ANALYSIS OF TOTAL QUALITY MANAGEMENT IMPLEMENTATION OF
THE COST OF PRODUCTION IN ANIMAL FEED INDUSTRY

Yulianto Hadi
STIE Dr. Khez Muttaqien
Jl. KK Singawinata No. 83 Nagri Kidul
Purwakarta

ABSTRACT

Global competition is forcing companies have the ability to compete with similar companies, especially with companies that have applied science and technology, to be able to win this competition, companies are required to have efficiency so that their products can compete with similar products.

To minimize deviations production process and shrinkage fodder, required a series of continuous improvement by the company to support the smooth operation of the company as a whole.

Methods of research by the author is a method of collecting data with field studies and literature. Methods of field studies carried out by direct observation to the company.

Research conducted an analysis of Total Quality Management. The purpose of this study in order to determine deviations and shrinkage process of production (shrinkage) fodder. The observations were carried out on an on going basis include observation of the moisture content of raw materials, checking the engine used on a regular basis, setting or press machine setup, the engine speed is balanced and improve the existing human resources.

From the results of the study authors concluded that the application of Total Quality Management and conduct continuous improvement and sustainable can minimize shrinkage deviations and production process (shrinkage) so that the effectiveness of production can be achieved.

Keywords: Cost, Total Quality Management.

A. BACKGROUND

Forcing the global competition have the ability of companies in the face of competition with similar companies, especially with the company who have applied science and technology, to be won this competition, the company required to have the efficiency of their products that can compete with similar products.

The main objective is the company obtain optimum profit. Efforts to achieve this objective is to apply the total quality management. In the company manufacturing industry, where the main activities do the production process, in the sense of turning the raw materials become goods so to be sold.

Because of it, industrial companies need to take measures of strategies to increase effectiveness and efficiency in the use of financial resources there, to achieve that goal required analysis of irregularities process (froud process) and production depreciations (shrinkage) fodder. The management of the raw material good and sufficient, insurance.
Formulation of the problem
Based on the above description of the background and the identification of a problem that researchers can do is as follows:
1. How the implementation of the total quality management fodder to the cost of production?
2. What factors influence the implementation of the total quality management fodder to the cost of production?

Research Purposes
1. To see how the influence of the implementation of the total quality management fodder about the cost of production?
2. To find out what factors can minimize deviation process (froud process) and depreciation the production of (shrinkage) fodder about the cost of production?

B. LITERATURE REVIEW
1. The quality of the product
   Quality is a whole and the nature of a product or service that affects the ability to satisfy the needs expressed or implied Khotler (2004: 66). According to sumayang (2003: 18) the effectiveness of quality as a factor excellence compete, formed from the willingness of the customers to pay more or wait for the presence of products that believed to be high quality.

   The quality is everything that able to meet a desire or need pelanggan (meeting the need of customers) gaspersz (2006). While mowen (2005): define the quality of according to size relative of good (goodness) .Meanwhile according to purwanti. et., al., (2008: 326): the quality is the act of achieving the objective meet the needs of customers and give satisfaction to customers via work all those who involved in of business process .Tomo (2008) defines. Quality is degree or extent characteristic attached to products meet the requirements or desire.

2. Integrated quality management TQM
   The total quality management gaspersz according to (2006: 2) the quality of integrated management is defined as a ways to improve the performance of is available continuously on each the level of the operation and process in any area of functional architecture of an organization, by the use of all human resources and capital available. Meanwhile according to Tomo (2008) have the organization, document, an implement, and maintaining a quality management system and continuous fix their creativity in accordance with the requirement that standard.

3. The framework of thought
   The production process that is good and effective beneficial for management and reduce the possibility of deviation process (froud) and production depreciations (shrinkage). Company existence can be achieved through the profit rise and decent increase from year to year business that can be done is with the implementation method TQM can increase profit company control costs and improve the quality of product quality.

   Companies should always notice raw materials remain so that the quality is good and be on a level said, not too high and not too low. Quality control is an improvement that sustainable involving all part of the company in the organization particularly in the department of production with the purpose to produce products that are high quality and increase profit company. Management holds an important role by
C. RESEARCH METHODS

Research methodology that is used is a method of descriptive with the kind of research a case study.

1. Data collection techniques

This research technique using of Field Research and Library Research

2. Depreciation data

For data regarding depreciation complete this is done the withdrawal of data december 2013 for 4 a kind of fodder (broiler layer, breeder and quails).

Depreciations product (shrinkage) animal feed December 2013

<table>
<thead>
<tr>
<th>The type of cattle feed</th>
<th>Production</th>
<th>Themselves</th>
<th>Shrinkage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A cattle feed (Broiler)</td>
<td>4,500.000</td>
<td>4,428.000</td>
<td>(72.000)</td>
</tr>
<tr>
<td>Feed laying term (Layer)</td>
<td>3,500.000</td>
<td>3,437.000</td>
<td>(63.000)</td>
</tr>
<tr>
<td>Chicken feed parent (Breeder)</td>
<td>2,500.000</td>
<td>2,457.500</td>
<td>(42.500)</td>
</tr>
<tr>
<td>Feeding quail</td>
<td>2,000.000</td>
<td>1,964.000</td>
<td>(36.000)</td>
</tr>
<tr>
<td>Total Kerusakan (Shrinkage)</td>
<td>12,500.000</td>
<td>12,206,500</td>
<td>(233,500)</td>
</tr>
</tbody>
</table>

The formula used to calculate depreciation:

\[ \text{Percent depreciation (Shrinkage)} = \frac{\text{The production} - \text{The results}}{\text{The production}} \times 100\% \]

D. THE RESULT OF DISCUSSION AND EXAMINATION

Data based on the analysis that is already managed as in research metodelogi mentioned above the analysis and the results are as follow:

1. The comparative analysis HPP before and after TQM

The price of the following four basic calculation the production of the kind of product produced.

Calculation Cost Productions
December 2013 and April 2014

\[ \begin{align*}
\text{The costs of production December 2013 as much as 12,286.500 Kg} & \quad \text{April 2014: 14,009.500 Kg} \\
\text{a. The cost of raw materials directly} & \\
\text{a.1 cost of raw materials} & \text{Rp. 35,150,500.000} \quad & \text{39,761,500.000} \\
\text{a.2 The cost of supporting material as} & \text{Rp. 378,248,679} \quad & \text{451,292,464} \\
\text{b. Direct labor costs} & \text{Rp. 1,105,785,000} \quad & \text{1,260,855,000} \\
\text{c. The cost of over head factory} & \text{Rp. 2,580,165,000} \quad & \text{2,941,955,000} \\
\text{The total cost of the production} & \text{Rp. 39,222,698.679} \quad & \text{44,425,642.464} \\
\text{Calculation HPP} & \text{Rp. 39,222,698.679} \quad & \text{44,425,642.464} \\
\frac{12,286,500 \text{ Kg}}{} & \frac{14,009,500 \text{ Kg}}{} \\
\text{= Rp. 3.192 Kg} & \text{3.171 Kg}
\end{align*} \]
The cost of production decreased to the rupiah/Kg if a comparison between december 2013 with april 2014

\[
\text{HPP December 2013} = \text{Rp. 3.192 /Kg} \\
\text{HPP April 2014} = \text{Rp. 3.171 /Kg} \\
\text{= Rp. 21 /Kg}
\]

Following a recapitulation production of animal feed in the production that in december 2013 Recapitulations product animal feed.

<table>
<thead>
<tr>
<th>The type of cattle feed</th>
<th>Thereums</th>
<th>@</th>
<th>Rp</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>A cattle feed (Broiler)</td>
<td>4,428,000</td>
<td>3,319</td>
<td>14,694,719,145</td>
<td>30,04</td>
</tr>
<tr>
<td>Feed laying hens (Layer)</td>
<td>3,200,000</td>
<td>3,084</td>
<td>10,600,910,050</td>
<td>27,97</td>
</tr>
<tr>
<td>Chicken feed parent (Brooder)</td>
<td>2,455,000</td>
<td>3,302</td>
<td>8,115,465,893</td>
<td>20,00</td>
</tr>
<tr>
<td>Feeding quail</td>
<td>1,946,000</td>
<td>2,959</td>
<td>5,811,695,143</td>
<td>15,99</td>
</tr>
<tr>
<td><strong>Total Product</strong></td>
<td><strong>12,266,000</strong></td>
<td><strong>3,121</strong></td>
<td><strong>39,223,690,870</strong></td>
<td><strong>100,00</strong></td>
</tr>
</tbody>
</table>

**DEPRECIATIONS PRODUCT (SHRINKAGE) ANIMAL FEED DESEMBER 2013**

<table>
<thead>
<tr>
<th>The type of cattle feed</th>
<th>Productions</th>
<th>Thereums</th>
<th>Shrinkage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A cattle feed (Broiler)</td>
<td>4,500,000</td>
<td>4,428,000</td>
<td>(72,000) (1.60)</td>
</tr>
<tr>
<td>Feed laying hens (Layer)</td>
<td>3,500,000</td>
<td>3,437,000</td>
<td>(65,000) (1.80)</td>
</tr>
<tr>
<td>Chicken feed parent (Brooder)</td>
<td>2,500,000</td>
<td>2,457,500</td>
<td>(42,500) (1.70)</td>
</tr>
<tr>
<td>Feeding quail</td>
<td>2,000,000</td>
<td>1,964,000</td>
<td>(36,000) (1.80)</td>
</tr>
<tr>
<td><strong>Total Depreciation (Shrinkage)</strong></td>
<td><strong>12,500,000</strong></td>
<td><strong>12,266,000</strong></td>
<td><strong>(213,500) (1.71)</strong></td>
</tr>
</tbody>
</table>

Depreciations product (shrinkage) fodder december 2013 high enough until reaching 213.500 = 1,71 kg % this is because repairs done by a company not maximum. It is above an impact to the performance of a company because suffer a financial loss following losses the company before the application of TQM:

**DEPRECIATIONS PRODUCT (SHRINKAGE) DECEMBER 2013**

<table>
<thead>
<tr>
<th>The type of cattle feed</th>
<th>Shrinkage</th>
<th>@</th>
<th>Rp</th>
</tr>
</thead>
<tbody>
<tr>
<td>A cattle feed (Broiler)</td>
<td>72,000</td>
<td>3,319</td>
<td>238,963,000</td>
</tr>
<tr>
<td>Feed laying hens (Layer)</td>
<td>65,000</td>
<td>3,084</td>
<td>194,292,000</td>
</tr>
<tr>
<td>Chicken feed parent (Brooder)</td>
<td>42,500</td>
<td>3,302</td>
<td>140,335,000</td>
</tr>
<tr>
<td>Feeding quail</td>
<td>36,000</td>
<td>2,959</td>
<td>106,523,000</td>
</tr>
<tr>
<td><strong>Total Depreciation (Shrinkage)</strong></td>
<td><strong>213,500</strong></td>
<td><strong>3,186</strong></td>
<td><strong>680,119,000</strong></td>
</tr>
</tbody>
</table>

Shrinkage production (fodder) in december 2013 reach Rp.680.119.000,- that the losses caused by shrinkage production of animal feed.

The price of the four types of production of basic products produced in april 2014.

**RECAPITULATIONS PRODUCT ANIMAL FEED APRIL 2014**

<table>
<thead>
<tr>
<th>The type of cattle feed</th>
<th>Thereums</th>
<th>@</th>
<th>Rp</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>A cattle feed (Broiler)</td>
<td>4,761,600</td>
<td>3,294</td>
<td>15,687,069,257</td>
<td>33,99</td>
</tr>
<tr>
<td>Feed laying hens (Layer)</td>
<td>3,376,600</td>
<td>3,051</td>
<td>10,311,233,400</td>
<td>24,12</td>
</tr>
<tr>
<td>Chicken feed parent (Brooder)</td>
<td>3,581,500</td>
<td>3,266</td>
<td>12,025,487,607</td>
<td>26,28</td>
</tr>
<tr>
<td>Feeding quail</td>
<td>2,186,800</td>
<td>2,927</td>
<td>6,491,562,200</td>
<td>15,61</td>
</tr>
<tr>
<td><strong>Total Productions</strong></td>
<td><strong>14,009,500</strong></td>
<td><strong>3,171</strong></td>
<td><strong>44,425,642,464</strong></td>
<td><strong>100,00</strong></td>
</tr>
</tbody>
</table>
Production (shrinkage) fodder april 2014 enough begins to fall until it reaches 90.500= 0,64 kg % TQM with the application has a positive impact for the performance of companies

<table>
<thead>
<tr>
<th>Type of cattle feed</th>
<th>Product</th>
<th>Results</th>
<th>Shrinkage</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broiler</td>
<td>4,800.00</td>
<td>4,781.50</td>
<td>2.50</td>
<td>0.05</td>
</tr>
<tr>
<td>Laying hen</td>
<td>2,400.00</td>
<td>2,379.00</td>
<td>2.00</td>
<td>0.08</td>
</tr>
<tr>
<td>Feeder</td>
<td>2,500.00</td>
<td>2,301.50</td>
<td>18.50</td>
<td>0.05</td>
</tr>
<tr>
<td>Total Depreciation</td>
<td>14,100.00</td>
<td>14,009.50</td>
<td>1.60</td>
<td>0.06</td>
</tr>
</tbody>
</table>

The following comparison between before and after implementing shrinkage TQM (total quality management) and take action and corrective preventive in continuous and sustainable, as the following:

<table>
<thead>
<tr>
<th>Type of cattle feed</th>
<th>Shrinkage</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broiler</td>
<td>38,400</td>
<td>3.29</td>
</tr>
<tr>
<td>Laying hen</td>
<td>20,400</td>
<td>3.05</td>
</tr>
<tr>
<td>Feeder</td>
<td>15,200</td>
<td>2.92</td>
</tr>
<tr>
<td>Total Depreciation</td>
<td>90,500</td>
<td>3.18</td>
</tr>
</tbody>
</table>

The following comparison between before and after implementing TQM (total quality management) and take action and corrective preventive in continuous and sustainable, as the following:

Before and after implementation of shrinkage TQM kesusutan (fodder) in december 2013 by 2014 213.500 april 90.500 price fell to a decrease in price or 123.000 57,61 % of the price.

2. The cause of the process

Researchers from the analysis concluded researchers eating may do some things that cause the occurrence of irregularities during the process of producing animal feed are saying:

a) Occurring contamination raw materials (mixed) when charging son.

b) Formula/recipe included into the program is there iniquity dosing infusion and not in check by the related parts.

c) Lights control less attention when the process of manual (intake premix and hand add) so there is no feed containing premix and add hand.

d) Lack of coordination between the production with the hand add, between the number of a batch of raw materials will dimasuk in a mixer not the same with the number of premix and hand add prepared.
Of the problems in the company have to do a reproduction (mixing back), it can lead to the availability of animal feed is rather disturbed because planning production which had already count not in accordance with which it is hoped or planned beforehand, and companies had to pay back the cost of the production of (standard cost) is Rp. 300 per kg multiplied by the number of animal feed that is reproducible.

Deviation the process can be the very serious if fodder that is awaited in the production immediately by customers, gyrations (of the nature of the animal feed rapid) so that it will have an impact not good for companies, what else had made it to a competitor to turn away customers. From the results of this analysis there should have been the act of corrective and preventive is available continuously and sustainable.

Following irregularities the process of the production of fodder that occurred in december 2010 before the application of TQM and april 2014 after the application of TQM.

<table>
<thead>
<tr>
<th>IRREGULARITIES THE PROCESS OF THE ANIMAL FEED</th>
<th>DESEMBER 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>The type of cattle feed</td>
<td>Product</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>A cattle feed (Bos taurus)</td>
<td>4.500.000</td>
</tr>
<tr>
<td>Feed living hens (Gapers)</td>
<td>3.500.000</td>
</tr>
<tr>
<td>Chicken feed (Breeders)</td>
<td>2.500.000</td>
</tr>
<tr>
<td>Feeding quail</td>
<td>2.000.000</td>
</tr>
<tr>
<td>Total Irregularities Process</td>
<td>12.600.000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IRREGULARITIES THE PROCESS OF THE ANIMAL FEED</th>
<th>APRIL 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>The type of cattle feed</td>
<td>Product</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>A cattle feed (Bos taurus)</td>
<td>4.800.000</td>
</tr>
<tr>
<td>Feed living hens (Gapers)</td>
<td>3.400.000</td>
</tr>
<tr>
<td>Chicken feed (Breeders)</td>
<td>3.700.000</td>
</tr>
<tr>
<td>Feeding quail</td>
<td>2.200.000</td>
</tr>
<tr>
<td>Total Irregularities Process</td>
<td>14.100.000</td>
</tr>
</tbody>
</table>

COMPARISON IRREGULARITIES THE PROCESS OF THE ANIMAL FEED

<table>
<thead>
<tr>
<th>Decemde 2013</th>
<th>April 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before TQM</td>
<td>After</td>
</tr>
<tr>
<td>A cattle feed (Bos taurus)</td>
<td>55.000</td>
</tr>
<tr>
<td>Feed living hens (Gapers)</td>
<td>15.000</td>
</tr>
<tr>
<td>Chicken feed (Breeders)</td>
<td>45.000</td>
</tr>
<tr>
<td>Feeding quail</td>
<td>20.000</td>
</tr>
<tr>
<td>Total Irregularities Process</td>
<td>115.000</td>
</tr>
</tbody>
</table>

In the future, tqm or refinement positive impact for companies that undergo a process in both the irregularities and prosentase between december 2013 by april 2014 as follows:

\[
\begin{align*}
\text{Rp} & \quad \% \\
\text{December 2013} & = \text{Rp. 370.195.000,-} \quad 4,01\% \\
\text{April 2014} & = \text{Rp.183.914.750,-} \quad - 1,74\% \\
& = \text{Rp. 186.280.250,-} \quad 2,27 \% \\
\text{Kg} & \\
\text{December 2013} & = 115.000 \text{ Kg} \\
\text{April 2014} & = 58.200 \text{ Kg} \\
\text{The results of improvement} & = 56.800 \text{ Kg}.
\end{align*}
\]
Where cause of the irregularities the process largely because of errors the job less konsenterasi negligent when working most of the shift happened in 3 hours 23:00 – 07:00 pm. Of the company has given instructions to the implementing to be more concentration when working particularly when shift 3 hours 23:00–07:00 pm to errors or deviations production which may occur.

3. The application of total quality management
   a. The application of total quality management to minimise deviation the production process

   By doing the application of total quality management and corrective action and preventive a continuous and sustainable goal is to minimise irregularities production process the input of them:
   1. If find any contamination in the process, report immediately to the sub departamenten the production or head of production. The process should not be worn then prepare the process of a substitute for while waiting for a response from departemen QC (quality control).
   2. If found the prescription formula into dosing program not corresponding with the original, immediately do change/correction. Check once more before signed by a section of the production and the department of QC (quality control).
   3. If there is any cast premix and hand add or delay cast because of lack of attention to control lights, please reported production to section chief, to immediately separate products the animal feed, to be bagging, using the sacks plain and given the identity of that feed the cattle troubled and immediately followed up.
   4. If there is a shortage and excess in dosing weigher add hand, take all add hand has been cast into the back with hopper weigh and count the number of digital scales repeated a batch of raw materials in a mixer with the number will dimasuk premix add have been prepared and hand, logged and reported it to head of the production and wait intruksi next.

   b. The application of total quality management to minimise the production of (shrinkage) feed cattle.

   The result of observation writer also provided feedback to departemen plant and do observations with departemen plant the start of the month of march 2014, researchers found that there is such an instrument is the cause deviation processes and the production of (shrinkage) fodder of them:
   1. The raw material used to make animal feed containing the water level high.
   2. Censorship machine scales dosing weigher (dw) that is not functioning optimally.
   3. Work functions chain elevators less maximal (stalled).
   4. The arrangement or the setup a machine press (the process of warming) a less well, between speed the speed with the temperature of steam.
   5. Lack of action corrective and preventive measures are carried out by the field officer and human resources that there is .

   From the results of the discovery of above expected the company performing the act of corrective and preventive a continuous and sustainable of five way of problems the act of repairing of them:
   1. Conducted meeting small (part relating to production of animal feed) before and after the production process to be conducted every shift between 15-20 minutes. If they find discordance or error to be made the act of the act of corrective and preventive to resolve into five problem above.
   2. Standardization the water level of raw materials in tighter run, with sunshine policy test twice received first raw materials, test done by taking sample of raw materials part on the truck after a part qc (quality control) said they agreed the raw materials was told to do digudang loading and raw materials that had been determined, second with the process of loading and unloading part qc (quality control) supervise and take second sample, test part
then will be reexamined by qc (quality control) if raw materials is in accordance with the
criteria company with the water level a maximum of 15 % thus raw materials are received,
if the water level above 15 % of raw materials was rejected.

3. Censorship machine scales dossing weigher accurating (dw) be checked regularly
previously done any checks twice a month, with preventive and corrective implementations
sustainable now held every four times a month, but if necessary or if there is a problem in
censorship machine scales dossing weigher (dw) done twice a week, so that preventive and
corrective action can be done immediately and with accuracy protracted not do the scales if
still problematic do the act of calibration scales.

4. Do check periodically every new elevators there are three things to shift attention from
elevators:
   a) if found the damaged raw materials in kavling (a depository raw materials), please
      reported it to head of section for the production of implementing /qc (quality control).
      On the directive implementing qc (quality control) adoption of raw materials diverted to
      kavling (a depository raw materials) next.
   b) if thumbwheel broken/slide that leads to an elevator not behaving normally please
      reported it to head of section for the production of implementing/mechanical to be
      improved, the act of one who needs to be done will delay penuangan raw materials to
      thumbwheel/that slide broken repaired. Before this occurred implementing mechanical
      check periodically in accordance scheduled by the head of mechanical and check the
      results of the regulation should be reported to the head of mechanical, then the job of a
      head mechanic ascertain whether his subordinates duty was done with good.
   c) if found the damaged raw materials in kavling (a depository raw materials), please
      reported it to head of section for the production of implementing/qc (quality control).
      On the directive implementing qc (quality control) adoption of raw materials diverted to
      kavling (a depository raw materials) next.
   d) if thumbwheel broken/slide that leads to an elevator not behaving normally please
      reported it to head of section for the production of implementing/mechanical to be
      improved, the act of one who needs to be done will delay penuangan raw materials to
      thumbwheel/that slide broken repaired. Before this occurred implementing mechanical
      check periodically in accordance scheduled by the head of mechanical and the results of
      the checks had to be reported to the chief mechanical, then the job of a head mechanic
      ascertain whether his subordinates duty was done with good.
   e) if there is error in thumbwheel/slide that causes the raw material defaulted or any enter
      into a bin, immediately stop the transport chain and elevator. Then reported it to head of
      the production of implementing/qc (quality control) to prepare the process of new to the
      production process not disturbed

5. The arrangement or the setup machine press (the process of heating) do with porposional,
between speed (of speed) with temperatures to feed steam produced is not scoreboard or
not get stuck in a machine press by taking into account four things of them:
   a) if this condition die, roll, a knife, sievetr and cooler not yet ready to operate, reported it
to head of section for the production of/one of the department of the production of sub
   to a follow-up.
   b) if pressure of a steam coming from a boiler did not reach a maximum of 5 bar report
      that back to implementing a boiler/head of section for produced for the next act.
   c) pelleting if the process often slips and congestion the quality of pellet so as not to reach
      standards set, do the examination and setting dies and roll gap.
   d) if setting dies and roll gap does not solve reported this to section head production
      sub/head the department of the production for the next act.

     This course of action the goal out of four was there to perform the act of corrective
     and preventive to production of animal feed walking well without any obstacles.
6. The head of the production Section are required to coordinate the work of his subordinates and check whether is in compliance with SOP (Standard Operation Procedure) which has been set, if there is a problem then the corrective action immediately to report to the head of the production division of what is going on, and then discussed how to conduct preventive action in the future to avoid similar problems reoccur, with how to perform data checking or machines that will be used in the production process prior to making animal feed.

c. The influence of the application of Total Quality Management on the Effectiveness of the Production.

Following the result of the act of koreti preventive and taken all of a continuous and sustainable impact good for the company, december 2013 fraud the process , 115.000 kg = 4.01 %, april 2014 fell to 58.200 kg = 1.74 %, likewise from the side of the production of (shinkage) fodder also has experienced an improvement december 2013 depretiatiions the production of (shinkage) feed 213.000 kg = 1.71 % , april 2014 fell to 90.500 kg = 0.64 %, Rp. 392.231.332,- from the results of the effectiveness of the production of the decline expected is making progress than before .

The impact of terminimalisasinya deviation processes and the production of (shrinkage) fodder includes efficiency a problem about the cost of production. Make the cost of production per kilo grams decline because it would be like the results of increasing the action on the application of total quality management to minimize deviation processes and the production of (shrinkage) fodder visible effective, this speeds for the company, so that the effectiveness of the production that are supposed to be achieved so can increase profit rise for businesses and in the end the welfare of employees will increase.

3.4. The Cost of the quality

<table>
<thead>
<tr>
<th>The Cost of the quality</th>
<th>Before TQM</th>
<th>After TQM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preventive Cost:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- training program</td>
<td>70.106.363</td>
<td>91.723.160</td>
</tr>
<tr>
<td>- Quality Audit</td>
<td>16.691.991</td>
<td>19.941.991</td>
</tr>
<tr>
<td>- Maintenance of the machine</td>
<td>116.843.927</td>
<td>131.617.142</td>
</tr>
<tr>
<td>The total cost of prevention</td>
<td>283.642.251</td>
<td>343.292.253</td>
</tr>
<tr>
<td>The cost of judgment:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Audit cost</td>
<td>26.707.185</td>
<td>31.907.186</td>
</tr>
<tr>
<td>- inspection cost</td>
<td>40.060.776</td>
<td>47.860.779</td>
</tr>
<tr>
<td>The total cost of judgment</td>
<td>66.767.961</td>
<td>79.767.965</td>
</tr>
<tr>
<td>Internal the cost of failure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The cost of the Spparnt</td>
<td>33.342.982</td>
<td>40.781.982</td>
</tr>
<tr>
<td>The cost of a repeated examination</td>
<td>18.691.990</td>
<td>19.941.991</td>
</tr>
<tr>
<td>The total cost of the failure of internal</td>
<td>50.075.972</td>
<td>60.726.973</td>
</tr>
<tr>
<td>The failure of external costs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- The cost of the repayment of the product</td>
<td>3.398.398</td>
<td>3.088.398</td>
</tr>
<tr>
<td>- The cost of customer complaints</td>
<td>10.015.185</td>
<td>11.965.185</td>
</tr>
<tr>
<td>The total cost of the failure of external</td>
<td>12.395.589</td>
<td>15.053.589</td>
</tr>
<tr>
<td>The total cost of the quality</td>
<td>333.839.813</td>
<td>398.839.824</td>
</tr>
</tbody>
</table>

The following comparison the cost of the quality of before and after applying total quality management, the cost of the quality of issued increased at the time of applied TQM on corporations; compared the cost of the quality of being issued in december 2013 Rp. 333.839.813,- while april 2014 Rp. 398.839.823,- up by Rp. 65.000.010, - it’s if viewed from the side of the cost of the quality of after implementing TQM showing an upward trend and however had a positive impact, and can be minimize depreciations the production of (shrinkage) fodder and the deflection the process of fodder, so that performance company increase.
The effectiveness of the application of production after Total Quality Management

April 2014

3.3.2. Production Effectivity before applied the Total Quality Management

The production of cattle feed the month of April 2014 = 14,009,500 Kg

Effectiveness Degradation and irregularities process:
- Depreciation Product (Stockage) Rp 382,333,852
- Irregularities process of cattle feed Rp 186,380,250

Total effectiveness and irregularities became the production process Rp 568,714,102

The cost of the quality:
- The cost of prevention Rp 243,892,993
- The cost of judgement Rp 78,767,995
- The cost of failure of internal Rp 607,253,973
- The cost of failure of external Rp 15,051,595

The total cost of the quality Rp 1,093,023,448

The effectiveness of production Rp 179,771,358

The effectiveness of our production calculations per kilogram = Rp 179,771,358

14,009,500 Kg

= Rp (1.3) Kg

3.3.2. Production Effectivity before applied the Total Quality Management

EFEKTIFITAS PRODUKSI SEBELUM PENYARAPAN TQM
DESEMBER 2015

The production of cattle feed the month of December 2010 = 12,286,500

Effectiveness Degradation and irregularities process:
- Depreciation Product (Stockage) Rp 690,115,000
- Irregularities process of cattle feed Rp 370,185,000

Total effectiveness and irregularities became the production process Rp 1,060,300,000

The cost of the quality:
- The cost of prevention Rp 203,642,201
- The cost of judgement Rp 66,767,995
- The cost of failure of internal Rp 50,075,972
- The cost of failure of external Rp 12,343,595

The total cost of the quality Rp 333,599,813

The effectiveness of production Rp (23,515,813)

The effectiveness of our production calculations per kilogram = Rp (23,515,813)

12,286,500 Kg

= Rp (1.9) Kg
E. SUMMARY
The conclusion of research
1. General conclusions

From the research and analysis of who writers do, hence writers can take in general conclusion regarding the application of total quality management and the act of corrective and preventive is available continuously and sustainable can minimize deviation depreciations processes and the production of (shrinkage) fodder, a product produced good stay awake its quality and received the cost of production is low as well as the company can know for the occurrence of a problem in production activities company, so as to be done the act of corrective and preventive. A fall in the irregularities processes and shrinkage fodder that occurs make the cost of production per kilogram declines because it would be like the results of increasing thus the level of profit rise will increase said and at the end of the welfare of employees had could increase.

2. Conclusion Special

Researchers researchers also provide a summary special problems that researched which is the its application within the company. After doing research on minimize deviation depreciations processes and the production of (shinkage) fodder, researchers presenting some improvements with regard to the issue of deviation depreciations processes and the production of (shinkage) fodder, namely:

1. Conducted a meeting of small (part relating to the production of fodder ) before and after the production process be done every shift between 15-20 minutes. (of basic subjects of the meeting if they find irregularities or error immediately carried out the act of the act of corrective and preventive)

2. Evaluation of standardization water levels in raw material of tighter run, with sunshine policy twice testing raw materials, if the raw materials in accordance with the criteria for companies with the water level a maximum of 15 percent with the raw materials are received, if the water level raw materials up 15 percent, raw materials was rejected and returned to the suppliers

3. Evaluating censorship machine scales dossing weigher (DW) accurations a be checked regularly, conducted a week twice, so tidakan corrective and preventive measures can be done immediately and not do protracted with accuracy the scales if still problematic do the act of calibration scales

4. Check elevators done every new shift, to avoid traffic congestion on elevators depreciations that causes high production.

5. Will start to regulations and the setup machine press (the process of heating) do with porposional, between speed (of speed) with temperature to feed steam produced is not burned or not get stuck in a machine press.

6. If mistakes immediately report to superior and perform the act of corrective and preventive in a nice way , and do check at regular intervals and consistent.

Suggestions
1. Suggestions for managerial policy

The following are suggestions that can be researchers given that can be used as input to the company in their policy manjerial to improve what already exists in companies are:

1. Established a good relationship with a purveyor benefiting each other, this is very important because the company would feel safe and suppliers will give the raw material in accordance with the quality of being necessary

2. Established a good relationship again with the customers with the purpose of making the customers loyal to products which a company make.
3. Increase human resources being there was either from the up to were given training to the bottom, as pmb (positive mental attitude building) this training to establish mental employees for the better.
4. Make a schedule of production that is more effective and efficient, so as to be profitable firm and able to meet the level of customer satisfaction.
5. Pertaining to the production of machines check periodically early to know whether there is damage or not, not to disrupt the production process

2. Suggestions for researchers/the development of advanced science
   Besides giving policy advice to managerial, researchers will also give advice to advanced research or suggestions to the development of science, namely:
   1. Conducting research by seeking data sources more accurate and can be supported by the theory that there is.
   2. Search for data in accordance with fact occurring dilapangan or company and conducting interviews with the part that deals with problems that researched.
   3. The results of research must provide a better and clear again about the object researched and can provide an answer about things becoming a problem in research

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