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WORLD MARITIME UNIVERSITY

Malmö, Sweden

**A PROPOSAL FOR ESTABLISHMENT OF A
MARITIME UNIVERSITY
IN BANGLADESH**

By

SAJID HUSSAIN

Bangladesh

A dissertation submitted to the World Maritime University in partial
fulfilment of the requirements for the award of the degree of

MASTER OF SCIENCE

in

MARITIME SAFETY ADMINISTRATION

(Marine Engineering)

1998

DECLARATION

I certify that all the material in this dissertation that is not my own work has been identified, and that no material is included for which a degree has previously been conferred on me.

The contents of this dissertation reflect my own personal views, and are not necessarily endorsed by the University.

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DEDICATION

This small piece of work is
dedicated to those
brave 75 million people including 3 million martyrs
who fought for and achieved
independence of Bangladesh in 1971 under the leadership of our
national leader
Bangabandhu Sheikh Mujibur Rahman
[the father of the Bangalee Nation]

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ABSTRACT

Title of Dissertation: **A proposal for establishment of a Maritime University in Bangladesh**

Degree: **Master of Science**

The main aim of the study is to formulate a process to establish an integrated centre for higher maritime studies and research in Bangladesh. An assessment is made to verify the need for such specialised higher education and research at postgraduate and at doctoral level for the maritime and shipping personnel. It also highlights the need and appropriation for in-service continued education and research. The geographical location, historical background of the emergence of this new country in 1971 and the rehabilitation programme thereafter (in shipping sector) is described. Its diplomatic and political relation with other regional countries is discussed briefly.

A brief look is taken to review the existing maritime education, the requirement of post-sea and shipping trade related higher education and research and unification of two seafaring streams, i.e. marine engineering and navigation. The roles and responsibilities of shipping managers, maritime administrators and maritime lecturers are examined. The local, regional and global impact of this university and scope to perform as a regional university is acknowledged. Most importantly the establishment process (physical and academic) is described and the government education policy and the legal procedure in establishing such institution is reviewed.

Finally it has been concluded that there is a clear need for an integrated centre for maritime studies and research in Bangladesh and that may be fulfilled by establishing the proposed **Bangabandhu Maritime University**.

KEYWORDS: Bangladesh, Maritime University, Postgraduate Research, Maritime experts, Curriculum, University Plan.

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List of abbreviations

ADB	– Asian Development Bank
ASEAN	– Association of South-east Asian Nations
BMS	– Bachelor of Maritime Science
BOGSOA	– Bangladesh Ocean-Going Shipowners' Association
BSC	– Bangladesh Shipping Corporation
BUET	– Bangladesh university of engineering and technology
CoC	– Certificate of Competency
CP	– Colombo Plan
ESCAP	– Economic and social commission for Asia and the Pacific
IMO	– International Maritime Organisation
LL	– Load lines (Convention)
MARPOL	– Marine Pollution (Convention)
MET	– Maritime Education and Training
MPhil	– Master of Philosophy
PhD	– Doctor of Philosophy
PG	– Postgraduate
SOLAS	– Safety of life at sea
STCW	– Standards of Training, Certification and Watchkeeping Convention
UG	– Undergraduate
UGC	– University grants commission
UNDP	– United Nations Development Fund
WB/IBRD	– World Bank/International Bank for Reconstruction and Development
WMU	– World Maritime University

*“Your Lord is He that maketh the ship go smoothly for you through
the sea, in order that ye may seek of
His Bounty;
for He is unto you Most Merciful.”
(Al-Quran 17:66)*

*“Of priests, O Arjuna, know Me to be the chief, Brashpati. Of
generals I am Kartikeya, and of bodies of water
I am the ocean.”
(Bhagavad-Gita 10:24)*

*“They that go down to the sea in ships, that do business in great
waters; these see the works of the LORD;
and His wonders in the deep.”
(Psalm 107:23-24)*

Introduction

Right from the beginning of human era on earth, man commenced ambitious sea-expeditions to explore the unseen and unknown treasure world of the seven seas. Thus seafaring became a natural and spontaneous phenomena of the human civilisation. It is unknown that when man sailed first; however it is presumed that the Egyptians made the first sailing vessel about 12,000 years ago. Through this long span of time with impulsive changes in technological advancement and continuous exploration, the 'world of the seven seas' has emerged as the mother of human being. The majority of the world as being the water yields the feeling of 'world means water'.

However the tragic TITANIC disaster in 1912 made the 'water world' realised that it was miles to go to conquer the then forthcoming modern maritime arena in this twentieth century. Since then the maritime world concentrated in all its related areas with 'safety' as the most predominant consideration. However the basic consideration remains with, as ever, the appropriate and applied education and training to develop the most important instrument of the water-world: the HUMAN RESOURCES. Today the maritime education extends from the seafaring knowledge into the areas like shipping industries, information, communication, environments, economics, and business at shore.

In addition to basic maritime training for seafaring personnel, specialised education and training is required for maritime and shipping personnel at sea as well as at shore for efficient management and operation of ships and shipping. Advanced maritime education in the form of higher education and research is required for senior maritime and shipping personnel like surveyors, examiners, professors, administrators, managers, economists, business personnel and market analysts.

Bangladesh is a seafaring country that has a long maritime historical background. It has a number of Maritime Institutions that provide different programmes for education and training for sea-going and inland shipping personnel. Yet there is no facility for any higher education like Masters and Doctoral degree for shipping maritime personnel. Again there is no institution where there is a facility to receive education on various shipping trades like shipping management, maritime business, port operations and maritime safety management. With the passage of time world shipping has changed to a greater extent. In fact at present the change (shifting of core shipping-business from west to eastern parts of the world) is taking place with acceleration. Naturally Bangladesh is falling behind mainly due to shortage of skilled and expert maritime and shipping personnel.

Highly skilled maritime and shipping personnel are the prime requirement for development of Bangladesh Shipping trade. Therefore obviously for fostering its shipping trade, it is now a vital important matter for Bangladesh to find a way to establish an integrated centre for maritime studies i.e. a *Maritime University*.

Chapter 1

Maritime University and Bangladesh

1.1 Concept of a University and a Maritime University

“A university is an institution of higher education which offers study at degree level. Courses may be taken leading to bachelor, master, or doctoral levels. The courses lead to qualifications in professions such as medicine, teaching, engineering, and the law, sometimes in conjunction with professional bodies. Research is given a high priority.” - The Cambridge University Press (1990, pp. 1249).

A University means:

1. A body of persons gathered at a particular place for the disseminating and assimilating of knowledge in advanced fields of study.
2. An institution of higher learning providing facilities for teaching and research and authorised to grant academic degrees.
3. An institution made up of an undergraduate division which confers bachelor's degrees and graduate division which comprises a graduate school and professional schools each of which may confer master's degree and doctorates. (Gove, Philip Babcock, Ph.D., 1981, page no. 2502).

Universities these days offer a bewildering array of menus. On top of this, each university and each department within it has its own hierarchy, and its own complicated list of rules and regulations.

John Henry Cardinal Newman (1801-1890) gave the Idea of a University in 1852 at the founding ceremony of the Catholic University of Dublin. His Preface begins:

The view taken of a University in these discourses is the following: that it is a place of teaching universal knowledge. This implies that its object is, on the one hand, intellectual, not moral; and, on the other, that it is the diffusion and extension of knowledge rather than the advancement. (The Ideas of a University Home Page. <http://quarries.unbc.edu/ideas/> [02.17.98], 1995).

A university means an institution to provide higher education and learning to its students to prepare them for the responsibilities of being administrators, entrepreneurs, teachers and professionals. It is a gateway to higher research and implementation of new technology ideas. An effective university system, fruitful interaction among the universities, government, business and social welfare organisations can transform the state of a country. In a word a university play a role in making sure that students understand the advances in knowledge, absorb this knowledge and utilise it in their works for the development of the country. A university serves as the dynamic institution that can generate new technology and knowledge necessary for transformation of a society.

In low and middle income countries investment in higher education can lead to social returns of 10% by some estimates, which in turn means that these investments lead to increases in labour productivity and higher long term growth. (World Bank, 1995).

Higher education is a resource to address employees' educational needs. Company participation in company-sponsored education programmes has grown dramatically nowadays. The increasing recognition of enrolment growth in employer-sponsored education and continuing education throughout one's life is much more widely accepted phenomenon.

Higher education also has much to gain in symbiotic relationship. Its students and faculties are major beneficiaries. Business offers significant numbers of students who want and need additional formal study. These students are generally serious, matured, highly motivated and challenging. They bring experience to the classroom and a need for relevance to their lives.

A maritime university is obviously a specialised institution possesses all the qualities that mentioned above of a university; however it is dedicated for maritime education, training and research in the fields of maritime safety, protection of marine environment, international shipping, marine engineering and nautical science.

It may be mentioned here that a maritime academy is a specialised institution that offers courses of education and training (certificate of competencies) for students those who will serve on-board sea-going vessels as marine engineers or navigating officers. And a maritime university focuses mainly on maritime research.

1.2 Geographical location of Bangladesh

Bangladesh lies in the north-eastern part of South Asia between 20°34' and 26°38' north latitude and 88°01' and 92°41' east longitude. The country is bounded by India on the west, north and north-east, Myanmar (Burma) on the south-east and the Bay of Bengal on the south. The area of the country is 1,47,570-sq. km (56,977 sq. miles). The limit of territorial water of Bangladesh is 12 nautical miles and the area of the high seas extends to 200 nautical miles measured from the base lines; that also constitutes the exclusive economic zone of the country.

South Asia is composed of Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka. South Asia is often called the 'Subcontinent', and is an accurate descriptive term for its 1000 million inhabitants. While South Asia is a sub-region of the greater Asian continent, for most of recorded history it has had only limited political, economic and cultural ties with other major Asian societies. No other region

of the world has such formidable natural boundaries like massive Himalayan and Hindu Kush ranges, the highest in the world, as the subcontinent. Economically and culturally, South Asia's most important contacts, as well as for Bangladesh, with the rest of the world for the last two millennia have been by sea.

1.3 Facts of Bangladesh

The old and traditional name of Bangladesh was *Banga* (afterwards *Bangla*) what is being spelled as 'Bengal' in English. The then *Banga* (including today's West Bengal and a part of Assam in India) was under the Muslim (Mughals etc.) regime of greater India from 1201 to 1757 AD. The British Empire ruled over the entire Indian Sub-continent (including *Bangla*) from 1757 to 1947. The sub-continent became independent in 1947 with the partitioning of it as India for Hindus and Pakistan (East and West) for Muslims. Geographically the two wings of Pakistan were situated about 1000 miles apart at two sides of India.

East Pakistan became independent on 26th March of 1971, under the leadership of *Bangabandhu* (Friend of Bengal) *Sheikh Mujibur Rahman* (the father of the nation), renamed as BANGLADESH and became a secular state. The main reasons for break up of Pakistan and the emergence of Bangladesh were the lack of Bengali participation in central decision-making processes in Pakistan and the colonial style of economic exploitation of East Pakistan by West Pakistan.

After independence in 1971 Bangladesh took a foreign policy of non-alignment basing on sovereign equality, territorial integrity, peaceful co-existence and non-interference in each other's internal affairs. It became member of various international platforms like UN (United Nations), Commonwealth, OIC (Organisation of Islamic conference).

In spite of the presence of a massive neighbouring country like India, Bangladesh took a remarkable initiative and leadership to create various regional co-operation platforms from time to time.

1975: **The Bangkok Agreement**: for trade negotiation among Bangladesh, India, Korea, Laos and Sri Lanka.

1985: **SAARC** (South Asian Association for regional co-operation): for development of Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka.

1997: **D-8** (Developing 8): for development of Bangladesh, Egypt, Indonesia, Iran, Malaysia, Nigeria, Pakistan and Turkey.

1997: **BIMSTEC**: for economic co-operation of Bangladesh, Indonesia, Myanmar, Sri Lanka, Thailand.

1997: **South Asian Growth Quadrangle**: for Bangladesh, Bhutan, India and Nepal.

Climate: A sub-tropical monsoon climate with average temperature of 7 – 12 degree Celsius (45⁰ F – 53⁰ F) in winter and 30 – 38 (86⁰ F – 100⁰ F) degrees in summer.

Population: According to Bangladesh bureau of statistics' population census in March 1998 the population is 127 million.

Literacy rate: According to Planning Commission report (1997) it is 44.3%.

Professional Educational Institutions (by 1997):

Number of Technical/General Universities	– 29 (11 public + 18 private)
Number of Maritime Academy/Training centres	– 5 (all public)
Number of Engineering Colleges	– 4 (all public)
Number of Polytechnic Institutes	– 20 (all public)
Number of Medical University	– 1 (public)
Number of Medical Colleges	– 19 (14 public + 5 private)

1.4 Bangladesh as a maritime nation

Standing just beside the furious Bay of Bengal, Bangladesh is traditionally a maritime country. The Bay of Bengal surrounds the country throughout its southern border. Moreover internally Bangladesh is a riverine country; criss-crossed by over 3,500 rivers, streams and canals having length of about 24,000 km (15,000 miles) covering nearly 7% of the country's land-surface. A good number of major rivers, namely the Ganges (Padma), the Brahmaputra (Jamuna) and the Meghna, with their tributaries and distributaries, has formed one of the largest networks of waterways in the world. There are about 8300 km of navigable waterways in Bangladesh and about 6,630 registered vessel, as on 31.12.91 (Bangladesh third inland transport project, 1994, vol. 3), ply in these waterways.

The above-mentioned rivers, flowing down from the Himalayan range, met in Bangladesh and formed the *world's largest delta*. This delta as being 60,000-sq. km (23,000 sq. miles) is twice the size of what is formed by the Mississippi and thrice the area of the Nile delta. More than half of the country's total land area is situated within a distance of 10 km of navigable waterways and about a third of the land being under water at any time of the year. With this huge amount of inland waterways and with about 52,000 Sq. km (20,000 sq. miles) of exclusive economic zone, stretching form the coast line of 480 miles (768 km), along the Bay of Bengal, having a massive stock of fish in it, the 127 million peoples of Bangladesh are traditionally dependent on maritime resources for their survival.

Naturally the major portion of our economy depends on this maritime sector. The country's strategic position has provided a spontaneous scope to build a strong merchant fleet for carrying national sea-borne trade.

Back in 13th century the Sultan of Turkey imported 13 sailing vessels from this country. In 14th century world famous Chinese tourist IBNE BATUTA came to this sub-continent and went back with a wooden ship named 'Jank', made by local builders at Sonargaon, Dhaka. Tourist Frederick came to Bangladesh in 1567 and found some wooden sailing vessels that could cross 100 miles in 8 hours. Some

vessels (sloop ships) made in Bangladesh were used by Portuguese in the Battle of Trafalgar in 1805. In 18th century Germany imported one sailing vessel from Bangladesh named *Deutsche Fregatte*; which is still being displayed at the Bremer Havn shipbuilding museum (Hossain, 1996, 22).

The very old seaport of Chittagong (old name was 'Porta Grande') is being used for about 2000 years. Trees like Segun (teak), Jarul and Shishu are available here in Chittagong area and so the wooden shipbuilding industries had been established here during last few centuries. Those naval architects were mostly illiterate but by inheritance they could build the sailing vessels. But it's a pity that we have lost those traditional methods with the invention of newer shipbuilding technologies world-wide and could not establish modern shipbuilding industries of our own.

Bangladesh Shipping Corporation was established with *no ships* in 1972, right after liberation, by the initiative of the then *President Bangabandhu Sheikh Mujibur Rahman*. Within only three and half years time *Bangabandhu* could arrange to acquire 19 ships from different countries, almost free of costs, for Bangladesh Shipping Corporation. He also arranged for more 13 ships to receive; which were acquired later within 1981.

However due to acute shortage of senior seafaring personnel, and shore-experts as well, all those ships had to be run mostly by foreign *Masters/Chief Engineers* and other *senior officers*. Meanwhile a good number of trained marine engineering and nautical cadets, passed out from the Bangladesh Marine Academy, after liberation, started achieving sea-going certificates of competency as *Masters/Chief Engineers/Second Engineers/Chief Officers* from UK around 1980. Since 1983 Bangladesh ships are fully being manned by Bangladeshi officers.

Today in this competitive modern shipping world, in spite of financial and other constraints, Bangladesh is having a total number of 29 ocean-going vessels in the public and private sectors with a total of approximately about 400,000 DWT (Dead Weight Ton). The country has two seaports namely Chittagong and Mongla. About 95% of her overseas trading are routed through these ports.

The Government of Bangladesh has been pursuing the policy of encouraging the private sector to grow side by side to share its responsibility to the national shipping trade. Both public and private sector operates in shipping business in Bangladesh. There are about 70 private shipping companies in Bangladesh among which only 8 companies own ocean going ships and others work as local agents on behalf of their respective principals.

Table 1

<i>Fleet position of Bangladesh in 1997</i>		
Company/sector	Number	DWT
Bangladesh Shipping Corporation (govt.)	16	237,595
Private Shipping Companies	13	162,500 (approx.)

Source: Bangladesh Ocean-going Shipowners Association

Table 2

<i>International Vessels called the Port of Chittagong & Mongla</i>		
Year	Number	Cargo handled
1994-95	1566	12,882,000 mt

Source: Port of Chittagong & Mongla Authorities

Ship Repair facilities at Chittagong and Mongla seaports: The Chittagong Dry-dock Ltd. offers a wide range of repair facilities apart from it's dry-docking works for ocean-going vessels upto 16,500 dwt. The Bangladesh Shipping Corporation Marine Workshop offers almost all kind of repair facilities. There are also a number of private repairing workshops and yards at Chittagong. Among them the 'Western Marine Services' is remarkable. Only minor repairs can be arranged through Khulna Shipyard and other small private workshops in Mongla sea-port.

Chapter 2

Review of the existing Maritime Education facilities

2.1 Preclusion

Having a long coastline of 480 miles (768 km) along the Bay of Bengal the people of Bangladesh used to go for seafaring for centuries. So, modern seafaring is a natural heritage of those old sailors. Specially the people of South Bangladesh are major in number in this profession. Emphasising the need for maritime education and training and to meet the future challenge of modern seafaring a government officer of British-India and a well-known scholar Mr. G. N. Gupta suggested in one of his reports titled, 'Industrial prospects of Bengal' in 1907-08 to establish a maritime/nautical training school or a college at Chittagong Port of South Bengal (Hossain, 1996, 23). Thereafter the Pakistan Government established two institutes for maritime education. The existing 'Seamen's Training Centre' was established in 1959 for sea-going ratings (crews) and the existing 'Marine Academy' was established in 1962 for sea-going marine engineers and nautical officers.

2.2 Existing facilities in different universities

Education for maritime knowledge at the level of *seafaring* Certificate of Competency or at maritime research is not available in any of the 29 technical/general universities. However there is a facility to study Naval Architecture (basically a shipbuilding engineering with partial marine engineering), Marine Biology and Marine Science in some Universities.

Bangladesh University of Engineering and Technology (BUET):

Among the five Faculties of the University the Faculty of Mechanical Engineering comprises of three departments.

Department of Industrial & Production Engineering : PG only

Department of Mechanical Engineering : UG and PG

Department of Naval Arch. and Marine Engineering : UG and PG

Department of Naval Architecture and Marine Engineering offers B.Sc. Engineering Degree, M.Sc. Engineering Degree, Master of Engineering (M.Eng) Degree and Ph.D Degree courses in relevant areas.

The programme of study in Naval Architecture and Marine Engineering covers Mathematics, Ship Drawing, Ship Structure, Thermodynamics, Fluid mechanics, Shipbuilding Materials, Marine engines & fuels, Shipbuilding technology, Marine hydrodynamics, Ship Design, Shipyard management, Resistance of ships, Propulsion of ships, Hull vibration, Sea waves, Computer programming in Ship design etc. In post graduate courses students get opportunity to specialise in certain areas with greater depth.

At present there is a limited (upto 4000 dwt) facility for ocean-going shipbuilding in Bangladesh. Therefore the workforce i.e. output of this department are not being utilised fully. Again the graduates are not trained to be skilled and suitable for practical works on board-ships. Normal entrants per year are 10 in undergraduate programme.

University of Chittagong:

The Institute of Marine Science, under the Faculty of Science, offers Bachelor of Science (Honours) Degree and Master of Science Degree courses. The Institute of Marine Science was initially established as a project of Canadian Technical Association programme in 1969. The Department of Marine Biology was

established in 1971. However these two establishments merged together in 1983 and continued as the present Institute of Marine Science. In its 4 years undergraduate course the number of entrants is 40 in each of the years.

Purpose: In order to make better assessment of the biological potentialities and to explore & exploit the marine resources of the Bay of Bengal. Expert marine scientists are necessary to undertake study and extensive research in various disciplines of the bay in organised manner to create manpower for educational institutions, marine fisheries departments, coastal aquaculture organisations, marine food production companies, shrimp hatcheries, BFDC (Bangladesh Fisheries Development Corporation), fishermen co-operative societies, Bay fishing corporations etc.

The programme of study in Bachelor of Science (Honours) Degree course covers biology, marine invertebrates, marine vertebrates and ichthyology, marine ecology, biochemistry, oceanography, marine plankton, coastal aquaculture, marine microbiology, marine botany, marine pollution, marine fisheries, diseases & nutrition of fish & shellfish, estuarine and mangrove ecosystems, environment impact assessment etc.

The programme of study in Master of Science Degree course covers marine ecology, aquaculture, oceanography, environmental pollution & management, post harvest technology & microbiology, marine fisheries & resource management. However the curriculum of this institute is not connected with sea-borne shipping trade but marine lives and ocean environment. So the commercial shipping industry of Bangladesh is not directly being benefited from this institute.

Khulna University:

This is a new university established in 1991 with 2 (two) faculties having 6 (six) departments. The department of fishery and marine resources offers four years' Bachelor of Science Degree Course. The curriculum of this course does not include any areas of sea-borne shipping trade.

2.3 Existing facilities in different institutions

The maritime education and training, for certificate of competency, in Bangladesh can be divide into two sectors. One is for sea-going ship operation and the other is for inland smaller ship operation. There are altogether five institutions that are offering maritime courses in different grades and areas.

Marine Academy, Chittagong: It provides education and training for Marine Engineers, Nautical Officers and Engineer/Deck Cadets of seagoing vessels.

Seamen's Training Centre, Chittagong: It provides education and training for Ratings (Engine crews and Deck Crews) of sea-going vessels.

Marine Fisheries Academy, Chittagong: It provides education and training for Engine and Deck personnel of fishing vessels that engaged in fishing in Bay of Bengal.

Marine Diesel Training Centre, Narayanganj, Dhaka: It provides education and training for Engine personnel of inland vessels that ply in rivers.

Deck Personnel Training Centre, Narayanganj, Dhaka: It provides education and training for Deck personnel of inland vessels that ply in rivers.

Marine Academy, Chittagong, Bangladesh:

Established in 1962 primarily to impart pre-sea training to 10 Engineering and 10 Nautical Cadets every year. Initially almost all the Cadets used to be recruited in Pakistan National Shipping Corporation (government shipping line) vessels. Academy increased the number of entrants from average 20 per year to 44 per year during 70s (after liberation in 1971) to keep up the pace with the growing global demand of *fresh Cadets*. Again there was a growing demand of the continued

professional training for post-sea officers especially for preparation of their certificates of competency examinations. And so the Academy had to be expanded to meet these demands.

In line with the British maritime education system a four years' Engineer Cadet Training Scheme, in three phases, had been superimposed on the existing pre-sea cadets' training in 1978.

Phase I : TWO years theoretical and practical training at the Academy (pre-sea training).

Phase II : ONE year practical/on the job training on board.

Phase III : ONE year advanced practical training at the Academy*.

* Now this phase can be performed on board as well under the '1995 amendment' of the Bangladesh Merchant shipping Rules 1983.

Bangladesh, as a member country to the IMO, signed the STCW 78 and adopted it in 1984. Then all the training programmes were streamlined with the new requirements of the convention. Some of the IMO Model courses were then introduced.

Today the Academy ranks as one of the world's foremost maritime institutions. This Academy has been chosen and recognised as one of the 14 branches of the World Maritime University at Malmö, Sweden.

A two years Bachelor of Science (Pass) Degree (Engineering/Nautical) course, superimposing on the existing pre-sea training, was introduced under the University of Chittagong in 1991. Again this Degree course had been upgraded to a two years Bachelor of Maritime Science Degree (Engineering/Nautical) course in 1994 under the National University. At present the Academy is offering a number of ancillary courses mostly following specific IMO Model courses.

The number of entrants per year is 30 in Engineering branch and 30 in Nautical branch. There are 1740 Engineering and Deck Cadets, with pre-sea training and

later simultaneously with bachelor degree, have successfully passed-out from this Academy since establishment in 1962 till 1997. Another 6829 numbers of Post-sea Officers were given training in various grades of preparatory/ancillary courses in between 1979 and 1995.

Following adoption of the STCW'95, appropriate measures are in progress to streamline or upgrade, as necessary, the existing maritime education, training and certification processes.

At present Marine Academy is offering following courses:

1. Engineer Cadet Training Scheme (4 years) – pre-sea training for Engineering Cadets.
2. Nautical Cadet Course (2 years) – pre-sea training for Nautical Cadets.
3. Bachelor of Maritime Science Degree course (2 years) – superimposed on above two courses.
4. Preparatory courses for Certificate of Competency (CoC) examinations.
5. Ancillary courses for above CoC examinations (Fire fighting, First aid, Basic survival at sea, Efficient deck hand, Radio telephony, Electro-navigational aid, Ship Captain's medical guide etc.

There is an acute shortage of professional instructors in this Academy which is a prime requirement of the new amendments to the STCW convention. At present only 2 professional instructors are working in place of 19 posts. Other 2 professional instructors are working as visiting lecturers. The professional instructors i.e. the *seafaring Chief Engineers and Masters* with appropriate sea-experience are not easily available; in fact this is not a problem of Bangladesh only but of world's many maritime institutions as well.

Marine Academy, as being a government organisation, offers a fixed, limited and obviously many times less than that of ships' salary to its professional instructors. For example: the monthly gross salary of a sailing Chief Engineer/Master in Bangladesh Shipping Corporation is around 75,000 taka (\$1600) and that for an

instructor (Chief Engineer/Master) in marine academy is about 15,000 taka (\$320). So the sailing Chief Engineers and Masters do not feel inspired to join here as lecturers. As a result the training programmes are being hampered to a great extent. Courses for senior post-sea officers like preparatory courses for Class 1 and 2 (Engineer and Nautical) certificates of competency had been discontinued since 1987.

However this is the only institution in Bangladesh that provides maritime education and training to the pre-sea and sea-going officers. Its training programmes only aim to create workforce for ships operation i.e. not for *shipping trade*. The absence of expert shipping personnel is felt with great concern in every aspect of the country's shipping arena. Although the marine academy is 36 years old, it could not improve itself to a state to offer some of the specialised shipping trade related courses like ISO 9000, maritime management, maritime economics etc. The invaluable status of being a branch of the IMO's World Maritime University could not bring any changes also.

Seamen's Training Centre, Chittagong, Bangladesh:

This institution had been formally established in 1959 by upgrading *Adult Seamen Training Centre* to keep up the pace with demand of the continued technological advancement and nature of job on-board automated vessels. 9476 youths were given pre-sea training in between 1959–76. The centre could not function smoothly due to various problems during 1977–93 and it also went through some changes. However the centre again started functioning with full swing from 1993. 406 seamen in 1993-94, 387 in 1994-95 and 393 seamen in 1995-96 has been provided various training and recruited in national and international ships. Recently its entire training programme has been reformed in line with the STCW'95 requirements. Under the on-going Japanese aid programme an arrangement is in progress to provide training for 1000 post-sea and 400 pre-sea seamen in every year.

The training programme is divided into 3 categories:

1. *Post-sea seamen's training* (Refresher course) – Engine, Deck and Saloon
2. *A pre-sea seaman's training* (Fresher course) comprising safety and professional training – Engine, Fitter, Electrician, Deck and Saloon.
3. *Ancillary courses* – Efficient deck hand, Proficiency in survival craft, Basic first-aid, Basic fire fighting, Basic sea-survival, Spoken English (for all) etc.

Marine Fisheries Academy, Chittagong:

Marine Fisheries Training Centre had been established in 1973, after liberation, to build up a trained and skilled work-force for operation of 10 fishing trawlers, gifted by Soviet Union, to fish in Bay of Bengal. With the growing demand and expansion of the fishing fleet, both in public and private sector, in Bay of Bengal the Centre had been upgraded in 1983 and renamed as 'Marine Fisheries Academy'. However the training programme is basically aims at the 'operational side' of the fishing fleet not the 'fishing industrial knowledge'. The institute provides 2 years training in three branches:

<u>Branch</u>	<u>Entrants per year</u>
1. Marine Fisheries Technology branch –	8
2. Marine Engineering branch –	18
3. Nautical branch –	14

Until 1996 there are 709 cadets have successfully completed the above courses. A number of foreign personnel work in various posts in fishing and fish processing plants. But logically the employment should be kept reserved for this academy's cadets. According to the Bangladesh Fishing Ordinance 1983, chapter 55, there must be at least three cadets of this institute in every fishing trawler. However it is not being maintained properly by some private owners. Again still there is no service rules or recruitment rules for the cadets to be working in fishing sector. Therefore it is strongly felt that the course is to be upgraded as a full fledged undergraduate one (e.g. Bachelor of Fishing Studies) under the National University like the Marine Academy, Bangladesh.

Marine Diesel Training Centre, Narayanganj, Dhaka:

This institution offers courses to train and develop technical personnel (Engine drivers/crews) to operate passenger launches/ferries, cargo launches/barges, tug boats, pontoons, smaller crafts etc. that ply only in riverways. The institution offers 3 years Diploma Course and associated safety and other ancillary courses.

Deck Personnel Training Centre, Narayanganj, Dhaka:

This institution offers courses to train and develop navigational personnel (Navigation drivers/serangs/crews) to operate passenger launches/ferries, cargo launches/barges, tug boats, pontoons, smaller crafts etc. that ply only in riverways. The institution offers 3 years Diploma Course and associated safety and other ancillary courses.

2.4 Deficiency in accordance with STCW Convention

The STCW convention is one of the most important IMO conventions. Basically its scope is limited to ensuring a quality standard of seafarers. Neither it deals with nor it is intended for upkeep and upgrading the shipping trade of a country or a region. However it is an appropriate tool for safer shipping and cleaner ocean by ensuring a service from a skilled workforce for ships operation.

STCW '78 has been fully revised in 1995 to meet the new requirements that arose with the time. The new requirements have come into force on 1st February 1997 and its implementation will have to be ensured by 1st August 1998. However its full implementation is to be completed by 1st February 2002. Bangladesh has also taken appropriate measures to fulfil the new requirements by 1st August 1998.

The revised STCW conventions sets global and mandatory standards for the following:

1. Professional competence of seafarers.
2. Education, training and certification of seafarers and requirement of mandatory programme of education and training for Officers.
3. The responsibilities of MET institutions, maritime administrations and shipping industry in meeting these standards.

There are a number of deficiencies lie in different areas of the new requirements with the Department of Shipping, Marine Academy, Seamen's Training Centre and the Shipping Companies including Bangladesh Shipping Corporation. The implementation process is in progress and is trying to fulfil the requirements, if not, partially, by August 1998. Deficiencies lying with Marine Academy cannot be fulfilled within this time. Specially qualified and experienced instructors and assessors are not available at the moment.

2.5 Requirement of maritime personnel

Shipping is a complex industry. Ship operation is only a part of it. Maritime personnel at shore, by virtue of their skill and intelligence, will foster the Bangladesh shipping industry if they receive appropriate specialised higher education and scope to research. Maritime personnel will be required in every sub-areas like the National Maritime Council, Coast Guard, Maritime Court, Maritime Trade and Business, Education, Shipbuilding, Training & Research of this unique industry. A list of different related professions is as below:

Seafarers, Ship Operators, Ship Managers, Ship Builders, Marine Engine Builders, Marine Equipment makers, Towage and Salvage operators, Ship Financiers, Marine Insurance personnel, P & I (protection & indemnity) personnel, Maritime Lawyers, Ship Brokers, Marine Consultants, Maritime Schools, Classification Society Surveyors, Port Authority personnel, Shipping Company personnel etc.

The shipping industry in Bangladesh is not remarkable in size and moreover it is not even at emerging stage also. Bangladesh is lacking maritime experts in all of the above mentioned areas. Some Maritime personnel, mostly trained in World Maritime University, Sweden, are working in most of the key-positions with the Government and in private sectors. Such posts are as follows:

The Director General of Shipping, Chief Engineer & Ship Surveyor, Chief Nautical Surveyor, Principal Officer of Mercantile Marine Department, Commandant and Chief Engineer of Marine Academy, Principal of Seamen's Training Centre, Head of the Coast Guard, General Managers and Deputy General Managers in Bangladesh Shipping Corporation, Technical Directors of private shipping companies and marine workshops, Superintendents and Managers with private shipping agencies.

2.6 List of different maritime related organisations in Bangladesh

Government agencies:	Ministry of shipping Department of shipping National maritime council Maritime training institutions Port authorities Coast Guard
Industries:	Shipping companies Dry-dock Bank and financiers Ancillary sectors
Non-governmental organisations:	Seafarers' associations Shipowners association Shippers council Ship agents associations Surveyors association Trade unions

Professional organisations: Institute of Marine Engineers
Nautical Institute

Others: Local authorities – city corporation, police,
immigration etc.
Media – press, TV, radio etc.

Chapter 3

Requirement of a maritime university in Bangladesh

3.1 Preamble

International shipping has undergone a technological revolution in recent years. Moreover development and change has taken place in all aspects of life, family, society, education, health, transport and communications. The change not only took place with 'developed' countries but throughout the world. Many developing countries, crucially depend on maritime transport for their foreign trade and, of course, on general economic development.

The main problem of Bangladesh, in this field, is an acute shortage of national maritime experts. There has been a dramatic change in the composition of the world's merchant fleet. In this respect, Bangladesh, recognising the crucial importance of maritime transport for their general economic development and for the promotion of her foreign trade, is endeavouring to build up her national maritime infrastructure. Bangladesh is, however, seriously handicapped due to shortage of well-trained maritime personnel in different levels and categories.

Traditionally higher level in Maritime Education was the Extra First Class Marine Engineer's and Extra Master's Certificate of Competency. However these certificates generally were not a requirement at sea or at shore but for individual ambitious excellence. During 1960s and 70s the 'extra' level qualification became necessary for college/polytechnic lecturers, superintendents and surveyors

especially in UK. Additionally it was felt that if the marine departments were to survive in competition with different polytechnics then the courses would have to include a 'graduate programme'.

The new BSc in maritime studies became available along with Extras. Extra certificate was of only one discipline but the BSc degree was having coverage over both technical and commercial aspects. As a result the shipping industry started preferring seafarers with Masters/Chief Engineering Class 1 CoC and a BSc degree than having Extra certificate in employing at shore-based positions.

The BSc programme was then introduced in many maritime institutes around the world. Eventually MSc, MPhil and PhD courses also started in many renowned Universities of the world; namely Liverpool John Moores University (UK), University of Wales (UK), Southampton University (UK), Guildhall University (UK), Dalhousie University (Canada), Kobe University of Mercantile Marine (Japan), Dalian Maritime University (China) and Korea Maritime University (Korea).

The education in shipping can be divided, only broadly, into two areas e.g. Technical and Commercial. Technical pathway includes in-depth study of the ship technical subjects like ship stability, construction and design, maritime engineering subjects like navigation and electronic navigation. The commercial pathway includes studies in law, shipping business and economics.

Employers' expectations:

Graduates/post graduates should provide something more than non-graduates, analysis skills, and deeper knowledge of his subject area. Especially they should possess core skill that includes ability to research quickly and efficiently, to present findings in a clear and an understandable manner, to report succinctly and to communicate at all levels.

The undergraduate degree in maritime studies had been in existence for last 30 years and recent postgraduate degree is a well-recognised qualification in shipping

industry. It is a specialised degree and hold by a remarkable number of shipping personnel around the world. The specific areas like maritime business, maritime law, maritime transportation and maritime environment etc. are very popular nowadays. Like the developed countries the graduate and postgraduate degrees like BSc, MSc and PhD are gradually getting more and more necessary to upkeep and upgrade the shipping trades in developing countries.

Seafarers wishing to make themselves suitably competent for shore-positions must decide to which level to acquire professional and academic qualifications. In professional terms minimum requirement is a chief engineer's or master's certificate of competency. In academically the minimum qualification is a first degree. However in both cases, for advisory works in maritime administration, shipping companies and in maritime training institutes, a specialised higher degree is essential. The theory and practice of this higher degree level is very different from seafaring even though the subject matters may be related to sea.

3.2 Requirement of post-sea higher education

There are various factors which put pressure on the way shipowners construct and operate their ships today. Modern electronic communication and evolution of computers and internet keeps a head office in close contact continuously with its fleet. As a result the decision making roles of Masters/Chief Engineers have reduced significantly. Economic decisions are exclusively being taken from shore. Specialised cargo stowage like container handling is carried out by shore personnel. Wider application of unmanned machinery space, integrated bridge/engine control room, one-man bridge control obviously have influenced to rethink about the appropriate way of specialisation of ships officers.

Today's complex maritime economics, specialised ship operation and stiff international competition have put further pressure on profit and loss margin. Greater ship/shore interface and communication is required to improve the productivity.

Seafarers are becoming more and more less interested to serve at sea for long periods. Because seafaring has become less adventurous; world is now wider open through TV, movies and internet; difference between salaries of ship & shore is becoming smaller; higher and influential shore position is becoming more attractive to today's seafaring Masters/Chief Engineers. Therefore these sea-going officers like to consider and expect to take the 'sea-carrier' as a temporary phase. Obviously the 'permanent phase' is being the shore-based ones in the maritime or maritime related industry.

Traditional maritime education and training is limited to imparting shipboard knowledge and skills. Again its upward mobility is limited to a definite branch of discipline i.e. Deck or Engine. It also appeals a fear of being trapped into seafaring for a lifetime. A good number of Masters/Chief Engineers leave sea and take a career of responsibility and rewarding positions ashore. However the real fact is that the seafaring path is never planned nor it's curriculum facilitates such professional mobility ashore.

Therefore the maritime education and training is to be reformed to include higher academic degree along with or followed by the professional certificate. Syllabuses for unlimited certificate of competency should allow mobility between disciplines i.e. Marine Engineering to Deck and vice-versa. This mobility will help the seafaring personnel to embark upon the higher maritime studies at MS & PhD levels fairly easily. Thus shipping sector will be benefited by having true experts with practical sea-experience. In essence, today, the maritime education and training ideally should emphasis for 'temporary' aspect of seafaring and the 'permanent' aspect of shipping trade related careers ashore.

3.2.1 Unification of Marine Engineering and Navigation

In recent years a number of countries have introduced combined education and training programmes which will produce a dual-purpose officer who is qualified for both the disciplines. Again some of the countries like France, Denmark and Finland

has also included *command training* in each of the disciplines that enables both chief engineer and chief mate to be chosen as the Master of a vessel.

The existing system in Bangladesh may be reformed to unify nautical and marine engineering (may be called as nautical engineering) programmes followed by appropriate specialised post graduate education will definitely attract the ambitious seafarers and general university graduates, where applicable, to embark upon these courses. Thereafter they will take up the shore-based key-positions and will be able to foster Bangladesh Shipping into a broader area.

Table 3 at the following page reflects the above concept of socio-technical approach to maritime education in Bangladesh which is the unification of the marine engineering and the navigation i.e. the Nautical Engineering.

Shore jobs	Maritime & Shipping related positions	Full job mobility from sea
at Maritime University	Post-graduate Degree MS and PhD	Specialisation
at Sea	-----> Nautical Engineering <-----	Inter-department mobility
at Marine Academy	-----> Class 1 & 2 combined Nautical Engineering <-----	Semi-permeable Membrane between Nautical & Engineering
at Sea	-----> Nautical Engineering <-----	Inter-department mobility
at Marine Academy	Post-secondary Maritime Education & Training (pre-sea & post-sea And Class 3 & 4) Nautical & Engineering	Integrated Education with cross-training According to STCW95 Chapter VII Alternative Certification
at School/College	Secondary Education (HSC or A-level) (SSC or O-level)	General Basic Education

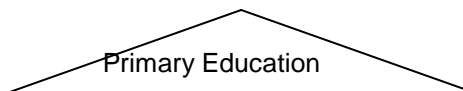


Table 3: A possible socio-technical approach to maritime education in Bangladesh.

3.3 Requirement of Shipping trade related higher education in Bangladesh

Bangladesh commenced its shipping activities without any ship after liberation in 1971. The occupation Pakistani Army took away all the merchant ships and left Chittagong Port with hidden mines all around under the water. Foreign ships were not willing to call here and insurance companies imposed increased premium on ships calling Chittagong Port. However mainly due to carry out massive relief and rehabilitation works Bangladesh had to take initiative to build a new fleet.

The state-owned Bangladesh shipping Corporation (BSC) was established on 5th February 1972 with aims like carrying a major portion of country's sea-borne trade, fostering employment opportunity, economic advancement through its efficient management, development of maritime skills and projection of image of Bangladesh in maritime world. BSC had a plan to acquire 43 ships including 3 tankers in 1972-82 period. By the year 1980 its fleet expanded with 31 ships including 3 tankers with total capacity of about 400,000 DWT. However due to scrapping off the older vessel at a higher rate than acquisition the number started reducing since 1980. At the moment it is having only 16 ships including 2 tankers.

Private shipping sector commenced its operation since 1977. The private shipping fleet also expanded up to about 25 in number in mid 80's but it is also in a diminishing stage. At present there are only 13 ships in this sector. Bangladesh Flag Vessels are able to carry only about 17% of its sea-borne trade. Bangladesh normally carry out operation in the following routes as liner service:

1. Bangladesh/UK-Continent route
2. Bangladesh/Far-East/Japan route
3. Bangladesh/US-East Coast route
4. Bangladesh/Colombo/Pakistan/West Asia Gulf route
5. Bangladesh/Singapore feeder service for Australia and New Zealand

Mainly due to unavailability of cargo from USA the Bangladesh/US-East Coast route has been kept suspended since 1989. Both private and public sector is not in a suitable position to take active part in country's sea-borne trade. The shortage of seafaring personnel after liberation was over by 1983. However there is a shortage of shore-based experts who can advise about chartering, cargo arrangement, brokerage, agency service, market analysis etc. and foster Bangladesh Shipping to a greater extent; so that it might share a remarkable part of the country's economy. A few number of personnel with maritime degree/higher education/specialised education are working in the three areas of Bangladesh Shipping sector e.g. Administration, Shipping Trade and Maritime Education.

Bangladesh is well behind the position of signing some of the vital IMO conventions like MARPOL, SOLAS (had signed only SOLAS 74), LL, CLC etc. It is almost sure that Bangladesh will not be able to meet the requirement of STCW'95 in terms of maritime lecturers in the Marine Academy within the prescribed datelines.

Maritime institutes traditionally offer courses for seafarers only (certificate of competency) and Bangladesh Marine Academy is not an exception. So-called ideally, or may be theoretically, experienced Masters/Chief Engineers are suitable to become shore-based shipping managers, administrators and maritime lecturers. Parallely graduates with general university education are also being employed in shipping sectors at various positions.

However shipowners, or more specifically the society, believe that the specialised/appropriate management skills will be acquired by the personnel of these two areas, from sea and from general university, only by experience on their jobs ashore. Or it is thought that the required 'management skills' are their 'inherent quality' of 'sea' or of the 'general education'. The complexity of today's technological change and greater sophistication of management tools led us to recognise that shore-based personnel need systematic, formal and specialised education. Learning only from experience or traditionally from 'senior managers' often meant perpetuation of old techniques and ideas.

Although Bangladesh is highly dependent on seaborne trade and so on the efficient operation of its ports and related areas, the maritime sectors has not yet been prominent in its educational programmes.

Maritime Education and Training does not necessarily approach to produce only seafaring experts i.e. Master Mariners and Chief Engineers but shore-based specialist maritime personnel in governments (administrators), in shipping industry (managers) and in maritime training institutions (educators) as well. Cause shipping work-force is a composition of three types of peoples.

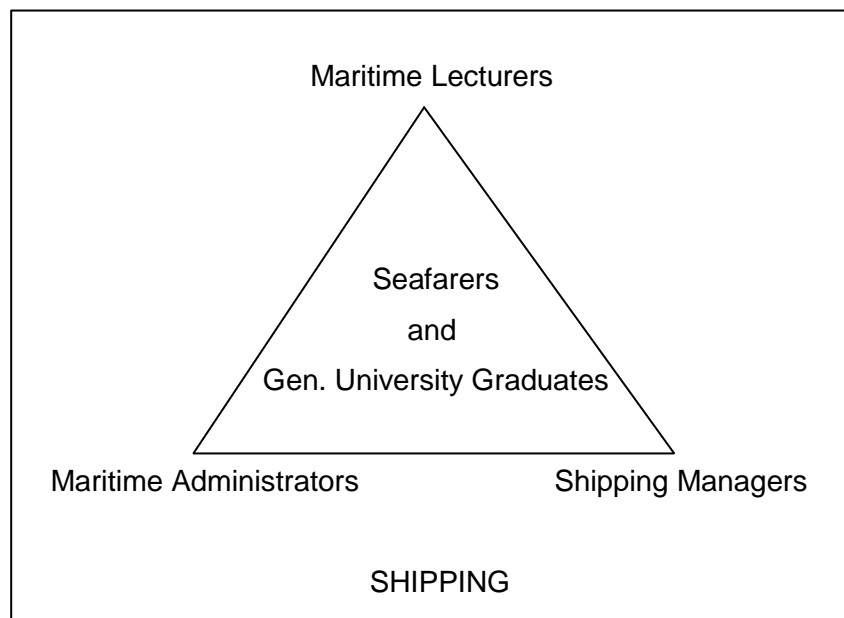


Fig.1 Shipping triangle

Shipping managers: A shipping manager's responsibility in Bangladesh is an enormous one. The shipping management team operates in an international environment. They are always in competition with well-established, well-reputed and efficient shipping firms of other countries. The team has to possess a thorough knowledge of legal, insurance, technical, economic and social aspects of their work. They are responsible for profitability of the company's ships i.e. they have to ensure cargo, reasonable return, manning and smooth operation of equipment. Particularly a manager has to have the ability to analyse the world shipping market and to

evaluate the types of vessels suitable for his company in future. His work involves considerable amount of risk and has become more complex with recent technological advancement in vessels and in their operations.

Maritime administrators: The personnel involving with Bangladesh maritime administration work with their responsibility of implementation of rules and regulations in shipping sector comprising inland and seaborne trade, ensure safe and pollution free operation of vessels, conduction of examinations for Certificates of Competency and surveys and inspection. Such a complex task requires knowledge of law, safety, management skills, understandings of situation, examination techniques and survey.

Maritime lecturers: In Bangladesh the only place for maritime lecturing for seafaring officers is the Marine Academy. Normally its professional instructors are former Masters and Chief Engineers. Maritime lecturers here are obliged to have understanding of curriculum development and review. They also require introducing newer techniques of teachings and simulation using computer aided instruction. Normally they are involved in lecturing, instructing, tutoring, marking, examining etc.

There is a need for maritime lecturers to have greater awareness of the need of good teaching and of modern concepts of how to best transfer knowledge. These ex-seafarers teach by much the same methods as they were taught by. They do not have the benefit of teacher training; many do not have adequate understanding of science of technology (pedagogy). Being a good teacher is a rewarding job. There is an unique satisfaction in watching the students, one has taught, take off senior positions at sea and at shore. All teachers need management skills to some degree. However seafarers are generally realistic and intelligent people and being a maritime lecturer for them is one of the noble occupations.

Specialised education of shore-based personnel:

Development of human resources like all other fields is getting important in shipping industries too. It is one of the very effective step that has not been paid with due emphasis yet. Richard C. McCullough (1987, 37) remarked:

Professional development is defined here as the process by which individuals increase their understanding and knowledge, and/or improve their skills and abilities, to perform better in their current positions or to prepare themselves for a position to which they can realistically aspire in the near future. Professional development is very practical and result-oriented.

Modern and appropriate instruments of shipping business are being innovated through constant analysis that would go ineffective without the appropriately specialised personnel. In-house updating training about chartering, business, ship acquisition, market economy, cargo flow, container trend etc. could be arranged through regular lectures, seminars and workshops. However external specialised education and research (applied education) would require an institution to send its personnel for a higher degree in shipping to acquire an in-depth applied knowledge of various aspects of shipping.

With due importance some of the educational institutions around the world are already offering higher maritime degrees in different areas of shipping in Masters or in Doctoral courses including researches.

Postgraduate study to MSc :

MSc in Maritime studies had been introduced in 70s in different universities around the world. Liverpool University in UK is one of those. The course was based on maritime law, maritime business, maritime economics etc. However afterwards it had been changed to have common subjects of Engineering and Technology management. A student normally qualifies with a thesis of his own chosen topic. This thesis is much more analytical than that of an undergraduate one. The students may come and attend these courses on sabbatical from industry, graduates wishing to gain knowledge at master degree level, graduates wishing to gain understanding of another discipline and industry managers wishing to gain academic credibility for his specific area. Provision of Postgraduate Diploma is

permitted after completion of the taught section i.e. without completion of the thesis. A full-length MSc course is normally of 14 months' duration.

Post graduate study to PhD :

PhD study is an essential part of a university activities. The entire programme is based on production of a thesis i.e. without any taught section. It may be performed through a research team. Possession of a first degree with distinction is a prime requirement for entry. It may be of two stages: initial study of Master of Philosophy (MPhil) and then transfer to Doctor of Philosophy (PhD). Supervision and assessment at PhD level is much more extensive than at other levels. Assessment is carried out by a panel including external assessors.

Remarks:

However it is to be kept in mind that generally students seek specialised maritime education at higher level more as a 'customer' or 'matured students' rather than inspired 'knowledge-searcher'. The shipping companies are keen to assess the benefit of sending their appointed personnel, if sponsored by them, before commencing working at their offices.

3.4 Impact of the proposed university (local, regional & global)

Education is always considered as the most important factor and a precondition for a successful career. Eventually research comes in its way ahead. In last few years the need for higher education for maritime personnel ashore has been felt with great concern. Since inauguration of the World Maritime University in 1983 Bangladesh sent 45 persons till 1998 in its different MSc programmes. Every year the number of applicants is about 3/4 times the number of offered fellowships. The graduates, after returning, are keeping remarkable role in shipping sectors of Bangladesh.

Acute shortage of shipping and maritime personnel is prevailing in all areas of Bangladesh shipping sector. Some of the maritime personnel after achieving some higher qualifications from some developed country do not feel to come back and

serve this country mainly due to poor salary structure under the government. The candidates, those who go to WMU through the government, have to sign bonds against a good amount of money for compulsory service in Bangladesh. At present there are a few personnel, seven/eight in number (only three of them are having higher degree as MSc from WMU) are working in the Department of shipping (Maritime administration of Bangladesh). In the shipping companies (private and public) there are about 150 managers (directors, General Managers, Deputy General Managers, Assistant general managers etc.). Most of them are having a general university graduation (MSc/MA) and without any shipping related education/specialisation. Only about 10 of them are having graduation from WMU. The scenario with the training institutes is more frustrating. Only two seafaring professionals (only one is with WMU degree; another one [the author] is undergoing an MSc programme at WMU) are working in the Marine Academy; although the requirement is nineteen.

In fact, until now if the country could keep up the growing trend of shipping during 70's and in early 80's, she could emerge as one of the leading shipping oriented countries of the asia-pacific region. However due to the shipping recess in late 80's and early 90's and due to absence of shipping experts, *Bangladesh shipping* is in a clear diminishing state at the moment. Therefore the demand of efficient operation and development of administration, shipping industry and of training institutes reflects the requirement of continuous supply of expert maritime personnel with specialised higher degree.

Many of the shipowners and shipping oriented businessmen of Bangladesh have the opinion that there is a distinct need for a higher maritime educational institute in the country that will provide formal Masters and PhD education and as well as in-service short courses for continuous upgrading for their personnel. The existing Marine Academy is only suitable for pre-sea cadet training and for preparatory courses of sea-going Competency examinations. However the recognition of the Academy as a branch of the World Maritime University has shown a way to establish a comprehensive maritime educational institution for higher studies.

The country will be benefited through the continuous supply of graduates from the proposed university. Again the graduates from this university will mainly work in private sectors therefore they will get an attractive salary structure; that will inspire them to stay and work in Bangladesh. Moreover it is not at all possible to send maritime personnel/port managers/shipping managers/maritime lecturers to the maritime universities at foreign countries. Though the capital cost for establishment will be extremely high, this development will bring a better shipping status in the long run. For example before establishing the Engineering University (Bangladesh University of Science and Technology, Dhaka) in 1962 it was not understood that it would earn an international standard as that it is having today. The proposed university will be beneficial directly in terms of the followings:

- ❑ Self-sustainable and conscious development of maritime sector of Bangladesh
- ❑ Exploring and utilising the maritime resources
- ❑ Attaining self-reliance in transportation of foreign trade
- ❑ Saving foreign exchange
- ❑ Earning foreign exchange
- ❑ Education for skilled workforce for Bangladesh and the world as well
- ❑ Creating employment opportunity to Bangladeshi nationals

The following organisations will directly be benefited:

The Ministry of Shipping and its subordinate offices

The Department of Shipping and its other offices

Bangladesh Shipping Corporation

All private shipping companies/Agencies etc.

Port Authorities

Maritime training institutes

The following organisation of the regions will be benefited in terms of expertise exchange programmes:

South Asian Association for Regional Co-operation

South Asian Regional Shipping Authority (proposed)

Additionally following international organisations will be benefited in terms of global maritime development:

International Maritime Organisation

Maritime Universities/training institutes in different countries

3.5 Scope to perform as a regional centre for maritime studies

The region of south-asia comprises of the following countries:

Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka.

The neighbouring countries like Iran, Iraq, Afghanistan, Pakistan, Myanmar, Thailand, Malaysia, Indonesia etc. are also expected to send their students to this proposed university.

The region of south-asia plays an important role in world shipping. However not a single country of this region is having any institute for higher maritime/shipping education. Traditionally students wishing to take up maritime courses proceed to developed countries like UK, USA, Australia etc. The maritime universities that available in this part are in Singapore and in Vietnam. India, being at the top line in shipping world, has as many as 10 maritime training institutes. All of them offers courses mainly at the undergraduate levels and at pre-sea levels. Recently four maritime training institutes of India, unifying themselves, are trying to establish a maritime university. However that university will only meet the higher and ever-increasing demand of its own. India has a vast shipping activities with its large fleet; 5th in the world. So it will have less possibility to offer scope to study for foreign students.

Therefore a regional university is evitable. In absence of such an institution, this proposed university can well perform as a regional centre for higher maritime studies. The living expenditure in Bangladesh is very less in comparing with the developed and many depoloping countries as well. The study materials and related

articles are cheaper too. Obviously the cost of study and living expenditure for foreign students will be a very attractive one.

BIMSTEC (Bangladesh, India, Myanmar, Sri Lanka and Thailand Economic co-operation) is a regional co-operation platform. In a meeting of the concerned ministers of these countries on 22 December of 1997, this forum has come to a consensus to establish a **composite transit system** comprising sea, air, road and rail communication among its member countries. Development of a **common shipping policy** for seven members (Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka) of SAARC (South Asian Association for Regional Co-operation) is under process in terms of Port State Control, Search and Rescue etc. Therefore this proposed university may easily perform as a *Regional Maritime Institute* as well.

Chapter 4

Establishment of the proposed maritime university

4.1 Name and location

The name of the proposed university should reflect its nature and purpose appropriately to have a clear engaging impression to anyone. As the proposed university will be a unique one in this country and is desired to serve the region and the world as well, the name should preferably be with the country's name. The ancient name of any country bears and symbolises the long heritage of its own culture. Many countries prefer to be identified with their ancient names in different occasions. In more than 2000 years of history, Bangladesh (became independent in 1971 as Bangladesh) was always known as *Banga*. Therefore, it will be reasonable to propose the name for the new university as the *Banga Maritime University*.

Geographically the port-city of *Chittagong* is suitably located at the south of Bangladesh and beside the Bay of Bengal and on the west-bank of the river *Karnafully*. The river, commencing from the *Lusai Hill* in *Chittagong Hill Tracts*, is flowing down to the Bay of Bengal at *Patenga*. As a recognition to its importance in country's trade and commerce the City of Chittagong has been declared as the Commercial Capital of Bangladesh. The city of Chittagong is built for centuries centring this river. There are various types of industries, institutions, firms, mills have been established along the bank of this river. The Naval Academy is situated just beside the sea and on west bank of that river's mouth at the Bay of Bengal.



Fig.2 Map of Asia

Source: www.reliefweb.int/mapc/index.html



Fig.3 Map of Bangladesh

Source: www.reliefweb.int/mapc/index.html

SITE ON THE MAP

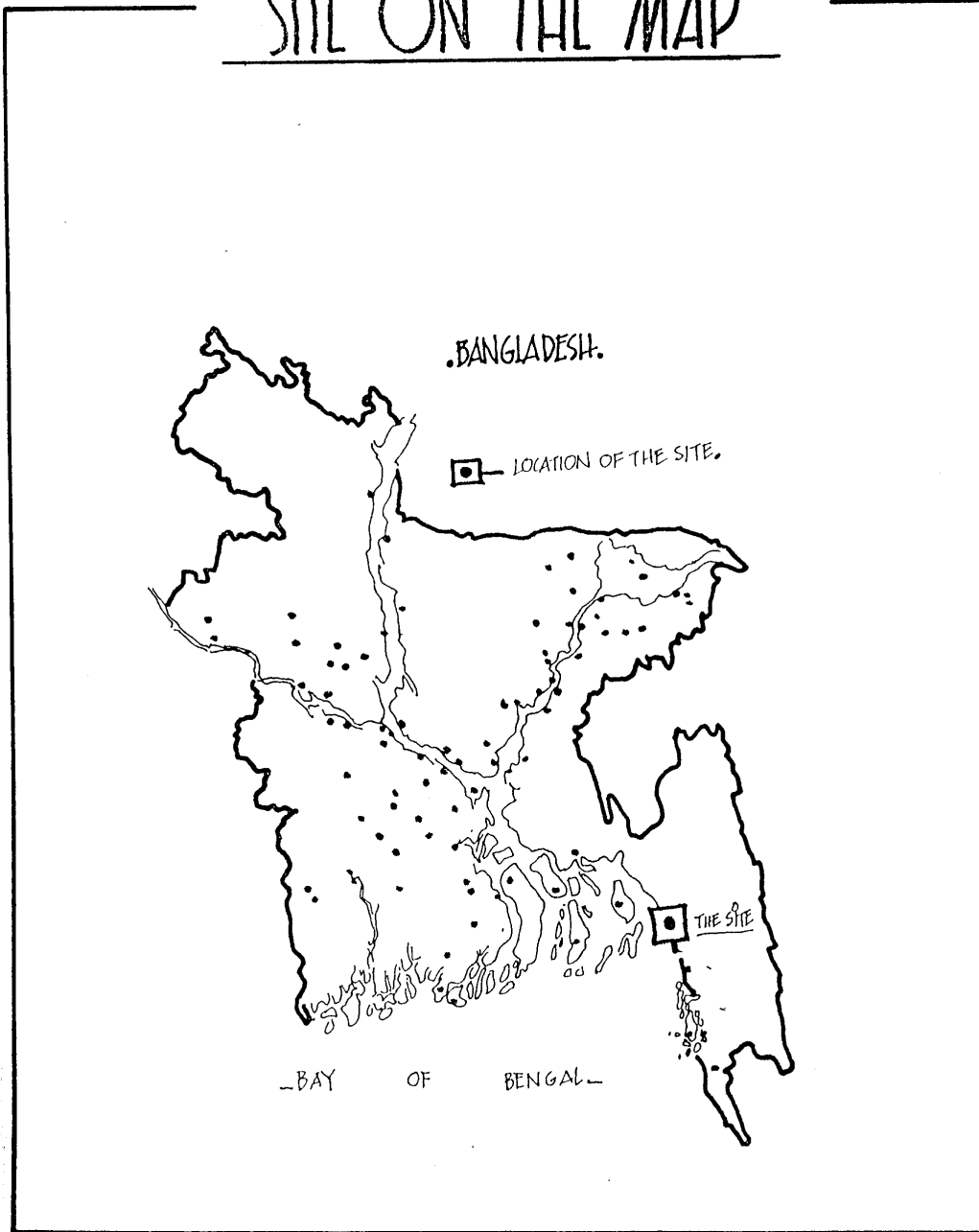


Fig.4 Site on map of Bangladesh

Source: Rahman and Anwar (1996-97)

ROADS & RAIL ROADS

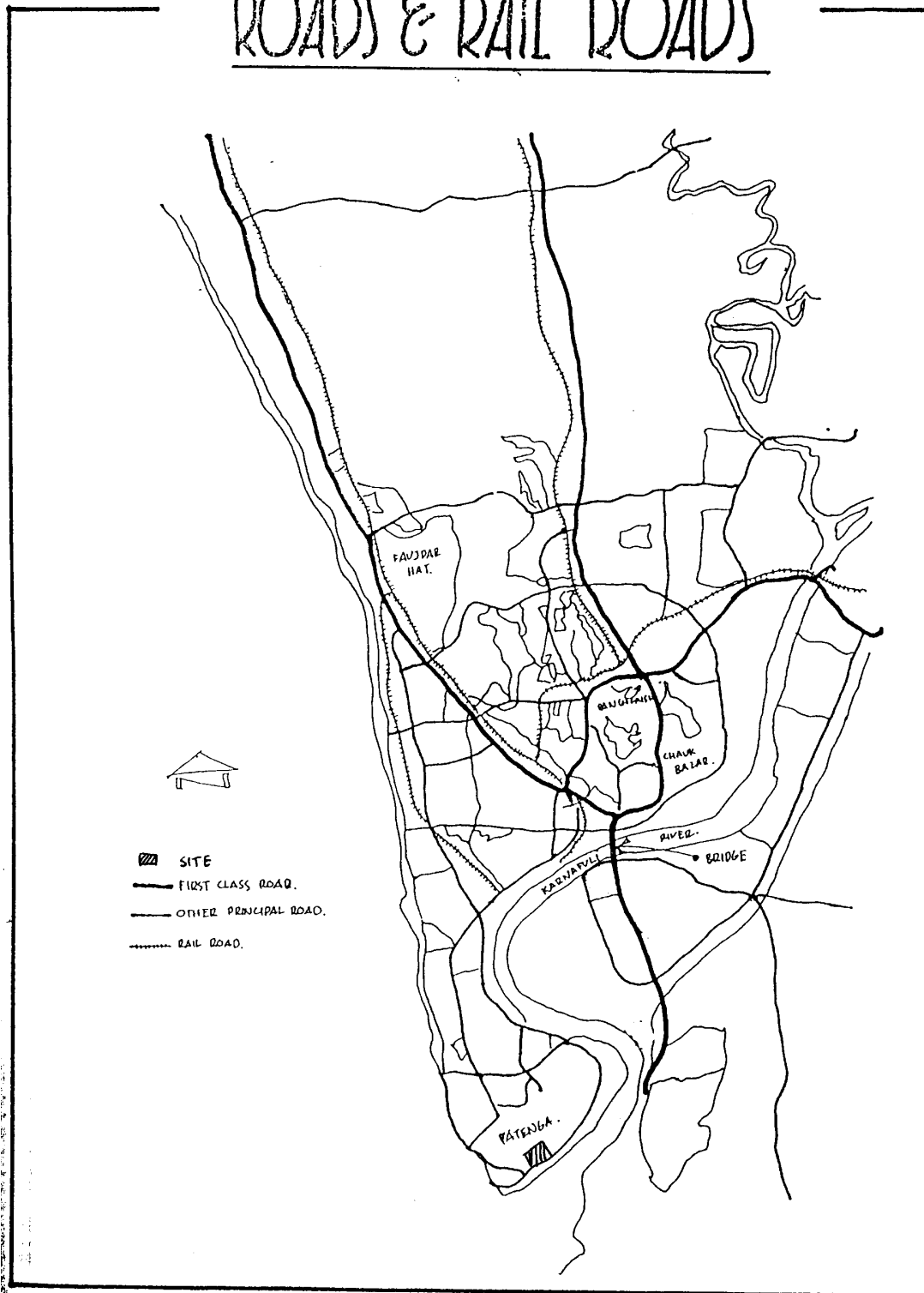


Fig.5 Roads and Railway towards the site

Source: Rahman and Anwar (1996-97)

THE SITE ON CLOSE UP

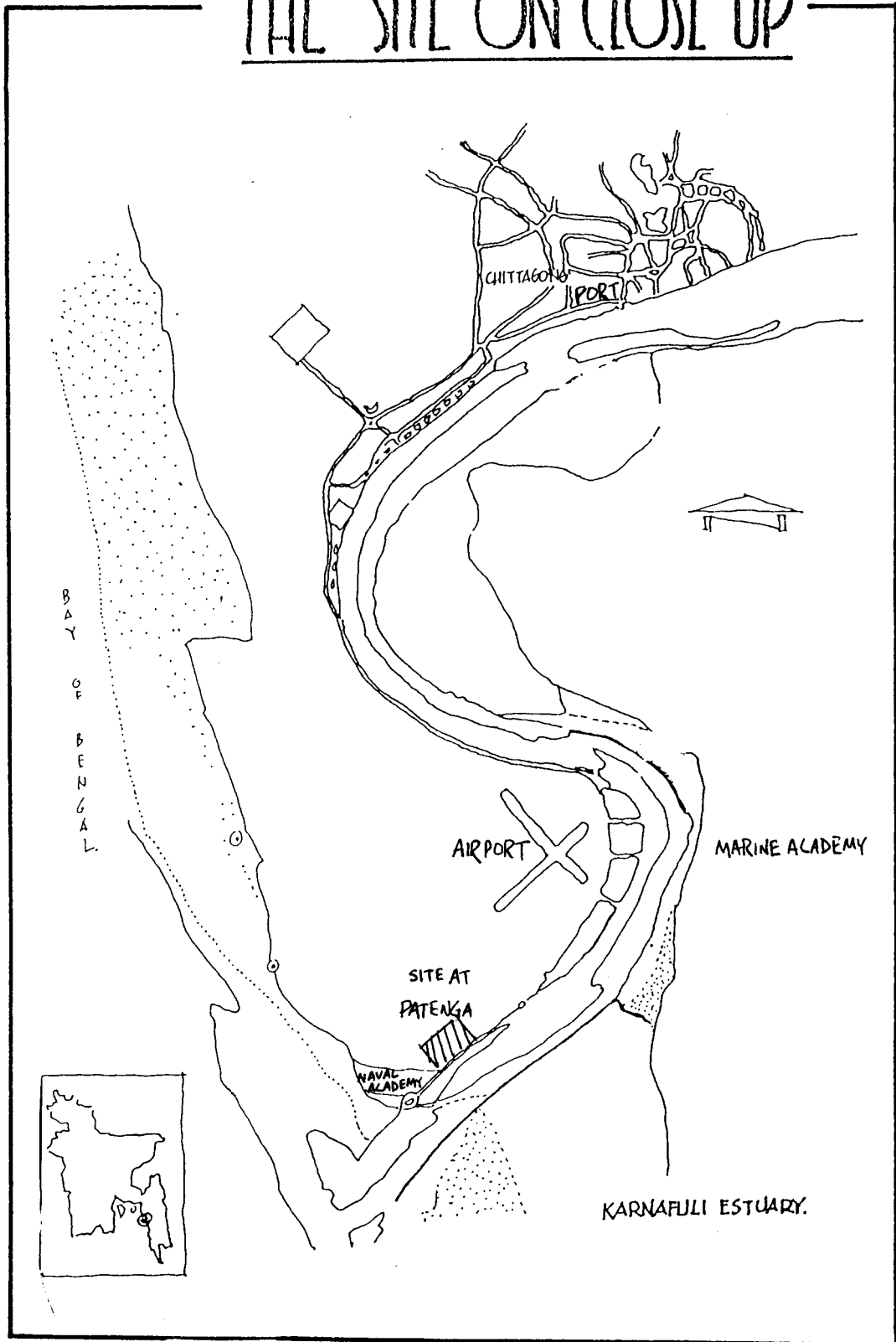


Fig.6 Close-up view of the Site

Source: Rahman and Anwar (1996-97)

Chittagong International Airport is situated about 5 km up from that naval academy beside the river. The Marine Academy is situated on the east bank of the river Karnafully abreast of the Airport. The Seaport of Chittagong is about 10 km up from the mouth of the river. The seamen's training centre is situated just beside the Port.

4.1.1 The site

There is a vast area of unique beauty and environmentally clean is lying unused in *Patenga seashore* area; owned by the government. Patenga is 15 km south-east of Chittagong City and is situated beside the Bay of Bengal. The proposed site is in between the Naval Academy and the M. A. Hannan International Airport. The link with the riverside road made this place easily accessible from the city as well as the Airport. At present the conversion and upgrading of this road into a *marine drive* is under progress by the Chittagong City Council. This place is having air, road, river and sea communications. The existence of the seaport, airport, marine academy, naval academy and seamen's training centre within 10 km distance, made this place as an unique and most suitable to be proposed as the ideal site for the University.

4.2 Construction

Land: Approximately 200 acres of land will be suitable for the project and for possible future expansion. 150 acres will be initially required to establish and commence its operation. The land from the vast open and plain land at Patenga will be a unique one. The acquisition of land will be on a lease basis from the government. The soil is a little sandy; mainly lying unused.

Plantation: Following construction, huge plantation will be required to make the campus ideally suitable for a residential vintage having calm and cool atmosphere.

Plan: The architectural plan for the university will be obtained from a reputed architectural firm of Bangladesh, through open competition.

Cost/expenditure: The establishment cost may be assumed to be about 1,200 million taka (equivalent US\$ 25 million)

Required time: Approximately 5 years will be required to complete the project.

Fund acquisition – 1 year

Land development, civil works and construction – 2 years

Installation of educational equipment and machinery – 1 years

Primary function initiation – 1 years

Utilities:

Electricity will be supplied from the national grid by the greater Chittagong power development project. It will be supported by the universities own electricity generators. Approximately 0.5 megawatt power will be required.

Fresh water will have a supply source from the Chittagong water supply authority; a deep tube-well will be necessary for emergency back up.

Gas will be available from the Chittagong gas supply authority.

Topography: Reclamation will be necessary as the existing site is approximately 1.5 m below the road along the *karnafully* river. The road on top of the river-bank is 3 m above the water line. The tidal variation is 2 m. Chittagong Port Authority carries out continuous dredging in the river. The land can be reclaimed fairly easily by the soil that may be available from the dredging operation.

Jetty: A new jetty will be necessary for research/training vessel's use and can easily be constructed following the guidelines of the port authority beside the site; the jetty may be used by the port-authority as well.

4.2.1 Advantages of the proposed site at a glance

- Cheaper development and reclamation of the land.
- Beside the river; suitable for jetty-use.
- Easy availability for services and utilities since it is located near the port, airport and the city.
- Near the Chittagong seaport, Marine Academy, Naval Academy, Marine Fisheries Academy and Seamen's Training Centre.
- Land can easily be acquired from the Government on a lease basis.
- Located at the Maritime Gateway of Bangladesh i.e. river-mouth of the *Karnafully*.
- Easy access to its facilities for other maritime institutions.
- Accessible to ships due to adequate depth (approximately 9 m) and turning radius of the river.

4.3 Campus Plan and Design

The Plan and Design may be obtained on a competitive basis. The best one would be chosen by the entrepreneur. The guidelines are hereby mentioned below:

4.3.1 General considerations

The land for the main campus will be of a 'circular shape' with approximately 150 acres with a diameter of 870 metres. There will be three fundamental parts in the plan i.e. buildings, exterior spaces and circulation/services. The landscape, open spaces, pedestrian ways, vehicular access, framework of buildings and utility service system will be 'visible', while interaction among academic and living activities, time motion and communication will be 'invisible' distinction of the design. The plan may be expressed with the following hierarchy:

- Structural skeleton* – Framework of buildings
- Muscles* – Ordered sequences of linked spaces
- Nerves network* – Services
- Circulation system* – Pedestrian ways and roads
- Brain centre* – Administrative convenience and easily identified from the entrance
- Heart* – Core of central activities around which the whole campus will grow

The academic areas will be tightened up around the core to have a stronger definition; housing and other functions will grow out of it. Multi-use facilities such as students centre, computer centre, simulator centre, cafeteria, auditorium, museum, lecture halls, cultural centre etc. are to be placed either at the core or close to it. The campus should be a compact and denser with variety of small exterior spaces having informal and flexible approaches. Essentially, it should be a single structure having arms that will link external parts, designed to grow laterally. The central structure will have high density without high buildings, covered weathered passages and convenience on phasing of construction.

Bank, library, assembly hall, buffet, bookstore and administrative offices will be combined with the central building. The academic residential and community services/ facilities should provide the opportunity for a 'live' campus in day and in night as well.

Essential parts of an institution is open-endedness within a hole i.e. *freedom within limits*. It should have a dynamism that conveys its aspirations to grow both horizontally and vertically beyond limits. The basic design will always have spontaneous changes or modifications while retaining the core i.e. *the centre remains steady while the periphery shifts*.

The class rooms including laboratories will be placed within a circular zone at the core. The research places, gymnasium, swimming pool, sports clubs, amusement centres, fire fighting centre, survival training centre, planetarium etc. will be placed at

its periphery. Students housing and dining hall should be located nearby the periphery so that they always remain part of the university life. The internal streets should be slow and annular. These should also encourage trips on foot, bikes etc. There should be ample pedestrian pathways too. All buildings should ideally be facing south for easy air access during summer and to avoid shadows on open spaces.

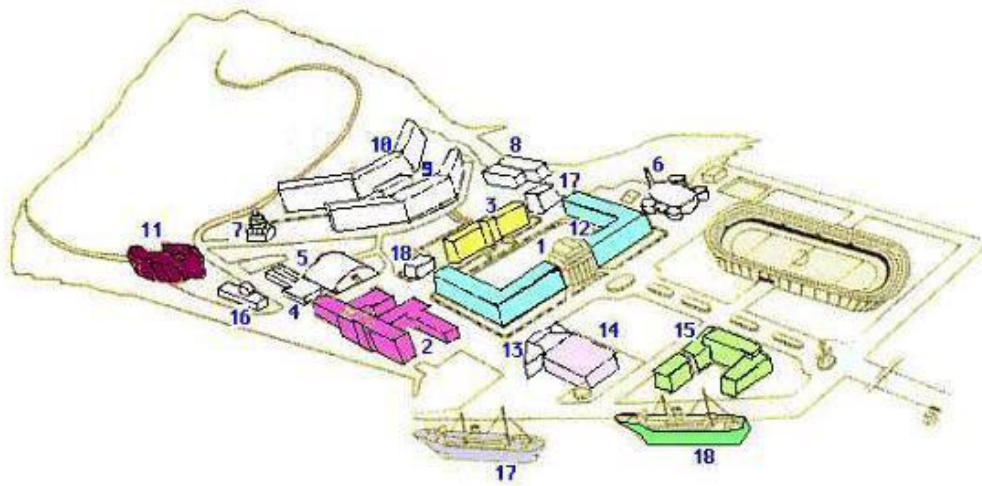


Fig.7 Korea Maritime University Campus layout
 Source: <http://hanara.kmaritime.ac.kr/english/gif/map.jpg>

- | | |
|-------------------------------------|----------------------------|
| 1. Main building | 10. Dormitory |
| 2. College of Science & Engineering | 11. Dormitory |
| 3. College of Social Science | 12. Graduate School |
| 4. Factory | 13. Audio-Visual Hall |
| 5. Auditorium | 14. Library |
| 6. Gymnasium | 15. College of Sc. & Engg. |
| 7. Public-welfare Building | 16. Lab Building |
| 8. Student Hall | 17. Training Vessel |
| 9. Dormitory | 18. Training Vessel |

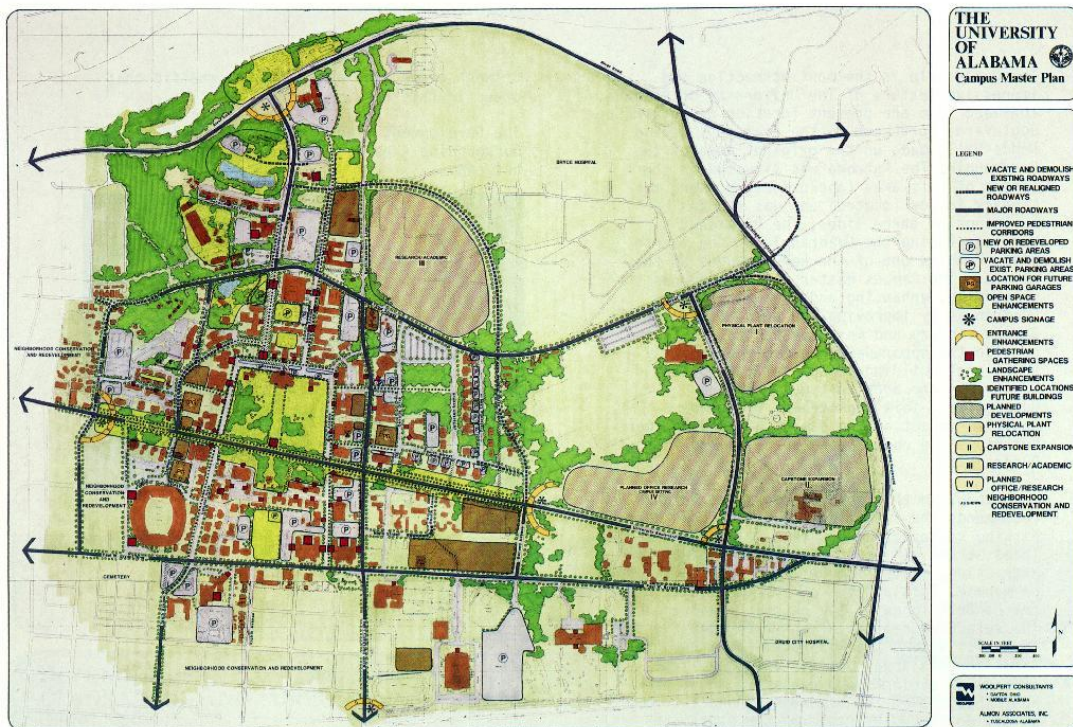


Fig.8 The University of Alabama (USA) Campus layout
Source: <http://www.ua.edu/mapleg.htm>

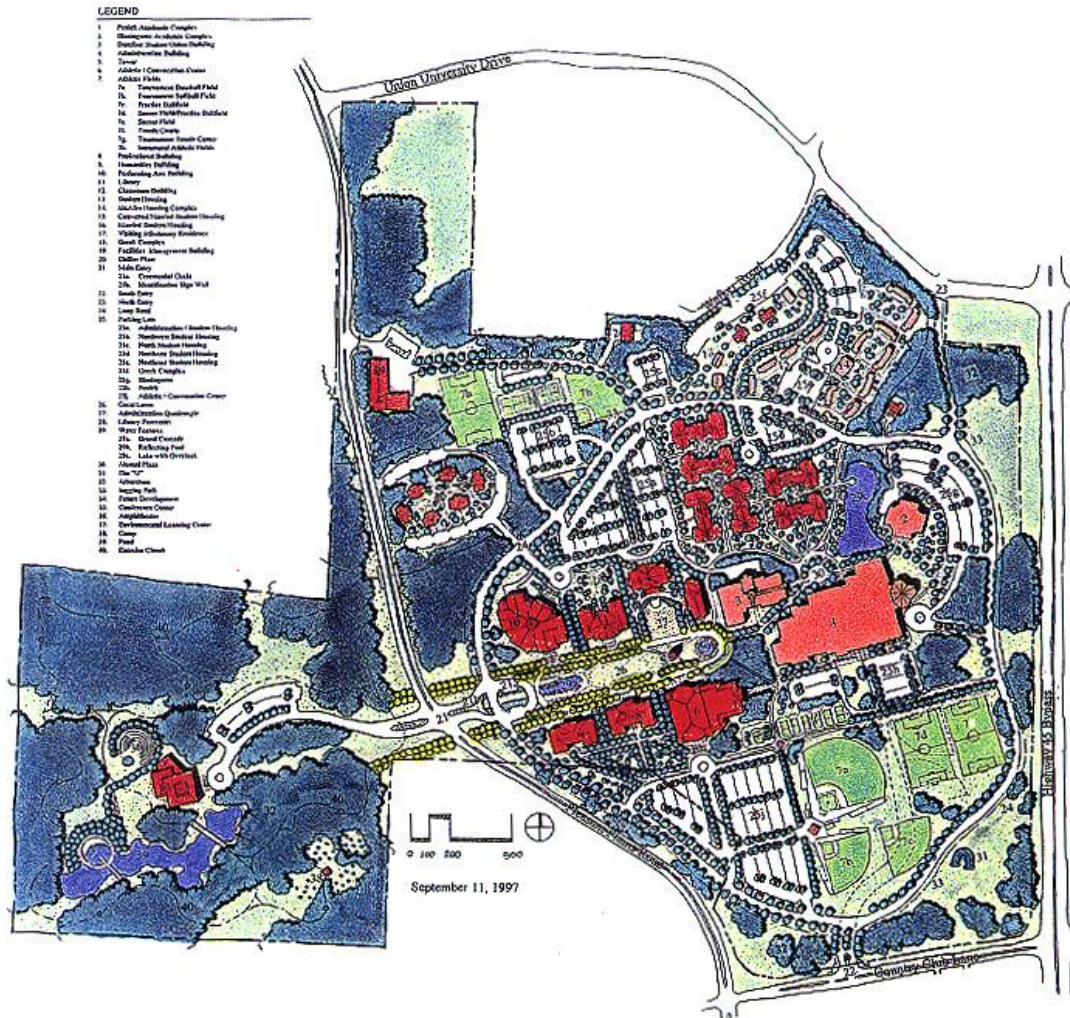


Fig.9 Union University's (USA) Campus master plan
 Source: <http://www.uu.edu/union/about/campusmp/phase.htm>

4.3.2 Climatic considerations

Bangladesh has a tropical monsoon climate i.e. rainy, summer and dry winter. The temperature in Chittagong is as follows:

Summer	[March – June]	: 25 ⁰ C – 35 ⁰ C
Rainy	[July – October]	: 25 ⁰ C – 32 ⁰ C
Winter	[November – February]	: 10 ⁰ C – 20 ⁰ C

The yearly average rainfall is 250 cm. A gentle cool breeze flows from north during winter. While it flows from south during the rest of the period. Bangladesh often faces fiercest cyclones having wind speed as high as over 200 km at times. The structures should be built to withstand that wind-speed. However, flood is seldom experienced by Chittagong as it stands on high ground. Mild tremors are felt at Chittagong at times but of insignificant magnitude.

4.3.3 Architectural and environmental considerations

The circulation pattern for the students and staff within the inner spaces will reflect its image of the training facility. Corridors should be wide enough for easy movement. Classrooms, cafeteria, and break areas should be arranged to minimise movement time. The circulation pattern should also avoid interference between the students and other staffs. It is reasonable to locate lounges and break areas near the class rooms.

Concrete brick and teak-wood are suitable as the main building materials due to their easy availability. Landscaping elements outside the buildings like trees, shrubs, grass and water bodies should appropriately be arranged to control the intensity of light, air and sound either to reduce, divert or increase as desired.

Trees around buildings have positive environmental effects on the whole area. They modify sunlight and reflection from polished paved earth surface. Additionally temperature, ventilation, wind direction etc. are also modified by trees in groups. 'Virtual Reality' techniques may be used in computers to generate the environmental factors and to acquire possible future data. For example: possible wind speed on the buildings when the trees are at their full bloom; may be after 4/5 years growth. It may be stated that a normal windspeed, over the full bloomed trees, of 80 km/h, may reduce to only 6/7 km/h at their bottom. Trees not only slow down the wind speed near the ground but also prevent weak evaporation of soil moisture and cut down the wind erosion and loss of top soil.

4.3.4 Technical considerations

Acoustic considerations: Sound should be of ascertainable direction and explicable in nature; noise level should be kept as low as possible. There should not be any unnecessary or unusual noise. It is desirable to have a fatigue free, calm and quiet internal environment. Special attention is to be given to the acoustic environment in the auditorium and seminar hall. The walls, floors, ceilings and doors should be designed to have lowest possible noise levels.

Lighting considerations: Efficiency increases with comfort. Comfort regarding light is desired in all working spaces. Strong contrast should be avoided. Sunlight should be controlled and required illumination should be arranged where necessary. Both light and heat transmission can be reduced by use of appropriate types of glasses. Fluorescent lighting is ideal and energy saving (lumens per watt) for office and training environment. The level of lighting in classrooms should be designed for highest comfort and for project media.

Temperature/ ventilation considerations: Air does not provide physical health only but also the mental comfort and fitness. Proper amounts of ventilation are essential to appropriately control the environment within a training facility. Environmental control is an important functional part of the training facility design. Negligence to it

will result either too hot or cold, too draughty or stuffy, too humid or dry atmosphere. All internal spaces of class rooms, lecture/conference halls, library, auditorium, cafeteria, indoor games rooms and swimming pools will require appropriate ventilation with air-conditioning to achieve the desired temperature, relative humidity and air speed.

Area consideration: The area distribution for individual officers and staff are to be calculated as standard. The spaces like class rooms, auditorium, museum, cafeteria, library, computer/simulator centre, practical laboratories, workshops, fire-fighting centre, dining hall, gymnasium, planetarium, student hostels and sports grounds are to be designed for about 100 full-time students and 100 part-time students.

4.3.5 Training hardware/equipment considerations

Major portion of the training facility is determined by the training hardware used in the classroom. These hardware includes visual training aids, hands-on equipment, mock-ups, projection equipment, terminals (communications), and furniture. Workstation furniture [chairs, tables and desks], carrels, modular furniture [office space within training facility for instructors, developers, support personnel etc.], training equipment and audio-visual equipment including computers are to be appropriately chosen/designed and installed.

4.4 Monetary/Technical assistance

Idealistically training is so important that 'who pays' becomes secondary. However, realistically we find that without clarifying 'who pays' the whole matter becomes academic or impracticable. Society as well as the country will be benefited through this higher training; then why should a group of private people will bear the 'load' alone. Government is taking up the responsibility of all faculties (economics,

engineering, technology, administration etc.) in almost all the Universities of Bangladesh. Govt. of Bangladesh has expressed through its education policy (para 20.16 of the 5th five year plan) that it will provide supportive services for setting up of private universities and will ensure the quality of education.

The BOGSOA (Bangladesh Ocean Going Ship Owners Association) have a keen interest in helping such a unique installation.

The Trade Unions of Bangladesh will be expected to come forward to accept their fair share too.

Ex-seafarers should come forward to contribute, if not by direct payments i.e. donations in the form of cash and/or kind, but may be by giving their valuable time by providing lectures.

A general urge should be made to all concerned organisation in Bangladesh, regions and in the world. The following organisations (Bangladesh is involved as a member to almost all of them), are generous to provide (partially) installation funds and running expenditures as well. Therefore, other than the national and the regional co-operation organisations, a special urge will be made to all of these organisations.

- ADB – Asian Development Bank , 2330, Roxas Boulevard, Manila, Philippines.
- ASEAN – Association of South-east Asian Nations, Jakarta, Indonesia.
- CP – Colombo plan for co-operative economic development in South and Southeast Asia, 12, Melbourne Avenue, Colombo 4, Sri Lanka.
- ESCAP – Economic and social commission for Asia and the pacific, Sala Santitham, Bangkok, Thailand.
- IMO – International Maritime Organisation, 4, Albert Embankment, London, UK.
- UNDP – United Nations Development Fund, New York, N.Y. 10017.

WB/IBRD – World Bank / International bank for reconstruction and development,
1818 H Street, N.Y., Washington, D.C. 20433.

4.5 Government Education policy and Regulatory Rules

Bangladesh has specific education policy and rules for establishment of a new university. The education policy of the Bangladesh Government has been published recently in chapter XX of its Fifth Five Year Plan 1997-2002. The plan (Planning Commission, 1997, XX-1 to XX-31) includes the followings related clauses:

20.1 Introduction

Education is the basic need for socio-economic transformation and advancement of a country. It is the prime ingredient of human resource development. The educated and trained workforce can easily acquire new information and technology and apply them in new situations. To supplement government efforts, there is need for greater participation of the private sector, community and non-government organisations (NGOs).

20.6 Objectives of the fifth five year plan

- i. To attain 75% literacy rate (presently 45%) by the year 2000 in order to achieve 100% within 10 years.

- iv. To develop higher institutions of learning, viz. the general and professional universities and the institutes of technologies as centres of excellence.

- x. To enhance participation of women in every sphere of education as well as to reduce the gap between facilities provided for male and female education.

20.7 Strategies for fifth five year plan

iii. Education at secondary and higher levels will be attuned towards science and technology and vocationalisation.

viii. The higher seats of learning such as universities will develop themselves into important centres of fundamental and applied research.

20.13 University Education

20.13.5 In order to hasten the process of development, the government has laid emphasis on expanding the science and technical education at higher level and accordingly it has planned to establish 12 more science and technology universities in the country. Necessary professional manpower, books and equipment for the laboratories for quality education in these universities will be provided through mobilising both domestic and external resources and obtaining technical co-operation from foreign universities.

20.13.8 Objectives of the University Education during fifth five year plan

i. Quantitative expansion on desired lines with emphasis on science and technology.

iii. Focus on quality, selectivity and excellence of higher education

v. Development of human resources for higher education, research and training, and provision of increased training facilities abroad.

xii. Establishment of links with foreign universities and promote collaborative/ exchange programme.

20.13.9 Strategy of the fifth five year plan

i. Universities will be made centres of excellence specially in fields of science and technology.

iv. Establishment of private universities will be encouraged.

20.13.11 Private University

Private Universities, particularly those emphasising teaching and research in science and technology, will be encouraged during the fifth

five year plan in line with public sector plans and objectives. The UGC (university grants commission) will scrutinise the proposals strictly on the guidelines/ regulations provided by the government in order to maintain quality of education. Experienced academicians and the interested citizens will be encouraged to set up such private universities.

20.16 Private sector investment during fifth five year plan

20.16.1 With the massive investment envisaged in the education sector by the government, it is expected that private investment will be forthcoming in all fields of education. The government will give supportive services for setting up of private universities and ensure quality of education.

The rule that regulates the establishment and operation of a university in private sector is Private University Establishment Act 1992; which is published in *Bangla* language and has been enforced on 9th August 1992. The text of this Act in *Bangla* has been attached as *appendix – 1* at the end.

Bangladesh Government recently has taken a decision to establish 12 more science and technology universities and 13 polytechnic institutes in phases (Daily Lloyds List, June 18, 1998). This reflects the paragraph no. 20.13.5 of the education policy mentioned above.

4.6 Establishment in which sector – private or public

The proposed university may be established as a *state-owned enterprise* by converting the existing Marine Academy of Bangladesh. This process would be less costly because existing government assets like land, structures etc. will be used. However, it will definitely take longer time to get off the ground because of the scarcity of government fund and also because of the narrow scope for conversion under the existing rules and regulations. Again the Marine Academy as being a

government institution is not generous to make any dynamic change in its structure; both in education and training and in physical status.

The second option is to create an entirely new institution by inviting private investors participation through a joint venture arrangement with the govt. of Bangladesh. Country's cash-rich maritime organisations like BOGSOA (Bangladesh Ocean Going Shipowners Association), Seamen's Unions and shipping businessmen individuals have already shown their interest in this respect.

Therefore, for the easy and early implementation the proposed *Maritime University* should ideally be established in *private sector*.

Chapter 5

Course Curriculum

Technically the education and research facilities have to reflect today's shipping structure. Methods and education syllabi require adequate backup by modern technology simulation and practical operational training units. The old fashioned classroom, filled with eager trainees, experienced instructors, chalk and blackboard i.e. 'chalk and talk' styled lecture, is not deemed adequate anymore to meet today's demand. A properly equipped educational place will require substantial investments in equipment and facilities to meet the required training standards.

5.1 Aims and objectives of the university

- To enrich Bangladesh and possibly the regional countries with maritime and shipping experts possessing professional excellence, leadership and dependability in the fields of Inland and international shipping, maritime administration, shipping company management, port operations and maritime education and training.
- To provide supportive activities to other maritime educational institutions.
- To provide consultancy services to shipping industry.
- To upkeep and upgrade the professional competence of existing maritime professionals through regular technical workshop, seminars and lectures by foreign visiting lecturers.
- To earn foreign currency through providing education to foreign students.

5.2 Mission statement

Know maritime activities – Be maritime experts

5.3 Public relationship

The proposed university should ideally have an effective role to develop a professional relationship with other maritime institutions both in the country and in abroad to manage maritime environment. Primarily this means to focus on the elements like the government, industry, community and the public. Therefore following objectives are important for a better integration into the society:

1. Establishing a positive public relationship.
2. Seeking the support of all relevant agencies.
3. Strengthening University/Maritime Industry relationship.
4. Strengthening University/local authorities relationship.
5. Developing alliances with relevant sectors and organisations.
6. Developing distinct image and status.
7. Creating professional friendship with other technical/engineering/maritime universities in the neighbouring countries.

The proposed university may not be well-known among the people living outside of the maritime circle. Because, being a specialised institution, it will have a very less number of students (initially 35 per year – however afterwards 110 per year) in comparing with country's other universities like Dhaka University; having about 20,000 students. Obviously, It will have a very nominal social impact. The Bangladesh Marine Academy, being established in 1962, still remains mostly unknown among the greater portion of the society. Therefore, this university will have to take following steps to be one of the centre-point of the maritime environment:

1. Conducting joint programme with leading universities (country and abroad), maritime industry and professional organisations.
2. Publicity through print and through electronic media like opening a web page in Internet.
3. Hosting people from other disciplines also into media-friendly activities like celebration of World Maritime Day.
4. Arranging and participating in seminars, educational expositions and exhibitions.
5. Distribution of university newsletter or journal as widely as possible.
6. Arrangement of Graduation City Parade in the port-city of Chittagong.
7. Arrangement of friendly games and sports with other institutions.

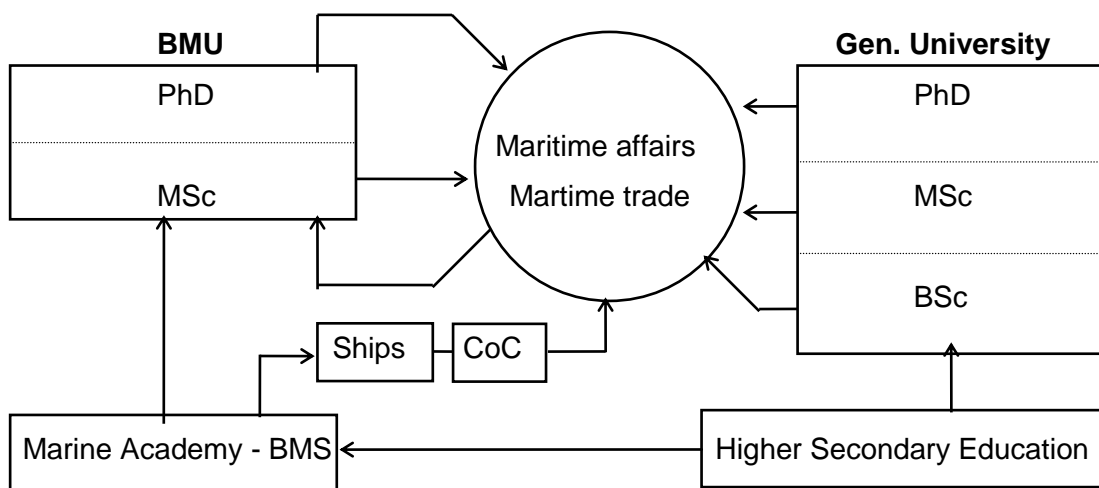


Fig.10 Maritime activites - flow chart

5.4 Entry requirement

Although the master's programmes will be suitable for providing education and research to the learners possessing a sea-going certificate and/or bachelor degree, the target group will preferably be the working professionals i.e. candidates that are working in some shipping/maritime organisations. There will be a formal entrance examination including personal interviews. In view above, the applicants should be any one of the followings:

1. Holder of sea-going certificate of competency of Class 1 grade (STCW) preferably with some relevant working experience.
2. Holder of a Bachelor degree (or equivalent) preferably with some relevant working experience.

In setting the goals of the curriculum the practical aspect of the university-industry partnership is to be considered as the prime factor. The fundamental mission of a university is education and research and that for the industry and business is application of knowledge. Therefore, the partnership manifests itself in spontaneous demand for an *extended mission* of a university. The extended mission of this proposed university will provide *applied education* in a lifelong sense. The applied education programme will provide the learners, mainly working professionals, the best of knowledge and the best of ways to apply it to their individual workplaces.

5.5 Faculties and Departments

Broadly different disciplines like Shipping Management, Maritime Economics, Maritime Safety, Maritime Administration, Maritime Law, Marine Engineering, Naval Architecture, Navigation will be covered through the proposed university's educational curriculum.

Structure of the faculties and departments:

Faculty of maritime technology:

Department of maritime transportation	MS and PhD
Department of inland waterways transportation	MS and PhD

Faculty of maritime management:

Department of shipping trade and management	MS and PhD
Department of maritime law	MS and PhD

5.6 Areas of study

Education prepares a student for his professional life involving learning of concepts, principles and problem-solving methods. Following a general education, 'specific education' prepares him for a specific job or set of tasks i.e. *specialisation*.

Generally all the universities of Bangladesh have their master's and doctoral programmes' duration of 24 and 30 months respectively. However with the higher demand in the market and for highly improved educational plan the proposed university should ideally complete its master's programme in 18 months. The proposed *Banga Maritime University* should ideally provide the following different formal levels of courses for senior maritime personnel with duration as below:

Postgraduate courses (MS)	– 18 months
Doctoral courses (PhD)	– 30 months
Specialised short courses	– various
Research/Fellowships	– various

It is to be mentioned that presently the first-degree course (BMS - Bachelor of Maritime Science) is being conducted by the Bangladesh Marine Academy for engineering and nautical cadets. General Bachelor degree (BSc - Bachelor of

Science) course is being conducted by all the existing universities and colleges (under National University) of Bangladesh.

Postgraduate courses (Master of Science): this course will contain specialised syllabi along with appropriate study tours in Bangladesh and in foreign countries for the graduates who wish to acquire more detailed knowledge of new concepts, techniques and additional skills in maritime fields.

Doctoral courses (PhD): this course will focus on specific areas through in-depth study with wider view. Specialised syllabi will contain close analyses over actual shipping environment both within and outside the country.

Short courses: Normally these courses will be arranged for the maritime personnel with high potential at a mid-point of their careers i.e. *in-service training*. Courses will be composed of lectures, seminars, workshops and visits. Courses will also be based on IMO conventions implementation, safety implementation and pollution prevention.

Research/Fellowships: These facilities will be offered, upon demand and sponsor, for specific need of interested group of maritime personnel. Shipping is a dynamic discipline. Researchers will become expert in these fields. They will be at the leading edge of a subject area and will be able to pass on the leading knowledge to the required places. All lecturers will therefore be encouraged to involve in research. The researches will comprise of tuition in specific areas, visits to organisations (including abroad), study tours and attachment to ports, shipping companies, training institutes or administration for a specific period.

5.7 Course curriculum outlines

The proposed university will start functioning by introducing only the master's programmes in all disciplines in its initial stages. With the development of successful fostering and depending upon the demand eventually the doctoral programmes will come into force. However, the short courses and the researches will go in parallel to the master's programmes. The outlines of the Courses' curriculum under the proposed departments are as follows:

Department of maritime transportation (MS and PhD): Planning, design, construction and maintenance of port facilities, general cargo and container terminal planning and development, dangerous cargo handling, coastal hydraulics, breakwaters, hydrographic surveys, geo-technology, design of wharves, piers and dolphins, computer-based ports and terminal operations, maritime administration, sustainable development of sea, vessel types and operation, disaster management, casualty investigation, certification of seafarers, survey, ship registration, pollution prevention, noise and vibration engineering and corrosion engineering, telecommunication, radio-telephony, satellite communication, internet and GMDSS.

Department of inland waterways transportation (MS and PhD): Navigation technology (nautical and engineering), navigability of rivers, maintenance of rivers, dredging, small ships' safety, inland port management, operation with faster vessels, mathematics and statistics, map projections, environmental factors, radio positioning, satellite navigation, electronic charting, riverine transportation safety, hydrographic survey, engine operation and maintenance, ship stress and stability.

Department of maritime law (MS and PhD): Political science, labour law, personnel administration, marine insurance, naval structures, maritime policy, marine environmental law, law of the sea, liabilities and limitations, ship registration, maritime liens and salvage and casualty investigation.

Department of shipping trade and management (MS and PhD): shipping finance, shipping economics, marketing, chartering, maritime transport systems, pollution

control, maritime IT, marine insurance, port administration and operations, marine insurance and law, human resources management, labour management and containerisation, managerial accounting, maritime economics, currency risk management, logistic management, futures and options, international banking, marketing and trade finance, 'purchasing, materials, & operation management', specialised trades with LNG, LPG carriers, chemical carriers and ro-ro vessels.

5.8 Award of Degree

Award of degree will depend on various factors i.e. not only on a written examinations. Because this university will be an industry-oriented one that will provide education and research directly applicable to the industry. Regular publication of a minimum number of papers, set by the department, will be a good criteria to assess the quality of research by the students. The publication ideally should be in some reputed national professional journals. Students will need to present technical papers in some seminars, arranged by the university, in front of professional audience. Apart from the formal written examinations students will need to submit dissertation/thesis papers that will be assessed by the professors, technical experts, maritime personnel of relevant experiences.

5.9 Short courses

- Multimodal transportation
- Simulator operations
- Quality standard systems
- Port state control
- Containerisation
- Clearing and forwarding
- Cargo brokering
- Marine accident investigations

Management information systems

Computer based office-management and communications

5.10 Availability of Professors

Probably this is the most important area that will require the highest attention. All initiatives, attempt, zeal, development and success will depend mostly on the teaching team. Higher the efficiency of the teaching professors better will be the standard of the students. However, this area will be very hard to overcome. Generally, there is a tremendous shortage of maritime lecturers/professors around the world. It has already mentioned that the Bangladesh Marine Academy is suffering with shortage of instructors. The main reason is being the comparatively lower salary. Hopefully the proposed pay-structure (Chapter 6 - section 6.3.8.1) of this new university will attract many such experts. The resident professors will ideally be a possessor of MS/PhD with notable experience.

The professors who work as resident ones are sometimes get confined within a limited or narrow field of education and research. But the personnel who work within the industry are always updated with the latest technology and advancement. Therefore these experts will be always expected in this university as visiting professors.

It may be expected that the professors [resident and visiting] will be available from the following areas:

1. Bangladeshi WMU Graduates - 39 in number till date.
2. Ex-seafarers with Extra Master's/Extra Chief Engineer's certificate.
3. Experienced professors from other technical universities of Bangladesh.
4. Experienced Naval personnel from Bangladesh Navy.
5. Professors from other sister universities in other countries.
6. Experienced personnel from around the world.
7. IMO experts.

5.11 Women Participation

Almost half of the population (127 million) of Bangladesh is women. Bangladesh Constitution provides equal rights for women as for men. About 85% of the population belongs to Islam. Rests are Hindu, Christians and Buddhists. Bangladesh is a secular state; however with Islam as its state religion. Women are free in taking up any profession, as they like. Informatively both the present Prime Minister and the main opposition leaders are women. Besides men, the women are holding important key-positions in the government and in the private sectors.

Due to obvious reason, there is a limited participation of women in the world maritime industry; specially in seafaring arena. Continuous living within ships that sail for months at oceans bars the women to be seafarers. However, we have had the glorious example of **Ms. Victoria Drummond** of Scotland, UK; who started her seafaring career as a *cadet engineer* in 1921 and eventually became *Chief Engineer* after crossing numerous obstacles in so-called Men's world. She retired in 1962 and died in December 25, 1980. A noble proposal may be hereby made to name one of the buildings of the *Banga Maritime University* after this '*incredible lady*'. For example: *Drummond Simulator Centre*, *Drummond Auditorium*, *Drummond Residence* (student hostel) etc.

Bangladesh has a traditional conservative society composed of people from four main religions. The society is proud of this tradition. Within this traditional conservation the social attitude towards women's free-participation in all possible working atmosphere has made this country a unique one.

UN had its Women Decade (1975-85) as a beginning-mark to promote, encourage and integrate women into all levels of politics, economics and social development. UN Resolution 40/108 by the general assembly on 13 December 1985 provided a framework for promoting greater equality, opportunity and integration for women at national, regional and international levels in coming years. It has been emphasised in Beijing Assembly in 1995.

IMO, through its technical co-operation committee, is in active role to integrate women into maritime field as a part of its *human resources development*. The same has been again urged to all IMO members through its resolution 14 of STCW 95.

There are a large number of female students that are graduating (BA, BSc, MA, MSc, MCom, MBA, PhD) every year from different universities of Bangladesh in different disciplines. Besides male graduates, the female graduates should also be inspired to embark upon the proposed university's specialised maritime courses. Having a general graduation qualification together with the specialised maritime degree will make them suitable for the following highly specialised, technical, complex and challenging maritime professions.

1. **Administrators** – maritime policy development, research, advisory services within Ministry of Shipping and in national maritime administration.
2. **Professors/lecturers** – Maritime Training in subjects like Mathematics, Electronics, Computer Science, Physics, Environment protection, Law, Astronomy, Geography, Ocean Science, meteorology etc.
3. **Maritime Lawyers** – Formulation of national maritime legislation according to the international conventions, Practising in Marine Court, Consultancy services to the administration etc.
4. **Engineers/Technologists** – Different posts in Computation, Maritime Communication (coastal radio stations and ports communication centres), Maritime Electronics etc.
5. **Port Administrators** – Management of port operations, pilotage, port engineering management etc.
6. **Naval Architects** – Management of Ship construction, inspection etc.
7. **Managers** – Technical management of shipping companies, maritime safety, pollution prevention, fleet management, engineering superintendence etc.

Bangalee (Bangladeshi) female graduates of different universities have the potential to be integrated in maritime industry as well. Thus they can also present their excellence in this so-called manly profession. However, they only need to bridge the specialised education-gap that may be provided by this proposed university.

Chapter 6

The legal procedures for establishment

The Act for establishment of a University in private sector is the *Private University Act No.12 of 1992* (ref: appendix – 1). It was passed through the Parliament and had been duly accepted by the President of Bangladesh on August 9, 1992.

6.1 Conditions under the Act

The conditions that will be fulfilled to meet the requirements of the Act are as follows:

1. The establishment Act

1.1 (clause 3/1) The proposed university will be established under the private university act 1992.

1.2 (clause 3/2) It can acquire, keep or hand over any moveable/ unmoveable properties.

3. Location

3.1 (clause 4) It will start functioning permanently on about 150 acres of land at Patenga, Chittagong.

4. Open for all

- 4.1 (clause 5) It will remain wide-open to all interested persons or groups irrespective of nationality, religion, colour, groups, men or women.

5. Approval for establishment

- 5.1 (clause 6/1) The establishment procedure will go into operation only after acquiring a formal approval (certification) from the government.
- 5.2 (clause 6/2) An application to acquire the above approval will be made in due time.

6. Conditions for approval

- 6.1 (clause 7) The conditions that will be fulfilled for acquiring approval:
- (a) There will be an education plan duly approved by the Grants Commission.
 - (b) There will be two faculties at its initial stage.
 - (c) Each of the faculties will have sufficient number of duly qualified teachers as approved by the Grants commission.
 - (d) The proposed university will have a reserved fund of Taka 10 million (equivalent of US \$ 215,000) in a government bank.
 - (e) It will have an applied and appropriate course curriculum duly approved by the University Grants Commission.
 - (f) There will be a reserve of 5% seats (studentship) for poor but genius applicants and they will study here on *free of costs* basis.
 - (g) The salary structure for the teachers and the fees imposed on students will clearly be mentioned.

7. University officers

- 7.1 (clause 8) The proposed university will have the following officers:
- (a) Chancellor
 - (b) Vice-chancellor
 - (c) Treasurer
 - (d) Registrar

- (e) Dean
- (f) Departmental Heads
- (g) Controller of Examinations

8. Chancellor

- 8.1 (clause 9/1) The President of the peoples' republic of Bangladesh will remain as the Chancellor of the university and he/she or a person nominated by him/her will preside the convocations for awarding academic and honorary degrees.
- 8.2 (clause 9/2) The honorary degrees will be duly approved by the Chancellor.
- 8.3 (clause 9/3) The convocation will take place yearly or as directed by the Chancellor.

9. Vice-chancellor

- 9.1 (clause 10/1) The Vice-chancellor, recommended by the establishing authority, will be appointed for a period of 4 (four) years by the Chancellor, under certain conditions, and will act as the Chief Executive of the university.
- 9.2 (clause 10/2) In case of the Vice-chancellor becomes unable to discharge his duties due to leave, sickness or any other causes the Registrar will act as the Vice-chancellor for that period of time.

10. Treasurer

- 10.1 (clause 11/1) The Treasurer, as recommended by the entrepreneur, will be appointed by Chancellor, under certain conditions, for a period of 4 years.
- 10.2 (clause 11/2) The Treasurer will be responsible for all accounts of the university.

11. Registrar, Dean etc.

- 11.1 (clause 12/1) The Registrar, Departmental Heads, Controller of examinations will be appointed by the entrepreneur under certain conditions set by the Chancellor.

11.2 (clause 12/2) The Deans of the faculties, as recommended by the Chancellor, will be elected by the departmental heads and for period of time as set by the Chancellor.

12. Other staff employment

12.1 (clause 13) The officers, other than those mentioned in clause 8, will be appointed on acquiring a formal approval from the government.

13. University Authority

13.1 (clause 14/1) The following working bodies will be there in the university.

- (a) a syndicate comprising 9 members,
- (b) an academic council comprising minimum 9 members,
- (c) a school of studies,
- (d) a curriculum committee,
- (e) a finance committee comprising minimum 5 members,
- (f) an election committee comprising minimum 5 members.

13.2 (clause 14/2) The university will be able to create or establish any other bodies as necessary other than those mentioned in clause 13/1.

13.3 (clause 14/3) All the members of the syndicate, directory boards, regency council or trustee boards will ideally be long-experienced in the field of education, culture, art, science, technology and administration.

14. Education plan

14.1 (clause 15/1) The plan, curriculum, syllabus and the quality of the education programme will be duly approved by the University Grants Commission.

14.2 (clause 15/2) An application will be submitted to the University Grants Commission for acquiring approval for the education programme as mentioned in clause 15/1.

15. Cancellation of approval

- 15.1 (clause 16) If the university becomes unable to maintain its quality standard or be found to award false certificates, subjected to prove, its *approval* for functioning would be ceased.

16. Statute

- 16.1 (clause 17/1) The syndicate, directory boards, regency council or trustee boards, under the approval of the Chancellor, will prepare a *statute* for the syllabus, curriculum, index, administrative directives and any other related matters.
- 16.2 (clause 17/2) The above mentioned statute will have to be published in the government gazette.

17. Certification

- 17.1 (clause 18) All certificates for awarding degrees will be duly signed by the Vice-chancellor and be stamped by the university seal.

18. Account

- 18.1 (clause 19/1) The university will have an account.
- 18.2 (clause 19/2) The account will be in a government bank and be used as approved by the syndicate, directory boards, regency council or trustee boards.
- 18.3 (clause 19/3) No attempt will be made to acquire any fund from any person or any institution within the country or in abroad without the knowledge of the Chancellor.

19. Account keeping and audit

- 19.1 (clause 20) The income-expenditure account will be maintained accordingly and be audited yearly by a chartered accountant, as approved by the Chancellor.

6.2 Procedure for application

The UGC (university grants commission) performs the assessment of any proposal for a new university. UGC has a standard format for preparation of an application for such proposal. The application format is in *Bangla*. The text in *Bangla* has been attached as *appendix –2* at the end.

Ample time is to be provided for the UGC to assess and examine the prospect and feasibility studies of the project. This proposed project completion period would be of 5 years. In this period, the world shipping will also undergo more changes strategically. Bangladesh will need more and more shipping and maritime experts with the growing demand and changes. Therefore, an early submission will assist the project to commence.

6.3 The Application for approval

The application for establishment of the proposed *Banga Maritime University* (the standard format prepared by the University Grants Commission) for acquiring the formal approval (certification) from the government will require mentioning all possible information. They are as follows:

1. Name : **BANGA MARITIME UNIVERSITY**
2. Address : South Patenga, Chittagong,
Bangladesh.
3. Entrepreneur's name : (will be mentioned)
4. Name of the Vice-chancellors name : (will be mentioned)
5. Officers' names as appointed by the
Board of Governors : (will be mentioned)

6. Name of the Faculties : Faculty of Maritime Technology
Faculty of Maritime Management

7. Number of seats in different Departments *per year*:

Department of maritime transportation – 10 (afterwards 30)
Department of inland waterways transportation – 10 (afterwards 30)
Department of shipping trade and management – 10 (afterwards 30)
Department of maritime law – 5 (afterwards 20)

8.1 32 numbers of different staffs' monthly pay:

Professor – 4 @ \$1000
Associate Professor – 2 @ \$800
Assistant Professor – 2 @ \$600
Lecturer – 2 @ \$400
Treasurer – 1 @ \$900
Controller of Examinations – 1 @ \$700
General staffs – 20 (approximately) - various

8.2 Detailed curriculum vitae of all teaching staff: (will be submitted)

8.3 A list of general staff: (as required – approximately 20 in number)

9. Tuition fees: approximately Bangladesh Taka 400,000 (app. \$8000) for PhD programme and 300,000 (app. \$6000) for Master's programme.

10. Land property: total area – 150 acres

The area will be used as below.

- (a) The main buildings and surrounding areas, students' residence, playgrounds and residence for teachers and staff.
- (b) The administrative buildings, students' class rooms, games rooms, auditorium, gymnasium etc.
- (c) All teaching and administrative staff will be provided appropriate housings.

11. The original deeds/papers as a prove for possessing the above mentioned land will be submitted.
12. Following facilities will be provided for associated research:
 - (a) Practical mechanical laboratory
 - (b) Practical navigational laboratory
 - (c) Practical electronics and electrical laboratory
 - (d) Marine Workshop
 - (e) Maritime museum
 - (f) Simulator training centre
 - (g) Planetarium
13. List of equipment that will be required for education and research.
 - (a) the research equipment as necessary for the above mentioned laboratories and workshops.
 - (b) Planetarium equipment
 - (c) Computer, LAN servers and associated equipment
14. The University fund:
 - Reserved – 10 million taka (\$200,000); required as a *fixed deposit* with the bank.
 - General – 1,000 million taka (\$20 million)
15. A copy of the education plan as approved by the Grants Commission: (will be submitted by the entrepreneur).
16. A copy of the course curriculum as approved by the Grants Commission: (will be submitted by the entrepreneur).

Chapter 7

Summary and Conclusion

Today Bangladesh belongs to the third world. Once upon a time it was self-reliant, self-sufficient and prosperous one too. It was a proverb that 'What Bengal thinks today, India thinks tomorrow'. With the modern technological revolution, the traditional technologies became obsolete. The people of Bangladesh are always independent minded. Nevertheless, it is a pity that this country was always been ruled by foreigners like Muslims, Mughals, British Empire and finally by Pakistan ranging from 1201 to 1971. Therefore people in general were frustrated and hopeless during this long period of suppression when this prosperous country was subjugated and exploited in all possible way.

Under the Pakistan rule, during 60's, the issue of autonomy rose under the leadership of *Bangabandhu Sheikh Mujibur Rahman* (Father of the nation). Ultimately *Bangabandhu* declared independence on 26th March 1971 and the country emerged as a sovereign state through a bloody war of liberation from the occupation Pakistani army on 16th December 1971. It is to be mentioned here with great honour that 3 million people were killed and 200,000 women were raped by the Pakistani army during the 9 months of the liberation war.

After liberation *Bangabandhu* took all possible efforts to build and organise the country in all sectors including shipping sector. Marine Academy and Seamen's Training School commenced functioning. A new training centre for fishing trawlers' personnel was established in 1973. The long pending work of the construction of the Chittagong Dry Dock & Heavy Industries was commenced; however it was

commissioned in 1983. Smaller ship-construction commenced in Khulna Shipyard in 1972. Oil and gas exploration in the Bay of Bengal was commenced in 1973. The National shipping line, 'Bangladesh shipping Corporation', was established in 1972. However due to obvious shortage of seafaring personnel all its ships used to be mainly manned by foreigners. Shortage of shore-experts in maritime administration, shipping companies, ports and in training centres was more than that at sea.

Different foreign countries specially UK came forward to train our seafarers. Thus Bangladesh was blessed with a few maritime experts after liberation. Such aid in the form of study-fellowships was discontinued with the passage of time. Bangladesh was expected to stand on its own feet; but it was not an easy task. Despite hard competition in shipping world, this newly born country was making a distinct profit during 70's and in early 80's in its shipping trade.

Whatsoever today Bangladesh is emerging as the most prosperous country in this region. The same has been commented by the US President Bill Clinton recently. He and his regional advisor Ms. Albright also commented that by the year of 2010 Bangladesh would be a fully self-sufficient country. Traditionally the people of this country lead a very simple life which is often confuses the foreigners as so-called 'extreme poverty'. The true fact is that today not a single citizen of 127 million people suffers from hunger.

Around 1980 it was calculated that the population would go around 200 million by 2000 but now it is clear that this figure will not go beyond 150 million. Modern technological advances in the areas like agriculture, industries, business and shipping are bringing change with acceleration.

Bangladesh shipping trade never received any attention before liberation although prospects prevailed. Bangladesh possesses the unique and natural shelter of the Bay of Bengal. Bangladesh has had a long heritage of wooden-shipbuilding. The Bangladeshi general labourers including the seafarers are always happy with comparatively less salary due to the country's simple life-style.

Today Bangladesh has all associated prospects to emerge as one of the leading maritime countries in this region. The only deficiency lying with it is '*skilled maritime and shipping personnel*'. The same has been felt by the concerned Ministries, shipowners, ship operators, foreign entrepreneurs, port authorities and maritime training centres.

Existing Marine Academy imparts education and training only to seafarers. Marine Fisheries Academy imparts education and training only to fishing trawlers' personnel. There is no scope for appropriate and applied education and research that can produce national maritime experts like Maritime Administrators, Shipping Managers and Maritime Lecturers. It is always preferable to stand one's own feet.

Government has taken a decision to set up 12 technical universities recently. Moreover recognition of the Bangladesh Marine Academy as one of the 14 branches of the World Maritime University has inspired the country's maritime community to feel the need for establishing a maritime university. Therefore standing at this point, just before entering the new millennium of 2001-3000 AD, it is the right time to start thinking of establishment of a centre for higher maritime studies in the form of a Maritime University to regain and boost up the shipping trade.

Funding for the project may be arranged from various sources from the country's cash-rich organisations like BOGSOA, Shipping individuals and foreign donors. As a part of the ongoing developmental works the Government of Bangladesh always inspires private establishments. Therefore the proposed university will get all out co-operation from the Government.

In this piece of work a proposal of establishing a Maritime University has been outlined briefly. The main aim of this proposal is to highlight the scope to establish such an institution and to show the guidelines for the concerned personnel to plan, formulate and execute the proposed project. The study has revealed many information that will help us to commence on such a unique task in reality.

- Bangladesh has a long seafaring tradition.
- Government policy inspires private entrepreneurship.
- Shipbuilding receives much importance now than ever before.
- Chittagong sea-port facilities are being enhanced remarkably.
- US entrepreneur is setting up a new and most modern container terminal.
- Remarkably less living-expenditure prevails in Bangladesh.
- The proposed land for the university possesses a spontaneous maritime environment.
- The construction cost will be comparatively less due to cheap labour.
- The operating cost will obviously be less too.
- Therefore the less tuition fees will attract foreign students.
- The teaching staff would primarily be among the Bangladeshi WMU graduates; 39 in number till 1997.

Following suppression and dependence of long 770 years Bangladesh became free in 1971. This prudent and potential country will definitely come out as one of the leading maritime country as well by the year 2010. Hopeless people are like dead people and hopeful people are like *burning sun*. Let us be those hopeful, zealous and enthusiastic people. Let us stand on our own feet in maritime world. Let us establish this proposed centre for higher maritime studies –
BANGABANDHU MARITIME UNIVERSITY.

May Allah bless us all.

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সংস্করণ নং ১৫

বাংলাদেশ গেজেট

জাতিরত সংখ্যা
কর্তৃপক্ষ কর্তৃক প্রকাশিত

রবিবার, আগস্ট ৯, ১৯৯২

বাংলাদেশ জাতীয় সংসদ
ঢাকা, ৯ই আগস্ট, ১৯৯২/২৫শে প্রাবণ, ১৩৯৯

জাতীয় সংসদ কর্তৃক গৃহীত নিম্নলিখিত আইনটি ৯ই আগস্ট, ১৯৯২ (২৫শে প্রাবণ, ১৩৯৯) তারিখে রাষ্ট্রপতির সম্মতি লাভ করিয়াছে এবং এতদ্বারা এই আইনটি সাধারণের অবগতির জন্য প্রকাশ করা যাইতেছে:—

১৯৯২ সনের ০৪ নং আইন

বেসরকারী বিশ্ববিদ্যালয় স্থাপনের বিধানকল্পে প্রণীত আইন

যেহেতু দেশে উচ্চ শিক্ষার ক্রমবর্ধমান চাহিদা পূরণ ও ব্যাপক সম্প্রসারণ, সর্বসাধারণের জন্য উচ্চ শিক্ষা সুলভকরণ এবং উহার মাধ্যমে দক্ষ জনগোষ্ঠী সৃষ্টির উদ্দেশ্যে বেসরকারী পর্যায়ে বিশ্ববিদ্যালয় প্রতিষ্ঠাকরণ অত্যাৱশ্যক;

এবং যেহেতু দেশের কতিপয় জনকল্যাণকামী ব্যক্তি, ব্যক্তিগোষ্ঠী, দাতব্য ট্রাস্ট ও প্রতিষ্ঠান বেসরকারী পর্যায়ে বিশ্ববিদ্যালয় প্রতিষ্ঠা ও পরিচালনা করিতে আগ্রহী;

এবং যেহেতু বেসরকারী পর্যায়ে বিশ্ববিদ্যালয় প্রতিষ্ঠাকরণকল্পে বিধান করা প্রয়োজনীয় ও সমীচীন;

সেহেতু এতদ্বারা নিম্নরূপ আইন করা হইল:—

১। সংক্ষিপ্ত শিরোনাম।—এই আইন বেসরকারী বিশ্ববিদ্যালয় আইন, ১৯৯২ নামে অভিহিত হইবে।

(৭৫৮১)

মূল্য : টাকা ২'০০

- ২। সংজ্ঞা।— বিষয় বা প্রসংগের পরিপন্থী কোন কিছু না থাকিলে, এই আইনে—
- (ক) “অনুদান” অর্থ কোন বেসরকারী বিশ্ববিদ্যালয়ের শিক্ষা অনুদান;
 - (খ) “একাডেমিক কাউন্সিল” অর্থ কোন বেসরকারী বিশ্ববিদ্যালয়ের একাডেমিক কাউন্সিল;
 - (গ) “কর্তৃপক্ষ” অর্থ এই আইনে উল্লিখিত বা উহার অধীনে গঠিত কোন কর্তৃপক্ষ;
 - (ঘ) “ট্রাস্টি বোর্ড” অর্থ ধারা ১৪(১) এ উল্লিখিত ট্রাস্টি বোর্ড;
 - (ঙ) “পরিচালনা পর্ষদ” অর্থ ধারা ১৪(১) এ উল্লিখিত পরিচালনা পর্ষদ;
 - (চ) “প্রতিষ্ঠাতা” অর্থ কোন বেসরকারী বিশ্ববিদ্যালয় স্থাপনকারী কোন ব্যক্তি, ব্যক্তিগোষ্ঠী, দাতব্য ট্রাস্ট বা অন্য কোন প্রতিষ্ঠান;
 - (ছ) “বেসরকারী বিশ্ববিদ্যালয়” অর্থ এই আইনের অধীন স্থাপিত কোন বেসরকারী বিশ্ববিদ্যালয়;
 - (জ) “ব্যক্তিগোষ্ঠী” অর্থ কোন বেসরকারী বিশ্ববিদ্যালয় স্থাপনের উদ্দেশ্যে দুই বা ততোধিক ব্যক্তির সম্মিলিত গোষ্ঠী বা গ্রুপ;
 - (ঝ) “মঞ্জুরী কমিশন” অর্থ University Grants Commission of Bangladesh Order, 1973 (P.O. No. 10 of 1973) দ্বারা গঠিত University Grants Commission of Bangladesh;
 - (ঞ) “রিজেন্সী কাউন্সিল” অর্থ ধারা ১৪(১) এ উল্লিখিত রিজেন্সী কাউন্সিল;
 - (ট) “সনদপত্র” অর্থ কোন বেসরকারী বিশ্ববিদ্যালয় স্থাপনের জন্য ধারা ৬ এর অধীন প্রদত্ত কোন সনদপত্র;
 - (ঠ) “সিন্ডিকেট” অর্থ ধারা ১৪(১) এ উল্লিখিত সিন্ডিকেট।

৩। বেসরকারী বিশ্ববিদ্যালয়।— (১) এই আইনের বিধান অনুযায়ী এক বা একাধিক বেসরকারী বিশ্ববিদ্যালয় স্থাপন করা যাইবে।

(২) এই আইনের বিধান সাপেক্ষে, কোন বেসরকারী বিশ্ববিদ্যালয়ের স্থাবর ও অস্থাবর উভয় প্রকার সম্পত্তি অর্জন করার, অধিকারে রাখার এবং হস্তান্তর করার ক্ষমতা থাকিবে এবং উহার নামে উহার পক্ষে বা বিপক্ষে মামলা দায়ের করা যাইবে।

৪। বেসরকারী বিশ্ববিদ্যালয়ের অবস্থান।— সরকারের অনুমোদনক্রমে এবং এই আইনের বিধান সাপেক্ষে কোন বেসরকারী বিশ্ববিদ্যালয় বাংলাদেশের যে কোন স্থানে অবস্থিত হইতে পারিবে:

তবে শর্ত থাকে যে, সরকারের পূর্বানুমোদনক্রমে, কোন বেসরকারী বিশ্ববিদ্যালয় প্রারম্ভিকভাবে কোন স্থানে অস্থায়ীভাবে স্থাপন করা যাইবে, কিন্তু অস্থায়ীভাবে স্থাপনের তারিখ হইতে পাঁচ বৎসরের মধ্যে উহা, সরকার কর্তৃক অনুমোদিত, উহার নিজস্ব অন্তত পাঁচ একর পরিমাণ ভূমি ও পর্যাপ্ত অবকাঠামোর মধ্যে স্থায়ীভাবে স্থাপন করিতে হইবে।

৫। জাতি-ধর্ম-নির্বিশেষে সকলের জন্য বিশ্ববিদ্যালয় উন্মুক্ত।— যে কোন জাতি, ধর্ম, বর্ণ, গোত্র এবং শ্রেণীর পুরুষ ও মহিলার জন্য বেসরকারী বিশ্ববিদ্যালয় উন্মুক্ত থাকিবে।

৬। বেসরকারী বিশ্ববিদ্যালয় স্থাপনের জন্য সনদপত্র।— (১) এই ধারার অধীন সরকারের নিকট হইতে প্রয়োজনীয় সনদপত্র অর্জন না করিয়া কোন বেসরকারী বিশ্ববিদ্যালয় স্থাপন বা পরিচালনা করা যাইবে না।

(২) কোন বেসরকারী বিশ্ববিদ্যালয় স্থাপনে বা পরিচালনার আগ্রহী কোন ব্যক্তি, ব্যক্তি-গোষ্ঠী, দাতব্য ট্রাস্ট বা অন্য কোন প্রতিষ্ঠানকে উপ-ধারা (১) এর অধীন একটি সনদপত্র অর্জনের উদ্দেশ্যে সরকারের নিকট নির্ধারিত ফরমে আবেদন করিতে হইবে।

(৩) উপ-ধারা (২) এর অধীন কোন আবেদন পাওয়ার পর সরকার আবেদনকারীর নিকট হইতে বিষয়টি সম্পর্কে উহার বিবেচনার প্রয়োজনীয় আরও তথ্য তলব করিতে পারিবে এবং আবেদনটি বিবেচনার পর যদি সরকার এই মর্মে সন্তুষ্ট হয় যে, আবেদনকারী কোন বেসরকারী বিশ্ববিদ্যালয় স্থাপনের জন্য ধারা ৭ এর অধীন শর্তাবলী পূরণ করিয়াছেন তাহা হইলে একটি বেসরকারী বিশ্ববিদ্যালয় স্থাপনের জন্য বিধি দ্বারা নির্ধারিত ফরমে আবেদনকারীর অন্তর্ভুক্ত উপ-ধারা (১) এর অধীন একটি সনদপত্র প্রদান করিবে।

(৪) যদি সরকার এই মর্মে সন্তুষ্ট হয় যে, আবেদনকারী একটি বেসরকারী বিশ্ববিদ্যালয় স্থাপনের জন্য ধারা ৭ এর অধীন শর্তাবলী পূরণ করিতে ব্যর্থ হইয়াছে, তাহা হইলে সরকার আদেশ দ্বারা আবেদনকারী কর্তৃক উপ-ধারা (২) এর অধীন দাখিলকৃত আবেদনটি নাকচ করিতে পারিবে :

ভবে শর্ত থাকে যে, আবেদনকারীকে বৃদ্ধিসংগত শ্রমের সুযোগ প্রদান না করিয়া অনুরূপ কোন আবেদন নাকচ করা যাইবে না।

(৫) উপ-ধারা (৪) এর অধীন কোন আবেদন নাকচ আদেশ দ্বারা সংক্রান্ত কোন ব্যক্তি, ব্যক্তি-গোষ্ঠী, দাতব্য ট্রাস্ট বা প্রতিষ্ঠান উক্ত আদেশের তারিখ হইতে ত্রিশ দিনের মধ্যে চ্যাম্বেলারের নিকট উক্ত আদেশের বিরুদ্ধে আপীল করিতে পারিবেন এবং উক্ত আপীলের উপর চ্যাম্বেলারের সিদ্ধান্ত চূড়ান্ত বলিয়া গণ্য হইবে।

৭। সনদপত্র অর্জনের শর্তাবলী।—ধারা ৬ এর অধীন সনদপত্র অর্জনের জন্য কোন বেসরকারী বিশ্ববিদ্যালয়কে, অন্যান্যের মধ্যে, নিম্নবর্ণিত শর্তাবলী পূরণ করিতে হইবে, যথা:—

- (ক) উহার শিক্ষা কার্যক্রম সম্পর্কিত একটি পরিকল্পনা মঞ্জুরী কমিশন কর্তৃক পূর্বানুমোদিত হইতে হইবে;
- (খ) প্রারম্ভিক অবস্থায় উহার অন্তর্গত দুইটি অনুষদ থাকিতে হইবে;
- (গ) প্রত্যেকটি অনুষদের জন্য মঞ্জুরী কমিশন কর্তৃক অনুমোদিত সংখ্যক বৈশিষ্ট্যপূর্ণ শিক্ষাগত যোগ্যতাসম্পন্ন শিক্ষক থাকিতে হইবে;
- (ঘ) উহার অন্তর্গত এক কোটি টাকার সংরক্ষিত তহবিল (reserved fund) কোন রাষ্ট্রায়ত্ত্ব ব্যাংকে জমা থাকিতে হইবে;
- (ঙ) উহার মঞ্জুরী কমিশন কর্তৃক অনুমোদিত একটি সুদম নিবিড় শিক্ষা ও পাঠ্যক্রম থাকিতে হইবে;
- (চ) উহাতে ছাত্র ভর্তির জন্য নির্ধারিত মোট আসন (seat) এর শতকরা পাঁচ ভাগ দরিদ্র অথচ প্রতিভাবান ছাত্র ভর্তির জন্য সংরক্ষিত থাকিতে হইবে এবং এই সকল ছাত্রের বিনা বেতনে অধ্যয়নের সুযোগ থাকিতে হইবে;
- (ছ) শিক্ষকগণের বেতনক্রম ও ছাত্রগণ কর্তৃক প্রদেয় বেতনের হার স্পষ্টরূপে বর্ণিত হইতে হইবে।

৮। বেসরকারী বিশ্ববিদ্যালয় কর্মকর্তা।—(১) কোন বেসরকারী বিশ্ববিদ্যালয়ের নিম্নবর্ণিত কর্মকর্তাগণ থাকিবেন, যথা:—

- (ক) চ্যাম্বেলার,
- (খ) ভাইস-চ্যাম্বেলার, রেজিস্ট্রার বা প্রিন্সিপাল,

- (গ) কোষাধ্যক্ষ,
 (ঘ) রেজিস্ট্রার,
 (ঙ) ডীন,
 (চ) বিভাগীয় প্রধান,
 (ছ) পরীক্ষা নিয়ন্ত্রক।

৯। চ্যান্সেলার।—(১) গণপ্রজাতন্ত্রী বাংলাদেশের রাষ্ট্রপতি সকল বেসরকারী বিশ্ববিদ্যালয়ের চ্যান্সেলার থাকিবেন এবং তিনি বা তাহার মনোনীত কোন ব্যক্তি একাডেমিক ডিগ্রী ও সম্মানসূচক ডিগ্রী প্রদানের সমাবর্তন অনুষ্ঠানে সভাপতিত্ব করিবেন।

(২) সম্মানসূচক ডিগ্রী প্রদানের প্রতিটি প্রস্তাবে চ্যান্সেলারের সম্মতি থাকিতে হইবে।

(৩) চ্যান্সেলারের অনুমোদনক্রমে প্রতি বৎসর অথবা তিনি আদেশ দ্বারা যে রূপ নির্ধারণ করিতে পারেন সে রূপ সময়ের ব্যবধানে একাডেমিক ডিগ্রী প্রদানের সমাবর্তন অনুষ্ঠিত হইবে।

১০। ভাইস-চ্যান্সেলার, ইত্যাদি।—(১) কোন বেসরকারী বিশ্ববিদ্যালয়ের ভাইস-চ্যান্সেলার, রেজিস্ট্রার বা প্রিন্সিপাল চ্যান্সেলার কর্তৃক নির্ধারিত শর্তে চার বৎসর মেয়াদে, প্রতিষ্ঠাতার সুপারিশক্রমে, চ্যান্সেলার কর্তৃক নিযুক্ত হইবেন এবং উক্ত বিশ্ববিদ্যালয়ের প্রধান নির্বাহী হইবেন।

(২) ছুটি, অসুস্থতা বা অন্য কোন কারণে ভাইস-চ্যান্সেলার, রেজিস্ট্রার বা প্রিন্সিপাল তাহার পদের দায়িত্ব পালনে অসমর্থ হইলে কোষাধ্যক্ষ অনুরূপ অসমর্থতার মেয়াদে ভাইস-চ্যান্সেলার, রেজিস্ট্রার বা ক্ষেত্রমত প্রিন্সিপাল পদের দায়িত্ব পালন করিবেন।

১১। কোষাধ্যক্ষ।—(১) কোষাধ্যক্ষ চ্যান্সেলার কর্তৃক নির্ধারিত শর্তে চার বৎসর মেয়াদে, প্রতিষ্ঠাতার সুপারিশক্রমে, চ্যান্সেলার কর্তৃক নিযুক্ত হইবেন।

(২) কোন বেসরকারী বিশ্ববিদ্যালয়ের হিসাবের জন্য কোষাধ্যক্ষ দায়ী থাকিবেন।

১২। রেজিস্ট্রার, ডীন, ইত্যাদির নিয়োগ।—(১) কোন বেসরকারী বিশ্ববিদ্যালয়ের রেজিস্ট্রার, বিভাগীয় প্রধান এবং পরীক্ষা নিয়ন্ত্রক চ্যান্সেলার কর্তৃক নির্ধারিত শর্তে, সিন্ডিকেট, পরিচালনা পর্ষদ, রিজেন্সী কাউন্সিল বা ক্ষেত্রমত ট্রাস্ট বোর্ড কর্তৃক নিযুক্ত হইবেন।

(২) কোন অনুষ্ঠানের ডীন, প্রতিষ্ঠাতার সুপারিশক্রমে, চ্যান্সেলার কর্তৃক নির্ধারিত মেয়াদের জন্য, সংশ্লিষ্ট অনুষ্ঠানের অধীন বিভাগসমূহের প্রধানগণ কর্তৃক নির্বাচিত হইবেন।

১৩। অন্যান্য কর্মকর্তাগণের নিয়োগ।—ধারা ৮ এ উল্লিখিত কর্মকর্তাগণ ছাড়াও যদি অন্য কোন কর্মকর্তার প্রয়োজন হয় তাহা হইলে প্রতিষ্ঠাতাকে উক্ত অন্য কোন কর্মকর্তা নিয়োগের জন্য সরকারের পূর্বানুমোদন গ্রহণ করিতে হইবে, এবং অনুরূপ অনুমোদনের আবেদনের তারিখ হইতে ত্রিশ দিনের মধ্যে অনুমোদন না পাওয়া গেলে, অনুমোদন না পাওয়ার ত্রিশ দিনের মধ্যে চ্যান্সেলারের নিকট আপীল করা যাইবে এবং চ্যান্সেলার আপীল প্রাপ্তির বাট দিনের মধ্যে উহা নিষ্পত্তি না করিলে আপীলটি মঞ্জুর হইয়াছে বলিয়া ধরিয়া লওয়া হইবে।

১৪। বেসরকারী বিশ্ববিদ্যালয় কর্তৃপক্ষ।—(১) কোন বেসরকারী বিশ্ববিদ্যালয়ের নিম্ন-বর্ণিত কর্তৃপক্ষসমূহ থাকিবে, যথাঃ—

- (ক) অন্যান্য নয় সদস্য-বিশিষ্ট একটি সিন্ডিকেট, পরিচালনা পর্ষদ, রিজেন্সী কাউন্সিল বা ট্রাস্ট বোর্ড;
 (খ) অন্যান্য নয় সদস্য-বিশিষ্ট একাডেমিক কাউন্সিল,

- (গ) অনুবাদ বা স্কুল অব স্টাডিজ,
- (ঘ) পাঠ্যক্রম কমিটি,
- (ঙ) অন্যান্য পাঁচ সদস্য-বিশিষ্ট অর্থ কমিটি,
- (চ) অন্যান্য পাঁচ সদস্য-বিশিষ্ট নির্বাচন কমিটি।

(২) উপ-ধারা (১) এ উল্লিখিত কর্তৃপক্ষসমূহ ছাড়াও কোন বেসরকারী বিশ্ববিদ্যালয়ের কার্যাবলী সুচারুরূপে ও দক্ষতার সহিত সম্পাদনের উদ্দেশ্যে প্রতিষ্ঠাতা, চ্যান্সেলারের পূর্বানুমোদনক্রমে, প্রয়োজনীয় অন্য যে কোন কর্তৃপক্ষ গঠন করিতে পারিবেন।

(৩) সিন্ডিকেট, পরিচালনা পর্ষদ, রিজেন্সী কাউন্সিল বা ট্রাস্টি বোর্ড এমন ব্যক্তিগণের সমন্বয়ে গঠিত হইবে যাহাদের শিক্ষা, সংস্কৃতি, শিল্প, বিজ্ঞান, প্রযুক্তি ও প্রশাসনের ক্ষেত্রে দীর্ঘ দিনের অভিজ্ঞতা রহিয়াছে।

১৫। শিক্ষাকার্যক্রম, ইত্যাদি।—(১) কোন বেসরকারী বিশ্ববিদ্যালয়ের শিক্ষাকার্যক্রম সম্পর্কিত পরিকল্পনা, শিক্ষাক্রম, সিলেবাস ও শিক্ষার মান মঞ্জুরী কমিশন কর্তৃক অনুমোদিত হইতে হইবে।

(২) উপ-ধারা (১) এর অধীন অনুমোদনের জন্য মঞ্জুরী কমিশনের নিকট একটি আবেদন করিতে হইবে; এবং আবেদন প্রাপ্তির তারিখ হইতে ষাট দিনের মধ্যে মঞ্জুরী কমিশন আবেদনটির উপর উহার সিদ্ধান্ত দান করিবে।

(৩) যদি মঞ্জুরী কমিশন কোন বেসরকারী বিশ্ববিদ্যালয়ের শিক্ষাকার্যক্রম সম্পর্কিত পরিকল্পনা, শিক্ষাক্রম, সিলেবাস বা শিক্ষার মান অনুমোদন করিতে অস্বীকৃতি জ্ঞাপন করে তাহা হইলে অনুরূপ অস্বীকৃতি আদেশের তারিখ হইতে ত্রিশ দিনের মধ্যে উহার বিরুদ্ধে চ্যান্সেলারের নিকট আপীল করা যাইবে এবং উক্ত আপীলের উপর চ্যান্সেলারের সিদ্ধান্ত চূড়ান্ত বলিয়া গণ্য হইবে।

(৪) যদি চ্যান্সেলার উপ-ধারা (৩) এর অধীন কোন আপীল প্রাপ্তির তারিখ হইতে ষাট দিনের মধ্যে উহা নিষ্পত্তি করিতে ব্যর্থ হন তাহা হইলে আপীলটি মঞ্জুর হইয়াছে বলিয়া ধরিয়া লওয়া হইবে।

১৬। সনদপত্র বাতিল।—(১) কোন বেসরকারী বিশ্ববিদ্যালয়ের কোন সার্টিফিকেট, ডিপ্লোমা বা ডিগ্রী প্রদানের ক্ষেত্রে কোন জালিয়াতি বা কারচুপির অথবা ধারা ১৫ এর অধীন অনুমোদিত উক্ত বিশ্ববিদ্যালয়ের শিক্ষার মান বজায় রাখিতে ব্যর্থতার অভিযোগ পাওয়া গেলে চ্যান্সেলার সুপ্রীম কোর্টের বিচারপতি পদে অধিষ্ঠিত আছেন অথবা ছিলেন এমন কোন ব্যক্তির স্বারা উক্ত অভিযোগের তদন্ত করাইতে পারিবেন এবং যদি উক্ত তদন্তে অভিযোগটি সত্য বলিয়া প্রমাণিত হয় তাহা হইলে সরকার উক্ত বিশ্ববিদ্যালয়ের সনদপত্র বাতিল করিতে পারিবে :

তবে শর্ত থাকে যে, প্রতিষ্ঠাতাকে শুনানীর ব্যক্তিসংগত সুযোগ প্রদান না করিয়া এই উপ-ধারার অধীন কোন বেসরকারী বিশ্ববিদ্যালয়ের সনদপত্র বাতিল করা যাইবে না।

(২) উপ-ধারা (১) এর অধীন কোন সনদপত্র বাতিল আদেশ স্বারা সংকুচিত কোন ব্যক্তি, ব্যক্তিগোষ্ঠী, দাতব্য ট্রাস্ট বা প্রতিষ্ঠান উক্ত আদেশের তারিখ হইতে ত্রিশ দিনের মধ্যে উক্ত আদেশের বিরুদ্ধে চ্যান্সেলারের নিকট আপীল করিতে পারিবেন এবং অনুরূপ আপীলের উপর চ্যান্সেলারের সিদ্ধান্ত চূড়ান্ত বলিয়া গণ্য হইবে।

(৩) উপ-ধারা (২) এর অধীন আপীল উহা প্রাপ্তির তারিখ হইতে ষাট দিনের মধ্যে নিষ্পত্তি করিতে হইবে এবং উক্ত মেয়াদের মধ্যে আপীলটি নিষ্পত্তি করা না হইলে উহা মঞ্জুর হইয়াছে বলিয়া ধরিয়া লওয়া হইবে।

১৭। স্ট্যাটিউটস।—(১) সিন্ডিকেট, পরিচালনা পর্ষদ, রিজেন্সী কাউন্সিল বা ট্রাষ্ট বোর্ড, চ্যান্সেলারের অনুমোদনক্রমে, কোন বেসরকারী বিশ্ববিদ্যালয়ের পাঠ্যক্রম, শিক্ষাক্রম, পাঠ্যানির্ঘণ্ট এবং প্রশাসনিক ও অন্যান্য প্রয়োজনীয় কার্যাদি সম্পাদন সম্পর্কিত বিধান সম্বলিত স্ট্যাটিউটস প্রণয়ন করিবে।

(২) উপ-ধারা (১) এর অধীন প্রণীত স্ট্যাটিউটস সরকারী গেজেটে প্রকাশের তারিখ হইতে কার্যকর হইবে।

১৮। বেসরকারী বিশ্ববিদ্যালয়ের সার্টিফিকেট, ডিপ্লোমা ইত্যাদি।—কোন বেসরকারী বিশ্ববিদ্যালয় কর্তৃক প্রদত্ত সকল শিক্ষাগত সার্টিফিকেট, ডিগ্রী ও ডিপ্লোমা ভাইস-চ্যান্সেলার, রেজেন্ট বা ক্ষেত্রমত প্রিন্সিপাল কর্তৃক স্বাক্ষরিত হইবে এবং উহাতে উক্ত বিশ্ববিদ্যালয়ের সীল মোহর থাকিতে হইবে।

১৯। তহবিল।—(১) বেসরকারী বিশ্ববিদ্যালয়ের একটি তহবিল থাকিবে।

(২) এই তহবিল উক্ত বিশ্ববিদ্যালয়ের নামে, সিন্ডিকেট, পরিচালনা পর্ষদ, রিজেন্সী কাউন্সিল বা ক্ষেত্রমত ট্রাষ্ট বোর্ডের অনুমোদনক্রমে, কোন রাসায়নিক ব্যাংকে জমা রাখিতে হইবে এবং বিধি দ্বারা নির্ধারিত পদ্ধতিতে তহবিল হইতে অর্থ উঠানো যাইবে।

(৩) চ্যান্সেলারের অজ্ঞাতসারে বা পূর্বানুমোদন ব্যতিরেকে কোন বেসরকারী বিশ্ববিদ্যালয় বা উহার পক্ষ কোন ব্যক্তি বা প্রতিষ্ঠান দেশের অভ্যন্তরে বা বাহিরে উহার জন্য কোন তহবিল সংগ্রহ করিতে পারিবে না।

২০। হিসাব রক্ষণ ও নিরীক্ষা।—কোন বেসরকারী বিশ্ববিদ্যালয়ের আয়-ব্যয়ের হিসাব মঞ্জুরী কমিশন কর্তৃক নির্ধারিত ফরমে সংরক্ষণ করিতে হইবে এবং প্রত্যেক আর্থিক বৎসরে চ্যান্সেলারের অনুমোদনক্রমে নিয়োগকৃত কোন চার্টার্ড একাউন্টেন্ট দ্বারা উক্ত হিসাব নিরীক্ষিত হইতে হইবে।

২১। বিধি প্রণয়নের ক্ষমতা।—এই আইনের উদ্দেশ্য পূরণকল্পে সরকার, সরকারী গেজেটে প্রজ্ঞাপন দ্বারা, বিধি প্রণয়ন করিতে পারিবে।

আবুল হাশেম

সচিব।

বাউদুর রহমান, উপ-নিয়ন্ত্রক, বাংলাদেশ সরকারী মন্ত্রণালয়, ঢাকা কর্তৃক মন্ত্রিত।
মোঃ আব্দুর রশীদ সরকার, উপ-নিয়ন্ত্রক, বাংলাদেশ ফরমস্ ও প্রকাশনী অফিস,
ডেহুগাঁও, ঢাকা কর্তৃক প্রকাশিত।

বেসরকারী বিশ্ববিদ্যালয়
সনদ প্রাপ্তির আবেদনপত্র

- ১। প্রস্তাবিত বিশ্ববিদ্যালয়ের নাম/ঠিকানা : ডাকঘর-
থানা -
জেলা -
- ২। উদ্যোক্তাদের নাম :
- ৩। ভাইস-চ্যান্সেলর/রেটর/প্রিন্সিপ্যাল এর নাম :
- ৪। বোর্ড অব গভর্নরস কর্তৃক সৃষ্ট পদে
অধিষ্ঠিত কর্মকর্তার (যদি থাকে) নাম :
- ৫। অনুষদের নাম :
- ৬। বিভাগ ওয়ারী ছাত্র, আসন সংখ্যা/ ছাত্র সংখ্যা :
- ৭। (ক) শিক্ষক ও অন্যান্য কর্মচারীদের সংখ্যা ও বেতনের স্কেল :
- অধ্যাপক :
- সহযোগী অধ্যাপক :
- সহকারী অধ্যাপক :
- প্রভাষক :
- কোষাধ্যক্ষ :
- রেজিস্ট্রার :
- পরীক্ষা নিয়ন্ত্রক :
- অন্যান্য কর্মকর্তা/কর্মচারী :

(খ) শিক্ষক মণ্ডলীর বিষয়ভিত্তিক একটি সমগ্র তালিকা এতদসঙ্গে সংযোজিত করুন। এই তালিকায় শিক্ষকদের নাম, বয়স, শিক্ষাগত যোগ্যতা (মাধ্যমিক ইহতে স্নাতকোত্তর পর্যায় পর্যন্ত সকল পরীক্ষায় প্রাপ্ত বিভাগ/শ্রেণী, ডিগ্রী পর্যায়ে পাশ বা অনার্স, নিয়োগ পূর্ণকালীন বা ঋণকালীন ইত্যাদির উল্লেখসহ) নিয়োগের তারিখ শিক্ষাদানের অভিজ্ঞতা, বর্তমান বেতন, সাপ্তাহিক কার্যমাত্রা, গবেষণামূলক কাজ, প্রকাশিত পুস্তক/প্রবন্ধ ইত্যাদির বিবরণ লিপিবদ্ধ করিতে হইবে।

(গ) কর্মকর্তা/কর্মচারীদের একটি তালিকা সংযুক্ত করিতে হইবে।

৮। ছাত্র বেতনের হার :

৯। বিশ্ববিদ্যালয়ের নিজস্ব জমি ও সংস্থান :

(ক) মোট জমির পরিমাণ :

বিশ্ববিদ্যালয় ভবন ও তৎসংলগ্ন এলাকা ছাত্রবাস

খেলার মাঠঃ আবাসিক এলাকা

পুকুর :

সর্বমোট : একর

Appendix-2

(খ) বিশ্ববিদ্যালয় ভবনের বিবরণ :		
পাকা দালান	কক্ষ সংখ্যা	মোট মেঝে আয়তন
পাকা ভিত টিনের ঘর	"	"
কাঁচা ভিত টিনের ঘর	"	"
শ্রেণীকক্ষ ও শিক্ষার কাজে ব্যবহৃত	"	"
প্রশাসনিক কাজে ব্যবহৃত	"	"
ছাত্রদের কমন রুম	"	"
ছাত্রীদের কমন রুম	"	"
প্রেক্ষাগৃহ (অডিটোরিয়াম)	"	"
জিমনেসিয়াম	"	"

(গ) ছাত্রাবাসের কক্ষ সংখ্যা মোট মেঝে আয়তন

(ঘ) শিক্ষক ও অন্যান্য কর্মচারীর আবাসিক সংস্থান :

(১) বিশ্ববিদ্যালয়ের কতজন শিক্ষককে আবাসিক (পরিবারসহ) সংস্থান দিবার ব্যবস্থা আছে :

(২) অন্যান্য :

(ঙ) বিশ্ববিদ্যালয় কি সূত্রে উল্লেখিত জমি, ভবন ও অন্যান্য স্থাবর সম্পত্তির আইনানুগ মাসিক তাহার বিবরণাদি। রেজিস্ট্রিকৃত দলিল থাকিলে তাহার নং ও তারিখ উল্লেখ করুন। দলিলের ফটোকপি কপি দিতে হইবে।

১০। ব্যবহারিক পরীক্ষাগারের বিবরণ :

বিজ্ঞান বিষয়ের অধিভুক্তি প্রার্থনা করিলে সংশ্লিষ্ট বিষয়ে ডিগ্রী সন্ধান ও দ্রাতকোত্তর পর্যায়ে পরীক্ষাগারের বিশদ বিবরণ লিপিবদ্ধ করিতে হইবে। উক্ত মাধ্যমিক, ডিগ্রী, সন্ধান ও দ্রাতকোত্তর স্তরের জন্য পৃথক পরীক্ষাগারের ব্যবস্থা করিতে হইবে।

ক)	বিষয়	পরীক্ষাগারের মোট আয়তন	গ্যাস, পানি ও বিদ্যুতের ব্যবস্থা আছে কি?	ডিগ্রী পাস সন্ধান ও দ্রাতকোত্তর সিলেবাসে বর্ণিত ব্যবহারিক পরীক্ষাসমূহের শতকরা কত ভাগ করার উপযোগী যন্ত্রপাতি আছে।
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১১। যন্ত্রপাতি ও রাসায়নিক দ্রব্যাদির তালিকাসহ বিবরণ দিতে হইবে :

১১। বিশ্ববিদ্যালয়ের 'তহবিল' :

(ক) বিভিন্ন তহবিলে রক্ষিত অর্থের পরিমাণ (..... তারিখের হিসাব)।

(১) সংরক্ষিত তহবিল : টাকা :

(২) সাধারণ তহবিল : টাকা :

১২। মঞ্জুরী কমিশন কর্তৃক অনুমোদিত শিক্ষা কার্যক্রম সম্পর্কিত ১টি পরিকল্পনার কপি :

১৩। মঞ্জুরী কমিশন কর্তৃক অনুমোদিত একটি সুষম নিবিড় শিক্ষা ও পাঠ্যক্রম :

এই আবেদনপত্রে প্রদত্ত তথ্য যথাসম্ভব নির্ভুলভাবে পরিবেশিত ইহাচ্ছে।

প্রতিষ্ঠাতা/উদ্যোক্তা