



A STUDY ON PROBLEM AND CHALLENGES OF WIND FARM LAND OWNERS WITH SPECIAL REFERENCE TO UDUMALPET TALUK

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Abstract:

Wind Energy, like solar is a free energy resource. Wind speeds may vary within minutes and affect the power generation and in cases of high speeds may result in overloading of generator. Setting up of these turbines needs little research before being established. Be it a small wind turbine on a house, a commercial wind farm or any offshore installation, all of them, at first, need the Wind Resource to be determined in the area of proposed site. The Wind Resource data is an estimation of average and peak wind speeds at a location based on various meteorological. It is also necessary to survey the impact of putting up wind turbines on the community and wildlife in the locality. If sufficient wind resources are found, the developer will secure land leases from property owners, obtain the necessary permits and financing; purchase and install wind turbines.

Key Words: Wind Energy, Wind Resource, Area & Wind Speed

Introduction:

Winds are caused by the uneven heating of the atmosphere by the sun, the irregularities of the earth's surface, and rotation of the earth. The earth's surface is made of different types of land and water. These surfaces absorb the sun's heat at different rates, giving rise to the differences in temperature and subsequently to winds. During the day, the air above the land heats up more quickly than the air over water. The warm air over the land expands and rises, and the heavier, cooler air rushes in to take its place, creating winds. At night, the winds are reversed because the air cools more rapidly over land than over water. In the same way, the large atmospheric winds that circle the earth are created because the land near the earth's equator is heated more by the sun than the land near the North and South Poles. Humans use this wind flow for many purposes sailing boats, pumping water, grinding mills and also generating electricity. Wind turbines convert the kinetic energy of the moving wind into electricity. The proliferation of wind energy as a viable alternative to fossil based fuels used in the production of electricity is well documented. While media reports on the influx of wind power farms often shed a positive light on the use of wind for generating electricity, few reports have squarely addressed the challenges faced by states, municipalities, and investors in implementing such projects. Even fewer reports have recognized the difficulties Indian tribes face when attempting to develop wind power facilitates in Indian country.

Land Owners:

This Introduction to Landowner Wind Energy Associations provides an overview to this model of landowner participation. A landowner wind energy association bridges the gap between full ownership participation and simply leasing their land. This model allows landowners to come together and combine their resources, which provides greater negotiating power with the developer. The association model can also be used to provide financial benefits to all landowners in the association, not just those who host the turbines Landowners have an opportunity to earn additional income for each

turbine they have on their land. Wind farms provide landowners with a regular income, for no additional labor or expense, usually for a period of 25 years.

Wind Prospect would like to hear from farmers, community groups, councils and major corporations that would like to earn additional income through generating clean sustainable energy on their land. As work on the land has become increasingly difficult over recent years, many farmers are looking to diversify. Little room is taken up by the turbine bases, so little impact is made on usable land. A landowner wind energy association, or LWEA, consists of a group of landowners who have decided to work together to have more control over the wind leasing process than they would have individually. The members of an LWEA work together for compensation that reflects the true value of their wind and land resource. The LWEA model is a way to address some concerns with wind development as well as provide landowners with some control in the process. Benefits of LWEA membership include Diminishing the power of developers to divide landowners by offering different terms to neighbors preventing unnecessary loss of property rights limiting the presence of speculators who convince landowners to sign agreements for a proposed wind project they never intend to build.

Statement of the Problem:

The wind farm center would like to become energy self-sufficient and remove itself from the electrical grid, except for backup purposes. The center is looking for a solution that is environmentally friendly, reliable, economically feasible and cost effective. A plan that meets these criteria should provide a number of energy sources, necessary electric designs, economic analysis, and a cost analysis. Wind farm land owner move to country areas because of the relatively undeveloped feel of the place. Others have lived in an area for a long time and have developed a feeling of attachment to the place as it is and understandably might not think it will be improved by a row of wind turbines on nearby hills.

Some wind farm developers have been less than honest when they have told people, for example, that they will not hear the turbines. Some developers make little effort in keeping the local people informed about the development. Some wind farm developers place confidentiality clauses in contracts with the turbine-hosting landowners that limit the landowner's freedom of speech in matters relating to the wind farm. This causes mistrust and resentment and places the whole industry in a bad light. Secrecy should be avoided, and limiting freedom of speech may well be unethical, certainly if the organization doing the limiting does not freely admit that it is limiting the freedom of speech of the landholders.

The massive subsidy provided to Wind Power is a wasteful use of our tax dollars. Efficiency and Conservation programs should be the priority if significant reductions in fossil fuel use are to be achieved. Industrial wind factories are destructive to communities and local environments. Fragile ecosystems are destroyed. Birds and bats are killed. Animal habitats are disrupted and wildlife is driven from the area. Noise and vibrations cause human health problems, including sleep problems, headaches and nervous disorders. Home values and real estate prices are reduced, with some properties becoming impossible to sell.

Objectives of the Study:

The specific objectives of the study are:

- To identify the problems faced by the wind farm land owners.
- To know the information from wind farm landowners in Udumalpet Taluk.
- To study the challenges faced by Wind farm landowners in Udumalpet Taluk.
- To offer suggestion for the problem faced by wind farm land owners.

Method of Data Collection:

The data for this study are of two types: -

- Primary data
- Secondary data

Primary Data:

Primary data is the data is collected from the respondent for the first time, it is original in nature. For the purpose of collection of primary data, a well structured questionnaire was framed and filled by the respondents. The questionnaire comprises of close ended as well as open ended questions. In close ended questions, checklist questions and multiple choice questions are used.

Secondary Data:

Secondary data are collected from books, magazines, web sites etc, and both open ended & close-ended questions are incorporated in the questionnaire for the collection of data.

Limitation of the Study:

- The attitude of the worker changes from time to time. Hence the result of the project may be applicable only at present.
- The samples size is limited to 200 respondents only
- Time is one of the major constraints.
- At most care taken by the researches to choose the correct information from the respondents.
- The study is based upon primary data, so any wrong information given by the respondents may mislead the findings.

Analysis and Interpretations:

This chapter deals with the analysis and interpretation of the study. An attempt has been made in this chapter to explain the details relating to Socio-economic profile of the respondents. The data has been collected from 200 respondents who are residents of Udumalpet Taluk, through a structured questionnaire.

Weighted Average Rank Method:

The weighted average formula is used to calculate the average value of a particular set of numbers with different levels of relevance. The relevance of each number is called its weight. The weights should be represented as a percentage of the total relevancy. Therefore, all weights should be equal to 100%, or 1.

Table 1.1

Rank	Weight	Profitable		Self Employment		Property Values		Development of area		Bank Loan	
		No of Respondents	Score	No of Respondents	Score	No of Respondents	Score	No of Respondents	Score	No of Respondents	Score
I	5	91	455	34	170	26	130	24	120	35	175
II	4	18	72	74	296	36	144	50	200	32	128
III	3	46	138	5	15	41	123	51	153	48	144
IV	2	28	56	72	144	23	46	39	78	31	62
V	1	17	17	15	15	74	74	36	36	54	54
Total		738		640		517		587		563	
Average		147.6		128		103.4		117.4		112.6	
RANK		I		II		V		III		IV	

Activities

(Source: Primary Data)

In this method the interesting to reading pages selected for the following factor causing activities of wind farm. The Classifications are Profitable, Self Employment, Property Values, development of area and Bank Loan.

From the above table out of 200 respondents rankings the 1st rank is given to profitable of wind farm landowners, 2nd rank is given to self employment, 3rd rank is given to development of area, 4th rank is given to bank loan and 5th rank is given to Property values.

Conclusion:

Most of the respondents are male. Maximum respondents annual income is less than Rs.10, 000, Majority of the respondents are own below 5 acres in this area. The majority of the respondents have installed three wind mills. The chapter identifies that of the selected twenty variables, twelve variables are found to be associated with problems faced by wind land owners as per chi-square analysis. Based on the results of chi-square test that twelve variables are tested with Problems faced by wind land Owners and strength of relationship between said variables and Problems faced by wind land Owners.

Suggestions:

- Finally, we must consider where we are going to get our energy if we do not build sustainable energy infrastructure such as wind farms. Very few people will be willing to get by with substantially less energy and using fossil fuels or nuclear power comes with far more problems than does wind power. The burning of coal, in particular, has caused, and continues to cause, great environmental and health problems. We must do all we can to slow climate change.
- A surge in health complaints linked to wind farms could owe more to increased discussion of health risk than the low-level sound generated by the actual turbines, according to a new study.
- This occurs because such information can create health concerns and related symptom expectations, priming people to notice and negatively interpret common physical sensations and symptoms.
- Postings on anti-wind sites such as Stop These Things which show a callous disregard for the truth;
- Statements from groups set up to oppose specific wind farms such as Heartland Farmers, who are dishonest and do not give evidence in support of their claims.

References:

1. Kothari C R, Research Methodology, New Delhi, Wishwa Prakashan, 1985.
2. Chand S Research Methodology Rajendra Ravindra Printers Pvt Ltd.
3. Marketing Management – S A Sherlekar Himalaya Publishing House, 2005.
4. R S N Pillai and Bagavathi (2012), “Modern Marketing principles & practice”, 4th Edition.
5. Dr. Vershney R L, Dr. Gupta S L, Marketing management: [An Indian perspective], published by Sultan Chand & Sons, New Delhi, 2004.
6. Dr. Shanmugapriya S & Veerakumar. K, “Determinants of Investment decision on Online Commodities” Acme International Journal of Multidisciplinary Research, Vol-II, Issue-IX, September 2014.
7. Dr. S. Shanmugapriya & K. Veerakumar, “A Study on Working Parents and their Parental Investment in Child with special reference to Coimbatore”, Global Academic Research Journal, Vol.2, Issue X, Oct 2014.