Achieving the SDGs in a time of COVID-19: Bangladesh Perspective

Ramiz Uddin, PhD
Head of Results Management and Data
a2i, UNDP-Bangladesh
Big Data: What we have in place

1. Data from Digital Devices
2. e-Commerce site and NID
3. Historical Data for Insights
4. Telco Data
5. Social Media Data
6. Advanced Data analytics
Initial Findings: *Electricity data analysis*

Average consumption of residential connections

Average consumption of commercial offices
Self-reported Syndromic data streams and human verification process

Data Sources

- 333 (Hotline)
- *3332# (USSD)
- App/Web interface

Human verification

- Based on response to questions in the IVR system
- Based on telecom operator’s screening algorithm

Classified as high risk

(A) daily number of confirmed cases,
(B) total number classified as a suspected COVID-19 case and (C) the total number classified as being high risk of COVID-19
Early spread of COVID-19 in Bangladesh

Aligned with National Preparedness and Response Plan (NPRP) to prevent, quickly detect, characterize the response and efficiently control the COVID-19 threats.
Tracking the spread of the outbreak in near real-time using mobility data

Narayanganj Sadar Hotspot identified
First confirmed case

Number of people traveling from Narayanganj district to other locations (on a single day)

Large volume of people moving out of this hotspot

~3000
nCOVID response: Red Zoning Based on COVID-19 Patient Location Cluster in Dhaka North and South City Corporation (50 Red Zones)
nCOVID response: Road selection for lockdown based on patient location (to be used by CC)
Infrastructural development in Disaster prone areas: Flood Incident and Bridge construction

Ongoing bridge and culvert construction in 2019

Flood affected areas in 2019
Intelligent Dengue Tracking & Management System (iDTAMS)

- 50+ Decision Support Info
- Dengue Prediction using Artificial Intelligence
- Early Warning System for better Preparedness
- Intelligent Hospital Resource Manager for Reducing Cost and More Service
- Automated hospital Selection System for reducing Patient Harassment
- Inter-Operable Information layer between City Corp and DGHS
Data Analytics on financial Inclusion and Student and Teacher ratio

Data Analytics on Student and teacher ratio
Source: BANBEIS

Data Analytics on Financial Inclusion (mobile money users)
Source: Inter media

Analyzed 35,000+ educational institutions
Food Assistance using **333** Helpline to newly poor and Digital financial aid to Poor/newly classified as poor

Covid-19 Impact: Poor subjected to Food Insecurity Seeking Relief
Health Impact due to COVID-19
Education Impact

20,660 Institutions 10,349,323 Students 246,845 Teachers

District Wise Affected Institution

- Dhaka District
  - Edu. Institution: 818
  - Student: 632,437
  - Teacher: 19,013

- Chattogram District
  - Edu. Institution: 816
  - Student: 598,941
  - Teacher: 10,898

- Dinajpur District
  - Edu. Institution: 703
  - Student: 236,274
  - Teacher: 8,050

- Mymensingh District
  - Edu. Institution: 657
  - Student: 337,350
  - Teacher: 7,103

- Cumilla District
  - Edu. Institution: 647
  - Student: 420,266
  - Teacher: 7,880

- Rajshahi District
  - Edu. Institution: 593
  - Student: 203,829
  - Teacher: 6,926

- Jashore District
  - Edu. Institution: 619
  - Student: 343,984
  - Teacher: 7,105

Affected Students by Divisions

- Chattogram
  - Students: 642,727
  - Teachers: 2,447

- Khulna
  - Students: 770,947
  - Teachers: 1,347

- Rajshahi
  - Students: 679,833
  - Teachers: 1,347
Employment Impact

**Effect of Lockdown**

- **83,243,640** People
- **49,669,400** Employees
- **18,337,080** Households
- **3,681,360** Industrial Employees
- **7,948,960** Service Holders
- **11,657,220** Farmers

**Division Wise Vulnerable Poors**

- **Sylhet**: 2M
- **Bogra**: 427.3k
- **Rajshahi**: 2.2M
- **Khulna**: 3.5M
- **Chittagong**: 5.5M
- **Dhaka**: 10.9M

Last update: a few seconds ago
Next Step

1. Data Sharing Policy
2. Data Integration
3. Data Privacy
4. Partnership
Thank You