

# CGS PEACE REPORT

*an initiative of BPO*

CGS  
CENTRE FOR  
GENOCIDE  
STUDIES  
UNIVERSITY OF DHAKA



Volume 1, Issue 2  
July-August 2017



**Cyber Security:  
A Global Perspective**

**Political Economy of  
Cyber Technology in  
Bangladesh**

**Cyber Security  
Apparatus in Bangladesh**

**Understanding  
Violent Extremism in  
Bangladesh: A Focus on  
Bogra**

*Photo courtesy: BPO Team*

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*an initiative of*  
**BPO- Bangladesh Peace Observatory**



**Volume 1, Number 2**  
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## From the Editor's Desk

A certain myth pervades when it comes to technology, and that is, technological innovation motivates human activities. The case, however, is quite the reverse. Human activities create conditions for technological innovation. It is no wonder that paper came to be used in China long before the rest of the world, mainly because the 'textual civilization' in China could not do without paper! The same is the case with the invention of paintbrush in China in 250 BCE. Writing in China did not start with the invention of paintbrush by Meng Tian. Rather, the system of writing was already well established in the Chinese society. But then the prevailing mode of writing - 'a stick dipped in ink' - could not meet the rising demand. Meng Tian's paintbrush did the trick and came to rescue the writers! The passionate drive and the need for humans to communicate and remain connected, for reasons ranging from producing things, sharing ideas to profiting from trade, certainly led to the invention and development of cyber technology, one that involves the internet or cyber space.

Two things, however, require flagging. Firstly, technology cannot be territorialized, indeed, not only in the sense of the invention making an impact beyond borders but also for producing it. In the age of globalization, particularly in the backdrop of rationalizing the cost and having it produced internationally with cheap labour, the proliferation of modern technology has attained greater momentum. Secondly, the proliferation of technology itself could result in the creative use of the product, particularly in places where human activities have created a newer demand. In the case of Bangladesh, this would include the success of mobile banking as much as it would include the success of mobile health. Indeed, human activities in Bangladesh in the midst of weak institutions and limited options created grounds for the success of both *BCash* and *MHealth*.

Technology, however, can have both positive and negative uses. Alfred Bernhard Nobel, the Swedish inventor of dynamite, learned it in hard ways, and the guilt probably led him to bequeath his fortune to institute the Nobel Prizes! The same is the case with cyber technology. Educationists and bankers could use the latter, so can the smugglers and the terrorists. And there lies the fear!

But this 'fear' should not be the reason for blocking and limiting the use of cyber technology. Not only because this would go against the very creativity of the human mind and the invention of technology but more importantly, the 'negative use' of technology itself could be contained and countered by the application of the same technology. Moreover, limiting or blocking the use of cyber technology, in this case, would fail to restrict the 'dubious forces' from using it. Rather, it would benefit them, as they would find ways of using it while knowing fully well that the other side is unable to use it.

This issue deals with cyber security, indeed, with the idea that cyber technology, nationally as well as globally, ought to make people more *secure*, and not be a cause of fear and insecurity. Indeed, given the state of cyber technology, it is now possible not only to have 100% cyber literacy in Bangladesh but also to use the technology creatively in education as well as in business and transform the life and livelihood of millions of people in the shortest possible time. And there lies our hope!

Imtiaz Ahmed  
29 August 2017

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# Cyber Security: A Global Perspective

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It is no secret that the human race is increasingly becoming dependent on computers and automation.<sup>1</sup> Today, its' influence is visible on all spheres of life. When British engineer Charles Babbage invented the computer, he could never have foreseen the cyber world in which we are now living. The invention of the Internet and the World Wide Web (WWW) has revealed a new horizon before us.<sup>2</sup> Today, cyber communications have become the backbone of all communications across the globe, becoming the most important source of knowledge in a digitalized world.

The internet is a *network of networks* that connects millions of private and public, academic, business and government entities through copper wires, fiber-optic cables, wireless connections, and other technologies.<sup>3</sup> The WWW is a massive interface that interlinks documents, images and other resources through hyperlinks.

In the beginning, the development of cyber technologies mostly took place in the countries which possessed the resources and infrastructure to host such development. As the cost and complexity of the technology rapidly decreased, however, it became more convenient for developing

and less developed countries to adopt such technologies.

Today, it is impossible to mention progress in the fields of business, economics, politics, social, entertainment, education, health, and almost all other aspects of life without referring to cyber technology. Figure-1 illustrates how, globally, each minute in the year 2017 sees 156 million emails sent, 16 million text messages, 4.1 million Youtube views, 3.5 million Google searches, 0.90 million Facebook logins, 0.45 million tweets, and \$750,000 in online spending.<sup>4</sup> Without access to fast and convenient online services, it is clear we feel increasingly cut off from an important component of modern life.

However, like all other revolutionary technologies, the internet has its own pitfalls. The internet allows individuals to connect to other individuals' (or agency's) computers or smart devices and access their information easily from anywhere in the world.

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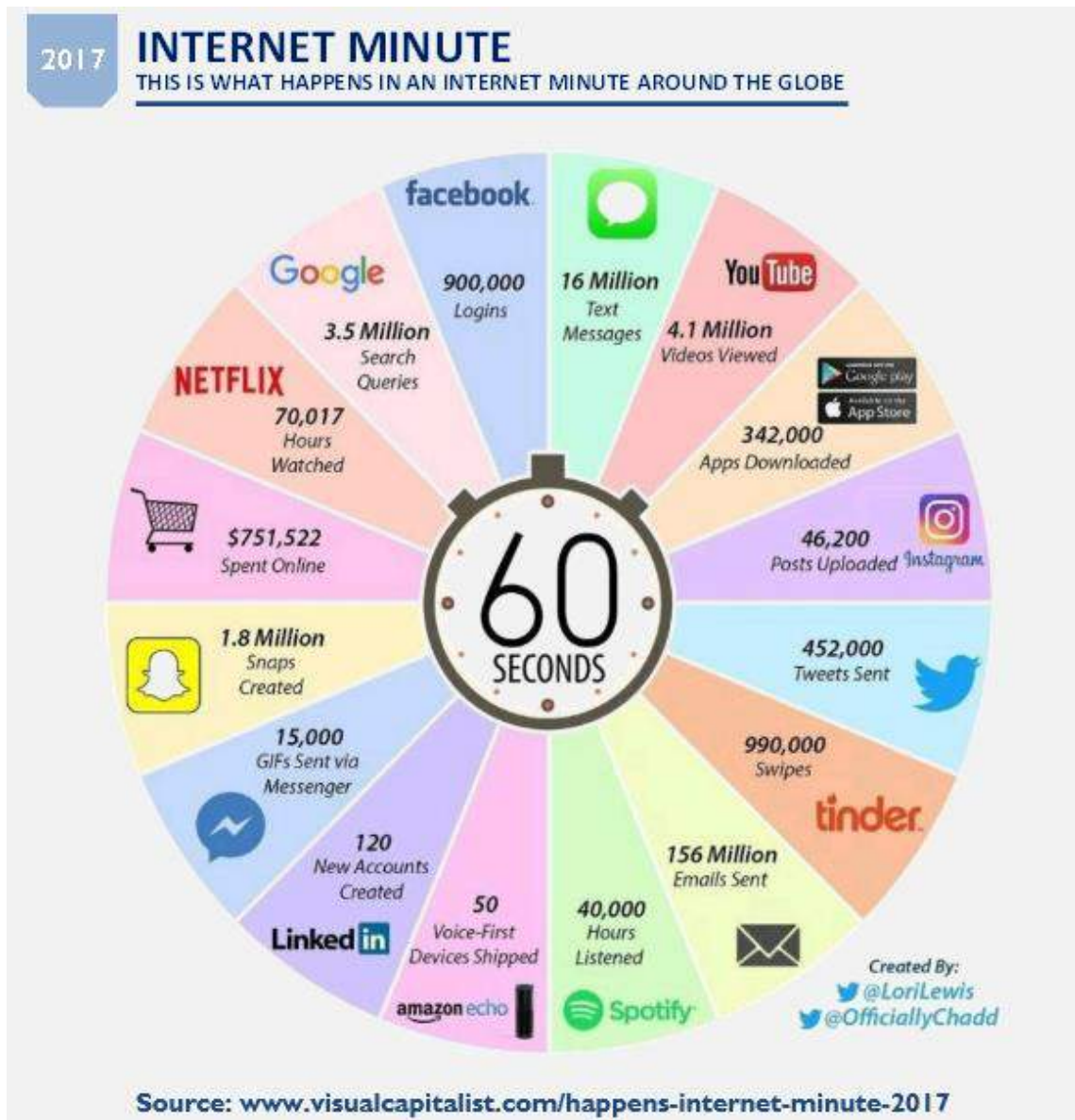
<sup>1</sup> Gaines, B.R. (1985). The entrepreneur in the information age. Accessed: 25 June 2017, available at: <https://prism.ucalgary.ca/bitstream/1880/45479/2/1985-212-25.pdf>

<sup>2</sup> Owston, R.D. (1997). Research news and Comment: The World Wide Web: A Technology to Enhance Teaching and Learning? Educational researcher, 26(2), pp.27-33. Accessed: 20 June 2017, available at: <http://www.jstor.org/stable/1176036>

<sup>3</sup> ZapThinkTank (2016). Accessed: 20 June 2017, available at: <http://zapthink.com/2013/07/16/cd3-cyber-development-cyber-democratization-cyber-defense/>

<sup>4</sup> Lewis and Chadd (2017). Accessed 21 June 2017, available at: [www.visualcapitalist.com/happens-internet-minute-2017](http://www.visualcapitalist.com/happens-internet-minute-2017)

FIGURE I: WHAT HAPPENS IN AN INTERNET MINUTE AROUND THE GLOBE?



Open access to internet provides opportunities to highly- skilled hackers and criminals in cyberspace. Expert coders can use their knowledge of programming languages to bypass security, authentication and encryption protections on an individual's computer.<sup>5</sup> In Bangladesh, the most common criminal acts involve remote hacking, e-mail scams, financial fraud (including breaking the security codes of credit cards), denial of services, virus attacks, and other threats ranging from extortion to espionage. As such, cyber security is taken very seriously by the Bangladesh government. Government assistance is ensuring grassroots communities can access Information and Communication Technology (ICT) services safely and constructively.

The abundance of smart electronic devices has made instant communication easy from nearly anywhere in the world. People can easily connect and communicate with each other through Facebook, Twitter, Tumblr, Instagram, LinkedIn and hundreds of other social media platforms. The rapid expansion of social media options has led to significant social opportunities across the world, some encouraging, and others more contentious. For example, in the Middle

East, social media played a significant role in the ousting of dictatorial regimes, famously known as the 'Arab Spring'. During the 'Spring', cyberspace became an important and very real 'place' for people to organize and raise their voice against authoritarianism and oppression. On the other hand, the presence of terrorist or violent extremist elements online has made the internet a risky place. Social media may be a recruitment zone for violent or criminal organizations, creating legitimate concerns among average people.<sup>6</sup>

According to world internet statistics, Bangladesh has the 11<sup>th</sup> highest number of internet users in the world. The total number of people using internet in the country is estimated at 66 million (Table 1).<sup>7</sup> Of Bangladesh's 120.5 million mobile phone subscribers, 22 million access social media through their phones (of an estimated 26 million active social media users total – see Table 2). Bangladesh ranks 19<sup>th</sup> in the Global Cybersecurity Index while India ranks 5<sup>th</sup> and Pakistan 23<sup>rd</sup>. Other South Asian countries like Nepal, Bhutan, Afghanistan, and Sri Lanka rank 25<sup>th</sup>, 25<sup>th</sup>, 20<sup>th</sup>, and 15<sup>th</sup> respectively (figure 1).

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<sup>5</sup> Maruf, Ashiquddin Mohammad, Md Rabiul Islam, and Bulbul Ahamed (2014). "Emerging Cyber Threats in Bangladesh: in quest of effective legal remedies." NU Journal of Law: 112-124. Available at:

<http://www.banglajol.info/index.php/NUJL/article/view/18529>

<sup>6</sup> Ibid.

<sup>7</sup> Ibid.

**TABLE 1: TOP 11 COUNTRIES BY NUMBER OF INTERNET USERS<sup>8</sup>**

Ranking	Country or Region	Internet Users 31 Mar 2017	Internet Penetration	Growth* 2000- 2017
1	China	731,434,547	52.7 %	3,150.8 %
2	India	462,124,989	34.4 %	9,142.5 %
3	USA	286,942,362	87.9 %	200.9 %
4	Brazil	139,111,185	65.9 %	2,682.2 %
5	Indonesia	132,700,000	50.4 %	6,535.0 %
6	Japan	118,453,595	94.0 %	151.6 %
7	Russia	104,553,691	72.9 %	3,272.7 %
8	Nigeria	93,591,174	48.8 %	46,695.6 %
9	Germany	71,727,551	89.0 %	198.9 %
10	Mexico	69,915,219	53.7 %	2,477.6 %
11	<b>Bangladesh</b>	<b>66,965,000</b>	<b>40.6 %</b>	<b>66,865.0 %</b>

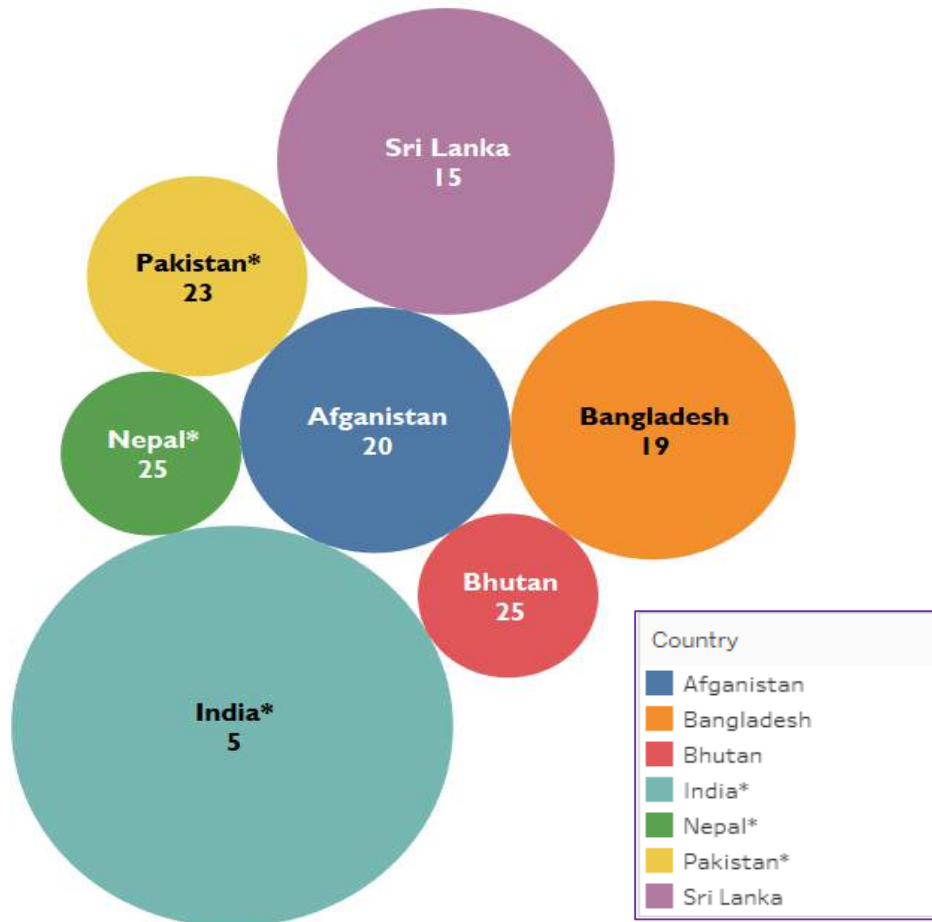
**TABLE 2: INTERNET USE IN SOUTH ASIAN COUNTRIES<sup>9</sup>**

Country	Total Population (million)	Internet users (million)	Active social media users (million)	Mobile subscriptions (million)	Active Mobile social users (million)
Afghanistan	33.77	4.01 (12%)	3.00 (9%)	25.20 (75%)	2.70 (8%)
<b>Bangladesh</b>	<b>163.9</b>	<b>63.3 (39%)</b>	<b>26 (16%)</b>	<b>120.5 (74%)</b>	<b>22 (13%)</b>
Bhutan	.79	.31 (40%)	.29 (37%)	.75 (95%)	.27 (34%)
India	1,335	462 (35%)	191 (14%)	1,059 (79%)	167 (13%)
Maldives	.37	.31 (83%)	.31 (83%)	.81 (216%)	.29 (78%)
Nepal	29.02	14.12 (49%)	7.10 (24%)	31.55 (109%)	6.60 (23%)
Pakistan	194.8	35.10 (18%)	31.0 (16%)	140.20 (72%)	28.00 (14%)
Sri Lanka	20.86	6.26 (30%)	4.90 (23%)	26.36 (126%)	4.20 (20%)

<sup>8</sup> Internet World Stats (2017). Accessed: 15 May 2017, available at: <http://www.internetworldstats.com/top20.htm>

<sup>9</sup> We are social- HootSuite (2017). Accessed: 10 May 2017, available at: <https://www.slideshare.net/wearesocialsg/digital-in-2017-southern-asia>

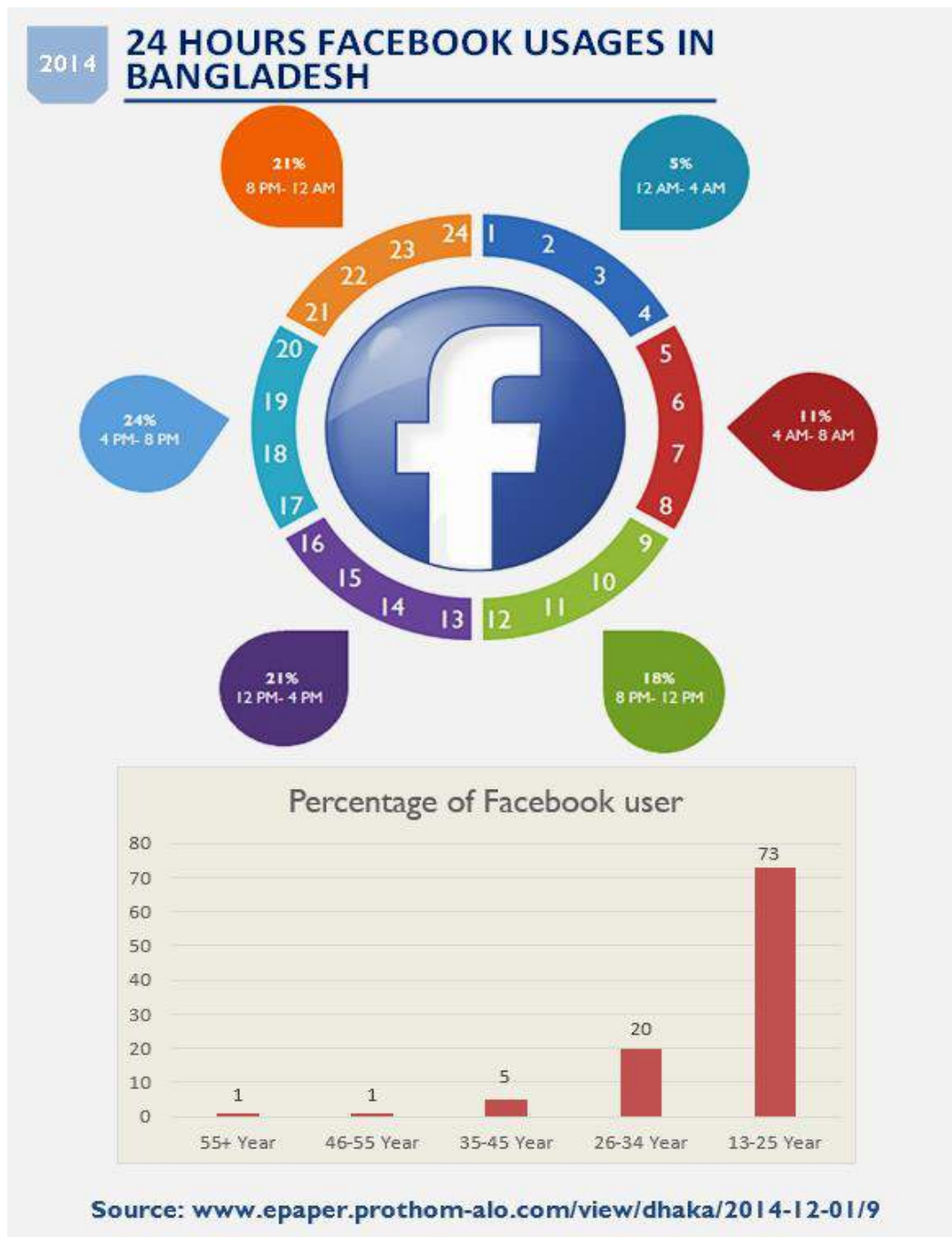
**FIGURE 2: SOUTH ASIAN COUNTRIES IN GLOBAL CYBERSECURITY INDEX**



**Source: Global CYB; \* Secondary data of ABI Research<sup>10</sup>**

<sup>10</sup> Global Cybersecurity Index & Cyberwellness Profiles (April 2015). The International Telecommunication Union. Accessed: 30 May 2017, available at: [https://www.itu.int/dms\\_pub/itu-d/opb/str/D-STR-SECU-2015-PDF-E.pdf](https://www.itu.int/dms_pub/itu-d/opb/str/D-STR-SECU-2015-PDF-E.pdf)

FIGURE 3: 24 HOURS FACEBOOK USAGES IN BANGLADESH

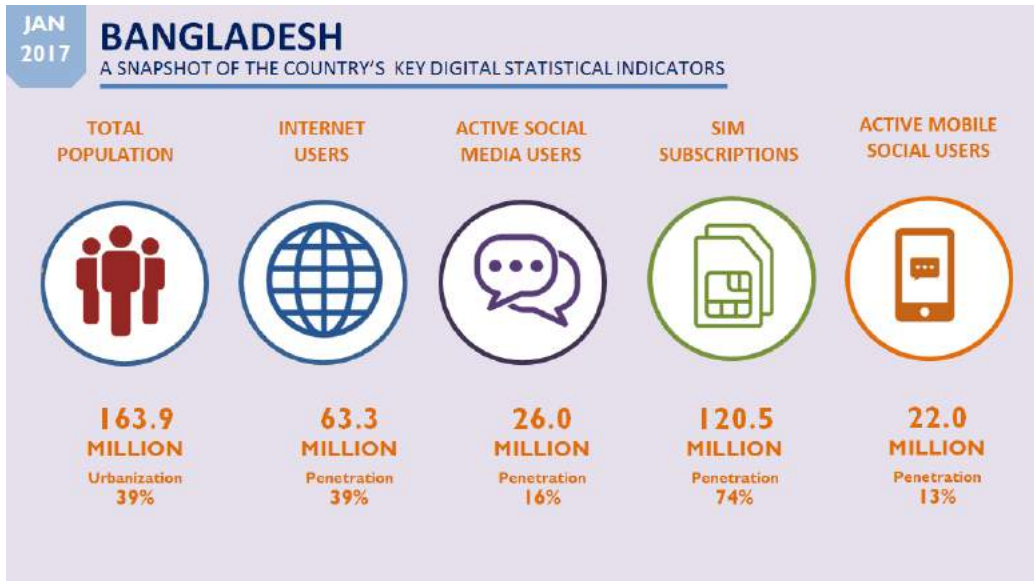


In Bangladesh, social media use is rapidly rising. For example, a report produced by the daily newspaper Prothom Alo reveals that most Bangladeshis use Facebook between 4 PM- 8 PM.<sup>11</sup> The most active Facebook user age group in 2014 was 13-25 year-olds, comprising 73% of the total users (figure 3). More recently, from January 2016 to 2017, Bangladeshi internet users increased 17% to 63.3 million (of 163.9 million population, see figures 4 & 5). Over the same period, however, active social media users increased 73%, to a total of 26 million people, of which 22 million access social media by their phones.

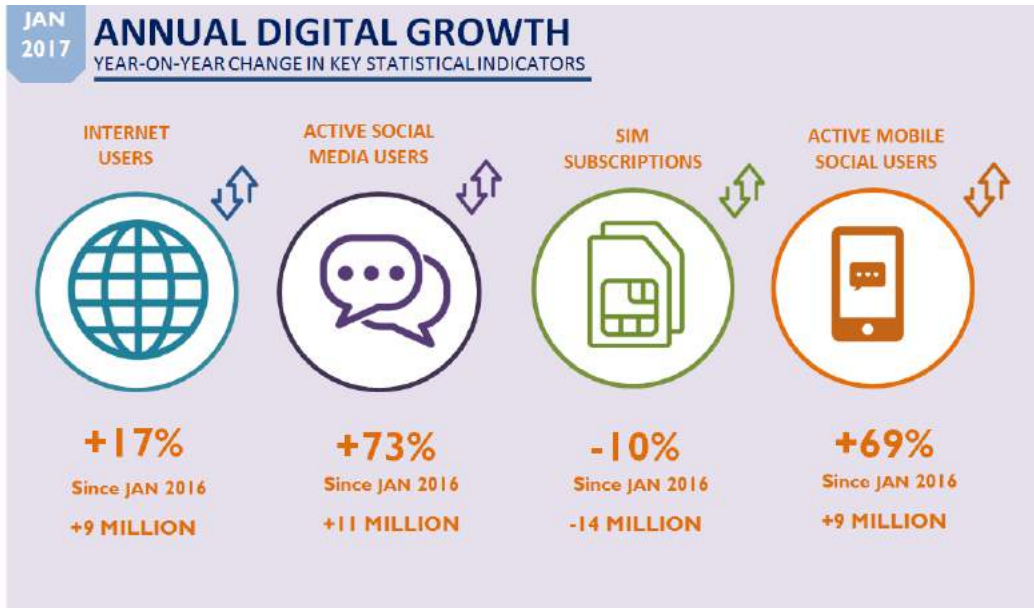
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<sup>11</sup> Prothom Alo (2014). Accessed: 20 June 2017, available at: [www.epaper.prothom-alo.com/view/dhaka/2014-12-01/9](http://www.epaper.prothom-alo.com/view/dhaka/2014-12-01/9)

**FIGURE 4: A SNAPSHOT OF BANGLADESH'S DIGITAL INDICATORS**



**FIGURE 5: A SNAPSHOT OF ANNUAL DIGITAL GROWTH OF BANGLADESH**



Source of figure 4 & 5: We are social- HootSuite (2017)

# Cyber Security Apparatus in Bangladesh

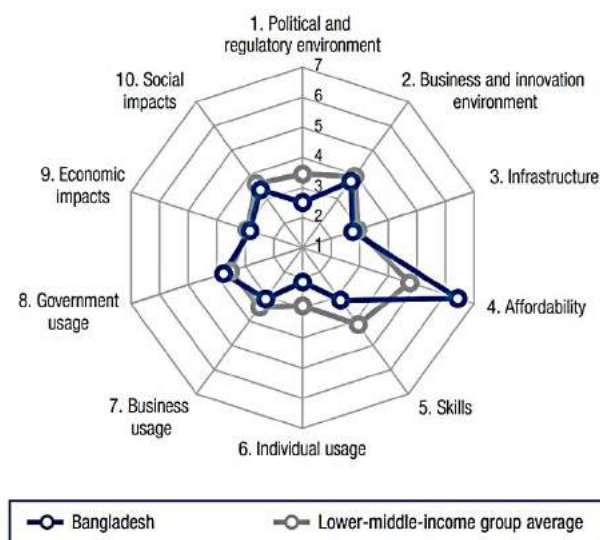
The cyber sector of Bangladesh in recent times has witnessed exponential growth. The Network Readiness Index, published by the World Economic Forum, is based on ten Indicators, appraising network connectivity. Bangladesh belongs to the lower middle income group (figure 2), but has taken a leap from 130th in 2008 to 112th out of 139 countries in 2016 (table 3).

**TABLE 3: BANGLADESH ON NETWORK READINESS INDEX<sup>12</sup>**

Year	Position
2008-09	130
2009-10	118
2010-11	115
2012	113
2013	114
2014	119
2015	109
2016	112

Almost every bureaucratic activity, whether service or business, is now being digitalized, adhering to emerging standards of e-democracy and e-

**FIGURE 6: BANGLADESH ON NETWORK READINESS INDEX 2016**



governance. Despite having such enormous potential, excessive reliance on internet requires cyber security and oversight.

<sup>12</sup> Compiled by collecting yearly report data from [www3.weforum.org](http://www3.weforum.org) website. Accessed: 20 May 2017, available at: [http://www3.weforum.org/docs/GITR2016/WEF\\_GITR\\_Bangladesh\\_2016.pdf](http://www3.weforum.org/docs/GITR2016/WEF_GITR_Bangladesh_2016.pdf)

## Cyber Development & Incidents in Bangladesh

From the days of dial-up internet to the present era of wifi even in remote corners of Bangladesh, tremendous advancement in cyber technology has been achieved. These advances have led to measures related to

cyber security. A chronological understanding of cyber development in last decade is given in the following table (table 4).

**TABLE 4: CYBER DEVELOPMENT IN BANGLADESH**

<b>2005</b>	<ul style="list-style-type: none"> <li>▪ Bangladesh connected to internet by submarine cable with a maximum speed of 200 gigabites per second</li> </ul>
<b>2008</b>	<ul style="list-style-type: none"> <li>▪ Introduction of Biometric National Identity Card</li> </ul>
<b>2009</b>	<ul style="list-style-type: none"> <li>▪ Introduction of WiMax wireless internet service</li> </ul>
<b>2010</b>	<ul style="list-style-type: none"> <li>▪ Bangladesh government announces replacement of all hand-written passports with machine readable passports (MRP).</li> <li>▪ Online share trading system started on the Bangladesh Stock Exchange.</li> <li>▪ Establishment of 4,516 Union Information and Service Centres (UISC) to provide ICT services and education at the grassroots level.</li> <li>▪ Launching of the Electronic Money Transfer System (e-MTS) and Postal Cash Card by Bangladesh Postal Service.</li> <li>▪ Introduction of online admission application to the University of Dhaka.</li> </ul>
<b>2011</b>	<ul style="list-style-type: none"> <li>▪ Establishment of District e-Service Centre with an aim to increase the efficiency of district councils</li> <li>▪ Introduction of e-tender as a part of Electronic Government Procurement (e-GP).</li> <li>▪ Introduction of online water bill payment system.</li> <li>▪ Launching of mobile based financial service bKash.</li> <li>▪ Launching of national e-book portal comprising all text books used by the general education, madrassa and technical education school boards.</li> </ul>
<b>2012</b>	<ul style="list-style-type: none"> <li>▪ Introduction of National e-Service System (NESS) incorporating e-forms, e-communication, e-service management, govt. directory access, e-directory, national e-service portal, citizen web account, e-notification and NESS web service</li> <li>▪ Introduction of fast 3G mobile service by state owned mobile service Teletalk</li> <li>▪ Introduction of E-ticketing by Bangladesh Railway</li> </ul>
<b>2013</b>	<ul style="list-style-type: none"> <li>▪ Second submarine cable connected.</li> </ul>
<b>2015</b>	<ul style="list-style-type: none"> <li>▪ Biometric SIM registration launched for mobile phone users.</li> <li>▪ Introduction of E-health service to provide free medical advice and alerts.</li> <li>▪ Dhaka University website hacked by 'Cyber 71' group protesting 7.5% VAT on private university education.</li> </ul>
<b>2016</b>	<ul style="list-style-type: none"> <li>▪ Bangladesh Bank heist took place on February where 951 million USD was stolen using Dridex malware.</li> <li>▪ Introduction of Smart National Identity Card.</li> </ul>

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# Anti-Cyber Threat Acts, Rules & Policies in Bangladesh

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To prevent the misuse of cyber technology, government has adopted a series of acts, rules, and policies. These are included below:

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## Acts & Rules

### Bangladesh Computer Council (BCC) Act, 1990

Some functions of this Act related to cyber security are:

- Encouraging the use of computers and informatics aiming at social, intellectual, technical and financial advancement of Bangladesh;
- Improving the computerized practical framework, providing on arrangements for grants, education, workshops, discussions and training on Information Technology (IT);
- Determining and executing national policy concerning computers and IT;
- Local, national and international collaboration on IT;
- Advising on security of information technology.

Available at: <https://goo.gl/TGCFoh>

### Information and Communication Technology Act, 2006

This Act provides legal recognition and security for ICT networks. It has been amended twice (2009 & 2013) to update it to changing realities. The act focuses on:

- Digital signatures and electronic records;
- Attribution, acknowledgement and dispatch of electronic records;
- Secure electronic records and digital signatures;
- Controllers and certifying authorities;
- Rules, prevention and penalties for breaching procedures;
- Offences, investigations, and adjudication of cybercrime.

Available at: <https://goo.gl/o2dTKS>; <https://goo.gl/YRHgZk>

### High-Tech Park Authority Act, 2010

This Act has led to the establishment of Bangladesh High-Tech Park Authority on 28 June 2010. Recently, the construction of hi-tech parks in Gazipur and Jessore has seen significant progress. In addition, the development of Varendra Silicon City in Rajshahi, and Sylhet Electronic City are taking place. A total of 3000 cr. Taka projects has been planned to establish IT villages in Cox's Bazar, Chittagong, Rangpur, Khulna, Barisal, Gopalganj, Comilla, Natore, Mymensingh, Jamalpur and Keraniganj.

Available at: <https://goo.gl/9RcRTh>

**(Amended) Policy regarding fellowships and scholarships for research in the field of information and communication technology and grants for innovative work-2013**

Major objectives of this policy are:

- Creating efficient workforce in ICT by encouraging higher studies and research;
- Contributing in local and sustainable ICT programs;
- Eradication of poverty through ICT development;
- Creating awareness through ICT development;
- Providing scholarship and fellowship on ICT at masters, doctoral and post-doctoral levels to individuals and also to institutions.

Available at:  
<https://goo.gl/ZfM2hv>

**Information Security Policy Guidelines- 2014**

Some of the crucial areas that this guideline covers are:

- Brief illustration of different terminology required to develop own policy;
- Roles and responsibility of the information owner and information custodian;
- Information security strategy;
- Identification of probable risks, threats and vulnerabilities;
- Assessment of the extent of the risks, threats and vulnerabilities;
- Procedure to set security controls to protect information;
- Legal issues of information security;
- Standards to follow to establish Information Security Management System (ISMS);
- Importance of auditing information security;
- Monitoring and improving of security policies;
- Act as a certificate giving body;
- Procedures for incident handling and disaster recovery;
- Backup and restore;
- Business continuation plan;
- Template for Information security policy.

Available at: <https://goo.gl/CMSSdg>

**Cyber Security Strategy- 2014**

The strategy sets three priorities which are subject of the following actions:

**Priority 1: Legal Measures**

Action 1: Cybercrime Legislation  
Action 2: Government Legal Authority

**Priority 2: Technical and Procedural Measures**

Action 1: National Cyber Security Framework  
Action 2: Secure Government Infrastructure  
Action 3: Critical Information Infrastructure Protection

**Priority 3: Organizational Structures**

Action 1: Government's Cyber Security Role  
Action 2: National Cyber Security Council  
Action 3: National Incident Management Capacity  
Action 4: Public-Private Partnerships  
Action 5: Cyber Security Skills and Training  
Action 6: National Culture of Cyber Security

Available at: <https://goo.gl/jTS6Pt>

## National Information and Communication Technology Policy-2015

Comprising a total of 235 (short term- 2016, midterm-2018 & long term- 2021) inter-ministerial action items, 54 strategic themes and 10 objectives, this policy is the refined and revised version of the 2009 policy of the same name. The strategy relates to the following themes:

- Social equity;
- Integrity;
- Universal access;
- Education and research;
- Employment generation;
- Strengthening exports;
- Supports to ICTs;
- Healthcare;
- Environment, climate & disaster management;
- Productivity.

Available at: <https://goo.gl/GBxBtc>

Cyber Security Act 2015- Available at: <https://goo.gl/YWacu7>

Digital Security Act 2016- Available at: <https://goo.gl/Ej4ur8>

ICT Development Fund Management Policy, 2016 Available at: <https://goo.gl/6otPmQ>

National e-commerce / e-trade policy 2017 Available at: <https://goo.gl/2pBLP6>

## Draft Acts, Rules and Policies

### **Cyber Security Act 2015:**

Highlight of this proposed act are as follows:

- Formation of a National Cyber Security Agency headed by the Prime Minister;
- Declaration of few computer systems, networks, data sets related to national security, social welfare and economy;
- Outlining new crimes and punishments related to online fraud, cyber-terrorism, impersonation, breach of privacy, pornography, organized crime and details governing investigation, search, detention, seizure and trial;
- Regional and international cooperation related to cyber security.

### **Digital Security Act 2016:**

- Following on the Cyber Security Act 2016, this Act has included a feature of extraterritoriality.

### **ICT Development Fund Management Policy, 2016:**

To support and fund, the objectives of ICT Act 2015 along with eradicating digital divide by establishing social justice, safeguarding all e-services, and more- this draft policy aims to develop ICT sector through funding.

### **National e-commerce / e-trade Policy 2017:**

To have an integrated policy to provide universal access, legal infrastructure development, digital marketing, funds, R&D (research and development), and risk assessment/ management in e-commerce/ e-trade this draft policy has been prepared.

# Cyber Security tools in Bangladesh

Along with legal, institutional and infrastructural precautions, the Bangladesh government has taken a number of initiatives to ensure online services and security for citizens. For example, the Hello CT app (figure 7), launched by the Dhaka Metropolitan Police (DMP), aims to encourage urban residents to provide information about militant and criminal activities. Using this app, any person can anonymously send information, including photos and videos, about militancy and other crimes.

Again, the ICTD app works as a mother app to 500 national apps. Each of the apps can also be downloaded separately. These apps are intended to provide service, security, information, learning and also entertainment on the go (for details, see annex).

Apart from this application-based service, Bangladesh now offers a number of online services through interactive websites. Furthermore, the government is taking various preparations to make these online services accessible at the grassroots level. (See Annex)

FIGURE 7: HELLO CT APP



Source: CTTC google app.

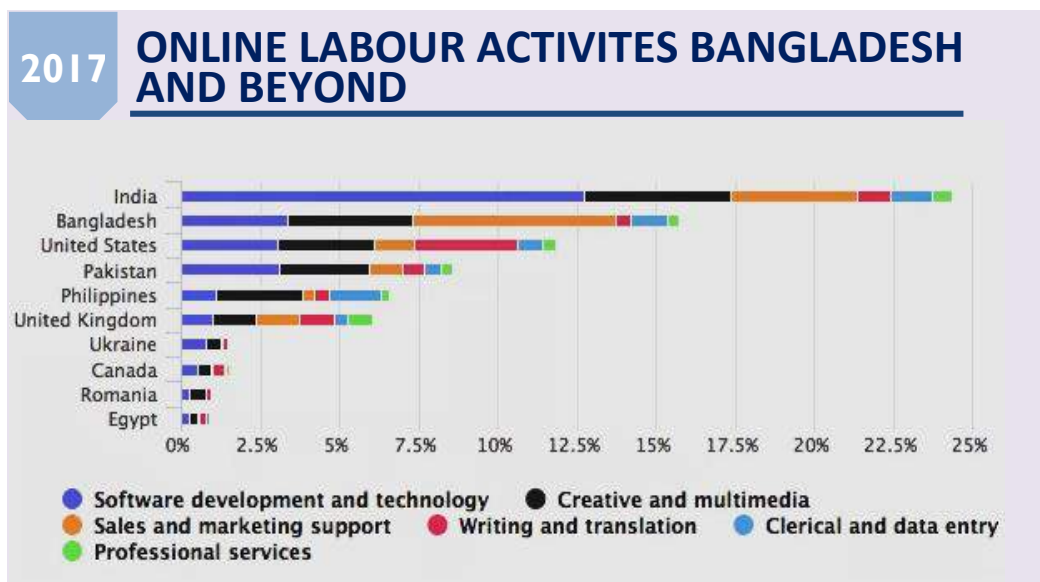
## Political Economy of Cyber Technology

Online banking and money transfer have become the most common and secured methods of transaction. From paying bills to making multi-million-dollar deals online, paper money and coins are no longer as relevant today. However, as mentioned before, these online financial systems are not impregnable. They can be subject to high-profile hackers. To keep the online financial systems free from

bugs and hacking, a strong security interface is required.

As a continuation of this development, Bangladesh has become an active participant of global digital market. Bangladesh has secured a reputable position as a provider of digital freelance work. A recent analysis from Oxford Internet Institute (OII) reveals that

FIGURE 8: ONLINE LABOUR INDEX



Bangladesh is the second-largest overall supplier of online labor.<sup>13</sup> Bangladesh

<sup>13</sup> The iLabour Project (2017). Accessed: 15 May 2017 available at:

specializes in: (1) Sales and marketing support, (2) Creative and multimedia, and (3) Software development and technology. Bangladesh is home to an estimated of 16% of the online global workforce.<sup>14</sup> Figure 8 shows that Bangladesh ranks only second to India, and ranks well ahead of other countries in the Online Labour Index.

Apart from freelancing, online shopping and marketing have also become very popular in Bangladesh. The country is yet to draw much attention from electronic commerce giants like as Amazon and Ebay. However, local enterprises are doing well at providing home delivery of desired products after a few clicks. Mobile phone banking ventures in Bangladesh generate an average of 8.44 billion taka (USD \$105m) through transactions.<sup>15</sup> For instance, companies like BKash have become phenomenal successes and household names. Due to user-friendliness, mobile and online banking

have become very popular among clients and for transactions between banks.

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<http://ilabour.oii.ox.ac.uk/comparint-the-oli-worker-map-to-other-studies-on-online-work-supply/>

<sup>14</sup> Ibid.

<sup>15</sup> BDNews 24 (2017). Accessed: 20 May 2017 available at: <http://bdnews24.com/economy/2017/07/10/mobile-banking-transactions-hit-tk-8.44-billion-a-day-in-bangladesh>

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## Violent Extremist Narratives and Social Media in Bangladesh

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Violent extremism may be amplified by well-funded social media campaigns. A recent study commissioned by UNDP and the SecDev Group finds that extremists are active in Bangladeshi cyberspace, if far less than in other countries.<sup>16</sup> The study also notes that given trends demonstrating the exponential numbers of Bangladeshis migrating online, migrating to vulnerable locations in the Gulf and elsewhere, violent extremist activity in Bangladeshi cyberspace is projected to grow.

To date, there has been a dearth of reliable data and analysis on the presence and reach of violent extremist groups in Bangladeshi cyberspace. To fill this gap, the SecDev Group conducted an analysis of violent extremism (VE) activity and content online in Bangladesh between January and December 2016. It analyzed data from VE content groups and sites on Facebook between January and December 2016, and Twitter traffic from October through to December 2016. The research relied on publicly available social media posts and examined content belonging to recognized extremist groups in Bangladeshi cyberspace. The study limited its search to VE groups that fell within the

designation of sanctioned organizations as recognized by the United Nations.

Over 119 million Bangladeshis are connected with internet, of which 66.7 million are connected through mobile networks.<sup>17</sup> The study finds that Facebook dominates as the social media of choice accounting for 99.3% of all social media usage on mobile device, and 93% of all social media usage (regardless of access device). While Twitter usage is less than 1% of the online population and principally used as a broadcast medium. On the other hands, blogs are important repository for information and the use of third-party file sharing sites is significant. As the 58% of total population of Bangladesh is under the age of 25, the study claims that this Generation D is increasingly will-connected and will challenge the status quo. Their exposure to VE content has been identified as a crucial area.

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<sup>16</sup>SecDev abridged report on Violent Extremist Narratives and Social Media in Bangladesh

<sup>17</sup> Ibid.

While much of the internet remains text based, social media makes use of videos, audio recordings and photographs. Without basic skills of reading and writing, anyone can post and access social media contents. This represents a significant opportunity to manipulate individuals by posting materials that is designed to elicit strong emotional reactions or a call for action. The study anticipates adaptation of similar techniques adopted by extremist actors. It also expresses the possibility of instability that may occur by regulatory actions of government.

The major findings and areas of concern of the SecDev report are given in the box.

The SecDev research team has identified Bangladeshi extremists are slower to incorporate newer social media platforms than their Arab counterparts. The study recommended to create partnership and capacity building among different stakeholders of Bangladesh to set community standards for online content, to undertake open-source and social media monitoring on the presence and impact of VE contents and to adopt specific measures designed to remove VE contents and fake news. It also recommends to adopt a public health based approach to preventing VE which can monitor and address risk factors to safeguard digital data in consistent with United Nations Universal Declaration of Human Rights without jeopardizing privacy

- Considering the VE groups that fell within the designation of sanctioned organizations as recognized by the United Nations, between 0.8% and 0.05% of Bangladeshi Facebook users residing in Bangladesh interacted with VE content.

- Bangladeshis working abroad (principally young men) appear to be at most risk. Up to 2.3% of Bangladeshis working in Bahrain access VE content (based on 100,444 Bangladeshi foreign workers in Bahrain). A similar pattern was found in other countries hosting Bangladeshi foreign workers: 1.9% in Oman and Singapore, 1.7% in Malaysia followed by Qatar (1.3%); Saudi Arabia (1.1%); Kuwait (0.9%); and the UAE (0.8%).

- Violent extremist narratives target niche communities and lack mainstream appeal.

- Fake news, deliberate misinformation and religious incitement appear to be a greater driver of violence than violent extremist content.

- Top 3 online VE narrative content posted in Bangladeshi cyberspace:



- Religious justification for Jihad;
- Discrimination against perceived unbelievers;
- Western violence/ discrimination towards Muslims.

- Rohingya issues have gained widespread attention among VE groups and will likely emerge as a significant narrative within the VE community.

**Source:** SecDev (2017), abridged report on Violent Extremist Narratives and Social Media in Bangladesh

standards/ rights, developing and deploying specific awareness programmes to enhance social media literacy by working with women and youth groups.

## List of Recommendations for Improving Cyber Security:

 <b>Do</b>	 <b>Don't</b>
<ul style="list-style-type: none"><li>✓ Use strong password with frequent numbers and symbols;</li><li>✓ Use multi-step account verification for logging in from a remote location;</li><li>✓ Be aware of privacy settings;</li><li>✓ Use a secured connection;</li><li>✓ Verify unknown requests on social media before accepting;</li><li>✓ Verify links, attachments on email even from trusted contacts before downloading;</li><li>✓ Be cautious when sharing the personal information with third party apps and extensions;</li><li>✓ Use parental controls and monitor your children's internet activity;</li><li>✓ Use One Time Passwords (OTPs) for transactions;</li><li>✓ Use anti-virus and internet security;</li><li>✓ Shop online on verified sites;</li><li>✓ Report to law enforcement agencies if bullied or harassed online;</li><li>✓ Respect the online privacy of others;</li><li>✓ Keep a record of the online transactions and important chat history.</li></ul>	<ul style="list-style-type: none"><li>✗ Share password of email, credit card number, or PIN number on a suspicious platform;</li><li>✗ Provide more personal information than necessary;</li><li>✗ Share anything that can incite religious or ethnic tensions;</li><li>✗ Share your current location on social media;</li><li>✗ Share pictures of children or their school;</li><li>✗ Meet someone you met online for a casual outing;</li><li>✗ Use unlicensed products;</li><li>✗ Use public wifi to access personal data;</li><li>✗ Store banking information, personal photos, or sensitive documents in online cloud storage;</li><li>✗ Fill out unknown online survey forms that require personal information;</li><li>✗ Save password for emails, banks, office and social networks.</li></ul>

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## Understanding the State of Violence in Bangladesh through the Lens of the BPO

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The Bangladesh Peace Observatory (BPO) has recently upgraded its Open Access data (OAD) platform. The platform is now being augmented with new analytics and mapping tools. In addition, the BPO has recently introduced a new data collection initiative, under which the OAD platform will now autonomously collect violence data from carefully-selected news outlets rather than relying on secondary data

collection sources. At the moment, the BPO collects information from four newspapers (two English, two Bangla dailies- *The Daily Star*; *New Age*; *Prothom Alo* and *Ittefaq*). These were chosen based on their level of national circulation and the depth of their violent incidence coverage. The following box provides further information on selection criteria.

The Daily Star	Prothom Alo	The Ittefaq	New Age
<ul style="list-style-type: none"><li>▪ Highest circulated English daily in Bangladesh.</li><li>▪ Wide acceptance among scholars and professionals.</li><li>▪ Member of BPO advisory group.</li><li>▪ Has the best electronic archiving system in Bangladesh.</li></ul>	<ul style="list-style-type: none"><li>▪ Leading Bengali daily newspaper.</li><li>▪ It has the second highest circulation number.</li><li>▪ The daily is considered as one of the most influential newspapers of current times.</li><li>▪ Maintains a good archiving system.</li></ul>	<ul style="list-style-type: none"><li>▪ Ittefaq is one of the oldest dailies of Bangladesh.</li><li>▪ It has a rich tradition and greatly contributed to our liberation struggle.</li><li>▪ The paper is renowned for its comprehensive coverage of crime and violence in Bangladesh.</li></ul>	<ul style="list-style-type: none"><li>▪ New Age is fourth highest circulated English daily in Bangladesh.</li><li>▪ Covers a broad range of news in Bangladesh.</li></ul>

### Violence data analysis (May- July 2017):

Based on the aforementioned newspapers, the OAD platform recorded a total of 346 violent incidents across the country from May to July.

In **May**, 135 violent incidents were recorded. Around 25 violent clashes took place and a majority of them involved

political parties. In these incidents, 15 people were killed, 347 people were injured and 32 people were arrested. The prevalence of such violence was higher in Dhaka, Habiganj, Narsingdi, Chittagong and Jhenaidah districts than other districts in the country.

At least 25 physical assaults took place in May across the country. The BPO has coded physical assault as one-sided violence by an individual or small group against another individual or small group, including stabbings and shootings. In these physical assaults, 19 people were killed, 35 people were injured and seven people were arrested.

In May, at least seven gunfight incidents and a crossfire case were recorded, in which a total of 14 people were killed, 8 injured, and 7 arrested. Most of these incidents took place between fugitives and law enforcers.

Rape, attempted rape and sexual harassments were the top violent incidents recorded this month. At least, eight incidents were recorded across the country, while nine women were victims of sexual assault. Six people were arrested so far by the law enforcement agencies in these incidents.

In **June**, the OAD platform recorded 137 violent incidents across the country. At least 50 physical assault incidents took place this month. In these incidents, 44 people died, 11 were injured and 38 were arrested.

In the same month, 16 violent clashes were observed in Sirajganj, Patuakhali, Thakurgaon, Chandpur, Kushtia, Sylhet, Chittagong, Mymensingh, Gopalganj, Dinajpur and Munshiganj districts. In

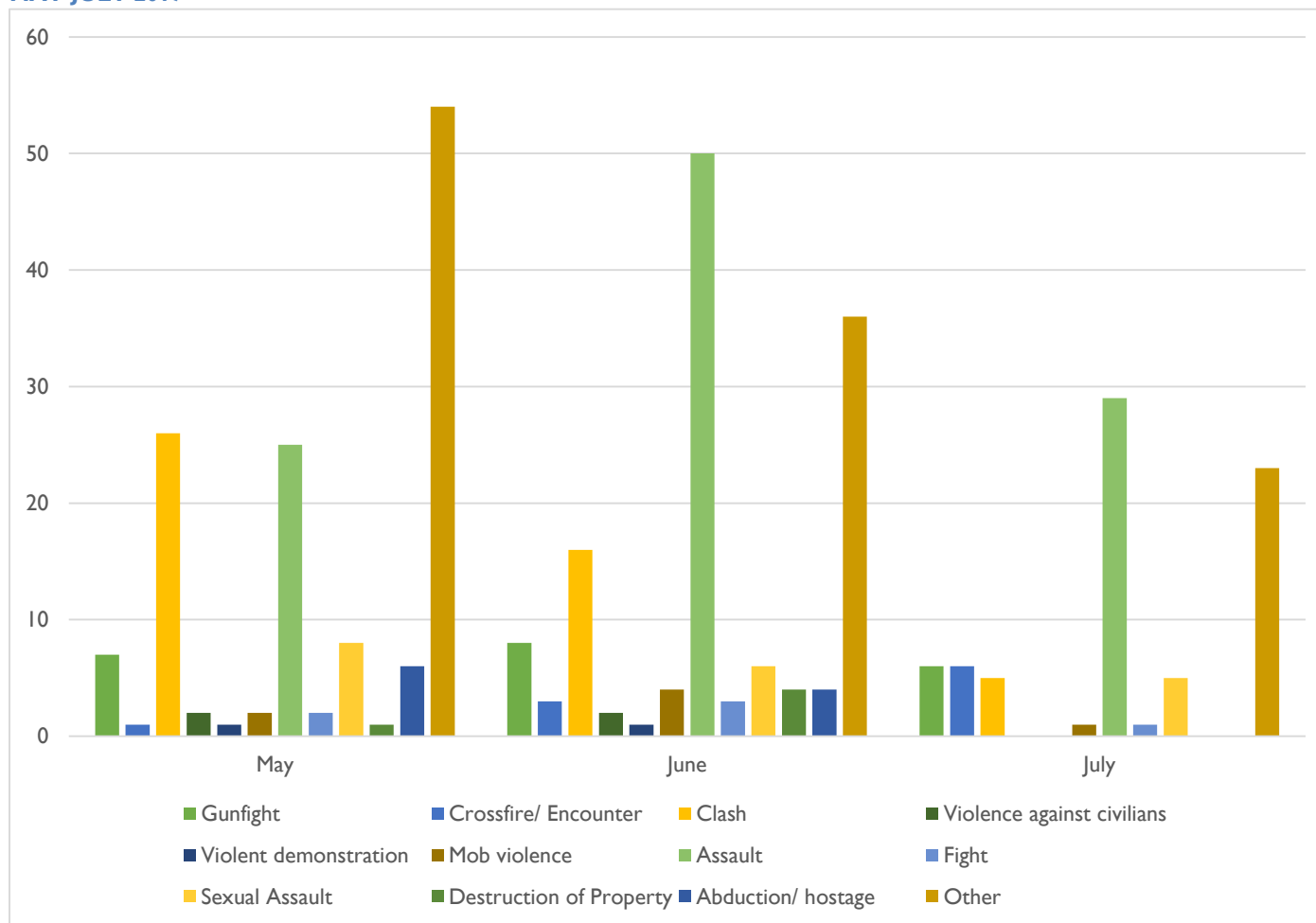
these incidents, 13 people died, 200 were injured, and 35 were arrested.

Eight gunfights and three crossfire incidents were reported in June. Most of the incidents took place between alleged criminals and law enforcement agencies. At least 14 people were killed, seven were injured and 22 arrested. The three crossfire incidents took place in Pabna, Jhenaidah and Brahmanbaria districts. At least five people were killed and 10 were injured.

Six sexual assault are reported in the newspapers in the month of June, where seven women were injured. Police were able to arrest three people associated with the incidents.

In **July**, a total of 76 incidents were recorded by the OAD. The number of crossfire and gunfight incidents was highest in this month, with six gunfights and six crossfire incidents resulting in 11 deaths and four injuries. All of these incidents happened between law enforcers and convicted criminals. The crossfire incidents took place in Dhaka, Brahmanbaria, and Khulna districts. At least 29 physical assault cases were recorded this month. 20 people were killed, 19 were injured and 10 were arrested in these incidents.

**FIGURE 9: VIOLENT INCIDENTS IN BANGLADESH RECORDED BY BPO OPEN ACCESS DATA PLATFORM DURING MAY-JULY 2017**



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## Understanding Violent Extremism: The Case of Bogra

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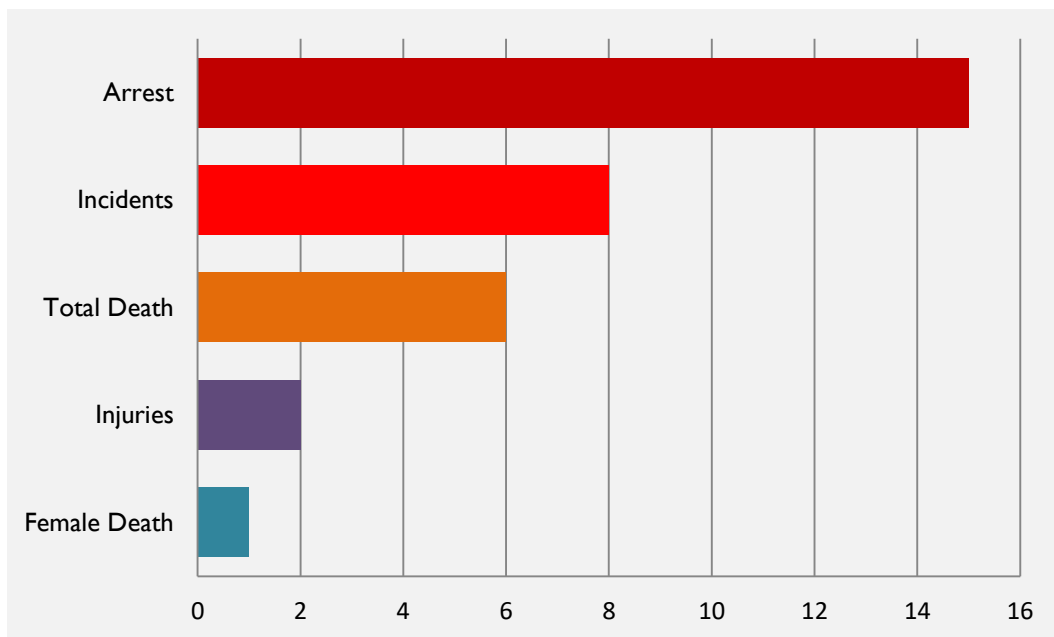
Bogra is abode of numerous char lands located at the bank of the river Jamuna. Charlands in Bangladesh are poverty ridden and socio economically backward areas. They are also very remote areas often very difficult to access. As a result, charlands often remain outside the radar of the law enforcing agencies resulting in heightened criminal activities in char and adjacent areas. In recent months it is found that the extremists used some of the chars of Gaibandha and Bogra districts as their

hideouts and training camps.

In terms of violence and extremism, the district did not stand out as distinctive in the past. In recent years there, were reports of heightened intolerance and violence in the district. According to the BPO print media review, during May- June 2017 there were 8 incidents, of religio-centric violent extremism in the area. In these incidents, 6 died, 2 were injured, and 15 were arrested (figure 10).

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**FIGURE 10: VIOLENT EXTREMISM IN BOGRA (MAY-JUN 2017; SOURCE: BPO)**



Case	General Observations	Findings
<ul style="list-style-type: none"> <li>•Name: Mr. Dalim</li> <li>•Profession: NGO worker</li> <li>•Location: Bogra</li> </ul>	<ul style="list-style-type: none"> <li>•Majority of women wear Borkha and Hijab;</li> <li>•Majority of the people are deeply religious;</li> <li>•Willingness to talk about extremism varies from area to area;</li> <li>•Manifestation of strong body language;</li> <li>•People talked about religio-centric tensions.</li> </ul>	<ul style="list-style-type: none"> <li>•People of Char are very connected;</li> <li>•Local people keep outsiders in watch;</li> <li>•Locals blame outsiders for violence;</li> <li>•Most of the people blamed America and International Politics;</li> <li>•Majority of individuals possessed religious sentiment.</li> </ul>

Dalim hails from Bogra city. According to him, “Bogra has seen significant development following the construction of the Jamuna bridge. This made the city a de facto capital of North Bengal”. Bogra is traditionally a stronghold of the Bangladesh Nationalist Party (BNP). Dalim narrates, “I have been working as a development worker in NGOs for the last 15-16 years. The situation of Bogra Sadar is terrible.... Teachers of schools and Imams of mosques act as de facto opposition party ....many Hindu girls are wearing Hijab for security reasons.... Religious intolerance has increased.” There is an interesting rumor among the supporters of Delwar Hossain Sayeedi in Bogra that his face was seen in the moon. Regarding this rumor, Dalim said, “you have no idea what people call him. He is Allama. There are many places in Bogra where you cannot say a single word against him. They will just kill you....There is no concept of tolerance in Bogra. They cannot tolerate different views...When the verdict of Kader Molla was given, hujur called a waaj maahfil, and asked his supporters in the waaj ‘do you want this government?’ his words made the people crazy, they came out of the waaj mahfil with knives, machetes; chopped down the trees beside the streets.”

Dalim went on, “I knew Bangla Bhai\* He was senior to me in our school. He believed that he will go to heaven for his actions. He was killed in a suicide blast..... in my village there were 17 young people who were enlisted by the police as they are involved with JMB. They were arrested. They are moving freely now. Why? Because they have connections in almost every sector of the administration.” Dalim claims that “There are more than one JMB training center still operating in the Bogra Sadar and the char areas. The administration is well informed about such facilities. But they take no action. The whole administration is involved. SP is a very tactful officer; I suspect even he is involved.”

\***Bangla bhai:** Siddique ul-Islam, known popularly as Bangla Bhai, was a Bangladeshi extremist and military commander of the Al Qaeda affiliated radical Islamist organization Jagrata Muslim Janata Bangladesh (Awakened Muslim Masses of Bangladesh).

*“Peace TV (the channel of Dr. Zakir Nayak) is closed by the government just because jongis said that they were inspired by him. But the government allows telecasting the Hindi serials in Hindi channels. Seriously!! These Indian channels need to be shut down as well. Every second, the characters in these serials plot against each other in their family. People are learning to plot against each other from these. These are the conspiracy to destroy the believe of Muslims. They want to destroy the Iman of Muslims.”*

**- Harun  
Imam, Bogra Sadar**

*“At 2.00 AM, they were announcing in mike that Delwar Hossain Sayeedi was seen on the moon. Within a few moments that led to a massive movement. We heard the noise of gun fire and fluster at dawn. Almost several thousands of people were out with blunt and sharp weapons in their hands in order to break the ‘Ganajagaran Mancha’. Almost ten to twelve people were dead because of this religious orthodoxy. Just think how pathetic the situation was. How come they believe that Sayeedi was seen on the moon?”*

**- Shishir  
NGO Worker, Bogra Sadar**

*“I do not know whether the Police or RAB arrests the real jongis or not. I believe these jongis are not sure themselves why they are doing this. Jamaat or Shibir can be a part of this but not all of them are part of the jongi activities. Some people blame Madrasa education system. But Madrasa is part of this country since the British period. Actually the family bonding is not there. That’s the reason of increasing problems.”*

**- Sumaiya  
Student, Bogra**

*“Some people ask for money during the time of Puja. When the Hindus refuse to pay then they vandalize their idols. That’s all about the money. In the Sariakandi Bazar, you can see many rich Hindu families. They possess so much assets that could allure people.”*

**- Ali  
Rickshaw Puller, Bogra**

*“Mobile is the main reason for young people being spoiled. Due to this mobile technology, people are losing respect for each other. You will find that young people are busy with internet in mobile all the while. Here you cannot expect anything from them. This is the means to destroy young people’s capacity for work.”*

**- Pramanik  
Farmer, Vatiyar Char**

*“We, journalists have been saying for years that, char is a very dangerous area for us and safe haven for radicals. Since the rise of Bangla Bhai, we have spotted some areas which are breathing spaces of extremist activities. Bogras’ chars are one of them. Recently, I visited an uninhabited char. It took me more than half an hour to reach there. The worst is that, the administration does not have the records of exact number of chars in their papers. They are impassable and situated in very remote areas. Another interesting thing is that, chars have many trees and some have deep jungles. In the middle of these jungles, fugitives chop down trees and develop their den in the area in such manner that you will never find a clue. Furthermore, if you want to travel there you have to be concerned about your security. If you get killed, no one could ever find you. So, it is possible that training centers could be found there.”*

**- Anonymous  
Journalist, Bogra Sadar**

FIGURE 11: E-COURT<sup>18</sup>

www.ecourt.gov.bd/citizen\_public\_view/new

আপনারাঙ্গের তত্ত্বাবধায় (Under the supervision of the Bangladesh E-Court)

অপরাধের তথ্য দিন (Enter the date of the crime) | গল্প নয় সত্যি (Story is not truth) | খবর (News)

অপরাধ সম্পর্কিত তথ্য (Crime related information)  
 \* চিহ্নিত ঘর অবশ্যই পূরণ করতে হবে (আপনার তথ্য সম্পূর্ণরূপে পোশন রাখা হবে) (Marked house must be filled (your information will be fully provided))

আপনার তথ্য (Your information)

নাম (Name) | পোনাম (Surname)

জাতীয় পরিচয় পত্র নম্বর (National ID Number) | ই-মেইল(ইংরেজিতে দিখুন) (Email (in English))

ঠিকানা (Address) | নারী / পুরুষ (Female / Male)  
 নারী (Female) |  পুরুষ (Male)

অভিযোগের বিবরণ (Complaint details)

অভিযোগের বিষয় (Subject of complaint) | ঘটনার তারিখ (Date of incident) | ঘটনার সময় (Time of incident)  
 বাছাই করুন... (Select) | yyyy/mm/dd | 10:40 AM

ঘটনার বিবরণ (Incident details)

অভিযোগ সংক্রান্ত প্রমাণাদি সংযুক্ত করুন (যদি থাকে) (সর্বোচ্চ আইন সাইজ 1MB) (Attach evidence related to the complaint (if any) (Maximum file size 1MB))

ঘটনাস্থলের বিবরণ (Incident location details)

বিভাগ (District) | জেলা (Upazila) | উপজেলা / সিটি কর্পোরেশন / মেট্রোপলিটন (Upazila / City Corporation / Metropolitan)  
 বাছাই করুন... (Select) | বাছাই করুন... (Select) | উপজেলা (Upazila) | সিটি কর্পোরেশন (City Corporation) | মেট্রোপলিটন (Metropolitan)

ঘটনাস্থল (Incident location)

(যদিও গ্রাফ কেভিটি ইংরেজিতে দিখুন) (Even if the graph is in English, please write in English)

GyupKA (Logo)

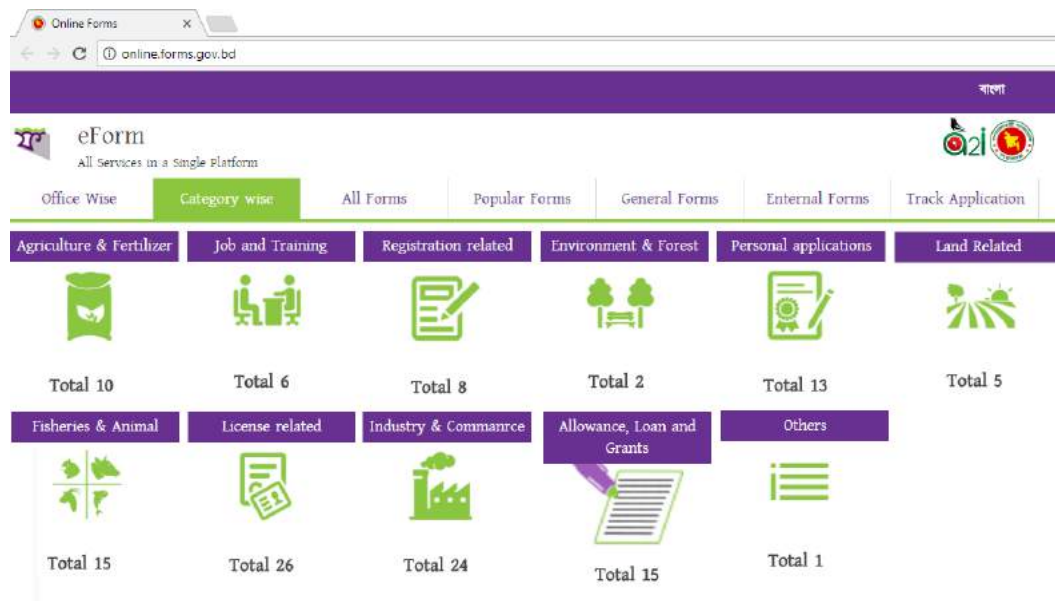
উপরের কোডটি দিখুন (Enter the code above)

প্রথম পাতা (First page) | প্রেরণ করুন (Submit)

সিস্টেম সম্পর্কে (About the system) | সহযোগিতায় (With cooperation) | সচরাচর জিজ্ঞাসা (Frequently asked questions) | ভিসিট্রোর (Visitors) | ব্যবহারের শর্তাবলি (Terms of use)

<sup>18</sup> a2i (2017), Adaloter totthya abong seba kathamo. Accessed: 20 June 2017. available at: [http://www.ecourt.gov.bd/citizen\\_public\\_view/new](http://www.ecourt.gov.bd/citizen_public_view/new)

**FIGURE 12: e- FORMS OF BD<sup>19</sup>**



<sup>19</sup> a2i (2017), e-forms, Accessed: 20 June 2017, available at: <http://online.forms.gov.bd/>

FIGURE 13: BANGLADESH NATIONAL PORTAL<sup>20</sup>

The screenshot displays the Bangladesh National Portal (www.bangladesh.gov.bd) as of July 12, 2017. The header includes the portal's name, logo, and statistics: 58 Ministries & Institutions, 353 Directorates & Offices, 8 Divisions, 64 Districts, 491 Upazilas, and 4554 Unions. A search bar and social media links are also present.

The main navigation menu includes: Home, About Bangladesh, e-Services, Service Sectors, Trade & Business, Foreign Investment, Law & Policy, Achievements, District Portals, Service Portal, and Forms.

The central banner features the 'FORMS PORTAL' and 'service portal' logos, with the tagline 'All forms in a single address'. Below this is a grid of service icons categorized under 'Popular', 'New', 'Mobile', 'Office', and 'All e-Services'. Services include Admissions, Treasury Invoice, Recruitment, Ticket Booking & Purchase, Passport, Visa and Immigration, Agriculture, Fisheries and Livestock, Utility Bills, Online Application, Online Registration, Postal and Courier, Training, Income Tax, Education, Radio, TV News, Vehicle Services, Finance and Trade, Health Services, and Ask Your Question.

On the right side, there are several service tiles: SSC & Equivalent Results, Apply Online For Service, Government Job Circular, উত্তরাধিকার, বাংলা (Succession, Bangladesh), Policies, and Digital Guard File. Below these are 'All National Portals' with a dropdown menu, a 'Feedback' button, and a 'Beautiful Bangladesh' video player.

At the bottom, there are promotional banners for 'বাংলাদেশ ফরম' (Bangladesh Form), 'ভিশন 2025' (Vision 2025), 'visit Bangladesh', 'স্বাস্থ্য থেরাপি' (Health Therapy), 'সেবাকুঞ্জ' (Sevakunj), and 'eBOOK'. A 'Popular Contents of this week' section lists 10 items under 'Services', 'Pages', and 'Portals'.

The 'Services' list includes: 1. জাতীয় পরিচয়পত্রের তথ্য হালনাগাদকরণ, 2. জন্ম ও মৃত্যু নিবন্ধন, 3. এসএসসি, দাবিদা ও সম্মানচারে পরীক্ষার ফলাফল, 4. অনলাইন ভিসা আবেদন, 5. অনলাইনে শাসনপত্রের আবেদন, 6. বাংলাদেশ পেশা বাতিল, 7. সরকারী চাকরির আবেদনের মডেল ফর্ম, 8. মৃত্যু কোডের নিবন্ধন, 9. প্রাথমিক সনাক্তী পরীক্ষার ফলাফল, 10. সরকারি ফরমস।

The 'Pages' list includes: 1. স্বজন্মকর আপলোড | Department of Youth Develo..., 2. Notice | Department of Agricultural Inte..., 3. Circular | Department of Social Services..., 4. Circular | Department of Social Services..., 5. চালুসীল আবেদন ফর্ম | Bangladesh Hi-Tech P..., 6. সেন্সাসফর্ম | Bangladesh National Portal | ..., 7. 23 06 2017 তারিখে জারিকৃত উপজেলাবিশি সনদ ..., 8. Machine Readable Passport(MRP) Fee (Bang..., 9. Job Circular for Class 3 & Class 4 V..., 10. Under Construction | Ministry of Liber...

The 'Portals' list includes: 1. ds.gov.bd, 2. dia.gov.bd, 3. www.forms.gov.bd, 4. dip.gov.bd, 5. moypm.gov.bd, 6. dne.gov.bd, 7. dae.gov.bd, 8. bangladesh.gov.bd, 9. dyd.gov.bd, 10. bhpa.gov.bd.

Additional features include a 'Feedback' button, a 'Beautiful Bangladesh' video, and a 'Popular Contents of this week' section. The bottom right corner shows a 'Tweets by @a2i\_bd' section with a 'More...' button and 'Embed' and 'View on Twitter' options.

<sup>20</sup> a2i (2017), Bangladesh national portal. Accessed: 19 June 2017, available at: www.bangladesh.gov.bd



## GLOSSARY

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**Alim:** Higher secondary school level of formal education provided under Bangladesh Madrasah Education Board.

**Allama:** An Islamic honorary title for knowledge on religious jurisprudence and philosophy.

**App:** An abbreviated form of the word "application" which refers to downloadable software program for devices to perform specific functions.

**Biometric SIM:** A SIM card for mobile phones which has personal details of the user obtained through biometric authentication.

**Bugs:** An error in a software program causing it to unexpectedly quit or behave in an unintended manner.

**Dakhil:** Secondary school standard of formal education provided under Bangladesh Madrasah Education Board

**Dridex malware:** Online banking software that steals personal information through HTML injections.

**E-mail bombing:** A type of internet abuse to send massive

amount of e-mail to a specific person or system causing malfunction in server.

**Fiber-optic cable:** A high-speed data transmission medium which uses glass (or plastic) threads (fibers) to transmit data to ensure minimum loss of strength.

**Granularity:** The scale or level of detail presented in a set of data or other phenomenon.

**Hujur:** A formal title used by the followers to address and show respect to Islamic preachers.

**Iman:** A believer's faith in the metaphysical aspects of Islam.

**Madrasah:** Educational institution for the study of Islamic theology and religious law as major where other subjects are also taught.

**Multi-step account verification:** Other measures such as OTP, email verification, SMS, voice recognition, pattern password etc. than entering password to enter into online accounts or doing financial activities

**Online freelance work:** Service which does not require

physical presence of the person into physical workplace.

**Smart national identity card:** Digital National Identity Card commissioned by government that carries all information of the cardholder to be used for various purposes.

**Submarine cable:** A cable laid on the sea bed between land-based stations to carry telecommunication signals across stretches of ocean.

**SWIFT network:** A network used by banks and other financial institutions to quickly, accurately, and securely send and receive information such as money transfer instructions.

**Wi-Fi:** A wireless networking technology allowing computers, smartphones, or other devices to connect to the Internet wirelessly within a particular area

**WiMax:** A wireless technology that provides wireless internet service over longer distances than standard Wi-Fi.

**Waja Maahfil:** Gathering of Islamic preachers and followers.

## The Bangladesh Peace Observatory Project



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