

CHAPTER 12
CONCLUSION AND RECOMMENDATION

Chapter 12 : Conclusion and Recommendation

Recommendations from the study are summarized below :

1. It is concluded that the proposed flood mitigation and storm water drainage improvement plans for the feasibility study areas, i.e. Greater Dhaka East, DND and Narayanganj West, will be feasible in technical, economical, social and environmental terms.

The feasibility study areas constitute a continuous zone along the eastern side of the Dhaka Metropolitan area and anticipated to be under a high population pressure. The areas will most likely be developed as urban areas, however the areas are extremely vulnerable to floods due to low and flat topography. The flood and storm water drainage problems would be severe constraints to future urban development

The whole study area needs immediate action for implementation of the proposed measures. However, in order to attain the expected project benefit, prompt actions will be required for improving land use management and O&M activities.

2. Also early execution of a comprehensive urban development study and supporting development studies including multiple uses of retarding areas are needed.

The Metropolitan Development Plan commissioned in 1992 will make an in-depth study in these areas. Then the supporting development studies should be done based on their recommendations.

The objectives of the supporting development studies should be :

- Strategic development zones,
- Transportation network system,
- Housing / industrial / commercial development,
- Recreation facilities development,
- Major public facilities development,
- Urban utilities and sanitation / solid waste management system development,
- Multiple uses of flood mitigation facilities.

3. Early establishment of proper management and control of land use are needed according to the urban development plan mentioned above.

The flood mitigation and drainage improvement strategy will be a major determinant of the urban development. If urban development is to proceed in accordance with preferred strategy, land use management and control will be very decisive.

RAJUK is the planning and land development authority for the Dhaka Metropolitan area. It should have the necessary authority to control development.

The existing legislation for land use control, and land acquisition may require revision in order to facilitate the implementation of the project.

4. Improvement of O&M activities for flood mitigation facilities are essential. After implementation of the project, proper O&M activities will be decisive measures for security of the schemes.

Although poor O&M activities are widely pronounced, the GOB is fully responsible for proper O&M activities.

Budget constraints are the most frequently cited constraint on O&M reported by the GOB. If so, it should be solved without fail.

Everyone in Dhaka would benefit from flood protection measures. Everyone should in principle contribute towards the cost. A tax based on the increase in land values (as suggested in the ADB Aide memories) would be an equitable measure.

Also the GOB should prepare routine O&M manuals and training programs for its staff and local participants.

5. Establishment of an environmental monitoring system for surface water is needed.

Surface water quality is the prime indicator of pollution, however available data and information are still quite limited. Without proper monitoring systems the environmental laws and regulation standards are useless.

6. Improvement of major access roads in the flood prone areas is needed for evacuation purposes.

A number of rural settlements at low-lying areas are isolated during floods. By improvement of the major access roads. The situation will be greatly improved.

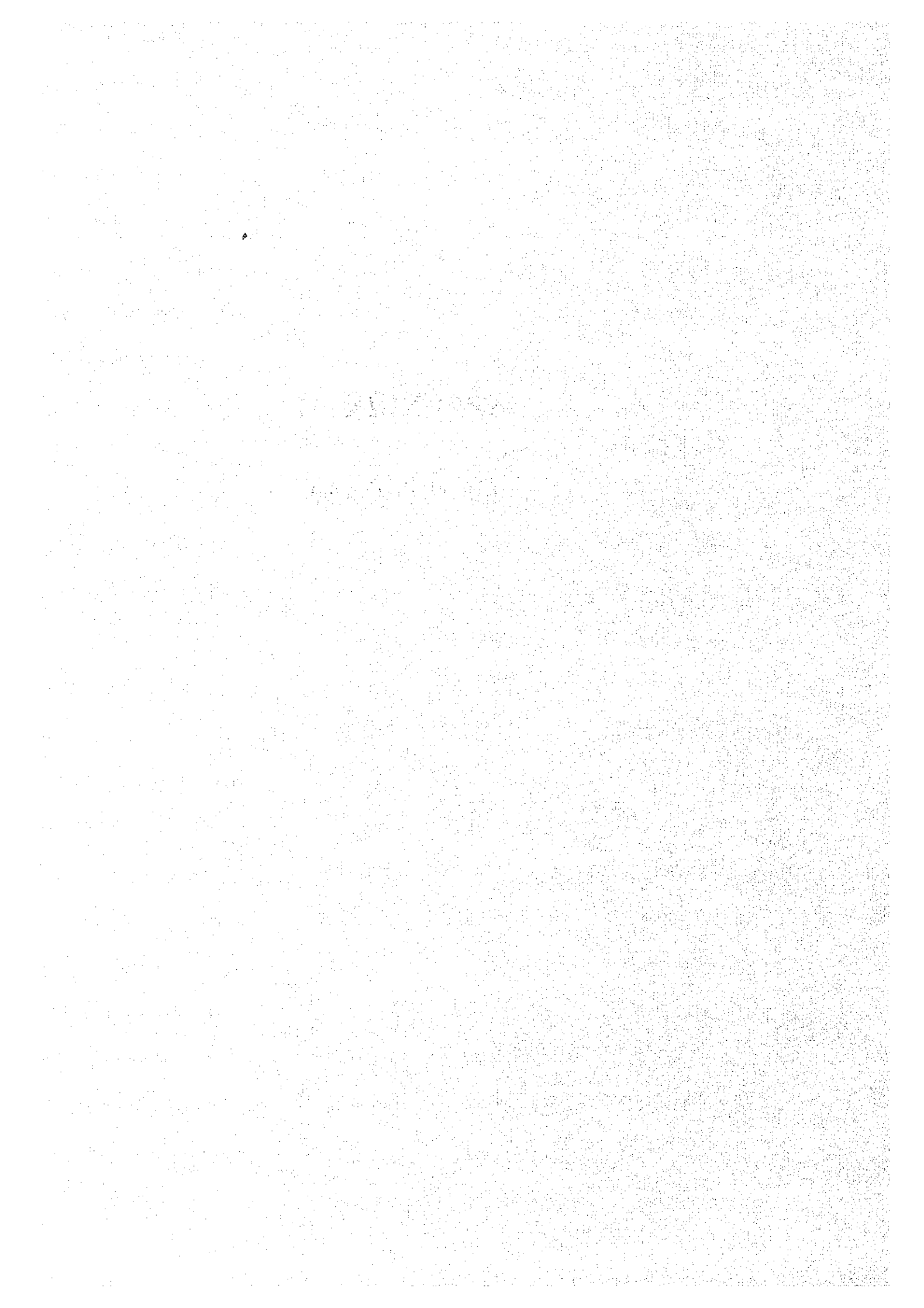
7. The projects are proposed to be implemented with progressing urbanization. In addition, monitoring and periodical review will be required.

After implementation of the proposed facilities of the initial stage, the major facilities such as pumps, trunk channels and retarding areas shall be monitored and reviewed before undertaking the scheme in full scale.

8. The flood plain management area and other rural areas, in Keraniganj and Savar, of the proposed master plan are recommended for further studies concerned to ecological and nature conservation and development. A balanced development of these areas for aquatic and terrestrial flora and fauna, the defined general ecological elements, and the productive ecological elements of agriculture and fishery/aquaculture be encouraged.

APPENDIX I

List of Participant



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1. JICA Advisory Committee

Dr. Hiroyoshi Shigai		Chairman Professor, University of Tsukuba
Mr. Tadahiko Nakao		Ministry of Construction
Mr. Hidetoni OI		Development Specialist, JICA
Mr. Motoharu Sekizawa		Ministry of Construction
Mr. Atsushi Suzuki		Ministry of Construction
Mr. Nitoshi Baba		Hokkaido Development Agency

2. JICA Study Team

Mr. Hajime Tanaka		Team Leader
Mr. Toshiaki Tokumasu		Deputy Team Leader Drainage Planning Engineer
Mr. Isao Misono		Flood Prevention Planning Engr.
Mr. J.R. Jones		Urban Planner
Mr. Hiroshi Matsuo		land Use Analyst
Mr. Takashi Furukawa		Hydrologist/Hydraulic Engineer
Mr. Kunihiko Okada		Drainage Facility Engineer
Mr. Kimio Takeya		River Structure Engineer
Mr. Tokihiko Ina		Construction Planner/Cost Estimator
Dr. S. Jayamohan		Environmental Engineer
Mr. Yuichi Hashimoto		Flood Damage Survey Expert
Mr. Naomichi Ishibashi		Socio-Economist
Mr. Yoshiaki Ohtoku		Mapping Specialist
Mr. Etsuro Warashina		Topo. Survey Expert

3. GOB Study Team

Mr. M.N. Huda	FPCO	Chairman, Local Panel of Experts
Mr. A.M.M. Nurul Huq	FPCO	Chief Engineer
Prof. Ainun Nishat	FPCO	Member POE
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4. Panel of Experts

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Mr. Tadahiko Nakao	Panel of Expert

5. World Bank

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6. Surface Water Modelling Center

Mr. Alasdair Macdonald, PHD	Team Leader
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7. Local Consultants

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