Preventive Measures Adapted by One of the Philippine Government Agency in Port Operation

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Abstract
This study primarily aims to evaluate the preventive measures adapted by Bureau of Customs Port of Batangas. The objectives of this study were to assess the level of effectiveness of the preventive measures adapted; identify the problems encountered in the implementation of the preventive measure; to test the significant relationship between the level of effectiveness and problems encountered as perceived by the two groups of respondents; and to propose plan of action that may be designed to address the level of effectiveness of the preventive measures adapted. The present study was a descriptive research that used quantitative analysis. The respondents of the study were the heads and employees from the four division of Bureau of Customs, Port of Batangas such as Assessment Division, Port Operation Division, Customs Police Division-Enforcement and Security Service (CPD-ESS) and Customs Intelligence and Investigation Service (CIIS). The results revealed that the preventive measures adapted by Bureau of Customs were assessed by the respondents as very effective. However, two of the preventive measures were assessed by the two groups of respondents such as heads and employees as effective only. The researchers recommended that Bureau of Customs, Port of Batangas continuously strengthen their implementation of their preventive measures for further prevention and suppression of smuggling.

Keywords: Preventive Measures, Bureau of Customs, Port of Batangas

1. Introduction
Smuggling, as one of the biggest problems that the Bureau of Customs is continuously combating, diminishes in a large scale the lawful revenues intended for the government for economic growth and nation’s stability. Fair Trade estimates that the government is losing P224.5 billion a year in revenues due to smuggling.

“Prevention is better than cure” as what the popular saying goes by. It is advantageous to any organization to be prepared first hand on what possible happenings or circumstances the future will hold. It is

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more likely that the Bureau of Customs sighted the implementation and enforcement of preventive measures as an initial remedy to extract and abolish various smuggling activities throughout the Bureau. They focus on these preventive measures because no smuggling will occur or any other illegal activities will flourish if there is tight implementation of these measures. As a distinguished International Port of Entry, Port of Batangas, Bureau of Customs adapted these preventive measures to be tightly implemented on all the ports under its jurisdiction. On the study conducted by Demesa (2012) about preventive maintenance employed by Babcock- Hitachi Philippines Incorporated, preventive maintenance is employed and observed by the BPHI concerning the safety of the employees. There is only one problem that is often faced by the BPHI concerning the preventive maintenance. There is correlation on these two studies for it both deals with the preventive. Even though the current study is dealing with the preventive measures against smuggling at the Bureau of Customs, study about the preventive maintenance can be a source of information or data for the current study.

Through this study, the level of effectiveness of the preventive measures will be determined along with the problems encountered while implementing the preventive measures and proposed action plan is to be designed for the continuous combating of smuggling at the Bureau of Customs, Port of Batangas.

This study will serve as an empirical data for the future researchers and be a necessary tool in the library in acquiring further knowledge regarding this topic.

**Objectives of the Study**

The study aims to assess the preventive measures adapted by Bureau of Customs, Port of Batangas against smuggling. Specifically, to assess the level of effectiveness of the preventive measures adapted; to identify the problems encountered in the implementation of the preventive measures; to test the significant relationship between the level of effectiveness and problems encountered as perceived by the two groups of respondents and; to propose action plan that may be designed to address the level of effectiveness of the preventive measures adapted.

**Ho:** There is no significant relationship between the level of effectiveness of the preventive measures and problems encountered as perceived by the two groups of respondents.

2. Method

**Research Design**

The research method used by the researchers is descriptive method in order to assess the preventive measures adapted through the different divisions under the Bureau of Customs, Port of Batangas. Descriptive method involves gathering data that describes events and then organizes, tabulates, depicts and describes the data collection (Glass & Hopkins, 2011).

**Participants of the Study**

The participants of the study are from four divisions of Bureau of Customs, Port of Batangas such as Assessment Division, Port Operation Division, Customs Police Division-Enforcement and Security Service (CPD-ESS) and Customs Intelligence and Investigation Service (CIIS). There are two groups of respondents: 1 head for each division and employees, 31 employees from the Port Operation Division, 3 from Assessment Division, 5 from CPD-ESS and 2 from CIIS. These respondents were reliable sources of information and likewise knowledgeable in the topic under study.

**Research Instrument**

In connection with the descriptive method used in order to gather relevant data, the researchers preferred the use of a questionnaire. The researchers prepared a draft of questionnaire based on the information gathered and personal interviews conducted. The researchers divided the questionnaire into two parts: first part identifies the effectiveness of the Preventive measures and the second part deals with the
possible problems encountered in the enforcement of preventive measures adapted by Bureau of Customs, Port of Batangas against smuggling. The researchers also conducted an interview with the employees in order to gather data and information that were used throughout the formulation of the study.

**Research Procedures**

The researchers, together with a letter noted by the College of Business Administration Dean and their Research Adviser, conducted a preliminary interview at Bureau of Customs, Port of Batangas in relation to their research study entitled “Preventive Measures Adapted by Bureau of Customs, Port of Batangas: An Assessment”. From the gathered data from the interview, the researchers formulated a two-part questionnaire. After deriving to a self-made questionnaire, the researchers asked the consent of Bureau of Customs, Port of Batangas Administrative Division Head, Mrs. Ebora, if they can have the distribution of questionnaires to the specified respondents on each divisions. Upon approval of the distribution and the questionnaire itself, these questionnaires were distributed to the respective respondents.

Aside from questionnaire, the researchers conducted interviews in order to gain enough information about the subject matter from the different divisions of Bureau of Customs, which is the primary background regarding the preventive measures that were assessed by the researchers.

**Data Analysis**

Frequency, weighted mean and ranking were used in assessing the level of effectiveness of the Preventive Measures adapted and identifying the problems encountered in the implementation of the Preventive Measures. Ranking is also descriptive statistics that shows positioned importance of an item. The researchers used number 1,2,3,4,5,6… to show the degree of importance where 1 signifies the most important and the last number signifies the least.

The results were analyzed and interpreted using the Statistical Version 17.0 statistical analysis software package. The hypotheses of the study were analyzed using Point Biserial Correlation for the relationship with dichotomous variable. Relationships among the rest of interval variables were tested using the Pearson “r” Product-Moment of Correlation. The correlation was tested at 0.05 level of significance.

**3. Results and Discussion**

Table 1 presents the preventive measures adapted by Bureau of Customs. It can be seen from the table that the two sets of respondents, heads (3.80) and employees (3.86) assessed the preventive measures as very effective. All the items yield high to very high means ranging from 3.25-4.00 interpreted as “Very Effective”” and “Effective”.

As indicated from the results, tight security for the protection of all cargoes and all properties within the customs zone (4.00), regular check-up of computer used for E2M system (4.00, 3.98) and consistency on conducting searches on board vessels, aircrafts, vehicles, warehouse, piers, wharves and other customs premises (4.00, 3.98) were assessed by the respondents as very effective among the preventive measures.

However, 24 hour security for customs installations, building and properties was assessed by the heads as effective only having a weighted mean of 3.25. On the other hand, step by step implementation of the Profiling/Color Coding System was assessed by the employees as effective only with a mean score of 3.49.

This implies that Bureau of Customs, Port of Batangas is very competent in executing these preventive measures in the prevention and suppression of smuggling that greatly affects the lawful revenues intended for the government. Internationally, CSI or Computer Security Initiative has been developed in the United States. It is a program intended to help increase security for maritime containerized cargo shipped to the United States from around the world. CSI addresses the threat to border security and global trade posed by the potential for terrorist use of a maritime container to deliver a weapon. Here in Philippines, particularly on the Bureau of Customs, the Customs Police as pursuant to EO 127, are strictly implementing the tight
security for the cargoes that are comparable to the CSI of America. They have prevailing charters that guides them on the efficient accomplishment of their tasks (“Container Security Initiative”).

Also on the first rank is the regular check-up of computer used for E2M system. It was assessed by the respondents as very effective. E2M (Electronic to Mobile) System is an internet-based technology that allows Customs Officials and Traders to handle most of their transactions via internet. It makes use of advance technology of including electronic signatures to provide government officials with new tools to enable them to make dramatic improvements in security, trade efficiency and to fight against corruption (Adviento, 2014).

According to Serrano, (2011) the Electronic to Mobile System (E2M) is part of the multi-million modernization program of the Bureau of Customs that aims to further enhance its revenue collecting capacity through ensuring proper tariff and taxes are collected. The system also promises to cut the time needed for the release of cargo and other imports from the usual three-day long wait to as little as thirty minutes. Basically, the E2M project is a shift to paperless transaction using even mobile gadgets like cellular phones to process import documents. Furthermore, it’s an internet-based technology that allows customs officers and traders to handle most of their transactions from customs declaration to cargo manifests and transit documents via the internet. It makes use of technology including electronic signatures to provide government officials, specifically customs administration with new tools that will enable them to make dramatic improvements in security.

<table>
<thead>
<tr>
<th>Table 1: Effectiveness of Preventive Measures Adapted by Bureau of Customs (N=45)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preventive Measures</td>
</tr>
<tr>
<td>1. Step by step implementation of the Profiling/Color Coding System</td>
</tr>
<tr>
<td>2. Double checking of the documents of imported articles</td>
</tr>
<tr>
<td>3. Regular inventory/checking of Cargoes</td>
</tr>
<tr>
<td>4. On the spot monitoring by Customs Employees in the Examination Area</td>
</tr>
<tr>
<td>5. Day to day assessment of duties, taxes and other charges</td>
</tr>
<tr>
<td>6. Full physical examination, classification and appraisal of imported articles</td>
</tr>
<tr>
<td>7. 24 hour security for customs installations, building and properties</td>
</tr>
<tr>
<td>8. Consistency on conducting searches on board vessels, aircrafts, vehicles, warehouse, piers, wharves and other customs premises</td>
</tr>
<tr>
<td>9. Regular check-up of computer used for E2M system</td>
</tr>
<tr>
<td>10. Tight security for the protection of all cargoes and all properties within the customs zone</td>
</tr>
<tr>
<td>Composite Mean</td>
</tr>
</tbody>
</table>

Legend: 3.50 – 4.00 – Very Effective (VE); 2.50 – 3.49 – Effective (E); 1.50 – 2.49 – Moderately Effective (ME); 1.00 – 1.49 – Not Effective (NE)

Consistency on conducting searches on board vessels, aircrafts, vehicles, warehouse, piers, wharves and other customs premises was also assessed as very effective. It is very vital to implement this preventive measure efficiently and effectively because without this, a high rate of smuggling case will surely be faced by the Philippine Government. Smugglers and law violators are closely monitored by Customs officials especially the Customs police by having consistent searches and inspections.
On military parlance and in connection with the conducting of searches and inspections, visit, board, search and seizure (VBSS) are being executed by law enforcement agencies for maritime board actions and tactics, designed to capture enemy vessels, to combat terrorism, piracy and smuggling and to conduct customs, safety and other inspection (www.abs-cbnnews.com).

Even though the preventive measures were assessed generally as very effective, the heads assessed the 24-hour security for customs installations, buildings and properties as effective only. It’ll become a very big challenge for the heads who in the scalar chain are most likely to make decisions on their certain area of supervision to absolutely exercise the 24-hour security with insufficient monitoring device such as CCTV cameras, x-ray machines etc. These are the work of technology that greatly contributes in the proper and continuous monitoring of customs properties and installations.

Sen. ChizEscudero called for the installation of CCTV cameras in all revenue-generating agencies especially on Bureau of Customs and will consider it a criminal offense if the equipment is not maintained or in good running condition. Specific products will have a specific port for easy detection in case of smuggling, he said, adding that unconfirmed reports showed that the points of Cebu and Batangas have been deemed alternate sites for smugglers. (Gallarde, 2014)

Step by step implementation of the Profiling/Color Coding system was evaluated only as effective by the employees. It’ll become very tough for employees to have the step-step implementation of the Profiling System because of the frequent reorganization in the Bureau of Customs. With this reorganization comes the reorganization also of the steps in the system that is to be followed by the employees.

According to Prof. Norbert Castillo of LPU-Manila, there are two criteria wherein importers and their importations will be subject to different color lanes. 1st criteria: Situation in the country of export and 2nd criteria: Country of export is known for smuggling. The Profiling/ color coding system is a very effective preventive measure to combat smuggling.

The Bureau of Customs will be put to the test as it begins verifying the performance and compliance of "super green lane” importers. Under the procedure devised by the bureau, importers are now classified into three “lanes”: super green, yellow and red. Those in the “super green” group, numbering some 118, will be allowed to move their goods out of customs with minimal documentation and inspection requirements. Yellow and red lane importers will have to contend with stricter procedures. (“Ampil faces litmus test…”)

Table 2 presents the problems encountered in the implementation of the preventive measures. Having a composite mean of 2.08 and 2.13 by the two groups of respondents such as heads and employees, the overall evaluation acquired the verbal interpretation sometimes. As what is clearly stipulated from the results, frequent modification of procedures (2.50,3.12) and computer system failures (2.50,2.61) are the often problems that are evident in the implementation of the preventive measures according to the respondents.

With a weighted mean of 1.25 and 1.12, inconsistent communication between customs employees and IT professionals is never a problem.

Based on the results, frequent modification of the profiling system has always been a problem. To supplement the results on the level of effectiveness of the preventive measures on the step by step implementation of the profiling/ color coding system, there is a difficulty on the implementation of it because of the frequency of the modification brought about the reorganization of the organizational chart. Example of this scenario is the appointing of heads like district collectors, deputy collectors etc. occasionally. When the new appointee is in the position, they tend to modify or rectify the procedures that are traditionally been followed and implemented by the employees.

Another problem that is always been faced by the Bureau of Customs, Port of Batangas is the computer system failures. According to the Assessment Division Chief, that computer system failure is the major problem on their division considering that they are using the E2M system for the assessment of duties and taxes. Resulting from this is the delayed of the transactions, slow processing of customs documents due to manual filing of import/export entries and high possibility of smuggling.
Computer system failures are resulting on manual processing. This kind of processing is just practiced only when there is computer system breakdown, power failure which renders the computer system non-operational, the AAB is offline and upon authorization by the BOC Deputy Commissioner for MISTG ("Requiring Prior Approval…, 2002")

The Philippine Bureau of Customs (BOC) is scrambling to fix a transaction backlog in the electronic-to-mobile system (e2m) that led to a server overload. The situation has in turn fouled up cargo delivery schedules and online payments.

### Table 2: Problems Encountered in the Implementation of the Preventive Measures N=45

<table>
<thead>
<tr>
<th>Problems Encountered</th>
<th>Heads</th>
<th></th>
<th>Employees</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WM</td>
<td>VI</td>
<td>Rank</td>
<td>WM</td>
</tr>
<tr>
<td>1. Frequent modification of procedures</td>
<td>2.50</td>
<td>O</td>
<td>2.5</td>
<td>3.12</td>
</tr>
<tr>
<td>2. Material time to meet import commitments</td>
<td>2.75</td>
<td>O</td>
<td>1</td>
<td>1.68</td>
</tr>
<tr>
<td>3. Continuous processing of cargo import documents</td>
<td>1.75</td>
<td>S</td>
<td>7.5</td>
<td>1.73</td>
</tr>
<tr>
<td>4. Unaccomplished permit required for monitoring and inspection</td>
<td>2.25</td>
<td>S</td>
<td>5</td>
<td>2.20</td>
</tr>
<tr>
<td>5. Computer system failures</td>
<td>2.50</td>
<td>O</td>
<td>2.5</td>
<td>2.61</td>
</tr>
<tr>
<td>6. Availability of equipment and machines used in the examination procedures of imported articles like x-ray, etc.</td>
<td>2.25</td>
<td>S</td>
<td>5</td>
<td>2.37</td>
</tr>
<tr>
<td>7. Budget allocation for CCTV cameras</td>
<td>2.25</td>
<td>S</td>
<td>5</td>
<td>2.78</td>
</tr>
<tr>
<td>8. Congestion of imported articles or cargoes</td>
<td>1.50</td>
<td>S</td>
<td>9</td>
<td>1.20</td>
</tr>
<tr>
<td>9. Inconsistent communication between customs employees and IT professionals.</td>
<td>1.25</td>
<td>N</td>
<td>10</td>
<td>1.12</td>
</tr>
<tr>
<td>10. Lack of customs personnel for security purposes</td>
<td>1.75</td>
<td>S</td>
<td>7.5</td>
<td>2.46</td>
</tr>
<tr>
<td><strong>Composite Mean</strong></td>
<td><strong>2.08</strong></td>
<td><strong>S</strong></td>
<td><strong>2.13</strong></td>
<td><strong>S</strong></td>
</tr>
</tbody>
</table>

Legend: 3.50 – 4.00 –Always (A); 2.50 – 3.49 –Often (O); 1.50 – 2.49 –Sometimes (S); 1.00 – 1.49 – Never (N)

A new system called the intergraded Philippine customs system (IPCS) is expected to replace the trouble-plagued e2m hopefully by July next year after bidding for the contract is finalized next month, the BOC said. iPCS has a budget of P550 million. (http://www.portcalls.com/ph-customs-pressed-to-fix-e2m-system-glitch-stakeholders-offer-solutions/#)

### Table 3: Relationship Between the Effectiveness of Preventive Measures and Problems Encountered in the Implementation of the Preventive Measures N=45

<table>
<thead>
<tr>
<th>Preventive Measures and Problems Encountered</th>
<th>R</th>
<th>P</th>
<th>Decision</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head</td>
<td>-0.685</td>
<td>0.000</td>
<td>Reject</td>
<td>Significant</td>
</tr>
<tr>
<td>Employees</td>
<td>-0.828</td>
<td>0.172</td>
<td>Failed to Reject</td>
<td>Not Significant</td>
</tr>
</tbody>
</table>

Legend: Significant at p-value < 0.05; R – Rejected; FR – Fail to Reject; S – Significant; NS – Not Significant

Table 3 presents the relationship between the effectiveness of preventive measures and problems encountered in the implementation of the preventive measures. It can be noticed from the results that there is very high negative correlation in the effectiveness of preventive measures and problems encountered in the implementation of the preventive measures as perceived by the heads and the employees. This implies that greater the effectiveness of the preventive measures the lesser the problems encountered in the implementation of these preventive measures.

The results also indicated that as perceived by the heads, effectiveness of preventive measures significantly affects the problems encountered since computed p-value (0.000) is lower than 0.05 level of significance. On the other hand, as perceived by the employees, effectiveness of preventive measures shows no relationship with the problems encountered since the computed p-value is less than 0.05 level of
significance, thus the hypothesis that there is relationship between the effectiveness of preventive measures and problems encountered as perceived by the employees is failed to reject.

This suggests that heads believe that the problems encountered should be addressed well because it is significantly related and affecting the prevent measures. The study by Kilburg & Hancock (2003) involving problems encountered by the heads or leaders is to identify mentoring teams that were encountering recurring problems, attempts to manage those problems, and assess the effectiveness of those procedures.

In contrast with the assessment of heads between the relationship of preventive measures and problems encountered, the employees do not agree that the effectiveness of preventive measures greatly affects the problems encountered. There is no significance relationship between the two.

**Table 4: Proposed Action Plan**

<table>
<thead>
<tr>
<th>Key Results Areas</th>
<th>Objectives</th>
<th>Activity/ Program</th>
<th>Expected Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>24 hour security for customs installations, buildings, properties</td>
<td>To strictly put into action the closely monitoring of cargoes and customs premises to prevent smuggling. To improve safety and security.</td>
<td>Procure additional x-ray machines, walk-through metal detectors and CCTVs and install these in various parts of customs zone.</td>
<td>Effective and considered ideal.</td>
</tr>
<tr>
<td>Frequent modification of the profiling/color coding system</td>
<td>To have the step by step procedure on the profiling system that will abolish confusion and inefficiency among customs employees.</td>
<td>Develop a concrete procedures to follow and prescribe a specific period and criteria wherein procedures can be modified.</td>
<td>Effective and considered ideal.</td>
</tr>
<tr>
<td>Computer system Failures</td>
<td>To maintain good computer condition for E2m System</td>
<td>Invest new applications and software that will guarantee and speed of Internet service that is highly important on the computer system of the Bureau of Customs.</td>
<td>Effective and considered ideal.</td>
</tr>
<tr>
<td>Budget Allocation for CCTV Cameras</td>
<td>To have proper and appropriate budget allocation for necessary monitoring devices like CCTV cameras</td>
<td>Formulate a more comprehensive procurement program on the financing/budgeting of funds concerning CCTV cameras.</td>
<td>Effective and considered ideal.</td>
</tr>
</tbody>
</table>

4. Conclusions and Recommendations

The preventive measures adapted by the Bureau of Customs, Port of Batangas were very effective. Bureau of Customs, Port of Batangas sometimes encountered problems in the implementation of the preventive measures. Effectiveness of preventive measures affects problems encountered by the heads. Proposed action plan was designed to address the problems encountered in the implementation of the preventive measures.

The customs employees and heads of the Bureau of Customs, Port of Batangas may continuously and strictly implement the adapted preventive measures for its overall progress in combating smuggling. The Bureau of Customs may have a concrete procedure and specific time and criteria to be observed for the modification of the profiling system. Computer system may always contain up to date necessary software and may have regular preventive maintenance to avoid system failures. The heads and employees of Bureau of Customs may continuously develop a more cooperative working environment to strengthen effectively the
preventive measures that lessen or totally avoid the problems encountered. The proposed action plan may be reviewed and evaluated by the management for possible implementation.

For the future researchers, this present study may be a guide for gaining more knowledge about the implementation of preventive measures and other variables. Additional studies in connection with the recent topic may be conducted for further understanding of the other aspects of this present study.

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