

# **Protection of Consumer Interest by Standardization and Quality Control**

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## **Introduction**

The contemporary business world is swayed by consumer demand for quality products and services. The term quality may be defined in many ways. However, a simple definition of quality may mean the attributes of a product or service, which, as perceived by the customer, make the product or service attractive to them and gives them satisfaction. Basically quality refers to fitness for purpose/use and or conformance to requirements. (B. Dale & G. Cooper, Total quality & human resources. Infinity books. 2000)

Products and service quality provides a significant business opportunity and a key business strategy today. In fact many business houses claim that focusing on standardization and quality is now their number one strategy. By standardizing products and services and ensuring quality, manufacturers and traders are able to enjoy consumer confidence and loyalty, which are key to profitability of a company. Spectacular success of Japanese automobile companies in manufacturing and American company Walmart in retail trading are cases in point. To be more precise protection of consumer interest is a must for the own interest of business itself.

Philip Kotler the great marketing guru says that the marketer of a product needs to think through five levels of the product where each level adds more value to customers, and the five constitute a customer value hierarchy. (Philip Kotler, Marketing Management, Prentice Hall Inc. 2002) His suggestion to business people is that the best way to get and keep customers is to give them more for less. Apparently, if every businessman heeds to Kotler's counsel consumers will have nothing to complain about.

## **The Standard**

The genesis of world and the process of evolution tell us that standards were invented billions of years ago and it exists in all biological organisms. Biological control and actions are based on responses to those stimuli, which are a departure from standard. Mankind has reinvented the concept of standards. If we analyze the evolution of human society we see that primitive people had to judge whether fruits, fish, vegetables or meat were fit to eat. They had to develop standards for communication, for trade, for defense.

In the same way business managers have reinvented standards. Knowledge of performance is not adequate to judge an employee, they must have a basis for comparison before they can act or take decision. The concept of standard does not mean simply the numbered quantities-budgeted profit, scheduled deliveries, specified carbon content. It extends to wide range of business practices as well.

Standards are used in all places but masquerade in different jargons. In the market standard for selling is called quota, in the research laboratory is called specification, among the finance people it is called budget among the consumers it is the quality product.

Sometimes it is the producers who set the product standard sometimes it is the consumers who decide on it. Consumers have the ultimate say in the success of a product. The product may be well accepted or rejected by the consumers. That is why the business houses are so keen to learn from the consumers what they prefer and what they like. The whole business of test marketing is to get the feed back from the consumers.

In fact a strategy of customer faced value chain devotes entirely in identifying customer needs and satisfying that to the fullest extent. If business houses go for product standardization and quality management the customer's interests are automatically protected. It is for the best interest of their own, business houses should safeguard the interest of the consumers. However, in the absence of legal deterrent and watchful eyes of conscious consumers in Bangladesh the standardization of product and quality management is yet to set the tune in market.

The key issues of standardization are the standard weight, size, composition, ingredients, strength and many other features that go along with a quality product. In product manufacturing deviation from standard may occur from batch to batch and even units within the same batch. In view of that, manufacturers have to remain ever vigilant so as to ensure the standard of their products, which further require lot of testing, weighing and other kind of experimentation.

### **Quality Control**

Quality has many definitions and many meanings to different authors. However it is measured precisely when used as conformance to specifications but difficult to measure when used as product excellence. According to David Garvin (1987) about eight critical dimensions of quality can serve as a framework for strategic analysis which include:

1. Performance,
2. Features
3. Reliability
4. Conformance
5. Durability
6. Serviceability
7. Aesthetics
8. And perceived quality.

He suggested that a company need not pursue all eight dimensions simultaneously. Technology may be a limiting factor as improvement in one dimension might lead to worsening in another dimension.

Garvin's eight dimensions are good for measuring quality of tangible products but not for services. Zeithaml. et. al identified five dimensions of quality, which are,

1. Tangibles
2. Reliability
3. Responsiveness
4. Assurance
5. Empathy

### **Status of consumer products in Bangladesh**

Consumer marketing in Bangladesh is passing through a transition. The rise of consumerism globally has impacted on our market and a section of customers are now well informed and

conscious and demand standard and quality product. The popularity of some of the super markets as retail outlets justify this contention. Although this silver lining around the dark cloud augurs well we have yet to travel many miles before we can claim the situation as satisfactory. In general the market behavior is unfriendly to customers. There is a general tendency to short change the customers for quick profit.

In an economy where quality fails to play key role and the market is dominated by sub standard even fake and counterfeit products it is not only the consumers who suffer so do the honest manufacturers and traders. Reasons for such state of affairs are many of which some may be identified as under:

- a. Illiteracy and ignorance of general masses
- b. Inadequate provision of legal sanctions and absence of consumer protection act.
- c. Inadequate surveillance of government and government agencies. (BSTI being the only testing organization)
- d. Lack of adequate vigilance on the part of manufacturers association (absence of fair trading policies.)
- e. Lack of standardization of product and absence of total quality management
- f. Absence of strong consumer movement and consumer association

In order to check the reckless exploitation of consumers a few measures have been proved to be effective historically. These are:

1. Legal actions
2. Product standardization and quality control.
3. Role of consumer's association.
4. Voluntary controlling system by the producers and traders

### **1. Legal actions**

If we review the acts related to consumer protection we can cite the following; e.g. Trade Mark Act 1940, The control of essential commodities act, 1956, The pure food stuff ordinance 1959, Weights and measures ordinance, 1961, Essential commodities price & bond ordinance, 1970, Drug control ordinance, 1982, Weights & measures ordinance, 1982, breast milk substitutes ordinance, 1983. These acts are old and outdated and needs revision and major act on consumer protection is in the process of being enacted. It is disheartening to note that, except us all other countries in the region have upto -date and comprehensive consumer protection laws in order to ensure and enforce the rights of the consumers and protect their interest.

### **2. Product standardization and quality control**

Manufacturers and traders may do a great deal of service to themselves by standardizing their products and ensuring quality. If they are going to remain in business for long time it is a wise policy to take care of consumer interest. Companies that perform well in business generally listen to the customers and take their feed back. They focus their products specification to the likes and dislikes of the customers. In terms of product development a great deal of efforts are made to obtain customer choice in terms of colour, size, weight, shape and quality. This sort of endeavor makes their product an instant success immediately after launch. In Bangladesh we also see the customers and the consumers are keen to buy products from quality manufacturers and reputed traders.

However, the problem faced by the consumers is the plethora of fake and counterfeit products imitating the products of successful brand manufacturers. Fake and counterfeit products in the market imitating that of BATA, Lever Brothers, and British American Tobacco not only cause

enormous financial loss to those manufactures but also damage the confidence of the consumers to those brands.

In terms of product standardization, it is a common and popular notion in Bangladesh that companies once earning a goodwill of their products quality become complacent about it later and the quality of their products erode subsequently. The quality of food and the service you get from a newly opened restaurant diminishes overtime as many customers frequent them. This sort of allegations against our business houses speaks of lack of product and service standardization in our country. On the other hand customers and consumers would have remained loyal to the products and services if the standard could have maintained. Thus key beneficiary of product standardization and quality control is not only the customers but the producers as well. In fact this is a win and win situation where both the manufacturers and consumers benefit from it. Companies, which standardize its product and ensure quality normally, get the information from the reports on the following:

- a. Customer quality complaints
- b. Returns and claims from customers
- c. Quality of product compared to competitors
- d. Cost of inspection and test
- e. Cost of scrap, rework, other quality failures.

The process of quality control in a company may include among others the following:

1. Informational control
2. Control by personal supervision (process)
3. Operator control
4. Automatic control
5. Control by fool-proofing
6. Control by inspection (finished)

### **3. Role of consumer association**

As the name implies consumer associations are dedicated to protect the interest of the consumers and struggle for winning their rights in the society. In Bangladesh only a handful of organizations are performing this role. Consumer Association of Bangladesh (CAB) a pioneer in pivoting this role in Bangladesh has been instrumental in bringing the first ever consumer protection act so close to be enacted soon. We hope that the present government which first took the initiative to draft a consumer protection act in mid nineties will soon pass this act in parliament to safeguard the rights of the consumers and in Bangladesh and thus help to protect their interest. No doubt in the face of a vigilant consumer groups the rights and the interest of the consumers may hardly be compromised by anyone.

### **4. Voluntary control by manufacturers and traders**

Apart from standardization and quality control the business houses and chambers may impose voluntary control on those activities, which may be detrimental to consumers and their interest. One glaring example of this sort of activity is hoarding, price hiking and creating artificial crisis of consumer items. Flouting business ethics some traders may indulge in this sort of activities, which may be checked by business houses themselves by their chambers and associations. Ensuring fair trading and upholding the business ethics and not to profit from human misery can succeed more through voluntary control and less by imposition of harsh legal instruments.

## **Conclusion**

In the backdrop of the above scenario we are witnessing a qualitative change in the business environment, which is heartening to note. The business houses are now more matured in their thinking and have realized the importance of customer service and focusing on customers. In the retail trade sector we have already seen the emergence of the super market, which ensures the customers right to physically inspect a product and then buy which is a departure from practices of the traditional stores. Displayed products are graded, categorized and standardized and more customized to suit different segments of customers.

Increased competition in business has prompted the companies to focus more on customers and they are trying to attract their attention and offering them attractive packages. The recent changes in banking practices to become more customer friendly even by the local ones justify this point which is ultimately benefiting the customers.

Similar changes are happening in the telephone sector particularly in the cell phone sector. There are now a number of operators in the market where each one is trying to woo the customer with some thing the others lack. In the process we the consumers benefit. From a healthy competition in business major winner are the consumers.

The story is same with the real estate and developers where only the quality deliverers can survive in the long run and withstand the business downslide.

We hope the situation will further improve and the business people will try to standardize their products and ensure quality and offer their products at right price and right quantity so that the customers have nothing to complain about.

# **Uses of Nuclear Energy: In Bangladesh**

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It is true that the world has, for the first time, been aware of nuclear energy with the dreadful blasts in 1945 of “Little Boy” and “Fat Man” over Hiroshima and Nagasaki respectively. This is one side of the picture. The other side is for maintaining and enhancing the quality of life of human being. It is the peaceful uses of the same. The present paper deals with the latter uses only and more specifically it discusses about the truncated role of Bangladesh Atomic Energy Commission (BAEC) in promoting peaceful uses of nuclear energy in the country. Without nuclear power the role of BAEC is definitely truncated. At the moment, the introduction of nuclear power in Bangladesh is, to say the least, unthinkable.

The Presidential Orders-15 established Bangladesh Atomic Energy Commission in the year 1973 with the mandate to promote, among others, all peaceful uses of nuclear energy including nuclear power. As it has, in a legal sense, inherited Pakistan Atomic Energy Commission, activities, institutes, establishments situated in Bangladesh and rules & regulations that were in vogue, were handed over and adopted as the case may be. Although the program has been the continuation of the pre-liberated period, there are certain distinctive features in terms of objectives and hence the relevant strategy. Service Rules for its officers and employees were passed in 1985. For a long time, there were no legal instruments to control all radiological and other nuclear activities that naturally include harmful ionizing radiation. Nuclear Safety and Radiation Control (NSRC) Act 1993 (Act No. 21 of 1993) was passed by the National Assembly in 1993. The Nuclear Safety and Radiation Control (NSRC) Rules-1997 (SRO No. 205-Law/97) were notified in the Bangladesh Gazette on September 18, 1997. It is, of course, not ethical at all that same authority is simultaneously assigned to be the promoter and the controlling body of a particular field of activities. In view of the paucity of trained manpower in the specific field of specialization, there was, however, no other alternative at that time. As a matter of fact, before the enactment of the law referred to above, the proposal for the relevant law and the creation of a completely separate authority had been shuttled like a feather cock from one Ministry to the other. In view of highly technical and specialized nature of the job, no Ministry or authority was adjudged as suitable. Hence, the only pragmatic solution then was to put on two caps on BAEC. It was rather a compulsion. The reconsideration of this decision may be in order now. The paragraphs that follow will review the present activities of BAEC and recommendations will be made for their further improvement.

The services rendered to the public by BAEC in diagnosing and treatment of patients with different nuclear techniques is most commendable. There are, at the moment, thirteen Nuclear Medical Centers (NMC) and one Institute of Nuclear Medicine in the country. More than one hundred thousand patients are treated annually throughout the country. Moreover, they are providing on-the-job training to medical graduates in nuclear medicine and offering academic courses for post-graduate Diplomas & Degrees. The latter facility exists only in the Institute of Nuclear Medicine. BAEC may consider on extending this facility to other NMCs also so that medical graduates working at places outside Dhaka can avail themselves of this opportunity. In the field of nuclear medicine, the role of medical physicists is to be defined in more clear terms and they should be involved in the service in such a way that they can be regarded as essential member of the whole medical team. The present status of medical physicists in NMCs is not very

happy one, although without the advice of them proper medical service is not possible. Major portion of Radioisotopes used in these NMCs are improved ones while a tiny fraction is produced at the Research Reactor TRIGA Mk-II (3MW) of BAEC established at Savar, 25km away from the city of Dhaka. This reactor became critical in the year 1986. The reactor is operated & maintained entirely by BAEC engineers and scientists. Apart from manpower training and the production of radioisotopes, the reactor may be considered for other commercial uses.

Non Destructive Testing (NDT) is highly useful commercially. BAEC should strengthen its activities in NDT both in providing services and training manpower in the field. The analytical service in sophisticated chemical analysis is another field where BAEC is considered as referral laboratory in the country. Using nuclear techniques, analytical methods have been developed to detect the presence of impurities in different materials up to the level of parts per billion. These techniques are used to identify elements responsible for the pollution of the environment or causing hazard to ecology or human and animal lives. In this way these methods are employed in agriculture, industry, health, development of natural resources and the protection of the environment. The present capacity may be increased so as to extend the service to a bigger group of clients than the current one.

BAEC scientists in biosciences are doing very useful work also. Food preservation by irradiation, tissue culture & tissue banking, researches in genetics are worth mentioning. The advantages of food preservation by irradiation with gamma ray are that the process does not require any heat; nor any heat is generated in the process. There is no residual radioactivity on the irradiated food, which is exposed to radiation source and removed when proper amount of radiation dose is received. Hence medicine contained in plastic vials e.g. eye ointment, eye drops and disposable syringe can be irradiated to make them free from any germ. As a matter of fact, the type of materials mentioned above can be sterilized only by radiation. Such a commercial plant of gamma ray for food preservation and sterilization of medical products was constructed and started in Chittagong. Technologically, it was a success but commercially it was a flop. Ironically enough, the capacity of the plant was not big enough to cope up with the dry fish only.

The prevalent practice of preserving dry fish is to put DDT directly, which is naturally cheaper than irradiation. This is also a fact that the use of DDT as a pesticide is banned in the country. Utilizing appropriate nuclear methods the embryonic membrane of the newly born baby is cleaned, sterilized and stored for applying the same in burn injuries. Similarly human bones are processed and used in dental treatment. Both the applications have been found to be very convenient and effective.

The Nuclear Safety and Radiation Control Act and the Rules that have been mentioned earlier are technical legal instruments. The intent of the law is to ensure safety and the protection of the occupational workers, patients, public and the environment from ionizing radiation, so that the society is not put to undue risk. The nature of ionizing radiation is such that one cannot see, feel, sense or identify the same without scientific instruments. It is causing harm silently without any notice. The damage may be prompt if the dose is very high or stochastic, like changes in the genetic code and induce fatal cancer. There is no threshold of radiation dose for the stochastic effects. Severity of fatal carcinogenesis is independent on the amount of the dose received. The risk is, however, age dependent. The children are more prone to risk than the adult. The fetus in particular is very sensitive to radiation.

As mentioned already, BAEC is looking after the control of all radiological and nuclear practices and hence the implementation of the Nuclear Safety and Radiation Control Rules in the country.

A Division of the Commission has been assigned to do the job. To start with, a national survey of all radiation sources, namely X-ray machines was conducted during the period from May 15, 1999 to November 15, 2000. The survey findings reveal that the radiation protection status of the X-ray installations and overall quality of the imaging service, from regulatory consideration, are in general not satisfactory. Majority of the X-ray installations do not fulfill the required standards, only 15% of them may be considered as satisfactory. The existing Government training facilities for the radiographers and technicians are inadequate to meet the needs of the country. Quality of images can considerably be improved with some control on the films, chemicals, temperature and timing of the process. The Government hospitals, compared to the private ones and clinics, usually have better staff, machines and facility. However, the maintenance and management at the former are inferior. The survey is reported to have generated some awareness throughout the country. It may be hoped that with the cooperation of all concerned the Act can eventually be implemented to its intent and the public will get medical services in a safe manner, and all other related persons and the environment will not be put to any undue risk.

With the firm and unconditional conviction in the uses of nuclear energy and radiation exclusively for peaceful purposes, the main areas of nuclear related R&D programs in Bangladesh include, among others, medicare, food preservation, sterilization of the medical products and tissue banking, biotechnology, electronic instruments & control systems, production of radioisotopes, industrial applications of non-destructive testing, radiation survey and protection services including the control of radiation in improved food staff. In spite of certain constrain and impediments, the nation wide concerted efforts in these fields are reported to have yielded some positive results which have successfully been used in sectors, like health, agriculture, food, industry an energy. In the present age of information and communication technology development and open market economy the efficient management of knowledge and resources is considered to be essential for sustainable development. In order to reap the full benefit from nuclear energy, commitment for further support in the form of better facility and service conditions from the highest authority is essential.



## প্রতি পদার্থ ও মহাবিশ্ব

ডক্টর আলী আসগর

অধ্যাপক, পদার্থবিদ

বাংলাদেশ প্রকৌশল বিশ্ববিদ্যালয় [বুয়েটা]

আধুনিক পদার্থ বিদ্যার একটি বৈশিষ্ট্য হলো, বিশালতম ও ক্ষুদ্রতম সম্পর্কে অজিত জ্ঞানের সমন্বয় ঘটানো। দূর পাল্লার টেলিস্কোপ বা রেডিও টেলিস্কোপ দিয়ে দূর নক্ষত্র বা সহস্র আলোক বর্ষ দূরের বিশাল গ্যালাক্সি সম্পর্কে যে তথ্য নভোপদার্থবিদরা সংগ্রহ করছে, আর প্রচন্ড শক্তির কণিকা ত্বরক দিয়ে কণিকা পদার্থবিদরা মৌলিক কণিকা সম্পর্কে যে তথ্য সংগ্রহ করছে, তার মধ্যে একটি তত্ত্বগত মিল খুঁজে পাওয়া যাচ্ছে।

অবশ্য পদার্থবিদ্যায় আণবিক তত্ত্ব ও বৃহৎ জগতের তত্ত্বে সমন্বয় ঘটেছে অনেক দিন থেকেই, যেমন আমাদের সূর্যের চার পাশের গ্রহগুলো যে পাক খাচ্ছে তার ব্যাখ্যা এসেছে মহাকর্ষের তত্ত্ব থেকে। মহাকর্ষের তত্ত্বের উৎস স্বভাবতই বৃহৎ। এদিকে সূর্যের শক্তির উৎস যে ফিউশন বিক্রিয়া অর্থাৎ হাইড্রোজেন বোমার বিস্ফোরণ, যে তত্ত্ব এসেছে নিউক্লিয়ার পদার্থবিদ্যা থেকে তা স্বভাবতই অতিক্ষুদ্র বস্তু জগতের ব্যাপার। আর এই দুই ভিন্ন মাপের জগতের জ্ঞান মিলিয়েই নক্ষত্র জগতের উদ্ভব সম্পর্কে সঠিক ধারণা পাওয়া সম্ভব হয়েছে।

মহাবিশ্বের উদ্ভব কেমন করে হলো? এই মৌলিক প্রশ্নের জবাব দিতে পদার্থবিদরা শুধু দূর পাল্লার রেডিও টেলিস্কোপ থেকে পাওয়া তথ্যের উপরে নির্ভরশীল নন। কণা-ত্বরক থেকে মৌলিক কণিকাগুলো সম্পর্কে যে তথ্য সংগৃহীত হচ্ছে তাকেও তারা ব্যবহার করছেন সমানভাবে। এরই ফলে জন্ম নিয়েছে প্রতিবিশ্ব বা Anti Universe এর ধারণা।

প্রতিবিশ্বের কথা বলার আগে প্রতিকণিকার কথা বলা যাক। প্রতিকণিকা (Anti particle) এর ধারণা দেন পল ডিরাক। তার তত্ত্ব অনুসারে প্রতিটি মৌলিক কণিকার মতই প্রতিকণিকার অস্তিত্ব মহাবিশ্বে রয়েছে। কণিকা, এর প্রতিকণিকার সান্নিধ্যে এলে উভয়ই ধ্বংসপ্রাপ্ত হবে এবং রূপান্তরিত হবে শক্তিতে, আইনস্টাইনের সূত্র অনুসারে। ১৯৩২ সালে ইলেকট্রনের প্রতিকণিকা পজিট্রন আবিষ্কৃত হবার পর ডিরাকের তত্ত্ব প্রতিষ্ঠিত হলো। খুব শক্তিশালী ত্বরকের সাহায্যে প্রতিপ্রোটন ও প্রতিনিউট্রন ১৯৫৫-১৯৫৬ সালে তৈরী হলো। পজিট্রন সবদিক থেকেই ইলেকট্রনের মত শুধু এর বৈদ্যুতিক চার্জ হলো ইলেকট্রনের বিপরীত অর্থাৎ ধনাত্মক। তেমনি প্রতিপ্রোটনের চার্জ হলো ঋণাত্মক প্রোটনের সমমানের।

একটি প্রোটনকে কেন্দ্র করে একটি ইলেকট্রন যখন পাক খায় তখন তৈরী হয় স্বাভাবিক হাইড্রোজেন পরমাণু, কিন্তু একটি প্রতিপ্রোটনকে কেন্দ্র করে যদি একটি প্রতিইলেকট্রন বা পজিট্রন প্রদক্ষিণ করে সেটা হবে প্রতিহাইড্রোজেন পরমাণু। প্রতিঅক্সিজেন পরমাণুর নিউক্লিয়াসে তেমনি থাকবে আটটি প্রতিনিউট্রন ও আটটি প্রতিপ্রোটন এবং এদের কেন্দ্র করে প্রদক্ষিণ করবে আটটি পজিট্রন। এমনভাবে যে কোন ভারি অণুর প্রতিঅণুর কথা আমরা ভাবতে পারি।

একটি মানুষের দেহে বিভিন্ন অণু যেমনভাবে সাজানো আছে, যদি ঠিক তেমনিভাবে এদের প্রতিঅণুগুলো সাজানো সম্ভব হতো তা হলে নিশ্চয়ই প্রতিমানুষ তৈরী হতো, যার বাহ্যিক চেহারা হতো মানুষের মত; শুধু পার্থক্য হতো এই যে স্বাভাবিক মানুষের কাছে এলে উভয়েই রূপান্তরিত হতো শক্তিতে। ব্যাপারটি শুনতে যতই আজগুবি মনে হোক, পদার্থবিদ্যার প্রতিসাম্যের নিয়ম লঙ্ঘন না করে এটি ঘটা সম্ভব। এই যুক্তিকে ভিত্তি করে ক্লাইন মহাবিশ্বের উদ্ভব সম্পর্কে বিকল্প এক তত্ত্ব দাঁড় করিয়েছেন। তার তত্ত্ব অবশ্য Big bang বা মহা বিস্ফোরণ তত্ত্বের মত সমর্থন লাভ করেনি, কিন্তু তাঁর যৌক্তিক ভিত্তি যেমন দৃঢ় এবং তেমনি চিন্তার জগতে অভিযানমূলক।

ক্লাইনের মত হলো আদি অবস্থায় মহাবিশ্ব ছিল মৌলিক কণিকা ও প্রতি কণিকার সমন্বয়ে গঠিত এক মেঘ। হতে পারে তখন শুধু প্রোটন ও প্রতিপ্রোটন ছিল সে মেঘে। এইমেঘের বিস্তার ছিল দশ সহস্র কোটি আলোকবর্ষ ব্যাসার্ধের গোলকের মধ্যে। এই প্রোটন ও প্রতিপ্রোটনগুলো ছড়িয়ে ছিল। এত হালকা ভাবে এরা ছড়িয়ে ছিল যে, কোন কণিকা এর প্রতিকণিকার কাছাকাছি আসার সম্ভাবনা প্রায় ছিলইনা। ধীরে ধীরে মহাকর্ষের টানে আদি কণিকা ও প্রতিকণিকাগুলো যখন পরস্পরের কাছাকাছি এলো এবং আদি মেঘের

ব্যাসার্ধ দাঁড়াল কয়েক শ' কোটি আলোক বর্ষ, তখন প্রোটন ও প্রতি প্রোটনের মধ্যে মাঝে মাঝে সংঘর্ষ হতে থাকলে এবং এরা রূপান্তরিত হতে থাকল বিকিরণে। আরো কিছু সংকোচন ঘটান পর, গ্যালাক্সিগুলোর যখন উদ্ভব ঘটে গেছে মহাবিশ্বে, অধিক সংখ্যক কণিকা ও প্রতিকণিকার রূপান্তর ঘটতে থাকল শক্তিতে। এই বিকিরণের চাপে মহাবিশ্বের, আদি মেঘ এবং মধ্যকার গ্যালাক্সিগুলো ছুটতে থাকল বাইরের দিকে। ক্লাইনের তত্ত্বের ব্যাখ্যা মতে এটাই আমরা লক্ষ্য করি লাল সরণ রূপে অর্থাৎ এই সব গ্যালাক্সি থেকে পাওয়া আলোর তরঙ্গ দৈর্ঘ্য বৃদ্ধি পাওয়া।

মহাবিশ্বের উদ্ভব সম্পর্কে এই কণিকা ও প্রতিকণার তত্ত্বের বিরুদ্ধে যে দুটো জটিল প্রশ্ন উত্থাপিত হতে পারে তা হলো, পদার্থ থেকে প্রতিপদার্থ আদি মিশ্র অবস্থা থেকে কেমন করে পৃথক হলো - যার ফলে স্থিতিশীল বস্তুজগত সৃষ্টি সম্ভব হয়েছে? পদার্থ ও প্রতিপদার্থের জগৎ পৃথক থাকছে কেমন করে? পরস্পরকে ধ্বংস করে বিকিরণে রূপান্তরিত হচ্ছে না কেন?

প্রথম প্রশ্নের জবাব হলো আদি অবস্থায় চৌম্বক ও মহাকর্ষ একত্রে কাজ করেছে প্রোটন ও প্রতিপ্রোটন মেঘের উপরে। এদের মিলিত প্রভাবে পদার্থ প্রতিপদার্থের পৃথকীকরণ সম্ভব অনেকটা তড়িৎ বিশ্লেষণের মত। পদার্থ ও প্রতিপদার্থের জগৎ যে পৃথকভাবে টিকে আছে তার ব্যাখ্যা হলো- এই দুই জগতের মাঝখানে যে এলাকা সেখানে কণিকা ও প্রতিকণিকা পরস্পরকে ধ্বংস করে প্রচণ্ড বিকিরণ চাপ তৈরী করছে এবং দুই জগৎকে ঠেলে দূরে রাখছে। ব্যাপারটা অনেকটা অত্যন্ত উত্তপ্ত কড়াইয়ে পানির ফোঁটা ফেলে দেবার মত। যে তাপমাত্রায় পানি বাষ্প হয় তার কাছাকাছি তাপমাত্রার কোন কড়াইয়ে পানির ফোঁটা ফেললে দেখা যাবে, তা বাষ্প হয়ে উড়ে যায় সহজে, কিন্তু বেশী উত্তপ্ত কড়াইয়ে পানির ফোঁটা ফেললে দেখা যাবে দ্রুত একটি বাষ্পের আবরণ পানির ফোঁটাকে দূরে রাখছে কড়াইয়ের উত্তপ্ত তলা থেকে, ফলে বেশ কিছুক্ষণ ফোঁটাটি টিকে থাকছে। এই ব্যাপারটাকে বলা হয় Leiden-frost ঘটনা। তা হলে ক্লাইনের তত্ত্ব অনুসারে আমাদের মহাবিশ্বের মত প্রতিমহাবিশ্ব রয়েছে। এই দুই মহাবিশ্ব মিলেই পূর্ণ মহাবিশ্ব। এমনকি যে মহাবিশ্ব আমরা দেখছি তার অনেক গ্যালাক্সি হয়ত প্রতিপদার্থ দিয়ে তৈরী।

# Natural Gas of Bangladesh

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## Introduction

Natural gas is the most important energy resource of Bangladesh. Presently 68% of the total commercial energy demand is met by natural gas and 90% of our electricity is generated using natural gas. Energy is a crucial input to the development process of the country. It is more important for a developing country like Bangladesh when poverty alleviation is the prime objective of the country and per capita energy consumption is one of the lowest in the world. In the year 2000, per capita commercial energy consumption was 87 kgoe, (kilogram of oil equivalent) which is very low even compared to low-income countries of the world. Of the total energy used about 65% comes from the conventional biomass fuel. Only about 30% households have electricity connection and 4% have natural gas supply for household cooking. Vast majority of the people (about 90%) depend on conventional biomass fuel for cooking.

On the energy resource side Bangladesh is blessed with a significant natural gas reserve which presently stands in the range of 12 to 15 tcf of 22 gas fields. With present rate of consumption, this reserve will be exhausted by the year 2020 or so. The country is considered highly under explored and therefore, there is great potential for finding new gas reservoirs in future through a properly undertaken exploration program. Very little oil prospect has been found so far. The only oil field having an in place deposit of 8.2 million barrels has stopped producing after only 0.64 million barrels due to technical reasons. Presently the country imports all the liquid hydrocarbon fuels.

Total in place coal of the three deposits discovered so far stands at 1750 million tons. Boropukuria coal mine having an in place deposit of 300 million tons is being developed and is expected to go into production in 2004 with a target production capacity of 1 million ton per year. Country's peat deposit is estimated to be 170 million tons which has not been developed yet due to the anticipated adverse effect on agricultural land. About 0.5 to 1 million ton of low grade coal is being imported from India mainly for brickfields.

Total hydropower potential of the country is estimated to be 753 MW (1995) of which 230 MW has been harnessed at Kaptai. Conventional biomass fuels provide a major share (65%) of the total energy consumed in the country. Reserve forests, village forests, agricultural land, cattle population are the major sources of biomass fuels. Over extraction of biomass fuel is causing deforestation and environmental degradation. There is also some renewable energy sources such as solar, wind and minihydro. Out of these, only a few solar photovoltaic units are in use now.

Proper planning on energy utilization especially the natural gas is very important for efficient and sustainable use of the limited energy resources of the country. This is also for economic and energy security reasons. Proper energy planning is crucial for sustainable economic development and poverty alleviation of the country.

## Natural gas

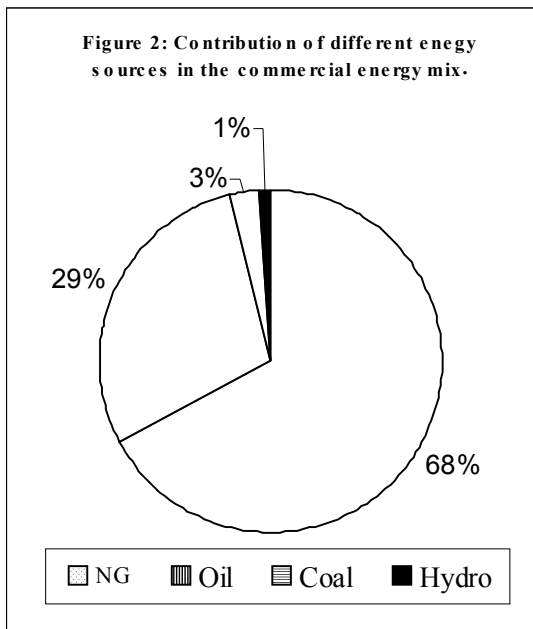
Natural gas, which is a mixture of hydrocarbon gases, such as methane, ethane, propane, butane and some higher hydrocarbons, is located in underground reservoirs at high pressure and

temperature. In our country gas reservoirs are located about 10,000 feet below the surface and at pressure of over 3000 psi, and natural gas contains mostly methane (about 95%), 2-3% ethane and the rest higher hydrocarbons. Wells need to be drilled to bring this gas from underground to the surface. Well drilling is a very expensive and sophisticated technology. Natural gas as obtained from the underground reservoirs contains some impurities such as water, dirt, and sulfur compounds, which are removed by a process called ‘gas processing’ before gas is transmitted through pipelines to the customers for various uses. Some quantities of higher hydrocarbons, which are called condensate, are also recovered during gas processing. Condensate can be separated into petrol and diesel by further processing. Natural gas containing sulfur compounds is called sour gas and needs special processing. Fortunately natural gas of our country does not have any sulfur compound and such natural gas is called sweet natural gas.

### Natural gas reserve and production

Natural gas reserve is that amount of gas which can be or likely to be produced from the discovered gas fields. So far in Bangladesh 22 gas fields have been discovered and according to the National Committee Report (June 2002), proved plus probable reserve of the country lies in the range of 12 to 15 trillion cubic feet (TCF). Natural gas is produced by Petrobangla through its subsidiary companies, i.e., Bangladesh Gas Fields Company Ltd. (BGFCL), Sylhet Gas Fields Ltd. (SGFL), Bangladesh Petroleum Exploration and Production Company (BAPEX), and two International Oil Companies (IOCs), i.e., Shell Bangladesh Exploration and Development B.V. (SHELL) and UNOCAL Bangladesh Ltd. (UNOCAL). The IOCs are working under Production Sharing Contracts (PSC).

There are now 53 production wells capable of producing more than 1300 MMSCFD of gas from



12 gas fields presently under production. BGFCL owns eight gas fields, namely, Titas, Habigonj, Bakhrabad, Narshingdi, Meghna, Begumgonj, Feni and Kamta. The production from the Kamta and Feni is now suspended. The production from the Bakhrabad field is likely to be suspended in near future. The Begumgonj field has not yet been developed. SGFL owns five gas fields, namely, Sylhet, Kailashtila, Rashidpur, Beanibazar and Chhatak; and one oil field, namely, Haripur. The production from the Chhatak gas field and the Haripur oil field is now suspended. BAPEX has been given the operatorship of the Saldanadi, Fenchugonj and Shahbazpur gas fields. It produces from the Saldanadi field. Shahbazpur and Fenchugonj fields are yet to be developed. Shell Bangladesh Exploration and Development B.V. produces from one field, namely, Sangu and this is an offshore field. It also owns two other fields, namely, Semutang and Kutubdia. Kutubdia is an offshore field discovered in the seventies.

UNOCAL owns three gas fields, namely, Jalalabad, Maulavibazar and Bibiyana. It produces gas from the Jalalabad field. Figure 1 shows the gas fields and transmission network of Bangladesh.

### The role of natural gas in energy sector

In Bangladesh commercial energy sources, which includes natural gas, oil and oil products, coal and hydro electricity, supply about 35 % of the total energy demand of the country. The

remaining 65% of the energy demand is supplied by bio-mass fuels. Natural gas alone supplies about 68 % of the total commercial energy need of the country. Natural gas is used as fuel to produce about 90% of the total electricity generated in the country. It is also a significant fuel in industry, commercial, domestic and transport sectors. Figure 2 shows the contribution of different energy sources in the commercial energy mix of the country. From Figure 2 it is evident that natural gas is the most important energy resource of the country. Since it is indigenous and the country has a good reserve, the importance of natural gas as an energy source is going to grow further in the years to come.

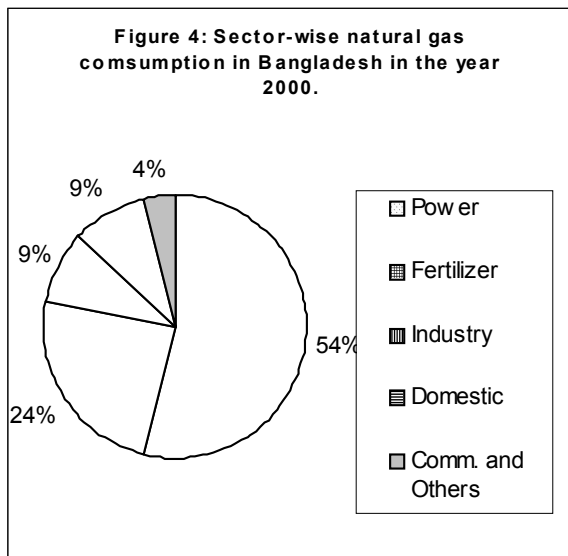
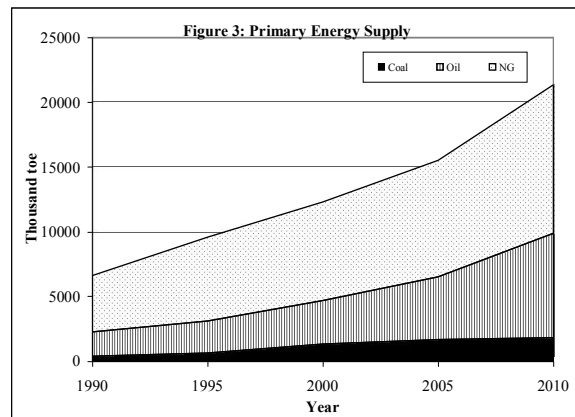
Figure 3 shows historical contribution of natural gas, oil and coal in the energy sector of the country. Up to year 2000, actual data has been used, rest are projected data based on some assumptions. Figure 3 also shows that natural gas is an important fuel and its importance is going to grow in future. Coal consumption is also expected to grow in future as Boropukuria coal mine comes into full production and other coal mines are developed.

### Sector-wise natural gas use

Natural gas is the most important commercial fuel of the country. The uses of natural gas in Bangladesh can be broadly divided into the following five categories:

- Power
- Fertilizer ( urea, ammonia and ammonium sulfate)
- Industrial
- Domestic
- Commercial and others

There are some seasonal users like the brick fields. Recent utilization pattern of natural gas shows that power sector consumes



approximately 54%, fertilizer 24%, industry 9%, domestic 9%, and commercial and others 4%, which can also be graphically seen in Figure 4. Figure 4 is based on 2000 data. Except for fertilizer sector, natural gas is used as energy sources in all the sectors. While future gas consumption in different sectors will depend on gas utilization policy of the government, it is very obvious that natural gas will continue to play a very important role to meet the energy needs of the country.

### Conclusion

Natural gas is the most important source of energy in Bangladesh. Future natural gas demand of the country will depend on the economic development of the country. Present recoverable reserve of natural gas will be

exhausted by 2020 or so even at the present rate of development. Since the country has a good potential for finding new gas, a long term, integrated and strategic plan for exploration, development and utilization of natural gas is the urgent need of the country.

# **Nerve Gas**

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## **A brief introduction to nerve gases**

Nerve Gases are among the most widely recognized and most often used forms of lethal chemical warfare agents. Nerve gases are clear and colorless. Some have no odor but some do have a faint sweet smell. They are extremely dangerous because they affect the nervous system. Nerve gas can enter the body through the air or on contact with the skin. They can be released using bombs, missiles, spray tanks, rockets and land mines. The most dangerous known nerve gas is called VX. Breathing a lethal dose of a nerve gas can kill a person in 15 minutes; a lethal dose on the skin can kill a person in only 1-2 minutes!

More commonly known these days as Nerve Agents (as they can also be liquids and solids that are easily atomized in an explosion), these dangerous chemical cocktails can be easily manufactured using fairly simple chemicals and inexpensive raw materials, a consequence of which was terrifyingly illustrated by the Tokyo subway attacks in the not too distant past.

Nerve agents acquired their name because of the effect they have on the transmission of nerve impulses in the nervous system of affected organisms. All nerve agents are known chemically as Organo - Phosphorus compounds. They are stable compound, which can be easily dispersed and absorbed through the skin or by inhalation resulting in highly toxic, rapid effects.

All nerve gases have a similar purpose: to attack an organism's synapses. A synapse is a space between two nerve cells. By affecting the synapses, an organism may experience:

Muscle twitching, weakness, paralysis and respiratory failure.

Reduced vision, drooling, sweating, diarrhea, nausea, abdominal pain and vomiting.

Headache, convulsions, coma, confusion, slurred speech, depression.

## **The history of nerve agents**

During the early part of the nineteen thirties some German chemists observed that organo-phosphorus compounds could be poisonous. The first of these chemicals was made in 1854 and was originally developed to be used as a pest control to protect crops. In 1936 a chemist by the name of Dr Gerhard Schrader finished the development of a pesticide. Due to the regulations of the time, the existence of this pesticide was notified to the military authorities who took a keen interest in it. And so the first of the substances to become known as nerve agents was born. It's name - Tabun.

During the latter half of the second world war over 10,000 tones of tabun was produced. In this time Schrader and his colleagues also developed many other organo-phosphorus compounds including the now infamous Sarin, and the third of the classic nerve agents, Soman.

Why Hitler never deployed these weapons against the allies during the war is the source of much controversy and speculation. The most popular theory being that, as Hitler was victimized by the toxic gases unleashed during the previous war, he was unwilling to allow even more dangerous

substances to be used because of the threat of retaliation. Minister of Production Albert Speer said after the war, "All sensible army people turned gas warfare down as being utterly insane, since, in view of America's superiority in the air, it would not be long before it would bring the most terrible catastrophe upon German cities".

Later research concentrated on the development of ways in which to protect individuals from the effects of nerve agents but this inevitably led to the development of more effective poisons and by the mid nineteen fifties V-agents had been produced. V-agents are many times more poisonous than the old 'classic' agents of the immediate post war era and perhaps more importantly, many times more stable also.

An agent named VX was discovered by British Chemist R. Ghosh in 1949. More persistent and more poisonous than the previously synthesized agents it still remains one of the most toxic chemicals on earth.

On March 20, 1995, twelve people were killed and more than 5,000 were injured when the nerve gas called sarin was released in a Tokyo subway system by the Aum Shinrikyo Cult. Soldiers were exposed to nerve gas during the Gulf War in the Middle East.

### **Types of nerve gases**

There are several types of nerve gases that are available to terrorist/subversive operatives. They may include:

#### **Tabun (GA)**

Tabun is an organophosphate type compound that was developed between WWI & II. It can be easily absorbed through the skin, by means of inhalation, or ingestion. The symptoms of the poisoning are similar, regardless of the route of introduction. Upon inhalation, for instance, the symptoms (in order of occurrence) include;

a. Runny nose, b. Bronchial secretions, c. Tightness in the chest, d. Dimming of vision, e. Pin-Point Pupils, f. Drooling, g. Excessive perspiration, h. Nausea, Vomiting, i. involuntary defecation, urination, j. muscle tremors, convulsions, k. Coma, l. Death

Primary treatment for Tabun and several other nerve agents is Atropine Sulfate. It is commonly carried in auto-injectors by military personnel in dosages of 1-2 mgs. However, in many cases, massive doses may be necessary to reverse the effects of the anticholinesterase agents. Frequently, 20-40 mgs. of atropine may be necessary.

The second drug that is used in the treatment of "nerve gas" poisoning is Pralidoxime chloride (3-PAMC<sub>1</sub>). It is used to reactivate the acetylcholinesterase that is bound by the nerve agent. 3-PAMC<sub>1</sub> is not as effective against Soman (GD). The dosage for 3-PAMC<sub>1</sub> is normally 600mg per injection and that it may have to be given repeatedly. Therapeutic levels may also include 1 or more grams of Pralidoxime to be given by intravenous administration over an eight hour period.

#### **Sarin (GB)**

Also a nerve agent in the organophosphate family. Has similar symptoms and is generally "non-persistent" (as is Tabun); is dispersed in a droplet or mist form. GB is also a cholinesterase inhibitor, as are all of the "G" agents. It is treated in a similar manner as Tabun with Atropine and 3-PAMC<sub>1</sub>.

#### **Soman (GD)**

Again; a compound of the organophosphate family, but more difficult to treat than the other "G" agents. Pralidoxime does not work as well with GD, due to the fact that its reactivation of acetylcholinesterase must be accomplished within moments of exposure to be at all effective. Normally dispersed like the other "G" agents.

### **(VX)**

VX is an organophosphate-like compound, but comes in an oily liquid form that is persistent for weeks or longer in the environment. It is commonly used to deny access to a given area and thus stop or slow an enemy ground advance. It can be treated by the same methods that are used for the "G" agents, but must be decontaminated in a different manner than the other agents; alcohol, ether, or acetate can be used to wash the oily liquid from the skin.

### **Other agents and information of concern**

*CYANIDES (AC- Hydrogen cyanide HCN) (CK- Cyanogen chloride CNCL)*

The cyanides can be delivered by artillery, rockets, bombs, or released from upwind cannisters. The symptoms of cyanide poisoning include:

a. Dryness and burning of the throat, b. Dyspnea, shortness of breath, c. Hyperpnea, rapid shallow breathing, d. Apnea, lack of breathing, e. Convulsion & coma, f. Cardiovascular collapse

These agents act by binding the iron (FE) component of the cytochrome c oxides system, which controls the cellular respiration and exchange of oxygen. The treatment of this agent includes the administration of oxygen and nitrates. Standard military treatment includes administration of 10cc of 3% solution of Sodium nitrate followed by sodium thiosulphate (50cc of 25% solution) by intravenous. Some other medical authorities recommend the use of Ammonium Nitrate crushable ampules followed by the nitrates listed above.

Others recommend using Vitamin B12, EDTA, and/or hyperbaric oxygen (High Compression oxygen chamber). Due to the fact that "field" conditions do not allow the use of such extensive equipment, or inconsistent treatment methods; the military method is recommended for the near future.

### **Physical and chemical properties of nerve agents**

The three classic nerve agents we have already seen are:

#### **Tabun / GA**

O-ethyl dimethylamidophosphoryl cyanide, this is the easiest to manufacture and of limited use.

#### **Sarin / GB**

Isopropyl methylphosphonofluoridate, a volatile compound taken up through inhalation.

#### **Soman / GD**

Pinacolyl methylphosphonofluoridate, taken up through skin contact or inhalation.

Many of the modern insecticides in use have similar structures to these lethal chemicals. They are metabolized in the body of pest organisms to produce anticholinesterase poisons.

#### **Their structures differ in the following way:**

Where the formula for Tabun is  $(\text{CH}_3)_2\text{N}-\text{P}(=\text{O})(-\text{CN})(-\text{OC}_2\text{H}_5)$ , in a pesticide, the P (=O) will generally be replaced by P (=S) and a less reactive group than (-CN) used.



Nerve agents are generally split into two classes, *Volatile and Persistent*. G-agents such as sarin are referred to as volatile, its consistency can be compared to water and it is mainly taken up through inhalation. These compounds are quite soluble in water.

V-agents such as VX can be likened to a viscous oil and its main effects come from skin contact. These agents are much more sparingly soluble in water.

Due to the differences in solubility an area contaminated by G-agents may decontaminate itself in a few days, however V-agents take much longer to clear.

The Chemistry of nerve agents is centred around the bonds of the phosphorus atom. The bonds of the P atom are easily broken by nucleophilic reagents such as OH<sup>-</sup>. This hydrolysis results in a non-toxic phosphoric acid and forms the basis of the decontamination procedure.

The graph shows the rate of hydrolysis of sarin and VX. It can be clearly seen that at neutral pH (ie. natural conditions) an area exposed to sarin will be decontaminated much sooner.

### **The biological action of nerve agents**

We have already seen that nerve agents can enter the body through the skin or by inhalation. Poisoning may also occur through ingestion of contaminated foodstuffs. The way in which the poison enters the body influences the time before symptoms develop and even the symptoms themselves will be different. Nerve agents when inhaled, may be absorbed into the body by a number of different routes in the respiratory tract. They may be absorbed at any point between the mucosa of the mouth and nose and the alveoli of the lungs. Direct absorption may also occur through the eye. Other routes include absorption through the skin, particularly when broken, or through the intestinal tract.

### **How nerve agents work**

At nerve muscle junctions and many other synapses throughout the body, there exists an enzyme called *Acetyl-cholinesterase*. The action of this enzyme is to hydrolyse and thus break up molecules of acetylcholine which are released as a result of nerve signals reaching these synapses. In a normal synapse, when a nerve signal is received, millions of these acetylcholine molecules are released into the synaptic cleft (a microscopic space between the neuron and muscle) and bind to acetylcholine receptors on the muscle. Under normal circumstances these are bound only for a few milliseconds as the acetylcholine molecules are rapidly hydrolysed by the acetyl-cholinesterase enzyme.

In the presence of a nerve agent, however, the enzyme becomes inhibited and is unable to hydrolyse the acetylcholine which then remains bound to the receptor. As more nerve signals are received, more molecules are released resulting in excessive amounts of acetylcholine in these clefts.

The following sketch illustrates the effect of inhibition of acetyl-cholinesterase.

In addition to these direct effects there is another complication to deal with. In normal acetylcholine hydrolysis, one of the hydrolysis products - choline is taken back up by the presynaptic nerve and recycled to acetylcholine by more enzymes. Obviously if there is no hydrolysis occurring there can be only be limited replenishment of acetylcholine stocks in the nerve endings. Due to this, the effects of exposure could be irreversible and even with immediate treatment using oximes the recovery period could be weeks or months, with hugely increased sensitivity to nerve agents as weak as insecticides.

### **Decontamination**

Generally, protected (i.e. Gloves, Respirators/SCBA, non- permeable clothing) medical and rescue personnel must wash the victim with soap and water at the scene. Wash water should be properly disposed of in drums or containers that can be properly destroyed. Victims of VX and other non- soluble agents should be cleaned with the alcohol and/or the agents described above. This must be accomplished as soon as possible, and the specific antidotes listed above then be administered. "Dirty" patients should not be transported to the hospital.

(Ed. Note/Disclaimer: This article contains commonly accepted practices in the treatment of those exposed to toxic gases. It should be understood that these recommendations may not be in keeping with local medical practice or EMS standing medical protocols. All practitioners should follow those guidelines that are deemed acceptable within the system that they work. If you have questions, refer to your local system policy.)

### **Treatment with oximes**

Oximes are substances which act directly on the cause of the problem - the nerve agent inhibited acetyl-cholinesterase. Oximes act as a reactivator, allowing the enzyme to carry out its acetylcholine hydrolising function. Oximes work best in the peripheral nervous system as they have a poor penetration to the brain.

If treatment is not administered, with moderate doses of an effective nerve agent death can occur over a very short time scale. The most common cause of death within victims is by anoxia resulting from airway obstruction due to pharyngeal muscle collapse and excessive bronchial secretions. Even with treatment using assisted ventilation via, for example, a tracheotomy tube, death may still ensue with large doses due to eventual respiratory arrest and cardiac arrhythmia.

### **Conclusion**

Nerve agents are thought to be in the stockpiles of several extremist nations and terrorist organizations. They are also said to have access to a "Mustard Gas" type agent, which can cause extensive skin and respiratory system burns. The consequences of letting the "Chemical Genie out of the bottle" have been demonstrated by the chemical release in the Tokyo subway system. Numerous terrorists have vowed to use whatever means are available to them to strike out against piece loving people in any country; we must be prepared.

# **A Brief Discussion About VSAT**

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The term 'VSAT' stands for 'Very Small Aperture Terminal', a small earth station usually less than 2.4 meters of diameter used for satellite communications. These small diameter terminals are usually perceived as being two-way data terminals, though strictly speaking many of the systems used for data broadcast are, in reality, one-way VSATs. As an approximation, about half of the installed VSATs working now-a-days are only used for one way data links. The size of the small antenna may not always be less than 2.4 meters, but the size is restricted to being less than or equal to 3.8 meters for Ku- band and 7.8 meters for C- band. Frequencies in the range from 12 GHz to 14 GHz for satellite reception and transmission is called known as Ku- band of frequencies and frequencies of approximately 4 GHz to 6 GHz for satellite downlink and uplink transmission respectively is known as C- band of frequencies. The main applications of VSAT technology in modern days include but are not limited to, computer communications, reservation systems, database enquiries, billing systems, file transfers, electronic mail, video conferencing, point of sale transactions, credit checks and credit card verification, stock control and management.

## **VSAT Shared Hub and Mini Hub Networks**

In commercial and business applications many users who are preferably some companies use to transfer information from central computers to remote sites via VSAT satellites. The most common VSAT configuration is the TDM/TDMA star network. These have a high bit rate outbound carrier (TDM) from the hub to the remote earth stations, and one or more low or medium bit rate Time Division Multiple Access (TDMA) inbound carriers. Thus interactive VSAT technology is appropriate for any organization with centralized management and data processing with its star configuration network architecture.

To make VSAT networks more affordable it is possible to share the hub between several users, thereby spreading the cost. In this case the hub is usually owned by a service provider who retains overall control of the network and who manages the hub itself. Each user, however, is allocated his own time slots or carriers and can so operate his own private network using the shared hub facility without any loss of privacy. The operation and management of these subnetworks is performed by the users themselves completely independently of the service supplier.

In Mini Hub configuration, each user has his own "mini-hub" which is much smaller and simpler, and hence cheaper, than a conventional hub. An approximate price for a mini-hub is 250k Euro. The antenna diameter is typically only 2.4 m. Each user organization has complete control over his own communications. Overall management of the complete network is provided by the service supplier who has a "super hub" which provides network supervision and diagnostic support.

## **Network topologies and network management of interactive VSAT systems**

Interactive VSAT systems come in two main network topologies - star and mesh. The former tends to be based either on a shared access scheme (TDM/TDMA), which is designed to support transactional processing applications, or on a dedicated link (the satellite equivalent to a leased

line). The latter usually uses links that are set-up and torn-down on request to establish a direct link between two sites on a demand assigned basis. These mesh systems were initially designed to support corporate and public network telephony links, but are being increasingly used to serve high data rate services, such as file downloads, at rates of 64 kbps or greater. To make VSAT networks more affordable it is possible to share the hub between several users, thereby spreading the cost. In this case the hub is usually owned by a service provider who retains overall control of the network and who manages the hub itself.

### **Conclusion**

A more general definition is that a network is a VSAT network if it consists of a large high performance hub earth station (with an antenna of up to 9 m in diameter) and a large number of smaller, lower performance terminals. Being completely general, these small terminals can be receive only, transmit only or transmit/receive. Even this definition is not universal. Meshed VSAT networks exist in which all terminals have the same size and performance. As terminal technology advances, the size of the antenna required to achieve a particular link quality (bit error rate) decreases. A class of terminals smaller than VSATs is now available; these are termed Ultra Small Aperture Terminals (USATs). For most practical purposes, USATs are just VSATs with smaller antennas. It must always be remembered, however, that as antenna size decreases, the antenna beam widens and that a point is rapidly reached when there is no further advantage in decreasing antenna size because of increased interference with other systems. The practical current lower limit on antenna size is 55 cm diameter.

# **Student Magazine and the Student Community**

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There can be no denying that the enhancement of the student community is in the foremost priority list of an educational institution's ideology. The term 'enhancement' not only comprises academic issues, but also includes to all sorts of co-curricular facets—like, music, drama, debate, sports, photography, paintings etc. Now, when we are talking of this student development, we are actually referring to a forum that highlights and sustains these activities. An official student magazine is this *de facto* forum of an institution.

Well, one may say, a student magazine is merely a mouthpiece where numerous 'this' and 'that' are published accompanied by some photographs. So, what should be the big deal about it? Aren't there the oratory club, drama club, or other clubs as the prime forums?

There is no such clean-cut answer to this. Is the matter so vaguely crude? Or, should it be?

While keeping in mind the efficacy of different clubs in a university which predominantly serve internal purpose, one must not overlook various facts. First, the interior activities and events have to be publicized in the broader domain, and thus, a student magazine is the only way to do so. Second, there occur many small-and-big events and ventures beyond the jurisdiction of such clubs (for example, initiating new schemes with foreign universities, organizing of techno-economic seminars in conjunction with other institutes), and these narrations have to come out through a student magazine. Third, students' creative thoughts find their permanent way out in the pages of a student magazine.

Therefore, if you judge the clubs as strongholds of co-curricular nourishment, you need to view the student magazine as an emblem of permanent exposure. Club events are enjoyed by the students only, as outsiders hardly get the chance; but a magazine—by virtue of its wide readership—is appreciated by hundreds and thousands...or, who knows, may be thousands and millions. A student magazine can do what clubs cannot, and may not, do.

But should this mean that clubs are somewhat less important? Obviously not. We are justifiably in favor of keeping both the sectors alive and vibrant. That is very much needed in building up the reputation of a university, in glorifying the excellence of its socio-academic infrastructure.

VOICES, the official student magazine of AIUB, has been performing multifarious roles in a remarkable manner. It has given birth to many promising young writers in this campus. Of course, all their write-ups do not come into light because the limitations do not permit to do so. But what is important, they endeavor with heart and soul with all their creativity...and this has a great value. VOICES is ever-ready to incorporate everybody's voice, and the students keep articulating their creative thoughts.

Being teachers of Communication Skills, we have much privilege. One of these is the opportunity of watching students 'grow up'. 'Bloom' would perhaps be a better word instead. Yes, we can see them blossom from the buds. We can recall so many instances where students at their initial stages would feel fainted uttering even a word in English, but managed to finish their semesters as wonderful orators. We have in our memories the students who used to produce incorrectly structured sentences at the beginning, but ended up as creative narrators

(well, they are still carrying on). These are the students who really make their teachers feel proud—for the simple reason that they have been trying to live up to the expectations of their teachers. We deem ourselves very fortunate to be in the backstage of their creative expansion.

And, we feel happy that there is this VOICES to materialize our good fortune in the form of printed document. And side-by-side, it has maintained all the goodness of a genuine student magazine.

One more issue, we feel, is very crucial in this regard. VOICES has been acting as a bridge between the present and the passed-out students of AIUB. Not that this bridge is something very conspicuous; we are talking in the sense that when an alumnus holds VOICES in her/his hand and goes through the pages, s/he subconsciously renews her/his membership with the AIUB family. Therefore, the bondage remains unending.

Now, whatever we have said so far is equally applicable for any institutions of learning—regardless of society and context. But what gives us distinctive pleasure is the fact that, AIUB has so far been the first (if not only) university in this country to come up with an official student magazine.

And, this magazine has been, and will be, nourished with the maximum care by all AIUBians. You know why? They can read their minds in its words; they can hear their voices in its pages! Phenomenal, in its truest sense.

# Can Computer Speak in Bangla?

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## Computers can talk!

Well, they don't have mouth and vocal cords like human. But they can be programmed to talk with human species. It is not far when people would probably replace their loved ones and talk with their dumb, although intelligent PC's. And, through the virtue of speech mechanism, people would tell their PC's all their desires and after a long conversation, the computer would say,

"Heard, but not recognized!"

We have a lot of things to do beside talking with a dumb fellow like the computer. But, in the real and business world people are very much fond of listening to computer speech. The automated inquiry of mobile phones, utility bills and bank statements have already been replaced with synchronized computer speech. The automated schedule of flights are spoken with the help of Text to Speech software.

Lets get this clear. There are two basic technologies in this field: - Speech Recognition (SR) & Speech Synthesis (SS).

It depends on who is doing the talking, you or the computer. Speech synthesis is commonly called "text-to-speech" or TTS, since the speech is usually synthesized from text data. Speech recognition hears the sound, process it and make a sensible sense out of it.

Text to speech or Speech Synthesis is divided into two types. One has a specific dictionary of voices. It may contain about thousands and millions of words. But it is not efficient as it cannot pronounce a word that is not in the dictionary.

The other breaks apart the sentence into words and then breaks the words into phonemes that can be easily pronounced. Difficulty arises when words have different pronunciation and they have similar words.

I shall pour some light on speech recognition and text to speech mechanism here and emphasize how to localize the mechanism with our own mother language.

Have you ever been to a bangladeshi site and wished to hear the contents and daily news in Bangla rather than reading from the monitor? Have you ever been too much tired as to read your emails that are too long and hurting your eyes? Well, a little command can make your life a bit easier. You can give commands to your computer "Bondho kore dao windows" and windows shuts down itself and you can easily go to sleep or you can ask your computer "Porey Shunao!" and the rest is a blessing. Everything is possible as fictions sometimes gets real!

In the beginning when people lived in caves, they used body gestures, and wall pictures to communicate. It was not efficient and people invented the mechanism of speaking. Communication is everything nowadays. Computer communicate with us through monitors,

speakers and printers and we the human being communicate with the help of the keyboard or a mouse.

People have been trying to minimize the communication gap between human and computers. They thought of a better idea - the "Mouse" which has a small tail and can move anywhere over the screen. It was better than typing. Perhaps the mouse made people learn computers easily than ever. Microsoft Windows made a breakthrough for people who wanted to communicate with computers easily than ever. But, people was not satisfied and they wanted something more.

Now, how about talking with the computer and the computer answers your questions ! Indeed is not easy for the computer to speak so easily. It has to have much intelligent to differentiate between 'to' and 'go' .

There is a huge gap between the illiterate and disabled people who are left behind the scenes with not enough care and education. Computers with the help of speech recognition can facilitate more information to the specific users.

Text to speech is a field that has been quite a remarkable in research. A Text-To-Speech (TTS) synthesizer is a computer-based system that should be able to read *any* text aloud, whether it was directly introduced in the computer by an operator or scanned and submitted to an Optical Character Recognition (OCR) system. There is a fundamental difference between the system I am about to discuss here and any other talking machine (as a cassette-player for example) in the sense that we are interested in the automatic re-production of new sentences. This definition still needs some refinements. Systems that simply concatenate isolated words or parts of sentences, denoted as *Voice Response Systems*, are only applicable when a limited vocabulary is required (typically a few one hundreds of words), and when the sentences to be pronounced respect a very restricted structure, as is the case for the announcement of arrivals in train stations for instance. In the context of TTS synthesis, it is impossible (and luckily useless) to record and store all the words of the language. It is thus more suitable to define Text-To-Speech as the automatic production of speech, through a grapheme-to-phoneme transcription of the sentences to utter.

Moreover, TTS can deliver rich voice output without any specified voice dictionary. It requires extensive scanning the whole text and match synonyms and then try to read sensible sentences or words. Intelligent software has made it possible for the computers to raise their voices.

At first sight, this task does not look too hard to perform. After all, Human cannot correctly pronounce an unknown sentence from his childhood. We all have, mainly unconsciously, a deep knowledge of the reading rules of our mother tongue. They were transmitted to us, in a simplified form, at primary school, and we improved them year after year. However, it would be a bold claim indeed to say that it is only a short step before the computer is likely to equal the human being in that respect. Despite the present state of our knowledge and techniques and the progress recently accomplished in the fields of Signal Processing and Artificial Intelligence, we would have to express some reservations. As a matter of fact, the reading process draws from the furthest depths, often unthought of, of the human intelligence.

A basic question arises that how does a machine read?

It should be clear that a reading machine would hardly adopt a processing scheme as the one naturally taken up by humans, whether it was for language analysis or for speech production itself. Vocal sounds are inherently governed by the partial differential equations of fluid mechanics, applied in a dynamic case since our lung pressure, glottis tension, and vocal and



nasal tracts configuration evolve with time. These are controlled by our cortex, which takes advantage of the power of its parallel structure to extract the essence of the text read and its meaning. Even though, in the current state of the engineering art, building a Text-To-Speech synthesizer on such intricate models is almost scientifically conceivable (intensive research on articulatory synthesis, neural networks, and semantic analysis give evidence of it), it would result anyway in a machine with a very high degree of (possibly avoidable) complexity, which is not always compatible with economical criteria. After all, computers are not like human.

Bengali Language has been a very rich language with lots of people who use it everyday in communication and business. Bangla has not a very complex structure than English, but it also requires hard work to build a speech engine in Bangla.

Technology has grown very fast and we are still left behind. Bangla Language is a result of so much blood and struggle and thus it should be centralized as well as globalized. Text to speech in Bangla is a revolutionary step in our Bangla Computing. Progression in Bangla Unicode and Keyboard interfacing will help in building a better speech engine.

In the end, as computers get more clever and human being tired and lazy they would like to command their computers through speech. As a result, it would not be very amazing to get a reply from a computer that,

"Voice Heard, but cannot be recognized!"

or,

"Please Raise and change your voice! "

*Reference: MSDN Library- October 2000/ Websites*

# **Basics of EEE**

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The branch of engineering concerned with the practical applications of electricity in all its forms, including those of the field of electronics. Electronics engineering is that branch of electrical engineering concerned with the uses of the electromagnetic spectrum and with the application of such electronic devices as integrated circuits, transistors, and vacuum tubes.

In engineering practice, the distinction between electrical engineering and electronics is based on the comparative strength of the electric currents used. In this sense, electrical engineering is the branch dealing with “heavy current”—that is, electric light and power systems and apparatuses—whereas electronics engineering deals with such “light current” applications as wire and radio communication, the stored-program electronic computer, radar, and automatic control systems.

The distinction between the fields has become less sharp with technical progress. For example, in the high-voltage transmission of electric power, large arrays of electronic devices are used to convert transmission-line current at power levels in the tens of megawatts. Moreover, in the regulation and control of interconnected power systems, electronic computers are used to compute requirements much more rapidly and accurately than is possible by manual methods.

## **History**

Electrical phenomena attracted the attention of European thinkers as early as the 17th century. Beginning as a mathematically oriented science, the field has remained primarily in that form; mathematical predication often precedes laboratory demonstration. The most noteworthy pioneers include Ludwig Wilhelm Gilbert and Georg Simon Ohm of Germany, Hans Christian Ørsted of Denmark, André-Marie Ampère of France, Alessandro Volta of Italy, Joseph Henry of the United States, and Michael Faraday of England. Electrical engineering may be said to have emerged as a discipline in 1864 when the Scottish physicist James Clerk Maxwell summarized the basic laws of electricity in mathematical form and predicted that radiation of electromagnetic energy would occur in a form that later became known as radio waves. In 1887 the German physicist Heinrich Hertz experimentally demonstrated the existence of radio waves.

The first practical application of electricity was the telegraph, invented by Samuel F.B. Morse in 1837. The need for electrical engineers was not felt until some 40 years later, upon the invention of the telephone (1876) by Alexander Graham Bell and of the incandescent lamp (1878) by Thomas A. Edison. These devices and Edison's first central generating plant in New York City (1882) created a large demand for men trained to work with electricity.

The discovery of the “Edison effect,” a flow of current through the vacuum of one of his lamps, was the first observation of current in space. Hendrick Antoon Lorentz of The Netherlands predicted the electron theory of electrical charge in 1895, and in 1897 J.J. Thomson of England showed that the Edison effect current was indeed caused by negatively charged particles (electrons). This led to the work of Guglielmo Marconi of Italy, Lee De Forest of the United States, and many others, which laid the foundations of radio engineering. In 1930 the term

electronics was introduced to embrace radio and the industrial applications of electron tubes. Since 1947, when the transistor was invented by John Bardeen, William H. Brattain, and William B. Shockley, electronics engineering has been dominated by the applications of such solid-state electronic devices as the transistor, the semiconductor diode, and the integrated circuit.

## **Electrical and electronics engineering functions**

### **Research**

The functions performed by electrical and electronics engineers include (1) basic research in physics, other sciences, and applied mathematics in order to extend knowledge applicable to the field of electronics, (2) applied research based on the findings of basic research and directed at discovering new applications and principles of operation, (3) development of new materials, devices, assemblies, and systems suitable for existing or proposed product lines, (4) design of devices, equipment, and systems for manufacture, (5) field-testing of equipment and systems, (6) establishment of quality control standards to be observed in manufacture, (7) supervision of manufacture and production testing, (8) postproduction assessment of performance, maintenance, and repair, and (9) engineering management, or the direction of research, development, engineering, manufacture, and marketing and sales.

### **Consulting**

The rapid proliferation of new discoveries, products, and markets in the electrical and electronics industries has made it difficult for workers in the field to maintain the range of skills required to manage their activities. Consulting engineers, specializing in new fields, are employed to study and recommend courses of action.

The educational background required for these functions tends to be highest in basic and applied research. In most major laboratories a doctorate in science or engineering is required to fill leadership roles. Most positions in design, product development, and supervision of manufacture and quality control require a master's degree. In the high-technology industries typical of modern electronics, an engineering background at not less than the bachelor's level is required to assess competitive factors in sales engineering to guide marketing strategy.

### **Branches of electrical and electronics engineering**

The largest of the specialized branches of electrical engineering, the branch concerned with the electronic computer, was introduced during World War II. The field of computer science and engineering has attracted members of several disciplines outside electronics, notably logicians, linguists, and applied mathematicians.

Another very large field is that concerned with electric light and power and their applications. Specialties within the field include the design, manufacture, and use of turbines, generators, transmission lines, transformers, motors, lighting systems, and appliances.

A third major field is that of communications, which comprises not only telegraphy and telephony but also satellite communications and the transmission of voice and data by laser signals through optical-fibre networks. The communication of digital data among computers connected by wire, microwave, and satellite circuits is now a major enterprise that has built a strong bond between computer and communications specialists.

The applications of electricity and electronics to other fields of science have expanded since World War II. Among the sciences represented are medicine, biology, oceanography, geoscience,

nuclear science, laser physics, sonics and ultrasonics, and acoustics. Theoretical specialties within electronics include circuit theory, information theory, radio-wave propagation, and microwave theory.

Another important speciality concerns improvements in materials and components used in electrical and electronics engineering, such as conductive, magnetic, and insulating materials and the semiconductors used in solid-state devices. One of the most active areas is the development of new electronic devices, particularly the integrated circuits used in computers and other digital systems.

The development of electronic systems—equipment for consumers, such as radios, television sets, stereo equipment, video games, and home computers—occupies a large number of engineers. Another field is the application of computers and radio systems to automobiles, ships, and other vehicles. The field of aerospace electronic systems includes navigation aids for aircraft, automatic pilots, altimeters, and radar for traffic control, blind landing, and collision prevention. Many of these devices are also widely used in the marine services.

**Source:** Internet, Various Journals & Encyclopedia Britannica

# **Asian Brown Cloud**

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ID No: 01-02146-1

In the biggest-ever study of the phenomenon, 200 scientists warned that the cloud, estimated to be two miles (three kilometers) thick, is responsible for hundreds of thousands of deaths a year from respiratory disease.

By slashing the sunlight that reaches the ground by 10 to 15 percent, the choking smog has also altered the region's climate, cooling the ground while heating the atmosphere, scientists said.

The potent haze lying over the entire Indian subcontinent -- from Sri Lanka to Afghanistan -- has led to some erratic weather, sparking flooding in Bangladesh, Nepal and northeastern India, but drought in Pakistan and northwestern India.

"There are also global implications, not least because a pollution parcel like this, which stretches three kilometers high, can travel half way round the globe in a week," U.N. Environment Program chief Klaus Toepfer told a news conference in London.

## **Global threat**

While haze hovers over other parts of the world, including America and Europe, what surprised scientists was just how far the cloud extended, and how much black carbon was in it, according to A P Mitra from India's National Physical Laboratory.

A cocktail of aerosols, ash, soot and other particles, the haze's reach extends far beyond the study zone of the Indian subcontinent, and towards East and Southeast Asia.

While many scientists once thought that only lighter greenhouse gases, such as carbon dioxide, could travel across the Earth, they now say that aerosol clouds can too.

"Biomass burning" from forest fires, vegetation clearing and fossil fuel was just as much to blame for the shrouding haze as dirty industries from Asia's great cities, the study found.

A large part of the aerosol cloud comes from inefficient cookers, where fuels such as cow dung and kerosene are used to cook food in many parts of Asia, says Mitra.

## **Acid rain**

Using data from ships, planes and satellites to study Asia's haze during the northern winter months of 1995 to 2000, scientists were able to track its journey to pristine parts of the world, such as the Maldives, to see how it affected climate.

They discovered not only that the smog cut sunlight, heating the atmosphere, but also that it created acid rain, a serious threat to crops and trees, as well as contaminating oceans and hurting agriculture.

"It was much larger than we thought," said Mitra. The report suggested the pollution could be cutting India's winter rice harvest by as much as 10 percent.

The report calculated that the cloud -- 80 percent of which was made by people -- could cut rainfall over northwest Pakistan, Afghanistan, western China and western central Asia by up to 40 percent.

While scientists say they still need more scientific data, they suggest the regional and global impact of the haze will intensify over the next 30 years.

Nobel laureate Paul Crutzen -- one of the first scientists to identify the causes of the hole in the ozone layer and also involved in the U.N. report -- said up to two million people in India alone were dying each year from atmospheric pollution.

In the next phase of the project, scientists will collect data from the entire Asian region, over more seasons with more observation sites and refine their techniques.

But because the lifetime of pollutants is short and they can be rained out, scientists are hopeful that if Asians use more efficient ways of burning fuel, such as better stoves, and cleaner sources of energy, time has not run out.

**Source:** CNN.com

# Extrasensory Perception (ESP)

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In *New Frontiers of the Mind* (1937) Rhine said that ESP experiments were changing the way people thought the mind sensed information. Historically learned people held the human mind received information through the ordinary five senses, and that therefore, the mind is subject to the laws of the mechanical world. Laboratory tests have attempted to determine the existence of ESP and discover the physical mechanism by which it operates. "The mind has been equated with the brain, and scientists search to discover how ESP registers in the brain/mind."

However, increasing evidence is demonstrating that ESP does exist, but it cannot be explained or quantified by physical laws; and furthermore, that the mind (consciousness) and the brain are two separate entities. Simultaneously, research in quantum physics points to the existence of a second, nonmaterial universe. So, the time is fast approaching when Western scientists must come to terms with the Eastern mystical concept: "that an extrasensory force exists in another reality, and intersects and integrates with the physical world."

In function, ESP is dissimilar to the ordinary senses. There is no location like governs the other senses which receive information through various parts of the body; and it is not dependent on any of the other five senses. ESP is independent of such factors as geography, time, intelligence, age or education.

ESP has been given various names. In the 19<sup>th</sup> century it was called "cryptesthesia", later it was labeled "releesthesia" which since became clairvoyance, or "seeing in the distance". It was Rhine who coined the term "general extrasensory perception" (GESP) to include both telepathy and clairvoyance. Later the term PSI was designated to cover ESP and PK.

It was researcher Lousia E. Rhine who proposed the theory that ESP starts in the unconscious, a storehouse of memories, hopes and fears. At this point a contact is made between the objective world and the center of the mind. The person remains unaware of this contact until or unless the information is brought to the conscious level. Also, the psychiatrist Carl G. Jung proposed a similar theory that the conscious mind has subliminal psychic access to the collective unconscious, a vast repository of accumulative wisdom and experience of the human race.

Others theories attempting to explain ESP have been produced. One such theory involved macrophages, cells present in connective tissue, lymph nodes, and bone marrow and tied to nerve endings. The person thought these might be body's ESP organs, sending and receiving impressions below the normal perceptive level. Such cells are more sensitive and active during childhood, but deteriorate without proper diet.

Some theories involve the discussion of two sub-consciousnesses, the second one sometimes called the super-consciousness, soul, subliminal self, transcendent ego, dream self and several other terms. The argument rest on the hypothesis that two realities exist, the physical one and a second one. ESP can occur when there is an integration between both realities. This occurs infrequently only when the brains between the realities are broken which does not happen often

because if it did all unconscious thought would flood and overflow the conscious mind. A condition which the mind could not withstand.

When considering types or forms that ESP might take dreams become an important factor, especially in relationship to the theory of two realities. Upon this basis dreams were separated into two categories: realistic, vivid having detailed imagery of the information conveyed, and intuition which includes “gut feeling”, forebodings, and premonitions; and unrealistic dreams containing fantastical imaginary and symbols. Hallucinations that relayed visual and auditory information also were included. Rhine suggest the reason for dreams being efficient carriers of ESP messages is because the brains surrounding the conscious mind appear to be thinnest.

It has been discovered that the natural tendency for ESP in individuals can be distorted by previous prejudices, thoughts, and conditioning. Likewise, inaccurate ESP message may be the result of distortions and blockages of the conscious mind. However, in times of crisis such as accidents and death of loved ones, ESP message seem to occur spontaneously. It is theorized that perhaps trauma and shock enable information to penetrate the subliminal barriers more easily than happy information.

There are theories concerning individuals who possess ESP and how they acquired this ability. One theory holds that some people such as seers, prophets and diviners were born with the gift which was inherited by their relatives. Another theory holds that it is a primordial sense which has decreased in population as their cultures advanced. Still another theory claims ESP is a super-sense which evolves in the nervous system.

Psychical research does support the theory that everyone is born with ESP capability, though some may possess more than others. Most people have experienced at least one ESP experience in their lives. It was found in a survey published in 1987 by the University of Chicago's National Opinion Research Council, that 67 percent of all adult Americans believed they have experienced ESP. Eleven years earlier the figure was 58 percent. It was thought the increase indicates an increased acceptance of the possibility of ESP among the general public.

Source: **ESP websites**



# **Air Force One**

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Presidential air transport began in 1944 when a C-54-the “Sacred Cow” was put into service for President Franklin D. Roosevelt. Then came the “Independence”, a DC-6 (Lifemaster), which transported President Harry S. Truman during the period 1947 to 1953. President Dwight D. Eisenhower traveled aboard the “Columbine II” and “Columbine III” from 1953 to 1961. While the call sign “Air Force One” was First used in the 50s, President Kennedy’s VC-137 (Boeing 707) was the first aircraft to be popularly known as “ Air Force One”. In 1962, a C-137C specifically purchased for use as Air Force One, entered into service with the tail number 26000. It is perhaps the most widely known and most historically significant presidential aircraft. Tail number 26000 is the aircraft that carried President Kennedy to Dallas, Nov. 22, 1963, and returned the body to Washington, D.C., following his assassination. Lyndon B. Johnson was sworn into office as the 36<sup>th</sup> president on board the aircraft at Love Field in Dallas. This fateful aircraft also was used to return President Johnson’s body to Texas following his sate funeral Jan. 24, 1973. In 1972 President Richard M. Nixon made historic visits aboard 26000 to the People’s Republic of China in February and to the former Union of Soviet Socialist Republics in May. Tail number 27000 replaced and carved its own history when it was used to fly Presidents Nixon, Ford and Carter to Cairo, Egypt, Oct. 19, 1981, to represent the United States at the funeral of Egyptian President Anwar Sadat. Tail number 26000 was retired May 1998, and is on display at the U.S. Air Force Museum, Wright-Patterson AFB, Ohio. The first VC-25A-tail number 28000-flew as “Air Force One” on Sept.6, 1990, when it transported President George Bush to Kansas, Florida and back to Washington, D.C. A second VC-25A, tail number 29000 transported President Clinton, Carter and Bush to Israel for the funeral of Prime Minister Yitzhak Rabin. The VC-25A will usher presidential travel into the 21<sup>st</sup> century, upholding the proud tradition and distinction of being known as “ Air Force One”.

Principal differences between the VC-25A and the standard Boeing 747, other than the number of passenger carried, are the electronic and communications equipment aboard Air Force One, its interior configuration and furnishing, self-contained baggage loader, front and aft air-stairs, and the capability for in-flight refueling. Accommodations for the president include an executive suite consisting of a stateroom (with dressing room, lavatory and shower) and the president’s office. A conference/dining room is also available for the president, has family and staff. Other separate accommodations are provided for guests, senior staff, secret service and security personnel, and news media. Two galleys provide up to 100 meals at one sitting. Six passenger lavatories, including disabled access facilities, are provided as well as a rest area and mini-galley for the aircrew. The VC-25A also has a compartment outfitted with medical equipment and supplies for minor medical emergencies. These aircraft are flown by the presidential aircrew, maintained by Presidential Maintenance Branch, and are assigned to Air Mobility Command’s 89<sup>th</sup> Airlift Wing, Andrews Air Force Base, Md.

## **Technical Specifications of Air Force One**

Crew	26 (passenger/crew capacity: 102)
Model	747-200B

Engines	General Electric CF6-80C2B1
Thrust rating	56,700 pounds, each engine
Long-range mission takeoff gross weight	833,000 pounds
Maximum zero fuel weight	526,500 pounds
Design mission zero fuel weight	46,000 pounds
Maximum landing weight	630,000 pounds
Fuel Capacity	53,611 gallons
Range	7,800 statute miles
Wing span	195 feet, 8 inches
Length	231 feet, 10 inches
Height	63 feet, 5 inches
Service ceiling	45,100 feet

*Source: U.S. Air Force*

# Ancient Olympic Games

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The Olympic games began at Olympia in Greece in 776 BC. The Greek calendar was based on the Olympiad, the four-year period between games. The games were staged in the wooded valley of Olympia in Elis. Here the Greeks erected statues and built temples in a grove dedicated to Zeus, supreme among the gods. The greatest shrine was an ivory and gold statue of Zeus. Created by the sculptor Phidias, it was considered one of the Seven Wonders of the World. Scholars have speculated that the games in 776 BC were not the first games, but rather the first games held after they were organized into festivals held every four years as a result of a peace agreement between the city-states of Elis and Pisa. The Eleans traced the founding of the Olympic games to their King Iphitos, who was told by the Delphi Oracle to plant the olive tree from which the victors' wreaths were made.

According to Hippias of Elis, who compiled a list of Olympic victors c.400 BC, at first the only Olympic event was a 200-yard dash, called a stadium. This was the only event until 724 BC, when a two-stadia race was added. Two years later the 24-stadia event began, and in 708 the pentathlon was added and wrestling became part of the games. This pentathlon, a five-event match consisted of running, wrestling, leaping, throwing the discus, and hurling the javelin. In time boxing, a chariot race, and other events were included.

The victors of these early games were crowned with wreaths from a sacred olive tree that grew behind the temple of Zeus. According to tradition this tree was planted by Hercules (Heracles), founder of the games. The winners marched around the grove to the accompaniment of a flute while admirers chanted songs written by a prominent poet.

The Olympic Games were held without interruptions in ancient Greece. The games were even held in 480 BC during the Persian Wars, and coincided with the Battle of Thermopylae. Although the Olympic games were never suspended, the games of 364 BC were not considered Olympic since the Arkadians had captured the sanctuary and reorganized the games.

After the Battle of Chaironeia in 338 BC, Philip of Makedon and his son Alexander gained control over the Greek city-states. They erected the Philippeion (a family memorial) in the sanctuary, and held political meetings at Olympia during each Olympiad. In 146 BC, the Romans gained control of Greece and, therefore, of the Olympic games. In 85 BC, the Roman general Sulla plundered the sanctuary to finance his campaign against Mithridates. Sulla also moved the 175th Olympiad (80 BC) to Rome.

The games were held every four years from 776 BC to 393 AD, when they were abolished by the Christian Byzantine Emperor Theodosius I. The ancient Olympic Games lasted for 1170 years.

The successful campaign to revive the Olympics was started in France by Baron Pierre de Coubertin late in the 19th century. The first of the modern Summer Games opened on Sunday, March 24, 1896, in Athens, Greece. The first race was won by an American college student named James Connolly.

**Source:** Internet

# **Proud to be an AIUBIAN**

Hossain Scion M. Anjir

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Once upon a time, there was ...err...wrong story...ok lets start again, it was a wet morning. I jumped down from the bus and felt the chill down my spine of the winter wind. I was just entering a new page of my history...the very first day at my university. Entering the gate I was suddenly stopped by a man wearing black (combat) dress !!! I found my legs trembling. I thought I had done a great mistake...!!! "ID" asked the man. I was about to start telling him my name with my father, grandfather, and great grandfather's name along with my address and so on...when suddenly I remembered that we are supposed to show our id cards...Oofff!!! That was a relief. I told him boldly "freshman" & showed him my temporary id card (At that time id cards were provided a few days after admission). He let me in.

After a hard days toil I finally found my self outside the great building with tinted glass' in front, which was campus-1 of AIUB. "So" I told to myself..."I m an AIUBIAN".

After 2 lovely university years (& 2 boring academic years!), I m now a proud AIUBIAN with lots of thoughts and dreams (actually dreaming doesn't need money that's why we all dream a lot...). During my these two years I discovered some very interesting characteristics of the AIUBIANs, may be I can share them with you folks...

## **The cools**

These types of Aiubians think they are on the top of the world. Always chatting over their cell phones (which is actually out of account balance!), they pretend to be a very busy guy for some very easy task. Making their face look like a FBI agent and wearing some funky stuff, they enter the varsity campus. Hooking their ID cards on their chest and hardly talking to others make these folks look like a complete numskull...!!!

## **The Atels**

These guys have their own way of thinking. They make their selves look like the "ultimate programmer" .If any body asks them what they do all day long, they will answer in a very soft tone that they spend all the free time in front of their PCs. (Actually not programming, by chatting over the net). In class' they hardly ask questions. But when they do they realize that they do not understand what they do not understand. Unfortunately, the programming contest authorities do not greet these guys.

## **The addafyings**

These folks ply around with the same sort of friends. They are most of the time found in front of "Mama's tea shop" beside the campus-2 or behind campus-1. Addafying is their motto of life. If asked about their class', they will put a very surprising gesture on their face and ask you what a "class" is? ("Class ki jinish???Khae na mathae dae???). The special feature about these folks is they always stay around the CGPA limit 2. (Most of the times below it !)

## **Song-addicts**

Most of these guys could also be found in the addafying category. These boys have their looks like rising (like mushroom!) band stars. They always have lyrics of top metal or underground

bands in their lips. Sometimes the dogs of the campus areas greet them. They spend the break time near the cars where they could listen the songs of their favorites.

### **Broad-mindeds**

These folks are very sharp in their respective subjects. They work real hard to acquire satisfactory results (which is A). Most of the time they are seen in the library working out something with some others around them. They always try to make their friends understand the lecture and class tasks. Sometimes they also help by making the lab reports for their friends. They are found banging their heads just before the exam as they forget to bring back their copies of notes and doing their own lab reports.

### **Typicals**

The category name shows the significance of these folks. They are having their classes all around the clock, they regularly sit for quizzes, they ask questions frequently in classes and overall they have a very good CGPA score in their bags.

So I was just able to find these categories of boy AIUBIANS in our university. I did not mention any girl-category, as it is quite harmful for the voice authority and me. (After all I got only one head over my soldier as a “poittrik shompotti & I don’t want to lose it.) After all these thinking and expressing I might find myself in danger as some groups would not like my point of vision, but my thoughts are all mine and I am proud to be an AIUBIAN.

# Our AIUB Teachers: New Comer's perspective

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## কাহিনীর শুরু

কে জানতে যে আমার মতো 'পরম অলেখক' আবারও লেখালেখির ঝুঁকি নেবে!

যশোর ক্যান্টনমেন্ট কলেজের ম্যাগাজিনে সেই একবার লেখার পরই বুঝেছি লেখালেখি কত কঠিন কাজ। জগৎসংসারের ও কাজটি এই অধমের জন্য নয়- এই সান্তনা নিয়েই দিন কেটে যাচ্ছিল। সেবার আমার প্রবন্ধটি ছিল 'তুলনামূলক দ্বন্দ্ব ও সমন্বয়: বস্তুবাদ-আধ্যাত্মবাদ'। বিষয়টি আমার জন্য বেশ ভারী ছিল। কিন্তু, এবার না হয় খুব সহজ বিষয় নিয়ে লিখলাম; এই যেমন এখানে কি দেখছি শিক্ষকদেরকে কেমন লাগছে- এইসব। কাজটি তেমন কঠিন নয়। অন্যদিকে এই বিশিষ্ট সুলেখকের(!) 'কাচাত্ব' ও ঢাকা পড়ে অনেকখানি। সিঁড়ি দিয়ে উঠতে গিয়ে **Voices** এর বিজ্ঞাপনটি দেখার পর এইসব বিক্ষিপ্ত চিন্তা মাথায় ঘুরছিল। কিন্তু ওই পর্যন্তই। তারপরই বেমালুম ভুলে গেলাম সবকিছু। শেষে যখন মনে পড়ল তখন সময় প্রায় শেষ। তবু লিখেই ফেললাম আর কি ---।

## নীল বই

নীল রঙের হ্যান্ডবুকটা হাতে পাবার পরই প্রথম জানলাম যে, আমাদের বিশ্ববিদ্যালয়ের ভাইস চ্যান্সেলর হলেন মিসেস কারমেন জেড, লামাগনা। একে তো ভাইস চ্যান্সেলর তার উপর বিদেশীনী।

তাই তাঁর ব্যাপারে কৌতুহলের মাত্রাটাও ছিল দ্বিগুণ। বিদেশী মানুষ হিসেবে ছাত্র-ছাত্রীদের সাথে Communicate করতে সমস্যা হয় না তো- এ ধরনের আশঙ্কা যে তখন মনের মধ্যে স্থান পায় নি; এ কথা হলফ করে বলতে পারব না।

## Auditorium

বিশ্ববিদ্যালয়ের প্রথম দিন। Orientation। ফিসফিস, ছটোপুটি, চিৎকার। এরই মাঝে এলেন উপস্থাপক। কখনবা কথার ফাঁকে কিছুটা চটুল রসিকতা। প্রজেক্টরে মাঝেমাঝে Slide উল্টাপাল্টা সিরিয়ালে আসছে। এই নিয়ে আবার হাসাহাসি। আমার কিন্তু খুব একটা ভাল লাগছে না। কোথায় সেই প্রতিক্রিত তিনি? অবশেষে তিনি মঞ্চে এলেন। 'এলেন, দেখলেন এবং জয় করলেন।' প্রিয় পাঠক নিশ্চয় বুঝতে পারছেন তিনি কে? তিনি আমাদের 'মাম' মিসেস কারমেন জেড, লামাগনা। এত সহজে তিনি সবাইকে মাতিয়ে তুললেন যে, আমাদের মধ্যে যে জড়তা থাকা স্বাভাবিক ছিল- সব যেন খড়কুটোর মতো উড়ে গেল। বুঝলাম হৃদয়ের বিনিময়ের ক্ষেত্রে ভাষা, সংস্কৃতি বা দেশের ভিন্নতা বাধা হয়ে দাঁড়াতে পারে না। ওই একটি ক্ষেত্রে ফিলিপিনো-ফিলিস্তিনি কিংবা বার্মিজ-বাংলাদেশী কোন ভেদাভেদ নেই। হালকা-পাতলা, প্রাণোচ্ছল ম্যাডামকে দেখে সত্যিই সেদিন ভাল লেগেছে (এই ফাঁকে বলে রাখি: আমি বিস্মিত হয়ে লক্ষ্য করেছি শুধুমাত্র 'মাম' নন; আমার কোর্স টিচারদের সকলেই বেশ হালকা-পাতলা। এর রহস্য কি?)

## প্রথম ক্লাসে

"Have you got the point?" - আর কিছু বলার দরকার আছে? নিশ্চয় আমার সতীর্থরা ইতোমধ্যে বুঝে গেছেন যা কিছু বোঝার। হ্যাঁ, ঠিকই ধরেছেন; যার প্রসঙ্গে বলতে যাচ্ছি তিনি আমাদের সদাহাস্যময় ব্যক্তিসম্পন্ন শিক্ষক মি. বিজয়ভূষণ দাস।

ইংরেজী ভীতি আমার মধ্যে একেবারেই যে নেই সে দাবী করবো না। তাই, একটা আশংকা ছিল যে ক্লাসে হয়ত অনেক কথাই বুঝতে পারবো না। কিন্তু, কি আশ্চর্য! ইনি দেখি সাক্ষাৎ অক্সফোর্ড ডিকশনারী যা কিনা ইংরেজীতে লেখা অথচ বাংলার চেয়েও সরল। শুধুমাত্র কথা বলার ক্ষেত্রেই নয় বরং বিষয়বস্তু উপস্থাপনেও তার ক্ষেত্রে ওই একই কথা প্রযোজ্য।

অনেকে বিশ্বাস করেন সকালবেলা কাঙ্ক্ষিত কারো মুখ দেখে ঘুম থেকে উঠলে সারাদিন ভালো কাটে। আমার অবশ্য এ সব সংস্কারে বিশ্বাস নেই। তবে, তাতে মনের উপর যে একটা ভালো প্রভাব পড়ে সে কথা মানি বৈ কি। স্যারের প্রথম ক্লাস এই বিশ্ববিদ্যালয় সম্পর্কে আমার মানষপটে একটি ইতিবাচক ধারণা তৈরি করে দিয়েছিল। আর সেদিন বাড়িতে ফিরে এসব কথাই ভাবছিলাম।

## Pronunciation

জাহাঙ্গীরনগর বিশ্ববিদ্যালয়ের দর্শন বিভাগের একটি সেমিনারে আমি উপস্থিত ছিলাম। সেখানে জাবি ও টাবির শিক্ষকবৃন্দ ছাড়াও একজন উপস্থিত ছিলেন যিনি কানাডার কোন একটি বিশ্ববিদ্যালয় থেকে এসেছিলেন। প্রত্যেকেই ইংরেজীতে কথা বলছিলেন। কিন্তু, শেষোক্ত ভদ্রলোকের বাচনভঙ্গি এবং উচ্চারণে আমি মুগ্ধ হয়ে গেলাম। এরপর থেকে আমি চেষ্টা করছিলাম কিভাবে সঠিক Pronunciation এ ইংরেজীতে কথা বলা যায়। কিন্তু, বিদ্যার যে দৌড় তাতে আমি এখনও লক্ষ্যস্থল থেকে বহুদূরে। প্রথমবারের মতো আমি একজন বাংলাদেশীকে পেয়েছি যিনি বাংলাদেশী অথচ বিশুদ্ধ উচ্চারণে ইংরেজী বলেন। তিনি আমাদের মাহনুমা ম্যাডাম। সামান্য কদিনে আমি তাঁর নিকট তিনটি পরিচয় পেয়েছি। ভয়ানক পরিশ্রমী, নিবেদিতপ্রাণ এবং সাবলীল। নিজে ভূতের মতো খাটেন এবং তাঁর ছাত্রদেরকে খাটিয়ে নিতে জানেন। আমরা বাঙ্গালী। হুয়ুগে জাতি বলে আমাদের একটি নাম আছে। আর নতুন কোন ধারা। অসম্ভব। তাই, যে কোন শিক্ষার্থী আমাদের এই ম্যাডামকে দেখে প্রথমত অবাক হয়। আর তারপরই তাকে ভীষণ পছন্দ করতে শুরু করে। আমার মনে হয় অন্য সবাইও আমার সাথে একমত।

## তাকিয়া

দেশে ক্ষুধা-দারিদ্র; অমুক অমুক সমস্যা- ইত্যাদি ইত্যাদি বলার পর পাকিস্তান আমলে রাজনীতিবিদরা নাকি বলতেন ‘খয়ের’। এবং এরপরেই চলে যেতেন অন্য প্রসঙ্গে। কেউ ভেবে বসতে পারেন যে, এই শব্দের মাঝেই নিশ্চয় ঐ সব সমস্যার সমাধান আছে। কিছুটা খোঁজ করলে কৌতূহলী ব্যক্তি জানতে পারবেন ‘খয়ের’ অর্থ সে ‘যাগ গে’। সৈয়দ মুজতবা আলী লিখেছেন, ফার্সি ভাষায় এই জাতীয় শব্দকে নাকি বলে তাকিয়া। অর্থাৎ কিনা এমন শব্দ যার উপর সমস্ত সমস্যা চাপিয়ে দিয়ে আপনি তাকিয়ায় হেলান দিয়ে বিশ্রাম নিতে পারেন। মি. মাকসুদুল আলম চৌধুরী স্যারের ক্লাস করতে গেলে বারবার মনে পড়ে মুজতবা আলীর এই লেখার কথা। কম্পিউটারের খটমটে টার্মগুলো সাবলীল দ্রুততায় উচ্চারণ করে জটিল জটিল বিষয়গুলো যখন বোঝাতে থাকেন; হঠাৎ করেই মন বলে ওঠে, ‘একটু ধীরে’। তখনি পূর্ণ বিশ্রাম। Is it OK? কিছুটা বিরতি। তারপর আবার পরবর্তী Lesson। স্যারের যে বিষয়টি সবচেয়ে ভাল লাগে তা হলো তিনি শুধু পাঠ্যবিষয়ের গভীরে নয় শিক্ষার্থীর হৃদয়ের গভীরেও বিচরণ করতে জানেন। কথা নেই- বার্তা নেই হঠাৎই শুরু হয়ে যাবে গল্প। আবার হঠাৎ করেই পড়াশোনা। অদ্ভুত এক শৃঙ্খলা। ছোটবেলায় গানের স্যারের কাছে শেখা ও নং সারগাম যেন। বেশ মজা পেয়েছি তার ক্লাসে।

## যে গল্পের শেষ নেই

ইতোমধ্যে নিশ্চয় আমার এ লেখাকে পক্ষপাতদুষ্ট, চরম অপন্যাসসূলভ ইত্যাদি প্রেমের সম্ভাষণে আখ্যায়িত করা হয়েছে। অন্যান্য Section এর ছাত্র-ছাত্রীরাও যে আমাকে ক্ষমা করতে পারবেন না সে কথা আমি লিখে দিতে পারি। অভিযোগ আর কিছুই নয়- তাদের Section এর শিক্ষকদের কথা বাদ পড়লো কেন? সেই উত্তরে আমি বিনীতভাবে বলতে চাই, আমি একজন Freshman। খুব কমসংখ্যক শিক্ষককে দেখার এবং তাদের সম্বন্ধেও যতকিঞ্চিৎ জানার সুজোগ হয়েছে। অগত্যা ---। আর তাছাড়া এই কাহিনী তো সবে শুরু- বাকি কাহিনী সাক্ষী হবো আমি এবং আমার সতীর্থ বন্ধুরা।

## **AIUB's First Ever Pohela Boishakh Festival: Blazing Brilliance, Glazing Glory**

### ***What all witnessed...***

There come some events in our lives which transplant permanent memories in our minds—comparable probably to the initial moments of first love. One cannot help but recall the awe of delight one experienced during those moments, and yet keep wondering whether those actually occurred!

*Kaal Boishakhi*—the first ever Pohela Boishakh (Bangla New Year) Festival in AIUB was a quintessential example of such event. The razzmatazz and grandeur of the festival was enormous—so much so that irrespective of students, guardians, teachers, officers and outsiders, all were glued to all portions of the Banani Club ground on 14 April from dawn to dusk.

What did not happen that day? The attraction predominantly rested on the grand *Boishakhi Mela*—comprising stalls of boutique, handicrafts, flowers, traditional foods, all types of shawrbats and drinks, nagordola, monkey dance, musical items etc. There was also a gallery of photograph, painting, cartoon exhibitions.

The spectators? Those who like to say that Bangalees are not as beautiful as other races should have come and seen with their own eyes the *bashonti-saree* women and *panjabi-pajama* men!

However, the big colorful stage—with a traditional rural decorative touch—under a shady banyan tree looked like a magical patch of flora. And when Baul songs, Tagore and Nazrul songs, Folk songs were being rendered on that accompanied by Kaththak and pastoral dances, the environment really turned out mesmerizing.

An enthralling Bangla debate between the inter department champion team (Computer Science 1<sup>st</sup> semester) and a faculty team made audience forget the noon heat. After some time, a comedy Jaatra made all burst into ceaseless laughter. Two AIUB bands with their popular folk numbers added a beating feel to the entire show.

The festival ended with the most extravagant event—Boishakhi Fashion Show—which was performed solely by AIUB students under the guidance of our gorgeously feminine colleague Farheen Hassan.

A prize-giving ceremony marked the end of all colors and excitement. What was this prize-giving all about? Well, you need to go through the next part of this write-up to get the answer...

### ***What all missed...***

It is natural that any event has its internal happenings. These are obviously missed by the audience. But these are the ones that generate the eventual success of the show.

Being in charge of the entire festival, both of us deem ourselves fortunate to be the intimate activists and witnesses of every incidents that took place behind the scene over the period of one month before 14<sup>th</sup>.

So what happened during this one month? All pre-festival activities (like inter-department debate, different cultural and designing competitions etc) took place. The debate competition,



which was based on romantic themes, drew huge crowds in all the sessions. We were so happy to see that a freshmen team of CS department emerged as the Champions.

However, the most exhilarating part of these pre-arrangement programs was a ‘poll’ conducted among the students of all disciplines. The students filled a ballot paper to elect their sirs and madams in various categories—as well as to elect the ‘AIUB Nawbobarsho Shawpno Konna’ (AIUB New Year Dream Girl) and ‘AIUB Nawbobarsho Shawpno Pooroosh’ (AIUB New Year Dream Boy). Amid severe enthusiasm, the polling continued throughout the day in all the classes with the lively support of the faculties and officers.

Who were elected as what? Well, we are giving the results of the poll here:

<b>The Top Three Madams</b>	<b>The Top Three Sirs</b>
The madam with the most <i>beautiful smile</i> 1. Nuzhat madam 2. Farheen madam 3. Salma madam	The sir with the most <i>severe personality</i> 1. Badrul sir 2. Sohrab sir 3. Mannan sir
The madam who <i>speaks</i> most <i>attractively</i> 1. Farheen madam 2. Afroza madam 3. Salma madam	The <i>hardest-nut-to-crack</i> sir 1. Sohrab sir 2. Shamim Joarder sir/Firoz sir 3. Nazmuzzaman sir/Bijoy Bhushan sir
The madam with the most <i>beautiful eyes</i> 1. Sadia madam 2. Salma madam 3. Nuzhat madam	The most <i>philosopher-like</i> sir 1. Faheem sir 2. Firoz sir 3. Modhusudan sir
The most <i>affectionate</i> madam 1. Salma madam 2. Farheen madam 3. Afroza madam	The most <i>fearsome</i> sir 1. Tashfeen sir 2. Sohrab sir 3. Mannan sir
The most <i>vibrant</i> and <i>lively</i> madam 1. Farheen madam 2. Nuzhat madam 3. Afroza madam	The most <i>affectionate</i> sir 1. Malek sir 2. Firoz sir/Sajjad Mostofa sir 3. Asif sir/Moshiur sir
The madam with the most <i>serious mood</i> 1. Kalpoma madam 2. Marzan Lulu madam 3. Dilara madam	The most <i>friendly-natured</i> sir 1. Ehsan sir 2. Awal sir 3. Asif sir
The most <i>shy</i> madam 1. Sadia madam 2. Salma madam 3. Sonia Sharmin madam	The sir with the most <i>child-like face</i> 1. Firoz sir 2. Nayeem sir 3. Mushfique sir/Amar Chowdhury sir
The most <i>elder-sisterly</i> madam 1. Afroza madam 2. Kalpoma madam 3. Dilara madam	The most <i>shy</i> sir 1. Tanveer sir 2. Fazle Rabbi sir 3. Emdad sir
The most <i>fun-loving</i> madam 1. Nuzhat madam 2. Farheen madam 3. Afroza madam	The most <i>meek-and-gentle</i> sir 1. Modhusudan sir 2. Tanveer sir 3. Miraz sir

<b>AIUB Nawbobarsho Shawpno Konna</b> (AIUB New Year Dream Girl)	<b>AIUB Nawbobarsho Shawpno Pooroosh</b> (AIUB New Year Dream Boy)
<b>Runner Up 2:</b> Majumadar Trisha (BBA)	<b>Runner Up 2:</b> Amin Md Faridul (BBA)
<b>Runner Up 1:</b> Shafique Kashfia (BBA)	<b>Runner Up 1:</b> Uddin Md Sharif (BBA)
<b>Champion:</b> Chakma Sisilia (COE)	<b>Champion:</b> Shakil Mohammad (BBA)

<b>Boishakhi Shoodawrshon Babu *</b>	<b>Boishakhi Shoodawrshona Bibi *</b>
<b>Faculty :</b> Fazle Rabbi Sir (School of Business)	<b>Faculty :</b> Syeda Nuzhat Zaman Madam (School of Business)
<b>Student :</b> Shakil Mohammad (BBA)	<b>Students :</b> Meera Farhana Rashid (BBA) Naher Nazmun (BBA)

\* This polling was conducted on the Pohela Boishakh Day at the venue

### Backstage story

We remember an evening of February when a few of us were sitting at the Campus-1 office room at the ground floor with Hasan bhai (our Founder Director Mr Hasanul A Hasan). As we raised the issue of organizing a Boishakhi Festival on 13 April, the day before the Pohela Boishakh, he instantly wanted to know why we had the 13<sup>th</sup> in our minds. Our logic was: since it was for the first time in this university, we feared a scanty turnout. So we should avoid the 14<sup>th</sup>, and go for the previous day when the campus would remain open.

He said smilingly, 'Why worry? It matters little whether or not it is for the first time. We will inshallah succeed and use this experience for the next year. And I tell you, people will come!'

We made a plan excluding the *mela*. Preparations were going on smoothly until one day when our Ishtiaque bhai (Founder Director Mr Ishtiaque Abedin) suddenly screamed, 'My God, where is *mela*? Mela must be there!'

When we mentioned of the time constraint to arrange a *mela*, he enthusiastically geared us up. 'Nothing is impossible brother', he said. 'Just go ahead.'

So, *mela* was included. Volunteers activated themselves to their extreme. Participants of cultural events, jatraa and fashion show engaged themselves in rigorous practice sessions. Classes and rehearsals went on hand in hand. The hectic schedules often created mess-ups, but that was fun. Classes had to be rearranged, and teachers had to adjust with the difficulties, but the electric atmosphere kept climbing up all the time. The volunteers and the office staff worked till late mid night without any fatigue.

As days went by, all virtually impossible things kept on becoming realities. Nadia madam, our Director of Student Affairs spent her time with the students, performers and volunteers like a friend. And when our VC madam Ms Carmen Z Lamagna started supervising the proceedings herself, it seemed as if she was working for the New Year festival of Philippines. Unforgettable are those days; AIUB was just like a *biye baari* at that time.

We indeed thank the AIUB authority for having all their confidence in two of us for organizing this massive gala. We are also grateful to all the guardians and audience from all over the place for joining our students and encouraging them.

The widespread support of *Shaptak*-famed ever-charming Ehsan Uddin Ahmed, our Coordinator of student affairs, can never be compared with anything. He was with us in every big and small matter whenever we needed him.

And, a cute ‘thank you’ to our adorable senior colleague Firoz Hasan who acted as our overall adviser in all aspects. His mature guidance was a beacon in some moments of perplexity.

There were some major unbelievable incidents from outside which nearly annihilated the entire arrangement. Better not to mention those, further better not to remember those. The greatest thing was, we were able to get out of the shackles by His mercy. We can never repay our debt to Mr Khondoker Sabbir Kabir (Chief Accounts Officer) and Mr Lutfar Rahman (Assistant Director of Public Relations) for the tremendous role they played in this regard.

Some people asked us, ‘Why is this name *Kaal Boishakhi*? Don’t you know it’s a negative thing?’

Our answer was, ‘We are using it in the most positive sense. Remember poet Nazrul’s words: *tora shawb jayodhono kawr/ oi nootoner keton ore kaal boshekhir jhaur? This fampous Boishakhi storm will sweep away all the evils and darkness from our lives...and we are waiting for the light afterwards. This is the spirit.*’

The very first Boishakhi festival—with all our inexperience and lacking—eventually converted into a dream saga. Like a *kaal boishakhi* it came in our lives...wiping out the wretchedness, despondency and naivety of our existence, and showing all AIUBians the way to greater accomplishment in the years to come. After all, God is just.

**Special Thanks To:**  
*Faheem Hasan Shahed, Ph.D. (Assistant Professor, Communication Skills)*  
*& Md. Nazmuzzaman Bhuian ( Faculty Member, Business Law)*  
*American International University – Bangladesh (AIUB)*

# All About The AIUB-Pepsi Cup Tournament 2003

**Taimur Reza Sharif**

The day 29 March 2003 has been a memorable day for the entire AIUB community as the grand cricket tournament among 23 private universities ended with great enthusiasm and delight. Like before, AIUB again highlighted their strength of organizing extra-curricular events at the national level for the third time. The first occasion was the successful arrangement of the first AIUB Cup Cricket Tournament 2002 and the second was the large-scale sports competition with a name AIUB Games 2002. The successful completion of the 2<sup>nd</sup> AIUB-Pepsi Cup 2003 has penetrated the promise of AIUB regarding their student development thought and its practical implications for the greater interest of the private university student community. It is AIUB who has been always in the forefront of organizing mega events for private university student. This endeavor of AIUB not only creates opportunity for the students to show their inner extra-curricular talent but also helps broaden their psychological perception that private university cannot be ignored in any sector and cannot be differentiated with the government-fed universities.

This year the number of competing universities has increased to 23 with a participation growth rate of 43.75% as compared to the last year's participation which was 16. In the recent tournament, AIUB emerged as the Unbeaten Champion winning all awards for individual performances throughout the tournament.

## **Awards on Individual Performance**

Man of the Tournament	Rajib Maidul Islam, student of BBA [Finance], AIUB [for all round performance with a batting average of $\alpha$ for no outs in batting throughout the tournament]
Best Bowler	Mustadir Litu, student of MBA, AIUB
Best Batsman	Rajin Saleh, student of BBA [Marketing], AIUB

## **The Way AIUB Became the Champion:**

All through the tournament, AIUB snatched victories with big margins. From the very beginning, AIUB outplayed the opponents with confidence and professional attitude.

**Best batsman of the tournament [left], Man of the Tournament [Middle] and Best Bowler of the Tournament [Right] receiving their Crests from the Chief Guest, Honorable State Minister for Youth & Sports, Mr. Fazlur Rahman, MP.**

**Chief Guest, Mr. Fazlur Rahman, MP, State Minister for Youth & Sports; with the founder Chairman, VC, Pro-VC, Founder Directors of AIUB; Founder Director of UAP; and players of the new champion team – AIUB**

In the Final on 29<sup>th</sup> March 2003 at Mirpur City Club Ground, AIUB defeated the UAP by a huge margin of 150 runs. AIUB won the toss and opted to bat first and scored 303 runs in 40 overs. In reply, UAP were bowled out in 26 overs at a score of 153 runs. Interestingly, UAP has been the first team to score 153 runs which is, in fact, the highest runs against AIUB by any team in the tournament.

In the semi-final at Mirpur City Club ground, AIUB bit BRAC University by 177 runs. AIUB won the toss and opted to bat first and scored 266 runs in 40 overs. In reply, BRAC started chasing

the target of 267 with a thrashing run rate of 6.6 for 1 till 10 overs but could not survive against AIUB's consistent spin-bowling attacks and lost all wickets in 24.2 overs only.

The AIUB-Tigers sent the defending Champion, North South University, packing by bowling them out at a mere score of 139 runs in Quarter final. In the Mirpur City Club ground, AIUB won the toss and opted to field first, and finally, defeated NSU by 6 wickets with Islam Md. Manjurul, an MBA student, being the man of the match.

**Management & players of AIUB after defeating defending champion, NSU**

In the second round at the Mirpur City Club ground, AIUB faced University Dental College & Hospital [UDCH] [which defeated University of Comilla in the first round] and managed a easy win by 256 runs. Winning the toss, AIUB opted to bat and scored 326 runs in 40 overs [the highest score in the tournament]. AIUB's Rajin Saleh scored 110\* [60 balls] but could not win the man of the match trophy due to the all round performance of Rajib Maidul Islam [3 wickets for 7 and 65\* runs].

**The Way UAP Reached the Final:**

UAP appeared as the most improved team this year in comparison to the last year's tournament [lost to Asian University in the first round by 6 wickets].

Interestingly, UAP reached the final by taking revenge over Asian University [AUB] in the semi-final. At Jagannath Hall ground [Dhaka University], AUB won the toss in the second semi-final and offered UAP batting and finally lost to UAP by 16 runs. UAP scored 201 runs in 40 overs loosing 9 wickets and in reply, AUB were bowled out in 39.4 overs at 185 runs. It is note that the between UAP and AUB has been one of the most exciting matches of the tournament. Throughout the match, both the teams showed equal chance of potential to win.

In the 4<sup>th</sup> Quarter Final of the tournament at BKSP [Bangladesh Krira Sinkkha Pratisthan] ground, UAP bit International University of Business, Agriculture & Technology [IUBAT] by ..... *AIUB won the toss and opted to bat first and scored 266 runs in 40 overs. In reply, BRAC started chasing the target of 267 with a thrashing run rate of 6.6 for 1 at 10 overs but could survive against AIUB's consistent spin-bowling attacks and lost all wickets in 24.2 overs only.*

**UAP receiving runner-up trophy from the chief guest**

In the second round at the Dhanmondi Cricket ground, UAP fought against Independent University [IUB] and managed to win by 49 runs scoring 194 runs for 8 in 30 overs. In reply, IUB struggled to chase 195 but survived for 28 overs loosing all wickets to reach 145 runs only. Galib became the man of the match for his bowling record of 5 wickets for 22 runs.

UAP qualified for the second round by getting walkover against Ahsanullah University of Science & Technology [AUST] in the first round match.

**Highlight of the Final Match**

29 March 2003 [Mirpur City Club]	American International University Bangladesh 303/7 [in 40 overs] Faisal Islam 71*[26 balls]	University of Asia Pacific 153/10 [in 26 overs] Saifuddin 42 [60 balls] Saikat 25/4	Result: AIUB won by 150 runs	Man of the Match: Faisal Islam
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Ground]	Shakel Ahmed 30/3		[AIUB]
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## **VOICES** (আড্ডাচক্র)

“ ইন্টারনেটের এই যুগে হাতে লেখা প্রেমপত্র কি তার গুরুত্ব হারিয়েছে”

**Voices-** এর উদ্যোগে গত-----তারিখ বিকাল ৫টায় AIUB’ র অডিটোরিয়ামে বসেছিল এক মনোজ্ঞ আড্ডাচক্র। বিভিন্ন বিভাগের ছাত্র/ছাত্রীদের উপস্থিতিতে CS, COE, BBA ও EEE এর ক’জন ছাত্রছাত্রী এক চমকপ্রদ বিষয় নিয়ে খোলামেলা আলোচনায় মশগুল হলেন। তর্কটা ছিলঃ ইন্টারনেটের এই যুগে যেখানে ইমেইল, Messenger, Web cam ইত্যাদি নানান সুযোগ সুবিধা প্রেমিক-প্রেমিকারা পাচ্ছেন। সেকানে হাতে লেখা প্রেমপত্র কি তার আগের মত অবস্থানে আছে নাকি বহু লাংশেই গুরুত্ব হারিয়েছে। যাঁরা এই আড্ডায় সামিল হয়েছিলেন তাঁরা হলেনঃ হোসেন মোঃ রিশাদ (CS), ফরহাদুজ্জামান মোহাম্মদ (CS), সুমী রওশন করিম (COE), খান রুমানা শিরিন (COE), রহমান মোঃ মাহবুবুর (CS), আলম আল-আমরান ইবনে (CS), রহমান সৈয়দ জিয়াউল (CS), খান জিয়ারত হোসেন (BBA), খান আশেকুর রহমান (COE), ফেরদৌস মোঃ জাকারিয়া (BBA), আহমেদ নাজিম (COE), ভিক্টর তিয়াস দাস (BBA) ও সিংহ এডওয়ার্ড অপূর্ব (COE)। দু’জন শিক্ষকও স্বতঃস্ফূর্তভাবে আড্ডায় অংশ নিয়েছিলেন। Communication Skills এর সাঈদুর রহমান ও Business law এর নাজমুজ্জামান ভূঁইয়া। আড্ডাপত্রটি পরিচালনা করেছিলেন Business Communications এর সহকারী অধ্যাপক ৫. ফহিম হাসান শাহেদ। দীর্ঘ আড়াই ঘন্টার এই প্রানান্ত আলাপারিতা **VOICES** – এর জন্য সংক্ষেপে তুলে ধরা হলো।

ফাহিম স্যারঃ সাবইকে আড্ডাচক্রে স্বাগতম। আজকের আড্ডার শিরোনাম তো সবারই জানা- মূল বিষয়টা হলো ইমেইলে পাঠানো প্রেমপত্র বনাম হাতে লেখা প্রেমপত্র।

একসময় ডাকপিয়ন যখন প্রবল প্রতাপশালী ছিলেন, তখন প্রেমিক-প্রেমিকাদের প্রতীক্ষা করতে হতো তাঁর জন্য। প্রেমিকার চিঠি না পেয়ে হতাশ প্রেমিক ভাবতো, ডাকপিয়নের অসুখ করেছে। আবার দূর থেকে ডাকপিয়নের আগমনের দৃশ্য দেখে প্রেমিক তার অবয়বে অদৃশ্য প্রেমিকের প্রতিরূপ দেখতে পেত (সমবেত হাততালি)। এখন ক’জন আর ডাকপিয়নের জন্য বসে থাকেন? ইমেইল আসার ফলে ভালোবাসার ভাব আদান- প্রদানের কাজটা নিশ্চয়ই সহজ হয়েছে। কিন্তু হাতে লেখা চিঠির যে শিহরন, তা কি মুছে গেছে? যান্ত্রিকতা ও মানবিকতার এই বিষয়টা কি মহাব্যবস্থানে চলছে, নাকি বিরোধে জড়িয়ে পড়েছে?

এসব নানা প্রসংগে আমরা আজ আপনাদের মতামত জানবো এবং সুখের কথা, আমাদের মধ্যে উপস্থিত আছেন দু’জন ফ্যাকাণ্ডি-প্রেম, রোমন্টিকতা ও মানবিকতার ব্যাপার-সাপারে যাঁদের দক্ষতা প্রশ্নাতীত (সমবেত হাততালি)। তাঁরাও নিশ্চয়ই অনেক মূল্যবান কথা বলবেন। তাহলে শুরু করা যাকঃ-

ফরহাদুজ্জামানঃ স্যারের তোলা প্রসঙ্গটায় আসি-যান্ত্রিকতা বনাম মানবিকতা। ভালোবাসা মানবীয় ব্যাপার। যন্ত্র ভালোবাস বোঝে না। যন্ত্র বোঝে ১+১ = ২ যা ভালোবাসার ক্ষেত্রে সমসময় সত্য নাও হতে পারে। ভালোবাসার মানুষকে আমি ই-মেইল করে যে চিঠি পাঠিয়েছি তাতে রয়েছে Keyboard বা Microprocessor -এর স্পর্শ। আমার কাছে এটা তেমন আকর্ষণীয় কিছু না। আমার প্রেমিকা আমাকে যে চিঠি হাতে লিখে পাঠাচ্ছে তাতে তার কলমের আঁচড় ও আঙ্গুলের ছোঁয়া আছে। এর মূল্য কি পরিমাপ করা চলে? এমনকি সে চিঠিতে তার শরীরের সুগন্ধও মিশে আছে। ভালোবাসার ক্ষেত্রে এ ব্যাপারগুলো অপারিসীম গুরুত্বপূর্ণ- (বিপুল হাততালি) ই-মেইলের মধ্যে আমি আমার প্রিয়াকে খুঁজে পাব না, কখনোই না!

রিসাদঃ আমি একটু দ্বিমত পোষণ করি। ইমেইলে যে কথা গুলো লেখা হচ্ছে তা কিন্তু কম্পিউটার লিখে না; মানুষই তার মানবিক অনুভূতি টাইপ করে পাঠাচ্ছে। আবেগ নামক ব্যাপারটার কি তাহলে কোন হেরফের ঘটছে?

সুমীঃ আমি মানছি না। ধরুন, আপনার বৌয়ের হাতের রান্না আপনার খুবই পছন্দ। এমনকি লবণ কম হলেও সুস্বাদু। বউ যদি আপনাকে রেস্টুরেন্ট থেকে খাবার কিনে এনে খাওয়ার তহলে তা কি একই জিনিস থাকবে? প্রথমটা সে যত্ন করে Specially আপনার মানবিকতা। আর রেস্টুরেন্টের খাবারটা সবার জন্যই রান্না করা-ওটা যান্ত্রিকতা।

জিয়াউলঃ বউ রান্না করে খাওয়ানোর মধ্যেও মাধ্যমের বিষয়টা চলে আসে। আমার বউ কি আমাকে সরাসরি প্লেটে বেড়ে দিয়ে খাওয়াচ্ছে না টিফিন বক্স বা হটপটে ভরে পাঠাচ্ছে-----।

সুমীঃ আপনি কি কখনো গ্রামে গিয়েছেন? গ্রামের যে মেয়েটা লেখাপড়া জানে না, তাকেও দেখেছি একটা কথা সেলাই করে রুমালে তুলতে পারে-‘যাও পাখি বলো তারে’ সে যেন ভুলে না আমারে’। অথবা, মুধু তার প্রেমিকের নামটা লিখতে পারে। সেই রুমালটা যখন যে তার প্রেমিককে উপহার দেয় তখন তো সেটা হাতে লেখা চিঠির মতই তাৎপর্যপূর্ণ হচ্ছে।

এমরানঃ গ্রামের অশিক্ষিত মেয়েটা ‘যাও পাখি’ লিখলে তা কি খুব গুরুত্বপূর্ণ কিছু।

ভিক্টরঃ -----সে হয়তো শিক্ষিত না, তবে তার কিছুটা অক্ষরজ্ঞান অবশ্যই আছে এবং সে তার সীমিত সামর্থ্যেই তার ভালোবাসাকে প্রকাশ করছে রুমাল লিখনের মাধ্যমে। সে তাতেই সন্তুষ্ট। তার হৃদয়বৃত্তির গুরুত্ব শহরের কারো চেয়ে কম মোটেও না।

জিয়ারতঃ আজকের বিষয়টা তোন একমাত্র তাদের জন্যই করা ই-মেইল ও চিঠি-দুই মাধ্যমেই অভ্যস্ত, তাই না?

আশেকুরঃ আমাদের মূল তর্কটাই হলো মাধ্যম নিয়ে। কবি কালিদাস বলেছেন কিভাবে সাগর তার ভালোবাসা পাহাড়ের কাছে পৌঁছে দেয় মেঘের মাধ্যমে। অর্থাৎ ভালোবাসার আদান-প্রদানের মধ্যমটাই সব ই-মেইলে দ্রুততার কাছে হাতে লেখা চিঠি কিছুটা চ্যালেঞ্জের মুখে- কিন্তু এই চ্যালেঞ্জটা গতির, অন্য কিছু নয়।

ফহিম স্যারঃ নতুন দিকে আলোকপাত করি। ই-মেইলে আপনি যখন লেখেন, তখন ইংরেজিতে লেখেন। বাংলায় ও যদি লেখেন, অর্থগুলো ইংরেজি। আবেগ-অনুভূতি গুলো কি ঠিক বাংলায় হাতে লেখা চিঠির সংগে তুলনীয়?

জাকারিয়াঃ আমার ব্যক্তিগত অভিজ্ঞতা থেকে বলি। আমি ইংরেজিতে ই-মেইল করি কিন্তু বাংলায় চিঠি কমই লিখি। এমনকি ‘আমি তোমাকে ভালোবাসি’ কথাটা লিখে বলিনা, মুখেই বলি। সেটাই আমার কাছে বেশি চমকপ্রদ। আমি বলতে চাচ্ছি, ভাষাটা আমার জন্য তেমন জরুরী না।

ফরহাদঃ আমার কাছে মাতৃভাষায় ভালোবাসার প্রকাশটা গুরুত্বপূর্ণ বিষয়। (এ পর্যায়ে অনেকেই এর সংগে একমত পোষন করেন)।

জিয়াউরঃ ই-মেইল একটা বিপদ সম্পর্কে কেউ কিন্তু বলছে না। Account I user name ব্যবহার করেই ই-মেইল করা যাচ্ছে। যন্ত্রের আড়ালে কোন্ মানুষটা আপনাকে ভালোবাসার কথা শোনাচ্ছে তা কি করে বুঝবেন। আমার এক বন্ধু তার আরেক বন্ধুর প্রেমিকাকে ই-মেইলে বন্ধুর হয়ে চৎডুঁ দিতে অবশ্যই বন্ধুর অনুমতি নিয়েই-----

সুমীঃ নিজের কথাই বলছেন না তো? (সমবেত হাসি)

জিয়াউরঃ আরে না! সিনেমায়ও ও তো দেখি নায়িকার বান্ধবী ই-মেইল করছে; নায়ক ভাবছে নায়িকার মেইল। হাতের লেখা চিঠিতে এরকম প্রতারণা সম্ভব না। আমি অবশ্যই আমার প্রেমিকার হাতের লেখা চিনবো।

ফরহাদঃ ঝবপঁত্রঃ’র চবৎৎবপঃরাব অবশ্যই হাতে লেখা চিঠির অবস্থান অনেক শক্ত। তবে আমি হাতের লেখার চাইতেও দামী মনে করি অন্য একটি দিক। সেটা হলো, মনের মাধুরী মিশিয়ে আমিই একটা চিঠি লিখেছি ও আমার বান্ধবী সেটা পড়ছে। সে চিঠিতে ও ‘আমি তোমাকে ভালোবাসি’ থাকবে নাকি কোন কবিতার দ’লাইন থাকবে তা অবান্তর। ভালো বাসার আশ্বাদই মুখ্য। চিঠির পাতায় আমার প্রেমিকা দু’ফোটা চবৎৎসব, যা সে নিজে ব্যবহার করে, মিশিয়ে দিতে পারে-সে সুগন্ধটাও আমার জন্য বিরাট পাওয়া।

ফহিম স্যারঃ একটা ব্যাপার কল্পনা করুন। প্রেমিক তার প্রেমিকার চিঠি দুপুরে বিছানায় শুয়ে শুয়ে পড়ছে। বাইরে মেঘ-----  
---হাল্কা বৃষ্টির ভাব। চিঠিটা তার বেশ ক’বার পড়া শেষ; কিন্তু প্রতিবারই চিঠিটার দিকে তাকিয়ে সে নানান ভাবনায ডুবে যাচ্ছে। এভাবে ঘন্টাখানেক পর সে হারিয়ে গেল ঘুমে-----। এই ব্যাপারটা এক ঘন্টা ধরে কম্পিউটারের সামনে বসে করা-----  
--সম্ভব??

ইমরানঃ তা সম্ভব না। তবে প্রিন্টারের সাহায্য নেয়াটা একটা বিকল্প হতে পারে।

ফরহাদঃ প্রিন্টার কতটা বাস্তব সম্মত? ঘরে কম্পিউটার থাকা মানেই প্রিন্টার থাকা এমন কথা তো নেই।

আশেকুরঃ প্রিন্ট আউটের সংগে কালি খরচ, সময় ব্যয়, ছোট খাট ঝামেলার ব্যাপারগুলোও জড়িত।

ভিক্টরঃ স্যার যে উদাহরণটা দিলেন, সেটা একমাত্র সেভাবেই সম্ভব। ই-মেইল তার সাথে তুলনায় আসে না।

ইমরানঃ Safety-র ব্যাপারে আসি। এরকম কতবার ঘটেছে যে প্রেমিকের চিঠি ধরা রয়েছে

প্রেমিকার মা-ভাবির কাছে। অথচ ই-মেইলের কথা ভাবুন-মা ঘরে ঢুকলে Window বন্ধ করে দিয়েই গেলো।

জিয়াউরঃ যদি ধরা খাওয়ার ভয় আপনাকে কুরে কুরে খয়, তাহলে দয়া করে প্রেম করবেনই না। (হাততালি)

সান্দিত স্যারঃ অনেকক্ষন ধরেই লক্ষ্য করছি, ফাহিম স্যার খুব সূক্ষ্মভাবে হাতে লেখা চিঠির প্রতি পক্ষপাতিত্ব প্রকাশ করে যাচ্ছেন (বিপুল তালি)। উনি যখন দিল্লীতে গুঁঘট তে ছিলেন, তখন একটা গান প্রায় সময়ই গাইতেন- ‘ ভালো আছি ভালো থেকে/ আকাশের ঠিকানায় চিঠি লিখ’। সম্ভবত সেই গানের প্রভাব তাঁর ওপর এখনো আছে (সবার উচ্চ হাসি)। তবে ফাহিম স্যার কিন্তু একটানা অনেকক্ষন কম্পিউটারের সামনে বসে ই-মেইল করে যেতে পারেন-----ভাবের কোন ঘাটতি হয়েছে বলে শুনিগি! (বিপুল তালি)

ফাহিম স্যারঃ ই-মেইল আমি যাদের করি, তার প্রায় সবাই Masculine Gender এর অন্তর্ভুক্ত (সমবেত অট্রহাসি); সেগুলো সবই দরকারি মেইল।

সান্দিত স্যারঃ যুগের সংগে তাল মিলিয়ে চলা উচিত। একটা সময় কবুতর ছিল চিঠির বাহক। তারপর এলো ডাকপিয়ন-অর্থাৎ দু’ কেনেই গবৎৎবহমবৎ এর চল ছিল। এখন ইন্টারনেটেও গবৎৎবহমবৎ বৎৎবৎপব আছে। তো এই গবৎৎবহমবৎ যেই হোক, আসল হচ্ছে ভাবের আদান প্রদান। গ্রামে গঞ্জে পেশাদার পত্রলেখকরা আগে যখন অন্যদের চিঠি লিখতেন, সেখানে তাদের হাতের লেখায় কি অন্যদের ভাবের প্রকাশ হতো না? আমি একজনকে জানি যে তার বন্ধুর হয়ে প্রেমপত্র লিখে দিতো ও সেই বন্ধুর প্রেম খুবই সার্থক হয়েছিল। কেন? ঐ ভাবে। বন্ধুর হয়ে লেখা প্রেমপত্রে সঠিক আবেগ ও ভাব ফুটে উঠতো।

আর স্থায়িত্ব কথা? বলা হচ্ছে, ই-মেইলের স্থায়িত্ব কম, ঝবৎবৎ যে কোন সময় Crash করতে পারে। কিন্তু আপনি Back – up ফাইল রাখতে পারেন। হাতে লেখা চিঠির কোন Back-up রাখা যায় না। অথচ নানান কারণেই কাগজের চিঠি নষ্ট হয়ে যেতে পারে-----।

ফরহাদুজ্জামানঃ ফটোকপি করে রাখা যায়-----।

সান্দিত স্যারঃ প্রিন্ট-আউটের চেয়েও ঝামেলাপূর্ণ ও সময় সাপেক্ষ কাজ এটা। যাহোক, ভাবের আদান প্রদানই যেখানে আসল, তখন তা ই-মেইলে হতে অসুবিধা কোথায়? বিশেষত এখন সময় যখন খুব দ্রুত ও আমাদের কাজের পরিধিও যখন বিস্তৃত।

ফাহিম স্যারঃ ই-মেইলের স্থায়িত্বের প্রতি যাঁর এত আস্থা, সেই সান্দিত স্যারই দুই মাস আগে আমাকে কাঁদো কাঁদো ভঙ্গিতে বর্ণনা করছিলেন তাঁর একটি মেইল Account Crash করার ঘটনা-----সেখানে তাঁর অনেক বিশেষ বিশেষ চিঠিও ছিল----- (প্রবল হাততালি)

জিয়াউরঃ আমি একটু আগে ফাহিম স্যারের কাছে অনুমতি চাচ্ছিলাম প্রেমপত্র থেকে সাধারণ পত্রে আলোচনাটা Divert করতে পারি কিনা কিছুক্ষনের জন্য। আমার প্রবাসী বড় বোনের সাথে আমার প্রতিদিনই ই-মেইলে যোগাযোগ হয়, Messenger-এ আলাপ হয়। তার পরও তিনি প্রতিমাসে আমাকে হাতে লেখা বিশাল চিঠি পাঠান যেটা আমার ও বাসার সবার জন্যই আনন্দকর একটা ব্যাপার। আমার দুই বছরের ভাগ্নী চিঠিতে কাকের ঠ্যাং -বকের ঠ্যাং একে পাঠায়, সেটাও আমার জন্য বিকট ব্যাপার। এগুলো কি ই-মেইল Replace করতে পারে? আমার কথা হলো-ই-মেইল ও হাতে লেখা চিঠি পাশাপাশি চলতে পারে। দুটোর Flavor দু’রকম।

জিয়ারতঃ আমার এক বন্ধুর প্রেমিকা ঢাকার বাইরে থাকে। যে আমার বন্ধুকে ডায়েরি পাঠিয়েছে-তার ৩৬৪ টি পাতায় প্রতিটি লাইনে নিজ হাতে ‘ আমি তোমাকে ভালোবাসি’ কথাটা লিখে দিয়েছে।

এটা ই-মেইল হলে কি হতো? একবার লিখে হাজারবার ঈডুচু-ঢংৎব করে দেয়া যেত- কিনা কষ্টে।

সেটোর চেয়ে এই যে কষ্টকর পরিশ্রমটা’ এর গুরুত্ব কি অনেক বেশি না?

ইমরানঃ এই কষ্টের কোন মানে আছে বলে আমি জানি না। রীতিমত Stupidity এট।



জিয়ারতঃ এটা ভালোবাসার একটা প্রকাশ যা বোঝার ক্ষমতা হয়তো আপনার নেই (সমবেত হাসি)। যাহোক, ই-মেইলের সাথে Attachment পাঠানোর বিষয়টাও যদি ধরি, তাহলেও দেখি হাতে লেখা চিঠির সংগে Attachment এর ব্যপকতা অনেক বেশি। যেমন-ফুলের পাঁপড়ি পাঠালো আপনার বান্ধবী। আপনি তখন চিন্তা করবেন কিভাবে সে আপনার জন্য ফুলটা ছিঁড়ছে, যত্ন করে সবচেয়ে সুন্দর পাঁপড়িটা ঘামে ভরেছে-----এই উপলব্ধিটা আপনার জন্য বয়ে আনছে অসীম ভালোবাসা।

নাজিমঃ কারেন্ট। তবে মেইলের ক্ষেত্রে অন্য একটা ব্যাপার আমার মাথায় এসেছে। ফাহিম স্যারের ডাকপিয়নের সূত্র ধরেই বলি, প্রতিদিন আপনি যখন ওহনডী খুলে আপনার প্রিয়জনের Account দেখছেন সেটাও ঐ ডাকপিয়নের আসার দৃশ্য দেখার সমতুল্য। আর আজকাল তো ডবন ঈডস আছে, প্রিয়জনের ছবিও সাথে সাথে দেখছেন- ফলে সামনা সামনি তাকে পাওয়ার একটা অনভূতিও পাচ্ছেন।

ফরহাদুজ্জামানঃ তারপরও চিঠির একটা তাৎপর্য আছে। ধরুন, আমার প্রিয়া ঠিকমত লিখতে জানেনা, ভাবপ্রকাশে অস্পষ্টতা আছে। তারপরও সে আমাকে চিঠি পাঠিয়েছে, তার সীমিত সামর্থ্যে অফরগুলো সাজিয়েছে আমারই জন্য-এটাই আমার কাছে বড়। এখানেই হাতে লেখা চিঠির মহিমা।

ফাহিম স্যারঃ এখন আমি একটা দৃশ্যকল্প তুলে ধরছি। ধরুন, আপনার প্রেমিকা আপনাকে চিঠি পাঠিয়েছে- শুরুতে আপনার নাম লেখা, শেষে তার নাম লেখা। মাঝে কিছুই নেই। এটাও কি তাৎপর্যহীন না? এরও তো এখন মানে হতে পারেঃ আমার আকাশের মত বিশাল হৃদয়ে কিছু লিখে কালো মেঘের আঁচড় লাগাতে চাই না-তুমিই দেখে নাও কত মেঘ জমেছিল, কত মেঘ সরে গেছে-----ইত্যাদি'। তাহলে কি দাঁড়ালো; ভাষা ছাড়াও ভাবের আদান ঘটেছে।

সপ্তর্ষিঃ এরকম গভীর ভাব হাতে লেখা চিঠিতেই বোঝানো সম্ভব। প্রতিটি মানুষের মনেই ভাব থাকে- প্রকাশভঙ্গি ভিন্ন। যেহেতু আপনি আপনার বন্ধুদের সামনে ভাব দেখাবেন না, দেখাবেন প্রিয়ার কাছেই। তখন কিসের আশ্রয় নেবেন? নিশ্চয়ই হাতে লেখার চিঠির।

রুমানাঃ আমার একটা মত আছে এই যে আমরা ই-মেইল বনাম চিঠির গুরুত্ব নিয়ে কথা বলে যাচ্ছি, এখানে লক্ষ্য করছি না একটা বিষয়। ই-মেইল প্রতিদিন করি বলে তার গুরুত্ব নিয়ে ভাবি না। কিন্তু চিঠি কালে ভদ্রে আসে বলে তা গুরুত্বটা বেশি বোঝা যায়। আমরা ই-মেইলের Technological Value এতটা Overlook করতে পারি কি? কত সময় বাঁচাচ্ছে ----- এ যুগে আমরা প্রত্যেকেই তো ভীষন ব্যস্ত।

ফরহাদুজ্জামানঃ আমি বিশ্বাস করি, আমি কাকে ভালোবাসি তবে জন্য কিছুটা সময় অবশ্যই আমার থাকবে।

ফাহিম স্যারঃ আইনজ্ঞ সহকর্মী নাজমুজ্জামান স্যার কি বলেন?

নাজমুজ্জামান স্যারঃ আইনজ্ঞ হিসাবে বলে, হাতে লেখা কিছু ছাড়া কোনো কিছুরই Legal validity নেই (সমবেত উচ্চহাসি)। যতই ই-মেইল বা ডবন ঈডস নিয়ে মাতামাতি করি, হাতে লেখা চিঠির মহামান্য আদালতের কাছে বৈধ (আরো হাসি)।

যাহোক, আমার খুব ভালো লেগেছে চিঠির সংগে প্রিয় মানুষের স্পর্শের বিষয়টা আলোচিত হওয়ায়। এটাই হাতে লেখা প্রেমপত্রের দ্রুততম আকর্ষণ। আর যারা ই-মেইল করেছেন তাদের বলি, মোমবাতির আলোয় হাতে লেখা প্রেমপত্র পড়ে দেখেছেন কোনদিন? না পড়ে থাকলে আজই পড়ুন-গ্যারান্টি দিচ্ছি, কালকে এসে আর ই-মেইলের পক্ষে কথাই বলবেন না! (বিপুল হাততালি)

আরো একটি কথা- ফাহিম স্যার বলেছেন ই-মেইলের ভাষা প্রধানত ইংরেজি, ফলে ভাব প্রকাশের গতিময়তা ব্যাহত হবার সুযোগ থাকে। আমি তা মনে করি না। ইংরেজিকে ই-মেইলের আপনি আপনার মতই ব্যবহার করুন না! এই ফাহিম স্যার ও আমার মধ্যে যখন ই-মেইল আদানপ্রদান হয় তখন আমরা তো কথ্য বাংলা-শুদ্ধ বাংলা- ইংরেজি মিলিয়ে রীতিমত জগাখিঁচুড়ি ভাষায় ভাবের আদান প্রদান করি- সমস্যা কোথায়? ভাব প্রকাশই আসল।

তবে হাতে লেখা চিঠিতে যেহেতু আনুষঙ্গিক বহু জিনিস জড়িত, সেহেতু তার তুলনা অসম্ভব।

ভালোবাসায় বাঁগ্‌রফরু নিয়ে বলা হয়েছে। আমি সবসময় বলি- 'Love is nothing but a misunderstanding between two idiots'। যে মানুষটা ভালোবাসায় আত্মমগ্ন তার কাজকর্ম অন্যের চোখে stupidity বা পাগলামি মনে হতেই পারে- তাতে প্রেমের মহত্ব তো কমেই না, বরং বাড়ে। প্রেম মানেই তো নিজেকে বিলিয়ে দেয়-----এ পর্যায়ে দীর্ঘক্ষণ ধরে হাততালি ও হর্ষধ্বনি চললো)

ফাহিম স্যারঃ ভালোবাসায় পাগলামির কথা যখন উঠলো, আমার দেখা একটা ছোট্ট অভিজ্ঞতার কথা বলি। ঘটনাটা সে সান্দ্র স্যারকে নিয়ে। আমরা দু'জনই যখন দিল্লীতে। এক সন্ধ্যায় তার রুমে গিয়ে দেখি তিনি ঘুমাচ্ছে। আর তার বালিশের পাশে পড়ে

আছে চিরকুট; লেখা- ‘ মনি আমি এসেছিলাম-----চলে যাচ্ছি । রাত ৮টায় আরেকবার আসব, যক্ষন তুমি ঘুমাও । -----  
ইত্যাদি । ভেবে দেখুন, চিরকুট রেখে গেছে তার প্রিয়া (বর্তমানে তিনি সাঈদ স্যারের সহধর্মিনী), পরে জেগে উঠে যখন তিনি এটা  
পড়বেন , তখন কিন্তু এই ‘ তুমি ঘুমাও’ ব্যাপারটা গুরুত্ব থাকবে না । প্রিয়াও সেটা জানতেন । কিন্তু তবুও তিনি লিখে গেছেন ঘুমন্ত  
সাঈদ স্যার নিশ্চয়ই স্বপ্নে চেয়ে পড়বেন ও নিশ্চিত অভয়বানী ‘ তুমি ঘুমাও’ শুনে আরো নিবিড় প্রশান্তিতে ঘুমের রাজ্যে ডুবে  
যাবেন । আমার কাছে অসাধারণ মনে হয়েছে এটা । এটাকে পাগলামি বলবেন? বলুন, কিন্তু ঐ যে নাজমুজ্জামান স্যার বললেন, যখন  
আমি ভালোবাসায় মগ্ন, তখন পাগলামি সত্যিই মহৎ! বলা বাহুল্য, ঐ চমকপ্রদ চিরকুটটি আমি তৎক্ষণাৎ seize করে আমার জিম্মায়  
রেখে দিই এবং আজো তা আমার কাছে আছে । (বিপুল হাততালি)

সাঈদ স্যারঃ আল্লাহই জানেন এরকম কত চিরকুট যে ফাহিম স্যারের সংগ্রহশালায় আছে যেগুলো আমি কখনো চোখেই  
দেখিনি----- (আরো হাসি) ।

মাহবুবুরঃ আমার বন্ধু আড্ডায় বসা অবস্থায় প্রেমিকার প্রথম চিঠি পেয়ে দৌড়ে বের হয়ে যে কাভ করলো, তা আজও আমার মাথায়  
ভাসে । Dangerous পাগলামি । সেদিন আমি হাতে লিখা চিঠির তাৎপর্য বুঝলাম ।

জনৈক দর্শকঃ আমাকে যখন আমার প্রিয় বান্ধবী বললো, সে প্রথমবারের মত আমাকে চিঠি লিখে পোস্ট ও করে দিয়েছে ।  
তারপর থেকে আমার ঘুম হারাম হয়েছিল । সারাক্ষণ বারান্দায় দাঁড়িয়ে থাকতাম কখন পোস্টম্যান তার চিঠি নিয়ে আসে । আম্মার  
হাতে পড়লে যে কি হবে সে টেনশনে আমার অবস্থা কাহিল ।

রিশাদঃ যে কাজটা একটা মেয়ে করলে মানায় তা আপনি করলেন । (সবার হাসি)

ফরহাদুজ্জামানঃ এই যে টেনশন, এই যে আতংক এটাই হাতে লেখা চিঠির অনন্যতা । ই-মেইলে এটা কখনোই পাবেন না ।

জিয়ারতঃ চিঠিতে এই যে ধরা হাওয়ার ব্যাপারটা তা কিন্তু অনেক সময় positive দিকেও মোড় নেয় । মা-বাবা হয়তো কল্পনাই  
করতেন না সন্তানের প্রেমের কথা-এখন চিঠিটা পেয়ে অনেক নাটক-হলুম জুলুমের পর হয়তো মেনেও নিতে পারেন ।

আশেকুরঃ নাটক হলুমুলের পর মেনে না নিয়ে হয়তো উপায়ও থাকে না!

এডওয়ার্ডঃ আমি এমকনিতাই দেরি করে এসেছি -----তারপরও আলোচনা যা শুনলাম, তাতে আমার মনে হয়েছে, সবাই  
কিন্তু একটা বিষয়ে একমত । তা হলো, ভালোবাসার চিরন্তন অ....প্রিয়জনের কাছে প্রকাশ করাটা ও ভাবের আদান- প্রদানটাই আসল  
কথা । ই-মেইল বা হাতে লেখা চিঠি- উভয় মাধ্যমেই এটা সম্ভব । দুটোর গুরুত্বপূর্ণ হয় তবে সমস্ত চৎড়ৎ এবং ঙ্গড়ৎ এর  
তুলনামূলক বিচারে শেষ পর্যন্ত বোধ হয় হাতে লেখা প্রেমপত্রই জিতে যায় । যতই technology এগিয়ে যাক, তার পরও চিঠি অমর  
ও অক্ষয় । (সমবেত তালি)

ফাহিম স্যারঃ কথা ছিল, এক ঘন্টার আড্ডায় বসবো । বিকালে আড়াই ঘন্টা পেরিয়ে গেল কেউই বুঝলাম না । আসলে  
আমাদের সবার ভালোবাসায় আবেগ ও রূপরেখা এতই গভীর যে সময় তার কাছে মূল্যহীন!

একটা ছোট্ট ঘটনা দিয়ে শেষ করি । কোন এক হাউজিং কমপ্লেক্স একই ফ্লোরে পাশাপাশি দু’টো অ্যাপার্টমেন্টে এক কিশোর ও এক  
কিশোরী দিনের বেশিরভাগ সময়ই ইন্টারনেটের মাধ্যমে যোগাযোগ চালিয়ে যাচ্ছে । ই-মেইল, ভয়েস-মেইল, গবংবহমবৎ ডবন  
পধহ -----কিই না ব্যবহার করছে । কারণ একটাই, তাদের দেখা করার সমস্যা আছে । দু’পক্ষের জন্য কেন লিখছে? আমার  
মনে হয়- এই প্রশ্নের উত্তর খোঁজার সাধ্য আজকের আড্ডার সারমর্ম মিলবে । সবাইকে অনেক অনেক ধন্যবাদ ।

এডওয়ার্ডঃ **VOICES**- এর পক্ষ থেকে আমিও সবাইকে ধন্যবাদ জানাই এমন প্রীতিকর একটা জমজমাট আড্ডা উপহার  
দেবার জন্য ভবিষ্যতে এম আড্ডা নিয়মিত ভাবেই হবে সন্দেহ নেই ।

## **A JOURNEY BY LEGS**

S.M. Sazzad Hossain (BBA)

### **ফিরে আসা**

Arman Mohammad Alif (EEE)

হাজার আলোকবর্ষ পেরিয়ে

অন্তরীক্ষ, গ্রহ, নক্ষত্র ছেঁরে

এখানে ফিরে আসা

যেখানে আকাশ মিশে গেছে

সবুজের সাথে;

যেখানে দাঁড়ালে

দেহে আকাশের ছায়া পড়ে

শত শতাব্দী পর

আবার সেখানে ফিরে আসা ।

কল্পলোকের সীমানা পেরিয়ে

নিজনে, নিভূতে ছায়াপথ ডিঙ্গিয়ে

আমার সপ্ন

আমার আশা, আমার ভালবাসা

আবার আমার প্রিয়

বাংলাদেশে ফিরে আসা ।

### **Rain**

*Shariar Md. Hasan (BBA)*

Oh Rain ! You drop out with unknown  
grief,

You drop out with thousands of  
sorrows in heart,

And a vast water falls.

You look for limitless sea and water,

And drop out with a great flow.

The blue sky is the homeland for you,

You make it blue or new.

World is for your selfness portion...

And also for your selfness  
contribution.

By dropping into the green fields,

You make more green.

Dropping into the nice scene,

You create more previously fine.

There was no way, without do it by mine.  
Though I knew, what I did, was so much fine.

I was walking on the heart of the river.  
As I know the river, is only for mine, forever.

There was no blood, on the shore of her heart.  
Do you know my friend?

My foolish legs were always alert.

There was no ray, that falling by the sun.  
I was walking, walking, walking and walking at  
all.

I was walking on the wood for a long long time,  
As I know, it is my best rhyme.

There was no love, on the shore of my heart.  
Do you know my friend?

Her foolish heart was always alert.

### **Dream Princess**

*Hossain Md. Selim Shakhawat (COE)*

I have shelled myself as a snail,

As you pass me by, even through your  
beautiful smell,

I hide through insecurity to look at your eyes,  
Those penetrating diamonds eyes never  
allows me

to say a formal good byes!

My princess!! when will you come to me,  
So just to open my eyes, just more to see,

My courage is shattered when your buttery  
lips speak,

I wonder is it a dream of mine or a star I  
seek.

I would like to take you, as if in a garden in  
heaven,

That is the treasure of my dream, I would  
smile when it is given.

Think of us in a carriage riding together  
music of A.R Rahman playing,

And let the moment be forever!

There may be a time, I will come out from my  
shell

No longer I will remain a snail.

We will smile together forever and ever

I will hold your hand, you will hold mine

We will light up the candles, so to dine!!

স্মৃতিতে বৈশাখ

মাজিদ নাশীদুল (CS)

বৃষ্টি ভেজা নব বৈশাখের রাত  
জানালা না , যেন স্মৃতির পর্দা ,  
দীর্ঘশ্বাসের শব্দ ঝরে পড়ে  
আকাশে স্মৃতির ঘনঘটা ।

সেদিনও ছিল প্রথম বৈশাখ  
তবে উৎসব মুখরিত ,  
ছিলে ভালোবাসা কাঙ্গালিনী  
চেয়েছিলে আমারই মতো কাউকে করতে খনী ।

আর আমি এ ছাড়া জীবনে  
কাউকে এতটা ভালবাসবো ভাবিনি ।  
তোমার আহবান ? না সম্মোহন ?  
এতটা পাগল কখনও হইনি , ফিরিয়ে দিইনি ।

ভালবাসা ছিল কানায় কানায় পূর্ণ  
ভুমিও আবেগ তাড়িতা ।  
থামাতে চাওনি , থামাইওনি  
জীবন রঙ্গে আঁকা রঙিন স্মৃতিটা ।

ভুলে গেছ ঠিকই , না ভুলিনি  
স্বাভাবিকতার মাঝে অস্বাভাবিক মৌনতা  
কোথাও যেন কিছু নেই ।  
কালবৈশাখীর তাড়ব মেঘের ঘনঘটা ।

( প্রথম পুরস্কার বৈশাখী উৎসব ১৪১০, আমেরিকান ইন্টারন্যাশনাল  
ইউনিভার্সিটি বাংলাদেশ । )