

Report on Detailed Soil Survey and Land Use of Gn1k, Gn1m, Gn1p and Gn2f Subwatersheds of Gomti (FPR) Catchment, Tehsils Hardoi and Shahabad, District Hardoi, Tehsil Muhamdi, District Kheri and Tehsil Misrikh, District Sitapur (U. P.)

ABSTRACT

- **Survey Area** : Gn1k, Gn1m, Gn1p and Gn2f Subwatersheds of Gomti (FPR) Catchment, Tehsils Hardoi and Shahabad, District Hardoi, Tehsil Muhamdi District, Kheri and Tehsil Misrikh, District Sitapur (U.P.)
- **Total Area Surveyed** : 8,378 ha
- **Period of Survey** : December, 1997 to June, 1998
- **Kind of Survey** : Detailed Soil Survey (on cadastral map of 16" = 1 mile scale)
- **Soil Series Mapped and Their Extent**

S. No.	Soil Series	Symbol	Total area in ha	Percentage
1.	Bukharpur	BP	342	4.1
2.	Chapartala	CH	66	0.8
3.	Gangapur	G	78	0.9
4.	Hamirpur	H	5,740	68.5
5.	Jairampur	J	959	11.5
6.	Nemi Sharanya	NS	243	2.9
7.	Rahimabad	R	302	3.6
Sub-total			7,730	92.3
8.	Miscellaneous land		387	4.6
9.	Area under water		261	3.1
Sub-total			648	7.7
Grand-total			8,378	100.0

➤ **Area Under Different Land Capability Classes**

Land Capability Class	Area (ha)	Percentage	Soil Series
ARABLE LANDS			
II Good land with moderate limitations	6,554	78.2	Chapartala, Bukharpur Hamirpur, Jairampur
III Moderately good land with severe limitations	756	9.0	Hamirpur, Jairampur, Nemi Sharanya Rahimabad
IV Marginal land with very severe limitations	420	5.0	Chapartala, Gangapur, Hamirpur, Jairampur, Nemi Sharanya
Sub-total		7,730	92.2
Miscellaneous land	648	7.8	
Grand-total		8,378	100.0

➤ **Area under Different Erosion Classes**

S. No.	Erosion class	Area (ha)	Percentage
1.	None to slight (e1)	6179	73.6
2.	Moderate (e2)	1185	14.2
3.	Severe (e3)	366	4.4
4.	Very severe (e4)	-	-
Sub-total		7730	92.2
5.	Miscellaneous	648	7.8
Grand-total		8,378	100.0

➤ **Salient Features**

- ⇒ Most of the area surveyed (92.3%) is found suitable for agriculture.
- ⇒ Nearly 14.7% (1231 ha) of the total area suffers from moderate erosion.
- ⇒ Only 3.8% (320 ha) of the total surveyed area is prone to suffer from severe (e3) erosion.
- ⇒ The survey area is devoid of non-arable land.
- ⇒ About 710 ha (8.5%) of the total land is subjected to either waterlogging or flooding which needs drainage improvement.
- ⇒ About 78 ha land suffers with problem of alkalinity and needs suitable reclamation measures to put under intensive agriculture.