

6.8.2.7 Other Matters

1) Standardization of Formats and Procedures

In contrast with technical matters, non-technical matters are learnt more through experience and by on-the-job training than by education and classroom training.

Importance of standardizing formats and procedures is, therefore, greater for the non-technical units.

Manuals detailing formats and procedures will be prepared and used by the employees in day-to-day operations.

2) Disciplinary and Rewarding Rules

Absenteeism, corrupt acts, political activities and other unbecoming acts shall be strictly disciplined. Diligence, devotion, high performance and praise-worthy acts shall be duly rewarded.

Establishment of internal rules for discipline and reward procedures are needed urgently.

6.9 Desirable Changes in External Conditions Related to the URW

6.9.1 Public Relations

The PPWSA should strengthen public relations activities. Background conditions of the present low level of service, shortage of power supply, lack of funds for operation and maintenance, intervention by the state and municipal governments, etc. shall be explained to the public openly, through the local mass media and by its own means of public relations.

Setting up a monitoring body with the participation of citizens is worthy of consideration.

Representatives for such a body are to be chosen from the massmedia, chamber of commerce, lawyers and civilian groups including women.

They are to be assured of being able to speak freely about their findings and viewpoints.

6.9.2 State Legislation and Administration

Autonomy of the PPWSA should be re-established by legislative means. In place of Decree 32, a law for water supply service should be introduced and legislated. In the law, the state policy on water supply should be announced, the state government's power over the PPWSA and administrative and financial assistance to it should be clearly defined.

Public servants should be assured of their employment and fair treatment in personnel matters. Rules for discipline and incentives should be established and enforced.

Legal actions against violation of rules by consumers should be enforced.

CHAPTER 7

CONCLUSIONS AND RECOMMENDATIONS

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7.1 Conclusions

- (1) Even though, the people in Phnom Penh City are suffering from shortage of water supply quantity and bad quality of supplied water now, it will be improved by implementation of the proposed URW of Phum Prek water treatment plant and Chamcar Morn treatment plant at the minimum allowable quality condition. Also, the distribution system has deteriorated so much that smooth distribution has been disturbed. This will be improved to a tolerable level by implementation of the proposed URW of the system.
- (2) It is possible to cope with the water demand originating from the rapidly increasing population, by supplying the minimum required water by executing the proposed expansion projects for production facilities and distribution facilities step by step.
- (3) The total investment cost excluding the land purchase cost is estimated as 575.56 million U.S. Dollars including URW, extension works and development works. The investment cost shall be covered by grant aid and soft loans.
- (4) The proposed URW, extension works and development works are:

Environmentally sound;

- rate of flow and quality of water from water sources will be good and the treated water quality will be clean and safe for drinking.
- environmental impacts accompanying the works can be mitigated and prevented.

Technically feasible;

- water treatment process technology is simple and appropriate.
- usage of the existing elevated tank is a good option for improving the distribution system.

- water pressure and water distribution will be improved further by controlling valves.
- water distribution condition will be improved by replacing the primary distribution pipes.
- water leakage will be decreased by replacing secondary distribution pipes and house connections.

Economically viable;

- the investment cost is reduced by utilizing the existing facilities.
- financially, the works become feasible by increasing water tariff and improving the efficiency of bill collection.
- water tariff is low so that low income groups can pay the tariff.

Depending on the progress of the proposed URW, extension works and development works, PPWSA can become an autonomous body which is the main objective of this plan, and it will have the capacity to develop the water supply works as a sustainable development, which will contribute to the development of Phnom Penh.

7.2 Recommendations

- (1) Cambodia side should devote their effort to this project so that they can implement the further extension projects of their system to cope with the increasing water demand in the near future.
- (2) The water tariff should be increased step by step within a payable limit of beneficiaries, and the increase shall be sufficient enough to be able to clear the accumulated nonpayment of the government organizations and be able to employ a depreciation accounting of the facilities so that they can manage to raise fund for renewing facilities.
- (3) In order to use insufficient supplied water effectively, the tariff should rise in proportion to the increase of consumption so that the system may give users an incentive to water saving.

- (4) It is also essential to collect water charge from faucets installed for the public. For this purpose, it is necessary to prepare the new tariff and method of collection.
- (5) For present contamination of supplied water from the waste water, Cambodia side should plan out the sewerage program of Phnom Penh Municipality.
- (6) It is advisable to dispatch specialists from Japan and to work together for the purpose of efficient and effective operation, maintenance and control of the facilities after the completion of these projects.

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