



Building up Digital Bangladesh: Role of Armed Forces Vis-A-Vis Self Digitalization

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INTRODUCTION

1. Bangladesh is aspired to be fully digitized by 2021 through application of third generation information and communication technology (ICT). This is a tool that will help accelerate economic development and increase competitive edges of Bangladesh in the world market. Wide-scale digitization is likely to help Bangladesh become a mid-income country sooner than otherwise possible.

2. The goal of mass digitization is to accelerate a national decision-making process and to implement the decisions, monitor the performance of the government functionaries at all levels starting from the national parliament through the ministries, administrative offices at districts, upazillas and down to the schools at village levels; evaluate the results at each level and if necessary adopt corrective measures. As an effective optimizer of government policies, beside all the government masonries, "Bangladesh Armed Forces" played a pivotal role in developing various sectors of the country since independence. Making of National ID card by the Armed forces is one of the marches forward towards the digital Bangladesh. As such, Bangladesh Armed Forces being one of the premier organizations need to be digitalized as part of the Digitalization as well.

3. Broadly speaking, a digital society ensures an ICT driven knowledge-based society where information will be readily available online and where all possible tasks of the government, semi-government and also private spheres will be processed using state of the art technology. In other words, it is necessary to establish technology-driven e-governance which includes e-administration, e-commerce, e-production, e-agriculture, e-health etc. In light of the aforementioned discussion, this paper will highlight the concept of digital Bangladesh in implementing the plan in the sector of governance, commerce, education, agriculture coupled with the ways and challenges, the possible role of the armed forces in this regard vis-à-vis the integral infrastructural digitalization of the armed forces as a part of digital Bangladesh.

CONCEPT OF DIGITAL BANGLADESH

4. **Digital Bangladesh Concept** Digital Bangladesh means the country will become digitally infrastructured. This policy mainly goals on: A broadband infrastructure with access for every Bangladeshi from their homes, work places, schools, telecentres with technologies like Wimax and 3G Network.

- A digitally literate population and workforce.
- A digitally enabled nation, providing e-government information and service at regional level.
- Digital business development with Internet in business and e-commerce.
- Internationally competitive information and communication technology, human capacity and business.

5. **Dimension/Proposed Plan to Implement the Concept.** The core dimension or planning nodes for digital Bangladesh centres on:

- a. E governance
- b. E Commerce
- c. E Education
- d. E Agricultere
- e. E Healthcare
- f. E Service
- g. E communication

6. **Progressive Steps vis-à-vis Pre-requisite to Implement the Concept.**

a. **Infrastructure Développement.**

(1) **Education.** A separate digital network should be built to connect all the educational institutes to share resources, teaching materials and research work which is a dire need in materializing e- education.

(2) **Local Government.** For any Good-governance, Local Government is the vital and crucial and in Bangladesh this is our Upazilla administrative unit. Digitalization policy aims to enrich it first.

(3) **Ministerial/Secretariat Level.** Different ministries though have implemented their websites; they only disseminate information on their respective sites. To aid the solution of this problem, the ICT ministry and its subsidiary, Bangladesh Computer Council (BCC), should be strengthened.

b. **Budget Allocation.** Government being the sole provider of e-governance is trying to create, manage and sustain the ICT infrastructure with required financial support. But the budget remains a constraint for the government.

c. **Education at Primary to Tertiary Level.** Right now, our public educational institutes from primary to secondary levels, are facing severe crisis in rendering quality education for various reasons. At tertiary level too, the quality of education is not up to the mark. To make a Digital Bangladesh, a good number of research oriented innovative young workforce is required.

d. **Recruitment of Skilled Personnel in Various Sectors.** Skilled manpower needs to be developed. We need to train our teachers. At the same time, from all the politechnique institutes, the graduates and the diploma holders are to be fed in the ICT system.

7. **Challenges and Dilemmas.**

a. **Poor Education Level of Mass People.** English literacy rate in Bangladesh is less than one percent. English literacy is a must for our ICT development. Unfortunately, in this case our position is the worst in the sub-continent.

c. **Poor Infrastructure of Power Sector and Power Deficit .** Latest statistics reveal that Bangladesh faces a power deficit of up to 2000 MW against a demand of 5000 MW daily. It may be noted that for proper ICT development an uninterrupted power supply is a must.

c. **Use of Internet.** For the ICT development, Internet users of the country must be increased. The latest statistics (ITU, 2007) revealed that Internet usage in our country is only 0.3%. Whereas, in Pakistan and India, it is 7.3% and 5.3% respectively.

ROLE OF ARMED FORCES

8. **Recent Contribution of Armed forces in National Development .** Following are the contribution those are being contributed by the army in the recent past:

- a. National ID Card and Voter List .
- b. Chittagong Port Automation.
- c. Machine Readable Passport
- d. Expansion of BTRC

9. **Future Role of Armed Forces.**

a. **Assisting in Developing Central Database Integrating all National Resources of Bangladesh.** To coordinate the efforts of different government masonries, it is a dire need to formulate a central database integrating all the national resources. Armed forces can feed in with the statistics and data required as per the requirement of government offices with the help of “Bureau of Statistics”. Side by side, all the other ministries like “Ministry of Human resources”, “Ministry of Health” and “Ministry of Population and Human resources” can coordinate their efforts in conjunction with Armed forces.

b. **Assisting in Developing ICT Infrastructure at Local Government Level.** In conjunction with the “Ministry of Science and Technology”, the armed forces may be employed to develop the ICT infrastructure at local Government masonry down to Union Parishad level. It will not be a tough job to establish an wireless network by them in the corners of the country.

c. **Assisting in Developing Digitalized Countrywide Communication Infrastructure.** As mentioned earlier, the remote areas like Chittagong Hill Tracts and shore areas like Kutubdia, strategic Saintmartins, Hatia, Dakop , Boitaghata , Koira and other deep sea areas where the Navy can only reach, it will be difficult for the government agencies to work efficiently. But with the required materials and minimum number of personnel from the ICT sector of the government, establishment and developing a countrywide communication infrastructure is very well possible. BAF aircrafts in this regard can be utilized to carry the required materials in those remotest places in the various corners of Bangladesh.

d. **Developing/Assisting in Developing Criminal Database for Law Enforcing Agencies.** Armed forces in this regard, may assist to develop a criminal database for the law enforcing agencies of the country taking the aid from the state of the art technology adopted by the RAB. Ministry of law and Ministry of Home Affairs may serve the guidelines to the armed forces while they reach to all the law enforcing establishments of the country to materialize this plan.

e. **Digital Mapping of Bangladesh.** This venture is highly required for our country in terms of urban planning, developing communication and transport infrastructures, and allocation of resources in the selected geographical area whilst planning for any development work etcetera. Armed forces can very well do this job in conjunction with Ministry of Information and statistics. Side by side, Ministry of communication may seek the help of armed forces to inquest for essential planning information required.

f. **Assisting in Developing Digitalized/ Automated Pay and Allowance System for all Government Officials with the help of Banking Sector.** Normally the pay and allowance system for the government offices still follows the age old clerical pay management system. Like the finance Control office of the army and other sister services, all the pay and allowance system of the government offices can be digitalized with the help of concerned banks.

g. **Digitalized Agro-Based Infrastructure Development.** The agriculture sector can grow phenomenally with proper implementation of IT with the help of the armed forces. Land management needs correct inputs. At the same time, by virtue of the capability of armed forces to reach to all the corners of the country, with coordination to Ministry of Agriculture and Ministry of Fisheries and livestock, they can collect all the relevant information to create and enhance an agro based infrastructure for Bangladesh.

Assist/Development of Digitalized DM System. In all the natural calamities, armed forces remain as the friend of people to help them in their need. With their experiences gathered, they may contribute to build up a digital database for disaster management masonries of the government. This database may be built up with the Bureau of Weather and Ministry of Disaster management to aid the preparedness to meet any natural disaster beforehand.

DIGITALIZATION OF BANGLADESH ARMED FORCES

10. **Probable Sectors.**

- a. **Office Automation.** The automated technology can be used for preparing, checking and distributing all day-to-day, weekly, fortnightly, monthly, quarterly, half yearly and annual reports and returns. The system can be used with customized software those can effectively manage various accounts used by the Army.
- b. **HR and Data Management.**
 - (1) **Force Level.** This system may be established down to brigade level to provide information about own deployment. Again, if used to aid the logistical venture, a computerized logistic system may cover planning of movement, ammunition dumping plan, rail/road/air situation assessment and planning, manpower reserves and their movement control and maintenance.
 - (2) **Arms Wise.** Arms and Services Record Office can manage the data regarding the officers, JCOs and other ranks of their respective arms and services.
 - (3) **Unit Level.** In the unit level, all the data regarding the members of the unit, their administration, all the training and administrative matters regarding the unit can be effectively managed through the use of ICT system and can be employed more effectively.
 - (4) **For Officers, JCOs and ORs.** Like Military Secretary Branch, Central Officers' Records Offices, Division Headquarters, Brigade Head quarters, Naval and Air Bases and units can use customized software for officers, JCO's and OR's data management and career planning.
- c. **Digitalized Communication.** The telecommunication system may include the digital voice terminals, analogue telephones, data terminals with data switching and packet transfer facilities, fax facilities, interface with civil authorities and in-built security systems which armed forces may use aiming to achieve synchronization.
- d. **Digitalized DM Cell .** As the dependable body of the government, armed forces are very frequently deployed to aid the people in case of after natural disaster situation. Hence, to remain prepared beforehand, armed forces in conjunction with the "Disaster Management Cell" of Armed forces division and " Ministry of Flood and Disaster Management " may work together to formulate the most effective functional mechanism during the time of need.
- e. **Updated Databank for in "Aid to the Civil Power".** In the context of present socio-political environment, it is likely that armed forces will be deployed in various requirements with the vivid responsibilities. To smoothen up the process, armed forces may built an updated databank for "In Aid to the Civil Power" comprising all the necessary information required for paramount efficiency in this regard.
- f. **Digital Military Mapping.** Unfortunately, armed forces of our country are still using the age old British maps, which are very little deviated from the time immemorial. As such, modern technologies like "Global Positioning System" and "Goggle earth" are to be employed to formulize the most updated maps for the better professionalism of our armed forces. With the help of digitalized equipments, this necessity can be fulfilled.
- g. **Integrating Modern Surveillance Equipment.** A computerized surveillance system will be comprised of the following:
 - (1) Long term data base.
 - (2) Intelligence analysis and communication of updated intelligence picture.
 - (3) Firepower analysis.
 - (4) Early warning.
 - (5) Identification of targets for the electronic counter measure effort.
 - (6) Correlate Intelligence with data available in all Intelligence organization.

11. **Suggestive Measures.**

- a. **Establishment of Joint Surveillance Cell in AFD.** A joint EW cell may be established at AFD to collect, collate and disseminate the information gathered by various EW means amongst sister services.
- b. **Centralized Planning for Developing Communication Infrastructure.** All three services should carry out centralized planning for developing integrated human resource and data infrastructure. Thus compatibility of manpower and other resources between sister services can be developed and economy of effort can also be achieved.
- c. **Computer Training. /Workshop.** There is a need to organize conferences/workshops on the subject of command, control and

communication system for the armed force members where the users can freely interact with the planners and designers of various systems.

d. **Availability of Customized Software.** The software available in the market does not meet requirements of the army in totality, which necessitates development of customized software for the Armed forces. Tactical and logistic decision- making software and other administration aid software are required to be endeavored basing on the customized requirement of the armed forces in particular.

CONCLUSION

12. To make a Digital Bangladesh as envisioned by the government, it is required to assess the relevant issues, for instances, ICT infrastructure, trend of e-Commerce, availability of ICT professionals, and competence of different sectors of the government in the contemporary Bangladesh. Based on such an assessment or baseline survey we need to adopt a holistic approach in designing a roadmap for digital Bangladesh.

13. As the most efficient and dependable masonry of the government , Bangladesh armed forces bears immense scopes to work with the civilian bodies and other government agencies to develop the socio-economic infrastructure of the country. Myriads of scopes are prevailing to utilize the potentialities of the blended brains of the armed forces in conjugation with the civilian master minds. Different ministries, bureaus and other civilian agencies may step forward to work in conjunction with the armed forces, which will definitely make the “Digital Bangladesh” dream into a reality.

14. Last of all, armed forces being a part of the digital Bangladesh should get the equal attention. The integral infrastructural development of the forces to be indexed to priority. Introduction of office automation will propel the working spirit. Coupled with this, the customization of required materials would be essential to meet the necessities of the forces. Adequate training and activation of the potentialities of the force personnel will add square boosts to the national development towards digital Bangladesh at large.

RECOMMENDATION

15. Basing on the above discussion following are recommended:

- a. Government should work out the specific and achievable roadmap to materialize digital Bangladesh prospect with a view to attain the goal in case of governance, economy, education, agriculture and other related arenas.
- b. Standing policies should be formulized to smoothen up the involvement of armed forces whilst working in conjunction with the other government agencies in order to achieve the digital Bangladesh goal within the desired time frame.
- c. Armed forces division should chalk out a plan in conjunction with the Army, Navy and Air Headquarters to weigh out the avenues of improvement in line with the roadmap of digital Bangladesh in particular.

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