# Integrated Municipal Information System (IMIS)

A Tool for planning and monitoring urban services





# What is IMIS?

A **web GIS-based information system** which enables information-based decision making and planning for municipal services.

A useful management system for government, utilities, and service provers that is in line with smart city initiatives.





# How IMIS can help municipalities?

Payment status (holding tax, water, waste).

#### Manage service delivery (FSM/sewer):

- Applications requests.
- Services provided per ward, year, type.
- Customer feedback.
- Faecal Sludge collection and disposal.

#### Monitor Key Performance Indicators.

Updated GIS database (mobile Apps).

- Buildings' footprint.
- Containments.

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- Plan block/scheduled FSM services:
  - Based on demand or containment situation.
- Plan Infrastructure Investment
  - Real-time picture of the city in many sector.
- Link/visualise external databases:
  - Health system (outbreaks)
  - Emergency response system
  - KWASA/KDA

<u>SNV</u>

One platform that links up multiple services info to residents' holding ID





# **Key functions**



Reporting Dashboard Managing

the services





**GIS analysis** Planning and decision-making



### Reporting using a powerful Dashboard for real-time status of services







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#### Web-based App (IMIS) for desk office work

# Managing services



Mobile Apps for field assessment, survey and service delivery





# **Process** Delivering an FSM service





**GIS** analysis Accurate info to better plan services and Infrastructure development





#### Water Supply connection status

Potential buildings to get connected to a selected drain



#### Buildings and containments within 100m buffer area of a river or water body



Structure Type	No. of buildings				
Pucca	1056				
Katcha	616				
Under Construction	84				
Semipucca	938				
UC	0				
Total	2694				
Containment	No. of				
Туре	containments				
	0				
No Containment	27				
Septic Tank	410				
Pit	1115				
Total	1552				

Export to:

Evcel

# **IMIS development stages**











#### **GIS Data Creation**

- Collection of available GIS data
- Gap analysis
- Digitization of missing data layers using high resolution satellite image
- Field verification and establishment of base GIS database

(3 Months)

#### Survey & Attribute Data Creation

- Collect available attribute data and integrate with GIS data
- Gap analysis
- Conduct survey for attribute information of buildings, containments,
- utilities, etc of ULB Establish attribute database

#### (3-4 Months)

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#### IMIS Customization & Setup

- Analyze the system's functional requirements including value added functionalities
- Analyze the ULB's policy guidelines and business process
- System customization and set up in the ULB's server (3 Weeks)

#### **Data Migration**

 Migration of the Data in the Server and make system ready for training

(1 Week)

#### Training & Launching

- Conduct Hands on training for operation to relevant departments
- Get feedback from trainees and update the system accordingly
- Prepare sustainability plan for system implementation
- Launch the system

(2 Weeks)

\* Source: Innovative Solution Pvt.

## Jhenaidah's IMIS



- Coverage 27,047 buildings20,016 containments (septic tanks and pit latrines)
- **Features FSM services**, holding tax

#### Layers Buildings, roads, drains, containments, water bodies, boundaries, FSTP

Users Paurashava: monitor, report and analysis AID Foundation: FSM service, customer database (2017), IMIS (Jan 2021)

# StatusLaunched and trained staff end 2019 & 2020City residents' holding ID linked to building outline



### Khulna's IMIS



Coverage 156,052 Buildings67,330 containments (septic tanks and pit latrines)

**Features FSM services**, holding tax, trade license

Layers Buildings, roads, drains, containments, water bodies, water logging areas, informal settlements, boundaries, FSTP

Users Conservancy department: FSM services Tax department: Holding tax and trade license

StatusTraining in 2021, ready for official launch in 2021Introduced Holding tax calculation and trade license in 2021



# Gazipur's IMIS



**Coverage 83,950** (Zone 1) + **48,393** (Zone 4) Buildings

Containments in-build into building (septic tanks and pit latrines)

**Features FSM** services, **sewer** system, **holding** tax, **water** supply

#### Layers Buildings, roads, drains, water bodies, boundaries, water connections

Users Conservancy department (new PPP): FSM services and sewer Tax department: Holding tax Water department: Water supply service

**Status** Developed for Zone 1; Ongoing data collection Zone 4 (**2030WRG/SNV**)

### Jashore's IMIS



**Coverage** 43,358 buildings

5,200 containments (only ward 5)

**Features** FSM services, holding tax

### Layers Buildings, roads, drains, containments, water bodies, boundaries, FSTP, Informal settlements

Users Conservancy department (new PPP): FSM services Tax department: Holding tax

### StatusPending final customisation and trainingPlanned containment data collection in rest of the city

# Challenges

### **Data collection practices**

- Not comprehensive enough.
- Not updated on time.
- Unwillingness to share data.

### **Holding ID**

- Holding nomenclator.
- Not linked to roads.

### Systems' change

• Adopting changes in internal processes and systems.

### Hosting data

- National Data Centre government services.
- Huge amounts need to be paid.
- Needed Government support



# Potential new features





Link to national databases





#### JHENAIDAH MUNICIPALITY

#### INTEGRATED MUNICIPAL INFORMATION SYSTEM FOR FSM

# Let's <u>log into</u> IMIS...

	LOGIN
Username	
Password	
	Remember Me
	LOGIN Forgot Your Password?
Deve	eloped for Chrome Browser





### Thanks

### **IMIS:** Strengthening local governments' capacities

For more information, read: <u>https://snv.org/update/imis-improving-</u> <u>municipal-led-fsm-service-efficiency-and-accountability</u>

Contact: Marc Pérez Casas, mcasas@snv.org Shahidul Islam, shahidulislam@snv.org

