

ESTIMATION ANALYSIS AND MAPPING THE NEED FOR 'AGEN PERISAI' IN EXPANDING THE MEMBERSHIP OF BP JAMSOSTEK

(A Case Study: West Java Province, Indonesia)

Yulinda Nurul Aini

*Research Center for Population
Indonesian Institute of Sciences (LIPI), Jakarta, Indonesia
Email: yulindaaini@gmail.com*

Abstract

Social security is one indicator of human development efforts to achieve Indonesia's 2045 vision plan. One of the challenges in social security is the limited coverage and involvement of the population. In 2019, data of the BP Jamsostek West Java Province showed that the involvement of workers in the informal sector in social security was still low (around 3%). One of the efforts to increase the participation of informal workers is through Perisai agents. However, the number of active agents in West Java Province was still low and not comparable to the number of informal workers which reached 10 million people. Meanwhile in 2024, the government is targeting the participation of informal workers to be around 30% and universal coverage by 2029. For this reason, this article will form a scenario for estimating the need for Perisai agents to achieve universal coverage for informal worker participation. Based on the result, if the government want to achieve the target of 30% of informal workers' participation in 2024, the best scenario is to recruit 626 agents, while to achieve the universal coverage participation in 2029, the need for agents is 928 people. The highest agent needs are in the agriculture, wholesale trade, and accommodation sector. According to regency/city, the highest demand for agents is in the regencies of Bogor, Bandung, Garut, and Sukabumi. Furthermore, the mapping results by sector and regency/city can be used by relevant stakeholders to help formulate a Perisai agent recruitment policy to achieve universal coverage of BP Jamsostek membership in the coming year.

Keywords: mapping, scenario, perisai agent, social security, universal coverage.

Abstrak

Jaminan sosial (Jamsos) merupakan salah satu indikator dalam upaya pembangunan manusia untuk mencapai rencana visi Indonesia 2045. Salah satu tantangan dalam jaminan sosial saat ini adalah masih terbatasnya cakupan dan keterlibatan penduduk. Data BP Jamsostek Provinsi Jawa Barat menunjukkan keterlibatan pekerja di sektor informal dalam kepesertaan Jamsos masih minim (sekitar 3%). Padahal pekerja informal sangat rentan mengalami kemiskinan karena ketidakpastian pekerjaan mereka. Salah satu upaya untuk meningkatkan kepesertaan pekerja informal adalah melalui agen perisai. Namun, jumlah agen yang aktif di Provinsi Jawa Barat juga masih minim dan tidak sebanding dengan jumlah pekerja informal yang mencapai 10 juta orang. Padahal di tahun 2024, pemerintah Provinsi Jawa Barat menargetkan kepesertaan pekerja informal sekitar 30% dan universal coverage di tahun 2029. Untuk itu artikel ini akan menyusun skenario estimasi kebutuhan jumlah agen perisai untuk mencapai universal coverage kepesertaan pekerja informal di Jawa Barat. Skenario terbaik akan digunakan untuk mapping kebutuhan agen perisai berdasarkan lapangan usaha dan Kabupaten/Kota. Berdasarkan hasil analisis, jika ingin mencapai target kepesertaan pekerja informal sebanyak 30% di tahun 2024, maka skenario terbaik adalah dengan merekrut 626

agen, sedangkan jika ingin tercapai di tahun 2029 maka kebutuhan agen sebanyak 928 orang. Adapun kebutuhan agen tertinggi adalah di sektor pertanian, perdagangan besar, dan penyediaan akomodasi. Menurut kabupaten/kota, kebutuhan agen tertinggi adalah di Kabupaten Bogor, Bandung, Garut, dan Sukabumi. Selanjutnya, hasil mapping menurut sektor dan kabupaten/kota ini bisa digunakan stakeholder terkait untuk membantu menyusun kebijakan perekrutan agen perisai demi mencapai universal coverage kepesertaan BP Jamsostek di tahun mendatang.

Kata kunci: *agen perisai, jaminan sosial, mapping, skenario, universal coverage.*

INTRODUCTION

Social security is a basic right of every citizen that can provide a sense of calm, security, and motivation to the community, hence they can carry out their activities comfortably (Tessier et al., 2013). The International Labor Organization (ILO) defines social security as an effort to protect both individuals and households in ensuring access to health services and income security, particularly in terms of old age, unemployment, illness, invalidity, work-related injuries, childbirth, or loss of a breadwinner (ILO, 2008). Social security is one of the important indicators in human development efforts to achieve Indonesia's 2045 vision plan, namely sovereignty, progress, and justice (Bappenas, 2019). Access to inclusive social security can affect the improving quality of the population as measured by education, health, the ease of getting a decent job, and its sustainability.

In Indonesia, policies regarding social security were regulated in the National Social Security System (SJSN) Law No. 40 of 2004 and Law No.24 of 2011 concerning the Social Security Management (BPJS). This national social security system is a program organized by the state that aims to provide assurance of social protection and welfare for all people. To realize the goals of the national social security system, an administrative body in the form of a legal entity based on the principles of mutual cooperation, openness, trust funds, non-profit, accountability, prudence, profitability, mandatory membership, and the results of the management of the social security fund is entirely for development program and for the benefit of participants (Sasongko et al., 2019). Especially for workers, employment-related social security is provided by the Manpower Social Security Administering Body (BP Jamsostek formerly BPJS Ketenagakerjaan) through 4 programs,

namely Work Accident Insurance (JKK), Death Security (JKM), Old Age Security (JHT), and Pension Security (JP). BP Jamsostek has the duty to provide basic protection to meet the minimum needs of workers and their families, by providing certainty for the flow of family income as a replacement for part or all of the lost income (Suzanalisa, 2015). The policy in this law was expected to protect the community at large. Since the enactment of the SJSN Law, BP Jamsostek had changed the coverage of mandatory participation in the protection, which was originally only required for formal workers to become a protection for all workers (Suzanalisa, 2015).

According to the business status, workers can be classified into formal and informal workers. Referring to the Manpower Act No.13 of 2003, informal workers refer to people who work without a working relationship, which means that there is no agreement that regulates the elements of work, wages, and power (RI, 2003). Jobs in the informal sector tend to be easier to obtain, but are vulnerable to work risks because they are an unprotected group of workers (Hohberg & Lay, 2015).

The Statistics Indonesia (BPS) in August 2019 noted that workers aged 15 years and over in the informal sector dominated workers in Indonesia with a total of 70.49 million people (55.7%), while workers in the formal sector were only 56.01 million workers. Informal sector workers are described as workers with low wages, irregular working hours, poor health and safety systems, and complicated access to social security (Wardhana et al., 2020).

In fact, in carrying out their work, workers will certainly face risks that may occur, both the risk of disease arising from their work, the risk of work accidents that result in disabilities, job

loss, and even death (Adireja et al., 2019). These conditions then exacerbate the vulnerability of informal workers.

The current social security system in Indonesia still does not cover workers in the informal economy, while other workers, such as domestic workers, are also not recognized by labor legislation. This makes informal sector workers a vulnerable group due to inequality and lack of access to social protection for them (ILO, 2013). BP Jamsostek data for 2016 showed that the level of participation of informal workers in social security was only 2.78%, while the participation of formal workers had reached 40.93%. From the percentage of informal workers, only 0.06% of them had continuity to pay monthly premiums, while the continuity of 2.72% of other participants was still low (BPJS Ketenagakerjaan, 2016).

One of the problems related to the participation of informal sector workers at BP Jamsostek is the low participation of participants. The Supervisory Board of BP Jamsostek acknowledged that the lack of socialization related to the employee social security program caused low public knowledge of the program's benefits, thus the participation of informal sector workers tended to be low (Adireja et al., 2019). Another problem is related to institutions and services which also complicate the issue of access to social security schemes. BP Jamsostek does not have a serviced office in every regency/city, so that service coverage in various locations is still limited (Permana et al., 2017). This problem hinders the achievement of inclusive access and universal coverage to the employee social security scheme.

One of the BP Jamsostek's strategies to overcome the problem of limited access and participation of informal sector workers to social security is through the Perisai agent scheme. This agent is tasked with recruiting informal workers with coverage that includes markets, rural areas, remote areas, to the community. This agent is also tasked with ensuring the activeness and continuity of participants in making premium payments (Adillah & Anik, 2015).

According to Director Regulation Number 15 Year 2018, Perisai is an individual who has met the requirements set by BP Jamsostek to conduct outreach, gain participants and manage participation in the employment social security program. To be registered as a Perisai agent, a person must be registered at the BP Jamsostek Office, not an active BP Jamsostek employee, declared a BP Jamsostek participant and has a minimum high school education. Perisai incentives consist of acquisition and contribution incentives. An incentive of Rp. 500 thousand is given every 1st day of the following month after Perisai gets 50 new participants every month and is not accumulative in nature. Perisai will receive a contribution of 7.5% in accordance with the number of contributions recruited by Perisai. Acquisition incentives and contributions are paid at a composition of 10% to the BP Jamsostek Office and 90% to Perisai agents (BP Jamsostek, 2018).

Based on information from the head of BP Jamsostek West Java Province, the number of active Perisai agents currently only 14 people with the ability to recruit participants of 50 to 100 informal workers per month. One of the BP Jamsostek's difficulties in recruiting Perisai agents was because this agent is an individual who does not have any legal aspects and conflict solutions. Besides, there was no special regulation (equivalent to constitutional and law) regulating Perisai agents, therefore they did not have legal force. In addition to low incentives, some of these problems made individuals less interested in becoming Perisai agents.

Currently, out of 10 million informal workers in West Java Province, only 3 percent of informal workers were participants in social security. This figure was insignificant when compared to the participation of formal workers which had reached 42 percent (Ridwan, 2020). For this reason, the role of the Perisai agent is undoubtedly needed by BP Jamsostek in realizing the goal of universal coverage of worker participation in social security.

In the National Medium-Range Development Plan (RPJMN) 2020-2024 of Bappenas, BP Jamsostek's membership coverage was targeted

to be more than 30 percent in 2024. Besides, universal coverage of participation was also expected to be achieved in 2029 (Bappenas, 2019). Based on this information and the membership data from BP Jamsostek of West Java province, this article aims to form a scenario to calculate the estimated need for Perisai agents based on the length of time recruiting and the needs of participants. The best scenario is then used to map the needs of Perisai agents by the business sector and regency/city. The scenario results are expected to help BP Jamsostek in formulating a strategy to expand access and participation of informal workers in social security, hence the government's goal of achieving universal coverage by 2029 can be achieved.

METHODOLOGY

Data Source

This article employed secondary data with the details of the variables, sources, and data types/scales as follows.

Table 1. Detail of Variables and Data Sources

Variable	Source	Data type/ Scale
Number of informal sector workers	National Labor Force Survey (Sakernas) 2018	Numeric/ Ratio
Number of Perisai agents	BP Jamsostek West Java	Numeric/ Ratio

Technique of Data Analysis

Time series is a series of a variable's value or the results of observations that are recorded in successive periods (Atmaja, 2009). The time series method is a method of forecasting using an analysis of the relationship pattern between the variables to be estimated and the time variable. Forecasting is a process of compiling information about successive past events to predict future events (Frechtling, 2001). Forecasting a time series data needs to pay attention to the type or pattern of data. In general, there are four kinds of time series data patterns, namely horizontal, trend, seasonal, and cyclical (Hanke & Wichern, 2005).

In this article, data processing techniques to form the need for Perisai agents estimation in West Java Province used a deterministic method, namely trend analysis. The trend pattern is the trend in long term data direction, which in this article is the increasing need for Perisai agents over time (Wei, 1990). There are four kinds of trend models, namely linear, quadratic, exponential growth, and S-curve (Ely et al., 1997). The following is an analysis step to form an estimate of the need for Perisai agents (Rahmawati, 2019). Arrange the elements of the Perisai agent requirement estimation scenario:

1. Determining the time series data pattern based on scatterplot of the number of monthly Perisai agent recruits
2. Forming linear, quadratic, exponential growth, and S-curve trend models
3. Determining the best model based on the value of Mean Absolute Percentage Error (MAPE), Mean of Standard Deviation (MSD), and Mean Absolute Deviation (MAD)
4. Calculating the estimated requirement for Perisai agents in each scenario based on the formed model
5. Mapping agent needs based on business sector and regency/city location in each scenario
6. Classifying regencies/cities for business sectors that need to be a priority in recruiting Perisai agents.

RESULTS AND DISCUSSION

Agent of Indonesian Social Security (Perisai)

Social security is the basic right of every citizen as stated in the 1945 Constitution Article 27 paragraph 2 which states that "Every citizen has the right to work and a decent living for humanity" (RI, 1945). The social security program is a basic protection program for workers. This program is a means of guaranteeing the flow of income for workers and their families from the occurrence of socio-economic risks with affordable financing for employers and workers (Agusmidah, 2010). Therefore, preparing and

increasing the social security of workers is an important part of the government's efforts to achieve worker welfare, in addition to adequate wages and human working conditions.

The concept of the informal sector is more focused on economic, social, and cultural aspects. Economic aspects include the use of low capital, low income, and relatively small business scale. The social aspect includes low levels of formal education, coming from economically weak circles, and generally migrants. Meanwhile, from the cultural aspect, including the tendency to operate outside the regulatory system, the use of simple technology, and not bound by working time (BAPPENAS, 2009).

In 2013, the government has piloted a social security scheme for informal sector workers. The program had covered about 1.17 million workers who received subsidies to contribute to social security. However, it was difficult for the government to draw lessons from this pilot and its implementation in a national scheme, hence all informal workers could participate in social security. Even though informal workers were a group that is very vulnerable to becoming poor, especially during retirement, or when they were unable to work (ILO, 2015a).

Based on Government Regulation No.85 of 2013, BP Jamsostek could work with government agencies to improve the quality of social security programs implementation and increased membership growth rates rapidly (RI, 2013). For this reason, to recruit informal workers as participants, starting in 2017 BP Jamsostek had mobilized the agency "Perisai" (Indonesian Social Security Activator). Perisai is BP Jamsostek's innovation to expand the coverage of informal workers or non-wage earners (BPU) and Micro, Small, and Medium Enterprises (MSMEs) (Pranita et al., 2019).

Perisai is an agency system adopted from the Japanese business model, *Jimukumiai* and *Sharoushi*, in supporting the acquisition and expansion of social security membership since 1968 with the acquisition rate of social security participants reaching 98% of the existing workforce (JICA, 2017). BP Jamsostek adopted this model to implement functions including

conducting/accepting participant registration, collecting contributions from participants and employers, managing social security funds for the benefit of participants, managing participant data, paying health service benefits following program provisions, and providing information regarding administering social security programs to participants and the community. Perisai can be recruited from various groups, such as banking, professional groups, employers' associations, trade unions, community associations, traditional institutions, and even religious institution (BPJS Ketenagakerjaan, 2016). Perisai development was one way to reduce the unemployment rate because agents will get incentives when they successfully recruit new participants (Wardhana et al., 2020).

Before becoming Perisai, agents were provided with sufficient knowledge and education regarding employment social security through routine workshops (Permana et al., 2017). As workshop's output, the Perisai agent was able to be empowered to conduct outreach to the community to assist BP Jamsostek in increasing access and expanding the participation of informal sector workers in various regions.

The role of Perisai agents is significantly important in disseminating social security benefits to informal workers. Through socialization, the Perisai agent can change the mindset of informal workers towards social security as a need that must be met because of its enormous benefits, both for the worker and family to ensure that in the event of unwanted things happen in work environment (Prawira, 2015).

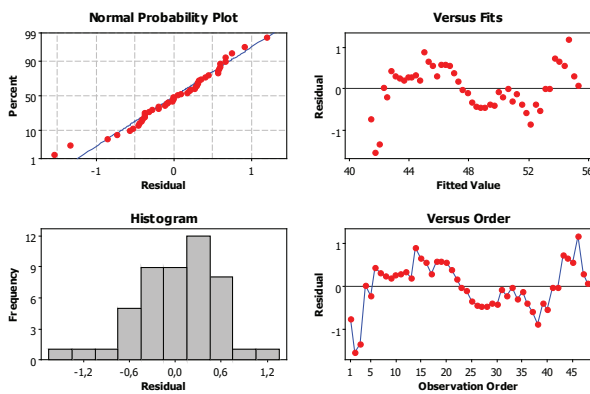
Besides, an all-online system for social security membership, from registration, monthly premium payment, verification, to claim disbursement (Hidayah & Santoso, 2015) will make it difficult for workers with low education due to limited access and knowledge of technology. The presence of Perisai agent will make it easier for them to become participants, because the agents play an important role in recruiting and coordinating the payment of premiums for participants in informal workers,

thus in this case informal workers will be greatly facilitated.

Estimation Scenario of Perisai Agent Needs

The first step before creating an estimation scenario is to test the assumptions on the residual dataset that has been obtained. The assumption test results in Figure 1 show that the data is normally distributed based on the Normal Probability Plot and Histogram. Moreover, the residuals met the heteroscedasticity test because the residuals did not form a certain pattern based on Versus Fits Plot. The residual has also fulfilled the independent test in Versus Order Plot.

Figure 1. Assumption Test Charts



Source: Primary Data Analysis BP Jamsostek 2018

After performing the assumption test, the best model is selected in trend analysis using the MAPE, MAD, and MSD values in Table 2 below.

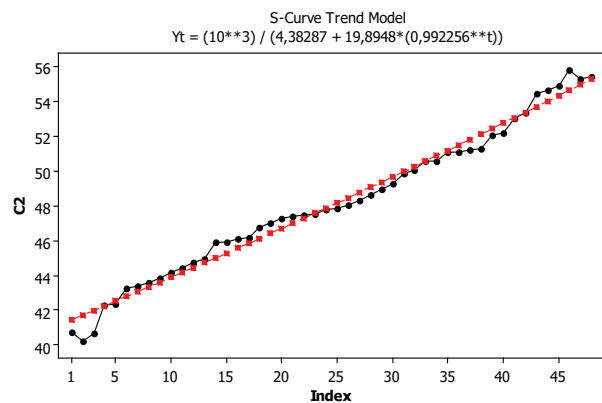
Table 2. Goodness of Fit Model

Model	MAPE	MAD	MSD
Linear	0,961	0,458	0,291
Quadratic	0,938	0,444	0,285
Exponential Growth	0,924	0,434	0,288
S-Curve	0,902	0,425	0,289

Source: Primary Data Analysis BP Jamsostek 2018

Based on Table 2, the model with the smallest MAPE and MAD values is the S-Curve, hence the S-Curve is the best model for estimating the Perisai agent requirement.

Figure 2. Trend Analysis Plot



Source: Primary Data Analysis BP Jamsostek 2018

Figure 2 shows the trend analysis plot with the S-Curve model and the equations that were formed. This equation is then used to estimate the need for Perisai agents in West Java. In this article, the scenario for estimating the needs of the BP Jamsostek West Java Perisai agent is divided into 4 scenarios. The first two scenarios are assumed if BP Jamsostek will reach 30% coverage of informal workers within 4 years (2021-2024) under BP Jamsostek targets. Scenarios 3 and 4 are assumed if universal coverage of participation is achieved within 9 years (2021-2029). In terms of the target monthly participants, 2 assumptions were formed for each achievement year, namely 50 participants and 100 participants.

Table 3. Scenario's of Agent Need Estimation

Year	2024	2029		
Scenario	1	2	3	4
Monthly Target Audience	50	100	50	100
Perisai Agent Needs	1252	626	1856	928

Source: Primary Data Analysis BP Jamsostek 2018

Table 3 shows that the best scenario to achieve the target of 30% informal worker participation in 2024 is scenario 2 with an estimated Perisai requirement of 626 agents. Meanwhile, if BP Jamsostek wants to achieve universal coverage by 2029, the best scenario is scenario 4 with an estimated Perisai requirement of 928 agents. Of course, this estimate has several assumptions to be fulfilled, including

the universal coverage of informal worker participation if the Perisai agent estimate is met in the first year (2021) and the monthly participant gain is assumed to be ± 100 informal workers. If these assumptions are not fulfilled, the possibility of achieving universal coverage for the participation of informal workers will be delayed from the time that has been targeted by BP Jamsostek.

Mapping Perisai Agent' Needs by Sectors

Based on data from the 2016-2018 National Labor Force Survey (Sakernas), the number of informal workers was increasing along with the various challenges and risks they face. Therefore, informal sector workers needed to be provided with protection, maintenance, and increased welfare, thus in turn it would increase national productivity (Adillah & Anik, 2015).

In Indonesia, the number of informal sector workers is higher than the formal. The vulnerability and productivity of informal workers is still a problem in the world of labor. Many informal workers carry out activities with a low level of productivity, hence their real income remains low (ILO, 2015a). Low quality and wages as well as intermittent and unsafe work arrangements make them vulnerable to economic turmoil, thus they need a social protection system that can help them in case of layoffs, work accidents, or retirement. The term security itself implies a possibility of uncertainty, insecurity, or threat. Therefore, social security can be interpreted as a way to deal with or overcome uncertainty and threats to material and non-material conditions (Bellante & Jackson, 2000).

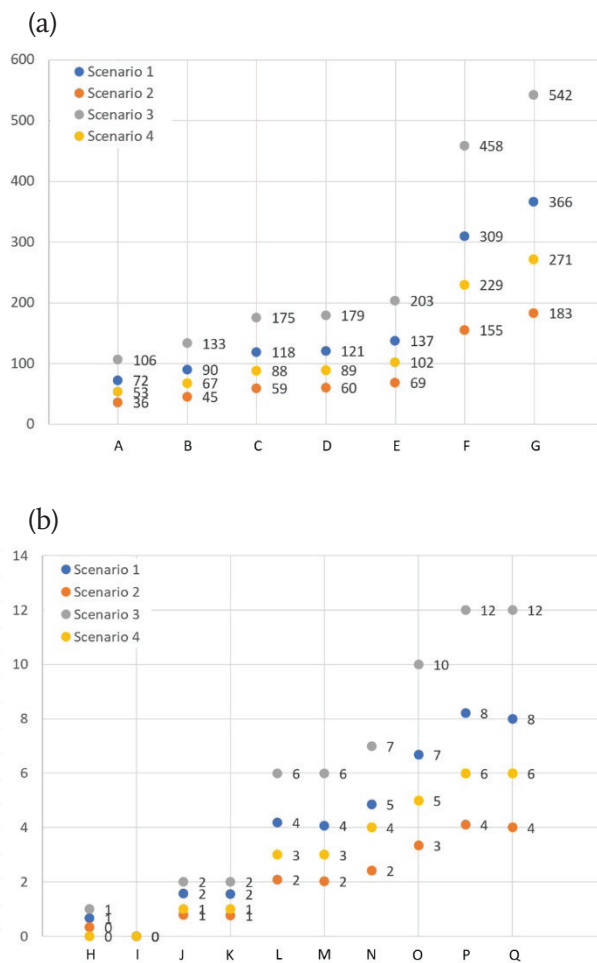
Many factors make informal workers vulnerable to exploitation, such as the absence of written regulations, acknowledgments, and work contracts, thus they are vulnerable to unilateral termination of employment from subcontractors or companies (ILO, 2015b). Besides, if an accident occurs at work, no party can bear hospital fees and wages when one stops working (Nurwati, 2017). Informal workers also do not have special skills and are very deficient in working capital. Therefore, their productivity and income tend to be low

(Bellante & Jackson, 2000). In general, informal workers are also known to be part of the poor population who are greatly affected if there is economic uncertainty (Safaria et al., 2003). Hence, the participation of informal workers in employment social security is important.

One of the main problems in the participation of workers in the informal sector towards employment social security is their low knowledge of the social security program's benefits. So far, BP Jamsostek had conducted various socializations to them, but the socialization was still implemented conventionally with a very limited scope (Wardhana et al., 2020).

The formation of a Perisai agent was one of the strategic innovations to increase the knowledge and participation of informal sector workers in employment social security. The presence of Perisai in West Java had a positive impact on workers in the informal sector. Since they are recruited from various communities, associations, and associations, the Perisai agent can reach informal workers in various business sectors. Through outreach from agents, it is hoped that informal workers will have an awareness of the importance of the social security's benefits, therefore the level of participation will increase.

Figure 3 shows the mapping of Perisai agent requirements by sector in each scenario. Several sectors that require a large number of Perisai agents include (1) Wholesale and Retail Trade, Repair Vehicles and Motorcycle, (2) Agriculture, Forestry, and Fishing, and (3) Accommodation and Food Service Activities with the need for Perisai agents respectively 24.60%, 29.22%, and 10.9% of the total agent needs. The amount needed for this agent is directly proportional to the number of informal sector workers in each business sector. According to data from the Central Bureau of Statistics (BPS) the wholesale and retail trade sector, the agriculture sector, and the accommodation and food services activities sector in West Java are the 3 sectors with the highest number of informal workers, which are 2.93 million, 2.47 million, and 1.1 million informal workers respectively (BPS, 2019).

Figure 3. Mapping Agent Needs by Sectors

Source: Primary Data Analysis

Information:

- A. Other Services Activities
- B. Transportation and Storage
- C. Manufacturing
- D. Construction
- E. Accommodation and Food Service Activities
- F. Agriculture, Forestry, and Fishing
- G. Wholesale and Retail Trade, Repair Vehicle and Motorcycle
- H. Electricity and Gas
- I. Public Administration
- J. Insurance Activities
- K. Education
- L. Mining and Quarrying
- M. Human Health and Social Work Activities
- N. Real Estate Activities
- O. Water Supply and Waste Management
- P. Business Activities
- Q. Information and Communication

Several other sectors such as Electricity and Gas, Insurance Activities, and Education only have a small need for Perisai agents, because the majority of workers in these sectors are formal workers who are generally registered by the office in BP Jamsostek membership. According to Statistics Indonesia data, the number of informal workers in these sectors is also low. In electricity and gas sector, the number of informal workers is only 5.3 thousand. Likewise, in insurance activities and education sector, which only had 12.6 thousand and 12.38 thousand informal workers, respectively (BPS, 2019).

One of the reasons for the high need for Perisai agents in the trade and accommodation sector is because, since 2000, informal workers in this sector had indeed increased. After all, the need for jobs in the formal sector tended to weaken. The market shared with basic education background or less, with manual labor patterns was more needed (Manning, 2012). Besides, West Java Province had industrial estates and large-scale factories, including multinational companies (ILO, 2017). With a large number of industrial sectors in various fields, the increasing number of social security participants will also be large, therefore it is directly proportional to the high need for Perisai agents.

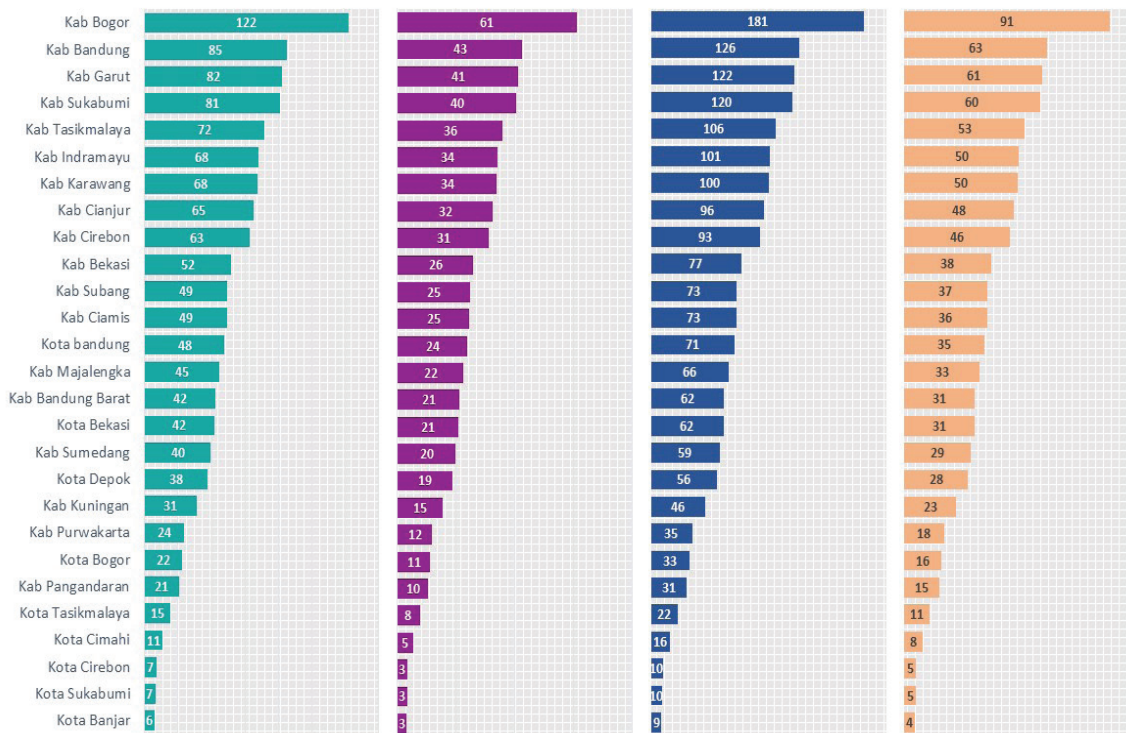
Moreover, West Java was a province that was rich in seasonal resources, such as plantations, agriculture, etc (ILO, 2017) so that the agricultural sector had always employed more informal workers (Manning, 2012).

The presence of the Perisai agent as network marketing is expected to be able to overcome the problem of BP Jamsostek's low affordability to informal sector workers. Through this Perisai agent, the public can get to know more about the various benefits that can be obtained if they become a participant in the employment social security program (Nasrul, 2020).

Mapping The Need for Perisai Agent by Regency/City

In addition to the business sector, mapping the need for Perisai agents by regency /city is also

Figure 4. Mapping Agent Needs by Regency/City



important to ensure that Perisai agents can cover various areas, hence the socialization of employment social security can be conveyed to all informal workers.

Based on Figure 4, it can be seen that several areas that require a high number of Perisai agents include Bogor Regency, Bandung Regency, Garut Regency, Sukabumi Regency, and Tasikmalaya Regency. These five regions have a high number of informal workers in several sectors, thus the need for Perisai agents is also high. According to Statistics Indonesia data, these areas have a consecutive number of informal workers of 977.59 thousand, 680.38 thousand, 657.44 thousand, 647.26 thousand, and 573.39 thousand workers (BPS, 2019). The areas with a low need for Perisai agents include Cimahi City, Cirebon City, Sukabumi City, and Banjar City with the number of informal workers in a row of 87.10 thousand, 55.13 thousand, 52.42 thousand, and 48.16 thousand. workers (BPS, 2019).

In general, employment problems in West Java are caused by several reasons, namely the excess proportion of unskilled labor. Types of informal work are more common in regencies

because usually the informal economy is dominated by unskilled and low educated workers. They may not have access to social protection and have to work in conditions of poor health and safety (ILO, 2015b). Other research shows that 72.3% of informal workers live in rural areas. Of all informal workers who live in rural areas, 73% only have primary school education or less than urban areas (Nazara, 2010). Therefore, the expansion of the social protection system is immensely important in the regency/rural area.

The high number of informal workers in urban areas, such as the city of Bandung, Bekasi, and Depok, is partly due to circular migration and commuting. Several studies state that informal sector workers in cities are mostly migrants from regencies (BAPPENAS, 2009).

In 2016, BP Jamsostek targeted to provide services that reach all remote areas, both in big cities and small cities to suburban areas (BPJS Ketenagakerjaan, 2016). For this reason, outreach to all informal workers in various areas is important so that people have a good understanding of employment social security. Premium payments also need to be adjusted to the economic conditions and regency minimum

wage/income (UMK), hence informal workers do not feel burdened to pay premiums regularly (Ginting et al., 2016). Thus, the continuity of informal workers in becoming social security participants will be maintained.

Furthermore, the mapping of Perisai agent needs is conducted based on tabulations between provinces and the business sector. This tabulation produces a mapping of regency/city areas that need to be prioritized in the recruitment of Perisai agents in various business sectors.

Table 4. Priority Provinces According to The Main Business Sector

Main Business Sector	Priority Province
Agriculture, Forestry, and Fishing	1. Bandung Regency
	2. Bogor Regency
	3. Indramayu Regency
	4. Sukabumi Regency
	5. Garut Regency
Manufacturing and Construction	1. Bekasi Regency
	2. Bandung Regency
	3. Bogor Regency
	4. Bekasi City
	5. Karawang Regency
Wholesale, Retail Trade, and Accommodation	1. Bogor Regency
	2. Bandung City
	3. Bandung Regency
	4. Bekasi City
	5. Depok City
Services Activities	1. Bogor Regency
	2. Bekasi City
	3. Depok city
	4. Bekasi Regency
	5. Bandung Regency

Source: Primary Data Analysis

Table 4 provides information that Bandung Regency and Bogor Regency are priority areas in the four main business sectors. Therefore, BP Jamsostek needs to prioritize this area in recruiting Perisai agents, because apart from having the highest number of informal workers in West Java, these two regions also have various main business sectors.

There are quite distinct differences in the sectoral emphasis of informal workers in

regency/city areas. Regency areas are characterized by informal workers in the agriculture, forestry, and fisheries sectors (Nazara, 2010). Besides, manufacturing and construction companies are also concentrated in regency areas. On the other hand, city areas are generally dominated by informal workers who work in trade, restaurants, and accommodation. This has resulted in locations that need to be a priority in the recruitment of Perisai agents in several sectors to be concentrated in regency areas.

Based on the explanation above, as a strategy to increase the number of Perisai agents, BP Jamsostek can cooperate with the government/related agencies in the city / regency. For example, in Table 4, the increase in Perisai agents in the main business sectors of agriculture, forestry and fisheries needs to be prioritized in several regencies, such as Bandung, Bogor, Indramayu, Sukabumi, and Garut. Therefore, BP Jamsostek can work together with the agriculture, forestry and fisheries agencies to help recruit Perisai agents in these locations.

BP Jamsostek can increase the number of Perisai agents, especially those from the chairman of associations and community groups. The role of this Perisai agent needs to be focused as a network marketing for the social security program for the BP Jamsostek (Triyono et al., 2019). Perisai agents can be recruited from communities, such as forest communities, farm laborers, fishermen, environmentalist, and others through related government agencies/offices. Thus, the recruitment of Perisai agents can be more effective because they are tailored to the main business sectors and priority areas. In addition, with Perisai agents recruited based on these communities, there will be more participation of informal sector workers, considering that these business sectors are the sector with the largest number of informal sector workers in West Java Province.

CONCLUSION

To achieve the target of 30% participation of informal workers in West Java by 2024, the best scenario is to recruit 626 agents (scenario 2),

while to achieve universal coverage for informal workers participation in 2029, scenario 4 becomes the best scenario with the need for agents as many as 928 people. The assumption of this scenario is if the Perisai agent can recruit ± 100 participants per month continuously starting in 2021. If this assumption is not fulfilled, then the possibility of achieving universal coverage for informal worker participation will be delayed from the time that has been targeted by BP Jamsostek. The highest agent needs are in the agricultural sector, wholesale trade, and the provision of accommodation. According to regencies/cities, the highest demand for agents is in the regencies of Bogor, Bandung, Garut, and Sukabumi. For this reason, the achievement of the Perisai agent recruitment scenario can be conducted in collaboration city/regency governments and related major business sector agencies in recruiting Perisai agents from communities in its region. Thus, the Perisai agent works for BP Jamsostek under the government/related agencies, hence there is an institutional legal aspect. Besides, Perisai agents can be recruited from the head of associations and community groups in each village or at least at the sub-district level, hence the volume and distribution of Perisai agents can be evenly distributed and reach informal sector workers in various areas, especially rural areas. Furthermore, the results of the mapping by sector and regency/city can be used by relevant stakeholders to help formulate Perisai agent recruitment policy in order to achieve universal coverage of BP Jamsostek membership in the coming year. The low number of Perisai BP Jamsostek of West Java Province have could be due to the difficulty in recruiting such agents.

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