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Factors Affecting the Awareness of Wind Power Projects - A Case Study in Vinh Chau Town, Soc Trang Province, Vietnam

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ABSTRACT

The increasing global challenge of fossil energy depletion is driving a crucial shift towards clean, renewable sources like wind energy, with Vietnam, particularly Soc Trang province, recognized as a strategic region for its development due to favorable wind conditions. However, this rapid expansion of wind power projects has raised concerns about their significant impacts on local habitat, community health, and socio-economic activities, necessitating comprehensive assessment to inform sustainable development policies. This study was conducted in Vinh Chau town, Soc Trang province, focusing specifically on 60 randomly selected households whose land was occupied by the Hoa Dong II Wind Power Plant. Data was collected through face-to-face household interviews utilizing a two-part questionnaire, incorporating socio-demographic inquiries and a five-point Likert scale to quantify perceptions of impacts. Socio-demographic analysis revealed that higher education and income levels were significantly correlated with decreased negative awareness regarding wind power impacts, with education being the most influential factor, indicating a greater acceptance of renewable energy benefits among more educated individuals. Perceptions of environmental impacts demonstrated a positive correlation with landscape changes and a significant negative correlation with noise from wind turbines, suggesting that concerns about visual impact and noise prominently shape community awareness, while impacts on aquatic resources were also noted. Regarding production activities, agricultural production was perceived to have little negative impact, but both aquaculture cultivation and natural fisheries showed significant negative correlations with community awareness, indicating concerns about the reduction of aquatic resources and impacts on cultivation. The findings highlight systematic and coherent community perceptions consistent with broader renewable energy studies, underscoring the critical need to integrate social-environmental factors into wind power project planning to ensure sustainable development and enhance local community consensus.

Keywords: community awareness, socio-environmental impacts, sustainable development, Soc Trang - Vietnam, wind power

BACKGROUND

Currently, the depletion of fossil energy sources is posing a major challenge to socio-economic development, promoting the need to shift to clean, renewable and environmentally friendly energy sources. Among them, wind energy is becoming an important development trend globally (Ministry of Industry and Trade, 2021). According to the World Bank (2001), Vietnam - with its tropical monsoon climate - has about 8.6% of its territory assessed as suitable for the construction of large-scale wind power stations. Soc Trang province, with its coastal location and favorable wind conditions, has become a strategic locality for wind power development in the Vietnamese

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Mekong Delta (MD). As of year 2022, Soc Trang is the leading province in terms of the number and scale of implemented wind power projects (GIZ, 2022).

The rapid increase in wind power projects has also dramatically changed the natural landscape and living space, while causing significant impacts on habitat, economic activities, and the local ecological environment (General Department of Environment, 2020). In that context, this study was conducted to comprehensively assess the impacts of wind power projects on the local habitat, human health, and socio-economic sectors. This study are expected to provide scientific and practical arguments for policy makers, state management agencies, and businesses operating in the energy sector, thereby contributing to promoting the sustainable development of wind power in Soc Trang province in particular and Vietnam in general.

METHODOLOGY

Study site

Vinh Chau town is a district-level administrative unit under Soc Trang province, located in the lower reaches of the Bassac river, bordering the East Sea and belonging to the Southeastern coastal area of the MD (Figure 1). With a coastline of about 54 km, this locality has favorable natural conditions for the development of marine economic sectors and wind energy exploitation (Soc Trang People's Committee, 2025). According to the 2024 Soc Trang Statistical Yearbook, Vinh Chau has an area of 473.39 km² and a population of nearly 185,000 people, of which the Khmer people account for over 50%, creating a diverse cultural character of the area (Soc Trang Statistical Office, 2025). The town consists of 10 commune-level administrative units, including 4 inner-city wards and 6 coastal communes. Residents here mainly live on agriculture production (i.e. red onion, white radishes, etc.), and aquaculture cultavation (particular on white leg shrimp).

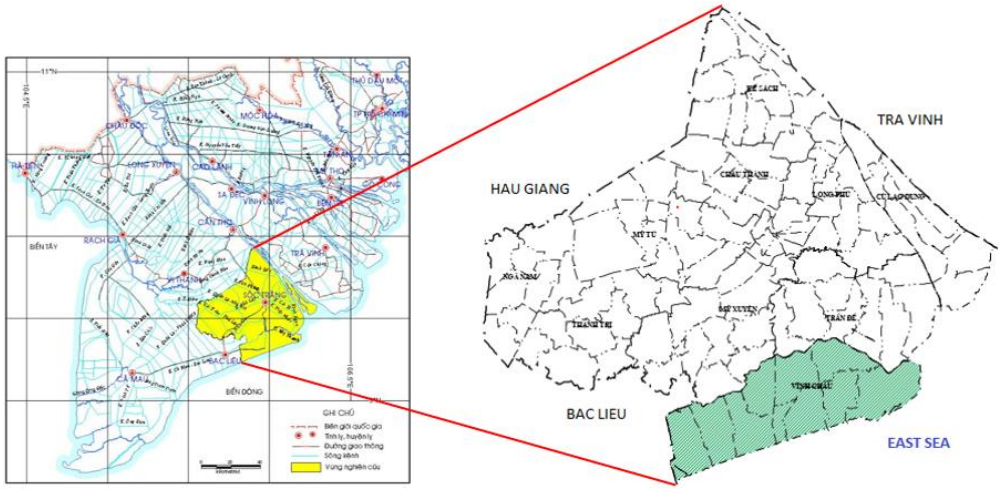

Figure 1. Study area in Soc Trang province, link to the MD map

Vinh Chau town has been approved by the Prime Minister to plan 18 wind power projects with a total capacity of 1,435 MW, of which 16 projects have been granted investment policies by the Provincial People's Committee (Ministry of Industry and Trade, 2014). Wind power projects are concentrated along the coastal alluvial land of 7/10 communes and wards, stretching from Lai Hoa, Vinh Hiep, Vinh Tan, Lac Hoa, Hoa Dong to Vinh Hai commune (Department of Industry and Trade, 2024). By early 2025, 7 wind power plants had been completed and put into commercial operation in Vinh Chau town (Table 1).

Table 1. Information of 7 operated wind power plants in Vinh Chau town

No.	Project	Power capacity (MW)	Investment cost (billion VND)	Note
1	Hoa Dong Wind Power Plant	30	1.406	On land

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2	Hoa Dong II Wind Power Plant	72	3.168	On land
3	Lac Hoa Wind Power Plant (phase 1)	30	1.120	On land
4	Lac Hoa Wind Power Plant	30	1.587	On land
5	Lac Hoa II Wind Power Plant	130	5.657	On land
6	Quoc Vinh - Soc Trang Wind Power Plant	30	1.420	On land
7	Number 7 Wind Power Plant	30	1.456	At sea

(Source: Compiled from various sources)

Households interview

The structure of the questionnaire is divided into two main parts: (i) In the first part, the survey questions are linked to socio-demographic attributes such as gender, age, education level and income of the respondents (qualitative factors); (ii) In the second part, a five-point Likert scale (Likert, 1932) is used in the questionnaire to answer quantitative factors on the impacts of wind power projects. The questions are divided into two groups of independent variables and dependent variables. The independent variables include: (i) group of variables of perception of local habitat (LH), (ii) group of variables of perception of community health (CH), and (iii) group of variables of perception of socio-economic activities (SE). All questions are proposed with five-scale Likert answers: (1) Strongly disagree, (2) Disagree, (3) Neutral, (4) Agree, (5) Completely agree (Table 2).

Table 2. Measurement variables in the study

Code	Measurement variables	Assessment scale				
Independent variables						
Awareness of local habitat						
LH1	Wild birds are affected and reduce	1	2	3	4	5
LH2	Aquatic resources are affected and reduced	1	2	3	4	5
LH3	Impact on infrastructure (electricity, water, roads, etc.)	1	2	3	4	5
LH4	Impact on surrounding landscape	1	2	3	4	5
Awareness of community health						
CH1	Wind turbine activities cause noise	1	2	3	4	5
CH2	Wind power plant activities cause electromagnetic	1	2	3	4	5
CH3	Wind power plant operations affect children's health	1	2	3	4	5
Awareness of socio-economic activities						
SE1	Impact on agriculture production	1	2	3	4	5
SE2	Impact on aquaculture cultivation	1	2	3	4	5

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SE3	Impact on fisheries	1	2	3	4	5
SE4	Impact on land values	1	2	3	4	5
SE5	Family members go to work/live elsewhere	1	2	3	4	5
Dependent variables						
CA	Community awareness on wind power projects	1	2	3	4	5

The households' interview process is conducted in two steps:

- Pilot interviews: conducted on 10 households living around wind power projects in Vinh Chau town. The results of the pilot interviews were tested using Cronbach's Alpha to assess the reliability of the interview questions. Then, the questionnaire is updated and ready for formal interviews.

- Formal interviews: randomly selected 60 households in Hoa Dong and Lac Hoa communes (Figure 2) whose land was occupied for the construction of Hoa Dong II Wind Power Plant. Interviews are typically carried out face-to-face to household member aged 16 or above at respondents' homes. The sample size was determined according to the formula suggested by Yamane (1967), with a total number of affected households of 141 and an allowable error of ±10%.

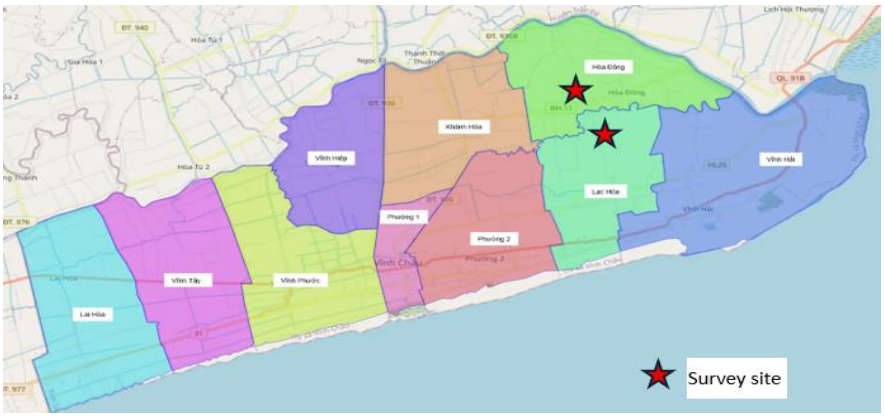

Figure 2. Survey sites in Vinh Chau town

Data analysis

Microsoft Excel 2021 is used to enter and store data recorded from the questionnaire and presented descriptive statistics of the respondents.

The IBM SPSS Statistics 20 is used to statistics data on measurement variables that affect to local community from wind power project. The used tools including the Cronbach's Alpha reliability analysis to test the reality of the questionnaire at pilot interview; the Pearson Product Moment Correlation test to examine the relationship between socio-demographic factors and dependent variable, and to obtain the correlation between dependent and qualitative variables; the Post Hoc multiple comparison test to identify the different from each factor within a socio-demographic variable.

RESULTS

Effect of socio-demographics characteristics

Socio-demographics characteristics

Of the 60 interviewed households, all respondents had a secondary education level or higher, of which 7% had a university degree. This shows that the great ability to receive and respond to the survey content of the research

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group (Figure 3). The average income of households in this study area was 4.02 million VND/person/month, lower than the national average income per capita of 4.51 million VND/person/month for household in the rural areas as recorded by the General Statistics Office (2025). This survey did not record any poor households which are households with average income below 1.5 million VND/person/month according to the Government's norms (Official Gazette, 2021) in the study area. The main income source of households originates from aquaculture cultivation with 58.6%, from agricultural production 30% and from fishing 11.4%.

Out of 60 respondents, there were unequal gender representations of about 65% males and 35% females. There are 77.1% respondents have lived in the locality for over 10 years, reflecting a high level of actual understanding of the socio-economic conditions and living environment in the local region, causal to improving the reliability and representativeness of the collected data. The results on number of people in a household show that most families live in a modern style of '2-generation nuclear family' with a couple and two children, accounting for 70%. There are 30% of households with more than 4 people, and there may be grandchildren in the traditional family style of "3 or 4-generation".

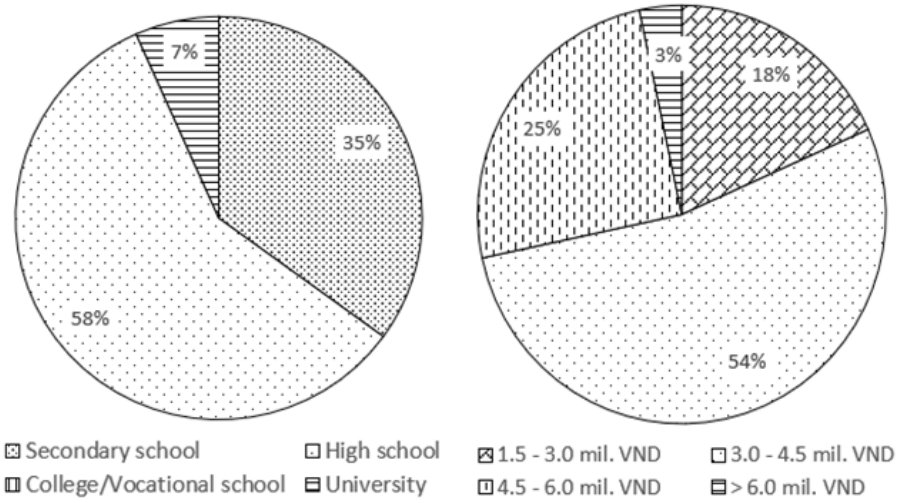

Figure 3. Education (left) and income (right) status of repondents

Correlation between socio-demographics characteristics and awareness on wind power project

The Pearson correlation analysis results showed that there were some notable relationships between socio-demographic factors and the CA variable - representing people's views on the impact of wind power projects on the local community (Table 3). Within the demographic factors, the relationships between variables of education and gender (r = 0.164), of education and income (r = 0.206), of gender and income (r = 0.014) showed weak correlations and did not reach statistical significance.

Table 3. Correlations between demographic factors and dependent variables

	Education	**Gender**	**Income**	**CA**
Education	1	0,164	0,206	-0,328
Gender	0,164	1	0,014	-0,034
Income	0,265	0,014	1	-0,342
CA	-0,328	-0,034	-0,342	1

The education factor had a negative correlation with the CA variable (r = -0.328) indicating that as the education level increased, the level of community awareness on wind power projects tended to decrease. This relationship is statistically significant at the 0.1 level. This result is similar to Ayodele et al. (2021), Zhang & Wu (2012), and

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Wolsink (2007) who found that people with higher education levels tend to support renewable power projects because they are aware of the long-term environmental and clean energy benefits of these kinds of projects. On the contrary, earlier study of Yoo & Kwak (2009) shows not statistically significance between education and the willingness to pay for green electricity in Korea. Accordingly, individuals with good analytical skills tend to assess impacts more cautiously, and demand transparency in operating processes, benefit sharing, and ensuring social equity.

Specifically, the gender factor has a negative correlation with the CA variable (r = -0.034) and has not been significant difference. While the income factor also has a negative correlation with the CA variable (r = -0.342), but has been marked as statistically significant. As noted by Aldy et al. (2012) mentioned that the gender was not statistically significant differences in the context of willingness to pay for clean energy in the United State. In additional, Jayaraman et al. (2017), the group of financial variables tends to be negatively correlated with the level of acceptance of new technologies such as solar energy, especially among the low-middle income group in Malaysia.

In this study, education had the most significant influence on the community awareness on wind power projects, the Post Hoc multiple comparison was tested to identify exactly which education groups differ from each other. The result of Post Hoc testing (Table 4) shows that only one p-value is equal 0.09 and smaller than 0.1. It means that there is significantly difference within two respondent's education groups of high school and university.

Table 4. Post Hoc testing result of households' education groups

(I) Education	(J) Education	Mean Difference (I-J)	Std. Error	Sig.	90% Confidence Interval	
					Lower Bound	Upper Bound
Secondary school	High school	-.229	.237	.340	-.63	.17
	University	1.000*	.469	.037	.22	1.78
High school	Secondary school	.229	.237	.340	-.17	.63
	University	1.229*	.454	.009	.47	1.99
University	Secondary school	-1.000*	.469	.037	-1.78	-.22
	High school	-1.229*	.454	.009	-1.99	-.47

Note: * The mean difference is significant at the 0.1 level

Respondents' perceptions of observed variables

Local habitat awareness

The results of Pearson correlation analysis between the living environment LH variables and the CA variable are presented in Table 5. Accordingly, the CA variable has a moderate positive correlation with the LH4 variable - landscape environment (r = 0.379), showing that when the LH4 factor increases, the level of impact of the project on the community also tends to increase. This result shows that the LH4 variable plays an important role and significantly affects people's awareness of the impacts of wind power projects.

In contrast, the CA variable has a weak negative correlation with variables LH2 - aquatic resources (r = -0.314) and LH3 - infrastructure (r = -0.268), indicating that these variables receive certain attention in the awareness of the community. While, the correlation between variables CA and LH1 (r = 0.026) is very weak, almost statistically insignificant; in other words, the community has no specific awareness or is not interested in the impact of the project on the winged animal group.

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Table 5. Correlation between local habitat variables and perceptions of wind power impacts

	LH1	LH2	LH3	LH4	CA
LH1	1	0,558	0,028	-0,275	0,026
LH2	0,558	1	0,071	-0,500	-0,314
LH3	0,028	0,071	1	0,197	-0,268
LH4	-0,275	-0,500	0,197	1	0,379
CA	0,026	-0,314	0,268	0,379	1

This result is similar to the study by Bidwell (2013) which showed that public awareness of the local habitat plays a role in regulating behavioral responses to wind energy projects. People tend to show more positive attitudes when they perceive environmental factors to be transparently disclosed; conversely, if awareness of environmental risks and pollution increases, the level of support from local community will decrease. Warning about the impact of wind power project in mountain region of Quang Tri province, Hieu (2021) announced during the construction process, rocks, and soil from the road above the village were pushed down and buried many rice fields of the residents. Wind power development not only damages the land and gardens, greatly affecting people's lives; but also involves environmental issues, land acquisition, and land use conversion, which are related to the long-term lives of the people. According to the report on the impact of wind power projects to the environment, natural resources, and socio-economy of Quang Tri province (University of Science, 2023), the main negative impacts of wind power projects occur during the project preparation and construction phases. While the operation phase of wind power projects has many positive impacts, such as: reducing CO_2 emissions by more than 100 times compared to conventional energy sources; changing livelihoods in a beneficial direction, increasing revenue and creating jobs, developing tourism and accompanying services; contributing to improving local infrastructure, especially the transportation network.

As proposed by Agut and Khanh (2018, cited from IFC), the environmental impact of a wind power project in Vietnam can be assessed through the landscape aspect and visual impacts such as biodiversity, noise, flicker, water quality. This study has assessed the landscape aspect, biodiversity, and noise (in 3.2.2 item). So, visual impacts of wind power project such as flicker, water quality need to be considered in future studies.

Community health awareness

The results of Pearson correlation analysis between the CH variables and respondent's assessment on the impact of wind power projects to the community (CA) showed only one statistically significant relationship (Table 6). Specifically, the CH1 variable had a negative correlation with the CA variable (r = -0.305), with statistical significance at the 0.1 level. This shows that people with a high level of agreement with the CH1 variable assessed that wind power projects cause more noise and have a more negative impact on the community. In contrast, variables CH2 and CH3 did not have a significant correlation with CA (r = -0.210 and -0.013, respectively), indicating that local people perceived the wind power project to have no significant impact on the CH2 - magnetic field, and on the CH3 - health of children in the area.

Table 6. Correlations between community health variables and perceptions of wind power impacts

	CH1	CH2	CH3	CA
CH1	1	0,458	0,201	-0,305
CH2	0,458	1	0,369	-0,210

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CH3	0,201	0,369	1	-0,013
CA	-0,305	-0,210	-0,013	1

In addition, considering the correlation within the same group of community health perception variables, the results showed that CH1 and CH2 variables had a strong positive correlation (r = 0.458), and CH2 and CH3 variables had a significant positive correlation (r = 0.369). This reflects the close connection and consistency in people's perceptions when responding to interview information about community health variables.

Regarding the impact of wind power on people's health, there have been some reflections through the social commentary channel including wind power project in the coastal areas of the MD such as Bac Lieu, Soc Trang, Tra Vinh, Ca Mau (Hiep, 2024), in the Central Highland area such as Quang Tri (Truong, 2022). As a results, at the 30th session of the National Assembly Standing Committee, Head of the Petition Committee request the Government and the Prime Minister to assign relevant ministries and branches to urgently study the impact of wind turbine blades and wind turbine noise to amend and supplement regulations on noise and safe distances of wind turbine towers to minimize impacts on people's lives and health (Hiep, 2024).

Socio-economic activities awareness

The results of Pearson correlation analysis show that there are some significant relationships between the socio-economic activity variables and the CA variance - impact of the wind power project on the community (Table 7). Specifically, the SE1 variable has a positive correlation with CA (r = 0.446), indicating that people tend to think that the wind power project has little negative impact on agricultural production. However, the SE2 variable - aquaculture cultivation (r = -0.439) and the SE3 variable - natural fishes (r = -0.378) recorded a negative correlation with CA, indicating that people consider the wind power project to reduce natural aquatic resources as well as impact on aquaculture in the area. This result is consistent with the natural behavior of aquatic animals (shrimp, fish, etc.). In nature, aquatic species are somewhat affected by construction works and tend to move away from construction sites. Previous report by Nicholson and Huong (2022) mentioned about biodiversity risks from the wind power project, including negative impact to native fish populations around wind farms within the operation period.

While the group of farmed aquatic species is sensitive to the living space conditions, especially when they are young. Bidwell (2013) pointed out that livelihood factors play a role in regulating behavioral responses to wind power projects. People often show more negative attitudes when they perceive increased livelihood changes, then the level of support for wind power projects will decrease. Similarly, Jayaraman et al. (2017) in Malaysia noted that the group of variables of perceived social benefits is positively correlated with attitudes and behavior of using solar energy.

Table 7. Correlation between socio-economic variables and perceptions of wind power impacts

	SE1	**SE2**	**SE3**	**SE4**	**SE5**	**CA**
SE1	1	-0,477	-0,674	-0,100	0,222	0,446
SE2	-0,477	1	0,535	0,625	-0,191	-0,439
SE3	-0,674	0,535	1	0,419	-0,214	-0,378
SE4	-0,100	0,625	0,419	1	-0,115	-0,224
SE5	0,222	-0,191	-0,214	-0,115	1	0,154
CA	0,446	-0,439	-0,378	-0,224	0,154	1

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The variables affecting land value of SE4 and having family members move elsewhere to work of SE5 do not have a significant correlation with CA, in other words, the wind power project does not affect these two variables. The study site is in a rural area, so land value did not increase after the wind power project, although infrastructure (bridges, roads, etc.) in the area has been improved. People have not moved elsewhere to work, showing the stability of households' livelihoods after the wind power project. This is also confirmed by the research of Devine-Wright (2009), the reaction of local people is not only based on technical or economic factors, but also influenced by community identity and emotional attachment to the place. These factors are often closely related to each other, thereby forming complex reactions such as opposition, environmental concerns or reduced trust in the project.

In addition, there are quite strong internal relationships between the production activity variables. Specifically, the SE1 variable has a strong negative correlation with the SE3 variable ($r = -0.674$), the SE2 variable has a positive correlation with the SE3 and SE4 variables ($r = 0.535$ and 0.625), and the SE3 variable has a positive correlation with the SE4 variable ($r = 0.419$). All of these relationships are statistically significant at the 0.1 level, indicating a strong connection between the variables in the respondents' perception of the impacts of wind power on socio-economic activities. The negative correlation between the SE1 variable and the remaining variables reflects the logic of similarity: the more negative variable SE1 increase, the more trust and acceptance of variables SE2 and SE3 decrease.

CONCLUSIONS

The study was conducted to assess the impacts of a wind power project in Vinh Chau town, Soc Trang province on local habitat, community health, and socio-economic activities. The survey results of 60 households showed that most of them had a general education level, working mainly in aquaculture and agricultural production. Pearson correlation analysis showed significant relationships between perceptions of environmental impacts, health, and production. Specifically, the living habitat variables had a positive correlation between impacts on aerial and aquatic organisms, but a negative correlation with landscape changes. Health variables such as noise and electromagnetic fields are closely linked, especially in the population concerned with children. Regarding production, impacts on crops are negatively correlated with aquaculture and natute fisheries, reflecting the difference in expectations and production reality. The results show that people's perceptions are systematic and coherent, and are consistent with domestic and foreign studies on community responses to renewable energy. The study emphasizes the importance of integrating social-environmental factors into the planning of wind power projects to ensure sustainable development and enhance local community consensus. Future research should expand on these findings by investigating other potential visual impacts such as flicker and the effects on water quality, which were not extensively covered in this assessment.

REFERENCES

1. Aldy, J.E., Kotchen, M.J., & Leiserowitz, A.A. (2012). Willingness to pay and political support for a US national clean energy standard. Nature Climate Change 2(8) 596.
2. Agut, A., & Khanh, N.Q. (2018). Guidelines for conducting environmental and social impact assessments for wind power projects in Vietnam. Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH.
3. Ayodele, T.R., Ogunjuyigbe, A.S.O., Ajayi, O.D., Yusuff, A.A., & Mosetlhe, T.C. (2021). Willingness to pay for green electricity derived from renewable energy sources in Nigeria. Renewable and Sustainable Energy Reviews 148, 111279.
4. Bidwell, D. (2013). The role of values in public beliefs and attitudes towards commercial wind energy. Energy Policy 58, 189-199. https://doi.org/10.1016/j.enpol.2013.03.010
5. Department of Industry and Trade (2024). Report on investment registration activities and implementation status of wind power projects in Soc Trang province. Soc Trang's People Committee.
6. Devine-Wright, P. (2009). Rethinking NIMBYism: The role of place attachment and place identity in explaining place-protective action. Journal of Community & Applied Social Psychology 19(6), 426-441. https://doi.org/10.1002/casp.1004

ISSN No. 2321-2705 | DOI: 10.51244/IJRSI |Volume XII Issue VII July 2025

7. General Department of Environment (2020). National environmental status report 2019: Air environment and renewable energy. Vietnam Natural Resources - Environment and Cartography Publishing House.
8. General Statistics Office (2025). Press release on the results of the 2024 population living standards survey. https://www.nso.gov.vn/tin-tuc-thong-ke/2025/05/thong-cao-bao-chi-ket-qua-khao-sat-muc-song-dan-cu-nam-2024/#:~:text=Thu%20nh%E1%BA%ADp%_20b%C3%ACnh%20_qu%C3%A2n%201,2022%20(6%2C2%25)
9. GIZ - Deutsche Gesellschaft für Internationale Zusammenarbeit (2022). Report on the current status of wind power development in Vietnam. Hanoi.
10. Hiep, L. (2024). Proposal to carefully assess the impacts of wind power is causing public outrage. https://thanhnien.vn/de-nghi-danh-gia-ky-cac-tac-dong-cua-dien-gio-dang-khien-nguoi-dan-buc-xuc-185240222174347805.htm (in Vietnamese)
11. Hieu, T. (2021). Massive wind power construction affects the environment and people's livelihoods. https://vov.vn/kinh-te/o-at-thi-cong-dien-gio-anh-huong-moi-truong-va-sinh-ke-nguoi-dan-879702.vov
12. Jayaraman, K., Paramasivan, L., & Kiumarsi, S. (2017). Reasons for low penetration on the purchase of photovoltaic (PV) panel system among Malaysian landed property owners. Renewable and Sustainable Energy Reviews, 80, 562-571. https://doi.org/10.1016/j.rser.2017.05.213
13. Kastner, I., & Matthies, E. (2016). Investments in renewable energies by German households: A matter of economics, morality or social influences? Energy Research & Social Science 17, 1-9. https://doi.org/10.1016/j.erss.2016.03.006
14. Likert, R. (1932). A technique for the measurement of attitudes. Archives of Psychology 140: 1-55.
15. Ministry of Industry and Trade (2021). National power development plan for the period 2021 - 2030, vision to 2045 (Power Plan VIII).
16. Ministry of Industry and Trade (2014). Decision No. 3909/QD-BCT dated May 6, 2014 approving the Wind Power Development Plan for Soc Trang province until 2020, with a vision to 2030.
17. Nicholson, D., Huong, L.M. (2022). Environmental and social factors to consider for wind power projects in Vietnam - Overview of risks, impact, differences and solutions. https://www.mainstreamrp.com/wp-content/uploads/2023/02/6-ifc_e-s-considerations-for-wind-powe-project-vie.pdf
18. Official Gazette (2021). Decree No. 07/2021/ND-CP dated January 27, 2021 of the Government on Regulations on multidimensional poverty standards for the period 2021 - 2025.
19. Soc Trang Statistical Office (2025). Soc Trang provincial statistical yearbook 2024. Statistical Publishing House.
20. Soc Trang People's Committee (2025). Natural conditions of Soc Trang province. https://soctrang.gov.vn/Default.aspx?sname=ubnd-stg&sid=4&pageid=467&catid=54255&catname=dieu-kien-tu-nhien
21. Sovacool, B.K., Axsen, J., & Sorrell, S. (2018). Promoting novelty, rigor, and style in energy social science: Towards codes of practice for appropriate methods and research design. Energy Research & Social Science 45, 12-42. https://doi.org/10.1016/j.erss.2018.07.007
22. Truong, L. (2022). Need to ensure sustainable livelihoods for people in wind power project areas. https://baoquangtri.vn/can-dam-bao-sinh-ke-ben-vung-cho-nguoi-dan-khu-vuc-du-an-dien-gio-171107.htm
23. University of Science (2023). Report "Investigation and assessment of the impact of wind power projects on the environment, natural resources and socio-economy of Quang Tri province in the period 2021 - 2025 and with a view to 2030". Hue University.
24. Wolsink, M. (2007). Wind power implementation: The nature of public attitudes: Equity and fairness instead of 'backyard motives.' Renewable and Sustainable Energy Reviews 11(6), 1188 - 1207. https://doi.org/10.1016/j.rser.2005.10.005
25. World Bank (2001). Vietnam: Renewable Energy Action Plan. Washington, D.C.
26. Yamane T. (1967). Statistics: An introductory analysis (2nd edition), New York: Harper and Row.
27. Yoo, S.H., & Kwak, S.Y. (2009). Willingness to pay for green electricity in Korea: A contingent valuation study. Energy Policy 37(12) 5408-5416.
28. Zhang, L., & Wu, Y. (2012). Market segmentation and willingness to pay for green electricity among urban residents in China: The case of Jiangsu Province. Energy Policy 51, 514-523.