

A STUDY ON PUBLIC OPINION ABOUT KUDANKULAM POWER PLANT IN SPECIFIC REFERENCE TO CHETTIKULAM PEOPLE IN TIRUNELVELI DISTRICT

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ABSTRACT

This study explores the voices and lived experiences of the people of Chettikulam, a community closely situated near the Kudankulam Nuclear Power Plant in Tirunelveli district. While the plant stands as a symbol of national progress and energy security, its presence has also stirred deep questions of safety, livelihood, and trust among the local people. Through this research, the aim is not only to measure public opinion but to understand the human side of development—how ordinary families perceive risks, how they balance hope for growth with fear of uncertainty, and how cultural roots shape their acceptance or resistance. By listening to the concerns, aspirations, and emotions of Chettikulam residents, this study highlights the importance of including local voices in national projects. It emphasizes that true progress is not just about producing power, but also about empowering communities with knowledge, reassurance, and participation in decisions that affect their lives.

Keywords: Public Opinion, Kudankulam Nuclear Power Plant, Chettikulam Community, Development And Participation.

1. INTRODUCTION

This study takes a closer look at the voices of Chettikulam residents, seeking to understand how they view the Kudankulam project. By capturing their perceptions, doubts, and aspirations, the research aims to bring out the human dimension of development—where technology meets community, and where progress must walk hand in hand with trust and well-being. Development in any society is often measured by the progress of science and technology the establishment of large projects like the Kudankulam Nuclear Power Plant reflects this drive for national growth. Nuclear power promises cleaner energy and the ability to meet the rising demands of electricity, which is essential for industries, education, health care, and everyday living. Yet, development is not only about infrastructure; it is also about people whose lives are touched by such projects. The village of Chettikulam in Tirunelveli district lies nearer to the Kudankulam Power Plant. For its people, the plant is not just a distant symbol of energy security, but a reality that shapes their thoughts, fears, and expectations. While some see it as a doorway to opportunities and modern living, others worry about safety, environmental impact, and the uncertainty of the future. Their opinions reflect the delicate balance between hope and hesitation, between national progress and personal security.

Statement of the problem

The Kudankulam Nuclear Power Plant was built to strengthen India's energy resources and meet the growing electricity demands of the nation. While the project is a milestone in technological advancement, its presence has generated mixed reactions among the people living nearby. The residents of Chettikulam, situated close to the plant, often find themselves caught between the promise of development and the fear of risk. Concerns about radiation, environmental safety, and long-term health impacts create anxiety in the community.

At the same time, hopes of improved infrastructure, job opportunities, and regional progress spark optimism. This clash of perceptions has led to uncertainty, confusion, and sometimes even resistance among the local people. The problem lies in the gap between national goals and community confidence. Without understanding the lived experiences and voices of the people, development remains incomplete. Therefore, it becomes essential to study the opinions of Chettikulam residents, to identify their fears and expectations, and to highlight how inclusive dialogue can bridge trust between the project and the community.

Objectives

- To understand the perceptions and opinions of Chettikulam people about the Kudankulam Power Plant from the study respondents.

- To identify the hopes, benefits, and opportunities the community associates with the project.
- To analyze the fears, concerns, and challenges faced by the local residents.
- To highlight the need for community participation and trust-building in large development projects.

Need for the study

- To bridge the gap between technological progress and the everyday concerns of people living near the Kudankulam Power Plant.
- To ensure that the voices of Chettikulam residents are heard and valued in decisions that directly affect

2. REVIEW OF LITERATURE

Arul I. Aram, G. C. Prem Nivas & G. P. Ramya (2014, 2015), “Newspaper Framing of the Kudankulam Nuclear Power Project in Tamil Nadu” (Media Asia, 2014) and “Newspaper Framing of Kudankulam Nuclear Plant in Tamil Nadu” (Indian Journal of Science Communication, 2015). These studies analyze media representations and how local and national narratives influence public perception around safety, identity, and development.

Shubhra Chaturvedi (2012), “Kudankulam: Nuclear Energy and Protest Movements” — explores tensions between civil society activism and governmental/national ambitions, highlighting the dynamics of human security, marginal voices, protest mobilization, and state response.

S. P. Udayakumar, authored various commentaries and critiques centered on “On Koodankulam Nuclear Power Project – Questions, Questions, No Answers”, laying out community-level questions about transparency, rights, ecological impact, and the contestation of official narratives.

He leads the People’s Movement Against Nuclear Energy, a grassroots movement critical to understanding local mobilization, resistance motives, and the lived experiences of proximate communities.

Anitha S. (2012), Wrote “Why We Love the Koodankulam Nuclear Power Plant?”, offering a contrasting perspective that includes vocal support, local feelings, and the subjective dimensions of identity and attachment toward the plant. This adds nuance to understanding community heterogeneity.

3. METHODOLOGY

Research Design – The study is descriptive in nature, aiming to capture the real opinions and feelings of Chettikulam residents about the Kudankulam Power DA (Department of Atomic energy)

Data collection – Both primary and secondary data were used. Primary data was collected through interviews, questionnaires, and informal conversations; secondary data was taken from books, articles, and reports.

Data Analysis – The collected responses were analyzed qualitatively, identifying themes such as safety, livelihood, development, and trust in authorities

Approach – A human-centered approach was used, treating people not as statistics but as individuals with unique voices and experiences.

Selection of sample

The sample for this study was carefully chosen from the residents of Chettikulam village, as they live in close proximity to the Kudankulam Nuclear Power Plant and are most directly affected by its presence. A purposive sampling method was adopted, since only the voices of this community could provide meaningful insights into the issue. The respondents included a cross-section of people—farmers, fishermen, shopkeepers, women, youth, and elders—so that different perspectives within the community were represented. The sample size 100 was kept manageable to ensure depth in responses rather than mere numbers. This approach helped to bring out authentic and diverse opinions, reflecting both the hopes and the concerns of those whose everyday lives are intertwined with the plant.

Tools and Techniques of the study

Face-to-face interviews with Chettikulam residents to understand their personal experiences and feelings about the Kudankulam Power Plant. Questionnaires prepared in simple language to collect opinions from a wider section of the community.

Informal conversations with farmers, fishermen, shopkeepers, students, women, and elders to capture natural and genuine expressions.

Direct observations of the community’s daily life and surroundings near the power plant to understand the context of their concerns.

Definition and terms used in the study

Public Opinion

Public opinion refers to the shared views, beliefs, and attitudes of people in a community about a particular issue. In this study, it reflects the study area people how think and feel about the Kudankulam Power Plant.

Nuclear Power Plant

A nuclear power plant is a facility that produces electricity using nuclear energy. It is seen as a modern way to meet rising energy demands, but it also brings concerns about safety and environmental impact.

Development

Development means progress that improves the quality of life for people—such as better roads, education, health care, and job opportunities. True development, however, should balance technological growth with the well-being of local communities.

Community Perception

Community perception is the way people in a particular area understand and interpret changes happening around them. In this study, it shows how Chettikulam residents view the opportunities and risks of living near the Kudankulam plant.

Scope of this study

Scope

The study is focused on understanding the public opinion of the Chettikulam people regarding the Kudankulam Nuclear Power Plant. It aims to explore both the positive and negative sides of development as experienced by the local community.

Possibilities

The Kudankulam project carries the possibility of improving infrastructure, generating more electricity, and creating opportunities for education, health, and employment in the region. It also has the potential to transform rural areas into centers of growth.

Advantage

The major advantages include reliable power supply, industrial growth, and economic development. For local people, it may mean better job prospects, improved living standards, and stronger connections to the modern world.

Future:

The future of the project depends on building trust between the government and local people. If safety and transparency are ensured, the plant can serve as a model of development where technology and community well-being go hand in hand.

Limitations

Choice of Area

The study is limited to only Chettikulam village. While this area is directly affected by the Kudankulam Power Plant, the views of people from other nearby villages are not included.

Difficulty in Responses

Some participants were hesitant to share their true opinions due to fear, personal beliefs, or social pressures, which may affect the openness of the responses.

Data Collection Challenges

Collecting information in the field was not always easy. Time limits, accessibility, and language differences sometimes restricted the depth of data gathered.

Process Limitation

The study relied mainly on descriptive and qualitative methods. While this approach captures emotions and opinions, it does not provide large-scale statistical analysis.

Scope for Further Study

There is a gap for future research to include a wider geographical area, larger samples, and long-term studies to compare how public opinion changes over time.

Data Interpretation

Table 1: Demographic Profile of Respondents

| Category | Male (per cent) | Female (per cent) | No of Respondent | Percentage |
|------------------|-----------------|-------------------|------------------|------------|
| 18–30 years | 22 | 18 | 40 | 40 |
| 31–45 years | 18 | 12 | 30 | 30 |
| 46 years & above | 20 | 10 | 30 | 30 |
| Total | 60 | 40 | 100 | 100 |

Sources: Primary data

40 percent of the respondents are young (18-30 years) followed by 31-40 years (30 per cent) and 46 years and above (30 percent). The respondents in the study area are hailing male Category (60 percent) and 40 percent of them are belongs to female category. Respondents are reflecting higher local livelihood engagement in agriculture and fishing.

It concludes that the majority of respondents are coming under the age group of are young (18-30 years). It means most of the study area respondents are very young and they are coming to male category

Male participation (60percent) is higher than female participation (40percent).

Table 2: Education Level of Respondents

| Education Level | No. of Respondent | Percentage of Respondents |
|---------------------------|-------------------|---------------------------|
| Illiterate | 15 | 15 |
| Primary | 25 | 25 |
| Secondary | 30 | 30 |
| Graduate & higher studies | 30 | 30 |
| Total | 100 | 100 |

Sources: Primary Data

Out of the total respondents selected for the study,30percent of them are studied and completed their graduate and secondary school levels followed by primary (25 percent) and only 15 percent of them are illiterate in the study area.

The present study reveals that a greater number of the respondents of educated in the study area also they aware of kudankulam power plant issues and advantages.

Table 3: Awareness about Kudankulam Power Plant

| Awareness Level | No of Respondent | Percentage of Respondents |
|-----------------|------------------|---------------------------|
| Fully Aware | 45 | 45 |
| Partially Aware | 35 | 35 |
| Not Aware | 20 | 20 |
| Total | 100 | 100 |

Sources: Primary Data

The present study reflects the level of awareness about Kudankulam Power Plant among the chettikulam people. 45per cent of respondents have full awareness about the Kudankulam Power Plant in the means of the well known the power plant merits and demerits followed by 35 percent of them are getting partially aware and remaining 25 percent of them have not aware about Kudankulam Power Plant.

Finally, the study area public are getting the aware ness about power plant because of the majority of the study population of coming under very young and completed their graduate and secondary level of education.

Table 4: Perceived Benefits of the Power Plant

| Benefit Perceived | No. of Respondent | Percentage of Respondents |
|-----------------------------|-------------------|---------------------------|
| Employment opportunities | 40 | 40 |
| Improved electricity supply | 35 | 35 |
| Regional development | 15 | 15 |
| No major benefit | 10 | 10 |
| Total | 100 | 100 |

Sources: Primary Data

A greater number (40 percent) of respondents highlights the benefit of the power plant related to job creation and Employment opportunities followed by improved electricity availability and support as key positives. People surveyed about the benefits of a power plant highlighted two main advantages i.e. the creates new employment opportunities to the study area people. Another substantial group, 35per cent, think it improves the electricity supply, 15per cent of them see it contributing to regional development. And only 10per cent them reported that do not perceive any major benefits from the power plant.

Overall, the greater number of respondents are emphasizing power plant would help job creation and better availability of electricity.

Table 5: Perceived Risks of the Power Plant

| Risk Perceived | No of Respondent | Percentage of Respondents |
|---|------------------|---------------------------|
| Radiation/Health hazards | 50 | 50 |
| Environmental impact (fishing, agriculture) | 25 | 25 |
| Safety concerns (accidents) | 15 | 15 |
| No major risk | 10 | 10 |
| Total | 100 | 100 |

Sources: Primary data

Out of the total respondents interviewed for the study about risk perceived from the power plant to the settlement areas. Fear of radiation and health risks dominate, reflecting influence of past nuclear disasters in public perception.

50per cent of respondents perceive power plant as a risk in the study area because of that power plant radiation create health hazard and new skin diseases to the living population followed by 25per cent of respondents perceive Environmental impact (fishing and agriculture). This will create a great impact of their livelihood conditions,15per cent of respondents perceive Safety concerns (accidents) risk and only 10per cent of respondents are stated that there is no any major risk due to power plant in the study area.

It concludes that half of the study respondent is reported as power plant gets greater risk to the living and cattle population.

Table 6: Opinion on Government Handling & Transparency

| Opinion | No of Respondent | Percentage of Respondents |
|----------------------|------------------|---------------------------|
| Highly Transparent | 10 | 10 |
| Somewhat Transparent | 30 | 30 |
| Not Transparent | 40 | 40 |
| No Opinion | 20 | 20 |
| Total | 100 | 100 |

Sources: Primary data

40 percent of the respondent giving their opinion about government handling transparency related to power plant, they

feel government lacks transparency, creating mistrust followed by 30per cent of respondents feel the government is somewhat transparent, no opinion (20 percent) and 10per cent of respondents feel the government is highly transparent in the matter of kudankulam power plant information's.

The present study reveals that a greater number of respondents reported as there is no transparency from the government.

Table 7: Level of Support for the Power Plant

| Support Level | No of Respondent | Percentage of Respondents |
|-------------------|------------------|---------------------------|
| Strongly Support | 20 | 20 |
| Moderate Support | 30 | 30 |
| Oppose | 35 | 35 |
| Neutral/Undecided | 15 | 15 |
| Total | 100 | 100 |

Sources: Primary data

The selected respondents are giving the level of support for the power plant structure in the kudankulam area. 35per cent of them are stated that the support level for the power plant is negative because that respondents are realized the real practical problems due to the power plant followed by 30 percent of them giving their support in the moderate level, 20 percent of them are gave their in strong level because the power plant create employment opportunities and they believe improving their economic conditions and only 15 percent of them are fully undecided giving their support level because they have a little confusion and may be aware of the disadvantage and health issues of the power plant to the living population.

Out of the respondents surveyed regarding their level of support for the power plant a greater number of respondents are providing support is negative followed by moderate level.

Table 8: Suggestions from Respondents

| Suggestion Given | No of Respondent | Percentage of Respondents |
|--|------------------|---------------------------|
| Increase safety measures | 30 | 30 |
| Provide health facilities & monitoring | 25 | 25 |
| More employment for locals | 20 | 20 |
| Awareness campaigns | 15 | 15 |
| No suggestion / indifferent | 10 | 10 |
| Total | 100 | 100 |

Sources: Primary data

Out of the total respondents for the study, the study respondents suggest some of the improving measures for the power plant for the protection of population in the study area.

30 percent of them are stated that some valuable suggest increase safety measures that is greater help for the healthy safety, healthcare, and livelihood benefits as conditions for acceptance. population of the study area followed by Provide health facilities & monitoring (25percent), More employment for locals(20percent), Awareness campaigns(15percent), and only 10 percent of them are having no suggestions and no idea and they eyeblinks in different related to the power plant.

The present study finds out the greater number of respondents are giving valuable suggestions for improving their living conditions and wealth and healthy way of life.

Findings of the Study on Public Opinion about Kudankulam Nuclear Power Plant (KKNPP)

- The present study concludes that the majority of respondents are coming under the age group of are young (18-30 years).it means most of the study area respondents are very young and they are coming to male category. Male participation (60percent) is higher than female participation (40percent).
- The present study reveals that a greater number of the respondents of educated in the study area also they aware of kudankulam power plant issues and advantages

- The present study finds out; public are got the awareness about power plant because of the majority of the study population of coming under very young and completed their graduate and secondary level of education.
- The study reflects that overall; the greater number of respondents are emphasizing power plant would help job creation and better availability of electricity
- It concludes that half of the study respondents reported as power plant gets greater risk to the living and cattle population
- The present study reveals that a greater number of respondents reported as there is no transparency from the government
- Out of the respondents surveyed regarding their level of support for the power plant a greater number of respondents are providing support is negative followed by moderate level.
- The present study finds out the greater number of respondents are giving valuable suggestions for improving their living conditions and wealth and healthy way of life.

4. SUGGESTIONS

1. Strengthen Safety & Transparency

- Establish regular safety audits and share reports with the public.
- Set up an independent monitoring committee including local representatives, doctors, and environmental experts.
- Conduct mock drills to prepare people for emergencies, which will reduce fear.

2. Health & Environmental Protection

- Provide free medical check-ups for residents, particularly in villages near the plant.
- Install radiation monitoring units in public places with real-time displays so people feel reassured.
- Ensure safe disposal of nuclear waste and take measures to protect fishing and agriculture.

3. Employment & Local Benefits

- Give job priority to Chettikulam residents, especially educated youth.
- Provide skill training programs to make locals eligible for plant-related technical jobs.
- Improve local infrastructure (roads, schools, hospitals) as part of corporate social responsibility (CSR).

4. Awareness & Education

- Conduct awareness campaigns to educate people about nuclear energy, its risks, and its safety systems in simple language.
- Arrange school and college visits to the plant to promote scientific understanding among youth.
- Use community meetings, pamphlets, and local media to counter misinformation

5. CONCLUSION

The study on the public opinion of the people of Chettikulam, Tirunelveli District, regarding the Kudankulam Nuclear Power Plant reveals a mixed perception. While the respondents recognize the **potential benefits** of the project—such as employment opportunities, improved electricity supply, and regional development—there exists a strong sense of fear and mistrust related to radiation risks, environmental hazards, and lack of government transparency.

The data shows that opposition though a significant proportion of respondents offer conditional or moderate support, indicating that public acceptance is possible if proper measures are taken. The findings highlight that health concerns, safety assurance, and livelihood opportunities are the most important factors shaping local attitudes.

It is clear that the trust deficit between the community and authorities plays a crucial role in resistance. Therefore, greater transparency, safety demonstrations, health monitoring, and inclusive development programs are essential for building confidence among the people.

In conclusion, the people of Chettikulam are not entirely against nuclear energy but demand safety, transparency, and tangible local benefits as prerequisites for long-term acceptance of the Kudankulam Power Plant. Strengthening community engagement and addressing their concerns can transform public opinion from skepticism to cooperation, ensuring both regional development and social harmony.

Research Questionnaire

1. Name (Optional):
2. Age Group:
3. Gender:

4. Education Level:
5. Occupation:
6. Are you aware of the Kudankulam Nuclear Power Plant
7. How did you come to know about the power plant?
8. In your opinion, what are the benefits of the Kudankulam Plant? (Tick all that apply)
9. What risks/concerns do you associate with the Kudankulam Plant?
10. Do you feel safe living near the plant?
11. Do you think the government is transparent in providing information about the plant?
12. Do you trust the safety measures taken at the plant?

6. REFERENCES

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