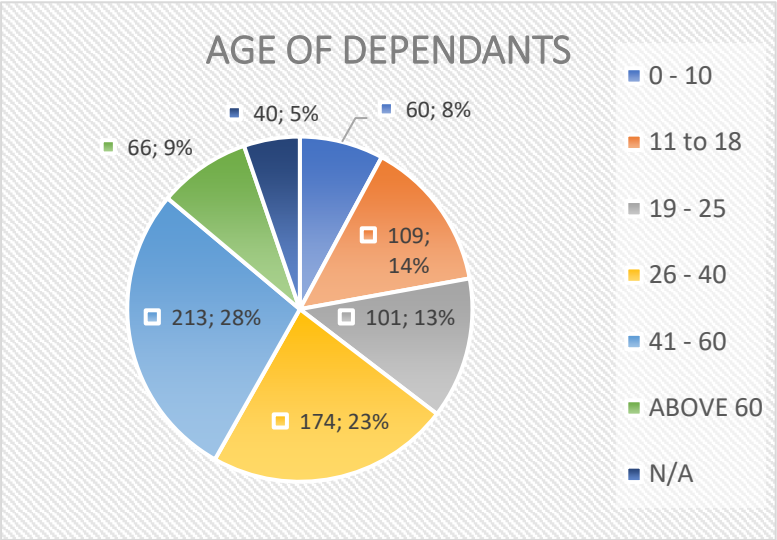


LINE 3

AGE OF DEPENDANTS

Out of the population of 650 from 187 households in the vicinity of Line 2, there were around 380 dependents whose age-related information was obtained during the survey.

0 - 10	**60**
11 - 18	**109**
19 - 25	**101**
26 - 40	**174**
41 - 60	**213**
ABOVE 60	**66**
N/A	**40**



SUMMARY OF THE FINDINGS

Overall, a population of around 2200 to 2300 from about 597 households was residing in the vicinity of the electric lines and their properties were well within the impact/buffer zone of the electric lines. The major highlights of the survey include the economic condition of the households and the age of the population that is likely to be impacted. Some of the important highlights are as follows.

1. **The electric lines were likely to impact and were currently impacting a population of around 2200 to 2300 individuals from 597 households (which is exclusive of the empty lands and majorly includes constructions).**
2. **Around 17.5% of the population of whose age-related data is obtained is either a senior citizen or a minor which makes them highly prone to the effects of Electric and Magnetic fields.**
3. **More than half of the households had an annual income equal to or less than Rs. Two lakh per annum.**
4. **More than half of the households or properties were self-acquired.**
5. **More than 50% of the population belonged to the backward classes.**
6. **More than 2/3rd of the properties were residential in nature while the remaining 1/3rd was either used for commercial purposes, agriculture or was empty land or any other use.**

SUMMARY OF THE FINDINGS

ECONOMIC CONDITION OF THE HOUSEHOLDS

1. The annual income of around 75% of the households was less than or equal to Rs. Four Lakh per annum.
2. The annual income of around 57% of the households was less than or equal to merely Rs. Two Lakh per annum.
3. Only 17% of the households had an annual income of above Rs. Four lakh per annum.

The data concerning the annual income of the 597 households highlights and reflects the economic conditions of those households. When more than 3/4th of the them and more than half of them have an annual income of less than or equal to four lakh and 2 lakh respective, the impact of the electric upgradation project is going to be extremely severe as the lack of proper compensation or the devaluation of the property would cause financial losses to the households pushing them towards further poverty and impacting their lives as a whole.

SUMMARY OF THE FINDINGS

AGE OF THE POPULATION LIKELY TO GET AFFECTED

1. Around 8.5% of the 1483 individuals were equal to or less than a mere age of 10 years.
2. Around 22% of the 1483 individuals were less than or equal to 18 years of age.
3. Around 34% of the 1483 individuals were equal to or less than the age of 25 years.
4. Around 9% of the 1483 individuals were of above 60 years of age.

The data concerning the age of the population highlights that nearly 43% of the population is is either very young or old and the effects due to the electric and magnetic fields that are likely from the electric lines may primarily impact the health of this 43% of the population. As per the World Health Organisation (WHO), some of the common health impacts due to electric and magnetic fields include headaches anxiety, sleep disturbance, fatigue, nausea etc. There are other impacts as well and some of them are severe in nature.

CONCLUSION

Although it is true that the geographical location was widely used for agricultural purposes earlier, there have been several developments in the said location in the recent times since past few years or a decade or two. It has to be noted that a good amount of population is now residing in those location including the vicinity of the electric lines. Considering the risks involved and the increase in development in that location, it is appropriate to look for better alternatives since the location now has not just a few residential houses but also schools, hospitals and other facilities which many of which wall under the impact or buffer zone of these electric lines. It is necessary to ensure that the lives of the citizens are not adversely impacted or they are not subjected to arbitrary denial of their rights.

NOTE:

- **The term ‘population’, wherever used in this report, refers to the number of dependants on the property within the close proximity of the electric lines.**
- **Out of a total population of 2200 to 2300 individuals, the age of only around 1483 individuals was obtained.**
- **The information regarding the annual income of 7% of the households was not obtained.**

NOTE OF GRATITUDE

Heartfelt thanks to the local leaders for facilitating and helping the students in completion of this survey in every possible way. The assistance and guidance by the local leaders in the villages made the survey easier and simpler.