

LIST OF TABLES

Table 1: Basic difference between conventional and integrated approaches	10
Table 3.1: Alternative Water Supply (AWS) Option with its Sub-options and Categories	42
Table 4.1: Previous frameworks and indicators covered under urban water cycle	53
Table 4.2: Indicators and relevant sub-indicators with their description categorized for WDPI development	54
Table 4.3: Need of modification in existing framework based on PSR framework and final expected goals	58
Table 4.4: Weight Assignment to Indicators, Relevant Sub-indicators and PSR for WDPI Evaluation.	61
Table 4.5: WDPI value range to classify category of status	63
Table 5.1: Reuse Standards of Various Treated Wastewater Reuse option	88
Table 5.2 Removal Efficiency (in Percentage) of Wastewater Treatment Technology (WWTT)	89
Table 5.3: Urban water balance condition and relevant course of action	98
Table 5.4: Indicators and Relevant Sub-Indicators for WDPI	100
Table 5.5: Basic Cases to Improve Water Supply Sustainability	102
Table 5.6: Analytic Hierarchy Process (AHP) for weight assignment	104
Table 5.7 (a): Weight assignment to options for improved Urban Water Balance (UWB)	104
Table 5.7 (b): Calculated weight of options for improved Urban Water Balance (UWB)	104
Table 6.1: Population of Water Supply Zones of Varanasi City	110

Table 6.2: Suggested Wastewater Treatment Technologies for Varanasi City for Different Reuse Categories	118
Table 6.3: Costs Comparison of Various Wastewater Treatment Technologies (WWTT)	118
Table 6.4: Roof-top Area of Varanasi City Calculated Using Satellite Imagery	122
Table 6.5: Summary of Results from SDSS_IUWM for Varanasi City	128
Table 6.6: Target based Improvement in Water Supply Sustainability	131
Table 6.7: Projected Water Situation in Varanasi City for Year 2020	132
Table 6.8: Projected Water Situation in Varanasi City for Year 2030	135
Table 6.9: Projected Water Situation in Varanasi City for Year 2040	137
Table 6.10: Pressure, State, Response Scores and WDPI for Varanasi, Allahabad, Lucknow and Kanpur cities without applying improvement options with the existing scenario (base year 2015 and projected years 2020, 2030, 2040)	144
Table 6.11: Pressure, State, Response and WDPI Conditions for Varanasi, Allahabad, Lucknow and Kanpur cities without applying improvement options with the existing scenario (base year 2015 and projected years 2020, 2030, 2040).	144