CHAPTER 1 INTRODUCTION

1.1 Research Background

Housing is a basic human need after food and clothing. The government has a responsibility to provide affordable housing for the community. However, the challenge of meeting the demand for affordable housing is still a problem in Indonesia. Therefore, an analysis of government housing subsidy policies needs to be carried out to evaluate the effectiveness of these policies, identify factors that influence demand for subsidized housing, and provide recommendations for improving housing subsidy policies. In Indonesia, there are several housing subsidy policies implemented by the government, such as FLPP KPR, Housing Loan Interest Subsidy, and the Indonesian Housing Financing System Roadmap.[1]

Based on BPS data, the percentage of households that have access to habitable housing has always increased from 2019 to 2021, but the increase each year tends to be insignificant. In 2020 there was an increase from 2019 of 3.03% to 59.54%, while in 2021 the percentage of households that had access to livable housing experienced a decrease in the rate of increase of only 0.51% from 2020 to 60.90 %. In 2021, the Provinces of Papua, West Sumatra and West Java occupy the bottom 3 (three) provinces in the percentage of households that have access to livable housing, while the Provinces of the Special Region of Yogyakarta, Bali, DKI Jakarta are the West provinces that occupy the top 3 (three) provinces. percentage of households that have access to livable housing. Papua Province has the lowest percentage at 40.81% while Yogyakarta Special Region Province occupies the highest position at 97.12%. Based on BPS data, it shows that the percentage of households that have access to livable houses in urban areas is always higher than in rural areas. This shows that there is still an inequality in the percentage of livable houses in Indonesia[2].

The Public Housing Savings *(Tapera)* work program has begun to be implemented. The government has issued Law Number 4 of 2016 concerning the Implementation of Public Housing Savings and Government Regulation Number 25 of 2020 concerning the Implementation of Public Housing Savings as the legal basis for implementing the *Tapera* program.[3]

Although *Tapera* has the potential to be an effective solution to overcome the housing backlog, there are several challenges that need to be overcome in its implementation. These challenges include: There are still many people who do not know about *Tapera* and its benefits. The *Tapera* Fund is still not sufficient to

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1 Adawiyah, Nur, Josua Adrio Sihombing, Sakinatul Mar'ah, and Putri Kemala. "Analisis Kebijakan Perumahan Subsidi Di Indonesia Policy Analysis Of Subsidized Housing In Indonesia." El-Mal: Jurnal Kajian Ekonomi & Bisnis Islam 5, no. 6 (2024): 3064–75.

2Septianingsih, Amin. "Analisis K-Means Clustering Pada Pemetaan Provinsi Indonesia Berdasarkan Indikator Rumah Layak Huni." Jurnal Lebesgue : Jurnal Ilmiah Pendidikan Matematika, Matematika Dan Statistika 3, no. 1 (2022): 224–41.

3 Pasah, Marip, Yohana Maria, and Henry Winata. "URGENSI PENERAPAN TAPERA BAGI PEGAWAI SWASTA DI INDONESIA." Jurnal Hukum Dan Kewarganegaraan 5, no. 2 (2024): 61–70.

meet the housing financing needs of low-income communities. *Tapera* Administrator needs to ensure good and transparent governance in managing funds. *Tapera* Government Regulation Number 21 of 2024 needs to be ensured that it is in line with regional regulations related to housing[4].

The implementation of *Tapera* in Indonesia still reaps many pros and cons. Those who support the *Tapera* policy argue that *Tapera* can be an equitable solution so that all people can have permanent housing that is cheap and livable. However, those who oppose it think that the *Tapera* program will only increase the burden on employers and reduce the wages that workers should receive. With a distribution of 0.5%, the amount of *Tapera* savings that must be paid by employers has attracted criticism from entrepreneurs because before *Tapera* there were so many contributions that had to be paid by employers, such as old age insurance contributions, BPJS Employment, and so on. Therefore, the emergence of *Tapera* will create new problems for society. Furthermore, the distribution of 2.5% of the amount of *Tapera* savings that must be paid by workers also adds new problems because it reduces the quantity of wages that workers should receive.[5].

The pros and cons of *Tapera* attract various groups to express opinions on various platforms, especially social media. Social media is media that is easy and fast to access. So it is not uncommon for people to express their views on social media. According to APJII, around 51.5% of internet users in Indonesia use social media every day. One of the social media that is often used in Indonesia is Twitter. Twitter has 152 million registered users worldwide and more than 500 million unregistered users per month[6].

The large number of opinions and easy access to social media allows researchers to research cyberspace. One such research is sentiment analysis. Sentiment analysis is a digital text analysis process to understand a person's opinions, attitudes and emotions when expressing opinions in text such as reviews, news, and social media comments. The results of sentiment analysis can be used for various purposes. Support Vector Machine (SVM) is a popular algorithm used in sentiment analysis because it can classify large amounts of data with accurate results.[7].

1.2 Research Problem Formulation

The problem formulation in this research is based on what we have described in the background which, when summarized, is as follows:

4Hasyim, Alfrida, Enny M Sasea, and Arang Suryana. "Challenges of Tapera Implementation in Indonesia: Toward an Equitable and Effective Housing Financing Schemeaw Review." Legalis : Journal of Law Review 2, no. 2 (2024): 62–71.

5 Pasah, Marip, Yohana Maria, and Henry Winata et al.

6 Rahardi, Majid, Afrig Aminuddin, Ferian Fauzi Abdulloh, and Rizky Adhi Nugroho. "Sentiment Analysis of Covid-19 Vaccination Using Support Vector Machine in Indonesia." International Journal of Advanced Computer Science and Applications 13, no. 6 (2022): 534–39.

7 Wankhade, Mayur, Annavarapu Chandra Sekhara Rao, and Chaitanya Kulkarni. A Survey on Sentiment Analysis Methods, Applications, and Challenges. Artificial Intelligence Review. Vol. 55.

1. There are various kinds of public sentiment towards *Tapera* policies, so they need to be classified into positive, negative and neutral categories
2. Previous research in sentiment analysis of *Tapera* policies exists using the Naive Bayes method. However, it has not tested using other methods.

1.3 Research Purpose

From the problem formulation written above, the objectives of the research carried out are as follows :

1. Analyzing public sentiment on the Twitter platform regarding Tapera policies after the ratification of PP *Tapera* 2024 in the form of positive, negative or neutral opinions using the Support Vector Machine method.
2. Conduct sentiment analysis based on Eva Darwisah Harahap's research using the Support Vector Machine method and different datasets.

1.4 Research Benefits

The expected benefits of this research are as follows :

1. For students

This research is useful as additional insight and deeper understanding of sentiment analysis, especially the Support Vector Machine method.

2. For other researchers

The use of this research for other researchers is as a reference for further research with better research by evaluating previous research.

3. For University

The use of this research for other researchers is as a reference for further research with better research by evaluating previous research.

4. For the government (policy makers)

Research provides additional information for policy makers as input for choosing the right steps to respond to public opinion in implementing *Tapera* policies.

1.5 Scope of Problem

To further focus the problem formulated, this research has the following limitations :

1. This system is still a prototype.
2. The programming language used is Python.
3. This system only provides a Twitter classification of the public's views on *Tapera* policies with positive, neutral and negative classifications only using the Support Vector Machine method.
4. The data collected in this system is only from the Twitter social media platform with search key “tapera lang:id”.

1.6 Writing Schematics

This research uses the following writing systematics :

BAB I. INTRODUCTION

1.1 Research Background

1.2 Research problem formulation

1.3 Scope of problem

1.4 Research Purpose

1.5 Research Benefits

BAB II. LITERATURE REVIEW

2.1 Previous Researches

2.2 Conceptual Foundation/Framework

2.3 Hypothesis(if exists)

BAB III. RESEARCH METHODS

3.1 Research Time and Place

3.2 Research Tools and Materials

3.3 Experimental Design

3.4 Research Stages

3.5 Data Analysis

BAB 1V. RESULTS AND DISCUSSION

BAB V. CLOSING

5.1 Summary

5.2 Suggestions.