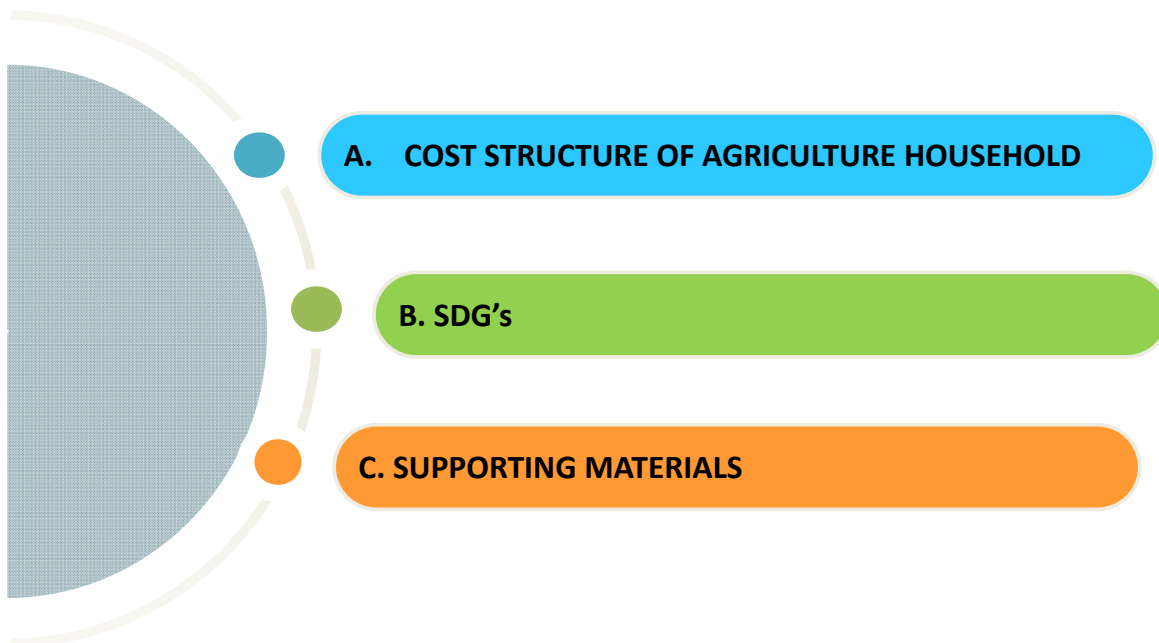
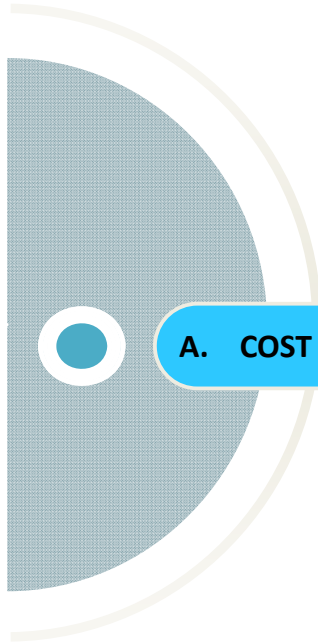


Cost Structure Survey of Agriculture Household and Implementation of Area Sample Frame





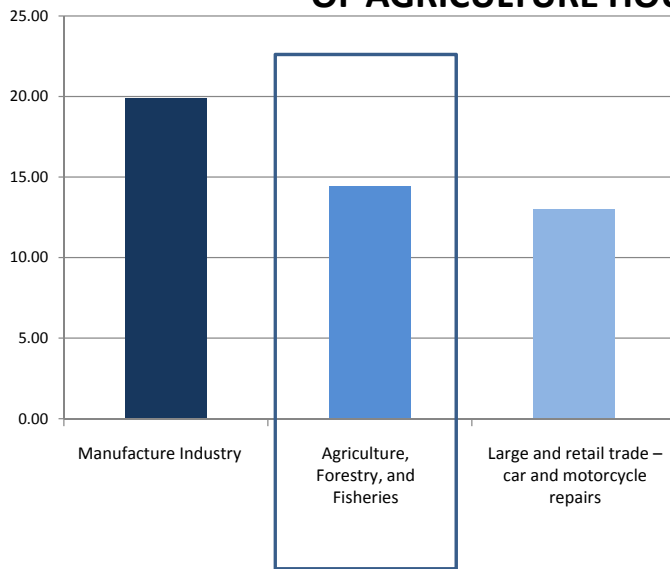
A. COST STRUCTURE OF AGRICULTURE HOUSEHOLD



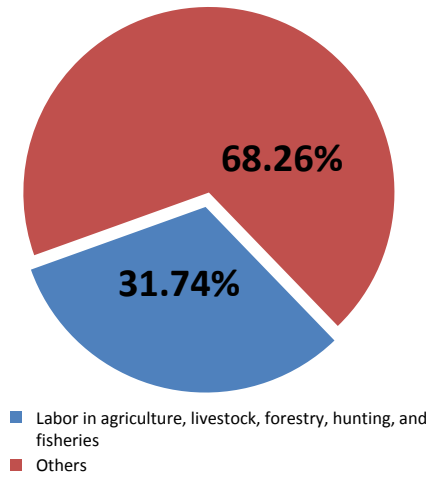
Cost Structure Survey in Indonesia

- Cost Structure Survey of Agriculture is carried out as a series of Agricultural Census conducted every 10 years.
- The latest Cost Structure Survey of Agriculture based on Household approach is in 2014.
- In 2017 is being conducted Cost Structure Survey of Food Crop and Livestock and the results will be released in November 2017.

BACKGROUND COST STRUCTURE SURVEY OF AGRICULTURE HOUSEHOLD

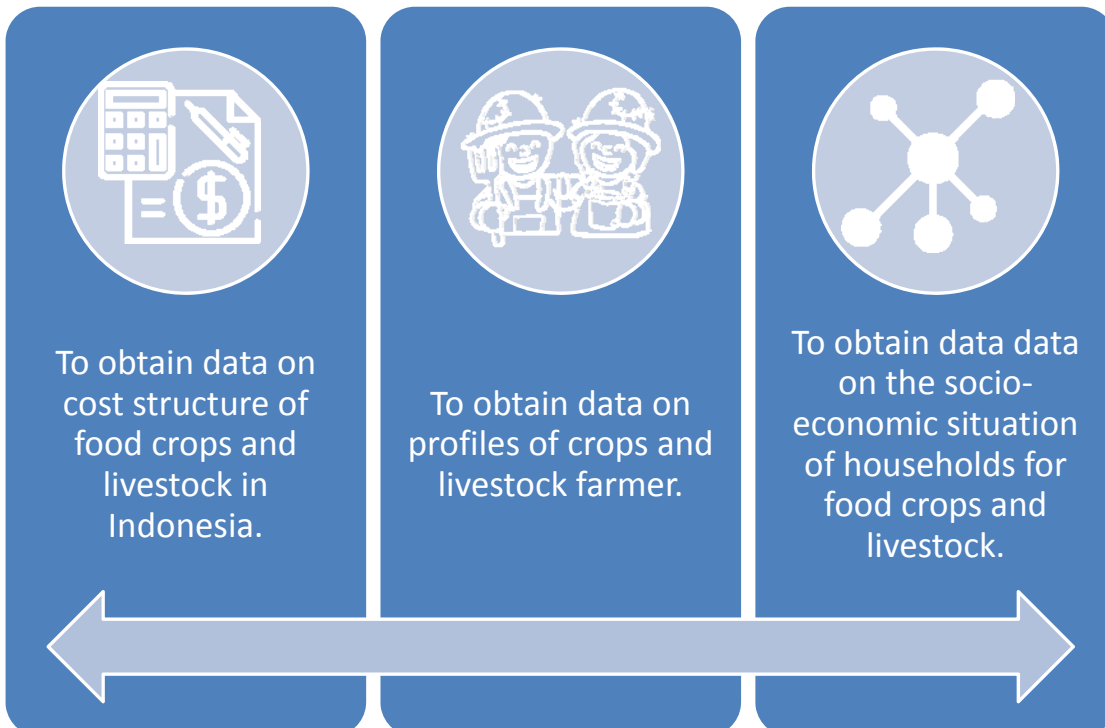


Percentage of Gross Domestic Product Structure by Major Business Lines (Top 3) Based on the GDP of Quarter III 2016

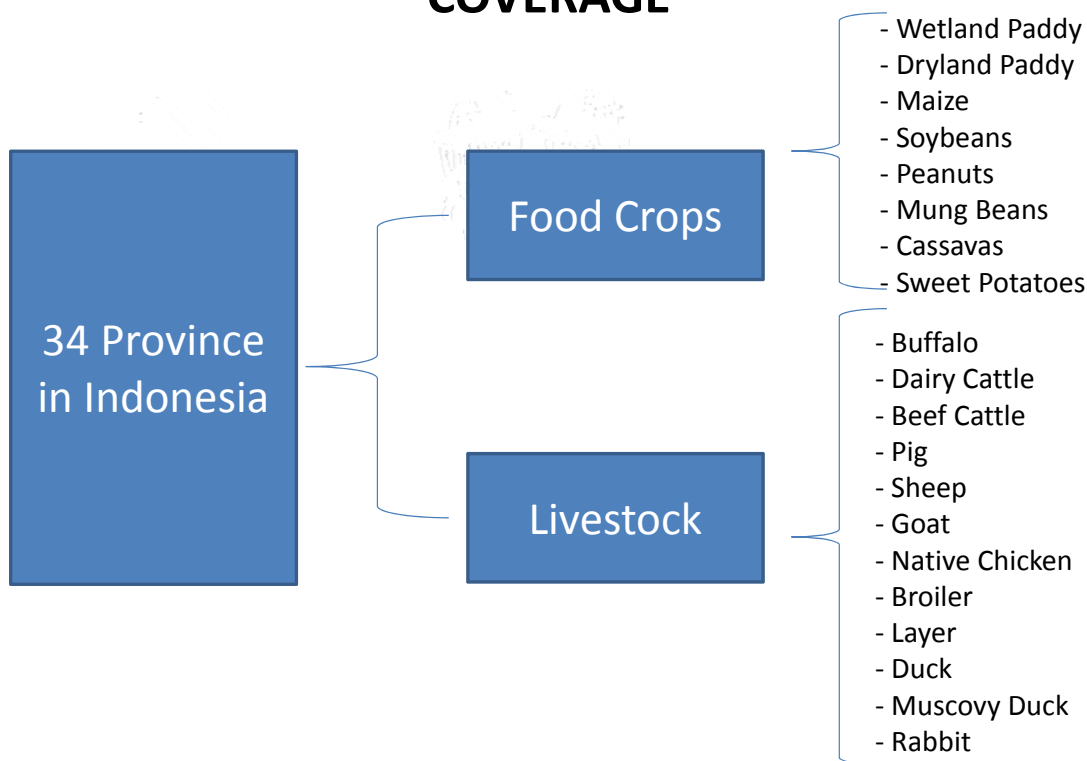


Percentage of Labor Structure by Employment Based on Sakernas February 2016

GOALS



COVERAGE



Methodology

Sampling Design

2-stage sampling:

- The first stage sampling is selection of census block using Probability Proportional to Size (PPS) sampling
- The second stage sampling is selection of strategic commodity households using Systematic Sampling

Enumeration Method

Direct interview with respondents

Representative Sample

The sample size was designed to produce characteristic estimation at provincial level

Opportunity Cost Principle

The calculation of the costs of managing agricultural enterprises (self-owned land, self-produced seeds, and unpaid family workers) is carried out by valuing local market prices for the same classification of goods and employment.



Sample Target

Census Block	:	36.229
Paddy Household	:	154.548
Food Crop Household	:	207.660
Livestock Household	:	180.044



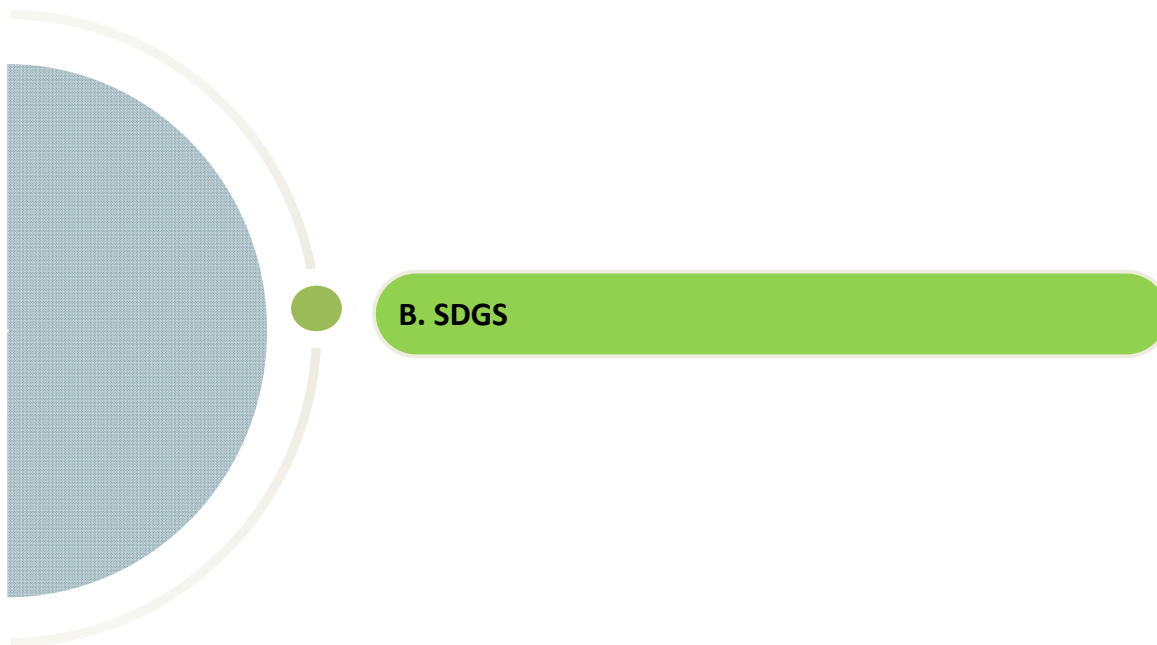
DATA COLLECTED

FOOD CROPS

- Description of Household Demography
- Description of Harvest and Business Production
- Business Characteristics
- Cost of Food Crops
- General Description of Food Crops Business
- Description of Building and Housing Residence Facilities
- Description of Household Food Access
- Description of Ownership and Land Use
- Description of Harvest Area

LIVESTOCK

- Description of Breeders Demography
- Ownership of Livestock and Livestock Business Facilities
- Livestock Composition and Fertility
- Cost of Livestock
- Livestock Production
- Vaccination, Disease, and Sales of Livestock
- Institutional
- Description of Building and Housing Residence Facilities



Several SDG's Indicators for Agriculture

- 2.3.1 Volume of production per labour unit by classes of farming/pastoral/forestry enterprise size
- 2.3.2* Total Factor Productivity
- 2.4.1* Percentage of agricultural area under sustainable agricultural practices
- 2.4.2* Percentage of agricultural households using irrigation systems compared to all agricultural households
- 2.4.3* Percentage of agricultural households using eco-friendly fertilizers compared to all agricultural households using fertilizers



Several SDG's Indicators for Agriculture

- 2.5.1* Ex situ crop collections enrichment index
- 2.5.2* Percentage of local crops and breeds and their wild relatives, classified as being at risk, not-at-risk or at an unknown level of risk of extinction
- 5.a.1(a) Percentage of people with ownership or secure rights over agricultural land (out of total agricultural population), by sex; and (b) share of women among owners or rights-bearers of agricultural land, by type of tenure
- 5.a.2 Percentage of countries where the legal framework including customary law) guarantees women's equal rights to land ownership and/or control



Cost Structure Survey to measure SDG Indicator 2.4.1

- ❖ SDG Indicator 2.4.1 is an indicator related to sustainable agriculture
- ❖ Sustainable agriculture is measured in 3 dimensions as follows:

Dimension	Theme	Sub-indicator	Include in Cost Structure Survey
Economic	Labour Productivity	Production Volume/ Number of labour	Yes
	Farm Income	Net Farm Income	Yes
	Access to credit/capital services and insurance	Ratio of access to credit, capital services, and insurance	Yes



Cost Structure Survey to measure SDG Indicator 2.4.1

Dimension	Theme	Sub-indicator	Include in Cost Structure Survey
Environment	Soil Quality	Soil quality ratio	No
	Water use	Abstraction of surface water and groundwater as a percentage of water available for agriculture	No
	Water quality	Excessive use of fertilizers and pesticides	Yes
	Fire/ Air pollution	The level of air pollution	No

15



Cost Structure Survey to measure SDG Indicator 2.4.1

Dimension	Theme	Sub-Indicator	Include in Cost Structure Survey
Environment	Biodiversity	Conservation area as a proportion of total agricultural land area	No
	Intensity of energy use	Energy use/ Volume of agricultural production (Joule/Ton)	No
	Greenhouse Gas Emissions (GHG)	GHG emissions (ton CO_2)/ Volume of agricultural output	No
	Land use change	The impact of changes in agricultural land function	No

16



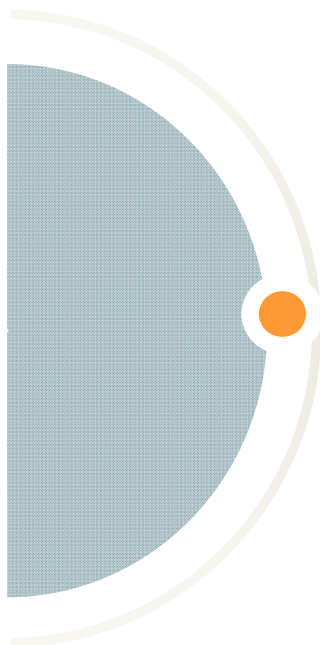
Cost Structure Survey to measure SDG Indicator 2.4.1

Dimension	Theme	Sub-indicator	Include in Cost Structure Survey
Social	Education Access	Ratio of access to education	Yes
	Land Access	Land ownership ratio	Yes
	Farmer's Age	Average of Farmer's Age	Yes
	Income Diversification	Ratio of Agricultural income	No



Cost Structure Survey to measure SDG Indicator 2.4.1

Dimension	Theme	Sub-indicator	Include in Cost Structure Survey
Social	Decent work	Poverty rate of workers in agricultural sector	No
	Safe and Health work environment	Proportion of the numbers of farmers who have health and safety insurance	No
	Gender equality	Farmers ratio by gender	Yes



C. SUPPORTING MATERIALS

PRODUCTION AND HARVESTED AREA OF FOOD CROPS

Food Crops	2013	2014	2015
Production (Ton)			
Paddy	71,279,709	70,846,465	75,397,841
Maize	18,511,853	19,008,426	19,612,435
Soybean	779,992	954,997	963,183
Harvested Area (Ha)			
Paddy	13,835,252	13,797,307	14,116,638
Maize	3,821,504	3,837,019	3,787,367
Soybean	550,793	615,685	614,095

Based on Press Release 1 July 2016

Previously, Indonesia released data of food crops production twice a year.

To improve the quality, primarily in area of planting and harvesting will be replaced to Area Sample Frame



No. 62/07/Th. XIX, 01 Juli 2016

PRODUKSI PADI, JAGUNG, DAN KEDELAI 2015

PRODUKSI PADI TAHUN 2015 NAIK 6,42 PERSEN

- A. PADI**
- ▣ Produksi padi tahun 2015 sebanyak 75,40 juta ton gabah kering giling (GKG) atau mengalami kenaikan sebanyak 4,55 juta ton (6,42 persen) dibandingkan tahun 2014. Kenaikan produksi padi tahun 2015 terjadi di Pulau Jawa sebanyak 2,31 juta ton dan di luar Pulau Jawa sebanyak 2,24 juta ton. Kenaikan produksi terjadi karena kenaikan luas panen sebesar 0,32 juta hektar (2,31 persen) dan produktivitas sebesar 2,06 kuintal/hektar (4,01 persen).
- B. JAGUNG**
- ▣ Produksi jagung tahun 2015 sebanyak 19,61 juta ton pipilan kering, mengalami kenaikan sebanyak 0,60 juta ton (3,18 persen) dibandingkan tahun 2014. Kenaikan produksi tersebut terjadi di Pulau Jawa dan luar Pulau Jawa masing-masing sebanyak 0,46 juta ton dan 0,15 juta ton. Kenaikan produksi terjadi karena kenaikan produktivitas sebesar 2,24 kuintal/hektar (4,52 persen), meskipun luas panen mengalami penurunan sebesar 49,65 ribu hektar (1,29 persen).
- C. KEDELAI**
- ▣ Produksi kedelai tahun 2015 sebanyak 963,18 ribu ton biji kering, meningkat sebanyak 8,19 ribu ton (0,86 persen) dibandingkan tahun 2014. Peningkatan produksi kedelai tersebut terjadi di luar Pulau Jawa sebanyak 30,50 ribu ton, sementara di Pulau Jawa terjadi penurunan produksi sebanyak 22,31 ribu ton. Peningkatan produksi kedelai terjadi karena kenaikan produktivitas sebesar 0,17 kuintal/hektar (1,10 persen), meskipun luas panen mengalami penurunan sebesar 1,59 ribu hektar (0,26 persen).



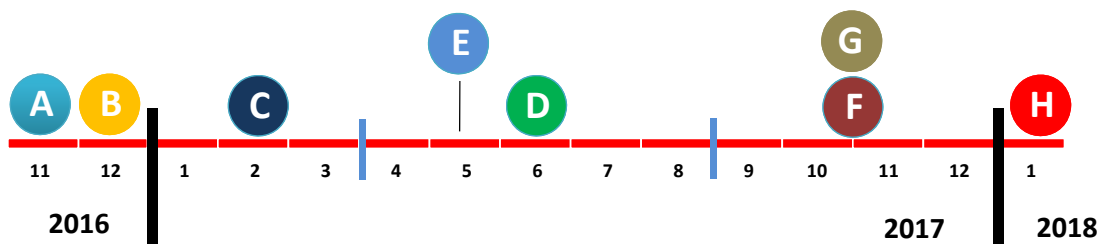
No. 62/07/Th. XIX, July 1st 2016

Production of Paddy, Maize, Soybean

Paddy Production in 2015 Up 6.42 percent

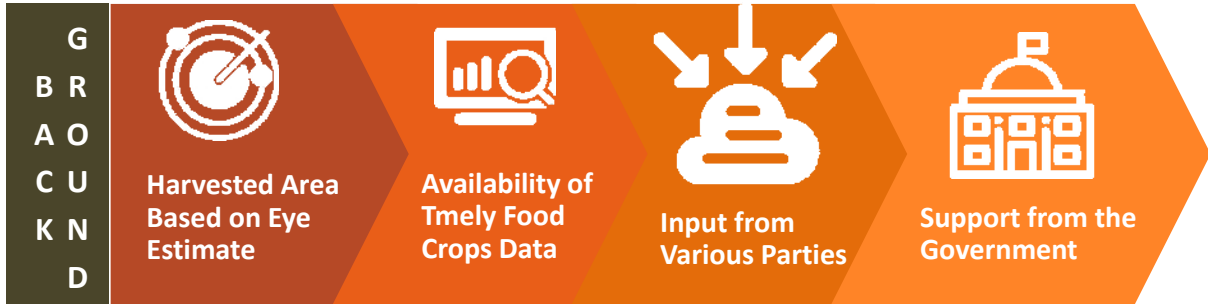
- A. Paddy**
- Paddy production in 2015 is 75.40 million tons of dry milled grain (GKG) or increase as much as 4.55 million tons (6.42 percent) compared to 2014. The increase of 2015 paddy production occurs in Java as much as 2.31 million tons and outside of Java as much as 2.24 million tons. That raise of production occurs due to an increase of 0.32 million hectares (2.31 percent) of harvested area and 2.06 quintal/hectare (4.01 percent) of productivity.
- B. Maize**
- Maize production in 2015 is 19.61 million tons of dry beans, increase by 0.60 million tons (3.18 percent) compared to 2014. The raise of production occurred in Java and outside Java island that are 0.46 million tons and 0.15 million tons respectively. The increase in production occurred due to the increase in productivity by 2.24 quintal / hectare (4.52 percent), although the harvested area decreased by 49.65 thousand hectares (1.29 percent).
- C. Soybean**
- Soybean Production in 2015 is 963.18 thousand tons of dry beans, increase of 8.19 thousand tons (0.86 percent) compared to 2014. The increase of soybean production occurred in outside of Java as much as 30.50 thousand tons, while in Java a decline in production of 22.31 thousand tons. The increase in soybean production was due to a rise in productivity by 0.17 quintal / hectare (1.10 percent), although the harvest area decreased by 1.59 thousand hectares (0.26 percent).

ROADMAP OF AREA SAMPLE FRAME

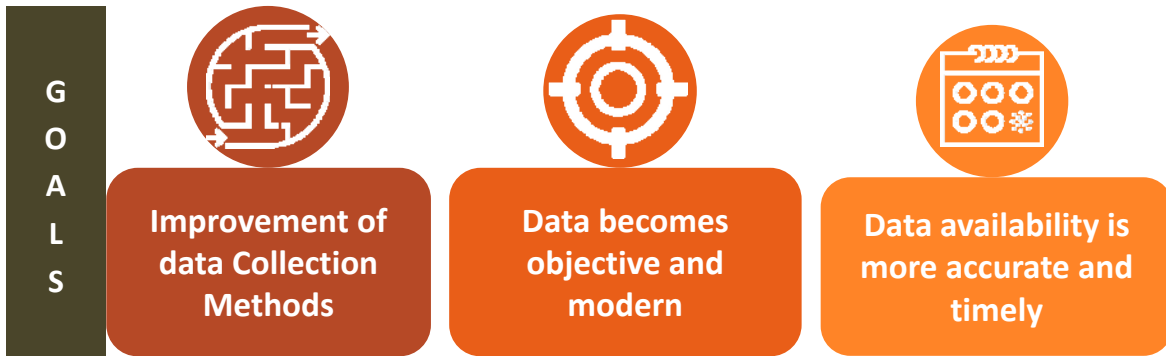


- A** Socialization of the implementation of Area Sample Frame Method
- B** Preparation
- C** Development of Jawa Sample Frame
- D** Development of Indonesia Sample Frame (Outside Jawa)
- E** Training of Instructor, Local Instructor, and Enumerator (Jawa)
- F** Implementation of data collection by enumerators (Jawa)
- G** Training of Instructor, Local Instructor, and Enumerator (Indonesia)
- H** Implementation of data collection by enumerators (Indonesia)

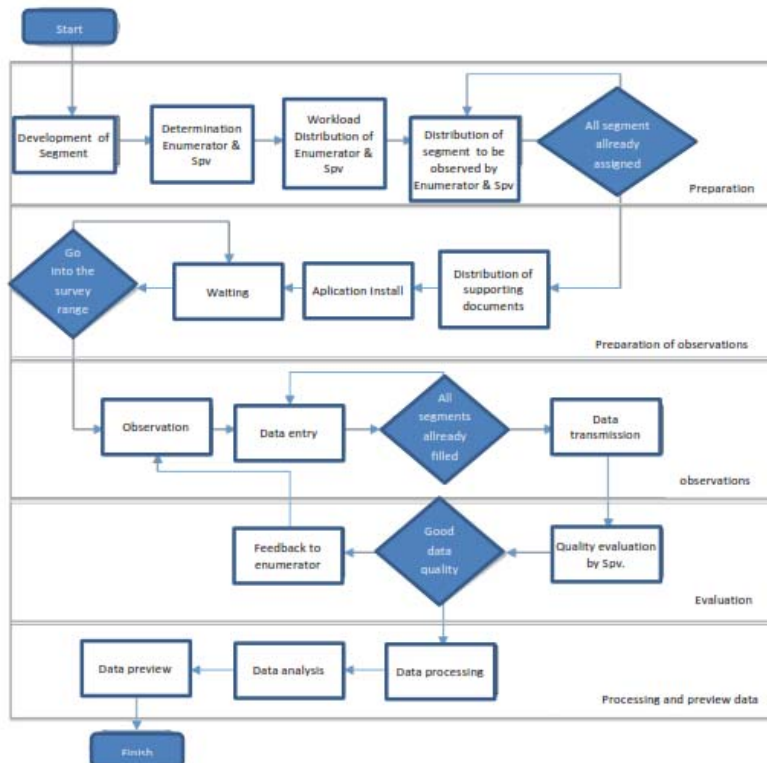
AREA SAMPLE FRAME



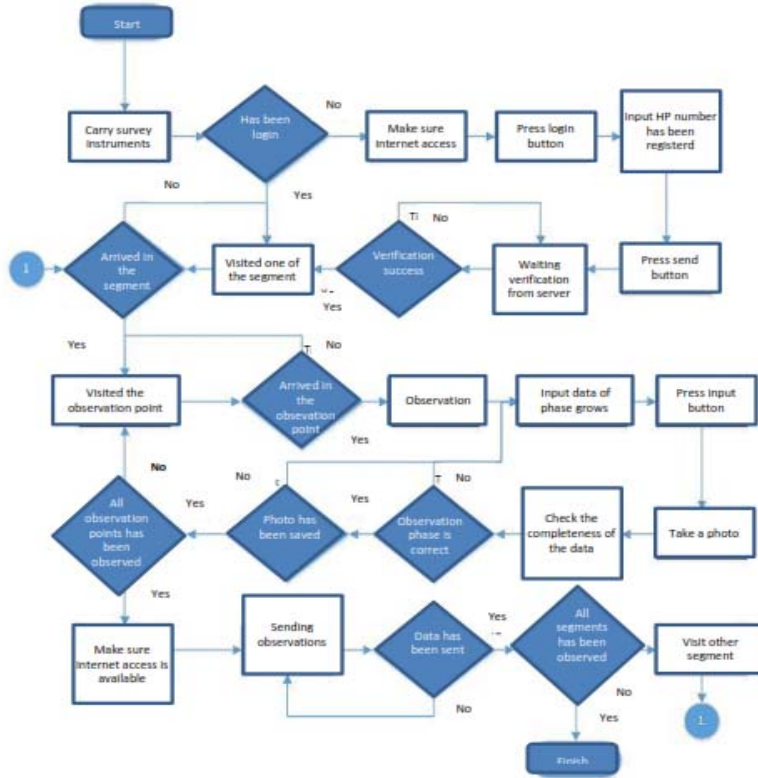
C O V E R A G E → JAVA ISLAND → 117 REGENCIES → 8,213 SEGMENT SAMPLES OF PADDY



STAGE OF AREA SAMPLE FRAME



WORKFLOW OF AREA SAMPLE FRAME



Thank You

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