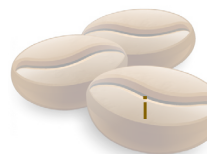


SOCIAL SECURITY GAP IN THE COFFEE SECTOR IN INDONESIA



SOCIAL SECURITY GAP IN THE COFFEE SECTOR IN INDONESIA

The research was conducted by Catharina Nawangpalupi, University of Parahyangan, under supervision of Sumarjono, Director for Strategic Planning and IT of BPJS Employment and the ILO/Japan Project on Extending Social Security Coverage in ASEAN



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CONTENTS

CONTENTS	iii
LIST OF TABLES	iv
LIST OF FIGURES	v
EXECUTIVE SUMMARY	1
INTRODUCTION	4
BPJS Ketenagakerjaan	5
Social security clusters	8
Potential Sectors	9
RESEARCH METHODOLOGY	10
Research framework	12
Sampling design	13
VALUE CHAIN IN COFFEE	15
SOCIAL SECURITY	17
Profiles of the Players in Coffee Beans Value Chain	18
VALUE CREATION IN COFFEE BEANS SECTOR	25
PENETRATION TO BPJS KETENAGAKERJAAN	28
MARKET SYSTEM DEVELOPMENT	32
Actor identification	32
Roles in value chain	33
RECOMMENDATION AND CONCLUSIONS	35





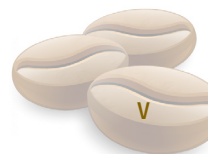
LIST OF TABLES

Table 1:	Scheme of BPS TK (JHT, JKK, JKM, and JP)	6
Table 2:	Types of value chains of coffee beans	11
Table 3:	Sampling size and respondents per area of study	13
Table 4:	Sampling size based on the roles in the value chain	14
Table 5:	Characteristics of coffee beans	16
Table 6:	Questions about profiles in the survey	17
Table 7:	Value creation and important activities for each chain	27
Table 8:	Reasons for non-wage earners not to join BPJS Ketenagakerjaan	29
Table 9:	Reasons for employees not to join BPJS Ketenagakerjaan	30
Table 10:	Supporting roles to farmers	34
Table 11:	Number of the respondents interested in joining	35



LIST OF FIGURES

Figure 1: Clusters of Employment	8
Figure 2: Proportion of Plantation in Indonesia	9
Figure 3: Supply chain for coffee bean cluster	10
Figure 4: Value chain model based on Market System Development	12
Figure 5: Sampling areas of the study	13
Figure 6: Value chain the coffee bean sector	15
Figure 7: Respondents based on Clusters of Employment	19
Figure 8: Educational background of the respondents	20
Figure 9: Place of residence	21
Figure 10: Educational background of the respondents	21
Figure 11: The lands owned by the farmers	22
Figure 12: The average landsize based on the regions	22
Figure 13: The average land size based on the age of business/occupation	23
Figure 14: Potential market for BPJS Ketenagakerjaan	31
Figure 15: Market System Development for coffee value chain	33





EXECUTIVE SUMMARY



BPJS Ketenagakerjaan has started its full operation on 1 July 2015 by offering four schemes of social security: Work Accident benefit (Jaminan Kecelakaan Kerja, JKK), Old-age Security benefit (Jaminan Hari Tua, JHT), Pension Security benefit (Jaminan Pensiun, JP) and Casualty Benefit (Jaminan Kematian, JKM). Although these schemes are mandatory according to the Law on Social Security System, data shows that there are still many employees that have not been covered by benefit schemes offered by BPJS TK. The study also shows that there is still lack of information about BPJS TK. It is important to understand the challenges and hindrances to employees (wage earners) and self-employed individuals to participate in social security schemes.

Specific to the agriculture sector, coffee is a promising sector for improving social security coverage because many productive age individuals are working in this area but have not yet covered by the social security benefits. Data in 2013 from Statistics Indonesia (BPS) shows that there are more than 39 millions productive ages who work in this sector, and there are only 656 thousand who work in the estate or large companies. The trend shows that the social security coverage is still an imbalance between employees in the large enterprises and micro, small and medium-size companies.

Thus, this study aims to provide policy recommendations for improving social security coverage (BPJS Ketenagakerjaan or BPJS TK), by exploring how social security schemes are implemented in different sectors and revealing the attitude in social security between different types of employment and different chains. The study interviewed 130 respondents covering wage earners and non-wage



earners in the coffee sector. The respondents of the survey represent the characteristics of the workers in coffee sectors:

1. The players in coffee sectors are dominated by males (98 males and 13 females for non-wage earners and 15 males and 2 females for wage earners in this sector).
2. Variety of educational background, from vocational and non-vocational and also from primary schools to universities/colleges.
3. A wide range of age starting from 17 years old to 82 years old, with the median is 46 years old.

The study confirms some problems in accessing social security. From 111 non-wage earners who mostly are farmers, only one farmer with 2 permanent employees who have registered the employees to BPJS TK. There are many reasons for the respondents for not registering BPJS TK; the top response is that they have never heard BPJS TK and followed by the reason that they do not know how to register. While many of wage earners and non-wage earners have not yet heard about BPJS TK, many of them are interested in joining BPJS TK if:

1. They know how to (and easily) claim
2. They get information on how to register
3. They get clear information about what benefits.

Revealing the profile of the farmer who registers the employees to BPJS TK, the farmer is younger than the average age (is 43 years old), male, owning 1 hectare of land for coffee crops and yielding 0.5 tons a year. He has owned a café (warung) since 2011 and started to plant coffee in 2006. In developing and managing the business, he has



received many supports from local government, banking institution and ministry in applying certification and receiving training.

From the interview, it is also revealed that significant supports received by players in the coffee sectors are cooperatives and farmers groups (especially for farmers) and local government (plantation district office) and field mentor. Also, the finding shows that it is more likely that players who have the ability to process their coffee with more added-value would be more interested in registering social security schemes. The farmers with ability to process red cherries to green beans would be easier to be persuaded to join social security schemes.

Given the profiles, attitudes, and supports received by players in the coffee sector, there are some quick wins strategies to improve social security coverage:

1. Approach farmers through farmers group when there is capacity building training to provide information about BPJS TK as well as how to register and to claim.
2. Collaborate with local government, either through field mentor (Pegawai Penyuluh Lapangan) or through district office to have sessions and distribute information about BPJS TK.
3. Work together with the supplier to provide coverage within BPJS TK schemes post harvesting time.

The quick wins strategies are recommended to be given to the farmers who have processed their red cherries to green beans or who sell ground coffee. Those farmers are potentials because they tend to have employees, they have achieved higher added-value and are likely to have more capital that is an affecting factors for social security benefits.



INTRODUCTION



In regards to the aim at providing policy recommendations for improving social security coverage (Social Security Administering Body for Employment, or BPJS Ketenagakerjaan), there is a need to explore further how social security schemes are implemented in different sectors. The agricultural sector has many different chains, including informal workers, self-employed and formal workers. The preliminary study shows that different types of workers participate differently in the social security schemes.

There are various reasons and rationale behind the variations. Informal workers and self-employed individuals tend to opt not to participate in social security schemes as they do not see long-time benefits of their participation. Some perceive different needs between social security and health insurance and feel more obligated to health insurance. This results in the joining health insurance and feel sufficient and secured to be covered by the scheme.

The findings from the preliminary study show that there is a gap between different types of employment to the social security participation. Currently, there is still lack of information about the reasons, hindrances, and support needed for informal workers and self-employed individuals to participate in social security schemes.

Also, the preliminary study finds out that there are different forces in the chain of a sector (from its upstream to downstream) that lead to different option and attitude to social security issues. It seems that buyer of the downstream chain would affect how a chain behaves in social security. For example, an exporter that has to comply with many requirements from the international buyer would have no objection to participating in the social security schemes voluntarily.



This study is proposed in order to further explore the attitude in social security between different types of employment and different chains.

BPJS Ketenagakerjaan

BPJS Ketenagakerjaan is the transformed organization from PT Jamsostek (Persero). The transformation began on November 25, 2011. The first phase of transformation was the period of transition from PT Jamsostek (Persero) to BPJS Ketenagakerjaan and ended with the establishment of BPJS Ketenagakerjaan on January 1, 2014. The second phase was BPJS Ketenagakerjaan's operationalization preparation for the management of the program of work accident benefit (Jaminan Kecelakaan Kerja/KK), Old-age Security benefit (Jaminan Hari Tua/JHT), pension security benefit (Jaminan Pensiun, JP) and casualty benefit (Jaminan Kematian/JKM) according to the Law on Social Security System BPJS Ketenagakerjaan's full operation started on July 1, 2015.

While the participation in health insurance is mandatory for all the population, three laws passed in July 2015 regulate the participation in the other programs:

1. participation is mandatory for all income earners, own account workers, employers and employees in the Old-age Security Program (JHT, Law No. 46 of 2015)
2. participation is also mandatory to all income earners in the Work accident (JKK) and the Casualty (JKM) Security Programs (JKM, Law No. 44 of 2015)
3. participation is mandatory only for employees in the Pension Security Program (Law No. 45 of 2015). However, small businesses with less than 20 employees and employees with



a monthly payroll lower than 1 million rupiahs [US\$70.86] are not required to follow the regulations yet.

There is no unemployment scheme and sick or maternity leave programs. BPJS also covers civil servants and police and army officers but with specific schemes.

Table 1: Scheme of BPS TK (JHT, JKK, JKM, and JP)¹

	Old-age security program (JHT)	Work accident (JKK) and the Casualty security program (JKM)	Old-age pension program (JP)
	Provident Fund	Pay-as-you-go scheme	Pay-as-you-go scheme
Participation	Mandatory for all employers, employees and own account workers, excluding civil servants, police and the army (art. 2,4) ²		Mandatory to all employees, including civil servants, police and the army (art. 2)
Payment basis	Monthly payments, including allowance, average income of last 3 months (or 12 if seasonal) (art. 1, 17,18)		At least based on local minimum wages and up to 7 mln Rp indexed every year on GDP growth
Benefit eligibility	Age 56	Any age	Age 56, 57 in 2017 up to 65 in 2047, or in case of permanent disability or decease
Benefits amount	Sum of individual savings in BPJS fund Partial withdrawal after 10 years of membership (up to 30% for housing, 10% otherwise)	Any age	In percent of the weighted average reported wages indexed by the inflation rate, 1% per year of contribution.

1 Based on Laws 24/2011, three government regulations are created under this Law: PP 44/2015, PP 45/2015 and PP 45/2015. The table summarizes these government regulations.

2 Data is summarized from the previous report (Social security gaps in a specific economic sector of Viet Nam and Indonesia) prepared by Castel, P. (2017).

Employers who fail to register and contribute for their employees are responsible for the payment of pension, old-age security, work accident and casualty benefits.

Note: 1/ the legislation differentiates between wage and non-wage earners

The previous study shows that despite the benefits, there is still a low rate of penetration to BPJS Ketenagakerjaan. Based on BPJS TK data in late 2015, there are only about 50% of the formal employees (19.2 million of 27 million) who have been registered in BPJS TK. No wage earners who have registered to BPJS TK is only 800 thousand (based on 2015 data).³

The low rate of registration makes BPJS TK to outreach new employees actively to register. BPJS TK targets the farmers and fishermen and upstream chains of the industries to register in the JKM and JKK schemes. Farmers and fishermen are located in the upstream chain (in the value chain). There are some characteristics of these types of employment in regards to the social security, such as:

- ♦ Range of potential expansion of coverage is significant but relatively small in regards to the target.
- ♦ Productive age who were previously employed and decided to move to informal sectors or micro-scale enterprises.
- ♦ Retaining JHT police holders and increasing their awareness of the benefit of JHT as a long-term safe saving instrument (especially for those who have limited access to bank accounts).

This study aims to provide policy recommendations for improving social security coverage (BPJS Ketenagakerjaan), by:

1. further exploring how social security schemes are implemented in different sectors.
2. further investigating the attitude in social security between different types of employment and different chains.

3 Data is taken from BPJS Ketenagakerjaan website, BPJSTK raih pendapatan Rp17,06 triliun di 2015, 25 May 2016, accessed from <https://www.bpjsketenagakerjaan.go.id/berita/8597/BPJSTK-raih-pendapatan-Rp17,06-triliun-di-2015> (10 Dec 2017).



Social security clusters

Based on the above explanation, there are four clusters of employment and to which schemes in BPJS TK each of the clusters are mandatory. Wage earners or employees are divided into two clusters: those who work for formally registered and those who work for non-registered business (or usually small and micro enterprises). Non-wage earners are those who earn money by themselves (self-employed) or who create job opportunities (wage givers). Non-wage earners can be divided into two clusters as well: formally registered ones and those who work alone (sole-traders) and non-registered ones. The figure below shows the schemes that apply to each of the clusters.

Figure 1: Clusters of Employment

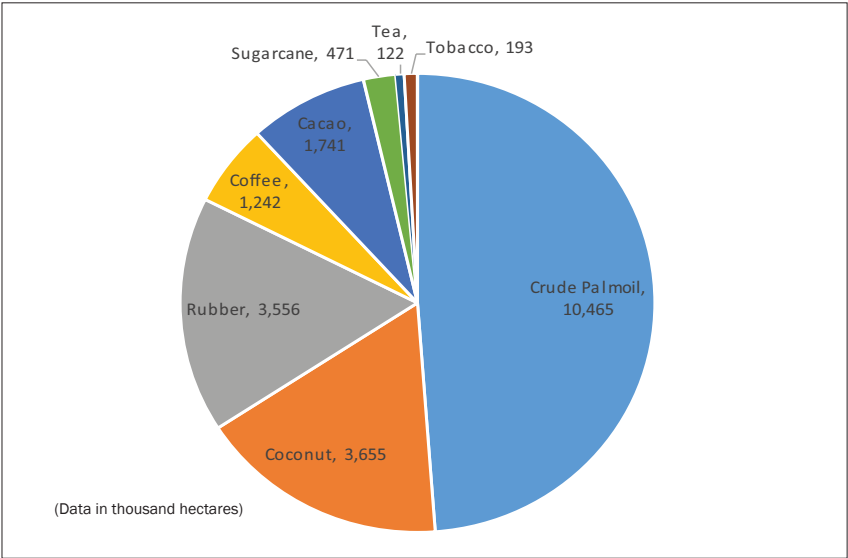


Potential Sectors

BPJS TK targets farmers to have social security to have social security. Farmers and workers in the agricultural or horticulture sectors are potential targets for BPJS. Data in 2013 from Statistics Indonesia (BPS) shows that there are more than 39 millions productive ages that work in this sector, and there are only 656 thousand who work in the estate or large companies.

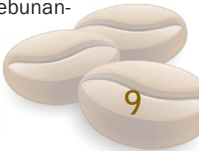
Looking at more detailed based on the types of the plantation, the figure below shows the proportion and the land size.

Figure 2: Proportion of Plantation in Indonesia



(Source: BPS, 2013)⁴

4 Data is based on BPS Indonesia, Luas Tanaman Perkebunan Besar Menurut Jenis Tanaman, Indonesia (000 Ha), 1995 – 2015, last updated 02 Mar 2017, accessed from <https://www.bps.go.id/statictable/2009/09/08/1665/luas-areal-tanaman-perkebunan-besar-menurut-jenis-tanaman-000-ha-1995-2015-.html> (accessed 5 Nov 2017).

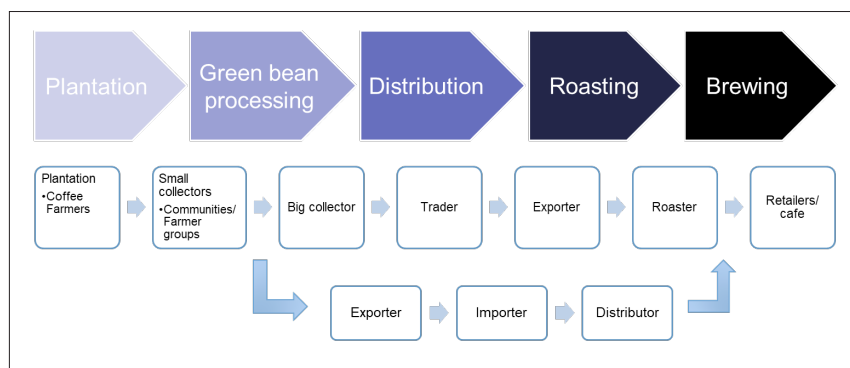


RESEARCH METHODOLOGY



The interviews were conducted with coffee players in Indonesia. Based on the preliminary study in the coffee sector, the figure below shows the chain detected in the coffee value chain.

Figure 3: Supply chain for coffee bean cluster



Based on the figure, there are main players identified that can add values to the chain, such as:

- ♦ Farmers: those who plant the crops and process it to either red cherries, washed coffee, green beans.
- ♦ Collector and Traders: those who purchase the beans from the farmer and distribute them to the downstream chain.
- ♦ Roastery: those who roast and grind the beans that are ready to brew.
- ♦ Breweries (café/coffee shops): those who make a cup of coffee from the roasted beans.

The table below shows the output from the coffee value chain, starting from the plantation that produces the red cherry, to a cup of



coffee served to the end customers. In the table, it is also identified who is the player for the output.

Table 2: Types of value chains of coffee beans

Output	Red cherry	Washed coffee	Green beans	Roasted beans	Cup of coffee
Quantity	10 kg	5 kg	2-2.5 kg	1.5 - 2 kg	150 - 200 cups
Player	Farmers	Farmers/ Farmer groups/ Cooperatives/	Farmers/ Farmer groups/ Cooperatives/ Traders (small/ medium/big)	Roastery	Breweries/ Café

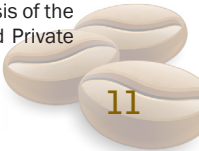
Referring to the previous study conducted in Aceh, farmers develop their coffee plantations by using seedlings of coffee that are obtained from existing coffee crops. Data from the previous study in Aceh, on average, the green beans produced from one hectare of the coffee plantation is 589 kgs.⁵

The yield from the upstream chain (red cherry) to the downstream chain is various, but based on the study conducted in Aceh, from 13 kgs red cherries, there is a weight reduction when the beans are washed and again when it is milled to be green beans. Subsequently, during the roasting process, the beans are dried and the water contents are minimized resulting in 20% weight reduction. Each kilogram of roasted beans can make 100 cups. As a result, ten kilograms of red cherries, with the appropriate bean processing, will serve 150 cups of coffee.⁶

The value chain of coffee processing is important for the study because it identifies the attitudes and significant value for each player in the sector. Also, from this value chain mapping, it can be seen that

5 Data is based on the interview to Sabastian Saragih, (an expert in market system development), 4 October 2017.

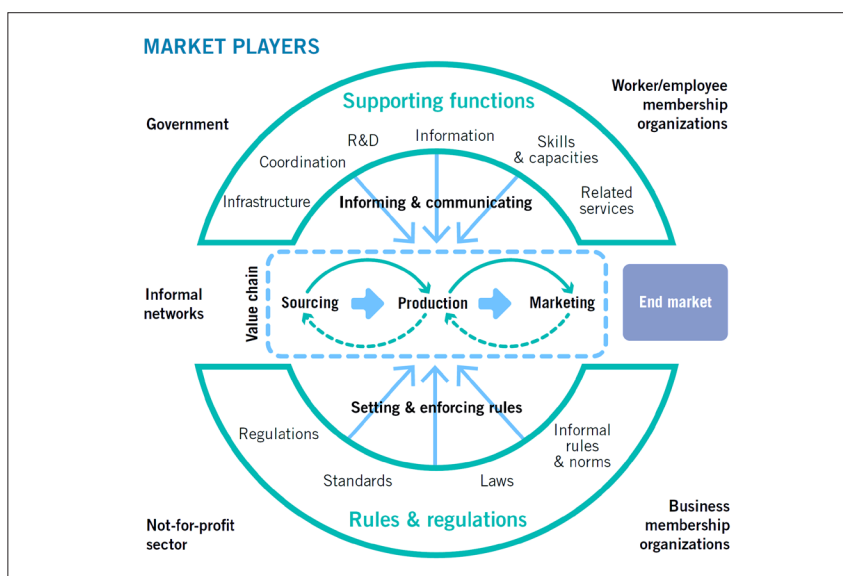
6 Data is based on the interview and the value chain explanation is also supported by the research report from TPSA Project: Conference Board of Canada (2018), An Analysis of the Global Value Chain for Indonesian Coffee Exports, Canada–Indonesia Trade And Private Sector Assistance Project.



Research framework

The research uses **Market System Development** to identify the attitude in social security and support required by wage earners or non-wage earners to get coverage in social security. The figure below shows Market System Development that consists of supporting functions, rules and regulations that will influence the value chain.

Figure 4: Value chain model based on Market System Development

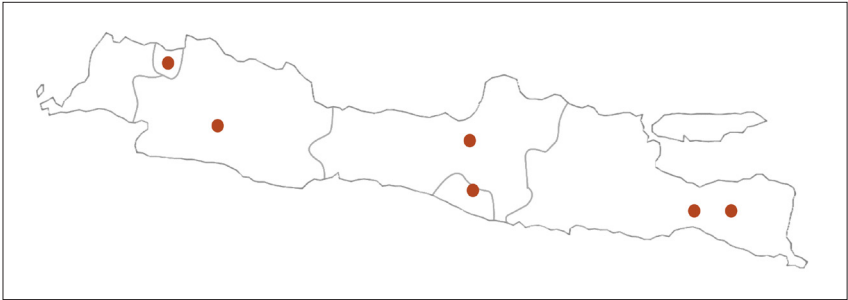


Source: Herr, Matthias; Muzira, Taprea, Value Chain Development for Decent Work: A guide for private sector initiatives, governments and development organizations / Matthias Herr and Taprea Muzira; International Labour Office, Geneva, 2009, p. 7

The study also explores how different types of employment and different roles in the chain have influenced the understanding of social security, and their perceived values about social security benefits.

In order to achieve the aim of the study, interviews are carried out. The figure below shows the sampling area. The table (Table 3) indicates the number of respondents for each area.

Figure 5: Sampling areas of the study



Sampling design

The interviews were conducted with 130 respondents covering farmers, cooperatives, traders, roastery and café owners/workers. The coverage area of surveys is West Java, Jakarta, Central Java and Yogyakarta, and East Java. Table 3 and 4 shows the data of the sampling size, sampling coverage, and categories.

Table 3: Sampling size and respondents per area of study

	Non wage earners	Wage earner
West Java	25	6
Central Java & Yogyakarta	35	2
East Java	51	9
Jakarta	-	2
TOTAL	111	19

Table 4: Sampling size based on the roles in the value chain

	Non wage earners	Wage earner
Farmers	96	6
Manager/Cooperatives	3	-
Traders	4	-
Exporter	3	-
Roastery	3	2
Café owner	10	-
Café worker	-	11

Based on Table 3 and 4, it can be seen that the respondents have represented all roles in value chains and also different regions in Java.

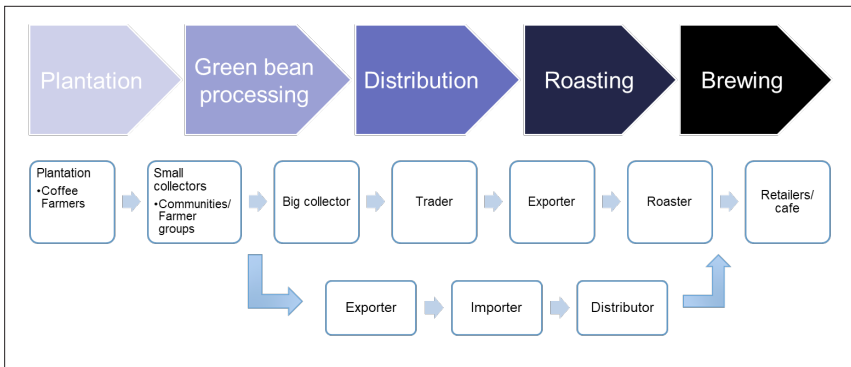


VALUE CHAIN IN COFFEE



The figure shows the process for coffee starting from the plantation that produces the red cherry, to a cup of coffee served to the end customers.

Figure 6: Value chain the coffee bean sector



There are 2 types of coffee: Arabica and Robusta with different kinds of selling: specialty and commodity. Specialty coffee is coffee beans from specific geographic microclimates that produce beans with unique flavor profiles. This designated word of “specialty” is the fundamental premise that specialty coffee beans would always be well prepared, freshly roasted, and properly brewed. This, specialty coffee beans usually available in a small amount (compared to commodity).⁷ Commodity trading coffee is coffee blends that typically are made from beans coming from several plantations, sometimes from multiple countries. The aims of blending are to produce a more

⁷ See Rhinehart (2009), What is Specialty Coffee?, newsletter March 17, 2017, Specialty Coffee Association (SCA), accessed from <http://www.scanews.coffee/2017/03/17/what-is-specialty-coffee/> (10 October 2017)



neutral flavor and to decrease the chance for any one part of the blend to overwhelm the whole profile. The beans are processed on a massive scale, and will likewise be roasted and ground on a massive scale.⁸

Depending on the types of selling, specialty or commodity trading, the process is similar, but the chain may be shorter for one type to another. Arabica can be processed as specialty and commodity trading while Robusta is only for the commodity.

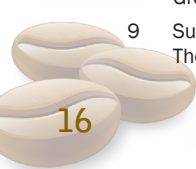
Table 5: Characteristics of coffee beans⁹

	Arabica coffee	Robusta coffee
Commodity trading: everyday diner style coffee, also used as freeze-dried, and traded on the commodities market. Roasting styles are not influential on the overall taste.	✓ (lower grade Arabica coffee)	✓
Specialty: bean that's denser and has more chemical compounds to produce an amazing array of flavors when roasted. Specialty coffee has so many complex flavor profiles that neighboring farms may taste vastly different.	✓ (a higher standard of processing and more pricey selected/ high-grade Arabica coffee)	☒

Different players for Robusta and Arabica coffee beans have also been selected. The respondents in East and Central Java are from Robusta and Arabica coffee beans while the respondents in West Java are only from those who plant and sell Arabica coffee beans.

8 See Freeman, J., Freeman, C., & Duggan, T. (2012). The Blue Bottle Craft of Coffee: Growing, Roasting, and Drinking, with Recipes. Ten Speed Press.

9 Summarized from Rhinehart (2009), Freeman, J., Freeman, C., & Duggan, T. (2012) and The Specialty Coffe Company



SOCIAL SECURITY



To identify the perceived values and attitudes towards social security benefits, a survey was conducted. Hence, questionnaires are designed which consist of four parts: introduction, value creation, views about social security benefits, and supports and constraints. The complete questionnaires can be found in Appendix A.

The first part (the introduction) consists of questions about profiles, business characteristics, and employment characteristics. The table below shows the questions from this introductory part.

Table 6: Questions about profiles in the survey

Profiles	<p>Are you (select that is correct):</p> <p>Farmer, cooperative manager (or head) of coffee farming, trader (export/local market), roaster, café owner, employee of coffee shop/café</p> <p>Location (city):</p> <p>Place of business/farm:</p> <p>Age:</p> <p>Educational background:</p> <p>How long have you been running the business (or doing coffee farming/organizing the coffee cooperative)?</p> <p>Are you</p> <ul style="list-style-type: none">- A wage earner- A non-wage earner <p>Is your business registered?</p>





Business characteristics	<p>Tell us the main activities of your business</p> <p>If you are a farmer: what is the size of the land you own?</p> <p>If you are a non-farmer: how many employees do you have?</p> <p>If you are an employee: is it your only job? If not what other jobs are currently working?</p> <p>What/who is your supplier (upstream chain)</p> <p>What/who is your customer (downstream chain)</p>
Employment characteristics	<p>If you have employees working in this business:</p> <p>How many staff do you have (and you give salary/ wage):</p> <ul style="list-style-type: none">♦ On permanent basis♦ On contract♦ Casual basis <p>What allowance do you provide to your employees</p>

Profiles of the Players in Coffee Beans Value Chain

Figure 7 shows the distribution of respondents based on the clusters of employment. As the study focuses on the farmer and players in the upstream chain, Cluster 4 (non-wage earners, self-employed or own account worker) has the most respondents.



Figure 7: Respondents based on Clusters of Employment



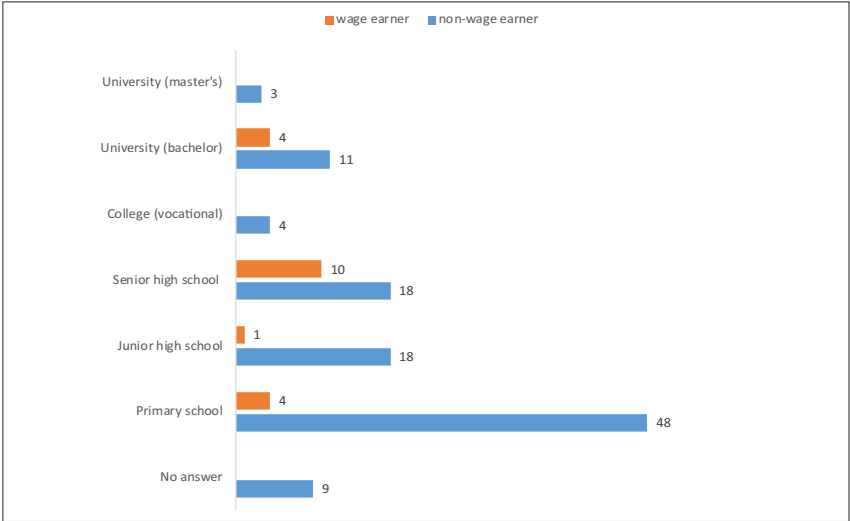
Based on the gender, there are more males (114 respondents) than females (16) working in this chain. Most of the women are working as a café owner or café worker (barista), there is only one female farmer. From cluster 1 and 2 (wage-earners), there are 3 females, 16 males and from cluster 3 and 4, there are 13 females and 98 males.

Based on the educational background, there are varying backgrounds, from vocational and non-vocational educations and there are ranges of educational levels, from primary schools to universities/colleges. Figure 8 shows the ranges of educational background for a wage earner and non-wage earner. Most of the farmers have primary school as their educational background while the workers (or wage earners) tend to have higher educational background with the majority are high school graduates.





Figure 8: Educational background of the respondents



The respondents also vary in regards to the age ranges. The youngest respondent is a 17-year old farmer in Bandung to 82-year old farmer in Yogyakarta. The median age is 46 years old. There are different locations of residence for the respondents, 35 respondents from Central Java and Yogyakarta (Temanggung and DI Yogyakarta), 51 from East Java (Lumajang and Jember), and 27 from West Java and Jakarta. The ranges of location can be seen in Figure 9.

Figure 9: Place of residence

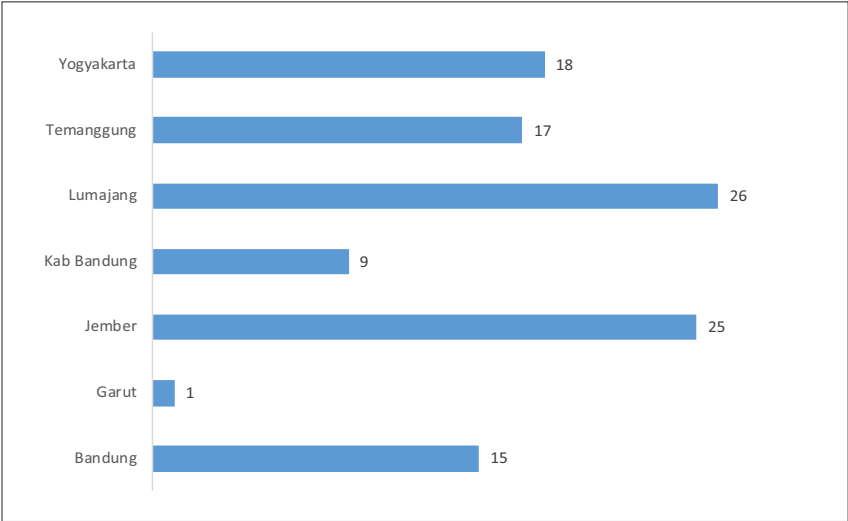


Figure 10: Educational background of the respondents

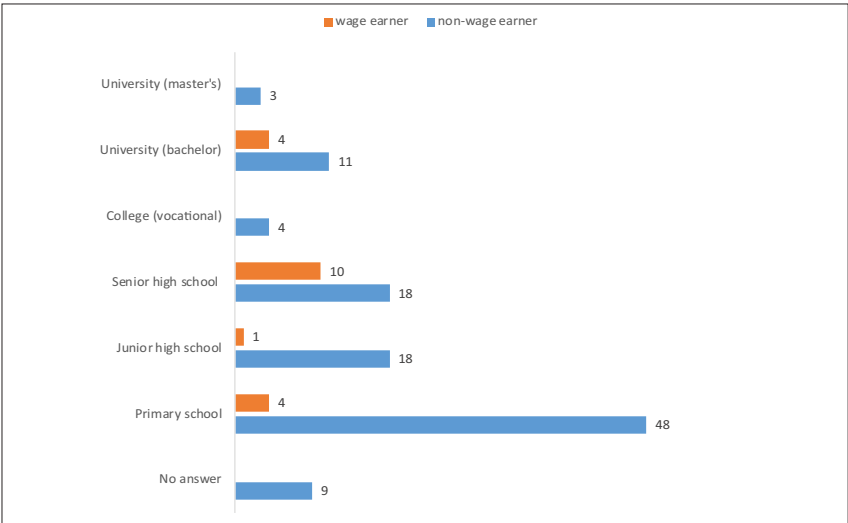




Figure 11: The lands owned by the farmers

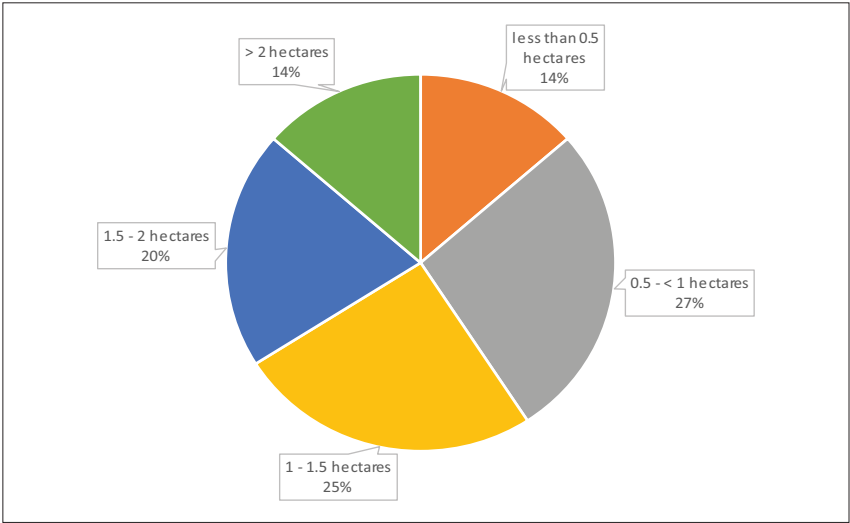
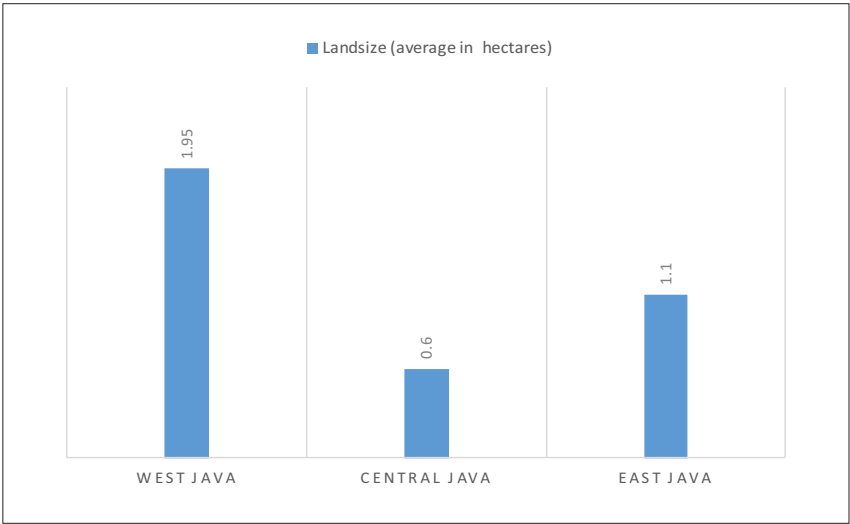
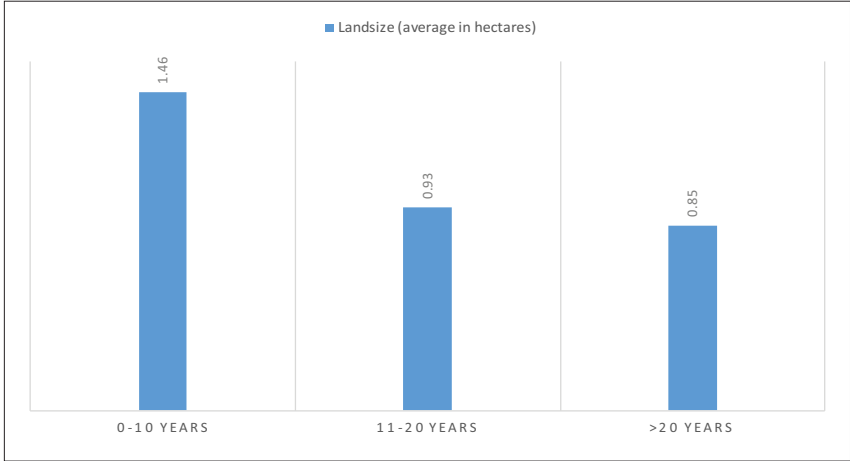


Figure 12: The average landsize based on the regions



Specific for the farmers, the average land they own is 1.1 hectares, with the range between 100 m² and 5 hectares (50,000 m²). Most of the farmers have the land between 0.5 to 1.5 hectares. There are differences between the lands of farmers in West Java and in Central and East Java. While the farmers in West Java have large land size, with the average of 1.95 hectares, the farmers in Central Java have, on average, only 0.6 hectares. This results in fewer coffee beans produced in Central Java.

Figure 13: The average land size based on the age of business/occupation



The farmers sell the coffee beans to the traders (small or big traders), either in red cherries or green beans. The farmers state that the land management is the most crucial activity in maintaining their products, which include the effort to keep the land fertile and to do pruning. Also, harvesting techniques to select good red cherry is also crucial.

For the roastery and coffee shop (café owner), roasting is the most valuable activity to offer a cup of coffee to their customers.



There are only 20% of non-wage earners (or 22 farmers, roaster, and café owner) who have permanent staff, with the minimum staff is zero, and the maximum number of staff is 30 persons. The average permanent staff for those who have permanent staff is 4 persons.

Many of the non-wage earners have casual and contract-based workers. Seventy-four of 111 non-wage earners have any kind of workers: permanent, contractual, casual or some of these types, with the range number of workers is from 1 person to 30 persons.



VALUE CREATION IN COFFEE BEANS SECTOR



The questions about value creation are focused on those who create employment or self-employed (or non-wage earners), and it focuses on their perception of the significant value of their businesses/activities. The value creation is identified based on the main roles in the supply chain: farmer, trader, roaster and café owner of the brewery.

Farmers have the roles in the value chain for planting and harvesting coffee. Most of the farmers sell the red cherries to the trader, and some of them (individually or in the cooperative, they have managed) sell the green beans. Several of the farmers sell the roasted coffee beans, either in small packages to the end customers or in bulk size to traders.

The traders buy red cherries or green beans to the farmers. When the traders buy red cherries, then they do bean processing by removing the fruit (red cherries) from the seed, by step-by-step removal of skin, pulp, parchment, and silverskin to get the green beans. The process starting from fermenting the beans, sorting, drying and hulling them. Specific to Arabica beans, there are many different processes, which is called full-wash (or wet wash), semi-wash or natural process (or dry process). The farmers who are also traders do all the same process. Some of the farmers who sell washed-coffee beans do not do hulling, so they sell the coffee beans that still have parchment and silverskin (only remove the skin and pulp of the coffee beans).

The roasters usually receive green beans from the farmers or traders. The roasting process depends on the characteristics of the coffee beans. Some green beans are aged before roasting to reduce the acidity. The roasters usually sort the bean and remove the poor-



quality beans (defective and broken beans) before roasting. There are three types of roasting: light, medium and dark roasting and some of the roasters also use light-medium or medium-dark roasting. After roasting beans are cooled and packaged, then the beans are ready to sell.

Café owners and baristas are those who serve a cup of coffee to the end customers. Cafés select the beans and make a cup of coffee using different methods: pressure brewing, gravity brewing or steeping methods. The most common pressure brewing is espresso making using an espresso machine, but there are also moka-pot and vacuum coffee brewing. The gravity brewing is also called manual brew, by using drip-method or pour-over using a coffee filter. The steeping method is the method where the coffee grounds are left to steep in the water for a particular time.

Based on the processes done by each of the chains, Table 7 summarizes the value created in each role based on the interview. It can be seen that land management is an essential issue for the farmer. They spend time for creating fertile soil and conducive environment for the coffee trees to grow optimally. The farmers also need to be careful in harvesting red cherries as the quality of beans is also influenced by the maturity of red cherries.



Table 7. Value creation and important activities for each chain

Role	Value creation	Comments
Farmer	Land fertilization, pruning, land clearing. Red-cherries harvesting and distribution	To maintain the balance of each cherry, it is important to have fertile soil, adequate light to keep the tree growing in balance.
Trader	Wash and Hull process	I need to ensure how the farmer plants its coffee trees, how they maintain the trees and the way they harvest it. The altitude of the coffee trees is also an important factor for me to select the coffee beans.
Roaster	Roasting	Roasting can play 30% of good quality coffee where the roaster can create the right taste by setting the temperature of the roasting.
Café or barista	Brewing	Passionate barista and how they work together with the owner, colleagues and also the customers affect the quality of the brewed coffee.



PENETRATION TO BPJS KETENAGAKERJAAN



From 111 non-wage earners, there is only one farmer that provides BPJS TK to the employees. There are eight non-wage earners. There are 14 non-wage earners who give medical insurance to their workers: (eight are BPJS and the other six are private health insurance. There are actually only 22 non-wage earners who hire permanent workers; the other 52 have casual or contract-based workers while the other 37 non-wage earners are working independently and have no paid workers.

The non-wage earner who pays BPJS Ketenagakerjaan (JKM and JKK) to the workers is a 43-years old male, owning 1 hectare of land for coffee crops, and yielding 0.5 tons a year. He has owned a café (warung) since 2011 and started to plant coffee in 2006. He has 3 non-contracting employees (for harvesting period) and 2 employees for the café (the ones that are registered to BPJS TK). This person has a lot of support for his business. He has support from banking for finance, Health District Office and Trade District Office for Halal certification and quality assurance, local government for expo and education, and Ministry of Industry for roasting training.

The other who do not join BPJS Ketenagakerjaan have many reasons, but the most expressed reason is that they do not know how to register (37 respondents) followed by the reason that they have never heard of this scheme for them. The other reasons include that they do not need to register as they do not have employees, there is another cheap and easy to access scheme from private insurance, and it is enough to register the employees for BPJS Kesehatan. The last two reasons imply that the farmers do not know the information about BPJS Ketenagakerjaan. Twenty respondents do not register to



BPJS Ketenagakerjaan because they do not know how to claim if they need too, while low responses about the price and obligations. Table 8 shows the summary of the reasons for the non-wage earners not to join BPJS Ketenagakerjaan.

Table 8. Reasons for non-wage earners not to join BPJS Ketenagakerjaan

Reasons for not joining	
Don't know how to register	37
Never heard of	36
Others	22
Don't know how to claim	20
Too expensive	6
Not compulsory	3
Not useful	3
No added value	2
Not important	1

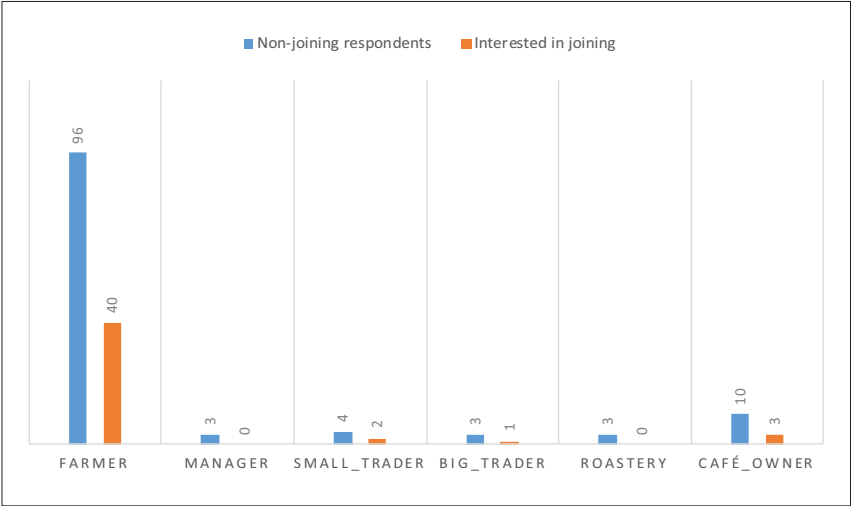
For the wage-earners, from 19 respondents, there are only 3 persons whose employers registered them for BPJS Ketenagakerjaan. One worker still has an old scheme of JHT from Jamsostek. They were also asked the reasons for not joining BPJS Ketenagakerjaan. Mst of them answered that they have never heard of the scheme, while the others do not see this as a mandatory option for their employers or do not know how to register. Table 9 shows the reasons for an employee not to join the scheme.

Table 9. Reasons for employees not to join BPJS Ketenagakerjaan

Reasons for not joining BPJS TK	Responses
Never heard of	7
Not compulsory	1
Don't know how to register	3
Don't know how to claim	1
No added value	1
Others	7

The non-wage earners were asked whether they want to join BPJS Ketenagakerjaan for themselves or for their employees. Also, for the employees who have not yet joined BPJS Ketenagakerjaan, they were informed about the opportunity for them to independently join BPJS Ketenagakerjaan and were explained the benefits of the scheme (*Pekerja Mandiri*). After that, they were asked if they are interested in joining the scheme. There were 119 respondents replied to this question and no more than half of them are interested. Forty of 96 farmers are interested and none of the managers is interested in joining. Three of seven traders are interested in joining and three of ten café owner (or baristas) are interested in joining. Figure 14 shows the proportions of them who are interested in joining the scheme after the explanation.

Figure 14: Potential market for BPJS Ketenagakerjaan



MARKET SYSTEM DEVELOPMENT



To further identify the strategy to increase penetration rate to BPJS Ketenagakerjaan in the coffee value chain, a market system development (MSD) is created. As explained earlier that MSD aims to identify the attitude in social security and the support from different roles that influence the value chain, this part describes how different organization or parties play their role to increase the involvement to BPJS Ketenagakerjaan.

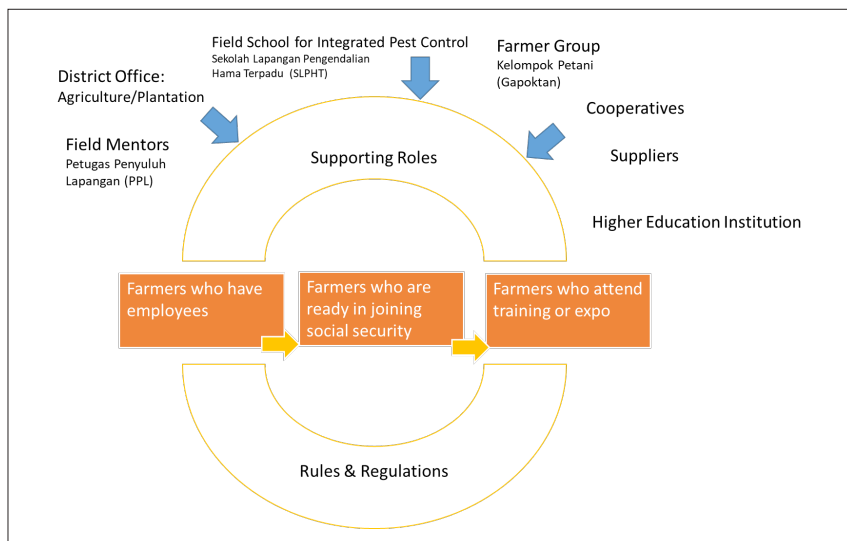
Focusing on the increase of a number of farmers that would join BPJS Ketenagakerjaan, the analysis starts with the actor identification and what roles they have been given to the farmers.

Actor identification

Figure 15 shows the actor in the value chain, from the leading actor, supporting roles and rule and regulation roles.



Figure 15: Market System Development for coffee value chain



Roles in value chain

The roles of each chain are summarized from the interviews to the farmers about the influencing actor to them in creating value in the value chain. Based on the interviews, Table 10 shows the leading roles and how the organizations give influence to the farmers.

It can be seen that there is professional infrastructure that provides main support to the community development. Also, local government has been identified as influencing actor in giving support to both farmers' welfare and agricultural condition.



Table 10. Supporting roles to farmers

Types	Organization	Supporting roles
Government & Government service	(not expressed)	Enforcing law and encouraging workforce for social security
Local government	Dinas Pertanian (Perkebunan dan Kehutanan)	Support for local economic Support for workforce welfare Support for better agricultural condition
Roaster	Gabungan Kelompok Tani (Gapoktan), Cooperatives, Sekolah Lapangan Pengendalian Hama Terpadu, Petugas Penyuluh Lapangan University	Support for training, community development (possible for raising awareness for social security)
Trade organization	Supplier	Strengthening value chain (possible for managing/ coordinating the social security)
Community	Community, Gapoktan	Strengthening and enriching value chain (possible for social capital enhancement in social security)

The table provides insight into the recommendation for BPJS Ketenagakerjaan in strengthening the network if BPJS want to increase the penetration rates of its schemes.



RECOMMENDATION AND CONCLUSIONS



From all non-wage earners, there is 42% of the respondents who are interested in joining. The characteristics of those people are:

- ♦ Mostly farmers, with most of them have employees.
- ♦ Twelve of 40 farmers (30%) sells raw materials (red cherries) where the others are processing their products to raw beans (beras), green beans or roast and ground beans.
- ♦ The differences between products sold make differences of training/support they need.

Table 11. Number of the respondents interested in joining

Reasons for not joining	Interested in joining	
Don't know how to register	37	20
Never heard of	36	14
Others	22	14
Don't know how to claim	20	13
Too expensive	6	0
Not compulsory	3	1
Not useful	3	0
No added value	2	1
Not important	1	0



Many of them are interested in joining BPJS TK if:

1. They know how to (and easily) claim.
2. They get information on how to register.
3. They get clear information about what benefits.

Revealing the profile of the farmer who registers the employees to BPJS TK, the farmer is younger than the average age (is 43 years old), male, owning 1 hectare of land for coffee crops and yielding 0.5 tons a year. He has owned a café (warung) since 2011 and started to plant coffee in 2006. In developing and managing the business, he has received many supports from local government, banking institution and ministry in applying certification and receiving training.

From the interview, it is also revealed that significant supports received by players in the coffee sectors are cooperatives and farmers groups (especially for farmers) and local government (plantation district office) and field mentor. Also, the finding shows that it is more likely that players who have the ability to process their coffee with more added-value would be more interested in registering social security schemes. The farmers with the ability to process red cherries to green beans would be more accessible to be persuaded to join social security schemes.

Given the profiles, attitudes, and supports received by players in the coffee sector, there are some quick wins strategies to improve social security coverage:

1. Approach farmers through farmers group when there is capacity building training to provide information about BPJS TK as well as how to register and to claim.
2. Collaborate with local government, either through field mentor (Pegawai Penyuluh Lapangan) or through district office to have sessions and distribute information about BPJS TK.



3. Work together with the supplier to provide coverage within BPJS TK schemes post harvesting time.

The quick wins strategies are recommended to be given to the farmers who have processed their red cherries to green beans or who sell ground coffee. Those farmers are potentials because they tend to have employees, they have achieved higher added-value and are likely to have more capital that is an affecting factor for social security benefits.



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APPENDIX A



QUESTIONNAIRES FOR WAGE EARNERS AND NON WAGE EARNERS

Parts	Type of questions	Questions
Introduction	Profiles	<p>Name:</p> <p>Are you (select that is correct): Farmer, cooperative manager (or head) of coffee farming, trader (export/local market), roaster, café owner, employee of coffee shop/café</p> <p>Location (city): Place of business/farm: Age: Educational background:</p> <p>How long have you been running the business (or doing coffee farming/organizing the coffee cooperative)?</p> <p>Are you</p> <ul style="list-style-type: none"> - A wage earner - A non-wage earner <p>Is your business registered?</p>
	Business characteristics	<p>Tell us the main activities of your business</p> <p>If you are a farmer: what is the size of the land you own?</p> <p>If you are a non-farmer: how many employees do you have?</p>



Parts	Type of questions	Questions
		<p>If you are an employee: is it your only job? If not what other jobs are currently working?</p> <p>What/who is your supplier (upstream chain)</p> <p>What/who is your customer (downstream chain)</p>
	Employment characteristics	<p>If you have employees working in this business:</p> <p>How many staff do you have (and you give salary/wage):</p> <ul style="list-style-type: none"> - On permanent basis - On contract - Casual basis <p>What allowance do you provide to your employees</p>
Value creation	Roles in the chain	<p>In terms of the business that you are running (Or in the farm that you own), what do you think is the most valuable activities (open-ended question)</p> <p>Tell us more about the value you provide (<i>note: explore in the interview the products/services and the quality how they deliver the products/services</i>)</p>
	Viewed of how social security affect to value creation	<p>Do you provide any of these allowances to your employee:</p> <ul style="list-style-type: none"> - Jaminan Kecelakaan Kerja - Jaminan Kematian - Jaminan Hari Tua - Jaminan Pensiun - Health insurance (please specify) - Other insurance (please specify)

Parts	Type of questions	Questions
Introduction	Profiles	<p>If any of the above is checked, probe further:</p> <p>Why are you giving these allowances to your employee?</p> <p>Do you think providing this allowance to your employee give you benefits?</p> <p>Why and how the benefits apply to you</p> <p>(probe in terms of better work quality, better product)</p> <p>For yourself, do you have these allowance yourself?</p> <ul style="list-style-type: none"> - Jaminan Kecelakaan Kerja - Jaminan Kematian - Jaminan Hari Tua - Jaminan Pensiun - Health insurance (please specify) - Other insurance (please specify) <p>Who pays the allowance?</p> <p>Why and how the benefits apply to you</p> <p>(probe in terms of better work quality, better product)</p>
	Parties involved in creating values	<p>Are you working together (cooperate) with other parties (other farmers, other companies in similar business, other businesses in different business) in creating valuable activities for your business?</p> <p>If yes, explain what and how you cooperate</p> <p>Are you receiving assistance from other parties in creating value for your business?</p>

Parts	Type of questions	Questions
		<p><i>(if it is not clear, ask if they have received training or assistance in product quality, service delivery, capacity building, access to market, access to supplies, enter international market)</i></p> <p>If you receive any assistance from more than one party, what is the most important party? Why</p>
Employment benefits	Social security to employment	<p>In terms of the social security you pay for yourself or your employee, please choose 1 -5 (from strongly disagree to agree strongly)</p> <p><i>(specify what allowance that the respondent refer to)</i></p> <p>The allowance that I pay is more than I can actually afford</p> <p>The allowance that I pay give me more burdens than benefits</p> <p>The allowance that I pay increase the productivity in my business <i>(such as improving efficiency)</i></p> <p>The allowance that I pay enable me to think about business expansion/ growth <i>(selling more, use more land for coffee farming, increasing production capacity, adding outlets)</i></p>
	Views about employment benefits	<p>In terms of the social security you pay for your employee, please choose 1 -5 (from strongly disagree to agree strongly)</p> <p><i>(specify what allowance that the respondent refer to)</i></p> <p>My employees work better after receiving the social security</p> <p>My employees become more loyal after receiving the social security</p>



Parts	Type of questions	Questions
		<p>My employees respect me more after receiving the social security</p> <p>My employees recommend me goof inputs for the business after receiving the social security</p> <p>There is no change of behavior with or without social security</p>
Supports & Constraints	Parties involved in employment support	<p>Do you receive support for the following aspects:</p> <ul style="list-style-type: none"> - Training the employee (for technical aspects) - Training the employee (for soft skills and better work condition) - Registering the employee for social security/insurance - Creating employee union - Registering your business - Other, please specify
	Drivers and barriers to applying Social Security	<p>(If the respondent has registered to JKK/JKM/JHT or JP), if you have new employee how quick will you register them in the schemes?</p> <ul style="list-style-type: none"> - Right after the employment - Between 1-3 months - Between 3-6 months - After 6 months - Never <p>(If the respondent has NOT registered to JKK/JKM/JHT or JP), What is the main problem that makes you not joining the scheme? (explore and write down the reasons, and also check the following criteria – can be more than one)</p> <ul style="list-style-type: none"> - Never heard (no access to information)

Parts	Type of questions	Questions
		<ul style="list-style-type: none"> - Too expensive (the cost issue) - Not compulsory (regulatory issue) - Not important/Don't care (behavior issue) - Cannot find how to pay or to register (support system in registration) - Don't know how to claim if I have a problem (support system in the claims) <p>If you have registered to BPJS Ketenagakerjaan (<i>please choose 1 -5 from strongly disagree to agree strongly</i>):</p> <p>I am satisfied with the service provided by the BPJS TK office</p> <p>I am happy with the service of BPJS TK officer</p> <p><i>(if they rate 3 or lower in any of the statement, please ask why and how BPJS TK can improve the service)</i></p> <p>What other supports do you expect to receive for better social security for yourself and/or for your employee (<i>explore the answers</i>)</p> <p>Who do you expect to receive the support from?</p>

