

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

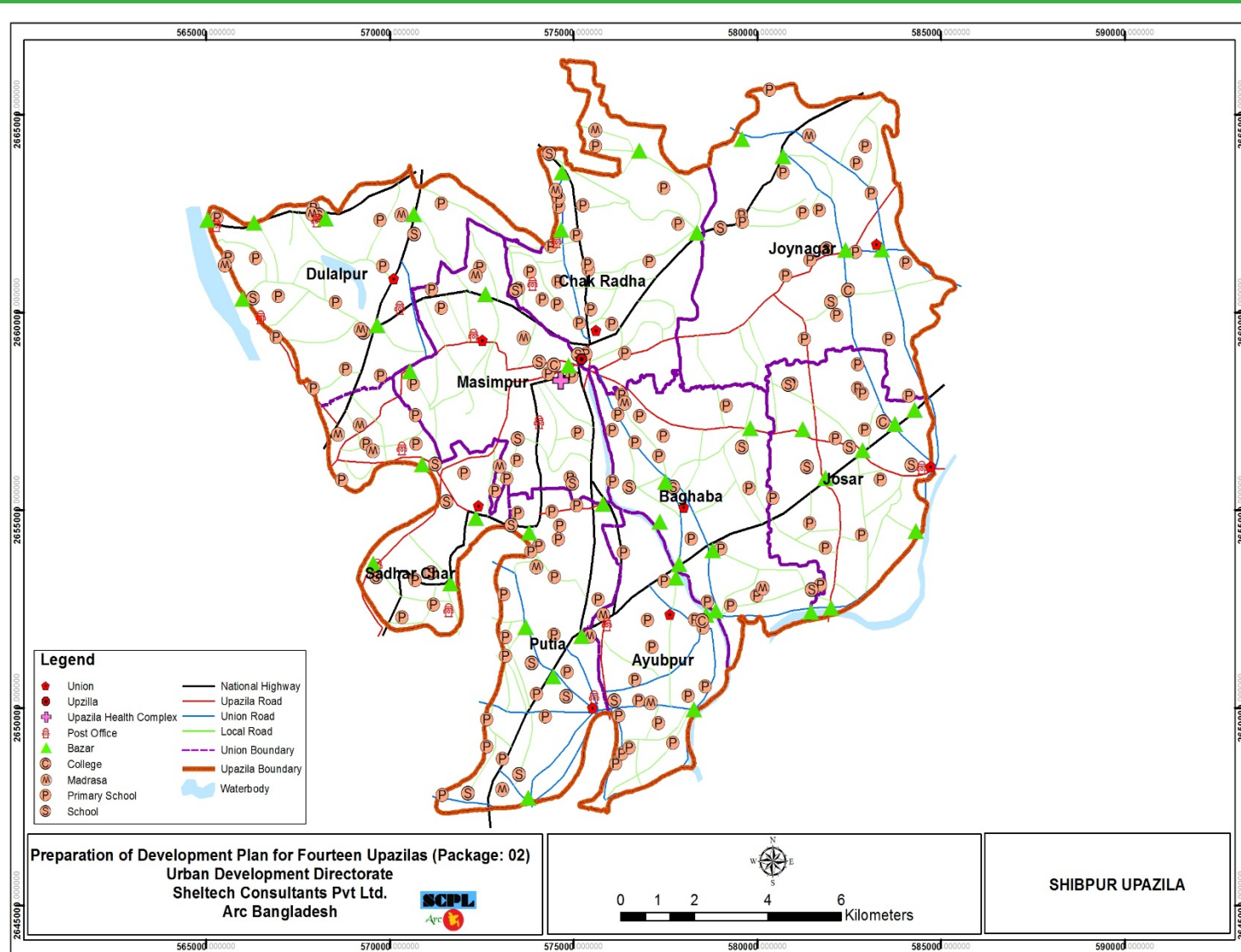
(Ishwarganj Upazila, Mymensingh; Raipura Upazila and Shibpur Upazila, Narsingdi)

Presentation On Agricultural Survey Report of Shibpur Upazila

Prepared By

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

Location Map of Shibpur Upazila



At a glance of Shibpur Upazila

- **Location:** Narsingdi District(24.3750°N and 90.7375°E)
- **Area:** 206.89 km²
- **Population:** 303813
- **Number of Municipality & Union:** 1 Municipality and 9 Unions
- **Land Type:** Flood Plains of Young Brahmaputra and Yamuna Floodplain, Old Brahmaputra Floodplain
- **Agro-ecological zones**

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 Shibpur Upazila

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

Name of Union	Total Area (HA)	NCA (ha)	Land Type (%)	Soil P ^H	Soil Texture	Present land Used (%)	Identified Land Zoning
Ayubpur	2588	1211	HL=20 MHL=29 MLL=34 LL =16 VLL =1	5.5-6.0	Loam clay	Agriculture =62.24 Industrial Area=0.04 Road = 1.31 Rural Settlement & HV = 33.56 Water bodies=2 .86	Agriculture Zone
Baghaba	4065	1850	HL=32 MHL=39 MLL=24 LL = 5	5.5-6.5	Clay Loam/ Clay	Agriculture=50.91 Forest =15.25 Industrial Area=0.05 Fruit garden=1.11 Road= 0.78 Rural Settlement &HV = 29.67 Urban Built-up Area =0.05 Water bodies=2.18	Agro-Forest & Fruit Garden Zone
Chakradha	4855	2325	HL=29 MHL=28 MLL=22 LL=21	4.0-6.0	Loam / clay loam	Agriculture=58.53 Road=0.86 Rural Settlement &HV =36.79 Urban Built-up Area =0.03 Water bodies=3.81	Agriculture Zone
Dulalpur	4535	2195	HL=15 MHL=50 MLL=23 LL=10 VLL=2	5.0-7.0	Clay loam/Clay	Agriculture =59.01 Road=1.14 Rural Settlement &HV =34.78 Water bodies=5.07	Agro-Fisheries Zone
Josar	2855	1395	HL=37 MHL=63	4.5-6.0	Loam / clay loam	Agriculture=24.34 Forest =26.65 Industrial Area=0.08 Fruit Garden=19.04 Road=0.93 Rural Settlement & HV =27.30 Water bodies=1.65	Gas Field- Agro-Forest & Fruit Garden Zone

Source: Land Zoning Report December 2014 of Shibpur Upazila under Narsingdi

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 Shibpur Upazila

Name of Union	Total Area (HA)	NCA (ha)	Land Type (%) NCA	Soil P ^H	Soil Texture	Present land Used (%)	Land Zoning
Joynagar	5220	2800	HL=24 MHL=40 MLL=21 LL=15	5.0-7.0	Clay loam/ Clay	Agriculture=40.78 Forest =22.40 Industrial Area=0.03 Fruit Garden=4.84 Road=0.43 Rural Settlement & HV =29.86 Water bodies=1.66	Agro-Forest& Fruit Garden Zone Zone
Masimpur	2106	1038	HL=17 MHL=67 MLL=11 LL=5	5.5-7.5	Clay loam loam/	Agriculture=59.70 Road=1.07 Rural Settlement& HV =36.29 Urban Built-up Area =0.41 Water bodies=2.54	Agriculture Zone
Putia	4239	1968	HL=5 MHL=30 MLL=38 LL=21 VLL=6	5.0-7.5	Loam / clay loam	Agriculture=52.04 Industrial Area=1.39 Road=1.41 Rural Settlement & HV =39.34 Urban Built-up Area =0.35 Water bodies=5.47	Agriculture Zone
Sadhar Char	2630	1210	HL=25 MHL=49 MLL=16 LL=7	5.6-7.3	Loam / clay	Agriculture=60.64 Road=1.43 Rural Settlement & HV =35.21 Water bodies=2.72	Agro-Fisheries Zone
Shibpur Paurashava		878.54	HL=9 MHL=40 MLL=21 LL=29 VLL=1	5.0-7.0	Clay loam/ Clay	Agriculture=45.27 Road=1.85 Rural Settlement & HV =42.21 Urban Built-up Area =7.44 Water bodies=3.23	Paurashava area

Source: Land Zoning Report December 2014 of Shibpur Upazila under Narsingdi

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

Unions Identified Land Zoning under Shibpur Upazila

Name of Zone	Union	Remarks
1. Agriculture Zone	Ayubpur , Chakradha, Masimpur & Putia	Considering the present agricultural land use, land suitability analysis and as per opinion of local peoples these Unions are identified as agricultural Zone
2. Agro-Fisheries Zone	Dulalpur & Sadhar Char	Some of the area is potential for capture and culture fisheries and high production of fisheries
3. Agro-Forest & Fruits Garden Zone	Baghaba & Joynagar	This Union lies in Agro-Ecological Zone of Modhupur tract and suitable for forest and various fruit garden
4. Narsingdi Gas Field-Agro-Forest and Fruits Garden Zone	Joysar	Narsingdi Gas field is situated in the Upazila adjacent to Dhaka-Sylhet highway
5. Paurashava Area	Shibpur Paurashava	Urban development of plan should be implemented without degrading fertile agricultural land.

Source: Land Zoning Report December 2014 of Shibpur Upazila under Narsingdi

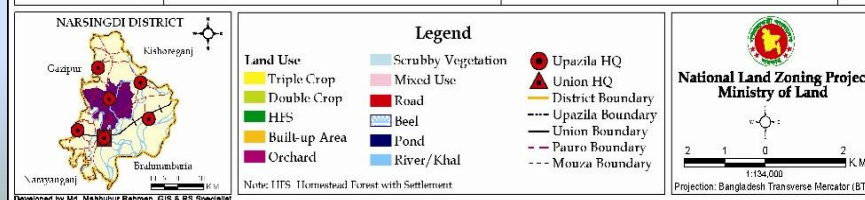
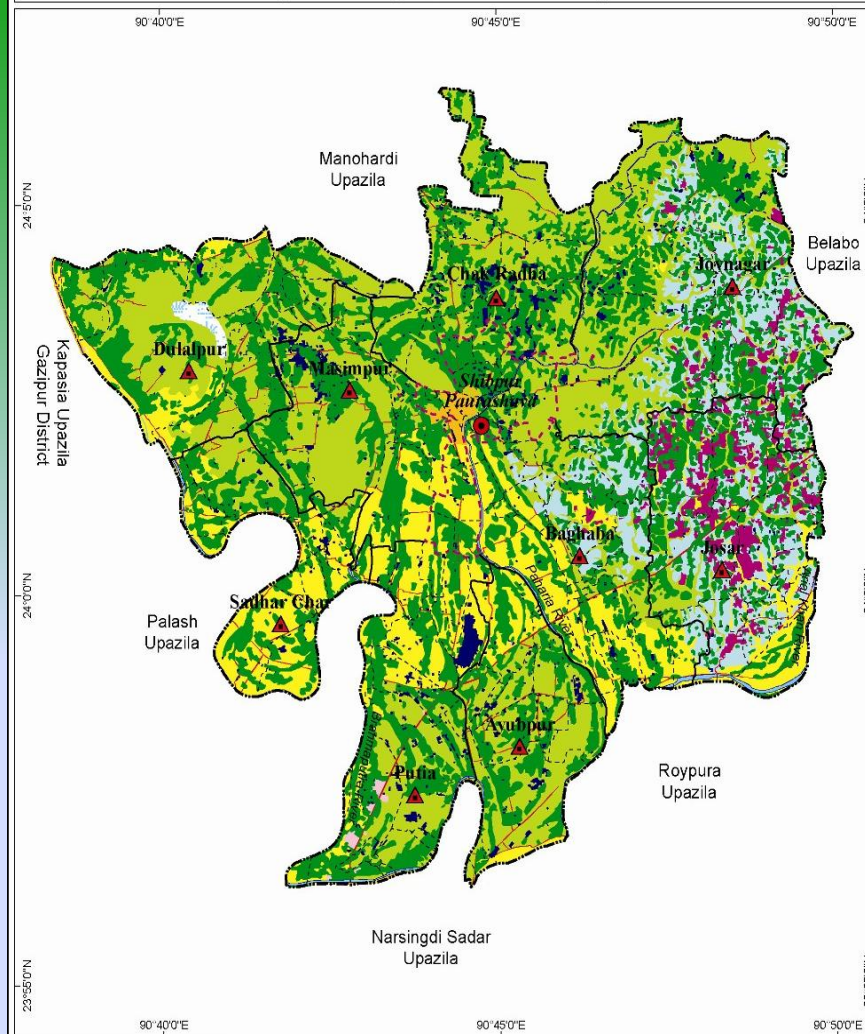
Present Cropping Pattern under Shibpur Upazila

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 Shibpur Upazila, DAE 2016

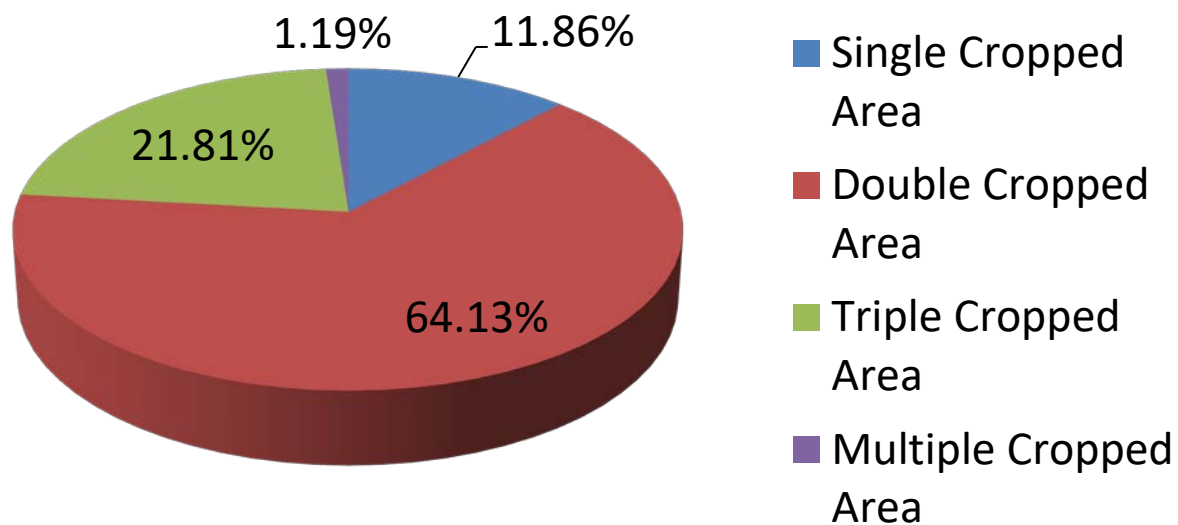
Note: HYV-High Yielding Variety; LIV-Local Improved Variety

Present Agricultural Land Use Map Upazila-Shibpur, District-Narsingdi



Present Agricultural Land Use Map of Shibpur Upazila

Agricultural Landuse Pattern of Shibpur Upazila



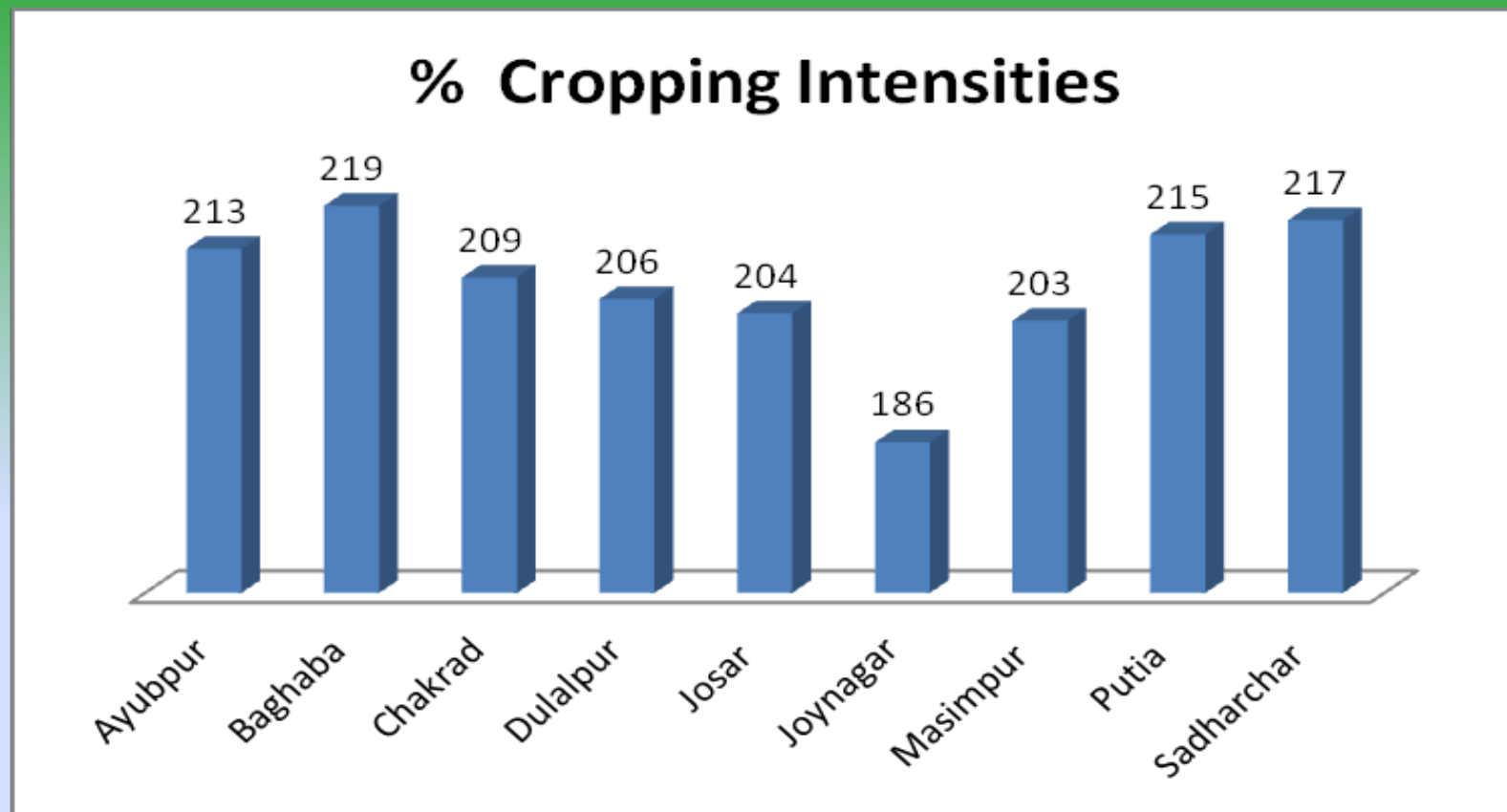
Percentage of single, double, triple and four cropped area under Shibpur Upazila

Present Cropping Patterns of Shibpur

Name	Total Area (ha)	Net Cultivable Area (ha)	Major Cropping Patterns	Cropping Intensity (%)
Shibpur Upazila	21780.97	23204 (82.71%)	Boro(HYV)→Fallow→T.Aman(HYV)	208
			Boro→Fallow-----Fallow	
			Vegetable→Vegetable→Vegetable	
			Mustard→Boro (HYV)→T. Aman	

Source: Compilation of SAAOs of Shibpur and Shibpur Upazila 2016

Cropping Intensity of Shibpur Upazila



Source: SAAOs of 9 Unions and 1 Municipality under Shibpur Upazila, DAE 2016

Table : Union wise Irrigation and Ground water used under Shibpur Upazila

Union	Irrigated Area (%)	Non Irrigated Area (%)	Irrigated Area						Availability of Surface Water	Drought Prone Area (in ha)	Waterlogged Area (in ha)	Remarks
			Surface Water		Ground Water							
			LLP		STW		DTW					
			No	Area (%)	No	Area (%)	No	Area (%)				
Ayubpur	88	12	1	1	390	98	1	1	√	120	9	-Supplemental Irrigation -Industrial waste /pollution
Baghaba	93	7	3	2	500	93	3	5	√	130	2	
Chakradha	71	29	0	0	416	99	1	1	-	0	0	
Dulalpur	88	12	2	1	499	99	0	0	√	0	0	
Josar	71	29	2	1	280	99	0	0	√	0	0	
Joynagar	80	20	0	0	535	100	0	0	-	0	0	
Masimpur	100	0	0	0	390	100	0	0	-	0	0	
Putia	92	8	0	0	540	100	0	0	-	1000	50	
Sadharchar	90	10	0	0	340	990	0	0	-	0	0	
Shibpur Paurashava	99	1	5	8	137	85	2	7	√	286	20	

Source: National Land Zoning Project Report, January 2015

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

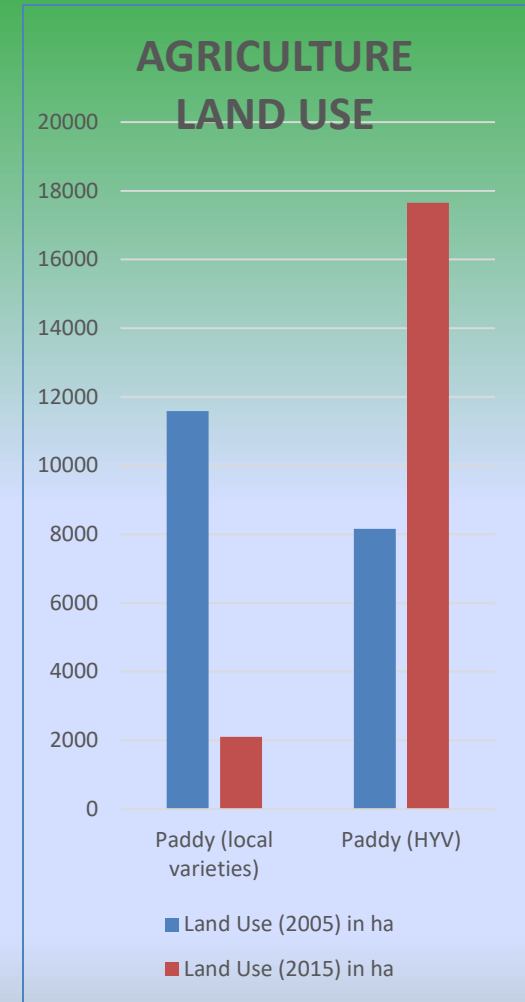
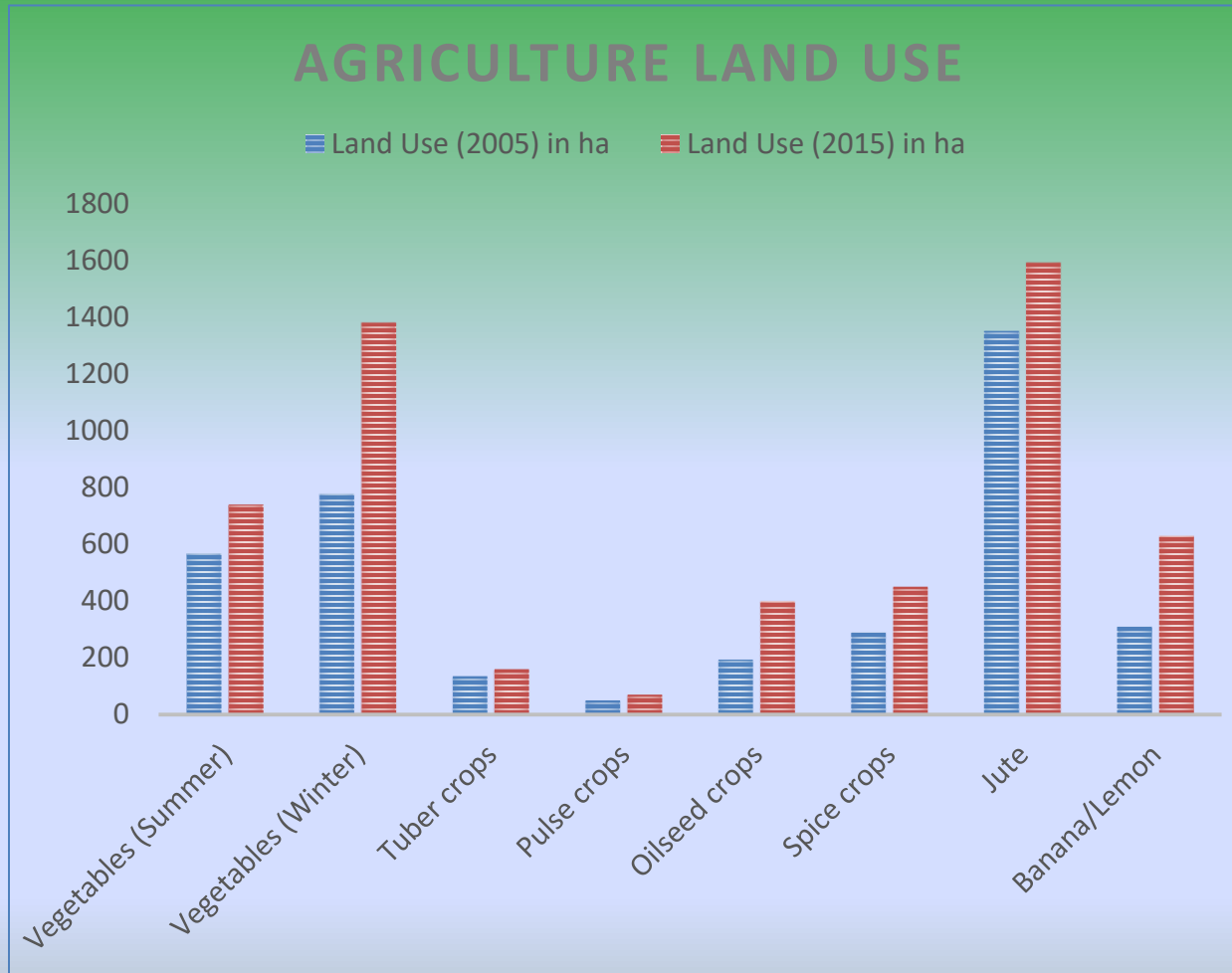
Source: Department of Agriculture Marketing, 2016

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

Sl. No.	Agricultural land use	Land Use (2005) in ha	Land Use (2015) in ha	% Change
1	Paddy (local varieties)	11590	2100	-81.88
2	Paddy (HYV)	8160	17650	116.3
3	Vegetables (Summer)	568	740	30.28
4	Vegetables (Winter)	778	1380	77.38
5	Tuber crops	135	160	18.52
6	Pulse crops	50	70	40
7	Oilseed crops	194	400	106.19
8	Spice crops	290	450	55.17
10	Jute	1350	1590	17.78
11	Banana/Lemon	310	630	103.23
12	Other purposes			
	-Brick field	12(#5)	50(#23)	316.67
	-Poultry farm	4.05(#100)	34.1 (#842)	741.98
	-Fish/shrimp culture	834.8	1013.21	21.37
	-Gardening	1174	2180	85.69
	-Housing	1506.48	2700.4	79.25

Source: SAAOs, UAO, ULO, UFO and Upazila Statistic Office of Shibpur Upazila

Growth or Decline Agriculture Land Use during the Last 10 Year



Major Agricultural Problems of Shibpur 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 Shibpur 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



Plate: Meeting with block supervisors of
Shibpur Agriculture Office

Thank You