An impact of training on employee performance in government Education Sector in Ethiopia - A case study of Arsi Negele district

SURAPANENI MOHANA Murali Krishna, 
Professor, Department of Management, college of Business and Economics, Hawassa University &
DR. ASFAW WASSIE
Assistant Professor School Of Management & Accounting, Hawassa University

Abstract
Training and development is very crucial to the employees, the organization and their effectiveness. The organizations have long understood that their most valuable asset is their human capital and many are convinced for large investments in employee training and development. It is an undisputed fact that effective training is an investment in the human resources of an organization, with both immediate and long–range returns. However mere investment is not enough; firms need to manage training programs more effectively so that they can get the highest returns from their investment. Training holds the key to unlock the potential growth and development opportunities to achieve a competitive edge. In this context, organizations train and develop their employees to the fullest advantage in order to enhance their effectiveness. Performance of an employee is a dependent factor on variables like knowledge, skill and abilities. Training and development provides employees required knowledge, skills and abilities to do a job. Training is a tool to fill the gap and the firms should use it wisely to improve employee productivity.

Key Words: Human capital – Employee training and development. – Assigned task – potential growth and development — Commitment – Performance —Job Enrichment – employee productivity.

INTRODUCTION:
Human resource is the most valuable assets of any organization nothing gets done without man-power. Any organization that wants to succeed, and to continue to succeed, has to maintain workforce consisting of people who are willing to learn and develop continuously. People the human resource are considered by many to be the key and most important resources of an organization especially in education sector. The effectiveness and success of an education sector therefore lies on the people who form and work within the sector. So, human resource of an organization is the determinant for the realization of its goals (Ladled chi et al, 2008) as cited in (Mengistu Beyazen, 2011).

Training and developing human capital is tremendously important in the effective management and maintenance of a skilled workforce. Training is one of the ways of improving organization’s effectiveness. In education sector importance of training and development is inevitable. Ethiopia made significant progress in education sector. Teachers, School Leaders and Teacher Educators are key actors in maintaining and improving the quality of education and training systems in education sector. Access at all levels of the education system increased at a rapid rate in line with a sharp increase in the number of teachers, schools and institutions. There were important improvements in the availability of trained teachers, educational experts and some other inputs which are indispensable for a high quality education system. District education offices and communities have strengthened their involvement in education planning, management and delivery (Education Sector Development Program IV, 2010).

Education sector can be seen as catalyst for sustainable development. Ethiopia education sector’s vision is “to see all school-age children get access to quality primary education by the year 2015 and realize the creation of trained and skilled human power at all levels who will be driving forces in the promotion of democracy and development in the country”. Government of Ethiopia are pursuing three core missions; first, extend quality and relevant primary education to all school-age children and expand standardized education and training programs at all levels to bring about rapid and sustainable
development with increased involvement of different stakeholders (community, private investors, NGOs, etc.), second ensure that educational establishments are production centers for well-rounded, competent, disciplined and educated people through the inclusion of civic and ethical education with trained, competent and committed teachers and third take affirmative action’s to insure equity of female participation, pastoral and agro-pastoral and those with special needs in all education and training programs and increase their role and participation in development (Education Section Development Program III, August 2005).

A well-trained and qualified manpower equipped with modern managerial, technical, research and leadership capabilities play an indispensable role for the speedy development of competitive industries in the country. Because of this, due attention is given to the reform in the structure of education system to make education and training responsive to the country’s development strategy (Education Section Development Program III, August 2005). To realize the above objective and by understanding the importance of training to boost employee performance MOE and NGOs’ is taking training and development initiatives in the form of on-the-job and off-the-job training.

RESEARCH METHODOLOGY:
Objectives of the Study
General Objective
The main objective of this study was to investigate the impact of training on employee performance in government education sector in case of Arsi Negele district.

Specific Objectives
The specific objectives of the study were:
- To assess out whether training schemes have positive effect on the performances of workers or not.
- To describe how far the training is useful to improve employees’ performance and career prospects of individual employee in the sector.
- To assess whether the sector effective from training program in terms of the objectives they have set or not.
- To identify deficiencies and unnecessary aspects in training schemes for the purpose it is intended.

Conceptual Framework
- Employees of any organization are like intellectual property, and on the basis of this property they can gain the competitive advantage against the other organizations. So, more the employees are trained and satisfied with the environmental conditions, the more they can provide competitive advantage to the firm, (Huger, 2006). Hence, carrying through from past it is not unforeseen that training is an impressive source of integrating employees’ abilities, commitment and professional beauties with the desired targets of the organization.
- The theory that the researcher used is the social identity theory. As a sub-theory of social cognition, social identity theory developed with the purpose of understanding how individuals make sense of themselves and other people in the social environment. In addition to this, there are other theories which can show the relationship between training and performance of worker, such as the Identical Elements Theory. The theory of identical elements was proposed by Wesley and Nemeroff, 1975. According to this theory, transfer is improved by increasing the degree of correspondence among the training setting stimuli, responses, and conditions and those related factors operative in the performance setting. They explained that if the task is identical in both training and transfer, trainees are simply practicing the final task during training and there should be high positive transfer (Wesley and Nemeroff, 1975). Training is implemented then does it affect the employee performance. Hence, theoretical framework can be seen from the following model.
Sources of Data
In this study primary and secondary data were:
- Primary data sources were individuals, focus groups, panels of respondents
- Secondary data sources were education sector records or archives, government publications, related literatures, research papers, web sites, the internet, and so on

Sampling and Sampling Technique
For the purpose of this study both probability and non-probability sampling were used. Simple random sampling provides equal chance for each and every population and purposive sampling was used in the assumption that some respondents have important information.

Sample Population and Sample Size Determination
The target population of this study was all of the Arsi Negele district education sector workers: administrative workers, educational experts, school teachers, educational supervisors and school directors. Therefore, the focus was Arsi Negele district education sector which has 1042 employees.

Table 1 Population Size of the Study

<table>
<thead>
<tr>
<th>S/N</th>
<th>Position</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Teacher</td>
<td>619</td>
<td>272</td>
<td>891</td>
</tr>
<tr>
<td>2</td>
<td>Education Office Expert</td>
<td>17</td>
<td>4</td>
<td>21</td>
</tr>
<tr>
<td>3</td>
<td>Supervisor</td>
<td>16</td>
<td>2</td>
<td>18</td>
</tr>
<tr>
<td>4</td>
<td>Director</td>
<td>88</td>
<td>4</td>
<td>92</td>
</tr>
<tr>
<td>5</td>
<td>Vice Director</td>
<td>20</td>
<td>0</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td>760</td>
<td>282</td>
<td>1042</td>
</tr>
</tbody>
</table>

Source: Authors compilation
The sample size of the respondents for questionnaire distribution was computed using the Yamane (1967) formula as follows:

\[ n = \frac{N}{1 + N(e)^2} \]

Where:
- \( N \) = Study population
- \( e \) = Marginal error
- \( n \) = Sample size

Now, computing the sample size at 95% confidence level (i.e. \( e = 0.05 \)), we have:

\[ n = \frac{1042}{1 + 1042 (0.05)^2} = \frac{1042}{1 + 2.605} \]

\[ = \frac{1042}{3.605} \approx 289 \]

Therefore, 289 questionnaires were administered.
Method of Data Analysis and Interpretation

After collecting the data through different techniques, the study was organized and prepared the various data depending on the sources of data. Moreover, in order to ensure logical competence and consistency of responses, in-house data editing was carried out on data each day by the researcher. Identified mistakes and data gaps were rectified accordingly. Once editing has done, data was analyzed qualitatively and quantitatively. The quantitative data analyses were done by the use of Statistical Package for the Social Sciences (SPSS) software version 17. The techniques for quantitative data analysis were frequency distribution and percentages besides regression and correlation which were used to determine the proportion of respondents choosing the various responses and to see the relationship between training and performance. These were done for each group of items relating to the research question and objectives. Tables and figures also employed to ensure easily understanding of the analysis.

Figure 1 Impact of Training on ANDEO workers Performance

As figure 1 sums up majority of respondents’ opinion regarding impact of training on employee performance in all questions. Regarding impact of training on overall work performance majority which is 51.7% of respondents out of 266 respondents agreed on training helps to improve overall work performance and only 3% of respondents strongly disagree on the opinion. Figure 5 also indicates 36.5%, 38.7%, 45.9%, 38.6, 45.5% and 49.6% of respondents out of 266 respondents agreed on training helps to improve regular activity way of doing, to improve speed and efficiency of performance, to accomplish work without wastage, to enhance accuracy of work performance, to improve group work performance and to improve problem solving ability of employees respectively. We can conclude based on the result that training program which is organized and facilitated by ANDEO is effective on improving its employees work performance. As a result, Arsi Negele Education Office is benefiting from training expenditure.

Correlation Analysis

The Pearson’s Product Moment Correlation Coefficient (r) is a measure of the degree of association between variables. It takes a value between –1 and 1. A value of r near to 1 indicates strong positive association, r near to indicate -1 a negative relationship exists and when the correlation is 0, there is no relationship between the two sets of data (John Adams, 2007). Coetzee (2003) noted that when considering the correlation between the independent variable (training) and the dependent variable (employee performance), the larger the magnitude of the correlation, the stronger the linear
association. The standard correlation coefficient is (Pearson’s r) which applies primarily to variables distributed more or less along interval or ratio scales of measurement.

<table>
<thead>
<tr>
<th>Training</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>.710**</td>
</tr>
<tr>
<td>Sig. (2-tailed) N</td>
<td>263</td>
</tr>
<tr>
<td>Performance</td>
<td>1</td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>0.000</td>
</tr>
<tr>
<td>Sig. (2-tailed) N</td>
<td>258</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).

Source: Authors compilation

As indicated in table 2 the inter-correlations among the variables which is training (independent) and employee performance (dependent) in case of Arsi Negele district education sector office workers. Relationship between the dependent and independent variable are positively and significantly correlated. From the analysis, it is noted that training is positively and strongly correlated \((r = 0.710, p < 0.01)\) with employees performance. Hence, we can note that the relationship between training (independent) and employee performance (dependent) is strong positive relationship and significant at \(p\) value less than 0.01.

**Regression Analysis**

Regression is concerned about finding a relationship between variables and forming a model. Hence, this is a major tool of statistical modeling (John Adams, 2007). This form of statistical test is only possible with interval or ratio data (www.SPSS for Psychologists). The beta value is a measure of how strongly predictor variable influences the criterion variable. As indicated table below shows the regression analysis of the impact of training on worker performance in case of Arsi Negele education sector office.

So that the beta value of this study as indicated in table 2 below is 0.710 which indicates that a change of one standard deviation in the predictor variable i.e. training resulted in a change of 71.0 standard deviations in the criterion variable i.e. employee performance. Thus, there is a higher impact of training on employee performance. Since the higher the beta value the greater the impact of the predictor variable on the criterion variable. Moreover, when you have only one predictor variable in your model, then beta is equivalent to the correlation coefficient between the predictor and the criterion variable (www.SPSS for Psychologists).

**Regression Analysis Beta Coefficients Value Impact of Training on Employee Performance**

<table>
<thead>
<tr>
<th>Model</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (Constant)</td>
<td>Beta</td>
</tr>
<tr>
<td>Training</td>
<td>.710</td>
</tr>
</tbody>
</table>

Source: Authors compilation

Regarding R and \(R^2\) table 3 clearly show the value of R and \(R^2\). In this analysis the value of R is 0.710 which is a measure of the correlation between the observed value and the predicted value of the dependent variable (employee performance). Whereas \(R\) Square (\(R^2\)) is the square of this measure of
correlation and indicates the proportion of the variance of employee performance with the existence of training. Hence, $R^2 = 0.504$ implies that only 50.4% of performance is explained by training. In essence, this is a measure of how good a prediction of the dependent variable we can make by knowing independent variables.

**Table 4 Regression Analysis Model Summary of R and $R^2$ Value of Impact of Training on Employee Performance in Case of ANDEO**

<table>
<thead>
<tr>
<th>Model</th>
<th>$R$</th>
<th>$R^2$</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.710$^a$</td>
<td>.504</td>
<td>2.134</td>
</tr>
</tbody>
</table>

Source: Authors compilation
Predictors: (Constant), Training
Dependent Variable: Performance

**Reliability Statistics Cronbach’s Alpha value of Research Result on Impact of Training on Employees Performance in Case of ANDEO**

<table>
<thead>
<tr>
<th>Cronbach's Alpha</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>.946</td>
<td>33</td>
</tr>
</tbody>
</table>

Source: Authors compilation

As indicated in table 4 the Cronbach’s Alpha value of research result on impact of training on employees performance in case of ANDEO is 0.946 which is greater than 0.70 so that we can conclude that the research result is reliable.

**Conclusion**

Employee training and development has been identified by various scholars to be very crucial to an organization and its effectiveness. In the light of the above, organizations are therefore encouraged to train and develop their employee to the fullest advantage in order to enhance their effectiveness. Employees are an organization’s greatest assets: individuals and organizations have learned about the importance of the role of people in an organization, and how the success of an organization depends on its people (Bartlett and Goshen, 1995). The role of human resources is absolutely critical in raising performance in an organization (Armstrong and Baron, 1998). Ultimately it is the performance of many individuals which culminates in the performance of an organization, or the achievement of goals in an organizational context (Armstrong and Baron, 1998).

The following conclusions were obtained from the research findings:

- **ANDEO** has education and training policy and separate unit which is responsible for workforce training and development.
- Arsi Negele education sector office is achieving its purpose through its training program. The main purposes of training in ANDEO are to develop the physical and mental potential and the problem-solving capacity of individuals and to bring up citizens who can take care of and utilize resources wisely, who are trained in various skills, by raising the private and social benefits of education.
- The training program of ANDEO is positively and strongly correlated ($r = 0.710$, $p < 0.01$) with employees performance. The regression analysis beta value of the impact of training on worker performance in case of Arsi Negele education sector office is 0.710 which indicates that a change of one standard deviation in the predictor variable i.e. training resulted in a change of 71.0 standard deviations in the criterion variable i.e. employee performance. Thus, there is a higher impact of training on employee performance. The value of $R$ is 0.710 which is a measure of the correlation between the observed value and the predicted value of the dependent variable (employee performance) and $R^2 = 0.504$ implies that only 50.4% of performance is explained by training. As result of improved performance of employees, schools and the sector office students result is improving and stakeholders’ participation became remarkable.
• ANDEO is using several training methods both on-the-job training like induction, CPD, experience sharing, supportive supervision, mentoring and the like and off-the-job training like summer/regular scholarships, seminar, workshops, meeting and the like.

• Training is one of the several human resource practices that can have a considerable impact on employee commitment (Muhammad us man Muzaffar, et. l March 2012). It is believed that specific training for employees are related to high level of commitment of staff and will have positive relationship with retention of employees. The training program of ANDEO is contributing to improve commitment and belongingness to the sector.

• Training programs of ANDEO is not planned and systematic as intended and stipulated in education and training policy due to resource shortage and less commitment of the sector workers. In order to utilize sudden and unplanned training that brought from external bodies such as NGO’s and other sector offices there is always a program mismatch to deliver the training on time.

• Even if the purpose of the training is to fill knowledge, skill and attitude gap Arsi Negele education sector office is not working in employees’ who score low performance evaluation result and who need intervention to improve their performance. The main criterion for selecting trainees in ANDEO is year of service and high performance evaluation result. The reason behind these selection criterions is to encourage and maintain employees’ who has longer tenure and the one who has high performance evaluation result.

• The training program of ANDEO is not good enough to satisfy its employees
  ➢ What are the deficiencies and unnecessary aspects in training programs for the purpose it is intended?

5.3 Recommendations

It is an undeniable fact that in recent times many organizations have come to the realization of the importance of the role of training programs as it increases the organization staff efficiency, skills and productivity. Due to this fact, organizations must be cleared about the learning requirement of employees. Therefore, both managers and employees must collaborate effectively and communicate the requisite for performance.

Based on the findings and conclusion of this study, the following issues are forwarded as recommendations that assist to improve the effectiveness of training program in ANDEO:

• Plewsey (1971) defines training as the systematic process of altering the behavior and or attitudes of employees in a direction to increase the achievement of organizational goals. This means for any organization to succeed in achieving the objectives of its training program, the design and implementation must be planned and systematic, tailored towards enhancing performance and productivity. So that ANDEO should work hard to secure resources for the training programs and it should motivate and encourage the workforce so as to accomplish the training program in planned and systematic as stipulated in the education and training policy of Ethiopia ministry of education.

• According to Armstrong (1996), expressing an understanding of training emphasizes that training should be developed and operated within an organization by appreciating learning theories and approaches if the training is to be well understood. They expressly indicated that the success of a training program depends more on the organization’s ability to identify training needs and the care with which it prepares the program so that if the trainees do not learn what they are supposed to learn, the training has not been successful. Even though the organization might have done all that is necessary to ensure a successful training program, the wrong candidate might have been selected for the training program. So that ANDEO should give emphasis and priority for employees’ who has poor performance result since the main objective of the training is to fill knowledge, skill and attitude gap of employees.

• Improvement in employee’s performance is a central part of training and development; therefore, the focus of an organizational training and development effort should be the alignment of individual goals with the organizational goals which will lead to higher levels of
employees’ satisfaction and organizational performance (Muhammad Usman Muzaffar, Hafiz Shahid Husain Salam & Hafiz Syed Muhammad Muneeb Ali, 2012). So that ANDEO should align the training and development purpose with individual goal as to enhance satisfaction of its employees.

Reference

- Arsi Negele District Education Office Teachers Profile, April 2005.

• Dr. V. Rama Devi and Mr. Nagurvali Sheik (July 2012): "Training & Development – A Jump Starter for Employee Performance and Organizational Effectiveness" International Journal of Social Science & Interdisciplinary Research; Vol.1 Issue 7, July 2012, ISSN 2277 3630


• Ethiopia Education Section Development Program III, August 2005

• Ethiopia Education Sector Development Program IV, 2010


• Irene Ferguson Laing (2009): "The Impact of Training and Development on Worker Performance and Productivity in Public Sector Organizations: A Case Study of Ghana Ports and Harbors Authority" Institute of Distance Learning-KNUST

• John Adams, Hafiz T.A. Khan, Robert Rae side and David White, 2007: Research Methods for graduate Business and Social Science Students.


• Mengistu Beyazen (June 2011);"Effect of Training on Employees’ Performance and Organizational Effectiveness" Addis Ababa University Graduate Studies.


• Mohammad Us man Muzaffar, Hafiz Shahid Husain Salam at & Hafiz Shed Muhammad Muneeb Ali (March 2012): "Impact of Trainings on Employees Outcome In IT Sector Pakistan" Shahid Zulfiquar Ali Bhutto institute of Science & Technology Islamabad


