#### **UNIVERSITY OF CAPE-COAST**

# MANAGING THE HUMAN RESOURCE AT THE VOLTA RIVER AUTHORITY: AN EXAMINATION OF TRAINING PROGRAMMES OF NON-ENGINEERING STAFF

## STELLA MAWUSHIE DEY-TSIKATA

#### UNIVERSITY OF CAPE-COAST

# MANAGING THE HUMAN RESOURCE AT THE VOLTA RIVER AUTHORITY: AN EXAMINATION OF TRAINING PROGRAMMES OF NON-ENGINEERING STAFF

BY

#### STELLA MAWUSHIE DEY-TSIKATA

DISSERTATION SUBMITTED TO THE INSTITUTE FOR

DEVELOPMENT STUDIES OF THE FACULTY OF SOCIAL SCIENCES,

UNIVERSITY OF CAPE COAST IN PARTIAL FULFILMENT OF THE

REQUIREMENTS FOR AWARD OF MASTER OF ARTS DEGREE IN

HUMAN RESOURCE MANAGEMENT

**MARCH 2010** 

#### **DECLARATION**

#### **Candidate's Declaration**

Name: Stella M. Dey-Tsikata

## **Supervisor's Declaration**

I hereby declare that the preparation and presentation of the dissertation were supervised in accordance with the guidelines on supervision of dissertation laid down by the University of Cape Coast.

#### **ABSTRACT**

This study examined training programmes outlined for non engineering staff in the Volta River Authority (VRA) and if adequate training is being given to this category of staff. It also seeks to find out if there is any point of reference by which training is done, and how systematic is the training programme. The research also seeks to determine if any serious training need analysis is being done.

The study design used for this research was exploratory. It was also a case study, concentrated on one company. Data needs and sources were primary and secondary, and included the administration of questionnaires, interviews of five managers, internet search, library search from books and journals. Secondary data used were mainly documents from the organisation. The data gathered were analysed using descriptive statistics, and presented using tables and charts.

The findings of the study indicated that training needs of staff were identified before nominations for training. Courses attended were mainly off-the-job and were beneficial and relevant to their jobs. It was concluded that staff gained knowledge, skills, and a change in their work attitudes. The study also revealed that non engineering staff of the VRA received as much training as their engineering counterparts. Among the recommendations was the need to consider other forms of training apart from off-the-job training, On-the-job training is strongly recommended for non-engineering staff. A comprehensive training need analysis is recommended at all levels with the active involvement of the trainers, managers and the staff, to facilitate the determination of the appropriate need for training.

#### **ACKNOWLEDGEMENTS**

My sincere gratitude goes to my able supervisor, Dr. Enu- Kwesi, a lecturer at the Institute for Development Studies, for his selfless devotion in offering very useful criticisms and contributions in the course of this study. I am also grateful to Mr. Ken Aikins for his efforts when he was supervising my work till he proceeded to further his education. My gratitude also goes to Mr. Isaac Akesseh, Edwin Gbekor, my sisters Mrs Doris Wunu and Mrs. Rosemary Ayivor for their encouragement and morale support during the course of my study. I appreciate my children Selorm and Senam for their co-operation when I was away from them during the course of my study. I will also like to appreciate the support of VRA Management for allowing me access to their busy staff.

Though I have acknowledged the support of various people in the completion of this dissertation, I hereby absolve them of guilt for any errors and inaccuracies in the project work and accept full responsibility for any shortcomings.

# **DEDICATION**

To my late parents Mr. and Mrs. John Kwadzo Dey.

# TABLE OF CONTENTS

Content	Page
DECLARATION	ii
ABSTRACT	iii
ACKNOWLEDGEMENTS	iv
DEDICATION	V
TABLE OF CONTENTS	vi
LIST OF TABLES	ix
LIST OF FIGURES	X
LIST OF ABBREVIATIONS	xi
CHAPTER ONE: INTRODUCTION	
Background to the study	1
Statement of the problem	5
Objectives of the study	6
Research questions	7
Significance of the study	7
Organisation of the study	8
CHAPTER TWO: REVIEW OF RELATED LITERATURE	
Introduction	9
Definition of training	9

Benefits of training in an organisation	13
Training at the workplace	16
The systematic approach to training	18
Identification of training needs	19
Formulating training objectives	24
Designing training programmes	26
Training techniques or methods	27
Training evaluation	32
The human capital theory	34
Conclusion	36
CHAPTER THREE: METHODOLOGY	
Introduction	38
Study organisation	38
Study design	40
Study population	42
Sampling	44
Data collection procedures	45
Ethical considerations	47
Problems encountered in data collection	48
Methods of data analysis	49

# CHAPTER FOUR: RESULTS AND DISCUSSION

Introduction	50
Background information	51
Techniques or methods used to implement training process	54
Procedure for identification of training needs	63
Benefits and relevance of training programmes	66
The role of the human resource department	73
CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENI	DATIONS
Introduction	77
Summary	78
Conclusions	81
Recommendations	82
REFERENCES	85
APPENDICES:	
APPENDIX A: QUESTIONNAIRE	90
APPENDIX B: INTERVIEW SCHEDULE	96

# LIST OF TABLES

Ta	ble	Page
1:	Study population in selected departments	42
2:	Sample size and respondents in selected departments	43
3:	Actual number of respondents by departments	51
4:	Length of service	52
5:	Length of service and type of training	57
6:	Methods used in selecting trainees	60
7:	Selection of trainees based on educational background	61
8:	Number of training programmes attended	67
9:	Content of training programmes attended	69
10:	Relevance of the training programme	70
11:	Training cost of four engineering departments against	
	four non-engineering departments from 2001-2004	72
12:	Nomination for training as a reward or based on training needs	74

# LIST OF FIGURES

Figure		Page	
1:	Organisational structure of the Volta River Authority	39	
2:	Educational background of respondents	53	
3:	Nature of training programmes	55	
4:	Determinants of training needs by objectives	64	
5:	Other determinants of training needs	65	

## LIST OF ABBREVIATIONS

GIMPA Ghana Institute of Management and Public Administration

HR Human Resource

MBA Masters in Business Administration

MDPI Management Development and Productivity Institute

NED Northern Electrification Department

VRA Volta River Authority

#### **CHAPTER ONE**

## **INTRODUCTION**

#### **Background to the study**

Economists, management scientists, social scientists and organisational psychologists have produced new and different ways of looking at organisations. Jin (1996), a management theorist, defines organisations as the frameworks of the management process. On the other hand, Wikipedia, a free online encyclopedia, defines organisation as a group of people who work together. It also defines it as an act of organising a business or an activity related to business. It goes on further to define an organisation as a social arrangement which pursues collective goals, which controls it own performance and which has a boundary separating it from its environment.

The main objective of all organisations is to survive and develop. In order to survive, the organisation must continue to provide the kinds of goods and services demanded by its customers and clients, bearing in mind that such demands change. Organisations also stimulate demand by creating and marketing new products and by modifying existing ones. In order to achieve these objectives the human resource (HR) needs in organisations need to be managed. People are the most valued asset and human resource management is one of the most important

employer responsibilities. Employees are important to the mission and success of any organisation. Informed employees who understand the policies, procedures, rules, and regulations are as important to any organisation as the quality of the services provided. Like all other resources of the company, the employees possess value because they provide current and future goods and services and without them it will be virtually impossible for organisations to thrive.

Training and development is vital to every organisation since it develops new knowledge and skills in employees to enable them put in extra and improved performance. It therefore increases efficiencies in processes resulting in financial gain, innovation in strategies and products and the capacity to adopt new technology and methods. Likewise it also increases job satisfaction, morale and motivation among employees. Similarly, it also reduces employee turnover and enhances the company's image. Goss (1996), maintains that employees are valued assets and should therefore have their competences developed.

In order to support the important role training and development programmes play, Sheard (1997) states that in response to growing competition, the best way to improve the business performance is to improve the performance of the people working within. Such recognition exists worldwide and organisations in Ghana including the VRA also try to improve the performance of their workforce.

The Volta River Authority (VRA) or (Authority) formally came into existence on 26<sup>th</sup> April 1961, under the Volta River Development Act, Act 46 of

the Republic of Ghana. It is a public sector utility organisation in the energy sector. The Authority's primary function is to generate, transmit and distribute electricity for industrial, commercial and domestic use. The Volta River Authority seeks to be the power utility of excellence in the West African subregion. The mission of the Volta River Authority is to produce and supply reliable electricity to meet customers' demand and stakeholders' expectations for the socio-economic development of Ghana and the West African sub region, while maintaining the highest standard of safety and sustainability of the environment.

#### In this regard, VRA strives to:

- Be ahead of the competition in the power markets both in Ghana and the sub-region, pool resources and pursue co-operation with other power utilities to improve reliability of power supply.
- Maintain a well managed and financially sound power utility and subsidiaries to fulfil its obligation to its owner, the state of Ghana and other stakeholders.
- Maintain highly skilled, motivated and productive employees who are responsive to change.

VRA is a public organisation which has autonomy in its operations but is ultimately responsible to the government of Ghana. It raises its own capital and is

responsible for all its operations. Government appoints the board of directors and the chief executive and also assists the VRA when it requires financial assistance as and when the need arise. The Authority is an engineering biased organisation and has a wide variety of its staff who are engineering staff as well as non engineering staff. VRA has core staff whose functions are related to the purpose for which the organisation was established, and supportive staff who are involved in non-core business operations such as administration, finance, information technology, estate management and security. However, both core and non core staff play vital roles in the success of any organisation.

As in other organisations, training in VRA is seen as crucial to its success. In the light of this, VRA has taken major steps to change the structure of the training division over the past seven years. The physical structures of the training school were expanded creating more rooms, new training programmes introduced, more trainers employed, additional computers purchased and other equipment which will help enrich training of staff, have been procured. This became necessary due to the power sector reform at the time, coupled with changes in science, technology, economics, finance and administration. It required that employees should be exposed to new methods of working to increase efficiency and to meet the challenges of business on the job.

### Statement of the problem

The VRA has only one training policy for both engineering and non engineering staff. Due to the peculiar nature of the hydro and thermal plant in the VRA, any engineer or technician recruited has to be trained for a period of two years to get acquainted with how the plants operate. Thereafter these employees undergo yearly courses to update their skills and knowledge in new developments in the industry (VRA 1998).

On the other hand, non engineering staff are recruited as pre-skilled labour that have been trained elsewhere, with the exception of management trainees who are graduates from various universities. These categories of staff are recruited after their national service and undergo a two year management training programme.

Training of non-engineering staff is fraught with irregularities. The problem arises after the two years where management trainees and other non engineering staff do not benefit from any systematic form of training in the course of their work as the years go by. The training school usually establishes list of courses for this category of staff, which is sent round to the departments who then select those they deem fit to attend these courses.

The study sought to find out the extent to which non-engineering staff receive training and whether there is any point of reference by which training is done, and how systematic the training programme is.

The research also sought to determine if any serious training need analysis is being done and in addition, if selection of participants for training is motivational, a reward for long service, based on performances or on training need analysis.

## Objectives of the study

Based on the issues above the prime objective of this study was to examine training programmes outlined for non engineering staff in the Volta River Authority (VRA).

The study specifically sought to:

- Assess the techniques or methods used to implement the training process.
- ii. Examine procedures that exist for the identification of training needs.
- iii. Assess the benefits and relevance of training for non engineering staff.
- iv. Determine the role the Human Resource Department plays in training of non engineering staff.
- v. Make recommendations to improve upon the existing training given to non-engineering staff.

## **Research questions**

Having considered the above issues, questions that the study sought to answer were:

- i. How are the techniques and methods for the training process implemented?
- ii. What procedures exist for the identification of training needs?
- iii. How relevant and beneficial is the training for non-engineering staff?
- iv. What role does the human resource department play in training at the work place?

## Significance of the study

The purpose of this study is to help build upon the existing training provided for non engineering with the view to achieving high performance in the day to day administration of the organisation. It will serve as the basis for better policies for improving training and development of non-engineering staff.

Recommendations and results from the study will also serve as the basis for further studies in the Volta River Authority and elsewhere. All things being equal, improvement in staff training and development programmes will lead to good performance and for that matter increase the level of productivity and profit.

This study will benefit academics by adding to the knowledge bank in social sciences and arts. It will also serve as a platform for human resource practitioners to develop, plan and implement programmes and offer facilities that will improve training. In addition, this research will provide information to the general public and will serve as a guide to promote human capital development directed towards the needs of the public. In effect training and development will continue to play a substantial role in national development.

#### **Organisation of the study**

The study is organised in five chapters. Chapter one covers the introduction, the background, statement of the problem, objectives, research questions and organisation of work. Chapter two deals with review of related literature, which includes discussions on training and development. Chapter three focuses on methodology and covers study organisation, discussions on sampling, choices and use of data collection procedures, techniques and instruments. It also includes problems encountered during data collection. Chapter four presents the results and discussion while Chapter five presents the summary, conclusions and recommendations.

#### **CHAPTER TWO**

## REVIEW OF RELATED LITERATURE

#### Introduction

This chapter examines formal definitions of training and development and the theoretical framework upon which this study is based. The focus is on the following areas: the definition of training and development, the training philosophy, the need for training in an organisation, training in the workplace and the systematic approach to training.

## **Definition of training**

Livy (1990) indicates that training is, to some extent, a management reaction to change, i.e. changes in equipment and design, methods of work, new tools and machines, control systems, or in response to changes dictated by new products, services or markets. Training also induces change. Training is both a cause and an effect of change. Accordingly, Livy defines training as the systematic development of the attitude, knowledge, skills and behaviour pattern required by an individual in order to perform adequately, a given task or job. Livy's (1990) definition considers training only as a modification of behaviour or

the acquisition of job-specific skills or knowledge, which will help the achievement of organisational goals without recognizing the need to tailor training to meet the individual goals and aspirations. The definition is also silent on the need to tailor training for human resource development for the achievement of strategic organisational goals.

Cascio (1995) considers training to consist of a planned programme designed to improve performance at the individual, group and/or organisational levels. Improved performance in turn implies that there have been measurable changes in knowledge, skills, attitudes and or social behaviour. Though Cascio's definition is in part similar to that of Livy as they both see training as a systematic process for the modification of attitude for the acquisition of skills and knowledge for the performance of a task, Cascio goes further to indicate the fact that training should be a holistic process for the achievement of both individual aspirations and corporate goals, and emphasises the fact that the improved performance should be seen in measurable changes in knowledge, skills, attitudes or social behaviour.

Breadwell and Holden (1995), in adopting the definition by Manpower Service Commission of England (1981), indicate that training is a planned process, which leads to modification of skills and knowledge for improved performance in an organisation. Being a planned process, it requires the systematic designing of the programme, taking into consideration the purpose of the exercise, the content and participants involved and the principles of adult learning incorporated for the achievement of the required knowledge and skills.

This definition is similar to those of Cascio and Livy as they all see training in the light of modification of attitude and acquisition of knowledge and skills. However, Breadwell and Holden (1995) indicate further that training helps to develop human resources for both current and future needs of the organisation.

Ivancevich (1995) postulates training as a systematic process of altering the behaviour of employees in a direction that will achieve organisational goals. Training is related to present job skills and abilities needed to be successful. A formal training programme is an effort by the employer to provide opportunities for the employee to acquire job-related skills, attitude and knowledge. Ivancevich sees training as the acquisition of job related skills and abilities that will lead to an improvement in current and future performance. It is also seen as a conscious effort on the part of an employer to provide the needed opportunity for the acquisition of job related skills and abilities in a planned process. This meaning of training places emphasis on the achievement of organisational objectives or goals by imparting the skills and abilities needed to make it possible. This is in agreement with earlier discussions made by Cascio, Breadwell and Holden as an attempt to impart specific job related skills.

Contrary to definitions by Cascio, Breadwell and Holden who see training as skill acquisition that will lead to improved performance at both the individual and organisational level and as a tool for career development, Triner, Greenberry and Watkins (1998), in agreement with Ivancevich define training as the process of acquiring and improving the skills, knowledge, and attitudes required for

present job performance. Training, as an intervention to solve a performance problem, may take many forms, for example: interactive and hypermedia-based, experiential and discovery learning, embedded training, computer based instruction, teleconferencing, etc. Whatever the means employed, the desired end is the same: mastery and acquisition of the skills, knowledge, attitudes, and abilities for the performance of mission and job-related tasks. Triner et al. (1998) consider training as an intervention only to fill a skill or knowledge gap that exists between required and actual skills for effective and efficient job performance. This definition emphasises the achievement of organisational goals without considering the goals and aspiration of the individual. Nevertheless it emphasises the necessity of training as an exercise to improve on skills required for the efficient performance of a job related task.

Cole (2002) opines that training will be understood as any learning activity, which is directed towards the acquisition of specific knowledge and skills for the purposes of an occupation or task. According to him, the focus of training is the job or task. Cole's assertion, like the earlier scholars', reinforces the fact that training is knowledge or skills specifically directed towards a particular job role. This meaning seeks to differentiate between training and development, which apart from focusing on the task and organisation also emphasises the individual's development. He went on to suggest the following potential benefits that an organisation will enjoy if training is organised effectively and efficiently, and these include:

- i. The development of knowledge and skills in the workforce
- The harnessing of work experience and other forms of on-the-job development, job performance and productivity
- iii. Achievement of improved job performance and productivity
- iv. Improved product quality and services to customers and
- v. Increased motivation among employees

The justification for a training exercise and the realisation of its potentials thereof, as well as its effectiveness as asserted by Cole (2002) and Ivancevich (1995) hinge on the conduction of training needs assessment.

### Benefits of training in an organisation

Organisations require competent personnel in order to have their goals, aims and objectives fulfilled. In the business world today, competition, rapid technological changes, globalisation and other changes in management practices have caused management of companies to realise the need for staff training as crucial tool since employees more often than not require some form of training to fit properly into workplace. At the same time, older employees need training to ward off obsolescence and to keep them alert to the demands of their jobs. In adding value to the key resource in the organisations, training is one vital way of ensuring the availability of competent personnel to perform duties expected of them. This pre-supposes that the efficiency of any organisation depends directly on how well their staff are trained.

Boella (1992) examines the issue of training in organisations in terms of staving off obsolescence and posits that training is necessary to avoid the inevitable situation of obsolescence. Boella (1992) indicates that one of the features of working life today is that whatever is obtained at a start will certainly become redundant or obsolete during the same working lifetime. The need to train, to acquire new knowledge and new skills has become an everyday aspect of each individual's working life. In some cases, this may merely be an updating process, but in others, it will require a complete change from one occupation to another.

Employee training is categorised into upgrading, updating, refresher specialised and accelerated exercises (Gretler, 1972). Upgrading involves acquiring supplementary knowledge and skills so as to increase versatility and occupational mobility, though it may not necessarily lead to promotion. On the other hand, updating implies the attempt to bring the knowledge and skills of an employee up to date with respect to new development such as new tools and equipment and new materials processes. The updating exercise helps the employee to manage change. Refresher training serves to refresh knowledge and skills which have been partly forgotten perhaps as a result of lengthy interruptions in an employee's working life. Specialised training is undertaken for the triple purpose of consolidating, deepening and broadening the knowledge and skills acquired during basic training as a means of positively influencing the occupation.

In cases where the employee's original knowledge and skills are not required in the organisation, he or she is to be retrained. He or she is given accelerated training to build upon what he already possesses. Massie and Douglas (1992) affirm that the training function takes personnel as "raw material", and improves and develops them to their highest potential. Beach (1985) agrees with Gretler (1972) that training is designed expressly to enable adults to understand their work, perform it more effectively and advance within it.

Generally, it is accepted that training provides benefits for the organisation (Gretler, 1972; Beach, 1985; Betts, 1989; Boella,1992). Labour effectiveness depends on how well the staff of an organisation are trained. Individual, team and corporate performance are enhanced in terms of quality, output, speed and overall productivity. In addition, commitment of staff is increased through training, and employees identify with the mission, vision and objectives of the organisation. Employees, therefore welcome any help to manage change in policy, technology, management and procedure since they comprehend the reasons for these. On the individual level, a positive attitude is developed and oriented towards performance improvement and capacity building owing to the fact that, being at home with the demands of the job, worker morale is boosted and job-satisfaction is obtained.

According to Osei-Bonsu (1977), the Government of Ghana and the State Enterprise Commission recognise personnel training as an important organisational step towards the realisation of effective, reasonable satisfied

personnel for the organisations. In this regard, all employees need to be encouraged to go through orientation and induction courses, on-the-job training, off-the-job training such as in-service and institutional training programmes. This will enhance their efficiency on-the-job, develop their potentials and improve their prospects for advancement in their organisations by way of promotion.

## **Training at the workplace**

Training at the workplace may take a variety of forms. In its broadest sense it may be identified with career development and the acquisition of required knowledge, skills and attitudes from the continuous experience and opportunities provided by the work itself. The human resource department has the key role in the supervision and direction of career paths to enable employees to widen their horizons and to develop their capabilities to assume wide responsibilities for the future. Line managers also obviously have the main responsibility for training their own staff at the workplace. They may do this in the course of normal work by delegation, job rotation, attachments and visits to related work unit, placing individuals under the tutelage of selected, experienced employees or by the use of formal workplace methods such as coaching, open and distance learning (Cascio, 1992). In recent times as a result of the ever-increasing emphasis on cost effectiveness, there has been a noticeable tendency for much of the training that was formerly given at training centres to be now carried out at the work place.

This shift applies particularly to training related to individual proficiency, that is, what is described as trade or vocational training.

Most people are familiar with formal methods of training centres and most organisations have permanent centres or hire accommodation for central training. Here, the training is conducted by full time training staff, assisted occasionally by part-time lecturers or tutors. Trainers usually work in groups and the methods commonly employed are lectures, discussions groups, case studies, simulation, role play and exercises of various kind. This formal method of training is essential for some forms of capacity building, especially in managerial and other related subjects. The central trainer must design central training in collaboration with line mangers to ensure that it provides what they and their staff need for effective performance of work (VRA, 1998).

Some central courses especially those provided by external centres, could be described as off-the peg. To avoid a mismatch between the trainee and the course, it is most important that the training centre should publish specific details about the course such as aims, objectives, target population, contents, methods and duration (VRA, 1996)

On the-job-training can be provided by managers, team leaders, colleagues or mentors (Breadwell & Holden, 1995). Off-the- job training, on the other hand, may be provided by members of the training department as it is done in the Volta River Authority. Other training providers include external education and training establishments or training providers such as training consultants or guest

lecturers. Increasingly, organisations are turning to external training providers rather than maintain their own establishment of training staff. Line managers also have a part to play in bringing reality into the classroom to ease the transfer of learning to work and to underline their prime responsibility for training. Therefore those who provide off-the-job training must be carefully selected, briefed and monitored to ensure that they make the right contribution.

## The systematic approach to training

Systematic training is training which is specifically designed to meet defined needs. It is planned and provided by people who know how to train and the impact of training is carefully evaluated. Armstrong (2000) indicates that systematic training is based on a simple four stage model expressed as follows:

- (i) identify training needs
- (ii) decide what sort of plan is required to satisfy these needs
- (iii) use experienced and trained trainers to implement training
- (iv) follow up and evaluate training to ensure that it is has been effective.

Armstrong's model thus provides a good basis for planning training programmes.

### **Identification of training needs**

Various studies have emphasised the importance of training needs assessment as a pre-requisite to establishing the need for the exercise and the content thereof. Hall (1984) comments that the first step of vital importance in human resource development is the identification of needed skills and active management of employee learning for their long- range future in relation to explicit corporate and business strategies. He emphasises that many organisations invest considerable resources in training and development but never really examine how training and development can most effectively promote organisational objectives. Hall's assertion seeks to emphasise the need to identify the skills and knowledge required in consonance with the business strategies through training needs assessment so that the learning activity will be managed for the achievement of the organisational objectives. This opinion reinforces the necessity of a well-organised training needs assessment as the basis for the effectiveness of training.

Cascio (1995) identifies three levels of analysis for determining the needs:

- 1) Organisation analysis focuses on identifying where within the organisation training is needed.
- 2) Operations analysis attempts to identify the content of training-what an employee must do in order to perform competently.

3) Individual analysis determines how well each employee is performing the tasks that make up his or her job.

According to Cascio (1995), training needs analysis must be done at the corporate level against the backdrop of organisational objectives and strategies. The view of Cascio on training needs analysis indicates that the exercise should be a comprehensive process beginning from the corporate or organisational level by relating the assessment of the needs to the achievement of organisational goals. Identification of training needs at this level inform the operations analysis which entails a careful examination of the job to be performed after training. This culminates in individual analysis to determine a gap if any between actual and desired performance of employees.

The view of Cascio supports Hall's assertion, which intimates that training needs assessment should be done in consideration of the business and corporate strategies of the organisation so as to achieve the desired goals. That is, the corporate or business strategies form the basis of training needs assessment.

Breadwell and Holden (1995) also stress the importance of training needs analysis. They indicate that in order to create a human resource development plan the first step is to analyse the training needs of the organisation in relation to the organisation's strategy and equate it with the needs of the individuals within it. They stress the fact that training needs assessment is inevitable in the definition of a human resource development plan and that it should be comprehensively conducted

from the corporate or organisational level through to the individual's level in order to meet the aspiration of the organisation as well as the employee. This view is in support of the assertion of Cascio, which recognises the need to analyse the organisation as well as the individual through training needs assessment to be able to determine the performance deficiencies that need to be corrected by training for the achievement of corporate goals.

Ivancevich (1995), in studying training and its strategies, indicate that the first step in managing training is to determine training needs and set objectives for these needs. According to him, training needs assessment involves analysing the organisational needs; knowledge, skills, and ability needed to perform the job; and the person or jobholder's needs. This implies a determination of the organisations needs vis-à-vis its objectives and strategies, the consideration of the task to be performed and the appropriate skills and knowledge needed for efficient performance standards. Ivancevich agrees with the earlier studies of Cascio (1992) and Breadwell and Holden (1995), which recognise the need to conduct training needs assessment in consideration of the organisation's goals and the individual's aspirations.

Osinski and Miller (1999) indicate that designing a training and development programme involves a sequence of steps that can be grouped into five phases: needs assessment, instructional objectives, design, implementation, and evaluation. In order to be effective and efficient, all training programmes must start with a needs assessment. Long before any actual training occurs, the

training manager must determine who, what, when, where, why and how of training. In order to do this, he must analyse as much information as possible about the:

- Organisation and its goals and objectives
- Jobs and related tasks that need to be learned
- Competencies and skills that are needed to perform the job and
- Individuals who are to be trained.

The assessment begins with a "need" which can be identified in several ways but is generally described as a "gap" between what is currently in place and what is needed, now and in the future. Gaps can include discrepancies/differences between what the organisation expects to happen and what actually happens, current and desired job performance and existing and desired competencies and skills. Needs assessment can also be used to assist with: competencies and performance of work teams, problem solving or productivity issues, and the need to prepare for and respond to future changes in the organisation or job duties. The results of the needs assessment allow the training manager to set the training objectives by answering two very basic questions: who, if anyone, needs training and what training is needed.

Osinski and Miller (1999) emphasise needs assessment as the most important exercise, which has to be conducted as a basis for training. Their findings are in agreement with submissions made by earlier scholars on the essence and relevance of training needs assessment. Armstrong (2000:551)

comments that "training must have a purpose and that purpose can be defined only if the learning needs of the organisation and the groups and individuals within it have been systematically identified and analysed." He goes on to indicate that training needs analysis is partly concerned with defining the gap between what is happening and what should happen. This is what has to be filled by training, i.e. the differences between what people know and can do (actual performance of individuals) and what they should know and be able to do (targets or standard of performance). However, Armstrong (2000) cautions that it is necessary to avoid falling into the trap of adopting the 'deficiency model' approach, which implies that training is only about putting things right that have gone wrong. Training is much more positive than that. It is, more concerned with identifying and satisfying learning and development of multiple skills needs, fitting people to take extra responsibilities, increasing all-round competence and preparing people to take on higher responsibility in the future.

According to Armstrong (2000), unlike the earlier scholars before him, the need assessment should not concentrate only on determining deficiencies existing in present job performance, which should be filled, but that it should be comprehensively done to be able to help realize the potentials inherent in employees so that they can take higher responsibilities.

Cole (2002) opines that organisations adopting a systematic approach to training and development will usually set about defining their needs for training in

accordance with a well-organised procedure. Such procedure will entail looking at training needs from a number of perspectives:

- i. organisation i.e. corporate requirements
- ii. department or function
- iii. job or occupational group
- iv. individual employee.

He also supports the essence of training needs assessment as the basis for training in line with the views of earlier scholars before him.

With the conduction of training needs assessment and the formulation of the instructional objectives, a training methodology or implementation design appropriate for the achievement of the objectives should be selected. Studies conducted on training programmes have reiterated the importance of the selection of appropriate training methodology for the achievement of training and learning objectives.

## Formulating training objectives

Producing sound objectives is crucial to the design and provision of cost effective training. Tyson and York (1994) agree that objectives must be specific, indicating exactly what should be accomplished, who should accomplish it, how it should be accomplished and within what time frame they should accomplish it. It is important to give specific details to eliminate confusion about objectives and ensure that trainees know and understand what is expected of them. Objectives

should be set high enough that trainees must extend themselves somewhat to achieve them. On the other hand, objectives should not be set so high that

trainees become frustrated and stop trying. Objectives that challenge trainees' abilities are more motivating than easily attained objectives. Trainers and developers should therefore establish achievable training and development objectives and all trainees should share this view.

Objectives should be measurable. To buttress this fact, Tyson and York (1994) indicate that objectives should be as measurable as possible and capable of achievement in the time allowed for training. However, it is much easier to produce objectives that enable learning achievement to be confidently assessed for some training subjects than it is for others. It is relatively straight forward to define objectives in measurable terms, for specific activities such as typing and driving, but much more difficult with a subject such as management.

Training objectives can be categorised into four broad headings:

- (i) Knowledge objectives : That is the material that the participants or trainees are expected to be familiar with after the programme
- (ii) Attitudinal objectives : These are the beliefs and convictions that trainees are expected to hold as a result of the programme.
- (iii) Skill objectives : The kind of behaviour trainees should be able to demonstrate after the training programme

(iv) Organisational objectives - : These can be in a form of stating changes in profitability, sales, service efficiency and employee turnover.

It is important to conduct instructional analysis to identify the relevant subordinate skills required for the trainee to achieve the training goal. Osei-Bonsu (1977:17) defines a subordinate skill "as a skill that while perhaps not important in and of itself as a learning outcome must be achieved in order to learn some higher or super ordinate skill. It is what the trainee needs to know in order to achieve the goal". Once training objectives have been defined, it is possible to address the next stage in the process and to consider questions such as who will provide the training, what form it will take, what will be the content, where it will be held and what techniques will be used.

### **Designing training programmes**

Generally, there are three categories or modes of designing training programmes and these are Action Design Approach, Packaged Approach and the Tailored Approach (Zemke & Zemke, 1995). The Action Design Approach is a psychological school of thought that holds that people get trained better when they do what they are supposed to be learning. Action design is problem centred and lasts for two to three months. The Package Approach is a programme that exists already and trainees are sent to take the package. The Tailored Approach is where the organisations own Human Resource Department or Consultants structure or tailor the training programmes to meet specific organisational needs.

It could be in house or out house training. This type of approach is often used to address performance gaps.

In developing a programme the strategy should be for a set of objectives related to the trainees' expertise, including the programme content, which refers to the material to be used in the training programme. Programme materials must be appropriate for the trainee's current state of knowledge, attitudes or skills as well as their ability to learn.

Appropriate sequencing of content to be presented is important here. The instructional analysis serves as a tool in determining the sequence in presenting information. For instance, lower level skills should be taught before progressing up the hierarchy. Accurate estimate of time is important for the achievement of the objective. The time allocated to each topic or specific aspect should be determined with regard to its relative importance, difficulty, complexity as against the total amount of time available for training.

## **Training techniques or methods**

Training techniques are the methods and principles used to provide the required instructions for the achievement of training objectives. It is also important because it aids in the implementation of the training programme. Cascio (1995) indicates that training techniques can be classified in three ways (i) information presentation (ii) simulation methods, or (iii) on-the-job and off-the-

job training. Information presentation technique entails the systematic presentation of a subject matter, which includes lectures, conference methods, correspondence courses, motion pictures, reading lists, programmed instruction and computer-assisted instruction.

Simulation methods involves interactive exercises in which trainees practice their skills in mock situations based on real work-related activity through the use of role-playing, programmed group exercises and the in-basket techniques and business games. On-the-job training includes orientation training, apprenticeship, near- the- job training (using identical equipment but away from the job itself), job rotation, committee assignments, understudy assignments, on-the-job coaching and performance appraisal.

According to Cascio (1995), choosing a training technique that best suits a given situation must first be defined through a training needs assessment, which will determine the essence of the training and the content thereof. He states further that a chosen method should meet the minimal conditions needed for effective learning to take place.

Ivancevich (1995) recognises four principal types of training depending on the place and the type of training. These four methods of training are apprenticeship, vestibule, on- the -job and off- the- job training. Apprentice training is a combination of on-the-job and off-the-job training. The apprentice commits to a period of training and learning that involves both formal classroom learning and practical on-the-job experience. In vestibule training, the trainee

learns the job in an environment that stimulates the real working environment as closely as possible. On- the- job training is the training process where the employee is placed into a real work situation and shown the job and the tricks of the trade by an experienced employee or the supervisor. This includes coaching, mentoring and apprenticeship, in which case the trainee learns from an experienced person.

In agreement with Cascio (1992) and Ivancevich (1995), Breadwell and Holden (1995) reiterate that training could be a cost effective investment if the most appropriate method is used for its delivery. They indicate that training methods could generally be divided into two broad types namely "on-the-job" and "off-the-job" training.

On-the-job training is conducting training in the job setting which can vary from relatively unsophisticated "observe and copy" methods to highly structured courses built into workshops or office practice. Examples of on-the-job training according to Breadwell and Holden, include "Sitting by Nellie" and "Learning by doing", mentoring, shadowing and job rotation." "Sitting by Nellie and Learning by doing" involves a training methodology where the trainee is attached to an experienced colleague who takes him through the job processes to help him acquire the needed skills and knowledge to be on his own. Mentoring is a system whereby a senior or experienced employee takes charge of the training and development of a new employee by acting as a mentor who advises and protects the trainee to achieve the needed career development. Under the

shadowing method the trainee is taken through the entire organisation by making him under study his or her senior colleagues at the various departments of the organisation. Job rotation involves the switching of roles to allow the trainee to understand the entire job process.

Breadwell and Holden (1995) categorise training programmes conducted outside the confines of the work place as off-the-job training. Under off -the-job training they make mention of workshops, seminar, case studies, role-play, simulation techniques, interactive computer learning packages, video and audiotapes and problem solving.

Cole (2002:354) indicates that "training methods are essentially the means by which we intend to communicate information, ideas, skills, attitudes and feelings to learners". He further reiterates that it is common to find methods categorised according to whether they are employed in on-the-job or off-the-job situations. Even though he categorises training methods into only on and off the job, it is in line with earlier submissions made by Breadwell and Holden (1995). Cascio (1995) and Ivancevich (1995). Cole emphasises that the selection of a particular method depends on the purpose of the exercise and the training needs assessment. For instance he indicates that off-the job method is the most appropriate when emphasis on learning is on developing an understanding of general principles, providing background knowledge and generating an awareness of comparative ideas and practices.

In the case of the choice of on-the-job training, it is most appropriate when learning is more on the acquisition of specific, local knowledge in a 'real' situation. He suggests the following as off-the-job method of training. They include lectures/talks, classroom instruction, programmed instruction, group discussions, and case study analysis and simulation exercises. For on-the-job training he mentions the following; job instructions, learning from experienced workmates (e.g. 'sitting by Nellie') coaching/counselling, delegation, secondments and special projects.

Off the job methods involve training that takes place away from the work situation. Classroom methods that have been popularised under off-the-job training involve lectures, conferencing, role-play, business-games, simulation and case studies, plenary sessions and field trips. This approach is considered suitable for conveying specific information. It is used for imparting effective technical and problem solving skills.

Though Cascio (1995) and Ivancevich (1995) are in agreement on training methodology on the basis of location and mode of delivery, Cascio categorises them into three types while Ivancevich differentiates the methodology into four principal types. Cascio considers off-the job training as information presentation which entails methods like lectures, conferences, role play, and business games method among others. The effectiveness of a given training method in achieving training goals depend on the integration of principles of adult learning incorporated in the process.

## **Training evaluation**

Hamblin (1970) contributes a well-known definition of evaluation, in a training context, as any attempt to obtain information (feedback) on the effects of a training programme, and to assess the value of the training in the light of that information. This definition emphasises the importance of information –gathering in evaluation for the needed feedback to determine the effectiveness of a training programme.

According to Cascio (1992), training must be evaluated by systematically documenting the outcomes of the training in terms of how trainees actually behave back on their jobs and the relevance of the trainees' behaviour to the objectives of the organisation. This opinion seeks to indicate that evaluation should be done thoroughly to be able to determine the outcome of the exercise in order to improve upon it.

Assessing training effectiveness often entails using the four-level model developed by Kirkpatrick (1994). According to this model, evaluation should always begin with level one, then as time and budget allows, should move sequentially through levels two, three, and four. Information from each prior level serves as a base for the next level's evaluation. Thus, each successive level represents a more precise measure of the effectiveness of the training programme, but at the same time requires a more rigorous and time-consuming analysis.

The first level of training evaluation is based on assessing the participants' feelings and opinions following the training. This can be measured by

administering an instrument to assess the trainees' satisfaction with the training, sometimes called a "happiness scale." The second level of training evaluation assesses whether the participants gained knowledge or skills from the training. This is a more objective measure that can be assessed with many different strategies varying from simple knowledge tests to complex skill demonstration exercises. Trainees who demonstrate that they acquired knowledge from a training programme will not necessarily be able to apply the knowledge to their job. However, acquiring new knowledge or skills is the first step toward positive work performance changes. The third level of evaluation is based on assessing whether new skills and knowledge are applied on the job. The fourth level of evaluation is the outcome evaluation. This is the most difficult level of evaluation to conduct. This evaluation serves to determine if the training is affecting desired outcomes, such as organisational performance. This model of Kirkpatrick considers evaluation as a comprehensive process that should be conducted from the beginning of the training cycle, immediately after the assessment of the skill and knowledge transfer, and the ultimate effect on the organisation's performance.

Breadwell and Holden (1995) state that training evaluation is commonly seen as a feedback loop, starting with course objectives and ending by collecting end of course reactions which are then generally filed away and not acted on. They seek to reiterate that though evaluation is recognised as an important aspect of training it is concentrated at only the first level immediately after the exercise

without assessing the performance of the individual on the job in order to improve on the exercise. They emphasise that the penultimate stage in the training strategy is the evaluation and monitoring of training. It is one of the most important but often the most neglected or least adequately carried out part of the training process.

Armstrong (2000) opines that it is important to evaluate training in order to assess its effectiveness in producing the learning outcomes specified when the training intervention was planned and to indicate where improvements or changes are required to make the training even more effective. He indicates that evaluation leads to control, which means deciding whether or not the training was worthwhile (preferably in cost-benefit terms) and what improvements are required to make it even more cost-effective. This view is similar to those of Hamblin (1970), Cascio (1992), Kirkpatrick (1994) and Breadwell and Holden (1995).

The review of the framework for a planned training programme as discussed was done in the context of the human capital theory, which reflected in the philosophy behind the training programme of non engineering staff.

### The human capital theory

Becker (1964:5) defines human capital as the stock of knowledge, skills and abilities, which potentially help to increase productivity and performance at work and also life in general. According to this definition, human capital can be a

goal/target for individual well-being and a means of achieving more fundamental long-term goals at work or in a life time career. Following from this interpretation of human capital, he postulates that expenditure on training and education, a costly investment is a means to achieving higher productivity and thereby higher wages.

According to the theory, training or education raises productivity of workers by imparting useful knowledge and skills, which in the long run will raise their future income and life time earnings. This concept seeks to emphasise the importance of training in the development of the skills and knowledge of workers with a resultant effect of increased productivity and higher wages (Becker, 1964).

Schultz (1975), after extensively developing the theory, opines that education and training enhance the individual's ability to successfully deal with disequilibria in changing economic conditions. In his view such ability includes that of perceiving a given disequilibrium, analysing information and relocating resources. Schultz's assertion, though in line with the views of Becker (1964), tries to analyse the importance of training and education in the determination of shortcomings in one's endeavour and in the allocation of resources.

Levin and Kelley (1994), in support of the theory, suggest that education can improve productivity only if complementary inputs exist, which include training, contract terms and management practices. They point out the overestimation of the pay-offs resulting from increased formal education by social scientists while ignoring the complementary inputs and conditions. The assertion

of Levin and Kelley (1994), seeks to emphasise the importance of training and other complementary inputs in the performance of workers in a bid to achieve increased productivity and higher wages in tandem with the views of Becker (1964) and Schultz (1975).

Jin (1996) argues that job related training which is provided to working adults is a strategy to re-equilibrate the changing economy and work place procedures and processes due to technological innovations. In the opinion of Jin, technological innovation creates discrepancy between firms' new investments and their employees' competences, skills and knowledge acquired through formal schooling, which can be addressed by employers through on-the-job training.

The opinion of Jin (1996) is similar to the views of Becker (1964), Schultz (1975) and Levin and Kelley (1994) about the importance of investing in the human resources of organisations, through training which will result in increased productivity and higher wages. These opinions are in line with VRA's philosophy on the training as indicated in the Authority's training policy.

### Conclusion

Training at the workplace is a vital tool for the VRA in developing its non engineering staff. Training is geared towards career development and the acquisition of required knowledge, skills and attitudes from the continuous experience and opportunities provided by the work itself. VRA has benefited

from training by producing competent personnel who are abreast with the rapid technological changes, globalisation and other changes in management practices.

Identification of training needs is the first step of human resource development in the VRA. The assessment begins with a "need" in other words, described as a "gap" between what is currently in place and what is needed, now and in the future. Before any actual training occurs, the training manager determines what should be accomplished, who should accomplish it, how it should be accomplished and within what time frame they should accomplish it.

Trainees are given specific details about objectives of the training, to eliminate confusion and ensure that they know and understand what is expected of them. To enable the training manager do this, he analyses as much information as possible with respect to the organisational and departmental objectives, jobs and related tasks that need to be learned, competencies and skills that are needed to perform the job and the individuals who are to be trained. A training plan is designed to satisfy the needs identified; experienced and trained trainers are resourced to implement the training.

The training manager does a follow up and evaluation for the needed feedback to determine the effectiveness of the training programme. The evaluation is conducted from the beginning of the training cycle, immediately after the assessment of the skill and knowledge transfer, and the ultimate effect on the organisation's performance.

#### **CHAPTER THREE**

## **METHODOLOGY**

### Introduction

The purpose of this chapter is to describe the methodology employed in this study. Issues covered in this chapter include study organisation, research design, population and sampling, methods used in collecting data and techniques of data analysis.

## **Study organisation**

The Volta River Authority (VRA) was established under the Volta River

Development Act 46, of 1961 as a body corporate. The Act mandates VRA to operate as a power generation, transmission and distribution entity. The VRA is made up of twenty one departments grouped under four branches namely Advisor,

Office of the Chief Executive, Deputy Chief Executive Engineering and Operation (DCE E&O), Deputy Chief Executive Finance (DCE F), Deputy Chief Executive Services as depicted in the organisational chart.

The Authority operates a total installed generation capacity of 1,710 Mega Watt (MW). This is made up of 1,160MW hydro and 550MW thermal generating capacity. Out of the thermal capacity of 550MW, 330MW is owned by VRA and

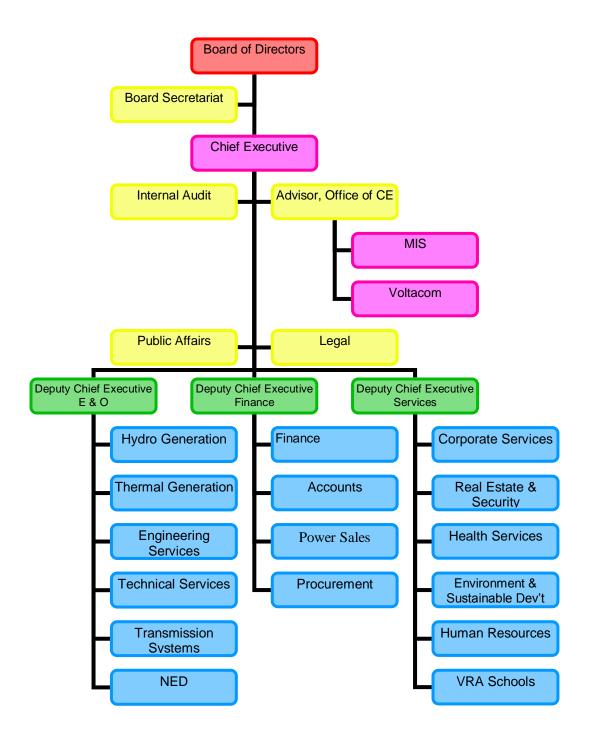


Figure 1: Organisational structure of the Volta River Authority

Source: VRA, 2006

220MW belongs to VRA-CMS Joint-Venture Company, Takoradi International Company (TICO). VRA's transmission system comprises 39 substations and approximately 4,000 circuit kilometres of transmission lines.

VRA also operates interconnections with La Cote d'Ivoire in the southwest, Lome, Togo in the south east and to Dapaong, in the north east of Ghana. VRA distributes electricity in the Northern Sector of Ghana comprising Brong Ahafo, Northern, Upper East, Upper West as well as parts of Ashanti and Volta Regions through its Northern Electricity Department (NED).

VRA is also responsible for providing assistance for the socio-economic development of the Volta Basin. It operates as a local authority for the Akosombo Township and exercises administrative responsibility over its Akuse Estates. The Authority has established the following subsidiaries as by-products of VRA's core operations: Kpong Farms Limited, Akosombo Hotels Limited, Volta Lake Transport Company and Volta Telecommunication Limited. The Authority implements environmental management programmes to mitigate the adverse impacts of its operation.

## Study design

The study design used for this research is exploratory in nature. It does not follow directly from an existing study. Instead, data is collected, analysed and used to develop a theory. It is also a case study, concentrated on one company. Wikipedia, the free online encyclopedia defines exploratory research as a type of

research conducted because a problem has not been clearly defined. It helps determine the best research design, data collection method and selection of subjects. Given its fundamental nature, exploratory research often concludes that a perceived problem does not actually exist. According to Trochim (2006), exploratory research often relies on secondary research such as reviewing available literature and/or data, or qualitative approaches such as informal discussions with consumers, employees, management or competitors, and more formal approaches through in-depth interviews, focus groups, projective methods, case studies or pilot studies.

As an exploratory study it sought to find out whether the issues described in the literature review were actually at play in the design and implementation of training programmes at VRA. Answers were sought for the following questions. To what extent are staff aware of training and development policy? What procedures exist for the identification of training needs? To what extent is training and development beneficial and relevant to the needs of non engineering staff in the organisation? What is the role of the human resource department? And how can training and development of non engineering staff be improved? This is type of study design will go a long way to determine whether engineering staff receive more training than non engineering staff.

## **Study population**

This study focuses on non-engineering staff which can be found in the Resource and Services, Finance Branches and the Office of the Chief Executive.

This category of staff forms a large proportion of VRA's staff.

**Table 1: Study population in selected departments** 

Department	Total Population	Target population	
Human resource	81	55	
Accounts	106	89	
Finance	23	20	
Public affairs	19	11	
Procurement	95	64	
Corporate services	384	101	
Real Estate	404	103	
Total	1112	443	

Source: VRA, 2006

Data from the human resource department show that non engineering staff are 1657 out of a total staff strength of 3259 (VRA, 2004). The study was concentrated in Accra, Akuse and Akosombo since these areas have a good representation of non engineering staff. The targeted study population is the staff of the following departments: accounts and finance, real estate, public affairs,

human resource, materials, transport and security. This is because these departments are important and contribute immensely to supporting the core business of VRA. As indicated in Table 1, the target population for the study was 443, made up of non-engineering staff concentrated in Akosombo, Akuse and Accra. For a target population of 443 the required sample size is approximately 205 (Kirk, 1995), but due to time and resource constraints 102 (50%) was targeted and the breakdown is presented in Table 2.

Table 2: Sample size and respondents in selected departments

Department	Target sample size	Respondents
Human resource	8	4
Accounts	46	29
Finance	12	7
Public affairs	10	8
Procurement	4	1
Corporate services	12	1
Real Estate	10	2
Total	102	52

Source: VRA, 2006

## Sampling

Various sampling methods were assessed to determine their appropriateness in selecting the 102 respondents, and finally stratified random sampling was settled on for the study. Stratified random sampling involves a process of stratification and segregation followed by random selection of subjects from each stratum (Moore, 2006). In stratified random sampling the population is first divided into mutually exclusive groups that are relevant, appropriate and meaningful in the context of the study. Respondents for the study were selected on the basis of job roles and positions in the department. In each of the departments as shown in Table 2, there was one supervisor, with the exception of procurement and corporate services which had one manager each. The rest of the respondents were up made of officers and clerks. Managers in the various sections in the departments influenced the sample size.

Questionnaires were distributed to 102 employees, and out of this only 52 responded as shown in Table 2. Some of the employees saw this exercise as interference since they were busy working to meet various deadlines with regards to the Power Sector Reforms of which VRA was a part.

At this point random sampling could not be used as initially planned. The training managers were interviewed on the adequacy of training of non engineering staff in the Volta River Authority. The researcher had to call them on telephone and go through the questions with them. Out of the five only two were able to make time to respond.

## **Data collection procedures**

Pre-test was carried out after the data collection instruments, the questionnaire and the interview schedules were designed. Before they were administered these instruments were given out for vetting and suggestions by my research supervisor, the human resource director and the head of the VRA training school. The rationale was to check the validity of the instruments. Prior to the interview a discussion was held with the key informants, and the non technical training manager to inform them about the purpose of the study in order to receive the required cooperation from them and to be able to gather the needed data from them. A time was agreed for a meeting to conduct the interview over the telephone. All the questions posed were open ended to enable them give as much data as they could.

The pre-test was carried out between April and August, 2006 using 10 support staff as the test sample. The aim of this exercise was to find out if questions have been well structured and are comprehensible. The necessary corrections were done. It was after the pre-test that actual questionnaires were administered and interviews carried out.

Data from primary and secondary sources were used. The primary data was made up of responses to self-administered questionnaires and detailed interview schedules. Detailed questionnaires were prepared to include socio – demographic variables. The researcher administered questionnaires, with

structured and open ended questions. Detailed interviews were also conducted to elicit information from trainers in the HR department.

The questionnaires were used to elicit first hand information from non engineering staff with reference to the objectives of the study guided by issues identified in the literature review. This necessitated the formulation of openended and closed ended questions on issues such as training and development policy, systematic training, identification of training needs, the role of the human resource department and improvement in training and development.

The questionnaires were sent to five departments whose area offices are in three work locations, namely Accra, Akuse and Akosombo. Respondents were briefed on the purpose of the study and assured of confidentiality. The questionnaires were distributed by the researcher who took fourteen (14) days from 1<sup>st</sup> to 14<sup>th</sup> September, 2006 to visit the locations. Some respondents filled the questionnaire the same day and others kept it for about six weeks. During this time, follow up calls were made to the respondents to convince them to complete the questionnaires within the next six weeks which was 31st October, 2006 to enable analysis to commence.

Field visits were made to the locations and during these visits a discussion was held with respondents who needed some clarification on issues raised in the questionnaire. Interviewing of the training manager for non technical training and trainers was done to solicit their views on the VRA training and development

policy, systematic training and types of training programmes run for non engineering staff.

Secondary data was collected from the Human Resource data base, the Accounts Department and other relevant research articles. The secondary sources of data were mainly records on staff count of non-engineering staff in VRA. Other sources of secondary data reviewed include comparison made with respect to how much had been spent on engineering staff as compared to non engineering staff for a period of five years.

## **Ethical considerations**

In order to abide by ethical considerations permission was sought from the Director of Human Resource to carry out this study in the organisation. The objectives of the study were clearly explained to him as follows:

- Assurance of the right to free consent of the participants in the study.
- The necessary information was given to respondents on the objectives of the study to enable those who will participate to make informed decisions.
- The right of informed consent, that is, to give sufficient information to potential participants to be able to make knowledgeable decisions about participation or non participation.

- Information obtained from participants will be treated confidentially.
- The researcher will avoid plagiarism ensuring that any literature used, will be acknowledged.

#### Problems encountered in data collection

Just like any research some problems were encountered during the collection of field data. Sixty respondents complained about filling questionnaires, and others thought it was a waste of time. Out of the 102 that were targeted only 52 responded. Thirty-five potential respondents were research fatigued and refused to even accept any questionnaire. These were replaced by others who finally told the researcher they had misplaced the questionnaire. Others came up with the excuse that they are very busy and are unable to fill the questionnaires and returned them. Twenty respondents left their questionnaires incomplete, five others returned their questionnaire saying it was a waste of their time.

Some respondents had misplaced their questionnaires. It is worth noting that respondents in the Human Resource department were only four. This is because staffs in this department are bound by an oath not to divulge confidential information. Thus some decided not to answer the questionnaire. In the transport and real estate department, the educational background is low, and they found this routine of answering the questionnaire or even being interviewed as a waste of their time. So one key informant, in the person of the administrative officer in

each of these departments answered the questionnaire. Despite these problems, the field work, though challenging, was worth it.

The sample sizes show an absence of proportionality due to the challenges encountered on the field. With regards to accounts, finance and public affairs, respondents were not interested in filling the questionnaire. They made remarks like; it is a waste of time since they have filled many questionnaires in the past but nothing was done to improve the situation and besides this was not going to add anything to their salaries. With respect to procurement, corporate services, and real estate two-thirds of the staff have low educational background and are mostly artisans, drivers, cleaners, and warehouse staff. The same resistance posed by the staff in the other departments prevailed in these departments. Some staff received the questionnaire but did not fill it.

### Methods of data analysis

The data collected was sorted out, edited and summarised. Frequency tools of Statistical Product and Service Solutions (SPSS) software version 9.1 were used for data analysis since these tools are able to generate percentages, graphs, charts and cross tabulations. Using the Excel programme, percentage tables and charts were also used to give a good visual impression of the data collected.

### **CHAPTER FOUR**

## **RESULTS AND DISCUSSION**

## Introduction

This chapter is divided into two main parts looking at views of some non engineering staff and that of trainers and managers regarding training of non engineering staff in VRA. This was done by analysing and discussing data collected from both primary and secondary sources under the following specific objectives.

- Technique or methods used to implement the training process.
- ii. Procedures for the identification of training needs.
- iii. Benefits and relevance of training.
- iv. Role of the Human Resource Department

The target population was 443, made up of staff concentrated in Akosombo, Akuse and Accra. Respondents for the study were selected on the basis of job roles and positions in the department. Managers in the various sections in the department influenced the sample size. Questionnaires were distributed to a total sample size of 102. However, only 52 people responded as shown in Table 3.

**Table 3: Actual number of respondents by departments** 

Department	Sample size	Respondents
Human resource	8	4
Accounts	46	29
Finance	12	7
Public affairs	10	8
Procurement	4	1
Corporate services	12	1
Real Estate	10	2
Total	102	52

Source: VRA, 2006

# **Background information**

Out of the sample of 52, 71%, were male, while 29%, were female. Seventy three percent fell within the ages of 31 to 50 years which indicates that these respondents are part of the active workforce in VRA. Analysis of the response on length of service is important since this will help in determining the number of training programmes respondents have benefited from during their working life in VRA.

**Table 4: Length of service** 

Numbers of years	Frequency	Percentage
1-10	24	46
11-15	5	10
16-20	2	4
21-25	10	19
26-30	5	10
Above 30	6	11
Total	52	100

Source: Field data, 2006

The basis for the grouping is based on emphasis that VRA places on various length of service. Ten years is very significant to the Authority. Any staff that has worked for ten years is given special recognition at a long service award ceremony held every year and is presented a certificate, cash and/or a gift as determined by the human resource department. Thereafter, any additional five years for instance 15 years, 20 years etc. is rewarded. It is within this first ten years that staff develop themselves to fit into the jobs they do.

In Table 4, out of 52 respondents 46% have been in the service of VRA between 1 - 10 years, 10% fell between 11 to 15 years. Respondents whose length of service fell between 16 to 20 years constitute 4% while 19% have been in the

service between 21 to 25 years. Ten percent of the respondents have worked at VRA for 26-30 years, while 11% have been with the authority for over 30 years.

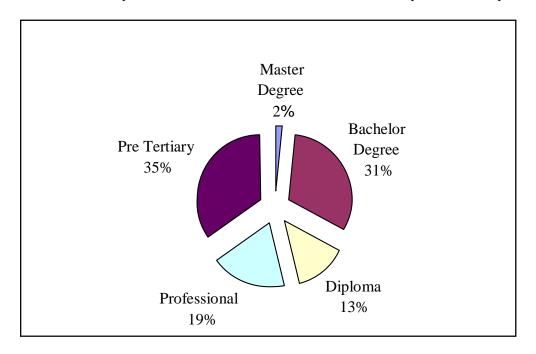


Figure 2: Educational background of respondents

Source: Field data, 2006

The survey of educational background in Figure 2 shows that 35% of them have pre tertiary education (Ordinary and Advance level), 31% are bachelor degree holders, 19% hold professional qualifications, 13% are diploma holders and 2% are masters degree holders. It can therefore be inferred that non engineering staff in VRA possess diverse qualifications. This will enable the human resource department obtain insight into the required attributes and skills needed for non engineering to work effectively in the future.

For any meaningful discussion to take place the study deemed it fit to ask whether respondents were aware of VRA's training policy since, this is what guides training in the Authority. In addition to that, the study went on to find out whether respondents had job descriptions and if they were aware of the skills they required to perform their jobs. Out of fifty-two respondents, 39 or 75% were aware of the training policy. The findings further indicated that 90% or 43 of the respondents had job descriptions and have been notified of the skills and training required to perform their jobs. This is in line with the VRA Training Policy (VRA,1996)

## **Techniques or methods used to implement training process**

In order to understand the training techniques or methods used in training non engineering staff of the VRA, respondents were questioned with respect to the nature or type of training programme attended, methods used in selecting trainees, appropriateness of selection method and educational background. The training manager and trainers were also interviewed on issues relating to evaluation of training and on the VRA training and development policy, systematic training and types of training programmes run for non engineering staff.

The study sought to find out the nature of training programmes attended by respondents. As shown in Figure 3, 50% of the 52 respondents indicated having attended off-the-job training which is organised in the VRA training school which is popularly known as in-house training in VRA. This reflects what the VRA training manual (VRA, 1998) spells out and desires to achieve. Fifteen percent have attended local institutional training at Ghana Institute of Management and Public Administration (GIMPA) and Management Development and Productivity Institute (MDPI) and local academic programmes in the universities respectively. Twelve percent have attended local training by consultants outside VRA and 4% have attended overseas attachment and seminars respectively.

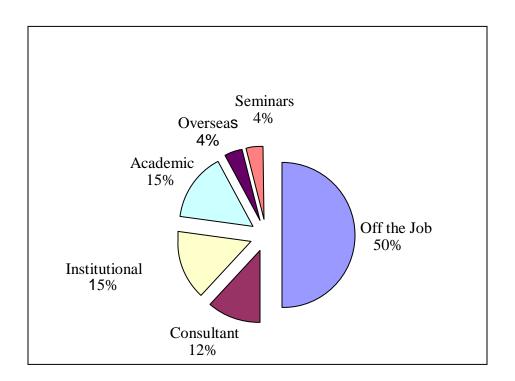


Figure 3: Nature of training programmes

Source: Field data, 2006

Evidence from the Figure shows that respondents have been exposed to training in various institutions. The method of training for non engineering staff in VRA is mainly off-the-job training since most of these courses are managerial and require learning and understanding general principles. This supports Cole's (2002) view that off-the job method is the most appropriate when emphasis on learning is on developing an understanding of general principles, providing background knowledge and generating an awareness of comparative ideas and practices. This is also corroborative of submissions made by Cascio (1995), Ivancevich (1995), and Breadwell and Holden (1995) which emphasise that the selection of a particular method depends on the purpose of the exercise and the training needs assessment.

The study went on further to examine length of service and type of training as indicated in the Table 5. With regard to respondents with 1 to 10 years length of service it was revealed that 44% received in house training at the VRA training school. The analysis indicates that respondents with this length of experience are trained off-the-job to enable them understand VRA and its business and how as non engineers they can effectively contribute their skills and knowledge acquired to the organisation.

This reflects in the courses that are designed with regards to all aspects of their job as non engineers to enable them acquire and upgrade their knowledge and skills. This agrees with Cascio (1995) and VRA (1998) that off-the job method of training is most appropriate when emphasis is on developing an

understanding of general principles, providing background knowledge and generating an awareness of comparative ideas and practices.

Respondents who received institutional training (for example training in GIMPA and MDPI) and academic training from polytechnics and universities were 45%. Respondents in this group were sent on off-the-job training that assists them to acquire knowledge, understand general principles and improve their skills with regards to best industrial practices.

Table 5: Length of service and type of training

Type of training

Length of service In years	Off- the-job	Institutional and	Overseas courses
	(%)	Academic (%)	and Seminars (%)
1 – 10	44	45	2
11 – 15	10	0	7
16-20	5	9	13
21-25	22	28	30
26-30	10	9	38
Above 30	9	9	10
Total	100	100	100

Source: Field data, 2006

This opines with submissions made by Cascio (1995) who indicates that off-thejob method is most appropriate when emphasis is on understanding of general principles, acquisition of background knowledge and generation of an awareness of comparative ideas and best practices in the industry. Responses in this group also show that one person attended overseas courses and seminars.

From Table 5, respondents with 11 to 15 years of experience had 10% of them attending off-the-job training while 7% attended overseas courses and seminars. The percentage of training received by this category of staff has dropped compared to that of respondent with 1 to 10 years experience. This is because staff in this category have received a lot of training in their first ten years to assist them in their jobs. Any other form of training comes as and when the staff requires it. Five percent of the respondents with 16 to 20 years of experience received off-the-job training, while 9% had institutional and academic training with 13% attending overseas courses and seminars. It is obvious from the table that the percentage of training is higher in the first ten years where staff are trained to acquire knowledge and update the skills they require to carry out their jobs. This indicates the importance VRA places on training during this period (VRA,1996). This is significant since VRA has a programme of rewarding staff after the first ten years of service (VRA, 2004) and subsequently every five years.

The analysis also indicates that 30% of respondents with 21-25 years experience attended overseas courses and seminars, while 28% of them received institutional and academic training, with respondents who received off-the-job

training being 22%. These data indicate that staff training has picked up as compared with the preceding category with 16 to 20 years length of service. During this period staff receive training to upgrade their skill and to keep abreast with best practices and international standards (Ivancevich, 1995). Courses for staff within this category are mainly refresher courses. A few of the staff are trained in some academic programmes such as Master in Business Administration (MBA) to prepare them for management positions.

In the group with 26-30 years experience, 10% were trained in-house, 9% received institutional and academic training and 38% attended overseas courses and seminars. It is evident that respondents in this category attended mainly seminars locally and overseas. It was revealed that seminars exposed them to new trends in areas related to their work such as accounting, real estate and human resource (Cascio,1995). Respondent with over 30 years experience also received training. Some of the respondents in this category are managers and senior officers who pursue academic courses to add value to their lives and to acquire knowledge in general principles with regards to the position they occupy. Others attend seminars to expose them to new trends and best practices in their area of specialisation. The remaining are due for retirement in a few years and VRA makes provision in the training policy to prepare these category of staff due for retirement by organising off-the-job training sessions in the VRA training school and seminars held outside VRA.

### Method used in selecting trainees

The study sought to find out what method is used in selection of trainees. In Table 6, 43.5% of the respondents which represents twenty-three responses indicated that they were selected by their managers and supervisors. This is similar to Cole's (2002) findings that organisations adopt a systematic approach to training and development by defining their needs for training in accordance with a well-organized procedure. In addition Cole (2002), indicates that these managers knew more about the weakness of their subordinates and could do a better selection. Respondents that were selected by assessing their training needs were 29.2% representing 15 responses, while those selected by the human resource department (17.3%) were represented by 9 responses. Three responses were related to the trainees applying for the courses themselves.

**Table 6: Methods used in selecting trainees** 

Method	Respondents	Percentage
Assessing training needs	15	29.2
Managers and superiors	23	43.5
Human resource department	9	17.3
Trainee applies	3	6.0
Ad hoc Selection	2	4.0
Total	52	100

Source: Field data, 2006

Four percent were picked by ad hoc selection meaning that no training need assessment was done nor were any of the methods below applied before they were selected.

Analysis of the results of selection of trainees based on educational background in Table 7 indicated that trainees with their bachelor's degree were frequently selected by the human resource department, managers and supervisors for off-the-job training since they are assistant supervisors and supervisors in their various departments. This method of selection is considered suitable for conveying specific information and imparting effective technical and problem solving skills (Boella, 1992).

Table 7: Selection of trainees based on educational background

Educational	Human		Managers		Supervisor		Total	
background	resource							
	Frequency	%	Frequency	%	Frequency	%	Frequency	%
Bachelor's	8	53	9	31	7	37	24	40
Diploma	2	14	2	7	3	16	7	10
Professional	5	33	7	24	3	16	15	24
Pre Tertiary	-	-	11	38	6	31	17	26

Note: Multiple responses Source: Field data, 2006

This is to prepare them for succession in the future. Professionals were next in line. Staff with a diploma as their educational background, were rarely selected. Though the human resource department did not select trainees with pre tertiary educational background, managers and supervisors' selected 38% and

31% respectively. This is due to the fact that these managers and supervisors work directly with these categories of staff and are able to identify the type of training they require (Armstrong, 2000). Due to the nature of their work as subordinates, they require on-the-job and some specialised form of training.

As part of the study a survey was also carried out to examine if the method of selecting trainees was appropriate. The majority (67%) agreed that the method of selection is appropriate. With regards to the question of whether nomination for training was based on training needs identification, 75% responded in the affirmative.

The trainers stated that evaluation of training was done throughout the year while the manager said it was done quarterly (every three months). The discrepancy here is due to the fact that trainers are always evaluated after each training session by their participants in order to express their opinion on whether they have gained knowledge and skills from the programme (Kirkpatrick, 1994). However, the training manager says all the evaluation done in the quarter is collated and sent to management where it is assessed and feedback is provided to the human resource department. It is at this point that management evaluates whether new skills and knowledge are being applied on the job and whether training is affecting desired outcomes, such as organisational performance (Armstrong, 2000).

The training manager and trainers also stated that the training and development policy in VRA (1996) is to develop and implement training

programmes that are cost-effective, directly address performance problems or developmental needs in the organisation, are relevant to the job and have a maximum impact on performance (Beach, 1985).

### Procedure for identification of training needs

In order to understand the training needs analysis conducted, respondents were questioned with respect to whether nomination for training was based on identifying training needs, what determines training needs of non engineering staff and who determines the training needs?

Responses from participants indicated that training need analysis was critical in determining what type of training an employee should receive. With reference to Figure 4, 31% percent responded that the objectives of the department determine training needs of the individual. Nineteen percent responded that training gap determines training needs, while 17% responded that the objectives of the Volta River Authority determine training needs. Four percent of the respondents indicated that training needs were determined based on skill deficiency gap. It was evident from the findings that the responses corroborate the assertion of Armstrong (2000) and Cole (2002) about the need for organisations to analyse training needs against the backdrop of organisational and departmental objectives and strategies.

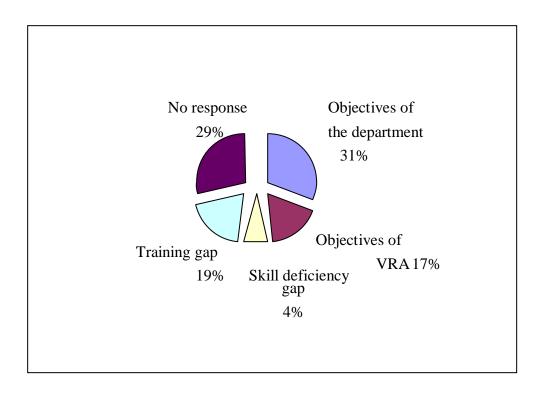


Figure 4: Determinants of training needs by objectives

Source: Field data, 2006

An attempt was made to find out who determines training needs of non engineering staff. Evidence from Figure 5 shows that 55% were of the view that line managers find it easier to identify the training gaps in subordinates because they work directly with them and are aware of how good or bad they perform. This confirms the assertion of Broadbent and Friodevaux (1998) with regard to analysis of the tasks being performed and whether training is the solution. This process enables the manager to determine what type of training is required by the staff. It behoves then, on the line manager to ensure that the employee attends the programme outlined for him or her.

In Figure 5, twelve percent were of the view that it was the Human Resource Department that determined training needs, while 4% responded that it is the employee himself that determines his or her training need.

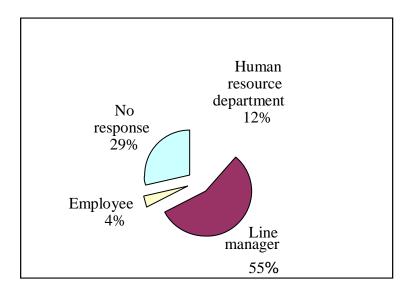


Figure 5: Other determinants of training needs

Source: Field data, 2006

It is worth noting that, findings in this survey do not agree with Hall's (1994) view that most organisations invest considerable resources in training without effectively examining how deficiencies in knowledge and skills will be addressed.

The evidence in Figure 5 shows that training need analysis of non-engineering staff in the VRA is well organised as the basis for effective training. This conforms with the assertion of Breadwell and Holden (1995) who stress the importance of training needs analysis as a human development plan to analyse the

training needs of the organisation in relation to the organisation's strategy and equate it with the needs of the individuals within it.

Responses from interview with non technical training managers and trainers indicated that on a continuous basis VRA carries out analysis of present and future training needs as well as monitor and evaluate the quality and impact of its programmes. Most training programmes are management and specialised programmes peculiar to the functions of each non engineering department. They opined that the programmes are very relevant and meet the changes in technology and organisational objectives. All the interviewees stated that performance problems were used to identify training need. They all pointed out that poor performance can be detected through observation and this reflects in the performance appraisal of the staff.

#### **Benefits and relevance of training programmes**

The survey results indicate that respondents have attended one or more courses since they joined VRA. Table 8 depicts that 46% have attended 2 to 4 training programmes; 12% have attend 4 to 5 programmes; 6% have attended 6 to 8 training programmes; another 6% indicated they had attended no training programmes, and 28% gave no response. The findings here indicate that majority of respondents have attended training programmes organised by VRA.

The analysis of benefits of training programmes in Table 8 shows that training is an important determinant of improvement in the jobs of non

engineering staff of the Volta River Authority. Indeed, in the study, benefits of training cut across all jobs of non engineering staff.

**Table 8: Number of training programmes attended** 

Number of programmes	Frequency	Percentage
0-1	1	2
2-4	24	46
5-7	6	12
8-10	3	6
None	3	6
No Response	15	28
Total	52	100

Source: Field data, 2006

Fifty percent of the trained staff stated that there was great improvement in their jobs and had acquired new skills in management. Accounting and finance staff updated their skills in financial management systems. The respondents said they were now able to log on to the financial system, set up invoices that were due for payment. They noted that they were also able to edit their entries when they made mistakes. The same number of staff said they could run financial reports and even print them out for their supervisors. This finding corroborates Beach's (1985), view that management development is a systematic process of training and growth by which individuals gain and apply knowledge, skills, insights and attitude to manage work. Beach (1985) and Armstrong (2000) also make it clear

that management development is a continuing activity. To support the important role training and development programmes play, Jin (1996) also indicates that staff development is vital for an organisation trying to make itself better. Sheard (1997) states that in response to growing competition, the best way to improve business performance was to improve the performance of the people working within it.

The study tried to find out the content of training programmes attended by non engineering staff as shown in Table 9. The responses show that courses in finance and accounting were more often attended (35%), followed by management courses (18%), courses in safety (9%), (5%) in records keeping with (33%) of non-response.

This supports the assertion of Osei-Bonsu (1977) that all employees need to attend off-the-job training, and be exposed to on-the-job training such as job rotation, in-service and institutional training programmes. It is at these off-the-job programmes that the above courses in the table are taught. It is however important, because it is not all staff that will get the chance to partake in off-the-job training every year, and training on the job is relevant to fill in the gap as one waits for training off the job.

**Table 9: Content of training programmes attended** 

Programmes	Frequency	Percentage
Management	10	18
Safety	5	9
Financial accounting	19	35
Records Keeping	3	5
No response	18	33
Total	55	100

Note: Multiple responses Source: Field data, 2006

Such an arrangement is useful and enhances efficiency on-the-job, develops potential of employees and improves their prospects for advancement in the organisation by way of promotion.

With regard to relevance of the training programme forty-four percent (44%) were of the view that the programmes are relevant as shown in Table 10. This is as a result of respondents being able to apply what they have learnt to their jobs. This was evident from responses from accounting and finance staff who after training were now able to log on to the financial system, set up invoices that were due for payment, edit their entries when they made mistakes, pass journals on the system and run the general ledger report to be able to balance their books.

**Table 10: Relevance of the training programme** 

Relevance	Frequency	Percentage
Relevant	23	44
Little Relevance	14	28
No Response	15	28
Total	52	100

Source: Field data, 2006

The response of the trainees about the relevance of the training programme in providing them with skills required in their future job roles supports Cole's (2002) assertion of the potential benefits that will be enjoyed by an organisation if training is organized effectively to include sufficient and suitable range of skills among employees and development of knowledge relevant to the jobs assigned to them.

Response from fourteen percent of the respondents show that training programmes attended were of little relevance because they applied what they learnt at the training programme only when the need arose since what they were taught was not applicable now but will be useful in the future. Another 14% were also of the view that the training programmes were irrelevant. These respondents received training which was different from what they actually do in the workplace. According to Knowles (1984), one great virtue of training is to focus on learning rather than just doing, as obtains in on-the-job training. Trainees will

achieve little if the training process is too different from what the trainees actually do in the work place. They expect to see what is useful in real working life.

The analysis shows that training has helped improved the job performance of respondents as 65% of respondents responded in the affirmative, while only 4% responded in the negative and 31% gave no feedback. With respect to whether staff needed more training, 63% responded no, two percent 2% responded yes, 35% gave no feedback. This indicates that performances of respondents have improved on the job after training.

With regard to whether non-engineering staff receive as much training as engineering staff, responses indicated that 54% of the respondents stated that non engineering staff do not receive as much training as engineering staff, 14% stated that non engineering staffs receive as much training as engineering staff. The study went on further to examine this finding with secondary data on training cost of eight departments selected at random over a period of four years. The training cost in Table 11 is based on the number of people trained in the selected departments. Over a period of four years the engineering departments trained one hundred and eighty-eight staff at a cost of ¢1,961million as against one hundred and eighty-one at a cost ¢1,782 million in the non engineering departments.

From the data in Table 11, it cost VRA ¢10.4 million on the average to train an engineer over a period of four years and ¢9.8 million to train a non engineering staff over the same period. It is evident that training cost of engineering staff is observedly higher than that of non-engineering staff.

Table 11: Training cost of four engineering departments against four nonengineering departments from 2001-2004

Engineering Departments	Cost Million ¢	Number	Non- Engineering Departments	Cost Million ¢	Number
Technical	45	15	Human	508	43
Services			Resource		
Engineering	152	30	Finance	724	40
Planning					
Eng. Design &	981	85	Accounts	307	62
Construction					
Thermal	783	58	Public Affairs	243	36
Generation					
Total	1,961	188		1,782	181

Source: VRA, 2004

However, the data indicate that non engineering staff receive as much training as engineering staff. Interviews with the training manager and the trainers in the human resource department affirm that non engineering staff receive as much training as engineering staff.

Considering money, time, effort and other resources for training and development it is revealed that development of non engineering staff has achieved expected results. This is reflected in the performance of staff who have benefited from training.

#### The role of the human resource department

In every organisation HR plays a very vital role in the training of staff. In the light of this the study attempted to find out the role of human resource department in the training of non engineering staff. The study tried to find out if there was adequate co-ordination between HR and the other departments. The findings reveal that co-ordination between HR and other departments was not adequate enough since 46% responded no. This means that HR is not doing as much co-ordination as it is expected to do.

The study also sought to find out if HR maintained data on each training programme attended by non-engineering staff, and the analysis indicate that 44% responded that HR kept some data on training attended. Interviews with the training manager revealed that the human resource department has data on every staff that has been trained. Supervisors also confirmed that the department of the trainee has records on staff that have been trained. An attempt was also made to find out the difficulty HR faces in determining training needs of non engineering staff. With regards to difficulties faced by HR, 65% responded in the affirmative that HR encountered difficulties. These difficulties were due to the challenge the HR department faces in interfacing the departmental objectives with the organisational objectives for proper implementation of the policy on training needs. This is in line with Breadwell and Holden's (1995) assertion with regards to challenges faced by HR in interfacing departmental objectives with organisational objectives.

In some organisations training is considered as a reward in the absence of any training need analysis. This research tried to find out what the views of respondents were on this assertion as depicted in Table 12.

Table 12: Nomination for training as a reward or based on training needs

Views	Frequency	Percentage
Reward for loyalty	13	25
Reward for long service	5	10
Based on training needs	2	4
None of the above	15	28
No response	17	33
Total	52	100

Source: Field data, 2006

In determining this, 25% indicated that nomination for training was a reward for loyalty. Responses received on nomination as a reward for long service was 10%. Views from respondents on the fact that nomination was based on training needs were 4%. This is similar to Agnaia's (1996) results from the empirical studies on Libyan management practice, which revealed that the approaches and techniques used by companies for selecting their employees for management training and development programmes, and for assessing management training development needs depended mostly on indications of performance reports and on bosses' and supervisors' views.

At the same time, surveyed and interviewed managers did not indicate any communication with the employees who are the basic ground for management training and development programmes. This identifies the difficulties and problems in management training development needs assessment and, therefore, allows the researcher to contrast Libyan management training and development practices with the responses received.

As part of the study to determine the role of HR, Non technical managers were interviewed. However, from non technical training managers and trainers indicated that on a continuous basis VRA carries out analysis of present and future training needs as well as monitor and evaluate the quality and impact of its programmes. The responses from interviews with staff and training managers revealed inconsistencies because staff further indicated that selection in their departments was done on adhoc basis and based on loyalty and long service. Staff did not dispute the fact that HR conducted training needs analysis. They explained that they sometimes attended courses they did not find relevant to their job and some said they had attended the same course more than once in different years. Respondents went on to say that staff who were selected based on loyalty and long service had an extensive training need analysis done by HR to determine their training need and thereafter proceed to pursue the programme that will address their skill deficiency.

As part of the role of the human resource department, the non technical training managers insisted that they carried out the training need analysis and

assigned staff to training programmes based on their skill deficiency. Most of these training programmes are management and specialised programmes peculiar to the functions of each non engineering department. They opined that the programmes are very relevant and meet the changes in technology and organisational objectives which is an important role of HR when designing training programmes. All the interviewees stated that performance problems were used to identify training needs. They all pointed out that poor performance can be detected through observation and this reflects in the performance appraisal of the staff which HR carries out yearly as part of its role to assess performance of staff.

The study went on further to interview staff, namely the non technical training manager and trainers with respect to problems they encounter. This interview was critical because it is the role of HR to solve the problems faced by trainers and the training school. The trainers complained of few lecture rooms, limited computers and LCD projectors which affected delivery of courses.

Another problem was the fact that some departments fail to release staff who have been nominated for training. They also suggested that improvement in training and development would have to start with the expansion of the training school and building capacity of the trainers in the training school.

.

#### **CHAPTER FIVE**

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### Introduction

The study examined issues related to training of non engineering staff of the Volta River Authority. The main objective was to examine training programmes outlined for non engineering staff in VRA. This objective was broken into related specific issues which included:

- i. the techniques or methods used to implement the training process.
- ii. procedures that exist for the identification of training needs.
- iii. the benefits and relevance of training for non engineering staff,
- iv. the role the Human Resource Department plays in training of non engineering staff.

Stratified random sampling was settled on for the study, but unfortunately managers greatly influenced the sample size by presenting the number of subjects they wanted, with the reason that staff were busy working towards deadlines and would not have the time to answer the questionnaire. In all 52 questionnaires were retrieved.

#### **Summary**

The study dealt with four specific objectives as outlined in the introduction above. With respect to techniques or methods used to implement the training process the key findings are:

- The technique or method of training was mainly off-the-job, and 50% of the 52 respondents indicated having attended off-the-job training which was organised in the VRA training school popularly known as in-house training.
- 2. The majority of the staff benefited from this type of training in the VRA training school and 15% received institutional training, which is out of the work location, in institutions like Ghana Institute of Management and Public Administration (GIMPA), Management Development and Productivity Institute (MDPI), and other local and overseas institutes.
- Another 15% received academic training in local and foreign universities.
   Other staff attended seminars and overseas programmes and 12% received training from consultants.
- That staff were selected for training by their supervisors, managers and superiors and the educational background of the employee was also considered.

- 5. That staff with the various educational backgrounds had attended a minimum of three courses. It was evident that staff with pre tertiary educational background attended at least six to eight courses.
- 6. Training of staff with low educational background is ongoing to enable them upgrade their skills to assist them in carrying out their jobs efficiently. Respondents received off-the job training that assists them to acquire knowledge, understand general principles and improve their skills
- 7. That staff who had worked for 16 to 20 years attended refresher courses to upgrade their skill. Two percent received training in Master in Business Administration (MBA) to prepare them for management positions.

The main issues identified for the procedures that exist for the identification of training needs are as follows:

- 1. Nomination for training is based on training needs were in the affirmative
- 2. Respondents appreciated the need for training need assessment. Thirty-one percent out of 52 respondents indicated that training needs were identified by the objectives of the department.
- 3. It was also clear that staff recognised that there was the need for some person for example a manager/supervisor or an authority like the HR department to do the training need assessment. Findings showed that 55% of the 52 respondents recognised the importance of a line manager in determining training needs

The key findings with regard to the benefits and relevance of training for non engineering staff, revealed the following:

- The majority of staff have benefited from training since they joined the Volta River Authority. Findings indicate that out of a total of 52 respondents 46% have attended 2 to 4 programmes.
- 2. Forty-four percent of the staff were of the view that the type of training programmes they attended were relevant to their work because it provided them with the skills they required to do their jobs now and in the future. Respondents were now able to log on to the financial system, set up invoices that were due for payment. They noted that they were also able to edit their entries when they made mistakes. Respondent said they could run financial reports and even print them out for their supervisors.
- 3. The analysis also revealed that training has helped improve the job performance of staff of which 65% responded in the affirmative.
- 4. As to whether they needed more training on that particular job, 63% out of the 52 respondents responded in the negative indicating they did not need more training.
- 5. With regards to whether non-engineering staff receive as much training as engineering staff, it is indicated that non engineering staff receive as much training as engineering staff. Interviews with the training manager and the trainers in the human resource department

affirm that non engineering staff receive as much training as engineering staff.

Assessment of findings with respect to the role of Human Resource Department (HR) revealed the following:

- Co-ordination between HR department and other departments was not adequate enough. However, the analysis showed that data on training programmes attended by staff was kept by the employees department and the HR department.
- HR faced difficulties in interfacing the departmental objectives with the organisational objectives for proper implementation of the policy on training needs.
- 3. There were few lecture rooms, limited computers and LCD projectors which affected delivery of courses. In addition, some departments fail to release staff who have been nominated for training.

#### **Conclusions**

The techniques or methods used to implement the training process were mainly off-the-job training, of which the majority is held in the VRA training school. Other programmes with regard to off-the-job training were institutional, academic, overseas courses and seminars held outside VRA. These were implemented through selection of candidates based on assessing training needs, selection by managers and superiors, human resource department and by trainees

applying for the courses. Selection was also based on educational background of staff.

Procedures for the identification of training needs were that the employee, human resource department and the line manager were used for the identification of training needs. The training needs analysis focused on skill deficiency, the objectives of the department and the objectives of VRA. It was evident that the objectives of the department and the recommendations of the line manager were procedures used for the identification of training needs in VRA. However, the training need analysis is not equated to employee needs.

The benefits and relevance of training for non engineering staff are that the training enabled the respondents to use the knowledge, skills and insights to input data, edit their entries, run financial reports and even print them out for their supervisors. Their job performance was improved considerably.

With respect to the role of the human resource department, it can be concluded that the human resource department was not doing as much coordination as it was expected to do. The HR department however, faced challenges in interfacing the departmental objectives with the organisational objectives for proper implementation of the policy on training needs.

#### Recommendations

Based on the above conclusions, the following recommendations are made:

- 1. The supervisors should consider other forms of training apart from off-the-job training, for example on-the-job training is strongly recommended for non-engineering staff. This would also assist in addressing the specific requirement of staff since jobs vary on the shop floor. The content of such training should be designed to address all forms of training needs according to the staff job role.
- 2. Managers are advised to conduct a comprehensive training need analysis at all levels with the active participation of the managers, trainers, and the staff to enable them determine the appropriate need for training. This will enable training to be equated to employee needs resulting in training being very beneficial.
- 3. Trainers should reach out to more non engineering staff, since staff have benefited from training programmes and found some of the programmes relevant to their jobs. These programmes will be of great benefit since they are related to the jobs they perform. This will assist in meeting the departmental and the organisational goal leading to increase in productivity

#### 4. The Human Resource Department should:

a. Work hard in interfacing the organisational objectives which is to improve efficiency by better training and development of staff to achieve specific productivity targets. This will have to be integrated in

- the departmental objectives for proper implementation of the policy on training needs.
- b. Take training process seriously confer with departments to confirm that staff nominated for training have gone through extensive training need analyse, and require the training they have been nominated for.
- c. Ensure that departments release their staff to attend the programmes they are nominated for. This will enable staff achieve specified productivity target.
- d. Seriously consider improving facilities in the training school, purchase state of the art equipments like LCD projectors, computers among others. The department will have to start with the expansion of the training school complex and build the capacity of trainers in the training school to meet world class standards.
- 5. Staff are advised to commit themselves to attend the programmes they have been nominated for. They should take the initiative to remind their managers and supervisors about their training at least two weeks before the time. This will enable relieving arrangements to be made.

#### **REFERENCES**

- Agnaia, A. (1996). Assessment of management training needs and selection for Training: The case of Libyan Companies. *International Journal of Manpower*, 17(3), 31-51.
- Armstrong, M. (2000). A handbook of human resource management practice (7<sup>th</sup> ed.). London: Kogan Page Limited.
- Beach, D.S. (1985). *The management of people at work*. New York: Macmillan Publishing.
- Beach E.G. (1992). *The principles and practice of management* (3<sup>rd</sup>ed.) London: Longman.
- Becker, G. S. (1964). *Human capital*. New York: Columbia University Press.
- Betts, P.W. (1989). Supervisory studies (5<sup>th</sup> ed.). London: Pitman Publishing.
- Boella, M.J. (1992). *Human resource management in the hospitality industry* (5<sup>th</sup> ed.). Gloucester Shire: Stanley Thorns Ltd.
- Breadwell, I., & Holden, L. (1995). *Human resource management: A contemporary perspective*. London: Pitman Publishing.
- Broadbent, B., & Friodevaux, S. (1998). Training needs analysis-broadview. In *Jossey-Bass/Pfeiffer Training Manual* (pp. 5). New York: McCraw-Hill, Inc.
- Carroll, L. (1993). *Long term care crisis*. San Francisco: Sage Publications University of California.

- Cascio, W.F. (1992). *Managing human resource: productivity, quality of work life, profit* (3<sup>rd</sup> ed.). New York: McGraw-Hill, Inc.
- Cascio, W.F (1995). Managing human resources: productivity, quality of work life, profits (4th ed.). New York: McGraw-Hill, Inc.
- Cole, E.A. (2002). *Personnel and human resource management* (5<sup>th</sup> ed.). London: Biddles Limited.
- Goss, D. (1996). Principles of human resource management. London: Routledge.
- Gretler, A. (1972). The training of adult middle-level personnel. *International Year Book*. Paris: UNESCO.
- Hall, D.T. (1984). Human resource development and organisational effectiveness.In C. Fombrun, N. Tichy & M. Devanna (Eds.), *Strategic human resource management* (pp. 11-13) New York: Wiley.
- Hamblin, A.C. (1970). Evaluation of training: Supplement to industrial training international. New York: McGraw-Hill Book Company.
- Healey, J. F. (1996). *Statistics: A tool for social research*. Massachusetts: Wadsworth Publishing Company.
- Ivancevich, J.M. (1995). Human resource management. Chicago: Irwin Inc.
- Jin, X. (1996). A study of the relationship between organisational factors and the transfer of training in Electronic industry in Shenzhen, China. *Human Resource Development Quarterly*, 7 (1), 55-73.
- Kirk, J. J. (1995). *Training games for career development*. New York: McGraw-Hill Companies.

- Kirkpatrick, D. (1994). Techniques for evaluating training programmes. *Journal* of the American Society of Training Director, 13 (3-9), 21-26.
- Knowles, M. S. (1984). *Applying modern principles of adult education*. San Francisco: Jossey Bass Publishers.
- Levin, H.M., & Kelley, C. (1994). Can education do it alone? *Economics of Education Review*, 13(2), 97-108.
- Livy, B. (1990). *Management in banking*. London: Chartered Institute of Bankers (CIB).
- Manpower Services Commission (1981). *A new training initiative: An agenda for action*. London: Manpwer Services Commission.
- Massie, J. L., & Douglas, J. (1992). *Managing a contemporary introduction*.

  India: Prentice Hall Gale.
- Moore, M. L. (2007). The new science of human capital. Michigan: Gale Group.
- Osei-Bonsu, M. (1977). Non-book media in management and supervisory training management games, simulation and role play. *Greenhill Journal of Administration*, 1 (2), 7-12.
- Osinski, D.M., & Miller, J.A. (1999). *Training needs assessment in needs assessment handbook*. Washington D.C: Gulf Publishing.
- Robbins, S. P., & Stuart-Kotze, R. (1990). *Management* (2nd ed.). Ontario: Prentice Hall.
- Schultz, T. (1975). The value of the ability to deal with disequilibria. *Journal of*

- Economic Literature, 13 (3), 827-846.
- Sheard, A. G. (1997). *Learning to improve performance*. London: Pitman Publishing.
- Triner, D., Greenberry, A., & Watkins, R. (1998). *Training needs assessment: A contradiction in term.* New Jersey: Educational Technology Publications.
- Trochim, W. M. K. (2006). *Research methods knowledge base*. Cincinnati: Atomic Dog Publishers.
- Tyson, S., & York, A. (1994). Essentials of human resource management (4<sup>th</sup> ed.). Oxford: Butterworth- Heinemann Ltd.
- Volta River Authority (2006). Staff count. Accra: VRA Printing Unit.
- Volta River Authority (2006). *Organisational structure*. Accra: VRA Printing Unit.
- Volta River Authority (2004) *Human resource manual*. Accra: VRA Printing Unit.
- Volta River Authority (2004). Senior staff association condition of service Revised (6<sup>th</sup> ed.). Accra: VRA Printing Unit.
- Volta River Authority (1996). Training policy. Accra: VRA Printing Unit.
- Volta River Authority (1998). Training manual. Accra: VRA Printing Unit.
- Wikipedia. <a href="http://en.www.wikipedia.com/wiki/Organisations">http://en.www.wikipedia.com/wiki/Organisations</a> (definitions of organisation on the Web) 22<sup>nd</sup> September, 2008.

Zemke, R., & Zemke, S. (1995). Adult learning: What do we know for sure? Journal of Child Welfare Training, 6 (72), 569-579.

#### **APPENDIX A**

### **QUESTIONNAIRE**

This Questionnaire Is For Non Engineering Senior and Junior Staff

of the Volta River Authority. It is to assist in gathering relevant data to enable the researcher examine the training programmes outlined for non engineering staff of the Volta River Authority and how staff perceive these programmes.

The study is in partial fulfilment of the requirement for the award of Master of Arts in Human Resource Management at the University of Cape-Coast. All information provided will be treated with the strictest confidentiality and shall be used exclusively for the purpose of the study. Anonymity will be observed unless you want your name assigned to opinions you express.

#### **Background Information**

1.	Please indicate your age
	20-30 years 31-40 years 41-50 years Above 50 years
2.	Please indicate your sex
	Male Female

3. How long have you been working with VRA?

	a. b. c. d. e. f.	1-10 years 11-15 years 16-20 years 21-25 years 26-30 years Above 30 years
4.	a. b. c. d. e. f.	What is your current department/ Human Resource Department Accounts Department Corporate Services Department Finance Department Public Relations Department Procurement
5.	1-10 11-15 16-20 21-25 26-30 Above	How long have you been in this Department?  30 years
6.	Bachel Diplon Profess Pre-Te	sional (Please State)
7.	Are yo	u aware of the training policy and or programmes for non- ering staff?
	a. b.	Yes No
8.	•	you been given a job description and been notified of skills and g required?

	a. b.	Yes No
9.		If No why?
	a. b. c.	Have not been informed by Human Resource Department Have not been informed by my supervisor Have not found out the training programmers
10.		Have you benefited from any form of training since joining VRA?
	a. b.	Yes No
11.	What	type of training programmes have you attended? Kindly tick.
	Safety Finan Recor Procu Labor	gement programmes y programmes ucial and Accounting programmes rds Keeping urement programmes ur relations programmes
12.	In gen	eral, how many courses have you attended to date?
	1-3 4-5 6-8 9-10 Abov	e 10
13.		is the nature of training/courses you have attended? (Multiple ers allowed)
	a. b. c. d. e. f	In house training (VRA personnel) Local Training (Consultant outside VRA) Local Institutional (GIMPA, MDPI etc) Local Academic (Universities etc) Overseas Attachment Overseas courses and seminars

# Procedure for identification of training needs

How are trainees selected?

14.

	a. b. c. d. e. f. g.	By assessing raining needs by supervisors Trainees select training programmes themselves By their managers and supervisors By the training department Trainee applies for course Nomination by colleagues Adhoc Selection
15.		In your view is the method of selecting trainees appropriate?
	a. b.	Yes No
16.	Do you	u think nomination for training is based on identified training needs?
	a.	Yes
	b.	No
	c.	Somehow
17.		determines the training needs of non-engineering staff? (Please rank being the highest.)
	a.	Objectives of the department
	b.	Objective of VRA
	c.	Skills deficiency/gap
	d.	Training gap
18.		Who determines the training needs of Non-Engineering staff?
	a.	Human Resource Department
	b.	Line Manager
	c.	Staff/employee
19.	To wh	at extent was the training programme relevant to your current job?

	a. b.	Relevant Little relevant
20.	Has the	ere been any improvement in your job performance since the g?
	a. b.	Yes No
21.		e programmes relevant to your personal needs, goals and self- pment?
	a. b.	Yes No
22.	In which	ch areas do you lack skills?
23.		Do you need more training?
	a. b.	Yes No
24.		If yes in which areas?
	a. b. c.	Financial management Human Resource Management Health and Safety
25.	Do nor	n-engineering staffs receive as much training as engineering staff?
	a. b.	Yes No
The ro	le of th	e human resource department
26.	Do you	i find training in your organisation to be systematic or adhoc?
	a. b.	Systematic Adhoc

27.	Do you think there is adequate co-ordination between your department and
	human resource Department?

- a. Yes
- b. No
- 28. Does HR and your department maintain data or records of each training attended by staff?
  - a. Yes
  - b. No
  - c. Do not know
- 29. Does HR have difficulty in determining the training needs of your department and the staff?
  - a. Yes
  - b. No
  - c. Do not know
- 30. Do you consider nomination for training as a reward for loyalty or long service?
  - a. Reward for loyalty
  - b. Reward for long service
  - c. Do not know

## APPENDIX B

# INTERVIEW SCHEDULE

This interview schedule was used to Interview the Manager Non Technical Training in The Volta River Authority

_	. •	
( )	uestions	3
v	ucstions	)

1.	Position /Rank
2.	How long have you been holding your current position?
3.	What training policy does management have for non-engineering staff?
4.	What training programmes does management have for non-engineering staff.
5a.	Are the current training programmes for non engineering staff able to meet changes in technology in meeting the objectives of Volta River Authority (VRA)
	Yes No
b.	If No, suggest any improvement in training of non-engineering staff
6.	Which of the factors below are used to identify training needs of existing non engineering staff?  Tick one or more as appropriate a. Performance problems (e.g. lack of skill or knowledge) b. Technological changes c. Changes in departmental programmes d. Low Productivity
	06

	any otherlard performance that employees are expected t
Yes	No
Tick one or mo a. Observation b. Questionnai c. Interview d. Appraisal R Please specify	re
	does management set for training programme
What subjects programmes for	are taught during training and development or non-engineering staff?
What subjects programmes for	are taught during training and development or non-engineering staff?
What subjects programmes for the subjects what category	are taught during training and development or non-engineering staff?
What subjects programmes for the subjects what category a. Supervisors b. Manager (V	are taught during training and development or non-engineering staff?  of personnel are trainers? (VRA) (VRA) (VRA) m the training department (VRA) illitators
What subjects programmes for the subjects programmes for the subjects programmes for the subject of the subject	are taught during training and development or non-engineering staff?  of personnel are trainers? (VRA) (VRA) (VRA) m the training department (VRA) illitators

e. Excessive indiscipline

	c. I don't know Please specify any other
13.	How does management evaluate training programmes

b. As the need arises

### VOLTA RIVER AUTHORITY HUMAN RESOURCES DEPARTMENT

STAFF COUNT BY DEPARTMENTS & BRANCH AS AT DECEMBER 31,2004

Junior	Senior	Management	Total
22	15	7	44
22	15	7	44
Junior	Senior	Management	Total
72	64	1	137
7	13	1	21
486	124	1	611
86	63	1	150
13	16	1	30
142	74	1	217
277	136	1	414
4	11	0	15
1087	501	7	1595
Junior	Senior	Management	Total
353	30	1	384
70	24	1	95
357	46	1	404
140	41	1	182
31	49	1	81
56	57	1	114
72	23	1	96
6	8	1	15
1085	278	8	1371
59	46	1	106
3	3	1	7
3	4	1	8
7	15	1	23
72	68	4	144
6	15	1	22
		•	
27	37	0	64
27 10	37 9	0	19
	1		
10	9	0	19
	Junior 22 22 Junior 72 7 486 86 13 142 277 4 1087  Junior 353 70 357 140 31 56 72 6 1085	Junior         Senior           22         15           22         15           Junior         Senior           72         64           7         13           486         124           86         63           13         16           142         74           277         136           4         11           1087         501           Junior         Senior           353         30           70         24           357         46           140         41           31         49           56         57           72         23           6         8           1085         278           59         46           3         3           4         7           15         68	22         15         7           22         15         7           Junior         Senior         Management           72         64         1           7         13         1           486         124         1           86         63         1           13         16         1           142         74         1           277         136         1           4         11         0           1087         501         7           Junior         Senior         Management           353         30         1           70         24         1           357         46         1           140         41         1           31         49         1           56         57         1           72         23         1           6         8         1           1085         278         8           59         46         1           3         3         1           3         3         1           7         15