

Presentation on Final Plan of Shibpur Upazila Under Fourteen Upazilas Project

Presented By Dr. Nurul Islam Nazem

Team Leader (Package-02)

Client
Urban Development Directorate(UDD)
Ministry of Housing and Public Works

Consultants
Sheltech Consultants Pvt. Ltd
ARC Bangladesh Ltd

Vision

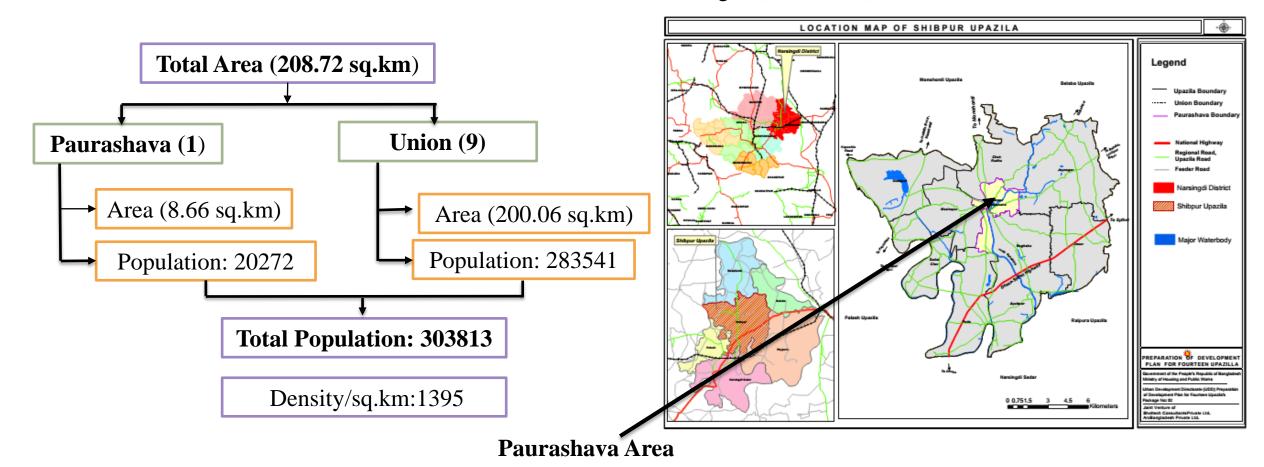
Bangladesh has now going towards achieving the rank in the list of developed countries in the world and this plan will help to meet the SDGs of Bangladesh in Upazila stage in order to make the development uniform all over the country to ensure sustainable growth. The rate of this development is not uniform all over the country. There are some Upazilas which are not well enough but rich in terms of resources. These Upazillas need proper utilization of it s resources in planned manner.

Objectives

- To find the development issues and potential of the Upazila and make a 20 year development vision
- To develop, improve and update provisions for better transport network, housing, social and community needs of the poor and the disadvantaged groups for a better quality of life.
- To prepare a multi-sector short and long term investment plan through participatory process for better living standards by identifying area based priority
- To provide controlled provisions for private sector development, clarity and security with regard to future development

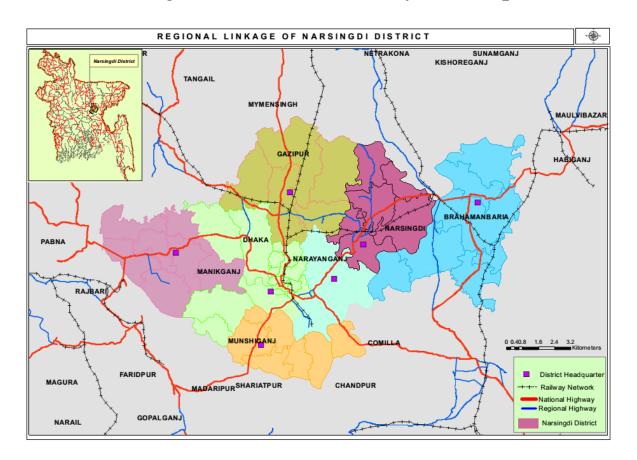
Shibpur Upazila at a Glance

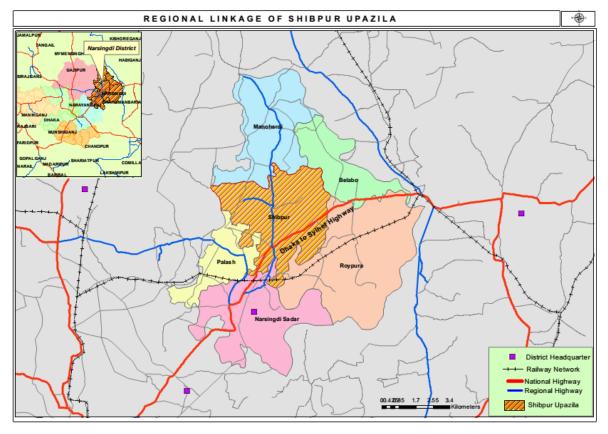
- Shibpur Upazila having an area of 208.72 sq. km. (as per GIS database) was established in 1918.
- Shibpur Upazila (Narsingdi district) is located in between 23°56' and 24°07' North Latitudes and in between 90°38' and 90°50' East Longitudes.
- It has 9 Wards, 9 Unions, 132 Mouzas and Mahallas, and 194 villages (BBS, 2011).



Regional Context of Shibpur Upazila

Shibpur Upazila has great significance in the context of road network. Regional Highway has gone through it which makes the Upazila Center more viable. Dhaka—Sylhet National Highway passing through Shibpur as road communication of Shibpur with Dhaka, Sylhet, Chittagong and other divisional towns. Mainly based on agriculture, the economy of Shibpur has flourished through trade and cottage industries.



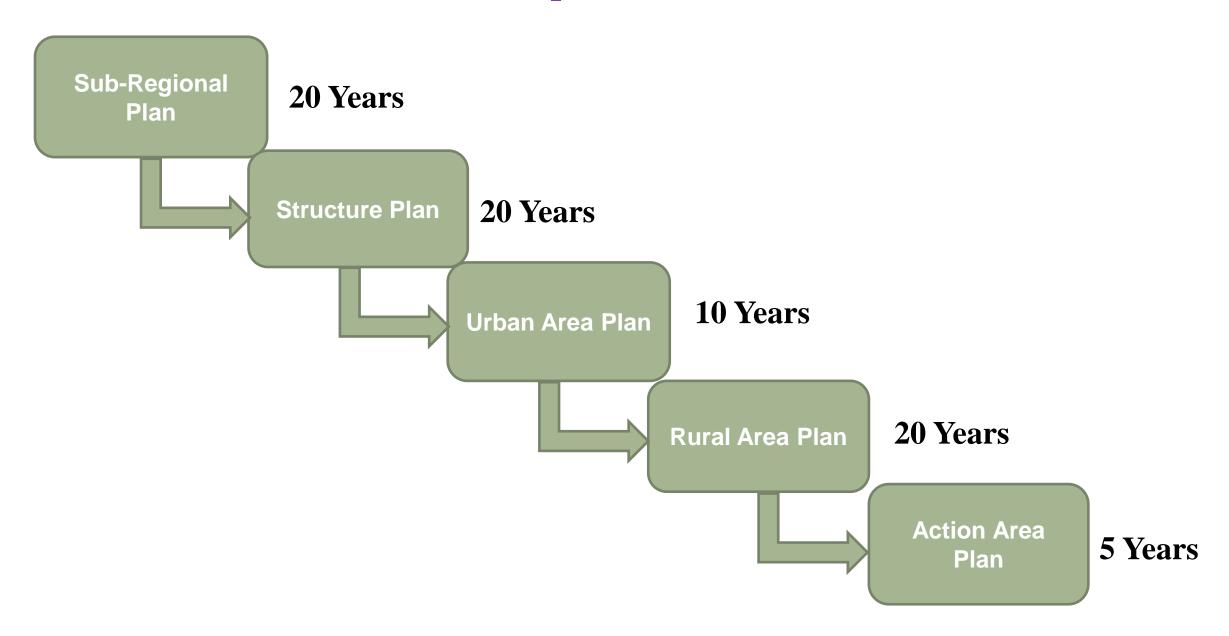


Projected Population

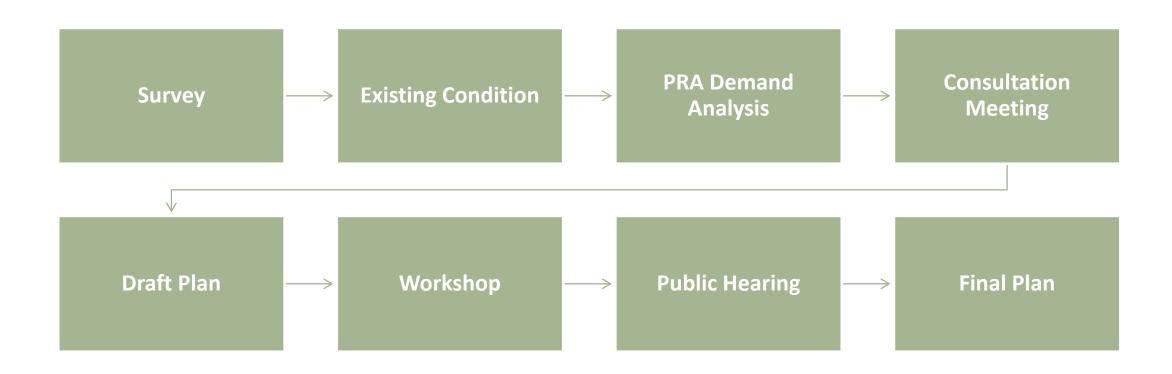
Exponential Compound Growth Method has been used for population projection

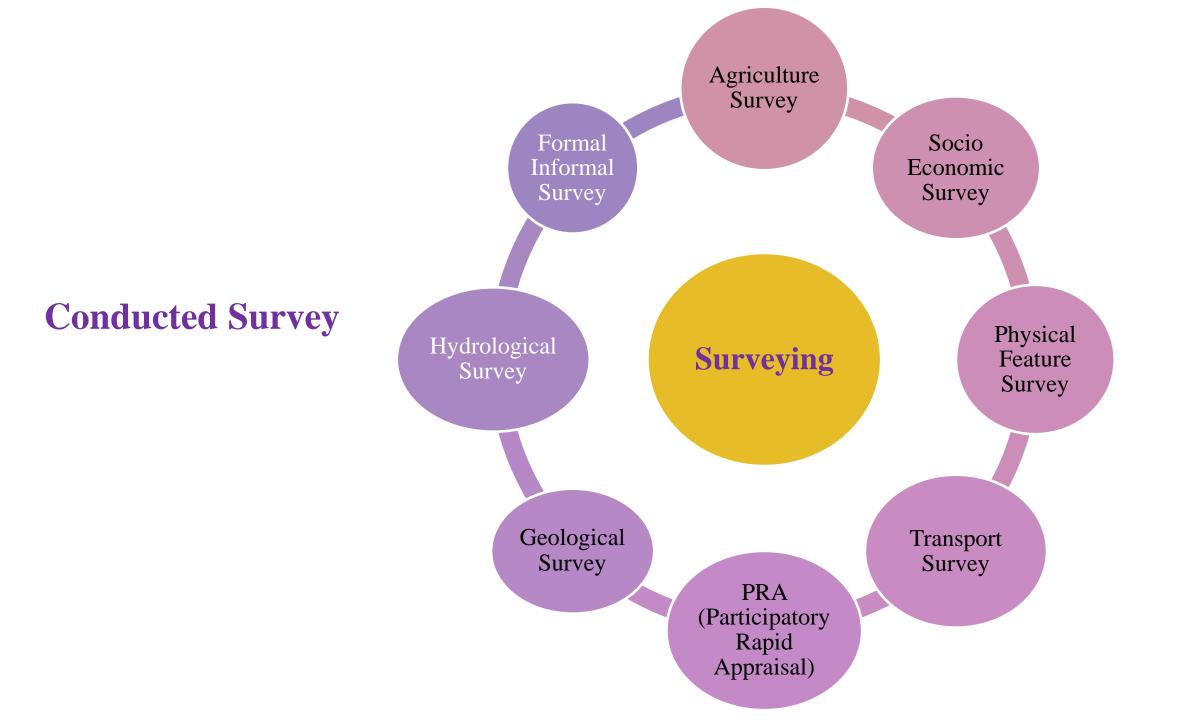
Area	Base Year Populati	Projected Population (Consider Medium Growth Rate, 1.37%)				
	on (2011)	2015	2020	2025	2030	2035
Paurasha va	20272	22194	24854	27833	31169	34905
Rural Area	283,541	293305	305984	319212	333011	347407
Total	303813	315499	330838	347045	364180	382312

5 Tier of Development Plan



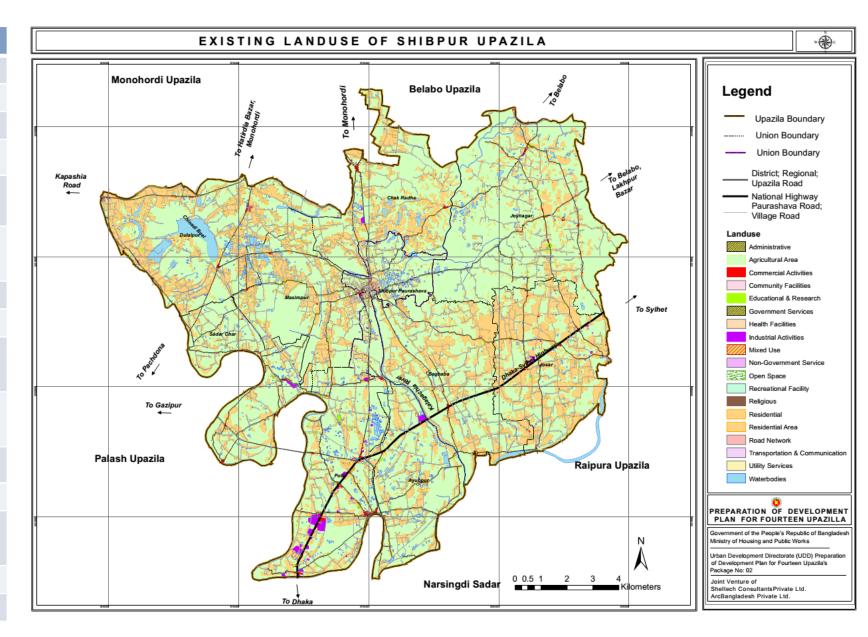
Plan Preparation Methodology



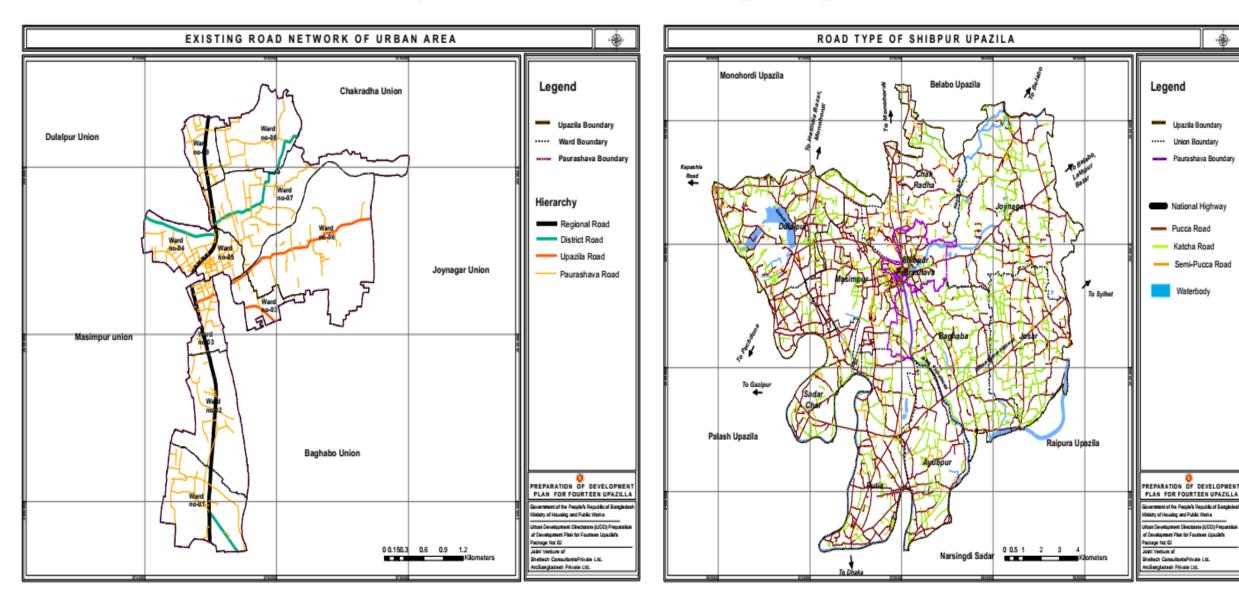


Existing Landuse of Shibpur Upazila

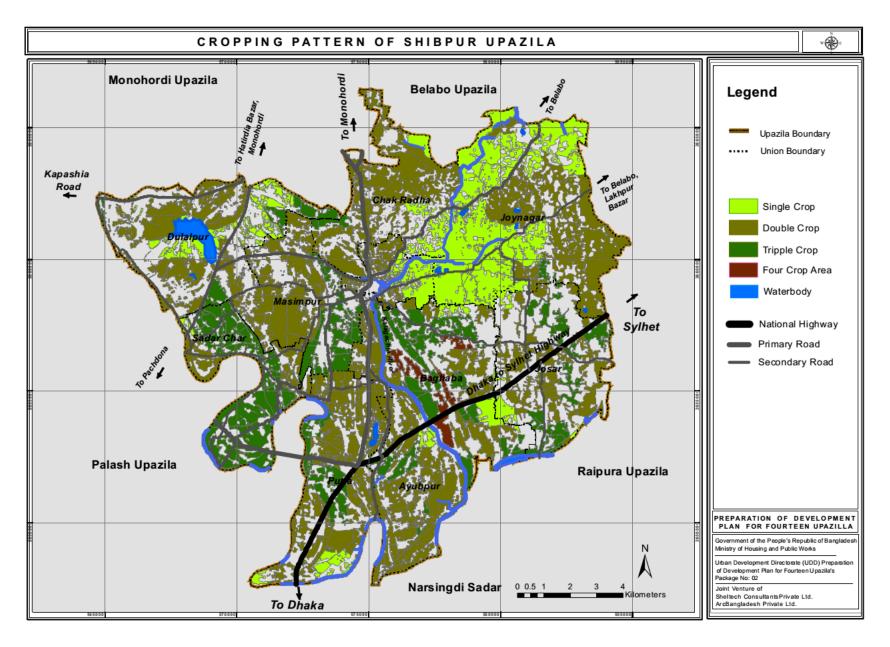
Landuse	Existing Landuse		
Landuse	Area (acre)	%	
Administrative	14.85	0.03	
Agricultural Area	30557.65	61.81	
Circulation Network	613.12	1.24	
Commercial Activities	281.15	0.57	
Community and	76.70	0.16	
Religious Facilities	76.72	0.16	
Education & Health	170.12	0.34	
<u>Industrial</u>	217.01	0.44	
Recreational and			
Open Space	7.50	0.02	
Transport and			
Communication	0.6	0.00	
Mixed Use / Others	109.84	0.22	
Residential	15046.45	30.44	
Utility & Waste			
Management	0.92	0.00	
Water Body	2340.71	4.73	
Total	51590.54	100	

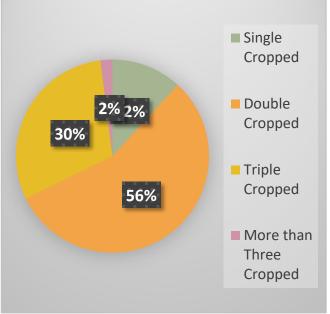


Existing Road Network of Shibpur Upazila

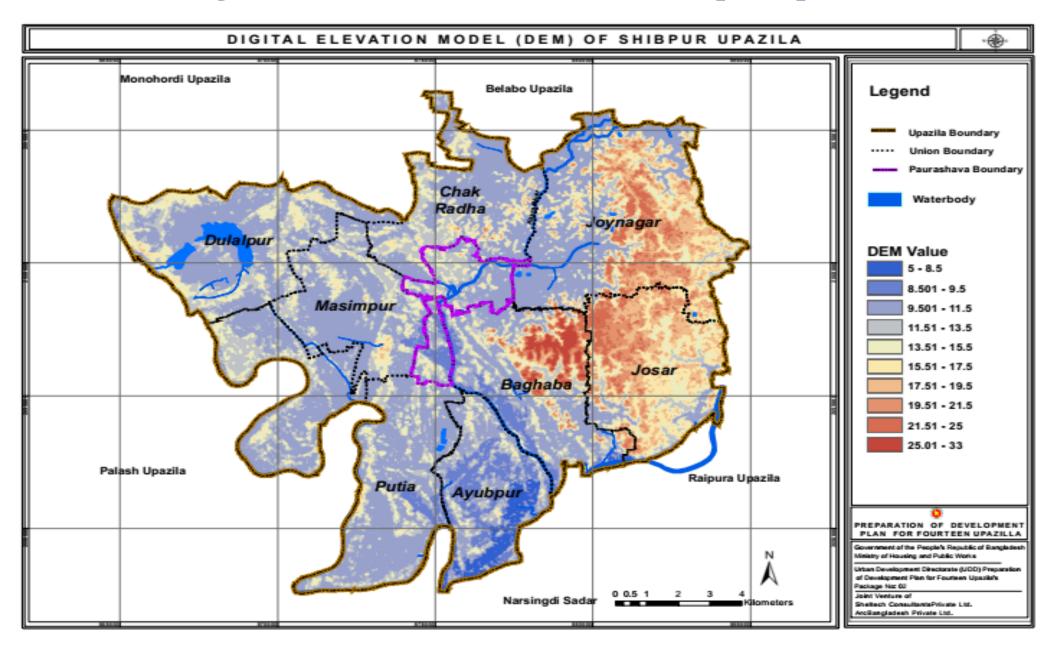


Cropping Pattern of Shibpur Upazila



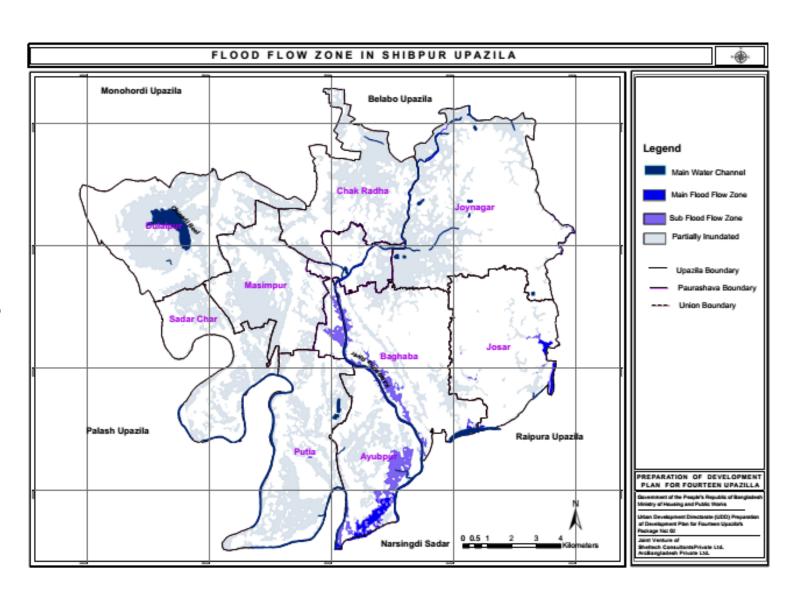


Digital Elevation Model (DEM) of Shibpur Upazila

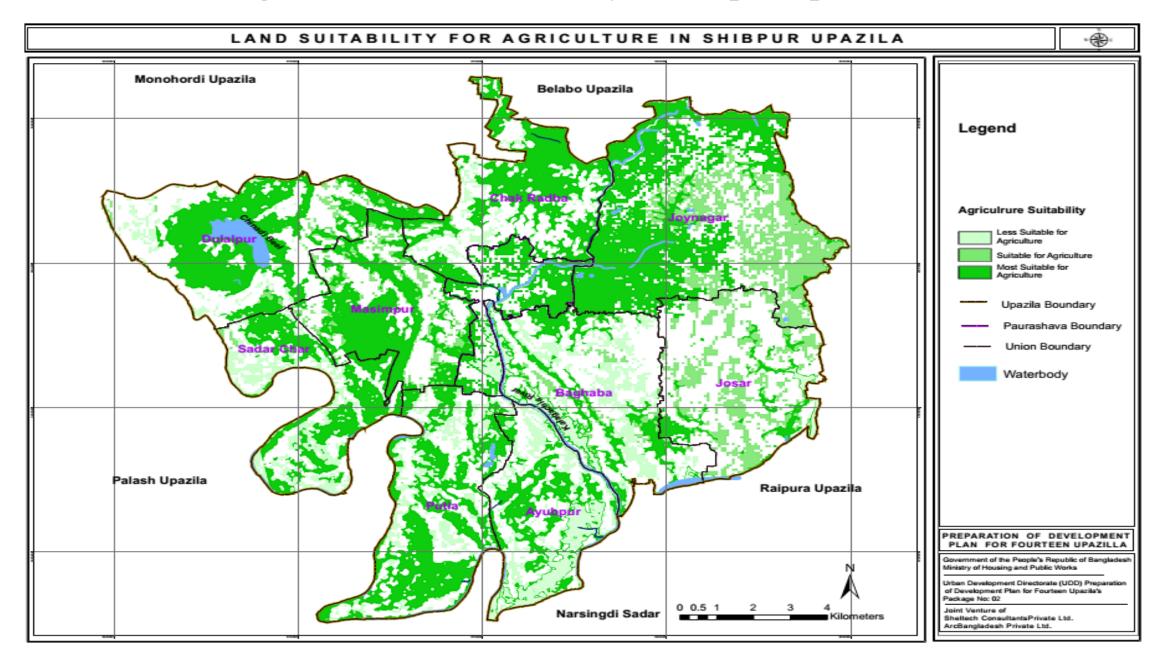


Inundation Map of Shibpur Upazila

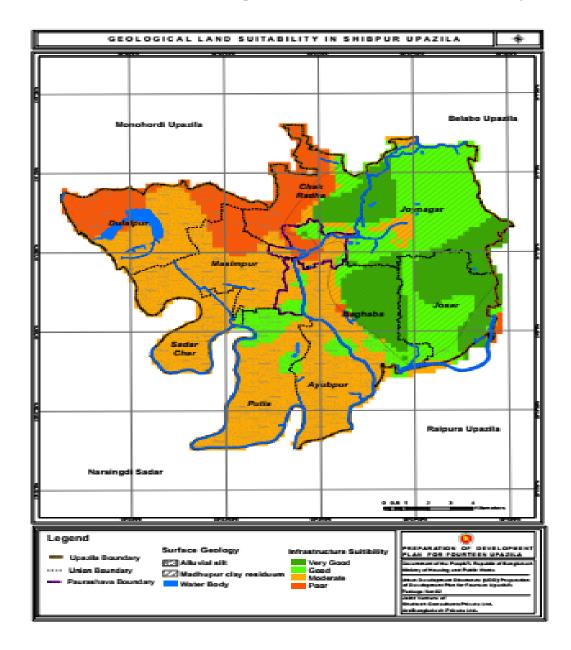
- Maximum not inundated area.
- In Paurashava, some area of ward no2 situated in sub flood flow zone.



Agriculture Land Suitability of Shibpur Upazila

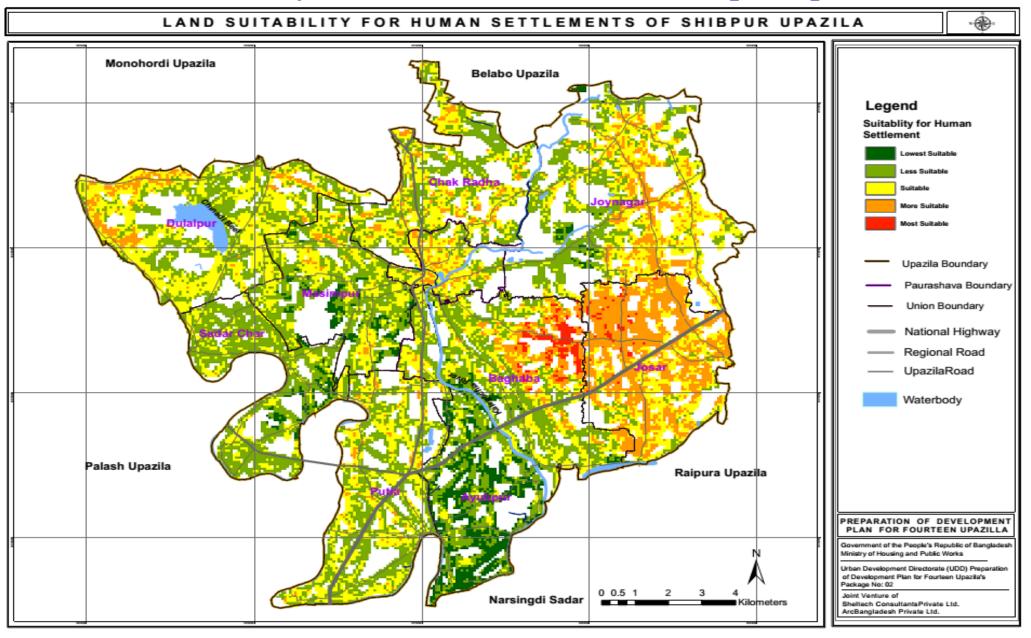


Geological Land Suitability of Shibpur Upazila

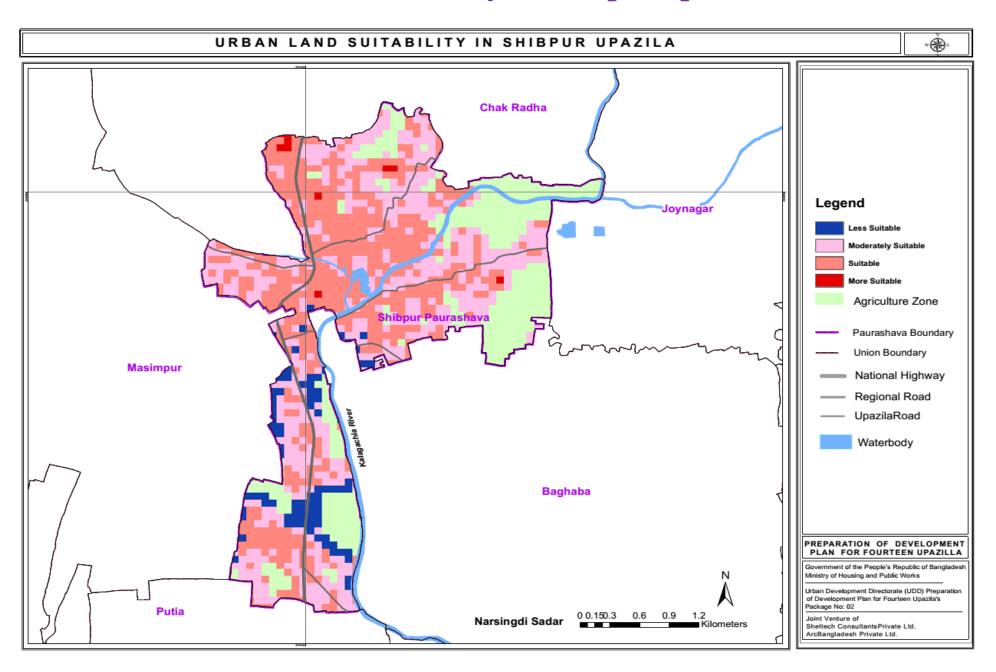


Infrastructure Suitability	Suggested land use suitability	
Very Good	Commercial area Residential area	
Good	Commercial area Residential area	
Good	Industrial zone	
Moderate	Industrial zone Residential area Commercial area Agricultural Zone	
	Park and Recreation	
D	Agricultural zone Flood flow zone Wetland	
Poor	Rural settlement	
	Park and Recreation	

Land Suitability for Human Settlement of Shibpur Upazila



Urban Land Suitability of ShibpurUpazila



PRA Analysis of Shibpur Upazila



Problems Identification with Venn diagram.



Preparing Social Map

Planning Standard

Types of Landuse	Recommended Standard	
Residential	50 persons/1 acre	
General residential	150-200 persons/1 acre	
Real Estate – Public/Private	200-250 population/ 1 acre	
Private Govt. Housing Estate	1 acre/ 100 pop.	
Total		
Roads	10% of total proposed land	
Primary/Major road	150-100 feet	
Secondary road	100-60 feet	
Tertiary road	30-40 feet	
Local road	20-25 feet	
Total		
Education		
Primary/Kindergarten	2.0 acres/5000 pop.	
Secondary	5.0 acres/20,000 pop.	
College	5.0 acres/20,000 pop.	
Vocational Institute	5-10 acres/upazila	
Others (Library, Madrasha)	5 acres / 20,000 pop.	
Total		
Health Facilities		
Hospital	5.0 acres/20,000 pop.	
Upazila Health Complex	5.0 acres/20,000 pop.	
Specialized Hospital	1 acre/Paurashava	
Maternity/Child care	1 acre /5,000 pop.	

Types of Landuse	Recommended Standard	
Administrative	12 acres/ Upazila	
Upazila complex	15.00 acres	
Paurashava office	3 acres/Paurashava	
Jail/Sub-Jail	10 acres/Upazila HQ	
Ward Councilor Office	0.25 acre /Office	
Police Station	3-5 acres/Upazila	
Police Box/Outpost	1 acre/box	
Total		
Recreational & Open Space		
Playground	3.00 acres/20,000 pop.	
Central Park	5acres/Paurashava/Upazila HQ	
Neighborhood/ Community Park	1 acre/1,000 pop.	
Stadium/Sports Complex	6 acres/Paurashava/Upazila	
Cinema	0.5 acre /20,000 pop.	
Total		
Religious	0.5 acre /20,000	
Mosque/Church/Temple	0.5 acre /20,000	
Masjid Complex	1 unit/ Upazila	
Eidgah	0.5 acre/20,000 pop.	

Planning Standard

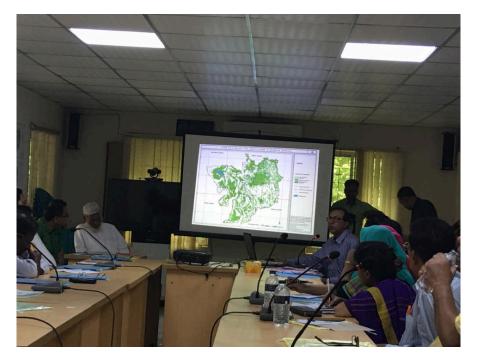
Types of Landuse	Recommended Standard
Community Facilities	
Graveyard	0.6 acre /20,000 pop
Community Center	1 acre /20,000 pop.
Post office	0.5acre/20,000 pop./Paurashava/Union
Telephone/Telegraph	0.5 acre/20,000 pop.
Fire Station	1 acre/20,000 pop./District HQ/Union HQ
Total	
Commerce	1.5 acres/ 1000
Wholesale Market	1.5-2 acres/Paurashava
Retail Sale Market	0.5 acre/10,000 pop.
Neighbourhood Market	1 acre/ Neighbourhood Market
Super Market	2 acres/Market
Cattle Market	1 acre/Paurashava
Slaughter House	0.15 acre/Unit
Total	
Industry	1.5 acres/ 1000
small scale	5 acres/Paurashava
cottage/agro-based	10-15 acres/Paurashava
Heavy Industry	20 acres/Upazila

Turner of London	December ded Ctendend		
Types of Landuse	Recommended Standard		
Transportation			
Bus Terminal	1.00 acre /20,000		
Bus Stoppage including passenger shed	0.33 acre/Per Unit		
Truck terminal	1.50 acre/Per Unit		
Launch/steamer terminal	0.5 acre/20,000 pop ⁿ		
Railway station	4.00 acre / per Station		
Baby taxi/tempo stand	0.25 acre /one baby taxi/tempo stand		
Rickshaw/van stand	0.25 acre /one baby taxi/tempo stand		
Total			
Drainage			
Water supply	1 acre/20,000 pop ⁿ		
Gas Supply Station	1.00/ Per Unit		
Solid waste disposal site	5 acres/Paurashava		
Waste transfer station/ collection point	0.05-0.10 acres/Station		
Electric sub-station	1 acre/20,000 pop ⁿ		
Fuel Station	0.50 acre/Pump		
Garbage	1 acre/20,000 pop ⁿ		

Consultation Meeting with honorable Parliament Member













Public Hearing on Draft Plan of Shibpur Upazila.









Public Hearing on Draft Plan of Shibpur Upazila.

Participants	Comments and Suggestions	Steps taken by the consultant
UNO	On behalf of Ministry of Housing and Public works, Urban Development Directorate has prepared the development plan of Shibpur Upazila under the project titled "Preparation of Development Plan for Fourteen Upazilas." This plan is very much realistic and practical. During the implementation period, UNO will give full support and cooperation and also mention that comments and suggestions must incorporate within the plan. 1. To solve drainage problem 2. Road must be proposed according to the requirement for next 20 years 3. Unplanned road network 4. Widening of road from Dargabandh Govt. primary school to Habir Bari House Q 1. To develop residential building as a planned way 2. Dargabandh Jame Masjid is missing in the map. Road widening from Abdul based shop to Doctor bari Jame Masjid 3. To improve drainage system at Masimpur Union 4. Establish Vocational Training Institute	 Drainage Network for urban area and natural drainage channel has been proposed. Road network for 20 years has been proposed considering traffic impact assessment and all factors. Road widening proposal has been incorporated. Residential Building construction guideline has been mentioned in report. Masimpur Drainage system has been proposed in detailed drainage plan. Vocational Training Institute has been proposed in Paurashava, Dulalpur, Ayubpur and Baghabo Union. Canal digging proposal has been incorporated from Rana beel to chinadi beel.
	Recommendation for canal digging from Rana bil to Chinadi bil. -During the plan preparation LGED was not involved. Recommendation for saving the water body from pollution. There should be specific parking places for microbus, auto rickshaws. Widening of the existing road for early movement for ambulance. The plan prepared by UDD is very much realistic. As a citizen of the Upazila we are very much hopeful. There should be a community clinic for every ward. Recommendation for drainage system.	8. Water retention pond proposal and details guideline for conservation has been proposed in plan.9. In contingency plan the fire route mapping and emergency movement for ambulance has been proposed.

Sub Regional Plan

Policy 01: For the development of Shibpur both Upazila as a whole and also for the township (Paurashava), it is an almost necessary to have better linkage with capital city.

Plan 01: The means interactions to be activated between these two places.

Plan 02: Development of linkage between Narsingdi District town and Shibpur.

Plan 03: Besides Dhaka and Narsingdi, Linkage can be developed between other important places such as with all Upazils of the district and important places of greater Dhaka such Narayanganj, Gazipur, Tongi and Brahman Baria.

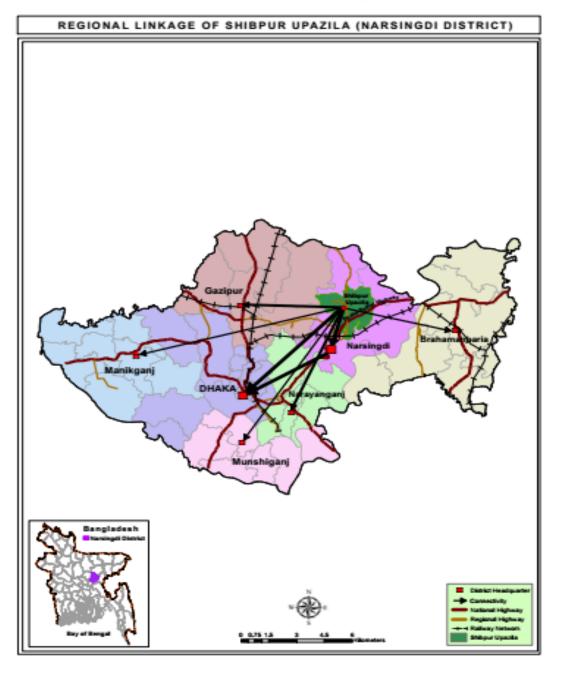
These Linkage can be established primarily by roads in physical sense. However the mobility of the people not necessarily develop based on road network, economic productivity, exchange of goods and distribution of services.

Policy02: Taking /Reaping the advantages of Dhaka-Sylhet Highway as an economic corridor.

Plan 01: Corridor development is encouraged along the Dhaka Sylhet Highway Shibpur part. This will enhance economic development.

Please note that corridor development should be made in such a manner that it does not disturb traffic number of proposals have been put forward in the structure plan.

Sub Regional Plan of Shibpur Upazila



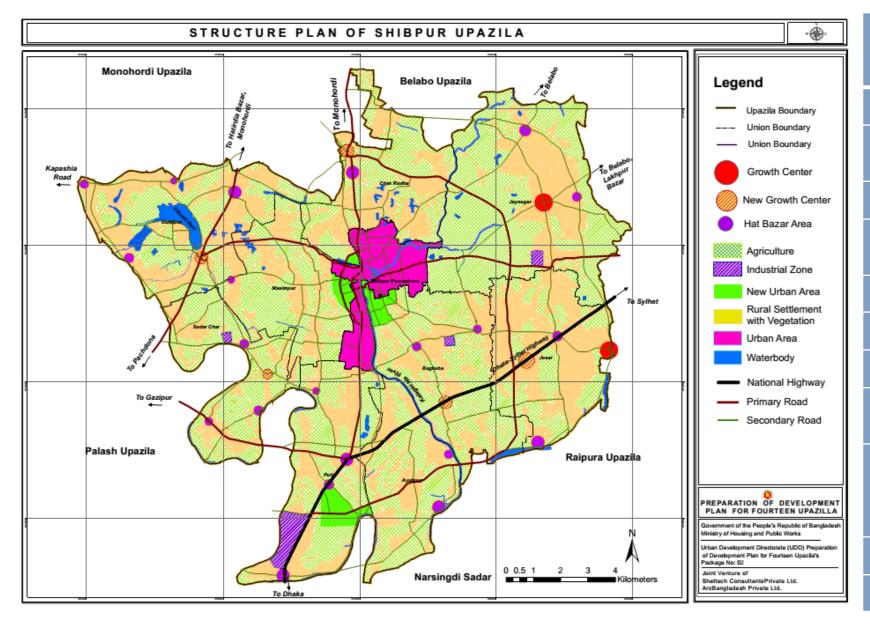
SDGs and Proposed Plan of Shibpur Upazila

SDGs	Proposed Plan of Shibpur Upazila
SDG-1: Ensure access for all to adequate housing and basic services and upgrade slums	 Core Housing Area- for low income people Planned Housing Area
SDG-2: Provide access to safe affordable accessible and sustainable transport systems for all, improving road safety, notable by expanding public transport.	 By pass Foot over bridges Over pass Grade separations and Different types of new service roads
SDG-3: Enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries	 Human settlement land suitability analysis Hydrological suitability analysis Geological suitability analysis Road network analysis These analysis has been done to propose all kind of land use in hibpurUpazila.
SDG-4: Strengthen efforts to protect and safeguard the worlds cultural and natural heritage	Heritage sites such as •Three Domed Mosque (Ashrafpur, 1524), •Single Domed Mosque (Kumardi), •Tomb of Shah Mansur, •Shonamuri Pahar at Baghaba union, •a gold coin (Gupta period) discovered at village Baghaba, • graveyard of Shaheed Asad, (the Hero of 1969) at Dhanua These are recommended as Restricted zone. • One tourist spot proposed at Baghaba union.
SDG-5: Reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses.	 Only some sub flood flow zone has identified after analyzing previous 20 years flood flow data. Flood flow zone - not found in hibpur Human settlement on sub flood flow zone are discouraged.

SDGs and Proposed Plan of Shibpur Upazila

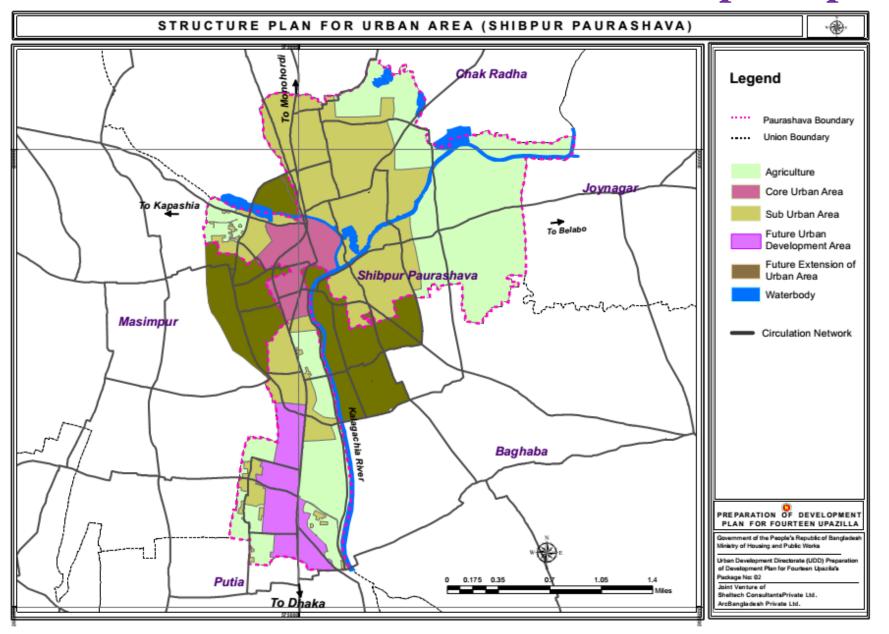
SDG-6: Reduce the adverse per capita environmental impact of		One waste transfer station at each union.
	● Ir	ndustrial zone at Putia Union which is outside of the city area.
cities including by paying quality and municipal and other waste		Water Treatment Plant to evade direct mix of industrial waste with water.
management.		uggestion of different policy and strategy for waste management and pollution
		ontrol.
SDG-7: Reduce the adverse per capita environment impact of cities	l	n Urban, and peri-urban area brick field is restricted within 3 km. buffer zone from
including by paying enocial attention to air quality and municipal		entre of the Paurashava.
including by paying special attention to air quality and municipal		Considering this consultant has proposed 2 Brick field zone at Ayubpur union (9.88
and other waste management	a	cres) and Masimpur union (8.92 acres) for control future pollution.
SDG-8: Provide universal access to safe inclusive and accessible	• U	Jrban parks,
SDG-8. Flovide diliversal access to sale iliciusive and accessible	• v	'illage parks,
green and public spaces in particular for women and children, older	• P	Play grounds
persons and persons with disabilities .	• R	Recreational zone beside Chinadi bill
persons and persons with disabilities.	• 2	new park and
	• A	a stadium
SDG-9: Support positive economic, social and environment links	• S	hopping complex,
	● P	auro market,
between urban, peri-urban and rural areas by strengthening	• R	Residential zone ,
national and regional development planning	• R	Recreational park,
	• G	Government college,
	l	Aosjid complex,
		lospital,
		Bus terminal and
		Central park etc.
SDG-10: Support least developed countries including through	l	tisk Assessment survey
	• C	Collection of 8 type's structural data such as Overhanging, Soft Story, Pounding, Set
financial and technical assistance in building sustainable and	_	Back, Short Column, Mobile Tower, tilting and Ground Set
resilient buildings utilizing local material.	l	Risk Assessment survey has done for those structure which has more than 1 floor and number of those building were 425.

Structure Plan of Shibpur Upazila



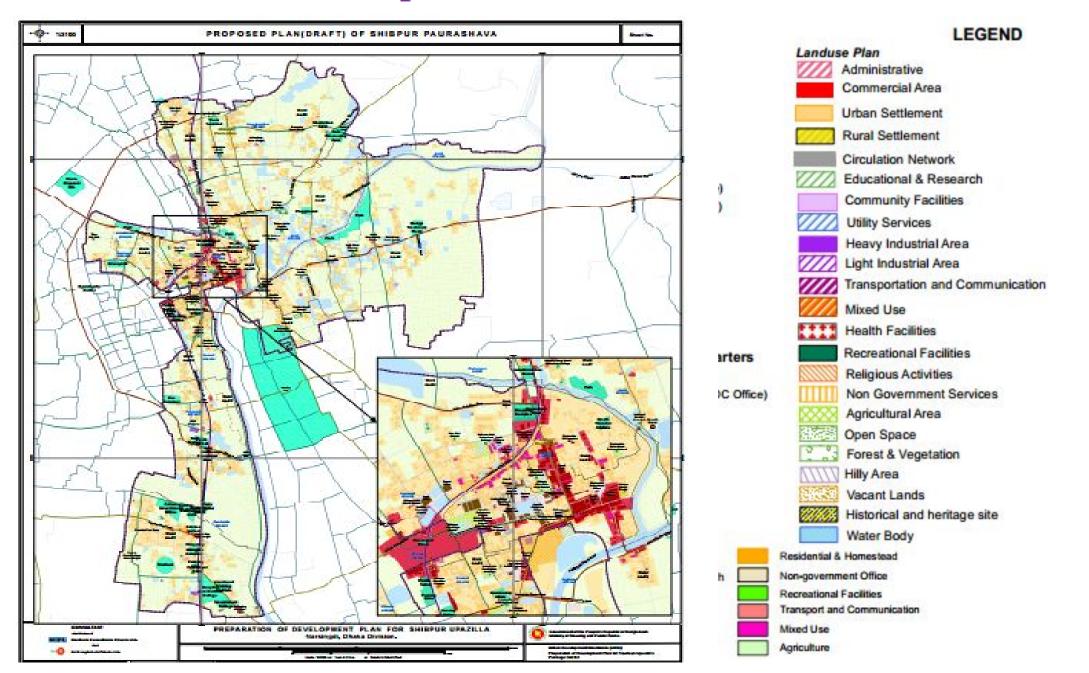
Structure Plan Categories	Area (acre)	%
Agricultural Area	25246.11	48.94
Circulation Network	545.41	1.06
Growth Center	164.06	0.32
New Growth Center	615.92	1.19
Hat Bazar	624.46	1.21
Industrial Zone	233.22	0.45
Urban Area	910.77	1.77
New Urban Area	20036.65	38.84
Rural Settlement &		
Vegetation	2097.24	4.07
Waterbody	1116.76	2.16
Total	51590.54	100

Urban Structure Plan of Shibpur Upazila

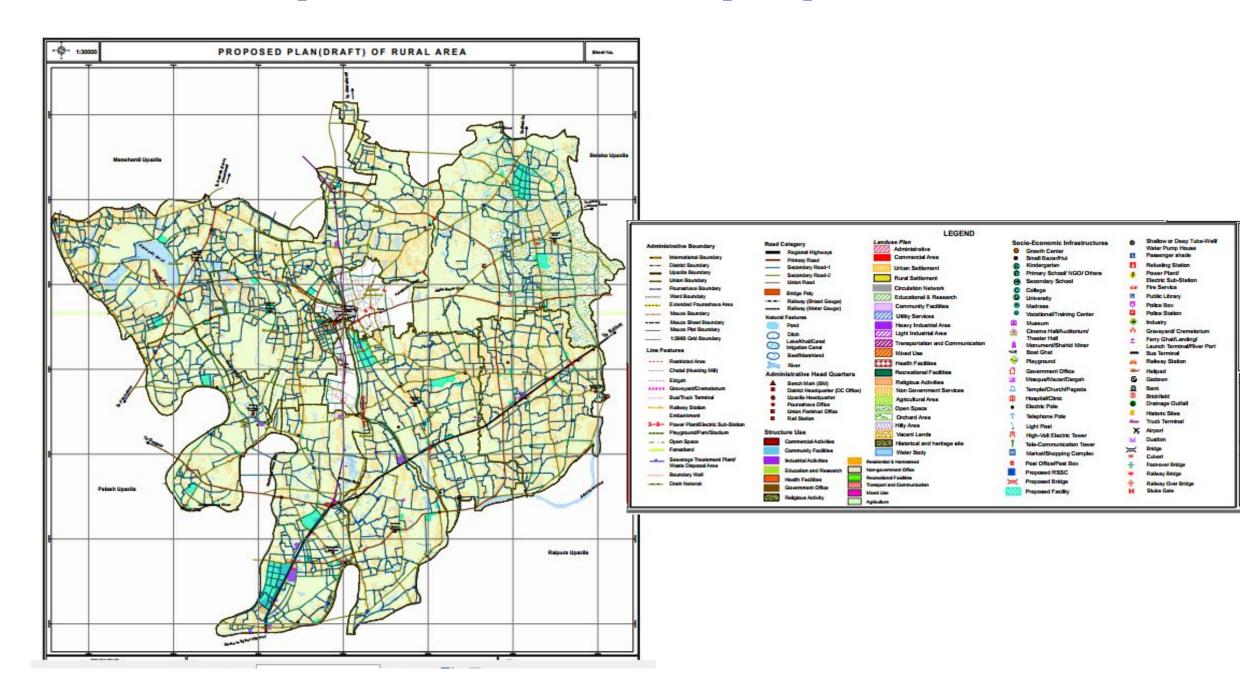


Zoning	Area(Acre)	%
Agricultural	880.35	31.88
Core Urban Area	144.57 5.23	
Future Extension Irban Area	607.58	22.00
Tuture Urban Area	234.95	8.51
ub Urban Area	894.23	32.38
otal	2761.68	100

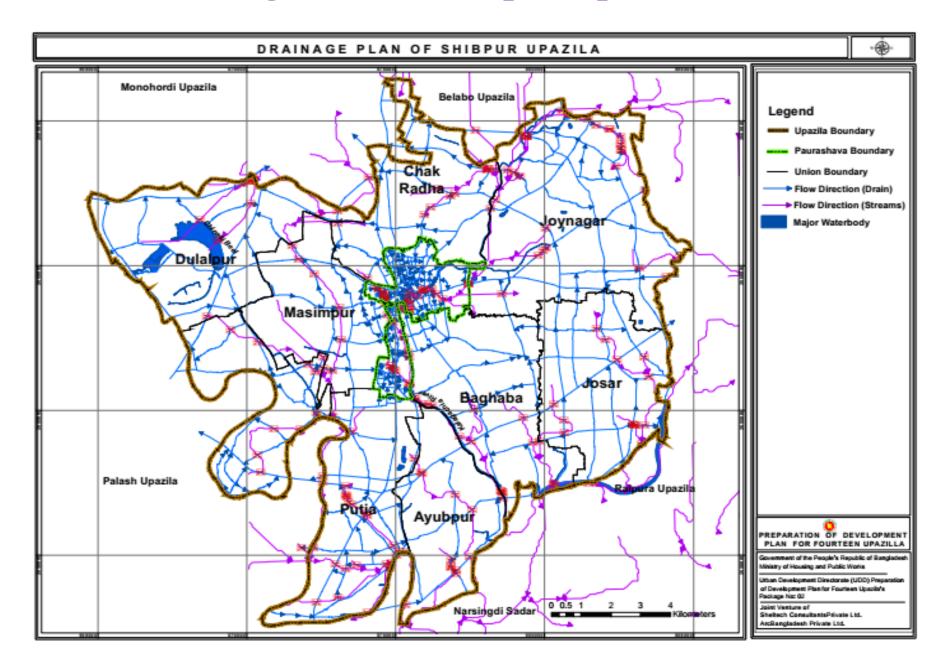
Proposed Plan of Urban Area



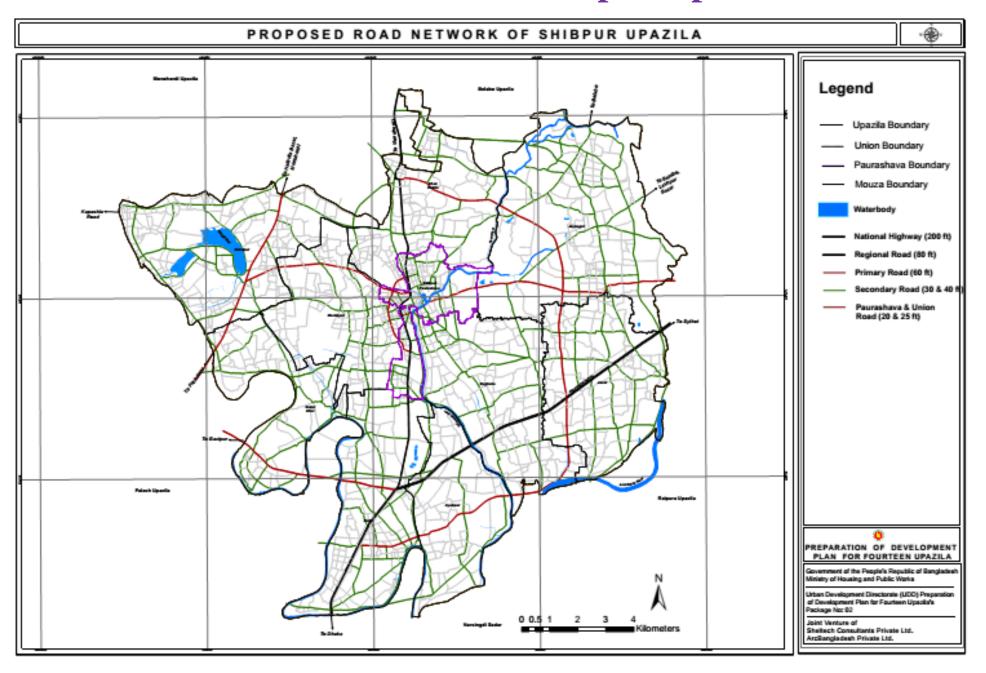
Proposed Plan of Rural Area (Shibpur Upazila)



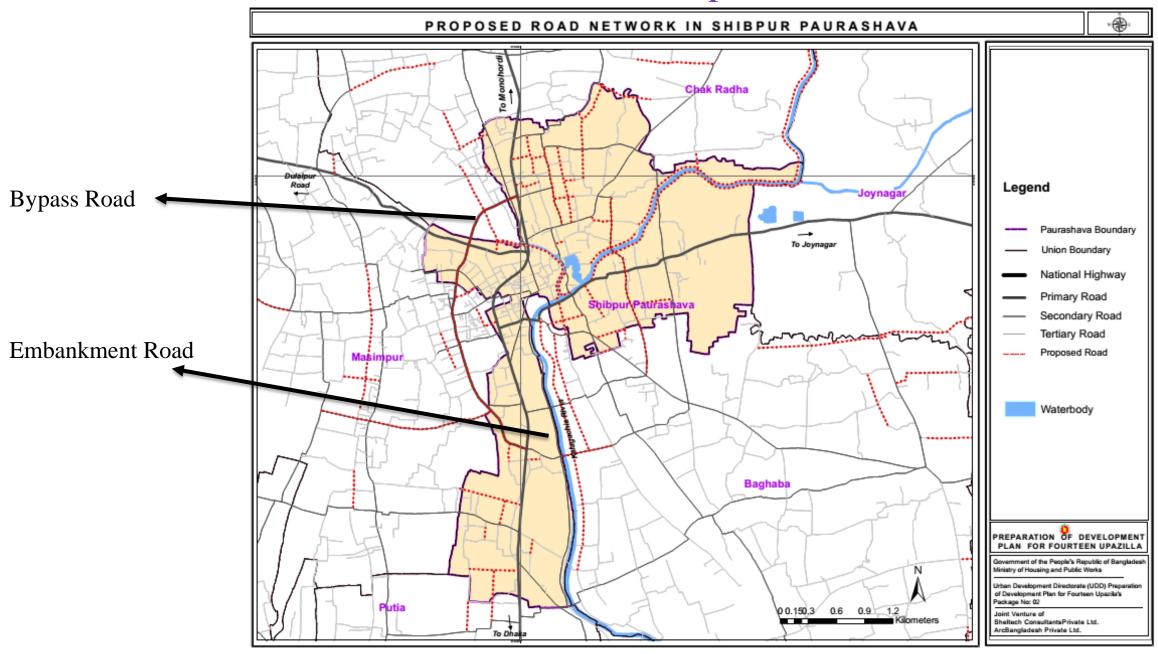
Drainage Plan of Shibpur Upazila



Road Network Plan of Shibpur Upazila



Road Network Plan of Shibpur Paurashava



Contingency Plan

Scenario

- Total Structure 86272
- Risky Structure 347

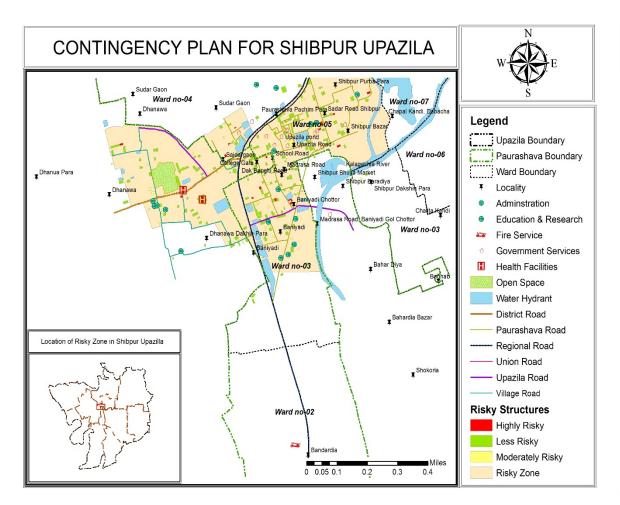
Objectives

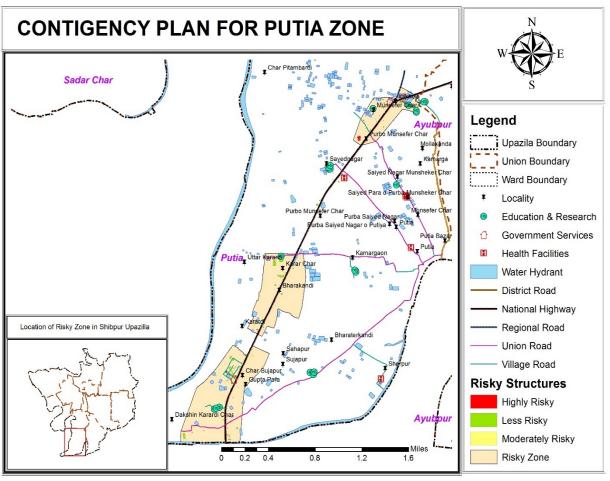
• To mitigate the impact of a major earthquake in Bangladesh and save as many lives as possible.

Planning Assumptions

- Earthquakes are impact type events and provide no warning preventing any pre-event response activities
- There is likelihood of secondary effects following an earthquake or aftershocks which may include fire, flood, liquefactions, subsidence and release of hazardous and toxic chemicals
- Strong aftershocks will continue for several days resulting in further building collapse
- Access will be severely restricted due to debris, collapsed bridges etc.

Contingency Plan





Proposed Facility (Urban Area)

Name	Area	Ward Name	
Bus Terminal	2.62	Ward no-02	
Cattle Hut	0.49	Ward no-08	
Central Park	13.4	Ward no-06	
Clinic	0.37	Ward no-03	
Cold Storage	0.82	Ward no-02, 03	
Fish Processing Zone	3.13	Ward no-08	
Future Government			
Office	6.57	Ward no-01	
Government College	2.27	Ward no-01	
Graveyard	2.8	Ward no-04	
Hospital cum			
Medical College	10.97	Ward no-01	
Kitchen Market	0.43	Ward no-01	
Masjid Complex	1.46	Ward no-03	
Park	3.57	Ward no-07,04	
Passenger Shed	0.26	Ward no-07	
Paura Bhaban	0.96	Ward no-02	
Pauro Market	2.18	Ward no-02	

Name	Area	Ward Name
Playground	1.26	Ward no-07
Public Toilet	0.27	Ward no-03
Recreational Park	2.22	Ward no-02
Refueling Station	0.46	Ward no-03
Shamshan Ghat	0.79	Ward no-08
Shopping Complex	1.81	Ward no-01,04
Stadium	7.18	Ward no-01
Tempoo Stand	1.11	Ward no-09
Training Center	0.77	Ward no-02
Vocational Training Institute	1.4	Ward no-01
Waste Transfer		
Station	0.35	Ward no-05
Water Treatment		
Plant	0.77	Ward no-02
Total	70.69	

Rural Area Plan

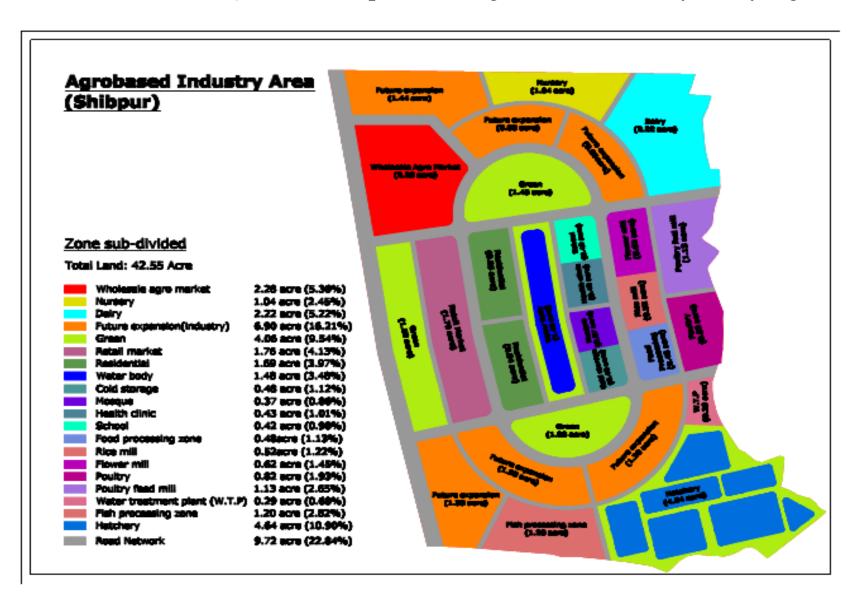
Proposed Facility

Name	Area	Union Name
Agriculture Training Center	2.21	Joynagar
Agro-Based Industry	125.52	Sadar Char, Baghaba, Sadar Char, joynagar
Brick Field Zone	17.51	Ayubpur, Masimpur
Cold Storage	1.98	Putia, Baghaba, josar, Chak Radha
Community Clinic	6.8	Putia (2), Ayubpur, Josar, Sadar Char, Dulalpur, Chak Radha,Joynagar
Cottage Industry	11.12	Baghaba
Dairy farm/ Cow Hatchery	5.05	Putia
Graveyard	4.38	Josar, Joynagar
Hawkers Market	1.74	Putia
Housing Area	137.45	Baghaba
Housing for poor	24.15	Dulalpur
Housing for worker	11.97	Putia
Industrial Zone(BSCIC)	239.04	Putia
Kitchen Market	8.51	Putia, Sadar Char(2), Baghaba,Chak Radha,Joynagar.
Mini Bus/CNG Terminal	2.18	Putia

Name	Area	Union Name
Neighborhood Market	4.26	Josar,Dulalpur
Neighborhood Park	2.87	Putia
Park	7.71	Chak Radha and Dulalpur
Passenger Shed	0.09	Masimpur
Playground	7.14	Baghaba, Josar and Joynagar
Police Box	0.59	Masimpur
Police Furry	0.96	Sadar Char and Baghaba
Recreation Zone	14.26	Dulalpur
Rural Housing for Poor	159.65	Joynagar
Shopping Complex	1.83	Josar
Tempoo Stand	1.11	Putia
Tourist Spot	6.04	Baghaba
Truck Terminal	3.46	Joynagar
Village Park	3.83	Josar
Vocational Training Institute	4.6	Baghaba and Dualapur
Waste Disposal Site	17.52	Chak Radha
Waste Transfer Station	2.75	Putia(2), Sadar Char, Josar (2), Baghaba, Dulalpur, Chak Radha, Dulalpur, joynagar(2)
Wholesale Market	2.02	Joynagar
Total	840.32	

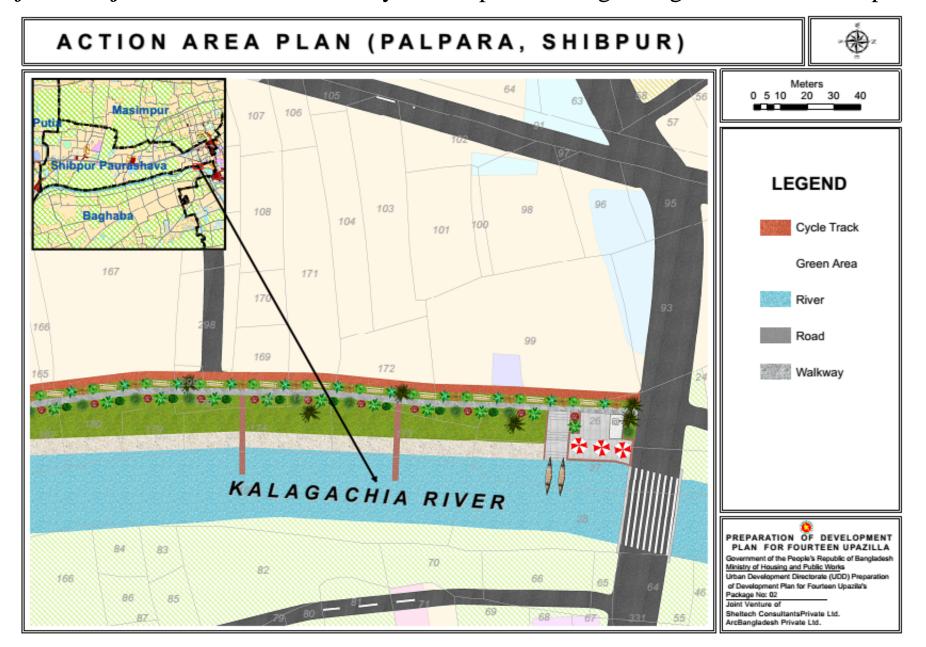
Action Area Plan

Name of the Project: Development of Agro-Based Industry at Joynagar Union.



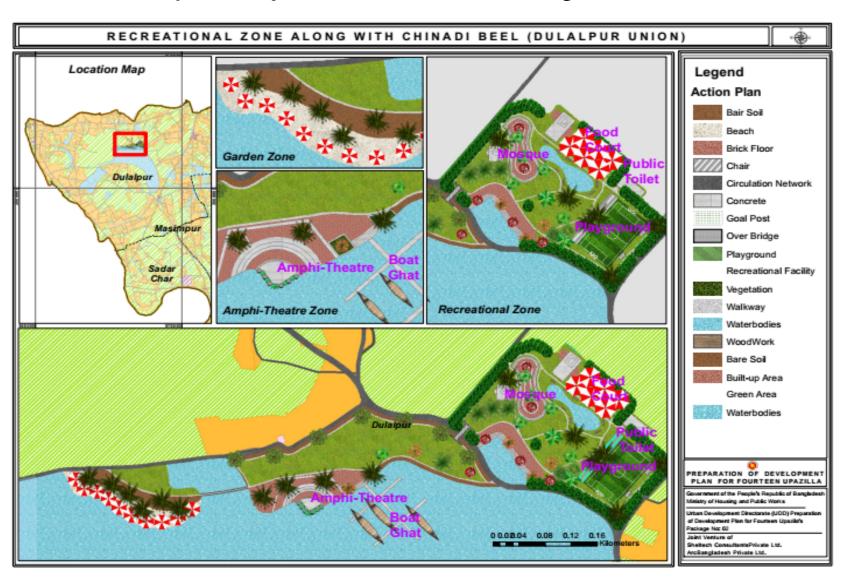
Action Area Plan

Name of the Project: River Side Walkway Development along Kolagachia River at Palpara Bazar.



Action Area Plan

Name of the Project: Recreation zone along with Chinadi Beel



Development Project of Shibpur Upazila

Categories	Name of the Project	Implementing
		Agency
Administrative	Development of New Pauro Bhaban at Ward No 02	Paurashava
	Development of Future Government Office at Ward No 01	DC Office
Agriculture	Development of Agro-Based Industry at Joynagar Union.	BEZA
Development	Development of Agriculture Training Center at Masimpur Union.	BADC
Community Facilities	Development of Cultural Center	DC Office
Development	Graveyard Development at Different Union.	PPP
Commercial	Development of New Commercial Area	PPP
Development	Kitchen Market Development at Different Union.	PPP
	Development of Shopping Complex at josar Union.	UNO Office
	Development of New Growth Center	Paurashava
	Pauro Market Development.	Paurashava
Drainage	Primary Drainage Development in the Shibpur Paurashava and Surrounding	Paurashava
Development	Area	
Education	Development of IT Training Center at Wrad No 2	DEE
Development	Development of Vocational Training Institute at Dulalpur Union.	Directorate of
		Secondary and
		Higher Education.
Health Development	Development of Community Clinic at Different Union.	DPHE
Industrial	Development of Industrial Area at Putia Union	BEZA
Development	Development of Small Scale Industry at Masimpur and Chak Radha Union	BEZA
	Development of Fish Processing Zone at Paurashava Area.	PPP
	Development of Brick Field Zone at Masimpur Union.	Paurashava
	Consult Control to devetor a Dovedonom out	DEZA

Thank You