Performance Measurement for Food Security Supply Chain Management: A BSC-SCOR Integrated Approach

A H Umimaryam[1,4], A Y Ridwan[2,5] and M D Akbar[3,6]

[1]Ayu Hapsari Umimaryam, Telkom University, Bandung, Indonesia
[2]Ari Yanuar Ridwan, Telkom University, Bandung, Indonesia
[3]Mohammad Deni Akbar, Telkom University, Bandung, Indonesia
[4]ayuhapsariu@gmail.com, [5]ariyanuar@telkomuniversity.ac.id,
[6]denimath@telkomuniversity.ac.id

Abstract. Rice has become Indonesians staple food for over the years, thus rice trading has taken seroiusly by the goverrment. Indonesia entrust this role to its bureau of logistic known as Bulog. Bulog main task is to manage the nine basic comodities to fulfill demands from throughout the country. To comply with this duty, Bulog need to manage the movement of the nine basic comodities, since most consumed food in Indonesian is rice, therefore rice bargaining has become the most common transaction amongst all nine basic comodities. To maintain food security, Bulog has 3 pillars of food security and in order to achieve the goal of 3 pillars of food security, Bulog need KPIs or performance measurement system (PMS). To desing the PMS, the method approach used in this research is by integrating BSC method and SCOR. Which will be resulted a set of KPIs intergrated from BSC arranging process and SCOR assessment process. Those set of KPIs are then become the assessment indicator for measuring Bulog performance whilst carryig their task in securing rice comodity in the community.
Keywords: SCOR, BSC, Key Performance Indicator, Food Security, Performance Measurement System

1. Introduction

Bureau of Logistics or known as Bulog has carried out on of the most important task since 1976. Based on Keppres Number 13 year 2001 regarding the implementation of duties and fuction of LPND (non-departemental government agency) Bulog has been assigned to carry out the govermental duties in managing food logistics regarding to the costitution that has been set. In Indonesia, there are nine basic comodities that become the main focus for the Food Bureau of Logistic in Indonesia, which of them are rice, granulated sugar, cooking oil, meats, eggs, milk, corn, salt, and soy bean. Most of Indonesians consume rice mostly likely 3 times a day, thus rice has become the most common food in Indonesia.

Based on Bulog annual report, the rice consumtion over the year of 2018, there are differentiation of rice consumption throughout January to December. For example, rice consumption in January to February increased by 498.497 ton rice, but in June to July, rice consumption decreased by 4277 ton rice. The rice consumption demands can be varied since there are different culture and season in Indonesia. So that, Bulog need a stable planning for each season. Moreover, sourcing or procuring rice comodity has become a very crucial process since Bulog has been procured about 680 times for about

20,310.64 tons of rice annually. Which makes rice the highest comodity procured and consumed troughout the year compared to the other comodity procured[5].

Buloh have 3 major KPIs that apperaining with food security in Indonesia which become the work program each year which are availability, affordability, and quality and safety. Those 3 major KPIs are known as 3 pillars of food security in Indonesia. However, those pillars aren't quite detailed and required to monitor daily accomplishment. Another example for food security indicators that can be benchmarked is Global Food Security Index, which arranged by Economist. Those indexeses are more complex and covers more food security fields.

1.1. Global Food Security Index (GFSI)

Global Food Security Index (GFSI) is an annual report provided by the Economist Intelligence unit and sponsored by Corteva Agriscience, the Agriculture division by DuwDoPoint [1]. GFSI annual report can be used as basic knowledge to determine the next decision for government to improve their food security. In GFSI there are 4 main factors they are affordability, availability, quality and safety, and natural resources and resilience. The first three of GFSI main factors are the manageable factors. Which are adopted into 3 pilars of food security in Indonesia.

1.2. Supply Chain Management

The term of supply chain management introduced for the first time by Oliver and Webber back then in 1982. Oliver and Webber stated that supply chain management is a strategy for integrating the activities of a supply chain (Oliver and Webber, 1982). According to Chopra and Meindl, supply chain consists of all the parties involved, directly and indirectly, to fulfill a costumer requests [2]. From the statements above, supply chain management is about integrating all the parties that involved to fulfill a costumer demand. Which has driven us to manage all the components that involved to fulfill costumer demand from upstream to downstream.

1.3. Balanced Scorecard and SCOR Integrated Model

Balance scorecard is a management tool developed in 1992 by Kaplan and Norton [3]. Since then, the balance scorecard has been the most known management tool. It is a multidimensional approach that translates mission and strategy into objectives and measures. It allows the visualization of the organization's accomplishments with word pictures to identifies areas of excellence and improve quality. It's organized mainly into four perspectives: financial, customer, internal business [3].

Since 1996 the Supply Chain Council has been developing the best supply chain performance measurement system along with APICS (American Production and Inventory Control Society). SCOR stands for supply chain operation model, which offers a set of model reference, methodology, diagnostic and also a bench marking tools from the best practices that help organizations make rapid change in supply chain[6]. APICS also released four model reference about critical elements in a value chain, those are PLCOR a model reference for product management, DCOR model reference for design product, CCOR model reference for costumer chain, and laslty there's SCOR. The SCOR model used in this research is version 12.0. In SCOR there are three level of metric, a metric is a standard measurement of the performance of supply chain or process [6].

Estampe et. al. compared 16 different measurement tool in measuring supply chain performance, and two of those are SCOR and Balanced Scorecard. When using single handedly, SCOR covers in decision level, only cover on tactical and operational level, for type of flows covers physical, informational, and financial flow, as for level of supply chain maturity SCOR covers all 5 level of supply chain maturity

from intra-organisational in to societal, as for type of bench marking, cover both internal and external bench marking, as for contextualisation covers all sector, and as for human capital, quality factor, and sustainablity also covered [9]. On the other side, when using single handedly, balanced scorecard covers strategic and tactical level for decision level, as for typle of flows, BSC covers only informational and financial flow, for level supply chain maturity only cover intra-organisational and societal level, for type of bench marking only covers internal bench marking, for contetualisation BSC covers all sector of industry, and as for human capital and sustainability covered as well [9].

2. Research Systematic

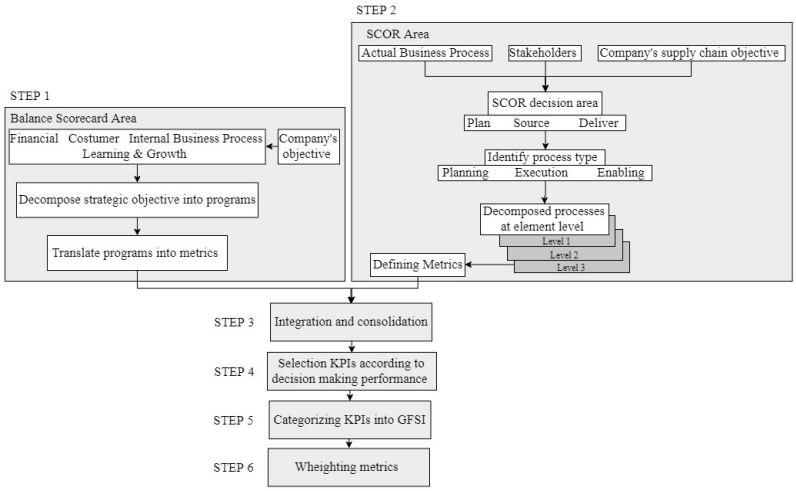

Figure 1. Research systematic

This research begins with mapping strategy in balanced scorecard. The balanced scorecard itself has 4 perspective i.e. financial perspective, costumer perspective, internal business process perspective, and learning and growth perspective. After mapping the strategy into 4 perspective of balanced scorecard, the next step is defining SCOR process that related to Bulog's balanced scorecard. The SCOR process started with defining which process that related to Bulog's balanced scorecard, Bulog's supply chain objectives and business process. The SCOR process started with defining which process that related to Bulog's activities and objectives. In this research the planning, sourcing, and delivery model is used. After that, the KPIs from SCOR that obtained before categorized by GFSI indicators i.e. availability, affordability, and quality & safety. From there the BSC KPIs and SCOR KPIs are integrated and weighted using AHP.

3. Data Collection and Analysis

In Bulog there are two main functions that are running to stabilize rice trading they are: PSO (Public Service Obligation), and Non-PSO. The PSO function is to make sure the availability, affordability and stability rice for low class up to middle class people. In this function Bulog is not look for profit, though for middle class citizen still have to pay for the rice they get. On the other hand, the Non-PSO or known as commercial function, in this function Bulog manage to gain profit to cover the gap that occurs in the PSO function. In this research we focus on the PSO function.

The data needed in this research are: Bulog balanced scorecard for PSO function, internal business process for PSO rice procurement, internal business process for PSO rice distribution, supply chain objective from Bulog. After all the data completed, the next step is data analysis using SCOR model, identify which operation reference model that suitable with Bulog internal business process, and mapping the activities in internal business process into SCOR model.

3.1. Data Collection

3.1.1. Bulog Balanced Scorecard from 4 Perspectives

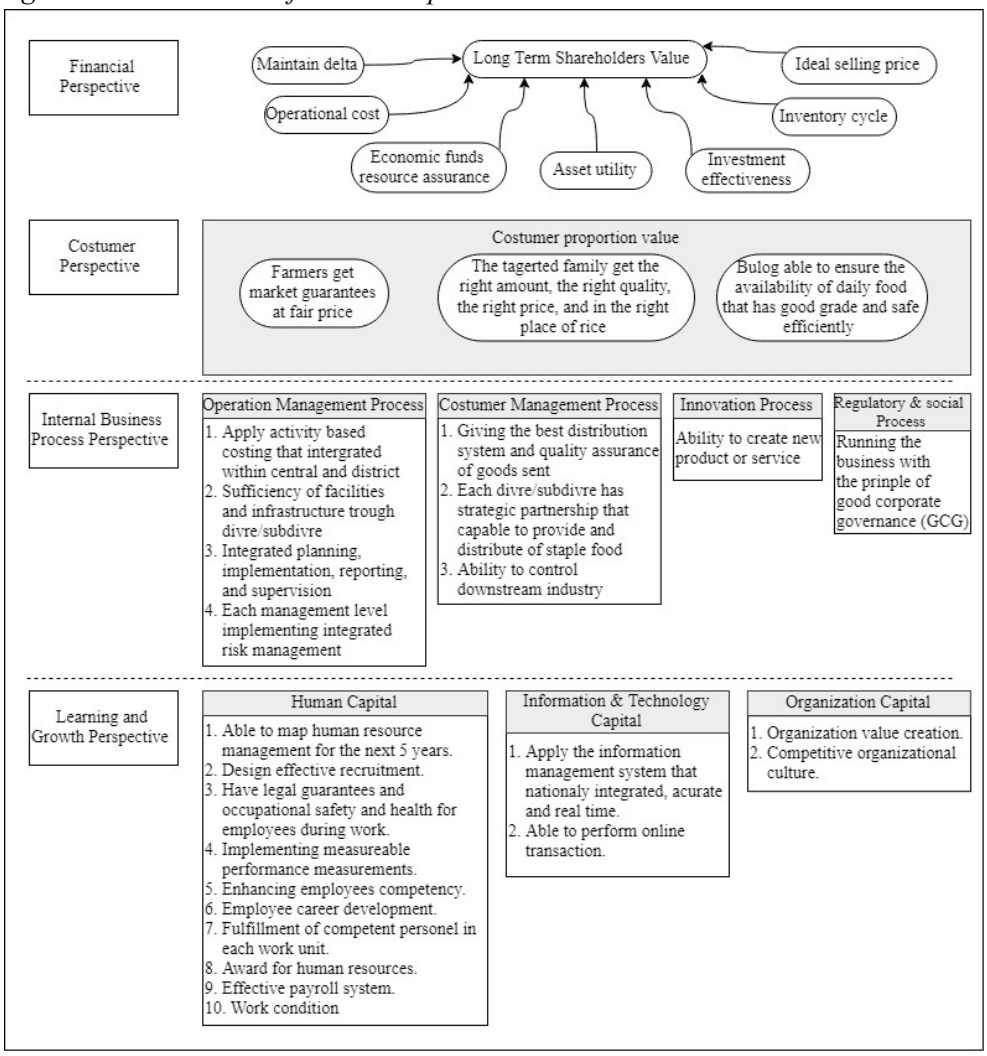

Figure 2. Balanced Scoreard of Bulog.

This balanced scorecard is the result of prior research done by Suswono *et al*. in the article which focused in designing the objective strategy, KPI, and strategic initiative which reviewed from four different perspective [4]. The article is aimed to arrange KPIs from Bulog two function which are PSO and non-PSO. PSO stands for Public Service Obligation which focus on making sure that the lower income household to be able to purchase rice for their daily consume. The PSO function also aimed at making sure the price of rice comodity is under the price given by the government in order to protect low income household from food insecurity.

3.1.2. Internal business process in PSO for rice procurement

The existing business process in supply chain activities is used to match up with the SCOR decision area, which will be used to arrange the KPIs or metrics for supply chain related activities. The business process also indicates which procurement style that is used for rice procuring. Thus a detaied business process place a significant role in determining which SCOR process and planning is going to be used when come down looking for metrics in supply chain activities.

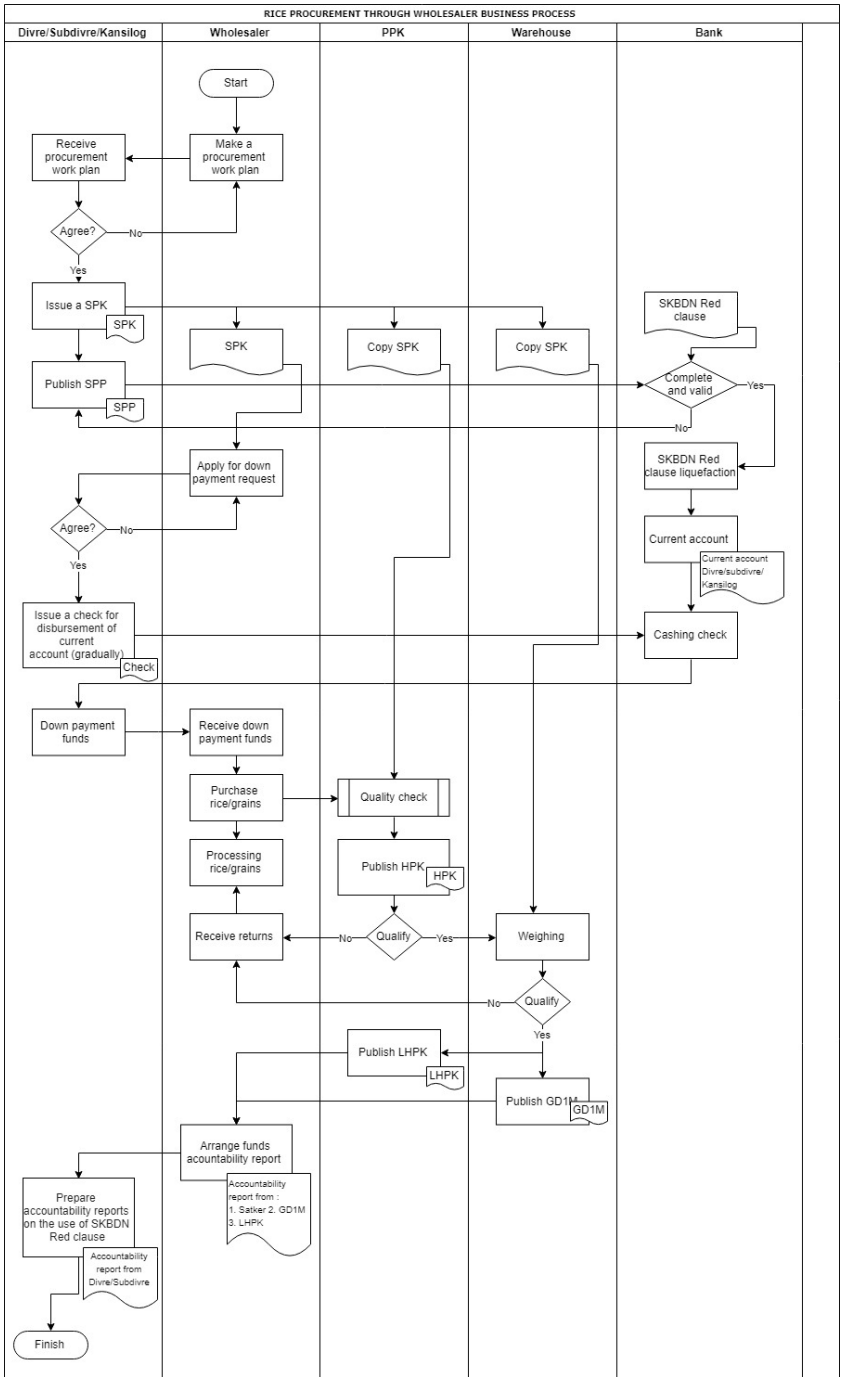

Figure 3. Business process in PSO for rice procurement

While procuring rice to stock up rice inventory in Bulog warehouse, there are 5 stakeholders that are equally contributing during the process, they are first Bulog divre, subdivre, or kansilog which in this research is Bulog subdivre Bandung, second wholesaler the party that connect Bulog with local farmers, and the third is PPK or quality inspection agency, fourth is warehouse to store the procured rice, and lastly bank to legitimate the payment or giving the bank loan.

The rice procurement process starts with making an agreement document which both parties—Bulog and wholesaler—have agreed upon, and next Bulog publish and infrom other parties about the approved agreement (SPK), then the approved are issued by wholesaler in order to make a down payment application for Bulog. While on the same time Bank receive the agreement document and validating all

the document required to loan the money for funding the sale and purchase agreement, if all the required document have been approved Bank would make a current account, an account where Bank would palce the money after cashing the cheque. After receiving the money from Bank, Bulog give the down payment fund, to the wholesaler, then the wholesaler start preparing the rice and send it to Bulog warehouse. In the warehouse, Bulog prepare a facility to receive the procured rice from wholesaler. After that, the quality inspection agency proceed to check the quality and weight of the rice received by the warehouse. If the all the quality inspection have been checked as qualified warehouse would issue a LHPK document which report all the quality inspection result to Bulog, then Bulog obligate to cashing the rest of the payment to wholesaler.

3.1.3. Internal business process in PSO for rice distribution

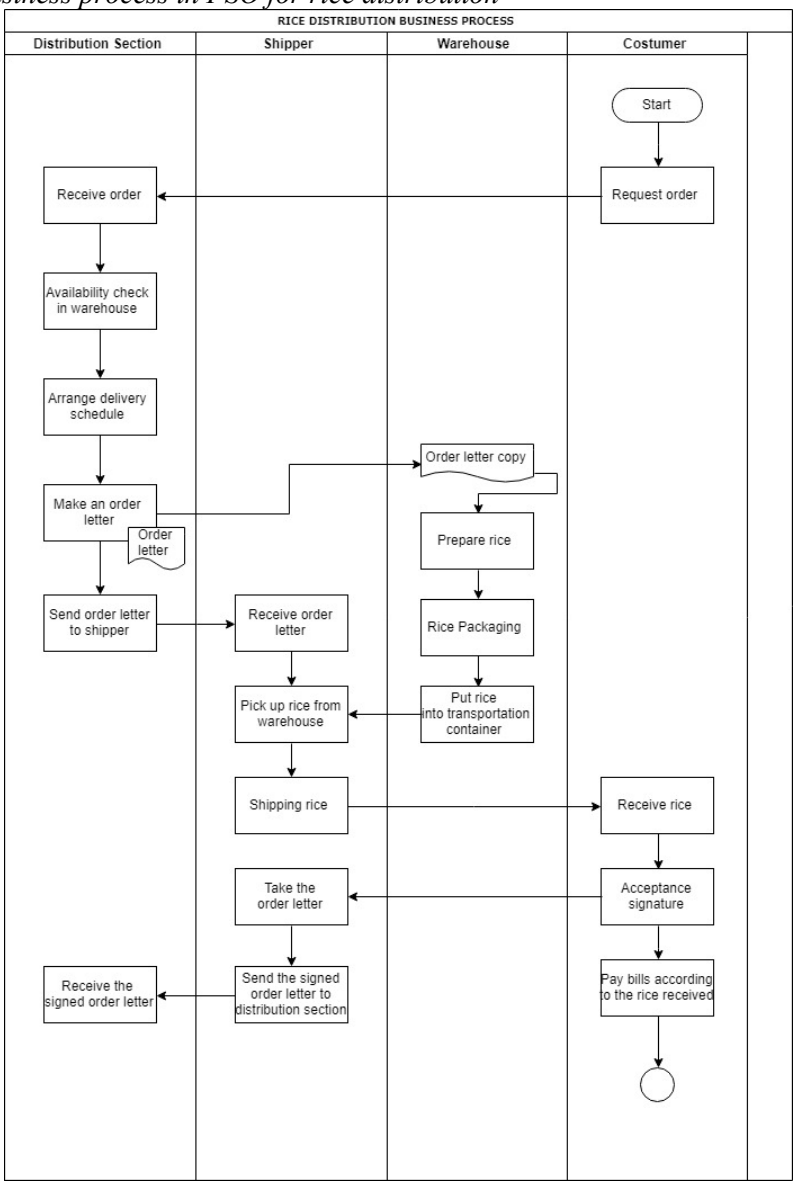

Figure 4. Business process in PSO for rice distribution

Business process in PSO for rice distribution started with request order from costumer. The request order collected first in sub-drive, then the request order turned over to drive, in the distribution section the request order is checked and inquired, the distribution section also check the availability, whether

the stock rice enough to fulfill of this month demand or not. While in rice distribution process there are four stakeholders involved in the process which are Bulog distribution section, shipper and costumer.

As for rice distribution process starts with the request order from costumer which will be received by Bulog in distribution section. Then the distribution section proceed to check the rice availability in warehouse. After making sure the rice availability is secure, the distribution senction then schedule and arrange the delivery. After that, distribution section would issue and publish the order letter to the warehouse and shipper. Next, warehouse prepare the rice and pack into proper packaging and then put rice into transportation container, which then the shipper proceed to pick up rice from warehouse then ship it to the costumer. Once the costumer has received the shipped rice, the costumer signature in acceptance document. Then the signed document hand back to the shipper and report it back to distribution section. And lastly, the costumer pay the bill according to the rice they received.

3.2. Mapping Business Process into SCOR Model

3.2.1. SCOR decision area for planning rice procurement

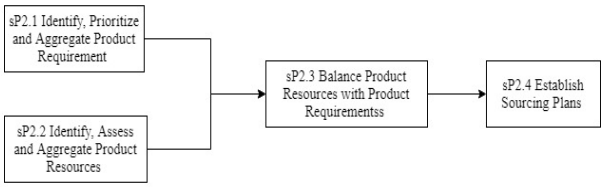

Figure 5. SCOR decision area for planning rice procurement

For planning rice procurement, the SCOR model used is the plan source, since it is not only simplify Bulog to determine the demand planning for the following month or year, but also the plan source is the reference for planning in procuring product. Since there are no existing business process in planning for rice procurement, the ones that are provided by SCOR is used as a bench marking business process. The business strats with identify, prioritize, and aggregate the product requirement which in this case the rice stocked in Bulog warehouse must meet a certain qualification in order to prevent the costumers from food borne deases. While in the same time identify, asses, and aggregate product resources which in this research refer to find the good wholesaler that connect Bulog with the local farmers. The planning rice procurement ends with establish the sourcing plan.

3.2.2. SCOR with mapped activities from business process for rice procurement

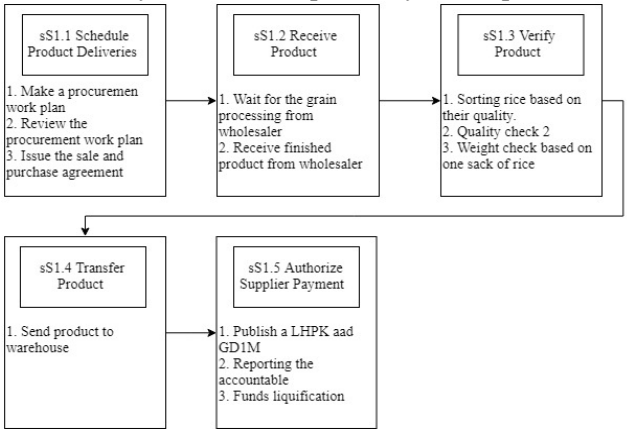

Figure 6. SCOR with mapped activities from business process for procurement

As for rice procurement performance, the SCOR model that can be used is the source stocked product. This set of SCOR business process is chosen because Bulog is handling product to be stocked untill the order request come in. Selecting a set of business process during SCOR business area is important as it's going to lead which metrics that are going to suit best with the nature of product that Bulog is handling. The rice procurement process starts with schedule product deliveries which in the existing Bulog business process, this process is represented by making a procurement work plan revieing the work plan agreement, and issuing the sale and purchase agreement to three other parties involved in rice procurement. After that the process continue by receiving product which represented by wait for the grain processing from wholesaler and receive finished product from wholesaler. Then, the next process is verify product received from wholesaler which represented by sorting rse besod on their quality grades, the second quality inspection, and weight checking based on one sack of rice. Next, tranfer the recieved product into storaging facility which represented by send product to warehouse. Lastly, authorize supplier payment which represented by publishing LPHK (quality inspection report) and GD1M (receipt of goods), reporting the accountable and finishing liquification.

3.2.3. SCOR with mapped activities from business process for rice distribution

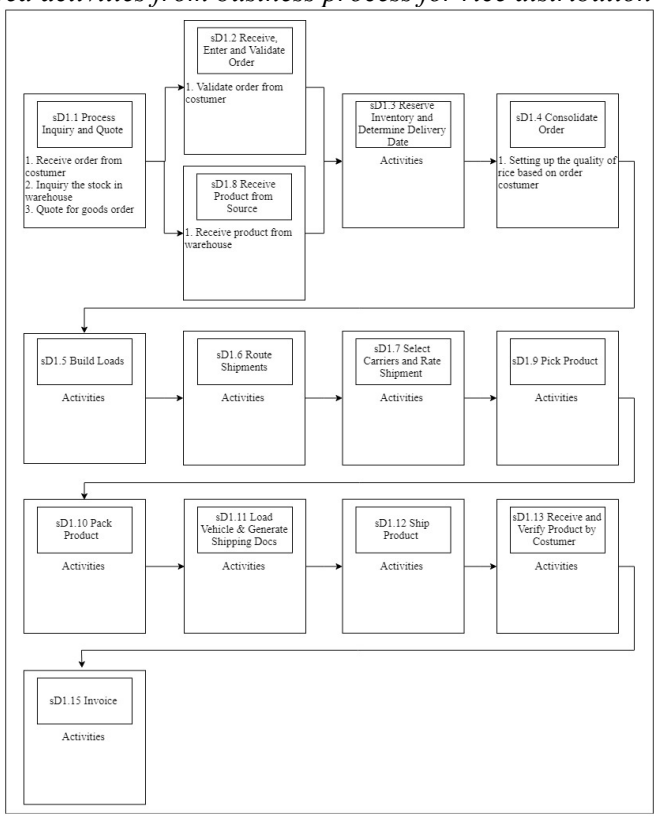

Figure 7. Mapped SCOR decision area with business process

As for rice distribution process, the chosen SCOR metric in level-1 is deliver stocked product. The process starts with process inquiry and quote which represented by receiving the order request by costumer, inquiry the stock in warehouse and quote the goods for order. And then receive, enter, and validate order which represented by validating order from costumer, while on the same time receive product from source to make which represented by receiving product from warehouse. Next, consolidate order which represented by setting up the quality of rice based on the order received from costumer. Lastly the process ends with invoice that represented by receiving the signed of acceptance document and invoicing the bill to the cutomer.

3.3. Mapping KPI SCOR into GFSI

KPI verification is done by interviewing the concerned stakeholders. Each metric grouped based on their GFSI indicator. In this reseacrh the 5 attributes from SCOR is replaced by GFSI indicator. Tabel 1 below showed the verified KPI.

Table 1. Verified KPI

GFSI Indicator	Metric	Characteristic
Availability	Forecast accuracy	The bigger the better
	Fill rate	The bigger the better
	Identify, prioritize, and aggregate delivery requirement cycle time	The smaller the better
	Establish delivery plan cycle time	The bigger the better
	Order Fulfillment Dwell Time	The smaller the better
	Ship product cycle time	The smaller the better
	Delivery Item Accuracy	The bigger the better
	Delivery Location Accuracy	The bigger the better
	Delivery Quantity Accuracy	The bigger the better
	Inventory days of supply	The smaller the better
Quality and Safety	Identify, prioritize, and aggregate product requirements cycle time	The smaller the better
	Compliance documentation accuracy	The bigger the better
	Other required documentation accuracy	The bigger the better
	Payment documentation accuracy	The bigger the better
	Shipping documentation accuracy	The bigger the better
	Orders delivered defect free conformance	The bigger the better
	% orders / lines proessed complete	The bigger the better
	% orders / lines received with correct packaging	The bigger the better
	Cash-to-cash cycle time	The smaller the better
	% orders / lines damage free	The smaller the better
Affordability	Cost to plan	The smaller the better
	Days payable outstanding	The smaller the better
	Inventory days of supply	The smaller the better
	Cost to plan deliver	The smaller the better
	Cost to schedule product deliveries	The smaller the better
	Return on working capital	The smaller the better
	Order Management cost	The smaller the better

4. Integrating BSC-SCOR and Wheigthing Metrics

4.1. Integraing Performance Measurement system using BSC-SCOR

In the previous chapter (data collection) showed the balanced scorecard of Bulog. During strategic planning, the future strategic target is determined. Initiatives strategic statement should translate to programs so that the targeted strategic which is the company long term goal is achieved. The BSC-SCOR integration model is a balanced scorecard planning strategy and mapped business process into SCOR. The integration between BSC and SCOR model is showed in Tabel 8.

4.2. Wheigthing Metrics using AHP

Wheigthing metrics accomplished to determine the level of importance between 4 BSC perspective which are financial, costumer, internal process business, and learning and growth. Besides that, the metrics on each persepective will be done the wheigthing process so that it can be used a performance

measurement for the metrics itself. The wheighting will be done by spreading a questionaire to the concerned stakeholders. The AHP data are quoted from the previous research, for rice procurement the AHP data are below.

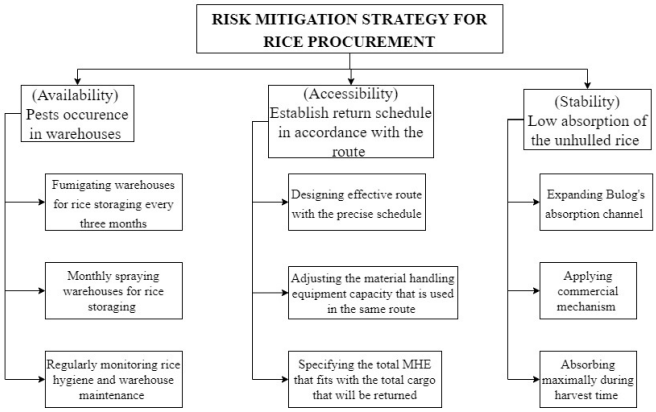

Figure 9. Decision Hierarchy—Rice Procurement

The decision hierarchy is arranged in a previous research about food security mitigation risk. The author considering the three indicators of GFSI as attribute in their decision hierarchy. Those three indicators represent the risks in food security, such as in availability Bulog is dealing with pests occurence in warehouse [7]. As for accesability in rice procurement Bulog is dealing with establishing return schedule in accordance with the route. As for stability rice procurement is dealing with low absorption of the unhulled rice.

Figure 2. AHP Normalization Matrie—Rice Procurement

Source of risk	Availability	Accessibility	Stability
Availability	1	7	0,5
Accessibility	0,143	1	0,167
Stability	2	6	1
Total	3,143	14	1,667

After making the hierarchy decision, then the AHP calculation can be done. The first thing to do is to make pairwise comparison matrices, and then make into questionaire, the result are then turned into normalization matrice in Table 2. After that, calculate the priority vector using the priority vector formulation. The priority vector formulation of rice procurement can be seen in Table 3.

Figure 3. Priority Vector—Rice Procurement

Source of risk	Priority vector	Rank
Availability	0,3727	2
Accessability	0,0723	3
Stability	0,5549	1

From priority vector, the AHP result can be generated, however one needs to check the consistency of each criteria by dividing between the consistency index and average random consistency index. The result of consistency check can be seen in Table 4.

Table 4. Consistency Test—Rice Procurement

Source of risk	Priority Vector	Matrix × Priority	Consistency
Availability	0,3727	3,1679	3,5406
Accessibility	0,0723	0,0948	0,16717
Stability	0,5549	4,9943	5,5492

λ max	3,08571
CI	0,02857
RI	0,58
CR	0,04925

After obtaining the consistency index, and assured that the AHP calculation is consistent, then the AHP result in priority vector can be used as a the most important criteria. The result obtained for rice procurement is stability, thus we translate into metrics, and the result in Table 5.

Table 5. Important Metrics—Rice Procurement

SCOR Metrics	Attribute
% orders/ lines processed complete	Quality and safety (Stability)
% orders/ lines received with correct packaging	Quality and safety (Stability)
% orders/ line received damage free	Quality and safety (Stability)

As for the rice distribution, we do it all over once again to obtain the most important metrics related to rice distribution supply chain processes. Starts with the decision hierarchy that structuring between criteria. Then make it into normalization metrics that become the questionaire that will filled by the person in charge with the rice distribution supply chain processes. The result that appertained the questionaire will be processed to generate the metrics that are considered as important.

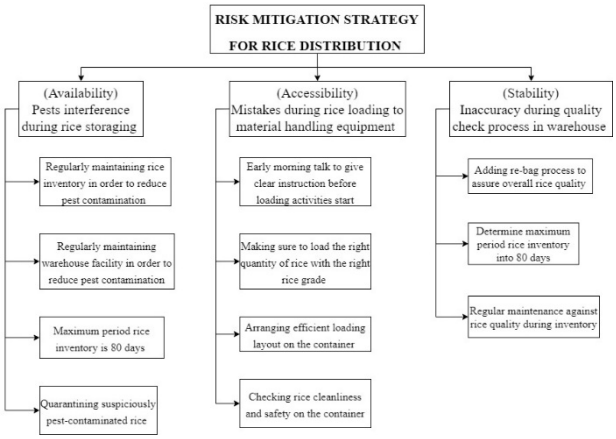

Figure 10. Decision Hierarchy—Rice Distribution

The decision hierarchy is quoted from another previous research which discussed about risk mitigation that are associated with rice distribution [8]. For example the availability risk that Bulog is facing for rice distribution is pests interference during rice storaging. Meanwhile for accessability, Bulog is facing mistakes during rice loading to material handling equipment. And also for stability, Bulog is facing inaccuracy during quality check in warehouse.

Table 6. Priority Vector—Rice Distribution

Source of risk	Availability	Accessibility	Stability
Availability	1	7	0,5
Accessibility	0,143	1	0,167
Stability	2	6	1
Total	3,143	14	1,667

From the priority vector calculation in Table 6, obtained that the source of risk in availability is the highest criteria that contribute to the risk mitigation. Therefore, the metrics that are appertained with availability considered to be important metrics that needs to be taken very carefully as KPIs in rice distribution process.

Table 7. Important Metrics—Rice Distribution

SCOR Metrics	Attribute
Forecast accuracy	Availability
Fill rate	Availability
Delivery item accuracy	Availability
Delivery location accuracy	Availability
Delivery quantity accuracy	Availability
Identify, prioritize, and aggregate delivery requirements cycle time	Availability
Establish delivery plan cycle time	Availability
Order fulfillment dwell time	Availability
Ship product cycle time	Availability

From AHP itterations, obtained that there are 3 metrics associated with rice procurement as important metrics. Those metrics are related with quality and safety (stability). As for rice distribution process there are 9 metrics that considered as important metrics. Those metrics are related to availability metrics.

5. Conclusion

From the research, can be conclude that to enhancing food security that lead to food sovereignty, Bulog has KPIs integrated from BSC-SCOR model. The KPIs are categorized based on their GFSI indicators and grouped by 4 perspective of balanced scorecard. From the financial perspective there are 17 KPIs, from the costumer perspective, there are 12 KPIs, from the internal business process there are 32 KPIs, and from learning and growth there are 18 KPIs.

Points to highlight in this research that there are some limitation that confines this research e.g. this research is only conducted in Bulog Subdivre Bandung for rice procurement and distribution, this research is limited only to design a supply chain performance measurement system and not discussing about how to correct the imperfect process, and also.... . from those limitations, open up opportunity for future research to continue this study, such as designing a web-based performance monitoring system which can be accessed by every entity appertain supply chain process using KPIs designed in this research.

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Table 8. Integrating BSC-SCOR

Perspective		Strategic Objective	SCOR Process	Lag Indicator	Source	Level
Financial	Maintain delta	Increasing the gap between goverment rice purchasing and Bulog's rice purchasing		Annual growth percentage	BSC	Strategic
	Asset utility	Upgrading the effectivity of asset utility		ROA (return of asset)	BSC	Strategic
				% of cost centre asset building and land that become the profit centre	BSC	Strategic
	Investment effectiveness	Improving the investment effectiveness		ROI (return of investment)	BSC	Strategic
			Plan source, plan deliver	Return on working capital	SCOR	Strategic
	Inventory cycle	Increasing inventory turn over		Days of inventory, Inventory days of supply	BSC	Strategic
	Ideal selling price	Improving Bulogs' ability to give the ideal selling price to farmers		Bulog selling price	BSC	Strategic
	Operational cost	Reducing total operational cost		%of reduced operational cost	BSC	
		Reducing total supply chain cost	Source stocked product	Cost to schedule product deliveries	SCOR	Strategic
			Plan deliver, plan source	Cost to plan		
			Plan deliver	Cost to plan deliveries		
			Deliver stocked product	Order managemet cost		
	Economic funds resource assurance	Bulog have the economic funds resoure assurance that economical and suffiicient enough to fund the operational expenses		Cost of fund	BSC	Strategic
				% of optimalized self-funding for operational cost	BSC	Strategic
				Total of effective and safe funds source alternative	BSC	Strategic
				% of the total operational cost that funded with the alternative funding source	BSC	Strategic
				Debt to equity ratio	BSC	Strategic
Costumer	Guarantees fair prices to farmers	Giving the guarantees of affordable price for farmers		The total of farmers that have direct access	BSC	Strategic
				% of purchased unhulled rice directly from farmers aording to HPP compared to Bulog total procurement	BSC	Strategic
				% of cases when the prie of unhulled rice is under HPP	BSC	Strategic

	The targeted family get rice in the right amount, the right quality, the right price, and in the right place of rice	Able to deliver rice with good grade safely to the right targeted family	Plan deliver	Forecast accuracy	SCOR	Strategic
				Fill rate	SCOR	Operational
				Identify, prioritize, and aggregate delivery requirement cycle time	SCOR	Operational
			Plan source	Identify, prioritize, and aggregate product requirement cycle time	SCOR	Operational
			Deliver stocked product	Delivery item accuracy	SCOR	Operational
				Delivery location accuracy	SCOR	Operational
				Delivery quantity accuracy	SCOR	Operational
				Orders delivered defect free conformance	SCOR	Operational
	Bulog able to ensure the availability of daily food that has good grade and safe efficiently	Able to ensure the place, time, and price accuracy		The time span of government rice buffer stock for national consumption	BSC	Strategic
Internal process	Operation managment processes	Financial management implement integrated activity based costing within headquarter and dicstrics		% of SOP activities that implementing the activity based costing integrated within headquarter and districts	BSC	Operational
				% of public servie activities and business development that applying ativity based costing	BSC	Operational
				Punctuality of providing financial report accurately	BSC	Operational
		Whole divre/subdivre have sufficient and standardized facilities and infrastructure		% of sufficiency facilities and infrastructure in each divre/subdivre	BSC	Strategic
				% of facilities and infrastructure that satisfy the requirement in each divre/ subdivre	BSC	Strategic
		Each managemetn level implement integrated risk management		% of work units that implement risk management	BSC	Operational
				Total risk management certificate that Bulog have	BSC	Strategic
				% of decreasing loss in each work unit	BSC	Operational
		Planning, implementing, reporting, and monitoring is authorized in integrated manner, cost effective, accountable , and punctual based on accurate realtime data base		% of work units that integrated in planning, monitoring, and evaluatig on time based on accurate and realtime data base	BSC	Operational
				Indentifies success and failure factors in task accomplishment in each work unit periodically	BSC	Operational

				% of objective accomplishment work unit cost effectively and administrative orderly	BSC	Operational
				% of work unit reporting that punctual, accurate, and accountable	BSC	Operational
	Costumer management processes	Capable to provide the best distribution system for costumer		% of repeat buying	BSC	Operational
				% of cross selling	BSC	Operational
			Deliver stocked product	Compliance documentation accuracy	SCOR	Operational
				Other required documetation accuracy	SCOR	Operational
				Payment documentation accuracy	SCOR	Operational
				Shipping documentation accuracy	SCOR	Operational
		Capable to provide quality assurance of goods sent to the costumer		Costumer complaint rate	BSC	Operational
			Source stocked product	% orders/ lines processed complete	SCOR	Operational
				% orders/ lines received with correct packaging	SCOR	Operational
				% orders/ lines received damage free	SCOR	Operational
				Retur	BSC	Operational
		Each divre/subdivre has strategic partnership that capable to provide and distribute staple food that have a certain quality for the community		% of divre/subdivre that have strategic partnership that capable to provide and ditribute good quality staple food	BSC	Strategic
				Total strategi partnership in each divre/subdivre	BSC	Strategic
		Ability to control downstream industry		Rating against its industry	BSC	Strategic
	Inovation processes	Ability to create new product or service (differentiation)		Product and serive variation	BSC	Operational
	Regulator and social processes	Running the business with the principle of GCG		GCG index	BSC	Operational
Learning and growth	Human capital	Able to map human resourcess for the next 5 years		% of workforce fullfilment rate acording to organzations' requirement	BSC	Strategic
		Design the effective recruitment system		% of individuals competency rate divided by occupation competency	BSC	Strategic

		Having legal guarantees and occupational safety and health for employees during work		% of assignment that have legal protection and or clear SOP, and satisfy the ocupational health and safety principle	BSC	Strategic
		Implementing measured performance measurement		% of employees that satisfy their performance objective	BSC	Strategic
		Employee competency enhancement		% of occupation that has sustainable regeneration (education, profiiency, and attitude)	BSC	Strategic
		Employee career development		% of employees that granted with career development	BSC	Strategic
		Fullfilment of competent personel in each work unit		% of work unit that have total competent employee as needed	BSC	Strategic
		Appreciation for human resources		% of employee that granted with awards and punishment based on their performance	BSC	Strategic
		Effective payroll system		Payroll structure	BSC	Strategic
		Work condition		Employee satisfaction index	BSC	Strategic
	Organizarional capital	Organization value creation		Internalisation companys' value rate	BSC	Strategic
		Competitive orgaizational culture		Value culture index	BSC	Strategic
	Information and technology capital	Applying the information management system that nationally integrated, accurate, and real time		% of work unit that applied management information system on-line, real time and integrated	BSC	Operational
				% of management funtion that utilize the management information system	BSC	Strategic
				% of accurate data that accessible nationally and real time	BSC	Strategic
				Total certified management information system module	BSC	Strategic
		Able to perform online transaction		% of online transaction divided by offline transaction	BSC	Operational