



ASSESSMENT OF AWARENESS ON THE USE OF RENEWABLE ENERGY IN URBAN DISTRICT OF ZANZIBAR

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Outline

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- **Results and discussion**
- **Conclusion & Recommendation**
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Introduction

- It is important for Zanzibar communities to have a good understanding of RE, so that they can make informed decisions about energy use and support the transition to a sustainable energy future.
- Zanzibar is enriched with enough RE sources (i.e., solar, wind and biomass) necessary for development of the successful energy sector.
- Despite this massive potentials, Zanzibar has achieved little in terms of RE uses compared to other countries in Africa.
- When examining RE uses figures, Zanzibar shows little performance in almost every aspect of RE energy.
- The number of RE users is still small and contributions to the country's energy economy is small too.
- An indication that, the communities in Zanzibar have limited knowledge of RE and their benefits in countries economy and combating climate changes.

Introduction

- Therefore, this study aimed at assessing the understanding on the use of RE technology among people in urban district of Zanzibar.

Significance of the Study

- The will provide information regarding to awareness on the RE uses.
- The findings might also be used to inform the policies makers, curriculum developers and communities at large to promote sustainable energy practices and address environmental challenges and climate change.

Methodology

Population and Sampling

- The population for this study was people living in urban district of Zanzibar.
- The study sample was selected randomly from the list of registered people as per their ZAN ID.
- Since the sampling frame was comprises a large number of people, the study was covered by only 100 people from urban district.

Methodology

Data Collection Procedure

- Data were collected using structured questionnaires on a sample of respondents from urban district selected from their ZAIN ID.
- The respondents were then requested to participate in the study by filling in the questionnaires.

Questionnaires Administration

- Personal interviews was used in order to administer the questionnaires.
- Personal interview was used in order to guide the respondents to provide relevant information relating to the study and ensure higher response rate.

Methodology

Data Cleaning

- Data with margin of error and inconsistencies and were rejected.
- The data with uniformity and accuracy were accepted for further processing using SPSS.

Data Processing

- Data collected were analyzed and tested for reliability using the Statistical Program for Social Science (SPSS) version 20.

Methodology

Data Reliability

- Data reliability was tested using Cronbach alpha.
- Each part was tested separately as advised by Cronbach (1951), and the results are shown in Table 1.
- Values between 0.5 and 0.8 are considered as a indicator of reliable data (Tull and Hawkins, 1999).
- Thus, this study captured data that are reliable for further testing.

Table 1: Reliability test

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	No. of Items
0.639	0.659	10

Methodology

Data Validity

- To ensure the validity, measuring instruments (questionnaires) were pilot tested.
- To ensure that:-
 1. Respondents had no problems in giving answers.
 2. There would no problem in reading the data.
- This enabled to obtain some assessment of the questions, and likely reliability of the data was concluded.

Results and discussion

Respondents` concerned about RE

- This study shows that 52.6% of respondents are aware of RE while 44.7 % are not aware as shown in Figure 1.
- As Zanzibar still progressing in this technology, this findings is very convincing regarding the people awareness on RE.
- Because the level of awareness and knowledge of RE differ from country to country and even from region to region within the same country (Bird and Sumner, 2011).

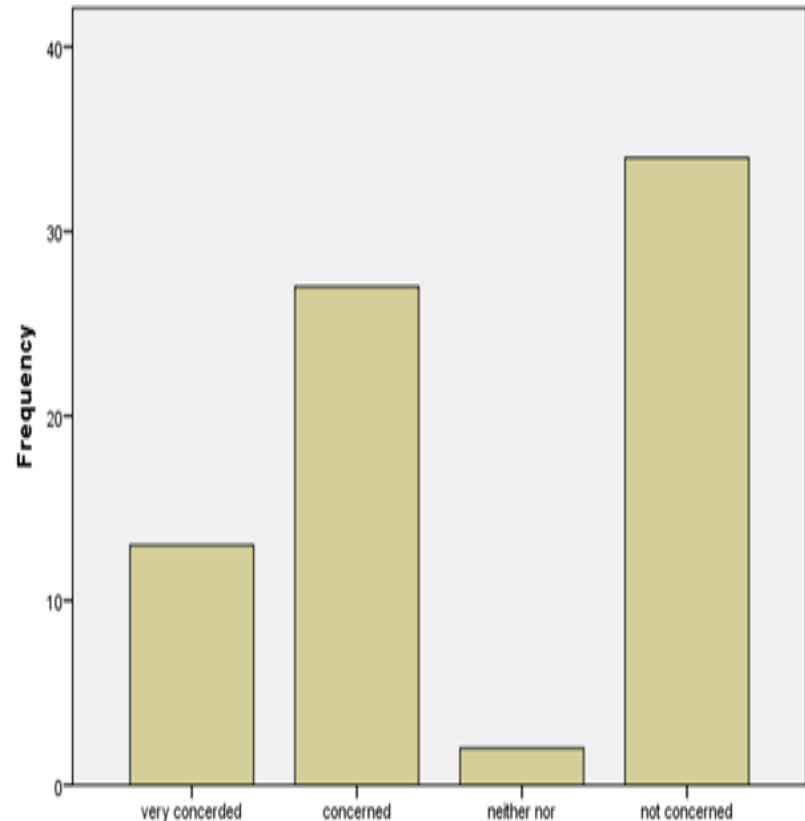


Figure 1

Results and discussion

Types of RE used at homes

- This study shows that, solar energy are mostly used 23.7% as a source of energy at homes in Zanzibar compared to biogas 9.2%, wind 7.9% and hydropower 1.3%.
- While 57.9% respondents are not using any kind of RE at their homes as shown in Figure 2.
- This results shows that, the general usage of RE is still low in Zanzibar.

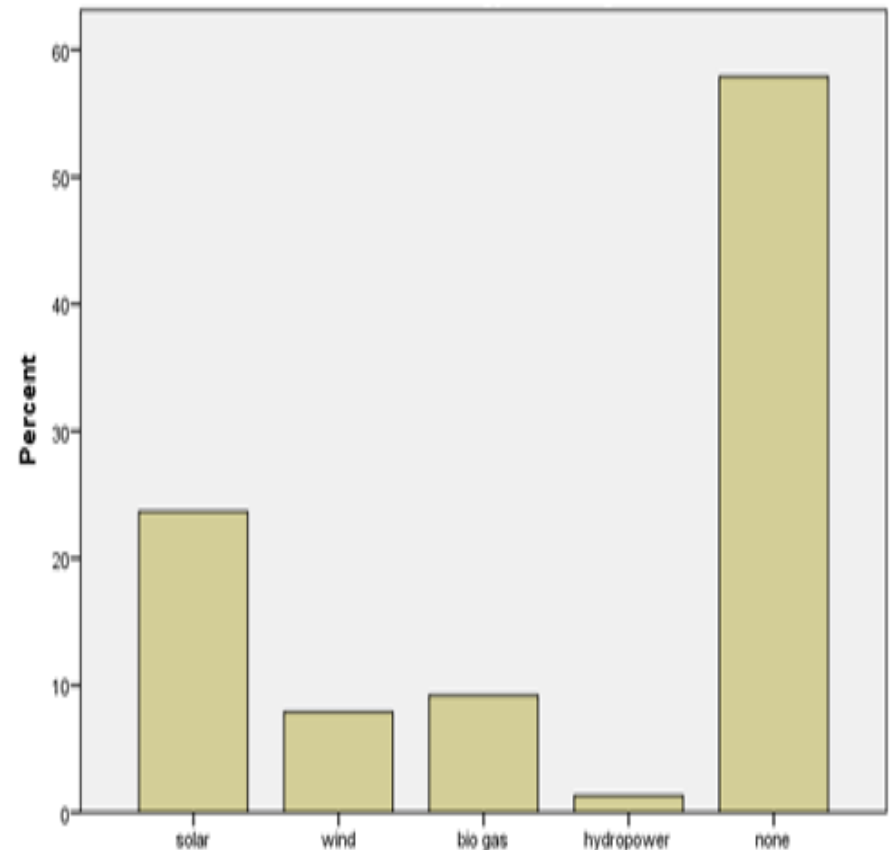


Figure 2

Results and discussion

Reason why Most People in Zanzibar do not use RE.

- The study shows that:-
- 30.3% are not aware about RE.
- 26.3% initial cost is high.
- 10.5% RE equipment are not available.
- 7.9% RE is difficult to install.
- 2.6% No enough technician of RE in Zanzibar.
- 22.7% they do not know the reasons behind.
- These reasons reflect differences in awareness regarding RE in Zanzibar.

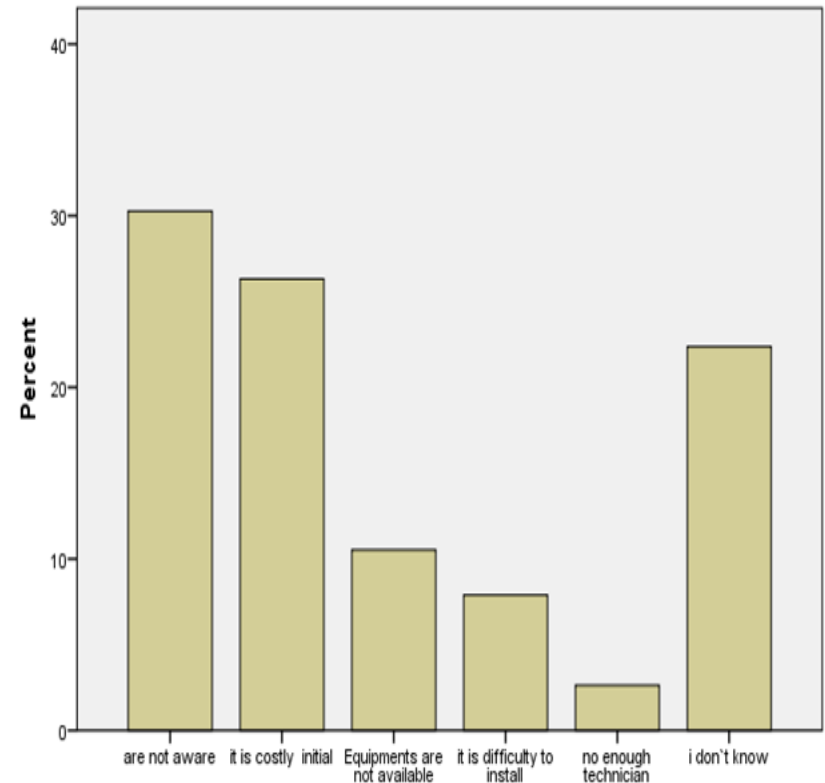


Figure 3

Results and discussion

Promotion of RE in Zanzibar

- In order to promote RE in Zanzibar, 35.5% of respondents suggested that awareness should be increased.
- 21.1% of respondents have advice to provide fund to support and promote the use of RE.
- While 10.5% and 2.6% of respondents suggested the reduction of initial cost and provide enough technician, respectively.
- And 30.3% respondents have no advice regarding the use of RE in Zanzibar.

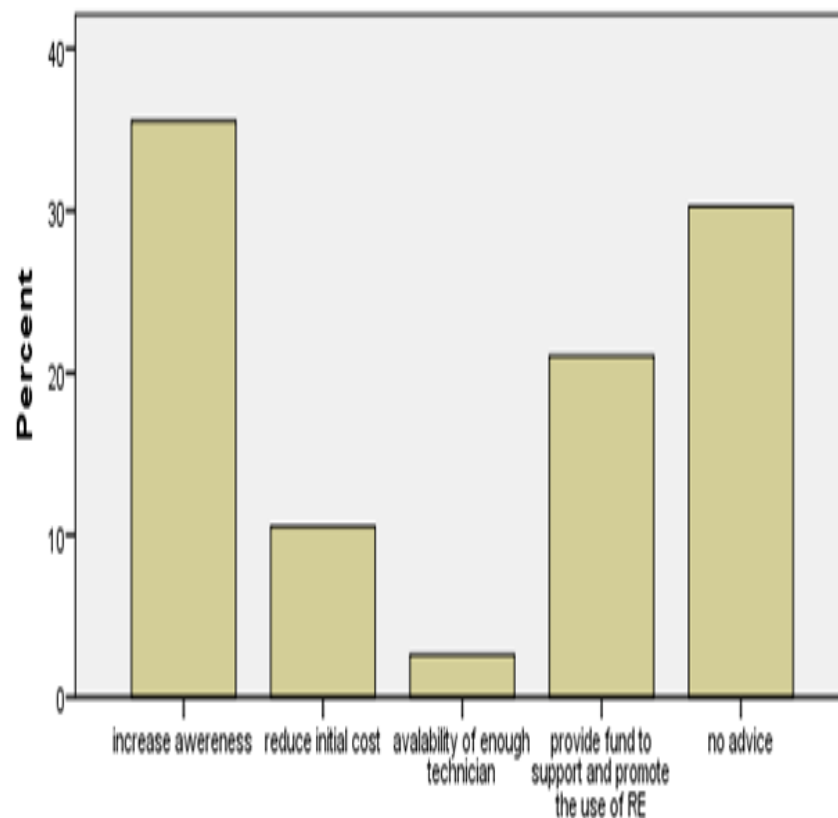


Figure 4

Conclusion & Recommendation

Conclusion

- The awareness of wind and solar was outstanding and the relationship between them was very strong.
- In terms of promotion of RE better education and income are highly required.
- We did not show a significant relationship with age; however, in cluster formation, young people were typically more informed.
- Dissemination of information and knowledge can be carried out through multilevel marketing communication within the framework of programs increasing awareness.
- The government has to target stakeholders who play a crucial role in disseminating information and in shaping awareness, i.e, local authorities, non-governmental organizations, research institutes, the media, etc.

Conclusion & Recommendation

Recommendation

- Formulation of policies and discussions from all sectors towards the improvement of RE technologies sector to sustain them.
- Increase research in these areas, so that the fear of some renewables posing risks in the future is limited.
- Improve education, awareness-raising and human institutional capacity on climate change mitigation, adaptation, impact reduction and early warning.
- Efforts in Zanzibar aimed at improving institutional training, strengthening institutions and improving capacity of RE researches will increase awareness, promote adaptation and RE sustainability.

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THANK YOU FOR LISTENING