

FINANCIAL MANAGEMENT IN PARASTATALS:  
THE CASE OF TANZANIA ELECTRIC SUPPLY COMPANY LIMITED (TANESCO)

BY

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A thesis submitted in part fulfilment for  
the degree of Master of Business and  
Administration (MBA) in the University of  
Nairobi.

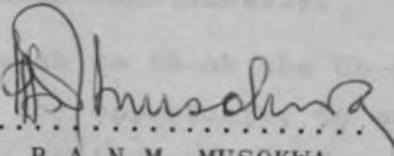
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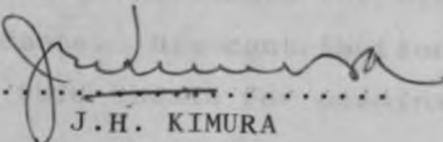
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P.A.N.M. MUSOKWA

This thesis has been submitted for examination with my approval as University Supervisor.

Signed .....



J.H. KIMURA

### Acknowledgements

The submission of this thesis signals the end of a course of study in which many people and institutions have been involved. I will not be able to acknowledge the contribution of each individually.

However, I wish to thank the Co-operative College Moshi for affording me the opportunity to pursue a masters course. Opportunity alone would not have done much had the United Nations Economic Commission for Africa (ECA) not sponsored me. Therefore, I am very grateful to ECA for their generosity.

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To my wife, Letty and our children, Oswald, Scholastica and Atufikile, submission of the thesis marks the end of a long and painful separation. I dedicate this thesis to them all as a recognition of the vital role they have played throughout my course.

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ABSTRACT

This study is about financial management in the Tanzania Electric Supply Company Limited (Tanesco). Tanesco is a parastatal organization in the power sector. It is responsible for the generation, transmission and distribution of electricity.

Financial management in Tanesco is examined under the investment decision, the financing decision and the dividend decision. The investment decision is concerned with using funds in capital projects, such as acquisition of plant and machinery, construction of dams and erection of transmission lines. Such capital projects expand Tanesco's capacity to generate and distribute electricity. The financing decision is concerned with sources of funds used for capital projects and for current operations. The dividend decision is about what is done with the profit that is earned in a financial year. Working capital management is a day to day aspect of financial management by means of which investment is made in short-term assets such as cash, debtors and stock and current liabilities are incurred and then paid.

All these aspects of financial management are inter-related funds are sought and obtained from various sources. They are used to achieve an organization's objectives through investments in capital projects and working capital. In the process of using these funds, profits may be made in which case decisions must be made about what to do with profits. The technique of budgeting as a planning device is useful in financial management; accordingly, it is also examined. All these have been analysed in depth.

The methodology used is a combination of personal interviews of heads of department and the Director of Finance, observation of the day to day activities of the departments of the Directorate of Finance and the examination of files, annual reports and other documents kept in the library at Tanesco head office in Dar-es-Salaam. A visit was made to the Treasury - Public Investments Department-for the purpose of collecting data on investment in the public sector.

The conclusions are that financial management in Tanesco is influenced by national considerations, such as compatibility of Tanesco investments with overall economic development. Investments by Tanesco must be in the Five Year Development Plans and must conform with national economic strategy. In the financing decision, especially debt financing using foreign loans, national sovereignty is the crucial consideration. Cost considerations are such that soft loans with low interests are preferred to commercial loans. In the dividend decision it is found that Government has a lot of influence.

The overall conclusion is that national policies and objectives override all other considerations in the financial management of Tanesco. This is because Tanesco and other parastatals were created to serve national interests which are defined politically in the Arusha Declaration. Any other considerations such as profit are secondary to political considerations. Therefore Tanesco cannot be viewed as a commercial organisation - in spite of its "charter" from the Government to operate as such.

INTRODUCTION1.1. DEFINITION AND DISTINCTIONS : PARASTATALS

A parastatal in Tanzania is a public sector institution in which the government holds all or part of the equity share capital. Parastatals as a group form the parastatal sector. This sector was expanded considerably in 1967 following the proclamation of the Arusha Declaration<sup>1</sup> and the subsequent nationalisation of private banks, insurance companies, communication, import and export trade, distribution and other important means of production and distribution. The Arusha Declaration mentions the following as important means of production and distribution: land, forests, mines, water, petrol and electricity, communication media, import and export trade, iron and steel enterprises, arms and ammunitions, cement and fertilizer. This list is not exhaustive. Parastatals have been formed to control these means of production and together with ministries, departments and regions (that is provinces) constitute the public sector in Tanzania. They further social, political and economic objectives of Tanzania. Consequently they are instruments of social, political and economic policy.

There are various ways of classifying parastatals in Tanzania. In this study only two classifications will be considered because they are important.

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1 The Arusha Declaration is a political blueprint, the basis of socialism in Tanzania. Four principles are outlined in it: Self-reliance, social equality, collective and cooperative economic activities and economic cooperation with other African countries.

Parastatals can be distinguished on the basis of how they came into being. On this basis parastatals are classified according to the Acts which brought them into existence. There are parastatals instituted under the Public Corporations Act 1969 and the Presidential Directive. In this class of parastatals the Government of Tanzania is the sole shareholder. For example, the Tanzania Legal Corporation is a parastatal institute under the Public Corporations Act 1969. There are parastatals which are limited companies registered under the Companies Ordinance 1932. The Tanzania Electric Supply Company Limited (TANESCO) is an example of such parastatals. Also in this category are parastatals which are subsidiary companies of other parastatals. For instance the National Development Corporation is a parastatal which has subsidiary companies that are parastatals.

Parastatals can also be classified on the basis of profit making. Some parastatals operate commercially and are supposed to earn profits. Tanesco is one such parastatal which is profit earning.

#### 1.2. Rationale for Parastatal Organizations

Parastatals have been created for different sectors of the economy. There are parastatals in agriculture, manufacturing and industry, mining, forestry, insurance, transport and communication, import and export, finance, power, distribution and so on. According to the Bureau of Statistics in Dar-es-Salaam there were 350 parastatals in Tanzania in 1980.

In many countries in the world the existence of some parastatals is acceptable. In developed countries of Western Europe and North America public utilities are publicly controlled. There are economic reasons for organizing public utilities as public sector organizations. These reasons have to do with big investment in machinery and very high fixed costs.

The existence of a lot of parastatals in Tanzania even in sectors which are left to the private sector seems to suggest that there are other reasons to explain such a large number of parastatals. Since most of them were formed from February 1967 onwards the reasons must be political. These reasons are amplified below:

1. Instruments of Control

Parastatals along with ministries and regions have a role in implementing control of the economy as suggested by the Arusha Declaration.

2. Self-reliance

Some parastatals have been set up to enable Tanzania to rely upon her own institutions in critical times or emergencies. Self-reliance is enhanced by the government's control over parastatals and its ability to direct their activities. This fact is supported by the right of every government to assume extra powers of control over other organizations in emergencies.

3. Management of Scarce Resources

That financial resources and skilled manpower are scarce resources is an economic fact. In Tanzania, to help better utilization of these resources and to avoid their wasteful use a system of holding parastatals is used. For instance, the National Development Corporation is a holding parastatal for a number of parastatals in manufacturing and industry. With this arrangement resources are better managed. Research and development staff, for instance, are employed at the holding parastatal level and are used by all parastatals in the manufacturing sector.

#### 4. Employment

The parastatal sector is a big employer in Tanzania. The 350 parastatals in Tanzania employ 92,769<sup>2</sup> people. As we shall see later creation of employment opportunities is one of the consideration in choosing projects in which parastatals will invest. Labour is available in large quantities and so the fact that the parastatal sector has created more employment opportunities has led to expansion of purchasing power. From the extra employment people earn income out of which they can purchase goods and services.

#### 5. Entrepreneurial Development

The parastatal sector undertakes investments in the various sectors of the economy. With the assistance of the government parastatals identify areas in which to invest. In this way parastatals assist in the development of entrepreneurs. Ventures into which they invest enhance social and economic development.

#### 1.3. Sources of Influence on Parastatal Organizations

In this part it will be shown how government control on parastatals is exercised. Each parastatal has a ministry which supervises and directs the parastatal. Such a ministry is called the parent ministry. It links the parastatal to the government. The Minister responsible for the parent ministry appoints the Board of Directors and the Chairman. In certain cases the President does the appointment. \*

The Public Investment Department in the Ministry of Finance has a big say in all investments of and in parastatals. The Ministry of Finance as a whole controls all government finances including those available to the parastatals.

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<sup>2</sup> Bureau of Statistics, Dar-es-Salaam, 1980.

The Economic Committee of the Cabinet is responsible for all economic affairs in the country. All economic plans of the public sector are controlled by it. In the section on the investment decision in Tanesco it will be seen that his committee vets all major projects.

The Presidential Standing Committee on Parastatal Organizations (SCOPO) was established in 1967. Its formation came after the Arusha Declaration. This Committee has to do with uniform development and application of personnel conditions and salaries and wages in all parastatals. SCOPO controls recruitment and remuneration in parastatals by its directives. So far there are more than forty such directives and any decision on personnel matters must be done according to SCOPO directives.

Later it will be shown how all these controls on parastatals impinge on the decisions of Tansco or other parastatals.

Before stating the objectives of the study, Tanesco is briefly described.

is normally the Chairman of the Board of Directors.

The Public Investment Department in the Ministry of Finance makes all investments in parastatals. It is thus an important source of influence. But the Ministry of Finance as a whole is also very important.

The Economic Committee of the Cabinet is responsible for all economic issues of the country. In this regard too it is an important source of influence.

The Presidential Standing Committee on Parastatal Organizations (SCOPO) was established in 1967 to ensure uniform development and application of all salary, wage and personnel conditions in all parastatal organisations. SCOP<sup>O</sup> control recruitment and remuneration in parastatals.

Later, it will be shown how all these sources of influence impinge on the decisions of parastatals.

Before stating the objectives of the study, Tanesco is briefly described.

#### 1.4 THE TANZANIA ELECTRIC SUPPLY COMPANY LIMITED (TANESCO)

Introduction: Tanesco is a parastatal organization responsible for the generation, transmission and distribution of electricity in Tanzania. It has a sales turnover of T.Shs.250 million per annum and employs four thousand people.

##### History

The Tanzania Electric Supply Company Limited (Tanesco) was originally established under the Indian Companies Act 1913 on 26th November 1931 as the Dar-es-Salaam and District Electricity Supply Company Limited (Daresco). Its share capital was held partly by the Tanzania Government and the East African Power and Lighting Company. In 1957 Daresco and another company were amalgamated to form the Tanganyika Electric Supply Company Limited and adopted its present Memorandum and Articles of Association.

In 1964 the Tanzania Government acquired the whole of the issued share capital by the issue of debentures to the East African Power and Lighting Company.

Tanesco is governed by the Electricity Ordinance and the Articles of Association. It has a Government Licence which is valid up to 2012.

Policies and Mission

The Government's policy on Tanesco is that:

### Objectives and Mission.

The Government's policy on Tanesco is that:

- (1) Tanesco shall be an economically viable organization
- (2) Tanesco shall be an agent of development, and
- (3) a social service to the public.<sup>3</sup>

The objective of Tanesco is to generate, transmit and distribute electricity at a profit while maintaining social accountability. This objective combines commercial and social considerations. It is not clear which ~~overrides~~ the other. Anyway to achieve both Tanesco requires capital and technical and management skills.

### Controls on Tanesco

In order to analyse the financial management of Tanesco it will be helpful to briefly go over the various controls affecting Tanesco. Both the Government and the Party<sup>4</sup> control Tanesco. The Government does so by:

#### (1) Licensing

What Tanesco can do and what it cannot do are detailed in the licence. The current operating licence was issued in 1957 and will expire in 2012. The Government still controls the level of tariffs.

<sup>3</sup>Cabinet Paper No. 17/65 and letter from the Parent Ministry Reference No. IMP-C/E 70/2 of 10/3/65.

<sup>4</sup>.The Party referred to here is Chama cha Mapinduzi (CCM)

(2) The Parent Ministry and the Board of Directors

Tanesco's parent ministry is that of Water and Energy. The parent ministry supervises and controls Tanesco. The Minister of Water and Energy is also the Chairman of the Board of Directors. Board members are mostly from the government with only two among the ten members coming from the industrial and banking sectors.

National policy is channelled into Tanesco through:

- (a) having annual budgets and major work programmes presented to parliament for approval
- (b) discussion with the parent ministry on technical and financial implications of projects.

(3) Ministry of Finance

Tanesco or any other parastatal for that matter is linked with the Ministry of Finance (or the Treasury). In Tanzania all long-term funds from foreign sources are negotiated by the Ministry of Finance and when they are obtained they are made available to the parastatal via the parent ministry. There is a nominee of this ministry on the Board of Tanesco.

(4) SCOPO

When explaining the sources of influences on parastatal organizations in Tanzania SCOPO was mentioned. This committee reports to the President and has a big say on remuneration and recruitment.

It has to approve such things as organisation charts and any modifications.

(5) There is a political commissar who is stationed at the Tanesco headquarters. He sees to it that the management of Tanesco does not deviate from the political policies of the Party. He links Tanesco to the Party. He sits on the Board as an observer. In addition there is a party Branch. The presence of party branches at places of work is a party decision and cannot be challenged.

#### Organisation Structure

Tanesco's organisation chart is shown in Appendix 1. This chart shows that Tanesco is organised on functional lines with five directorates among them the Directorates of Finance and the Directorate of Project Planning and Design. The former is responsible for finance and accounting and computer services. The Directorate of Planning and Design is responsible for planning, development and design of major projects.

#### 1.5 Statement of the problem/topic area

This study is an examination of financial management as is practised in a parastatal in Tanzania. It is based on the Tanzania Electric Supply Company Limited (Tanesco).

Financial management is examined by analysing the three major decisions of investment, financing and divided decision in Tanesco. Also examined are the working capital management and the budgetary process by means of which budgets are made, approved and implemented.

The examination is carried out in the context of national objectives and priorities without excluding business considerations. The overriding objective is to determine how Tanesco carries out financial management given its strategic importance to Tanzania and the requirement to make profits. National objectives are stated in the Arusha Declaration and priorities are indicated by economic development plans which are made for five-year periods. The question is given that parastatals such as Tanesco were created or acquired to further political objectives are financial techniques developed in the private sector relevant? The examination of financial management in Tanesco is an attempt to find this out and finally make recommendations based on findings as to sound financial management in Tanesco and other parastatals.

#### 1.6 Justification of the study

Given the importance of parastatals in the political and economic objectives of Tanzania a <sup>k</sup> study of parastatals is opportune. As finance is at the core of the lives of parastatals, it is evident that the study of financial management in parastatals can contribute to their efficient management.

Tanesco is chosen as a case study for a number of reasons. First, it is the importance of Tanesco to Tanzania. Tanesco is a strategic parastatal given its role in the power sector. Its importance to the economy makes it a parastatal with a lot of Government influence. It is this influence which is to be examined as it impinges on financial management. Thus Tanesco is a typical parastatal. Tanesco has been a parastatal for more than fifteen years. It was one of the first parastatals to be acquired after Tanzania's independence. The fact that it was acquired even before the formal declaration of socialism confirms the statement that it is a typical parastatal. Tanesco is an unresearched parastatal when compared with the National Development Corporation (NDC) or the National Transport Corporation(NTC). No doubt findings about Tanesco will add to a body of knowledge about parastatals in Tanzania. When this knowledge is used it will contribute to an increase in efficiency. The nature of Tanesco's operations provides data which, when analysed would provide a basis for coming up with useful conclusions. Lastly, it is my interest in the company and its operations. Interest in the area to be researched into is fundamental because it provides the motivation to carry out the study to its completion.

#### 1.7 Objectives of the Study

The objective of this study is to examine financial management as it is carried out in Tanesco. In this respect the study will seek to:

- (a) identify decision making procedures for the investment, financing and dividend decisions;

- (b) examine in detail the investment decision in Tanesco with a view to identifying how projects are generated, screened, prepared and appraised; and the criteria used to accept or reject projects; and
- (c) examine working capital and the budgetary process.

In particular the study will be concerned with:

- (i) determining whether sound financial management exists in Tanesco;
- (ii) determining how factors such as national objectives and policies and commercial considerations influence financial management in Tanesco;
- (iii) determining whether Tanesco is a commercially oriented parastatal.

This study is important because understanding financial management of a parastatal like Tanesco is useful in the improvement of its overall management. Conclusions from this study and the recommendations from it can be useful in other parastatals. The findings will be useful in other studies in the same company or others.

#### 1.8 Methodology used in the study

In order to carry out the study of financial management in Tanesco and achieve the objectives, I visited Tanesco on 23rd April, 1980 and reported to the Director of Finance. This is what the letter from Tanesco instructed me to do and since my study was about financial

management reporting to this Director was appropriate. At this stage of the study the main concern was reaching an agreement with the Director on how to collect the data required. After discussions it was finally decided that the Chief Accountant would allocate me to the various departments of the directorate. This procedure was very appropriate for the kind of study to be conducted.

I was going to make an indepth study of financial management, a study of financial management in practice in a parastatal in Tanzania. While in each department notes would be made from files and other documents; interview departmental heads and other staff and make notes; and make on-the-spot observations. The Director of finance was also to be interviewed in person from time to time. This interview would be useful for clarifying and elaborating any matters arising from the departmental observations and interviews.

In this study it was important to obtain data also from other directors such as the Director of Project Planning, the Company Secretary and the Chief Internal Auditor. Data from these people would be additional to that from the Directorate of Finance and would countercheck it.

Since sources of data required for the study include files, documents and people it was also agreed that data would also be collected from the library at Tanesco headquarters. The library has

data on the electricity industry not all of which would be relevant to this study. There would be need for selectivity.

After this preliminary visit to Tanesco data collection arrangements were finalised in Nairobi. I returned to Tanesco for actual data collection from 15th May, 1980 to 30th June, 1980.

While there I was allocated to various departments of the Directorate of Finance.

These are:

Financial Forecasting Department

Budget Department

Revenue Department

Credit Control Department

Capital Works Orders Department

Financial Reconciliation Department

Financial Accounting Department

Supplies Department

Computer Services Department

When I visited each department the first thing was to introduce myself and explain why I was there. This had an advantage because it created a climate in which I would obtain the data required. Then the departmental <sup>head</sup> or his nominee would explain to me the functions of the department. During and after the explanation there was room for

questions and notes.

The drawback of this data collection method was that the departmental head's/nominee's hesitancy to disclose significant information because of the short time of acquaintance. The other problem was that some departmental heads were not capable of expressing themselves a situation which lead to many questions. Thus it was not very much relied upon.

Observation of actual work being carried out in each department was also used as a data collection method. These observations were useful for counterchecking what was described and explained. But the drawback in this method was the interference of other phenomena not related to the study which have the effect of distorting data. Therefore a high degree of selecting was demanded on the part of the researcher. This was ensured by a careful revision of notes made from observations.

Data was also collected from reading files and other documents found in departments and the library. Files contain important correspondences and information which is collected in the course of managing a business. The chairman's reports and accounts are useful sources of data on finance and company performance. Other reports, such as a Tanesco pamphlet called "Tanesco News," are also important sources of data. The bulk of data used in the study was collected

from reading files and other documents.

A structured questionnaire for mailing to some of the senior officers of Tanesco at the headquarters was not prepared. Instead reliance was placed on personal interviews in which questions were asked in person. I interviewed the Director of Finance and the Chief Internal Auditor. One advantage in personal interviews rather than structured questionnaires is the flexibility in the questions one can ask. Thus questions can be varied or modified as need arises. Personal interviews were thus more appropriate in the kind of study being done.

The Public Investments Department at the Treasury makes all investments in parastatals. I visited this Department in order to obtain some data regarding investment in parastatals. Since the decision to invest in the public sector is made by this Department, data on what is involved would be particularly useful in the investment decision in Tanesco.

The letter from Tanesco permitting me to undertake research appears as Appendix 2.

### 1.9 Hypotheses

Conventional research methodology has the following sequences: Statement of the problems, hypotheses to be tested, collection of data and analysis, acceptance or rejection of hypotheses.

The study being conducted examines a situation in detail and concludes with an **explanation** of why things are the way they are. It is a case study. In this kind of study there are no hypotheses to be tested. If the following claim can be considered a hypothesis, this study will partly be testing such a claim:

"Financial management in most of the public enterprises in Tanzania today is very much lacking, if not completely absent. The reason for this state of affairs is twofold, viz. the lack of understanding of the technique of financial management by most managers of these institutions and the non-realization of the importance of financial planning as an operational basis in the undertakings. As a result improper utilization of scarce resources has on occasion brought about complete collapse of some public sector undertakings."<sup>5</sup>

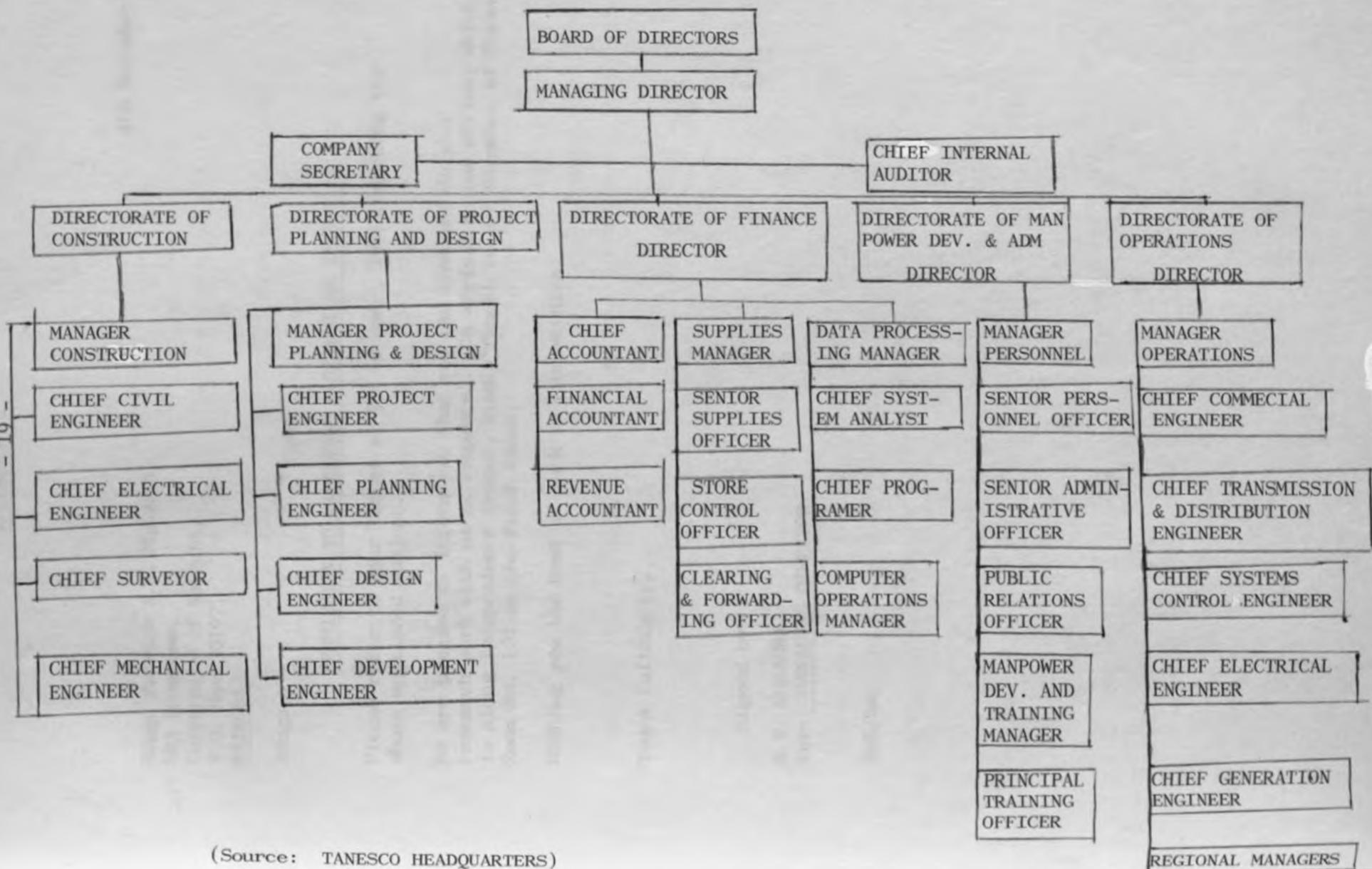
Is financial management in public sector undertakings, i.e. parastatals, lacking or completely absent?

---

<sup>5</sup>Sayore, S.F., Financial Management and Auditing of the Public Sector in Tanzania (Dar-es-Salaam: Tanzania Audit Corporation, 1978) p.1.  
The Tanzania Audit Corporation audits all parastatals in Tanzania.

APPENDIX I

THE ORGANIZATION CHART OF TANESCO AS APPROVED BY SCPO



APPENDIX 2

4th December, 1979

Ndugu Patrick A.N. Musokwa,  
MBA Programm,  
University of Nairobi,  
P.O. Box 30197,  
NAIROBI

Ndugu,

PERMISSION TO UNDERTAKE RESEARCH IN TANESCO:

Please refer to your letter of 5th October, 1979 regarding the above mentioned subject.

We are pleased to inform you that you can come and do your research work with us as requested. On arrival to our office, which is along Independence Avenue, kindly report to our Director of Finance Room No. 102 on the first floor.

Wishing you the best of luck in your studies.

Yours faithfully,

Signed by  
S.W. KUBAGWA  
for: MANAGING DIRECTOR

SWK/bm

## CHAPTER 2

### THE NATURE OF FINANCIAL MANAGEMENT

#### 2.1 Introduction

Financial management is a key aspect of overall management as Sayore<sup>6</sup> and others admit<sup>7</sup>.

What is the nature of financial management? In order to answer this question a review of literature is called for.

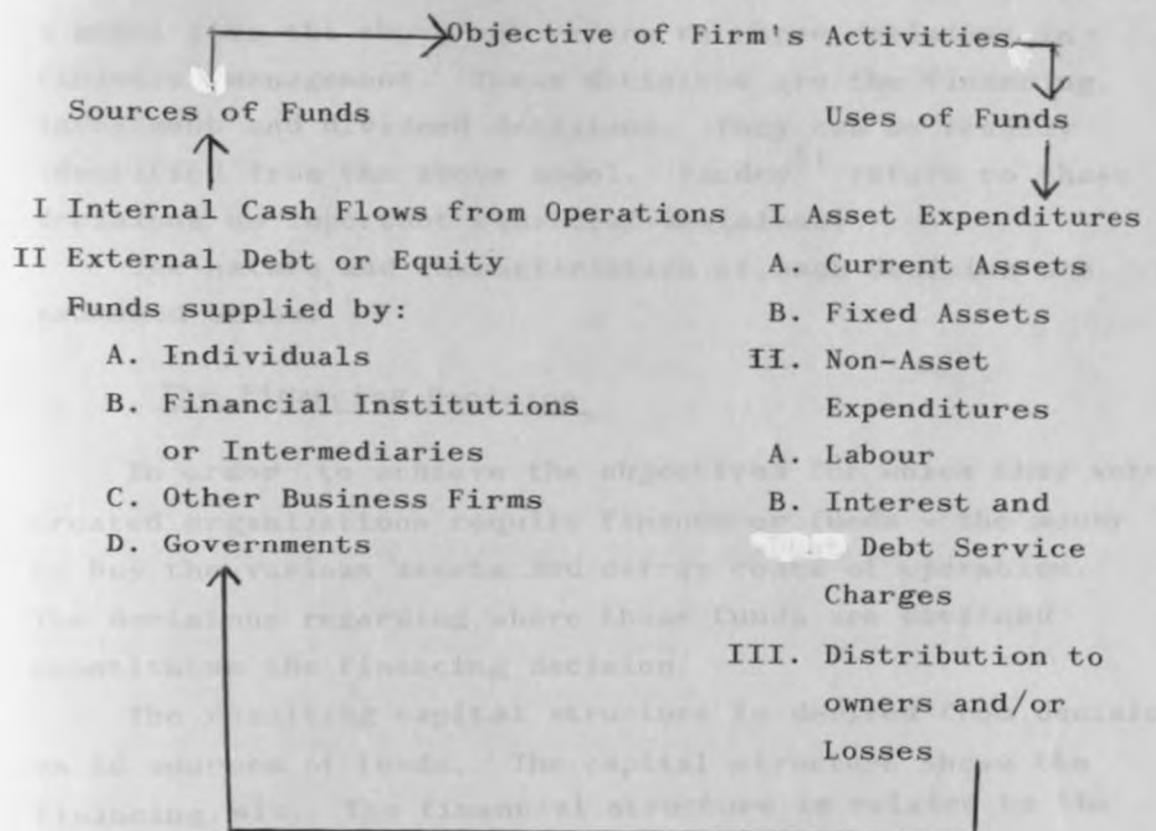
The finance function in any organization has two aspects: the acquisition of finance (or funds) and the disposition of finance. This is presented as a model in figure I.

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<sup>6</sup>Sayore, op. cit. (5) p.1

<sup>7</sup>Anderson, L.P. Miller, V.V. and Thompson, D.L., The Finance Function (Scranton, Toronto, London: Intext Educational Publishers, 1971) p.11.

Figure 1  
Simple Financial Management Model



Source: Anderson and others, Op. cit. (7), P. 5

Weston and Brigham<sup>9</sup> also have a similar model of the nature of financial management. Van Horne<sup>10</sup> does not present a model like the above but refers to three decisions in financial management. These decisions are the financing, investment and dividend decisions. They can be readily identified from the above model. Pandey<sup>11</sup> refers to these decisions as important financial decisions.

The nature and characteristics of each decision are examined below.

2.2

### The Financing Decision

In order to achieve the objectives for which they were created organizations require finance or funds - the money to buy the various assets and defray costs of operation. The decisions regarding where these funds are obtained constitutes the financing decision.

The resulting capital structure is derived from decisions as to sources of funds. The capital structure shows the financing mix. The financial structure is related to the

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<sup>9</sup> Weston, J. Fred and Brigham E.F., Managerial Finance, Sixth Edition (Eastbourne East Essex: Holt - Saunders International Editions, 1978) p.4

<sup>10</sup> Van Horne, J.C. Financial Management and policy (Englewood Cliffs, New Jersey: Prentice-Hall International, Inc., 1971) p.9

<sup>11</sup> Pandey I.M., Financial Management (New Delhi: Vikas Publishing House, PVT Ltd, 1979) p.vii.

capital structure and actually in certain cases the terms are used interchangeably. Where they are used separately capital structure refers to the make up of the long term funds which include the share capital, reserves and long term debt. Financial structure refers to how an organization is financed in total. That means sources of long and short term finance.

Each type of funds or each source of funds has a cost associated with it. Whereas the cost of certain funds is easily determinable, such as the cost of a loan, the cost of share capital and reserves is not obvious. But all the same share capital and reserves have a cost.

The financing decision in a country with a capital market involves considering borrowing from the market or floating shares. In Tanzania there is no stock market. The Government and various financial parastatals are the critical sources of finance. Mbowe<sup>12</sup> identified the four main sources of funds in Tanzania as:

1. Internal cashflows generated by operating parastatals;
2. Government equity contributions to parastatals;
3. Overdraft facilities for working capital provided by the National Bank of Commerce; and

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<sup>12</sup> Mbowe, G. F., Credit Evaluation by the Tanzania Investment Bank in Rasilimali Tanzania Investment Outlook, January 1973, p. 16.

4. Medium-term and long-term loans provided by Tanzania Investment Bank, Tanzania Rural Development Bank, Tanzania Development Finance Company Limited and the East African Development Bank.

Mbowe did not consider other sources including the African Development Bank and the World Bank.

### 2. 3. The Investment Decision

This decision involves investment in working capital and fixed assets. Working capital decisions deal with investment in those assets and liabilities which enable the firm to operate in the short run. Materials required for production and/or sale have to be paid for well before the cash from sale of the finished product in certain cases, personnel have to be paid wages and rent has to be paid. Since these may have to be paid before funds from sales are collected, there is need to have ready money for paying these and other obligations. "Money is needed to make money".<sup>13</sup> In fact, historically this is how the working capital concept arose. Farmers would borrow money during ploughing and planting in order to buy inputs and would repay the loans after they sold their harvest.

<sup>13</sup> Sayore, op. cit. (5), p. 12 (Opportunities, Investment and Financial Decisions (London: Prentice-Hall Inc., 1970) p. 1).

See also, E. G. Anderson Planning and Policy Formulation (New York: American Elsevier Publishers, 1972) p. 172.

In the capital budgeting decision the basic elements are:

1. Total funds outflows and inflows
2. Cost of funds
3. Timing of the funds flows
4. Risk associated with the funds flow.

This list is by no means exhaustive. In fact some writers, e.g. Levy and Sarnat<sup>14</sup> have suggested a comprehensive project planning process. It divides project planning into three stages, Viz. planning stage implementation stage and control stage. What they suggest is depicted in Figure 2. Levy and Sarnat stress the need for comprehensive and detailed planning before arriving at the capital budget in an investment decision. Mockler<sup>15</sup> suggests a four step capital budgeting process, Viz.

1. Determining the amount for capital investment
2. Examining each possible capital project to determine its costs in relation to its potential return on investment
3. Selecting projects which appear profitable and determining the amount needed for capital expenditure during the plan period

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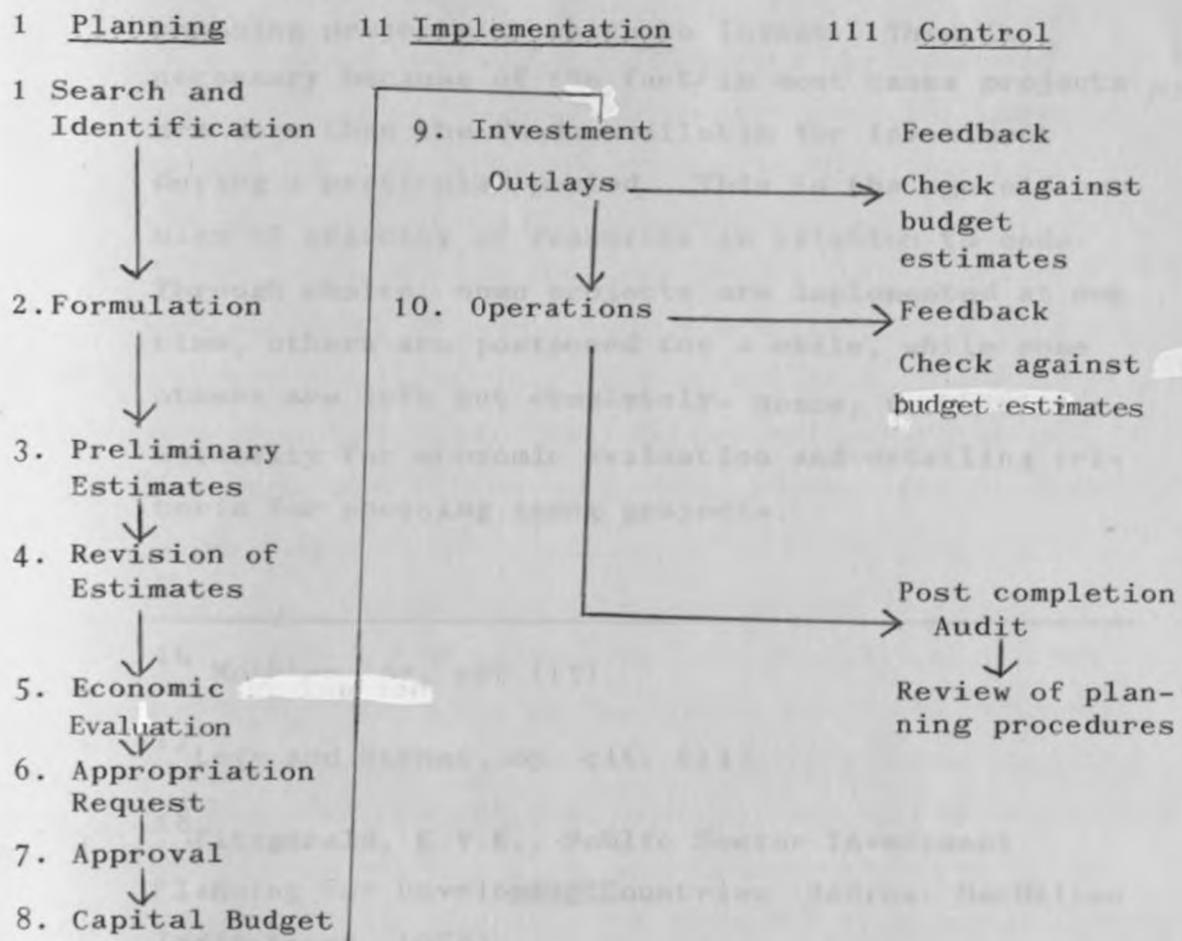
<sup>14</sup> Levy, H. and Sarnat, M., Capital Investment and Financial Decisions (London: Prentice-Hall Inc., 1978) P.19

<sup>15</sup> Mockler, R.J., Business Planning and Policy Formulation (New York: Appleton-Century-Crofts, 1972) P. 174.

4. Determining how much money will have to be raised externally for capital expenditures and selecting methods of external financing.

Figure 2

Project Planning



Source: Levy, H. and Sarnat, M., Capital Investment and Financial Decisions (London: Prentice-Hall Inc., 1978) P.19.

The point being stressed by Mockler<sup>16</sup> and Levy and Sarnat<sup>17</sup> is that the investment decision should be comprehensive and systematic.

Fitzgerald<sup>18</sup> stresses the point that in the public sector capital budgeting is part of the overall economic planning process.

The capital budgeting decision also involves choosing projects in which to invest. This is necessary because of the fact/in most cases projects /that are more than the funds available for investment during a particular period. This is the age old problem of scarcity of resources in relation to ends. Through choice, some projects are implemented at one time, others are postponed for a while, while some others are left out completely. Hence, there is a necessity for economic evaluation and detailing criteria for choosing among projects.

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<sup>16</sup> Mockler, op. cit (15)

<sup>17</sup> Levy and Sarnat, op. cit. (14)

<sup>18</sup> Fitzgerald, E.V.K., Public Sector Investment Planning for Developing Countries (Madras: MacMillan India Press, 1978).

Among criteria that are usually employed in financial management the following are common:-

1. The Payback method
2. The Average Rate of Return method
3. The Net present value method
4. The Internal Rate of Return or Yield method.

The payback method is based on the period a project takes to return the money initially invested in the project. The decision rule is to invest in projects which have the shortest payback period. Although its merits and demerits are not considered exhaustively, it is useful to note that this method is very simple to use. But it can lead to choice of the wrong projects - that is projects which should not have been chosen. Further, it does not consider risk formally.

The average rate of return method is based on the relationship between the net profit and capital employed. Recognizing the controversies in Accounting and the various ways of defining capital employed it becomes apparent that choice based on the accounting rate of return can also lead to selecting the wrong projects. Risk is also not formally considered under

this approach.

The other two methods are referred to as discounted cash flow methods because they take into account the time value of money. This is a recognition that money now is worth more than the same money in the future because money now can be invested to earn interest. In economic evaluation cash flows now are given more weight than distant cash flows. Under the net present value method cash flows are discounted using the company's weighted average cost of capital. The decision rule is to select projects with a positive net present value. This method leads to selection of projects which should be chosen. Although it does not formally consider risk it is a more sophisticated method than the first two methods. The internal rate of return is that rate which equates the present value of a project's cash flows to the present value of the cost of the project. The decision rule is to select projects which have an internal rate of return which is higher than the cost of capital.

Over and above quantitative factors, the capital budgeting decision has to take into account qualitative factors. The fact that these factors cannot be expressed in terms of numbers does not warrant their omission.

Risk in capital budgeting is an important consideration. It is defined as the probability that actual returns will be different from expected returns of a project.<sup>19</sup> How to incorporate risk in the appraisal of projects is still a contentious subject but a simple way of taking it into account is to use sensitivity analysis. So if one considers returns on capital one does not consider one return only but two or three to see what happens when key parameters are varied. Other ways of incorporating risk include discounting using higher discount rates and using the technique of certainty equivalent.

#### 2.4. Dividend Decision

Profits made during a particular accounting period by a parastatal or a privately owned company can be distributed as dividends or ploughed back into the business. The decision whether to distribute or retain profits in the organization constitutes the dividend decision.

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19 This meaning is suggested by two writers viz; Archer, S.H. and D'Ambrosio, C.A., *The Theory of Business Finance: A Book of Readings* (New York: The MacMillan Company, 1967) p. 410-411, and Cohan, B.A., *Financial Decision Making-Theory and Practice Text and Problems* (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1972) p. 431.

The following considerations are critical to the dividend decision: The first is whether there is profit to be distributed. Dividends can only be distributed out of profits available for distribution. In East Africa, Company Law may have to be consulted as to what is profit. The second consideration is whether there are any restrictions as to the payment of dividends. Some companies set dividend payout ratios which must be maintained over time. In other cases, there may be external restrictions imposed by loan agreements as to the amount that can be distributed. Restrictions may also be internal in that directors may consider it prudent to retain part of the profits to finance rapid expansion of assets especially when outside sources of funds are difficult to get.

Another consideration is the theoretical implication of dividends. This factor is critical in free market economies. For instance, Vaughn<sup>20</sup> suggests that management should be aware of the feedback it receives from the market with respect to dividend actions.

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<sup>20</sup> Vaughn, D.E., Norgaard, R.L., and Bennett, H., Financial Planning and Management (Pacific Palisades, California: Goodyear Publishing Company, Inc., 1972) P. 270 - 271.

In the private sector or in free economies the dividend decision is related to expected rates of return. In certain cases, stock dividends are distributed but normally the dividend decision assumes cash dividends.

In the public sector both legal and practical considerations apply. Thus it must be legal to pay dividends in the sense that profits as defined by company law must be there and there must not be any restrictions against paying dividends. Cash with which to pay dividends must also be available. But the question of dividends in relation to the valuation of the firm does not arise.

Financial management consists of the acquisition of funds from the various sources and the use of such funds in the achievement of the firm's objectives. Although details differ in each of the three decisions the nature of financial management for both the private and the public sector is clear.

This literature review indicates a serious deficiency of studies on parastatals.

Most of the authors quoted have written about financial management in the private sector in the developed countries of Western Europe and North America. Trully, in these industrialised countries, capital markets are well developed and the public sector investments in business limited.

In Tanzania parastatal organizations are the dominant and preponderant forms of business.

The foregoing suggests a need for a systematic study of the finance function in parastatals in Tanzania. This study is a contribution towards that end.

## CHAPTER 3

### FINANCIAL MANAGEMENT IN TANESCO

#### 3.1 The Investment Decision in Tanesco

##### 3.1.1 Objectives and policies

The socio-political philosophy embodied in the Arusha Declaration and economic objectives set out in five year plans are the overriding factors in all investments by the public sector. The objectives and policies have been worked out into action programmes in economic plans and annual plans.

Investments are only made in critical sectors as indicated in five year development plans. Tanesco is therefore not free to invest in any project unless it is in the government plan.

Investments in the public sector have to conform to certain conditions as follows:-

1. Conformity with governmental strategy and plans.

Any project to be undertaken in the public sector must be included in the Five Year Development Plan. Thus, capital projects in which Tanesco invests must be only those which appear

in the government development plans.<sup>21</sup> To be implemented in any year, a project has to appear in the annual plan.

## 2. Employment Effects

Government policy requires that investment in the public sector should be geared towards those projects which create as many employment opportunities as possible. Labour is plentiful in Tanzania and in order to uplift the standard of living of many people there must be sources of income. Thus investments which are labour intensive are preferred to capital intensive investments.

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<sup>21</sup>. The formulation of Economic Development Plans is the responsibility of the National Planning Commission. This Commission comprises all members of Parliament with the Prime Minister as the Chairman and the Ministry of Finance as the Secretariat. The Commission is broken up into eighteen working committees, each committee deals with a specific sector and coopts experts from the Civil Service and the parastatal sector.

### 3. Foreign Exchange Effects

Projects which lead to earning foreign exchange or those which save the expenditure of foreign exchange are more desirable than those which waste foreign exchange. Foreign exchange is critical because it enables Tanzania to buy those goods and services which are required for development.

### 4. Acceptable Economic Rate of Return

Projects chosen for investment should have a real net contribution to national output. For this to be possible, the value of output from any project should exceed the cost of the investment.

### 5. Social Impact

The Government is committed to balancing regional development. Projects which utilize idle resources in backward areas are encouraged.

Since these conditions guide decisions about public investments they can be termed investment policies of the government. Tanesco as a parastatal is required to observe them. Below we shall be able to determine whether they are adhered to or not.

Capital expenditure decisions in Tanesco are classified into

1. Major projects, and
2. Capital works orders.

#### 3.1.2. Major Projects

All projects classified as major projects usually involve separate financing, specific design, consultancy, construction and materials procurement arrangements. They constitute power sector projects which must be included in national Five Year Development Plans. The Economic Committee of the Cabinet must vet them for they are strategic to the whole economy.

Examples of major projects completed are:

Hale Hydroelectric power station in Tanga

Ubungo Thermal Power Station in Dar-Es-Salaam

Nyumba ya Mungu Hydro Power Station in Kilimanjaro

Kidatu Hydroelectric Power Station I in Morogoro .

In the period 1975 - 1982 major projects that will be undertaken are shown as Capital Works Program and appear in Appendix 3. Kiddatu Hydro-electric Power Station II which will be used to illustrate the project preparation, appraisal and implementation is included in this appendix. The preparation of a major works program reflects Tanesco's planning which is vital in management.

Major projects have to be identified, prepared and appraised. The identification stage corresponds to idea generation and screening in product planning in marketing. Tanesco, in collaboration with the parent ministry, commissions foreign consultants to identify projects which are feasible and conform to national development strategies.

Project preparation which is based on the prefeasibility study is a team work exercise. The team is made up of civil, mechanical and electrical engineers and economists specialised in investment analysis. The project report or feasibility study which they prepare is the basis of the decision of whether to accept the project, modify it or reject it altogether.

Among its contents are the engineering study, financial study, cost - benefit analysis and, finally, conclusions and recommendations.

The report is sent to Tanesco, the parent ministry, the Economic Committee of the Cabinet and Parliament. Financing agencies also receive a copy. This report is used by such financial institutions as a basis for negotiations and appraisal of viability of the projects

Project appraisal systematically examines economic, commercial, technical, managerial, organizational and financial viewpoints of projects. Project appraisal is a specialised job and is done by consultants.

As foreign financing is always required in major projects negotiations have to be made in such a way that implementation is not delayed. In the past, Tanesco negotiated directly with lenders. The policy now is for negotiations to be made by the Ministry of Finance with representatives from Tanesco and the parent ministry.

The World Bank (the International Bank for Reconstruction and Development), the Swedish International Development Authority (SIDA) and the Canadian International Development Agency (CIDA) have financed and continue to finance Tanesco's major projects.

In awarding construction contracts international competitive bidding is used. This ensures that major projects are constructed by competent contractors.

Tanesco's major projects involve the use of foreign consultants because of the technical nature of these projects and lack of local experts who have the experience. Foreign consultants are used for identifying projects, preparing project reports, appraising these projects and supervising implementation. The progress of major projects is reviewed at Tanesco by the Projects Committee whose Chairman is the Managing Director.

In order to illustrate how this capital budgeting process has been applied, an actual major project - the Kidatu Hydroelectric Power Station II - is given as a case study in the next section.

### 3.1.3 The Framework as Applied to Kidatu Hydro-Electric Power Project: A Case Study

#### 1. Identification of Projects

A number of detailed studies of Tanzania's river basins have already been made.<sup>22</sup> From among these, three river basins were chosen so that comparisons could be made and only one chosen given the forecast demand and the cost of the investment. The river basins

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<sup>22</sup>. A list of reports is given in Appendix 4

chosen were Rufiji (Stiegler's Gorge) Wami (Pongwe) and Great Ruaha (Kidatu).

Stiegler's Gorge Hydroelectric power project was rejected because the cost of the investment was too high and investing in the project would result into too much idle capacity. That is, if Stiegler's Gorge Hydroelectric project was undertaken the generating capacity of the project would be in excess of the demand for electricity. On grounds of cost, the Pongwe hydroelectric project was similarly rejected. Thus, the Kidatu Hydroelectric project was the alternative left after eliminating the two projects on grounds of cost and idle capacity.

In order to determine whether the hydro or thermal project or combination of the two was least cost the following alternatives were compared:-

1. Hydroelectric power project
2. Thermal-Hydro blend
3. Thermal project

The decision variables were the capital costs of each project, operating costs and load growth.

The alternative with the least present value of capital and operating costs was the one to be chosen. Since revenues would be equal for all strategies they do not make a difference whether they are considered or not. The alternative projects were extended over sixty-two years to attain a common facility point and also to reach a point of insignificance for the present value factor.

It was found that the Kidatu Hydroelectric Power Project was the cheapest of the three projects. Thus it was chosen as the major project and was to be implemented in two stages. Kidatu Hydroelectric Power Project I started in 1971 and ended in 1975. Kidatu Hydroelectric Power Project II was the major project for 1976 to 1980.

Although capital costs of hydroelectric projects are higher than the alternative thermal sources, savings on recurrent costs are so considerable as to make hydroelectric power preferable to thermal power for major development. Thermal power is increasingly used to meet short term needs such as peak demand, small scale local needs and to provide flexibility in the electric supply system.

For Tanzania, the policy regarding power is to concentrate on hydroelectric power. This is a realistic policy in view of the ever rising prices of oil and the huge potential of hydroelectric power in the country.

## 2. Project Preparation (Feasibility Study)

The Swedish consulting firm, SWECO prepared the Kidatu Hydroelectric Project II feasibility study. According to the feasibility study, the cost components were:-

1. Civil works - Dam and relocation of the Great North Road.
- ii. Mechanical equipment, transformers, switchgear control equipment, and connecting lines.
- iii. Engineering consultants
- iv. Contingencies: Physical (25% on Civil Works)  
Price (15% on equipment)
- v. Training
- vi. Taxes
- vii. Interest on loans during construction.

According to the feasibility study, it was estimated that this project would cost US \$76.8 million or T.Shs. 618 million. The foreign exchange component was estimated at US \$58.4 million or T. Shs. 470 million. This meant that 76% of the total project cost would be in foreign exchange.

From the project report, it can be seen that in a hydroelectric project civil works constitute an important

cost element which explains why the capital costs of a hydroelectric project are higher than those of the thermal.

Cost of training is considered a part of the project cost because it is necessary to train personnel to operate the machines and run the new power project.

The project report was considered by Tanesco and then by the Government and it was decided that the next stage of the capital budgeting process should be undertaken.

### 3. Project Appraisal

The objective of project appraisal in general and for Kidatu II in particular was to determine the economic and financial feasibility. Several viewpoints are considered.

#### i) Why it was necessary to undertake

#### Kidatu Hydroelectric Project II.

This project was to be undertaken to meet the demand for power in the interconnected system along the coastal areas of Dar-es-Salaam, Morogoro and Tanga; and the North East area around Moshi and Arusha. Both the Coastal area and the North East area are important centres for economic activities in Tanzania.

The figure for hydro generating capacity for 1975 was a projection. The actual hydro generating capacity after the completion of Kidatau was 149 megawatts. In terms of growth rates we have the following:-

ii. Economic Viewpoint

Economic analysis of the Kidatu Hydroelectric Project involved the assessment of the direct and indirect effects of the project. The analysis involved examining the economy as a whole as to population, gross domestic product, future growth, energy resources and the power sector.

Some statistics generated in the course of economic analysis are shown in the tables below:-

TABLE I

POWER GENERATION CAPACITY (IN MEGAWATTS<sup>23</sup>)

|         | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 | 1970 | 1971 | 1972 | 1973 | 1974 | 1975 |
|---------|------|------|------|------|------|------|------|------|------|------|------|------|
| Hydro   | 29   | 49   | 49   | 49   | 49   | 49   | 49   | 49   | 49   | 49   | 49   | 15   |
| Diesel  | 35   | 36   | 40   | 45   | 50   | 53   | 56   | 62   | 74   | 89   | 89   | 8    |
| Gas     |      |      |      |      |      |      |      |      |      |      |      |      |
| Turbine | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 15   |

<sup>23</sup> Megawatts are units of electricity defined as below:-

1 Megawatt = 1000 Kilowatts or 1000000 watts.

1 Kilowatt = 1000 watts. 1 Kilowatt hour is a unit of electricity sold.

The figure for hydro generating capacity for 1975 was a projection. The actual hydro generating capacity after the completion Kidatu I was 149 megawatts. In terms of percentages we have the following:-

TABLE 2  
POWER GENERATION CAPACITY (%) BY 1975

|             |            |
|-------------|------------|
| Hydro       | 59         |
| Diesel      | 35         |
| Gas Turbine | 6          |
|             | <u>100</u> |

The economic analysis revealed that the project would considerably reduce Tanzania's dependence on oil and would therefore contribute to favourable balance of payments.

### iii. Commercial Viewpoint

Commercial analysis involved the assessment of the market for electricity. The analysis revealed that the major consumers of electricity are industrial and domestic consumers. Since industrial development is a priority area, there would be an assured market for power if the Kidatu II project was undertaken. Therefore additional power supply is required to satisfy the expanding demand.

Table 3 shows consumers of electricity:-

TABLE 3  
CONSUMERS OF ELECTRICITY

| <u>CONSUMERS</u> | <u>% OF CONSUMERS</u> | <u>% OF SALES</u> |
|------------------|-----------------------|-------------------|
| DOMESTIC         | 80                    | 16                |
| INDUSTRIAL       | 2                     | 76                |
| COMMERCIAL       | 18                    | 8                 |

Although industrial consumers are a mere two percent of the consumers, they account for three quarters of the sales of electricity.

Table 4 shows generation and sale of power:-

TABLE 4  
GENERATION AND SALE OF POWER (KWH MILLION<sup>24</sup>)

|           | 1969 | 1970 | 1971 | 1972 | 1973 | 1974 | 1975 |
|-----------|------|------|------|------|------|------|------|
| GENERATED | 358  | 393  | 426  | 472  | 516  | 536  | 558  |
| SOLD      | 307  | 341  | 372  | 401  | 431  | 459  | 486  |
| SOLD AS   |      |      |      |      |      |      |      |
| A % OF    |      |      |      |      |      |      |      |
| GENERATED | 86   | 87   | 87   | 85   | 84   | 86   | 87   |

<sup>24</sup>. KWH = Kilowatt hours. These are units of electric power generated and sold.

The difference between units generated and units sold is accounted for by the loss of some units during transmission and distribution. Further, some units are consumed by Tanesco itself. But statistics indicate that about 85.7% of the power is sold. The sale of electric power is at different tariffs such as domestic tariff, light industrial tariff, industrial tariff, commercial tariff and maximum demand.

iv. Financial Viewpoint

This analysis is required to determine whether in financial terms the project is sound. For Kidatu Hydro-electric Power Project II the internal rate of return was 17%. It was computed by SWECO. This rate equates the present value of the project cash flows to the present value of the project costs. Using shadow prices (or "border prices") - i.e. marginal foreign exchange revenue or expenditure, the Kidatu II project had an internal rate of return of 15%. The World Bank has determined that 11% is the opportunity cost of capital and is taken as the cost of capital. Since the internal rate of return of the project was higher than the cost of capital the project was considered financially sound.

Project appraisal, as was said above has the objective of determining the economic and financial acceptability of the project. Kidatu II was determined to be acceptable economically and financially, [redacted]. A decision was taken to proceed with negotiations for financing.

4. Negotiations for financing

Negotiations between the Government of Tanzania and financing institutions overseas resulted into an agreement whereby the World Bank, SIDA and KFW of West Germany would finance the foreign exchange part and Tanesco the local expenditures. In the table below are shown financiers, the amount and purpose. These figures differ from the estimates above because of price increases with the passage of time.

Implementation

In order to obtain the best financial contractors by competitive bidding was

FINANCING OF KIDATU H.E.P. II

| <u>FINANCIER</u> | <u>PURPOSE</u>   | <u>AMOUNT (US \$ MILLION)</u> |
|------------------|--|-------------------------------|
| World Bank       | Interest and Commitment charges on its loan during construction, Mechanical and Electrical equipment for the Dam, Capacitor Bank, Training and Consulting services | 30.0                          |
| SIDA             | Mechanical and Electrical Equipment for the Dam, etc, with the World Bank in the ratio 14:11 (World Bank to SIDA)  | 18.6                          |
| KFW              | Supply and installation of turbines, generators and electrical and mechanical equipment and related interest and commitment charges during construction            | 21.2                          |
| Tanesco          | Unskilled and semi-skilled labour, timber and other materials.   | 20.2                          |
|                  |  | 90.0                          |

## 5. Implementation

In order to obtain competent contractors to implement the Kidatu H.E.P. II, international competitive bidding was used. Tenders received were evaluated by the consulting engineers of Tanesco, SWECO. They handled all technical details and advised Tanesco. There is room for [redacted] collusion between the consultants and the contractors. But Tanesco can hedge against this by using its own technical staff and in certain cases using services of the Industrial Studies and Development Centre and the Institute for National Productivity.

Tanеско receives monthly progress reports from the Consultants who supervise the implementation. These reports are discussed at monthly meetings of the projects Committee which is under the Chairmanship of the Managing Director.

[redacted] Before Tanesco can accept completed projects they have to be tested and evaluated. Although this is not a sufficient safeguard, it is useful for testing whether the project is operational and consistent with technical specifications.

## 1.4 Conclusions

Capital budgeting in the power sector and hence in Tanesco is a long process and an exacting exercise. It requires use of teams of specialists in engineering,

economics and management. The best equipped teams are in experienced consulting firms such as SWECO.

Tanesco is far from competent in capital budgeting in its sector as can be seen from its endless reliance on foreign consultants.

Only projects which are consistent with national development are undertaken. Thus projects which are too large in relation to current development are postponed. Economic acceptability of a project is assessed before embarking on the implementation. Since only projects which are included in the national Five Year Development Plans are considered for appraisal and implementation, we can conclude that both economic and social considerations are taken into account. This conclusion is valid because when drawing up the economic plans for the nation social factors are considered.

### 3.1.5 Capital Works Orders.

The second type of capital projects undertaken by Tanesco are called capital works orders. They are not major projects and they are wholly financed by Tanesco and implemented entirely by its staff. Some of them are revenue earning. There are four types of capital works orders which are analysed below:-

### i) Service Lines

Service lines are connections from the main transmission lines to the **customers**. The capital budgeting process as regards service lines is very simple. It consists of the following sequences. Applications from customers → Cost estimates by local engineers → Payment of contribution by applicants → Implementation.

Service lines are initiated outside Tanesco by customers or prospective consumers of electricity. Applications for service lines are sent to local Tanesco offices. For each application a cost estimate is made by a local Tanesco engineer. The applicant pays a contribution that varies with the type of service lines. For instance, a service line for domestic uses which is single phase 0 - 60 metres a minimum of T.Shs. 400 is payable. For each metre in excess T.Shs. 10 is payable. T. Shs. 250 is payable for each pole used. Service lines are therefore revenue earning activities. Implementation commences when the applicant has paid the contribution.

Uncompleted service lines are part of the work in progress.

Although service lines are identified and cost estimates prepared they are not appraised as major projects are. One reason is service lines do not require heavy capital investments. They also take a short time to implement and they are very simple projects.

ii) Repairs and Maintenance

This class of capital works orders is not revenue earning. Expenditure in respect of repair and maintenance can be very high because of the capital intensive operations of Tanesco. To control authorization expenditure ranges are specified and the authority required. Table 6 below summarizes the expenditure and authority.

TABLE 6  
REPAIRS AND MAINTENANCE (RM)

| FORMERLY (T.SHS.) | PRESENT (T.SHS.) | AUTHORITY FOR RM           |
|-------------------|------------------|----------------------------|
| 0 — 1000          | 0 — 5000         | Charge to Income Statement |
| 1001— 5000        | 5001—10,000      | Regional Manager           |
| 5001— 10,000      | 10001—20,000     | Director                   |
| 10001—60,000      | 20001—120,000    | Managing Director          |
| Over 60,000       | Over 120,000     | Board of Directors         |

Expenditure for repair and maintenance above T.Shs.5000 is capitalized. Below this figure it is expensed.

iii) Chargeable Works Orders

Capital works orders carried out on chargeable basis are revenue earning activities. The amount the customer pays is calculated as:

Materials xxx

Labour xxx

Transport xxx

Total xxx

Add 10% Head Office charges xxx

Total xxx

Add 25% Profit xxx

Amount Payable by Customer xxx

Chargeable works orders consist of temporary works orders especially on construction sites, damaged lines when the culprit is known and wiring.

iv) Capital Works Orders

Capital works such as purchase of furniture, air conditioners, motor vehicles, etc which do not fit in the above classes are budgeted separately. The amount the company plans to invest in Capital Works Orders is

determined and included in the annual budgets of Tanesco. When the budgets are approved by Parliament the amounts for investment become fixed at the figures approved. What is required is the capital works which will have to implemented.

Every year in July and August capital works proposals from branches and the Head Office are sent to the Director of Finance. When collated, they form capital works proposals for the entire company. The problem which arises is which projects to choose and which to reject given a limited budget and competing projects. For instance in 1980 the amount requested was T.Shs. 143,700,000. The amount approved for capital works in Tanesco budgets was T.Shs. 83,700,000.

Summaries of the proposals by branches and departments are examined by the Budget Committee of the Workers Council. The Director of Finance chairs the Budget Committee. Past allocations and amount utilized are considered when approving or rejecting capital works proposals. The committee's recommendations are discussed in the Workers' Council which meets in October. The Council does not decide on the proposals; it is the Board of Directors which takes the decision as to which capital works proposals to approve and which ones to reject. But the Board's decision is based on the advice of the Workers' Council.

When the Board approves capital works proposals they become the projects to be implemented in the following

financial year. Tanesco's financial year starts on January 1st each year and ends on December 31st each year.

The Head Office closely controls the implementation of approved capital projects by requiring applications for these capital works orders to be scrutinized at the Head Office by the Director concerned and the Director of Finance.

#### Conclusion

Considering major projects as a component of the investment decision in Tanesco some conclusions can be made. Major projects are of national concern rather than Tanesco's responsibility. Decisions to invest in major projects is made by the National Planning Commission. The nation, through this commission, formulates development plans which by nature are aggregates of projects by ministries, parastatals and regions. Power Sector projects are formulated by the working committee of the power sector. Tanesco is merely an executing agency of decisions by the commission. Major projects undertaken must be those which conform to national development strategy and economic plans.

The Economic Committee of the Cabinet is involved to ensure that this is done.

Another conclusion is about the capital budgeting process itself. It is comprehensive and systematic. Comprehensiveness is reflected by considering economic requirements of the whole economy before choosing a major project. It is because of this that in the choice of Kidatu Hydroelectric Project, Stiegler's Gorge Project was rejected for it would result in a lot of idle capacity given the nation's demand for power. It is systematic because of the following relationships:  
Needs for electric power → identification of projects → preparation of projects → Appraisal → Implementation → Satisfaction of Need. See Figure 3 below.

Capital budgeting in the power sector requires technical expertise to undertake tasks at every stage. There is little, if any, self-reliance on the part of Tanesco as far as expertise is concerned. If major projects are meant to further national objectives, lack of self-reliance in technical personnel implies that foreign experts are responsible for our economic development. This is undesirable.

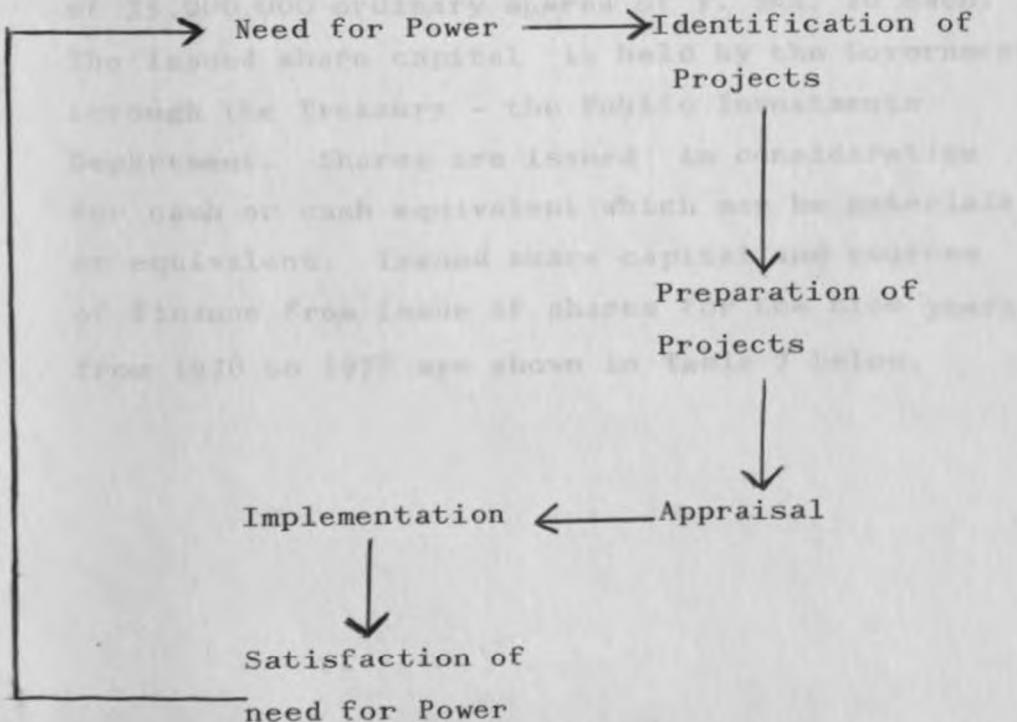
In the investment decision relating to major projects commercial considerations come after social and political considerations. This is so because first economic plans are drawn up to achieve certain socio-political objectives. Secondly only projects which conform to these plans are

selected. This means only projects which are consistent with socio-political objectives are chosen. Socio-political considerations override commercial considerations.

Non-major projects, called capital works orders, are Tanesco's concern. It is Tanesco which identifies them and implements them using its own funds. Although some of them are revenue earning, they generate very little revenue relative to the other sources.

FIGURE 3

SCHEME OF CAPITAL BUDGETING IN TANESCO



### 3.2 The Financing Decision in Tanesco

Finance required to fund Tanesco's operation is obtained from three principal sources, namely issue of shares, borrowing and funds from operations. When finance is obtained from a company's operations it is said to be internally generated. Each source is considered separately.

#### i) Issue of Shares

In 1978 Tanesco had an authorized share capital of 35,000,000 ordinary shares of T. Shs. 20 each. The issued share capital is held by the Government through the Treasury - the Public Investments Department. Shares are issued in consideration for cash or cash equivalent which may be materials or equivalent. Issued share capital and sources of finance from issue of shares for the nine years from 1970 to 1978 are shown in Table 7 below.

TABLE 7

SOURCES OF FINANCE FROM ISSUE OF SHARES (T.Shs.)

| YEAR                                  | 1970        | 1971        | 1972        | 1973        | 1974        | 1975        | 1976        | 1977        |
|---------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| ISSUED<br>SHARE                       |             |             |             |             |             |             |             |             |
| CAPITAL                               | 112,598,080 | 117,586,080 | 126,528,080 | 181,164,040 | 249,452,580 | 336,941,680 | 379,767,540 | 436,843,540 |
| 1978                                  |             |             |             |             |             |             |             |             |
|                                       | 648,448,880 |             |             |             |             |             |             |             |
| FINANCE<br>FROM<br>ISSUE OF<br>SHARES | 4,025,000   | 4,988,000   | 8,942,000   | 54,635,960  | 68,288,540  | 87,489,100  | 42,825,860  | 57,076,000  |
|                                       | 211,605,340 |             |             |             |             |             |             |             |

This table shows that government equity investment has been rising between 1970 and 1978. In Tanzania, the Government makes annual equity contributions to all parastatals. Tanesco received T. Shs. 4 million in 1970 as equity contribution from the Treasury while in 1978 it received T. Shs. 211 million. The contribution in 1978 was fifty three times that of 1970.

Equity contributions received by Tanesco but for which no shares are issued are classified as advances towards share capital. Dividends are paid on issued share capital while advances toward share capital is not awarded anything.

Issue of shares by Tanesco to the Treasury is not through the stock market. The Treasury makes the investment in Tanesco or any other parastatal and the parastatal issues shares to it. The only consideration then is the Treasury's resources in a particular year in relation to requirements of Tanesco or any other parastatal. There are not share floatation expenses because shares are not issued through the stock market. The office of the Company Secretary handles all legal matters pertaining to the issue of shares.

## 2) Long term loans

Table 8 shows foreign and local long-term loans. Long term loans are obtained from various lenders in the West.

TABLE 8  
TANESCO: LONG-TERM LOANS

| Foreign Loans  | Amount<br>(Currency of<br>origin)              | Moratorium<br>(Grace Period) | Due     | Interest<br>Charges                                   | Outstanding at 31.12.77<br>Currency of<br>Origin | T.Shs       |
|--|--|------------------------------|---------|---|--|-------------|
| Commonwealth Development Corporation (secured against first mortgage upon freehold properties and a first floating charge upon all other properties and assets both present and future ) | Sterling £3m                                   | 5                            | 1969/85 | 7 $\frac{1}{4}$ %                                     | £1,416,600                                       | 19,979,895  |
| IBRD Loan 518-TA (Secured as above)  | US \$ 5.2m (withdrawn in different currencies) | 5                            | 1976/91 | 7 $\frac{1}{4}$ % (commitment charge 3/8%)            | \$2,729,377.79                                   | 14,276,663  |
| IBRD Loan 715-TA   | US \$ 35m                                      | 5                            | 1976/96 | 7 $\frac{1}{4}$ % (commitment charge $\frac{1}{4}$ %) | \$33,755,000                                     | 313,718,145 |
|  |  |                              |         |   |  | 366,553,605 |

Balance carried forward

| Foreign Loans  | Amount<br>(Currency of<br>origin) | Moratorium<br>(Grace Period) | Due       | Interest<br>charges | Outstanding<br>Currency of<br>origin | at 31.12.1977<br>T.Shs. |
|--|-----------------------------------|------------------------------|-----------|---------------------|--------------------------------------|-------------------------|
| Balance brought forward  |                                   |                              |           |                     |                                      | 366,553,605             |
| Kingdom of<br>Sweden through<br>Government of<br>Tanzania<br>(unsecured) | Swedish<br>Kroner, 83m            | 5                            | 1976/96   | 7 1/4%              | Swedish Kroner<br>72,729,597.79      | 147,276,663             |
| Government of<br>Canada through<br>Government of<br>Tanzania (unsecured) | Canadian<br>\$2m                  | -                            | 1977/92   | 3 1/4%              | Canadian \$<br>1,866,668             | 15,409,127              |
| IBRD Loan 1306-TA  | US \$ 30m                         | 6                            | 1983/2001 | 8 1/2%              | \$30,000,000                         | 238,576,206             |
| Kingdom of Sweden  | Swedish Kroner<br>80m             | 5                            | 1982/2001 | 6.3%                | Sw.Kr.<br>80,000,000                 | 136,242,392             |
| KfW Loan No.76-65-<br>300  | DM 60m                            | 5                            | 1982/2001 | 8 1/2%              | D.M. 60,000,000                      | 221,156,520             |
| KfW Loan No.75-65-   |                                   |                              |           | 6%                  | D.M. 13,500,000                      | 49,260,217              |

| Local Loans  | Amount (currency<br>of origin) | Moratorium        | Due     | Interest rate                 | Outstanding at 31.12.<br>Currency of<br>origin | T.Shs.     |
|--|--------------------------------|-------------------|---------|-------------------------------|--|------------|
| Total foreign loans brought forward  |                                |                   |         |                               |  | 1,174,474, |
| Government of Tanzania for Subeconomic Branches  | T.Shs. 982,700                 | IBRD              | 1968/88 | Original 6½%                  | T.Shs. 416,355                                 | 416,       |
| Tanzania Investment Bank (secured against third charge on all assets present & future) | T.Shs. 7,500,000               | Kingdom of Sweden | 1976/89 | 9%<br>(Commitment charge .1%) | 55,522,061<br>T.Shs. 5,693,079                 | 5,693,     |
| Total long-term loans  |                                |                   |         |                               |  | 1,180,584, |

Notes: 1. IBRD is an abbreviation for International Bank for Reconstruction and Development.

KfW is an abbreviation for Kreditanstalt Fur Wiederaufbau of the Federal Republic of Germany.

2. The following loans are intended to finance Kidatu II

IBRD US \$30,000,000

Kingdom of Sweden Sw.Kr. 80,000,000

KfW DM 60,000,000

By the end of 1977 amounts withdrawn were (both in Currency of origin and T.Shs. equivalent):

|                   | <u>Currency of Origin</u> | <u>T.Shs.</u> |
|-------------------|---------------------------|---------------|
| IBRD              | US \$ 3,137,657.76        | 24,952,349    |
| Kingdom of Sweden | Sw.Kr. 9,773,634.73       | 16,644,793    |
| KfW Loan          | D.M. 3,780,558.32         | 13,934,919    |
|                   | Total                     | 55,532,061    |

In the table unwithdrawn balances are shown even though repayment is not yet due.

3. Commitment charges are paid on unwithdrawn balances of some loans at rates indicated.

First, the World Bank is the most important single lender of Tanesco. In the 1970's the World Bank lent Tanesco US \$ 70.2 million to finance three major projects. The Bank's loans are shown in Table 9.

TABLE 9  
WORLD BANK LOANS TO TANESCO IN 1970's

| PROJECT          | CAPACITY (MW) | AMOUNT           |
|------------------|---------------|------------------|
| UBUNGO (THERMAL) | 15            | US \$5.2 Million |
| KIDATU I(HYDRO)  | 100           | 35.0 Million     |
| KIDATU II(HYDRO) | 100           | 30.0 Million     |
|                  |               | 70.2 Million     |
|                  |               | ====             |

The projects financed are Tanzania's most important electric projects. They have tremendously expanded the country's capacity to generate electricity.

The World Bank finances productive projects which are a priority in economic development. Electric power is an economic infrastructure necessary for economic activities. The World Bank finances projects only when certain conditions are fulfilled:

- The long term loans from Canada and Sweden were granted to
- i) the borrower must have failed to obtain loans from private sources,
  - ii) the project to be financed must be economically and technically sound,
  - iii) Consultants and competitive bidding must be used,
  - iv) The Bank finances the part of the cost requiring foreign exchange.

The fact, that the World Bank has been able to lend US \$70 million to Tanesco within a short time suggests the strategic importance of electricity in the development of Tanzania. Further, this huge World Bank lending implies that Tanesco has not been able to obtain loans from private commercial sources. The projects financed are economically and technically viable.

Loans from commercial sources have not been many in Tanesco. The only commercial loan obtained by Tanesco was the Commonwealth Development Corporation Loan of £3 million<sup>25</sup> made in 1964 to finance the Hale Hydroelectric Project on the Pangani River. Its capacity is 21 MW.

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<sup>25</sup>. At the time of lending 1 sterling £ was equivalent to Shs.20.

The long term loans from Canada and Sweden were grants to the Tanzania Government initially. They were lent to Tanesco as unsecured loans. These loans have been used to finance Kidatu Hydroelectric Projects I and II.

The DM 60 million loan from KFW was used to finance Kidatu H.E. P. II. The other loan of DM 13.5 million from the same lender was used for rural electrification.

Lending by the Government to parastatals like Tanesco with interest is justified in that parastatals are made to appreciate that such funds are not free.

The Government has laid down five conditions relating to foreign loans. Before considering them it is appropriate to mention that all loans from outside are negotiated by the Treasury. The Loan Agreement is between the Government and the lender. The Financing Agreement is between the Treasury and the borrower-a parastatal such as Tanesco.

The conditions laid down are:

- I) The loan should not be used to change Tanzania's policy of socialism and self-reliance,
- 2) Interest should be as low as possible and should be spread over a long period of time,
- 3) What projects will be financed using such loans and what projects have priority is Tanzania's responsibility,
4. Loans should be for industrial projects with shorter gestation periods,

- 5) Total loans per annum should not exceed 15% of the total foreign exchange earnings of the three preceding years. This condition is contained in the Loans, Grants and Guarantee Act 1974.

The first and third condition are political in nature in that foreign loans to Tanzania can be used to alter the political system. Priority of projects for development is not the concern of the lender. The National Planning Commission decides this priority.

The second condition is made recognizing the country's ability to service foreign loans. To pay interest and repay the principal require foreign exchange. This condition explains why Tanesco's long term loans are from the World Bank and grants from Sweden and Canada. World Bank Loans are soft loans, they are not commercial. The only commercial loan was from the Commonwealth Development Corporation and that was in 1964 when Tanesco was emerging from private ownership. The use of soft loans and grants is a national consideration and hence a national policy applicable to Tanesco and other parastatals.

The fifth condition is both political and prudent. It is prudent because borrowing from foreign sources without limits per period can result in borrowing more than one's ability to repay. Since repayment is in foreign exchange it is prudent to tie the amount borrowed to foreign exchange earnings. The same condition is politically motivated in that Tanzania perceives that when borrowing is excessive a country can lose its sovereignty.

Lenders will take control and require that their interests prevail over all major decisions. Financial literature also sees this situation occurring when there is excessive debt relative to equity. Lenders can bring about winding up of a company if interest and principal repayments are not made.

As at 31st December 1977, foreign long term loans were T.Shs. 1.2 billion. At the same date, local long term loans amounted to T.Shs. 6 million only. The World Bank lent half of the foreign loans.

The local long term loans are made up of the Government loan to Tanesco in 1968. The loan was used to finance sub-economic projects at Mpwapwa and Nachingwea. The loan from the Tanzania Investment Bank was used to finance the Mwanza Power Station. It is the most expensive loan if we consider the interest rate of 9% per annum. Thus as at 31st December 1977, local to foreign long term loans ratio was approximately 1:200 or  $\frac{1}{2}\%$ . Tanesco relies heavily on foreign long-term loans. The implication is that there is no self-reliance in financing Tanesco's major projects because foreign resources are used extensively. This also implies that Tanzania must continue to foster good relations with lender countries in order for these funds to continue flowing.

The debt to equity ratio as at 31st December 1977, was 1.6 : 1. Debt excludes short term debt. This ratio shows that Tanesco is highly levered. Tanesco has very high debt content in its capital structure relative to shareholders' funds. Lenders have invested more in Tanesco than the

owners. For Tanesco this high leverage is not dangerous because these loans are between the Government of Tanzania and the lenders. Therefore the debt to equity ratio is not as important as it would be if borrowing was between Tanesco and the lenders. That is if Tanesco was a private borrower.

Table 10 below shows the financing of investment programmes between 1969 and 1974 a period when Tanesco made very high investments. The table shows the crucial role of foreign finance in investments, further illustrating the lack of self-reliance in financing investments.

According to Table 10 foreign finance accounted for 47% of the investments in Tanesco in the period 1969/70 to 1973/74.

TABLE 10

TANESCO: CAPITAL INVESTMENT PROGRAMME (T.SHS.<sup>1</sup> 000)

|                  | 1969/70 | %     | 1970/71 | %     | 1971/72 | %   | 1972/73 | %   | 1973/74 | %   |
|------------------|---------|-------|---------|-------|---------|-----|---------|-----|---------|-----|
| External Finance | 26,682  | 61.00 | 42,682  | 45.00 | 64,355  | 46  | 56,285  | 45  | 22,560  | 42  |
| Local (Gvt.)     | 7,973   | 18.00 | 36,612  | 39.00 | 63,200  | 45  | 53,050  | 42  | 13,100  | 24  |
| Local (Tanesco)  | 9,380   | 21.00 | 14,815  | 16.00 | 12,180  | 9   | 16,120  | 13  | 18,170  | 34  |
|                  | 44,055  | 100   | 94,109  | 100   | 139,735 | 100 | 125,455 | 100 | 53,830  | 100 |

Government finance accounted for 38% of the finance invested in major projects. Tanesco's own funds accounted for a mere 15% in the same period.

In the period 1975-1980 Tanesco forecast the following sources of funds:

TABLE II

SOURCE OF FUNDS FOR YEARS 1975-1980

|                          | <u>T.SHS MILLION</u> | <u>US \$ MILLION</u> | <u>% OF TOTAL</u> |
|--------------------------|----------------------|----------------------|-------------------|
| <b>Internal Cash</b>     |                      |                      |                   |
| Generation               | 681.3                | 84.6                 | 40.0              |
| <b>Borrowing-</b>        |                      |                      |                   |
| Long term                | 780.0                | 96.9                 | 45.8              |
| <b>Government Equity</b> |                      |                      |                   |
| Contributions            | 226.7                | 28.2                 | 13.4              |
| <b>Consumers Contri-</b> |                      |                      |                   |
| butions                  | 13.7                 | 1.7                  | 0.8               |
|                          | <u>1701.7</u>        | <u>211.4</u>         | <u>100.0</u>      |

Although the forecast sources of funds shows funds generated internally would be next to long-term borrowing, the equity contribution from the Government would still be very significant.

### 3. Internal Cash Generation

In addition to long term borrowing and government equity investment Tanesco obtains funds from its own operations. As has been shown above funds from operations rank third in importance the first being foreign loans.

### 4. Funds from other sources

Tanesco obtains funds from contributions from customers in respect of service lines and chargeable works orders. But the amount of finance from this source is not much. In certain cases funds are obtained from the sale of fixed assets which are no longer useful to Tanesco. Funds from this source are also insignificant. One reason why funds generated internally are very insignificant is that operations have not been very profitable. The return on average net fixed operating assets that is recommended is 7%<sup>26</sup> but this rate of return has been varying between 4.3% and 6.4% between 1974 and 1976. During this period Tanesco was relying on oil imported from the Persian Gulf. The price of

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<sup>26</sup>. The 7% rate of return on revalued assets is required by the World Bank when it lends to Tanesco.

oil has been rising faster than the tariffs at which electricity is sold in Tanzania.

### 3.2.1 Conclusions

In the financing decision, there is predominance of the foreign funds in financing major projects undertaken by Tanesco. These loans are negotiated by the Treasury and made available to Tanesco. Hence Government plays a major role in the financing decision. Political considerations far outweigh financial or commercial considerations in this financing decision. Predominance of foreign loans in Tanesco investments raises doubts about self-reliance in financing Tanesco or any other parastatal. The whole objective of self reliance in financing is that local or domestic resources be mobilised to finance parastatal and ministerial projects rather than relying on foreign funds.

The debt equity ratio which is used to depict leverage is very high for Tanesco because of the very high debt content in long term funds. In any case this ratio is not important in the relationship between Tanesco and the lenders because the foreign loans are made between Tanzania and the lending countries or institutions. Further, as the Government has set a limit to be observed when borrowing it is this limit which matters per year and not the debt content of Tanesco or any other parastatal.

Government investment in Tanesco is called equity

investment if shares are to be issued in return. Or else it can be a loan on which Tanesco will have to pay interest. This source is next to foreign loans in importance. The extent to which funds can be given for equity investment in Tanesco is limited by the total funds available to the Treasury and the requirements of other parastatals.

Internally generated funds have taken a third place in financing Tanesco. The operations of Tanesco have not been very profitable for if they were, more funds should have been obtained from this source. This would have reduced reliance on the Treasury's funds.

### 3.3 The Dividend Decision In Tanesco

Investments in parastatals such as Tanesco by the Government are made in order to get dividends. Tanesco pays cash dividends to the Government when they are recommended by the board of directors. There are conditions that have to be observed before dividends can be declared.

There must be profits from which dividends can be paid. By law dividends are payable out of profits of a particular period of time. Cash is required to enable Tanesco to pay the liability in respect of declared dividends. In Tanzania stock dividends are out of the question. Tanesco like other parastatals is expected to finance its operations partly

out of internally generated funds. For this to be possible dividends must be restricted to some extent. Loan agreements with the World Bank impose a restriction on dividends which can be paid to 6 2/3% of the issued share capital. This means most of the profits are retained in Tanesco in order to finance its capital development.

Government legislation has had a lot of influence on the dividend decision in Tanesco and other companies. In 1972 the Government enacted the Companies (Regulation of dividends and surpluses and miscellaneous provisions) Act 1972. It became effective on 15/6/72. This Act seeks to impose certain limitations on dividends that may be declared by any company, parastatals included. This is because the Government wants to encourage companies to reinvest their profits.

This Act imposes two limitations on the declaration and distribution of dividends. The first limitation is that after the envisaged dividend the net worth of the company should not be less than 125% of the par value of the company's paid up shares. Net worth is defined by the Act as issued share capital plus reserves including undistributed profits. This figure should not be less than the product of paid up capital x 125%.

The second limitation is that the dividend should not exceed the larger of the following two sums: i) 80% of that

year's profit, or ii) Average annual profits of the immediately preceding 3 years.

The application of this Act to Tanesco in 1978 will be shown below. Table 15 shows dividends paid by Tanesco in the ten years from 1969 to 1978.

The figures are rounded to the nearest one thousand.

TABLE 15  
DIVIDENDS DECLARED AND PAID 1969-1978 (T.Shs. '000)

| YEAR            | 1969   | 1970   | 1971   | 1972   | 1973   | 1974   | 1975   | 1976  | 1977   | 1978   |
|-----------------|--------|--------|--------|--------|--------|--------|--------|-------|--------|--------|
| DIVIDENDS       | 7,305  | 7,507  | 7,839  | 8,435  | 11,356 | -      | -      | -     | -      | 7,799  |
| NET INCOME      | 17,836 | 19,925 | 22,106 | 24,196 | 29,071 | 11,544 | 18,024 | 7,401 | 47,090 | 23,175 |
| DIV %<br>INCOME | 41.0   | 37.8   | 35.5   | 34.9   | 39.1   | 0      | 0      | 0     | 0      | 33.7   |

There were no dividends from 1974 to 1977 because the requirements of the 1972 Act were not satisfied. The dividend declared and paid in 1978 was also illegal according to the analysis below.

The 1978 dividend of Tanesco to the Treasury was T.Shs. 7,798,508 which was shown in the table at 7,799,000 after rounding to the nearest one thousand.

The Net Worth of Tanesco per audited accounts as at  
31/12/78 was T. Shs. 791,523,830

### **Less the envisaged**

**dividend** 7,798,508

Net worth after payment of 783,725,322

diuvi dond

Paid up equity T. Shs. 648,448,887

Applying the formula: Paid up Equity x 12.5%

We have    648,448,887 x 125    = 810,561,000

100

After the payment of the dividend the net worth required should not be less than T. Shs. 810,561,000.

But from above the net worth remaining after the dividend was only T.Shs. 783,725,322 which is less than the required amount by:

T.Shs. 810,561,000

783,725,322

T. Shs. 26, 835, 678

Thus the first limitation should have made Tanesco not pay dividends in 1978. But it did pay.

If this condition were satisfied, the amount of dividends should have been the larger of the following:

i) 80% of 1978 after tax profits

Net profit after tax in 1978 was T.Shs. 23,174,695

80% of net profit is T. Shs. 18,549,756

ii) Average annual net profit after tax of the three preceding years, i.e. from 1975 - 1977 was T.Shs. 24,172,000.

The dividend should have been T.Shs. 24,172,000 if the first condition was satisfied. But it was not, so the determination of the larger of the two sums was not necessary.

In 1978 Tanesco should not have paid the dividend because the net worth after the envisaged dividend was less than the statutory limit as per Act. At the time of undertaking the study the Company Secretary was being advised to find out the possibility of rescinding the resolution to declare the dividend.

The dividend decision in Tanzania does not consider the effect of dividends on the valuation of shares. Therefore, this consideration which can be crucial in economies with stock markets and for private sector companies is completely absent in Tanesco and Tanzania.

The dividend decision in Tanesco is therefore principally governed by the need to finance operations by internal funds. The fact that even with these requirements Tanesco has not managed to finance its operations with internal funds shows that operations have not been as efficiently managed as they should. As a consequence, the company has not been as profitable as it might have been.

APPENDIX 3

CAPITAL WORKS PROGRAM 1975 - 1982 (IN T.SHS. THOUSAND)

| DESCRIPTION  | 1975    | 1976    | 1977      | 1978    | 1979    | 1980    | 1975-80 | 1981   | 1982    |
|--|---------|---------|-----------|---------|---------|---------|---------|--------|---------|
| Kidatu I   | 55,570  |         |           |         |         |         | 55,570  |        |         |
| Kidatu II  |         | 60,300  | 85,300    | 163,700 | 175,600 | 113,800 | 618,000 |        |         |
| 220KV Transmission Line<br>(Kidatu- Ubungo<br>Dar-es-Salaam)                 |         | 42,470  |           |         |         |         | 42,470  |        |         |
| Preinvest Ecology<br>Studies for Kidatu<br>Stage II                          | 5,988   | 1,951   | 1,951     |         |         |         | 9,890   |        |         |
| 132 KV Transmission<br>Line(Hale - Moshi)                                    | 34,330  |         |           |         |         |         | 34,330  |        |         |
| Kiwira Hydroelectric<br>Project  | 10,530  | 42,800  | 43,958    | 33,000  | 10,900  |         | 141,188 |        |         |
| Mwanza Power Station<br>Extensions   | 27,247  | 18,188  |           |         |         |         | 45,435  |        |         |
| Minor 33 KV,high and<br>Low Voltage Distribution<br>and Generation Additions | 26,000  | 32,300  | 38,339    | 44,090  | 50,703  | 58,308  | 249,740 | 67,078 | 77,110  |
| Kidatu Technical School<br>Sites & Services Project                          | 6,956   | 4,248   | 3,056     | 1,319   |         |         | 15,579  |        |         |
| Sundry Generating Equip-<br>ment from Finland                                | 2,389   | 2,007   |           |         |         |         | 4,396   |        |         |
| Sundry Power Stations<br>Extensions  | 6,757   |         |           |         |         |         | 6,757   |        |         |
| Future Works   | 6,160   | 55,138  | 17,752    |         |         |         | 79,050  |        |         |
|  | 242,397 | 216,932 | 210,356   | 35,000  | 50,000  | 75,000  | 180,000 | 90,000 | 100,000 |
|  | 287,203 | 247,108 | 1,482,405 | 176,378 | 177,110 |         |         |        |         |

Appendix 4

Documents and Reports on Tanzania River Basins.

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## CHAPTER 4

### WORKING CAPITAL MANAGEMENT IN TANESCO

#### 4.1 Introduction

In addition to investing in fixed assets there must be investment in working capital in order to operate efficiently and effectively. To be able to generate and distribute electricity Tanesco requires cash to buy fuel for thermal plants, pay salaries and wages, buy stores and supplies and pay expenses requiring immediate settlement. Solvency which is the ability to meet obligations as they fall due requires cash resources.

Investment in debtors arises from sale of electricity on credit. This involves waiting for customers to pay before this money can be utilized by the company. Yet, while waiting for customers to settle their accounts materials must be purchased, expenses must be paid, and electricity must be generated. Tanesco must continue to operate while expecting money from customers. It requires working capital.

In order to ensure that funds flow smoothly from debtors to Tanesco and bad debts are minimized, the investment in debtors must be managed efficiently. Stores and supplies must be managed so that operations of Tanesco are not disrupted by shortages of inventories of materials required to generate and sell electricity and the implementation of major projects and other capital works. At any one time there should not be too much or too little stocks for contemplated levels of operations. There must be money to liquidate current obligations.

TABLE 12

WORKING CAPITAL (IN T.SHS.) 1965 - 1978

| Current Assets                     | 1965       | 1968        | 1971        | 1974         | 1977        | 1978        |
|------------------------------------|------------|-------------|-------------|--------------|-------------|-------------|
| Stock of Stores                    | 10,032,600 | 11,458,900  | 35,854,800  | 46,902,900   | 60,945,700  | 103,404,500 |
| Sundry Debtors (Net)               | 6,378,800  | 7,768,900   | 16,770,100  | 31,173,800   | 81,095,000  | 93,275,800  |
| Prepayments and Deposits           |            |             | 339,100     | 55,300       | 671,200     | 3,085,000   |
| Investments at Cost (Unquoted)     | 198,000    | 198,000     |             |              |             |             |
| Treasury Bills                     |            | 996,100     | 1,979,400   |              | 48,194,400  | 7,971,200   |
| Cash in Hand and at Bank           | 7,855,300  | 7,954,400   | 3,331,200   | 4,455,500    | 2,488,900   |             |
| Total Current Assets               | 24,464,700 | 28,376,300  | 58,274,600  | 82,587,500   | 193,395,200 | 207,736,500 |
| Growth rate of Current Assets      |            | 16%(5.3)    | 105%(35%)   | 42%(14%)     | 134%(44.7%) | 7.4%        |
| Current Liabilities                |            |             |             |              |             |             |
| Bank Overdraft                     |            |             |             |              |             |             |
| Sundry Creditors and               |            |             |             | 7,596,900    |             | 159,500     |
| Accrued Expenses                   | 8,343,900  | 13,748,700  | 44,178,900  | 84,659,200   | 112,436,800 | 124,198,300 |
| Provision for Taxation             | 900,000    | 14,544,500  | 15,034,400  | 6,681,500    | 4,360,800   | 11,618,300  |
| Long term Loans (Maturities)       |            |             |             |              | 20,703,900  | 20,770,500  |
| Total Current Liabilities          | 9,243,900  | 28,293,200  | 59,213,300  | 102,937,600  | 137,501,500 | 156,746,600 |
| Growth rate of Current Liabilities |            | 206%(68.7%) | 109%(36.3%) | 73%(24.3%)   | 33%(11%)    | 13%         |
| Working Capital                    | 15,274,600 | 83,100      | 938,700     | (20,350,100) | 55,893,700  | 50,989,900  |

The need for working capital in Tanesco is very obvious. Working capital is made up of current assets and current liabilities. Table 12 shows working capital between 1965 and 1978. In this period the investment in current assets grew from T.Shs. 24 million in 1965 to T.Shs. 208 million in 1978. That means the investment in current assets has grown at an average growth of 57.6% per annum.

An examination of the components of current assets shows that stores and debtors are the major components of current assets. Both items show a rising trend, which means more money was tied up in stores and investment in debtors is rising. Cash on the other hand was moving in the opposite direction, it shows a downward trend. Sales of electricity have been rising at a decreasing rate as is shown in Table 13. Investment in current assets increases as the level of operations increases. More sales means more debtors.

TABLE 13  
SALES OF ELECTRICITY IN UNITS (MILLION KWH)

| YEAR          | 1968 | 1969 | 1970 | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 | 1977 |
|---------------|------|------|------|------|------|------|------|------|------|------|
| UNITS SOLD    | 266  | 307  | 341  | 372  | 404  | 431  | 459  | 486  | 490  | 516  |
| GROWTH RATE % |      | 15.4 | 11.1 | 9.1  | 8.6  | 6.7  | 6.5  | 5.9  | 0.8  | 5.3  |

Similarly, more sales means more investment in stocks. But this state of affairs needs more examination before any conclusions can be made.

With investments in debtors and stocks rising, cash falling and in certain cases bringing about overdraft, something must be done to make investments in current assets in line with operations.

The current liabilities have been rising at an average rate of 122.7% per annum. This rate exceeds the rate of growth of current assets by 65.1% per annum. In future, this will make current liabilities outstrip current assets, a state of affairs which will bring about working capital problems to Tanesco. There is need for management to improve working capital management. Let us look at each working capital component separately.

#### 4.1.1 Cash and Near Cash

Cash receipts in all Tanesco offices are banked intact the following day. Branch cash takings banked with the National Bank of Commerce branches are transferred to the Head Office Account once a week.

Branches are given cash floats which are fixed depending on the level of operations at each branch. For instance, the imprest for Musoma is T.Shs.60,000 per week. Reimbursements are made by cheque from the Head office.

Control over cash is exercised by banking all cash takings intact and using cash registers. Every Thursday a statement of receipts and payments for the week ending then is prepared.

Although cash forecasts are prepared, cash budgeting as such is not practised. The computer which is rented by Tanesco could be of great help in cash budgeting.

Idle cash is at times used to buy Treasury Bills. Interest is earned on Treasury Bills held and increases income of Tanesco. In 1977 T.Shs.48 million worth of Treasury Bills were held. When cash is required these Bills can be discounted at branches of the National Bank of Commerce. Tanesco has a line of credit of T.Shs.8 million with the National Bank of Commerce. In case of need this amount can be used to pay creditors immediately.

#### 4.1.2 Debtors

Debtors arise from sales of electricity, loans to staff and provision of sundry services such as computer processing for clients. Billing customers is on monthly basis and is computerised.

Investment in debtors is very high. This implies that Tanesco finances consumers to a considerable extent. The money with debtors, if released, would be more useful to Tanesco in increasing its profitability. In 1978, debtors were T.Shs.93 million out of electricity sales of T.Shs.274 million representing 34% of sales. Table 14 shows debtors as a percentage of sales from 1975 to 1978 with corresponding collection periods.

TABLE 14

DEBTORS IN RELATION TO SALES (%) AND  
COLLECTION PERIODS

|                   | 1975 | 1976 | 1977 | 1978 |
|-------------------|------|------|------|------|
| Debtors as % of   |      |      |      |      |
| Sales             | 18   | 24   | 23   | 34   |
| Collection Period |      |      |      |      |
| (days)            | 64   | 86   | 82   | 122  |

Since the investment in debtors is rising and collection period is also increasing, there are problems of debtors not paying up their accounts in time. It is possible that credit control is not properly managed. The fact that cash has been showing a downward trend and debtors are not paying their accounts in time requires immediate management action to improve management of debtors and cash.

Credit terms are such that accounts are due on submission. That is a bill is due for payment when Tanesco submits the bill and customer has to pay as soon as the bill is received.

The credit control department is responsible for ensuring prompt payment of bills. If an account which is due is not settled electricity may be disconnected. In order to reconnect a customer has to first settle the outstanding balance and secondly pay a reconnection fee of T.Shs.20. This fee is very low and was set before the 1970s.

There is a possibility that if this fee was raised it could motivate customers to pay their bills more promptly. Tanesco requires or demands a deposit on applying for power connection. This deposit acts as a security for all sums due to the company in case of default in bill payment. The deposit varies from customer to customer. It is determined by estimating electricity consumption based on electric appliances an applicant has. Since estimation can be faulty in certain cases the deposits are not adequate.

Electricity may never be disconnected for essential services like government ministries, parastatals, hospitals, Radio Tanzania, Post office, Religious Communities and others.

Accounts for electricity sold or services rendered are either "live" or "dead". An account is "live" if its holder has not stopped using electricity. Final accounts are prepared for "dead" accounts and settlement must be followed up closely. An account remaining unsettled for more than 15 days after submission of a bill entitles Tanesco to interest on the unsettled amount at the bank overdraft rate plus 1%. This is not enforced by Tanesco. The exact reason is not known but it could be because of resistance from customers, the work involved in demanding the interest and the additional complaints from customers. Failure to enforce this rule raises questions as to why it was decided if it cannot be enforced.

Overdue accounts classified as "dead" accounts are followed up first by two reminders. The next step is transfer the holder's deposit to the electricity account so as to offset the amount due. If the balance is such that it will be less than the costs which could be incurred in enforcing payment the amount is written off as a bad debt. Otherwise the company's lawyers, Tanzania Legal Corporation sue the defaulters for payments not effected within 10 days of demand.

Bad debts of less T.Shs.100/- are written off by management after standing in the books for one year. Bad debts between T.Shs.101 and T.Shs.500 are written <sup>off</sup> with the Board's authority after two years of being in the books. Those amounting to more than T.Shs.500 are written off with Board's authority after three years. That authority to write off bad debts is vested in the management and the board only and not in individuals is bound to prevent indiscriminate write offs of amounts which are otherwise receivable by Tanesco. The procedures established enforce internal control.

Cash collections and overdue amounts of each branch are monitored by the credit control department. Records are kept in such a way as to compare past collection performances and to enable follow-up action to be initiated.

Books of account are scrutinized and on the spot visits to selected customers made to determine the reasonableness of amounts charged and/or paid in the light of the customers real situation.

This step is useful in ensuring that Tanesco gets what is rightly due to it.

From the examination of debtors it seems that there are collection problems which are reflected in rising investments in debtors and lengthening of collection period. Management requires to step up collection of accounts due and overdue.

#### 4.1.3 Stocks

Stocks are made up of general stores; fuel stocks - diesel, petrol and gas oil; lubricating oils, engine spares and electrical stores. Fuel is supplied in bulk by Shell BP and/or Caltex.

The stores system is computerized but physical stock taking is done once a year.

There was a rising trend of investment in stocks. In 1978 stocks were T.Shs.103 million while in 1971 the stocks were T.Shs.36 million an average growth rate of 26.6% p.a. This high average growth rate is explained by first and foremost inflation. Stocks of fuel cost more now than they did in 1971. Tanesco's operations have also expanded requiring more investment in stocks to support the operations. Some stocks are held because of major projects and work orders which are in the process of being completed. Investment in stocks of electrical stores can be made on a large scale as a hedge against price rises.

#### 4.1.4 Current Liabilities

Creditors and taxation form the bulk of current liabilities.

Current liabilities have risen at an average rate of 122.7%, a rate that is higher than that of current assets, 57.6%. If this situation continues Tanesco will experience working capital difficulties which will affect the entire company operations. The line of credit of T.Shs.8 million with the National Bank of Commerce is a very temporary solution, let alone the fact that it is small compared to Tanesco's operations. Tanesco requires to review its working capital management such that current assets grow faster than current liabilities.

Having examined current assets separately and current liabilities a general comment about working capital management in Tanesco can be made. Working capital management is necessary for efficient management of Tanesco. Since working capital management is part of the overall financial management its efficient management will improve overall financial performance. The investment in debtors and stocks is very high and this means Tanesco is not collecting its accounts as it should while high investment in stocks may be due to inflation, expanded operations and overstoking. The fact that creditors are rising faster than current assets and that cash resources show a declining trend calls for Tanesco management to review its working capital management with a view to bringing about a more desirable state of affairs. This will involve arresting the higher growth of current liabilities so that it is in line with that of current assets.

Tanesco requires to make an effort to collect its accounts in order to improve cash position in relation to current liabilities.

Working capital management in Tanesco is unsatisfactory especially the management of debtors.

#### 4.2 Budgetary Process in Tanesco

Financial management involves the use of techniques such as budgetary control to assess whether objectives are being achieved.

The budgetary process in Tanesco which is examined here is a process by which budgets are set and used for control through the comparison of actual and budgeted performance. The comparison is followed by corrective actions by management.

The budgetary process in Tanesco can be examined in three parts: major projects, capital works orders and annual operating budgets.

The budgetary process for major projects is tied up with the capital budgeting which has been examined under the investment decision. Major projects are prepared and appraised in the light of national objectives and strategy. They form part of the Five Year Development Plans in which they are going to be implemented. In this sense they are long-range plans. The budgeting sequences are: Tanesco - Parent Ministry - Treasury and Economic Planning - Economic Committee of Cabinet - Parliament. Through this sequence capital budgets for Tanesco and any other parastatals are made.

Implementing major projects is the responsibility of Tanesco. Progress reports by which periodic status is monitored are useful in that they inform Tanesco and the Government the progress of major projects. Further they reveal trouble spots on monthly basis for management action. The Projects Committee of Tanesco under the Managing Director discusses these progress reports when it meets monthly. Periodic evaluation is also made by Tanesco's consultants and certificates are issued for completed portions of jobs. These certificates are important because contractors are paid based on them. These certificates are reviewed in consultation with Tanesco's project advisor before payments are made. The review involves verification of actual quantities of resources spent, updating contracts and comparison of budgeted performance with actual performance.

The budgetary process for major projects is part of the capital projects management and is exercised by consultants. Tanesco relies on progress reports periodic evaluations and certificates.

Budgeting for capital works orders starts with proposals by branches and the Head office. Budget proposals are compiled by the Head Office according to branches. All proposals are discussed in the budget committee of the workers' Council. The Workers' Council advises the Board of Directors about which capital works to approve or reject. After the Board's approval a capital works orders budget is finalised and ready for implementation. This capital budget is annual.

During implementation of capital works orders by branches and the Head office, capital works orders reports are prepared each month. These reports are scrutinized by the capital expenditure accountant. These reports are instruments of control and the basis of follow-up of expenditure of all the works orders. Expenditure is compared with the budget allocations to ensure that there is no overexpenditure.

Budgeting for revenue and expenditure for each accounting year is centralised at the Head Office. Each year a forecast of units to be generated and sold is made as the initial step in budgeting. There are forecasts for each branch and for Tanesco as a whole. Using appropriate tariffs budgeted revenue is obtained by multiplying units sold by the tariffs.

Operating expenses consist of generating, distribution and administration expenses. A budget of these expenses is made for each branch on the basis of the forecast of units which will be generated and sold. Other expenses for which budgets are made include depreciation and interest. When branch and head officer budgets are consolidated the revenue and expenditure budget is obtained. When this budget is approved by the Board it becomes the Tanesco budget. The parent ministry tables this budget along with others in parliament after the Board's approval.

During the year when operations are carried out monthly computer print-out of budgeted and actual expenditures are produced. Variances are calculated and analysed. On the basis of these, control actions are initiated. Overall performance is monitored by monthly reports: the Finance Directors' monthly Report and Operating statements and the Engineering Reports. The Finance Director's Report contains figures on power production, power consumption and operating expenses for each branch. Also, it gives details about sales, expenditure and surplus for each branch. Engineering reports deal with, among other things, repair and maintenance works and capital works orders.

The budgetary process in Tanesco especially for capital works orders and the operating budgets is unsatisfactory. For one thing, there are no standards which would improve the quality of budgets prepared each year. Budgets prepared are based on what has happened in the past. Inefficiencies can be perpetuated by relying on past events. Standard costs established using scientific methodology would certainly improve the quality of budgeting. Flexible budgets prepared after the actual level of operations is known would improve the controlling function of budgets by focusing on what costs should have been at a given level of operations. The position now prevailing in Tanesco is such that static budgets are used which do not reflect what has happened between the time the budget was prepared and the time the budget is implemented. The comparison of the static budget and actual expenditure is unrealistic and unsatisfactory because it does not reveal what should have been the expenditure given the changes in production and sale of electricity.

There is no strategic planning as such. The only forward planning is the Five Year Plans which are prepared for Tanzania as a whole. In these plans, Tanesco's major projects are a part. If this way of planning can be accepted as strategic planning then Tanesco makes strategic plans. As was pointed out above major projects of Tanesco are part and parcel of the socio-political strategy for socio-economic development. By making capital budgets for Tanesco it is national objectives which will be achieved. The national objectives for the power sector in which Tanesco is involved are to supply cheap, abundant and uninterrupted power using the strategy which emphasizes the use of indigenous energy resources such as hydropower and coal.

#### 4.3 Financial Controls

Tanesco is a very large parastatal with sales of about T.Shs.250 million per annum. To ensure that all resources of Tanesco are used for Tanesco purposes, it is necessary to institute controls. By means of these controls the management of Tanesco will safeguard company resources against misappropriation and misuse. Further, it will ensure that these resources are used profitably.

The need for controls in Tanesco arises from the fact that management is far removed from areas of operations. Yet, it has the responsibility of ensuring that operations are carried out as planned and resources are used accordingly. Since the internal audit department is primarily charged with the evaluation of the effectiveness of the controls, an examination of the internal audit function in Tanesco was made. This examination is necessary because internal control is a

crucial aspect of the management function.

At Tanesco Head Office there is an internal audit department under the charge of the Chief Internal Auditor who is responsible to the Managing Director. That the chief internal auditor reports to the managing Director is acceptable because this enables the Managing Director to be informed of the actual state of affairs in different parts of Tanesco.

Internal audit tasks consist of routine checks to determine if controls are effective and special assignments. The evaluation of the internal control system, compliance with management policies, verification of the existence of assets and their valuation are routine internal control tasks. Teams of internal audit staff examine branch and head office accounts to assess the effectiveness of controls. They also travel to branches for on the spot observation of operations and personal interviews with branch managers. The internal audit staff are well versed with operations of Tanesco and this helps them to assess the reasonableness of the figures produced and the efficiency of the operations. Through these routine checks and evaluations, areas of weaknesses are disclosed, frauds are discovered and irregularities revealed.

Controls operative in Tanesco derive from various sources. There are those which are derived from the Parliament, the Treasury and the parent Ministry.

Such controls are what may be called controls for all parastatals. Some controls derive from the Party and SCPO. It has been shown above that parastatals pursue national objectives which are socio-political. As such it is not strange that the party institutes some controls which operate in Tanesco and other parastatals. The bulk of controls are instituted by Tanesco management.

Special investigations are made when the internal audit department is intimated about irregularities in certain areas of Tanesco operations such as interference with meters. Reports to management emanating from special investigations are confidential and were therefore inaccessible.

There were two frauds which accured in Tanesco which question the effectiveness of internal control. The first was the theft of T.Shs.413,300 cash being salaries of Head Office Staff in December 1976.

It was reported in the Daily News<sup>26</sup> of December 23rd, 1976. The following month in January 622,500 litres of petrol worth T.Shs.1,680,000 were reportedly stolen sold in a period of one year. Thus, cash and stocks were are susceptible to theft in Tanesco and it was apparent that collusion defeated the controls which had been instituted. In the first fraud, twelve Tanesco employees were involved while in the second two employees were implicated.

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<sup>26</sup> The Daily News is a Government Daily in Tanzania.

That such frauds did occur and were very large, casts doubts about the effectiveness of internal control.

#### 4.4 External Auditing in Tanesco

Tanesco is audited by the Tanzania Audit Corporation, which is also a parastatal. By law all parastatals have to be audited by the Tanzania Audit Corporation.

Apart from giving an opinion/the accounts of Tanesco, the external /on auditors also issue a management report which is addressed to the Chairman of the Board of Directors. This report contains suggestions about how to improve efficiency and management effectiveness. External auditors are in a better position to advise management because of their expert knowledge of operations of Tanesco and other parastatals and their professional training. A copy of this report is sent to the parent ministry, the Treasury and also to Parliament. This practice of sending reports to all these ministries is to ensure that suggestions for improvement will be implemented. If the board sits on the report, then the parent ministry or the Treasury or parliament can press for its implementation.

#### 4.5 Is Financial Management lacking or absent in Tanesco?

Financial management in Tanesco is present from what has been shown in this and the previous chapters.

But in crucial decisions like what projects to select for investment and how to finance Tanesco, the Government has a lot of say. In fact it is the Government which decides. Only in the management of working capital is management of Tanesco autonomous.

The fact that there is a lot of Government decision-making in Tanesco casts doubts whether Tanesco is commercial. It is more of a ministry or department than a commercial organization. Since there is no clearly specified measure of financial performance it is vague to say that Tanesco should make a profit. How much profit? This is difficult to determine. Therefore although financial management is present, it is inadequate. It is inadequate in that there are no standards for comparing the company with other companies in the parastatal sector of the economy or with power companies in other countries.

## CHAPTER 5

### SUMMARY AND CONCLUSIONS

#### 5.1. Summary and Conclusions

Most parastatals were created in the wake of the Arusha Declaration although Tanesco became a parastatal well before it. Having declared a political philosophy which is based on public ownership of the major means of production and distribution, the Government had to institute public organizations which would implement the political objectives of socialism and self reliance. These parastatals were to control the economy. Since they were created to fulfil socio-political objectives and since through them the Government was to control the economy parastatals were created to fulfil economic goals as well.

The other factors which are mentioned to explain why parastatals were created are incidental to the political and economic reasons.

Parastatals are either wholly or partly owned by the Government. Minority shareholders are in all cases foreign investors. Foreign investments in important sectors in Tanzania is by joint ventures between parastatals and foreign investors.

Tanesco is a wholly owned parastatal responsible for the national objectives in the power sector. It is the Government's chief executing agency for the power policy. Its mission is to generate and distribute abundant and reliable electricity from mostly water. This is reasonable and justified in view of Tanzania's plentiful water resources. Generating electricity from thermal sources is not advisable for the reason that oil is imported and its prices are ever rising.

Financial management is an aspect of overall management in all types of organizations, including Tanesco. Financial management involves the acquisition of funds and the subsequent use of these funds. In private companies management has a duty of maximizing shareholders' wealth - that is wealth of the owners. For parastatals in Tanzania we cannot say their objective is to maximize the wealth of nationals. The objectives of these institutions must be inferred from political and economic objectives of the Government. These objectives are never clear. Thus for Tanesco we can say its objectives is to implement government power policy. This objectives is vague because it is very general. Financial objectives of Tanesco are not specified anywhere.

Tanesco is confronted with the problem of limited resources relative to unlimited needs. Through planning which is choosing from alternative courses of action Tanesco chooses projects into which to invest. Its long-term plans must be consistent with those of the nation as a whole. The National Planning Commission which is assited by experts from the civil service and from the parastatal sector makes national plans which are really aggregates of plans of parastatals, ministries and regions.

The capital budgeting process of Tanesco involves identifying projects, preparing them, appraising and finally implementing those which are selected. The sequence of stages in the capital budgeting process can be summarized as planning, implementing and controlling. In its appraisal of major projects Tanesco assesses economic, financial and commercial soundness. To secure foreign financial participation this soundness has to be determined by independent parties, hence the use of consultants.

Financing parastatals is the responsibility of the Government through the Treasury. Tanesco does not decide how much share capital or debt to use in its capital structure.

This decision is made by the Treasury which holds shares on behalf of the Government. Capital structure decisions in a private organization is given particular attention at the time of forming such an organization and is reviewed every time additional finance is required. In Tanesco and other parastatals this is not the case.

Whether Tanesco has more debt than equity is not important because it is the debt to the nation as a whole which matters. At the national level the Government is concerned with ensuring that Tanzania does not borrow more from outside than it can pay. The Government guarantees all loans to parastatals. Soft loans with long repayment periods are preferred to commercial loans. Self-reliance in the sense of using more domestic resources than foreign resources is far from true looking at the financing of Tanesco.

The dividend decision is made by considering whether a profit has been made, whether debt covenants are not infringed and whether legal restrictions are not violated. Theoretical considerations as to the implication of cash dividends on the price of Tanesco shares are irrelevant to Tanesco.

Working capital management in Tanesco is weak. Tanesco's management urgently needs to step up efforts to collect debtors.

If working capital is not improved current liabilities will outstrip current assets. This is evident from the fact that creditors are rising faster than current assets. Cash management is particularly important in the management of working capital to avoid situations of maintaining too much cash or falling short of the required amount.

Excessive cash is not advisable because cash does not earn a return. Shortages of cash lead to failure to pay creditors in time. Creditors in turn may take legal action against Tanesco.

Cash management, which requires stepping up efforts to collect debtors, is urgently needed.

### 5.2 Can Parastatals like Tanesco Be Said To Be Commercial? (A Paradox)

Chapter one of this thesis examined the rationale of the establishment of parastatal organizations in Tanzania. There is ample evidence that the overriding motive of the Party and the Government in the institution of parastatals was and still is political. Most of the parastatals were created in the wake of the Arusha Declaration on February 5th, 1967. Even if Tanesco was acquired in 1964 the motive was the same - strategic sectors of the economy must be publicly owned.

Commercial considerations were never given formal analysis before these parastatals were created. Instead, what was considered a "commanding height" was taken over and put under public ownership through the creation of parastatals. It became simple to say that parastatals which replaced previously commercially managed organization would be commercial. In fact, such parastatals are not at all commercial because the motive of establishing them was not commercial but political - to implement socialist ideas. Tanesco cannot, therefore, be said to be commercial. It is nationalistic instead.

If one looks at the decision making procedure or process as to the investment decision and the financing decision in Tanesco, one discovers that the Government makes these important decisions.

Circulars, directives and guidelines govern every decision making procedure. The investment decision by means of which capital projects are identified and appraised is made by the Government. All national plans are prepared by the National Planning Commission by using working committees. These plans are sum totals of capital projects by parastatals, ministries and regions. Thus the capital budget of Tanesco or any other parastatal must be that which is envisaged by the national plan. Tanesco in such a case is just an executing agency of investment decisions of the nation in the power sector.

The financing decision is wholly the responsibility of the Treasury—the Public Investment Department. It decides on the financial mix of share capital, retained earnings and debt. Decisions on capitalization in Tanesco and other parastatals is by the government.

In the dividend decision it is the board of directors which makes the dividend decision. But the board's behaviour is very much influenced by Government thinking and legislation. After all, it is only fair that the board should be influenced by the Government. It is the major shareholder if not the only one. In order to encourage parastatals to finance themselves the Government has enacted a law which limits dividends.

In spite of this law Tanesco's internal sources of funds are not as important as foreign loans and equity from Government.

The working capital decision is the only decision in Tanesco that can be said to be least influenced by Government. Working capital decisions are operating decisions. This is where management of Tanesco or any other parastatal can show their competence. This is where parastatal professionals can show their management skills.

The board of directors which is a policy-making body at Tanesco is dominated by civil service personnel with the Minister for Water and Energy as the Chairman. Naturally, policy decisions will be in the framework of government strategy. Therefore, even if Tanesco were a commercial parastatal it could operate commercially only to a limited extent because its policy making body is not made up of people - with commercial inclinations. It is dominated by bureaucratic people Directors who decide on the basis of staff orders, circulars and directives.

So, is Tanesco a government ministry or a commercial parastatal? It is not a ministry because a ministry does not have share capital. A ministry does not have a board of directors. But like in a ministry all important decisions in Tanesco are made by the government. Circulars, directives and guidelines influence decision-making in many spheres of Tanesco's operations. Although profit is not of primary concern, Tanesco is expected to operate profitably in order to

to be able to finance some of its investment programmes. This is a paradox, therefore, as to what Tanesco is. On the one hand it operates like a government ministry pursuing national objectives but has to make profits. On the other hand it is expected to be run like a commercial organization but most important decisions are made by the Government.

### 5.3. Recommendations

There is need to make some reforms in the way financial management is practised in parastatals in order to obtain better results from the use of resources.

For parastatals like Tanesco which have to earn profits the rate of profit must be stated in quantitative terms such as so percentage of capital employed. With the profit objective stated like that the Government is in a better position to measure performance of parastatals. As things are now, it is difficult to measure the performance of parastatals such as Tanesco on account of lack of a predetermined rate of return.

The Treasury should develop financial management techniques for use in the parastatal sector. There is need for clear cut criteria of selecting investment projects for parastatals such as Tanesco which are supposed to earn profits.

The Government should clearly define policies which parastatals should observe in major decisions such as the investment and financing decisions. Having stated the policies, parastatals which have to earn profits should be given greater autonomy in the way they are run. In this way, such parastatals will be accountable for their stated rates of return. This autonomy should be allowed

to profit making parastatals in order to avoid the stifling of initiative and creating on the part of management.

The current preponderance of non-business directors in the boards of parastatals should be changed so that recommendation is consistent with the other recommendations greater autonomy. At present, most directors of parastatals are from the civil service where management is on the basis of circulars and directives. Creativity is kept low. With the recommended changes better utilization of resources is likely to result. This will help in the improvement of performance of parastatals.

Superior profit performance, in order to generate more resources, must be accompanied by a rise in the level of executive perquisites. Thus, it is recommended that with the recommended changes in the operation of parastatals other will have to be made.

There is too much reliance on foreign consultants especially in the capital budgeting process. Their use may retard the development of locally skilled people and so impair our self-reliance in qualified manpower. It is recommended that for Tanesco qualified personnel be attached to these consultants so that they acquire the skills when working with these experts. By working with the consultants at the sites of projects they get on the job training. To ensure that consultants' technical advice is not misleading Tanesco and other parastatals should use the National Institute for Productivity (NIP) and the Industrial Studies Centre (ISC) because these institutions have technical skills.

Thus, it is recommended that with the recommended changes in the operation of parastatals other changes will have to be made.

There is too much reliance on foreign consultants especially in the capital budgeting process. Their use may retard the development of locally skilled people and so impair our self-reliance in qualified manpower. It is recommended that for Tenesco some qualified personnel be attached to these consultants so that they acquire the skills required. Further they should work with the consultants at the site of projects so as to get on the job training. As to control of consultants Tenesco and other parastatals should consider using the National Institute for Productivity (NIP) and the Industrial Studies Centre (ISC) because these institutions are national and have technical skills which can be of real help.

#### 5.4 Suggestions for further research and limitations of the study.

This study was exploratory and sought to examine financial management in Tenesco. It examined the investment decision, the financing decision, dividend decision and working capital management. It was limited to examination of these decisions in broad terms. As such, it is lacking in details about some important aspects of Tenesco.

I It is suggested that such gaps as exist in this study be filled by future research. This can take the form of detailed research on capital budgeting, financing parastatals, the dividend decision

in parastatals and working capital management in parastatals. These topics are important if one is interested in improving the performance of parastatals in Tanzania in particular and in other developing economies in general.

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