

1. Project Overview:

This project aims to introduce and promote sustainable agricultural practices in Amethi, a district in Uttar Pradesh, to ensure food security, improve farmers' incomes, and safeguard the environment. Through the implementation of eco-friendly, efficient, and resource-conserving agricultural techniques, this initiative will empower local farmers, reduce dependency on chemical inputs, and enhance agricultural productivity in the region. The project will include training, demonstration plots, and the establishment of local farmer groups to promote the adoption of sustainable farming practices such as organic farming, crop diversification, water conservation techniques, and integrated non-pesticide management (INPM).

2. Geographical Relevance

Amethi district came into existence in July 2010 by merging three tehsils of the erstwhile Sultanpur district and two tehsils of the erstwhile Raebareli district of Uttar Pradesh.

The climate of Amethi district is semi-arid subtropical monsoon type. The cold days start from 15 November and last up to 15 March. However, severe cold days are in December and January. Hot summer months are May and June. Monsoon sets generally by the end of June and lasts up to the first week of October. The average annual rainfall of the past 6 years (2010-2015) is 775 mm, about 80% of which is received between June and September. Mean maximum temperatures of 41.1 C and 38.9 C are recorded in the months of May and June, which are the hottest months. The month of April is also quite hot with a mean temperature of 38.1 C. The mean minimum temperatures in the month of December and January are 7.7 C and 7.9C, respectively. The soil temperature regime of the study area is Hyper thermic and the soil moisture regime is Ustic (Anonymous, 1988). Block Amethi is a part of Lower Gangetic Plains. The general slope is from north-west to south-east. The central 150 P.P.S. Yadav et al. part is slightly elevated, on which the Amethi distributary of Sharda Sahayak canal is located. The land is very gently sloping out from the distributary towards the north-east and the south-west. The land use/land cover in the study area comprises mainly of agricultural land, fallow land, plantation, waterbody and sodic wastelands. About 68% of the area is covered by seasonal crops and about 15% by orchards and plantations.

Land Use pattern of the district

Total Area of The district	238201 ha
Area under Forest	2111 ha
Net Cropped Area	144683 ha
Gross cropped area	234943
Cultivable wasteland	5955 ha
Current fallow	20231 ha
Other fallows	14853 ha
Area under non agricultural uses	33296 ha
Permanent Pasture	2005 ha
Barren and Uncultivated land	7241 ha
Area under trees, hort. & groves	7826 ha
Cropping Intensity	162.38%

Demographic Pattern of the district

Total Population	1867678
Male Population	945000
Female Population	922000
Female per thousand male	976
Population density	802
Percentage of SC/ST population	25.26%
Percentage of urban population	5.69

Land holding Type	Criteria	No of holdings	Area ha	Percentage
Average land holding		0.54 ha		
Marginal farmers	Less than 0.50 ha	129221	33843	66.74%
	0.50 -1.0 ha	41652	29129	21.51
Small Farmers	1.0 -2.0 ha	16464	21921	8.5
Semi Medium Famers	2.0-4.0 ha	5340	14280	2.76
Medium Farmers	4.0 to 10.0 ha	896	4738	0.46
Large farmers	More than 10.0 ha	25	357	0.0013

Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

Area under different AESs in the District – Amethi

Soil Type:

	Particulars	Area ('000 ha)	Percent (%) of total
AES-1	Deep, loamy soil	140.5	56
AES-2	Deep, silty soil	25.1	10
AES-3	Deep, fine soil moderately saline or sodic	45.2	18

Irrigation facility

S.N.	Irrigation	Area (ha)	
1	Net irrigated area	129766	
2	Gross irrigated area	208572	
3	Rain-fed area	20.7	
S.N.	Source of Irrigation	Area (ha)	Percent of total irrigated area
1	Canal	58742	45.27%
2	Bore well (Tube well)	71024	54.73%
	Total	129766	