



## LIST OF GRAPHS

Graph	Title	Page
2.1	Meteorology of Machhan Basin (Temperature & Sunshine Hours)	32
2.2	Meteorology of Machhan Basin (Humidity, Wind Velocity & Sunshine Hours)	33
6.1	Annual Rainfall - Jhalod & Dahod	138
6.2	Rainy Days - Jhalod	139
6.3	Rainy Days – Dahod	140
6.4	Rainfall Pattern - Jhalod (Average Rainfall)	141
6.5	Rainfall Pattern - Dahod (Average Rainfall)	142
6.6	Rainfall Characteristics - Jhalod	143
6.7	Rainfall Characteristics - Dahod	144
6.8	Draught Analysis – Jhalod	145
6.9	Draught Analysis – Dahod	146
7.1	Pre-monsoon R.W.L. Variation At Dungri Falia (Before Check Dam)	156
7.2	Pre-monsoon R.W.L. Variation At Dungri Falia (After Check Dam)	156
7.3	Post-monsoon R.W.L. Variation at Dungri Falia (Before Check Dam)	157
7.4	Post-monsoon R.W.L. Variation at Dungri Falia (After Check Dam)	157
7.5	Post-pre Difference of R.W.L. at Dungri Falia (Before Check Dam)	158
7.6	Post-pre R.W.L. Difference of R.W.L. at Dungri Falia (After Check Dam)	158
7.7	Pre-monsoon R.W.L. s at Simaliya (Before Check Dam)	159

Graph	Title	Page
7.8	Pre-monsoon R.W.L. Variation at Simaliya (After Check Dam)	159
7.9	Pre-monsoon R.W.L. Variation At Kalia Talav (Before Check Dam)	160
7.10	Pre-monsoon R.W.L Variation At Kalia Talav (After Check Dam)	160
7.11	Post-monsoon R.W.L. Variation at Kalia Talav (Before Check Dam)	161
7.12	Post-monsoon R.W.L. Variation at Kalia Talav (After Check Dam)	161
7.13	Pre-monsoon R.W.L.s at Mandli Khunta (Before Check Dam)	162
7.14	Pre-monsoon R.W.L.s at Mandli Khunta (After Check Dam)	162
7.15	Post-monsoon R.W.L. Variation at Mandli Khunta (Before Check Dam)	163
7.16	Post-monsoon R.W.L. Variation at Mandli Khunta (After Check Dam)	163
7.17	Pre-monsoon R.W.L. Variation at Melania (Before Check Dam)	164
7.18	Pre-monsoon R.W.L Variation at Melania (After Check Dam)	164
7.19	Post-monsoon R.W.L. Variation at Melania (Before Check Dam)	165
7.20	Post-monsoon R.W.L. Variation at Melania (After Check Dam)	165
7.21	Post-monsoon R.W.L. Variation at Muvada (Before Check Dam)	166
7.22	Post-Monsoon Water Level Fluctuations at Muvada (After Check Dam)	166
7.23	Pre-Monsoon R.W.L. Variation at Anwarpura (Before Check Dam)	167
7.24	Pre-Monsoon R.W.L. Variation at Anwarpura (After Check Dam)	167
7.25	Post-Monsoon R.W.L. Variation at Anwarpura (Before Check Dam)	168
7.26	Post-Monsoon R.W.L. Variation at Anwarpura (After Check Dam)	168
7.27	Post-Pre R.W.L. Difference at Bhanpur (Before Check Dam)	169

Graph	Title	Page
7.28	Post-Pre R.W.L. Difference at Bhanpur (After Check Dam)	169
7.29	Post-Pre R.W.L. Diff. In Three Villages of Bambela Check Dam (Before Check Dam)	170
7.30	Post Pre R.W.L. Diff. In Three Villages Of Bambela Check Dam (After Check Dam)	170
7.31	Pre-monsoon R.W.L. Variation in at Dahod (After Check Dam)	171
7.32	Post-Monsoon R.W.L. Variation at Dahod (After Check Dam)	171
7.33	Post-Pre R.W.L. Difference at Dahod (After Check Dam)	172
7.34	Pre-Monsoon R.W.L. Variation At Dhadhela (Before Check Dam)	172
7.35	Pre-monsoon R.W.L. Variation at Dhadhela (After Check Dam)	173
7.36	Area Irrigated by Kachumber Dam	179
7.37	Area Irrigated by Wankol Check Dam	179
7.38	Area Irrigated by Simaliya Check Dam	180
7.39	Area Irrigated by Therka Check Dam	180
7.40	Area Irrigated by Bambela Check Dam	181
7.41	Area Irrigated by Mahudi Check Dam	181
7.42	Area Irrigated by Kheda-Amba Check Dam	182
7.43	Area Irrigated by Thunthi-Kankasiya Check Dam	182
7.44	Area Irrigated in 1994	183
7.45	Area Irrigated in 1995	183

Graph	Title	Page
7.46	Area Irrigated in 1996	184
7.47	Area Irrigated in 1997	184
7.48	Area Irrigated in 1998	185
7.49	Area Irrigated in 1999	185
7.50	Area Irrigated in 2000	186
7.51	Area Irrigated in 2001	186
7.52	Area Irrigated in 2002	187
7.53	Area Irrigated in 2003	187
7.54	Area Irrigated in 2004	188
7.55	Area Irrigated in 2005	188
7.56	Area Irrigated in 2006	189
8.1	Observed Runoff & Calculated Runoff Vs Time 1993	195
8.2	Inter Flow Vs Time for year 1993	195
8.3	Base flow Vs time for year 1993	196
8.4	Observed Runoff & Calculated Runoff Vs Time 1994	196
8.5	Inter flow Vs Time for year 1994	197
8.6	Base flow Vs Time for year 1994	197
8.7	Observed Runoff & Calculated Runoff Vs Time 1995	198
8.8	Inter Flow Vs Time for year 1995	198
8.9	Base flow Vs time for year 1995	199

Graph	Title	Page
8.10	Observed Runoff & Calculated Runoff Vs Time 1996	199
8.11	Inter Flow Vs Time for the year 1996	200
8.12	Base Flow Vs Time for year 1996	200
8.13	Observed Runoff & Calculated Runoff Vs Time 1997	201
8.14	Inter Flow Vs Time for the year 1997	201
8.15	Base Flow Vs Time for year 1997	202
8.16	Observed Runoff & Calculated Runoff Vs Time 1998	202
8.17	Inter Flow Vs Time for year 1998	203
8.18	Base Flow Vs Time for year 1998	203
8.19	Observed Runoff & Calculated Runoff Vs Time 1999	204
8.20	Inter flow Vs time for the year 1999	204
8.21	Base Flow vs. Time for the year 1999	205
8.22	Observed Runoff & Calculated Runoff Vs Time 2001	205
8.23	Inter flow Vs time for the year 2001	206
8.24	Base Flow vs. Time for the year 2001	206
8.25	Observed Runoff & Calculated Runoff Vs Time 2003	207
8.26	Inter flow Vs time for the year 2003	207
8.27	Base Flow Vs Time for the year 2003	208
8.28	Base Flow Vs Time for year 1995 (No Check Dam)	208
8.29	Base Flow Vs Time for year 1995 (Three Check Dams)	209

Graph	Title	Page
8.30	Inter Flow Vs Time for year 1995 (No Check Dam)	209
8.31	Inter Flow Vs Time for year 1995 (Three Check Dams)	210
8.32	Base Flow Vs Time for year 2001 (No Check Dam)	210
8.33	Base Flow Vs Time for year 2001 (Two Check Dams)	211
8.34	Inter Flow Vs Time for year 2001 (No Check Dam)	211
8.35	Inter Flow Vs Time for year 2001 (Two Check Dams)	212
8.36	Base Flow Vs Time for year 2003 (One Check Dam)	212
8.37	Base Flow Vs Time for year 2003 (Two Check Dams)	213
8.38	Inter Flow Vs Time for year 2003 (One Check Dam)	213
8.39	Inter Flow Vs Time for year 2003 (Two Check Dams)	214
8.40	Effect of Different Number of Check Dams - 1994	214
8.41	Effect of Different Number of Check Dams - 1995	215
8.42	Effect of Different Number of Check Dams - 1999	215
8.43	Effect of Different Number of Check Dams - 2001	216
8.44	Effect of Different Number of Check Dams - 2003	216
8.45	Comparison of Effect of One Check Dam in Different Zone	217