

IMPACT EVALUATION STUDY FOR INSTITUTION STRENGTHENING OF SOCIAL FOOD DISTRIBUTION

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The general objectives of this study were to evaluate whether the implementation of activities for strengthening LDPM could achieve the expected goals, to evaluate whether the LDPM strengthening activities had a positive impact. The study analysis used was descriptive, comparison, and financial analysis. The results of this study have shown that LDPM farmers' income have increased significantly, and the Gapoktan as LPDM farmers' institution has been significantly developing as a Bulog function in procuring grain paddy from farmers during peak harvest and distributing rice to stabilize the price of rice during the limited rice in the market.

Keywords: farmers group association (Gapoktan), LPDM, and Bulog.

INTRODUCTION

The drop in the price of grain during the harvest and the unavailability of food reserves during the drought are interrelated that almost always overrides farmers and rural communities. Indeed it is the task of Bulog (Badan Urusan Logistik/Indonesia Bureau of Logistics) to buy grain at harvest time to stabilize the price, to hold, and to distribute food supplies to people needed during harvest time or if there is a disaster. However, Bulog is unable to do so simultaneously, either during the harvest or during the drought where most of the people needed. So there are two problems to be solved simultaneously, namely falling grain prices and the availability of food reserves. According to the Food Security Agency which has launched a breakthrough program since 2009, Strengthening Institutions Food Distribution Society (Strengthening LDPM/Lembaga Distribusi Pangan Masyarakat) by channeling social funds (Bantuan Sosial) assistance LDPM to Gapoktan (Gabungan Kelompok Tani/Association of Farmers Group). It is hope that Gapoktan is able to contribute to purchase grain farmers with a minimum price of HPP (Harga Pokok Penjualan/floor price), conduct processing of paddy to rice, store and sell grain or rice at a high price in order to generate optimal profits, manage food reserves and releasing to the current members if needed, especially in times of scarcity or disaster. The general objective of this study is to evaluate whether the implementation of the activities during the LDPM reinforcement can achieve the desired objectives, evaluate whether this LDPM strengthening activities have a positive impact, provide recommendations for the future sustainability of the program.

METHODS

According to the World Bank (2013), impact evaluation rigorously measures the project's impact on beneficiaries. This is usually done by comparing the results between the beneficiaries and the control group, both before and after the project is implemented. Therefore, the simplified logical framework is essentially to strengthen the organization management of Gapoktan that is able to deliver the venture capital to unit distribution/marketing/processing unit and reserves so as to benefit from

selling rice, stabilize prices at harvest time, and provide a food reserve that can be used members at any time, if needed.

From the discussion, it is logical-framework composed of assessment evaluation strengthening of LDPM as seen in Figure 1 and 2.

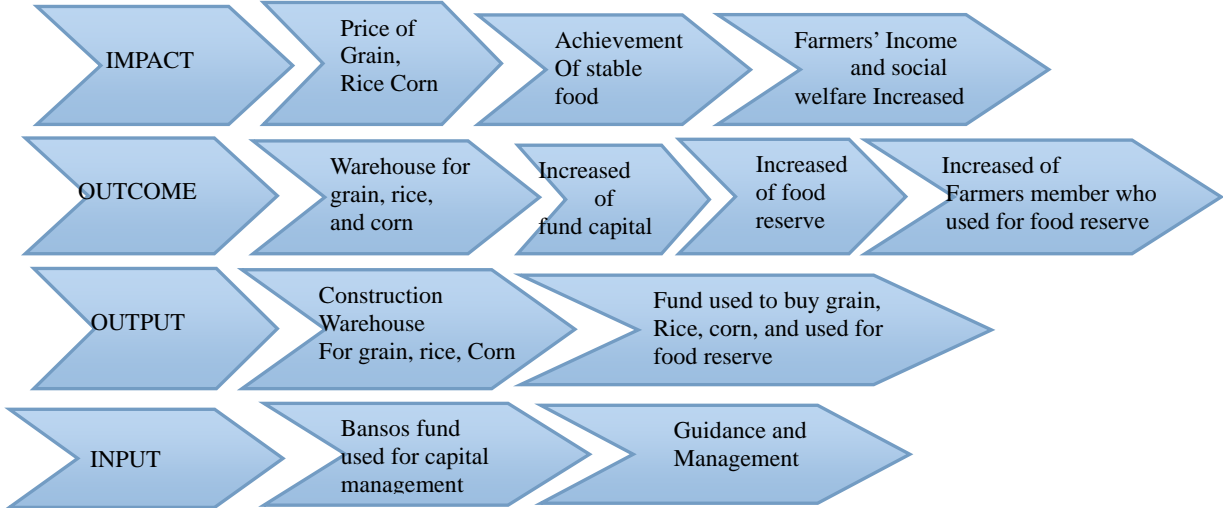


Figure 1 Logical Framework for Strengthening LDPM

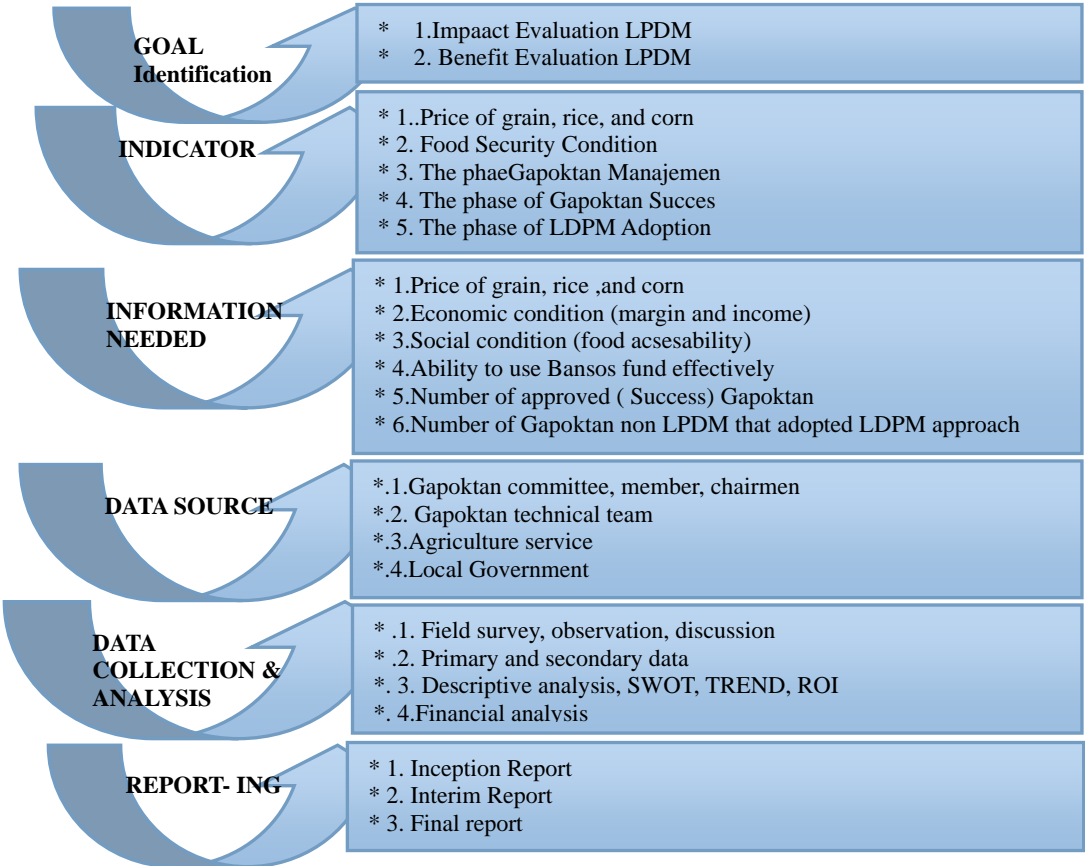


Figure 2 Operational Frame Work

Data analysis is the stage to interpret the data obtained. The activities undertaken include a primary data analysis and information collected. Because there is no baseline data then its substitute with Gapoktan Control. Thus the analysis of the data used is with or without project (Suryana, 2013). The analysis includes the descriptive analysis (MOA in <http://panel.hrgabkp.deptan.go.id>) and the benchmarking analysis (MOA in <http://aplikasi.deptan.go.id>). To compare performance is used before and after the activities by comparing Gapoktan participants with Gapoktan control (with and without project analysis). The method to be used is hypothesis testing for two independent populations. The hypothesis tested is:

Statistical tested:

$$H_0 : \mu_1 - \mu_2 = 0$$

$$H_1 : \mu_1 - \mu_2 \neq 0$$

Critical value:

$$z = \frac{(\bar{x}_1 - \bar{x}_2) - (\mu_1 - \mu_2)}{\sqrt{s_1^2 / n_1 + s_2^2 / n_2}}$$

$$z > z_{\alpha / 2} \quad or$$

$$z < -z_{\alpha / 2}$$

Trend Analysis is a statistical analysis which intended to make an estimate or forecast for the future (Sedana, 2013). In the study due to the period of data collected is not enough, then the trend analysis is used only to illustrate the progress of the achievements of each Gapoktan. While Wiehle et al., stated that financial feasibility analysis studies (Björnsdóttir, 2010) are often used in assessing the activities of the production is the return on investment with the formula:

$$ROI = \frac{(\text{Gain from Investment} - \text{Cost of Investment})}{\text{Cost of Investment}}$$

ROI (Return on Investment) is calculated by comparing the total revenues minus Gapoktan participating farmers received social funds (Gapoktan Bansos) that divided by funds received from bantuan sosial (social assistance). Then it is measured the economic benefits to the B/C1 ratio from the group, in conducting a unit efforts with the following formula value advantage that revenue fewer costs divided by costs. If the time series data will also be used enables the analysis of the NPV (Net Present Value).

To facilitate the preparation of the questionnaire presented a check-list relationship between evaluation purposes, the method of analysis, the unit of analysis, as well as the type and method of data collection, can be seen in the following Table.

Table Objective Evaluation, Tools and Analysis Unit and Data Types

Evaluation objective	Analysis framework	Analysis Unit	Data Type and Data Collected
1. To see strengthening impact LDPM to: a,b,c,d,			✓ Primary and Secondary data from http://aplikasi.deptan.go.id/smspldpm
a. Price Stability, Price of rice, grain, and corn	1. Descriptif analysis 2. Trend Analysis	1. Gapoktan	✓ Financial secondary Data ✓ Gapoktan, using check list questioner
b. Economical condition (increase margin and income)	1. Descriptive Analysis 2. B/C ratio Analysis 3. ROI and NPV	1. Gapoktan	✓ Quantitative financial secondary Data Gapoktan, from cek list ✓ Priimary Data from interview Gapoktan
c. Social condition	1. Trend Analysis	Gapoktan	✓ Primary data from interview with Gapoktan

Note: ✓ check-list Questioner

Table Objective Evaluation, Tools and Analysis Unit and Data Types (continued)

Evaluation objective	Analysis framework	Analysis Unit	Data Type and Data Collected
d. The functional phase of Institution: <ul style="list-style-type: none"> • Bansos fund development • Food procurement • Food reservation and distribution • Role of facilities 	<ol style="list-style-type: none"> 1. ROI Analysis 2. Trend Analysis 3. B/C ratio analysis 	Gapoktan	<ul style="list-style-type: none"> ✓ Primary and Secondary Data qualitative and quantitative from Gapoktan committee and resource person ✓ Secondary Data from Gapoktan
2. LPDM program need to be continued? <i>Exit Strategy?</i>	<ol style="list-style-type: none"> 1. Trend analysis 2. B/C ratio analysis 	Gapoktan	<ul style="list-style-type: none"> ✓ Secondary Data ✓ Primary Data

Note: ✓ check-list Questioner

The study is conducted by taking a sample of the recipient of the social assistance of Gapoktan Strengthening LDPM 2009 and 2010 (phase independence) from 9 provinces, namely West Java, Central Java, DI Yogyakarta, Lampung, North Sumatra, South Kalimantan, West Kalimantan, South Sulawesi, and West Nusa Tenggara. Each province randomly selects two districts, and each district selects two gapoktan LDPM randomly (total 72 gapoktan LDPM). From each district also selects 1-2 gapoktan non LDPM as controls (total 13 gapoktan control). Respondents are interviewed include the chairman of Gapoktan, Gapoktan caretaker, companion, farmer members and district-level technical adviser.

RESULTS AND DISCUSSIONS

The development of Gapoktan distribution business units and reserve units has increased by 59,8% and 67,3%. It indicates that Gapoktan has been carrying out activities that mandated by the General Guidelines for Strengthening LDPM. Bansos funds received have been used by all Gapoktan (100%) to build warehouses. This is in accordance with the rules that stated in the general guidelines. Approximately 63,3% reserve warehouses built on land is owned by the Gapoktan, while remaining on a land grant of 24,5%, and the land belongs to members of 2%; and that 10,2% had a notarial deed. Even though many choices of purchasing grain/rice/corn, but 60% Gapoktan prioritize the permanent members, and 20% Gapoktan prioritize non-permanent members. As the place of purchase within the rules. Gapoktan has implemented the procurement of food reserves of grain, rice, and maize to replenish warehouse stock of food. This stock is stored and sold at a decent price, and partly for the food reserve.

Gapoktan distributed grain is either not sold (44%) and for further processed or stored as a backup or to be sold (60%) varies. This condition is an economic opportunity to select more than one distribution/sales. When it is not exhausted to channel into one place, could be channeled into other places. Gapoktan bought grain/rice is at above HPP (floor price). As expected the average purchase price of grain per kilogram is Rp 3.848,00 and rice Rp 6.804,00 by Gapoktan LDPM above HPP (grain Rp 3.300,00 and rice Rp 6.600,00) and the purchase price of an individual is higher than from non-members. The average selling price of grain is Rp 4.158,00 and rice is Rp 7.357,00 also above HPP, and the average selling price of rice to members is lower than non-members. Gapoktan buys corn from the various places. One Gapoktan can buy 2 or 3 that depends on needs and economic considerations. The existence of various places where Gapoktan buys corn shows that 46,33% Gapoktan buys corn from active members; 24,5% of non-member farmers in the same village and 20% of farmers outside the village.

Reserve Gapoktan rice has been functioned and used by 39% of active members and 24% inactive members. The average volume of lending is 26 kg/family in a month for active members and 12 kg/family in a month for inactive members. Distribution of rice reserves makes at the time is Famine 57,9%, no disasters 26,3%, and 15,8% at any time. Distribution of food reserves when disaster actually is not a task of Gapoktan, therefore in such cases to restore local government food reserves are borrowed during the disaster to Gapoktan. Gapoktan is not a charity institution, but it remains oriented to institution profits.

After following Strengthening LDPM, Gapoktan percentage who engages in activities that are off-farm increased significantly, such as buying and selling grain/rice/maize (up 50%), processing (up 35%), and management of reserves (an increase of 55%). While the on-farm activities such as the provision of inputs and another agronomic management, savings, and loans are still performed but no significant increase or even remain. A positive impact on the Gapoktan management is in particular stages of planning activities, business planning, demand planning food reserves, and monitoring and bookkeeping orderly after receiving bansos for LDPM Strengthening. Also compared to non-LDPM, the LDPM Gapoktan was still better off. At national level Strengthening activities LDPM has managed to raise and maintain the stability of the price of grain and rice Gapoktan members LDPM, especially when the prices fall in the harvest season. Figure 3 shows that nationwide during the year 2012, the price of unhusked rice harvest (GKP) for Gapoktan farmer members who got bansos LDPM always above HPP (floor price) and tend to be higher than the average price of GKP farmers. At the moment, the price GKP at farm level falls below the HPP in the harvest season (March-May 2012) farmer group members still get the price above the HPP. Similarly, the price of paddy at the mill, and the price of rice milling rate nationally. It turns out that this condition is found in almost all the provinces and districts, as seen in Figure 3.

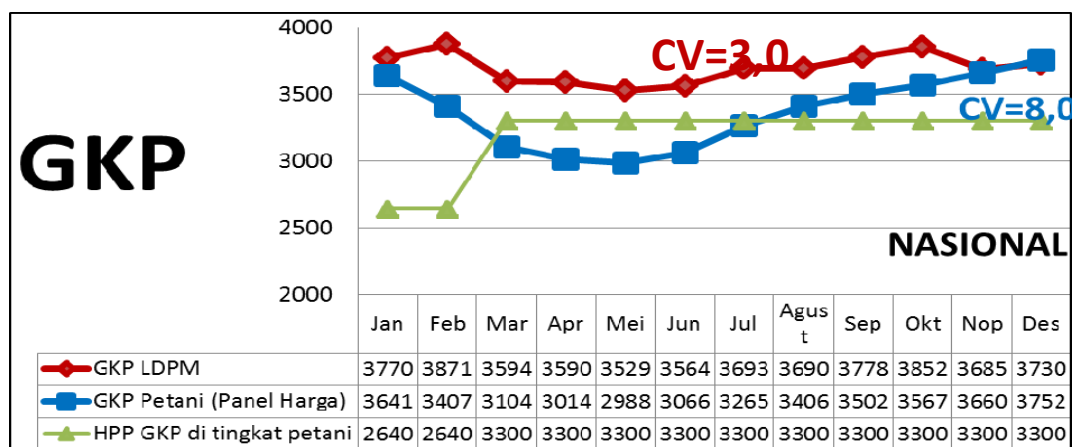


Figure 3 Grain Price Development (GKP) at Farmers LDPM Level and at National Level

The average ending balance of cash book Bansos LDPM fund when the survey is USD 83 million in cash and USD 34 million bank accounts. The existence of the final balance is a major indicator that Gapoktan participants strengthening LDPM are still going well. During the project period of 4 years, Gapoktan gains as much as US \$ 46,7 million, an average of Rp 11,7 million per year, or 6,74% per year. Indeed, the interest rate is below the Bank 8% per year. But keep in mind that there are other benefits that have not been taken into account, namely the increase in tangible assets and intangible assets. The facility of grain processing greatly affect the economic benefits. First, because it is associated with a cost, both the drying, and milling, and secondly, it is related to the quality of rice produced. Limitations are drying floor forces the farmers to hire a dryer, as well as ownership of RMU.

Comparing with Gapoktan non-LDPM, the owned assets of Gapoktan LDPM also looks better, except ownership of a dryer and a tractor is owned more by Gapoktan non-LDPM. By having better business assets show that LDPM strengthening activities motivate Gapoktan to have a more professional effort. By using the average price of members and non-members as well as the conversion of Gapoktan grain rice to 56% (to them including processing fees), then the rice sales business makes a profit of Rp 242,00/kg of rice. When it should hire processing facilities (including the drying and grinding) which require an additional fee, then the profit value will be reduced. Therefore it is quite reasonable when Gapoktan RMU expects to have its own purchased by non-members or other funding sources (budget or banking). The increasing number of permanent members (18%) indicates that the interest of farmers to become members Gapoktan who receive strengthening LDPM is increasing. While the decreasing number of non-permanent members (38%) shows that the displacement of the non-permanent membership status becomes permanent. This condition indicates that the presence of Gapoktan Strengthening LDPM has attracted the interest of farmers to become a permanent member because it provides benefits to its members.

The transparency of financial management is measured by the level of knowledge of participants farmer group as an LDPM members shows (1) Determine Gapoktan bansos receives funds as much as 92,6%, (2) The use of funds Bansos knows as much as 94,44%; but (3) The cash balance of Gapoktan knows only 62,70%, while 33,33% do not know the farmer Gapoktan members and the rest do not answer. This condition indicates that revenue transparency and the use of bansos funds are very good, but on the cash balance Gapoktan rated pretty but still needs to be improved. Before receiving bansos LDPM Gapoktan majority (45,5%) share gains as SHU members, but after participating in activities strengthening LDPM, most Gapoktan (43,3%) have taken advantages to increase business capital. Members believe and realize that increase business capital will boost revenue and enhance the performance of Gapoktan as a provider of food reserves and guard price stability in farmers to keep on top of HPP, especially at harvest time. Togetherness and caring society that is rooted in local policies able to glue the fraternity to prosperity. A total of 82,5% of respondents indicate that LDPM Strengthening is helpful. Based on the benefits of that 75% of respondents said strengthening LDPM is followed, only 1,47% are told to stop. It turns out that the principle of benefit for the farmer group members are not only economic benefits but also equally important social benefits as indicated by the "can establish a relationship". Indeed the role of social capital in the process of empowerment of farmers can not be considered trivial; sometimes it is even determining the success. Based on the magnitude of the acquisition of farmers' income, sales result's production in the form of rice gives higher earnings compared with the results of the sale of products in the form of paddy (Popidylah, Radian, & Suyatno, 2015).

The member of Gapoktan LDPM generally never borrows money from the Group (48,39%), which often borrows only 11,29%. They believe that this money is used as Gapoktan capital for agricultural activities that making it more useful than the loan. Similar circumstances in borrowing grain, because farmers feel still able to meet their own needs. Yet there remains a permanent member or not obtain a loan of grain/rice and corn. There is no interest to pay the loan. Farmers obtain assurance market, as shown by the majority of farmers who are always bought by Gapoktan (57,25%), while never just 4%. Likewise, guarantee Gapoktan price is always higher than the market price (44,35%). Members also get a share of the profits from the Group. From the survey results show that LDPM Strengthening Gapoktan believed by members to provide marketing collateral, the higher price than the market price and the guarantee of profit sharing. Another impact Strengthening LDPM is to increase the confidence.

CONCLUSIONS

Due to food security is one of the pillars of national development, through the program for strengthening LDPM is very important to motivate Gapoktan to develop the agribusiness on rice and corn. Farmers are no longer selling their own to middlemen, but they have been combined in Gapoktan to sell it in groups. Although the Gapoktan benefits are not optimal, but their profits are still better than profits earned before they receive bansos funds under the program of Strengthening LDPM. The level of profits does not take into account and take advantage of the increase in tangible and intangible assets that owned by Gapoktan as the impact of the "business capital" provided by the government through strengthening LDPM activities. Even though the benefits are partly not optimal due to Gapoktan, in general, has limited processing infrastructures such as harvesting equipment, dryers, drying floors, rice mills/maize. Meanwhile, other limitations that are not owned by Gapoktan among others are Gapoktan human resources' skills in entrepreneurship to run its business, the development of marketing networks, and the development of venture capital. If the infrastructure and capabilities, as well as the development of networking entrepreneurship, enhanced marketing, then Gapokatan are able to achieve even greater gains.

In strengthening LDPM activities which are able to push Gapoktan to grow the business and increase the value-added downstream side, namely, as a food business (storage, processing, packaging) compared to only perform activities on the upstream side that is only as perpetrators of cultivation. Although the activities of entrepreneurship are not sufficient, but it is already able to show the development of the embryo food business economic institutions. Looking ahead after Gapoktan beyond the stage of independence and has become an asset of the provincial government and the city district, then to maintain the assets of Gapoktan (capital and tools that have been provided by the government) need to be done intensively, so it does not become a no man's land assets (depleted indivisible for or used by the board Gapoktan only).

The social impact of the implementation of the Strengthening LDPM among others is to increase the interest of farmers to the food business, foster a culture of transparency in financial management, and foster a caring and sharing towards fellow members and rural communities. The strategy mentoring and coaching will be adapted to the conditions and status groups according to their level of success.

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