PROBLEMS OF TRAINING NEEDS DETERMINATION IN THE PUBLIC SERVICE IN SUDAN
The Case of the Agricultural Sector

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ABSTRACT
The need for management training and development is an obvious fact. With new developments and socio-political changes in the world environment, training has gained even greater impetus as a means of meeting the challenges of globalization and technological advancement. Organizational efficiency and effectiveness have increasingly become reliant on the quality and ingenuity of its management. Management training and development in Sudan have long been sought by various means to secure efficient management, especially for implementation of its development plans. Nevertheless, all contemporary studies and reports attributed the failure of development efforts to administrative inefficiency. The most relevant question raised in relation to management efficiency has been concerned with the relevance of the on-going training to the real needs of management in Sudan. Contemporary training theories advocate that the relevance of training could be achieved only through systematic assessment of training needs of organizations as well as of employees. As surveyed in the present study, such assessment is a prodigious task that needs full grasp of its concepts and methodologies. Further, it needs full commitment on the part of an organization’s leadership, as well as the availability of basic structural requirements, including clear organizational objectives and plans, manpower policies and plans, performance standards and a viable performance appraisal. Therefore this research was designed to investigate the subject of training needs determination in the Sudan’s public service organizations based on the following two hypotheses:

1. That the basic structural requirements are not sufficiently available in any public sector organizations; and hence the basic requirements to launch systematic needs assessment does not exist and

2. There is a general lack of awareness within public service organizations regarding the value and means of effecting the training process, hence training is only paid lip service and treated in isolation from the organizations’ strategic plans.

The field chosen for this study is the agricultural sector, for its importance in the development of the country. The focus of the study is on management training and development, since needs assessment related to this category of employees is even more difficult for the lack of precise quantitative data pertaining to their tasks and performance.

The adopted methodology is based on a case study approach in which the process of training needs determination is investigated in four
agriculture sector organizations with different identities, different structural set-up and different financial and administrative autonomy. The major findings of the research are that: the basic structural requirements for systematic needs assessment are not equally present in the four organizations. However, even where present they are not used effectively for the purpose of training needs assessment.

The process of training in all organizations investigated follows a reserved route, in which training opportunities are sought first, and then employees are fitted into those opportunities as circumstances may avail. No needs analysis is conducted (in any of the four organizations) to determine the exact need of the organization or of individuals therein for the particular type of training; a situation that indicates an absence of awareness and a lack of know-how about the process of needs assessment. However some change is observed in the case of the agricultural bank where a discernible effort is being made by its training department to systematize the needs assessment process. This may be attributed to the fact that the training officials at ABS have themselves already had a series of training courses in the subject of “training management” and “training needs assessment”, unlike the case with the other three organizations. This fact reinforces the validity of the second hypothesis which states that lack of awareness could be the principal problem hindering systematic training needs assessment within the subject organizations.

In view of the complex nature of the process (of training needs assessment) and the reality of the Sudanese public organizations, characterized by lack of institutionalism this study tends to conclude that: lack of awareness, on the part management, of the value systematic needs assessment and its impact of the training seems to be the biggest problem hindering systematic needs assessment. In the case of ABS, efforts of the training department were often obscured by the undue intervention from line managers in the course of allocating training opportunities. Nevertheless, no evidence has been provided to show that need analysis was at the base of their intervention. Hence this study proposes a simpler and more practical model of training needs assessment that can inspire greater involvement of the management, the training department and the employees, in a more consultative manner focusing on the personal behaviour of employees in their jobs, rather than focusing on a fixed requirement of the job. This approach seems to be rather contemporary, more attuned to meet the changing nature of today’s work, and at the same time urging the organizations to think continuously of the required skills necessary for their survival, growth and excellence.
الخلاصة

الحاجة للتدريب حقيقة واقعة. مع التطورات الجديدة في المناخ العالمي؛ اجتماعياً وسياسياً، أكتمت التدريب دفعة أكبر بانتظاره الوسيلة لمجابهة تحديات العلوم والتقدم التقني حيث أصبحت كفاءة وفعالية المنظمات تعتمد بصورة أكبر على قدرات وفعالية الإدارة.

تدريب وتنمية الإدارة في السودان هدفه ومنذ أمتد بعدي تأهيل الإدارة لتحمل أعباء التنمية، التي كل الدراسات المعاصرة وتقارير الخبراء أسندت فشل جهود التنمية في السودان إلى عدم كفاءة الإدارة.

السؤال المطرح كان دائماً هو ما مدى توافق التدريب القائم مع الاحتياجات الفعلية للإدارة في منظمات الخدمة العامة في السودان.

كل النظريات المعاصرة تؤكد أن توافق التدريب مع الاحتياجات الفعلية للإدارة يمكن أن يتحقق فقط عن طريق الدراسة المنهجية المنظمة لاحتياجات المنظمة والعاملين فيها في منظومة واحدة تعتمد على تحليل اداء المنظمة لتحديد "أين" يجب أن يوجه التدريب، وتحليل الوظائف لتحديد "ماذا" يكون التدريب، إضافة إلى تحليل اداء الافراد لتحديد "من" يحتاج إلى التدريب "ومتي".

دراسة التدريب luậnية لتحديد الاحتياجات التدريبية وكما تشير الانديبات التي عرضت في هذا البحث عملية طويلة، شاقة ومكلفة في نفس الوقت. وتحتاج إلى معرفة تامة بمفاهيم وأساليب تحديد الاحتياجات التدريبية، دعم القيادة الإدارية في اقتصاد مستوياتها، إضافة إلى توفير العناصر الهيكلية والإدارية التالية:

- هدف واضح ومحدد
- خطط عمل واسعة ومفهومة للجميع
- سياسة واضحة تنمية القوى العاملة
- وصف وظيفي ومعايير محددة للاداء
- نظام فعال لتقييم الافراد

صمم هذا البحث الاستطلاعي لدراسة وتقييم النظام التنظيمي لتحديد الاحتياجات التدريبية في منظمات الخدمة العامة في السودان وفقاً للتوفرات التالية:

1/ منظمات الخدمة العامة بالسودان تفترض إلى العناصر الهيكلية والإدارية المطلوبة لإجراء تدريب التدريب بطريقة منهجية منظمة.
2/ هناك عدم وعي عام بمنظمات الخدمة العامة فيما يتعلق بأهمية تحديد الاحتياجات التدريبية وأساليب تفعيل التدريب، لذا فالتدريب يعامل بخفة وفي عزلة تامة عن الخط الاستراتيجية المنظمات
المجال البحث يشمل اربع من منظمات القطاع الزراعي كعينة ممثلة للقطاع وذلك لأهمية القطاع الزراعي في عملية التنمية بالسودان.

تركز الدراسة بصورة خاصة على عملية تحديد الاحتياجات التدريبية بالنسبة للكوادر الادارية في مستوياتها الوسيطة والعلية والتنفيذية والقيادية، حيث أن تحديد الاحتياجات التدريبية بالنسبة لهذه الفئات بظل اصعب نسبة لعدم توفر المعايير الكمية والنوعية الدقيقة لقياس الأداء.

اتبعت الدراسة منهج دراسة الحالة، حيث تم دراسة عملية تحديد الاحتياجات التدريبية في المنظمات الاربع, عينة البحث، وهي وزارة الزراعة الاتحادية، مؤسسة الري الزراعية، الهيئة العامة للزراعة الأهلية و البنك الزراعي السوداني.

تم اختيار هذه المؤسسات على أساس أنها كلها مؤسسات تعمل لتحقيق أهداف التنمية الزراعية وتستخدم نفس النوع من العملين. في نفس الوقت نجد أن هذه المؤسسات تختلف عن بعضها البعض فيما يتعلق بالشكل القانوني - الشكل التنظيمي - نمط الإدارة - درجة الاستقلال المالي والإداري

أهم النتائج التي توصلت لها الدراسة هي:

1. المطلوبات الأساسية (ادارية و هيكلية) التي تساعد على إجراء الدراسة التحليلية للاحتياجات التدريبية لاتتوفر للمنظمات الاربع بنفس القدر بل واهم من ذلك حتى عند توفر تلك المقومات فإنها لم تستخدم بفعالية لغرض تحديد الاحتياجات التدريبية.

2. التدريب في كل كلي المؤسسات يتبع نظاماً معكوساً يبدأ برصد فرص التدريب المتوفرة محلياً أو من خلال المنح والقروض ثم بعد ذلك يتم تشريحة المترب وفقاً لتناسب كل فرصة مع نوع العمل الذي يقوم به المرشح وتتوفر شروط الترشيح لديه.

3. لا يتم تحليل احتياجات المؤسسة للتدريب ولا يتم تحديد احتياجات الأفراد الذين يذهبون للتدريب ما يؤدي إلى بعض الاحيان إلى اختيار التدريب غير المناسب أو الأفراد غير المناسبين.

الخلاصة التي توصلت لها الدراسة هي:
- حقيقة أن كل المنظمات لا تتوفر لديها المتطلبات الهيكلية والإدارية اللازمة ولكن هذا ليس عائقاً إذا توفرت الارادة والقدرة المهنية للعاملين في إدارات التدريب.
- الدليل الذي تقدمه هذه الدراسة هو ان إدارة التدريب بالبنك الزراعي بدأت في وضع نظام منهجي لتحديد الاحتياجات التدريبية بالنسبة
لمركز التدريب الخاص بهم يعتمد على استطلاع رأى الأدارات المتخصصة والتحقق من احتياجاتهم الفعلية ومن ثم تحديد البرامج التدريبية المناسبة ومن ثم يتم ترشيح المتدربيين المعينين.

الفرق الذي لوحظ هو أن مسؤولي التدريب بالبنك قد تم تدريبهم في مجال إدارة التدريب وتحديد الاحتياجات التدريبية الشيء الذي لم يتوفر لرسفائهم في المؤسسات الأخرى. هذا وأن كانوا ينقصهم الكثير فيما يتعلق بتطبيق أساليب تحديد الاحتياجات التدريبية. لكن المؤكد هو أن المعرفة والخبرة بطرق واساليب تحديد الاحتياجات لها تأثيرها الواضح في التعامل بجدية مع التدريب والنتائج المتوقعة منه.

الدراسات الحديثة في مجال تحديد الاحتياجات لا تعود كثيرا على المتطلبات الهيكلية كثيرة لكنها تركز على تحديد السلوك المطلوب للإلهام المتميز بالنسبة للمهام المختلفة باشراف العمليين أنفسهم والخبراء والأشخاص الذين ومن ثم يتوفر لدى المنظمة معيارا يمكن لأي من كان قياس القدرات الموجوده عليها ومن ثم يسهل تحديد الفجوة التدريبية.

الدراسات الحديثة تركز بصورة خاصة على كفاءة مسؤولي التدريب وقدراتهم التحليلية ودورهم في المبادرة لإصلاح مسار التدريب بمنظمة تهم لذلك فهي تركز أيضا على حسن اختيارهم وتأهيلهم.

- أخيرا توصى الدراسة بان تهتم المنظمات بتدريب وتأهيل العاملين بإدارة التدريب حتى يتمكنوا من ادارة النشاط بحريفة ومنهجية علمية تضمن توافق التدريب مع احتياجات المنظمات والعمالين على حد سواء.

- تقدم الدراسة نموذجا عمليا لتحديد الاحتياجات التدريبية عسى أن تجد فيه منظمات الدراسة طريقا سهلا لتحديد احتياجاتهم من التدريب.
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CHAPTER ONE

INTRODUCTION

This research is concerned with the problems of management development and training need determination in the public service in Sudan. During the last four decades training and development of management have witnessed an explosive growth. Employers were increasingly recognizing the need for increasing the knowledge, developing skills and changing attitudes of management to achieve organizational success and develop management capacities.

Concurrent with this growth of expectations; the body of knowledge in management development has grown enormously. The traditional assumption that “all training is good” is being questioned in today’s world, with all problems of resource scarcity, accelerated development and continuous changes in social life. Hence special emphasis is being laid now on systematic and quantitative methods for determining training needs and assessing its outcome.

1.1 Objectives of Study
Using system approach, this research aims at the following:
1- Critically examine the process of management development and training needs determination in the public service in Sudan to find out to what extent it is taken systematically.
2- Identify the main problems hindering systematic training needs assessment in the public service in Sudan.
3- Provide some practical solution to problems of Training Need Assessment in Sudan.

1.2 Hypotheses
a. Management training needs determination in the sample organizations is not systematic due to absence of basic structural requirements in the public service organizations.
b. The process of training need assessment in the sample organizations is completely obscured due to unawareness.

The above stated hypotheses are operationally addressed through the following research questions:
a. What are the premises on which training decisions are built?
b. What structural facilities are there for assessing training needs?
c. What is the attitude towards management training and development need assessment?
d. What is the outcome of the ongoing training?
The choice of these questions is based on the fact that training in any organization is part of the whole organizational system. Thus the objective of training must be directly linked to the objectives of the organization. In other words, training is expected to produce positive changes in job-related knowledge, skills and attitudes of the individuals in order to enhance corresponding changes in job-performance and consequently in the organization’s performance. To achieve relevance to the ultimate performance of the organization; the decision to train must be the result of careful research and analysis of problem areas in the organization and the actual deficiency in individuals’ performance. It is important to note here that a good number of organizational problems need actions other than training in order to subdue performance inefficiencies. At the same time, analysis of training needs require that basic structural as well as attitudinal support factors must be available.

1.3 Focus of the Study

Focus of this study is on the process of training need determination for management in its senior and middle levels. A systematic view of training need determination is a prodigious task which requires bird’s eye view of the organization and its constituent parts. Problem analysis as the corner-stone of system thinking relies primarily on the availability of a firm basis of information nuclei. One considerable area in which information problems are most visible within an organization is the managerial levels. Measuring performance in these levels seems to be problematic because the tasks to be performed are unquantifiable and in many cases the tasks themselves are not well defined.

The importance of the chosen management group lies in the fact that inefficient performance of these groups eventually impresses itself on the organizations’ ability to achieve its objectives. So it is important that every organization should have the means for timely identification of performance inefficiencies of those groups, analyze the causes, determine the exact size of the training problems and interpret this in terms of training objectives to be achieved in the right time.

1.4 Field of Study

This research is conducted in the agricultural sector in Sudan. Its significance lies in the role attributed to agriculture in promoting the economic and social life of the country. Since the early 70s a tremendous effort has been vested by the successive national governments towards agricultural development. Large sums of local as well as foreign funds were drained into agricultural development projects, yet the yield was rather disappointing. Problems of food shortage, desertification and foreign currency scarcity have eventually crippled the whole economic life of the country. According to expert opinion
“Failures of implementation of development plans, and keep-going of development projects were in most cases attributed to administrative weaknesses of the sector”. (World Bank 1978)

During the 90s a ternary salvation program has been devised by the salvation government for the period 1990 – 1993. Emphasis again was laid on agriculture as the primary concern of the program, yet a new formula of a development paradigm was adopted, that of a self initiated and a self-sustained development. This in-turn implied an over-reliance on the country’s domestic resources (both material and administrative). So tapping these resources had to be rationalized if their performance is to be maximized² (Morawetz 1977).

1.5 Importance of the study

In most Third World Countries, nationally as well as internationally, organized efforts to promote rapid socio-economic development do not yet seem to be producing the intended impact. Further, it is becoming unceasingly evident that the inability of development to yield the promised results is largely attributable to the weaknesses in administration³ (World Bank 1980).

The importance of administrative capability to the question of development has often been a central issue in the literature of development administration. Ineffective administration is being increasingly recognized as an endemic source of trouble for a large number of development programs. The World Development Report 1983 which focused on the management of development programs asserts the significance of the administrative factor to the successful implementation of its development projects.

Commenting on the issue Mathur (1986) stated⁴:

“In Africa, development has continued to lag behind, mainly because of administrative inadequacies”.

Referring to problems of public administration and management in Western Africa, the World Bank Development Report (1980)⁵ noted:

“The desire to accelerate the pace of development has complicated matters”.

Such complications as observed by Mathur⁶ have greatly effected the administration (Mathur 1986).

“In many cases persons lacking even basic managerial skills have been saddled with responsibilities for development in very senior administrative positions. It is clear that such development organizations can’t cope with the demands made on them for the provision of administrative skills of the kind needed to plan and implement the highly complex development projects”

Similar observation with regard to the case of Sudan was also made by Sudanese scholars; Al-Teraifi (1972) stated⁷:
“During the colonial rule all policy, planning and managerial functions were a prerogative of the foreign colonizer, while the Sudanese nationals were assigned only executive and outline tasks ... Thus it was quite natural, that, then the public service has been lacking the proper qualifications for undertaking the new tasks assigned to it “.

To enhance administrative capabilities for development, training during the decades after independence has witnessed a phenomenal growth in all Third World countries, including Sudan. A major impulse for the expansion of administrative training has come from international organizations and donors in the form of technical assistance. Subsequently, management training institutes were established all over Third World countries. The Institute of Public Administration and The Management Development Centre in Sudan were examples of the product of such efforts.

Despite this growing concern for management training and despite the encouraging results it has produced, yet still there are some people who believe that training has not lived up to its promise, this as put by Jacobs and Schaffers\(^9\) (1974):

“Indeed, one urgent issue in training currently is related to its own effectiveness”

Discussing some of the deficiencies in training, A. R. Hoyle (1974) noted\(^10\):

“Today in the mid 70th there are many dozens of institutes and schools of public administration operating both in developed and developing countries and some thousands of academic and professional training officers who devote their efforts to provide the administrative capabilities. But the disillusion which is felt about development efforts in general has not spared training and at a recent large development conference one speaker referred to the training schools and institutions as disaster area”.

Bernard Schaffer was particularly opposed to the training provided by training institutions which he disparagingly called “Trainingism”. He believed that they cannot hope to achieve the objective of adequately equipping the personnel for their new role in promoting development.

It is worth mentioning here that in a study on Administrative Reform and development planning in Sudan, Moharir and Kagwe\(^11\) made an account of problems of implementation of development plans in different sectors of the Sudanese economy. They identified the main problems as being attributed to administrative inefficiency and shortage of trained man power.

However despite the growing criticism of training, there are many who genuinely believe that if only the personnel could be trained adequately development will proceed smoothly along its routes. It was observed at an FAO Expert consultation (1985) that\(^12\):
“Relevant experience of some countries indicated that training created the opportunities not only for improved individual performance but also had great potential for organizational development”.

It seems, however, that the reasons for the current disenchantment with training are largely related to the unsatisfactory manner in which most training is conducted. This, as noted by Trail

“It has become abundantly clear that the majority of training programmes are superficial, rushed and poorly managed, often establishing a negative attitude at the beginning of the assignment. The end result is a cost to the project.” (Mathur 1986)

Similar comment was also found to be made with regard to management training in Sudan. In a recent study by Abdel Aziz Mustafà (1984) on the value of training carried out by the Management Development Centre (MDC) the writer commented:

“Since 1965 the MDC, International agencies and foreign consultancy firms, have made massive and quite unprecedented efforts to transform the organizational and managerial environment of the Sudanese organizations through management training. These efforts still continue, yet the enthusiasm and optimism of earlier times has been replaced by growing disenchantment. Experts, managers and supervisors felt that the work which has been done has proved dysfunctional and inappropriate”.

Recognizing the deficiencies in the training of development personnel writers in the field have noted that training is still being conducted with no concern for the real development objectives. Commenting on the situation in Southeast Asian countries, John Wong noted:

“Conventional training programs will result in the increased supply of bureaucrats who are no doubt managing large-scale show-case development project, if suitably located in some big urban centers, but who are also likely to lose touch with those at the grass-roots level. The need in the future is for greater supply of dedicated development cadres who are more likely organizers or mobilizers capable of involving the masses in the total development effort”.

Certainly training needs to be better understood, a basic understanding of what training can or cannot do is important if it is to yield satisfactory results. Emphasizing the need for a better appreciation of what training is, Wyn Reilly noted

“Training is surprisingly little understood. Indeed to many public servants it is regarded as a waste of time, money and manpower. To others it is seen as a panacea, a magic answer to the problems of an inefficient public service. In
practice it is neither. It is one of several important means of developing a sound and effective administrative system. Thus, there is a need for a far greater, understanding of training in its widest sense and in all its forms to know when training can help and when it cannot, what type may be appropriate, how to improve its effectiveness and the reasons why administrative training has produced such disappointing results over the past ten to twenty years.”

It is worth mentioning at this point that concern about the effectiveness of training has been recognized in Sudan since the early days of the establishment of the IPA. In the introductory remarks the sixth round table proceedings of the Institute, Sayed Abdel Rahman Abdullah commended the efforts of IPA at holding its annual conferences because, as he believed, they “provide an occasion for the assessment of the needs of the service”. In the same meeting, Sayed Abdel Karim Jacob advocated the creation of a central body in the public service to take responsibility for all training activity in Sudan. He stated:\n
“This body should undertake research to assess the different needs of all government departments as well as act as a coordinating agent for all training to save time and effort”.

Further he added:

“Training is very expensive, that it should be based on an up to date appraisal of the needs of the country”.

Despite this early recognition of the problem of training in the Sudanese public service, yet there is no evidence that these voices were heard within the public service organizations. More important no systematic analysis embracing all aspects of the problem has been carried out. Much later, during the first National Conference on training and Manpower Planning in the Sudan, held in 1984, the following citation has appeared in a number of the conference papers:\n
“Training plans of our administrative organizations, both at the national, local or organizational levels are not built to meet actual training needs... in spite of the fact that a remarkable increase in the number of trainees has been witnessed during the past few years”.

Of particular importance here is that in a study by Management Development Centre (MDC, 1977), the following has been identified as hindering the progress of management training in Sudan:

a. Training was usually designed on assumed needs rather than on actual assessment of organizational and individual managers’ needs.

b. Lack of proper assessment of training results.

c. Methods of training were inappropriate.
Similarly in a survey carried out by the Research Department of the Sudan Academy for Administrative Sciences (SAAS) on the value of the Senior Management training program carried out by the Academy; the respondents (former trainees) made similar comments as regards course contents, as well as the methods of training.

This clearly indicates that training for development administrators in Sudan does not seem to have received enough attention.

All this, together with other reasons motivated this research work to investigate the premises upon which management training in the Sudanese public service is based. As a trainer who has been directly engaged in designing and conducting management training programs for the last twenty-five years the researcher has his reasons of concern about the relevance and efficiency of training. This in turn necessitated empirical testing of a number of factors which succor the relevance and efficiency of training in the Sudanese public organizations.

1.6 The Research Sample

For the purpose of this research a sample organizations were chosen from the agricultural sector to represent the productive and service activities of the sector. These were the following:

1. Ministry of Agriculture and its affiliated departments (eight of them) (MoA)
2. The Mechanized farming corporation (MFC).
3. El Rahad Agricultural Corporation (RAC).
4. The Agricultural Bank of Sudan (ABS).

The first three organizations were taken to represent the three sub-sectors; the traditional, the mechanized (modern) and the irrigated sub-sectors respectively. ABS was chosen because agricultural finance represents the generic force for all the agricultural activity. Its inclusion was important to give a complete picture of an integrated agricultural activity. Besides, it provides a good example of a quasi autonomous public body.

In total the four organizations were chosen on basis of their similarity and comparability to provide a model of a cross-comparison case study. They are similar in that they all serve in the same sector, having a common overall objective of agricultural development, directed by the same body of general policy and they all employ the same type of employees (agriculturalists, economists, and accountants). They differ with respect to their legal status, type of organization, management style, system operation and degree of financial autonomy and flexibility.

1.7 Methodology

There is a dearth of evaluative studies on the subject of training needs assessment. Most of the available studies are primarily concerned with the structural and policy issues of the training function in the Sudanese public
service or as part of personnel policies. Examples are studies made by G.M. Salih (1964), M El Beshir (1972); A.A.Al Teraifi (1974). Systematic training and its application in Sudan have been tackled by Osman O. Abdel Aziz (1984) as part of his research on “Personnel Policies and Practice in Sudan”. Some useful insights concerning the quality and content of training for development administrators is provided by Sarwal (1988) “A case Study of India’s Experience”.

Abdel Aziz M. Mohammed (1984) utilized the case study design to investigate the problem of evaluation of Management training program, the case of the young Executive Program (MEP) carried out by the Management Development Centre (MDC).

The case study approach, as a research strategy for this study attempts to examine the process of training need determination in its real life context. According to Yin (1980) case studies can be done using either qualitative or quantitative evidence. An example of an organizational case that combines qualitative with quantitative evidence is the research of Cross et al (1971).

1.8 Data Collection

Data for this study has been collected from a variety of sources within the sample organizations. These included organizational documents, studies, consultant report, training officers, and personnel officers. In addition a cross-sectional sample of the management groups (trainees) was also questioned particularly with respect to the following:

1. Their understanding to the process of training needs assessment,
2. Their attitude and involvement in the process of training and their needs assessment,
3. The relevance of the training provided to them.

The methods used for Data Collection included the following:

1- Interviews, structured interviews were used to collect data from top Management of the sample organizations including the following:
   a- Directors of training departments and training officers.
   b- Directors of personnel departments.
   c- A sample of functional department’s heads.
   d- Officials of the National Directorate of Training.

2- Questionnaire, a random sample of respondents was chosen from among the management groups within the sample organizations, to represent the trainees’ populations.

The number of the total population was 867 approximately. The total number of Questionnaires distributed was 600, of those only 200 were returned. Secondary data was also obtained from various documents. These were:

a. Training plans
b. Consultancy Reports on the organizations’ performance and problems.
c. Organizations charts, plans and objectives.
d. Other relevant documents and reports found within the sample organizations, either written locally or by overseas consultants.
e. The national training acts and plans.

1.9 Study Variables
This study adopts a system approach to examine the process of training needs determination in the agricultural sector. System approach postulates that for training to be effective the need for it must be systematically undertaken and its activities should have direct relevance to the needs of the organization and individuals within it. Systematic training need determination involves an analysis of the present and future manpower requirements of the organization, the assessment of the existing and potential skills of the people within the organization and the derivation of the best means by which people can be trained and developed to meet these requirements (Turrell, 1980). Such analytical approach to training need, determination by necessity utilizes specific techniques for identifying and assessing training needs both at the organization and individual levels. This entails that unless the procedure used in determining training needs follow certain systematic steps; each step to build on the other, no accountable prediction could be made. On the other hand, the literature on the subject stipulates that trainers in public service organizations are generally faced with a wide range of problems which constrain their effectiveness and frustrates any effort to systematize the process of need determination. Some of these problems are structural while others are attitudinal. For the purpose of this study these problems were investigated and treated as the independent variable, while the process of training need determination was treated as the dependent variable.

A. Dependent Variable
This constitutes the focus of this study. The literature on the subject stipulates that, the decision to train relies primarily on the prediction of the required quantity and quality of the required manpower to achieve the organizations’ objectives successfully (Stanley 1987). Such prediction relies heavily on systematic investigation, compilation and analysis of a variety of information about the organization and the individuals working in it. Systematic investigation, in turn, can not be carried unless certain questioning techniques and analytical tools are operated to identify the job requirements, to assess individuals’ performance and to determine the actual gap in the individuals’ performance and finally to assess the gap to find out whether training is the right intervention. So the variable used here is the procedure adopted in need identification and assessment it is measured as follows:
1. What are the methods used for identifying training needs.
2. On what premises training decisions were built.
3. Selection of trainees.
B. Independent Variables

Systematic training need determination depends on a continuous and reliable flow of information obtained from certain information nuclei within the organization. Paramount among these are:

a. Organizations objectives and plans.
b. Job description.
c. Performance standards.
d. Manpower development policy.
e. Performance problems.
f. Status of the training department.

These were used as independent variables and were measured as follows:

a. Availability of such information.
b. Clarity of such information.
c. Accessibility of such information to the training function.

C. Intervening Variables

System view of training envisages that performance of training in any organization is influenced by other factors apart from its structure. Stanley stipulates22 (Stanley 1987):

“Several factors emerge to prevent training from achieving positive results. Many of these are intangible relating to human motives and prejudices which pervade and sometimes disrupt structures”.

Of significance to this study are factors relating to the attitude towards training: the following are used as intervening variables:

1) - Decision makers attitude. It is measured as follows:
   a. Support given to training.
   b. Involvement in training needs determination.
   c. Evaluation of training.
   d. Utilization of trainees.

2) - Recipients attitude: This is measured as follows:
   a. Involvement in training needs identification.
   b. Satisfaction with training.
   c. The desired training.

1.10 Organization of the Study

The study is composed of 6 chapters as follows:

Chapter One, the Introduction which includes a definition of the subject, importance of the study, the objectives, the field of study, methodology and organization of thesis.

Chapter Two contains a theoretical framework including, Management thought and training, different approaches to training, definition of T.N., models of T.N.A., Approaches to training needs Assessment.
Techniques of training need Assessment and basic requirements for training need Assessment.

Chapter Three contains a background of the study including the importance of the agricultural sector to the socio-economic development of the country, planning in Sudan, manpower planning and management development and training.

Chapter Four contains the findings of the study. It is comprised of two sections; assessment of the process of training needs determination in the research sample and the factors affecting the needs Assessment process in the sample organizations.

Chapter Five contains discussion of the results.

Conclusion and Recommendations including a proposed model for training need assessment.
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CHAPTER TWO
THEORETICAL FRAMEWORK

2.1 Introduction

Training is costly, both in terms of manpower and material resources, thus it is important to ensure that a training system is efficient, that the system produces, at minimum cost a man who has the necessary and sufficient skills, knowledge and the right attitude to enable him to carry out his job safely and effectively.

The unprecedented growth in managerial training activities in the industrialized world since the Second World War tends to obscure the fact that the concept of management as a body began to gain general acceptance between 1918 and 1939. The second world war saw the successful application of "scientific management" techniques, primarily devised for military purposes, to the solution of industrial problems. The very considerable mass of techniques, empirical data, skills and concepts built up during this period resembled a rag-bag of recipes rather than a concrete body of knowledge, parts of the training have been developed in isolation, the syllabus been changed, examinations have been changed or new training methods have been adopted, what has resulted was a learning system in which control of what is taught, what is examined and how teaching has been done, has been largely in the hands of the instructor. To some extent, training has been out of managerial control.

Many questions have often come to the surface: what skills, knowledge and attitudes does the man require to be able to do the job effectively and safely? Is unnecessary training being given? Is the training done in the best way to aid trainees' learning? Is assessment valid and reliable? Does the user organization know what the produce of the training system can actually do?

In many traditional training centers, it has been very difficult to answer such questions, but to be sure, training, properly done, can have a formidable impact on the organization. This simple fact has been overemphasized throughout the literature on the subject of training. To quote one comprehensive example:

"Training activities, properly planned, conducted and evaluated, help to raise the productivity of the enterprise through the more effective use of human resources" (ILO, 1985).

In the following part of this chapter a review of the relevant literature on managerial theories and managerial training and different approaches to training will be examined. Focus will be on the process of training needs assessment as the cornerstone of the training activity, different approaches and models will be examined. Finally an attempt will be made to provide a suitable approach for determining training needs in the Sudanese public organizations.
2.2 Management Thought and Training

2.2.1 Traditional management thinking

The formal theory of management thought is relatively short, dating back only about 100 years. History shows that most of the ancestors of organizational analysis and even some of the modern writers were practicing managers as well as organization theorists. Nevertheless, they were neither wholly experimentally nor theoretically oriented. Beckett (1975) maintains²:

"It is an unfortunate but inescapable fact that throughout its entire history management thought has produced no theoretically substantive, no conceptually valid, no philosophically respectable general theory of management ".

"The great men of history", using Marsh's words, tended to apply techniques which were unconsciously based on principles of organization, management thought as developed by the ancients was more of a response to the organizational and administrative problems that they encountered in the past. They tended to report the knowledge they had gained from experience and found successful in their careers. Often the advice they gave to beginners contained general principles and basic truth, although the method was pragmatic and evidence was derived from experiences of day to day management. This as put by Marsh³ (1965):

“The … constraints of practice to the development of organization theory, are buried much more in these routine form of management technology than are in the persistent efforts to formulate 'principles of management'

It has been the practice, during that time of the Industrial Revolution in Medieval Europe, to describe economic development mainly in terms of scientific and technical changes. Management as an important factor in the actual life of industrial units, which together make up the economic system of a country, has been generally overlooked. This as put by some scholars⁴:

"It was ... only when the industrial unit become large and when the need for principles was emphasized by the emergence of problems of management did the study of executive control of industry began to figure in the manuals of economic history"

The work of Fredrick W. Taylor, in the early part of the twentieth century attracted substantial interest in the field. That material has grown ever since.

Before Taylor there have been other scientists who showed concern with the organization and the work of the people within it. One of the first to have systematically analyzed the management practices of the organizations in Great Britain was John London Mc Adam (1756-1838). His name has become
popularly linked with road-building known as macadanizing. His studies of the most efficient way of breaking stones, minimizing movements and efforts involved in the work, the most appropriate type of tools to be used etc. McAdam has not only been systematic in the development of work practices, but also contributed concepts of organization and management such as efficiency, economy, coordination and control in organizations.

Other management innovators who have contributed techniques to increase industrial efficiency were Mathew Bolton and James Watt.

Charles Babbage, a mathematician from Cambridge, was the first to suggest the application of principles of scientific method to all management problems. He studied economic theory and the amount of labor necessary for separate parts of production process. He also dealt with other problems such as the optimum size of factories, the need for scientifically determined incentive plans and wages. He argued that the skill and knowledge needed for a successful enterprise have to be scientific based on exact knowledge that was systematically collected and analyzed. He was also concerned about the relations between masters and men, the need for cooperation and the elimination of strikes and even the need for international exchange of experience in management problems. Babbage's work was hardly noticed during his time. This as noted by Robertson (1948):

..."The art of management developed throughout the 19th century in a haphazard and empirical way."

The beginning of a deliberate thinking about management appears to have been diverse. Some had been concerned first with specific productivity of labor. Others, with problems of factory costs, plant layout, inventory control or workflow. This is generally known as "Method Study".

One of Taylor's acknowledged predecessors was Oberlin Smith, whose original contribution of management was his system of "numeric symbols" for machine parts. His system of order numbers were used by Taylor, later on, to produce his rouling scheme.

Capelin Henry Metcalfe was another pioneer in management thought to make use of systematic knowledge. He introduced a system of record-keeping helping in making assessment of efficiency and cost.

Taylor acknowledged Metcalfe's work as a distinct advance in the art of management.

Other predecessors of Taylor were Henry L. Towne and Fredrick Arthur Halsey. They experimented on wage payment schemes and incentive system of wage payment and their distribution on basis of relative efficiency of departments. Halsey introduced his "ASME", later utilized by Taylor to advise
his famous piece-rate system as a base for systematic planning of every movement of every worker in the shop to increase efficiency and output.

Taylor's contribution was more a philosophy of management, based on a gradual elaboration of techniques for analyzing and measuring elementary processes which yielded standard times of movement used on every process and by recognizing tasks and systems of payments in the light of these data. In essence Taylor's philosophy emphasized cooperation in organization which can be achieved only if those concerned have a community of purpose and method.

Thus, from the beginning, management role was perceived as being exclusively one of influencing other men to get things done in organizations that were comprised predominantly of men. That as noted by Beckett\textsuperscript{7} (1975):

\begin{quote}
A "principal theme pervading management thought, across the years has been to get people to perform work effectively, individually and collectively".
\end{quote}

In earlier days the idea was put this way\textsuperscript{8}:

\begin{quote}
... "management is knowing exactly what you want men to do, and then seeing that they do it, and then seeing that they do it in the best and cheapest way" (Fredrick Taylor)
\end{quote}

Later on the idea persisted\textsuperscript{9}:

\begin{quote}
"Management is a process by which responsible persons in an organization combine resources for achieving given ends"
\end{quote}

Ernest Dale provided a classification of management which still persists up until now:

\begin{quote}
"Management is generally classified into three groups: low, middle, and top. The lower (or first level) management group is made up of foremen and white-collar supervisors men and women who are only one short step above the rank and file in status. Then comes middle management; a vast and diverse group made up of: In general, department heads of all kinds, as well as some people in less important positions. Finally there is top management; the board of chairmen, the company presidents, the executive vice-president's – the men who direct and coordinate all the specialists and make policy for the company as a whole".
\end{quote}

Management as defined by Koontz and O'Donnell\textsuperscript{10} is:

\begin{quote}
... 'The function of getting things done through others'
\end{quote}

Building on this understanding of what management is these theorists and their followers, tried to depict the functions of management. Reviewing these
functions as exhibited in the writing of these thinkers one would notice that they all bear the same connotation:

"Planning, organizing, controlling and coordinating"

(Henry Taylor)

“Planning, organizing, staffing, directing, coordinating, reporting and budgeting”

(Luther Gulick and Lindale Urwick)

“Planning, organizing, staffing, directing, control, innovation and representation”

(Ernest Dale)

"... The functions of management are (1) planning, (2) organizing, (3) staffing, (4) directing, (5) controlling"

(Harold Koontz and Cyril O'Donnell)

These functions have been cited repeatedly as "the fundamental functions of management", much of the literature on management, and many of the principles of management were built upon these foundation stones. Management was required to acquire both knowledge and skills of such principles in order to be able to perform adequately.

2.2.2 The behavioral Scientists and Management

Other theorists, building on Taylor's pioneering work tried to investigate into the management of people at work. A turning point came about at the early 1930s, in the so called Hawthorne experiment carried out at a Western Electric plant, near Chicago. The investigation concerned work groups to determine the best work conditions which enhanced production. To their surprise their experiment resulted in a new set of findings – far away from the physical and environmental conditions of the work place – concerning workers' attitudes and behavior, it was suggested that people had feelings and needs and so if management was to be successful in motivating them to perform, these needs had to be satisfied.

To predict behavior, managers must know which motives or needs of people evoke certain actions at a particular time. People differ not only in their ability to do, but also in their "will to do" or motivation.

In their quest for what motivated people to work, several scientists concluded that they were stimulated to satisfy certain psychological needs, it was believed that if the acquisition of something which was desired satisfied a basic need, this would contribute to the person's motivation in his job. Thus Maslow put forward his theory of "Needs Hierarchy".
In the 50s, Fredrick Herzberg delivered his "Motivation Hygiene" theory, from work carried out among engineers and accountants in a number of establishments in Pittsburgh area. It was found that, in general, the things that gave people happy feelings about their work were factors directly related to the task or "motivators", where as those which caused unhappiness or discomfort were factors which surrounded the job, such as money, security and environmental conditions or "hygiene" factors. According to Herzberg, some aspects of a job allow people to satisfy "higher level" needs which he called (satisfiers of motivators). He argued that people get and want more from their jobs than pay. They want recognition, responsibility feelings of achievement, prestige, pleasure from social interaction, stimulation and challenge. Feelings of competence and internal control have a bearing on employee's performance at a particular job. If jobs contain elements that are interesting and challenging and if employees have some control over their work, there is likely to be better job performance. It was concluded that if we seek to motivate people through greater job satisfaction, therefore we may have to concentrate on the motivators such as achievement, recognition, advancement, responsibility and indeed the work content.

Thus the theory clearly indicated the importance of (training) since knowledge of the job and the skill to perform the job are the means to have control over the work and consequently job satisfaction. However, the hygiene factors can't be ignored, but have to be held at an acceptable level if they were not to have a de-motivating effect.

In the late 50s, McGregor introduced his theory X and theory Y concept. His contribution added more insight into the nature of man in organization and his attitude towards work. This contribution added to the discourse on the effect on motivation of punishment and reward.

In the 60s another relevant area of study sought to explain why people were satisfied or dissatisfied in their work was that of Rensis Likert centered on the 'leadership' or 'management style' adopted by the boss. If the management style was such that it created an atmosphere in which the subordinates felt at ease, they were more likely to be satisfied with the work situation. Likert used the word 'supportive' to describe the boss's approach to employee relationship when the climate produced contributed to the subordinate's sense of personal worth and importance to the organization.

These theorists, being primarily concerned with the human aspect of the organization, they perceived the organization as a human whole.

Chester I. Bernard viewed the organization as: A formal organization is “a cooperative system ... a complex of physical, biological, personal and social components which are in a specific systematic relationship by reason of the cooperation of two or more people”[1].
Prethus conceived of the organization as: “a system of structural interpersonal relations”

Herbert A. Simon\textsuperscript{12} perceived the organization as:

"The complex pattern of communications and other relations, in a group of human beings."

This new perception of the human aspect of organization required additional skills of the manager in addition to his traditional function of planning, organizing and control. Such added new dimension to the manager’s role was often known as the 'human skills' or 'interpersonal relations'. One of the great entrepreneurs, John D. Rockefeller stated\textsuperscript{13}:

"I will pay more for the ability to deal with people, than for any other ability, under the sun".

According to a report by the American Management Association, an overwhelming majority of the two hundred managers who participated in a survey agreed that the most important single skill of an executive was his ability to get along with people. In this survey, management rated this ability more vital than intelligence, decisiveness, and knowledge or job skills.

2. 3 Approaches to Training

The first documented work of importance to the training profession was that of Taylor and Gilbreth at about the turn of the past century. These were famously known as the 'efficiency experts'. Their research into the nature of jobs and what contributed affair day's work focused management attention on the value of time and method study. Analyzing the job scientifically made it possible for management to determine the most productive way of carrying it out.

Taylor's philosophy was based on his perception of the 'economic man'. He assumed that man was rational; his main concern is to manage production and profit to the best of his organization's interest. That if man was taught the best way of doing his work in the shortest and the most economic way efficiency of the organization was thus guaranteed, provided that all physical and environmental factors were favorably set. Taylor's approach to training was mainly concerned with teaching the worker the basic knowledge and skills required for the efficient performance of his task.

The function of the leader under Taylor's scientific management was obviously to set and enforce performance criteria to meet organizational goals. His main focus was on the needs of the organization with no concern for the needs of the individual. It has been accepted for some years that all training can be categorized under the heading of knowledge and skills. Little distinction was made between the two areas. Skills were seen to be acquired when knowledge
of the method, process or system was passed on. Learners were expected to become professional in a job after being told what to do. The unfortunates who were unable to absorb the information and apply it fairly quickly were considered idle or un-trainable and were discharged. This approach to attitudes in training was negative \(^{14}\) (Robinson, 1988:79). Employees were often seen to have the wrong attitudes when they failed to meet employers' demands. It did not occur to anyone that including the right attitude, that is, one which was accepted as constructive, could have a reinforcing effect on learning.

In this context, the work of behavioral scientists, coupled with pressures from the workforce calling for the application of fairness and common sense, have helped to bring about a change in approach in recent years. The direct impact of the behavioral approach on training was envisaged in the considerable progress that has occurred in the concept, content and methods of training.

Trainers became more aware of the peoples' needs within the organization. A thorough understanding of the motives underlying their behavior within the organization is inevitable if their sense of commitment to organizational goals is to be aroused. People need to be treated as participators, not as machines.

Such awareness of the people's motivation has induced considerable changes in the training methods from didactic to participatory methods. This in turn affected a marked development of endless training techniques. Management itself has become aware of the fact that employees who were kept in the picture about what was going on were more likely to accept and give commitment to management decisions. Robinson assumed\(^{15}\):

"Uncertainty can have a more damaging effect on a work force than bad news."

Successful management should have the ability and the means that secure the commitment and sympathy of their employees.

To conclude this part, one would say that in essence the scientific management approach to training was more inclined to the technical side of the organization, while emphasis of the behavioral approach was more to the social or human side with more concern for the individual worker.

   In this context it is relevant to quote Robert Guest following words\(^ {16}\):

"On his part the social scientists often make the error of concentrating on human motivation and group behavior without fully accounting for the technical environment where circumstances, even determines, the roles which the actors play. Motivation, group structure, interaction processes, authority- none of these abstractions of behavior takes place in a technological vacuum."
Such Fractionations of thought has substantially concerned a growing number of observers. Harold Koontz stated\textsuperscript{17}:

"For most of its life the study of management has lacked any unifying theory or even any organized effort to seek one, however elusive it might be."

Renewed efforts to consolidate available knowledge and to achieve some degree of conceptual unification of management theory have recently been stimulated. Such efforts have been brought about by the concept of systems.

The strength of this view of management lies in its ability to provide a conceptual framework on the basis of which any organization can be more readily visualized and comprehended.

The concept of systems has invaded the field of management. Many of the less obscure activities that occur within man-made organizations are today greatly affected by the systems approach. Moreover, the proportion of the total amount of organizational activity that is managed by consciously designed formalized systems is increasing at a rapid pace. While systems synthesis certainly has not reached the obscure and perhaps impenetrable corners of complexity that exist in man-made organizations, it has nevertheless dramatically changed the way that many organizational problems are conceived and analyzed, as well as the way that solutions to these problems are designed and implemented.

2.4 System Thinking and Management

The concepts of general systems only started in the realm of formal management theory in the early 1970s. Substantive changes in management practice began a bit earlier. At mid-century, concepts of modeling and simulation had been brought into the field of management. Mathematical and quantitative appraisals of the effects of alternative courses of action were made possible by the growing availability of high speed computing devices. Increased automation, of work activities resulting from a technological explosion, stimulated new interest in the programming of the work and integration of activities of many sorts. This, in turn, nurtured a new interest in the process of harmonizing multiple and disparate activities with common objectives (Beckett, 1975: 71). In this context Beckett maintained\textsuperscript{18}:

"Where formerly it was enough to view the management process as relating to a job at the workplace, the techniques of planning, the relations of employees to one another, the qualities of leadership, the nature of decision-making and other aspects of activities in organizations, we have recently become conscious of the need (and the opportunity) to deal in a conceptual way with the entire process. We have discovered synergy, learned that the whole is greater than the sum of its
parts, and come to realize that there is a clear need for building ideas of wholeness on the framework of which a more adequate conceptual image of management can be built”.

The essence of the management process, from a systems point of view, was to be seen the same in all sorts of organizations, in the Biological and Physical systems and in the social organizations and other institutions of man's construction. They all involve management – the receiving of information about possible future courses of action, the processing of that information, and the reacting to it (whether that management conscious or unconscious).

2.4.1 Definition of a System

Russell L. Ackoff defines a system as 19:

"An entity, conceptual or physical, which consists of interdependent parts”

Walter Buckley provided the following definition:

"A system is a continuous, boundary maintaining, variously related assembly of parts".

The United States American Standards Institute offers the following definition

"A system is an assembly of procedures, processes, methods, routines or techniques united by some form of regulated interaction to form an organized whole"

The Webster New International Dictionary defines a system as follows 20:

"A system is an integration or assemblage of objects united by some form of regular interaction or interdependence a group of diverse units so combined by nature or act as to form an integral whole, and to function, operate or move in union and often, in obedience to some form of control"

These definitions clearly reveal the idea of wholeness and interrelatedness in the working of systems, however, as indeed confirmed by Beckett, some of these words found in most definitions of systems do not convey clear ideas – i.e. words such as things, parts, objects, elements and entities. This, Beckett confesses is the definitional dilemma that plagues the field of systems, thus he offered the following definition by way of clarification 21.

“A system is a collection of interacting systems.”.

That, words such as those which appeared in the above definitions are nothing but subsystems, sub-subsystems, sub-sub-subsystems and so on.

However, Beckett believes such problem of semantics can be resolved by arbitrary choices of language. A unitary whole must for practical purposes are
whatever one choose to mean (to arbitrarily circumscribe when he seeks to deal with some subsystem (Beckett 1975:30). Such arbitrariness in Beckett's opinion must never be permitted to obscure the reality of the interconnectedness of all things or to inhibit the study of their interrelationships.

"For it is, as has already been indicated, the nature, characteristics and behavior of that interrelatedness that offers the greatest promise of understanding systems and hence the management process."

The role of management as perceived by system thinking is all embracing and far reaching. This as put by Forrester:

"To see the role of man in organizations as one of strengthening management systems (rather than managing) is to be set free from artificial and restricting concepts of what management really is, and to discover vast new opportunities for achieving man's objectives through organizational effort. To implement management systems successfully is to multiply the probability of attaining organizational success."

Management functions from a system perspective were visualized as a dynamic continuum condition. Rather than the sequential short list long established in management literature, Beckett offers the following:

"Goal setting, forming policies, searching for opportunities which are consistent with policies, setting opportunities which are consistent with policies, constructing systems for computing selected opportunities, installing systems for capturing selected opportunities, operating the systems that have been installed, and maintaining and continuously perfecting the operating system."

Such view of management functions was more expressive of the reality of life and the actual working of the management process, since it includes some of the feeling for the flow of events; it defines the idea of interrelationships of activities, it expresses the presence of standards (in the form of policies) and it ever hints at the presence of feedback.

The qualities of successful management according to the available knowledge about management system pertains to man's ability to conceive of organizations as it really was; a dynamic system composed of states, flow rates, decisions and channels that carry information. Men with such expanded views as to see all the internal and external interrelationships that inextricably and variously bound them to one another and to other exogenous systems.

In short, system analysis was rather complex. It is not our concern here to analyze the management system, but rather to give some insight into the
management function and role in organization. Our basic concern is with management training and particularly with the issue of training needs determination. So in the following part of this study will be looking into the systems approach to training with special emphasis on training needs as the cornerstone of the entire process.

2.4.2 System Approach to Training

Training from a system point of view may be regarded as a sub-system contributing its particular expertise to the system (which is the management system or the organization). To reiterate what has been mentioned before, the effective operation of the system can not be accomplished unless all subsystems within that system are working effectively and in close harmony with one another and with other systems that constitute the environment of the system. As such training potentially, can move the system towards the desired outcome.

It must be remembered here, that:

a. A system receives inputs (from its environment), processes those inputs, produces output and evaluate this output and provides feedback for adjustment – Thus the process continues again and again.

b. A system interrelates with other systems, thus changes in any one of these interrelated systems affect the other.

Building on this theoretical understanding training is thus approached as an all pervasive function within the organization. Most writers in the field assert that there are six essential steps in a proper training system (Byre, 1970: 14, Craig 1976:91, Stanley1987:73).

These steps were described by Stanley as "phases" since they connote continuity, interdependence and a progressive flow of events. An illustration of the training process is provided by figure (1) below:

![Diagram](https://via.placeholder.com/100)

Figure (1): the training process

Source: Stanly (1987)
The training process is perceived as a cyclical system with interlocking elements. The inner ring plots the course of design / development while the outer ring symbolizes a need for feedback and validation. The process as perceived by Stanley is a symbiotic system in which all parts must receive appropriate attention. The above diagram visualizes the "phases" of the process as concentric rings. Development of the training activity follows the path of the inner ring.

Each phase, starting with diagnosis, feeds into the next to ensure that training is relevant and well designed in terms of:

a) Treating the correct problem.
b) Having the proper objectives.
c) Using the right set of criteria.
d) Selecting appropriate strategies, methods and techniques.
e) Providing training material and learning aids suitable for the activity and the trainees.
f) Designing evaluation approaches to give accurate feedback of results.

Byre’s expression of these "phases" or "steps", as he calls them was as follows:

a) Ascertain the real need that exists.
b) State objectives to erase that need.
c) Ascertain the resources available and the constraints that may exist.
d) Develop and consider attractive ways to accomplish the desired outcome. Consider costs and benefits in light of constraints and relevant assumptions. Consider possible consequences and their likelihood.
e) Select an optimum alternative and implement it in the best possible way, utilizing available resources optimally.
f) Get feedback, as much as feasible in order to evaluate the outcome or results achieved in terms of the criteria spelled out in the objectives. If a need still exists, "recycle" through the whole process again.

A perusal of these essential phases of the training process reveals that the first step, concerning the determination of training need is the most important and crucial phase in the whole process – in fact it is the cornerstone of the entire training system. All writers in the field lay special emphasis on the question of training need as the sole determinant of the relevance and validity of the training process.

Byres asserts²⁴

“It is sound specification of training needs, coupled with clear and precise definition of objectives that underlies effective and efficient training programs”

Byres proceeds further to explain this point stating
"If one were to summarize the fairly voluminous writings about the development of training programs, he would conclude that the very first step involved is to take pen in hand and to proceed to write objectives ... this arm chairing approach to objective writing may lead to noble statements of intent, but far too often it ends in objectives which are not relevant to the needs of the individual or the organization ... for training in the public service, the name of the game is "training for improved job performance".

Similarly, Robinson asserts:\footnote{25}{

"One of the most important steps in the training process is the establishment of the training needs."

Within this context Stanley provides the following observations:

a) That many public enterprises spend a great deal of money in an attempt to develop and maintain effective work force.

b) Unfortunately, the results are not encouraging, public enterprises continue to be plagued by human resources problems and low productivity.

Stanley believed that there were several questions, relating to ineffectiveness of training that need to be answered. The foremost were:

a) Why was training not producing the desired effects?

Other related questions were:

a) Was training treating the right problem?
b) Were training activities properly designed and implemented?
c) Were there support systems, within the enterprise, that would allow the training function to operate effectively?
d) Two important reasons underlie these questions:

1. The first was related to the purpose of training which was to improve the capabilities of the human resources in order to increase their efficiency and effectiveness on the job.

2. The second was in relation to an expectation which was that, training was expected to produce positive changes in job-related knowledge, skill and attitude in order to enhance corresponding changes in on the job performance.

Both sets of consequences could not be reached at unless the real problems encountering performance were identified and examined.
2.4.3 Definition of Training Needs

A training need as defined by writers in the field is:

"The gap which exists between the true requirements of a given job and the present capability of the incumbent ... the organization is seen to have a training need when it recognizes that it is not geared to meeting the objectives which it sets itself”.

Morrison provides the following definition:

“A training need may be described as existing any time an actual condition differs from a desired condition in the human or "people" aspect of organization performance, or, more specifically, when a change in present human knowledge, skills or attitudes can bring about the desired performance”.

Both definitions clearly recognize three important facts:

a) The direct relationship between training need and the actual work requirement.

b) The role of training in promoting organizational performance.

c) Training can not be just a reaction to a problem or a mere expression of a want. Rather it is an outcome of an in-depth investigation and analysis of the causes and consequences of the training activity.

This element of investigation and analysis is well expressed by Henry J, Duel (1970:92) in the following citation where he describes the responsibilities of the training director:

"It is his job to help refine this information ( wants expressed by line managers and employees) so that it becomes relevant to organization mission, and so that it relates general statements of needs to the where, the why, the how and the who of training ."

From this he must evolve statements of specific needs on which, definitive plans can be based. The importance of applying an analytical approach to the question of training needs determination emanates from the fact that not all performance problems within the organization are solved through training. This as put by Morrison (1979:9) 29

"Sometimes the most feasible answers are better materials, methods and machines or more money, rather than a training program"

Other writers add here, that problems of performance may sometimes be attributed to external forces outside the organization altogether. Such problems may be brought by the factor of change, brought by other systems in interaction with the organization e.g. legal system, technological systems or even change
brought about by the large social system e.g. change in norms, work values or a shift in demand.

This aspect of need justification is best illustrated by Stanley in the following figure: according to Stanley, the training need determination process does not stop at the phase of need "identification", but also extends to comprise an "assessment" of the need and the provision of alternative solutions, Stanley (1987:14)\textsuperscript{30}.

Referring back to figure (1) above (page26) the need determination process has been exhibited as comprising two complementary phases; the need identification (TNI) phase and a need assessment (TNA) phase. The TNI is considered as a precursor to the TNA. It is necessary to indicate the nature of the solution – training or non-training. Therefore it’s a decision-making phase of whether to proceed with training however, decision to proceed with training does not necessarily indicate how the training should be designed and implemented.

2.4.4 How TNI works

In figure (2) above, the rectangle represents the job in totality. "A" is that portion, which the worker can do, and the inset "B" is what the worker cannot do, "B" therefore, signifies the area in which training is required. In this context, the responsibility of the trainer is to plan or design an activity in relation to the tasks comprising this aspect of the job.

The arrows represent those external forces over which the worker has little or no control and which will not be solved by training. TNI makes this distinction in respect of training and non-training problems. If, for instance, the “external forces” overwhelm the skill component, it may be that by correcting these forces the individual would be able to perform satisfactorily. Training would
not then be necessary. TNI has thus, clarified the need within the work situation. But Stanley (1987:16) establishes that:

"Training activities which are based on the mere recognition that a training need exists, quite often do not adequately treat the real problems.”

To avoid such pitfalls, Stanley believes that several things should be considered before a decision is made to proceed with training, that there are other factors which are complementary to the skill of the worker and could indeed make the individual appear incompetent.

Such factors which can affect performance, and are therefore objects of scrutiny for TNA are illustrated in the following figure:

![Figure (3) Factors producing important Influences on Job Performance](Source: Stanley (1987))

Successful training depends on the dovetailing of such factors that affect performance, whether that effect is direct or indirect. The idea is that, the individual, at work, practices a skill in particular situation, using particular tools and materials and by establishing and maintaining particular relationships. Within this framework, there are several variables which must be controlled. Hence the job could demand skills which are only indirectly related to the tasks, but which have a critical impact on the job performance.

In essence, the above illustration represents a proposition that poor performance is caused by some "inappropriate action on the part of the individual performing the act. But "acts" according to Parsons (1951) do not occur singly and
discretely. They are organized in system and must be considered within the framework of 'system integration'.

Figure (4) below illustrates the system in which TNA works to clarify training needs.

The training need assessment phase of the training process takes account of the system context of behavior and attempts to analyze the identified training need to clarify: the real nature of the training need, the critical factors relating to the need and are likely to cause the need to persist, whether such factors within the control of the training situation, whether training is the best alternative what other options are available in this respect, what are the characteristics of the potential trainee and how these characteristics will assist or impede the effectiveness of training.

This implies that training is not merely concerned with the skill itself, but also includes the preparation of the individual for coping within the job situation, or for dealing with job related issues, since it is quite normal that such individual very frequently perform the skill-related action in less than ideal conditions.

In this way TNA goes well beyond the identification of a need and provide a solid base for developing the training activity. This is important because
trainers need to adopt a questioning attitude towards the design and implementation of training activities.

For each training need, there is a wide range of possible interventions for changing or influencing the role perception of each trainee. This makes it clear that a significant amount of investigation is necessary to determine the nature of the intervention in relation to the causes and in order to ensure appropriate results.

Specific purposes of TNA in relation to these issues are as follows:

a) It facilitates correct and precise formulation of training objective,

b) It enhances appropriate choice of training strategies with respect to the quantity and quality and to the methods and technologies of training.

c) It helps to establish the criteria against which behavior resulting from training will be measured. This feature of TNA supports the proposition that evaluation is a "built-in activity" in the training process. It subsumes the importance of performance standards as the critical functional instrument in any work situation. Validated performance standards provide the basis for assessing performance – For "pining down" deviations from the norm, as well as indicating precisely the objective that training (or other forms of intervention) should accomplish.

d) It also provides an understanding of the resources that will be required, and as such, forms a basis for estimating the cost of training. If an attempt was made at the outset to estimate the cost of the problem to the enterprise, this estimate could be used later to calculate the cost-benefit of the training.

2.5 Methods of Training Needs Determination within Organization

Generally speaking, contributors to the subject are consentaneous to the existence of training needs at two main levels within the organization. These as classified by Robinson, (1988), HenryJ.Duel, (1970), Morrison, (1979) and Turrell, (1980) are as follows:

a) Needs at the organizational or corporate level.

b) Needs at the individual level.

The first approach is mainly concerned with investigation into the improvement of organizational and department performances. Here the desired performance of the organization and its short falls in meeting its objectives are closely examined to determine training deficiencies. This approach has the advantage of being more system-oriented by focusing on products and processes of the organization and by orienting the utilization of training resources toward end
results. The difficulty with it is that it may be difficult to finally focus training needs at the individual level where all needs must eventually be directed.

The second approach starts with the most basic unit in the organization, the employee.

A training need is established for each employee. The results are accumulated through successive higher levels of the organization until all outstanding needs of employees are summarized and related to organizational objectives, this approach has the advantage of being simple and specific, but it sometimes suffers from failure to adequately relate employee needs to the broad mission, objectives and long-range goals of the organization. Thus care must be taken each step of the way to identify employee needs and goals in conjunction with organization needs and goals.

Whatever the case both approaches seem to be indispensable if training is meant to answer the what, why, where, how and who questions. Any serious attempt at systematic planning and implementation of training would inevitably make use of one or the other approaches during the different phases of the training process.

A comprehensive illustration of such integrated relationship of the two approaches is provided by Turrell, (1980:2) as follows:

---

STAGE 1
Clarify the objectives of the organization

STAGE 2
Obtain organizational information relevant to man power needs

STAGE 3
Analyze organizational information & identify corporate training needs

STAGE 4
Prepare the corporate training plan

STAGE 5
Analyze indiv. Jobs & prepare the individual trg. Programmes

STAGE 6
Causes behavior to change

STAGE 7
Evaluate the effectiveness of development & training

---

Figure (5) the integrated relationship of TNA Approaches
Source: Turrell 1980:17
The diagram offers an alternative way of representing the training activity, within an organization. An important point to be noticed in the above diagram is that it clearly highlights where the process of 'analysis' occurs in the system. An organizational analysis will lead to the establishment of overall corporate manpower requirements. The job analysis will help in deciding the training needed to make the job holder an effective performer. The process of analysis is no doubt a continuous one which occurs at each stage as one goes back in the light of current information to the previous stage to modify the information it contains, thus the diagram, besides highlighting the points of analysis, it also explains how the recognition of training needs at the corporate level can be considered together as part of an overall integrated training system.

Robinson (1988) and Stanley (1987) talk of one more level at which training needs exist in respect of occupational groupings, namely; at the occupational or job level. This mainly refers to the different occupational classifications; classes, grades or scales as they are often called. Such grading seems critical to such things as:

a) Expectations regarding quality of output.
   b) Reclassification or moving from one grade to a higher one.
   c) Levels of responsibility which individuals at different grades are expected to assume.

As Stanley (1987) puts it:33:

"For motivational and other purposes, it is important that individuals are provided with opportunities to 'move up' in the occupation".

Thus such people are entitled to be trained to assume higher responsibilities. Similarly changes in the organization, its processes or methods of operation (e.g. introduction of office automation, adoption of new procedures etc.) may affect occupational groups in a manner which creates a group demand for training. Hence TNA plays a vital role in the streamlining of training and development objectives to these ends.

### 2.5.1 Techniques of TNA within the Organization

There is a variety of methods and techniques for obtaining information related to the assessment of training needs within an organization. Each method and each technique utilizes specific approaches for obtaining and analyzing the required information. However, all methods and techniques depend on the same major information nuclei. Salient among these are:

a) The organization objectives.
   b) The organization structure.
   c) Job designs.
   d) Career development policies.
e) Manpower planning data.
   f) Performance standards.
   g) Performance problems.
   h) Employees’ records.

The following provide some insights into the methods and techniques which can be used for assessing training needs at the enterprise level or corporate level.

2.5.1.1 Corporate Needs Analysis

At this level of training needs analysis, the purpose of training will generally be viewed as one of enhancing organizational as well as departmental performance. So the purpose of analysis would be to investigate the difference between what the organization has planned to do, and what actually occurs to see if training can reduce or eliminate that difference. The procedure then is for improving the effectiveness of the organization; here Turrell (1980:7) believed that it is helpful to classify corporate training needs into the following groups:

1. The first group of training needs concerns those needs which arise as a result of changed circumstances. These changes can be brought about either by external factors such as economic, legal, technological, cultural and political factors. At this juncture Stanley (1987:51) especially emphasizes the issue of international agreements. As he puts it:

   "Industrial agencies are increasingly playing significant roles in the operation of public enterprises, there is growing evidence that international agencies are 'reaching down' into public enterprise to influence their internal management. This has some implications, at least in some instances for TNA methods".

Here important issues of concern are:

   a) Political and economic relations with neighboring countries.
   b) Bilateral and multilateral agreements.
   c) The international attitude towards the country.
   d) International aid and the various caveats accompanying it.
   e) International lending agencies.

These items have a tremendous impact on the development of strategic plans and as a consequence on manpower development plans and strategies. This is especially true in cases where the training opportunities themselves are determined by such international agreements.

TNA in these cases involves a careful study of the situation and agreements, the identification of knowledge and skills gaps which appear as a result of funding agreements; more important, the determination of criteria and the means of treating the situation to ensure a smooth implementation of change. It further,
involves an effort to foretell the impact of events in an attempt to produce programs that will help in adjusting to sudden changes in situations.

The other types of changes are brought about by internal factors such as retirements, promotions, reorganizing, workforce composition, shift in objectives etc...

2. The second group of corporate training needs arises as a result of work problems which exist in the department and sections of an organization. In this group, the problems are investigated and an assessment is made to determine whether they can be reduced or eliminated by the application of training solution.

The recognition of these training needs relies on acceptance that the systems and procedures of the organization are not as productive as they should be. However, it should be recognized that not all organizational difficulties can be solved in the short term by training; for example, financial problems can not be solved unless an injection of more capital investment is provided. Yet in the long run, development and training of employees could well solve such problems.

The major difficulty with problem oriented training needs as perceived by Turrell (1980:16) is one of detection. "Managers and staff would not readily disclose and parade the problems and inefficiencies of which they are responsible.” Hence the investigation process aims at encouraging staff to discuss frankly their problem areas and assist them to recognize training solutions.

3. The third group of training needs can be interpreted from the manpower statistics of the organization. Here concern will be with examining in an overall way, the rates at which people join and leave the organization together with information concerning their length of stay in the organization, their age, sex and background.

Analysis of this data allows deducing some overall implications about the ways in which organizations attract, select and train their staff. The diagram below summarizes the three main areas from which corporate training needs may be determined. It also indicates those factors which must be analyzed in order to device specific training requirements.
CLASSIFICATION OF CORPORATE TRAINING NEEDS

Table (1)  
Source: Terrell 1980:9

<table>
<thead>
<tr>
<th>Training needs caused by change</th>
<th>Training needs derived from work problems</th>
<th>Training needs derived from man power wastage data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training needs can be derived from an analysis of changes in:</td>
<td>Training needs can be derived from analysis of problems related to:</td>
<td>Training needs can be derived from an analysis of manpower losses due to:</td>
</tr>
<tr>
<td>1.1 Technology.</td>
<td>2.1 Organization structure</td>
<td>3.1 Induction.</td>
</tr>
<tr>
<td>1.2 Markets.</td>
<td>2.2 Succession requirements</td>
<td>3.2 Skill &amp; career development.</td>
</tr>
<tr>
<td>1.3 Legislation.</td>
<td>2.3 work method e.g. manpower -utilization machine &quot;</td>
<td>3.3 Wages &amp; salary structure.</td>
</tr>
<tr>
<td>1.4 Manpower composition.</td>
<td>operation times learning times disputes working conditions</td>
<td>3.4 Recruitment &amp; selection.</td>
</tr>
<tr>
<td>1.5 Other environmental factor.</td>
<td>2.4 Material Control.</td>
<td>3.5 Interpersonal conflicts</td>
</tr>
<tr>
<td></td>
<td>2.5 Salary.</td>
<td>3.6 Work demands.</td>
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<td>2.6 Quality.</td>
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<td></td>
<td>2.7 Sales</td>
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</tbody>
</table>

The techniques used in training needs assessment are numerous; some of the relevant ones to occur will be enumerated hereafter.

A. Educational Needs Survey

Educational needs are considered prime targets for TNA in the face of variance between the products of educational institutions and the specific work requirements. The purpose of analysis here will be to look at the overall educational requirement for jobs in the enterprise. The process is carried out within the frame work of the objectives and operations of the enterprise. The focus will be on specific levels, functions and types of specifications. Job
description will be examined to have an idea of the necessary qualification. By comparing the required levels of qualifications with those of the incumbents the required training will be detected.

B. The Employees Attitude Survey

This is frequently used to obtain reactions to supervisory and managerial personnel for use in designing managerial training programs. Such surveys, generally, are used to uncover the feelings, views and opinions of employees in respect of such things as the overall organization, the supervision they receive, their work load, facilities and working conditions and a whole range of other issues that directly or indirectly influence performance.

Attitude survey is widely used currently to detect workers and managerial satisfaction with employment. Job satisfaction to a great extent is influenced by competence and the esteem which the individual earns as a result. Training can indeed play a crucial role in inducing job satisfaction and improving performance. It is entirely true that low performance is not attributable only to lack of competence. An individual may possess an abundance of knowledge and skill but may perform poorly because he is not disposed to use his attributes appropriately. Hence attitude surveys help in providing feedback on the perceptual frames which impact on the utilization of knowledge and skills and which are important determinants of work behavior. The results of surveys therefore can either be fed directly into training and development programs, or they can provide insights into support factors that are necessary for reinforcement37 (Stanley, 1987: 59).

Attitude Surveys are commonly conducted either through:

a) Interviews,
b) Self-administered questionnaires,
c) Combination of interviews and questionnaires.

The choice of method depends on such factors as:

a) The objectives of the survey.
b) The size of the target group
c) The time available to do the survey.

C. Organizational Audits

Records of performance can provide a variety of clues, about the efficiency and effectiveness of an organization. They can provide revealing information with respect to certain organizational units, activities, costs, inputs, outputs, system, standards etc… Audit statements are useful in explaining the reasons behind recurring crises. Audits dealing with structural or functional components of organizational performance can provide useful information on the way in which management makes decision, conceptualizes issues, anticipates or resolves conflicts, responds to changes, creates favorable climate etc
D. Analysis of personnel records and reports

Personnel records can provide useful data for determining training needs. A high rate of staff turnover, conflicts, grievances, absenteeism etc can all be signs of low job satisfaction, influenced by low capabilities, but as mentioned earlier low job satisfaction is not caused solely by low capabilities. Therefore careful examination of all the prevailing conditions is absolutely necessary. Reports by themselves do not indicate that training is needed. However, they provide useful clues to areas that need detailed investigation. They also provide opportunities for assessing what the problems cost the enterprise, thereby forming a basis for evaluating the benefit of training.

2.5.1.2 Manpower Planning Data

Manpower planning, properly done, should provide useful data to training. Of major importance here is:

a- Management Succession or Replacement Chart

Succession planning can be started once the organization chart has been prepared. It simply consists of listing those jobs which will fall vacant over the next few years because of the anticipated departure of the job holders. When succession needs have been recognized the chain reaction of expected promotions, transfers, and retirement has to be planned before people can be allocated to their new roles and jobs. It is this aspect of succession planning which creates training and development needs. People will be required to do new jobs, to adopt new skills, to use new knowledge and to develop different attitudes as others in the organization retire and have to be replaced.

The information needed about each post holder would include:

a) Job title / job grade.
b) name
c) age
d) Length of service.
e) Time in post.
f) Education.
g) Assessment of performance.
h) Promotion prospects.

As a result of succession analysis possible successors to each post are determined and consequently their training is also determined. (Annex A provides an example of a succession analysis chart)

The process of finding successors and training then continues throughout the organization for all managerial posts.
**b-Interpersonal Conflicts Analysis**

Manpower wastage is caused when an employee becomes dissatisfied and leaves because of the stresses, arguments and rows which he must face in his job. One of the main reasons for the conflicts getting out of control is due to the failure of management to be fair, just and equitable when dealing with staff, and management's inability to recognize and take action against any increase in this type of conflict. One implication of such conflict situations may be because managers are lacking the proper interpersonal or team building skills. Another implication could be, with the individual experiencing the conflict himself. He may be over-sensitive to the stresses in the job because of his lack of training to deal with difficult situations. A third implication could be that the initial selection procedure needs investigation, as a possibly suitable candidate can not perform in his job, then a relevant question would be whether the particular job demands a certain set of mental attributes to withstand conflict situation. In this case a management training used could be revealed in respect of those who set the selection criteria and recruit people.

**2.5.2 The Corporate Training Plan**

On completion of a corporate analysis, a number of problem area and training implication will have been recognized. The next stage of the systematic process is to use these implications as the basis for constructing a corporate training plan. To ensure that training and development is related to the needs of the individual and his organization we must continuously monitor the activities of both, the organization and the individual, so that the training and development that are provided help the individual and his organization to meet their respective objectives and goals.

**2.5.3 Methods and Techniques of TNA at the Individual Level**

A person's training needs are derived from two major sources. The first comes from the corporate training plan, and from this it is possible to decide those people both individually and as groups who need to be trained now, or at some time in the future. The second major method from which individual training needs can be derived compares the performance achieved by a job holder with the performance demanded by the job\(^3\) (Turrell, 1988: 53).

The assessment of training needs for the organization as a whole provides the training function with broad global responsibilities, while the assessment of individual training needs identifies, in a detailed form, the actual deficiencies in knowledge, skills and attitudes which exist and which must be treated to bridge the gap between the individual’s actual performance and the required performance.

Assessment of training needs of both the organizational and the individual levels are essential and are in fact complementary. Neither of the two approaches could replace the other. The assessment of individual training needs
essentially demands more detailed studies, more investment of time and resources and less guess work, the thing which creates some hesitation, among those, who do not appreciate the need for systematic pains taking effort. However, Stanley maintains:

"It is ... important to emphasize what is surely a truism: that TNA is vital to successful training which, in turn, should be undertaken in response to the needs of the organization and the individuals within it".

The methods and techniques for individual training needs assessment as presented by writers on the subject are numerous; but generally, they all focus upon two main sources of information; job-related information and individual performance information. The principal method for obtaining information about the job is:

25.3.1 Job Analysis


Job analysis as defined by Robinson (1988:39) is:

“The term used to define a process which involves the analysis of a job into its component parts or tasks to provide the data required for a variety of purposes. These include recruitment, management development, developing organizational and wage structures, improving job methods and safety and, of course, establishing training needs”.

Roff (1976) points out that the job analysis needed for the purposes of training will be decided to ascertaining what the worker needs to know and what he needs to be able to do to perform satisfactorily.

2.5.3.2 The Process of Job Analysis

Job analysis starts with a consideration of the type of information which the analyst seeks and the format which he will use. Next, there is careful planning of the procedure to achieve the desired end, in terms of collecting the information that will assist complete understanding of the job and its related aspects.

Initially, Stanley identifies four important considerations in the data collection stage. These are:

1- What type of information is necessary?
2- In what form should the information be obtained?
3- What method of analysis will be used?
4- Who will be responsible; will the analyst be used, or will the supervisor or job incumbent be the agents for producing the information?
Most writers emphasize that the combined effort of the analyst, the incumbent and the incumbent's supervisors are all essential. For a detailed method of information gathering for job analysis see (annex B)

2.5.3.3 Performance Skill Analysis
Performance analysis is the other arm of the individual needs analysis process. While Task Analysis is an indexing of job elements which provides the basis for understanding the nature of the job, performance analysis is the method whereby performance deficiencies are detected and thereby provides a true understanding of the extent to which training is needed.

Performance analysis is considered by most writers to be the most critical aspect of the whole process.
Stanley\(^42\) (1987:76) specifically assigns great concern for performance analysis, because as he puts it:

"There are a number of job related (direct and indirect) factors which impinge on performance, even if the individual possess the right skill, such factors are as follows":

1/ Physical factors e.g.
   a. The physical environment.
   b. The materials.
   c. The machinery or tools.
   d. Physical handicaps.

2/ Psycho-social factors e.g.
   a. Analytic capabilities.
   b. Communication skills.
   c. Social (interpersonal) skills.
   d. Perceptual skills.
   e. The social environment.

If these factors exist in a negative dimension, they can have a devastating effect on the performance of tasks. This is why performance analysis is important.

Some aspects of managerial performance and their methods of analysis are provided by Stanley\(^43\) (1987:76-83) salient among these are:

   a. Perceptual skill performance.
   c. Diagnostic skill performance.
   d. Logical Decision-making Skill Performance.
   e. Communication Skill performance.
   g. Interpersonal Skill performance.
The techniques used for analyzing performance skills are various. Some of these are mentioned above. For simple jobs the usual questioning methods, through questionnaires, interviews and general surveys, may be used together with systematic observation. For complicated jobs, more sophisticated methods may be applied. These include brainstorming, case studies, performance tests etc…

Using the information collated through job analysis and task analysis and the resulting job description and specification, performance deficiencies could be elicited by comparing the required standard of performance with the actual performance of the job holder. Thus, the performance skills analysis provides information about the real cause/s of the performance deficiency and whether the deficiency is curable by training (For more details on conducting performance analysis see annex C).

2.5.3.4 Conducting a Performance Audit

In the "real world" ideal situations rarely exist. Organizations frequently tends to classify problems according to their proposed solutions and therefore a training department might just become aware that a 'problem’ exists only when it receives a request for training – what some writers characterized as "fire-fighting" training, according to the model (annex C); what is happening is that someone is specifying a particular solution or tactic (level III). In such case, the training administrator has to move as many levels as possible to begin the analysis in an effort to get answers to the following questions:-

1- Is the problem the result of a deficiency of knowledge (D<sub>K</sub>) or deficiency of execution (D<sub>E</sub>) i.e. can training solve the problem. (Cell IIB, fig. 6).
2- Is it of value to solve this problem? (Cell IIB)
3- What is the desired outcome? What should be happening? (Cell IIA).
4- Could the effort be better spent impacting some other problem? (Cell IIB).

Minimally, it would be beneficial to begin with a level II analysis, determining the desired performance, the deficiencies and the cause of the deficiencies.

When there is little chance for such analysis, the following questions usually yield helpful information:

1- What is the desired performance (job outcome)?
   a- What are the job standards?
   b- Who says that these are the standards?
   c- Does everybody agree on these standards?
   d- Does everybody know whether these standards are now being met?
2- What are specific differences between actual and expected performance?
   a- Has anyone ever performed as required?
   b- Who?
   c- When?

3- Could employees perform properly if their lives depended on it?
   a- Did employees perform properly at any previous time

4- Do employees whose performance is deficient know:
   a- What is expected of them?
   b- That they are not performing correctly and exactly how far they are from expected performance?
   c- How to perform correctly?
   d- When to perform?

5- What positive (or negative) consequences of performing correctly or incorrectly can employees expect from:
   a- Their bosses?
   b- Their subordinates?
   c- Their peers?

To conclude, the performance audit is not a training technique rather it is a process of analyzing human performance problems which results in cost-effective solutions and one of which might be training.

2.5.3.5 Performance Appraisal and TNA

Performance appraisal (PA) as defined by Donald Spanier\(^46\) (1967) is "the activity of analyzing and evaluating the work performance and accomplishments of management employees in relation to what they are expected to do, and what they are expected to accomplish".

Byres further adds\(^47\):

"Those requirements and objectives are stated in some forms of managerial position specification and standard of performance, if they are available”.

Duel (1970:97) maintains that\(^48\):

“If an effective performance evaluation program is in operation. It can greatly contribute to individual employee-need determination. Such program focuses on the requirements of the job and employee behavior as measured against those requirements. Information relevant to needed training can be obtained from a good appraisal program.”
All writers stress the importance of (PA) in providing feedback on training and development needs at the individual level, yet they, simultaneously, agree that abuse of PA system is wide-spread.

Stanley (1987:85) maintains that (PA) is a management tool which has not lived up to its potential, that:

"Basically the performance appraisal concept has come to mean much more than merely 'rating' an individuals' job behavior or traits. It is expected to assist the managers / supervisors establish or re-establish a working contact with the worker which enhances improved or sustained performance according to the workers' capabilities".

Effectively PA is conceptually designed to have a two fold objectives:

1- It provides the manager with insights into the employee's performance. How well he is doing, his strength and weakness, and scope for improvement.

2- It provides an opportunity for the worker to receive feedback regarding his performance and encourages the employee to make a commitment to improve that performance.

There are major implications in such an approach, both to do with the relationship between the manager and the employee; these are:

a. The manager is required to help the worker understand what is expected in terms of improved work performance.

b. Then he must provide help in improving that performance. This is frequently referred to as "Supportive Behavior" from managers.

This mutual responsibility for PA has, further, been expanded by Robinson.

"Performance review assumes that the interviewee takes an active part in the activity; it's a democratic two-way system. Targets which were agreed, not set, at the last interview are reviewed and where they are not met, reasons are sought ... where failure to meet targets satisfactory points to shortcomings in knowledge or capability, training needs are identified and recorded in the training plan for suitable action".

In this way, the employee will agree to targets which he believes will be achievable and he will be able to talk through any difficulties that he may feel he is going to encounter. Hence, he will be greatly committed to strive for achievement of the agreed objectives.

The main instrument for arriving at a mutually agreed target is the performance Appraisal Interview. The process as perceived by Stanley involves:
a- An examination of the present situations the current job performance in the position, held at the time of the interview.
b- What management can do to improve it?
c- What the employee can do to improve it.

In this way the process seeks to influence self-analysis and the immediate outcome would be a jointly practical approach focused on improved performance.

2.5.3.6 Economics and Behavior

The performance audit also concerns itself with the economics of the organization being analyzed. This is useful for two reasons:

1- To determine whether the deficient behavior really makes a difference; i.e., is there any value in improving that particular behavior, or could the time and energy be better spent correcting some other behavior?

2- It tells us something about what is important (or should be important) to the organization and therefore is most likely to receive positive consequences from all levels of management. For example, in private organizations, profits are the ultimate consequences at all levels. Behavior which cannot be observed to contribute to profits or other economic measures will not be supported. Also there is frequently a conflict between levels or subsystems centered on economic measures, so when this is clarified, a number of problems and deficiencies are often explained.

Economic analysis, according to the performance audit model, takes place on several levels. At a general level, an attempt to do a "stakes" analysis – to find out what is at stake in the organization and what would be the impact of improving performance in a particular area. The analysis, at this level would be undertaken to determine what training, if any, given the available budget / resources, would have the greatest impact on the performance of the organization.

The first step in the audit would be to build a facsimile of a "typical" organization on paper (a model organization) documenting critical dimensions such as the flow of work, organization chart, budget etc…. Next look at the "stakes" of the typical organization, given the assembled budget, review the various operations within the organization, then starts to question:

1. Suppose a certain operation is not carried out efficiently, where does the largest financial loss occur?
   a. materials
   b. labors
   c. Equipment etc…
2. Suppose a training program made the workforce so efficient that the direct labor budget was reduced by a certain percentage. How long would it take to recover the sum of money invested in training if it were used in only one area?

3. Suppose a training program reduced material waste to such an extent that the cost of material was reduced by a certain percentage. How long would it take to recover the sum of money invested in training? And so forth.

The answer to such questions indicates what the big stakes are. Then knowing what is at stake the next step would be:

- look to see who in the organization can best impact these high-stake areas. This may be done by looking at the variance in performance of a particular level of employees (e.g. operators, supervisors, department managers, field administrators etc…). Here we would be looking for the difference between the performance of the poorest and the best employees. If that difference is large, then the programs potential for improvement is great. If the difference is negligible then the potential impact of the program would be low. Thus by examining different levels and different categories of employees we would be able to distinguish which deficiency is worth correcting. A quantitative measure of the potential impact on performance of any group of employees could be found by:

- First identify the critical ways in which employees could fail.
- Then ask which failures would cost money (or production failures), and how much.

A convenient economic unit for each job could be devised and the average cost of the loss is calculated per production year. This would give an indication of the amount of savings (or improvement) achieved when a decision to introduce a change in performance of a certain employee (or a group of employees) is taken. In this way the economic analysis would help in determining in which group of employees there is the greatest potential impact on performance.

In brief, the analysis of economics tells us whether a problem is worth solving (or which deficiency is worth correcting); it also tells us about the organizational consequences which may or may not support any changes of behavior. the viability of the whole process is maintained only when a performance feedback system is developed and implemented which would provide all levels of plant management with daily (or periodic) waste and production data. Without such an information system which apprises them of the improved performance, management will not be able to arrange the consequences necessary to maintain the improved performance. It is important to note that this economic analysis helps in getting direction and setting priorities for training. Furthermore it also helps in evaluating the results of the training program. (Rummler, 1976:14-16)
2.6 Responsibility for Training Needs Determination

"The problem of training needs brings into focus the critical role relationship between the functional manager and the training director. It is at this point that their mutual responsibility for the training subsystem becomes defined; how it is developed and defined have critical impact on the quality of the training program from that point on" (Duel and Byres 1970:90).

Most writers stress the functional managers' responsibility for recognizing the role of training in helping to accomplish organizational goals. In Duel words:

"With his focus on broad organization mission, he is in the best position to assess the utility of the various subsystems, including training, in producing desired system products."

Robinson (1988) perceives the functional manager's responsibility for training and training needs assessment in totality. He is accountable to top management for the performance of his staff, knowing better than anyone what their jobs entail. Thus he should be able to assess to what extent the job requirements are being met. Even further he has to make sure that his employees know the requirements of their jobs; that they are able to learn those requirements and have guidance and training, to enable them to carry out their duties to the necessary standards. Though this does not mean that the manager is expected to carry out all the necessary training by himself, yet it does emphasize his role in monitoring and reviewing his employees' performance and particularly coaching "which should be part of his normal day-to-day duties".

A- Role of the functional manager

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those requirements and have guidance and training to enable them to carry out their duties to the necessary standards. Though this does not mean that the manager is expected to carry out all the necessary training himself, yet it does emphasize his role in monitoring and reviewing his employees' performance and particularly coaching "which should be part of his normal day-to-day duties".

B- The Role of the Training Department

It has been mentioned that responsibility for training needs determination within an organization lies primarily with the functional manager. The training director, like any other staff advisor, his role is that of providing assistance and guidance. He is the one who possesses all the specialized knowledge of procedure, technique and resources. He is responsible for seeing that necessary training is recognized and conducted in all departments and that the training subsystem functions efficiently. This role as described by some writers is that53:

"He is a catalyst in guiding, encouraging and assisting the functional manager and supervisor to think about their problems and about the way in which training might provide a solution to them. His first approach to this responsibility is through stimulation of an adequate assessment of training needs". (Duel and Byres, 1970).

By virtue of his professional know-how the organization may initially depend on him to be a collator of training needs, so that a systematic analysis can be made and indeed a useful organization wide development plan can be prepared.

This in fact entails that the training director (and consequently the training staff) should assume a more proactive role in dispensing his responsibilities. The usual attitude of training directors in public organizations is rather reactionary waiting for a training action to be initiated elsewhere in the organization, while they respond to those actions in a more or less automatic manner, such attitude greatly undermines the effectiveness of training in those organizations and reduce it to what Stanley would call a "professional fringe".

Training staff, effectively, have a central role to play in planning, monitoring and evaluation of training and thus the first step in this process is the identification and assessment of training needs.

In previous sections of this study the identification of training needs using the organization's and manpower plans, performance reviews and other techniques that are widely used in the relevant literature have been elaborately considered.

In practice training directors may find that they have to use their own judgment and knowledge of their own organization to pinpoint training needs which are peculiar to particular jobs in the organization but which are not highlighted by the above mentioned means. Some of these aspects have been highlighted by
Robinson (1988:50) as areas which essentially require proactive action on the part of the training staff; a relevant example of these aspects pertains to managers:

"Most of the blame for things going wrong in business is probably laid at management's door" (Robinson, 1988:50)

Managers, in most cases do not seriously lack knowledge or experience, however very often problems arise because such managers are unable to utilize their attributes to optimum effect. On the other hand, while deficiency in knowledge and technical skills are easier to identify even by a manager himself. Other inefficiencies and frustrations are more difficult to identify since managers themselves will not concede that they lack the requisite skills. Such inefficiencies as may appear in problems of insularity, interpersonal relations, group conflict etc…. In such cases it is the training staff ingenuity that is required to make managers aware of such situations and help them to recognize their performance deficiencies.

Other instances where the proactive role of the training staff is required arise where something changes and the manager may not know about it, Examples of this are government legislations, changes in work practices, in rules, in internal policy, or changes in international agreements etc…

In such instances, managers rely on the training staff to keep them informed of what is happening and what the training implications for their departments may be. (Robinson, 1988: 51). In addition to this there are also training needs which are of a general character and may not become apparent to individual managers. Robinson maintains that there is cause of common training needs i.e. there are fundamental skills which every manager, regardless of function, should possess. These as enumerated by Robinson, (1988:51) are interviewing, running meetings, delegation, coaching, counseling, instructional and presentation skills. Similarly for each group of management function there is also a core of common needs that each manager in the group should possess. Identification of such needs is primarily the responsibility of the training staff by virtue of his status and also because of the extensive contacts the training department has throughout an organization. The same situation also applies for supervisors, specialists and other levels of management. When a need of this kind is identified by the training staff, they have to ascertain the demand first before suggesting the type of training. This could be done through a training survey. The survey form should contain a clear statement of the identified need, requesting each department decision to express its demand, the approximate number of trainees, possibility of their release, the timing and any specific requirements of the proposed persons.

Such approach to training is highly demanding, though inevitable if the training function within an organization is to assume its proper role as a "performance
improver" and as a system installer. In regard to this, Stanley (1987:31) maintains.

"To many public enterprise managers, 'Training' is a buzzword, a fact, an 'in-thing' and the training department is window-dressing ".

Perceiving the pervasive influence which the training function could have on organization performance, the first factor which comes to mind is the status of the trainers.

2.7. The Status of the Trainers

Stanley (1987:31) states that:

"Trainers are usually placed relatively low in the hierarchy of the enterprise. They are therefore effectively nuzzled in respect of influencing decision, and are usually poorly informed in respect of strategic plans and operations".

That, trainers are not involved in organizational planning so that they can get first hand information and, on the basis of this, raise issues about the implications for training needs. That they are forced to work on the basis of second-hand information and to determine their actions according to the dictates of those in authority but who have no knowledge in the field of training.

Robinson (1988:195) emphasized that the commitment of the top management in an organization is essential if the training function is to make its contribution to the success of the business.

"Resources will not be forthcoming if those who hold the purse strings are not convinced of the value of the service".

That, the training departments have to prove their effectiveness in a tangible way before they can expect to get unqualified support from the top. That they should seize every opportunity to show the management what the training department is doing, what success it is achieving and the ways in which the activity can be developed for the good of the work. To achieve an improvement in status, Stanley (1987:32) believes that trainers can adopt "a Process Consultancy Approach" i.e. first look for individuals who have influence in the organization and are willing to give support or who are open to suggestions, work with such an individual; develop a program for his section, Make sure it has an attainable objective and that the result will be of significant benefit, with some visibility. Then carefully record the process and the results, with the help of that ally, "sell the success" attained, Using this rather simplistic view of process consultancy the training department can plant any new idea as may suit its particular situation and thus gain support for the training cause. In that, training directors can play a valid role in influencing the attitudes of managers and gain their support for promoting the training function within an
organization. Yet the effort demands that the training staff be properly qualified for the task.

2.7.1 Qualifications and Skills of Training Staff

Most writers emphasize that training management has become a profession in its own right. It follows that there are certain qualifications which lay the foundation for a career in training. There are a variety of institutes which offer such qualifications. Prominent among these are the Institutes of Personnel Management (IPM) and the Institutes of Training and Development (ITD). They both offer courses in 'employee development'. Those who wish to make a career in training management can acquire a broad working knowledge of the profession by academic study; the institutes’ membership provides the opportunity for a wide exchange of knowledge and experience with others in the field. Besides it also gives access to information through the libraries and information services, and enables one to contribute to the promotion of the profession at local, national and international levels.

Proficiency in training management requests practical know-how and certain skills and attitudes in addition to academic knowledge, Robinson (1988:204) comments that:

"The training officer who has not carried out practical training activities himself is at a disadvantage both with the trainer and the trainee".

It is noteworthy at this point to mention that most of the available literature refer to 'training management' as an all-embracing function that constitute all elements of the training activity i.e. organizing, planning, implementing and evaluation of the training activity within an organization. Nevertheless, whether actual training i.e. instruction or teaching is conducted inside the organization or with the aid of an outside agency it makes no difference since in all cases the whole thing is initiated within the organization and therefore those who are responsible for training should possess appropriate knowledge, analytical skill and indeed attitude so that they can perform their role properly.

For our purpose here, the following definition by Paul H. Chaddock is most appropriate.

"If a training department is performing its mission of contributing to the achievement of organizational goals, it will be staffed by people trained to detect, analyze and solve the performance problems of those who make up the organization".

The various roles that are needed may all be assumed by one person or given to individuals who specialize. In any event, the total staff should be prepared to handle the following specialized roles:
a- Learning Specialist
Gordon L. Lippitt and Leonard Nadler, identify the roles of a training director. The first role is that of a learning specialist i.e. one who is "skilled in the ability to use learning theory and methods to meet training needs".

This definition of Lippitt and Nadler implies that there is much more to being a trainer than instructing. It means that the trainer must be able to identify needs solvable by training, to design appropriate training and to present it in such a way that the process of learning is maximized. In this connection Chaddock (1981) stipulates that for the purpose of staffing a department, his role can be divided into the roles of designer and presenter.

The designer is responsible for defining training needs, analyzing them in terms of training requirements and objectives, developing evaluation and validation procedures, and field testing the program to ensure that trainees have the necessary skills.

The presenter on the other hand is responsible for ensuring that the environments in which the designed training is given and the manner in which it is presented assist the trainees in their learning.

This involves establishing the climate for learning, presenting material clearly, responding to trainee concern, and providing ways for trainees to evaluate their own progress toward achieving the training objectives. Thus he should acquire an understanding of the dynamics of communication and motivation and knowledge of the principles of learning.

b- Administrator
Lippitt and Nadler state that the administrator, "will need to recruit, select, and develop his staff team; plan programs; set up the process of coordination and communication; carry out financial planning of the training effort and all of the other administrative steps of leading a staff function in the organization".

He is the manager to the training function, and must always strive to gain organizational creditability. This he achieves by focusing on solving real organizational problems and by advising line management on how best they may utilize the training resources. Therefore he should have the requisite characteristic that provide him with respect in the organization and allow him to operate proactively as well as react to request.

c- Consultant
The third role to be found in a training staff is that of internal consultant. This role has been described by Lippitt and Nadler as a consultant on problem solving, change and organizational development". The activities performed in
this role are varied and depend on many factors, including the skill of the consultant, his relationship with the organization and its management, familiarity with the pending problems, and personal style of behavior, where in the organizational hierarchy the training function is located, and the ability of the consultant to recognize problems in the organization.

Lippitt and Nadler list the following tasks of the internal consultant:

1- Helps management examine organizational problems.
2- Helps management examine the contribution of training to these problems.
3- Helps examine the long-range and short-range objectives of the training.
4- Explores with management alternatives to training problem solving approaches.
5- Develop, with management, the training plans.
6- Explore appropriate resources to implement plan.
7- Provide consultation for management on evaluation and review of program.
8- Explore with management the follow-up steps necessary to reinforce problem solution.

These three roles may appear to be separate and discrete but practically they are greatly interdependent. The total training function should be collectively providing advice and service aimed at correcting the human performance deficiencies of the organization. The implication of this role relationship is that it is desirable for the effectiveness of training that the training department be staffed by people capable of performing all tasks; however variations in the organizational structure of such departments / sections are numerous. The training policy of the organization will dictate whether the training section will be essentially organizers and administrators of training or whether they will carryout some of the training themselves. In the former case an outside staff will be engaged. Here it is the responsibility of the training director to provide adequate information on what is required. More detailed consideration has to be given to the substances of the program, what particular points to be stressed and the method to be used in instruction. This of course necessitates that the training staff be knowledgeable of the organizational plans and training philosophy of the organization; the organizational strategy, which among other things, favors a particular style of training. The significance of this can not be overemphasized since the relevance of the training content can not be achieved unless the instructors fully understand the training ethos in the organization and match their inputs to it. They need also to know the management philosophy, so that they are aware of what they may say or not to say in order to advance the interests of the organization.
2.8 Recent Approaches to training need assessment

2.8.1 The high impact training model (HITM)

The HITM is a six phase process that focuses on providing effective, targeted training. The model goes as follows:

- Phase 1: identify training needs.
- Phase 2: map the approach.
- Phase 3: produce learning tools.
- Phase 4: apply training techniques.
- Phase 5: calculate measurable results.
- Phase 6: track ongoing follow-through.

Each phase of HITM moves the training project forward. Effectiveness of the model is gained through completion of each phase in order. The products of each phase, is the raw material for the next phase. Activities in each phase and the product to be produced are illustrated in the following table:

Table 3: activities and products of the different phases of HITM

Source: Sparhawk 1994

<table>
<thead>
<tr>
<th>PHASE</th>
<th>ACTION</th>
<th>PRODUCT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-identify training needs</td>
<td>Gather and analyze appropriate information</td>
<td>A description of the specific training needed to improve job performance</td>
</tr>
<tr>
<td>2-map the approach</td>
<td>Define what needs to be learned to improve job performance. Choose appropriate approach</td>
<td>Detailed objectives for the training program. A design plan for the training program</td>
</tr>
<tr>
<td>3-produce learning tools</td>
<td>Create the actual training material</td>
<td>Training manuals Facilitation guide Audiovisual aids Job aids etc…</td>
</tr>
<tr>
<td>4-apply training techniques</td>
<td>Deliver the training materials</td>
<td>Instructor-led training Computes based training One-on-one coaching</td>
</tr>
</tbody>
</table>
5-calculate measurable results
Assess weather your training/coaching accomplished active performances, communicate results and redesign, if needed
An evaluation report
A redesigned course, if needed

6-track ongoing follow-through
Ensure that the impact of the training does not diminish
Ongoing suggestions and ideas that support the training

The high-impact training model provides a modus operandi for identifying targeted training needs which is called The Needs Analysis Model (NAM)

The NAM summarizes the actions necessary to complete the first phase of the HITM; identify Targeted Training Needs.

Like the HITM, the NAM has six actions which when taken they create six related products. The six actions are:

* assess the current situation
* envision the future
* gather information
* sort out the information
* share the result
* decide the next stage

When all six actions are complete, the issues would be known and the plan to address it could be drawn. That information will be the starting point for the second phase of the HITM: map the approach. Such building-blocks approach ensures that the training solutions have strong foundation. Such action of the needs analysis is driven by a question which focuses attentions and results in a concrete product that helps in achieving the next step in the process. The following chart illustrates the focusing questions and the end products that result from them:

Table (4) The Focusing Questions and the end products of NAM
Source: Spar hawk 1994

<table>
<thead>
<tr>
<th>ACTION NEEDED</th>
<th>QUESTION TO ASK</th>
<th>END PRODUCT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-assess current situation</td>
<td>Where are we now?</td>
<td>A clear definition of the situation</td>
</tr>
<tr>
<td>2-envision the future</td>
<td>Where do we want to be?</td>
<td>A clear description of what the future would look like if</td>
</tr>
<tr>
<td>Steps</td>
<td>What do we need to know?</td>
<td>A systematic gathering of relevant information and ideas from appropriate people to establish the whole picture</td>
</tr>
<tr>
<td>---------------</td>
<td>--------------------------</td>
<td>--------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>3-gather info</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4-sort info</td>
<td>What does it tell?</td>
<td>Themes and issues that need to be addressed</td>
</tr>
<tr>
<td>5-share results</td>
<td>How do we use this information to move forward?</td>
<td>A summary of issues and recommendations</td>
</tr>
<tr>
<td>6-decide next step</td>
<td>What actions should we take to have impact?</td>
<td>Action plan for beginning phase to map the training approach</td>
</tr>
</tbody>
</table>

**Developing a Strategy for Success**

The NAM could best looked at as target. *Source: Sparhawk 1994*

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**Figure (6): The Needs Analysis Model**

*Source: Sparhawk*<sup>64</sup> (1994)
Each ring of the target represents an action that must be taken to move you closer to your solution. The base of the target is labeled "strategy", indicating that support for the target is the base bone of the model.

Indeed the model stipulates that Training Needs Analysis should never be a lonely process, all people concerned should be involved in the process, and hence they become partners in shaping the solutions and the support group for implementing it.

According to the NAM, an effective training strategy involves three elements:

1. establish a partnership with others.
2. consider the larger picture.
3. serve the customer.

2.8.2 The Performance Perspective Model\textsuperscript{62} (PPM)

Figure (7): The Performance Perspective Model
The diagram highlights the key stages involved in the analysis process. In dealing with the performance concern (stage 2), identifying on the job requirements in the form of performance objectives is particularly helpful. These types of objectives are behavioral in design and do much to make the analysis and identification process more precise. Hence it should be pursued.

The training needs identification activity (stage 4) will screen out those performance objectives that can best be met by other means, such as, work experience, job aids, equipment adjustments, ergonomic changes, and the like.

The identified training needs are further analyzed (stage 5) to determine how they might best be approached form a training point of view. In some cases the analysis process may show that it is just not feasible or practical to meet some identified training needs through formal training of some kind. Such needs are then discarded. This is illustrated in the following figure which is a proton of the diagram depicted in figure (8).

Figure (8): Transfer from performance objective to training objective

3- Performance objectives

4- Training needs identification

5- Analysis of training needs

6- Training objectives

The model depicts that the discarded training needs are not necessarily forgotten. Individual employees, for instance, may decide to meet them on their own through part time courses and the like. Or, they can come back into consideration at a later time as a result of another training needs conducted for another part of the organization’s identified training.
Fundamental to this model is that a good perspective on performance should be retained. This applies to the way performance standard are set to examination and clarification of performance problems and analysis of training needs.

2.8.2.1 The Behavioral Focus
The behavioral focus in examining human activities essentially says that we must look at what people do or do not do not what they profess or claim to do. This focus is crucial, since it provides a means of clarifying issues in objective detail. It also provides the basis for developing full-scale technologies of learning as well as an essential base to evaluate results. The model stipulates that, while attitudes and ideas are important on their own right, it is on the job behavior that matters most. Productivity is a function of excellent on-the-job behavior, not nice thoughts or pleasant dreams; although the later play an important role in supporting and helping to develop the behavior desired. The essence of performance is behavior. Behavior, as defined by the model, is a specific an observable act by a given person. As such each job is made up of a set of behaviors. Laying out this kind of skill set can be a useful thing to analyze training needs.

2.8.2.2 Behavioral Objectives
A behavioral objective is an action-oriented statement. It focuses on real things happening, thus it must stand up to testing in the actual work environment. It is not theoretical or simply expresses a wish, and it must be something the employee must clearly understand and verify.

According to the model, a good behavioral objective tells us:

1- what the person will do
2- what standard of performance will apply (timing and quality)
3- when he/she will do it

2.8.2.3 Performance Objectives
The model uses the term synonymously with behavioral objectives. The term is defined as a specifically stated requirement for a person performing a particular task. It lays out the what, how, and when of the task performance as well as the standard required.

The model stipulates that well-conceived and well-written performance objectives become the key ingredient or the building blocks for examining human performance issues in a specific and detailed a manner as practical. Skill in identifying them is essential for objective training needs analysis. Performance objectives play an important role in conducting a full-scale job analysis to determine the specific skill and knowledge requirements of a given job and all its component parts. In effect, they describe the foundation structure for a job or its core, including all or almost all the skills required.
2.8.2.4 Performance Sets

The model uses the concept of performance sets to overcome the problem of setting performance standards, for complex jobs. It perceives the human behavior at work as a flow of connected actions. In carrying out a given task or job they automatically tend to cluster their actions and move smoothly from one to the next. This allows us to focus conveniently on performance as a set of connected actions. In effect the model displays the performance set for skills in a specific task as a form of molecule, with the subsidiary performance objectives taking on the role of electrons orbiting around the specified task nucleus. Thus, the model stipulates that instead of conducting full scale job and task analysis, each task could be taken as a core around which different actions are clustered in what might be termed action pattern. This allows focusing on performance without necessarily having to break it down into all the little behavioural steps involved. The key is to work with a reasonable sense of balance or proportion in deciding which tasks in a given job or work area need to be set out in performance objective terms and which might be conveniently left to the realm of perceptual trace or pattern. Figure (9) below illustrates the concept of performance set.

Figure (9) Performance Set Model
Source: Peterson, 1998

Performance objective may either be written for the corporate or the individual training needs; for a group of jobs across the organization or for an individual performer. Never the less, the use of performance objectives is by no means restricted to the process of training needs analysis. They are fundament
building blocks for a range of human resource development and planning activities. They crystallize thinking and force clarity on generalized statements. They help decision makers to better understand the performance issues about which they need to make their decisions. They can also help people to take stocks of their personal skill sets (Peterson, 1998: 4)

2.8.3 Strategic Needs Assessment Approach (SNAA)
The SNAA is made up of 5 phases:
1-assess current situation.
2-examine external environment.
3-examine internal environment.
   a- Validate business strategy.
   b- Document current performance.
   c- Identify causes of performance gaps.
4-chart future environment
5-develop performance improvement plan.
   a- Assess readiness for change.
   b- Select interventions.

Phase 1: assess current situation
The purpose of this phase is to develop a better understanding of an existing performance problem. Usually, discussion with a few key people can provide enough data to establish a clear definition of a problem. Supporting information can also be obtained from secondary sources, documents, reports, customers.

Phase 2: examine external environment
External environment very often affect the performance of organization in various ways. So examination of external factors is important in order to isolate them and their implications are determined since the solution to such problems is usually outside the training domain.

A full fledged analysis of external factors should involve all the threats and opportunities that can impede or enhance the performance of an organization. Moreover such analysis also helps to identify the crucial business issues that must be taken into consideration when eventually developing a solution Gupta (1999:45)

Phase 3: examine internal environment
The purpose of this phase is to provide answers to such question as: what is the organization's competitive strategy given its external environment? Which business processes are affected by the performance problem or need? And what are the performances and what are the possible causes of performance gaps?
   a) validation of performance strategy:
A business strategy as defined by Gupta (1999:47)
"Are the sets of policies and plans an organization uses to achieve its business goals? They set the direction for a performance improvement initiative. Such information allows for, the verification and documentation of goals, for each hierarchical level"

This as put by Van Buren\(^{65}\) (1996):

"Organizational goals and unit goals across levels, units, and processes should always be aligned. Problems arise only when there is misalignment" Gupta\(^{66}\) (1999:47).

The same principles are also emphasized by Rummler\(^{67}\) (1995) in his book 'Improving Performance'

b) document current performance:

After confirming the business strategy, then examine activities at the process level. By documenting how business process activities are being carried, only potential difficulties and discrepancies in the process can be identified. The model proposes the use of process maps to documents the inputs, outputs, and work flows. As to how detailed the process map should be, Hammer and Champy\(^{68}\) (1993) suggests it is critical that processes be kept simple in order to maintain quality, flexibility, and low costs.

The model stipulates that performance measures in term of quality and timing for each activity can be used during the analysis phase. Any deviation from a stated objective(s) is an indication that a problem exists. Gupta\(^{69}\) (1999:49).

Other techniques, such as root cause analysis, brainstorming or problem solving, can also be used to uncover the real cause of problems.

Phase 4: chart future environment

After deficiencies and causes of performance gaps have been identified, then the desired environment may be created. Usually, the map which is created in this phase is a reconfigured process map at the same level of detail as the one which was created in the previous phase showing new work flows, reorganization job classifications, performance measures, or team structures that are necessary to support a new system. By minimizing new specialization or rigidity in job content, performance at the organizational, process, and job level can be improved Gupta\(^{70}\) (1999:54)

Phase 5: develop performance improvement plan

Here a transformation of what was mapped in the earlier phase into something more tangible is made by creating a performance improvement plan or a blueprint that documents the entire performance improvement project that must be undertaken to improve the overall effectiveness of an organization. This phase also involves two important steps:

1- Assess readiness for change.
2- Select interventions.
2.8.4 Competency-Based Assessment Approach

The approach serves two purposes:
1- To identify the competencies necessary for superior job performances.
2- To create a composite picture or best practice model of the competencies necessary for a particular job function or functions.

The focal point in the approach is the person or the performer. A competency analysis seeks to identify the knowledge, skills, attitudes and behavior needed by a person to excel in a job Gupta71 (1999:65)

Key Phases:
A competency assessment approach is made up of 5 phases:

Phase 1: develop a project plan:
  a-establish parameters
  b-identify key players
  c-develop work plan

Phase 2: conduct behavioral interviews:
  a-obtain preliminary information
  b-obtain behavioral information

Phase 3: construct competency model
  a-create competency dictionary
  b-create competency model

Phase 4: assess gaps:
  a-identify gaps
  b-analyze results

Phase 5: implement model

Phase 1 of the competency based approach is a planning phase during which a refinement of the scope and objectives, creation of a project team and establishing management structure.

It is essential during this phase to determine how the model will be used. Then key players, people who will need to participate in the project, should be identified. Gupta asserts that depending on the scope, several players seem to be involved including the following:
1-sponsor or decision maker,
2-steering committee,
3-project liaison,
4-human resource manager,
5-subject-matter experts,
6-internal or external customers,
7-high performance,
8-target audience,
9-field personnel, and
10-training professionals
However, small or medium-sized projects may not require all the above mentioned players. Yet high performers are the "star players" in all projects. These are main source of information about the behaviors and actions that are necessary to do a job successfully. Guidelines for identifying high performers as set out by Gupta (1999:69) are as follows:

- People, who consistently exceed expectations and achieve "very good to excellent" ratings on performance reviews.
- People who consistently meet or exceeds business or unit objectives
- People informally labeled "masters" or experts by their peers and managers – people who are sought for their knowledge or for expertise in a particular subject.
- People who like what they are doing.
- People who are respected by others, which are particularly important in organizations in which teamwork is necessary.

Phase 2 in the competency based model involves gathering data for building a competency model. Behavioral interviews, either one-on-one or group interviews could be used. Gupta believes both methods are most effective for obtaining behavioral data for competency-based assessment.

The basic purpose of behavioral interviews is to seek two types of information from high performers:

- Background and job-related information and
- Information about what high performers do, that makes them successful in their jobs.

Phase 3, in the competency-based model, deals with drafting the model. The phase involves 2 steps:

1-create competency dictionary
   The idea of competency dictionary is that it is a way of grouping behavioral information into themes or core clusters that might give an indication as to what of the competent behavior of all the dimensions of the targeted job. The process goes on until every core cluster has been defined. Then a review and editing of these definitions is made until satisfaction with them is reached. Finally an overall statement that describes each dimension should be written Gupta (1999:76). An illustration of a competency dictionary is given in Tool kit 2.1

2-create competency model
   The competency model for a job is essentially a high-level depiction of the core elements contained in the dictionary: dimensions and core clusters Gupta (1999:76).

Phase 4: assess gaps
After a best practice model has been built, then gaps in proficiencies of others in the same job functions could be measured Gupta (1999:80)

The phase as depicted by Gupta consists of two steps:
1-identifying gaps, and
2-analyzing results

According to Gupta "surveys are an effective tool for gathering data on performance". Other writers advocate the use of other tools also to obtain more reliable information such as interviews and observation (Millano and Illus (1998), Sparhawk (1994), Abdel Rahman Tawfig (2002), Peterson (1998)

Analysis of results
After surveys has been distributed and returned, data can be analyzed electronically or by simple hand tabulation.

Phase 5: implement model
Competency models have many applications. They can be used to create individual employee learning development plans and also be used to develop selections, hiring, programs, promotions and other performance management systems Gupta (1999:81).

Hence the model enhances proactive performance management. After managers have received a copy of their employees' completed survey, a brief meeting can be held with managers to explain how the learning development plans can be used. (Annex 5 Exhibits a tool kit for applying the Model)

A suggested agenda that managers can use to conduct an actual meeting is proposed by Gupta as follows:
1. Review individual area of strengths and identify opportunities for development.
2. Identify the support and resources necessary to facilitate performance.
3. Develop an action plan that best meet the needs of the learners.
4. Make a schedule for implementing the learning and development activities.
5. Discuss a follow-up plan.

After implementation of the competency model, results can be monitored both at organization an individual levels. At an individual level, managers can conduct quarterly or annual progress checks with their employees. At an organizational level, the impact of the assessment can be measured through client satisfaction surveys Gupta (1999:81)

2.8.5 Job and Task Analysis Approach
The primary objective of a job and task analysis is to gather information about the scope, responsibilities, and task related to a particular job function or functions.
When to use approach (Gupta 1999:91):
The job and task analysis is most effective in the following circumstances:

- When new or existing job descriptions or position profiles for managerial and non-managerial jobs must be developed as part of a performance management system.
- When jobs must be redesigned and tasks (knowledge, skills, and abilities) for each job identified, and
- When a consistent set of training requirements must be created, especially those involving high technical or specialized job functions.

Key phases:

Conducting a job task analysis involves three stages:

Phase 1: prepare

1. identify high performance.
2. prepare job analysis questionnaire
3. prepare materials.

Phase 2: conduct job task analysis work sessions

1. refine job responsibilities
2. identify job tasks
3. identify training requirements

Phase 3: implement job training plan.

Phase 1: prepare

This phase consists of several tasks which could be summarized in the following:

a) Assemble a project team (depending on the scope of the project).

b) Identify high performers. These could either be key people considered above-average to high performers in the job category being analyzed, or job function experts. Job function experts are preferable when the job being analyzed is very technical or specialized.

c) Prepare job analysis questionnaire. The purpose of the questionnaire is to collect job-related information prior to a group or work session. This step helps participants begin thinking about the critical tasks involved in performing a job, and stimulates their interest in the job and task analysis process.

Prepare material:

This step involves the following tasks:

a) Review returned questionnaires.

b) Transcribe key job responsibilities from questionnaires into flip-chart paper.

c) Prepare an agenda for the work session.
d) Before the session, gather all appropriate materials and make arrangements for a meeting room.

Phase 2: the task analysis work session.
The primary objective for a session is to identify the key responsibilities and job tasks needed for effective on-the-job performance. This is done through refinement of the job responsibilities posted on the prepared flip chart. In the next step participants are asked to use that information to prepare a list of tasks for each job responsibility. These are then posted on a flip chart. Then the group is asked to review the list, delete those tasks considered non-essential to the job and than identify the knowledge, skills, and abilities required to perform each task by drawing on existing, prior, or on the job experience.

In the final step participants are asked to prioritize training needs based on tasks they consider most critical to the job performance.

Phase 3: implement job training plan
In this step, information obtained from the session is reviewed and organized. A preliminary draft is then prepared and presented to supervisors for review, addition, or deletion. After the draft has been approved, a final copy of the training plan may be prepared and distributed to superior management and the target group.

2.8.6 OTHER APPROACHES
Two important adaptations of systematic training need assessment to the circumstances in Arab world are devised by Arab researchers. The first model is introduced by Jaradat and Mubaydin73 (2001) of the Arab Administrative Development Organization "ARADO". The devised model is known as "Training Guided by Performance". The other model is introduced by Dr. Abdul Rahman Tawfig74 (2002) and known as the “The Measurement Approach to Training Needs Assessment".

2.8.6.1 Training Guided by Performance Approach
The main feature of the model is that it is directly correlated to the strategic planning process. So the model virtually builds on the same holistic approach of comprehensive analysis of the organization; validating its objectives and plans, determine the required skills and capabilities for the successful implementation of the plans. The process then goes on until we get to the job level and consequently the individual performer and the required knowledge and skills for achieving the required performance. The model in fact puts much emphasis on the importance of a full scale management analysis process as a precondition for a viable needs assessment as illustrated in the following diagram.
2.8.6.1.1 STEPS OF MANAGEMENT ANALYSIS FOR TRAINING NEED DETERMINATION

As could be noted from the model, the model is more oriented towards explaining the WHAT of the needs assessment more than towards explaining the procedural steps. It is not more than an emphasis of what has already been emphasized by the TNA model. Nevertheless, the training guided by performance model introduces the idea that the need assessment process should be carried on co-operatively by the organizations and the specialized training centers and institutions to overcome the intricacies involved in the process. Moreover such cooperation may allow training centers to conduct the analysis for a number of similar organizations in a way that justifies the expenses incurred at the same time secure the sufficient number of trainers for the training programs which would be designed to meet the specific training need Jaradat and Mubaydin (2001).
2.8.6.2 THE MEASUREMENT APPROACH TO NEEDS ASSESSMENT

The measurement approach is advocated by Dr. Abdul Rahman Tawfig (2002) in his book "The Training Process". The model aims primarily at distinguishing between the situations that could be treated with training and those which need other treatment. Hence it is a tool for rationalizing the training effort, since it provides the benchmark on which basis all questions of what, why, where, and when of training could be answered i.e. the training plan. The following diagram illustrates his perception of The Needs Assessment process, in which he embarks on 7 steps before indulging into actual analysis of training needs. According to (Tawfig 2002) it is essential that more effort be invested at this phase (need identification phase) of decision making in order to rationalize the training effort and establish measurements for answering the what, why, where, and when of training.
Treatment with training (what should be done before going into training analysis) is illustrated in fig. (12) below:

Figure (12)
Treatment with training (what ought to be done before going into training analysis)
Reviewing the stated approaches to the question of training needs, it could be noted that they all emanate from the same foundations of the theory of systematic needs assessment. The basic foundation of systematic needs assessment theory is the "Relevance" of training. Writers in the field, emphasize that for training to be effective and contributes to organizational success, it has to be based on real needs of the organization and the individual performer of the job. Stanley, Turrell, Millano and Illus, Peterson Sparhawk and many others. This as put by Millano and Illus, 1998:

"Although education may begin at subject matters, training begins in application".

Bearing this in mind it is quite obvious that what really matters in the final resort is the transfer of training to the work situation. This in turn entails careful analysis of what are the work requirements as well as what are the work performers' requirements. Actually it is this aspect of synchronizing the requirements of individual performers with the requirements of their jobs and of their organizations which complicate the issue of training needs assessment and could as well be one of the reasons why it is sometimes avoided.

2.9 DESIRED PERFORMANCE VERSUS ACTUAL PERFORMANCE

Performance lies at the centre of the theory of systematic training needs assessment. Performance gap is virtually the subject matter of all training. The performance gap as defined by all writers, Stanley, Millano, Peterson, Sparhawk, Tawfig, is:

"The difference between the desired performance and the actual performance".

Hence 2 basic requirements which lie at the centre of systematic need assessment are:

1- Performance standards.
2- Performance audit.

Analysis of performance entails rigorous analysis of jobs and tasks, establishing of performance standards for each (key) task, then a rigorous analysis of the job incumbent to determine the actual performance of the incumbent. The training need then is determined through simple calculations of the difference between standard performance and actual performance. This approach to performance analysis as confirmed by most writers is ideally the best and most reliable.

The TNA model advocates a holistic approach, starting at the organizational level, taking all aspects that affect organizational performance into consideration, internal and external. Performance problems are encountered for, as one among other issues that cause a training need to arise. Hence the analysis
The need assessment phase thus becomes a double face phase. During the first, the need is identified through the isolation of non-training problems from those that could be treated by training. During the second phase analysis of the training needs takes place to identify the where, what, and who of training and consequently the exact knowledge, skill, and attitude deficiency to be treated with training. Involvement of top management (decision makers) is envisaged as supporting the conduct of the need assessment process, thus securing the necessary flow of resources and information that aid the training decision process.

However the model itself is devised to work where basic requirements including:

1- Clearly stated organization objectives.
2- Rational organization structures.
3- Job description.
4- Performance standards, and
5- Qualified trainers (training staff).

This virtually indicates that where such basic requirements are not available, the process of need assessment becomes practically impossible. Recent approaches show more focus on job performance rather than job content. Hence more emphases are laid on identifying performance. This aspect of determining the desired performance together with measuring actual performance is the focus of analysis of the training needs process. Yet performance as perceived by systematic need assessment theory encompasses both organizational as well as individual performance. Different approaches to the question of training need assessment recognize that performance of organizations is subject to many external and internal factors which directly impinge on performance, other than the capabilities of the employee's performance. Such factors have to be identified, isolated and appropriately treated before the decision to train is taken (Stanley 1987, Turrell 1988, Jaradat and Mubaydin 2001, Tawfig 2002).

2.10 Recapitulations

The basic assumption in the different approaches to training need assessment is that training is no cure for all work problems. Training constitutes only one portion of the cure. Success of any training performance is not measured only by the amount of knowledge and skill gained by the trainees, but the real success lies in the extent to which training has met the needs of the organization as well. It is the transfer of training to the work situation which underlines the organic relationship between training design and the need assessment process. Information gathering and analysis is the crux of effectiveness of the whole process of needs assessment. Considering the above stated approaches we may observe that they may be grouped under two major approaches:
The first approach is more concerned with striking a balance between supply and demand for manpower (TNA approach, and competency based approach). The approach is more or less like manpower planning process seeking to find out the minimum number and minimum qualifications required of the workforce to meet the requirements of their jobs. Yet the two approaches differ in that the TNA model presupposes the existence of basic requirements, like:

- Clearly stated work objectives.
- Well developed work plans.
- Job description.
- Performance standards.

Hence it could be said the TNA model works best in stable environments, where long range planning is adopted and where the organization structure with the concomitant job description and job standards are well established. For the competency model the focal point is the person or the performer. The model seeks to establish the qualities or characteristics of exemplary performance as such it does not presupposes the existence of job description and performance standards, rather it is entirely reliant on timely data gathering for building a competency model through behavioral interviews with the high performers to determine the behaviors and actions that are necessary to do a job successfully and timely verification of the required behavior with top management. As such competency-based model is more behavior oriented. Involvement of top management is more proactive.

The second approach is more concerned with performance improvement (strategic needs assessment, performance perspective and high impact training model).

Identification of training needs starts with some indication or a symptom. The TNA theory talks about indications and phenomena that could tell about a training need. The high impact model advocates that organizations should develop a general alertness to performance problems, that the training department should encourage this kind of alertness. In a way this additional role of the training department has also been devised by the TNA model, where the training department is required to have "a bird's eye", detecting performance problems (Stanley 1987). Once a performance problem or a performer concern, as used by Peterson 1998, is detected, a performance objective should be established. Performance objectives are used by Peterson to refer to the same behavioral objectives depicted by the competency based model, these are then translated into training objectives to direct the design of training. The behavioral focus as used by the performance perspective model essentially says that we must look at what people do or do not do not what they profess or claim to do. According to Peterson (1998:33) "this focus is crucial. It provides a means of clarifying issues in objective detail". This in fact is different from the stipulation
of the TNA model which goes by what the job description and specifications says. However, all advocates of performance improvement approaches ensure that a good behavioral objective should tell:

1- What the person will do.
2- What a standard of performance will apply (timing and quality)
3- How the person will do it.

Nevertheless the technique for eliciting such information is rather through the conduct of group interviews and focus group sessions. Peterson (1998:39:40:41), on the other hand confess that behavioral objectives identified at the minutest level of observed activity is not always feasible, especially when dealing with more conceptually-oriented jobs, or those requiring significant decision-making activities. For such jobs Peterson (1998:39) believes that the productive setting out of performance objectives works with identifying performance at a level suitable to the reasonably-assumed existing skills level of the people involved. This as put in her own words:

"People from different cultural groups or people with lower level of education might need more details."

So she introduced the term perceptual trace (performance perspective approach) to refer to the way people automatically tend to cluster their actions and move smoothly from one to the next in carrying out their jobs. To quote her:

"We do things in a flow of connected actions, rather than in a series of specific tiny acts. You might also term this an action pattern or action template."

So Peterson though believes in the necessity of establishing good performance objective for low-level jobs, yet for more complex jobs she advocates the performance set model. In her own:

"Whatever term you use, you will find it allows you to focus conveniently on a performance such as setting a table, without necessarily having to break it down into the little behavioral steps involved."

She further states (Peterson 1998:40):

"The key is to work with a reasonable sense of balance or proportion in deciding which tasks in a given job or work area need to be set out in performance objective terms, and which you might conveniently leave to the realm of perceptual pattern or trace".

Identifying Performance Gaps:

All models acknowledge that for identification of the performance gap, measuring the actual performance of the job performer should be done as
accurately as possible to give a true picture of how well the performer is doing the job in the prevailing job situation. Different methods of performance audits are advocated by the various approaches, including performance surveys, performance interviews, check lists and observation. Most approaches advocate that performance appraisal should be a two way communication where performance requirements are set for employees and performance gaps are measured against the set standards. For measuring performance, Stanley particularly preferred performance counseling. Performance forms were generally being criticized, however, Peterson 1998, advocates the use of performance audit forms for key performance areas that correspond to her performance set model. As such the performance audit she provides shows the tasks for a given key performance area, together with the component performance objective and a short form of symbols arranged in columns for checking off the performance level for a work group or individual concerned against the performance objective(s) for the job performance being audited. The performance audit forms according to Peterson could be used either by supervisors or by individuals to allow them to identify their own short-falls. Generally speaking all approaches to TNA are concerned with quality training which directly support the goals and objectives of the organization. This as put Peterson79 (1998)

"Quality training is tailored training......the focus of good training need analysis must remain actual performance needs, not the wants or dictates of those with power, influence, or organizational titles".

The process of TNA is rather complicated because it involves so many stages and a variety of techniques of data gathering and analysis. Different approaches as apparent in this study used different strategies. Some use the training needs analysis to focus only on the task of analyzing the training needs that have already been identified. Others use the term to cover both the discovery or identification process and the analysis of the needs themselves. The identification phase is usually considered to be as a sub-set of the analysis process. As for the adaptations made by the Arab researches the analysis phase precedes the need identification phase. The ARADO 2001 model insists on a full-scale management analysis phase before any training decision is taken. The measurement model (Dr.Tawfig 2002), a full scale analysis of all performance indicators and calculation of risks factors precedes the training need identification.

2.12 CONCLUSION

Examination of the TNA theory and the corresponding practical approaches assure that training need assessment is a rather complicated decision-making process, which involves the whole organization. Involvement of all people
concerned, decision-makers, supervisors, employees and the training specialists is the backbone of the whole process.

Systematic training needs assessment signifies a shift from the traditional focus on training and development activities to the performance of individuals and organizations. The complete process of training needs analysis involves all those activities and skills necessary to identify and analyze training needs accurately. This means specifying those gaps or discrepancies in performance that actually exist between what people are capable of doing, what they should be doing and what the organization want them to do in the future. Major changes in organizational structures, technology and other environmental factors raise performance qualities which need to be dealt with as anticipated performance problems and possible source of training needs. The analysis process closely examines the training needs that emerge to determine the best ways of dealing with them given the realities of the people, technology and organization concerned.

Although training needs analysis provides the organization with the means for measuring performance proactively. It does much more than identify the human resource development activity that may or may not be required. It allows the organization or work group to examine itself from the point of view of its general organizational effectiveness. Moreover it provides 'operational audit' of how well things are going. Inadequacies in locations, machines, work designs, safety, health, communications, organizational controls, personnel policies and many other problems will automatically reveal themselves during the process. The training needs analysis process can tell an organization much about itself. It provides a valuable component of any continuing effort to achieve performance improvement in the organization. Some practitioners say that we should not focus on the term training needs analysis, we should talk about performance needs analysis, thus emphasizing the need for training to play a subordinate and support role. Peterson (1998:16) confirms:

"So its usefulness goes far beyond the requirement of the training department. When thinking about this process, keep in mind it's larger role, and avoid thinking of it as another training activity. This will help you to keep it in the right perspective".

Indeed the right perspective is to solve performance problems and training is not necessarily the answer to all performance problems.

So which approach to use is determined by the objective and scope of the study, whether the performance problem is organizational, group or individual. Sometimes it may be useful to use a combination of two or more approaches. What really matters is a skillful grasp of the strategy and technique used.
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CHAPTER THREE
Background of the Case Study

3.1 Socio economic-environment of the country

Since Independence in 1956, Sudan has been under a succession of various military and civilian governments who adopted various political ideologies and philosophies in ruling the country. During the period of fifty years, starting at the mid fifties until the end of the century, the political environment had been sharply fluctuating from western type liberal democracy to eastern type socialism at the early seventies and to conservative Islamization towards the mid eighties up till now. Such fluctuations had their remarkable impact on the public policies underlying all government functions and actions.

Sudan is considered among the least developed countries of the world. After independence the country was faced with challenges on an unprecedented scale. The national aspirations for self-government and the progressive realization of these aspirations have urged the launching of an immense developmental campaign aiming at improving the economic and social life of the people.

The population of Sudan was estimated at 31 million (1993 census); made up of approximately 19% urban dwellers, 70% rural and sedentary, and about 11% nomads. In addition there is a considerable population influx due to a large number of refugees coming from neighboring African countries for different political and economic reasons.

Agriculture is the most important economic resource. It provides a livelihood for 75% of the population and accounts for 90% of the country's exports and over 50% of government revenue. Other resources include some mineral deposits, including oil in different parts of the country and especially in the south which was suffering from a prolonged civil war. The country also, has a big game reserves which could become a potential tourist attraction yet exploitation of these resources depend largely on future political and economic development of the country as a whole and on the resolution of the southern problem in particular. A peace Agreement has been concluded recently (2005) between the government of Sudan and SLPM bringing the war to an end. There is great hope that this development would boost the development prospects of the country.

Presently, agriculture forms the backbone of the economy, yet it has been reported (FAO 2000) that only one third of the cultivatable land exploited so far. A part from the irrigated agriculture which is the most developed sub-sector, there is a great potential for rain-fed agriculture since a sizable part of the cultivatable land lies in a zone with sufficient rainfall to
support crop production. However chronic shortage of capital investment, absence of well developed transport and communication infrastructure, in addition to security problems in the south are the major bottlenecks hampering development of the agricultural sector.

Like many developing countries, the Sudan is characterized by a strikingly diverse society in which the public service must operate under certain conditions of diverse aims. To cope with such complexities all modern time governments resorted to planning as the only reliable means of bringing about the desired changes.

3.2 Planning in Sudan

In Sudan, the history of long range of planning goes back to the pre-Independence period when a Development Priorities Committee was established to examine the projects launched for post war reconstruction and to decide on priorities with regard to their execution. This resulted in the experience of the Five Years Development Program (1946-51) consisting of public sector projects amounting to LS 13.8 million. At the expiry of this first plan a Development Committee was formed with wider terms of reference to undertake an overall survey of national and other resources in the Sudan and to make proposals for long term strategies to conserve them and to improve the standards of living of the people. This resulted in the second Development program (1951–56) with an investment of LS 24 million. As remarked by Moharir and Kagwe (1987:28), these two pre-independence plans covered only public sector projects. Moreover the achievement of both plans was quite considerable in their economic side, though they had some achievement in the social side. This as put by the same writer:

"Although the two Development Programs did not result in considerable improvement in the standard of living, they by and large, led to some expansion in educational, health and administrative services".

However, after independence and up to 1960 only annual development budgets were prepared.

3.2.1 Development and Economic Planning after Independence

Development is a multi dimensional concept. It has always been interpreted differently by different people, according to the specific and pressing need of the people. This implies that any genuine development effort must primarily concern itself with the real needs of the people involved, so as to gain their support and participation if development is to be sustained.

According to the Pan African Institute for Development (PAID), Development was seen to mean:

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"The process of satisfying the aspirations of the people, in political, economic and socio-cultural areas, and of channeling its aspirations into common objectives".

This definition clearly identifies the dimensions of development, that development does not limit itself to the economy only. Moreover it also shows that development is "a continuous process", involving more than the mere drafting of viable economic plans, but of necessity it involves continuous monitoring and adjusting of those plans in order to meet the rising and changing aspirations of the society.

In many developing nations, Sudan being one of these, development has ever since independence been equated with industrialization. In some writers Words, (El Jack and Taha (1974:2):

“This is a reflection of the convention that only through industrialization can a nation achieves the standard of economic growth enjoyed by advanced nations. It is assumed here, that social and political development comes as a natural concomitant of economic development".

To achieve economic development, the successive governments of the Sudan assumed responsibility for central planning. But it was not until 1960 that comprehensive planning has adopted. The Ten Year Plan 1961/62 - 1970/71 was drawn by General Abboud's government with a total investment of LS 565 million of which public sector accounted for 337 million and private sector LS 228 million. This was expected to generate an annual average growth rate of 5.2% in the GDP to provide the necessary support for the Ten Year Plan; elaborate planning machinery was created at the central, regional and departmental levels.

The Ten Year plan had almost been suspended due to the political instability caused by the advent of the "October Revolution 1964".

A second era of centralized comprehensive planning was ushered again by the coming of the “May 1969 military government”. Following its socialist policies, the new regime of Jaafar Numeiry gave planning a prominent place in the governmental hierarchy and turned its attention to the implementation of an expanded program of economic and social development. Hence the government control over the economy increased considerably through large scale nationalization of the individual banking and commercial enterprises of the economy. The objective was to bring the country on a path of accelerated growth through this new structure. The plan was supposed to make the Sudan the bread basket of the Arab World as well as bringing about a modern industry that would replace a good part of the country's imports.
Accordingly a full –fledged Ministry of Planning with a Minister of Cabinet – rank was created for coordinating the work of the coming Five Year Plan (1970/71 – 74-75). A team of Russian experts was attached to the Ministry of Planning and a number of Sudanese intellectuals sympathizing with the communist cause were put in prominent positions in the planning organization (Moharir and Kagwe, 1987:30)\(^6\).

The Five Year Plan which was almost entirely the creation of the Russian experts aimed at an investment of LS 385 million and an annual growth rate of 7.6% in the GDP. The highest priority in the plan was given to services and construction, followed by agriculture, then industry, transport and communication.

The Ministry of Planning has played an important role in coordinating the work of other ministries and agencies. It also assumed control over the "Development Budget". It has also succeeded in establishing a system of periodic reporting by the ministries and agencies on the performance of targets. It published too detailed annual, evaluation reports on the follow-up of implementation in 1970/71 and 1971/72 (World Bank progress Report, 1972)\(^7\).

To coordinate effectively planning at the sectoral level, steps were taken to institutionalize planning units in the ministries and departments. The planning discipline itself has started getting accepted by the government agencies. Emphasis of the plan during the early 70s was put on food production, with industrial policies based on accelerated import substitution and geographical decentralization. Generous financial aid from Arab oil producing countries gave impetus to investment and boosted consumption, this have initially increased GDP sharply. But this high pattern of growth could not be sustained, the reasons for the slow down as identified by the World Bank mission\(^8\) (1985: V) were as follows:

"Most of the investments had been financed with foreign loans, but were decided upon without adequate economic evaluation. Moreover the new parastatal enterprises suffered from managerial weaknesses, loss of qualified staff to neighboring oil exporting countries and over staffing at the lower staff levels".

In accordance with the government's nationalization policy, investment in agriculture was shifted from the private to the public sector. This led to a significant increase in imports (capital and intermediate goods) and a sharp decline in export volumes. This was partly due to heavy investment in new production capability, much of it not export-oriented, necessitating the division of critically required finance for maintenance away from the
existing irrigation schemes. As a result, expected production targets were not realized⁹ (World Bank Report, 1987: XIV).

Other problems that contributed to the declining output of the agricultural sector was the prolonged drought which began in 1969 reaching catastrophic proportions in 1973 and which struck again in 1983 and 1984 and 1990/91. This desertification process resulted in reduced food production and excessive loss of livestock. Eventually this has led to a major displacement of population from drought stricken areas to relatively well off areas and by sites. This coupled with the 1973 petroleum crisis aggravated the overall economic situation.

Of significance here to note that at the dawn of the Five Year Plan, political events caused by the attempted coup of Hashim Al Aata have put a halt to the ascendancy of planning in the Sudan, the Russian planning team had to leave the country. A number of senior officials associated with planning were "purged" and the status of the planning organization was down graded to that of a committee of civil servants directly put under the Ministry of Finance and Economy.

Thus, the Five Year Plan, though was not completely abandoned, it lost its force and appeal. This as put by Moharir and Kagwe¹⁰, (1987: 31) have led to deterioration in the achievement of targets. So an interim Action Program (1973 - 77) consisting of a number of schemes, to make the country self-sufficient in sugar, textile, jute etc… was super-imposed on the Five Year Plan in 1973 to terminate in 1977. The priorities in the process have also changed.

Around 1976, foreign aid fell sharply but the government continued its expansionary policies financing the shortfall through domestic borrowing. This had an inflationary impact and eventually led to a depletion of foreign reserves. Problems also arose on the physical side of the economy. The viability of a good numbers of investment projects became questionable, especially in the industrial field where bottlenecks started to appear. The deficiencies of the large parastatal sector led to high production costs and large financial losses, the following citation from a consultancy report on Es Suki rehabilitation project¹¹(1988) is well expressive of the situation.

"the agricultural corporations, set up to be self financing, incurred debts and now depend heavily on government subsidies, as government funds are very limited, provision was made for only a fraction of the required (re) investment budget, the reduced investment levels led to a decline in capital assets, which in turn led to a decline in production, this self-propelled process has continued for several years now
and many corporative irrigation schemes, like that at El Suki require rehabilitation, an activity which is underway in various schemes”.

In 1978, after ten years of effort in centralizing and socializing the Sudanese economy, the government found that its economic policies had not produced the expected results and could not be sustained any longer. It called on the International Monetary Fund (IMF) and later also, on the World Bank (IBRD), to help adjust its policies and implement a program of economic recovery. So the Six Year Plan (1978 - 84) came into the scene, which though achieved some progress in certain areas, yet the whole economy did not seem to be affected. The IBRD mission, (1985) have observed\(^1\):

"As was to be expected, the government has to maneuver between the need for economic efficiency and vested interests in the old system. The end result was that while progress was made in important areas, the program did not pass the threshold of becoming fully effective while certain tendencies such as administrative laxity, over consumption and excessive indebtedness retarded the recovery efforts”

On the strength of the recovery program laid in collaboration with the IMF and the World Bank, the government asked the donor community for program aid and debt rescheduling, in May 1979, the IMF approved an Extended Fund Facility Agreement (EFF) to give thrust and direction for the policies set for that period, specific targets of the EFF were as follows:

1. Maintain GDP growth at 4% per annum.
2. Reduce inflation from 26% in 1978/79 to 10% by 1981/82.

A number of important policy measures were implemented in support of these targets. Yet the economic situation continued to deteriorate. This was partly due to external factors, such as increases in the oil prices and declining export prices. During the period 1977-82 the index of Sudanese international terms of trade fell by 15%, which represented a loss of US$ 170 million, equivalent to 20% of 1977 GDP. However the basic reason for the deterioration, as asserted by the World Bank mission\(^1\) (1985:4) was the insufficient size and late implementation of the agreed policies.

Around 1980 a more global strategy of economic recovery was adopted to replace the initial emphasis on the balance of payment adjustment. The World Bank and other donors entered the process with the financing of the first agricultural rehabilitation program especially in the irrigated sub sector.
The Bank also undertook the management of a UNDP macro economic planning project that would help to produce an annual economic policy statement, including a three year rolling public investment plan.

Total gross IMF disbursement made available during the 1978/79 - 1983/84 amounted to US$ 851 million. The Bank on the other hand was able to commit LS 115 million of IDA fund for program aid to help finance inputs for the irrigation schemes. The recovery program enjoyed massive financial support from western and Arab donors, in particular the United States and Saudi Arabia over that six-year period, the gross capital aid flow amounted to 4.0 billion dollars.

In 1981/82 gross domestic production was below the level of 1977/78. This weak performance according to the Bank's mission was mainly due to a drop in agricultural production to respond to the vast investments in this sector during the 1970s, this in turn was reflected in general deterioration in savings performance. The savings normally generated in productive sectors in the economy dried up and, in some cases, were replaced by losses of the state enterprises. An important element of the bad savings performance was the un-savings of the central government. This is reflected in the following table which illustrates the overall budget deficit of the central government.

Table (5) Central Government Operations (% of GDP)

<table>
<thead>
<tr>
<th>Item</th>
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<th>78/79</th>
<th>79/80</th>
<th>80/81</th>
<th>81/82</th>
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<td>15.9</td>
<td>14.7</td>
<td>14.6</td>
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<td>17.9</td>
<td>16.1</td>
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<td>13.1</td>
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<td>-1.9</td>
<td>-1.4</td>
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<tr>
<td>Development Exp.</td>
<td>6.4</td>
<td>5.2</td>
<td>5.5</td>
<td>5.8</td>
<td>4.7</td>
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<tr>
<td>Other Expenditures (a)</td>
<td>-</td>
<td>2.4</td>
<td>1.5</td>
<td>3.7</td>
<td>4.5</td>
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<tr>
<td>Overall Balance</td>
<td>-5.2</td>
<td>.95</td>
<td>-8.4</td>
<td>-10.6</td>
<td>-9.0</td>
</tr>
<tr>
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<td>6.0</td>
<td>4.7</td>
<td>3.6</td>
<td>5.8</td>
<td>0.5</td>
</tr>
</tbody>
</table>
(a) Includes financial investments by Government, other leading operations & extra budgetary expenditures.


During the first phase of policy redirection, the overall budget deficit of the central government more than doubled from 5.2% of the GDP in 1977/78 to 10.6% in 1980/81 and fell slightly to 9.0% in 1981/82.

On average, roughly half of the deficit was covered by foreign loans and half by domestic bank borrowing. But more important the growing deficit was not due to expression of the development budget which declined from 6.4% of GDP in 1977/78 to 4.7% in 1981/82. This, on the other hand reflects the failure of the budget, as a control instrument over the governmental economic performance.

However, despite all efforts dispensed at the rehabilitations program, the same vicious circle of declining GDP, deficient domestic resources mobilization, excessive domestic credit creation, and continuous high inflation continued through the subsequent rehabilitation programs. This had strong repercussions on the adjustment program. Despite the positive developments achieved in certain areas, but many of the rehabilitation policies were not adhered to.

In the Bank's mission (1985: X) words:

"*In sum, some critical elements in the economic rehabilitation program were neglected*."

According to the mission's assessment the recovery program lost its cohesiveness due to a number of inconsistent policies and the late implementation of the necessary measures in areas such as foreign exchange, demand management, budgetary revenues, institutional changes, savings performance, costing of producers' commodity etc.

Thus, the diversion from the IMF endorsed standardization program finally led to abandoning the rehabilitation program. The debt ceiling in 1978 was put at US$ 10.6 billion. This in turn has virtually crippled all development efforts of the country during the subsequent years. However in 1989 with the advent of the Salvation Military Government a resumption of the development task has been undertaken by the new government. The general policy orientation adopted by the Salvation government advocated a free-market economy, aiming at revitalizing the private sector and the gradual withdrawal of the public sector from the productive venture. The adopted policy was sought as a means of rationalizing the country's domestic resources, thus fulfilling the wide policy of self-reliance and consequently sustainability for the development task. A long term development strategy
has been planned to cover the period 1992 – 2002. Emphasis again of this latter plan is put on Agriculture and its related industry as an important source of foreign currency. A number of institutional, financial, costing and demand management has been adopted.

3.3 Performance of the agricultural ternary developmental program

Objectives of the program (Ministry of Agriculture, 1992)

1. Achieve an annual rate growth; on the average.
2. Increasing production and productivity rates, of agricultural products.
3. Achieve food security by increasing the production of food crops, like corn, wheat and millet.
4. Increasing the country’s export yields, by an average of 19%.
5. Achieve balanced growth, regionally and categorically.
6. Combating drought and desertification and preserve the environment.
7. Increase agricultural production to avail raw material for local industries.

The strategy for achieving those objectives included the following:

1- focus on the irrigated sub sector; for vertical expansion, to increase productivity and replacing outmoded and disintegrated machinery, in addition to improving agricultural services and developing infrastructure.

2- more attention was to be paid to the rain-fed sub sector (mechanized and traditional) to alleviate the long-lived neglect of the subsector despite its great contribution to the national economy and its low production cost compared to the irrigated subsector. Therefore, it has been decided that more attention should be devoted to its development side by side with the irrigated subsector.

Adopting an integrated, rural development approach, the proposed strategy was as follows:

1- Focusing on vertical promotion of production, by intensifying the required agricultural services of extension, plant protection, credit, and high-quality seeds.

2- Developing basic infra-structure; sub-ways, storage, and drinking water.

3- Attention to be given to improving the agricultural services stated above to increase its efficiency in carrying out its vital role in agricultural development.

4- More attention to be devoted to horticulture production with regard to:
   a) Strengthening the service of extension and plant protection.
   b) Improving marketing facilities of vegetables and fruits, through establishing a specialized body for crops export.
c) Seeking the provision of capital inputs like freezing and transport equipments and vehicles for exports.

For the effective implementation of the proposed strategy a number of policies and structural reforms were also advocated to facilitate the achievement of the objective of food security. Rehabilitation of the production capacities and maximum utilization of potential resources were the targeted approach, without much resort to excessive capital investment.

The recommended reform measures could be summarized in the following:

1. Review the existing organizational structures and removes all the overlapping and duplication of work. Define the jurisdiction of all organs and units of the sector especially those at the central and state levels to promote efficiency and production.
2. Establish machinery for coordination in areas of research, production and distribution.
3. To revise the marketing system of agricultural products.
4. Seek new markets and new avenues for bilateral and regional agreements that may aid in maximizing the export revenue.
5. To urge development of agricultural credit favoring small farmers, in the traditional sub sector and food security, over the cash crop sub sector.
6. Encourage the establishment of new cooperatives in the area of agricultural production, in addition to removing all bottlenecks hampering the existing ones.

3.4 The inception of a comprehensive national strategy; 1992-2002

In 1992, a comprehensive national strategy was adopted. The general objectives were more or less the same as those of ternary salvation program. They included the following:

1. Achieve the level of food security.
2. Increase the contribution of the sector to the national product and agricultural revenue.
3. Increase the outcome of agricultural exports and consequently lighten the burden on the balance of payment.
4. Optimize the utilization of the potential agricultural resources.
5. Achieve balanced regional development.

The adopted strategy for the achievement of those goals was as follows:

1. Increase the food grain by six times and oil seeds by five times.
2. Increase the rain-fed cultivable area to reach 51.7 million Fedans by the end of the ten year plan. 30 million Fedans of these in rain-fed mechanized area and 21.7 million Fedans in the traditional rain-fed area.
3. Increase the annual production rate, year after year through intensive use of technology transfers.

4. Achieve positive integration of animal in rain-fed plant projects. It is worth mentioning here that the quantitative objectives for agricultural production were defined in light of the directives of the national strategy. Consideration was also taken as to the levels of the productive capacity then, and the anticipated improvement in the performance and investment flow during the period of the plan\(^{16}\) (Agricultural Sector Committee Report, 1992). This is illustrated in the following tables:

**Table (6):** Quantitative objectives of the first three Years of agricultural strategic plan. Area, in thousand fedan; productivity, in ton/fedan, qintar/fedan for cotton; Production, in thousand ton, (thousand qintar for cotton).

<table>
<thead>
<tr>
<th>Crop</th>
<th>First year</th>
<th>Second year</th>
<th>Third year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Area</td>
<td>Productivity</td>
<td>Area</td>
</tr>
<tr>
<td></td>
<td>Production</td>
<td></td>
<td>Production</td>
</tr>
<tr>
<td></td>
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<tr>
<td>Cotton</td>
<td>590</td>
<td>4.2</td>
<td>680</td>
</tr>
<tr>
<td></td>
<td>2,470</td>
<td>0.8</td>
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</tr>
<tr>
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<tr>
<td></td>
<td>800</td>
<td>0.14</td>
<td>4,150</td>
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<tr>
<td></td>
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<td>0.27</td>
<td>14,620</td>
</tr>
<tr>
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<td>20</td>
</tr>
<tr>
<td>Dukhon</td>
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<td>15</td>
</tr>
<tr>
<td>Millet</td>
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<td>0.3</td>
<td>12</td>
</tr>
<tr>
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<td>Rice</td>
<td>10</td>
<td>1.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
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<td>60</td>
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<td>73</td>
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<td>0.16</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>8</td>
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<td>Total oil seeds</td>
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<td>5,575</td>
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<td>360</td>
<td>370</td>
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<tr>
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<tr>
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<td>1.320</td>
<td>5.5</td>
<td>1.500</td>
</tr>
<tr>
<td></td>
<td>40</td>
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<td>765</td>
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<tr>
<td></td>
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Table (7): **Quantitative objectives – Irrigated subsector**

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<th>Second year</th>
<th></th>
<th>Third year</th>
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<td></td>
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<td>1.0</td>
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<td>Wheat</td>
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<td>1.2</td>
<td>20</td>
<td>1.5</td>
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<td></td>
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</tr>
<tr>
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<td></td>
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</tr>
<tr>
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<td>Total</td>
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<td>3.360</td>
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<td></td>
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</tr>
<tr>
<td></td>
<td>1.320</td>
<td>4.5</td>
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</tr>
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<td>180</td>
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<tr>
<td>Total</td>
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<td>8.715</td>
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</table>

**Source:** Ministry of Agriculture – Sectoral committee report 1992
Table (8): Quantitative objectives of the first three years of the program of the strategy for rain-fed sub sector

Area, in thousand fedan; productivity, in ton/fedan, qintar/fedan for cotton; Production, in thousand ton, (thousand qintar for cotton).

<table>
<thead>
<tr>
<th>Crop</th>
<th>First year</th>
<th></th>
<th></th>
<th>Second year</th>
<th></th>
<th></th>
<th>Third year</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Area</td>
<td>Productivity</td>
<td>Production</td>
<td>Area</td>
<td>Productivity</td>
<td>Production</td>
<td>Area</td>
<td>Productivity</td>
<td>Production</td>
</tr>
<tr>
<td>Millet:</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
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<td>2.803</td>
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<td>666</td>
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<td>0.155</td>
<td>777</td>
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</tr>
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<td>Dokhon:</td>
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<td></td>
<td></td>
</tr>
<tr>
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<td>300</td>
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<td>0.225</td>
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<tr>
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<tr>
<td>Total</td>
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<td>4.700</td>
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<td>20</td>
<td>0.3</td>
<td>6</td>
<td>25</td>
<td>0.3</td>
<td>8</td>
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<td></td>
<td></td>
<td></td>
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<td>5.836</td>
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<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
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<tr>
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<td>60</td>
<td>325</td>
<td>0.225</td>
<td>73</td>
<td>350</td>
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<td>795</td>
<td>6.595</td>
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<td>0.175</td>
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<td>250</td>
<td>0.200</td>
<td>50</td>
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<tr>
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<td>0.117</td>
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<td>7</td>
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<tr>
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<td>322</td>
<td>59</td>
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<tr>
<td>Guar</td>
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<td>0.150</td>
<td>100</td>
<td>0.200</td>
<td>150</td>
<td>0.23</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Ministry of Agriculture – Sectoral committee report 1992

3.5 Performance of the agricultural sector 1990-2002

Commentary on the performance of the agricultural sector for the strategic ten years plan as found in various reports*17 and official documents were commending the impetus given by the program to the increase in agricultural production during the first two years of the plan where it achieved an annual growth rate of 31.2 in addition to an average increase of 2.5 billion Sudanese pounds in gross domestic products (GDP) compared to 2.2 for the period from 1985-1989. At the dawn of the ten years plan, the period was characterized with a remarkable improvement in the productivity of most crops, especially wheat, peanut, millet, and ground nuts.
Equally true the cultivable areas for all crops have witnessed a visible increase, except for cotton, where the area has been decreased in favor of food crops (tables 6,7,8, above).

However, as has been reported, after 1993, there were tremendous fluctuations in production and productivity and cultivated areas. This is illustrated in the following table:

Table (9): Area, Production & Productivity for the main groups of crops in Sudan (1990 – 1998).

This is illustrated in the following table;
Area, Thousand hectares; Production, thousand tons; Productivity, kilogram/hectare.

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Seeds</strong></td>
<td>5628.29</td>
<td>2116.30</td>
<td>316.01</td>
<td>5911.33</td>
<td>2015.30</td>
<td>515.25</td>
<td>6609.75</td>
<td>4745.20</td>
<td>717.91</td>
</tr>
<tr>
<td><strong>Area</strong></td>
<td>6609.75</td>
<td></td>
<td>515.25</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Production</strong></td>
<td>8093.52</td>
<td></td>
<td></td>
<td>9956.26</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Productivity</strong></td>
<td>5171.50</td>
<td></td>
<td></td>
<td>499.59</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Oil seeds</strong></td>
<td>4032.20</td>
<td>2015.30</td>
<td>515.25</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Area</strong></td>
<td>6609.75</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Production</strong></td>
<td>3367.60</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Productivity</strong></td>
<td>499.59</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

The table points out the fluctuations in the cultivated areas, gross production and productivity. Despite the fact that there was general increase in seed crops and sugar cane, yet for oil seeds and vegetables there were remarkable fluctuation in productivity while planted areas were almost constant. This, according to the AOAD report (2000)\(^\text{18}\), was due to:

"A good part of the cultivated areas in Sudan is dependant on rain, which rates undergoes great fluctuations in amount and span. In addition there is also a debilitating effect caused by various agricultural policies during the period".

It is worth mentioning here that a number of reports\(^\text{19}\) and studies have attempted to analyze the performance problems of the sector related to the cultivated areas, production and productivity. A preview of those problems revealed that the sector has been for long infected by a conglomerate of policy planning and operational problems which adversely affected all efforts of sustainable development. These could be summarized in the following:
A\ Neglect of the traditional rain-fed sub sector, despite the fact that it provides a source of living for about 90% of the farmers' population. These virtually constitute about 65% of the total population of Sudan. The sub sector, as observed by some scholars, suffers from meager investments and finance, weak infrastructure and administrative systems. This has largely minimized the capacity of the sub-sector 20 (Sid Ahmad 1999).

B\ Focus on the irrigated sub-sector despite its limited area, which does not align to the resources assigned to it. Its area is rarely 4.2 million Fedans and is not fully utilized. During the period from 1989-1993 the average cultivated area did not exceed 2.5 million Fedans, slightly raised to 3.2 in 1996/97. Yet the actual harvested area was only 2.5 million Fedans; the same as what has happened at the beginning of the 90s. As observed by scholars in the field 21 (1999).

"This meant that there was a great waste, not only in the sense of underutilization, but also in terms of wasting the water resources, irrigating unused areas to the detriment of other areas in some other locations".

C\ Absence of marketing policy; the ten years plan, 1992-2002, was based on a free market policy. Hence more attention was devoted to establishing silos, marketing corporations in the field of oil seeds, sugar, gum Arabic and crop markets in the main production areas, yet marketing services are still lagging behind. Marketing channels are full of middle men, storage and transport shortages. More important the service is greatly hampered by data and markets’ information deficiency. Promotion activity is completely absent. As observed by the same scholar (1999:84)22

".... The agricultural production strategy, which for long, have aimed at meeting domestic market needs and surplus export, should now be substituted by one which targets the Arab and Islamic worlds and the African countries. Getting through to these markets via an intensive promotion plan for supporting export, no doubts, would create common interests and consequently would lead to the creation of regional economic entities"

D\ Shortages and weakness of agricultural services:

(1)Mechanization, agricultural strategies have always been favoring mechanization over traditional means of cultivation. Yet, the dilemma has always been that the use of mechanization in the Sudanese farming was weak. Sudanese producers in the mechanized farming areas use only one Lauder for 1.500 fedan, while developed countries use one Lauder for 120 fedan. Yet some industrial countries use one Lauder for every 25 fedan. More over due to the fact that procedures in the national mechanized areas, do not have their own machines, they usually rely on rent. Equally true, because all renting services is carried out by the private sector, who in turn
employ ordinary drivers, with no or little experience in blowing work and
the different requirements of different seeds. Most of such operations are
inefficiently done to the determinant of the target product. According to the
analysis of critics 23 (Abdel Aziz, 1999: 72), this happens because:

"All agricultural corporations and departments do not have the required
number of agricultural engineers and technicians who could assume the
role of supervision and monitoring of such operations. Hence this
necessitates that a fully integrated mechanization policy and a phased plan
for mechanizing agricultural operations gradually. The plan should involve
the provision of the necessary professional and technical specialization
and support for research and extension services."

(2) Agricultural research: despite the commendable efforts played by
agricultural research in introducing high quality species of a number of cash
crops and horticulture; like cotton, wheat, millet, peanuts, vegetables and
fruits, yet the crop mix is considered very limited in view of the variable
agricultural environment with which the country is endowed. According to
expert opinion this is mainly due to the weak human and material resources
allocated to agricultural research. Scholars in the field have noted 24:

"Despite the recommendations of international organizations concerning
the importance of scientific research and that it should be allotted no less
than 1% of the national income, the total sum spent on agricultural
researches amounted only to about 0.06% in 1997. That was very minute
and did not correspond with the efforts that should be paid to meet the
challenges of globalization and the new century. On the other hand, the
International Food Conference held in Rome 1974 recommended that
allocations for agricultural research should not be less than 10% of any

As for the human resource, the same writer observed:

"The agricultural research corporation has lost a great number of its
specialized cadres because of the economic conditions and secondly
because of the meager resources devoted for the researchers. This as put by

"No doubt an intensive training plan to close the existing gap as well as
availing the required skills in various new areas like tissue transplant,
organic biology, genetic engineering, technology of machines and
equipments, information systems and computer technology to make pace
with the developments in agricultural services is highly needed".

Shortages of the required skills for the development of high quality seeds
have been particularly noted by Dr. Sid Ahmed 27, (1999:79) in the following
quotation:
"All national departments and corporations have divisions of quality seeds propagation, yet these divisions do not find enough resources or the required specialized manpower to cope with the incremental development in the field of discovering and developing high quality seeds".

(3) Extension: extension services are the link between agricultural research and the farmers; it helps convey the field problems to the research institutions for solutions. Consequently it conveys the proposed solutions for application in the field. The ministry of agriculture has taken responsibility for agricultural extension since 1959. By mid seventies, and the dawn of the economic crises, followed by “curbing expenditure” policies, extension services started to shrink

As noted by some scholars26, (1999:258)

“By 1992, with the application of the policies of structural adaptations of the IBRD and IMF, and the consequent minimization of the role of the ministry in agricultural services, an automatic disruption of the linking chain between research and extension work has occurred. A gap has been formed and aggravated by the "halt automatic recruit" policy adopted since 1981, despite the remarkable increase in the cultivated area since then. Due to the above mentioned developments, the number of extension cadre available at present amount to about 300 employees. These are supposed to serve 3 million farmers and producers in all agricultural sub sectors. Hence the estimate is that, for very 10.000 farmers, most of them are illiterate; there is only one extension worker. Egyptian statistics shows that for every 20 fedan there is an agricultural engineer or technician. It's worth mentioning here that Egypt is considered among the highest top countries regarding the level of productivity”.

Taking the conclusion of the FAO studies that:

"Agricultural extension can perform well if an extensionest is secured for every 500 farmers".

This assumes that an additional 20 time's increment of the available number at the time was required (Sid Ahmed 1999: 91)26

To conclude this part, it could be said that planning for agricultural development was rather hectic, multidimensional and extremely molded by extraneous factors.

Historically Sudan was known as an agricultural country. It was endowed with tremendous agricultural resources; 250 million hectares in area. One third of it is arable land and another one third is grass land and forestry. Sudan is also endowed with huge water resources; one thousand billion cubic meters of rain water, numerous rivers on top of which is the river Nile. In addition the country is
very rich in underground water resources; all of these are being underutilized. On the other hand the country is also endowed with a variety of climatic and environmental conditions which favor the production of an unlimited number of crops, vegetables and fruits.

Sudan has a strategic location, lying at the heart of the African continent surrounded by 9 African countries and connected to the Arab world through its distinguished sea port in the red sea. Given all such endowment, the expectations were that Sudan could have become a prominent agricultural country and quite a figure in the world of agricultural goods trade. Despite the huge resources of the country yet it still (at the beginning of the 21\textsuperscript{st} century) is considered one of the least developed countries, measured by the low national income and the high rates of poverty and unemployment, in addition to the low productivity of its agricultural products.

Sudan has always been considered a self-sufficient country in terms of food production and one of the prime Arab and African countries exporting agricultural goods, yet the latest statistics of foreign trade denoted that food production imports have risen from about 80 million dollars in 1990 up to 250 million dollars in 1997 (Sid Ahmed 1999:4)\textsuperscript{27}. The import list included wheat, flour, oil, rice, lentice, powdered milk, dates, fruits and different canned crops and fruits. This might, as indeed noted by the same scholar, indicate some wrongful act related to the manner in which the natural resources are being utilized, as well as in the manner in which the agricultural sector is being managed.

Examination of different development plans of the agricultural sector revealed that, agriculture being the back-bone of the national economy was subjected to unlimited diverse environmental factors (internal and external) which directly imposed on the performance of the successive development plans and interrupted their consistent flow and consequently the achievement of the stated objectives.

Tracing back the performance of the different agricultural development plans it could be noted that during the eighties following the setting of the "structural adaptation program" of Sudanese economy, the main focus of the agricultural plan was on the development of cash crops to promote export goods, but because of the adopted policies concerning the pricing of the products and the production interrelationship did not allow the farmers to achieve a profitable revenue, they automatically refrained from it and hence the targeted production was not achieved. This in turn led to conflict with the donors and automatically all subsequent agreements were stopped. This coupled with the ongoing military operations in the south at that time, resulted in aggravating the economic crises in the country especially that, agriculture in the traditional sub-sector was completely neglected. The ternary salvation program of the salvation regime 1989/90_1991/92, adopted a somewhat an integrated planning approach to
mobilize the stagnating national economy, through a gradual program of structural and policy reforms and liberalization of economic policies. The objective of the program was to achieve self-sufficiency in food production, encouraging investment in agriculture and the revision of the system and laws to serve the purpose of increasing production and abolishing monopoly of state marketing corporations. The program also targeted the activation of agricultural credit.

Performance of the program for the first two years was quite commendable; the increase in production went from 7.7 in 1988/89 to about 27% in 1992/93. The resulting development rate in the annual gross domestic product went up to 13.1%. The grain production has also increased from 1.2 million tons in 1990/91 up to 4 million tons in 1992/93. The country has achieved self-sufficiency in wheat production for the first time; the estimate wheat production was 838 thousand tons. This encouraged the government to adopt further policies which aimed at further liberalization of production, industrialization and distribution in addition to financing, marketing and other policies concerning investment procedures and foreign trade.

The direct effect of these liberalization policies was that production has decreased and concomitantly revenue for the farmers have started to diminish due to the increase in the cost of production, since most of the agricultural inputs are imported. This is illustrated in the following table.

Table (10): Developments of the cost prices of cotton production in Jezira scheme 1988/89_1992/93

<table>
<thead>
<tr>
<th>Season</th>
<th>Increase of % cost of production</th>
<th>Increases in prices of cotton buds</th>
</tr>
</thead>
<tbody>
<tr>
<td>1988/89</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>89/90</td>
<td>11</td>
<td>16</td>
</tr>
<tr>
<td>90/91</td>
<td>86</td>
<td>62</td>
</tr>
<tr>
<td>91/92</td>
<td>489</td>
<td>344</td>
</tr>
<tr>
<td>92/93</td>
<td>1494</td>
<td>843</td>
</tr>
</tbody>
</table>

Source :(Sid Ahmed, 1999:101)

The high increase in the cost of production was mainly due to the increase in the cost of insecticides by 57% and fertilizers by 397% as well as for other inputs by similar rates (Sid Ahmed 1999:101).²⁸

As remarked by experts in the field, structural reforms introduced into the Sudanese economy were supposed to boost agricultural production and the national economy, but as put by the same scholar:
"The bunch of policies was greater than the ability of the agricultural sector to deal with"

The same observations were also made in relation to the ten years strategic plan (1992-2000), which according to some observers succeeded in achieving self-reliance objectives, but the attributes were mainly referred to society’s effort. In the words of Sid Ahmed (1999)29

"This popular motivation was not accompanied by effective institutional, administrative or organizational approaches to mobilize the local system, unrevealing the latent wealth and capabilities at the local levels and promote popular initiative and support production cooperatives. This should have been sought so that all efforts of production and distribution of small farmers and entrepreneurs, could be brought together voluntarily to lead development and achieve the welfare of the society, instead of the prevailing pattern of creating a capitalist class to the detriment of the poor".

Further criticism of agricultural development plans described the ten years strategic plan as being very ambitious, considering the fact that it was virtually incepted at an unfavorable economic environment. For this reason its disadvantages outweighed the advantages (Sudan’s Strategic Report 2000)30. Analyzing the quantified objectives stated above one scholar has noted31:

"No doubt the formulation of the objectives took into consideration the tremendous agricultural resources of the country, yet no real assessment of the problems and constraints available at the time was being attempted" (Sid Ahmed 1999:114)

Similar observations, on the cause of diminishing performance of the 10 year development plan have also been made by another scholar (Abdel Aziz 2000)32 He enumerated the following:

1. The quantitative objectives were too ambitious and unrealistic.
2. Weaknesses of the basic infra structure for achieving the objectives; Lack of finance, marketing strategies, plant protection and extension in addition to the absence of roads, drinking water and security.
3. Shortage of budgets and cash flow
4. Shortage of administrative and technical manpower resource
5. Lack of transportation means and work equipments and machinery.
6. Overlapping authorities and responsibilities.

Knowing that, strategic planning is based mainly on analysis of the support factors as well as the threat factors, one would unblamingly start to question the planning capacity of the sector

In another observation Sid Ahmed, in an indication to the sector's performance during the second period of the strategy's period he mentioned;
"The agricultural sector did not play his expected role in mobilizing the other economic sectors. It was quite obvious, by statistical information, that during the reform period, farm production was characterized by fluctuation which was the core of the reform policies".

As a matter of fact, the agricultural sector is handicapped by a number of economic and policy problems that should have been taken into consideration while formulating the agricultural policies. Such problems as perceived by the deficiency of economic policies, pricing and marketing policies, inefficacy of financial resources, foreign debts and budget shortages have always been a constraint for all development planning efforts in Sudan. The direct effect of such constraints is well assembled in the chronic financial shortages which practically undermined all efforts of vertical expansion of crop production due to an incapacitated agricultural research and extension.

Agricultural credit policies and practices have been criticized as not being compatible with the objectives of agricultural development. As noted by Sid Ahmed33 (1999:94):

"Despite the increase and spread of credit institutions during the 5 past years, yet credit existence in Sudan is still weak. It is estimated there is a bank for every 79,000 citizens, while the average in developing countries is one for every 10,000 citizens and one for every 4,000 citizens in the developed world. Their effect is further weakened by the fact that they are mainly concentrated in urban areas, so their utility is greatly lessened especially in western and southern states. On the other hand the facilitation of credit loans requires the provision of financial and real estate guarantees which small farmers usually do not possess".

It is worth mentioning here that in the introduction to the ministry's plan for the year 200534 the following statements have shown up (Annual Development Plan 2005)

"A clear vision of the agricultural development necessitates the existence of a sustainable agricultural policy that meets the country’s needs and the citizen's needs as well as interact with the local and international changes and contributes directly or indirectly in promoting all human activities”.

"Formulation of effective agricultural policy, should consider the fact that agricultural production is not a function that ends at the farm's door, but it virtually extends to cover the ultimate outcome of processing industry and the entire aspects of the economic, and social life, and the environment as well".

It could be said that such a new vision is apt to bring about a new role definition for the ministry of agriculture and its executive bodies and agencies. Division of
powers among the central ministry of agriculture and the regional ministries, the new sets of relationships as imposed by the Federal system of government and the peace Agreement. All these developments will no doubt have their impact on the institutional capacity of those bodies and agencies. So a comprehensive review, that encompasses the whole picture, assess the required competencies, spot the deficiencies and plan systematically for their elimination is an urgent need, before embarking on production plans.

3.6 Manpower Planning in Sudan
As mentioned earlier, the urge for socio-economic development and the complexities of policies in all spheres of government resulted from the establishment of the new nationalist government, after independence, demanded the fashioning of a new structure and machinery of government. A structure that is capable of promoting and sustaining the developmental efforts of the country. This naturally, could not help but to have the profoundest influence on the public service, its organization and composition. After independence, the government's priorities had to be changed from keeping the status quo to meeting the rising aspiration of the people for socio-economic development and higher standards of living. This, according to some scholars:

"brought about a concomitant expansion of existing government departments and the creation of new ones, in addition the country was becoming increasingly involved in the arena of international relations"

Such expansion and diversification of governmental activities added dimension to the responsibilities and nature of public personnel which came to combine policy, technical advisory and managerial functions, (Al Teraifi 1972:2).

During the colonial rule, all policy, planning and managerial functions were prerogatives of the foreign colonizer, while the Sudanese nationals were assigned only executive and routine tasks following the laws and orders of this superiors, who were mostly British and Egyptians. Thus it was quite natural, that then, the public service had been lacking the proper qualifications for undertaking the new tasks assigned to it. This as put by Al Teraifi (1972):

"Localization, policies, adopted after independence necessitated the replacement of nationals for foreign employees. This eventually led to a loss of expertise, especially at the top level".

Evidently no preparation of these administrators has preceded their assignment.

Salih (1988:6) stated:

"None of the Sudanese administrators, who has been promoted automatically from below to fill in top vacant posts which were
held by the British, ever imagined or dreamt that this would happen".

This being the situation, one would expect that due attention should have been given to the manpower required to undertake the development task in various social and economic fields. However as appeared in many of the papers of the National conference of training and manpower development, this did not take place. This was clear from the following quotation39:

"manpower planning is commonly known as the continuous systematic process through which it would be possible to determine the society's wealth of the human resources to make available the required labor force through a population plan, to develop that labor force through education and training plans, to qualify the labor force to arrive at the actually demanded labor force for the development programs. Finally, comes the process of utilization through employment and distribution according to the needs of the various economic sectors in the light of specific social and economic targets within a specific time limit" (National Conference of Training and Manpower Development, 1984 Doc. BI:6).

In most developing countries manpower planning, in this sense, has not been adopted yet. However, lately these countries started to realize the importance of the human factor in promoting productivity.

In Sudan socio-economic planning itself has been a recent phenomenon, this was clearly illustrated by the inadequacy of the development plans since the sixties and yet most important is the un-sustainability of those plans.

However reviewing all development plans, of the country one would notice that no concern has been shown, in the different phases about manpower planning. Despite the growing concern over investment in education and training, but it was clear that these programs were far away from achieving the targets of social and economic development. This has led to a clear imbalance in both the required size and structural composition of the labor force. This as put by Mouly40 (1984:207)

"the comparative indifference on the part of economic text books towards manpower needs has its counter part in the minor place occupied by manpower considerations in most national development plans which all too often confine themselves to a number of generalization or range objectives without tracing clear links between these objectives and the other forming parts of the plan".

Reviewing the socio-economic plans of the 1961-71 and the 1970-75 one would notice that reference to the manpower requirements came by, during the
discussion of the main problems of the Sudan economy. The same observation made by Mouly was also made by El Jack and Taha⁴¹ (1974:9):

```
"- It is evident that the (targets) as well as the objectives of the Ten Year Plan as far as manpower is concerned were vague generalizations in the sense that they were not outcomes of a systematic manpower planning effort nor could they have led to any systematic measures pertaining to the development of human resources".
```

Although the above writer asserted that in the ten year plan, the planners engaged in some analysis of supply and demand for the technical manpower, yet it was also believed that the plan still left much to be desired. This was clear from the following quotation⁴²:

```
"The concept of manpower planning implicit in these analysis is restricted to labor and the whole field of administrative and managerial personnel, project management, individual labor relations required for the implementations of various projects included in the plan, was relegated".
```

Similar comment have also been made with respect to the five year plan by El Jack and Taha (1974:60), who have studied the manpower planning in the two plans, in concluding their study they made the following remark ⁴³:

```
"It is clear from the above analysis that attempts at manpower planning, incorporated in the ten year and five year plans for economic and social development do not constitute manpower planning in any meaningful sense. There is no indication that the planners were even cognizant of the objectives of manpower planning which is to determine the difference between the manpower needs of the plan and the available human resources in the economy, and specifying measures to convert this imbalance".
```

The problem of manpower planning in Sudan is not attributed only to deficient planning techniques, but more seriously to data constraints which seems to be an inherent feature of the Sudanese community. This as put by some scholar⁴⁴ (A. Ali, 1985:8), who studied the manpower planning in the consequent six year plan:

```
"the estimates were clearly unreasonable even from abroad perspective, for instance, the required engineers were estimated to reach about 5000 which is equal to nearly half of the registered graduates in employment in 1980, as a result, the planners concentrated heavily in producing engineers and scientists in surplus quantities, since then, no attempt has been made to correct these imbalances".
```

The Six Year Plan, 1977/78 – 1982/83 was meant to be the first phase of a long range perspective plan from 1977/78 – 1994-95; its objectives were
determined as part of the long range plan which basically aimed at pushing the Sudan's economy into the state of self–sustained growth. That was to be achieved by means of balanced and accelerated growth which requires long-run changes in the socio-economic structure of the country and the full mobilization of human, corporate and financial resources which should then be used optimally.

On basis of that plan, 100 new projects were to be accomplished by 1982/83. So the manpower projections were made according to the assumed absorptive capacity of the proposed projects. This is illustrated in the following table:

Table (11): The Six Year Plan Projections of Professionals
By Specialization for 1982/83

<table>
<thead>
<tr>
<th>Profession</th>
<th>Supply</th>
<th>Demand</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculturalists</td>
<td>2660</td>
<td>5600</td>
<td>-2940</td>
</tr>
<tr>
<td>Veterinarians</td>
<td>1000</td>
<td>2200</td>
<td>-1200</td>
</tr>
<tr>
<td>Medical Doctors</td>
<td>2380</td>
<td>2405</td>
<td>-0025</td>
</tr>
<tr>
<td>Engineers</td>
<td>2240</td>
<td>4400</td>
<td>-2160</td>
</tr>
<tr>
<td>Agricultural tech.</td>
<td>2150</td>
<td>7195</td>
<td>-5045</td>
</tr>
<tr>
<td>Veterinary tech.</td>
<td>1150</td>
<td>5000</td>
<td>-3850</td>
</tr>
<tr>
<td>Medical tech.</td>
<td>1580</td>
<td>2000</td>
<td>-0420</td>
</tr>
<tr>
<td>Engineers tech.</td>
<td>580</td>
<td>2400</td>
<td>-1820</td>
</tr>
<tr>
<td>Humanities</td>
<td>15615</td>
<td>3500</td>
<td>+12115</td>
</tr>
</tbody>
</table>

As illustrated in the above table, the plan projections show a deficit of the professional categories i.e. agriculturalists, veterinarians, medical doctors etc… The underlying assumption of these projections that the newly proposed projects would provide the necessary jobs for university graduates, however due to the failure of the economic plans in achieving the stated objectives, manpower projections seemed to be over optimistic. (A. Ali, 1985:13) states:

"contrary to the plan’s expectations, the new proposed projects which are expected to generate employment for different categories of manpower simply can not be established which means that the absorptive capacity of these sectors will not increase, at least in the next decade"
Despite this the country's inclination is still towards increasing university graduates.

3.6.1 Implications of Manpower planning on the manpower situation in Sudan

Despite all efforts of manpower planning in Sudan, the manpower situation in the mid eighties was going astray. The first National Conference on training and manpower, 1984, have accounted for manpower problems in the Sudanese public service. These were identified as a deficit and a surplus.

The deficit was envisaged in the shortage of skills and specializations needed for the process of economic development and the expected changes in the economic structure. The surplus was manifested in over employment in the traditional and modern sectors of the economy caused by the increasing outflow of secondary school leavers and graduates in arts and humanities. Recently the phenomenon of unemployment has extended even to graduates of science and technology. According to Labor Department statistics\textsuperscript{46} (1987) there were about 8852 professionals and about 768 technicians all of whom unemployed. According to the latest statistics (1996) the number of agricultural schools graduates have reached the number of 3749108 out of these the number of employed are only 3490724 while there are 258384 unemployed. These numbers have probably increased by now. In 1986 an ILO mission have warned that any planning of higher education should carefully consider such dimension of unemployment and to the relevance of the specific field of specialization and the quality of the training provided, since any investment in an unutilized training is wasteful to the country's already meager resources. This as put by ILO mission\textsuperscript{48} (1986:179):

"However, it is difficult to justify the continued public expenditure of about LS 26.000 per student in the national universities, when the vast majority of the graduates are unemployed and when primary schooling evidently needs more finance".

The ILO mission's comment on educational policies and plans was that they formidably lack consistency and clarity regarding the required manpower supply for the task of socio-economic development.

Criticizing the university education of agriculturalists, the mission has particularly emphasized its need for more practical orientation to minimize the problems of application of the imparted knowledge to the actual work situation.

The manpower deficit as envisaged by the National Conference of Training and manpower development (1984 Doc. BI) was found to be caused by migration\textsuperscript{49}.

According to the statistics of the Labor Department, during 1974 – 1983 i.e. the peak of the development era, 38.500 employees have left the country through
legal routes. These were said to be holding strategic professional qualifications and skills needed for the development process. Another 16,000 have left the service without notice during 1978-81 and similarly were considered to possess vital skills. An illustration of this is provided in the following table:

Table (12): Occupational Distribution of Service Leavers 1978 – 81

<table>
<thead>
<tr>
<th>Occupation</th>
<th>1978</th>
<th>1981</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional Technical</td>
<td>1630</td>
<td>1703</td>
<td>3333</td>
</tr>
<tr>
<td>Administrators</td>
<td>286</td>
<td>271</td>
<td>557</td>
</tr>
<tr>
<td>Clerks &amp; related occupations</td>
<td>1137</td>
<td>1989</td>
<td>3126</td>
</tr>
<tr>
<td>Sales workers</td>
<td>55</td>
<td>-</td>
<td>55</td>
</tr>
<tr>
<td>Service workers</td>
<td>246</td>
<td>1311</td>
<td>1557</td>
</tr>
<tr>
<td>Agriculturalist</td>
<td>82</td>
<td>164</td>
<td>246</td>
</tr>
<tr>
<td>Production &amp; transport</td>
<td>4604</td>
<td>2906</td>
<td>7510</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>8040</strong></td>
<td><strong>8344</strong></td>
<td><strong>16384</strong></td>
</tr>
</tbody>
</table>

Source: Labor Department, Studies on work leavers, 1979 and 1982, Khartoum.

Perceiving the complexities of the manpower situation in Sudan the conference brought to the fore the problem of manpower data and statistics which greatly hinder the process of policy formulation50 (N. Conference for training and manpower planning D.BI: 48).

"in this respect it is inevitable to mention that the deficiency in data and statistics concerning manpower and the variability of the labor market greatly hamper all effort at formulating policies and programs for manpower planning and development".

Unfortunately, despite all such warnings, still no serious effort has been made to encounter this information problem. The effort of the Labor department in this respect was greatly hampered by various structural problems. Commendably they pay considerable effort in collecting and tabulating manpower data, however their analysis capability and utilization of such data is very limited because of shortage of trained staff.

Thus, in view of the existing state of deficient manpower planning, the next section will be dealing with the question of manpower development in Sudan with the aim of giving insight into the training strategies and plans.
3.7 Manpower Development in the Sudanese Public Service

3.7.1 Historical Development

After independence, the country has recognized its need for training to meet the manpower deficit caused by the process of hurried Sudanization adopted at that time and also to embark on the long awaited development programs.

Training of Sudanese cadres for long before independence had been carried abroad, mostly in Britain; however, the type of training received then, was mostly concentrated in the professional fields like medical, engineering etc.

Administrative training was entirely confined to on the job training, through experience and supervisory surveillance. However, despite the relative importance of this "do it yourself" method of training, it had been criticized for its slow manner and limited value.

Besides, Sudan's public service itself had greatly lacked the type of qualified and experienced senior staff who would provide such training to their subordinates. On basis of this argument, the committee on training in Public Administration for Overseas Countries (1963) under the chairmanship of Lord Bridges had suggested that:

"This system, the backbone of British training, must be modified for the developing countries and methods must be devised to input by formal instruction and understanding of practical technologies and skill in this use". (Al Teraifi, 1972:4).

Towards the late fifties the government sought the help of UN, who in turn, after surveying the needs of the country advised on the establishment of an Institute of Public Administration (IPA). In 1960, the institute was established with the objective of helping the government of Sudan:

"To improve and develop the organization and administration of the public service so that public policy and programs could be carried out as effectively and as economically as possible". (Angus, Nichoff, 1960:32):

The purpose of the institute as outlined by Angus and Nichoff (1960:32) was that:

"The institute has to focus its attention and activity on the understanding and application of modern principles, practices and techniques of the administration which are common to all units of government".

Special attention would be given to those tools and attitudes of management which are concerned with planning, organization, staffing, coordinating and evaluating governmental organizational or administrative problems of all levels peculiar to that agency programs. It would also assist any public agency requesting its help in specific.
The training function of IPA was designed to supplement the efforts of the ministries and public departments to broaden the outlook of public servants, introduce them to modern techniques of administration and improve their skills of analysis. However IPA was particularly concerned with training of middle level and junior level public servants.

In 1965 the Management Development Centre (MDC) was established as a joint venture between the Government of Sudan (GOS), UNDP and ILO. In 1968 the center emerged as an independent body under a Board of Directors and its own law.

The objective of the Centre was the development of management in all levels in the private sector and the public enterprises, through three basic functions i.e. training, research and consultancy. The training function of MDC has started with supervisory training. In 1986 functional management training was introduced. General management training was rather limited due to lack of resources, particularly experienced instructors and the hesitancy of managers to attend local training programs54.

Middle level and supervisory training carried out by IPA have gained impetus during the 70s under the sponsorship of the Ministry of Public Service and Administrative Reform, MPSAR. In 1971 it started a series of induction courses for service entrants. The courses involved a general introduction to organization and public administration, Sudan economy, problems of development, report writing etc. The course, though, very useful but did not last for more than three or four years.

Through the foreign relations of MPSAR, the IPA has managed to get substantial foreign assistance for organizing and administering a series of middle management courses which aimed at increasing management capabilities of public servants and introducing them to modern principles and techniques.

The most distinguished among these courses was the “Management Services Course”, held by the Royal Institute of Public Administration (RIPA) under the United Kingdom Technical Assistance in cooperation with the Directorate of Organization and Administrative Reform. The purpose of the program was to train a core of Departmental management services officers that would possess all the tools and techniques of solving all organizational and work problems within their departments, thus make the whole service self-sufficient and relevant to the needs of the Sudan. Sudanese trainers were also trained in UK, to take over the tasks of training Departmental Management Services Officers in the future.

Similarly, IPA, in cooperation with the British Industrial Society and the Overseas Development Administration has started two management courses on two different themes53 (AlTeraifi, 1974:14).
The first course being on "Managing Human Resources" designed for senior officials in central government, local and provincial administration, public corporations and the private sector.

The purpose of the course was to impart knowledge to the participants on the effective use of manpower in their respective organizations.

The second course which was on "successful Management" was meant for middle management in government organizations, industry and commerce. The aim was to examine and discuss methods of managing people to improve performance on the job. This later course, besides the advantage of bringing public service leaders together in a spirit of mutual endeavor and understanding of their development problems; it also had the advantage of bringing in participants from the private sector and thus providing an integrative perspective from the different sectors for achieving 'national goals'.

Systematic planning of senior management training was not so adopted in IPA until after the establishment of the Sudan Academy for Administrative Sciences SAAS, though middle management and supervisory training has always been there, encouraged and coordinated by MPSAR.

3.7.2 Senior management training

Training of senior civil servants during the early 60s was for the most part confined to developing technical and professional skills. Management training was practically unknown. However the IPA had a very stimulating experience in this endeavor. It initiated what was known as the Annual Round Table Conference with the intention of bringing together leading public officials to discuss and exchange ideas about different questions which relate to the administrative scene and other related aspects of government activities.

Each conference had a specific theme. The objective of the Round Table Conference as quoted from Al Teraifi55, (1972:11):

"The increasing of the knowledge and technical competence of senior officers; the integration of their thinking, and the provision of new and balanced perspectives in the operation of administrative agencies; in order that senior officers may function effectively within a development environment".

The advantage of the Round Table Conference as summarized from Al Teraifi56 (1972:12) was that; it was able to bring together members of the higher public service to discuss critical institutional and managerial issues related to their work in an objective manner. At the same time it provided them with opportunity to test their analytical skills as well as enhancing their communication skill by providing an atmosphere of intimate interrelationship between the participants of different departmental units, hence providing an integrated outlook to the entire process of development. However, the Round
Table Conference, though provided an invaluable experience in the field of top management training in Sudan, yet it was not sustained.

3.7.3 The higher Diploma for Public Service Leadership

In 1977 a presidential decree number (483) was issued mandating the establishment of the Sudan Academy for Administrative Sciences (SAAS) in place of the IPA, which was merged in it.

The general objective of SAAS was to raise the standard of performance in the public service and the public corporations through the development of management in its top and middle levels. In addition SAAS had the objective of carrying out research and providing technical assistance for all government departments where that is needed for the promotion of the question of development in the country.

An important addition to the role of the Academy over its predecessor the IPA was the emphasis on training of top civil servants. However SAAS did not start functioning until after 1980 i.e. after approval of its organizational and job structures and it was not until February 1985 that the first in the series of top level courses has been organized and implemented. The need for the course was initiated by the presidential affairs secretariat which urged the implementation of the program and nominated the participants. The program was meant to be a national scheme for training all senior managers i.e. grade 4 upwards including general managers and under secretaries. Coverage of the course included all government ministries and departments, public corporations, the military, the police force, prisons, provincial administrators as well as the private sector.

The idea was to bring in all civil service leaders in a sort of a common forum for discussing problems of development as well as improving their analytical skill and ability for solving their organizations' problems in order to increase their total effectiveness in managing their organizations.

The program includes principles and techniques of management, policy analysis, problem solving, communication, motivation as well as other interdisciplinary matters and leadership skills.

The duration of course is 36 weeks long, held annually and imparted through lectures, discussion groups, role play, assignments and research. Later on, since 1997 a four weeks’ computer course was included.

The number of participants in each course totaled, on the average, about 20 participants. It is worth mentioning here that attendance of professional and technical employees is very weak. A relevant example of this is the case of the agriculturalists, where the only nominee from the Ministry of Agriculture, in seventeen of the series of the past two decades’ courses did not attend, and since then no nomination from agriculturalists was ever made. However at the inception of the program there was a great reluctance, both on the part of the
nominees' and their organizations, as well, to participate. Evidence for this was envisaged in the letters of apology and appeals for exemption submitted by various organizations, especially after the fall of the May regime. Feeling free from the commitment imposed on them by the Presidential Affairs Secretariat, four organizations immediately asked for the withdrawal of their employees. Nevertheless, the program has gradually started to gain acceptance, though still it undergoes considerable disruption due to the frequent dropping out of participants due to the policy of exemption from the service for 'public interest' or other political or administrative reasons.

3.7.4 The Young Executive Program

In 1977 the Management Development Centre (MDC), conducted a study on problems of Sudanese organizations. The study revealed that problems of management are more or less similar in both public and private organizations. "Organizations face total management problems which stem from the reality that management is a total system of interacting activities and people (MDC, 1977)".56

The main problems as stipulated by the MDC study were problems of:

- Total effectiveness and result.
- Lack of integration.

These problems are linked to the effectiveness of leadership and the experience of managers.

The problems of leadership were seen as a combination of questions of motivation, managerial knowledge, attitudes and behavior and development problems, such as knowledge to develop objectives and targets and the ability to monitor and control operations.

These problems were seen by (A.H. Mohamed, 1984:9) as needs for the development of:

- Skills in interdisciplinary and functional areas of management.
- Understanding the role of a manager and the effect of his / her function on others.
- Attitudes and behavior that affect performance.

The study also concluded that management training could not be confined to classroom instructions, but it must deal with skills managers need, with the structure of jobs and management relations, and with change of behavior likely to make a manager more effective. To do this, management training should be practically oriented towards real life situations and problems (MDC, 1977).

The above mentioned study by MDC was more or less the first attempt at identifying management training needs in a serious manner, however without commenting on the viability of such study to identify training needs for
individual organizations and individual managers, the study in itself signifies an important fact; that MDC have felt the need for finding a solid ground for designing its training programs; by relating its training activity to the organizational reality of its clients. Hence in response to that study, MDC have developed the Young Executive Program (YEP) for training managers in the private and public sector to help them to become better managers and change agents who could in turn help their organizations to become more effective.

YEP was particularly concerned with the development of new attitudes and skills rather than just imparting new knowledge. The YEP was originally initiated by the concern of the ILO and the UNDP in collaboration with the MDC who felt the need of Sudanese organizations for a long duration executive training program so structured as to achieve maximum effectiveness on the Sudanese work environment and practical managerial problems.

The program was designed and conducted jointly by the MDC, Trinity College Ireland, and Industrial Development Authority (IDA) of Ireland, the Management Center Ireland and ILO. The MDC was responsible for administrating the program as well as sharing in its design and instruction. The ILO was responsible for the selection of the foreign consultancy parties and for monitoring the implementation, while the UNDP was responsible for funding the program.

In 1981 the YEP was introduced for the first time to be offered regularly once a year, in 1982 ILO and UNDP withdrew their support. Hence MDC approached the European Community to fund the program but EC has only agreed to fund part of the courses up to 1986. The Sudanese Government undertook the finance of the project for the two following years, but as understood "it was not in a position to continue" (Lome III, 1989:22). Thus the program lost much impetus due to the exodus of the Irish consultancy team and instructors who practically were undertaking approximately 70% of the teaching, but more important due to the loss of the financial support provided by the ILO and UNDP. The EC seemed reluctant to take over unless MDC should consider redefining its relationship with Trinity College. However as noted by the consultancy team MDC should take more responsibility towards sustainability of the program:

"MDC is heavily biased in favor of Trinity College and, as such, cannot be described as a link program. Whilst such a relationship may have been necessary in the early days, by this stage, the MDC ought to have a far greater responsibility in decision making and teaching on the program". (Lome 111,1989:23)
3.7.5 University Training of Public Administrators

In 1966, the Department of Economics and Social Studies, University of Khartoum had started a post-graduate diploma in public administration for senior public servants. Requirements for admission were university degree plus a substantial work experience.

The course, which is for one academic year was particularly designed to meet the needs of the government for a short but intensive period of study for members of its administrative officers (U of K Calendar 1967-69 1968:254). The subjects covered by that diploma course were, principles of public administration, comparative public administration, office management and organizations, problems of administration in the Sudan and other developing countries, social problems of modern Africa, problems of development in new states and introduction to Sudan laws.

As clear from the above mentioned contents the course was more inclined towards theoretical knowledge which is imparted thorough lecturing, though seminars, tutorial and practical assignments were used.

3.7.6 Development Studies and Research Centre (DSRC)

The DSRC of the University of Khartoum was established in 1976 as an institute to provide post graduate education and training to conduct policy-oriented research and undertake consultancy work. The training program for senior management of DSRC has at present three elements: a one year post graduate diploma program in development, a two year masters program in development and a program of in-service courses in planning and management.

A short course program has been developed in cooperation with the Institute of Social Studies, The Hague, Netherlands. The procedure used was that background research work is undertaken in Sudan and the course preparation is completed in Holland by a joint Sudanese and Dutch team according to the consultants view, the DSRC has a good reputation for producing a high caliber of students and short course participants with newly acquired skills that are of particular benefit to the area of Rural Development61 (Lome III, 1989:20).

3.7.7 Management Training Abroad

As mentioned earlier, since independence, the Sudanese national government has recognized the need of the country for training its civil servants. Hence large numbers were sent abroad to take professional and technical training especially in areas where local facilities are lacking. This practice has continued for some time, nevertheless most of the training abroad was academic, taking the form of further education leading to post graduate certificates or diplomas or to further functional specialization, mostly in the fields of medicine, engineering, agriculture etc… which the country could not provide at that time. In addition senior civil servants were also sent to attend conferences, workshops, seminars or else they were sent on tours to investigate modern and technological
Developments in other countries of the world. The most pressing need for training, in the decade after independence, was to acquire new knowledge that could steer the wheel of development.

During those days training abroad was confined to Britain only, while financing of the training was the responsibility of the government of Sudan (GOS). Later on, the range of countries which provide training facilities for Sudanese has increased widely. This was especially true during the sixties and the seventies; the age of technical assistance, brought about when the need arose for foreign currency to finance various development projects. Various countries and organizations from all over the world, eastern and western, approached the country and provided technical assistance in the form of loans, grants, capital equipments and training programs. The training component in such a case was project oriented. The other form of technical assistance training awards, were those which were provided by certain countries through the normal cultural relations. These were usually open to free competition and hence allocation of opportunities is undertaken by the National Directorate of Training NDT according to the needs of each organization.

Technical assistance training awards are in most cases financed by the donor organizations, but where the award involve along stay study course, like in the case of post graduate studies, the GOS undertook to finance the candidates' family travel expenses. In other cases the award is only partly financed by the donor organization or country, in which case the GOS became responsible for the other part, which mostly involve the traveling expenses of the candidate and his family, travel allowances and post study allowances. In these later cases NDT and the financial authorities in Sudan require that the need for the specific training is well justified by the concerned organization.

Until 1983 the government of Sudan GOS maintained its responsibility for training its employees abroad on its own expenses and according to its own priorities. Then the government has given up this right for economic reasons. Thus training abroad became feasible only where an aid program is available. This though provided a solution for the financial problem, but as will be shown later, not without its adverse effect on the need satisfaction of the service.

3.8 Organization and Management of Training in Sudan

Responsibility for Public Servants training is carried out by the National Directorate of Training (NDT) which was directly responsible to the Minister of Presidential Affairs.

NDT has originally developed within the establishment, where it has first started as a small division to carry out the function of policy planning and organizing of training on an annual basis. The division was also entrusted with the provision of financial resources for implementation of the training programs needed by the various governmental units. Then all training was undertaken on government's expenses.
After independence, the country's foreign relations have substantially expanded cultural relations were established with many other countries than Britain. So a national commission for training abroad was formed to receive and administer the training awards, composition of the commission included representatives from the important ministries in Sudan, the training institutions, in addition to some prominent figures of concern with training and education in the country.

During the sixties the training division of the establishment functioned as a secretariat for the national Commission for training abroad. Nevertheless its affiliation was still to the establishment.

In 1969, immediately after the May revolution, the division was incorporated in the newly formed Ministry of Planning on the assumption that training can not be considered only as a function of the Personnel Department, rather as a basic function on its own right, essential for availing and preparing the required number of manpower for the implementation and administration of the socio-economic development projects

62 (National Conference of training and manpower development, 1984, doc, G5), while the National Commission for training abroad undertook the function of policy formulation and implementation of training programs. This continued until 1971, when the Ministry of Public Service and Administrative Reform MPSAR has been established, the training department was again transferred to the newly formed Ministry of Public Service. The criteria for the incorporation, was that training was a basic foundation of administrative reform. In consequence, the National Commission for training abroad was dissolved and the training department under MPSAR undertook the function of policy making and implementation of the annual training programs.

The UN Mission of 1972, which advised the government on the question of administrative reform, recommended for the promulgation of a National Training Act and a national training council.

Later on, an international commission chaired by Dr. J. S. Shaw of UK was requested by GOS to study, advise and formulate recommendations on reforming personnel systems and practices in the Public Service. The Commission submitted a report on Personnel, Administrative and related Reforms in 1973. Of relevance here; the Shaw commission strongly supported the recommendations of the UN 1972. Further it suggested that priority should be given by the Advisory Council to the development of a national scheme for "the effective absorption of university graduates into the public service, and creating linkage between the Public Service and the universities which should enable the output of the different university faculties and the curricula to be geared more directly to the national needs of the Sudan".

63

In relation to vocational training the Commission offered the following comment

64 (1973:22):
"As a form of investment in people it can, if well directed, produce an even higher rate of return than most investments in capital goods. Moreover, over and above the tangible effects on the technical efficiency of individuals' well designed courses of training can result in increased efficiency throughout an organization by the creation of a feeling of 'espirit de corps' amongst the individuals or in the various occupational groups or cadres".

Further the commission (1973: 22) emphasized the importance of taking care in identifying that the training will improve the performance of the official, either in his present grade or, on promotion, in the next higher grade. That training should not come to be regarded as "a form of welfare which would justify the proposition that 'all training is good' and that more training is always preferable to less training". As an investment, requiring the allocation of scarce resources, it must yield a worthwhile return.

On training for middle and senior management, the Shaw commission 65 (1973:23) recommended that their training be carried out externally through central institutions such as the Institute of Public Administration to keep down costs and make full use of scarce resources.

On the training of professionals the Commission's comment was as follows66:

"As it is widely felt in the Sudan that professional staffs, such as doctors, engineers, etc... are over burdened with routine work of an administrative nature, attention should be given to training the middle administrative levels to which this work should be delegated. This task could be assigned to a well staffed central institute, which could also develop appropriate training material and advise new training techniques".

The commission though was not able to formulate an integrated and comprehensive training scheme for the Public Service, but it managed to point out certain specific areas of need that could be met by:

- Post recruitment training for all service classes: clerical, sub-professional and technical, administrative and professional.

  The middle management courses, then run for two months needed to cover all the people in those grades, and when resources permit the period should be expanded to three or more months.

- Induction training for all newly recruited graduates – a one month course after one year of service.

- Refresher training for:
a- Administrative and professional grades after 5 and not more than 9 year's service.

b- Assistant Directors and above, after 15 years service for (2 – 3 weeks) and mainly be on specialized managerial subjects.

c- For top management grades, the suggestion was that they attend seminar / discussion group meetings of perhaps two or three days on topics of national interest. The Sudan Academy of Administrative Sciences SAAS was projected as a meeting place for top management courses, the meetings were proposed to fulfill the purpose of bringing together the top management of the Public Service, Higher Educational Institutions, Professional Societies, Public Corporations and the Private Sector.

The commission particularly emphasized that care must be taken to ensure that, in his next posting, the official is able to exercise the further skills which he has acquired, "if this is not done the department is failing to get a return for its investment, and the individual may well feel that the training was a waste of his time".

The commission has observed that most of the training expenditure, at that time was spent on specialized training abroad. That Public Administration training "as distinct" from further education could and should, be carried out more cheaply in Sudan. Hence they proposed that a certain percentage of the chapter I personnel costs should be earmarked for involvement in training on various aspects of administration.

More important, the commission has envisaged the implementation of training programs of the kind outlined above to be within the framework of a comprehensive National Training Scheme. Such a scheme, of course was only possible in view of the above recommendations concerning the establishment of a National Council for training, which could design such a comprehensive scheme, and as well the responsibility of the Training Directorate of the MPSAR, which was entrusted with the functions of planning, implementation and coordinating the training activity at the national level as well as with the task of helping identify the training needs of the Public Service as a whole.

Examination of the role of these two important bodies showed that neither of the two has given the chance to survive their roles.

In 1976 the National Training Act was issued defining the duties and responsibilities of the National Training Directorate (NTD), and then a central department within the Ministry of Public Service and Administrative Reform (MPSAR) was formed. Article 8 of that act provided for the establishment of a Technical Council for Training.
Membership of that council included all important ministries, public enterprises, business and industrial unions, University of Khartoum, regional government, NDT, National Council for Research and Public Administration Institutes.

The main responsibility of the Council as defined in Article 8 (1970 Act) was:

a) Lay down the foundation, principles and rules which govern the training programs of all government units to fulfill the following objectives.
   1- Raise the performance level in the public service.
   2- Produce a qualified and efficient cadre, equipped with the modern scientific, technical and administrative methods of work
   3- Maintain an equitable distribution and utilization of training opportunities.

b) Lay the basis for allocating scholarships receivable from regional and international organizations and countries.

c) Perform cultural agreements and examine the type and quality of education and training available in other countries.

d) Preparation of the annual training plan in the light of the development plan.

Unfortunately the above mentioned council was "born dead" (K. Shumeina 1983:25). It did not meet except once, after issuance of the training Act in 1976. Thus an important function of that council has been missed, that of policy planning and coordination with the development plans.

So, responsibility of planning and implementation of training on Sudan was left to the National Directorate of Training, which after the dissolution of the MPSAR, was affiliated to the Ministry of Presidential Affairs, then to the Council of Ministers and finally to the Ministry of Labor and Administrative Reform up to the present time.

Article 9, 1976 act defines the responsibilities of NDT as follows:

- Survey the training needs in both the public and private sectors with the help of the concerned government units to determine the real training needs that fulfill the requirements of development.

- Study the training proposals of the different government units and prepare the annual national training plan.

- Implement the approved plan.

- Follow up of trainees during their study period, to ensure the fulfillment of the training objectives.
Follow up and evaluation of training results to be carried out in collaboration with the concerned units.

For the successful implementation of the rules of this law, provisions were made that authorize the responsible minister to issue the necessary mandates with respect to the following:

- Presentation of the required information about the training proposals of the different units.
- Regulations that enable the concerned units to make full use of the services of their trainees.
- Means and methods of evaluating the training programs.
- Exchange of information about training programs, among the Public Sector Service units and between them and the private sector.
- Reporting on the outcome of the training plans and programs and their cost-benefit.
- Set out the basis for trainees' selection in the different government units.

Article 10 of the 1976 Act stipulated the establishment of training divisions within each of the government units and departments to be directly responsible to the under-secretary or the director general.

Responsibility of departmental training units was defined as follows:

a- Assessment of training needs, in a well-defined priority order that fulfill the requirements of the approved jobs within the unit.

b- To ensure that training is carried out according to a plan and well defined objectives.

3.9 NDT Experience with Planning for Training

The NDT produce a national training plan annually, in accordance with the rules of the 1976 Training Act, amended 1982. In this respect the Act states:

All units should take consideration of the following when formulating their training plans.

a- The country’s development projects need for training.

b- The general need for raising the performance standards of their functional units.

c- Training should be a response to a need and at the specific and appropriate time. Training is primarily for promoting work performance, rather than a sheer means for employees' development.

d- Priority is for technical, professional and vocational fields.
Generally speaking, planning for training precedes the preparation of the annual budget to allow for the plan to be endorsed in the budget. Since 1974, all financial appropriations for training were taken away from the individual units and vested in the Ministry of Finance. This implied that approval of the training plan also requires two separate approvals for each individual training program, one from the NDT and the other from the central financial authorities.

3.9.1 Preparation of the Annual Training Plan

At the beginning of each financial year, the Ministry of Finance issues its directives regarding the line of public expenditure, areas of restriction and areas of emphasis. All government units should strictly observe those directions in performing their activities and functions. It is worth mentioning here that the budget allocation to the various activities is allotted piece meal. Thus neither the NDT nor the individual government units have any knowledge of their share of the budget, before the final approval of their plan proposals. The planning process of the training activity does not, in fact, involve any sort of cost benefit analysis.

However, following the directives of the financial authorities, the NDT on its part issue its own directives to the different governmental units specifying their own restrictions and points of emphasis for the plan proposals within the financial limitations put by the Ministry of Finance.

On receiving these directives, which also include a fixed statement by NDT requesting all government units, to present their plan proposals for training their employees of all levels in accordance with the national development plan and the priorities set for raising performance.

The different government units should submit their proposals within six month prior to the beginning of the financial year.

The proposals according to the directions of NDT might include long academic or technical courses, short courses inside the country or abroad. No specification of the type or level of the required training is involved. According to the 1976 Act, the units should conform to their proposals and no change is allowed after approval of the plan.

The next phase of the preparation of the national training plan involves an examination of the proposed plans to assess their consistency with the national development plan, and the directions of the NDT.

The third phase, then, involves a discussion of the plan proposals with the concerned units individually, a process which is similar to that of discussing the annual budget, where the confrontation focuses on the strive for cutting the proposals to the minimum by NDT and the units attempt to pass it all, nevertheless the result of such discussion is an inevitable cuts in the proposed plan of each individual unit. The reduction usually takes place at the bottom of
the list, on the assumption that each unit's proposals were set in the proper priority order that have thoroughly catered for the actual needs of the unit.

Following, an estimate of the cost of the plan is calculated by NDT and the plan is then submitted to the Minister responsible for training supported by the recommendations of NDT.

After approval by the concerned Minister, the plan is submitted to the Council of Ministers for final approval.

Implementation of the training plan:

To warrant validity of training and its relevance to the actual needs of the country, the 1976 Act states:

"NDT, after final approval of the plan, carries out the necessary contacts and procedures for placing trainees inside the country or abroad, in collaboration with the respective cultural attaché."

Then NDT advises the concerned units of the results of their contacts. So although the different units may carry out their own contacts with respect to placing their trainees in the relevant training institution, yet the Act emphasize the importance of coordination with NDT.

Further responsibility of NDT for the plan implementation is instated in the second phrase of 'the section on implementation' where NDT is required to be directly involved in sending the completed application forms to the concerned institution whether locally or abroad.

In actual life this assumed role of NDT is not evident. Implementation of the training plan lies wholly within the hands of the concerned governmental units. The role of NDT actually ends up at the stage when the approved plan is distributed among the different units and departments. Initiative for placement of trainees is almost taken by their respective organizations. This is especially true in the case of short courses, abroad or in country, where the case involves group training. Otherwise each nominee takes his own responsibility for contacting the training institutes, selecting the most appropriate to his field of study and sometimes to his own personal liking. This is particularly valid in the case of study abroad, where the role of the cultural attaché is almost negligent, contrary to the assertions provided by the 1976 Act. In other cases such contacts are carried out by the employees even prior to their nomination and then they come to seek nomination. Worth mentioning here is that the role of NDT, at this point is contracted to the minimum necessary formalities, like issuing approvals and complementary correspondence.

 Evidence also shows that a lot of intricacies could and do take place ranging from late application and loss of scarce training opportunities, to a
change of the field of study and the concomitant affliction of the order of the set priorities for training.

To minimize the possibility of such changes in the field of study and hence the set priorities, the 1976 Act provides a number of conditions to be observed by the individual units. These as they appear in section 3 of the Act are as follows:

a. Any training should be for well defined purposes, in compliance with the set priorities and the needs of the development plans and the promotion of the service.
b. Congruity with the specializations of the unit and the type and level of the required training should be observed.
c. Further these conditions also include;
d. The field and subject of the study should be decided upon by the head of the unit, after consultation with the specialized people and the trainee himself. The place of study, abroad, to be determined by NDT.

As observed by this study these conditions do not hold in practice. At the units' level, no serious consideration is ever given to the objective or purpose of training. The training format only contained a justification statement which supposedly expresses the need of the organization for the specific type of training. Such statements as quoted from various training plans in this study were as follows:

1. To meet the expected expansion in the department, or
2. To improve performance.

No clear indication of the nature or time of the anticipated expansion, nor the standard of the required performance is ever made.¹

On the other hand evidence also shows that the right of determining, the subject or even the field of study itself is the nominees' own prerogative or else the training institution’s, in the case of short training courses." neither the head of the unit nor any other party within the unit had any say on it. Theoretically speaking training should be directed to specific problem areas within the organization, whether organizational or performance problems. The recognition of such problems is the responsibility of the units' top management. Thus management participation in determining the field and subject of study would help to militate against unnecessary training or irrelevant training. This is particularly important in the case of long academic courses abroad, where contacting the trainee or his training institution is somewhat difficult for following up and monitoring purposes.
3.9.2 Evaluation of Training

The rationale for evaluation is embodied in the training process itself (see Fig. (1) above). The training system as illustrated by the figure is made up of six stages, yet the division into stages is symbolic. The stages are integrated so that each stage embodies elements of the others and reaches forwards and backwards to ensure full integration of the process through a feedback mechanism. For instance, the objectives of the training activity are inherent in the training needs, while both needs and objectives set the stage for evaluation and are themselves influenced in the future by the process of evaluation.

Training, as distinct from education is task or job specific, and is expected to produce specific measurable results. Such results must be manifested in terms of change in behaviour. The importance of evaluation lies in the fact that it is the means whereby the training department justifies its involvement in the organization; that is if training cannot prove any contribution to the organization, management will be inclined to lose faith in the practice and the way to prove that training is a contributor to organizational success is to ensure that trainees learn and that the learning is transferred to the job situation. Evaluation is a complex phenomenon encompassing various outcome levels, implications and consequences. Therefore it has to be continuous, systematic and thorough in order to satisfy the multiple objectives associated with any training activity.

Article 9 of the 1976 Act, defines the duties and responsibilities of NDT. Phrase 4 of the article entrusted the NDT with the responsibility to follow up the trainees during their period of study to make sure that the training objective is being achieved. Likewise article 5 emphasized the responsibility of NDT as well as the departmental training units for evaluating the results of training after completion. However, as evidence also shows that evaluation of training has not been institutionalized at the NDT level. Experience has also shown that NDT does not concern itself with the progress of any training unless in cases where an extension of the period of study is required or else when the study has been terminated due to failure of a trainee to perform adequately or to attend regularly.

An important development in the training policy at the national level, has taken place in 1983. Due to the economic crisis of the country, a self-sustenance policy orientation was adopted consequently a presidential decree no.549 was pronounced advocating cuts in government expenditure, minimizing training opportunities abroad on government expenses and confining them only to the crucial occupations, i.e. training of trainers or training which the in country training facilities do not provide.

Further development concerning the national training Act and administration came in 2003 with the second amendment of the national training Act which also made provisions for the establishment of a High Council for Training. Responsibility of the Council was defined as erecting the training...
function within the country through proper policy planning, systematic need assessment of manpower for training and development and supervision over implementation of the country’s training plans. However, practical steps towards, the formation of the advocated council is still underway. The role of the NDT, in the new setup is perceived as an executive arm to the proposed council.

To conclude this chapter it may be said that planning in Sudan is still problematic; evidence for this was found in the continuous failure of the successive development plans, surveyed in this chapter. Additional evidence was further found in the absence of manpower planning where no national formula of the number and quality of the required work force to promote the development cause of the country. Consequently, the overall training objective is not clearly stated, the old perspective that “all training is good” still holds up to the moment. The training activity at the state level is being lightly taken. This study could not depict any effort, to systematize the training activities at the national level. Despite the good intentions expressed in the National Training Act, prophesizing the relevance of training to the needs of the service and the development of the country, yet no positive action is being taken to direct or equip the different governmental units to achieve that goal.
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CHAPTER FOUR
Results of the Case Study (1)

4.1 The Process of Training Need Assessment in the Agricultural Sector

In this part of the study an examination of the process of training need determination in the Ministry of Agriculture (MOA), Mechanized Farming Corporation (MFC), El Rahad Agricultural Corporation (RAC) and the Agricultural Bank of Sudan (ABS) was attempted. The objective was to find out to what extent the practice of training need determination coincides with the advocated theories of systematic training needs assessment. The research also aims at, identifying the problems encountering the process of need determination in each type of organization and ultimately aims at providing some practical solutions to those problems.

Investigation was focused on the following:

1) Premises upon which training decisions were based.
2) Planning for training.
3) Selection of trainees.
4) The outcome training.

To avoid repetition, information on the process of training need determination in MOA, MFC and RAC are presented under one and the same heading. This is because, they all follow the same type of procedure and ultimately all their training plans were found to be collated and presented to the National Directorate of Training (NDT), through the same channel, the Ministry's training department of MOA. However points of variation in the internal practices regarding the formulation of the plan or selection of trainees will be pointed out duly in their appropriate place.

The same issues will also be examined at ABS, under a separate heading, since the bank was found to have a separate entity with no links whatsoever with MOA's training department and only partially linked to NDT with respect to training abroad.

4.1.1 Basis of Training Decisions in MOA, MFC, and RAC

The decision to train in MOA, MFC and RAC is a long ago established decision, it was generally known and accepted that training was an on going activity; every year a certain number of the employees do go and should go to training. No much thinking was given as to whether training was the required action or some other action would be more appropriate, As such, the training decision does not involve any examinations of alternative courses of action, but has always been
considered, as a right per se to which every employee is entitled at some time/s during his work life.

4.1.2 Planning for Training
Planning for training in MOA, RAC and MFC is carried out annually. No long range planning is exercised in any of the three organizations, though some have reported¹, that they were requested by NDT, together as the other administration and corporations of MOA, to produce a long range plan for the years 1990-1996 and that they actually did prepare one. However no such document was found at the ministry or in any of the studied corporations. The training director at the ministry did not seem to be cognizant of such plan. In short, this study did not try to seek any further information about these plans, because NDT, who originally requested the plan, have abandoned the idea altogether since they came to be convinced that long range planning for training was rather unworkable for many practical reasons: this, as reported by NDT staff²:

"We discovered that the departmental training officers have no idea about long-range planning. They failed to organize their plans in a logical priority sequence. Distributions of their proposals have revealed an incredible concentration on the first year; much more than the available facilities can fulfill. On the other hand because of the uncertainty of the flow of training aid, we became convinced that a long range plan would be unworkable under the prevailing circumstances. So the idea was dropped altogether ".

4.1.3 Formulation of the Annual Training Plan
Responsibility for the plan preparation rests with the departmental training officer. In common with all governmental departments and units MOA is required to provide NDT with its annual training scheme for the coming year by December the previous year*. The plan is usually presented in a format, designed by NDT, setting out
a. The field of training.
b. The level of training.
c. Number of training places required.
d. Duration of training.
e. Justification of the need.

Separate plans are usually required; one for the in country training and another for training abroad.

Every year training directors request their respective departments / divisions or sections to prepare their plan proposals, "according to the felt

¹ Interviews with the training officers at the Plant Protection Administration and Mechanized Agriculture,
needs of each of them in the appropriate priority order". Observance of the general government policy was a necessary condition i.e.

a- Priority is given to training which fulfills the development objectives of the national socio-economic plans.

b- Maximum use should be made of opportunities availed by donor agencies and governments.

c- Where available, concentration is laid on in-country training.

d- Preference for practical and job-related training.

The process of plan formulation as followed by MOA, MFC and RAC was not preceded by any sort of systematic investigation or analysis of the organization's / departments' or individuals' requirements. Normally the task was mainly confined to desk-work carried out by each division / department individually. The role of the training departments at this phase of plan preparation was confined only to making requests for the different units to get on with preparing their training schemes and urging them to present their proposals in time.

No evidence was found that, at the plan preparation phase, note was taken of the work plans or the performance problems. The work planning itself takes place at a much later date (the training plans are usually submitted by December of each year, while the work plans are usually prepared in April the following year). So discussion of the two plans by top executives was actually carried separately. Hence it is rather difficult to establish any sort of organic relationship between the two plans.

Specification of the fields of training was almost confined to the type of training availed by the training institutes, whether in-country or abroad. A useful guide, as believed by the training staff in the three organizations, was found in past experience with previous training plans and with training plans issued by the training institutions. In response to a question on how they determine the type of the required training, the following responses were provided:

1. Some opportunities which were missed in previous years are tried again.

2. From experience we know that opportunities for training are more readily available for certain type of training so we try to make use of that.

On completion of this phase of plan preparation, each department and corporation submit their plans, individually to the training department at MOA, where the individually received plans were compiled together and then submitted to NDT. The process of plan compilation does not involve any overall previewing to determine training priority or rechecking of the
needs. Henceforth the training plans reach NDT as an expression of individual departments' needs rather than as organizational needs. However, as understood during this study, the training officers were not authorized to alter or monitor the individual training plans, other than channeling them through the usual transfer procedures to the NDT.

At NDT, the training plans of all government units, including those of MOA and its affiliated departments and corporations, were then compiled into a unitary national plan.

The national training plan then was subjected to a thorough examination of the proposals against the available resources. The process of scrutinizing the two usually involves dropping out some of the presented proposals by NDT. Assuming that, the different units have tailored their need for training in the right priority order, cutting of proposals by NDT usually takes place at the bottom of the list of each unit's plan, so as the cuts would not affect important proposals. Finally approval is granted to the training plan within the national context of observing the following criteria:

a- Priorities of the various government sectors.
b- Priorities within the sector.
c- Preference for practical training.

Final approval of the national training plan takes place at the council of Ministers to which the national training plan is usually submitted for approving the total proposed cost of training.

Then MOA is advised of the approved plan towards the end of the year, usually in July or August, and sometimes as late as September for implementation. Implementation of in country training is the responsibility of each individual organization. However for MOA, separate permits from NDT and the Ministry of Finance are required for each training program. The process of receiving such permits is very complicated, usually involving too many correspondences to and fro between the respective organization, NDT and the Ministry of Finance.

Implementation of training abroad is wholly dependent on the availability of foreign aid funds, grants and scholarships. These are usually not acknowledged by MOA unless they actually arrive, so MOA is never sure as to the what, where and when of training abroad until it is finally handed to it, this too has its complications. As reported by the training director at MOA:

"Due to problems of late correspondence and short notices to the concerned departments and individuals a lot of training opportunities are lost every year".
4.1.4 Selection of Trainees

Investigation on this issue in MOA, MFC and RAC revealed that nomination of trainees is the responsibility of the direct boss. The mechanism of choices usually involves a number of candidates who work in the same division/ department who are supposed to be eligible for training in the particular field or training program. Sometimes, the competition for a particular training opportunity extends to involve candidates of similar specialization in different or the other departments within the same organization. Some other times the competition further extends to involve candidates from other organizations too. This is especially true of training availed through grants and donations in technical fields.

Nomination for training in the three organizations constitute a separate activity, carried on almost after the plan has been approved by NDT and the Council of Ministers and the plan was finally handed to MOA. Only then, when the training department requests its affiliated training departments and offices to provide it with their respective lists of nominees, selection of potential candidates is usually left to the discretion of the direct boss and very often the result of such selection is not disclosed until the final approval was received from NDT. This indicates that, the process of selection for training in the organizations, subject of study, does not involve the consultation of candidates to determine their real need, instead, candidates were just informed at the end. This is indicated in the following table which illustrates the employees' responses to a question on how they were selected for training:

Table (13) Selection of trainees

<table>
<thead>
<tr>
<th>Method of selection</th>
<th>MOA</th>
<th>MFC</th>
<th>RAC</th>
</tr>
</thead>
<tbody>
<tr>
<td>By the Boss</td>
<td>69%</td>
<td>79%</td>
<td>65%</td>
</tr>
<tr>
<td>Sought the opportunity</td>
<td>16%</td>
<td>-</td>
<td>15%</td>
</tr>
<tr>
<td>Only candidate</td>
<td>3.5%</td>
<td>-</td>
<td>12%</td>
</tr>
<tr>
<td>Do not know</td>
<td>3.5%</td>
<td>-</td>
<td>2%</td>
</tr>
<tr>
<td>Not trained</td>
<td>8%</td>
<td>21%</td>
<td>8%</td>
</tr>
</tbody>
</table>

As clear from the table, the majority of respondents said that they were chosen by their bosses. This category included all trained respondents in MFC. At the other extreme 16% in MOA and 15% in RAC said that they have sought the opportunity and then managed to convince their bosses to
choose them for training. Also about 4% in MOA and 12% in RAC said that they were the only available candidates.

### 4.1.5 Criteria for Selection of Trainees

The established criteria for trainees' selection in MOA, MFC and RAC were as follows:

- Seniority.
- Suitability of the opportunities to the employees' field of specialization.
- Relevance of the training to the organization's work.

The above criteria were found to be invariably held by almost all training officials interviewed during this study. Asking the respondents about the criteria used for selection of trainees, the following responses were obtained:

#### Table (14) Criteria for selection at MOA, MFC, RAC

<table>
<thead>
<tr>
<th>criteria for training</th>
<th>MOA</th>
<th>MFC</th>
<th>RAC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seniority</td>
<td>41%</td>
<td>27%</td>
<td>35%</td>
</tr>
<tr>
<td>Suitability of opportunity to employee</td>
<td>11%</td>
<td>27%</td>
<td>25%</td>
</tr>
<tr>
<td>Efficiency of employee</td>
<td>22%</td>
<td>19%</td>
<td>10%</td>
</tr>
<tr>
<td>Randomly – not clear</td>
<td>17%</td>
<td>13%</td>
<td>27%</td>
</tr>
<tr>
<td>Do not know</td>
<td>9%</td>
<td>14%</td>
<td>3%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

As clear from the above table, the majority of respondents, in the three organizations believed that the criteria for training was seniority and suitability of opportunity to the trainee and efficiency of the employee i.e. the same criteria as the ones held by different officials interviewed above, except for the third criteria where the officials mentioned relevance to employee’s work; while the employees responses indicated efficiency of the employee. This seemed rather odd since training is primarily meant to remedy inefficiency. However, it may also be noted that about 18% of the total respondents in the three organizations; 17% in MOA, 13% in MFC and 27% in RAC, these believed that there was no clear criteria for selection and that selection was done randomly. In addition there were 13% who reported that they did not know what the criteria were. These were 9% in MOA, 14% in MFC and 3% in RAC. This meant that about 31% or
about one third of the total respondents in the three organizations did not share the same opinion as to the criteria for selection as the rest of the respondents or the officials' opinion. This may indicate that satisfaction with the selection criteria in the three organizations was not absolute or else, that these criteria though recognized by the respondents, were not usually adhered to. Though systematic information, concerning the validity of the adopted criteria could not be easily obtained, yet from the course of this study, examples of people working for 9, 12, 21 and 24 years respectively could be cited who did not receive any training. In the extreme case an example was cited from the agricultural investment department, where some employees who has been working for 40 years without any training what so ever. To avoid such pitfalls, in some other departments of MOA like the Agricultural Engineering and Plant Protection, seniority lists were found to be carefully established to secure a fair distribution of training opportunities among those who are entitled to training. The lists contained the following information:

a- Name of Employee.
b- Date of recruitment.
c- Qualifications.
d- Training attained.
e- Date of previous training.

According to these information, employees were to be subject for nomination "by turn", those whose turn is due and possess the right qualifications as required by the specific training institution and who has not had any training in the same area before, were considered eligible, provided that he had not been away for training during the past 2 years prior to his nomination.

To legitimize the selection procedures, some of MOA's departments and RAC often resorted to forming a training committee. Composition of the committee included heads of functional departments, in addition to the training director. Responsibility of such an adhoc committee is:

- To review the available training opportunities.
- To match the available training opportunities with the specializations within the different departments/divisions.
- To make sure that the qualifications of the nominees are correspondent to the requirements of the specific training.
- To secure a fair distribution of training among the different departments/divisions and individuals within the organization.

It is worth mentioning that such committees were not used except in the case of training abroad. As has been reported, in country training does not raise any problem, but training abroad usually raises many problems
and conflict among the different departments and individuals eligible to the same type of training. Thus the main purpose of the training committee was to prevent an anticipated conflict by widening the base of decision making as to who is to go for training, otherwise, the committee, originally has no role in the need analysis or in defining training objectives. Further, the committee has no right to consider alternatives other than the specific program/s being discussed, which clearly indicated that training was actually treated as a right per se, regardless of any other influences.

4.1.6 The Process of Need Assessment in ABS

4.1.6.1 Basis of Training Decision

Training in ABS is an old phenomenon since the early beginnings of the banks work in the late 50s, training of employees in the various operations and functional activities of the bank was recognized as a necessity for attuning employees' abilities to the requirements of work. Hence the decision to train with respect to functional groups is more or less systematically undertaken on a continuous basis, beginning with induction courses up to the branch managers' courses. Training in administrative aspects of the work, where provided is usually injected into the technical training courses. This is most common of the branch managers' level training.

Generally speaking, training in ABS is somewhat different from that of the other three organizations in that it is carried out at three different levels; Departmental; Institutional (external) and Institutional (internal).

4.1.6.2 Departmental Training

As mentioned above ABS has a long history of in house training. Since the early nineties the Bank has managed, with the aid of foreign assistance to establish a fully equipped training center with all modern means and teaching aids. The centre was opened towards the end of 1992, and was meant to serve the purpose of training the bank's employees in subjects related to the operations of agricultural finance. Over and above, the centre was also aimed to serve as a regional training centre, through which FAO and other specialized agencies may provide their expertise to the various Arab and African countries. In this connection many regional institutions and agencies cooperate every now and then to hold meetings, seminars, workshops etc. for participants from various countries in the region who are concerned with the question of agricultural development and finance. Examples of such agencies are the federation of North Africa and the Near East Techno-serf, FAO and the African Bank of Development.

The design of such training programs is usually proposed by one of the three organizations on subjects of common concern to different
countries in the region, who are usually invited by the sponsoring organization. The role of the Bank's training centre, thus, is usually confined to organization and administration of the program.

Concerning the local training programs, these are usually planned, organized and run by the bank's training staff.

4.1.6.3 Institutional Training

a. Internal Training

ABS has wide relations with a variety of specialized technical as well as administrative training institutions inside the country. It has been reported\(^1\) that training in some of the bank's functions has had a hundred percent coverage. Examples of these were the training of store keepers. The bank has also far-reaching relations with the Banking Institute which trains a fixed number of the bank's accountants annually, qualifying them for further specialized training in Britain. In the field of Agricultural economics and other Agricultural sciences, it has also been reported\(^1^3\) that the bank possesses some of the best qualifications in the country, especially in the field of grain storage. The conduct of this type of training is subject to the same general rules and regulations of the National Department of Training followed by all governmental agencies and departments within the country.

b. External Training

In common with all government departments and corporations, ABS has its share of the national training abroad. ABS employees' has the same chance of obtaining training opportunities that come to the country from other friendly countries and international organizations and agencies, whether through bilateral relations with the bank or through NDT.

In either case the conduct of training abroad is carried out through the usual process followed out by the other three organizations.

4.1.6.4 Formulation of ABS Training Plan

Similar to the case of the other three organizations long-range planning was non-existent in ABS. As to the training which is channeled through NDT, the process is carried on in the same way as the other three organizations. Every year the training director requests the different departments of the Bank to provide him with their training schemes for the year. Identification of the training required in each department is done by each department/division internally. Limitations of the government policy which confine the fields of training to the type of training availed by scholarships and donations is not so obvious in ABS. As reported by the

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\(^1\) Reorganization of the Agricultural Bank of Sudan; Consultancy Report No.16, 1987, P: 9, Sudan Academy of Administrative Sciences.
training director\textsuperscript{14} ABS has no problem of financing any type of training; that though sometimes they encounter some problems concerning the release of hard currency from the Bank of Sudan, yet ultimately they manage to implement the required training whether inside the country or abroad. So the role of the individual departments / divisions in identifying the required training within the respective departments/divisions is rather great. Nevertheless the process, as carried out by each department did not show that any systematic investigation of the real need for training was invested\textsuperscript{15}.

Determination of the field of training was subject to knowledge of the particular department of the available training, their past experience and the nature of work of the department.

The role of the training department in the plan preparation phase was confined to urging the different departments to submit their plan proposals in time, collation of different departments/divisions plans, organizing them in the right priority order, which is, according to the training department's opinion; That order which guarantees the bank the maximum opportunities possible and secures a fair chance for all departments. This as put by the bank's training director\textsuperscript{16}

\begin{quote}
'From our experience we know that certain type of training is more likely to be availed, so we do our best to concentrate on these'.
\end{quote}

Discussion of the training plan scheme is carried out separately and not as part of the overall plan of the bank, again in the words of the training director\textsuperscript{17}:

\begin{quote}
"For long we have been asking to be invited to the plan discussion sessions, but to no avail".
\end{quote}

So, though nearly carried on at the same time as the bank's overall plan, the training plan was actually separately formulated and separately endorsed for approval by the banks authorities. Equally true that though both plans are ultimately subject to discussion and approval by the bank's board of directors yet it is obvious that discussion at the board is concerned more with the cost of training rather than with its relevance.

\textbf{4.1.6.5 Formulation of the Departmental Training Plan}

As for the departmental training plan, it is normally initiated and formulated, by the bank's training centre, which as mentioned earlier undertakes a number of training programs annually. The training conducted by the bank's training centre is of two types; standardized induction, refreshing and branch-managers courses and the need for such types of

\begin{footnote}
\textsuperscript{1} Field investigation on the planning for training at ABS 2003.
\end{footnote}
training is considered as fixed and directly associated with the employees' career development through the line of service.

The other type of training is not fixed but dictated by the need created by the daily work problems, introduction of a new system, new procedures or new technology. In such cases, the training department carries on a number of contacts with the departments' heads and to some extent with the employees themselves to clarify the need and to certify the presence of a considerable number of trainees, to justify the cost of holding a training program. On other occasions the subject of training is proposed by one or the other of the functional departments. In the later case, the training director usually sits with the people of the department, discusses the department's need for the specific training as well as the objectives of the program and its contents. Eventually other parties (departments) concerned with the specific subject of training were also advised to participate.

In all cases, after finishing with the identification of need of all training required by all departments, the training staff goes on to formulate its annual departmental training plan through a process of collating the various needs integrating their parts and organizing them in a logical priority order. The logical priority order is determined by:

- Size of the need.
- Urgency of the subject.
- Relevance to the work needs.

The plan then is presented together with the other parts of the training plan to the Board of Directors for approval.

Implementation of the plan is the responsibility of the training department which carries on all the needed contacts with the training institutes (internally) and the NDT in the case of training abroad. Generally speaking ABS is responsible for financing all its training, thus relatively it does not encounter much complications concerning the release of funds, as in the case of the other three organizations, except in the few cases where the Bank of Sudan is not ready to issue the prerequisite hard currency permits in time. In the words of the training director:

"We have no problem in financing all the training we require, though sometimes we face problems with the Bank of Sudan concerning the issue of hard currency, yet ultimately we manage to carry out the training plan with no interruption".

4.1.6.6 Selection of Trainees

Investigation on this issue in ABS has revealed that selection of trainees was the prerogative of the direct supervisors, similar to the practice

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1 Interview with the training director of ABS, 2003.
in the three other organizations, subject of this study. On receiving the approved plan, the training department requested all functional units to send their nominations according to the approved plan. Selection of the eligible candidate was usually carried out by each individual department. Where there was more than one eligible candidate, often the concerned department resort to presenting the training department with a list of two or three candidates, where final selection for the most eligible nominee is left to the training department. For this purpose the training department has devised a card system for recording all pertinent information on the bank's employees. Information on the card was basically obtained from the personnel records, whereby the name, age, basic qualifications of each employee was registered. In addition other information completed by the employees' departments concerning the nature of the job, the type of training attained by the employee and the date of the last training were also included. In the light of such information, the training department advise as to who is to go for the particular training program. The points of reference for the final selection were that:

- The employee has the right qualifications.
- Not trained in the same field before.
- Relevance of the training opportunity to the employee's job.

According to the thinking of the training staff that their aim was to systemize the selection process by providing a positive criteria for selection. However, as reported, they often face opposition from the part of the direct supervisors. The source of opposition was that they sometimes choose the most eligible person according to the information they get from the cards, yet many of the bosses come and object to that, because they wanted someone else to go.

Other devices for deciding on who was to be sent to the particular training, working in ABS, were the training committee. A training committee operates in the case of training abroad and works on similar terms of reference, as was the case of MFC and some of MOA's administrations mentioned earlier. These are as follows:

- To review the available training.
- Make sure that they are relevant to the area of specializations found in ABS.
- Safeguard that the opportunities are properly utilized.
- Secure a fair distribution of opportunities amongst the different departments / divisions and individuals.

Criteria for trainees' selection

Investigation on the selection criteria in ABS have revealed that the generally held opinion was that selection of trainees depend on the
seniority of the employees and the relevance of the training to their area of work\(^1\). Asking the respondents about the basis on which they have been selected for training, the following responses were obtained:

Table (15) Criteria of selection for training

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seniority</td>
<td>31%</td>
</tr>
<tr>
<td>Suitability of the opportunity to the employee</td>
<td>32%</td>
</tr>
<tr>
<td>Not clear</td>
<td>19%</td>
</tr>
<tr>
<td>Do not know</td>
<td>10%</td>
</tr>
<tr>
<td>Relevance of training to employee's work</td>
<td>8%</td>
</tr>
</tbody>
</table>

As could be noted the table shows that 31% of the respondents in ABS believed selection for training was carried on seniority basis, while 32% believed that selection was based on the suitability of the training to the employee, while 8% mentioned relevance of training to the employee's work. As may be noted from the above responses, they are not different from the responses provided by the three other organizations (see table 2) which indicates that the perception of the respondents, regarding the selection criteria, was almost the same in the four organizations. Similarly it may also be noted that 29% of the total respondents in ABS provided a 'do not know' or 'not clear' answer which may also indicate signs of dissatisfaction with the established criteria.
Results of the Case Study (2)

4.2 Factors Affecting Training Needs Assessment

4.2.1 Structural Factors
4.2.1.1 Organizations’ objectives and plans

This study has not been able to confirm the existence of any written statement of organization objectives except in ABS, where the bank's objectives were found to be constantly laid down in the annual report reproduced by the bank at the end of each year. However, asking the respondents in this research about the clarity of their organizational objectives, the majority (about 80%) asserted that the organizations objectives were clear, known to everyone and quite attainable. The responses were as follows:

Table (16)  Clarity of organizational objectives and plans

<table>
<thead>
<tr>
<th>clarity of objectives</th>
<th>MOA</th>
<th>MFC</th>
<th>RAC</th>
<th>ABS</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clear</td>
<td>82%</td>
<td>67%</td>
<td>68%</td>
<td>94%</td>
<td>79%</td>
</tr>
<tr>
<td>Not clear</td>
<td>2%</td>
<td>15%</td>
<td>5%</td>
<td>-</td>
<td>4%</td>
</tr>
<tr>
<td>To some extent</td>
<td>16%</td>
<td>18%</td>
<td>27%</td>
<td>6%</td>
<td>17%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Despite the above responses, this study have also revealed that, though the majority in the four organizations said that their objectives were clear and known to all employees, yet their ability to restate those objectives was rather low, only 42% of the total respondents gave reasonable statements of their objectives. Details of the responses are provided in the following table:

Table (17)  Ability to state objectives

<table>
<thead>
<tr>
<th>ability to state objectives</th>
<th>MOA</th>
<th>MFC</th>
<th>RAC</th>
<th>ABS</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Able</td>
<td>50%</td>
<td>60%</td>
<td>42%</td>
<td>50%</td>
<td>42%</td>
</tr>
<tr>
<td>Not Able</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>To some extent</td>
<td>35%</td>
<td>36%</td>
<td>42%</td>
<td>33%</td>
<td>37.5%</td>
</tr>
<tr>
<td>Vague</td>
<td>15%</td>
<td>14%</td>
<td>16%</td>
<td>11%</td>
<td>20%</td>
</tr>
<tr>
<td>No answer</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>6%</td>
<td>1.5%</td>
</tr>
</tbody>
</table>
As clear from the above responses the differences in responses were rather minimal. Taking into consideration that a high percentage of the respondents said that their objectives were clear and known to all (see table 14), especially in ABS, where statements of objectives is provided in the annual report issued by the Bank on an annual basis; as well as in MOA, where no statement of objectives was found, the above responses seem to be quite odd. This might indicate that the organizational objectives were not so clear to all respondents and that the responses to the preceding questions were not being concise. A quick review of the institutional framework for agricultural development in Sudan shows that the sector is characterized by a multiplicity of agencies. Collectively they are all involved in the development of the sector. These agencies are as follows:

1- The Council of State and the Council of Ministers. These lay down the overall goals and objectives for the socio-economic development in the country and approve the development plans.

2- The Ministry of Finance and Economic Planning, which has the overall responsibility for planning and coordination of the development plans, formulation of investment policies and projects, mobilization of resources, annual development and recurrent budgets and the overall surveillance and monitoring of development programs and projects.

3- The Ministry of Agriculture and Natural Resources*, including the Agricultural Corporations under the Minister of Agriculture. These have the primary responsibility for the crops and natural resources (forestry, range and pastures etc…) sub sectors.

4- The Ministry of Animal Resources* (including its own corporations) which is responsible for livestock, cattle, diary, poultry and fisheries.

5- The Ministry of Irrigation which is responsible for construction, maintenance and operation of all major irrigation works and water conveyance systems.

In addition there are also other institutions which are closely involved in promoting the development objectives of the sector and hence affect the consequent policies and plans. Such institutions are:

1. The Agricultural Bank of Sudan, which is the main governmental source of institutional credit and inputs to the agricultural sector and also for marketing of staple food crop Durra (sorghum).

2. The ministries of commerce and industry which play a key role in the formulation of domestic (producer and consumer) price policies and marketing arrangements within the country and for foreign markets for a number of agricultural commodities.
3. The State ministries of agriculture and animal resources (including the national capital) which function directly under the administrative and financial control of the State governments headed by State Walis.
4. The private sector - The farmers and other producers.

All these agencies often function without clear vision or responsibilities and in complete absence of adequate coordination between sectoral, sub-sectoral and state level institution. Theoretically speaking, all matters of coordination and harmonization of the various sectoral/sub-sector development plans and policies lie within the hands of the Ministry of Finance and Economic planning (MOFEP). It is worth mentioning here that MOFEP has its own sectoral department which together with the project preparation unit PPU holds a commanding position in terms of micro/project level planning, annual allocation of resources of individual projects, and periodic release of funds. The terms of reference of these two units often overlap with those of the sectoral Ministry of Agriculture or its affiliated corporations. This was found to be a cause of confusion as to the actual role of the planning departments in the organizations, subject of study. Such confusion was evident from the following remarks by one of the staff members of the planning department at MOA:\(^{22}\):

"We are not planners, we are mere executors, and all planning is done in the sectoral department at MOFEP".

This was further confirmed by the following remark by a FAO mission which asserted that planning for Agricultural development was not being satisfactory. This was expressed in the following remarks of the mission:\(^{23}\):

1. - At present, there is no system of reviewing and assessing of the Agricultural development strategies and policies in the sector.
2. There is no system of horizontal coordination and vertical integration of the activities of the various institutions engaged in agricultural development.
3. There is no system of resolving inter-institutional differences on development strategies, policies and other related bodies.

So, the report suggested that a National Council for Agricultural Planning and Coordination be established to launch an approach to planning which fosters the integration and coordination of intra and inter-institutional set-up and mainly be oriented towards tying performance to the targeted output in every field (goods and services). The following
quotation by the same FAO mission reveals that development planning within the agricultural sector has been inconsistent with the stated policies:

'A close scrutiny of the agricultural strategy in Sudan reveals a wide discrepancy between the stated objectives and the advocated policies'.

Evidence for weak policy and strategic planning in the organizations, subject of study was also obtained from the responses of the sample trainees. Respondents were asked to state down the main problems which hinder performance of the sector, the responses obtained are exhibited in the following table:

<table>
<thead>
<tr>
<th>Problems</th>
<th>MOA</th>
<th>MFC</th>
<th>RAC</th>
<th>ABS</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial</td>
<td>35%</td>
<td>28%</td>
<td>30%</td>
<td>67%</td>
<td>53%</td>
</tr>
<tr>
<td>Policies &amp; Strategies</td>
<td>27%</td>
<td>24%</td>
<td>23%</td>
<td>24%</td>
<td>26%</td>
</tr>
<tr>
<td>Administrative and organizational</td>
<td>16%</td>
<td>30%</td>
<td>19%</td>
<td>5%</td>
<td>18%</td>
</tr>
<tr>
<td>Work force</td>
<td>14%</td>
<td>11%</td>
<td>21%</td>
<td>-</td>
<td>14%</td>
</tr>
<tr>
<td>Others</td>
<td>8%</td>
<td>7%</td>
<td>7%</td>
<td>4%</td>
<td>7%</td>
</tr>
</tbody>
</table>

The above table shows that the bulk of the performance problems as perceived by the respondents, pertain to shortage of finance, inconsistent policy and strategic plans as well as other administrative and organizational problems. However, according to expert reports the problem of finance was also seen as being one of poor planning and monitoring. Support for this could be obtained from the experience of the various development plans. Moharir and Kagwe (1987) have noted that:

"Lack of finance, or at least the domestic finance which is often sited as a major reason for shortage in achieving targets, was not a problem in Sudan during the ten year plan and the five year plan periods, rather it was the failure to absorb the outlays in the different sectors".

Commenting on the sectoral performance, the Economic Survey, 1971, have remarked that out of 327 projects envisaged for construction in 1971 – 72 only 228 of them were under execution. Out of these; 131
projects have utilized less than 30% of the annual allocation. On this, the planning Commission\textsuperscript{26} has provided the following comment:

"Using less than 30% execution as a measure, the situation in 230 projects or about 70% of the total projects is not satisfactory".

More especially Sayed Numeiry\textsuperscript{27} (1977:42) believed that failure of the agricultural sector in fully utilizing its outlay in (1965-66/1969-70) was largely due to poor planning and organizational inefficiencies.

It is worth mentioning here that the Ministry of Agriculture and its Para statals were responsible for 67 investment projects as to 1990, in addition to 24 technical assistance projects, implementation of these projects was carried on by various agricultural corporations and administrations of MOA. Commenting on the efficiency of implementation, monitoring, and evaluation of these projects. FAO, 1990 have noted\textsuperscript{28}:

"Past experience in implementation of development projects has not been very satisfactory, e.g. between 1981/82 and 1986/87 only 73.4% of the development budget allocation for the agricultural sector could be actually utilized by the concerned agencies. The rate of financial performance expenditure for MOANR's projects during the same period was only 68%. The status of physical performance of projects in relation to the planned targets for production of crops and provision of services was even lower, reflecting significant slippages in implementation and a weak monitoring and evaluation system".

Recognizing the inadequacy of the planning machinery in the agricultural sector a USAID program, towards the mid eighties, have provided technical assistance to strengthen the capabilities for agricultural planning and policy analysis. Over 150 individuals have been trained on various technical aspects of agricultural planning and economics including project analysis, use and maintenance of computer hardware and software, data collection and surveys, economic forecasting, statistics and agricultural economics. Yet there seem to be problems of utilization of that training for purposes of decision-making. On this, the following comment by an evaluation team on the prospects of the USAID assistance program and training of the planning staff well exposes the situation\textsuperscript{29}: 

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"The MOA and GOS should be encouraged and expected to extend their efforts to develop appropriate institutional arrangements to increase the utilization of analytical information showing consequences of alternative policies for policy decision-making".

Commenting about the financial performance of the Sudanese public corporations, A World Bank mission\textsuperscript{30} (1985) envisaged the problem at MFC as being one of weak management. Hence it recommended that the financial management of the enterprise be strengthened in areas of "banking, preparation of cash flow, accounting, internal auditing, expenditure control and preparation of annual reports".

This in fact points out to failure of the financial policy planning of the enterprise. Likewise, according to the findings of this study, the financial problem was most prominent at ABS (see table 17 above) where 67\% of the respondents believed that the main problem impacting the performance in ABS was financial. Further investigation into this issue revealed that the real problem was not due to shortage of supply, but rather to inefficiency of reimbursement of loans. As stated by some of the Bank's authorities\textsuperscript{31}:

"The Bank is actually undergoing an acute liquidity shortage, that it is nearly bankrupt".

Again the indication here is towards weak policy planning. This was further confirmed by expert reports, e.g. FAO\textsuperscript{32}, (1990) and the papers of the First Agricultural Conference\textsuperscript{33} (1989). The problem of agricultural development plans was identified as a failure of the organizations and bodies engaged in the process to conduct proper analysis of the agricultural policies, establish priorities and develop strategies for timely implementation, mobilization of the national resources and sustaining balanced development of the sector. So it was taken that the later results could be taken as an indication of a poor comprehensibility of the organizations’ mission and objectives. To have more insight into the issue of organizational objectives and plans, operational planning was investigated and the responses were provided in the following section.
4.2.1.2 Operational planning

Respondents were asked whether they have operational plans that define the work to be done, when and what and the resources required (Human and material). The responses obtained are shown in the table below:

<table>
<thead>
<tr>
<th>Availability of operational plans</th>
<th>MOA</th>
<th>MFC</th>
<th>RAC</th>
<th>ABS</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Available</td>
<td>76%</td>
<td>64%</td>
<td>90%</td>
<td>88%</td>
<td>82%</td>
</tr>
<tr>
<td>Not Available</td>
<td>6%</td>
<td>18%</td>
<td>10%</td>
<td>-</td>
<td>9%</td>
</tr>
<tr>
<td>Some times</td>
<td>18%</td>
<td>18%</td>
<td>-</td>
<td>12%</td>
<td>9%</td>
</tr>
</tbody>
</table>

As clear from the table, the majority of respondents believed that they have operational plans, 82%, yet further explanation of these responses denoted an incoherent nature of these responses. This as put by respondents from MFC, Gadarif region, ABS, and El Rahad scheme respectively was as follows:

"We have two committees, one for following up the agricultural operations and the other for internal audit, catering for all financial accounts".

"We have work plans which define the amount of credits, dates and seasons of delivering them while follow up of such operations is carried out spontaneously in all the bank's branches".

"We have plans, but these are greatly hindered due to problems of finance and the strict surveillance from the part of the Ministry of Finance. Similarly RAC suffers from a problem of manpower shortage because the corporation’s plans do not cater for such important issue”.

As revealed by this study, planning in the organizations, subject of study, was confined only to the annual budget. The only link between the long term or medium term development plan and plan implementation
was through the development budget which is purely a financial document. It briefly reviews the development allocations and expenditures in the previous year and outlines the development allocations, classified by major objects of expenditure for the budget year, on project by project basis.

Similar to the general practice in Sudan, the budgeting process is based on the dual classification of public expenditures into recurrent and development. The full budget comprises four distinct parts, normally, the revenue budget, the establishment budget (including salaries, staff cost and new jobs proposal), the recurrent budget and the development budget.

The Ministry of Finance and Economic Planning has the final responsibility for coordination, review and finalization of the recurrent and development budgets, while the Establishment reviews and finalizes the manpower budget and staff costs. In the case of the development budget, the sectoral departments of the Ministry of Finance have a dominant role in the synchronization of annual budgeting and by implication annual planning process.

The development budget is designed to finance new investments for expanding the productive capacity of the economy, while the normal maintenance costs of the various departments and services (including salaries) are supposed to be met through the recurrent budget. This portion of the budget is usually coordinated in a mechanical manner, with little or no scrutiny and without linking the demands for maintenance funds and staff to the tasks and targets contained in the development plan. On this incident a FAO report 1990 have noted 35:

"No doubt, the plan documents present a well laid out format, yet a closer scrutiny of the contents reveals clear and unmistakable signs of a patch-work, hurriedly put together. The planners just do not get the time to apply even simple consistency checks through a systematic process of iteration and vertical and horizontal coordination and consultations".

Lack of systematic review prior to planning the recurrent budget has virtually grounded a number of vital field services in the agricultural sector. This as expressed in the same FAO report 36:

"It has become more of a rule than an exception, for extension workers to be confined to their desks due to lack of fuel or maintenance of their vehicles etc".
This situation in fact still holds at the time this research was being carried. Examples were cited from various departments: statisticians at the Planning and Economic Administration at MOA complained that their field visits were always behind schedule due to transportation problems. Similarly, the head of the follow up division at MOA reported that practically they were incapable of performing their task because the division was devoid of the required vehicles and adequate staff. At MFC, it has been reported that one of the main reasons behind the failure of their mechanized schemes was the inability of the corporation to provide the requisite infrastructure and roads, the most illuminating example was cited from RAC where the non-timely rehabilitation of the drinking water stream have constituted a real constraint facing the progressive development of the scheme.

Further indication of the blurred nature, of the annual planning process adopted by all administrations and corporations in the Agricultural sector, and has been provided by the previous FAO report were:

"The present system of allocating resources between the maintenance cost and new investments appear to be totally ad hoc and is devoid of any logical foundation ... the maintenance requirements of the various services, field stations, plantations and individual projects was not worked out on basis of systematically prepared annual plans of work and tight norms of input / output relations and unit costs. Similarly the need for personnel was not justified on basis of an annual work plan of each administration or corporation given well defined targets of outputs of goods and / or services and specific work norms, but simply on basis of existing posts".

4.2.1.3. Performance standards

It may be recalled here that, training can generally be used to change employees behavior; i.e. it may be observed that an individuals' performance is below standard. Hence managers and trainers need a yardstick to measure performance. They need something against which to compare the actual performance of employees. Performance standards which are scientifically established provide such a yardstick. Once the standards are set, it is relatively easy to spot the deviations. With the deviations verified, various analytic procedures can be used to spot causes. Deviations can be caused by several factors. Some of these are solvable by training and some need other administrative action. Thus performance standards are important in helping to establish training criteria.
Examining this variable in the organizations, subject of study, it was found that none of the four organizations have established performance standards. As a matter of fact, the issue did not seem to stimulate any interest at the Ministry's headquarters level, though signs of dissatisfaction have been expressed by employees at El Rahad scheme and the Agricultural Bank of Sudan concerning the inefficient performance of their organizations.

However, as observed by this study performance targets did exist in all the production units, this was especially clear in El Rahad scheme and the Agricultural Bank, where production targets for every crop was being set. Similarly operation targets were also clearly set for the amount of all the disbursement as well as reimbursement operations of the Agricultural Bank, though the functional targets were rather vague; no attention was paid to the quality of the service or to the conditions for the required performance. This makes it rather difficult if not impossible to relate performance inefficiencies to any particular department, functional group or individual behavior. This was quite evident from the manner in which performance evaluation of the different organizations was conducted. Reference here is made to the evaluation reports of El Rahad scheme and the Agricultural Bank of Sudan.

Review of El Rahad evaluation reports reveal that the reports were full of statistical accounts and comparison of the year's yield, production operations, areas grown, size of employment etc., but no in-depth analysis of the production success or shortcomings. More important no mention of the corporations' performance or administrative shortcomings, were mentioned. They were only referred to as "administrative problems", but no analysis of the type of such problems appeared in the reports.

Likewise review of ABS reports showed that all emphasis of the reports were concentrated on accounting for the financial operations, quality and types of loans, extension of the service and other activities of the Silos etc. Performance problems were just mentioned as "setbacks", no analysis was provided.

It is worth mentioning here that in 1987 a reorganization study has been launched by the Sudan Academy for Administrative Sciences (SAAS) for the ABS headquarters' administrations. The study included establishing job description and job specification for all the major jobs in the bank. The study also provided model performance standards for some of the key posts of the bank. The idea was that the "Organization Development Unit" (OD) of the bank should overtake the same task of
establishing performance standards for all the rest of the existing jobs. However there was no evidence that such work has ever been completed or renewed\textsuperscript{40}.

4.2.1.4. Performance appraisal in the organizations subject of study

The only institutional method of performance appraisal in the four organizations was the annual 'confidential report', adopted by all civil service departments and units in Sudan. The main characteristic of the system is that it is a one-off activity, where a whole year's performance is recalled once every year; at the time of writing the report. Evidently the performance appraisal system, as adopted by the organizations subject of study was not designed to identify training needs, though the forms used contain the following statement\textsuperscript{41}:

"If the employee is given less than 45 marks, mention the weakness in his behavior or performance as to whether he needs training or retraining, mentioning what training is needed".

The employee was also entitled to receive a written warning as to his future performance at the same marking level. This clearly indicate that the system identifies training needs only when performance is sufficiently low to warrant a written warning, but as understood such marking level was very rare since most of the marks rotate around the figure "70". It is worth mentioning here that the adopted performance appraisal system is based on three criteria:

1- Work performance in terms of a number of criteria which were supposed to stand valid for all staff level in the same category regardless of department or the job requirement with a maximum of 70 marks.
2- Academic qualifications, with maximum of 20 marks.
3- Seniority or length of service with maximum of 10 marks.

As evident from the above stated criteria, the statement of performance criteria was rather vague, since no level or standard of performance appear in the appraisal forms. This denotes that the mark for performance is subject to the judgment of that who is responsible for filling the form. Hence respondents were asked whether they were counseled by their bosses to review their performance. The responses obtained are shown in the following table:
### Table (20)  Performance Counseling

<table>
<thead>
<tr>
<th>counselling by boss org.</th>
<th>MOA</th>
<th>MFC</th>
<th>RAC</th>
<th>ABS</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, continuously</td>
<td>40%</td>
<td>32%</td>
<td>50%</td>
<td>31.25%</td>
<td>39.2%</td>
</tr>
<tr>
<td>Very limited</td>
<td>44.4%</td>
<td>52%</td>
<td>41%</td>
<td>56.25%</td>
<td>46.4%</td>
</tr>
<tr>
<td>No</td>
<td>14.4%</td>
<td>16%</td>
<td>9%</td>
<td>6.25%</td>
<td>13%</td>
</tr>
<tr>
<td>No answer</td>
<td>1.2%</td>
<td>-</td>
<td>-</td>
<td>6.25%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As clear from the above responses, the majority of the total respondents said that their bosses practice very limited coaching on them. But, while the majority in MOA, MFC and ABS believed so also, the majority in RAC (50%) believed that they were continuously coached by their bosses. However further investigation on the nature of such coaching revealed that they were no more than casual consultation between the employees and their bosses for discussing recurring work problems. No reference to the employees work behavior is made during such meetings. This is well expressed in the following quotation from one of the field inspectors at El Rahad Scheme:

"We do not know what is exactly required from us and I doubt whether anyone knows".

Another quotation by one of the interviewees at MOA stated:

"Who knows what good performance is. This is an illusion; used to justify the promotion of those who are favored".

This in fact clearly indicates the absence of performance standards in the institutionalized system of performance appraisal. In addition there is a lack of consistency of the responses provided above, where about 39% of the total said that they were continuously coached by their bosses to appraise their performance, while the majority, about 46% said that the coaching was very limited, could be taken as an evidence that counseling for the purpose of performance appraisal was not so institutionalized. Support for this may be found in the fact that no performance targets or standards were set for individual performers, nor the meetings involved any systematic review of the past performance of the individuals to identify specific deficiencies.

However, signs of discontents with the adopted system of performance appraisal was very clear in the four organizations subject of
study where most of the respondents 71% believed that the present system of performance appraisal was not enough and indeed in need of improvement in order to be able to give a true picture of the employees performance, this is exhibited in the following table:

Table (21) Adequacy of PA system

<table>
<thead>
<tr>
<th>adequacy of performance appraisal</th>
<th>MOA</th>
<th>MFC</th>
<th>RAC</th>
<th>ABS</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adequate</td>
<td>8%</td>
<td>3%</td>
<td>4%</td>
<td>6%</td>
<td>7%</td>
</tr>
<tr>
<td>To some extent</td>
<td>23%</td>
<td>17%</td>
<td>21%</td>
<td>23.4%</td>
<td>21%</td>
</tr>
<tr>
<td>In adequate</td>
<td>46%</td>
<td>37%</td>
<td>42%</td>
<td>29.4%</td>
<td>42%</td>
</tr>
<tr>
<td>Needs improvement</td>
<td>23%</td>
<td>34%</td>
<td>33%</td>
<td>35.2%</td>
<td>29%</td>
</tr>
<tr>
<td>No answer</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>6%</td>
<td>1%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>100%</td>
</tr>
</tbody>
</table>

As clear from the table, the majority in all organizations believed that the system of performance appraisal in their organizations was inadequate and needs reinforcement. This again is an indication that consultation between bosses and employees is not an institutionalized practice.

4.2.1.5 Job description

The importance of job descriptions for the purpose of training need determination lies in the fact that they outline the duties and tasks which the employee must perform. It outlines areas of responsibility, levels of authority and all essential details which give the full range of performance targets for the individual.

Investigating this variable in the organizations, subject of study, it was found that the only viable document providing job descriptions was found in ABS. No such written documents could be readily found in MFC and RAC. In MOA, the latest document defining the duties and responsibilities was found to be dating back to the early eighties. As reported by RAC executives, two forms of organization structure were at work at the time of this study.

For the purpose of this study information on job description was obtained from the respondents. So they were asked whether they have clear and well defined job description. The responses obtained are shown in the following table:
Table (22)   Availability of Job Descriptions

<table>
<thead>
<tr>
<th>Availability of job description</th>
<th>MOA</th>
<th>MFC</th>
<th>RAC</th>
<th>ABS</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Available</td>
<td>68%</td>
<td>71%</td>
<td>76%</td>
<td>81%</td>
<td>69%</td>
</tr>
<tr>
<td>Not Available</td>
<td>3%</td>
<td>7%</td>
<td>14%</td>
<td>-</td>
<td>7%</td>
</tr>
<tr>
<td>Work according to the need</td>
<td>29%</td>
<td>22%</td>
<td>10%</td>
<td>19%</td>
<td>24%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>100%</td>
</tr>
</tbody>
</table>

As shown in the table above, the majority of respondents 69% believed that they have clearly defined job descriptions, but also it may be noticed that though, the majority in each organization believed so; 68% in MOA, 71% in MFC, 76% in RAC and 81% in ABS, yet about half of the total respondents of MOA and about third of MFC and RAC and about quarter of ABS respondents did not seem to be fully aware of the availability of jobs descriptions. This may either be attributed to the absence of clear statements of job descriptions and this is more applicable to the case of the first three organizations or else to the fact that people do not stick to the stated job description and this could be the case of ABS.

Respondents were then asked whether their jobs match their qualifications; the responses were as follows:

Table (23)   Match between Qualifications and jobs

<table>
<thead>
<tr>
<th>Qualifications match with jobs</th>
<th>MOA</th>
<th>MFC</th>
<th>RAC</th>
<th>ABS</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Match</td>
<td>21%</td>
<td>42%</td>
<td>55%</td>
<td>68%</td>
<td>36%</td>
</tr>
<tr>
<td>Do not match</td>
<td>36%</td>
<td>27%</td>
<td>18%</td>
<td>13%</td>
<td>29%</td>
</tr>
<tr>
<td>To some extent</td>
<td>39%</td>
<td>23%</td>
<td>27%</td>
<td>19%</td>
<td>32%</td>
</tr>
<tr>
<td>No answer</td>
<td>4%</td>
<td>8%</td>
<td>-</td>
<td>-</td>
<td>3%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>100%</td>
</tr>
</tbody>
</table>

Again, the above table shows a clear case of an absence of clear cut job specifications whereby the case was most visible in MOA in which a clear majority of respondents, about 75% either believed that their jobs do not suit their qualifications or they suit to some extent. In the other three organizations, though the majority said that their jobs suit
their qualifications yet, comparing the various categories of responses again it may be noticed that about 50% of the responses in MFC were on the negative side. Also if these were added to the last category which provided no answer the result would be that 58% in MFC occupy positions which do not suit their qualifications and this again raises a serious question concerning job specifications. Similar questions could be also raised in the case of RAC where about 45% of the responses came on the negative side. However, taking it for granted that in MOA, MFC and RAC job specifications were not clear cut, and also believing that matching the job requirements with the incumbent's qualifications is a prerequisite for occupying the job, whether a job specification is clearly stated or conventionally known, then the valid question may be raised in the case of ABS, where, though the majority of 68% believed that their jobs matched their qualifications, still a considerable percentage of the responses 32% answered negatively, thus further denoting the absence of up to date job description.

For further information on job description, respondents were asked whether they have the requisite authority to perform their tasks, the responses obtained are shown in the following table:

Table (24) Possession of the required authority

<table>
<thead>
<tr>
<th>requisite authority</th>
<th>MOA</th>
<th>MFC</th>
<th>RAC</th>
<th>ABS</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have authority</td>
<td>43%</td>
<td>52%</td>
<td>64%</td>
<td>78%</td>
<td>50.6%</td>
</tr>
<tr>
<td>Do not Have authority</td>
<td>18%</td>
<td>-</td>
<td>9%</td>
<td>-</td>
<td>12.3%</td>
</tr>
<tr>
<td>Instant orders</td>
<td>6%</td>
<td>61%</td>
<td>-</td>
<td>6.25%</td>
<td>6.5%</td>
</tr>
<tr>
<td>Have some authority</td>
<td>32%</td>
<td>32%</td>
<td>27%</td>
<td>-</td>
<td>3%</td>
</tr>
<tr>
<td>No answer</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>3%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

The table shows that about half, 50% of the total respondents believed that they have the required authority for performing their tasks. The highest majority was found in ABS 75% while MOA recorded the least 43% whereby MFC and RAC lied in between. Equally true that quite a considerable percentage 32% in MOA and MFC respectively and 27% in RAC believed that they only have some authority also there was about 24% and 16% in MOA and MFC respectively believed that they do not have the required authority and work in response to spontaneous orders. This indicates a lack of consensus among the respondents, as to the existence of clear lines of authority, though such lack of consensus was less apparent in ABS.
To get further information on the viability of organizations structures respondents were asked whether they face problems which hinder performance of their tasks. The responses obtained are shown below:

Table (25) Viability of Organizations structures

<table>
<thead>
<tr>
<th>Presence of Work Problem</th>
<th>MOA</th>
<th>MFC</th>
<th>RAC</th>
<th>ABS</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Face problems</td>
<td>5%</td>
<td>8%</td>
<td>10%</td>
<td>6%</td>
<td>12%</td>
</tr>
<tr>
<td>No problems</td>
<td>40%</td>
<td>42%</td>
<td>38%</td>
<td>56%</td>
<td>42%</td>
</tr>
<tr>
<td>Sometimes</td>
<td>45%</td>
<td>50%</td>
<td>52%</td>
<td>38%</td>
<td>46%</td>
</tr>
</tbody>
</table>

Though, the percentage of those who said that they face problems in performing their tasks is rather small i.e. 12% of the total, yet, with the exception of ABS, the majority in MOA, MFC and RAC reported that they often face problems and these amount to 46% of the total responses. Asking about the nature of the problems they face, the responses obtained were as follows:

Table (26) Nature of The work problems

<table>
<thead>
<tr>
<th>Nature of Performance Problems</th>
<th>MOA</th>
<th>MFC</th>
<th>RAC</th>
<th>ABS</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work different from specialization</td>
<td>2%</td>
<td>5%</td>
<td>3%</td>
<td>-</td>
<td>2%</td>
</tr>
<tr>
<td>Overload</td>
<td>11%</td>
<td>23%</td>
<td>19%</td>
<td>28%</td>
<td>16%</td>
</tr>
<tr>
<td>Concentration of work in few hands</td>
<td>16%</td>
<td>13%</td>
<td>21%</td>
<td>18%</td>
<td>16%</td>
</tr>
<tr>
<td>Information problem</td>
<td>18%</td>
<td>8%</td>
<td>9%</td>
<td>18%</td>
<td>15%</td>
</tr>
<tr>
<td>Shortage of work force</td>
<td>6%</td>
<td>15%</td>
<td>18%</td>
<td>18%</td>
<td>11%</td>
</tr>
<tr>
<td>Conflict of authority</td>
<td>15%</td>
<td>10%</td>
<td>9%</td>
<td>9%</td>
<td>13%</td>
</tr>
<tr>
<td>Unfavorable climate</td>
<td>19%</td>
<td>23%</td>
<td>6%</td>
<td>9%</td>
<td>17%</td>
</tr>
<tr>
<td>Others</td>
<td>11%</td>
<td>-</td>
<td>15%</td>
<td>-</td>
<td>9%</td>
</tr>
<tr>
<td>No answer</td>
<td>2%</td>
<td>3%</td>
<td>-</td>
<td>-</td>
<td>1%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The above responses show that in the four organizations, respondents believed in the presence of a variety of organizational problems which hinder their performance. The more or less even distribution of responses among the various factors, indicate the presence of a multiplicity of organizational and administrative problems. Some of these concern the formal relationships; within as well as outside the
organization and some concern the informal relationships within the organizations. Taking the formal problems, as they appear from the above responses, it may be noticed that about 60% of the total responses refer to work distribution and definition and conflicting authorities, as the table shows 16% of the total related their problems to being "over loaded" of these the highest percentage 28% was in ABS and the next high was in MFC. Equally 16% of the total related their problems to "concentration of work in a few hands" which means that the distribution of work is not proper. Here again, the highest percentage appeared in RAC 21% with ABS as the second highest 18%, both problems indicate that the jobs are not taking their true dimension and consequently reflect a poor job description and specifications, as well as poor work distribution.

On the other hand 13% of the total believed that their problems relate to conflict of authority either with other departments within the organization or between themselves and other agencies working in the agricultural field. Conflict of authority appears to be most prominent in MOA with the highest percentage 15%. This again is indicative of unclear job description as well as of unclear role definition of the various agencies and departments working in the field. Information problem also as part of the formal relationships problem constitute 15% of the total responses, with MOA showing the highest percentage 18% as well as ABS which also shows 18%. Remarkably most of those who talked about the information problem in MOA were employees of the planning and statistics department, these were supposed to be the source of information for the entire ministry, if not for the entire the sector. This in fact is quite indicative of the depth of the information problem in MOA. Yet more important, the information problem obviously point out to poor communication which is undoubtedly brought about by unclear definition of lines of communication and coordination. Equally true, taking the fact that the problem was mostly expressed by the planning and statistics department's respondents, it may safely be said that the job responsibilities were not clearly defined. Support for this conclusion was found in the following comment by one of the employees in MOA:

"The tasks to be performed by each individual are not defined therefore work is concentrated in very few hands".

A similar comment was also provided by another employee at MOA who said:

"The duties are not defined; more often we perform tasks which were supposed to be done by others. In addition much of the work we do is completed through personal relationships and not the formal".
Like wise similar views were also found to be prevailing at El Rahad scheme where the following comment was provided:

"Absence of a clear definition of the duties and responsibilities, both administrative and technical often result in duplication of effort".

4.2.1.6 Human resource development / training policy

Policy is defined as:

"A clear statement by the organization outlining its intention or its attitude towards a specific phenomenon".

An HRD training policy, therefore, provides a clear understanding of the role of training in the organization and helps the enterprise as well as the individual in terms of fixing the range of expectations and clarifying obligations on both sides.

In this study, the training policy was examined with the aim of finding out:

- Whether each organization has a clear training policy statement which is well communicated and supported by all employees.
- Contribution made by training.
- The attitude towards training.

Policy statement

Investigation on this issue in the four organizations, subject of study, revealed that no policy statement was found in MOA, MFC. In ABS a policy statement was found clarifying, the objective, expected contribution as well as the obligation of the bank towards training of its employees. However this was found to be confined only to the activity of their training center. As for other types of institutional training, whether inside the country or abroad nothing was found. Hence respondents were asked whether they have a clear training policy. The responses provided were as follows:

Table (27) Availability of clear training policy

<table>
<thead>
<tr>
<th>Availability of trg. policy</th>
<th>MOA</th>
<th>MFC</th>
<th>RAC</th>
<th>ABS</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Available</td>
<td>49%</td>
<td>37%</td>
<td>53%</td>
<td>59%</td>
<td>48%</td>
</tr>
<tr>
<td>Not Available</td>
<td>43%</td>
<td>56%</td>
<td>37%</td>
<td>35%</td>
<td>44%</td>
</tr>
<tr>
<td>Do not know</td>
<td>8%</td>
<td>7%</td>
<td>10%</td>
<td>6%</td>
<td>8%</td>
</tr>
</tbody>
</table>

As clear from the table, the responses were almost evenly distributed among available and not available, though the majority of the total responses was towards the negative i.e. 52% of the total either replied not available or do not know indicating an absence of a clear policy statement. As generally understood, training in the four
organizations, subject of study, follow the same general rules of the National Training Act. So respondents were asked to state down the main features of their training policy. The responses provided are exhibited in the following table:

Table (28) Features of organizational training policy

<table>
<thead>
<tr>
<th>features of training policy</th>
<th>MOA</th>
<th>MFC</th>
<th>RAC</th>
<th>ABS</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seniority</td>
<td>22%</td>
<td>7%</td>
<td>16%</td>
<td>20%</td>
<td>17%</td>
</tr>
<tr>
<td>Efficiency and discipline</td>
<td>9%</td>
<td>7%</td>
<td>12%</td>
<td>-</td>
<td>8%</td>
</tr>
<tr>
<td>Specialization</td>
<td>17%</td>
<td>29%</td>
<td>20%</td>
<td>30%</td>
<td>17%</td>
</tr>
<tr>
<td>Ability to make Use of the trg. Opportunity</td>
<td>5%</td>
<td>7%</td>
<td>-</td>
<td>-</td>
<td>4%</td>
</tr>
<tr>
<td>No answer + do not know</td>
<td>41%</td>
<td>43%</td>
<td>52%</td>
<td>50%</td>
<td>49%</td>
</tr>
<tr>
<td>Availability of training</td>
<td>6%</td>
<td>7%</td>
<td>-</td>
<td>-</td>
<td>4%</td>
</tr>
</tbody>
</table>

As revealed by the table, the majority of the total respondents i.e. 49% provided no answer. Equally true this category represented the majority of the responses in the four organizations which indicate a rather low comprehension of the features as well as the content of a training policy. As for the rest of the responses, they were clearly distributed among a number of criteria probably no more than a simple reflection of the adopted manner of selecting people for training. Further evidence on the respondents poor knowledge of their training policy was found in the following comment found attached to the previous answers:

One of the respondents at El Rahad Scheme commented as follows:\n
"I think, the whole issue needs revision and the establishment of firm basis for training. At present, the state's policy is the basis for planning and implementation of training programs".

Still for another; training follows the ministry's policy which follows the National Training Policy and he sees that policy as:\n
"Making use of all scholarships and training opportunities coming from abroad".

Similar comments have also come in the response of the mechanized farming people; where one has summarized their training policy in the following:\n
"The immediate response to any training opportunity that comes from the national directorate of training".

For another the issue was as follows:
"I believe that, every year a comprehensive program should be included in the budget, defining the training required according to the seniority of the employees, without discrimination".

As for people of the ministry:
"The whole issue is a luck strike".

Yet for the people of the Agricultural Bank the belief was that:
"The establishment of a big training centre and the existence of a national training program, in addition to the international aid have greatly enhanced training of the bank. The policy is to train all people in all fields of the bank's work".

For another the policy was to:
"Train people who are disciplined and show enough patience in doing their work".

As clearly shown from the above statements, people in the four organizations held different and incomplete perception of training than the established norms of the national training act. In view of this, investigation of the attitudinal factors towards training was attempted in the following section of this study.

4.2.1.7. Expectation from training

No clear statement of objectives was found in the four organizations, subject of study, except in ABS, where a general 'intention' statement pertinent to the training activity of the Bank's training centre. The statement was found embodied in the annual report produced by the bank's training department reviewing the center’s training plan during the year. Despite this, no overall training objective for the whole training activity was found. So various sources were sought to obtain information on the expectation from training, so the research sample were asked about the importance of training as they perceive it, a variety of responses were obtained. The following examples were considered as the most common of all the responses in the four organizations:

- It is important that people be exposed to the experience of advanced countries, update their knowledge and improve their skills.
- It encourages people to continue in their work.
- It is important for the development of the employees.

For the same question, the following responses were obtained from the training directors:
- Training is important for developing the employees.
- It also motivates them to work hard.

In the words of an ex-training director at ABS:
"For your knowledge; training is not just for improving performance. On the contrary we have very good people, they really work hard they deserve to be given a chance to go abroad to see what's going on in the world".

A perusal of the above responses, reveal that the purpose of training as seen by the employees and their training directors rotates around two main ideas; developing the employees and motivating them.

On the other hand asking the same question to a sample of the leadership positions in the four organizations, the most common answer was that:

"Training is important for developing the employees and for improving their performance".

Yet for some of the departments' heads, the matter was quite different:

"Our people work under very harsh conditions, they need some incentive. So we strive hard to find them training opportunities abroad to give them a push".

For another training was important for the following reason:

"Work in this department is rather tedious, so availing enough training for our employees is considered a sort of appreciation by the state"

Still, for another, training was important for the following reasons:

"We believe that work in our department is rather difficult and at the same time not paying. People tend to turn out quickly. So we think that we will be able to keep them longer by giving them more and more training opportunities".

Again, a perusal of the above responses reveals that training as perceived by some of the department heads is important as a 'reward system'

This conclusion in fact finds confirmation in the following comment by the evaluation team of the USAID program, provided to the Agriculture planning and Statistics:

"Short-term external training is often viewed as a benefit to be awarded to staff members. However, this training is too expensive to serve as a fringe benefit; all training should be viewed as meeting identified knowledge and skill gaps in PAEA".

4.2.1.8 Contribution of training in MOA, MFC, RAC and ABS:

Statistical records in the organizations, subject of study, were very poor and quite inconsistent. Asking for information on the number of trainees, type of training, fields of training and the whereabouts of the
trainees themselves was rather a difficult task both in MFC and RAC. They simply alleged that all records could be found in MOA's headquarters. The situation at MOA was even worse because the filing system of the training department was very poor. Questioning about the above mentioned information, the researcher was just referred to heaps of unorganized paper jackets containing the training plan proposals and the approved plan for the different years. All other information concerning the state of implementation of the plan whether the approved programs were attended or not was missing. So the researcher became convinced that getting any useful information out of such a mess was impossible.

The situation at ABS was much better because, at the time this research was being carried, the banks training department had already started a survey on the training situation and records by category of employees were being established containing the names of the trainees, their field of specialization, training etc. The state of plan implementation according to the records was very good. The percentages recorded denoted a range of ninety percent and above. However, as observed by the researcher, the percentage for some years has exceeded by and large the planned training which may indicate that some training was just held extracurricular. Nevertheless, assessment of the contribution of the implemented training was not feasible since; originally, the need for the implemented training was not established in a systematic manner. This was especially true when the basic education courses provided for the bank’s employees on an annual basis are considered, while the labor market is virtually full of unemployed university graduates.

4.2.1.9. The pattern of training

The general pattern of the provided training in the four organizations, subject of study revealed an obvious inclination towards technical specialized training. This is shown in the following table.

Table (29) the pattern of training

<table>
<thead>
<tr>
<th>Pattern of training</th>
<th>MOA</th>
<th>MFC</th>
<th>RAC</th>
<th>ABS</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long Academic practical</td>
<td>84%</td>
<td>58%</td>
<td>88%</td>
<td>75%</td>
<td>79%</td>
</tr>
<tr>
<td>Long practical</td>
<td>7%</td>
<td>-</td>
<td>-</td>
<td>8%</td>
<td>5%</td>
</tr>
<tr>
<td>Short Technical Specialized Training</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Short Academic practical</td>
<td>55%</td>
<td>50%</td>
<td>60%</td>
<td>50%</td>
<td>55%</td>
</tr>
<tr>
<td>Short practical</td>
<td>33%</td>
<td>33%</td>
<td>39%</td>
<td>28%</td>
<td>33%</td>
</tr>
</tbody>
</table>

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As shown in the above table 79% of the total research sample have had technical specialized training, 84% in MOA, 58% in MFC, 88% in RAC and 75% in ABS. Details of the provided training also showed that 79% of the technical training was long, academic courses. These mostly constituted higher diploma, Masters Degree and PhD degree. Long practical training courses was only about 5% of the total training availed to the research sample. This was found only in MOA; 7% and in ABC, 8%.

Short technical specialized training constituted the majority in the four organizations. 55% of the total respondents had short technical training, nevertheless, comparing the two types of technical training, the table also shows that academic training have an obvious predominance over practical training. About 55% in MOA, 50% in MFC, 60% in RAC and 60% in ABS had technical specialized academic training, whether short or long. Thus it may be said that the provided training in the four organizations shows more or less the same pattern.

An important finding in this study was that administrative training was very meagre. It constituted only about 15% of the provided training in the four organizations of this 9.5% was in MOA, 29% in MFC, about 6% in RAC and about 23% in ABS.

Again, the table also shows that academic training was also predominant in three of the organizations, subject of study i.e. MFC, RAC and ABS whereby the percentage of academic administrative training was 83% 100% and 71% respectively.

On the other hand, practical administrative training was found to be the majority of the provided administrative training in MOA with 61%. Thus it may be noted that though the technical training follow the
same uniform pattern in the four organizations. Administrative training, meagre as it was, does not show the same uniformity.

4.2.1.10. Features of the research sample

The basic feature of the research sample was that, they were all incumbents of administrative jobs within their respective organizations, i.e. directors, assistant directors, heads of departments and divisions, project managers, branch managers, and functional managers in various job grades from 1 to 7.

4.2.1.11. Qualifications of the sample

Table (30) Qualifications of the research sample

<table>
<thead>
<tr>
<th>Qualification</th>
<th>MOA</th>
<th>RAC</th>
<th>MFC</th>
<th>ABS</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduate</td>
<td>45</td>
<td>-</td>
<td>12</td>
<td>16</td>
<td>73</td>
</tr>
<tr>
<td>Diploma (Agri.)</td>
<td>38</td>
<td>12</td>
<td>10</td>
<td>8</td>
<td>68</td>
</tr>
<tr>
<td>B.Sc. (Agri.) /other</td>
<td>18</td>
<td>18</td>
<td>18</td>
<td>16</td>
<td>70</td>
</tr>
<tr>
<td>M.Sc. (Agri.)/Other</td>
<td>42</td>
<td>18</td>
<td>4</td>
<td>4</td>
<td>68</td>
</tr>
<tr>
<td>PhD (Agri.) /Other</td>
<td>8</td>
<td>0.0</td>
<td>2</td>
<td>0.0</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>151</td>
<td>48</td>
<td>48</td>
<td>46</td>
<td>293</td>
</tr>
</tbody>
</table>

As could be observed the most common factor in all the research sample was that they were all technical people occupying administrative positions whether those being leadership, executive or supervisory. 60% of the sample provided a job description which was predominantly administrative. While about 14% provided a mixed job description i.e.
administrative and technical, there were 17% whom were not able to describe their administrative duties fully, but only gave indications like "some administrative responsibilities", "assisting the manager", "replacing the manager while absent etc…”

According to the findings of this study 89% of the sample reported that they were involved in making decisions concerning the running of their respective organizations which virtually indicate that they do assume important administrative responsibilities within their organizations.

As shown above, administrative training was barely existent, and where it was found, was mainly confined to functional aspects of the jobs, i.e. personnel, financial etc. General administration training was practically non existent. It is noteworthy that indications relating to administrative inefficiency have more often been made very clear in various consultants' reports. To quote some of these, the FAO mission (1990) have noted that there was a training need at top level management to secure coordination and integrative perspective at the policy level. Specific examples of the failure of agricultural development policies due to absence of qualified manpower and adequate institutional coordination as came in the FAO report relate to the price policies, employment policies, coordination of different policies, policy implementation etc… The problem as seen by the FAO mission was attributed to inefficient planning both at the strategic level and at the implementation level. Commenting on the role of the Ministry of Agriculture as 'a think tank' for the entire sector, the following quotation illustrates the weakness in the administrative aspects of the planning units58:

"Although the role of PAEA was very strong in collection of basic agricultural statistics, marketing data, farm production, costs and input use estimates, yet very weak in utilizing and applying these information for reasons of agricultural planning, policy formulation and resource allocation".

Enumerating the causes of implementation failures of the agricultural development plans, the FAO report mentioned institutional coordination, information and data as well as the manpower resources. The problem of manpower as stated in this relation was59:

"The current management resources do not have the analytical capacity".
4.2.1.12. Utility of the acquired training:

Nearly all respondents, 96%, in the four organizations believed that the training they have received was useful, 60% of these believed that training have increased their knowledge and experience. The rest of the responses were distributed among acquiring certificates, qualifying for higher positions and pay increase. These are illustrated in the following table:

Table (31) Utilization of acquired training

<table>
<thead>
<tr>
<th>utility of training provided</th>
<th>MOA</th>
<th>MFC</th>
<th>RAC</th>
<th>ABSS</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase in knowledge and experience</td>
<td>52%</td>
<td>55%</td>
<td>67%</td>
<td>88%</td>
<td>60%</td>
</tr>
<tr>
<td>Acquiring certificate</td>
<td>23%</td>
<td>19%</td>
<td>17%</td>
<td>12%</td>
<td>17%</td>
</tr>
<tr>
<td>Promotional</td>
<td>15%</td>
<td>10%</td>
<td>10%</td>
<td>-</td>
<td>13%</td>
</tr>
<tr>
<td>Pay increase</td>
<td>6%</td>
<td>3%</td>
<td>7%</td>
<td>-</td>
<td>5%</td>
</tr>
<tr>
<td>Others</td>
<td>0%</td>
<td>6%</td>
<td>-</td>
<td>-</td>
<td>1%</td>
</tr>
<tr>
<td>No answer</td>
<td>4%</td>
<td>6%</td>
<td>-</td>
<td>-</td>
<td>4%</td>
</tr>
</tbody>
</table>

As shown in the above table, about 2/3 of the provided training in the four organizations was meant for increasing knowledge of the trainees and to some extent for career development. It may also be observed that these responses closely coincide with the previous findings concerning the pattern of training, which was also found to have a strong inclination towards technical academic training. Hence respondents were asked whether they feel that training have improved their work performance. The responses obtained are shown in the following table:
Table (32)  Effect of training on performance

<table>
<thead>
<tr>
<th>Effect of training on performance</th>
<th>MOA</th>
<th>MFC</th>
<th>RAC</th>
<th>ABS</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved</td>
<td>78%</td>
<td>74%</td>
<td>65%</td>
<td>86%</td>
<td>75%</td>
</tr>
<tr>
<td>Present position unsuitable</td>
<td>6%</td>
<td>4%</td>
<td>-</td>
<td>7%</td>
<td>5%</td>
</tr>
<tr>
<td>Moved to another position</td>
<td>5%</td>
<td>9%</td>
<td>35%</td>
<td>-</td>
<td>11%</td>
</tr>
<tr>
<td>No answer</td>
<td>11%</td>
<td>13%</td>
<td>-</td>
<td>7%</td>
<td>9%</td>
</tr>
</tbody>
</table>

It is clear from the table above, the majority, 75%, in the four organizations believed that training have improved their performance. Only 25% did not believe so, yet the importance of these lies in the fact that their responses bear a direct connotation to the question of need determination; that no consideration of the outcome training was being taken. Also it is important to note that 9% of these did not know or were not aware of the effect of training on their performance and this raises a big question as to the value of their training. Furthermore, taking the rest of the respondents, it was found that 11% of the total said that they have changed position. Correlating these responses to those in table (31) concerning the utility of training, it may be noted that 13% have said that training qualified them for higher positions.

This means that training implied promotional aspects for these respondents i.e. catering for future performance.

Taking, individual organizations, it has been found that 15% of MOA respondents said that training has qualified them for higher positions, while only 5% (table 32) did actually move to higher position. This in a sense implies a non correlation between training and promotion. The non correlation between training and promotion was further illustrated taking specific examples of individual departments of MOA. In the National Administration of Agriculture extension 7% said that their training qualified them for higher positions while none have changed position.

Similarly 22% in the Agricultural Investment, 20% in the financial department and 13% in the planning and economics department, all of whom reported that training have qualified them for higher positions, but non have changed places or promoted.
On the other hand, the reverse was found to be true in RAC where 10% reported that training have qualified them for higher positions while 35% reported that they have actually changed position either for promotional or other lateral movements. Similarly in MFC 10% of the respondents reported that training have qualified them for higher positions, but those who changed position were only 9% and for other lateral positions in other departments.

Thus it may be concluded that training in the organizations, subject of study, was not promotional. Likewise, the motivation element in training was also minimal since only 5% of the entire sample reported that training has entitled them to a pay increase. Thus it can safely be said that the only valid utility of the training carried out by the organizations, subject of study, was to increase knowledge and experience and partly for acquiring certificates. This as clear from the table amounted to 100% in ABS, 84% in RAC, 74% in MFC and 75% in MOA.

To have an insight into the relevance of such training to the job situation of the trainees, they were asked whether they have been able to transfer the acquired training into their job situation. The responses obtained are illustrated in the following table:

Table (33) Application of training on job situation

<table>
<thead>
<tr>
<th>Transfer ability of training to job situation</th>
<th>MOA</th>
<th>MFC</th>
<th>RAC</th>
<th>ABS</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>42%</td>
<td>36%</td>
<td>57%</td>
<td>46%</td>
<td>44%</td>
</tr>
<tr>
<td>No</td>
<td>20%</td>
<td>23%</td>
<td>22%</td>
<td>20%</td>
<td>21%</td>
</tr>
<tr>
<td>To some extent</td>
<td>32%</td>
<td>32%</td>
<td>21%</td>
<td>27%</td>
<td>30%</td>
</tr>
<tr>
<td>No answer</td>
<td>6%</td>
<td>9%</td>
<td>0.0%</td>
<td>7%</td>
<td>5%</td>
</tr>
</tbody>
</table>

As shown in the table above, less than half of the total respondents reported that they were able to transfer their training experience into their job situation.

It may be noted here that the responses in the four organizations were closely congruous which could as well be an indication of the congruity of the overall training situation of the sample organizations. Comparing the total result with the previous table (32) where 75% reported that training has improved their performance. It may be noted
that there is a difference of 31% between those who said that training have improved their performance and those who said that they were able to transfer it into their job situation. This clearly indicates that the felt improvement was rather absolute and not performance laden.

Again adding these 31% to those who actually admitted their inability to transfer training into their job situations 21% in the above table, it becomes evident that the majority of the total respondents i.e. 52% were not able to make use of the knowledge they have acquired in their jobs. Not with standing those who provided no answer 5% and also those who said they were only partly able to transfer their training into their jobs, hence an important question arises here about the relevance of training in the organization subject of study.

To have more insight into the reasons behind non-transferability of training into the work situation, the respondents were asked about the attitude of their bosses towards the transferred experience. The responses obtained are provided in the following table:

Table (34) Support for transferring training to job situation

<table>
<thead>
<tr>
<th>Boss reaction to transferred training into work situation</th>
<th>MOA</th>
<th>MFC</th>
<th>RAC</th>
<th>ABS</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acceptance</td>
<td>47%</td>
<td>69%</td>
<td>92%</td>
<td>70%</td>
<td>59%</td>
</tr>
<tr>
<td>Refusal</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Neutral</td>
<td>-</td>
<td>8%</td>
<td>8%</td>
<td>10%</td>
<td>3%</td>
</tr>
<tr>
<td>Do not know</td>
<td>53%</td>
<td>23%</td>
<td>-</td>
<td>20%</td>
<td>38%</td>
</tr>
</tbody>
</table>

As clear from the table, the majority 59% of all respondents reported that their bosses' reaction was favorable. Despite the considerable variation in the responses of the individual organizations i.e. 47% in MOA, 69% in MFC, 92% in RAC and 70% ABS, yet still the majority in all organizations believed that they found no objection. This excludes adverse reaction to new experience and work practices. A small percentage 8% in MFC, 8% in RAC and 10% in ABS said that their bosses' reaction was neutral. Looking for the ideal situation, the bosses' reaction should be supportive rather than indifferent, nevertheless, the situation being what it is in this research, considering that none of the respondents said they found objection, this gives a clear indication that
transferring new practices and experience into the work situation was dependent on the individual desire and aptitude.

Taking the rest of the responses, the table shows that 38% of the total responses came under a 'Do not know' or 'No answer'. Though RAC was not included in this category, yet the percentage of those who did not know what was the reaction to their action in MFC and RAC was rather considerable and still remarkably considerable in MOA where the percentage was 53% or the majority. This category is important because it provides three probabilities; the first was that, the transferred experience was so negligible that it could not evoke any reaction on the part of the bosses. Second, that they were themselves indifferent that they have not been able to see the reaction to their actions or third that this category have provided false responses regarding their ability to the transferred experiences. Whatever the case it may be concluded that, the organizational climate of the research organizations, though not fully supportive, yet it did not impede transferability of valuable experiences into the work situation.

Yet this research was not able to quote any valuable example of transferred knowledge into the work situation that could be directly related to training except in only one situation. That was found in ABS where it has been reported that one of the trainees has managed to introduce some successful improvements in the technology of grain storing (Matamir). He has actually been given full support by the bank's authorities even before concluding his study.

Otherwise, the general idea was that trainees were quite incapable of bringing about improvements in the work situation. This as expressed by one of the head departments in ABS:

"I do not know what is wrong with our trainees, but they seem to be quite incapable of bringing about any useful improvement".

Nevertheless, no systematic information on evaluation of training was kept in any of the four organizations, therefore no conclusive evidence regarding transferability of training could be obtained from the organizations' records, but as observed during this study any worthy improvement could easily be accepted. As a corollary, then for those who could not transfer their training experience, it could either be because of lack of skill and / or because of inappropriate attitude. This could be a problem of the quality of the provided, or else because the content of training was irrelevant to the work situation. Both questions in fact are central to the question of training need assessment.
4.2.2 Attitudinal Factors
4.2.2.1 Decision makers' Support for training  
a- Moral support  
Investigation on the support given by the decision makers to the training function in the organizations, subject of study, revealed that the function was wholly supported in the four organizations without an exception. Interviews with the top executives showed that they all believed in the importance of training for developing the employees and the organizations. This as expressed by the words of the Director General at RAC:

"On the contrary, we always seek training opportunities for our employees and we actually spare no effort for making maximum use of the opportunities we get".

No incidence was recorded during this study to tell that top executives were against training, except for one incidence that for the year 1989-90 training was suspended in MFC due to an action of the acting manager then. The reason, as under stood from some of the employees was quite unknown, but as mentioned by others, was that the idea was to allow for over viewing the training situation in order to have it improved. However for the following year the function was resumed again just like before.

b- Financial Support:

The training budget of MOA, MFC and RAC was the responsibility of the national directorate of training. All costs of training are calculated by it and the allocation for each government department is defined there, the training plan of the three organizations does not include any cost calculations. For this reason when asking about the training budget, only in MFC where a precise figure was given, while in RAC, they answered that they did not know; that knowledge about the budget could be found in the ministry of agriculture. Nonetheless, the ministry itself was found to be lacking such knowledge according to the words of the training director in MOA:

"We do not know anything about the training budget. All we do is to submit our proposals and the national directorate of training caters for all financial matters together with the ministry of finance".

However, the general opinion in the three organizations was that the training budget for all of them was far less than they aspire to. For people in MFC and RAC, the blame was to be put on the ministry of agriculture. Because as they believed the training directorate was not looking for their interest as they ought to be. On the other hand, the training directorate at MOA believed that the National Directorate of training was greatly undermining their need for training. This as expressed by them:
"The National directorate of training is the biggest constraint. The ministry often strives to get valuable training opportunities, but unfortunately they come to be wasted due to the constraints put by NDT".

So according to the view held by the ministry, though they did feel the need for training and they worked hard to avail training opportunities for their employees, yet they felt that ultimately they had no say as to the quality and quantity of the training they received, since they were devoid of the required resources. Truly they believe that the training budget has slightly increased, but the increment was due to the inflation in the cost of training rather than to an increase in the number of training opportunities. Practically they find that the number of trainees annually has greatly been reduced.

No consistent statistics was found in the three organizations relating to the number of trainees and the type of the required training. Yet the general feeling was that previously the chances for training were far better.

As far as ABS was concerned, they seemed to find no problems in financing or allocating finance to the purpose of training. The training budget was found to be constantly growing from hundred thousands during the eighties to about two millions Sudanese pounds in 1991/92. According to the opinion of the training director at the Bank, they find no problem in securing the required finance and usually they find full support from the part of the bank's management.

4.2.2.2. Evaluation of Training

One of the major findings of this research was that no system of evaluating the results of the training activity was found to exist in any of the four organizations. No cost/benefit analysis concerning the value of training was carried out. Equally true, there was also no means for ensuring that the "learning" has taken place. The effectiveness of training as a function contributing to organizational goals; and as an activity which enhances individual's capacities to contribute to the attainment of organizational goals and objectives did not seem to be a question in any of the four organizations. No special arrangements were found for measuring training effectiveness.

Even the follow up function of the training department at MOA, MFC and RAC was very weak and mainly confined to procedural matters concerning the initial placement of trainees, routine correspondence, the release of funds and other contingent problem situations. Progress reports on the performance of trainees were practically non-existent and post training reporting were said to be rather infrequent.
Reviewing the ongoing training programs of the ministry of Agriculture, and its affiliated corporations, up to 1991, it has been found that there were 127 ongoing long study in-country courses. These were found to be carried out at the U of K and the University of Al Gezira. Of these 21 trainees should have completed their study by 1989 and returned to their work sites, but the training department could not tell for sure whether they have actually returned back or not. This also indicates that the department has no information on their training performance. Similarly, it has also been found that there were other 17 cases where the trainees did not return to their sites and the training department was not cognizant whether they have successfully completed their study or not. In two of the cases, the training periods were terminated for one and suspended for the other because of poor attendance by the trainees. The training director has no knowledge of why this has happened or what have become of those employees. Concerning study abroad, it has also been found that there were 80 ongoing long study courses, all of which sponsored through technical aid by various donor institutions / countries. 10 of these trainees though completed their study but did not return to their work sites. No documents to prove that they have ever been qualified or not were found at the training department.

In ABS, the follow-up function was much better. Follow-up of the trainees was much closer. They keep regular contact with the training institutions, receive regular reports on trainees’ performance and have up to date information on each trainee. In addition post training reports were rather obligatory and no case of non-return was reported.

### 4.2.2.3 Utilization of Trainees

Evidence from this research has shown that the utilization of trainees in the organizations, subject of study did not follow any systematic plan. Succession charts were obviously not known in the four organizations. The mechanism of placement, transfer and deployment was mostly subject to circumstances rather than to a planned system of deployment and redeployment.

This research though was not able to obtain consistent information on the utilization of trainees in the organizations subject of study. Yet a number of examples could easily be cited that reveal an improper utilization of high level manpower.

To state one fact about the technical competence of the high level manpower in the agricultural sector in general was that it was considered as one of the best in the Arab world. According to official statistics, Sudan used to have about 300 higher degree holders in Agriculture (i.e. MScs and PhDs) during the eighties. Definitely this figure has greatly increased by now. The ministry's training records up to 1991 showed that
there were over eighty employees being under training for higher degrees. However evidence also showed that attention to the utilization of such competencies was rather weak, the most visible example in this study was cited from the Agricultural Investment Administration of MOA. At the time of this study, the administration had a professional staff of thirty; three of them with a PhD degree, five with MScs and 13 with BScs, while nine were found to be under training. Interestingly, these were found to be staying without knowing exactly what their real job was.

As reported\textsuperscript{63}, this situation has been created after 1980 when the various sectoral investment acts were replaced by a single Act under the direct administration of the Ministry of Finance. This resulted in concentration of decision making power within the Ministry of Finance and a gradual loss of initiative by the department and its investment role was relegated to a mere follow-up function. In 1986 a public corporation has been established to perform the same functions previously undertaken by the administration with a different staff. This further rendered the agricultural investment administration functionless, while the staff was not absorbed in the newly formed corporation. Commenting on the role of the administration the FAO mission has stated\textsuperscript{64}:

"Thus, while the private sector has expressed interest in Agricultural Investment, the administration has not been able, in recent years to channel this interest into visible investments. The role of the administration in promoting investment was not clear, nor does its planning role which should be complementary to that of PAEA in identifying, preparing and appraising projects was also clear."

Another prominent example of underutilized training was cited from both MOA and ABS, where both organizations had a fully trained staff of "Organization and Methods" officers, who never worked as such. This despite the fact that, the need for their service was so explicit in all organizations, subject of study. Ironically; ABS had a long established unit of organization development (OD) which was reported to be understaffed both quantitatively and qualitatively because none of its present staff had the required training except for the director of the unit. He himself was only partially trained in job-evaluation and organization structures.

On the other hand examples of misplaced trainees were also very common in the four organizations; the nearest example of these was cited from the training department at MOA and MFC. In both cases, the training directors were found to be specialized (with Masters Degree) in honey bees and plant protection respectively. At the same time neither of them had any training in the field of training.
It is also worth mentioning that one of the chief Clarks in MFC (El Gadarif region), while expressing his need to be trained in personnel management because as he put it "this would help me perform my job better", he was found to be trained in the organization and management of training. None of the training staff in MFC had such training.

Similarly, in RAC, the Social Development officer expressed his need for training in social development, while it was found that the training officer in the corporation had a diploma in social work, but no training in the management of training.

Another example which clearly shows that the utilization of training was even not thought of was cited from ABS where one of the top financial administrators with a diploma in banking and who had attended three training programs in finance and banking affairs, in addition to three seminars in the same venture. This same administrator had eventually been sent to training in personnel management for no clear reason. In his own words, he wished if he could transfer to any other department to gain new experience, but his bosses would not allow that.

However these were not the only examples of wasted training. Among the illuminating example was found in "Abu Gassaba Rice Project" in El Dueim region, where thirty employees had been trained in various field operations, farm mechanization and rice cultivation. As reported, all of them "have just gone" except for seven and these were virtually spread among the various departments and administrations in Khartoum, interestingly, it came to the knowledge of the researcher, that lately (at the time of this study), talks have been going between MOA authorities and their Egyptian counterparts concerning availing training for Sudanese agriculturalist in the field of rice cultivation and mechanization.

**Recipients Attitude**

In this section the attitude of the employees towards their jobs and the required training was investigated to find out how do they value training and hence their support for the training activity.

**4.2.2.4 Job Satisfaction**

Respondents were asked whether their present jobs match with their qualification and experience, the responses obtained are exhibited in the table below:
Table (35)  Job satisfaction

<table>
<thead>
<tr>
<th>suitability of qualifications to job</th>
<th>MOA</th>
<th>MFC</th>
<th>RAC</th>
<th>ABS</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suitable</td>
<td>21%</td>
<td>42%</td>
<td>55%</td>
<td>68%</td>
<td>36%</td>
</tr>
<tr>
<td>Unsuitable</td>
<td>36%</td>
<td>27%</td>
<td>18%</td>
<td>13%</td>
<td>29%</td>
</tr>
<tr>
<td>To some extent</td>
<td>39%</td>
<td>23%</td>
<td>27%</td>
<td>19%</td>
<td>32%</td>
</tr>
<tr>
<td>No answer</td>
<td>4%</td>
<td>8%</td>
<td>-</td>
<td>-</td>
<td>3%</td>
</tr>
</tbody>
</table>

As clear from the table only 36% of the total respondents said that their jobs match with their qualifications. Of these, the highest percentage was in ABS with 68% and the lowest being in MOA with 21%, where 36% said that their job did not match their qualifications, thus presenting the highest degree of dissatisfaction of the four organizations. Again it may be noted that the lowest percentage of those who said that their jobs did not match their qualification was in ABS, 13%. The large difference in the responses of ABS and MOA may be due to the great variation in the organizational aspects of the two organizations. This also may explain the closeness of the responses of MFC and RAC who almost enjoy the same organizational status in the mid way between ABS which is a fully autonomous body and MOA which represents a typical model of the traditional public bureaucracy. However, generally speaking, the total responses reflect a state of general dissatisfaction with the job, despite the variation in the degree. To have more insight into this aspect of job satisfaction respondents were asked whether they feel like changing position. The responses obtained were as follows:

Table (36)  Desire to change work position

<table>
<thead>
<tr>
<th>desire to change position</th>
<th>MOA</th>
<th>MFC</th>
<th>RAC</th>
<th>ABS</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>35%</td>
<td>25%</td>
<td>36%</td>
<td>25%</td>
<td>43%</td>
</tr>
<tr>
<td>No</td>
<td>59%</td>
<td>68%</td>
<td>56%</td>
<td>75%</td>
<td>52%</td>
</tr>
<tr>
<td>No answer</td>
<td>6%</td>
<td>7%</td>
<td>8%</td>
<td>-</td>
<td>5%</td>
</tr>
</tbody>
</table>

As shown in the table nearly half of the total respondents 43% said that they would like to change their positions. The distribution of these was 25% for MFC and ABS and about 35% for each of MOA and RAC. These in fact reflect an extreme case of dissatisfaction.

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Yet, still the majority in the four organizations 52% did not want to change position, even in MOA where the majority believed that their jobs did not suit their qualifications, hence looking for the reasons for the desire for change; respondents were asked to give reasons for change. The responses obtained are shown in the following table:

<table>
<thead>
<tr>
<th>Reasons for changing position</th>
<th>MOA</th>
<th>MFC</th>
<th>RAC</th>
<th>ABS</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bored – looking for different jobs</td>
<td>8%</td>
<td>71%</td>
<td>12.5%</td>
<td>40%</td>
<td>23%</td>
</tr>
<tr>
<td>Difference in specialization</td>
<td>13%</td>
<td>-</td>
<td>12.5%</td>
<td>40%</td>
<td>1%</td>
</tr>
<tr>
<td>Feeling of lack of recognition</td>
<td>11%</td>
<td>-</td>
<td>12.5%</td>
<td>-</td>
<td>11%</td>
</tr>
<tr>
<td>Poor Salary</td>
<td>22%</td>
<td>-</td>
<td>25%</td>
<td>-</td>
<td>21%</td>
</tr>
<tr>
<td>Work unsafe</td>
<td>3%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2%</td>
</tr>
<tr>
<td>Shortage of facilities</td>
<td>5%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>4%</td>
</tr>
<tr>
<td>Over loaded</td>
<td>3%</td>
<td>-</td>
<td>12.5%</td>
<td>-</td>
<td>4%</td>
</tr>
<tr>
<td>Under utilized</td>
<td>11%</td>
<td>14.5%</td>
<td>12.5%</td>
<td>-</td>
<td>11%</td>
</tr>
<tr>
<td>To gain new experience</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>20%</td>
<td>6%</td>
</tr>
<tr>
<td>Lack of motivation</td>
<td>5%</td>
<td>14.5%</td>
<td>12.5%</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>No answer</td>
<td>19%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

As clear from the table, the reasons for changing position in the organization constituted a number of institutional inconveniences felt by the employees. The most prevalent of these was 'boredom', this was expressed by respondents of the four organizations, and mostly felt in MFC and ABS, 71% and 40% respectively and further supported by respondents of ABS where 20% expressed their desire to "gain new experience". This in fact indicates that the organizational environment suffers from stagnation which could be the cause of the loss of interest in the present jobs.

The other salient reason for the desire to change position was the 'poor salary', 21% of the total respondents, though this was only felt in MOA 22% and RAC 25%, but it clearly indicates that they lack
motivation which was further explicitly expressed by respondents of MOA, 5%, MFC 14.5% and RAC 12.5%. Also 11% of the total respondents said that they find "lack of recognition". 11% of these were in MOA and 12.5% were in RAC. Again, taking the three reasons mentioned above it may be noted that lack of motivation constituted a majority in MOA 38% and RAC 50%.

Difference in specialization was mentioned by only 17% of the total respondents. 40% of three were in ABS, while non in MFC mentioned it as a reason for changing position. Also, noting that 11% of the total respondents said they were being underutilized, one may say that there was a problem of employees' placement and work distribution.

For further insight into the question of job satisfaction; respondents were asked whether they find appreciation from their bosses. The responses obtained are exhibited in the following table:

<table>
<thead>
<tr>
<th>suitability of qualifications to job</th>
<th>MOA</th>
<th>MFC</th>
<th>RAC</th>
<th>ABS</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>61%</td>
<td>67%</td>
<td>70%</td>
<td>81%</td>
<td>65%</td>
</tr>
<tr>
<td>No</td>
<td>4%</td>
<td>8%</td>
<td>4%</td>
<td>-</td>
<td>5%</td>
</tr>
<tr>
<td>Sometimes</td>
<td>29%</td>
<td>17%</td>
<td>26%</td>
<td>6%</td>
<td>24%</td>
</tr>
<tr>
<td>Frequently</td>
<td>6%</td>
<td>8%</td>
<td>-</td>
<td>13%</td>
<td>6%</td>
</tr>
<tr>
<td>No answer</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

As clear from the table above, 65% of the total respondents believed that their work was being appreciated by the bosses. These constituted the majority in each organization. Also about 25% of the total respondents believed that they often find appreciation which indicates that the source of dissatisfaction was not due to the work relationships, more than it was to organizational problems. Confirmation for this was also found in the previous findings relating to the job descriptions (see table 20 above) mentioned at the beginning of this chapter.

More insight into the attitude of the respondents towards their jobs was sought by asking the respondents whether they feel like introducing any improvement in their work practices. The responses are presented in the table below.
Desire to improve work performance

As shown in the above table, the majority in all organizations stated that they wish to have their work methods improved i.e. 72% of the total, while only 17% answered no. This in fact clearly indicate that the job dissatisfaction also was extended to include the way of doing the work itself, however despite this, the attitude towards changing the work methods was rather negative. Observations during this study clearly show that respondents lacked the motivation for change. This was rather clear from the following comments by various employees in the four organizations:

Comment by one of the employees at the planning department at MOA:
"Why change? Who cares what you do."
For these, the belief was that; since there are no criteria for good or bad performance, 'why bother'. In addition they believed that the bosses do not concern themselves much with what one does, thus indicating their need for encouragement and appreciation from the part of their bosses.

As for another employee:
"It does not really pay for results".
For these, the belief was that:
"If one is able to maintain his position with what he was doing, why bother and complicate things".

As understood during the course of this study, the incentive system in the organizations, subject of study had no direct relation to the quality of performance. The allowance system was rather automatic and fixed on an annual basis. Training is not subject to pay incentives except in the case of high level certificates. The incentive itself is specified through a fixed rate for the acquisition of the certificate rather than for the effect of training on performance. Thereafter whether the acquired training is applicable to the work situation or not seem to be nobody's concern. No special provisions were found in any of the four organizations concerning the utilization of training and its relation to deployment,
transfer or advancement of the employees. Such negligence of the quality of performance seems to be adversely affecting the morale of the employees. This was very clear from the following comment by a field inspector at El Rahad Scheme:\footnote{67}:

"What is the good performance? I doubt whether anybody knows? In my opinion this is just a camouflage used by those on top to promote whom they want."

4.2.2.5 Satisfaction with training

Respondents were asked whether they believe that the adopted training has contributed to the promotion of the employees’ capabilities in the agricultural sector. The responses obtained are shown in the following table:

Table(40) Satisfaction with training

<table>
<thead>
<tr>
<th>trg. Promoted employees capabilities</th>
<th>MOA</th>
<th>MFC</th>
<th>RAC</th>
<th>ABS</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>23%</td>
<td>20%</td>
<td>14%</td>
<td>25%</td>
<td>22%</td>
</tr>
<tr>
<td>No</td>
<td>21%</td>
<td>16%</td>
<td>29%</td>
<td>25%</td>
<td>22%</td>
</tr>
<tr>
<td>To some extent</td>
<td>40%</td>
<td>48%</td>
<td>52%</td>
<td>38%</td>
<td>43%</td>
</tr>
<tr>
<td>Do not know</td>
<td>15%</td>
<td>16%</td>
<td>5%</td>
<td>12%</td>
<td>14%</td>
</tr>
</tbody>
</table>

The table clearly shows that there was an obvious lack of consensus as to the effect of training on the capabilities of the employees; 22% answered positively while 22% answered negatively. More important is that this lack of consensus was almost the same in the four organizations denoting more or less the same perception. Yet in some of the ministry's administrations like agricultural investment, seed propagation and foreign relations as well as in RAC, the percentage of those who answered negatively exceeded those who were on the positive side, thus indicating an extreme case of dissatisfaction with the outcome of training.

It is noteworthy, too, that 14% of the total respondents answered 'do not know' which may rightly be an addition to the negative responses. Further as clear from the table 43%, or the majority of the total respondents answered 'to some extent' which clearly imply that there was no certainty about the effect of training on employees’ capabilities? So respondents were asked to give reasons for negative responses. The responses obtained are exhibited in the following table:
The above table clearly shows that the reason for the failure of training to contribute to the promotion of employees’ capabilities as perceived by the respondents was due to improper detection of need, inappropriate nomination, improper choice of training programs, misdistribution of training opportunities and finally improper utilization of the training experience. As could be seen all of which are factors which are directly related to the question of planning for training, despite the various expressions which appeared in the table, yet it seems that there was one general underlying belief in all the responses provided by the four organizations indiscriminately, that planning for training was not as efficient as it should be. This was clearly expressed in the comments of the respondents on the above mentioned question. Herein are some examples of such comments by some of MOA respondents:

"Training is too general, carried out in some fields in fulfillment of the established rules of seniority. Hence we find that people go for training which may not be needed by the departments.

For another respondent
"Concentration on theoretical training does not produce the desired result".

This opinion was also found to be held by respondents from the planning department at MOA.

Other comments which support the opinion relating to the improper utilization of training were found in the following:
"Trainees on their return are mostly transferred to another department".

For respondents of MFC:
"Training is not well directed, whereas it should be for a defined objective, we find most of those who go for training, they do so to improve their financial status rather than for improving their knowledge".
For respondents of ABS the reason behind the failure of training to contribute to the efficiency of the employees lies in the following:

"Absence of a comprehensive plan which defines priorities and the fields of training and the individuals to be trained within a specified period of time”.

So the respondents were further asked to evaluate the method of selection for training. The responses obtained are shown in the following table:

Table (42) Evaluation of the selection method

<table>
<thead>
<tr>
<th>evaluation of the selection methods</th>
<th>MOA</th>
<th>MFC</th>
<th>RAC</th>
<th>ABS</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Right</td>
<td>38%</td>
<td>41%</td>
<td>29%</td>
<td>44%</td>
<td>38%</td>
</tr>
<tr>
<td>Wrong</td>
<td>26%</td>
<td>15%</td>
<td>38%</td>
<td>12%</td>
<td>22%</td>
</tr>
<tr>
<td>In Between</td>
<td>7%</td>
<td>-</td>
<td>5%</td>
<td>-</td>
<td>1%</td>
</tr>
<tr>
<td>Do not know</td>
<td>29%</td>
<td>44%</td>
<td>28%</td>
<td>44%</td>
<td>39%</td>
</tr>
</tbody>
</table>

As clear from the table the majority, 39% of the total respondents could not give an opinion as to whether selection for training was good or bad. However, the majority in three of the organizations, subject of study i.e. MOA 38%, MFC 41%, and ABS 44% said that the method was just right. For these, the belief was that it guarantees that everyone will have a turn. Only in MFC where those who believed the method was wrong were a majority i.e. 38%, these believed that generally training opportunities were very few and especially so for the top level employees. So respondents were asked whether they believed that the available training provide equal opportunities for all employees of the sector. The responses provided are demonstrated in the following table:

Table (43) Equity of training opportunities

<table>
<thead>
<tr>
<th>equity of training opportunities</th>
<th>MOA</th>
<th>MFC</th>
<th>RAC</th>
<th>ABS</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>15%</td>
<td>35%</td>
<td>5%</td>
<td>33.3%</td>
<td>18%</td>
</tr>
<tr>
<td>No</td>
<td>57%</td>
<td>54%</td>
<td>65%</td>
<td>33.3%</td>
<td>52%</td>
</tr>
<tr>
<td>To some extent</td>
<td>28%</td>
<td>11%</td>
<td>30%</td>
<td>33.3%</td>
<td>30%</td>
</tr>
<tr>
<td>Do not know</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
The table clearly shows that the respondents strongly believe that the provided training was not just. 52% of the total respondents and the majority in MOA, MFC and RAC believed that the provided training does not provide equal opportunities for all employees in the sector. As for ABS it may be noted that the responses for all categories were more or less the same, which indicate that the feeling of injustice was not as obvious as in the other three organizations. Inquiry about the reason of the felt injustice, the respondents, mostly attributed the causes of inequity of training opportunities to the absence of an integrated training plan. This is exhibited in the following table:

Table (44) Causes of inequity of training opportunities

<table>
<thead>
<tr>
<th>reason of inequity of training</th>
<th>MOA</th>
<th>MFC</th>
<th>RAC</th>
<th>ABS</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absence of an integrated plan</td>
<td>47%</td>
<td>63%</td>
<td>65%</td>
<td>57%</td>
<td>53%</td>
</tr>
<tr>
<td>Available training</td>
<td>19%</td>
<td>31%</td>
<td>18%</td>
<td>29%</td>
<td>21%</td>
</tr>
<tr>
<td>Other reasons</td>
<td>7%</td>
<td>-</td>
<td>12%</td>
<td>-</td>
<td>6%</td>
</tr>
<tr>
<td>No answer</td>
<td>26%</td>
<td>6%</td>
<td>5%</td>
<td>14%</td>
<td>20%</td>
</tr>
</tbody>
</table>

As clear from the table, the majority 47% in MOA, 63% in MFC, 65% in RAC and 57% in ABS, they all believed that the causes of inequity of training was because there was no integrated training plan. This as best put by one of El Rahad's respondents:

"The departments' plans are never put into one unified and integrated plan in order to adjust the distribution of the training opportunities among the different departments. Secondly, despite the fact that agricultural work is an integrated whole, yet all emphasis is put on the agriculturalist. Thirdly, the national training directorate itself is not fully aware of its role and this often causes us to lose many training opportunities".

Other relevant explanations were also provided by respondents from ABS:

"In country training is not up to the standard. At the same time training abroad is usually tied up to donations and specified projects. These usually emphasize certain fields of training to the detriment of others".

Dependence on foreign aid was seen by a number of the respondents as a constraint depriving important categories from training. These include technicians, accountants and general administrators. As has been reported the accounting department at MFC, has lost ten of its trained employees during the past three years (by 1992) and since then no
replacement was found. Similar comment was also made by the chief accountant at RAC who complained that they received no training.

Yet as believed by almost all respondents that this was what the circumstances avail in view of the adopted policy of over reliance on grants and donations, which indicate that proper planning for training, was rather difficult if not impossible, unless the proper resources are secured.

However to have more insight on the respondents' view of training, they were asked what in their opinion are the basis for determining training needs. The responses provided are exhibited in the following table:

Table (45) The Basis for determining training needs

<table>
<thead>
<tr>
<th>basis of training need determination</th>
<th>MOA</th>
<th>MFC</th>
<th>RAC</th>
<th>ABS</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suitability of the training opportunity to the employees nature of work</td>
<td>30%</td>
<td>31%</td>
<td>45%</td>
<td>15%</td>
<td>30%</td>
</tr>
<tr>
<td>Do not know</td>
<td>24%</td>
<td>34%</td>
<td>24%</td>
<td>40%</td>
<td>28%</td>
</tr>
<tr>
<td>Efficiency of the employee</td>
<td>22%</td>
<td>23%</td>
<td>17%</td>
<td>15%</td>
<td>21%</td>
</tr>
<tr>
<td>Seniority</td>
<td>14%</td>
<td>3%</td>
<td>7%</td>
<td>5%</td>
<td>10%</td>
</tr>
<tr>
<td>Discipline and individuals willingness to work</td>
<td>6%</td>
<td>-</td>
<td>7%</td>
<td>25%</td>
<td>7%</td>
</tr>
<tr>
<td>Ability to utilize the training opportunity</td>
<td>4%</td>
<td>9%</td>
<td>-</td>
<td>-</td>
<td>4%</td>
</tr>
</tbody>
</table>

As clear from the table the responses provided show that the employees held different opinions as to what should be the basis for training needs determination. But, in total, rather than providing objective criteria, the responses provided a set of qualifications that should be fulfilled by the candidates i.e. efficiency, discipline and willingness to work and the ability to utilize the training opportunity. Thus giving the impression that, the candidates for training in the organizations subject of study, were non-conformers and not committed to the training cause. It is also notable, that seniority as appeared in the table, 10% of the total, was not assigned the same priority as a criteria for training, as that held by the organizations' management ( see table 12 above on criteria of selection for training ). This indicates that the respondents held different views from their management as to the basis for determining training needs.

An important observation to be made in the above table was that, the majority of the respondents i.e. 30% of the total believed that the training opportunity should be suitable to the nature of work. This may
also indicate that training was not always relevant to the employees' type of work.

In general, one would say that the responses provided above were no more than a reflection of the adopted practice of training which mostly rely on training coming through the foreign aid, then selecting candidates whose specialization match the area of the specific program. Explanations given to support the provided responses, suggested that training often goes to people who do not conform to the work regulations, or those who were not whole heartedly interested in work or else to those were not able to utilize the opportunity in the proper way.

Moreover, taking the third response; "Efficiency of the employee", putting this quality as a basis for training need assessment, suggest that, here too the respondents held the same opinion as their management, that training was being offered as a reward for efficient and hard working employees (see section on "expectation from training"). Yet a more important observation was that, a good percentage of the respondents answered 'Do not know'; 28% of the total. Of these 40% or the majority of respondents in ABS thus indicating an extreme state of a lack of awareness of the role of training in the organizations, subject of study, though, the responses may as well be an indication of a state of frustration due to the adopted practices of selecting trainees.

4.2.2.4 The Needed Training

Respondents were asked to state down what were the fields of training needed in their units? The responses provided are exhibited in the following table:

<table>
<thead>
<tr>
<th>trg. Most needed by the units</th>
<th>MOA</th>
<th>MFC</th>
<th>RAC</th>
<th>ABS</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical specialized fields</td>
<td>70%</td>
<td>54%</td>
<td>55%</td>
<td>74%</td>
<td>65%</td>
</tr>
<tr>
<td>Administrative fields</td>
<td>27%</td>
<td>44%</td>
<td>45%</td>
<td>26%</td>
<td>33%</td>
</tr>
<tr>
<td>No answer</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2%</td>
</tr>
</tbody>
</table>

As clear from the table most of the respondents 65% believed that the technical training was the most needed by their units. The administrative field was only mentioned by 33% of the total respondents. Of these, the highest percentage was in MFC 44% and RAC 45% respectively. This in fact goes in line with the available training both at the organizational level as well as at the national level. Then respondents were asked to state down which type of training most useful to the type of work done by them? The responses are shown in the following table:
Table (47)  Training needed to type of work

<table>
<thead>
<tr>
<th>trg. Needed to type Of work</th>
<th>MOA</th>
<th>MFC</th>
<th>RAC</th>
<th>ABS</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long theoretical training Programs</td>
<td>11%</td>
<td>32%</td>
<td>20%</td>
<td>6%</td>
<td>15%</td>
</tr>
<tr>
<td>Short practical training</td>
<td>76%</td>
<td>56%</td>
<td>80%</td>
<td>81%</td>
<td>74%</td>
</tr>
<tr>
<td>No answer</td>
<td>13%</td>
<td>12%</td>
<td>-</td>
<td>13%</td>
<td>11%</td>
</tr>
</tbody>
</table>

As shown in the table the most useful type of training, according to respondents' belief was the short-practical training programs. Long theoretical training was most needed by MFC respondents 32% and then RAC 20%. Those who provided no answer were 11% of the total which was rather difficult to explain; was it because they felt their work needed no training? Or was it just an expression of frustration? Respondents were specifically asked whether they wanted to attend any specific training but did not have the chance.

It was found that 60% of the total respondents answered "Yes". The responses are shown in the following table:

Table (48)  Unfulfilled training individual training required organization

<table>
<thead>
<tr>
<th>Yes</th>
<th>MOA</th>
<th>MFC</th>
<th>RAC</th>
<th>ABS</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>63%</td>
<td>54%</td>
<td>63%</td>
<td>50%</td>
<td>60%</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>2%</td>
<td>-</td>
<td>5%</td>
<td>6%</td>
<td>3%</td>
</tr>
<tr>
<td>No answer</td>
<td>35%</td>
<td>46%</td>
<td>32%</td>
<td>44%</td>
<td>37%</td>
</tr>
</tbody>
</table>

As clear from the table 60% of the total respondents and the majority in the four organizations felt that they wanted to attain certain training but were not given the chance. This may indicate that the individual need for training was not satisfied yet through the provided training. Again it may also be observed that 37% of whom 46% and 44% in MFC and ABS respectively, provided no answer which is again difficult to explain was it because they do not know or because they felt there was no way to satisfy their need. However evidence obtained during this study disclosed that there were a good number of employees in the four organizations who were attending different training programs in various training institutions on their own personal account and without their administrations' knowledge. Though it was rather difficult to spot these in MFC, RAC and ABS, it has actually been found that five of these were in MOA. This in fact may point to a discrepancy between the available training and actually needed training because people would not
just go for training on their own account unless the need for that training was very strong. It was rather interesting to know that of those who were spotted in MOA, two were actually interviewed to have more insight into their real need for training.

They were found to be studying management because as they believed this would help them a lot if they wanted to go into private business, when they were asked why they did not go through the formal channels, they said that they would rather spare their chance for training through the formal channels for a better chance abroad. This clearly shows that the bias towards training abroad was rather great in these organizations, because training abroad highly supercedes internal training in terms of the fringe benefits. This was further confirmed in this research when the researcher has eye witnessed three cases in different administrations of MOA where the candidates had insistently rejected their nomination for internal training. The reiterated reason by all of them was that they would rather wait for a "better chance abroad".

Yet further support for such incidence was provided by the NDT authorities, who assured that internal training was greatly prejudiced, which subject them to difficulty in meeting all the required training abroad. The following incidence was provided as an example of the bias for training abroad; when nine of the agricultural extensions were nominated by their units to training abroad. According to the NDT regulations, the national directorate of training rejected the request because the required training was available inside the country so why seeking it abroad? Nevertheless, the reaction was that the nominations were withdrawn altogether and the internal opportunities were refused altogether.

4.2.3 Recent Developments of the Process of Training Need Assessment in the Organizations subject of study

Update information of the process of training need determination in the organizations subject of study was sought to make up for the gap from 1992 up to 2005.

For the purpose of obtaining such information a series of interviews and record survey were carried out in MAO and ABS. As for MFC, was found that the corporation has been dissolved, and its employees were redeployed in various administrations of MAO. Information on RAC was obtained via their headquarters office in Khartoum North.

The objective was to find out:

1. whether the process of training needs assessment has been developed or changed.
2\ examine the pattern of the conducted training.
3\ to find out whether any change in attitude towards training have taken place in the research organizations.

4.2.3.1 Findings of the Survey

The process of need determination in the 3 above mentioned organization was found to be following the same old procedure in relation to the training programs and selection of trainees, training is still regarded as a right per se to which all employees are entitled at some point in their work life. Fair distribution of training opportunities among different departments, divisions and individuals in turn is the main criterion.

Training opportunities are sought in the different training plans and programs devised by various training centers and institutes inside the country. Training abroad is also dependant on the chances availed by different countries either through bilateral relations or through international cooperation technical assistance. The range of countries which provide training opportunities for MAO and its administrations and affiliated institutions include various Asian, African, European and Middle Eastern countries, which may indicate a great variability in knowledge and experience due to the variations of the sources.

Management grades’ training is mostly confined to educational studies in various higher diplomas, masters and Doctorate degrees, or else short seminars courses and workshops, in various specialized areas of agricultural disciplines

As for ABS the range of opportunities is still wider, since the bank has no problem of financing its own training, hence it has more freedom in choosing the type of training it wishes for. In the country training of ABS is two fold:
- Departmental; carried out by the bank's training center. These are carried out either within the bank's premises at the headquarters or at the states' capitals.
- training at various in country institutions; these include training institutions as well as educational institutions, like the universities and the high institute of finance and banking studies. As clear from the nature of these institutes the training acquired is of an educational nature which aims primarily at developing the employees rather than developing specific work skills. It is worth mentioning here that some of these educational programs include basic university degrees, as well as higher diplomas and Masters Degrees.
4.2.3.2 The Pattern of Training

a-The pattern of training at ABS

The pattern of training at ABS follows the same old general pattern which was heavily oriented towards specialized professional training courses. Management and administrative training is still minimal. Management grades training are mostly confined to visits, seminars or workshops abroad. These are of different financial accounting and administrative nature with the objective of exposing the bank's employees to modern experience and technological advances.

Departmental training of the bank is generally used for group training of different levels functional groups, either at the centers or at the states. The objective of such training programs is of two types:

A. programs that target the solution of impinging performance problems, whether administrative or other operational banking procedures. It is worth mentioning that for the past 4 years the bank's training center has introduced a training program for supervisory level employees, aiming at developing supervisory skills of its lower and middle management. The program is being launched with the help of Sudan Academy for Administrative Sciences who actually design and implement the program in close coordination and supervision of the center's staff.

To rationalize the expenditures on the cost of organizing group training for its employees the bank has made full use of its training facilities by working on commercial basis. Thus other employees from different banking institutions or agricultural administrations and corporations are also invited to participate after paying their due fees. As such, the center's training activity has become a revenue generating activity contributing to the bank's revenue. As has been reported, the revenue of the center for the years 2002, 2003 has been equal to the sum of 1,303,000 and 917,575 Dinars respectively. These count for the revenue of training programs as well as of renting the training facilities of the center to other interested organizations.

B. Programs that target the development of employees' knowledge and skills; these are usually programs that are designed to impart knowledge of new practices in the fields of bank administration, financial and accounting operations. Developmental objectives of the bank's training programs are also sought through the means of exchange experience training programs organized by the center for its employees of different branches inside the country and in the neighboring countries. The following table shows the type and number of training programs provided by the bank annually (on the average).
<table>
<thead>
<tr>
<th>Type of training</th>
<th>Number of programs</th>
<th>Area of training</th>
<th>Location of training</th>
<th>Number of trainees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Departmental central</td>
<td>5</td>
<td>-supervisory skills -computer basics of banking operations -new trends in banking operations</td>
<td>ABS training center</td>
<td>90</td>
</tr>
<tr>
<td>Institutional in country training</td>
<td>Numerous (Unspecified)</td>
<td>Administrative (various areas)</td>
<td>Various in country training institutes</td>
<td>115</td>
</tr>
<tr>
<td>Departmental state</td>
<td>5</td>
<td>-Supervisory skills -legal procedures of reimbursement and banking operations</td>
<td>The states</td>
<td>312</td>
</tr>
<tr>
<td>Computer</td>
<td>28</td>
<td>Operation premises</td>
<td>Training centers Training centers Training centers</td>
<td>100</td>
</tr>
<tr>
<td>Computer (different)</td>
<td>1</td>
<td>-project planning and evaluation -windows typing English -SSPS</td>
<td>ABS training center Training centers Training centers</td>
<td>8</td>
</tr>
<tr>
<td>Training abroad</td>
<td>Many, unidentified</td>
<td>Unidentified Different administrative financial accounting</td>
<td>-Training centers -different management levels</td>
<td>3</td>
</tr>
</tbody>
</table>
As clear from the table, still training of ABS is oriented towards technically specialized training whether inside the country or abroad. This virtually does not deny the fact that the Banks employees do have a constant presence in various training programs held by the Sudan Academy and The Management and productivity center but notably, the attendees were mostly of junior or middle staff levels. Senior staff and managerial levels are completely absent. Worth mentioning here, that Sudan Academy holds about six top management training programs of different nature and interest, with the aim of developing managerial skills. Another remark on the above table is that the large number of trainees shown in front of supervisory and other administrative training is mostly due to presence of other participants from other institutions.

ABS training plans equally include academic educational programs. During the past 4 years; 3 employees have been found to complete their Masters degree, 2 in agricultural economics and one in developmental economics. All 3 were reported to have been assigned new positions as managers of the commercial sector, credit department and Wad Medani branch respectively.

For the year 2003, 6 more were enrolled in higher studies, 4 of them to get Masters Degree and 2 higher diplomas. Moreover, the bank's training plan for the past decade has catered for qualifying its employees in basic university degrees and banking diplomas. The ongoing studies include:

- 18 BScs
- 6 diplomas

All such academic studies are carried out at the High Finance and Banking Studies Institute. It is worth mentioning here that during the years 2001/2002 and 2002/2003; 4 and 8 employees have been graduated respectively. It has also been reported that 2 of these are likewise assigned important positions as managers of the financial and budgeting departments respectively.

**b- The pattern of training in, MOA, RAC, and MFC**

Reviewing the training plans at MOA since 1997 it was found that training has been following the same pattern of the previous decade; mostly oriented towards technical professional training in various agricultural fields, carried out on piecemeal bases. Towards the mid nineties, training opportunities have grown lesser due to the cut of the technical assistance brought on by the boycott policy exercised on Sudan by the international community.

The following table illustrates the pattern of training in MOA:
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Long academic training abroad</td>
<td>___</td>
<td>___</td>
<td>2</td>
<td>___</td>
<td>3</td>
<td>___</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Long academic in country training</td>
<td>16</td>
<td>15</td>
<td>20</td>
<td>22</td>
<td>18</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Short training abroad technical</td>
<td>24</td>
<td>30</td>
<td>17</td>
<td>7</td>
<td>6</td>
<td>3</td>
<td>6</td>
<td>20</td>
</tr>
<tr>
<td>Short in country training technical</td>
<td>75</td>
<td>50</td>
<td>9</td>
<td>18</td>
<td>33</td>
<td>___</td>
<td>14</td>
<td>20</td>
</tr>
<tr>
<td>Short in country training administrative</td>
<td>2</td>
<td>___</td>
<td>3</td>
<td>___</td>
<td>1</td>
<td>___</td>
<td>___</td>
<td>___</td>
</tr>
<tr>
<td>Computer</td>
<td>15</td>
<td>8</td>
<td>3</td>
<td>28</td>
<td>___</td>
<td>18</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

Source: MOA, Training records, 2005

Training in MoA, as shown in the above table is following the long existing pattern, which was heavily inclined toward technical specialization. Administrative training is almost absent. In a period of ten years, only 6 training opportunities were availed in managerial skills. These were usually availed to the assistant managerial posts of various financial, personnel and similar functional specializations.

As clear from the above table in the period of 8 years, 95 long study Opportunities were availed for employees of MoA and its affiliated departments.

The table also shows that training abroad is obviously cut sharply, yet a more feasible substitute is found in the in country universities where most of the higher studies are virtually held at present.

These are usually Masters, PhDs and higher diplomas. It has been found (training records: 2005) that up to 1999 there were 177 trainees in long study courses; 38 of these were supposed to have finished their studies and come back, but they did not.
4.2.3.3 Objectives of Training

Statements of the objectives of training were very vague and usually confined to the phrase "to improve performance with no specification of the performance problem, nor the standard of the required performance. Like in the case of ABS no in depth evaluation of the conducted training is exercised the phenomenon just continues to perpetuate. As observed by the researcher monitoring of training in MoA was very weak. The record system is extremely distorted to the extent that the non-returnees could hardly be noticed. Evidence during this study was available in the fact that reporting on the non-return trainees did not take place virtually until after 2 years of their non-coming back. No evidence from the available records, of the action taken against them could be cited.

4.2.3.4 Utilization of Training

Unlike the case of ABS, where cases of appropriate utilization (without value judging how appropriate) of the bank's trainees has been reported, a number of cases of underutilized and wasted training could be cited from MoA. The most prominent of such cases was found in the case of the head of the training department who was sent for a one year training program on "manpower planning and development". On his return he found a replacement was given the job while he was left idle for the past 9 months. Other examples of the wasted training could be cited of another employee who was trained in management, analysis course, while actually employed in the "bilateral relations department". Yet another case was found in "a statistics and information" employee who was trained in "a training of trainers program". Many cases could also be cited of inappropriate distribution and inequitable allocation of training resources and found in the following:

During the same eight years period quoted above, 14 long study courses (MScs and PhD) were availed to the department of grazing and fodder. Two were trained in the internet, while internet training was not availed for the statistics and information or planning departments. During the same period the grazing and fodder department have had 57 training opportunities while the extension and technology transfer department had only 27 opportunities. Only 9 opportunities for training in planning, strategic planning and agricultural policies were available for the same period.

To conclude this part one could say that, according to the finding of this research, planning for training in MoA could hardly be termed so. It would rather be called a random activity carried on as circumstances might avail.
Systematic planning for a training activity should be a response to a need. A training need is defined as a performance gap between "what is" and "what should be".

As noted by some of the managers at MoA:

"Training in MOA lacks the clear vision"

The quotation is explicitly true; the training function at MoA is still entrapped in the micro-level vision of training individuals and building capacities of individuals for individual jobs without envisioning the whole picture. The picture of agricultural development as surveyed in chapter three above clearly indicates that it’s the macro-level performance which is at stake. Agricultural development for the past thirty five years has failed to achieve sustainability.

Piece-meal training here and there is no solution to the entire sector's performance problem. Many indicators have been eventually spotted during the course of this study that point to performance problems of macro-level nature, like problems of policy planning and articulation, inefficient resources allocation and utilization, inflexibility to adjust to external changes and failure to provide and coordinate basic agricultural services like research, extension and seed propagation. Worth mentioning here that in 2004 the FAO, in cooperation with the department of Planning and Agricultural Economics have organized eight training Programs within the context of strengthening the institutional capacity for planning, Economics and Policy Analysis for the Agricultural Sector. Participants from the states as well as the center were invited. The focal point of the programs was on different concepts of planning, policy analysis, data collection and analysis, strategies of the Agricultural Sector as well as Agricultural marketing. The participants were mainly top level administrators who are responsible for planning and organizing the activities of agricultural development including the state ministers of agriculture. Generally speaking this finding came in confirmation with the findings of this research that the adopted training in MoA has been undermining important areas which directly impact on the macro level performance of the sector. Adding to this the whole world is now undergoing drastic changes brought about by Globalization and economic liberalization which in turn imposed on national governments a new role perception and definition. This as put by one of the agricultural economics professors:

"Such changes reflect on the needs of the agricultural sector for the human resource (in quantity and quality) that the present employees would definitely be targets for a process of intensive rehabilitation and retraining in order to change the basic concepts and principles of their work methods. Likewise they need to learn new skills and attitudes for managing the new role of the sector which became entirely dependant on market mechanisms for directing the use of agricultural resources. This
entails the emergence of different training needs than before and consequently a change of planning and implementing the training programs."

If this is the case, Sudan still has undergone some profound changes since the mid 90s brought about by the inception of the Federal rule and the concomitant division of powers between the central government and the states. Again, this has its impact on the quality and quantity of competences needed at each level.

Of great relevance here is that Sudan is entering a new era of peace after a long war, which exhausted the country's resources and crippled all development efforts. This undoubtedly would impact on the direction of policy and development programs decision making. Consequently a new vision and reassessment of all development efforts is apt to take place. Hence, new daring and creative competencies are required for doing the job.

Indeed, the Joint Assessment Mission for sustained, development and poverty eradication (JAM) has stated:74

"In order to halve poverty by 2015, not only all does the annual rate growth of overall Sudanese GNP need to average about 10 percent, but the pattern of growth has to change"

The sources of growth, as stipulated by the mission, need to shift from mainly oil related activity in mining, manufacturing and construction, and in irrigated and semi mechanized agriculture, to growth that is increasingly rooted in smaller towns and based on environmentally sustainable increases in the productivity of small-scale traditional farmers and pastoralists. Such growth would aim to improve the lives of 80% of Sudanese living outside large urban agglomerations, and is an essential level for conflict prevention.

A number of actions to enable expansion of rural income were further proposed by the mission. These include75:

1. Reducing marketing margins and hence increasing income from domestic sales and export of grains, oil seeds, forestry products and live stock.
2. Improving policies to expand the productivity of small-scale farmer;
3. Changes in land policy that will improve incentives for farmers' investments in long term sustainable productivity
4. Developing mechanisms for increasing access to seasonal credit for small-scale farmers, and to micro-finance in general for rural residents; and
5. Conducting an agricultural survey to dramatically increase the amount of available data.
As evident from the above it could be readily be agreed that successful implementation of such actions require high level skills and management competencies which are usually available only to strategic thinker type of managers and administrators. Such type of skills and competencies could not be provided by the ongoing training activity of the agricultural sector which is focused at developing individual technical competencies at a squander with no clear immediate or overall objective.

However this study is not concerned with identifying the training needs of agricultural sector, rather it is concerned with identifying the problems which hamper systematic training need assessment. Evidence from the above data clearly revealed that training in the organizations, subject of this study, was following a traditional pattern which was basically based on selecting trainees according to seniority basis, by turn without systematic analysis of the real needs of the organizations, nor the jobs occupied by the incumbent trainees. This as revealed by this study has created a negative attitude among the employees, while the decision makers’ attitude remained indifferent indicating lack of awareness as to what training could actually do towards improving the organization performance. Thus training remains an isolated activity.
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CHAPTER FIVE

Discussion

Knowledge and technology of training have grown drastically during the last 4 decades. Due to the development of system theory and its concomitant techniques of training design and methodologies recognition of the contribution of training to organizational effectiveness have gained impetus. Most important the linkages between the performance of training and the performance of organization and individual performers became more conspicuous through the development of the theory of training need assessment which came to be the backbone of the entire training process.

The basic foundation of the theory of systematic need assessment is that training is for filling a performance gap. Identification of the performance gap and proper analysis of the causes of the gap form the core of the whole process of need assessment. Analysis of performance is the corner stone of the whole process of need assessment without which the process is relegated to sheer guesswork since very often performance deficiencies are caused by a variety of factors and the act of the performer is only one among these. Equally true performance analysis is a prodigious task that requires a skillful analyst, involvement and support of the organization’s top management as well as involvement of trainees themselves. Basic structural and attitudinal requirements are also fundamental to the analysis process. These are:

1. Clear organizational objectives and plans.
2. Rational organizational structure.
3. Clear statements of job description.
4. Well established performance standards.
5. A qualified training staff.
6. Proper attitude towards training.

For most organizations the presence of all such requirements would be an exception. Thus training for various reasons is taken lightly and the decision to train is taken a priori.

In the previous chapters the process of training need determination in the four organizations subject of study, revealed that in three of the organizations i.e. MAO, RAC and MFC, basic requirements do not exist, while in the ABS most of the basic requirements do exist, yet as will be explained in the following section of this thesis, the process of need assessment follow the same procedure in the four organizations. Further explanation of the phenomenon will be provided while examination of the four basic questions is attempted.
5.1 Premises on which Training Decisions are built

Examination of the results provided for this question revealed that the training decision in the four organizations is taken rather lightly. The activity was historically founded and continuing on by its own inertia. Evidence from this study has shown that training is carried on an annual basis, tens of employees from each organization annually go to training, most of them come back, yet some do not come back. Those who come back either return to their old jobs or transferred vertically or horizontally to some other position and yet some might be disposed off altogether. Cases of such after training incidents have been quoted in the results of this study (see chapter 4 above on the utilization of training). No evaluation of the training activity is carried out in the four organizations. Equally true no consistent follow up of trainees is conducted in any of the organizations studied.

Though annual reports on the performance of training are usually submitted every year, but these come up in the form of number trained and fields of training to tell that everything is good. No analysis of what and why of the training plans is carried out. The plans themselves are forged either in response to the training plans of in country training institutes and centers or according to the anticipated technical assistance programs. Systems thinking envisage training as a sub-system that contributes to the entire system, which is the organization. Thus planning for the organization entail that planning should also encompass the training function to determine what contribution is required from training, where and when it is needed. Thus like any other planning activity, the raw material of the training plan is information.

Information on training needs, unlike any other information is organization wide and to some extent in the external environment where possible changes could likely take place and impact on the organization and affect its performance. Therefore a training decision in fact, is a result of a long process of eliciting information and analyzing information and acting according to the results of the analysis.

The decision to train necessarily involves different parties in the organization. Top decision makers; to decide on what training is needed by the organization, where training is needed in the organization, and when and how the training resources should be distributed. Managers and supervisors’ decisions are needed on what training is needed by their departments and who needs training and when. Employees decision is needed to ascertain the need of the individuals for training as well as to secure their commitment.

Peterson (1998:4) maintains¹: “Fully effective training needs analysis must have the positive cooperation of the top decision makers concerned, otherwise it will lack authority. And it might become seriously flowed through the provision of inadequate or inaccurate information”.

¹ Peterson, 1998:4
Top decision makers involvement in the process of training need assessment is required because it provides the required backing for identifying and analyzing the need for training, they are the business planners who have the full grasp of the organizations’ vision, mission and objectives, they also have the required information on the situation of the organization’s performance and hence they could easily point to where training is needed. They could provide direction to the training activity but also their involvement provides the required support and facilitations of implementing the need analysis and the resultant training.

Evidence of this research did not reveal any direct involvement of top decision makers neither in identification nor in analysis nor in the training plan formulation. The training plan is separately prepared and discussed outside the context of the work plans. Training staff do not participate in discussion of the work plans, nor is their advice ever sought concerning the number and type of manpower required for implementation of the work plans. Discussion of the training plan takes place only in ABS, but only in relation to the cost of the plan, particulars of the plan are dealt with only as numbers, especially where conflict has risen between rival departments over allocations. As to MOA no discussion of the plan takes place except at the national directorate of training, where the cuts in allocations usually take place.

Yet this negligence of the decision makers is marked only in the case of in country training. As for training abroad they practically take full responsibility for allocation of training opportunities and selection of trainees. In ABS a committee of top level executives is responsible for the task. In MOA, the task is assumed by the top executive who does the allocation. This in a way confirms the view that training is being used to reward good performers or those who are favored. Evidence from this study, revealed signs of discontent with the criteria adopted for training and selection of trainees (see tables 12, 14, 40, 42 above). As noted by some of the training staff in the recent past years some of the MOA’s departments and corporations started to send some of their people to training on their own resources, outside the usual channels of training department.

Generally speaking, the only viable direction which the training department receives at present is the annual circular issued by NDT every year. Evidence also shows that observance of the set of rules in those ordinances is not always adhered to. For example some of these rules call for cutting long study training, yet evidence from this study shows that at present, MOA has 117 ongoing long study courses. Equally true the national training act of 1992 and its amendment of 2003 states that non-returnees from long study courses should be reported immediately to NDT. Evidence from this study shows that some non-returnees were not spotted until after 2 years. Yet NDT itself has no means of securing that its directives are properly followed,
while at the organization level no such measures do exist either, which further indicate that training is virtually an isolated activity.

5.2 Involvement of Senior Managers and Supervisors

These are the key to performance analysis. They are the prime source of information of what the required performance is and what the actual performance is. Systematic training need assessment stipulates that a training need is in fact a performance gap. In order to determine “what” training is required the performance gap has to be determined, whether in the performance of the organization, or a department or a group of employees or an individual employee. Determining the gap entails intensive information of what is required. Such information is found with managers and supervisors. This as put by Peterson (1998:14):

“They work with the organizations’ detailed realities everyday. So they spot the important little things that almost always escape top management. They also know the kind of changes or supports most likely to make their employees fully effective”.

Furthermore these managers and supervisors are the performance appraisers, who are entrusted with appraising their employees’ performance and judge their efficiency or deficiency. They are actually the sole assessors of the performance gap. The validity and preciseness of their assessment determine their capability of making the right nomination for training. Hence, by extrapolation, the gap identification and right nomination of trainees assumes that supervisors’ decision is based on full knowledge of the required performance and sound performance appraisal.

Evidence from this research shows that both conditions do not apply in the organizations subject of study performance standards are not established in the four organizations, except in ABS were financial targets are specified for the banks monetary operations only.

Performance appraisal is conducted through the means of performance reports common in all governmental organizations, but, ignoring the non viability and the wide criticism condemning these reports as being unobjective, they do not provide true indication of the quality of performance or the performance gap.

Evidence from this study shows that, the held belief in the organizations subject of study is that training is by turn. Seniority was given as the prime criteria for selection. The older are liable to leave earlier, so they go first, though seniority has nothing to do with performance. This in fact raises many questions about the criteria of trainees’ selection. However this issue does not seem to evoke any bad feelings within the four organizations. Still, recent interviews with different people in MOA and RAC showed that the common belief among these people is that, seniority is the best way for selection because it guarantees fairness and justice. This in fact further reveals
that the decision as to what training is required and who is to be trained is taken without much thought of what the organization need or what the trainees really need. Proper performance appraisal entails the setting of performance targets by the bosses, and the establishment of the performance criteria against which the employees’ performance is to be measured. None of the research organizations have shown that such practice is being carried on. On the contrary, evidence from this study showed that operational planning is almost absent and that the annual plan or the budget planning does not usually encompass the manpower estimates. This in fact clearly indicate that selection of trainees, in the absence of performance criteria is lacking validity since bosses originally can not establish for sure what training is really required. As such the whole process is no more than a guess work.

5.3 Involvement of Employees

Most writers in the field advocate that involvement of employees in the process of need assessment is essential because:

1. It provides support and cooperation for the process of performance analysis. Identification of performance deficiency becomes easier, when people are cooperative and ready to provide true information.

2. It motivates the learning process. People become ready to attend and absorb training if they actively participate in identifying their own deficiencies and felt the need for correcting them.

Evidence from this study revealed that trainees’ selection to the various training programs is usually carried out either by their direct supervisors, the case of MOA, or by consultation between the training department and supervisors, the case of “some” of ABS training programs.

On the other hand identification of the performance gab is only one side of the coin. Proper identification of a performance gap should give direction to the training activity itself, through the statement of proper training objective that tell “what the trainee should be able to know or do after training”. In other words the training objective should state what knowledge, what skills, and what attitude the trainee is supposed to learn from the particular training program, under the normal circumstances of his work environment. Evidence from this research shows that, statements of training objectives are completely neglected. Where they appear, they are usually written in vague terms saying “to improve performance” or “to meet the shortage in the area” or else “to meet the expected expansion” without specifying what performance or what shortage. As such the training decision was devoid of context.
5.4 Structural Requirement for Systematic Training Needs Assessment

Systematic training need assessment theory stipulates that certain basic requirements should be fulfilled so that proper training needs assessment could be accomplished. These basic requirements are:

1. Clear organization objectives.
2. Rational organization structure.
5. Qualified training staff.

Systematic training need assessment assumes that performance as a subsystem of the organization’s total system is apt to affect and be affected by other sub-systems. Systematic training needs assessment (Turrell 1980) theory emphasizes the existence of the above requirements for 2 reasons:

1. Existence of such organizational factors provide clarity and evidence for performance all over the organization, thus enhances good performance.
2. These same factors provide a source of information for the training need assessment research. They facilitate identification of the training problems as opposed to the problems that need other interventions.

Examination of these factors in the four organizations revealed that the planning process is weak; investigations on the organizations objectives and plans revealed (chapter four above) no evidence of objective clarity, and no indication of manpower planning to cater for the requirements of implementation of the business plan. Written job description is non-existent. The only document of job description found in ABS was rather old. Performance standards are completely missing. In fact, as observed by the researcher, the issue of performance standard was of no concern, neither to respondents nor to top managers. Evidence for this was found in the contradictory responses of the research sample where, on the one hand they confirm that they have clear objectives and work plans as well as the required responsibility, which may indicate that the respondents do not face any organizational problem, yet further investigation revealed that they do face a host of organizational as well as environmental problems (see table25) which may have their impact on performance.

Such organizational and environmental problems essentially need to be rectified before embarking on training. Indeed the presence of such problems could as well mislead the identification of training need if proper analysis of the need is not carried out. Evidence from this study has also shown that no need analysis is carried out in the four organizations, neither at organizational level nor at the individual level.

Truly, as revealed by the responses of the sample, they could be clear about their organizations’ objectives, on their job description, on their
authorities and responsibilities but all this is in their minds and evidence from this study did not show that they were ever asked of what in their minds neither as to the problems they face, nor to the training they feel they need. They are not involved at any stage of the need assessment process. As evident from this study they are just apprised at the end of the process of their being selected for the particular training. According to the researcher’s observation some trainees go to training without even knowing the name of the training program.

Recent approaches to the question of training need assessment though emphasize the conduct of analysis of organizational problems, yet they do not lay much emphasis on the existence of structural requirements. Instead shorter and more practical techniques were used spontaneously through the involvement of all parties; different levels of management, supervisors as well as subordinates.

As shown in chapter 2 above, more emphasis is now being laid on direct and active involvement of the different parties in the need identification and analysis process more than on documents’ analysis. Peterson (1998 :) assumes that:

“What is important is what people actually do or do not do and not on what they profess or claim to do”.

Thus the non involvement of the trainees in the need assessment process has devoid the training staff in the sample organizations of valuable information which is very basic to the need assessment process.

5.5 Attitude towards Training

Systematic need assessment theory stipulates that impetus is given to the need assessment process by the acts of the different parties and their contribution to the process. These parties according to Stanley (1987) are:

1. Decision makers.
2. Trainees.
3. Training staff.

According to the theory the initiative for implementing training need assessment projects is the training departments’ responsibility but support and involvement of decision makers as well as of employees is fundamental to the effectiveness of the process (Stanley 1987, Turrell 1980, Peterson 1998 and others).

Results on decision makers’ attitude towards the training process revealed that moral and financial support for training is widespread among the four organizations, yet no similar support for a lengthy research on training need has been indicated anywhere; probably because of lack of awareness or probably because of the costliness of needs assessment projects. No doubt there is a general laxity from the part of all parties towards the issue. Decision
makers do not see any wrong in the adopted method of determining the required training or required trainees. For MOA it is quite obvious that the need issue for long has been determined by the financing agencies (technical assistance programs and the ministry of finance). So they are playing the role of being recipients only, no much effort is made to improve the situation of training, though technical assistance programs have stopped since the early nineties. Training opportunities were greatly minimized, but, there seem to be no active role played by the ministry to attract or mobilize new training opportunities. Shift is made from dependence on international technical assistance opportunities to opportunities availed through bilateral relations with a host of a diversity of Afro-Asian and Arab countries, thus adding more to the fragmentary nature of the available training leading it astray. Evidence from this study have shown that training is being focused on building individual professional capacities at the micro level, while major macro level capacities are being undermined (see chapter four, section on “the pattern of training). Indeed as assured by different personalities within the ministry, this was most probably brought about due to the fact that training at MOA is lacking the proper vision.

It is worth mentioning that in 2004 training abroad was completely suspended compared to 30 training opportunities in 1998 and 24 in 1997 and 17 in 1999. The same could be said of in country training, where training was only half the number of the training implemented in 1997. As there is no manpower estimates there does not seem to be any worry about the required competencies, though as one of the ex-planning authorities of MOA noted:

“The ministry is at danger; in ten years time all the competencies at the top will be lost through retirement, and there is no second line managers. The problem is even aggravated by the low quality agricultural schools graduates recruited during the last decade”.

Despite this no replacement planning is being practiced at MOA and the problem seems to annoy no one. Quoting the strategic report (2000) on its comments on the unrealistic nature of the 10 years plans 1992-2000 objectives, it has been stated (item 5:172) that the plan aimed at:

“Increase the number of competencies by 5 times, reinforce agricultural scientific research and increase its centers and institutions. The discrepancy is that the number of researchers at the Agricultural Research Corporation, at present is 210 while before the number was 450 at the early seventies”.

Most of those are BScs and masters degrees holders, while PhDs holders are very few. At the ministry’s headquarters there are only 4 PhD holders, while in the sixties and seventies there were tens of them”.

As for ABS, though moral and financial support is even higher than in the case of MOA, yet the same laxity as to what type of training is required or what type of alternative action could be adopted, or as to whether the result of
the ongoing training are the required results or not. All such issues do not seem to evoke any feelings on the part of the bank’s authorities.

As shown in chapter four above, the bank facilities are quite enough to meet the planned training needs; however these are evaluated only in terms of achieved numbers. No yard stick to measure whether the achieved number is the appropriate one or not.

Note worthy here, that the bank is being engaged in a good deal of undergraduate education, BScs and diplomas. This in fact raises an important question realizing the fact that the manpower market is full of unemployed graduates. Hence a cost-benefit analysis of such training could save a lot of resources which could be used for meeting a real need else where. However it seems that training is being used to reward good performers holds more obviously in the case of ABS than in the other three organizations. This again urges that the held view about the purpose of training need revision for the four organizations equally.

Results on the attitude of employees toward the training policy and practice within the four organizations revealed a general discontent with the performance of training and general confusion of the purpose of training in their organizations. This was shown in chapter four were respondents believed that the training policy of their organizations was not clear and that training opportunities is sometimes given to people who did not deserve it, because they are lazy, not attentive to their work, and undisciplined.

Theoretically, training properly assessed is supposed to correct such skill and attitude deficiencies. Yet the general belief in the sample organizations is that training should go to good people who do their work well, thus clearly indicating that employees perception of training is shaped by the ongoing practice, rather than what should be. This is further revealed by the fact that, training in MOA and its agencies was more inclined towards technical professional training while management development and training is barely existent, and where it was found, was mainly confined to functional aspects of the jobs i.e. personnel, financial etc... training on general management skills was practically non existent. It is noteworthy that problems related to management inefficiency have more often been reiterated in various consultants’ reports. To quote some of these the FAO mission (1990), have noted that there was a training need at top level management to secure coordination and integrated perspective at the policy level. Specific example of the failure of agricultural development policies due to absence of qualified manpower and adequate institutional coordination as came in the FAO report related to the price policies, employment policies, coordination of different policies, policy implementation etc...the problem as seen by the FAO mission is attributed to inefficient planning both at the strategic level and at the implementation level. Commenting on the role of the ministry of agriculture
as ‘a think tank’ for the sector, the following quotation illustrates the weakness in the administrative aspects of the planning units:

“Although the role of PAEA was very strong in collection of basic agricultural statistics, marketing data, farm production, costs and inputs use estimates, yet very weak in utilizing and applying these information for reasons of agricultural planning, policy formulation and resource allocation”.

Enumerating the causes of implementation failures of the agricultural development plans, the FAO report mentioned institutional coordination, information and data as well as the manpower resources. The problem of manpower as stated in this relation is that:

“The current management resources do not have the analytical capacity”. Worth mentioning is that, the same problem still exists up to the present time. Data on the utilization of the acquired training could not be easily obtained. No consistent evaluation and follow up of the job performance is exercised, yet information obtained from respondents revealed that, though respondents believed that training has improved their job performance, valuable specific examples could not be cited. Furthermore, this study could not find any correlation between promotion and training (table31, on utility of the acquired training). Likewise no direct correlation could be established between the acquired training and the ability to transfer new practices into the job situation (table33, on transferability of training). Transferability of training, as asserted by writers in the fields (Stanley 1987, Turrell 1980, Peterson 1998, Gupta 1999) has all to do with the relevance of training, while relevance of training is the ultimate aim of training need assessment.

Recognizing that there was no environmental or organizational problem to hinder training transfer (table34, on reaction to transferred training), one may logically question the quality and relevance of the acquired training. Systematic training need assessment gives direction through the provision of proper statement of training objectives in behavioral terms that sets the way for training design and methodology. More important those training objectives provide the yardstick or standard measures against which the training results are measured.

Despite the avowed contention by most of the employees in the four organizations with the ongoing training and the methods of selection no conclusive answer could be given as to whether training have really promoted employees capabilities (table42). Moreover, signs of dissatisfaction were also depicted by the results of this study (table39). Trainees have expressed their dissatisfaction with their present position and nearly about half of the sample expressed their desire to change their present positions. These signs of discontent could as well denote a lack of proper skills. Stanley (1987:14) confirms this in the following quotation:
“*When people are trained properly, equipped with the required knowledge and skills, they become more confident and more satisfied with their jobs*”.

More important, evidence from this study also showed that such state of job dissatisfaction could lead to a state of apathy. As shown in (table 39) the trainees had no interest in changing their work methods because generally they lacked the motivation. Comments which reflected low morale was received from the research sample of various departments and corporations of MOA as well as of ABS (see pp55, 56 above). In the researcher’s opinion this state of mistrust, job dissatisfaction and lack of motivation was brought about by the existing practices of the training function in the four organizations. Evidence for this was obtained from the sample responses in (table 41) on the reasons for the negative contribution of training. The reasons as perceived by the respondents were:

1. Improper detection of the training need
2. Improper nomination of trainees
3. Improper choice of training programs
4. Maldistribution of training opportunities
5. Improper utilization of the training

Put in nutshell all the reasons above are clearly related to the question of planning for training. A more frank expression of the problem of training plans of the sample organization is found in the perception of respondents of RAC and ABS of the reason of inequitable training. They attributed the reasons to the absence of integrated planning. Despite this recognition of the underlying problem of the ongoing training in the four organizations, yet respondents did not show the same level of cognizance about the need assessment process. This is clear from their responses to a question on their opinion of the right basis for determining training needs (table 45). The bases, according to the respondent’s belief were rather confused. The responses provided the same criteria as the ones adopted by their organizations (see table 42 with tables13, 14), though in different priority order. Thus indicating that they have no knowledge of what training need is. Moreover they also provided some qualities like efficiency, discipline and ability to utilize the training opportunity which means that they hold a misinterpreted view of what a training need is. Probably this could be a corollary of the adopted practice of trainees’ selection and allocation of training which, is generally, understood to be as reward for good performance.

This misinterpreted view of what a training need is, find more evidence in the results of this study in the responses to a question on what is the training required for their type of work. The majority of the answers went for technical specialized training. Thus, showing more bias towards developing their technical proficiency rather than, towards their job functions. Bearing in mind that the research sample of this study are members of different management levels i.e. top and middle level managers and
supervisors one may question the credibility of their attitude towards training and whether it is really in support of improving performance. This as put by some scholars of ARADO:\(^1\)

"Training needs do not cater for technical knowledge and skills only, neglecting other important skills for administrative jobs, especially at top and leadership levels, supervisory levels and executive levels. Skills of change management, decision making, and team work, problem solving techniques, clients’ relation and adaptation skill. All such skills are essential in varying degrees for administrators because they help in improving their performance on the job”.

Performance problems as depicted in chapter three of this study were mainly problems of management. The major problem areas as outlined in this study as well as in previous studies and reports were managerial and administrative pertaining to failure in attaining the objectives of the successive development plans. Implementation problems were also perceived in the lack of integration and coordination of operational plans, late implementation and misallocation of resources. Information problems were also widespread across the agricultural sector.

As could be observed from this study the different developmental plans of the sector were not accompanied by manpower plans. Training is carried out as an isolated activity with no clear vision or direct relationship to the requirements of implementation. In relation to this, one of the Egyptian scholars has noted:\(^2\):

“Developmental plans are considered deficient on the implementation aspects. They do not embody the procedural and organizational needs as well as other indispensable elements necessary for implementation. The plan mainly contains all the aims and statistical objectives, yet they lack the basic administrative support. Very frequently coordination is missed, essentially in timing, between the agencies responsible for planning, financing and execution”.

Though, the need for training professionals on the different aspects of modern management, modern techniques and skills of handling and solving work problem which undermine implementation of the plan is greater, yet the ongoing training in the sample organizations does not give the necessary attention to management training and development. Moreover, management and administrative training meager as it was usually repelled by the professional agriculturalist. The system of training, operating in the four organizations has no mechanism to impose a training decision on the employees, what so ever. Thus training decisions were merely relegated to sheer expression of wishes and wants, contrary to what the theory of need assessment professes.

Evidence from this study has revealed that, still the training wanted by employees in the four organizations was technical professional (see table46),
despite the fact that the administrative system of the sector has been undergoing a series of successive changes, due to the introduction of the federal system, privatization policies, forces of globalization and world trade agreements and the peace agreement. Such changes have brought about great changes in the role definition of the ministries at the federal government. The redistribution of authorities has transferred all planning and executive powers to the states and local levels. At the federal level new agencies and departments have been created and added to the complex nature of the organization of the sector. New work methods and techniques have been introduced in favor of more participatory styles of management, team work, task forces, bottom-top planning, policy analysis and articulation. More business style management competencies are required to meet the developmental needs of the sector, in the face of external and internal environmental challenges imposed by the process of change.

5.6 The Role of the Training Department in the Needs Analysis

Systematic needs assessment stipulates that the process needs analysis is a collective responsibility of the functional managers, the training officers and of course the support of the decision makers. In the previous section it has been shown that the role of functional managers and decision makers in the process of need assessment in the sample organizations was only lip-service and to a great extent ignorantly undertaken without much thought of the results. Training directors can play a valid role in influencing the attitude of managers and gain their support for promoting the training function within an organization. The literature on the subject suggest that training directors, if properly qualified, can play a proactive role in managing the training function instead of the reactionary role they are now taking.

Training management is now becoming a profession in its own right. Certain qualifications which are essential to the training managers and staff include:

1. academic knowledge
2. practical knowledge and certain skills and attitude

Possessing these capacities, training managers can play their proper roles as:

1. administrators
2. professionals, and
3. consultants

As administrators, they are the managers of the training function and must always strive to gain organizational creditability. They must be capable of planning, organizing, coordinating and evaluating the training function in a way that training can contribute to the organizational goals.
As professionals, they are the experts who have got the knowledge and expertise to detect, analyze and solve the performance problems of those who make up the organization.

As consultants, they are the advisors to the management of the organization in issues concerning change and organizational development and manpower development and utilization. These roles necessitate that the training director and his staff be knowledgeable of the organizational plans, training philosophy of the organization, the organizational strategy, which should give direction to the entire training activity. Equally true they should possess the knowledge and skill of the training profession.

Results of this study have shown that the role of the training department of MOA and the training divisions of its affiliated departments and corporations were no more than window dressing; the departments do not manage training. Their roles were virtually confined to clerical work or secretarial type of work; making contacts, writing memos and processing correspondence to and from the NDT, the line managers and the financial authorities. Their planning role was merely relegated to a process of collating training proposals from various parts of the organizations concerned and compiling them in a unified form to be forwarded to NDT, with no real authority or decision powers as far as the content of the plan or the priorities set in it. The same could be said about the selection of trainees, which actually is done by the direct line supervisors.

The only role which the departments of MOA are playing at the present is the role of channeling correspondence between their departments, NDT and the training institutions. Follow up function was rather weak. Cases have been spotted, during this study of non returnees who were not reported until 2 years later.

As a matter of fact the least that could be said of the role of the training departments of MOA is that it is a valid illustration of the inefficiency with which training needs are assessed. Performance of the training function is one area which has never been tapped. It is noteworthy that all training directors and officers of MOA were agriculturalists who had never had training in management or heard of training needs assessment methods and techniques. Thus it could well be said that they have no input resources, neither knowledge nor skills of what the training function should actually be managed nor are they cognizant of the developments in the field of training, of which training needs assessment technology is most important.

As for ABS, the situation is somewhat better, though it is not as it should be. The training departments’ role in ABS is more felt in the sense that the function is well organized and well managed, yet it is rather difficult to say that it is the right role, or the should be role. Evidence from this study has revealed that the process of needs assessment as well as the pattern of training is similar to that of the other three organizations. No systematic
training needs analysis is carried out, though efforts to systematize the process of planning their departmental training and selection of trainees are quite conspicuous. Those efforts though still lacking proficiency, yet they do denote signs of proactive concern on the part of training managers at ABS. Evidence has also been found in this study that the training managers could influence the training decision, at least as far as their departmental training is concerned. A valid explanation for the growing authority, which the training department is assuming at ABS, is that their training center has been well developed to become an income generating function at its own right and this might be their source of power. However this does not exclude the capabilities of the training manager, being a general administrator in the first place, with management science qualifications, in addition to the training he and his staff have managed to acquire during the past few years in management of training and training needs assessment techniques. Though it could not be readily said that they are fully equipped with the knowledge and skills to conduct full scale needs assessment, yet, their will and keenness for improvement are observed in the constant contacts they have developed with the Sudan academy for administrative sciences for consultation while planning and designing their training programs.

Note worthy to recall here that recent practical approaches to TNA have particularly emphasized the necessity of skillful training analyst, more than any other structural requirement. The assumption in the researcher’s belief is that a training manager, who is properly equipped with the proper management skills as well as professional know how of his work would make all the difference. Just like any other managerial position would require, the management of training require high level leadership skills, because they have to influence the entire organization. They have to have management and decision making skills to be able to rationalize the training effort and allocate its resources properly. They have to show proficiency in conducting their function in order to convince the decision makers as well as the trainees in order to gain full support and secure proper implementation of the training plans, without unduly interference. Finally they have to show ingenuity and enthusiasm in order to gain status. Robinson (1988) advocates that:

“The training department has to prove their effectiveness in a tangible way before they can expect to get unqualified support from the top. That they should seize every opportunity to show the management what the training department is doing, what success it is achieving and the ways in which an improvement in status can improve training”.

To the researcher’s contention, impetus can be given to proper training needs assessment if qualified management is secured for the training activity. The progress the ABS’s training department is making could be evidence to this,
though they need more intense training as to the use of training needs techniques.

To conclude this part it could be said that the adopted process of training needs determination in the four organizations is no more than an inverted process of fitting people into training courses as their qualifications and circumstances may suit. The process lacks creditability and support because it is not founded on a solid basis of need identification and analysis. Thus it is practically reduced to mere wants or wishes of bosses and employees, without due consideration to the work or the organization’s needs. Basic structural requirements for the proper conduct of systematic needs analysis are missing in the four organizations, yet recent approaches to the subject revealed that these should not be a hindrance if a skillful training analyst who could initiate work, conduct systematic analysis and inspire the support of all the parties concerned.

Evidence from this study has shown that knowledge of the fundamentals of training needs assessment has caused some improvement in the way the ABS’s training center plan and organize their training activities which may well be a good indication that the presence of a qualified training department would make all the difference. Planning and implementation of systematic needs assessment, as outlined in chapter 2 above is a hectic venture which requires full understanding of the process and its importance and prospects. Equally true, the theory and practices of systematic needs assessment is still developing. Practical approaches are still emerging, so dissemination of knowledge of such practical approaches would aid in easing grasp of the process and facilitate its use for increasing the effectiveness of training in the sample organizations.
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CONCLUSION

Based on the above discussion this study concludes the following:

1) Systematic training needs assessment in the sample organizations is completely unrecognized.

2) Training is following a parochial approach focusing only on developing technical and professional skills, while management skills are not given due emphasis.

3) The sample organizations lack basic support requirements necessary for the proper conduct of systematic needs assessment.

4) Attitude of decision makers towards training and the way it is conducted is rather indifferent paying only lip-service to the function.

5) Attitude of trainees towards training is that it is either a reward or a punishment depending on whether it is abroad or in country.

6) Training departments are no more than windows dressing, performing clerical tasks, rather than managing the training activity.

7) Knowledge of methods and techniques of training needs assessment have positively affected the identification of training needs at ABS’s training center. Thus it may be said that exposure to more knowledge and practical know-how may bring about more improvements as to conducting full scale analysis and proper assessment of training needs.

This research is mainly concerned with the problems of training and development needs assessment of the management group in the agriculture sector. The assumption was that setting performance standards for managerial jobs is a difficult task. Therefore the hypotheses were that:

1. Management training need assessment is not systematic due to absence of basic structural requirement in public service organizations.

2. The process of training need assessment is completely obscured due to unawareness.

According to the findings of this research training was found to be standing as an isolated activity with no direct relationship to the organizations plans and objectives. No clear overall objectives of the training plans and no identification of the required competencies take place at the time of business plans discussion. The training managers are not involved at the discussion sessions.

Job description, performance standards are not available and they are no concern of the training departments except in the case of ABS where they are used to secure compatibility of the training opportunity with the job of the
trainee. Nevertheless they are not used to analyze the underlying performance problem, nor for identifying what is the specific performance gap. Hence other organizational problems are not tapped and left to perpetuate. Performance Appraisal is done almost automatically by direct supervisors and it lacks objectivity and correlation to performance. No cross-checking with the employees of the reasons of poor performance takes place. In addition performance audit forms do not give any indication of the training needs of the appraisees. This being the case, how can direct supervisors determine what training is required and who needs training.

As for the second hypothesis:

Training is defined as “the planned effort to impart knowledge and skills and change of attitude required by an employee to perform his job in away that can contribute to the achievement of the achievement of the organization’s objectives” (Robinson 19:7).

Planning as it is well known is based on information about the current situation, gathered from the relevant sources using the right methods and techniques so that the future projections could be made with minimum error. The means through which training information could be obtained as precisely as possible is a need analysis research that covers the organizations to detect its problems; analyze those problems to identify the underlying causes. The process hence continues to locate where training is needed. Then analysis of the located job is carried out to determine what training is needed. In the final analysis the individual who performs the job is analyzed to define the exact deficiency in his performance, whether it is a knowledge deficiency, a skill deficiency or an attitudinal deficiency. This three level analysis process; the organization, the job and the individual level is meant to secure the relevance of training to the needs of the individual, his job and his organization. Hence by skipping the needs analysis process, the identification of training in the research sample is reduced to guess work which clearly indicates a lack of awareness of what need analysis can do and indeed what training itself can do to the organization’s performance.

Hence the hypotheses to this study have been proved. However, generally speaking the process of training need assessment is a lengthy and prodigious task that takes time, money and energy. The effort of a skillful analyst could well inspire the interest of the decision makers to invest in the process. So the presence of qualified training staff lie at the foundation of the process. Modern approaches to systematic needs assessment have introduced much simpler and time saving techniques that could be useful in circumstances where basic environmental and organizational factors are not quite favorable. In the following part of this chapter a proposed model for training needs assessment in the agricultural sector is presented, hopefully those who are concerned may find some use in it to rectify and systematize
the process of training needs assessment in the agricultural sector and consequently help in rationalizing their training.
A PROPOSED MODEL FOR TRAINING NEEDS ASSESSMENT IN THE AGRICULTURAL SECTOR

In today’s business climate, the need for training has become more pronounced than ever before; but at the same time training has become very costly, therefore organizations have to be cautious about how their training funds are spent. Given this situation, it seems obvious that all performance improvement effort should begin with a systematic assessment of training needs so as to ensure that training programs have relevance to the needs of the organizations and to the specific needs of the people to be trained.

Research in the field of training has shown that some performance problems can be addressed by training, but not all. Therefore in many cases, interventions other than training are necessary too. In a broad sense, needs assessment can be described as a process for identifying the knowledge and skills necessary for achieving organizational goals (Brinkerhoff and Gill, 1994). It has also been described as a method for finding out the nature and extent of performance problems and how they can be solved (Molenda, Pershing and Reigeluth, 1996). The focus on performance problems have been inspired during the past 40 years by the search for greater organizational effectiveness. The effectiveness of training and development is enhanced when training activities are preceded by comprehensive analysis at the organizational level to determine “where” exactly training is needed; and at the level of the individuals to determine “who” needs training. Without information about what and how critical those needs are, training and development efforts are likely to continue the “spray and pray” strategies which have too often characterized them as Michaud said.

In principle training and development should be as cost effective as any other functional activities. Expenditure on training should be justified by an established training need that clearly identifies the required competencies, as employees may not automatically have the competencies necessary for effective performance, especially for supervisory and managerial functions. In practice, many employees move up the management hierarchy without having had the benefit of systematic preparation. The findings of the research have revealed that management training in the agricultural sector was minimal, while management development has completely been neglected. At the same time, certain basic requirements, including manpower planning, career planning and job analysis have never existed. Planning for training have at best been practiced on an ad hoc basis, carried out by different parties; These include the ministry’s training department, IFAD, FAO and others, on basis of assumed needs. No systematic study or needs assessment has virtually preceded the plan preparation. One of the objectives of this study was to propose some viable recommendations that would assist in establishing a systematic approach to the question of management training and development needs within the sample.
organizations of the study. Hence the proposed approach for the purpose of determining management training and development needs within the subject organizations is known as the competency-based assessment (CBA) approach, where the focal point is the person or the performer. The approach seeks to identify the knowledge, skills, attitudes and behaviors needed by a person to excel in a job.

The competency based approach is recognized in the relevant literature as being most effective in the following situations:
- When competencies for managerial supervisory, or professional jobs must be identified, and
- When a credible system or “template” for recruiting, hiring, developing and promoting must be developed (Boyatzis 1982).

The essence of CBA is the competency analysis which focuses on the performance of specific tasks to predetermined standards. Competencies are the demonstrable and assessable skills that distinguish effective performance from ineffective performance. In other words, they are the things that employees need to do so as to be as productive as they should be.

The CBA approach involves a number of steps as follows:
1. Capability profiling:
   - Identifying of competencies needed in the job
   - Rank the importance of the competencies
   - Evaluating the job holder against the competencies standards
   - Identifying strengths and areas needing remedial attention

2. Select training programs or other learning events (either on or off the job) which can help develop the desired skills
3. Produce a personal training plan for each employee
4. Assess the competency

**The work plan:**
Phase (1); identifying key players:
It is necessary to identify the people who need to participate in a competency-based training project. Several players can be involved including the following:
- Sponsor or decision maker
- The human resource manager
- Subject matter experts
- The target audience
- Selected high performers
- A training professional
High performers are the star performers within an organization. They are the main source of information about the behaviors and actions that are necessary to do a job successfully. Guidelines for identifying high performers may include the following:

- People who consistently exceed expectations and achieve “very good to excellent” ratings on performance reviews.
- People who consistently meet or exceed organization (and unit) objectives.
- People informally labeled “masters” or “experts” by their peers and managers.
- People who are sought for their knowledge of or expertise in a particular subject.
- People who like what they are doing, and
- People who are respected by others, which is particularly important in organizations in which close teamwork is necessary.

Phase (2); conducting behavioral interviews:
This phase consisting of gathering data for building a competency model is basic to the CBA approach. Several methods can be used for that, such as questionnaires, surveys, focus groups and observations. By and large, one-on-one or group interviews have proved to be the most effective method for obtaining behavioral data (KAVITA GUPTA, 1999)

The basic purpose of behavioral interviews is to seek two types of information from high performers:

- Background and job-related information, and
- Information about what high performers do that makes them successful in their jobs.

Phase (3); construct competency model:
After completing the interview process, a preliminary draft of a competency model may be prepared. This phase involves two steps:

1. Creating a competency dictionary, and
2. Creating a competency model

For creating a competency dictionary the following steps should be followed:

- Identifying similarities and patterns in data
- Group that information into themes or core clusters
- Review and define every core cluster
- Finally, write an overall statement that describes each dimension, (the dimension is an expression which define all the group of behaviors embodied in the core clusters).

For creating a competency model:
The model is a high-level depiction of the core elements contained in the dictionary: dimension and core clusters.
- A first draft of the competency model is made
- Approvals from senior management and/or the human resource department are obtained.
- If deemed necessary additional changes to the dictionary and to the model (based on their feedback) are introduced.
- A final copy of the competency model is then prepared.

Phase (4); assess gaps:
After a best-practices model has been built, gaps can be measured in proficiencies of the job occupiers or others in the same job function(s). The assessment of gaps involves two steps:
1. Identifying gaps
2. Analyzing results

Identifying gaps:
The difference between “what performance is” and “what performance should be” represents the “training gap”. Information on the actual situation can be gathered by means of surveys, using a simple rating scale. The competencies identified from the analysis are listed in the questionnaire to be used in the survey, along with the relevant rating scale.

Identifying results:
The retrieved questionnaires are to be analyzed to depict the actual difference between the “standard performance” and “the actual performance” of each employee.

Phase (5); implement model:
Competency models can be used to create learning development plans for individuals. After the organization’s HR manager has received a copy of the surveys completed by the managers and supervisors, a brief meeting can be held with the top leadership of the organization to explain how the learning development plans could best be used. During this meeting, copies of the proposed learning plan of each individual manager can also be distributed to help in discussing the need of every individual manager for training. A suggested agenda that the top leadership can use to conduct an actual meeting with their managers and supervisors is given below:
1. Review individual area of strengths and weaknesses and identify opportunities for development
2. Identify the support and resources necessary to facilitate the performance of individuals.
3. Develop an action plan that best meets the needs of the learners
4. Make a schedule for implementing learning and development activities
5. Discuss a follow-up plan

After implementing the model, results can be monitored at both the organizational and individual levels. At level of individuals, a quarterly or annual progress checks could be conducted with the trained managers. At the organizational level, the impact of the assessment can be measured through the leaders’ satisfaction with their managers’ performance, as well as by using subordinates’ surveys to measure their opinion on their bosses’ performance.
The process of conducting a competency Model project

Develop a project plan

- Determine competencies required to implement strategic plan.
- Establish parameters.
- Identify key players
- Identify high performers.

Conduct behavioral interviews….

- Obtain preliminary information.
- Obtain behavioral information.

Construct competency model

- Create competency dictionary.
- Create competency model.

Assess Gaps

- Identify gaps.
- Analyze results.

Involve senior management in determining:
- Required competencies.
- Resources required.
- People to be involved in the process.
- People with best practices

Involve best performers to gather data on:
- Background of the job
- Job related information to create best practices model for management & supervisory jobs.

- Use a simple rating scale survey
- Include the competencies listed in the model in the survey.
- Use the survey to measure the gaps in proficiencies of others in the same job functions.
- Analyze retained surveys.

a- Create competency dictionary.
- Identify similarities & patterns in data.
- Group these in themes or core clusters until every core cluster has been identified.
- Review & edit definitions.
- Write an overall statement that describes each dimension

b- Create the competency model for each job family.
- Obtain approval from senior management &/or HR management.
- Use feedback to make changes in dictionary & model as necessary. Prepare a final copy.

Involve best performers to gather data on:
- Background of the job
- Job related information to create best practices model for management & supervisory jobs.
Managers receive their employers completed surveys.
Managers meet with their employers to discuss.
   a- Strengths & opportunities for development.
   b- Identify support & resources necessary to facilitate performance.
   c- Develop an action plan that best meets the needs of the learners.
   d- Schedule implementation.
   e- Discuss a follow-up plan.

At the individual level.
Managers conduct quarterly & annual progress checks with their employees.
At the organizational level
- measure client satisfaction.
## TOOLKIT FORM 1 Competency Interview Worksheet

Name of Interviewer: ____________________________ Date: ____________________________

### I. About the Interviewee

Name: ____________________________
Org.: ____________________________ Position: ____________________________
Previous Training Received: ____________________________ Highest Degree

### II. About the Interviewee's Job

Name of Manager: ____________________________ overall responsibility: ____________________________

Previous Jobs (Year, Position, field, Location):

- __________________________________________________________________________
- __________________________________________________________________________
- __________________________________________________________________________
- __________________________________________________________________________
- __________________________________________________________________________

1. What are the five main responsibilities of your job?

- __________________________________________________________________________
- __________________________________________________________________________
- __________________________________________________________________________
- __________________________________________________________________________
- __________________________________________________________________________

Source (Gupta – K 1999)
TOOLKIT FORM 1.1 Competency *Interview Worksheet* (continued)

2. What skills and abilities do you require to accomplish each of the above?

3. What other skills and abilities do you require to make you successful in your job?

2 III. About the Interviewee’s Work Experiences

4. Think about an incident you experienced that resulted in a successful outcome. What was the context? When did it happen? Who was involved?

5. What did you feel or think?

Source (Gupta – K 1999)
TOOLKIT FORM 1.2 Competency *Interview Worksheet* (continued)

6. What did you say? Why were these actions and words effective?

7. What were the results? What significance does this event have?

8. Think about an incident you experienced that resulted in an unsuccessful outcome. What was the context? When did it happen? Who was involved?

Source (Gupta – K 1999)
# Competency Interview Worksheet (continued)

9. What did you feel or think?

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10. What did you say? Why were these actions and words ineffective?

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11. What are some other actions you did not take at the time that could have helped you succeed?

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12. What were the results? What significance does this event have?

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Source (Gupta – K 1999)
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<th>Core Clusters</th>
<th>Definitions</th>
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<td>5.</td>
<td>8 Core Clusters</td>
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<td>6.</td>
<td>10 Core Clusters</td>
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Source (Gupta – K 1999)
### TOOLKIT FORM 3 Competency Model Worksheet

<table>
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<th>Dimensions</th>
<th>Core Clusters</th>
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</table>

Source (Gupta – K 1999)
### TOOLKIT FORM 4. Individual Learning Development Plan

Trainee name: 

<table>
<thead>
<tr>
<th>Competency To Be Developed</th>
<th>Learning &amp; Development Activities</th>
<th>Internal &amp; External Support &amp; Resources Needed</th>
<th>Success Measures</th>
<th>Completion Date</th>
<th>Review Date</th>
</tr>
</thead>
</table>

Source (Guplta – K 1999)
TOOLKIT FORM 1 Competency Interview Worksheet

Name of Interviewer: __________________________ Date: __________________________

I. About the Interviewee

Name: __________________________________________
Org.: __________________________ : Position: __________________________
Previous Training Received: __________________________ Highest Degree: __________________________

II. about the Interviewee's Job

Name of Manager: __________________________ overall responsibility: __________________________
Previous Jobs (Year, Position, field, Location):

1. What are the five main responsibilities of your job?

Source (Gupta – K 1999)
2. What skills and abilities do you require to accomplish each of the above?

---

3. What other skills and abilities do you require to make you successful in your job?

---

2. III. About the Interviewee's Work Experiences

4. Think about an incident you experienced that resulted in a successful outcome. What was the context? When did it happen? Who was involved?

---

5. What did you feel or think?

---

Source (Gupta – K 1999)
<table>
<thead>
<tr>
<th><strong>TOOLKIT FORM 1.2 Competency Interview Worksheet (continued)</strong></th>
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<tbody>
<tr>
<td><strong>6.</strong> What did you say? Why were these actions and words effective?</td>
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| **7.** What were the results? What significance does this event have? |
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| **8.** Think about an incident you experienced that resulted in an unsuccessful outcome. What was the context? When did it happen? Who was involved? |
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Source (Gupta – K 1999)
**TOOLKIT FORM 1.3 Competency Interview Worksheet (continued)**

9. What did you feel or think?

10. What did you say? Why were these actions and words ineffective?

11. What are some other actions you did not take at the time that could have helped you succeed?

12. What were the results? What significance does this event have?

Source (Guplta – K 1999)
<table>
<thead>
<tr>
<th></th>
<th>Core Clusters</th>
<th>Definitions</th>
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<td>3.</td>
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<td>6</td>
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</table>

TOOLKIT FORM 2  Competency Dictionary Worksheet
4. 
| Core Clusters | Definitions |

5. 
| Core Clusters | Definitions |

6. 
| Core Clusters | Definitions |

Source (Gupta – K 1999)
### TOOLKIT FORM 3 Competency Model Worksheet

<table>
<thead>
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<th>Dimensions</th>
<th>Core Clusters</th>
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</table>

Source (Gupta – K 1999)
## TOOLKIT FORM 4. *Individual Learning Development Plan*

**Trainee name:**

<table>
<thead>
<tr>
<th>Competency To Be Developed</th>
<th>Learning &amp; Development Activities</th>
<th>Internal &amp; External Support &amp; Resources Needed</th>
<th>Success Measures</th>
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</tbody>
</table>

Source (Gupta – K 1999)
Annex (A)
Succession Planning Analysis Chart

<table>
<thead>
<tr>
<th>Job title</th>
<th>Name</th>
<th>Education</th>
<th>Present performance</th>
<th>Stay in position</th>
<th>Period of service</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Director</td>
<td>N E G</td>
<td>10 23 60</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Production manager</td>
<td>N E G</td>
<td>4 15 46</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial manager</td>
<td>L E G</td>
<td>2 5 36</td>
<td></td>
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<tr>
<td>Financial manager</td>
<td>L g U</td>
<td>3 6 37</td>
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<tr>
<td>Assist. Prod. manager</td>
<td>L F G</td>
<td>3 6 36</td>
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<tr>
<td>Assist. Comm. manager</td>
<td>L g U</td>
<td>9 20 59</td>
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<tr>
<td>Assist. Fin. manager</td>
<td>N E G</td>
<td>5 10 47</td>
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</tbody>
</table>

Key

- Promotability
- Present performance
- Education
- Stay in position
- Period of service
- Age

Symbols

<table>
<thead>
<tr>
<th>Promotability</th>
<th>Present performance</th>
<th>Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>N: now</td>
<td>E: excellent</td>
<td>G: graduate</td>
</tr>
<tr>
<td>L: later</td>
<td>g: good</td>
<td>B: basic</td>
</tr>
<tr>
<td>D: distant</td>
<td>F: fair</td>
<td>U: under gr.</td>
</tr>
<tr>
<td></td>
<td>W: weak</td>
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Annex (B)  
Methods of Gathering Information for the Job Analysis

The purpose of job analysis is to collect job-related information. Methods which enhance this with special emphasis on methods expedient for managerial jobs are:

a. Observation: Here an analyst observes the work activities of the incumbent and prepares a record of essential job elements and factors important to satisfactory performance.

b. Interview: Here the analyst interviews the incumbent of the specific job. This is usually a semi structured interview and is conducted under conditions which allow free, uninterrupted delivery of information. Sometimes it is necessary to interview two or more individuals having the same job title. Various activities of the job are then discussed to clear out ambiguities and a unified job description is produced.

c. Technical Conference: This method seeks to bring together individuals who are competent in specific jobs to provide information which forms the basis of job description.

"Experts" as explained by Stanley (1987: 67) may include heads of departments, supervisors and highly skilled (master) tradesmen.

Such conferences are directed by the analyst, who later compiles the job description.

a) Questionnaires: These could either be closed or open ended. It has been widely believed by all scholars in the field that incumbents ideally are the best sources of information in respect of the jobs they perform. The questionnaire provides information on work activities, working conditions etc… and respondents must indicate whether the items do or do not apply to the job.

b) The Diary: Here the individual is required to record his activities over a period of time; a day, a week or even a month. This can be done in two ways:

1. The employee records each activity after he has done it. The things he does and the important features involved. He may even record problems which he encounters on a regular basis.

2. A list is prepared and the employee "checks" the items as they are completed, and records the time spent on each activity. The problems encountered and the amount of time used to complete a task can provide clues to training needs.
c) Critical Incident: This method is actually one of recording performance. The analyst merely observes and makes recordings which outline behavior that distinguish effective from ineffective performance. Only those behaviors that differentiate between 'good' and 'poor' performance are listed. Under each of these are brief descriptions, usually in check list form of observable on-the-job behavior recorded by the analyst in his observations of each employee's performance.
Annex C

A framework for Conducting a Performance Analysis

Levels of Performance Analysis

Ideally, a performance audit involves the following three levels of analysis:

Level I: As mentioned earlier analysis at this level is conducted to determine what is at stake in the organization (labor, material resources, equipment etc...) and who impacted those high stake areas the most. Here direction and priorities are set.

Level II: Analysis at this level is concerned with examining a specific job or functions and determines how performance of that job can be improved. The basic sequence of analysis at this level is to:

1- Determine what is expected or desired of the individual and functions being stated.
2- Identify the actual performance.
3- Analyze the discrepancy, if any, between what is desired and what actually happens to determine:
   a) The value of correcting it,
   b) Its cause or causes.

Using the performance model, performance deficiencies are classified as "knowledge deficiencies" which result from employees' not knowing what to do, and how to do it; "Execution deficiencies”, which result from employees' failing to perform because of factors in the work environment. Execution deficiencies are further classified as resulting from poor feedback to employees on how well they are doing and what they might do to correct their performance, from punishment or insufficient positive consequences for doing as expected, or from some form of task interference resulting from poor or inappropriate job or system design. This entails a more detailed study of the existing communications network, paper work, meetings, reporting relationships, relationships between functions, and management controls.

4- Recommend changes for improving performance.

These changes include the following (where appropriate):

a- training,
   b- modifying consequences for various performance,
c- changing the information flow to provide better feedback on performance, and
d- changing the design of certain jobs or functions.

Level III: analysis at this level involve those steps generally accepted as basic to developing effective training materials. We start by developing training objectives, clearly stated in performance terms and end with a training program.

To conclude, the levels of performance analysis provide a structure for conducting a performance audit, they show that we move from the general to the specific, from policy (where and whom do we impact?) through strategy (how do we best impact what?) to tactics (designing the solution). Knowledge of these levels helps us keep track of where we are in an analysis and the scope of our analysis.
## Levels of Performance Analysis

<table>
<thead>
<tr>
<th>Stage A MODELS</th>
<th>Stage B MEASURES</th>
<th>Stage C METHODS</th>
</tr>
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<tbody>
<tr>
<td><strong>ORGANIZATIONAL MODELS</strong>&lt;br&gt;1. Draw up an organizational model.&lt;br&gt;2. Draw up a work-information flow charts&lt;br&gt;3. Draw up an economic model. To be sure these models are realistic and desirable; base them in knowledge of the actual setups in the organization on knowledge of these setups in similar organizations.</td>
<td><strong>STAKES ANALYSIS</strong>&lt;br&gt;1. Describe any performance problems noted in stage A&lt;br&gt;2. Measure the economics at stake.&lt;br&gt;3. Determine the value of correcting the problems.&lt;br&gt;4. Rank the problems by priority for treatment; decide to concentrate on the job with the highest potential payoff.</td>
<td><strong>POLICY PROGRAMS</strong>&lt;br&gt;1. Decide on some general programs to improve this job: a- organizational programs.&lt;br&gt;b- Job programs.&lt;br&gt;c- people programs&lt;br&gt;2. Estimate the cost of these programs.&lt;br&gt;3. Determine their worth.&lt;br&gt;4. Reevaluate the programs and make recommendations</td>
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</table>

| **JOB THEORY AND OUTPUT**<br>1. Describe key out puts.<br>2. Derive a job theory<br>3. Describe the requirement for each output and set standards for these requirement | **DEFICIENCY ANALYSIS**<br>1. Determine any deficiencies in job output.<br>2. Estimate the causes of critical deficiencies: a- a deficiency in the environment ($D_e$)<br>b- a deficiency in the individual's repertory ($D_R$) | **PROGRAM STRATEGIES**<br>Determine strategies for treating deficiencies: a- information program.<br>b- training.<br>c- guidance.<br>d- motivation program (etc) |

| **TACTICAL DESIGN**<br>1. Develop knowledge maps showing instructional strategies and subject matter inventories; to | **BEHAVIOR ANALYSIS**<br>1. Determine appropriate media for developing design.<br>2. Determine schedules for | **TACTICAL INVESTMENTS**<br>Develop the necessary material and tools and try them out: a- inductive.<br>b – theory training. |

---

**Level I**<br>POLICY

**Level II**<br>STRATEGY

**Level III**<br>TACTICS
treat D_k's
2. Develop environmental designs, to treat D_e's.
3. Develop designs for making changes in personnel, to treat D_i's

devolving designs.
3. Determine the costs of implementation including the cost of development
c- job aids and skill guides.
d- performance indices.
e- progress plotters.
f- incentive systems (etc)

<table>
<thead>
<tr>
<th>Table 2: Levels of performance analysis</th>
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<tbody>
<tr>
<td>Source, (Praxis Corporation, 1974)</td>
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<td>Turrell (1980)</td>
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</table>
Annex (D)
Foundation of the Performance Model

The performance audit is a system for examining performance problems from the vantage point of a rather simplistic model of human performance. The underlying theory is based on what may be called the "performance system". This means that any desired performance is part of a performance system, which has the following component:

1- The job situation or occasion to perform.
2- The performer.
3- The behavior (action or decision) that is to occur.
4- The consequence of that behavior to performer.
5- The feedback of the consequence back to the performer.

A schematic relationship of the performance system is provided by Dr. Thomas F. Gilbert – Technical Director of Praxis Corporation as follows:

7) In any job there is a situation or occasion requiring a particular performer to make a particular response or take some action, which results in some consequences to the performer. The performer may consider that consequence to be positive, or negative or to have little value. And last, information on that consequence is fed back to the performer.

The overriding and simplistic "law" governing this system is that behaviour is explained by its consequences. People tend to avoid doing things that result in negative consequences and to do more often things that lead to positive consequences. Given the general law of the performance system, it is found specially that a desired job behavior may fail to occur in any job situation because of a breakdown in any of the five components of the performance system ie the situation, the performer, the behavior (response or action), the consequences or feedback.

The model provides a framework for diagnosing performance problems and prescribing solutions. It can be used as a conceptual "template" to lay
over a problem-forcing identification of the components and suggesting questions to ask about each component. A representation of this template, along with "troubleshooting" questions, appears in the following figure:

![S R C Diagram]

dsition  R esponse  C onsequence

source: Craig 1976

- Does performer know when to respond?
- Does performer know how to respond?
- Does performer know criteria for proper response?
- Does performer have resources necessary to respond?

- What are the consequences of R?
- Are they positive, negative or of no value?
- How immediate they are?
- Does another R have more positive consequences?
- Does performer receive adequate information on consequences?

Application of the model in this way isolated which components of the performance system might be "faulty" and need correcting before the desired behavior can be expected. It is an invaluable tool for determining when training is an appropriate solution to a performance problem.

The model on the other hand allows us to discriminate between problems or deficiencies which can best be corrected through training and those which require changes in the "environment", For the latter, it also helps determine precisely what changes are required to correct the deficiency or to support the recommended training.