

## PROJECT MANAGEMENT OF WORKFORCE OF 150

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### 1. INTRODUCTION

Proper project management is usually required for the successful project execution. This is especially crucial for overseas projects with large direct labors, for which not only technical management associated with civil works but also management related to employees becomes very important. The authors were recently engaged in this type of the project, and this paper briefly describes the management of this project.

### 2. OUTLINE OF PROJECT

A modern extra-dosed bridge with three spans was constructed in Palau from November 1999 to December 2001, with grant aid by the Government of Japan. The workforce for this project consisted of Japanese, Palauan and Filipinos with a majority of Filipinos. As substantial work started in February 2000, the number of people working for this project increased since then. The number of people exceeded 100 in March 2000 and became a maximum of 158 in August 2000. Then the work force became smaller as the total amount of works became less. All Filipino engineers and workers stayed in the barracks located within the working sites. Meals and snacks were served at a canteen located at the working site.

### 3. STRUCTURE OF PROJECT TEAM

Technical directions on the construction work were issued at the daily schedule meeting by the Japanese engineers to the Filipino engineers, who, in turn, spoke to the Filipino workers at the morning assembly and supervised them at the sites. Whenever the management decided to deliver message directly to all the employees, the management spoke to and had discussions with them at the morning assembly. On the other hand, the Filipino and Palauan staff in the office were in charge of accounting work, medical work and local purchase under supervision of the management. Existence of the local or Filipino engineers and senior staff facilitated the communication between the management and employees.

### 4. IMPORTANT MANAGEMENT ITEMS

#### (1) Project Budget

Keeping track of revenue and expenditure for the project accounts for the current status of the project through comparison with the budget plan. It constitutes the base of the forecast of revenues and expenditures in the future. These two types of information enable the project management to monitor and revise the budget plan, to make an improved profit projection and to carry out more appropriate money management. From these points of view, the project budget was managed very carefully and accurately.

All the expenditure and revenue in the past and future were recorded and updated at the beginning of every month according to the preset accounting codes. The updated projection reflected not only the past record but also more accurate information in the future works. Whenever the updated projection suggested substantial increase in the expenditure, the management reconsidered the construction method and the procurement plan. All revenue and expenditures were recorded or posted on the ledger using an in-house computer program. The detailed data summarized in this manner helped the management analyze the financial status of the project and it might also contribute in making accurate budget plans for other projects.

Since the project was a grant aid project, the revenue was mainly monthly remittance from the head office in Tokyo. This simplified the revenue management but the management always had to be concerned about the cash flow. The amount of the monthly remittance was planned and ordered in advance to ensure that there would not be any shortage in cash at the project site.

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## **(2) Daily/Monthly Expense Management**

To ensure that the project will proceed on schedule, the management created a system on how to properly carry out local purchases and pay expenditures on time such as payroll. All local purchases were made either by a Purchase Requisition (PR) for materials and small parts or by a Purchase Order (PO) for purchase of large quantity and services provided by sub-contractors. PR's or PO's were requested by the engineers, approved by the manager-in-charge for proper control purposes, bought by the drives and recorded by the accountants.

Since it is very important to gain trust from the employees, salary should be paid on time. Then, the accountant posted daily overtime on the payroll program based on the application for overtime submitted by the engineers. A reconciliation of number of overtime was done weekly to adjust for any discrepancy. Salaries were paid directly to them through ATM.

Catering service charge consisted of fixed profit and overhead, and variable number of meals served each month. To control the meal tickets, the company provided computer-generated meal tickets with employees' name and control number to the employees, who could claim each meal at the canteen with meal tickets.

## **(3) Labor Management**

One of the key factors for the successful completion of a project is proper labor management. Labor management includes training and proper motivation of employees. Since majority of the workers of this project were chosen among the best workers who constructed almost the same bridge in the Philippines, the management paid more attention to motivating and inspiring employees to work efficiently and effectively. This was attempted by giving them salary increase, various bonus, vacations and special events, and awards. Management also encouraged them to engage on sports activities such as softball, baseball and basketball to entertain them and avoid feeling home sick. At the same time, however, the management made it clear that any employees who did not comply with the project rules stated in the contract should be penalized.

The company provided food and accommodations for Filipino workers. Barracks with canteen facilities were constructed for the workers and a caterer was contracted to serve food all day long.

## **(4) Health Management**

Sufficient medical and health care to the Filipino employees was essential in successful completion of the project and safety of the employees. First key factor to achieve this goal was the employment of a licensed Filipino nurse who can communicate with patient(s) in their mother tongue about their medical condition. Second factor was overseas traveler's insurance with an international service for all the Filipino employees for any medical problems. Using those resources, the following medical services were rendered by the management: maintaining hygienic environment and health education, daily service, and emergency service.

The barracks and its facilities were maintained clean and hygienic by assigning two workers who did all the necessary housekeeping all day around. The nurse was in charge of this activity, and cooperated with Environment Protection Board and Koror State Sanitary Department that made a monthly inspection of the work sites and living area.

Routine daily visit to the construction site by the nurse enabled the management to find medical problems in their early stage, to prevent further medical complications, and to give proper first aid during accidents to contain wounds. Health education given to employees through daily visit and special meeting promoted employees' awareness about hygiene and preventive measures so that cases of careless injuries or common sickness were decreased. Patients who required medical treatment unavailable in Palau were satisfactorily treated by the international service and cured without any complications.

Proper and prompt medical services given to the patients together with daily communication between the nurse and the employees developed trust between the nurse and the employees, and in turn between the employees and the management through communication between the nurse and the management.

## **5. CONCLUSIONS**

Although the management plans were implemented using computerized systems as much as possible, the management process and results were always consulted to the principles behind their plans. The budget management was directly connected to profit while the other managements indirectly contributed to the success by creating a positive atmosphere within the project team. The project was completed with success, which confirmed the importance of the management described above.