1.0 INTRODUCTION

1.1.1 The local construction industry is very large and fragmented, and as a result suffers from a high incidence of failures. The industry lacks coherence, as facilities are constructed by a loose agglomeration of design professionals, builders, suppliers, financers and others; all of whom are concerned with their own sectorial interests.

1.1.2 The local construction industry embraces a large number of firms of varying sizes in the field of consulting, contracting, construction management, and materials and equipment suppliers; together with the Statutory Board, State-owned companies; County Councils and various Ministries. Public sector investment in the industry currently accounts for more than 90% of the total investment in the industry.

1.1.3 A significant proportion of public sector projects have incurred considerable time and cost over-runs, and have been plagued by many problems related to the construction industry, generally. Despite the difficulties which are encountered in public sector construction projects, it is felt that their limited success is directly due to the absence and/or paucity of the public sector's construction management; including the present procedural arrangements and organisation structures.
1.2.1. It is considered necessary to clearly define the term construction management. Construction management can be defined as "the group of management activities (over and above normal architectural and engineering services) related to a construction programme carried out during the conceptual planning, pre-design, design and construction phases, that contributes to the control of time, cost and quality in the construction of a new facility".

1.2.2. Public sector construction management is essentially different from that of the private sector. The major differences occur in the areas of:

(i) Formulation (i.e. identification and funding)
(ii) Accounting procedures (including Tendering)
(iii) Delivery Systems (implementation)
(iv) Recruitment practices
(v) Financial Control, etc.

1.2.3. This research project is presented in two (2) parts. Part 1 discusses the existing methods, procedures, performances and constraints that are currently utilized in public sector construction management in Trinidad and Tobago. Part 2 contains recommendations for the improvement of public sector construction management with particular emphasis on minimising time and cost over-runs.
1.3.1. It is important to note that new methods of implementation of public sector projects have been developed since 1976. This has been a direct result of government's policy with respect to their accelerated industrialization and infrastructural development programmes. It is considered necessary to review the events that were responsible for the development of alternative methods of implementation of these projects; since they have contributed to the present state of arrangement of public sector projects in Trinidad and Tobago. (Chapter 2)

1.3.2. It has been noted also that the success of the management of public sector projects often depends on the circumstances responsible for the original investment decisions. The criteria used for making investment decisions and the importance of these decisions are examined at Chapter 3.

1.3.3. Chapter 4 gives details of the formulation and implementation of public sector projects. This chapter considers broadly the various activities that are usually undertaken from the project conception stage to its implementation.

1.3.4. Chapters 5, 6, 7, and 8 examine in detail the method of implementation of projects that have been utilized by various agencies; including: state corporations and companies, ministries, "special" companies, and government to government arrangements.

1.3.5. Chapter 9 summarises the performances of various implementation agencies, and Chapter 10 details some of the constraints affecting the performances of the respective agencies.
Part 2 of this report is concerned with recommendations that are aimed at the improving the success rate of the implementation of public sector projects. These recommendations relate to project formulation, procedural arrangements, organisation structures, construction management and performance evaluation.

Prior to 1974, major public sector construction programmes were conducted on the basis of 5-year development plans (the last and final being with respect to the years 1969-73, inclusive). At that time the major executing agency for public sector projects was the Ministry of Works, utilizing:

1. In-house consultants and direct labour - for relatively small projects,

2. Private consultants and local contractors,

3. Private consultants and local contractors, and

4. Foreign contractors.

The recruitment of international consultants and contractors was done on the basis of international tendering, mainly. In each case the Ministry of Works performed the role of "project manager" on behalf of the government.

Today, various methods are utilized for the implementation of public sector projects, and the Ministry of Works has been playing a lesser role - particularly in the area of public buildings. This section examines the circumstances leading up to the present practices in public sector construction management.