

CHAPTER III

RESEARCH METHODOLOGY

The study was carried out by utilizing the survey approach. This chapter describes the sampling procedure, the design of the research instruments, the data collection and data analysis methods.

SAMPLING PROCEDURE

This study was confined to TNB hydroelectric power station employees. The environment in hydroelectric power stations is different from that in other power stations such as thermal power stations. Hydroelectric power stations are normally situated in physically remote areas. The nearest towns are far from where the employees live and work. The surroundings have undoubtedly affected the behavior of the employees.

There are six main hydroelectric power stations throughout Peninsular Malaysia which are located at Cameron Highlands (Jor and Woh); Sungai Perak (Temenggor, Bersia, Kenering), Sungai Piah, and Chenderoh in Perak; Kenyir in Trengganu; and Pergau in Kelantan. The total number of TNB employees in these power stations is estimated at around 400. About 20 percent of them are executives i.e. managers, engineers, technical assistants and administration officers, the remaining 80 percent non-executives are comprised of technicians, welders, machinists, fitters, drivers, clerks, etc. The same questionnaire was prepared for and distributed to all 400 employees.

RESEARCH INSTRUMENT AND DATA COLLECTION METHOD

Primary data was utilized in this study. The survey instrument was a twelve page questionnaire. Two versions of the questionnaires were prepared, one in English and the other in the Malay language. The questionnaire consisted of six sections; A to F. Items for the statements used in the questionnaire were derived from several sources. These include items developed by Singaravello (1992) and Lee Teck Hock (1996). However, some of the original statements were modified so as to be more reflective to the local situation.

Section A was designed to measure the demographic characteristics and personal information of the respondents. This section consisted of 13 questions.

Section B was planned to understand the general perception of TNB personnel toward privatization. This section encompassed 9 activities, interest and opinion (AIO) statements on a five-point Likert-type scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

Section C was intended to examine the experiences of the employees with their co-workers, superiors and the organization after the privatization. This section had twenty one opinion statements on a five-point Likert-type scale similar to Section B. In addition, this section also identified ten problems in the organization, and asked the respondents to rank them according to the degree of importance to them. These problems were extracted from the research done by Dzulkifli (1996). In the study, the twenty most probable problems in Generation SBU have been identified by using the Delphi method. Only ten problems are considered in this study in order not to confuse the respondents with too many options.

Section D carries thirty statements that focus on the employee's perception towards his or her job, and his or her career opportunities in TNB. Furthermore, respondents are required to rank ten motivating factors according to the degree of importance to them. Again, many motivating factors can be discussed, but only ten factors which are relevant to the organization were selected.

Section E comprises of six statements on a five-point Likert-type scale similar to the other sections. The purpose of these questions is to understand the performance standards set in the organization perceived by the respondents. Section F contains eighteen questions covering the general perception of employees on the management style in TNB and the improvement that the respondents would like TNB management to focus on.

Before the actual survey, a pilot test was conducted using seven respondents and both the English and the Malay versions of the questionnaire. The final questionnaire was developed based on the feedback from this pilot test. The self-administered drop-off method of data collection was employed. A total of 433 sets of questionnaires were distributed through the respective station managers (361 sets are Malay Language version and 72 sets of the English version). The English version was prepared primarily for the executives, and the Malay Language version mainly for the non-executives. Since the majority of the Generation Hydro personnel only have up to upper secondary school educational qualifications, the Malay Language version was necessary to increase the response rate. The completed questionnaires were collected by the representatives of researcher at the various power stations. Informal interviews were also carried out to assess the viewpoints of the respondents.

DATA ANALYSIS METHOD

One hundred thirty three (133) questionnaires were returned back to the researcher, which represents 33 percent of the total TNB hydroelectric power station employees. However, some of the respondents did not respond to certain sections (section C and D) of the questionnaire. The low response rate might be due to several reasons. A first reason is that the employees were usually reluctant to participate in this study due to fear of revealing the weaknesses of the organization to the public. Secondly, the questionnaire might be too long (12 pages with 118 questions), and it required the employees to analyze the questions carefully. Furthermore, the time requires for them to fill up the questionnaire is limited.

In this study, statistical method called frequency was used to analyze the questionnaires. In addition, the Chi-square test (also called contingency table analysis) was conducted to relate two variables, two groups of employees and level of satisfaction after privatization if there was a significant difference between these two groups. Another statistical technique employed in this study was analysis of variance or ANOVA. ANOVA was used to compare the means of the two groups of employees (executive and non-executive) with respect to 8 statements on organizational factors. The F ratio and significance of f determined whether each group viewed the statements differently. Another method called an internal consistency reliability analysis was also conducted for 8 statements on the influence of co-workers and 7 statements on the influence of superiors. The purpose of internal consistency reliability analysis is to measure and assess the homogeneity of a set of items and whether the result of the study is acceptable.