EVALUATION OF TRAINING PROGRAM FOR WAREHOUSE MANAGER CANDIDATES WITHIN THE WAREHOUSE RECEIPT SYSTEM SCHEME AT COMMODITY FUTURE TRADING REGULATORY AGENCY (COFTRA), INDONESIA

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Abstract

This study aims to evaluate the implementation of training program for warehouse manager candidates within the warehouse receipt system scheme conducted by the Commodity Futures Trading Regulatory Agency (Coftra) in Indonesia. This research is an evaluative research using the CIPP model of Stufflebeam (Context, Input, Process, Product), supported by questionnaires (closed and open statements/questions), observation, and interviews. Evaluation on context, input, and process, the results show that the program is in a good category for these three components, with some elements needing improvement. While for product evaluation the results for this component are in a very good category, so it needs to be maintained. In terms of outcomes which are part of the product component, the results of the training provide a good impact of implementing warehouse management system, with warehouse operational license. In addition, to optimize outcomes, it is necessary to increase synergies among regional and central government levels, as well as empowering and involving stakeholders to jointly support and implement the warehouse receipt system.

Keywords: CIPP model, evaluation program, training, warehouse receipt system.
A. Introduction

Indonesian population (National Development Planning Agency - Central Bureau of Statistics, 2013) in the next two decades is estimated to reach around 1.1% per year, as many as 255.5 million people in 2015, and increase in 2035 to 305.7 million people. This will increase food consumption needs of the population, whose main staple is rice. The fulfillment of rice consumption is prioritized by producing it domestically, so that food security and food sovereignty are maintained. Dirhamsyah et al. (2016) explain that food needs can be fulfilled independently by empowering human capital, social and economic capital owned by Indonesian farmers, which in turn must have an impact on improving the welfare of farmers and the community.

One of the crucial agricultural sector problems is commodity prices factor, where during the harvest season, commodity supply increases, commodity prices decline drastically, creating a very low bargaining position of farmers. This condition continues to occur from time to time and can reduce the interest of farming communities, which in turn can threaten national food security. For this reason, the Indonesian government issued Law Number 9 of 2011 concerning the Warehouse Receipt System (WRS), which among other things to encourage the smooth production of agriculture in efforts to promote equitable public welfare through the warehouse receipt system as one of the financing instruments. With the instrument mechanism of the warehouse receipt system, farmers can delay selling if commodity prices are low, and sell them later when prices increase according to expectations. During the postponed selling period, farmers can obtain loan funds by collating their commodity warehouse receipts, thereby increasing the bargaining position of farmers. This needs a paradigm shift of farmers from "workers" to be "entrepreneurs".

To accelerate the implementation of the WRS through the Commodity Futures Trading Regulatory Agency - Ministry of Trade, the government conducts a continuous training program of the warehouse receipt system. The WRS training program carried out by Coftra is attended by participants from various stakeholders, including:
agricultural extension officers, related service officials at the provincial / district government, warehouse manager candidates within the WRS scheme, and farmers who join farmers' groups.

**Literature Review**

**Program Evaluation**

Scriven's statement was cited by Fitzpatrick et al. (2011) that evaluation is as judging the worth or merit of something. Evaluation determines the benefits or value of an evaluation object. More broadly, evaluation can be defined as an activity to identify, clarify, and apply a number of criteria to determine the value of the object being evaluated. Stufflebeam and Coryn (2014) defined that evaluation is the systematic process of delineating, obtaining, reporting, and applying descriptive and judgmental information about some object's merit, worth, probity, feasibility, safety, significance, and/or equity. Fitzpatrick defined that evaluation uses inquiry and judgement methods, including: (1) determining the criteria and standards for judging quality and deciding whether those standards should be relative or absolute, (2) collecting relevant information, and (3) applying the standards to determine value, quality, utility, effectiveness, or significance. Tyler’s statement was cited by Fitzpatrick et al. (2011) considered evaluation to be the process of determining the extent to which the objectives of a program are actually being achieved. McDavid et al. (2013) defined that the evaluation process, from the initial step of deciding to proceed with an evaluation assessment to framing and reporting the recommendation(s), is informed by our own experiences, beliefs, values, and expectations.

Measurement of program objectives is carried out by analyzing the level of implementation, positive-negative aspects, and what causes it, so that it needs to be made in detail. Program evaluation can be carried out throughout the program implementation, (Linzalone and Schiuma, 2015) in three stages: first, an ex-ante evaluation aimed at comparing and choosing alternative programs; second, an interim evaluation aimed at improving the strategy or process; and third, ex-post evaluation that aims
to take lessons, insights, considerations, and understanding to decide the program taken.

The benefits of evaluation (Mohebbi et al., 2011) are stated that: evaluation of these courses can help decision-makers and politics, in macro levels, to take correct and expert actions. Grohmann and Kauffeld (2013) The benefits of training program are justify the financial input made, serve for quality management purposes, provide feedback to human resource departments and trainers for improving training courses, and help to make more accurate decisions about the continuation of training courses (Kaufman et al., 1996; Kirkpatrick & Kirkpatrick, 2006, p. 17; Kraiger, 2002). The purpose of program evaluation, all in all, is to assess a program with certain criteria, and the benefits of program evaluation are to produce information that can be used by decision makers, whether a program can be continued, refined, or stopped. Thus, program evaluation can be viewed as an activity to determine the implementation of a program by assessing the effectiveness of its elements through systematic and regular information gathering on how the program is realized, by comparing certain standards or other similar programs, so that it can be used for decision making.

**CIPP Evaluation Model**

The CIPP model is used mainly because this model is more comprehensive. The four components of CIPP are evaluation targets, which are components of an activity program. The CIPP evaluation model is most commonly used by evaluators, which contains a comprehensive framework for guiding program implementation for analysis based on its components. The main objective is to ensure that the program can meet the expectations and needs of the community. To conduct a program evaluation it is necessary to consider the evaluation model to be used, in which each evaluation model has advantages and limitations. Selection of the model will determine the quality of the information produced. This study uses the CIPP evaluation model initiated by Daniel Stufflebeam. The stages of program evaluation for product aspects also measure impact or outcome.
The CIPP model in principle helps decision making, the focus is on program improvement. (Fitzpatrick et al., 2011) Means, done to improve the effectiveness of the program by modifying the program. The key component of the CIPP evaluation model is related to the program forming the "Stufflebeam Circle" which describes the influence of core values at each evaluation stage as the following illustration in the Figure 1. (Stufflebeam and Coryn: 2014).

Figure 1: Key Components of CIPP's Evaluation Model Regarding the Program.

Evaluation must be based on core values, namely "ideals adopted by society, groups, or individuals" (Fitzpatrick et al, 2011). The stages of context evaluation describe the program environment and program objectives. The stages of input evaluation are related to the determination of resources, alternatives to be chosen, planning and strategies and work procedures used to achieve the objectives. The stages of process evaluation assess the extent to which actions have been carried out and what components need improvement. The stages of product evaluation help make decisions on the results that have been achieved and things that need to be done after the program is running.
Measurement of outcomes must be able to measure benefits are obtained for all costs incurred for the training program. The training program aims to improve quality, productivity, motivation or better teamwork, and expected to produce benefits for the organization. Funds spent on training programs developed and implemented, (Crumpton, 2011) can be seen as a cost or an investment. If the expenditure of program funds is seen as an investment, (Grzeschik, 2010) it is usually determined by calculating Return on Investment (ROI), which is a calculation of the ratio between net investment returns and investment costs. The problem is, investment returns are rather difficult to measure the direct monetary benefits, so the benefits of training are difficult to quantitatively measure. While investment costs can be easily measured in accordance with the realization of the funds issued.

**Training**

Training (Dessler, 2015) “*means giving new or current employees the skills that they need to perform their jobs*”. Swanson (2010) state that “*training and development constitutes the largest realm of HRD activity. Training and development is defined as a process of systematically developing work-related knowledge and expertise for the purpose of improving performance.*" Training and development programs aim to maintain or improve individual performance and organizational performance. Borate et al. (2014) Training may be defined as the systematic acquisition of skills, rules, concepts, attitudes that should result in improved performance of the trainee (Aamodt, 2007; Goldstein and Ford, 2002). Training is vital for various reasons for every employee of the organisation for the new process implemented or if the employee is new to that particular process. Employees selected for a particular job often need to get appropriate knowledge and skills about the work to be done. It always helps an employee to know about the organization process, work content, importance and awareness about the work assign. It accordingly to Noe et al. (2009) "*training consists of organization's planned efforts to help employees acquire job-related knowledge, skills, abilities, and behaviors, with the goal of applying these on the job*". So, training is the process of a person getting knowledge and skills to be able to improve individual capabilities and
performance so that they can contribute to improving organizational performance and achieving organizational goals.

Jain (2016) Organizations recognize that training works (Skerlavaj, Dimovski, Mrvar, & Pahor, 2010) and spend billions of dollars every year (O’Leonard, 2012; Paradise, 2007) to train their employees. The problem is that training works only if the trainee transfers the training (applies the training) to improve performance on the job. It is estimated that only 10% to 30% of training transfers to on-the-job performance (Broad, 2005). An additional measure of training effectiveness, return on investment (ROI), was used by companies because of the pressures placed on Human Resource Departments to produce measures of output for total quality management (TQM) and continuous quality improvements (CQI). Siengthai et al. (2016), The effectiveness of training can be influenced by various factors such as the input into the training activities which include the participant’s skills, knowledge, and abilities; the training instructor, the training content and methods.

The results of the training are outputs and outcomes. Output is measured by increasing expertise, while outcomes are measured by social achievement. Measuring the output of training results can be done more easily through tests and questionnaires, which can be measured immediately. While measuring outcomes is more difficult to do, because it is related to social achievement in the community, and is long-term.

**Warehouse Receipt**

Warehouse Receipt (Law No. 9 of 2011, Article 1 paragraph 2) is a document proof of ownership of goods stored in a warehouse issued by the warehouse manager. The Warehouse Receipt System is an activity related to the issuance, transfer, guarantee, and settlement of warehouse receipt transactions. Warehouse Receipts are treated as securities, so they can be transferred or traded on organized markets (exchanges) or over the counter. This can encourage the creation of a more efficient commodity trade by eliminating the cost of moving commodities. The Warehouse Receipt System is one solution to the problems in the agricultural sector as during the abundant harvest commodity the prices are decreasing. For this reason, farmers need to delay selling, waiting for an increase in the
expected price level. Financing requirements due to delayed sales can be met by obtaining financing with warehouse receipt collateral through a warehouse receipt system scheme.

Zakić et al., (2014) The experience of USA, Canada, majority of EU countries, Ukraine, Serbia etc. shows that fully functional warehouse receipts system is very beneficial for the agribusiness sector. In the United States, until the 1990s the Warehouse Receipt was in the form of paper (WRs-paper document), then developed into an electronic form (e-WRs-electronic documentation). International Finance Corporation (IFC, 2013) states that these e-WRs systems are sometimes developed as an integral part of the operations of commodity exchanges. The form of e-WRs has several advantages including: it is safer because documents cannot / are difficult to be falsified, faster along with the development of information technology, and cheaper it costs because no paper is needed with special safeguards. Whereas, in Indonesia, the Warehouse Receipt is still in the form of paper (paper document), this is because it is still newly implemented in Indonesia, and began publishing since 2010.

The warehouse receipt system in Indonesia is regulated by Law Number 9 of 2011 as an amendment to Law Number 9 of 2006, not yet widely known by farmers, business people, and other stakeholders. For this reason it is necessary to conduct training, socialization and education continuously and sustainable. The use of warehouse receipt instruments can encourage the formation of more reasonable agricultural commodity prices. The benefits of warehouse receipts include: helping farmers overcome the problem of post-harvest financial difficulties due to delayed selling waiting for an increase in commodity prices; freeing farmers from the debt bondage, middlemen, and moneylenders; increase farmers' income by selling crops when commodity prices are high; can maintain the stability of agricultural commodity prices; encouraging farmers to improve the quality of yields to match the standards set, and can be used as collateral for loans without other additional collateral. Anitasari (2015), Khasanah, (2016), Putri et al, (2017) stated that farmers must be get open access, need socialization, additional government support, confident to utilization of warehouse receipts.
B. Methods

This evaluation study is qualitative research, aimed at analyzing and assessing the training program of warehouse manager candidates within the WRS scheme conducted by the Commodity Futures Trading Regulatory Agency, Ministry of Trade. Field research is conducted from May to December 2017. The training activities for warehouse manager candidates within the WRS scheme were attended by 52 participants from 13 regency regions throughout Indonesia, namely: participants who attended the training program came from 13 regencies: Ngawi, Wonogiri, Kediri, Toli-toli, Pati, Sumedang, Indramayu, Tanah Datar, Kupang, Pasaman Barat, East Lampung, Gowa, and Sumbawa Besar. A trial to measure the validity of the questionnaire was carried out to 30 participants for 53 questions asked. By using the Pearson formula if $r_{\text{count}} > r_{\text{table}}$, the questionnaire is valid. For $n = 30$, then $r_{\text{table}} = 0.361$. With the calculation of the statistical formulation, it turns out that 11 questions answered by the respondent produce $r_{\text{count}}$ less than 0.361. Thus, 42 items of the questions are submitted in the are valid. All 52 participants were sent questionnaires and 50 people returned the questionnaire.

C. Results

Context evaluation for training programs for warehouse manager candidates within the WSR scheme shows that there is a correspondence with government policies on training and the purpose of training programs. Context evaluation results show an average score of 73.3%, meaning in good category, as shown in the Table 1.

Table 1. Context Evaluation

<table>
<thead>
<tr>
<th>Statement</th>
<th>Questionnaire Answers</th>
<th>Average Score</th>
<th>% from the maximum score</th>
</tr>
</thead>
<tbody>
<tr>
<td>The foundation of government policy</td>
<td>Observers</td>
<td>3.50</td>
<td>70.0%</td>
</tr>
<tr>
<td>Purpose of the Training Program</td>
<td>Observers</td>
<td>3.83</td>
<td>76.7%</td>
</tr>
<tr>
<td>Average rating</td>
<td></td>
<td>3.67</td>
<td>73.3%</td>
</tr>
</tbody>
</table>
However, there are several components of the context evaluation stage that need to be improved, among others: basic technical training policies, more intensive socialization of Coftra's vision and mission, and the need for a comprehensive evaluation of previous WRS training.

Input evaluation for training programs for warehouse manager candidates within the WSR scheme is measured by planning quality indicators and quality of input resources consisting of: readiness of trainees, training instructor readiness, training implementers' readiness, training curriculum, and training infrastructure. The results of the input evaluation show an average score of 79.5%, meaning in the good category, as showed in the Table 2.

However, there are several components of the input evaluation stage that need to be improved, among others: first, the planning aspect of the training program that needs to be improved so that the expected goals can be optimized; second, increasing the readiness of training participants by requiring minimal education levels; third, to improve the quality of the training instructor's readiness, it can be required to have a certain certificate of expertise and prioritize among practitioners; fourth, to improve the quality of the training curriculum, it is necessary to regulate with more technical regulations by increasing the proportion of training time for practices, and fifth, the training infrastructure requires additional equipment for practice, and the completeness of the WRS reference book in the library.

**Table 2. Input Evaluation**

<table>
<thead>
<tr>
<th>Statement</th>
<th>Questionnaire Answers</th>
<th>Average Score</th>
<th>% from the maximum score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of Planning Training Programs</td>
<td>Observers</td>
<td>3.75</td>
<td>75.0%</td>
</tr>
<tr>
<td>Profile of HR Participants in the Training</td>
<td>Observers</td>
<td>3.83</td>
<td>76.7%</td>
</tr>
<tr>
<td>Perceptions of Participants Related to Experience</td>
<td>Participants</td>
<td>4.54</td>
<td>90.7%</td>
</tr>
<tr>
<td>Perception of Participants' Curiosity</td>
<td>Participants</td>
<td>4.54</td>
<td>90.7%</td>
</tr>
<tr>
<td>Perceptions of Needs of Participants Following Training</td>
<td>Participants</td>
<td>4.27</td>
<td>85.5%</td>
</tr>
<tr>
<td>Profile of Training Instructor</td>
<td>Observers</td>
<td>3.80</td>
<td>76.0%</td>
</tr>
<tr>
<td>Profile of Managing the Training</td>
<td>Observers</td>
<td>3.83</td>
<td>76.7%</td>
</tr>
<tr>
<td>Adequacy of the Training Curriculum</td>
<td>Observers</td>
<td>3.60</td>
<td>72.0%</td>
</tr>
<tr>
<td>Adequacy of Training Facilities and Infrastructure</td>
<td>Observers</td>
<td>3.63</td>
<td>72.5%</td>
</tr>
<tr>
<td>Average rating</td>
<td></td>
<td>3.98</td>
<td>79.5%</td>
</tr>
</tbody>
</table>
Process evaluation for training programs for warehouse manager candidates within the WSR scheme measured by indicators: activity of training participants, interaction of training learning, training instructor performance, training organizing services, and utilization of training facilities and infrastructure. The results of the process evaluation showed an average score of 75.6%, meaning in the good category, as showed in Table 3.

**Table 3. Process Evaluation**

<table>
<thead>
<tr>
<th>Statement</th>
<th>Questionnaire Answers</th>
<th>Average Score</th>
<th>% from the maximum score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training Participant Activities</td>
<td>Observers</td>
<td>4.00</td>
<td>80.0%</td>
</tr>
<tr>
<td>Interaction of Training Participants Learning</td>
<td>Observers</td>
<td>4.00</td>
<td>80.0%</td>
</tr>
<tr>
<td>Training Instructor Performance</td>
<td>Observers</td>
<td>3.80</td>
<td>76.0%</td>
</tr>
<tr>
<td>Training Organizing Performance</td>
<td>Observers</td>
<td>3.85</td>
<td>77.0%</td>
</tr>
<tr>
<td>Utilization of Training Facilities and Infrastructure</td>
<td>Observers</td>
<td>3.25</td>
<td>65.0%</td>
</tr>
<tr>
<td><strong>Average rating</strong></td>
<td></td>
<td><strong>3.78</strong></td>
<td><strong>75.6%</strong></td>
</tr>
</tbody>
</table>

However, there are several components of the evaluation process that need to be improved, among others: *first*, the activities of the trainees, the need to increase training participants' discipline; *second*, learning interactions need to be refined during practical training in the WRS warehouse; *third*, instructor performance needs to be optimized where the discussion of training material is relatively the same between one instructor and another instructor in order to avoid training time; *fourth*, the training organizing service is optimized by avoiding several activities that overlap and run job descriptions consistently; *fifth*, the addition of instructors resource persons from other stakeholders, and the addition of several topics related to the warehouse receipt system; and *sixth*, the use of information technology infrastructure needs to be optimized by increasing internet connection capacity.

Product evaluation for training programs for warehouse manager candidates within the WSR scheme measured by indicators: assessment of training participants' results, assessment of the implementation of training...
programs, results of training programs, benefits of training programs, and impact on WRS development. The results of product evaluation showed an average score of 86.7%, meaning in the very good category, as showed in the Table 4.

**Table 4. Product Evaluation**

<table>
<thead>
<tr>
<th>Statement</th>
<th>Questionnaire Answers</th>
<th>Average Score</th>
<th>% from the maximum score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessment of the Training Program Implementation</td>
<td>Participants</td>
<td>4.37</td>
<td>87.5%</td>
</tr>
<tr>
<td>Training Program Results</td>
<td>Participants</td>
<td>4.37</td>
<td>87.5%</td>
</tr>
<tr>
<td>Benefits of the Training Program Results</td>
<td>Participants</td>
<td>4.27</td>
<td>85.3%</td>
</tr>
<tr>
<td>Average rating</td>
<td></td>
<td>4.34</td>
<td>86.7%</td>
</tr>
</tbody>
</table>

However, the assessment of the results of the trainees needs to be refined by measuring the increase in knowledge of each trainee. Assessments made on the results of the training participants, measured from the realization of the target, obtained a business license as the WRS warehouse manager, which in this case means an assessment of results related to the outcome, means measuring the impact of a program. All participants (13 groups of warehouse manager candidates in the WRS), have submitted a business plan until the end of 2017, and Coftra is informed that the warehouse manager will obtain a business license as WRS warehouse manager in 2018.

The cost-benefit measurement shows that the realization of the expenses for the training program of warehouse manager candidates in the WRS scheme, for 2017 was amounted to Rp1.6 billion. Meanwhile to measure the benefits of the program is carried out by linking the objectives of the training with the implementation of the WRS warehouse management of the government-owned warehouses which have been built but without any WRS warehouse operational license yet. The value of the WRS warehouse construction in the 13 districts is around Rp39 billion. So that the cost-benefit comparison between training costs and WRS warehouse construction costs is 4.1%, a ratio that can encourage the effectiveness of implementing government-owned WRS warehouses.
However, for the improvement of outcomes on the benefits of further training programs, it is necessary to synergize government officials at the central and regional levels, and to encourage empowerment and involvement of the community and stakeholders.

C. Conclusion

From the results of the research findings as outlined in the conclusions, the researcher proposes suggestions and recommendations to Coftra on the following matters.

1. At the context evaluation stage, a basic technical training policy from the Ministry level or the Head of the Agency is needed and a comprehensive evaluation of the WRS training that has been carried out previously.

2. In the evaluation phase inputs are recommended several things. First, Coftra needs to require a minimum level of education for prospective warehouse management trainees in the WRS scheme to improve the readiness of trainees. This is needed so that the training does not interfere with the differences in the level of significant understanding of the participants on the training material; second, Coftra needs to require the training instructor to have a certificate of expertise relevant to the field being taught (if possible), to improve the quality of readiness of the instructor; thirdly, Coftra needs to regulate the curriculum with the Head of Coftra regulation whose syllabus focuses more on the competency base and the proportion of time for practical training so that participants get a comprehensive understanding of aspects of its implementation; fourth, Coftra needs to add infrastructure and equipment to support training for practice so that it makes it easier for participants to handle an equipment at the same time, and fifth, Coftra needs to add its library facilities to contain references related to WRS.

3. In the evaluation process, a number of things are recommended. First, the CoFTRA needs to regulate and implement more strictly the discipline of participants, especially attendance discipline at the beginning of the training session and during the training
(reducing the frequency of in and out of class). This is important so as not to disturb the concentration and activities of the trainees when delivering material by the instructor; second, Coftra needs to monitor more closely the learning interactions of trainees, especially during field practice at the WRS warehouse, especially the smoking ban and bringing food and beverage to the WRS warehouse location; and third, Coftra needs to hire a network band to increase internet connection capacity at the training location, so that the utilization of information technology infrastructure and training to operate the system (especially Is-ware) can be more optimized in practice.

4. In the evaluation phase the product is recommended that Coftra still needs to measure the increase in knowledge of each training participant by using the pre-test and post-test assessment methods. This is as well as the pre-test and post-test assessment for other types of WRS training. Post-training product evaluation, related to the outcome, is recommended to Coftra that: first, it is necessary to encourage increased synergy at the central government level between relevant ministries; secondly, to encourage the improvement of synergy and support of the regional government towards the relevant agencies towards the development of the WRS, including encouraging the Regional Government to participate in empowering the community by involving stakeholders in their respective regions so that WRS development will increase to improve community welfare.

Bibliography


Undang-Undang Republik Indonesia Nomor 9 Tahun 2011 tentang Sistem Resi Gudang. Lembaran Negara Republik Indonesia Tahun 2011 Nomor 78.