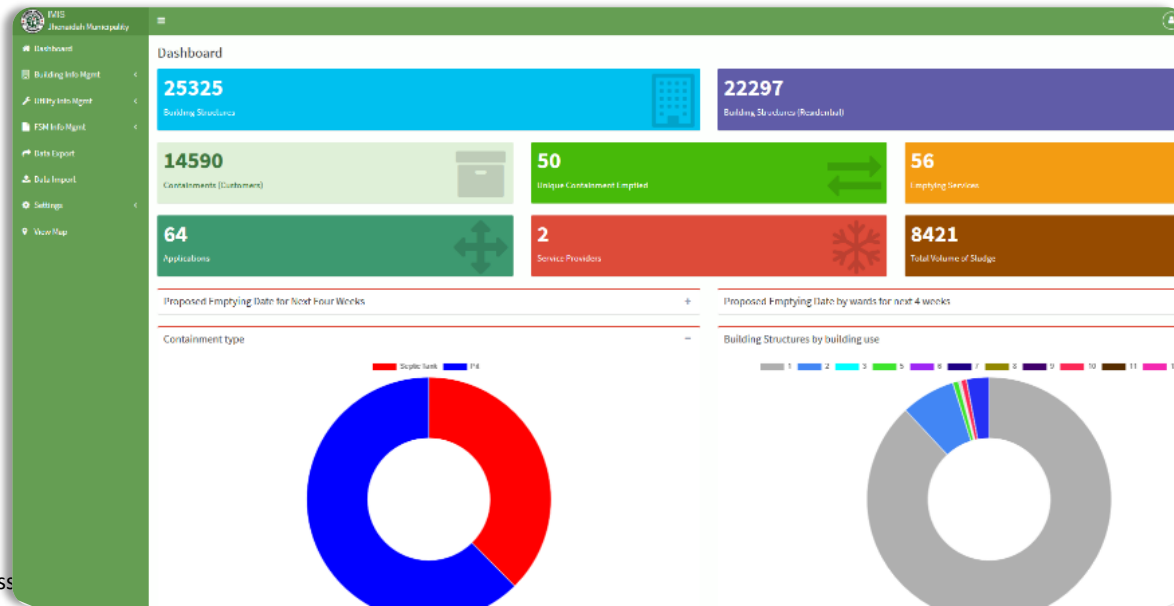


Integrated Municipal Information System (IMIS)

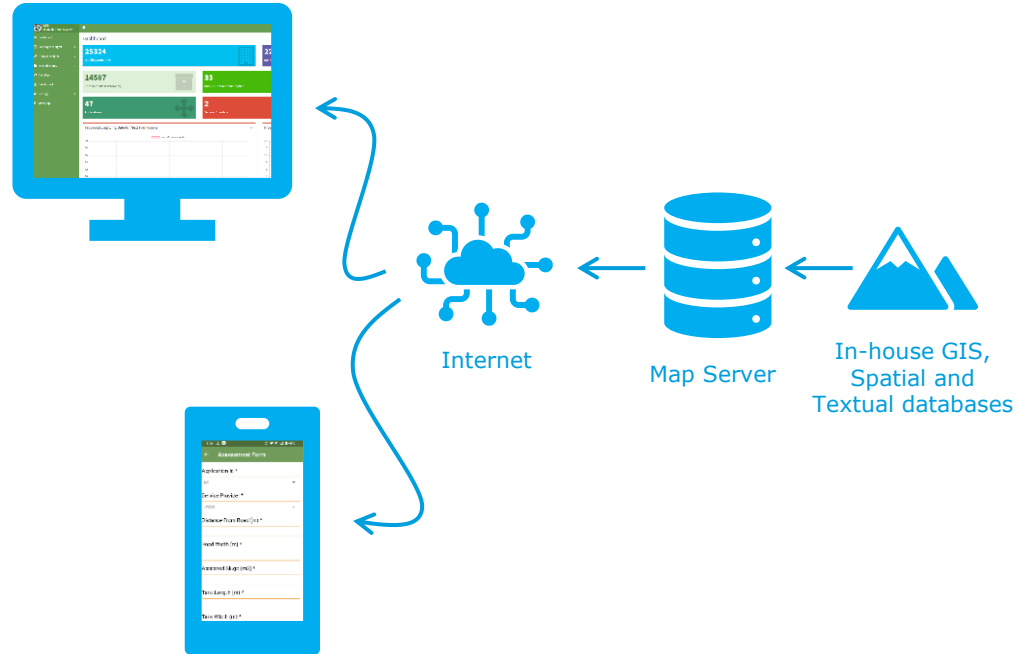
A Tool for planning and monitoring urban services



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 providers** that is in line with smart city initiatives.



How IMIS can help municipalities?

Holding assessment and taxation

- Bill issuing and payment tracking
- Due Payment status (local taxes)

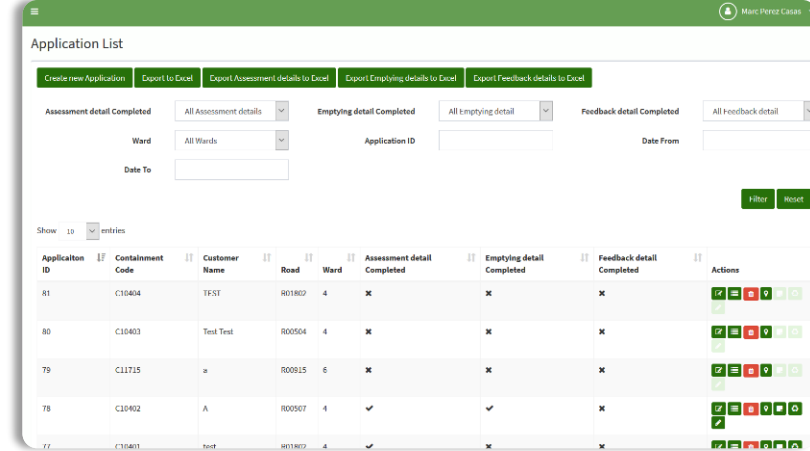
Manage service delivery (FSM/sewer):

- 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.

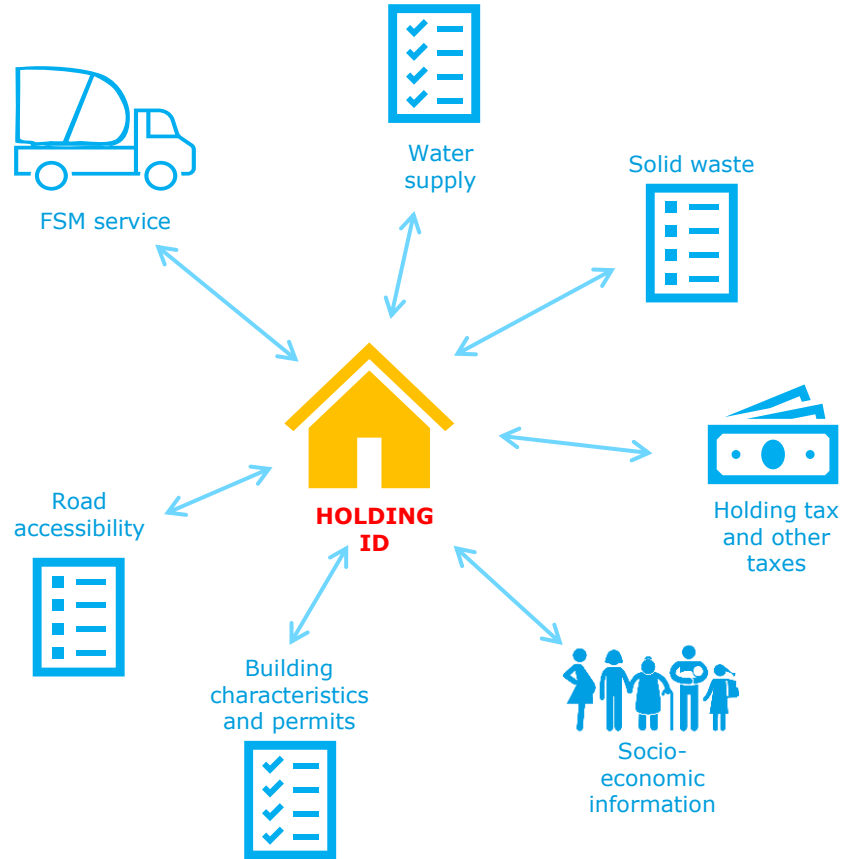


The screenshot shows the 'Application List' interface. At the top, there are navigation buttons: 'Create new Application', 'Export to Excel', 'Export Assessment details to Excel', 'Export Emptying details to Excel', and 'Export Feedback details to Excel'. Below these are filter options for 'Assessment detail Completed', 'Emptying detail Completed', and 'Feedback detail Completed', each with a dropdown menu. There are also input fields for 'Ward', 'Application ID', and 'Date From'. A 'Filter' button is on the right. Below the filters, there is a 'Show 10 entries' dropdown. The main table has the following columns: Application ID, Containment Code, Customer Name, Road, Ward, Assessment detail Completed, Emptying detail Completed, Feedback detail Completed, and Actions. The table contains five rows of data.

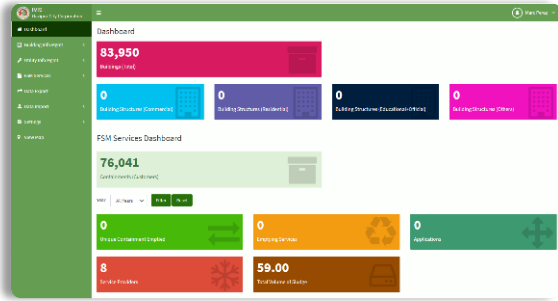
Application ID	Containment Code	Customer Name	Road	Ward	Assessment detail Completed	Emptying detail Completed	Feedback detail Completed	Actions
81	C15404	TEST	RO0180	4	✗	✗	✗	[Icons]
80	C10403	Test Test	RO0564	4	✗	✗	✗	[Icons]
79	C11715	a	RO0915	6	✗	✗	✗	[Icons]
78	C15402	A	RO0567	4	✓	✓	✗	[Icons]
77	C10401	test	RO0180	4	✓	✗	✗	[Icons]

- 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

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

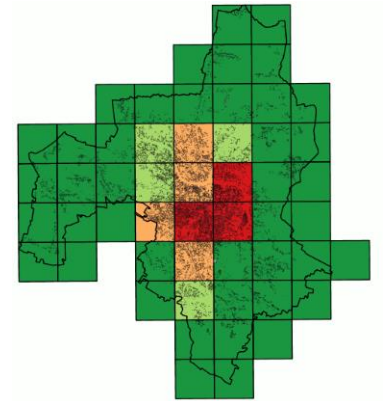
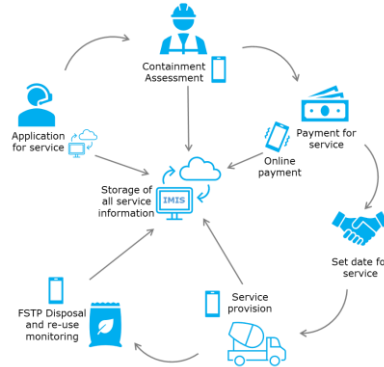


Key functions



Reporting
Dashboard

Managing
the services



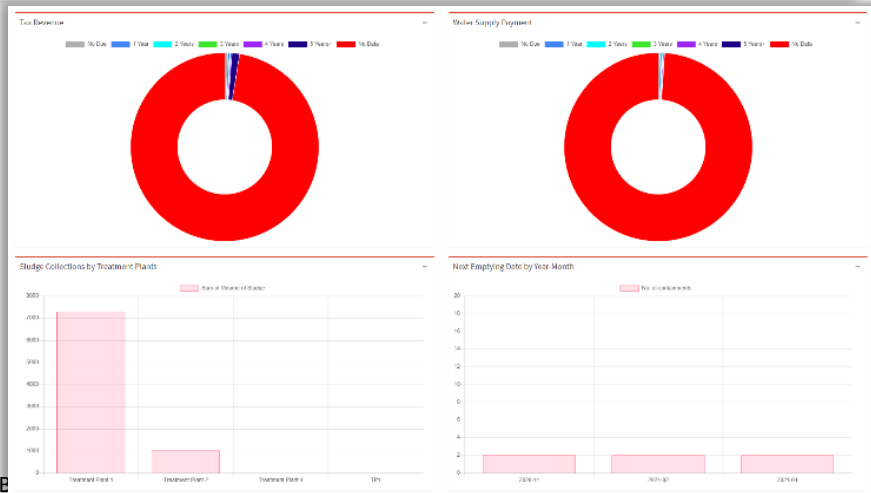
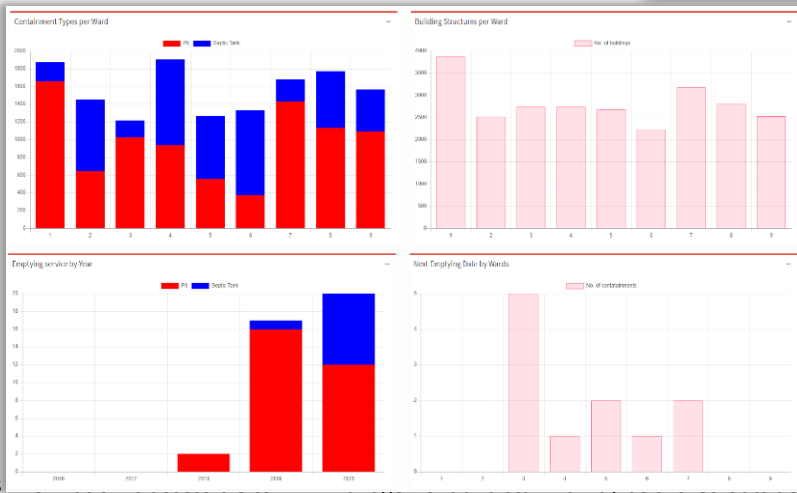
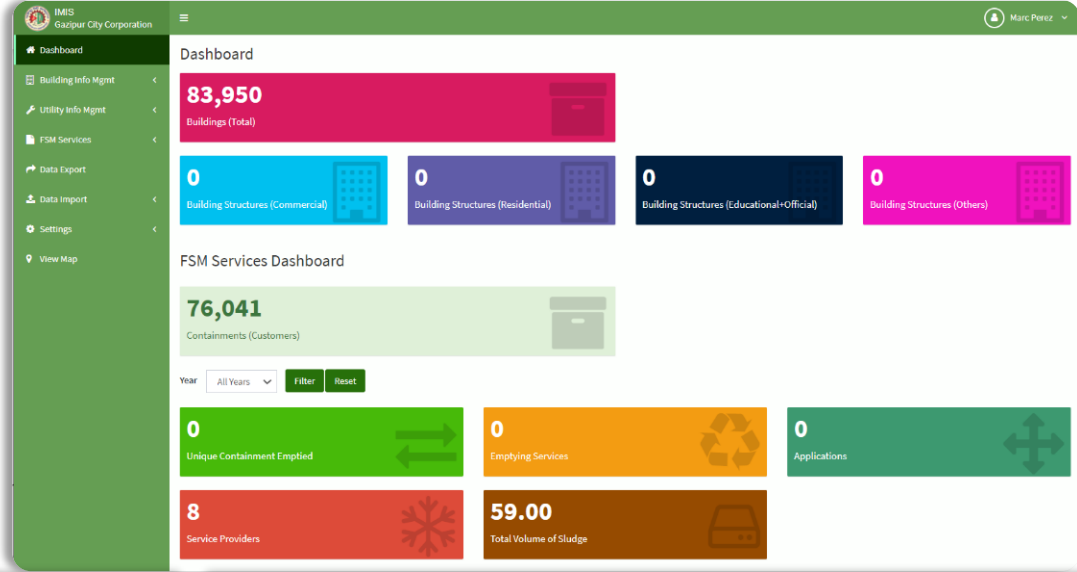
GIS analysis
Planning and
decision-making

Reporting

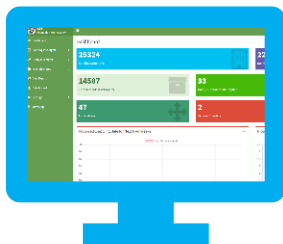
using a powerful

Dashboard for real-time

status of services



Managing services



Web-based App (IMIS)
for desk office work



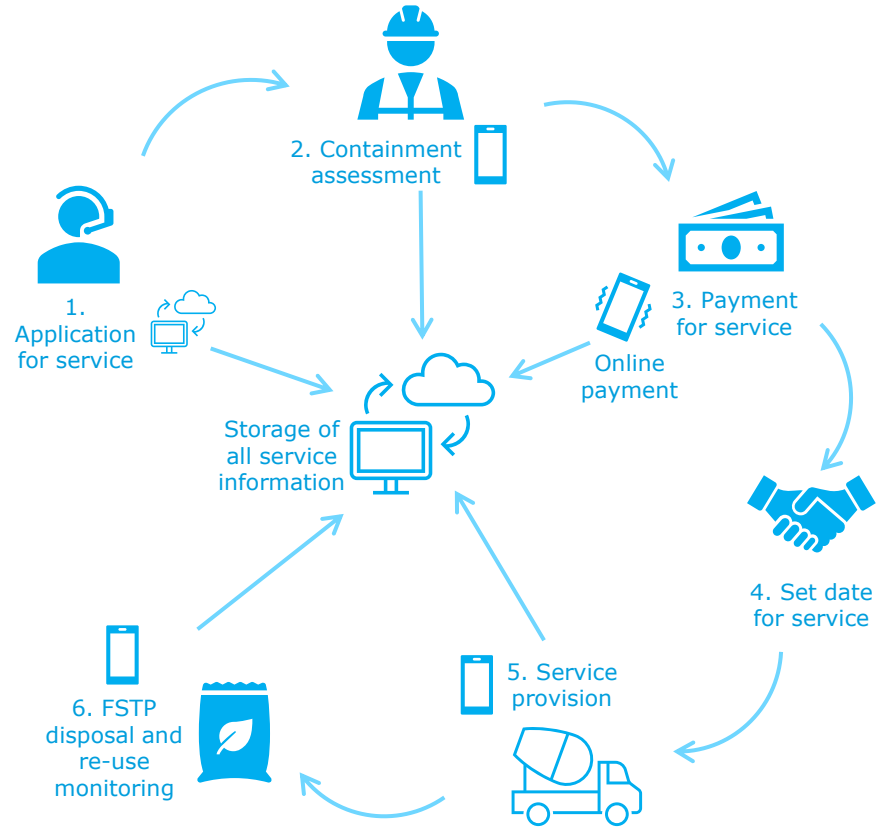
Mobile Apps
for field assessment, survey
and service delivery



External interfaces
For online payment or linking
up to local or national
databases

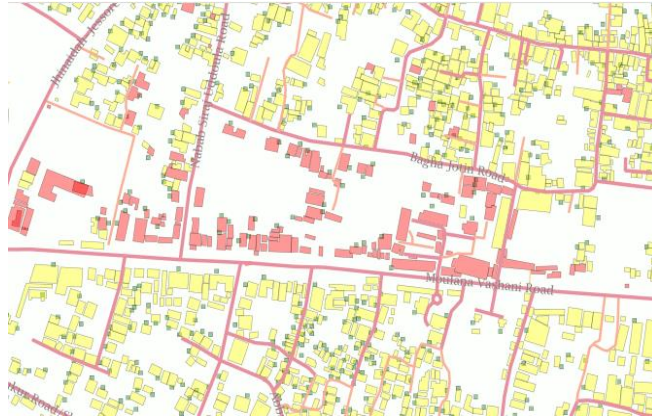
Process

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 Type	No. of containments
	0
No Containment	27
Septic Tank	410
Pit	1115
Total	1552

Export to:

Excel

500 m

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)



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)



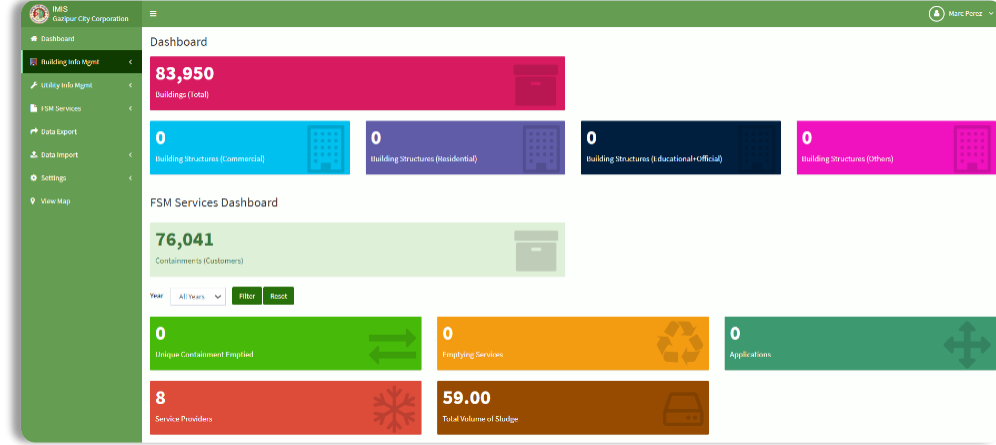
Training & Launching

- 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 buildings

20,016 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

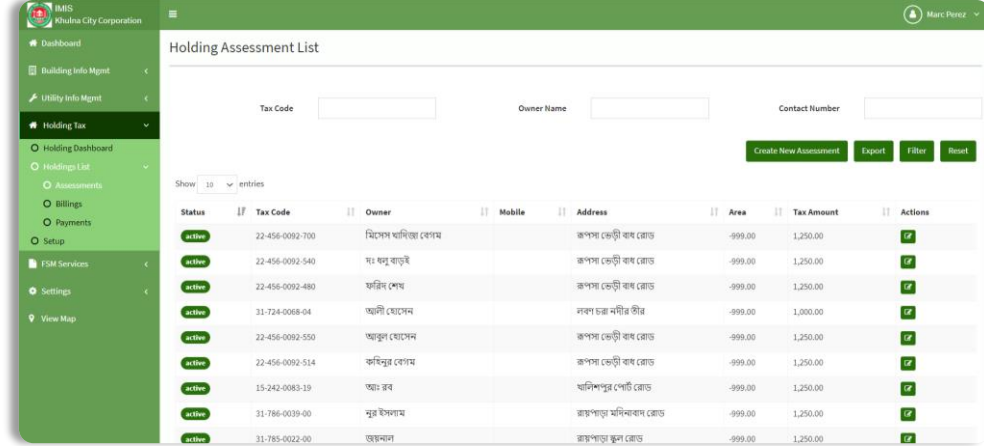
AID Foundation: FSM service, customer database (2017), IMIS (Jan 2021)

Status

Launched and trained staff end 2019 & 2020

City residents' holding ID linked to building outline

Khulna's IMIS



Coverage

156,052 Buildings

67,330 containments (septic tanks and pit latrines)

Features

FSM services, holding tax

Layers

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

Users

Conservancy department: FSM services

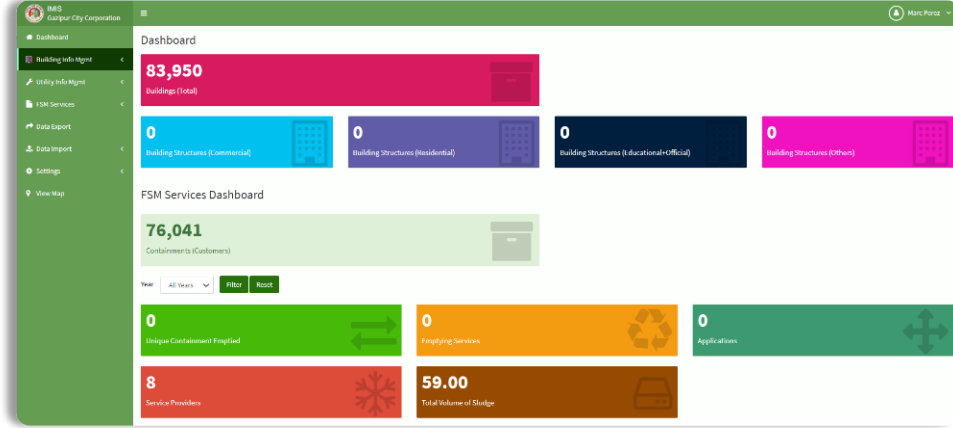
Tax department: Holding tax and trade license

Status

Training in 2021, ready for official launch in 2021

Introduced 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

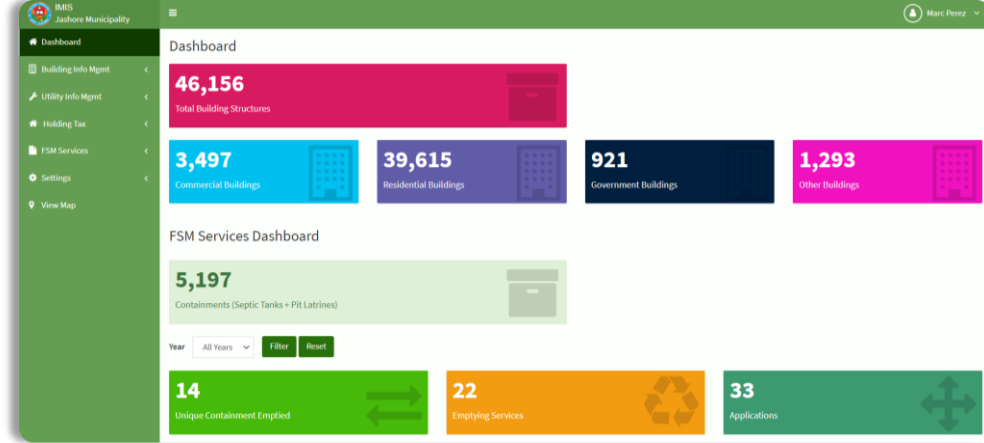
Tax department: Holding tax

Water department: Water supply service

Status

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

Jashore's IMIS



Coverage

43,358 buildings

Features

5,200 containments (only ward 5)

Layers

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

Users

Conservancy department (new PPP): FSM services

Tax department: Holding tax

Status

Pending final customisation and training

Planned 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.

Behaviour/System's change

- Adopting changes in internal processes and systems.

Hosting data

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

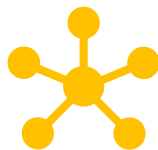
Potential new features



Share common
databases within a city



Online payments



Link to national
databases

Let's log into
IMIS...



 **JHENAI DAH MUNICIPALITY**
INTEGRATED MUNICIPAL INFORMATION SYSTEM

LOGIN

Username

Password

Remember Me

[LOGIN](#) [Forgot Your Password?](#)

Developed for Chrome Browser

Thanks

IMIS: Strengthening local governments' capacities

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

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