

**An Investigation of Enterprise Based Training and  
Entrepreneurial Performance: The case of the Industrial Training  
and Manufacturing Enterprises in Nairobi**

**By**

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**ICBE-RF Research Report No. 06/12**

Investment Climate and Business Environment Research Fund  
(ICBE-RF)

[www.trustafrica.org/icbe](http://www.trustafrica.org/icbe)

Dakar, March 2012

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## **Abstract**

Enterprise based training is any form of skill transfer that is as a result of identified training needs of an enterprise. In Kenya, the Directorate of Industrial Training (DIT) is mandated through the Industrial Training Act (cap. 237) to direct and enhance this type of training for all persons engaged in industry by improving the quality and efficiency of the training and by sharing the cost of such training as evenly as possible amongst employers. Although the DIT has been coordinating industrial training since 1973, it was not known as to whether such training had resulted in significant entrepreneurial performance for the participating firms since no empirical studies to this end had been carried out. Secondly, from officially available data, DIT supported industrial training appeared to have reached only about 10% of its formal customers whereas the informal sector that contributes about 30% of the Gross Domestic Product in Kenya has been ignored in industrial training delivery although the law does not discriminate against the informal sector enterprises. This study investigated as to whether DIT supported industrial training had contributed to improved entrepreneurial performance among participating enterprises relative to non-participating enterprises. It also investigated the constraints encountered by industrial training delivery and has proposed appropriate interventions so as to enhance training delivery in line with the legal mandate and the demands of national aspirations of industrialization. The study focused on 168 manufacturing enterprises in the Nairobi area which accommodates 74% of the manufacturing firms on the Kenya Association of Manufacturers countrywide list. Eighty training manufacturing enterprises were randomly selected from the DIT list of enterprises that trained with DIT in the 2002-2004 year period while eighty eight nominal non-training enterprises (enterprises that did not train with the DIT in the above period) were randomly selected from among enterprises in Nairobi and also on the KAM list but did not train with DIT during the above period. The study collected data using three surveys and used three categories of questionnaires. The questionnaire category 1 was administered to the 168 manufacturing firms. The questionnaire category 2 was administered to 40 purposively selected key informants while questionnaire category 3 was administered to 40 purposively selected informal sector operators. The overall response rate was 47.6%. Data analysis was conducted through content analysis as well as through descriptive and inferential statistics using computer packages. The investigation established that: training enterprises outperformed the non-training enterprises; there were high levels of EBT among both training and non-training enterprises (87%) although EBT was higher among the training enterprises. The study also established that Enterprise Based Training contributed to a fair extent (10%) to the Entrepreneurial Performance of the enterprises in Nairobi. The study also established that there was a significant difference at the 5% level of significance between the innovativeness of the training and that of the nominal non-training manufacturing enterprises in Nairobi but there was no significant difference at the 5% level of significance between the training and that of the nominal non-training manufacturing enterprises with regard enterprise growth, productivity, as well as the overall enterprise performance. It is recommended that: the relevant industrial training law be reviewed by the Government of Kenya; industrial training be expanded to cover all registered Small and Medium Enterprises and that it be used by the Government of Kenya and other Development partners as an instrument for both policy and programme intervention.

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## **1. Introduction**

This investigation was for both academic and practical utility. In the first instance, it was also designed to establish the relations between variables while in the latter instance it was designed to address practical questions for the policy makers, the EBT practitioners, the EBT researchers, the owners, managers and employees of the enterprises. The researcher's major concern was that there were contradicting views on the benefits accruing from the Industrial Levy Training Fund supported EBT. While some authors advocated for its existence others just stopped short of calling for its abolishment.

The study has therefore firstly investigated the incidence of EBT among manufacturing enterprises in Nairobi. This has laid a foundation for further work of investigating whether Enterprise based training had resulted in any impact on the Enterprise performance. Lastly the study has investigated whether EBT had resulted in the training manufacturing enterprises participating in ITLF benefiting relative to the nominal non-training manufacturing enterprises in terms of growth, innovativeness and productivity. It has established that there was a positive though low impact of Enterprise based training on Enterprise performance. Secondly the study has established that the Training enterprises generally outperformed the non-training enterprises out of 19 selected statistics.

The selected statistics were: 1. Mean employment (persons), 2. Mean enterprise age, 3. Mean wage, 4. Percentage of enterprises having a training budget, 5. Percentage of enterprises recognizing unions, 6. Percentage of enterprises having high technology, 7. Mean number .of persons trained in 2004, 8. Percentage of enterprises practicing Total Quality Management, 9. Percentage of enterprises doing exporting, 10. Percentage of enterprises doing quality control, 11. Percentage of enterprises engaged in R&D, 12. The percentage of enterprises that were automated, 13. Percentage of persons who perceived the contribution of EBT to Enterprise performance was above very good, 14. Percentage of persons who perceived the contribution of EBT to the Performance of the trainee as being above very good, 15. The Growth mean index-G, 16. The Innovativeness mean index-I, 17. The Productivity index-P, 18. The Entrepreneurial performance E- index 19. EBT training mean index- TR.

Background literature (Broad & Newstrom, 2001; DIT, 2004, 2007; Republic of Kenya, 2004, 2007) indicates that there had been major investments in Kenyan enterprises in technical as well as in management training both locally and internationally. Yet, contradictory views

existed on the importance of the ITLF supported EBT. Scanty empirical evidence was available to link EBT to performance and the DIT (2004) had conceded that there was low reach of the DIT to its targeted clientele. Confronted as well with DIT's total lack of reach to some of its legally mandated clientele, (Republic of Kenya, 2007) and in general the existence of major gaps in the knowledge and practice of EBT (Grierson, 2002) and its relative importance in Kenya it was difficult to say positively and categorically as to whether enterprise based training had had any impact on the performance (Johanson & Adams, 2003) or even whether it had contributed to any significant difference in the productivity, growth or innovativeness of the training relative to that of the nominal non-training manufacturing enterprises participating in the ITLF (Grierson, 2002).

This study has therefore investigated as to whether the variances in the firm attributes of growth, innovativeness and productivity were significant between the training and the nominal non-training manufacturing enterprises in Nairobi in addition to investigating the constraints hindering EBT delivery. This study was guided by the following objectives:

1. To establish whether the Training enterprises were statistically speaking different from the Nominal non-training enterprises.
2. To determine the prevalence of the various categories of EBT in Nairobi.
3. To determine to what extent industrial training had contributed to entrepreneurial performance among participating enterprises as reflected in a) growth, b) innovativeness, and c) productivity. ..
4. To establish the constraints hindering the delivery of industrial training programmes among the DIT's present as well potential customers.

The study was conducted through the use of three questionnaires targeted as follows:

- i. The questionnaire category one

This questionnaire was administered to one hundred and sixty eight systematically and randomly selected formal manufacturing enterprises stratified into eighty sample training manufacturing enterprises and eighty eight sample nominal non-training manufacturing enterprises. The eighty sample training manufacturing enterprises had been pre-selected from the DIT and KAM records. The purpose of this questionnaire was to probe into the prevalence of the various categories of EBT as well as the prevalence levels of the sub-variables of

enterprise performance, the forces hindering enterprise based training delivery and the probable interventions. The response rate was 41%.

ii. The questionnaire category two

This questionnaire was administered to forty key informants purposefully sampled. Ten of the informants were drawn from senior DIT staff, ten from employers' representatives, ten, from employees' representatives while the remaining ten were drawn from other interests' representatives in DIT training committees forming the DIT government. The purpose of this questionnaire was to probe into, the forces hindering enterprise based training and also the probable interventions so as confirm or otherwise the findings from above. The response rate was 75%.

iii. The questionnaire category 3

This questionnaire was administered to 38 purposively selected informal sector manufacturing enterprises. These comprised Jua kali operators in Ziwani Engineering Jua Kali Association, Kamukunji Jua Kali Association and Classic Jua Kali Association. The questionnaire was intended to solicit views among the informal sector manufacturing operators on the possible involvement of DIT in the industrial training provision among the informal sector members. The other questionnaires also addressed this issue with the intention of finding out whether there was a convergence or divergence of views among these three major stakeholders on industrial training provision among the informal sector operators.

## **2. The summary of the descriptive statistics for Training and Nominal non-training manufacturing enterprises in Nairobi**

The investigation was guided by the specific research objective number one which was to establish whether the Training and the Nominal non-training enterprises were statistically speaking different. It also sought to demonstrate the similarities as well as the differences among these two. In addition it sought to demonstrate that the basic assumptions made about the two groups of enterprises in the design of this study were valid.

Out of the 168 sampled manufacturing enterprises 69 or 41% responded. Out of the 69 respondents 30 or 43% were Training enterprises while the remaining 39 or 57% were Nominal non-training enterprises. The comparison of these two categories of enterprises was as below.

- i) Training enterprises outperformed the non- training enterprises at every level for 19 selected statistics (as listed above under section 1.0). Examining the individual categories, it was established that the large training category outperformed the corresponding nominal non-training category by 42% to 37% whereas the medium training category out performed the corresponding non-training medium category by 63% to 32%. The small training category out performed the corresponding non-training small category by 89.5% to 10.5%.
- ii) It was also established that the performance of the training and nominal non-training enterprises in the 19 selected statistics was size dependent. Refer to Table 1 below.

**Table 1: The summary of descriptive statistics by category and group**

1	Category	Training		Nominal non-training	
		Number out 19	%	Number out 19	%
2	Small	17	89,5	2	10.5
3	Medium	12	63	5	32
4	Large	8	42	7	37
	Large + Medium+ small	37	65	14	25

The performance decreased for training enterprises from small to large enterprises while on the other hand it increased for the nominal non-training enterprises from small to large enterprises.

- iii) From summary statistics, it was established that the data received from the research were comparable to the data held by the NSSF and were hence to a fair extent valid. The NSSF data were analyzed and compared with the research data received from the questionnaire category 1. The results were as follows: a) The mean of the number of employees from the research data was 238 as compared to the mean of 273 from the NSSF data, b) the median of the number of employees from the research data was 110 as compared to the median of 107 from the NSSF data. From these summary statistics, it was established that the data received from the research were comparable to the data held by the NSSF and were hence to a fair degree valid.

The two sets of data were also analyzed for variance in order to find out as to whether the difference between them was significant at the 0.05 level of significance. For 1 degree of freedom of the numerator and 128 degrees of freedom in the denominator the critical F statistic is 3.915138. In this case the F-statistic is neither equal nor greater than the critical F-

statistic at the 0.05 level of significance and hence there were no grounds on which the Null hypothesis could have been rejected. The Null hypothesis was hence upheld and it was concluded that there was no significant difference between the research data received through the category 1 questionnaire and the data held at the NSSF as far as numbers on permanent employment were concerned.

### **3. The summary of the prevalence of Enterprise based training among the manufacturing enterprises in Nairobi**

This part of the investigation was informed and directed by specific research objective number two of this investigation. The investigation established the incidence of various types of EBT in the manufacturing enterprises and further drew comparisons of the various types of EBT among the training and the non-training manufacturing enterprises. Here below were the findings:

- It was established that the most prevalent types of EBT among the training manufacturing enterprises in a descending order were; (i) formal in-house training by outsiders (97%), (ii) formal in-house training by staff (77%), (iii) external training by training source (77%), (iv) in-formal training by workers (40%), (v) training through trade buyers/suppliers (30%), (vi) in-formal training by self teaching (23%), (vii) external training by distance learning (23%) and (viii) training through foreign networks (10%). Refer to Table 2 below.

**Table 2: The prevalence of Enterprise based training among all manufacturing training enterprises**

Item	Type of training	Frequency	%	Ranking
a	Formal in-house training by staff	23/30	77	2
b	Formal in-house training by outsiders	29/30	97	1
c	In-formal training by co-workers	12/30	40	3
d	In-formal training by self teaching	7/30	23	5
e	External training by training source	23/30	77	2
f	External training by distance learning	7/30	23	5
g	Training through trade buyers/suppliers	9/30	30	4
h	Training through foreign networks	3/30	10	6

- It was established that the most prevalent types of EBT among the Nominal non-training manufacturing enterprises in a descending order were; (i) formal in-house training by outsiders (63%), (ii) external training by training source (48.5), (iii) formal in-house training by staff (43%), (iv) in-formal training by co-workers (23%), (v) training through

trade buyers/suppliers (17%), (vi) in-formal training by self teaching (14%), (vii) training through foreign networks (11%) and (viii) external training by distance learning (11%). In summary it was noted that 30/39 i.e. 77% of all the Nominal non-training manufacturing enterprises practiced one form or the other of EBT. Refer to Table 3 below.

**Table 3: The prevalence of Enterprise based training among all manufacturing non-training enterprises**

Item	Type of training	Frequency	%	Ranking
a	Formal in-house training by staff	15/35	43	3
b	Formal in-house training by outsiders	22/35	63	1
c	In-formal training by co-workers	8/35	23	4
d	In-formal training by self teaching	5/35	14	6
e	External training by training source	17/35	48.5	2
f	External training by distance learning	3/35	8.5	8
g	Training through trade buyers/suppliers	6/35	17	5
h	Training through foreign networks	4/35	11	7

- It was further established that the most prevalent types of EBT among all the manufacturing enterprises in a descending order were; (i) formal in-house training by outsiders (77%), (ii) external training by training source (63%), (iii) formal in-house training by staff (58%), (iv) in-formal training by co-workers (45%), (v) training through trade buyers/suppliers (23%), (vi) in-formal training by self teaching (18%), (vii) external training by distance learning (15%) and (viii) training through foreign networks (11%). In summary it was noted that 60/69 i.e. 87% of all the manufacturing enterprises practiced one form or the other of EBT. Refer to Table 4 below.

**Table 4: The prevalence of Enterprise based training among all formal manufacturing enterprises**

Item	Type of training	Frequency	%	Ranking
a	Formal in-house training by staff	38/65	58	3
b	Formal in-house training by outsiders	50/65	77	1
c	In-formal training by co-workers	29/65	45	4
d	In-formal training by self teaching	12/65	18	6
e	External training by training source	41/65	63	2
f	External training by distance learning	10/65	15	7
g	Training through trade buyers/suppliers	15/65	23	5
h	Training through foreign networks	7/65	11	8

#### 4. The summary of the relationship between Enterprise based training and Entrepreneurial performance

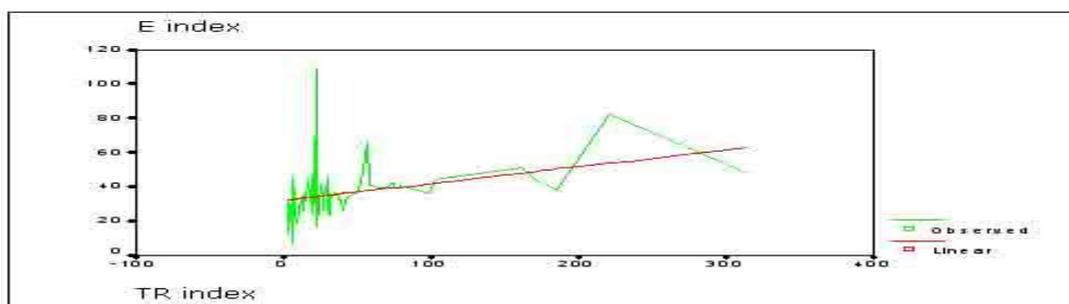
This part of the investigation was guided by specific objective number three. It describes the investigation of the regression relationship of the Innovativeness (I) index, the Growth (G) index and the Entrepreneurial performance (E) index on the EBT training (TR) index among all the manufacturing enterprises, the Training manufacturing enterprises and the Nominal non-training manufacturing enterprises. The results were similar for all categories of firms and as follows:

- For all the manufacturing enterprises, it was established that the  $b_1$  constant which measured the impact of EBT on enterprise performance was positive at 0.0994 (or 9.94%) while the Co-efficient of determination  $R^2$  value was also low at 0.139. The researcher hence concluded that there was a positive causal though low relationship between Enterprise based training and Entrepreneurial performance. The positive relationship was captured in the below linear regression relationship.

$$\text{Entrepreneurial Performance (E)} = 0.0994 (\text{TR}) + 30.7163 + (-) 0.002 \dots \dots \dots (1)$$

Plate 1 The all manufacturing enterprises (E) indices linear regression on the (TR) indices							
Independent: (TR) Index var 00001							
Dependent Mth	$R^2$	d.f.	F	Sigf	b0	b1	variable
(E) INDEX LIN	.139	63	10.17	.002	30.7163	.0994	var 00004

**Plate 1a: Graphical linear regression of the E indices on the TR indices for all the manufacturing enterprise**



From the linear regression results displayed in Plate 1 the relationship between Enterprise based training and the Entrepreneurial performance for all the manufacturing enterprises is characterized by the following:  $b_1 = 0.0994$ ,  $b_0 = 30.7163$ , significance = 0.002 and  $R^2 =$

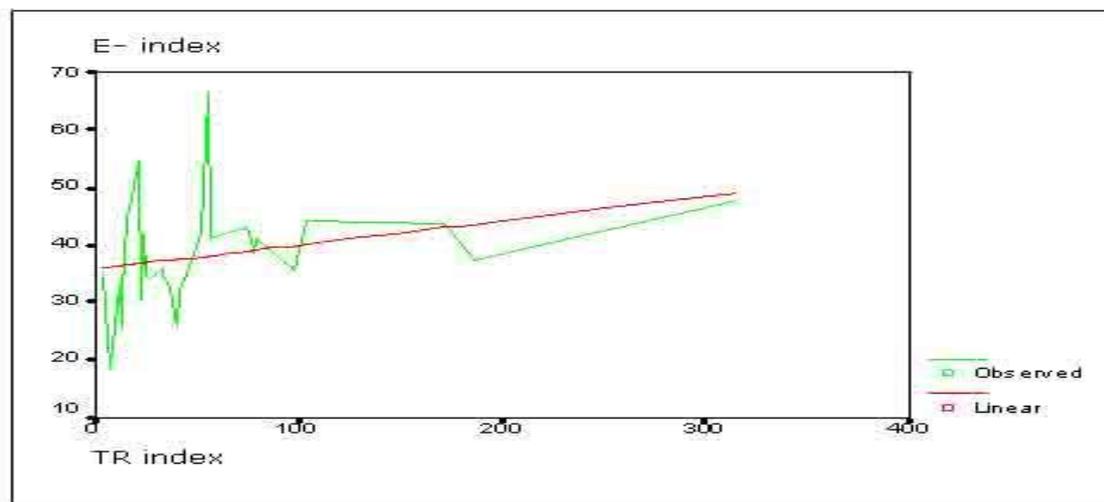
0.139. The relationship can therefore be represented by the linear regression equation:  $E = 0.0994(TR) + 30.7163 + (-) 0.002$ . This is in agreement with plate 1a.

- For the nominal non-training manufacturing enterprises, it was established that the  $b_1$  constant which measured the impact of EBT on enterprise performance was positive at 0.0434 (or 4.34%) while the Co-efficient of determination  $R^2$  value was also low at 0.092. The researcher hence concluded that there was a positive though low relationship between Enterprise based training and Entrepreneurial performance. The positive relationship was captured in the below linear regression relationship.

$$\text{Entrepreneurial Performance (E)} = 0.0434(TR) + 34.3383 + (-) 0.103 \dots \dots \dots (2)$$

Plate 2. The nominal non-training training manufacturing enterprises (I), (G) and (E) indices linear regression on the (TR) index							
Independent: (TR) index var 00001							
Dependent	Mth	$R^2$	d.f.	F	Sigf	$b_0$	$b_1$ variable
(E) INDEX LIN		.092	28	2.84	.103	34.3387	.0434 var 00004

**Plate 2a: Graphical linear regression of the E index on the TR index for the nominal non-training manufacturing enterprises**



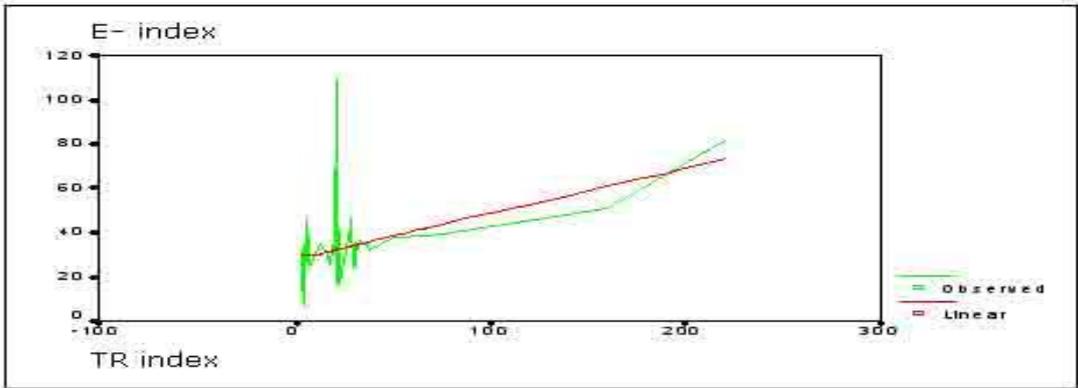
From the linear regression results displayed in Plate 2a the relationship between Enterprise based training and the Enterprise performance for the nominal non- training manufacturing enterprises is characterized by the following:  $b_1 = 0.0434$ ,  $b_0 = 34.3383$ , significance = 0.103 and  $R^2 = 0.092$ . The relationship can therefore be represented by the linear regression equation:  $E = 0.0434(TR) + 34.3383 + (-) 0.103$ . This agrees with plate 2a.

- For the training manufacturing enterprises, it was established that the  $b_1$  constant which measured the impact of EBT on enterprise performance was positive at 0.2059 (or 20.59%) while the Co-efficient of determination  $R^2$  value was also low at 0.235. The researcher hence concluded that there was a positive though low relationship between Enterprise based training and Entrepreneurial performance. The positive relationship was captured in the below linear regression relationship.

$$\text{Entrepreneurial Performance (E)} = 0.2059(\text{TR}) + 26.8282 + (-) 0.003 \dots \dots \dots (3)$$

Plate 3 The training manufacturing enterprises (E) indices linear regression on the (TR) indices							
Independent: (TR) index var 00001							
Dependent	Mth	$R^2$	d.f.	F	Sigf	$b_0$	$b_1$ variable
(E) INDEX LIN		.235	33	10.13	.003	26.8282	.2059 var 00004

**Plate 3a: Graphical linear regression of the E indices on the TR indices for the training manufacturing enterprises**



From the linear regression results displayed in Plate 3 the relationship between Enterprise based training and the Enterprise performance for the training manufacturing enterprises was characterized by the following,  $b_1 = 0.2059$ ,  $b_0 = 26.8282$ , significance = 0.003 and  $R^2 = 0.235$ . The relationship can therefore be represented by the linear regression equation:  $E = 0.2059(\text{TR}) + 26.8282 + (-) 0.003$ . This agrees with plate 3a.

**5. The summary of the variance between the indices of the training and those of the nominal non training manufacturing enterprises**

This part of the investigation was guided by specific objective number three. This section investigated the variances between the Innovativeness, the Growth, the Productivity and the

Enterprise performance indices in order to assess the magnitude of the differences in the above attributes in as far as Training and Nominal non-training enterprises were concerned. Specifically, this section on the analysis of variance sought to find out whether the differences of the relevant indices were significant at the 5% level of significance between the training and the Nominal non-training manufacturing enterprises. The results were as here under:

- From the Analysis of variance (ANOVA) of the Innovativeness index, it was established that the F statistic was 4.994308 and that the relevant degrees of freedom were sixty four (one in the numerator and sixty three in the denominator). It was also established from appropriate F-statistic tables that the critical F-statistic for the above stated degrees of freedom was 4.00 at the 0.05 level of significance. In this case the F-statistic was greater than the critical F-statistic at the 0.05 level of significance and hence there were enough grounds on which to conclude that there was a significant difference at the 0.05 level of significance between the Innovativeness (I) indices between the Training and the Nominal non-training manufacturing enterprises.
- From the ANOVA of the Growth index, it was established that the F statistic was 0.140781 and that the relevant degrees of freedom were sixty four (one in the numerator and sixty three in the denominator). It was also established from appropriate F-statistic tables that the critical F-statistic for the above stated degrees of freedom was 4.00 at the 0.05 level of significance. In this case the F-statistic was neither equal nor greater than the critical F-statistic at either the 0.05 level of significance and hence there was enough ground on which to conclude that there were no significant differences between the Growth (G) indices for the Training and those of the Nominal non-training manufacturing enterprises.
- As for the ANOVA of the Productivity (P) index, it was established that the F statistic was 0.1949458 and that the relevant degrees of freedom were 64 (1 in the numerator and 63 in the denominator). It was also established from appropriate F-statistic tables that the critical F-statistic for the above stated degrees of freedom was 7.08 at the 0.01 level of significance, and 4.00 at the 0.05 level of significance. In this case the F-statistic was neither equal nor greater than the critical F-statistic at either the 0.05 or at the 0.01 level and hence it was concluded that there was no significant difference between the Productivity (P) indices for the Training and Nominal non-training enterprises.

- From the ANOVA of the Entrepreneurial Performance index, it was established that the F statistic was 2.005011 and that the relevant degrees of freedom were sixty four (one in the numerator and sixty three in the denominator). It was also established from appropriate F-statistic tables that the critical F-statistic for the above stated degrees of freedom was 4.00 at the 0.05 level of significance. In this case the F-statistic was neither equal nor greater than the critical F-statistic at either the 0.05 level of significance and hence there were enough grounds on which to conclude that there were no significant difference between the Entrepreneurial (E) performance indices for the Training and those for the Nominal non-training manufacturing enterprises.

## **6. The constraints faced by the Directorate of Industrial Training in the delivery of Enterprise based training**

The investigation of the constraints that hindered the efficient delivery of Enterprise based training was guided by specific the research objective number four of this study. The results were as here below:

(a) The lack of qualified and experienced instructional and administrative staff to run the DIT activities, (b) the low level of government funding which subsequently translated into low level of levy collection, (c) the government bureaucracy which resulted in delayed or non-response to industry, (d) the obsolete equipment in DIT training centres, (e) the lack of commitment by some employers which resulted into a high default rate and failure by DIT to collect levy, (f) the delayed communication and non-communication which resulted in a low level awareness of DIT activities, (g) the demotivated DIT staff characterized by wrong attitudes to their work and lack of technological changes prevalent in industry, (h) the prevalent mode of levy collection which required many persons to be employed as enforcement officers for it to be effective, (i) the out-dated Enterprise based training Act, (j) the lack of transport for operational staff and especially the levy collection enforcement officers and (k) the low levy contribution by the government of Kenya as an employer even when the ITA bound the government.

## **7. The summary of the views held by stakeholders on the delivery of Enterprise based training**

The investigation in this section was guided by specific research objective number four. It drew, in descriptive statistics, the views among the formal manufacturing enterprise respondents as well as the views among the DIT management on salient matters regarding

enterprise based training. It also highlighted where there was convergence of these views as well as where there were differences. The views were summarized as here below:

(a) The stakeholders (72%) favoured the conversion of the DIT into a Semi-autonomous Government Agency.(b) The stakeholders favoured the maintaining of the current sector based levy system by 45% while 43% were against and 12% had no any opinion.(c) The stakeholders (79%) favoured the admission of the Jua Kali into the ITLF in organized groups as a separate industry with its own training committee and a different mode of levy contribution.(d) The stakeholders (57%) favoured the linkage of levy reimbursement to levy contribution.(e) The stakeholders (88%) favoured the introduction of a levy system that supported the training of all cadres of the workforce of the contributing enterprises.

**Table 5: Summary of stakeholder preferences**

	Proposition	% favouring	% opposing	% with no opinion
1	Convert of DIT into SAGA	72	28	
2	Maintain current sector based system	45	43	12
3	Admit of Jua Kali into the ITLF	79	21	
4	Link of reimbursement to contribution level	57	43	
5	Introduce a levy system catering for all cadres of the workforce	88	12	

### **8. The interventions perceived by the stakeholders as being appropriate to improve the delivery of Enterprise based training**

The investigation of the perceived interventions to improve Enterprise based training delivery was based upon the research objective number four. The results were as here below:

(a) Revise the Industrial Training Act (ITA) and convert the DIT into a Semi Autonomous Government Agency (b) change the mode of levy contribution from per capita to one based on a percentage of the payroll or wage bill, (c) bring on board all categories of employers and enterprises, (d) train all cadres of staff employed by the contributing enterprise, (e) introduce linkage between levy reimbursement and levy contribution, (f) equip the DIT training centres with appropriate new equipment, rehabilitate the old and make Information Communication Technology a cornerstone of the DIT technical training for the foreseeable future, (g) recruit more staff and institute retention and motivational measures for them, (h) introduce regular further training for instructional staff in industry to acquaint them with technological changes,

(i) enhance service delivery to the employers by appropriate and timely training approvals and timely training reimbursement, (j) provide appropriate operational resources such as vehicles to the levy inspectors, (k) step up the awareness campaign through normal communication with employers and also through the mass media and (l) since the ITA bound the government, the government should pay the Enterprise based training levy appropriately.

## **9. The conclusions of the study**

From the results and findings the following conclusions were made:

The prevalence of Enterprise based training among the manufacturing enterprises in Nairobi was high at 87% (refer to section 1.2, 3) and there was a positive though low impact (since  $b_1=9.94\%$ ) of Enterprise based training on Enterprise performance amongst the manufacturing enterprises in Nairobi and hence Enterprise based training was a viable instrument to be used for both policy and programme intervention.

There was a significant difference at the 5% level of significance between the innovativeness of the Training and that of the Nominal non-training manufacturing enterprises in Nairobi but there was no significant difference at the 5% level of significance between the Training and that of the Nominal non-training manufacturing enterprises with regard enterprise growth and productivity as well as the overall enterprise performance. It was concluded that this state of affairs was brought forth by the inappropriate targeting of the EBT support only to the innovative (supervisory and managerial) and not the productive (operational and clerical) arms of the manufacturing enterprises by the Industrial Training Levy Fund among other things.

Taking into account the finding that there was a positive though low relationship between Enterprise based training and Enterprise performance (since the  $b_1$  linear regression constant was positive at 0.0994) the researcher concluded that, Enterprise based training had contributed to the performance of the participating enterprises supported by the ITLF even though the differences in the growth and productivity attributes were not significant at the 0.05 level. Based on the higher  $b_1$  (0.2059) for the training enterprises as compared to  $b_1$  (0.0434) for the nominal non-training enterprises, it could be concluded that it was prudent to encourage the non-training enterprises to train.

Further, the training manufacturing enterprises practiced one form or the other of EBT while only seventy seven per cent of the Nominal non-training manufacturing enterprises practiced

one form or the other of EBT. It was hence concluded that it was prudent for the DIT to encourage the Nominal non-training manufacturing to undertake ITLF supported training with a view to improving their enterprise performance.

The constraints that hindered the delivery of enterprise based training as established in the findings revolved around the inappropriateness of the Industrial Training Act and also the inadequacy of finance, staffing and the provision of operational tools such as modern training equipment and operational vehicles. The constraints were hence both structural and operational.

The perceived interventions to remedy the delivery of enterprise based training as established in the findings revolved around the review of the ITA to give the DIT the appropriate semi-autonomy, appropriate industrial democracy and the provision of adequate operational tools such as staffing, appropriate training equipment, financing and operational vehicles. The interventions were hence structural and operational.

The relevant  $b_0$  linear regression constants were all positive but rather low. This was with respect to the growth, the innovativeness as well as the overall Enterprise performance. This meant that there was a residual Enterprise performance that could not be explained by the absence of Enterprise based training. The researcher concluded that this was consistent with the existence of other contributory factors to Enterprise performance such as investment and production capabilities.

## **10. The recommendations of the study**

Arising from the foregoing conclusions the study makes the following recommendations:

- That the EBT provision support by the Industrial Training Levy Fund be expanded to cover all enterprises and all cadres of workers in industry in order to support both the innovative as well as the productive arms of the enterprises as provided by existing legal mandate.
- That EBT provision support be enhanced so that it may be used by the Government of Kenya (GOK) and by other development agencies as an instrument for both policy and programme intervention in national development.
- In order to accord the DIT the ability to acquire the appropriate operational tools without a lot of bureaucracy, the DIT should be accorded semi- autonomous status by GOK in line with the wishes of the stakeholders.

- That EBT be used by enterprise owners and managers together with investment and production capabilities to enhance the enterprises' total performance with a view to facilitating national development.
- That management of the Industrial Training Levy Fund be strengthened by the DIT through staffing and training so as to enhance the institutions financial viability and capability in order to place it in a position to further support EBT delivery among the Kenyan enterprises and thus improve their Enterprise performance with a view to contributing to the realization of the national development objectives.
- That the mode of levy contribution be linked by the stakeholders to the payroll so as insulate the ITLF from the vagaries of inflation and also the non-responsiveness of the training committees to increase the levy payment.
- That the levy contribution rate be set by the stakeholders appropriately taking into account the requirements of the legal mandate as well as the needs of competition both regionally and internationally.

*NB: 1. This work forms part of the partial fulfillment of the requirements for the award of the degree of Doctor of Philosophy of Kenyatta University.*

*2. The author acknowledges with gratitude the ample grant by the Research Fund for the Investment Climate and Business Environment of Trust Africa. This grant helped make this study possible.*

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