

Preparation of Development Plan for Fourteen *Upazila* Package-02

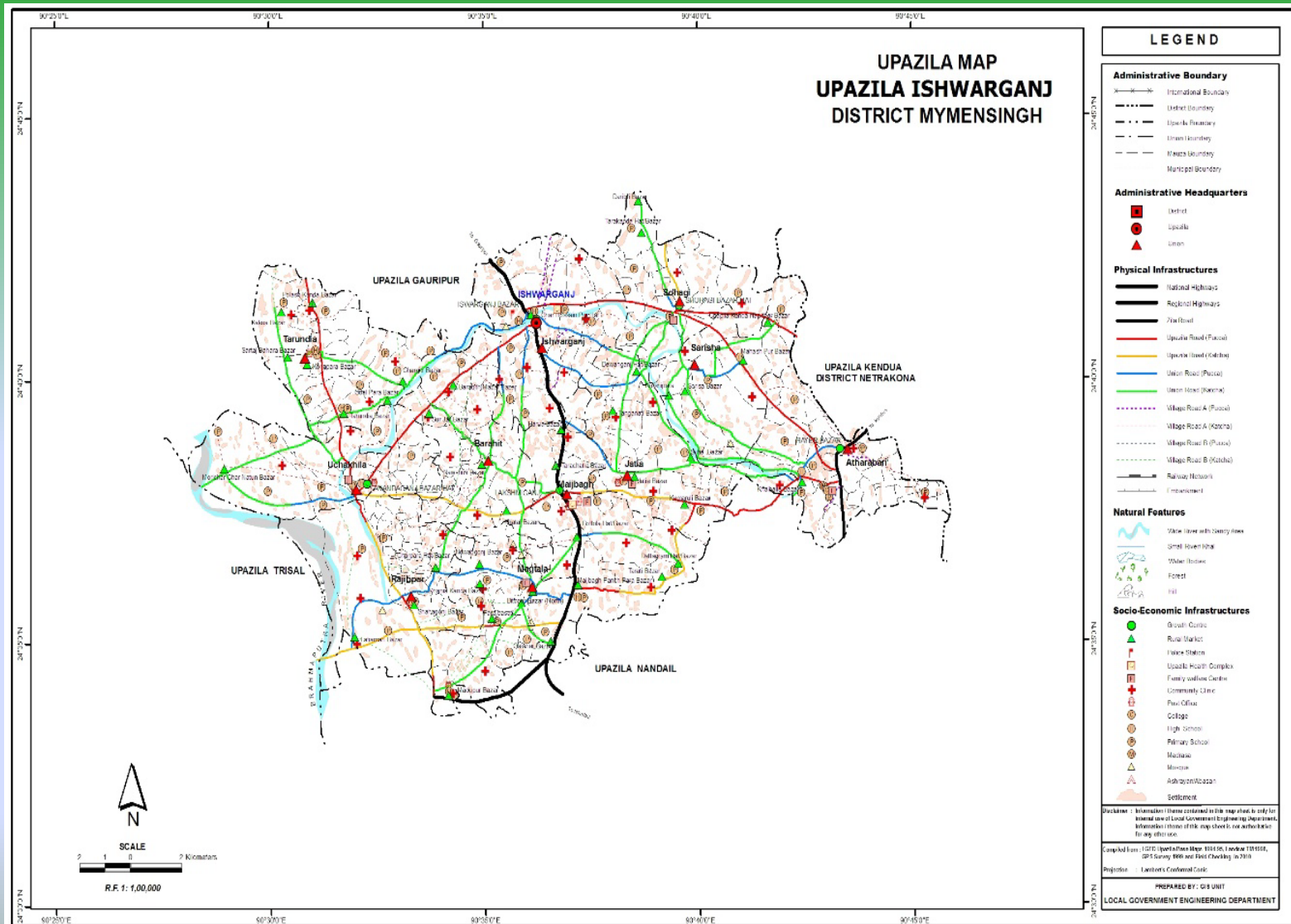
(IshwarganjUpazila,Mymensingh; RaipuraUpazila and ShibpurUpazila, Narsingdi)

Presentation On Agricultural Survey Report of Ishwarganj Upazila

Prepared By

**Joint Venture
of
Sheltech Consultants Pvt. Ltd
and
ARC Bangladesh Ltd**

Location Map of Ishwarganj Upazila



At a glance of Ishwarganj Upazila

- **Location:** Mymensingh District (24.6833°N 90.6250°E)
- **Area:** 286.19 km²
- **Population:** 376348
- **Number of Municipality & Union:** 1 Municipality and 11 Unions
- **Land Type:** Flood plains of Young Brahmaputra Yamuna and Old Brahmaputra
- **Dominant Occupation:** Agriculture

Objectives and Methodology

Objectives

- Assess present cropping pattern and cropping intensity
- Identify landuse pattern
- Projection of future agricultural pattern and its changes
- Sustainable development in agricultural sector

Methodology

Primary Data

- KII (Key Informant Interview)
- Field Visit

Secondary Data

- DAE Union and Upazila Office documents

Field Level Data Collection



Meeting with Upazila Agricultural Officer



Agricultural Land in Ishwarganj Upazila

Union-wise Present Agriculture Land Use Information and Identified land of Ishwarganj Upazila

Name of Unions	Total Area (HA)	NCA (ha)	Land Type (%)	Soil P ^H	Soil Texture	Present land Use (%)	Land Zoning
Atharabari	3817	1867	HL=56 MHL=22 MLL=16 LL=5 VLL=1	4.9-6.4	Silt loam to Silty clay loam	Agriculture=61 Road = 1 Settlement=36 Water bodies=2	Agriculture Zone
Barahit	4137	2010	HL=52 MHL=27 MLL=11 LL = 9 VLL=1	5.0-6.5	Silt loam to Silty clay loam	Agriculture=52 Road= 1 Settlement= 41 Water bodies=6	Agro-Fisheries Zone
Ishwarganj	2580	1293	HL=68 MHL=30 MLL=2	4.5-6.4	Silt loam to Silty clay loam	Agriculture=55 Road=1 Settlement=38 Water bodies=5	Agriculture Zone
Jatia	3647	1913	HL=74 MHL=12 MLL=2 LL=3 VLL=9	4.8-6.5	Silt loam to Silty clay loam	Agriculture=54 Road=1 Settlement=41 Water bodies=4	Agriculture Zone
Maijbagh	5404	2542	HL=26 MHL=64 MLL=10	4.5-6.5	Silt loam to Silty clay loam	Agriculture=57 Road= 1 Settlement=38 Water bodies=4	Agriculture Zone
Magtola	3468	1695	HL=17 MHL=41 MLL=36 LL=4 VLL=2	5.0-6.5	Silt loam to Silty clay loam	Agriculture=60 Road=1 Settlement=37 Water bodies=2	Agriculture Zone

Source: Land Zoning Report December2014 of Ishwarganj Upazila under Mymensingh

Note: HL-High Land; MHL-Medium High Land; LL- Low Land; VLL- Very Low Land

Union-wise Present Agriculture Land Use Information and Identified land of Ishwarganj Upazila

Name of Union	Total Area (HA)	NCA (ha)	Land Type (%) NCA	Soil P ^H	Soil Texture	Present land Use (%)	Land Zoning
Rajibpur	6316	2894	HL=70 MHL=10 MLL=10 LL=8 VLL=2	5.5-6.5	Silt loam to Silty clay loam	Agriculture=65 Road=1 Settlement=24 Char=4 Waterbodies=5	Agriculture Char land Zone
Sarisha	3943	1838	HL=8 MHL=49 MLL=39 LL=4	5.0-6.0	Silt loam to Silty clay loam	Agriculture=58 Road=1 Settlement=40 Water bodies=1	Agriculture Zone
Sohagi	3478	1719	HL=10 MHL=75 MLL=12 LL=3	5.0-6.5	Silt loam to Silty clay loam	Agriculture=61 Road=1 Settlement=33 Water bodies=4 Urban=1	Agriculture Zone
Tarundia	4504	2221	HL=18 MHL=53 MLL=18 LL=6 VLL=5	5.1-6.4	Silt loam to Silty clay loam	Agriculture=61 Road=1 Settlement=27 Water bodies=11 Urban=1	Agro-Fisheries Zone
Uchakhila	4578	2282	HL=6 MHL=83 MLL=8 LL=3	5.0-6.4	Silt loam to Silty clay loam	Agriculture=65 Forest=1 Settlement=23 Char=4 Road=1 Water bodies=6	Agriculture Zone
Ishwarganj Paurashava	1840	930	HL=6 MHL=83 MLL=8 LL=3	4.5-6.4	Silt loam to Silty clay loam	Agriculture=54 Road=2 Settlement=30 Urban area=9 Water bodies=5	Paurashava Area

Source: Land Zoning Report December 2014 of Ishwarganj Upazila under Mymensingh

Note: HL-High Land; MHL-Medium High Land; LL- Low Land; VLL- Very Low Land

Unions Identified Land Zoning under Ishwarganj Upazila

Name of Zone	Union	Remarks
1. Agriculture Zone	Atharabari, Ishwarganj, Jatia, Maijbagh, Magtola, Sohagi & Uchakhila	Considering the present agricultural land use, land suitability and peoples opinion these Union are recommended as agricultural Zone
2. Agro-Fisheries Zone	Barahit and Tarundia	Some area is potential for capture and culture fisheries and high production of fisheries
3. Agriculture Char Land Zone	Rajibpur	This Upazila lie on the bank of Old Brahmaputra& consist of unstable Char land
4. Paurashava Area	Ishwarganj Paurashava	Development of Paurashava area should be done without degradation of fertile agricultural land.

Source: Land Zoning Report December 2014 of Ishwarganj Upazila under Mymensingh

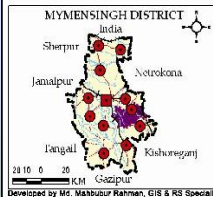
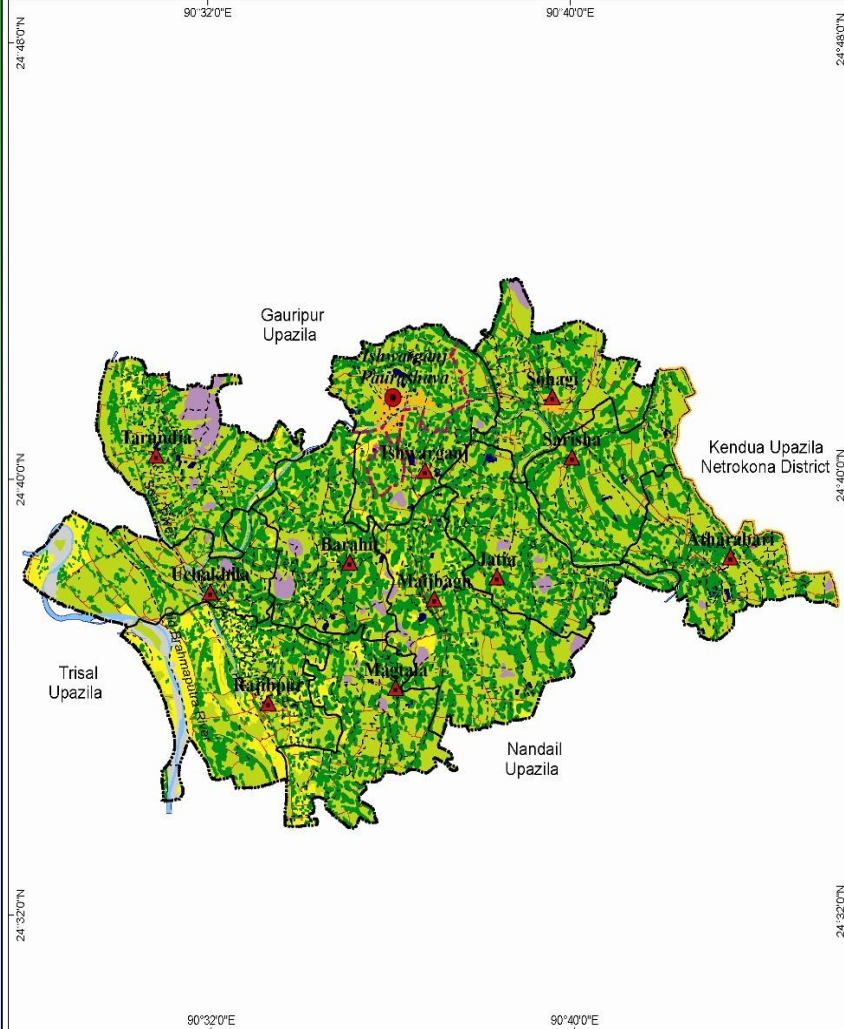
Present Cropping Pattern under Ishwarganj Upazila

Major Cropping Pattern			Area (ha)	Contribution %
Rabi	Kharif-1	Khari-2		
Boro (HYV/Hybrid)	Fallow	T. Aman (HYV)	16800	70
Boro (HYV/Hybrid)	Fallow	Fallow	3600	15
Boro(HYV/Hybrid)	T.Aus	T. Aman (HYV/LV)	480	2
Wheat	Jute	T.Aman (HYV/LIV)	240	1
Wheat	T. Aus	T. Aman (HYV/LV)	480	2
Potato/Sweet Potato	Jute	T. Aman (HYV/LV)	480	2
Potato	T.Aus	T. Aman (HYV/LV)	480	2
Mustard	Jute	T. Aman (HYV/LV)	240	1
Mustard	T. Aus	T. Aman (LV)	240	1
Vegetables	Vegetables	Vegetables	480	2
Vegetables + Boro	Fallow	Fallow	240	1
Vegetables	Fallow	T. Aman (HYV/LV)	480	2
Total			24240	100

Source: SAAOs and UAO Ishwarganj Upazila, DAE 2016

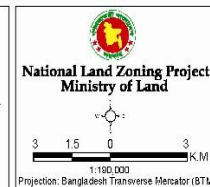
Note: HYV-High Yielding Variety; LIV-Local Improved Variety

Present Agricultural Land Use Map Upazila-Ishwarganj, District-Mymensingh



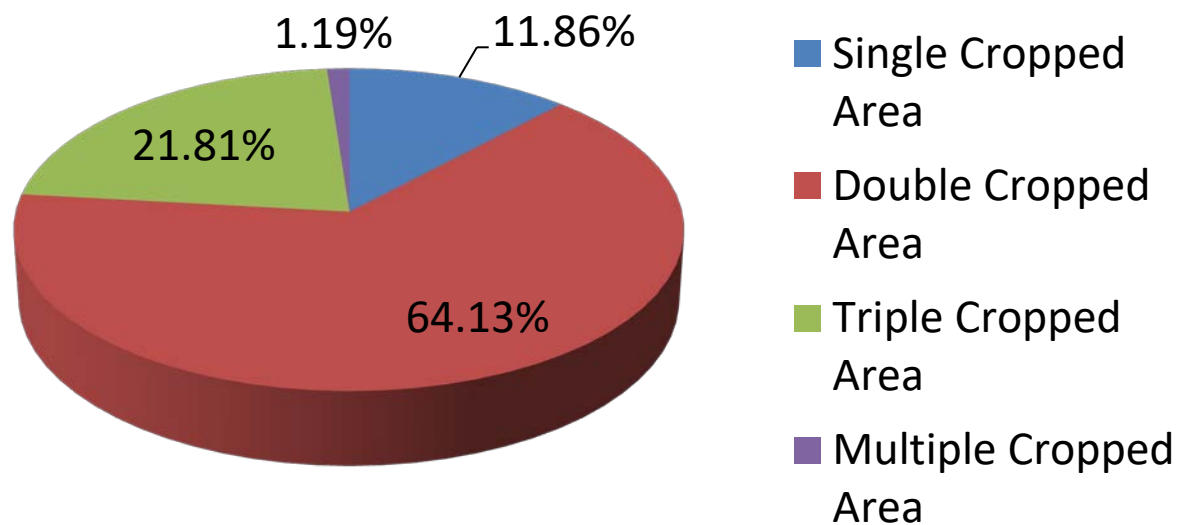
Legend	
Land Use	Other Features
Yellow: Triple Crop	Brown: Farm Land Forest
Light Green: Double Crop	Pink: Mixed Use
Medium Green: Single Crop	Red: Road
Dark Green: HPS	Black: Railway
Orange: Built-up Area	Blue: Pond
	Grey: Char Land
	Light Blue: River/Khal
	Red Circle: Upazila HQ
	Red Triangle: Union HQ
	Thick Black Line: District Boundary
	Dashed Black Line: Upazila Boundary
	Thin Black Line: Union Boundary
	Thin Purple Line: Puro Boundary
	Dashed Purple Line: Mouza Boundary

Note: HPS- Homestead Forest with Settlement



Present Agricultural Land Use Map of Ishwarganj Upazila

Agricultural Landuse Pattern of Ishwarganj Upazila



Percentage of single, double, triple and four cropped area under Ishwarganj Upazila

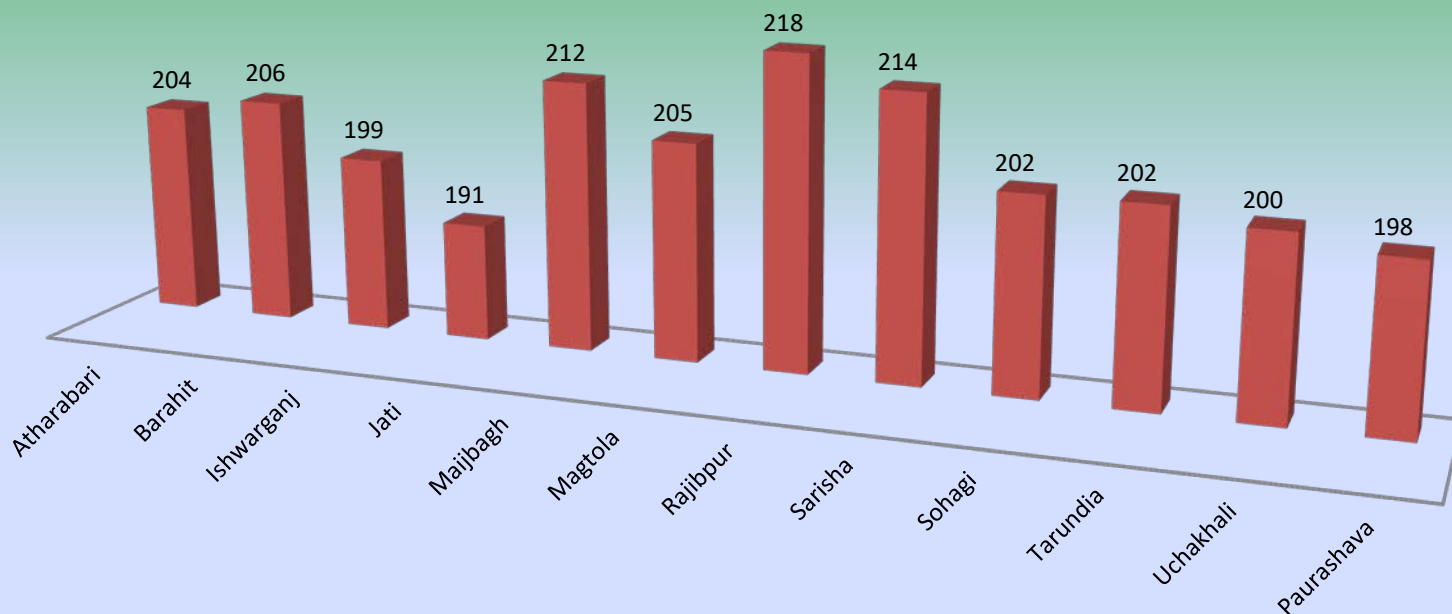
Present Cropping Patterns of Ishwarganj

Name	Total Area (ha)	Net Cultivable Area (ha)	Major Cropping Patterns	Cropping Intensity (%)
Ishwarganj Upazila	28,055	23204 (82.71%)	Boro(HYV)→Fallow→T.Aman(HYV)	204.29
			Boro→Fallow-----Fallow	
			Vegetable→Vegetable→Vegetable	
			Mustard→Boro (HYV)→T. Aman	

Source: Compilation of SAAs of Ishwarganj and Shibpur Upazila 2016

Cropping Intensity of Ishwarganj Upazila

Union wise % of Cropping Intensities



Source: SAOs of 11 Unions and 1 Municipality under Ishwarganj Upazila, DAE 2016

Table : Status of Union wise Irrigation and Ground& Surface Water Used Area under Ishwarganj Upazila

Union	Irrigated Area (%)	Irrigated Area (%)							Char Land	Remarks
			Ground				Surface			
			DTW		STW		LLP			
			No	Area (%)	No	Area (%)	No	Area (%)		
Atharabari	100	-	-	-	639	100	-	-	-	Rain fed crops need Supplemental Irrigation
Barahit	88	12	25	55	245	38	40	7	-	
Ishwarganj	95	5	15	6	317	92	9	2	-	
Jatia	90	10	39	25	75	60	25	15	√	
Maijbagh	93	7	39	4	331	84	46	12	-	
Mogtola	93	7	45	12	211	85	22	3	-	
Rajibpur	95	5	20	8	535	89	15	3	√	
Sarisha	86	14	-	-	320	100	-	-	-	
Sohagi	98	2	-	-	325	100	-	-	-	
Tarundia	97	3	47	4	155	82	57	14	√	
Uchakhila	100	-	21	4	641	90	29	6	√	
Ishwarganj	92	8	4	7	232	83	8	10	-	
Paurashava										

Source: National Land Zoning Project Report January 2014

Table: Cost of Rice Production (2014-15)

Name of Rice	Average per kg rice production cost (TK)	Crop season
Boro	18.65	Rabi
Aus	18.64	Kharif-1
Aman	17.61	Kharif-11

Source: Agriculture Economic Division, BRRI 2016

Name of Rice	Average per kg rice production cost (TK)	Crop season
Boro	18.08	Rabi
Wheat	23.50	Kharif-1
Aman	18.20	Kharif-11

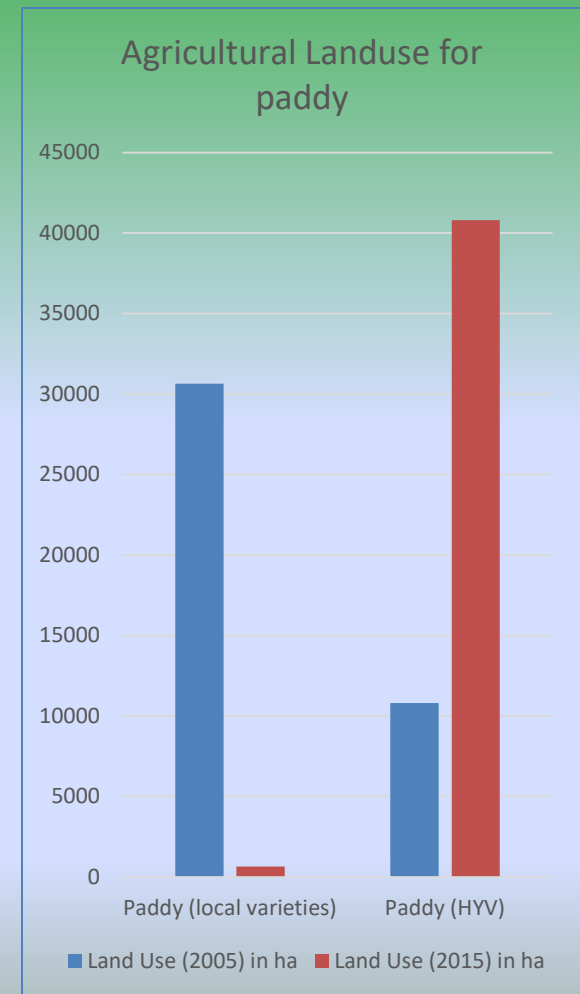
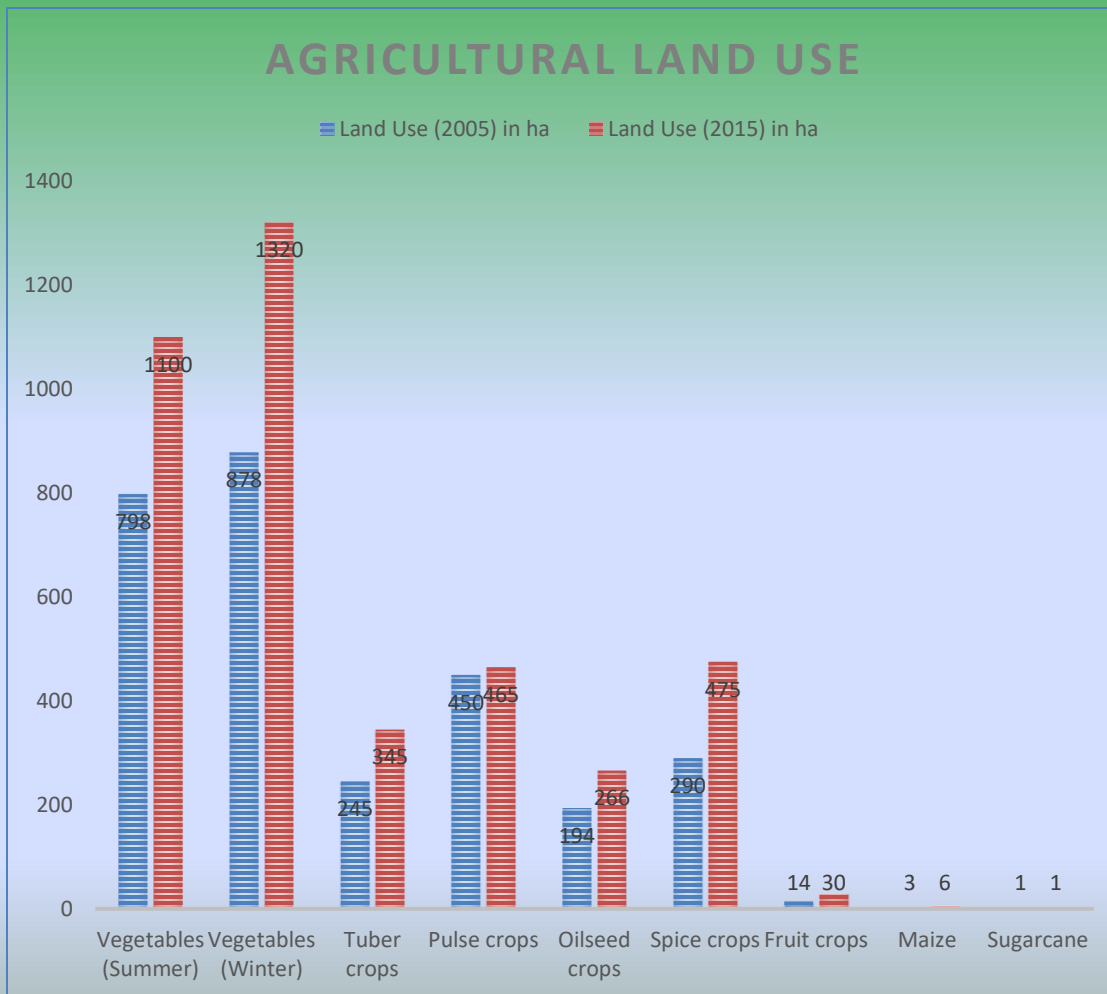
Source: Department of Agriculture Marketing, 2016

Growth or Decline Agriculture Land Use during the Last 10 Year under Ishwarganj Upazila

Sl. No.	Agricultural land use	Land Use (2005) in ha	Land Use (2015) in ha	% Change
1	Paddy (local varieties)	30644	655	-97.86
2	Paddy (HYV)	10816	40805	+277.27
3	Vegetables (Summer)	798	1100	+37.84
4	Vegetables (Winter)	878	1320	+50.34
5	Tuber crops	245	345	+40.82
6	Pulse crops	450	465	+3.33
7	Oilseed crops	194	266	+37.11
8	Spice crops	290	475	+38.95
9	Fruit crops	14	30	+114.29
10	Maize	3	6	+66.67
11	Sugarcane	1	1	0
12	Other purposes			
	-Brick field	20(#10)	32(#16)	+60
	-Poultry farm	1.50 (#25)	6.75 (#153)	+350
	-Fish/shrimp culture	2590.6	3873.6	+33.12
	-Gardening/forestry	74	100	+35.14
	-Housing	1373	2850	+107.57

Source: SAAOs and UAO Ishwarganj Upazila, 2016

Growth or Decline Agriculture Land Use during the Last 10 Year



Major Agricultural Problems of Ishwarganj Upazila

- **Natural**
- Natural disaster(such as heavy rain, flood, drought, and river erosion)
- **Man-made**
- Decrease of agricultural land due to increase of population
- Decrease of organic matter of soil
- Declination of top-soil
- Lack of knowledge about modern technology
- Labor shortage in the time of seedling and harvest period
- Improper use of fertilizer and insecticides
- Low product price at root level
- Involvement of local Foria in market
- **Infrastructure**
- Lack of electricity supply
- Improper irrigation system (about 95-100% irrigation canals are katcha) and declination of ground water level
- Bad communications system and damages of roads due to flood
- Lack of proper drainage system
- Absence of cold storage
- Absence of large competitive market
- Absence of monitoring cell to get right price of agricultural products

Recommendation for Ishwarganj Upazila

- Adaptation with modern technologies in farming
- Practice with high yielding, drought tolerant and cold susceptible varieties of crops
- Minimum use of chemical fertilizers and insecticides
- Increase the use of natural fertilizers and insecticides
- Availability of good quality seeds
- Reduce the use of ground water
- Improve irrigation and drainage system
- Jute-retting facilities
- Grow one leguminous crop (Dhaincha / Pulses/Fodder etc.) between two cereal crops.
- Re-excavation of canals
- Reconstruction of damaged water management infrastructures
- Develop market infrastructures and road communication system at local level
- Uninterrupted power supply
- Construction of new cold storage and food godown
- Arrange and allocate sufficient credit for agricultural activities

Thank You