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References

[1] M. Keiner, "Towards Gigapolis? From Urban Growth to Evolutionable Medium-Sized Cities," In: M. Keiner, M. Koll-Schretzenmayr and W. Schmid, Eds., Managing Urban Futures, Ashgate Publishing Limited, England, 2006.

and Protection, Vol. 4 No. 7, 2012, pp. 451-459. doi: 10.4236/jwarp.2012.47052.

- [2] P. Jayakody, L. Raschid-Sally, S. A. K. Abeywardana and M. Najim, "Sustainable Development of Water Resources, Water Supply and Environment Sanitation," 32nd WEDC International Conference, Colombo, 2006.
- [3] A. W. G. N. Abeygunawardane, N. D. K. Dayawansa and S. Pathmarajha, "Socioeconomic Implications of Water Pollution in an Urban Environment: A Case Study in Meda Ela Catchment, Kandy, Sri Lanka," Tropical Agricultural Research, Vol. 22, No. 4, 2011, pp. 374-383.
- [4] A. M. C. P. K. Abeysinghe, "Willingness to Pay for Wastewater Disposal by Commercial Water Users in Kandy Municipality," Unpublished Final Year Project Report, University of Peradeniya, ECON/07/02, Sri Lanka, 2007.
- [5] APHA, " Standard Methods for the Examination of Water and Wastewater," American Public Health Association, 1989.
- [6] JICA, " Greater Kandy Water Supply Augmentation Project, Final Report, Volume II-I, Main Report (I)," Project Report, Japan International Co-Operation Agency, 2002.
- [7] Urban Development Authority, " Development Plan for Urban Development Area of Kandy," Situation

Report, Sri Lanka, 2001.

[8] R. A. Patterson, "Demonstration of Effects of Sodicity on Soil Hydraulic Conductivity," Proceedings of the Innovative Approaches to the On-Site Management of Waste and Water, Southern Cross University, Australia, 26 November 1996.

- [9] P. D. W. S. Poddalgoda, "The Status of the Effluent Discharge into Meda-Ela and Its Impact on the Mahaweli River," M.Sc. Thesis, University of Peradeniya, Sri Lanka, 1996.
- [10] JICA, "Kandy City Wastewater Management Project," Project Report, Japan International Co-Operation Agency, 2005.
- [11] D. R. Keeney, "The Nitrogen Cycle in Sediment-Water System," Journal of Environmental Quality, Vol. 2, 1973, pp. 15-29. doi:10.2134/jeq1973.00472425000200010002x
- [12] E. I. L. Silva, "Water Quality of Sri Lanka: A Review on Twelve Water Bodies, Kandy," Department of Environmental Sciences Institute of Fundamental Studies, 1996.