

Action Plan To Improve JBA Service Delivery

By
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1. Background

Water Supply Department functions as a federal agency for consultation, technical advice to Federal and State Government, as well as a coordinating agency for all water supply projects funded by the Federal Government, both in the form of loans and grants, other functions include implementation of water supply projects.

Director General (DG) of Water Supply Department plays an important role in maintaining engineering standards for water supply practice in the country. This includes the provision of consultancy and leadership on technical matters. The DG also involves for overall planning, design, development and management of water resources and water supply programmes.

However, since JBA's core business is project planning, coordinating and implementation therefore this action plan will focus on project managements.

2. Vision

Vision:

- i. To improve the quality of engineering services rendered,
- ii. Striving to serve the clients better, and
- iii. Improve competitive edge of JBA in project coordinating and implementation.

3. Mission For The Next 2 Years

To transform JBA as a lead agency on the provision of consultancy and leadership on technical matters in the water supply construction industry.

4. Strategies

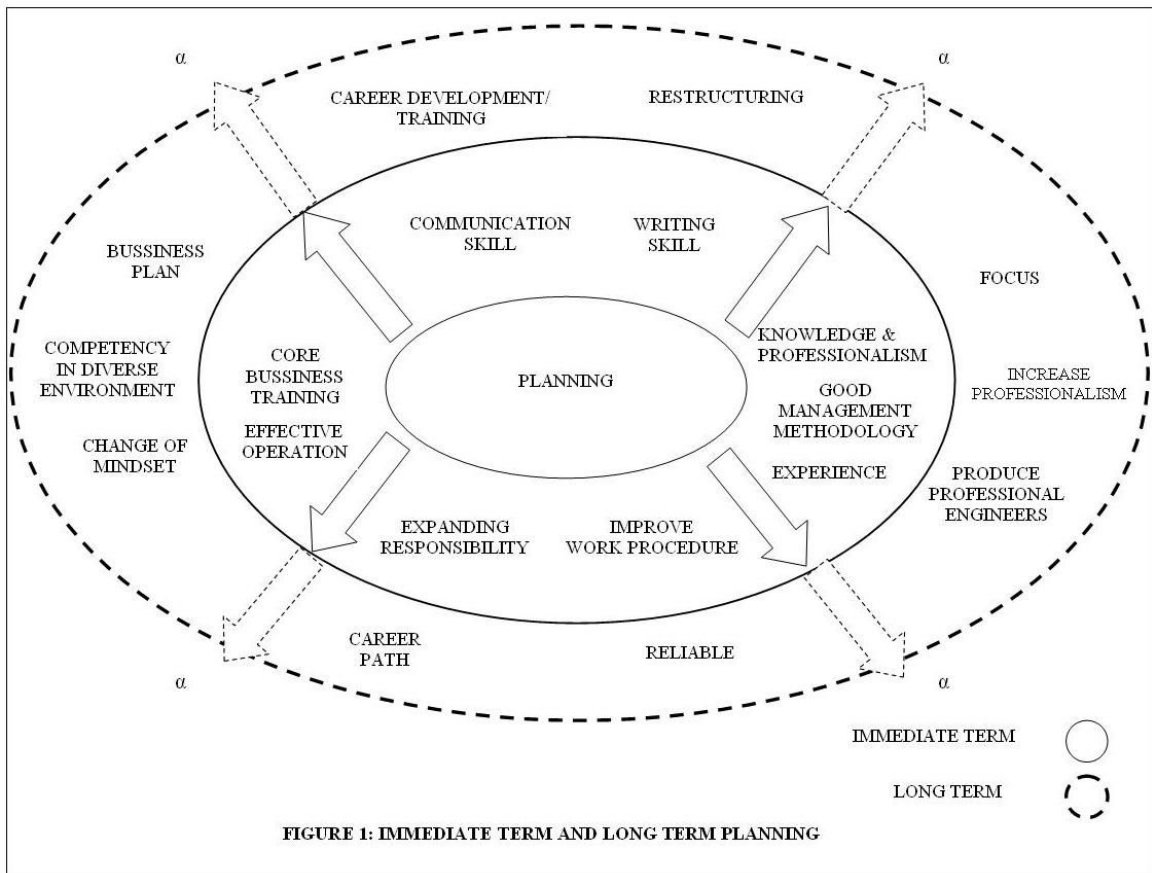
- Training and self improvement courses of personnel.
- Restructuring of JBA to create a conducive working environment and opportunity for career development.
- Establish good operating procedure at every stage of project development. This procedure is designed to represent good engineering practices and guidance to all supervisory staff during the construction of the project. In general the inspection personnel must ensure that each of the following items is adhered to :
 - a). That all material and workmanship are in accordance with the specifications and the acceptable good practice.
 - b). The quality control testing of material is at an acceptable level of workmanship.
 - c). That all works are to be in accordance with the level, alignment, dimension, and cross-sections as specified in construction drawings and specifications.
- Designs are economical and functional
- Works according to condition of contract

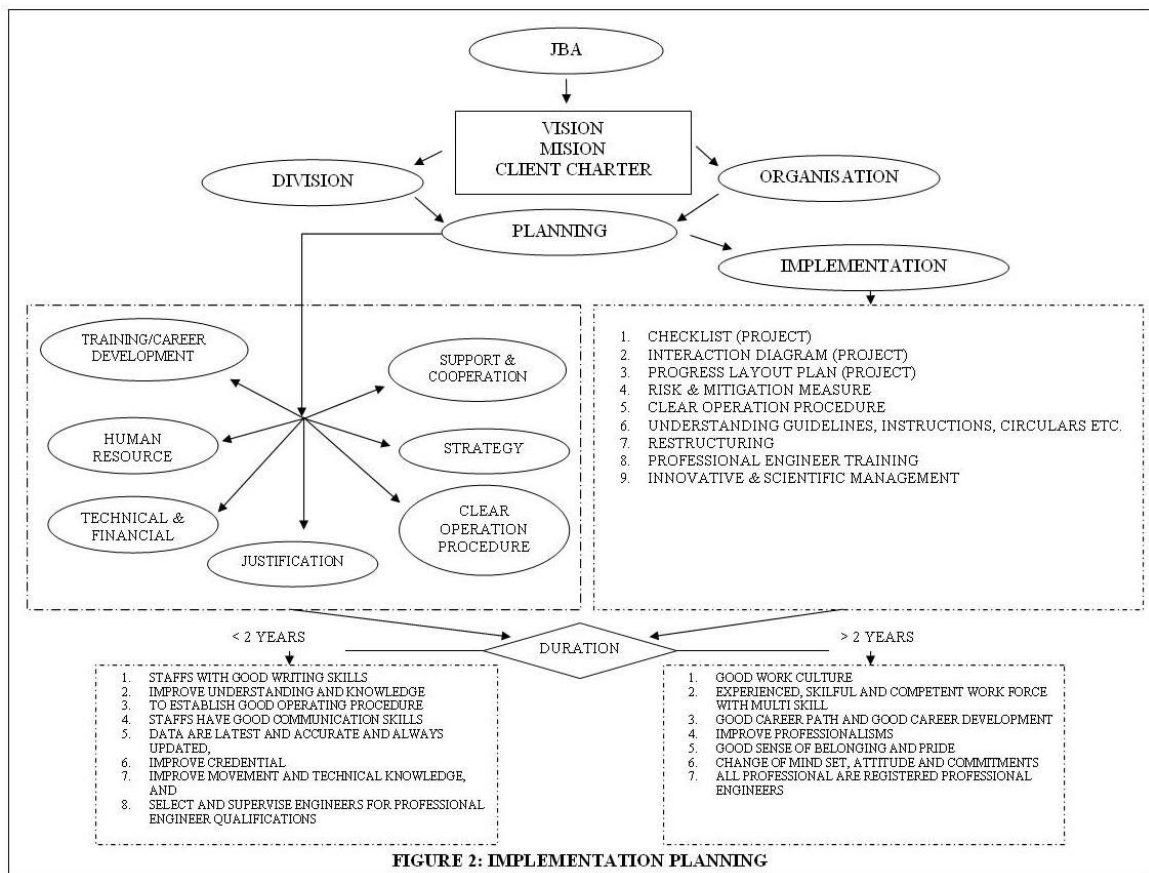
- Deliver quality projects on time

5. Human Resource

By striving to serve the Client better and to improve the competitive edge of JBA staffs, JBA has given high priority to training of staffs related to their daily duties and also for their career development. However, due to budget constraints, JBA probably would only be able to send about 70 percent of the staffs to attend training for seven days per year per person.

Planning and implementation will be carried out in two phases concurrently i.e. immediate and long-term as shown in Figure 1 and Figure 2 respectively.





In the immediate term in the next two years the focus is to:

- To have staffs with good writing skills,
- To improve understanding and knowledge,
- To establish good operating procedure,
- Staffs to have good communication skills,
- Data are latest, accurate and always updated,
- Improve credential,
- To improve skill and technical knowledge, and
- Select and supervise engineers for professional engineer qualifications.

However in the long term to ensure sustainability the focus is to,

- Good work culture,
- To have experience, skilful and competent work force with multi skill,
- Good career path and development,
- Improve professionalisms,
- Good sense of belonging and pride,
- Change of mind set, attitude and commitments,
- All engineers are registered professional engineers.

6. Restructuring Of JBA

JBA has to be restructured to respond to the increase in responsibilities. Over the years the number of projects have increased and the number of professionals and sub professionals have to commensurate with the increase in responsibilities and liabilities. Adequate number of staffs is necessary to ensure projects are monitored , implemented and delivered on time and with the highest quality standard. To retain the experienced staffs in the department there must be opportunities for them to be promoted in JBA as illustrated in Figure 3. All professional staffs are on secondment from JKR, very often professionals and sub-professionals are transferred out when they are due for promotion. The process of training will start all over again i.e. when new engineers and assistant engineers are recruited.

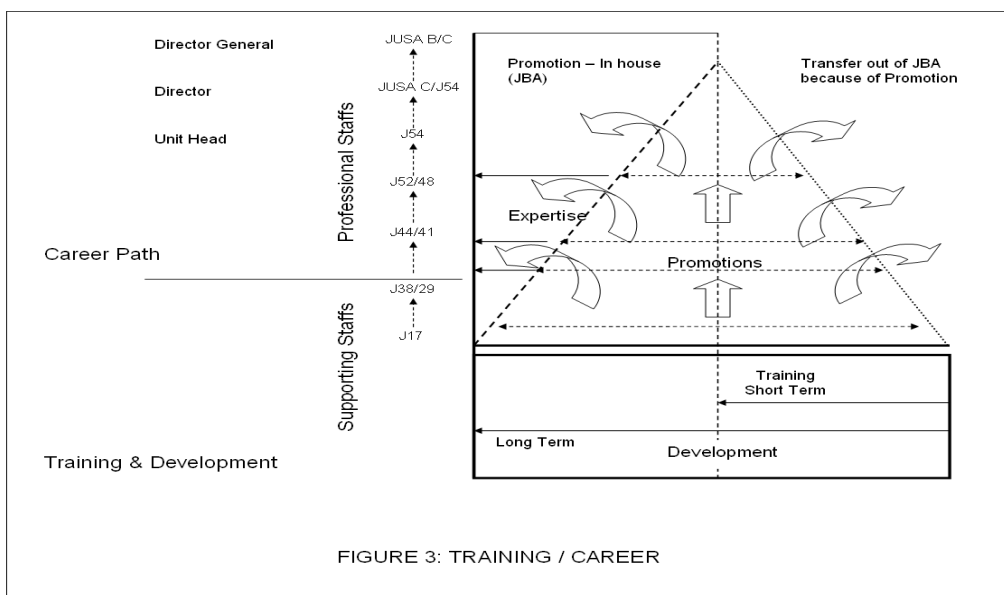


FIGURE 3: TRAINING / CAREER

7. Managing The Project

In order to continue providing excellent service to the Client, JBA has to establish a standard operating procedure to be adopted at different stages of development for any project undertaken.

7.1 Project Planning Stage

Upon securing an approval of a project from the Economic Planning unit the job analysis will be carried out by the JBA's Director of Planning and assisted by the relevant heads of division. The analysis shall include types of procurement, allocation, financing either loan or grant and understanding of the scope of works to be undertaken and matching it with available resources in JBA's organisation.

The Project Director who is Director General of JBA shall give direction and guidance on implementing the project and ensure successful completion of the project. A Project Manager, who is one of the Division Director highly competent in technical, managerial and contractual know-how, will be nominated by the Project Director to assist him on implementing the project. Subsequently, the Project Manager shall form the Project Team. The organization of the project team is structured to meet the needs and target completion date stipulated. It shall comprise of professionals and sub-professionals with vast experience on the similar jobs.

The Project Manager will immediately mobilize the Project Team to discuss the Needs Statement. A site reconnaissance by the Project Team will be conducted to gather data and carry out preliminary engineering investigation to identify key concerns and issues.

7.2 Project Design Stage

A brain storming session will be conducted by the Project Team at the initial design stage to analyse and evaluate lists of needs against lists of key

concerns and issues identified during site reconnaissance. The preliminary feasibility study and design concept shall be established during this session.

The Project Manager will set the timeline to prepare the feasibility study report for submission cost estimates for different options will be stated in the feasibility study.

Upon approval by the Project Director on the feasibility study report, the following tasks shall commence:-

- Preparation of tender specifications and document for the appointment of licensed surveyor.
- Preparation of conceptual design report.

After the land surveyor has been appointed BY JBA, the team shall monitor the progress of works and carry out periodic site inspection and shall also verify the surveyor's work at site.

At the same time, conceptual design which explains the design ideas and concepts of the Project will be prepared by the Project Team. The Project Manager, as the design leader will play a leading role in coordinating and determining the overall design process in arriving at the design concept. Normally minimum two (2) alternative proposals will be presented before approval. Once the concept is approved, the next step is to proceed with the detailed design.

Tender document for soil investigation works which is crucial to determine the type of foundation and earthwork design will be prepared once the Land surveyor drawings are made available, however, should the project timeline be very short, the Project Team shall prepare the document base on whatever available drawings/sketches to prepare the above mentioned tender document. This document will be submitted to the project Director for approval and subsequent appointment of the contractor. The Project Team

appointed also will conduct site supervision on works carried out by the soil investigation contractor.

7.3 Detailed Design

At the detailed design stage, the Project Team will translate concepts and ideas approved by the Project Director into tender document which shall generally consist of tender drawings, specification, Bill of Quantities and other contractual document.

The design and preparation of specifications and Bills of Quantities shall generally be guided by established standards and codes of practices. The Project Manager will prepare a schedule to monitor the progress of tender drawings, specifications, submissions to relevant authorities, expediting approvals from authorities, tendering and awarding of all contracts. The Project Manager will arrange technical discussions with the Project Team on a regular basis to resolve any issue affecting the progress.

7.4 Tendering

The tender documents for tender, will be prepared in accordance with the established standards, codes of practices and treasury circulars. The Project Manager to clarify any query raised by the tenderers during tender stage and issue addendum to the tenderers, if required.

The Project Team will work out the detailed project cost estimate during tender stage, the estimate will be based on the quotations received from the suppliers, built up rates or data available from other recent projects. Once tender is closed, the project team will submit a tender evaluation report based on established procedures within time frame. The tender evaluation report shall be approved by the JBA Technical Committee before submission to the Ministry Tender Board Meeting.

7.5 Project Implementation Stage

The Project Manager shall establish and identify the scope of works and ensure that the Project Team carry out the supervision works, if required, in accordance with the conditions of contract and specifications. The Project Team shall carry out the duty diligently and give advice as and when required. The following documents are expected to be prepared by the Project Team :

- Contract document,
- Construction drawings,
- Supervision Manual.

The Project Manager will propose a Site Supervision Team consists of suitable experience staff. The site supervisory responsibilities will be spelt out in the Supervision Manual which generally consists of the following:

- Daily records form, list of machineries and manpower at site, list of activities and weather chart,
- Responsibilities of each site personnel,
- Test forms,
- Inspection records,
- Request form.

Vetting and approval of preliminaries items, technical matters/drawings, method statements, construction material submitted by the contractor will be carried out by the Project Team. The Project Manager shall prepare and keep the list on status of approval for these items.

The Project Team shall notify the Project Manager immediately on any possible variation of works so that it could be brought up to the Project Director's attention and for approval. The Project Team shall also notify the Project Team head office on any discrepancies found on drawings so that proper decision could be made on the subject.

The Project Team shall be responsible to carry out monthly or more frequent assessment on the works completed by the Contractor and prepared the relevant document recommendation to the Project Director.

Should the Project Team be satisfied that the works have been satisfactorily completed, the Project Manager shall arrange a joint inspection with the Contractor to list down all the defects or minor uncompleted works that does not affect the issuance of the Certificate of Practical Completion (CPC). Handing over of the completed project will be documented by using handing over form. The Site Supervision Team will be demobilized upon issuance of the CPC. However the head office team will continue monitoring of making good defects and outstanding works. The Team shall update the defects list from time to time and shall arrange a joint inspection with all stakeholders at the end of the defects liability period.

Once the defects have been rectified satisfactorily by the Contractor, the Team shall prepare the Certificate of Making Good Defects for submission to the Project Director for approval. Subsequently, final account will be prepared and shall be considered as ended once the final account is approved by the Project Director.