An influence of HRM practices on employee productivity

The Case Study of Zawia Oil Refining Company

Dr. TAHER EM. AHMED SASI

Faculty of Economy Sabratha University

ملخص الدراسة:

بحثت هذه الدراسة في أثر ممارسات إدارة الموارد البشرية مثل (تخطيط الموارد البشرية، عمليـات   التعيين والاختيـار، التدريب والتطوير، نظـام المكافآت والتعويضـات، وعلاقـات العاملين) في إنتاجية العاملين في شركة الزاوية لتكرير النفط. يتضمن حجم البيانات مسحاً لنحو 55 موظفًا فـي الشـركة ، حيـث تم الحصـول علـى المعلومـات مـن خـلال المقابلات المباشرة مع بعض الموظفين ،وباستخدام نموذجا لاستبيان كأداة لجمع البيانات لدراسة بعض ممارسات إدارة الموارد البشرية في الشركة قيد الدراسة، مثل تخطيط الموارد البشرية، ونظام المكافآت والتعويضـات، وعلاقـات العـاملين، والتدريب والتطـوير، وعمليـة الاختيـار والتعيين للأفراد للعمل في الشركة، والهدف من هذه الدراسة هو تحديد أثر تلك الممارسات في إنتاجية العامل.

تم تحليل البيانات بطريقة وصفية وتحليلية. تضمن التحليل الوصفي التوزيعات التكرارية عبـر جداول إحصـائية مختلفة. تم استخدام اختبـار الموثوقيـة واختبـار Tوالارتبـاط وتحليل الانحدار. حيث ظهرت النتائج أن هذه الممارسات كان لها تأثير كبير على الإنتاجية.

كان التركيز الأساسي في هذه الدراسة هو زيادة الإنتاجية، ويتحقق ذلك من خلال مشاركة العاملين على جميع المستويات لتحديد مدى فاعلية برامج التدريب.

ABSTRACT:

This study examines the impact of human resource management practices such as (human resource planning, recruitment and selection staffing processes, training and development, rewards and compensation system, and employee relations) on the employee productivity of workers at Zawia Oil Refining Company. The volume of data includes a survey of about 55 employees of the company. As the information was obtained through direct interviews with employees, and by using the questionnaire form as a tool to collect data to study some of the human resource management practices in the company, including human resource planning, reward and compensation system, employee relations, training and development, and the selection and appointment process for individuals to work in the company, and the goal of this work is To determine the impact of these practices on employee productivity.

The data were analyzed using a descriptive and analytical method. The descriptive analysis included the frequency distributions, across different statistical tables. Reliability test, T-test, correlation, and regression analysis were used. The results demonstrate that these practices had a significant impact on productivity.

The main focus is to increase productivity, and this is achieved through the participation of workers at all levels to determine the effectiveness of the training programs.

Keywords: Human Recourse Management (HRM), employee productivity.

Introduction:

Over the past decade, there has been a great deal of interest in the human resources management (HRM) practices field in an organization. This subject of widespread debate in the field of management studies, human resources management is an important function in the institutions and all-inclusive. Human resources management effectively requiring special expertise and professionals can perform the task in partnership with other relevant managers and staff and the workplace. A number of studies have shown that human resource management practices, either individually or in bundles,

linked to higher levels of productivity and effectiveness, or at the organizational level of analysis (Arthur, 1994).

The human resource management (HRM) activities and functions can be categorized into six domains as: (1) human resource planning, recruitment, and selection; (2) human resource development (including performance appraisal); (3) reward and compensation systems; (4) safety and health; (5) employee and labour relations; and (6) human resource research (Abdul-Hamid, 1996). Pfeffer (1998) describes seven practices of successful organizations: (1) employment security, (2) selective hiring, (3) self-managed teams and decentralization of authority, (4) comparatively high compensation, (5) extensive training, (6) minimal status distinctions, and (7) extensive sharing of financial and performance information.

According to research conducted in the United States (US), and how companies practice in the management of human resources makes a big difference in the two most important organizational results, the productivity and profit. Abdul-Hamid has the same opinion; he pointed out that improving trade performance, are often linked to human resource management practices that provide skills, incentives, information and decision-making responsibility to staff (1996). One of the key elements of human resources are "training program" that can provide staff with the skills, abilities and knowledge.

Problem Statement:

The Oil field it is the most important sector in the Libya, which is the main source of funding the Libyan economy. This sector managed by the American Companies since 1952 pulled out of Libya in 1970. The situation in the current study is that the Zawia Oil Refining Company, the structures of authority, responsibility, and communication relatively free. While in the case of the Libyan organization, the employees show respect and loyalty to their superiors, and these practices also exist in the human resources planning, staffing processes, training and development practices, reward and compensation systems, and personnel and labor relations in the company.

The situation is very glaring that exists for theHRM, which are subject to legislation in the case of the Libyan Organization, which

controlled to a certain extent, because of the control system it will be difficult to manage staff productivity. This study is an attempt to address the problem of evaluating the effectiveness ofHRM practices in the Zawia Oil Refining Companyin the context of the control system.

Research Questions:

In present work, one of HRM practices have been chosen in relation to Zawia Oil Refining Company.

The Following question concerning HRM practices will be tested:

- Do the workers have a positive view of HRM?

Research Objectives:

The overall objective of this study is to examine the HRM practices in the Zawia Oil Refining Company.

The study expected to offer some useful information of human resource practices to the company, and hopes that this useful information can help to contribute to building knowledge and an understanding of human resource management conditions.

Research Hypotheses:

The basic proposition of the research is to study staffing processes practices in theZawia Oil Refining Company. The hypothesis of the study is:

- The workers have a positive view of HRM.

Importance of the Study:

This study is important for several reasons. Firstly, recognize positive views of workers' of HRM practices. Secondly, to participate in and contribute to research, resulting in knowledge increase. Lastly, assist scholars and other researchers in the HRM field.

Limitations of the Study:

The study is limited to the several Libyan industries and narrowed down to Zawia Oil Refining Company in Libya owned to NOC, in order to make available the necessary data and to fulfill this study. This study is conducting in a specific setting the NOC. While implications can be made, the results are not directly generalizable to other organizations. Further testing of the model would be needed to confirm the relationship in other settings. The human resource management (HRM) practices utilized in the NOC may not be under the control of the organization's heads.

Literature Review:
Human Resource Management (HRM):

   HRM is a broad term encompassing management practices used strategically by organization, to shape and develop the employment relationship so as to maximize organizational success. HRM practices that provide workers with skills, incentives, information, and decision-making responsibility have been shown to be associated with improved business performance (Abdul-Hamid, 1996).

The following topics will be covering in this review of the literature overall as following:

   - Overall practices of HRM, includes role and importance of HRM;

The HRM literature offers myriad views to explain HRM. At it is the broadest HRM concern of management of people within the employee-employer relationship, in order to meet the legal requirement of the workplace, while contributing to an organization's strategy, HRM is a vital function in organizations (Singh, 2003). defined it as "a term used to represent that part of an organization's activities concerned with the recruitment, development and management of its employees".

   Recent evidence has shown HRM practices to have a positive influence on employee productivity (Tzafrir, 2006).

This literature reveals, with different degrees of certainty, that HRM practices have an impact on productivity. Empirical studies in this field, most of them American, are growing and currently exists a whole body of literature dealing with the effect of various practices on productivity, some of researches found that there is no direct relationship between these HRM practices and employee productivity (Guest, 2002). Therefore, the difficulty with the universalistic perspective does not end by simply designating the various practices identifying the importance of several HRM practices to organizational performance. Pfeffer (1994), proposed 16 universalistic HRM practices. On the other hand, both Delery and Doty (1996), and a later Pfeffer study (1998) identified fewer "best practice" practices. For example, Delery and Doty (1996) used seven strategic HR practices. These practices were internal career opportunity, formal training system, appraisal measures, profit sharing, employment security,

voice mechanisms, and job definition. Using a cross-sectional research design, adopted seven HRM practices such as selection, training, incentive compensation, and internal labor market. More recently, in a project exploring international HRM practices, focused on hiring, training and development, performance appraisal, pay, leadership, and communication.

The overall purpose of HRM is to ensure that the organization is able to achieve success through people. As Ulrich and Lake (1990) have remarked, 'HRM systems can be the source of organizational capabilities that allow firms to learn capitalize on the new opportunities'.

It is now commonly accept that employees create an important source of competitive advantage for organization (Pfeffer 1994). As a result, it is important that an organization adopt HRM practices that make best use of its employees. The above trend has led to increased interest in the impact of HRM on organizational performance, and a number of studies have found a positive relationship between so called 'high performance work practices' (Huselid, 1995), and different measures of company performance. Furthermore, there is some empirical support for the hypothesis that firms, which align their HRM practices with their business strategy, will achieve superior outcomes (for recent reviews, see Becker and Huselid, 1998).

The impact of HRM practices on employee productivity of firms has been a leading theme of research in the past decade and the results have been encouraging, indicating positive association between HR practices and employee productivity(Wright et al., 2003).

HR planning (planning workforce): is a process of investigating supply and demand of current and future labor situations. Firms need to predict supply of labor to match with demand condition in the coming years. What is the rate of availability of future workforce? Are there enough potential young workers in labor market, in the next two years or five years? What is the level of education of those potential workers? Whether investment in national training and development of the workforce is required, "As Texas instruments and New York Telephone did" (Schuler & MacMillan, 1984). Without these preparations, firms will not be able to respond to labor fluctuation.

Training and development: The purposes of training are to improve current skill of workers and to correct skill deficits. Training can influence performance in two ways: first, training improves relevant skills and abilities; second, training increases employees' satisfaction with their current jobs and workplace (Harel and Tzafrir, 1999).

The aim of training is to build competencies of employees through job rotation, counseling, cross-functional exchange, or task assignments (Ulrich, 1997). Coaching, mentoring, and instructing are crucial parts of training tool. Schuler and Jackson (1987) mentioned about choices of training whether it is for short-term or long-term, narrow application or broad view, productivity focus or quality of work life emphasis, individual oriented or group oriented, low participation or high involvement and planned or unplanned, HR managers facing with respects to formal training were how much and in what areas. There are several kinds of training criteria. Training consists of on job training, off-job training, formal training, skill training, cross-functional training, team training, literacy training, etc. Computer-based training (CBT) is very attractive in research and practical areas. Most of practitioners suggested that computer-based training is a useful way to promote productivity of employee's learning. Recommendation of new direction of HRM research should take information system into account.

Compensation or Incentives: There are three kinds of compensation plan: first is base-compensation (fixed pay to employees). Second is pay incentives (bonuses and profit sharing). Third is indirect compensation (health insurance, vocation, and unemployment compensation). Commonly, compensation is based on two categories: financial incentives and non-financial incentives.

The purpose of compensation offering is to motivate employees to work harder and help an organization to achieve goals. Compensation can be used to explore competitive advantage, the reason why compensation policy can ensure better organizational performance is that it can attract and retain high talented employees (Pfeffer, 1998). Therefore, decision on how firms pay to employees is vital; it can absorb high skill people or bring down motivation of current employees.

Employee participation: The most powerful achievement of workplace of organization is when employees participation in the work process. Employee participation is the level of influence of individual employees has on both decision-making and factors associated with decision process. Involvement can be more effective when top management along with authority provides resources.

Appraisal process: The appraisal system helps top level of management to be able to clarify organizational objectives and expectation to internal employees and helps understand ability of its own workforce. Application of appraising into an organization is to make the entity able to identify poor performance, skill deficits, room for improvements, and training and development needed for internal employees.

Performance appraisal system, as mentioned, can be used for administrative purposes which are related to employee's work condition, including promotion, termination, and rewards. Ulrich (1997) raised three questions associated with appraisal system: what sort of work standards is provided to employees, behavioral or outcome standard? What is kind of feedback to employee, positive or negative? What processes are adopted to ensure continuous feedback to employees on regular basic, monthly, quarterly, and yearly? One thing, which an organization needs to do, is to ensure that feedbacks are not bias and help encourage commitment. Some scholars and managers argued that performance appraisal brings demoralization to a workplace and low productive, and should be eliminated from practices. Appraisal system is considered as bias process because it is related to rater error and bias, the influence of liking, organizational politics (value of worker's performance depends on the agenda or goals of supervisor), and legal issue. That is why appraisal system is used in the most careful way.

Staffing processes: Staffing is referring to personnel required for a program or a project. Staffing is the process of acquiring, deploying, and retaining a workforce of sufficient quantity and quality to create positive impacts on the organization's effectiveness. Staffing is the organizational function used to build the organization's workforce through such systems as staffing strategy, human resource planning, recruitment, selection, employment, and retention.

Staffing is critical to the success of every company. To be competitive in today's economy, companies need the best people to create ideas and execute them for the organization. Without a competent and talented workforce, organizations will stagnate and eventually perish. The right employees are the most important resources of companies today." Staffing processes are referring to recruitment and selection processes in an organization.

Human resource (HR) recruitment: Recruitment involves creating a pool, preferably a large one of qualified applicants from different sources. In small organizations, recruitment of qualified employees may fall on the owner/manager or the other employees in the particular area or department in need of personnel. Recruiting is often the responsibility of the HRM department in large organizations. A small business is generally more limited in time and money when it comes to recruiting employees. As a result, internal job posting is often utilized for mid-level and higher positions. This provides employees an opportunity to move up in the organization, which may increase employee morale and loyalty to the company.

Lower level positions as well as specialized midlevel and upper-level positions in small firms are often filed through other recruiting mechanisms. These include unsolicited walk-ins, advertising in the local newspaper or a trade magazine, using public or private employment agencies, and soliciting input on potential employees from current employee, friends, and relatives. Employee referrals often come in handy because they save time and energy in locating qualified applicants, not to mention that they are also reliable. Most of these forms of recruitment are inexpensive to a small business when utilized correctly.

Human resource (HR) selection: Selection test are used to provide more valid and reliable evidence of level of intelligence, personality characteristic, abilities, aptitudes, and attainment than can be obtained from an interview. As defined by Robertson and Smith (1985), a psychological test is "A carefully chosen, systematic and standardized procedure for evolving a sample of responses from candidates which can be used to assess one or more of their psychological characteristic with those of a representative sample of an appropriate population".

Personnel testing can be a highly reliable and valid way to predict job performance. Hundreds of tests have been developed to measure numerous dimensions of human behavior, including paper-and-pencil tests, performance tests, performance simulations, graphology, and honesty tests. Research cited by Roberts (1997) has indicated that extraversion and introversion; emotional stability; agreeableness; conscientiousness; and openness to experience all these factors is valid predictors of work performance and that one factor in particular, 'conscientiousness', was very effective.

Zawia Oil Refining Company (ZORC)

For the ZORC the numbers of managers was 55, numbers of distributed of questionnaires were 50; numbers of responded were 45, that mean is 90% respondent of the questionnaires.

1. Reliability test

Table 1: shows the result of α of all items in the variables is equal 0.894, so the all items are more significant with α.

Table 1: Reliability Statistics of items in the HRM variables… (Collective)

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.894	0.890	57

2. Demographic variable analysis

I- Respondent characteristics

Table 2: shows the characteristics of the respondents in ZORC, the items are gender, personal age, marital status, race, and education level, time of working, position, and time of working in current position. The table shows higher and middle levels of management (managers, supervisors, coordinators, and observers). These data tends to focus on HRM practices perceived by higher and middle levels of management. This table also show that the most of responded were male 93.3% and female 6.7% were between the ages of less than 30

مجلة صدى الجامعة.

years and more than 50 years, about 8.9% were less than 30 years, and 37.8% were between the ages of 30 to 40 years, and about 40% were between 41 and 50, and about 13.3% were above 50 years. This result indicates that there are higher respondents among the middle age of worker between 30 and 50 years. The study also shows that married men or women headed about 77.8% of the respondents. Furthermore single, divorced and widowed men or women head 20% and 2.2% respectively. The relatively high portion of married tenants is, to some extent, attributable to their older ages. The nationalities of respondent were 100% local.

The education levels of the respondents' show that about 15.6% had high school education, and 62.2% had Bachelor's degree, 22.2% had higher levels of education (Master degree). Indicate that the majority of respondents had high level of educations,71.1% of them are working at the company for more than 10 years.71.1% were serving as observers, and about 8.9% were works as a director in the company. About 26.7% were work in the current position in the period from 1 to 10 years, 53.3% works more than 10 years in the current situation, a few of whom 6.7% work less than 1 per year in the current situation.

The data in the table 2 also shows the work type of this company; about 80% were manufacturing (industry type) and about 17.8% were services, and 2.2% were manufacturing and service.

Table 2: Respondent Characteristics

Item	Criteria	Frequency	Percentage (%)
Gender	Male	42	93.3
	Female	3	6.7
Age	Less than 30 years	4	8.9
	30 – 40	17	37.8
	41 – 50	18	40
	More than 50 years	6	13.3
Marital status	Married	35	77.8
	Unmarried	9	20

	Others	1	2.2
Nationality	Local	45	100
	Foreign	0	0
Qualification	High School	7	15.6
	Bachelor's	28	62.2
	Master's	10	22.2
	Doctorate	0	0
Length of service	Less than 1 year	1	2.2
	1 – 5	7	15.6
	6 – 10	5	11.1
	More than 10 years	32	71.1
Current position	Management manager	1	2.2
	Department manager	4	8.9
	Supervisor	8	17.8
	Others	32	71.1
Length of service in current position	Less than 1 year	3	6.7
	1 – 5	12	26.7
	6 – 10	6	13.3
	More than 10 years	24	53.3
Type a work in the company	Manufacturing	36	80
	Service	8	17.8
	Manufacturing and Service	1	2.2
	Others	0	0

II- The relationship between demographic variable and HRM variables

1. Independent-Sample T-test analysis

1- Gender and research variables

The table 3 shows, the mean, standard deviation and the T-test of the gender variable and HRM practice variables. The mean of the reward

and compensation systems variable E is high with an average of 62.67±5.132 for the female and 55.88±8.34 for the male. The employee and labor relation F the mean is 55.67±4.51 for females, and 43.95±7.60 for males. For the other variables, the mean is between 10±3 and 30±5. We can see that the standard deviations among all variables are relatively high, so the respondents have different opinion about the study variables in this company. The data in the table shows that the values of T- test for the all HRM variables were negative. The data of the HR planning B shows that it large enough to be significant (sig. at 2-tailed) with the gender variable. However, other variables did not any significant relation with the gender. Then we can conclude that the difference between the means for the gender and research variable not significantly different (even given the variability).

Table 3: T-tests: Gender and HRM variables

Independent Samples T-Test

Variable		Mean	Std. D	t-test for Equality of Means			
				t	Sig. (2-tailed)	MD	Std. Error Difference
B	1	31.64	4.933	-0.695	0.491	-02.024	2.914
	2	33.67	3.512	-0.934	0.428	-02.024	2.166
C	1	22.64	3.721	-1.852	0.071	-04.024	2.173
	2	26.67	0.577	-6.061	0.000	-04.024	0.664
D	1	25.43	5.670	-1.172	0.248	-03.905	3.332
	2	29.33	3.055	-1.983	0.139	-03.905	1.969
E	1	55.88	8.344	-1.381	0.174	-06.786	4.914
	2	62.67	5.132	-2.101	0.132	-06.786	3.230
F	1	43.95	7.596	-2.620	0.012	-11.714	4.471
	2	55.67	4.509	-4.103	0.028	-11.714	2.855

1- Equal variances assumed (Male)
2- Equal variances assumed (Female)

2. One-Way ANOVA Test:

1- Age and research variables

The table 4 shows, the ANOVA table of the age and HRM variables, the results shows that F-ratio was found between 0.585 and 5.077 for

all variables. HR planning and employee and labour relation did not show any significant relation with the age of employee (i.e., sig. close to zero).

Table 4: ANOVA: Age and HRM variables

Variable		SS	MS	F	Sig.
Staffing processes	**B.G**	32.842	10.947	0.773	0.516
	W.G	580.802	14.166		

B.G / Between Groups
W.G / Within Groups

2- Marital status and HRM variables

The table 5 shows the ANOVA table of the marital status and HRM variables between groups and within groups. The data show that the F-ratio among the variable is relatively not high except for the training and development and HR planning, which is relatively high compared to other variables. HR planning, staffing processes and training and development did not show any significant relation with the marital status.

Table 5: ANOVA: Marital Status and HRM variables

Variable		SS	MS	F	Sig.
HR planning	**B.G**	0128.889	064.444	2.991	0.061
	W.G	0904.889	021.545		
Staffing processes	**B.G**	0103.213	051.606	4.246	0.021
	W.G	0510.432	012.153		
Training and development	**B.G**	0334.959	167.479	6.733	0.003
	W.G	1044.686	024.873		
Reward and compensation systems	**B.G**	0164.902	082.451	1.206	0.310
	W.G	2871.098	068.359		
Employee and labour relations	**B.G**	0274.057	137.029	2.287	0.114
	W.G	2516.743	059.922		

B.G / Between Groups
W.G / Within Groups

3- Qualification and HRM variables

The table 6 shows, the ANOVA table of the qualification and research variables analyzed between group and within groups. The results show that the value of F-ratio is high 0.067-2.010 and Sig is Zero; it means that the qualification has no significant effect on the research variables.

Table 6: ANOVA: Qualification and HRM variables

Variable		SS	MS	F	Sig.
HR planning	B.G	16.985	8.492	0.351	0.706
	W.G	1016.793	24.209		
Staffing processes	B.G	53.616	26.808	2.010	0.147
	W.G	560.029	13.334		
Training and development	B.G	4.394	02.197	0.067	0.935
	W.G	1375.250	32.744		
Reward and compensation systems	B.G	39.107	19.554	0.274	0.762
	W.G	2996.893	71.355		
Employee and labour relations	B.G	63.014	31.507	0.485	0.619
	W.G	2727.786	64.947		

B.G / Between Groups
W.G / Within Groups

4- Length of service and HRM variables

The ANOVA table of length of service and HRM variables is presented in the table 7 shows; the data was analyzed between group and within groups. The results show that the value of F-ratio is between 2.783 and 4.651. While it did not show any relationships between length of service and HR panning, staffing processes, employee and labour relations and reward and compensation systems.

Table 7: ANOVA: Length of service and HRM variables

Variable		SS	MS	F	Sig.
HR planning	B.G	0259.645	086.548	4.584	0.007
	W.G	0774.133	018.881		
Staffing processes	B.G	0103.819	034.606	2.783	0.053

		SS	MS	F	Sig.
	W.G	0509.826	012.435		
Training and development	B.G	0350.297	116.766	**4.651**	**0.007**
	W.G	1029.347	025.106		
Reward and compensation systems	B.G	0581.771	193.924	**3.240**	**0.032**
	W.G	2454.229	059.859		
Employee and labour relations	B.G	0540.567	180.189	**3.283**	**0.030**
	W.G	2250.233	054.884		

B.G / Between Groups
W.G / Within Groups

5- Current position and HRM variables

The ANOVA table of current position and HRM variables (analyzed between group and within groups) are presented in the table 8 shows, the results show that the F-ratio is between 0.305-2.291 and it significantly (sig.) of the range from 0.092 to 0.822 of the all variables. For the HRM variables the reward and compensation systems and staffing practices shows a higher significant relationship with current position among the other HRM variables. Training and development and HR planning show a lower relationship with current position. However, between current position and employee and labour relations the result did not observed any significant relationship (sig. 0.092 are closed to zero).

Table 8: ANOVA: Current position and HRM variables

Variable		SS	MS	F	Sig.
HR planning	B.G	106.684	35.561	1.573	0.211
	W.G	927.094	22.612		
Staffing processes	B.G	022.144	07.381	0.512	0.677
	W.G	591.500	14.427		
Training and development	B.G	155.394	51.798	1.735	0.175
	W.G	1224.250	29.860		
Reward and compensation systems	B.G	66.250	22.083	0.305	0.822
	W.G	2969.750	72.433		
Employee and labour relations	B.G	400.675	133.558	2.291	0.092
	W.G	2390.125	58.296		

B.G / Between Groups

W.G / Within Groups

6- Length of service in current position and HRM variables

The ANOVA table of length of service in current position item and HRM variables (analyzed between group and within groups) is presented in the table 9 shows, the results show that the value of F-ratio is between 0.842 and 3.180, which is indicate that there are more significant relation between the length of service in current position and reward and compensation systems, employee and labour relation, staffing processes. Lower relation has been observed between the length of service in current position and training and development and this relationship is seemed to be non-significant.

Table 9: ANOVA: Length of service in current position and HRM variables

Variable		SS	MS	F	Sig.
HR planning	B.G	89.069	29.690	1.289	0.291
	W.G	944.708	23.042		
Staffing processes	B.G	64.853	21.618	1.615	0.201
	W.G	548.792	13.385		
Training and development	B.G	164.728	54.909	1.853	0.153
	W.G	1214.917	29.632		
Reward and compensation systems	B.G	176.125	58.708	0.842	0.479
	W.G	2859.875	69.753		
Employee and labour relations	B.G	526.758	175.586	3.180	0.034
	W.G	2264.042	55.221		

B.G / Between Groups
W.G / Within Groups

2. Factor analysis

The table 10 shows result of the five variables of HRM practices, most of the variables are more significant with item-to-total, Eigenvalue, and α as HR Planning, training and development, reward and compensation systems, and employee and labour relations. Staffing

processes variable also is more significant with Eignvalue and α and not significant with item-to-total, it is less than 0.5.

Table 10: Factor analysis of HRM variables

Variable	Symbol of Variable	Item-to-total	Eigen-value	α
HR planning	B	0.71		0.63
Staffing processes	C	0.19		0.74
Training and development	D	0.63	2.65	0.78
Reward and compensation systems	E	0.64		0.75
Employee and labour relations	F	0.50		0.81

4. Mean and standard deviation

The table 11 represents the mean and standard deviation of HRM variables, the average mean values of the reward and compensation systems were found about 56.33±8.307, and the average of mean values of employee and labour relations were found about 44.73±7.964. The training and development show average of mean values are 25.69±5.600, it can be seen that, the staffing practices shows lower mean among the variables of 22.91±3.734. Among all variables the training and development, reward and compensation systems and employee and labour relations showed a high standard deviation, which is indicate that means that workers have different opinion on these variables.

Table 11: Mean and standard deviation of HRM variables

Variable	Code	N	Mean	Std. Deviation
HR planning	B	45	31.78	4.847
Staffing processes	C	45	22.91	3.734
Training and development	D	45	25.69	5.600
Reward and compensation systems	E	45	56.33	8.307
Employee and labour relations	F	45	44.73	7.964

5. Correlation analysis

Table 12 shows, the correlation coefficients of HRM practices variables as in the table below), these correlation coefficients were computed using the factor scores derived from the common criteria presented in this table. The table shows that there are high and significant correlations among variables. The results show that the headcount, poverty gap and severity of poverty are 43.14% and 12.58% and 5.72%, respectively, among tenants who reported complete access to irrigated water. The correlation coefficients show the relationship among the variables. The HR planning variable and reward and compensation systems variable show a strong correlation of 65% and it is significant at 1% level. The next strong relationship is identified between HR planning and training and development variable and it is significant at 1% level. The next strong relationship is identified between training and reward and compensation systems variable the correlation is 55% and significant at 1% level. None of the relationships is negative. The lowest correlation is recorded between staffing processes, training and development, reward and compensation systems whose coefficient is positive between 9% and 19%. However, it is not significant at any level.

Table 12: Correlation among HRM variables

Variable		B	C	D	E	F
HR planning	PC	1.00				
	Sig.					
Staffing processes	PC	0.17	1.00			
	Sig.	0.13				
Training and development	PC	0.62**	0.12	1.00		
	Sig.	0.00	0.22			
Reward and compensation systems	PC	0.65**	0.21	0.55**	1.00	
	Sig.	0.00	0.08	0.00		
Employee and labour relations	PC	0.48**	0.09	0.45**	0.41**	1.00
	Sig.	0.00	0.27	0.00	0.00	

PC= Pearson Correlation
*** Correlation is significant at the 0.01 level (1-tailed).*
** Correlation is significant at the 0.05 level (1-tailed).*

6. Regression analysis

Table 13 the values of R and R^2 were very small although there are no regression relations between HRM variables.

Table 13: Regression of HRM practices

Variable	R	R^2	Explained Sum of Square	Total Variance	F value	P
HR planning	0.179	0.032	20.806	628.130	1.491	0.228
Staffing processes	0.091	0.008	05.408	643.528	0.378	0.542
Training and development	0.015	0.000	00.147	648.790	0.010	0.920
Reward and compensation systems	0.174	0.030	19.539	629.397	1.397	0.243
Employee and labour relations	0.213	0.045	29.314	619.622	2.129	0.151
a Predictors: (Constant), F, C, D, B, E						

Conclusion and Recommendations

The data in this study were analyzed by using descriptive and analytical statistical analysis. The descriptive analysis included frequency distributions, cross tabulation and unvaried statistics. The reliability test, T-test, and correlation and regression analysis were used to examine the relationship relation between the human resources management practices as independent variables and employee productivity as dependent variable.

The results demonstrate that the effects of human resources planning, staffing practices, reward and compensation employee and labour relation remained significant in context of the effects of human resources management practices, suggesting that the employee productivity experienced not directly attributable to the quality of human resources management practices that they used. Employee attitudes are the final factor that determines productivity and may well has the strongest effect on the productivity. Because employees are the means by which the companies' goals are achieved, they drive a

company to success or failure. Their social and personal factors can be, intensified either positively or negatively by human resources management policies and practices.

Most importantly, their central focus is to increase organizational productivity. Through their efforts at all levels, the organization's employees determine its effectiveness. Basically, productivity occurs in proportion to the concern and attention employees give to each input component. Thus, management of an organization's human resources necessarily involves devising and implementing policies and practices, which enhance its employees' productivity. For the executive management to be effective in practice there should be evidence in the following items:

- All managers need to be fully conversant with each other's responsibilities and roles.

- Key values and ethics are reflected in the leadership provided by managers at all times.

- The policies and practices of executive management should be integrated into the ongoing with the operational management of each department or working team.

- Forward planning is accepted practice and includes all senior/executive vacancies, development opportunities at all levels, second mint opportunities, and retirement planning.

- All recruitment and selection activity should base on equal opportunities policies.

- Effective job designs should help both management and people by promoting efficiency and performance within the organization and by providing opportunities for learning new skills and improving career opportunities and job satisfaction.

- Employees are also responsible for operating this equipment according to manufacturer's recommendations

The productivity data show that by increasing the number of employee has a significant effect to increase employee productivity.

References

Abdul, Hamid, A. Z. (1996): An analysis of the impact of culture on human resource management practices of companies in Malaysia; DAI-A 57/04.

Arthur, J. B. 1994, Effects of Human Resource Systems on Manufacturing Performance and Turnover, Academy of Management Journal, 3, 37: pp. 670-87.

Asher, J. J. 1972, The Biographical Item: Can it be Improved?, Personnel Psychology 25: pp. 251- 269.

Bartel, A.P., 1994, 'Productivity gains from the implementation of employee training programs', Industrial Relations 33 (4), 411 - 425.

Becker, B. and Huselid, M.A., 1998. High performance work systems and firm performance: A synthesis of research and managerial implications. Research in Personnel and Human Resource Management, 16: pp. 53-101.

Blinkorn, S. and C. Johnson. 1991. Study shows personality test are 'useless' for predicting performance, Personnel Management Plus, 18: pp. 3.

Chan, S., 2005. Relationship between HRM Practices and the Perception of Organizational Performance, Roles of Management Style, Social Capital, and Culture: Comparison between Manufacturing Firms in Cambodia and Taiwan

Delaney, J. &Huselid, M. (1996). The impact of human resource practices on perceptions of organizational performance. Academy of Management Journal, 39, 949 967.

Delery, J. E. and Doty, D. H. 1996. Modes of Theorizing in Strategic Human Resource Management: tests of universalistic, contingency, and configurational performance predictions, Academy of Management Journal, 4, 39: pp. 802- 835.

Fletcher , S. 1991. NVQs, Standards and Competence, Kogan Page, Ladon.

Guest, D. E. 2002. Occupationnel Psychology. In Warner, M (ed.) (2nd ed.) International Encyclopedia of Business and Management. London: Thomson Learning, pp. 4803- 4820.

Heneman H., et al. 1975. Interviewer Validity as a Function of Interview Structure, Biographical Data, and Interviewee Order, Journal of Applied Psychology 60: pp. 748-53.

Koch, M. J. and R. G. McGrath. 1996. Improving labor productivity: Human resource management policies do matter. Strategic Management Journal, 17: pp. 335-354.

MacDuffie, J. P. 1995. Human resource bundles and manufacturing performance: Flexible production systems in the world auto industry. Industrial Relations & Labor Review, 48: 197- 221.

Nancy, P, & Leda, P. (2004): Exploring the mutual interaction of societal culture and human resource management practices: Evidence from 19 countries, Vol. 26 No. 5.

Patrick M.W. et al. (2001): The relationship between HR practices and firm performance: examining causal order, Personnel Psychology; summer 2005; 58, 2; ABI/INFORM Global.

Pfeffer J (1998): The Human Equation: Building Profits by Putting People First, Harvard Business School Press

Pfeffer, J. 1994. Competitive advantage through people: Unleashing the power of the work force. Boston: Harvard Business Press.

Roberts, G., 1997. Recruitment and Selection: A competency approach, Institute of Personnel Management, London.

Robertson, I. T. and Smith, M., 1985. Motivation and job Design, Institute of Personnel Management, London.

Saville, P. and G. Sik. 1992. Personality questionnaires: current issues and controversies, Humam Resources Management Year book, A P Services, London, pp.28- 32.

Schuler, R. S. and I. C. Macmillan. 1984. Gaining competitive advantage through human resource management practices. Human Resource Management, 23, 3: pp. 241 -255.

Schuler, R. S. and S. E. Jackson. 1987. Linking Competitive Strategies with Human Resource Management Practices', Academy of Management Executive, 1, 3: pp. 207-219.

Schmidt, F. L. and J. E. Hunter. 1998. The validity and utility of selection methods in personnel psychology: Practical and theoretical implications of 85 years of research findings. Psychological Bulletin, 1, 24, pp. 262-274.

Smart, D. 1983. Selecting Interviewing, Wiley, New York.

Smith, M. 1988. Calculating the sterling values of selection,

Taylor, S. 1998. Employee Resourcing, Institute of Personnel and Development, London.

Thamhain, H. J. 1991. From Engineer to Manager, Training & Development 45: pp. 66-70.

Townley, B. 1989. Selection and appraisal: reconstructing social relations? In New Perpectives on Human Resource Management, ed J. Storey, Routledge, London.

Ulrich, D. 1997, Measuring human resources: an overview of practice and prescription for results'. Human Resource Management, 36, 3: pp. 03- 20.

Ulrich, D. and D. Lake. 1990. Organizational Capability: Competing from the inside out', John Wiley, New York.

Wickens, P. 1987. The Road to Nissan, Macmillan, London.