

LIST OF PLATES

PLATES	PAGE NO
1.1. Gangotri glacier near Gaumukh-source of the river Ganga	3
1.2. "Gaumukh" the end part of the Gangotri glacier and the source of river Bhagirathi	3
1.3(a) Confluence of Alaknanda and Bhagirathi at Devprayag	4
1.3(b) Ganga at Devprayag	4
1.4. Ganga aarti ritual at Haridwar	12
1.5. Ganga ghat at Banaras	12
1.6. Floral variety named "Kachnaar"	21
1.7. Ganges fresh water Dolphin	21
3.1. Electromagnetic spectrum	47
3.2. Typical spectral reflectance curve for vegetation, soil and water	47
3.3. Pre-monsoon coverage of the Ganga river course in Bihar on 1:250,000 scale year - 2000	55
3.4. Post-monsoon coverage of the Ganga river course in Bihar on 1:250,000 scale year – 2000	55
3.5. Pre-monsoon coverage of the Ganga river course in Bihar on 1:250,000 scale – year 2004	56
3.6. Post-monsoon coverage of the Ganga river course in Bihar on 1:250,000 scale – year 2004	56
4.1(a) Formation of a natural levee	74
4.1(b) Formation of a natural levee	74
4.2. Formation of an ox-bow lake	75
4.3. Erosional and depositional terrace	75
4.4. Point-bar deposit	76
4.5. Figure showing few fluvial landforms	76
4.6. Formation of a meander	77
4.7. Braided pattern	77
5.1. IRS FCC image / field photograph showing the ox-bow lake near Rudrapur	94

5.2.	IRS FCC image / field photograph showing the palaeo-meander scar near Rudrapur	97
5.3.	IRS FCC image / field photograph showing a typical meandering pattern near Rudrapur	109
5.4.	A general view of a meandering pattern as seen in field	109
5.5.	IRS FCC image / field photograph showing a typical braided course near Patna	123
5.6.	IRS FCC image / field photograph showing a huge sand-bar near Sahri	127
5.7.	IRS FCC / field photograph showing the water-body near Patna	127
5.8.	IRS FCC / field photograph showing the new huge river-island formed near Patna	128
5.9.	IRS FCC / field photograph showing excess rate of erosion near Patna	128
5.10.	IRS FCC / field photograph showing river island near Bhagalpur	165
5.11.	IRS FCC image showing braided river pattern	165
5.12.	IRS FCC/field photograph showing vast flood-plain with vegetation near Sahibganj	177