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Calligraphy: Its Meaning and Practice in Islam

Shah Muhammad Shafiqullah

Of all the branches of fine art that the Muslims cultivated in medieval times, Arabic calligraphy or the art of writing Arabic script beautifully constitutes their most important original contribution. Unlike other fields of artistic pursuits wherein extraneous influences are unmistakenly discernible, the beautiful shaping of Arabic letters is the result of Muslim ingenuity and as such purely Muslim. The development of this art sprang from a sense of piety as well as utility. The Holy Qur'an, the sacred book of the Muslims, is revealed in Arabic, a fact which in itself embodies a holiness to read and write it. Secondly, exegetic prohibition on painting and sculpture of living beings in Islam led the Muslim artists from the outset to findout new avenues for their artistic expression which they discovered in the fantastically beautiful shaping of Arabic letters.

Arabic letters are by nature art pieces. Consisting basically of horizontal and vertical strokes — the fundamentals of space filling, Arabic letters easily lend themselves to every geometric forms like squares, circles, ovals, cubes and loops, entwining and interlacing shafts and to all other graceful curved shapes. Since writing is, from the point of art, organizing space beautifully, the pliant nature of Arabic letters did the work most well. Owing to this inherent characteristic of the script and aided by its assiduous cultivation at the hands of the Muslim artists, Arabic writing reached a level of excellance whose comparable is universally lacking.

All the civilizations of the past have left behind some kind of record of the aesthetic importance of writing. The ancient Egyptians and Assyrians are known to have had deep regard for good writing[1]. In medieval Europe, good writing was practised and it enjoyed the favour and patronage of the church and the state but was an ancillary art form, mainly

[1]Cf. David Diringer, "Calligraphy and Epigraphy", in *Encyclopedia of World Art*, Vol. III (New York, 1960), p. 3.

associated with libraries, books and scholars[2]. On the contrary, in Islam the use of calligraphy was not restricted to fine writing alone, rather, it flourished as a means of multi-media decoration. It achieved the highest expression not only on paper, nor even in architectural ornamentation, but also in arts which sometimes we designate as 'minor arts'.

The Chinese had an art of calligraphy much older than Islamic calligraphy[3] and they valued calligraphy as highly as the Muslim did, but the Chinese calligraphy consisted of only ideograms unconnected by lines that create a continuous movement. The artistic ideal of the Chinese calligraphy is the so-called seal character and the isolated ideograms. These are decorative in themselves and are used in general on porcelain, bronzes and textiles. But the Arabic calligraphy is powerful both as monogram and for purpose of continuity. The imperious leftward advance of Arabic script binds a design together more strongly and subtly and the letters themselves can be elaborated to various shapes without sacrificing clarity.

The art of Arabic calligraphy seems to have come into prominence almost with the advent of Islam for commiting to writing the sacred text of the Qur'an. Its prestige came from its use to perpetuate the word of Allah and it enjoyed the approval of the Qur'an. The first word revealed to the Prophet in the cave of Hira was *iqra*[4] "read", which was followed by an emphasis on writing in the third verse with the words that the Almighty "taught you by pen"[5]. Thus the first revelation that the Prophet received was a direction from Allah on reading and writing. Even a chapter of the Qur'an is dedicated to the pen (*qalam*[6]) in which Allah taking the oath of the pen says : "*Nun* And by the Pen and by what they write"[7]. This verse of the Qur'an clearly expresses the importance and significance of the pen which is the implement used in writing and Allah has sworn by it.

Although the Prophet Muhammad (*sm*) is described as *ummi*[8] (unlettered), he encouraged his companions both to memorize and commit

[2]Sajjad Haider, "A Note on Islamic Calligraphy", *Hamdard Islamicus*, Vol. II, No. 2. 1979, p. 99.

[3]Chinese had the tradition of calligraphic art for well over four thousand years. cf. Judith and Arthur Hart Burling, *Chinese Art* (New York, 1953), p. 44.

[4]Al-Qur'an, Chap. XCVI : Verse, 1.

[5]*Ibid.*, Chap. XCVI : Verses, 3-4.

[6]*Ibid.*, Chap. LXVIII.

[7]*Ibid.*, Chap. LXVIII : Verse, 1.

[8]The Prophet Muhammad (*sm.*) is designated as *al-Nabi al-Ummi* (unlettered Prophet) in the *Qur'an* (Chap. VII : Verses, 157-8).

to writing the verses of the Qur'an as and when these were revealed to him. The Prophet had around him a band of forty scribes always ready to write down the verses of the Qur'an whenever they were revealed to him[9]. These scribes used to preserve the revealed verses on anything available at hand — shoulder blades, wood, leather, rags, bark, palm-leaf, perchment, etc.

The importance that the Prophet attached to writing may further be gleaned from his decision taken in respect of ransom for the release of war prisoners of the battle of Badr. He declared that all those captives who could not pay their ransom would be free if each of them could teach ten believers the art of writing[10]. Zayd ibn Thabit, the chief secretary of the Prophet and scribe of the revelations, was among those who learnt the art of writing from the captives of the battle of Badr[11]. Good handwriting was very dear to the Prophet. He is reported to have said, "He who writes beautifully 'in the name of God (Allah) the Merciful and Compassionate' obtains innumerable blessings"[12]. He is also learnt to have said, "The first thing God (Allah) created was the pen (*qalam*)"[13] and "the ink of the scholar is more holy than the blood of the martyr"[14]. In consequence of such encouragement, the civilization that the unlettered Prophet brought into being excelled in the art of lettering within a century following his death.

A certain emphasis on good writing was always there in the Muslim society and the technique of the writing was developed alongside. Writing was regarded as "one half of knowledge"[15] and one who has written well was considered to have acquired one half of wisdom. Advising on the art of good handwriting, 'Ali ibn Abi Talib (d. 661) said to his secretary 'Ubaidallah: "O 'Ubaidallah, use cotton for your inkstant,

[9]Muhammad Abdur Rahim, *Hadis Sankolaner Itihash* (Dacca, 1970), p. 206.

[10]Muhammad Ibn Sa'd, *Kitab al-Tabaqat al-Kabir*, Vol. II., part-1 (Leiden, 1909), p. 14.

[11]*Ibid.*

[12]Qadi Ahmad, *Calligraphers and Painters*, Eng. transl. by T. Minorsky (Washington, 1959), p. 50.

[13]Tirmidhi, *Jami al-Tirmidhi*, (Karachi edition) p. 314; Tabari, *Tarikh al Umam Wa'L-Muluk*, Vol I (al-Qahira, 1939), pp. 21-24.

[14]Syed Ameer Ali, *The Spirit of Islam* (London, 1953), p. 361. The Prophet is also reported to have said that in the days of judgement Allah will measure the ink of the scholar with the blood of the martyr. Cf. Al-Ghazzali, *Ihya 'Ulum al-Din*, Vol. I. Bengali transl. by Fazlul Karim (Dacca, 1967), p. 9; also Al-Shaikh Shihab al-Din Ahmad al-Abshahi, *Kitab al-Mustataraf* (Misr, A. H., 1327), p. 27.

[15]Qadi Ahmad, *op. cit.*, p. 54; 'Abd Al-Muhammad Khan Irani and 'Ali Rahjiri, *Paydaish-i-Khatt wa khattatan baindiman-i-Tadhkirah-i-khushnawisan-i-Ma'asir* (Tehran, A.H. 1346), *Khatt wa khattatan*, p. 46; *Tudhkirah*, p. 5.

lengthen the edge of your calamus, leave intervals between your lines, keep your letters close together, and preserve the equilibrium"[16]. Many other sayings regarding good writing are also attributed to 'Ali: "The beauty of writing is the tongue of the hand and the elegance of thought"[17]; "Learn a good style of writing; writing is an adornment of the possessor of accomplishments. If you possess sufficiency, the style of writing becomes your adornments; and should any one be needy, it is the best means to earn a livelihood,"[18] etc. Ja'far ibn Yahya al-Barmaki (d. 803) said : "Hand writing is the necklace of wisodm. It serves to sort the pearls of wisdom, to bring its dispersed pieces into good order"[19].

The place of Arabic script in Islamic civilization is very conspicuous. It has been the vehicle of the religion Islam and the Qur'an. It is the most honoured script throughout the Islamic world even today. In Bangladesh, the illiterate Muslims show religious reverence to anything written in Arabic (identifying it by mere sight) even if the contents therein are purely secular. This reverence they often donot show even to their own script. Such love and respect for the Arabic script is undoubtedly due to its association with the religion Islam and the Qur'an.

Obviously, Arabic calligraphy found its beginning with the writing of the Qur'an. As the Qur'an is the word of Allah (*Kalam Allah* [20]), it is "uncreated", and co-eternal with a heavenly archetype[21]. In Islam, the term 'beauty' has a divine association [22] and the Muslim artists put their utmost labour and devotion to make the word of Allah as much beautiful in writing as they could. This is comparable with their invention of *'Ilm al-Tajwid* for giving a chanted voice to the Qur'an in recitation. As calligraphy embellishes Allah's word, the Muslims accord the highest rank to this art. Thus religion and art found a harmonious fusion in Arabic calligraphy and the calligraphers cultivated the art of writing with religious fervour developing various artistic styles and designs.

A conscious effort was made to make the Arabic script beautiful from the very beginning of Islam and an extensive literature grew up on the subject with the passage of time. The love of writing Arabic beautifully

[16]Abu Haiyan al-Tawhidi, "Epistle on Penmanship", Eng. Transl. by Franz Rosenthal, *Ars Islamica*, Vols-XIII-XIV, pp. 18, 19.

[17]Qadi Ahmad, *op. cit.*, p. 51.

[18]*Ibid.*

[19]Abu Haiyan al-Tawhidi, *op. cit.*, p. 12 ; cf. al-Qalqashandi, *Subh al-A'sha*, Vol. III (al-Qahira, 1914), p. 7.

[20]*Al-Qur'an*, Chap IX: Verse, 6 ; Chap. XLVIII: Verse, 15.

[21]*Ibid.*, Chap. LVI: Verses, 76-79 ; Chap. LXXXV: Verses, 21, 22.

[22]The Prophet said : "Allah is beautiful, He loves beauty." Muslim ibn al-Hajjaj, *al-Sahih-li-Muslim*, Vol. I (Karachi, A.H. 1349), p. 65.

spread through the different strata of the Muslim society and even the very possession of a piece of good calligraphy was deemed a matter of pride. Specimens of calligraphy by renowned calligraphers were collected by the Muslim kings and princes in the east with as much enthusiasm as for the collection of paintings by the great artists in the west. Shah-jahan (1628-58), the Mughal Emperor of India, had such a high fascination for the calligraphy of Mir 'Imad al-Din al-Husaini al-Qazvini (d. 1615), that whoever presented the Emperor with any of the artist's genuine calligraphic specimens, the Emperor was so pleased that he would confer upon him (the latter) the *mansab* of a hundred (*monsab-i-yaksadi*) with all its associated material benefits[23].

Calligraphy is considered by the Muslims as the noblest of all arts. It received patronage from all sections of the Muslim society including emperors, kings, amirs and nobles. A reputed calligrapher was the artist whom people honoured and loved most and kings and sultans felt proud of having him in their courts. It was the practice with the medieval Muslim conquerors to findout artists specially calligraphers immediately after any conquest in the same way as the atomic scientists of an invaded country are the first target of capture in a modern conquest. Hence, it is seen that when the fall of Tabriz was imminent in the hands of the Turks, Shah Ismail Safavi (1499-1524) issued a special instruction to the effect that his calligrapher Shah Mahmud Nishapuri (d. 1545) should not be allowed to fall into the hands of the invaders[24].

Patronizing attitude of the Muslims towards the art of calligraphy continued throughout the history of Islam and almost all the Muslim rulers had the taste and love for this art. Many of the kings, sultans, princes and princesses of the Muslim world were themselves reputed calligraphers. Ali (d. 661), the cousin and son-in-law of the Prophet and later the fourth Khalifa of Islam, was a good scribe of the early period. The historical treaty of Hudaybiya was committed to writing by him[25]. 'Ali's sons Hasan and Husain were also good calligraphers[26]. Qudi Ahmad mentions of a copy of the Qur'an in the writing of Imam Hasan, which he had the good fortune to see in the library of king Shah

[23]Ghulam Muhammad Dihlavi, *Tadhkirah-i-Khushnawisan*, ed. by M. Hidayet Husain (Calcutta, 1910), p. 93.

[24]A. U. Pope, ed. *A Survey of Persian Art*, Vol II (London, 1939), p. 1738 ; cf. Richard Ettinghausen, "Interaction and Integration in Islamic Art" in *Unity and Variety in Muslim Civilization* (Chicago, 1967), pp. 112, 113.

[25]Ihtiram al-Din Ahmad Shaghil' Uthmani, *Sahifah-i-Khushnawisan* (Aligarh, 1963), p. 21.

[26]*Ibid.*, p. 22.

Tahmasap (1524-76)[27]. Mu'awiya (661-80), the founder of the Umayyad dynasty was also a good scribe[28]. Tughril (1037-63), the Saljuq King, who was a good calligrapher, wrote a Qur'an in his own hand and employed painters and illuminators to ornament it[29]. Timur's son and sucessor Shah Rukh (1409-47) was a highly cultured king and had a great taste for art and letters. He held calligraphy in such a high esteem that he got transcribed many excellent Qur'ans. One of his sons, Ibrahim Sultan became the most outstanding calligrapher of his period, and his brilliant achievement can be seen in a Qur'an he copied in gold *rayhani* in 1431[30]. The Ottoman Sultan Bayazid II (1481-1512) had also fascination for the art of calligraphy. He learnt the art, while he was still a prince, from Shaikh Hamdallah (d. 1519), one of the greatest calligraphers Turkey ever produced[31]. Sultan Mustafa II (1695-1703) and Prince Ahmad III (1703-30) also learnt the art of calligraphy in 1695 from Hafiz 'Uthman (d. 1698), a renowned calligrapher of Turkey[32].

In Muslim India, calligraphy enjoyed a special status and princes and princesses had to cultivate it as part of their formal education. In the Sultanate period, Raddiya[33] (1236-40) and Nasir al-Din Mahmud (1246-66) are known to have attained a high standard of proficiency in the art of calligraphy. One of the copies of the Qur'an inscribed by Nasir al-Din Mahmud was shown to the famous traveller Ibn Battuta by Qudi Kamal al-Din about a century later[34].

The art of calligraphy reached its culmination in India under the Mughal emperors. Many of the emperors, princes and princesses of this dynasty were themselves renowned calligraphers and would always entertain and encourage this art and the artists. Babur (1526-30), the founder of the dynasty, was himself a skilled calligrapher and inventor of a new style of Arabic script known as *Khatt-i-Baburi*[35]. The Mughal emperors Humayun (d. 1556) and Shahjahan (1628-58) were also good calligra-

[27]Qadi Ahmad, *op. cit.* p. 55.

[28]Ihtiram al-Din Ahmad Shaghil 'Uthmani, *op. cit.*, p. 13 ; Y. H. Safadi, *Islamic Calligraphy* (London, 1978), p. 8.

[29]A. U. Pope, ed. *A Survey of Persian Art*, Vol. II, *op. cit.*, p. 1727.

[30]Y. H. Safadi, *op. cit.*, p. 26.

[31]Oktay Aslanapa, *Turkish Art and Architecture* (London, 1971), p. 324.

[32]*Ibid.*, p. 325.

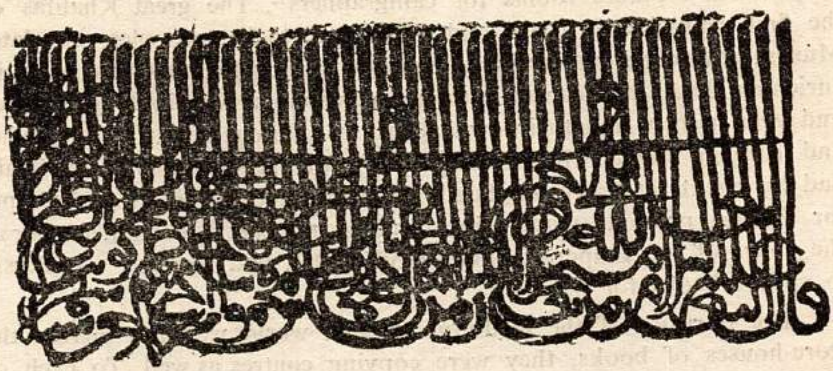
[33]Sajjad Haider, *op. cit.*, p. 102.

[34]Qazi Ahmad Mian Akhtar, "Muslim Calligraphy" in *The Cultural Heritage of Pakistan*, ed. by S. M. Ikram and P. Spear (Karachi, 1955). p. 77.

[35]Cf. Badaoni, *Muntakhabu-t-Tawarikh*, Vol. I Eng. Transl. & ed. by George S.A. Ranking (Reprint. Patna, 1973), p. 450; A. S. Beveridge, transl. & ed. *Babur-Nama* (Reprint. New Delhi, 1979) App. pp. LXii, LXiii.

phers[36]. Shahjahan took interest to teach his sons the art of calligraphy. Dara Skikuh, the eldest son of Shahjahan, learnt the art from Aqa Abd al-Rashid Dailami, a pupil and cousin of the renowned Persian calligrapher Mir 'Imad[37] (d. 1615). Shahjahan's second son, Shah Shuja also enjoyed a reputation for good handwriting. His third son, Aurangzeb was a brilliant calligrapher who could write several styles.

The calligraphic art continued to be cultivated under the later Mughals. The last Mughal Emperor Bahadur Shah Ja'far (1837-58) was a famous calligrapher and could write several styles. Specimens of his writing in *nasta'liq* and *tughra* are now preserved in the Delhi Museum of Archaeology[38]. The Emperor also used to give model calligraphic specimens for



Tughra Calligraphy of Barbak Shah's reign,
Hatkhola, Sylhet, (A.H. 868/A.D. 1463)

architectural embellishment which attained the highest pitch of development under the Mughals. Examples of his calligraphy are to be found in the inscriptions of Zinat Mahal at Farash Khana and the bath of Hakim Ahsanallah Khan at Delhi[39].

Apart from the emperors and princes, empresses and princesses of the Mughal family cultivated this art with utmost devotion. Princess Gulbadan Begum, Empress Nur Jahan, Princesses Jahan Ara and Zib

[36]K. M. Yusuf, "Calligraphy Under the Mughals", *The Islamic Review*, Vol. KLVIII, No. 7 (July, 1960), pp. 22, 23.

[37]*Ibid.*

[38]Zafar Hasan, "Muslim Calligraphy", *Indian Art and Letters*, New series, Vol. IX (1935), p. 61, Specimens, 31, 37.

[39]Qazi Ahmad Mian Akhtar, *op. cit.*, p. 80.

al-Nisa are also known to have had proficiency in the art of writing[40]. Saqi Must'ad Khan mentions that princess Zib al-Nisa, daughter of Emperor Aurangzeb, acquired proficiency in writing of various styles such as *nasta'liq*, *naskh* and *shikasta*[41].

The civilization of Islam was based on books. The pre-eminence that the Holy Qur'an was given as the divine book was extended with the passage of time to works on theology, philosophy and science and many of the early Khalifas took interest in translating the books of wisdom belonging to other civilizations, specially those of the Greek philosophers and scholars. In pursuance of this policy, the Abbasid Khalifa al-Ma'mun (813-33) established in Baghdad in 830 his famous *Bayt al-Hikma* (House of wisdom), a combination of library academy and translation bureau with separate rooms for calligraphers[42]. The great Khalifas of the first centuries of Islam and following their examples, the later Muslim sovereigns and princes, whatever their origin, took great pride in enriching their libraries with precious manuscripts. Muslim kings, princes and even nobles had their own agents in different countries for buying and copying books. Hakam II (961-76), the scholar-khalifa of Spain had his agents at Cairo, Baghdad, Damascus and Alexandria, who copie for Hakam precious manuscripts gruding no cost[43]. Faizi, a scholar at the court of the Emperor Akbar (1556-1605), had his agents in Persia to collect books for him[44].

The libraries of the medieval Muslim world were not merely the store-houses of books, they were copying contres as well. To each of these was attached a band of scribes under a master-calligrapher. The calligraphers in general enjoyed social respectability. "Even the names of minor calligraphers were well-known and their profession was esteemed above that of all other artisans"[45] Hitti says: "Arabic literature has honorably preserved the names of calligraphers beginning with the day of al-Ma'mun, a fact which contrast sharply with the omission of names of painters and other artists"[46]. This preservation of the names of the calligraphers and omission of the names of the other artists clearly reveals

[40]Ihtiram al-Din Ahmad Shaghil 'Uthmani, *op. cit.*, p. 5.

[41]Saqi Must'ad Khan, *Maasir-i-Alamgiri*, Eng. transl. by Jadunath Sarkar (Calcutta, 1947), p. 322.

[42]Cf. M. Ziauddin, *Moslem Calligraphy* (Calcutta, 1936), p. 35.

[43]S. M. Imamuddin, *Hispano-Arab Libraries*, Memoir No. 4 (Karachi, 1961), p. 4.

[44]M. Ziauddin, *op. cit.*, p. 35.

[45]Ernst Kuhnel, "Calligraphy and Epigraphy" in *Encyclopedia of World Art*, Vol. III (New York, 1960), p. 16.

[46]P.K. Hitti, *Islam : A Way of Life* (London, 1970), p. 168.

the honoured position of the art of calligraphy and the artists in the medieval Muslim society.

The above discussion makes it clear that calligraphy was regarded as the most honoured art in Islam. Due to religious sanction for calligraphy, kings and professional artists sought merit in perpetuating the words of Allah. It is the only art in Islam that sprang from the Muslim ingenuity and its raw materials are drawn from the shapes of the letters of the Arabic alphabet. Unlike other arts in Islam, calligraphy is purely Islamic and the artists borrowed nothing for its embellishment.

The art of Arabic calligraphy received the primary impetus from the need to write the Qur'an beautifully and the pliant nature of the script responded well to the need. But although began with the pages of the Qur'an, calligraphy journeyed to the walls of the monuments, both religious and secular and also to other art objects that the Muslims produced in medieval times. Thus calligraphy has also become an ornamental medium in Muslim art besides being the script of a language.

Calligraphy is the only art in Islam that provided a common platform to cross-section of people of the society. It was not monopolized by or confined to the professionals alone. Emperors and kings, princes and princesses, religious *'Ulama* and humble potters worked side by side to promote this art with great enthusiasm. In fact, the place of calligraphy is unrivalled in Muslim art.

Some Undeciphered Inscriptions of Bengal Sultanate : An Analytical Study

A. K. M. Yaqub Ali

In the absence of court chronicles and contemporary literary sources the study of pre-Mughal Bengal[1] depends greatly on the legends of coins and the contents of inscriptions inserted on architectural monuments of the period. So the scholars devoted much of their time and energy to study these objects for bringing to light some untapped materials which could be utilized for bridging the gap in the process of historical reconstruction. The non-availability of manuscripts of the time is a hindrance on our way to study the gradual development of calligraphic styles in Bengal. This deficiency, may to a great extent, be removed by the study of calligraphic styles as engraved on the stone slabs of architectural monuments of Bengal. A number of epigraphs even now are coming to light and are yet to be deciphered. The inscriptions under study fall in this category, and these could be analysed for their historical contents and more particularly be assessed for their calligraphic styles and decorative motifs. Hence, the decipherement of the text together with translation and comments are given in this paper.

[1]The period of pre-Mughal Bengal extends from the conquest of Lakhnawati by the Khalji Turks under the leadership of Ghazi Ikhtiyar al-Din Muhammad Bakhtiyar Khalji in A.H. 601/1205 A.D. down to the annexation of Bengal with the Mughal empire in A. H. 984/1576 A. D. This long period in Bengal history may be divided as follows:

(A) The initial period from A. H. 601/1205 to A.H. 739/1338 A.D. In this period the governors of Lakhnawati who were appointed by the Delhi sovereigns ran the administration of the conquered territories as semi-autonomous rulers, their number being twenty five.

(B) The period of independence from A.H. 739/1338 A.D. to A.H. 945/1538 A.D. during which twenty four sultans of different houses ruled from Gaur and Pandua.

(C) The period of the rulers of Sher Shah's family and their Afghan successors from A.H. 945/1538 A.D. to A.H. 984/1576 A.D.

(I) Gaur Inscription of Jalal al-Din Fath Shah

This stone inscription[2] presumably to have been procured from Gaur area is now in the Gallery of the Varendra Research Museum, Rajshahi, the Museum Accession No. being 2852. It escaped the notice of A. H. Dani[3] and S. Ahmad[4] for the reason of its procurement after the compilation of their respective monographs. The inscription belongs to the reign of Jalal al-Din Fath Shah throwing light on the construction of a mosque, the date of construction as recorded on the stone slab being 891 A.H./1486 A.D. The language of the inscription is Arabic with a few words in Persian.

(A) Description

The stone slab on which the inscription is engraved is black-basalt measuring 25½″ in length and 11″ in breadth. The slab is well dressed, smooth, and the engravings are noteworthy. The text consists of two lines of writing separated by a bold horizontal band.

The text of the epigraph is as follows:

1st line :

قال النبی صلی الله علیه و سلم من بنی مسجدا فی الدنیا بنی الله تعالی له سبعین قصرا فی الجنة - السلطان ابن -

2nd line

السلطان جلال الدنیا و الدین ابوالمظفر فتحشاه السلطان ابن محمود شاه السلطان بناکرده ملک تکر سنة احدی تسعین و ثمنمایة -

Translation:

1st line: The Prophet, peace be on him, said: He who builds a mosque in this world Allah, the exalted, builds for him seventy castles in the paradise. The Sultan, son

2nd line: Of the Sultan Jalal al-Din Abul Muzaffar Fath Shah, the Sultan son of Mahmud Shah, the Sultan (in whose reign) Malik Takir built (the mosque) in the year 891 A.H./1486 A.D.

[2]Plate No. I.

[3]cf. A. H. Dani, *Bibliography of the Muslim Inscriptions of Bengal* (Dacca : Asiatic Society of Pakistan, 1957), pp. 34-37.

[4]cf. S. Ahmad, *Inscriptions of Bengal*, Vol. IV (Rajshahi: Varendra Research Museum, 1960), pp. 113-127. (Henceforth the source is referred to as *IB*).

(B) Findings

The composition is very simple and its meaning is clearly understandable. No grammatical mistakes could be detected in the composition of the text. The insertion of a Persian word (بنا کردہ) in the midst of Arabic words does not seem to be inappropriate.

The text of the inscription belongs to the cursive group of Arabic writing and is included in the *Muhaqqaq*[5] style of *al-Aqlam al-Sittah*[6]. In its decorative motif the bold vertical shafts of الف and لام appear to have been spearheads. Even the dumpy and elongated vertical shafts could also be imagined as pillars for bamboo stockade being tied with jute-ropes by the letters like concave نون, فے and ی across the body of the text.

Here in this epigraph we come across the name of one Takir who might have been a noble during the reign of Sultan Jalal al-Din Fath Shah and entrusted with the management of affairs in an administrative unit. The word *malik* preceding the name Takir substantiates the contention. In no other sources this name could be traced. As the name signifies he might be taken as a local convert who rose to the rank of *malik* by dint of his merit. It gets its corroboration from another epigraph of this Sultan who appointed such local convert as *Malik* Kafur with the rank of *al-malik al-Mu'azzam*[7] in some administrative unit. In case of his being a Hindu noble he perhaps supervised the construction of the mosque under the dictates of Sultan Jalal al-Din Fath Shah. Such an example can be found in an inscription of 'Ala' al-Din Husayn Shah where Ramindlah son of Kinami, supposed to be a Hindu Chief, was employed as an architect for the construction of a mosque in 904 A.H./ 1498 A.D.[8]

(II) Champatali Inscription of 'Ala' al-Din Husayn Shah

This inscription[9] was procured a few years ago from Champatali of Ghoraghat Police Station in Dinajpur district, and is now preserved in the Mahasthan Archaeological Museum, Bogra.

[5]The *Muhaqqaq* is a cursive form of Arabic writing which consists of three-fourth straight lines and one-fourth curved lines, the letters being bold and *Jali* in character. cf. Abul Fadl 'Allami, *Ain-i-Akbari*, Vol. I. Tr. H. Blochmann (Calcutta: Asiatic Society of Bengal, 1873), p. 100; *Memoirs of the Archaeological Survey of India*, 1926, No. 29, p. 2.

[6]*al-Aqlam al-Sittah* or six styles are *Thulth*, *Naskh*, *Muhaqqaq*, *Raihan*, *Tawqi*, and *Riqa'*. cf. Qadi Ahmad, *Gulistan-i-Hunr*, Eng. Tr. entitled, *Calligraphers and Painters*, T. Minorsky (Washington: Freer Gallery of Art, 1959), p. 56.

[7]*IB*, Vol. IV, p. 120.

[8]*Ibid*, p. 156.

[9]Plate No. II.

The village Champatali, the find-place of the inscription stands on the west bank of the Karatoya river just one mile away to the south-east of Ghoraghat Police Station in the district of Dinajpur. The inscription was gathered from a mound approximately 2 to 3 feet high above the general level of the adjoining corn fields. Many brick bats and pot-sherds are still found scattered over this area. On an apparent observation some remains of the foundation walls are to be seen under the first layer of the ground. This tends support to the proposition that there might have been some structural complex including a mosque.

Ghoraghat region was famous during the period of Bengal Sultanate. In this connection it is to be mentioned that at Sura, 5 to 6 miles to the west of Ghoraghat there lies a mosque which on its stylistic ground may be ascribed to the period of Husayn Shahi rulers. The mosque of Sura[10] is on a high terrace approached by a flight of steps from the east side. The open space on all four sides of the mosque was secluded by massive surrounding walls which are now at level with the height of the terrace. But from the extant Gateway measuring 17′ in height on the east side, we may assume that the surrounding walls were originally raised to a certain height in order to protect the mosque from the outside noise and bustle. This may resemble the *Ziyadah*[11] device of the Abbasid mosques. This very device of the Sura mosque can be noticed in the Kusumba mosque of Rajshahi district. If the inscription under study can be connected with the Sura mosque then the year 910 A.H./1504 A.D. may be considered as the date of its construction. But in the case of the inscription being located to its find-spot another mosque of the Husayn Shahi period may be counted in the non-extant structural complex of the place — Champatali.

(A) Description

The inscription slab is of black basalt, the measurement of which is 38″ in length and 17″ in breadth. It refers to the construction of a mosque during the time of 'Ala al-Din Husayn Shah in 910 A. H./1504 A.D. The language of the inscription is Arabic. The text of the epigraph consists of a single line arranged in the ascending order. It runs as follows:

[10]Plate No. III.

[11]The *Zullah* or prayer chamber along with the *sahn* or courtyard is surrounded by an outer wall for maintaining the serene of the place. This device is called *ziyadah*. For detail of this device, see K. A. C. Creswell, *A Short Account of Early Muslim Architecture* (London: Penguin Books, 1958), pp. 277-78.

قال النبی صلی الله علیه و سلم من بنی مسجدا فی الدنیا بنی الله تعالی بیتا مثله فی الجنة - بنی هذا المسجد علاء الدنیا و الدین ابوالمظفر حسین شاه سلطان خلد الله ملکه و سلطانه و اعلی امره و شانه فی سنة عشرة و تسعمایة -

Translation:

The Prophet, peace be upon him, said: He who builds a mosque in this world, Allah, the Exalted builds a house like it in the paradise. 'Ala' al-Din Abul Muzaffar Husayn Shah, may Allah perpetuate his kingdom and sultanate, and exalt his power and position, built the mosque in the year 910 A.H./1504 A.D.

(B) Calligraphy and Explanatory Notes

The text of the epigraph falls in the cursive group of Arabic writing and the proportion of straight and curved lines represent the *Muhaqqaq Khatt.* In its ornamental design it may be termed as an exquisite piece of *Tughra* writing. The arrangement of letters is so nice and systematic that the epigraph creates a sort of rythm in the monotony of enormous shafts. The shafts are elongated and the vertical strokes of the letters are curved on the top in proportion so as to represent a series of spear-heads. Apparently one may think it a bow and arrow style of *Tughra.* But a close examination reveals it otherwise. It seems to be an unique type of *Tughra* representing an army contingent divided into five traditional rows of centre, two wings (right and left), rear guard and van-guard. The calligraphy as a whole speaks for the efficiency of the engraver-artist.

The rulers of Kamrupa and Kamta had a long standing struggle with the Muslim Sultans of Lakhnawati kingdom. Shah Isma'il Ghazi being appointed by Sultan Rukn al-Din Barbak Shah as Commander-in-Chief of the army led an expedition against the reigning Raja of Kamrupa in about 1472 A.D. Ultimately he was successful and the authority of the Sultan was established over the Ghoraghat region[12]. But the region was probably lost to the Muslim dominion when the Abyssinian interregnum stopped the progress of Muslim arms against Kamrupa. Nilambar, the third ruler of the Khen dynasty is said to have occupied the Ghoraghat region. This aggrassive attitude of the Khen ruler provoked sultan 'Ala al-Din Husayn Shah to reconquer the region

[12] *Risalah al-Shuhada'*, Text in *Journal of the Asiatic Society of Bengal* (*JASB*), Vol. XLIII, 1874, pp. 236-37.

and to bring the whole of Kamta and Kamrupa under his domination. These conquests were celebrated in the commemorative issues of his coins and in the epigraphs as well[13]. The inscription under study proves the fact that before 910 A.H./1504 A.D. the authority of 'Ala al-Din Husayn Shah was firmly established over this region. Otherwise it would not have been possible for him to build this mosque. Tradition relates that Kamtapur the capital of the Khen dynasty was occupied by the Muslims in 1498 A.D.[14] It is, therefore, reasonable to presume that 'Ala al-Din Husayn Shah or his deputy built this mosque mentioned in the epigraph, in the Ghoraghat region after the final conquest of Kamta and Kamrupa to make this place as a stronghold against further attacks of the north-eastern enemies, i. e. Kamrupa and Ahom kings. The direct form بنى (built) has probably been used to put importance on the mosque referred to in the epigraph.

(III) Gohalbari Inscription of 'Ala' al-Din Husayn Shah

The inscription[15] is reported to have been procured from Gaur area and is now placed on the frontal wall of a village mosque of Gohalbari in the Bholahat Police Station of Rajshahi district. It belongs to the reign of 'Ala' al-Din Husayn Shah and its purport is the construction of a mosque, the date as recorded in its content being A.H. 923/1517 A.D. The language of the epigraph is Arabic.

(A) Description

The stone on which the text of the epigraph is engraved is black basalt, but its measurement could not be taken for its being placed high in the facade of the mosque. The text consists of two lines of writing separated by a bold horizontal band. The text of the epigraph as deciphered is as follows:

1st line :

قال النبى صلى الله عليه و سلم من بنى مسجدا لله بنى الله له بيتا مثله
فى الجنة - بنى هذا المسجد فى عهد السلطان المعظم المكرم علاء الدنيا
و الدين ابوالمظفر -

2nd line :

حسين شاه السلطان بن سيد اشرف الحسينى خلد الله ملكه و سلطانه
و اعلى امره و شانه و بانيه دولت ناظر دام عزه فى سنة ثلث عشرين
و تسعماية -

[13]*JASB*, Vol. XLII, 1874, p. 303; *IB*, Vol. IV, p. 159.

[14]E.A. Gait, *History of Assam* (Calcutta: Thaker Spink & Co., 1926), p. 43; M.R. Tarafdar, *Husain Shahi Bengal* (Dacca: Asiatic Society of Pakistan, 1965), p. 48.

[15]Plate No. IV.

Translation:

Ist line: The Prophet, peace be upon him, said: He who builds a mosque for the sake of Allah, Allah builds for him a house like it in the Paradise. This mosque was built in the reign of honoured and respectable Sultan 'Ala' al-Dunya wa al-Din Abu'l al-Muzaffar

2nd line: Husayn Shah, the Sultan, son of Sayyid Ashraf al-Husayni. May Allah perpetuate his kingdom and sultanate, and exalt his power and position. The builder of this mosque is Dawlat Nazir, may his honour last long (the date of its construction being) in the year 923 A.H./1517 A.D.

(B) Findings

The inscription under study throws light on the parentage of Sultan 'Ala' al-Din Husayn Shah. The words, '*Sayyid*' and '*al-Husayni*' added to his father's name in the epigraph lead us to presume that he belonged to the descendants of Husayn, son of 'Ali, the fourth caliph of Islam.[16] The literal meaning of the word '*Sayyid*' is leader. Hence, the word is applied for the leader of a community or delegation in general and for the descendants of Fatimah, the daughter of Prophet Muhammad (sm.) in particular. Here the word '*Sayyid*' may stand for both the connotations. Because Ashraf, the father of Sultan 'Ala' al-Din Husayn Shah is represented here to be a scion of Husayn, and to support this contention the word '*al-Husayni*' is suffixed after his name. This contention is strengthened by the evidence of coin where Sultan 'Ala' al-Din Husayn Shah is clearly stated to have been a descendant of the leader of the apostles, i.e. Prophet Muhammad (sm.) [17]. His father was neither a Sultan nor an ordinary man, but he was Sharif of Makkah[18]. In that case the '*Sayyid*' used in this inscription would stand for his being a chief in mending the affairs of Makkah in his time. Thus, the word '*Sayyid*' is justifiably applied for Ashraf. Had he been a Sultan 'Ala' al-Din Husayn Shah would have represented him in his coins and ins-

[16]A.K.M. Yaqub Ali, "An Inscription of 'Ala' al-Din Husayn Shah", *Journal of the Varendra Research Museum* (hereafter *JVRM*), Vol. 2, Rajshahi, 1973, p. 69.

[17]On the reverse of the coin the legend — السلطان العادل الباذل ولد سيد المرسلين علاء الدنيا و الدين ابو المظفر حسين شاه السلطان خلد الله ملكه و سلطانه ـ

indicates his lineage to the descendants of the Prophet. For this coin, see Abdul Karim, *Catalogue of Coins in the Chittagong University Museum* (Chittagong: Chittagong University Museum, 1979), Coin No. 133, p. 58.

[18]Ghulam Husain Salim, *Riyad al-Salatin*, Eng. Tr. Abdus Salam (Calcutta: Asiatic Society of Bengal, 1902), p. 128.

criptions as Ashraf al-Sultan. It is, therefore, clear on the epigraphic and numismatic evidence that Ashraf, the father of Sultan 'Ala' al-Din Husayn Shah was an immigrant Muslim in Bengal.

Perhaps to seek better fortune Sayyid Ashraf al-Husayni left Makkah with his two sons, Husayn Shah and Yusuf Shah and settled in Tarmuz, a town in Turkistan[19]. But as they did not achieve their expectation in power and position, they took hazardous journey to Bengal and settled permanently in Chandpur in Radha[20]. Eventually Husayn Shah by dint of merit and ability rose to the throne of Bengal and founded a dynasty for his family. On the evidence of coins and inscriptions the Arab origin of Sultan 'Ala' al-Din Husayn Shah may be acknowledged.

Here in this inscription we come across the builder of the mosque Dawlat Nazir, the whereabouts of whom are yet to be ascertained. No other source recorded his name and the position he held in the administrative machinery of Sultan 'Ala' al-Din Husayn Shah. But it can be presumed from the circumstantial evidence that the person in question held some executive post in an administrative unit including the area in which the mosque referred to in the epigraph under study was built. This inscription, therefore, adds a name in the list of the persons occupying important posts in the administrative heirarchy during the reign of Sultan 'Ala' al-Din Husayn Shah (1493-1519 A.D.)

(C) Calligraphic and Decorative Value

The calligraphy of the epigraph falls in the cursive group of Arabic writing and is included in the *Aqlam al-Sittah*. Judged by the standard of the proportion of straight and curved lines the epigraph under study may represent the *Naskh* style of writing with an ornamental form of *Ghubar*[21]. The swan like ف and the concave letters نون (*nun*), فاء (*fa*) and ى (*ya*) at the upper part of the elongated shafts of الف (*Alif*) and لام (*Lam*) break the monotony of repetition and enhance the beauty of decoration. From all these considerations this epigraph may

[19] *Ibid*, p. 131.

[20] *Ibid*.

[21] *Naskh* is a style of writing which contains one-third curved lines and two-third straight lines (taken together the entire extract), the character of the letters being *Khafi* or thin. *Ghubar* means dust, and it denotes a thin writing wherein the letters appear as dust forming ground to set in relief an object or any other transcription. It invariably belongs to the cursive group of writing.

cf. A.K.M. Yaqub Ali, "A Study of Mural Calligraphy in Bengal: Based on Selected Muslim Epigraphs", *JVRM*, Vol. No. 7, 1985, pp. 175-76.

be taken as an excellent piece of calligraphy giving testimony to the degree of penmanship which the calligrapher artists attained during the time of 'Ala' al-Din Husayn Shah.

(IV) Undated Inscription of Gohalbari Mosque in the district of Rajshahi

The find-place of the inscription[22] is not known, but it might have been procured from Gaur area, and is now inserted in the wall of newly built Gohalbari Bara masjid of Bholahat Police Station in the district of Rajshahi. The inscription is undated and it contains the Quranic verse arranged in a single line with utmost precision. The stone-slab over which it is engraved is of black basalt, the measurement of which could not be taken for its being placed high over the wall of the mosque.

The text of the epigraph is as follows:

نصر من الله و فتح قريب و بشر المؤمنين و يسبح الرعد بحمده و الملائكة من خيفته -

Translation:

Help (comes) from Allah and near victory, and (oh Prophet) give good tidings (of this) to the believers. And the thunder pronounces His praise and the angels (also do so) for awe of Him.

(V) Undated Inscription of Bireswarpur Mosque in the district of Rajashahi

The find-place of this inscription[23] is also unknown as it is in the case of inscription No. IV. It is reported to have been procured from some old site of Gaur area and is now fixed in the wall of newly brick-built mosque of Bireswarpur village of Bholahat Police Station in the district of Rajshahi. The slab has the similar size and dimension like the stone slab of inscription No. IV, mentioned above. The inscription runs in single line maintaining symmetry in its vertical shafts and horizontal curves.

The text of the epigraph is as follows:

نصر من الله و فتح قريب و بشر المؤمنين و يسبح الرعد بحمده و الملائكة من خيفته -

Translation:

Help (comes) from Allah and near victory, and (oh Prophet) give good tidings (of this) to the believers. And the thunder pronounces His praise and the angles (also do so) for awe of Him.

[22]Plate No. V.

[23]Plate No. VI.

Both the inscriptions (Nos. IV & V) have the same theme and similar type of calligraphic setting in their elongated shafts and vertical strokes. Hence, the comments given below may be equally applicable for both the inscriptions unless anything is specified. Two verses taking partly from the different *Surahs* or chapters of the Holy Qur'an[24] have been engraved in a single stone slab without disturbing their symmetry in form and contents.

The verses represented in the epigraphs carry much weight and significance in the context of prevalent situation of the time. The first part of the inscriptions refers to the help and victory of Allah for the believers[25] while the last part establishes His overlordship upon the whole universe by way of reference to the submission of thunder and the angles to Him.[26] Thus, the contents of the inscriptions indirectly enjoin us to subdue our passion in order to surrender ourselves completely to the supreme will of Allah and to rely solely on His help.

The idea contained in the first verse of the inscriptions under study refers either to the event of the conquest of Makkah by Prophet Muhammad (sm.) or to the victory of the Romans, the people of the Book upon the Persians, the fire worshippers.[27] In any case, it indicates to the conquest and subjugation of geographical territories under the banner of the monotheistic people. After the conquest, it is the sacred duty of the believers to establish Allah's sovereignty in every sphere of life in the conquered territories by promulgating such rules and regulations as enunciated in the code of the *Shari'ah* of Islam. This idea may be sought in the second verse of the inscriptions referred to above. Taking the directives of both the verses into consideration, we may come to this proposition that the real motive of the Muslims behind the territorial expansion should be to establish Allah's sovereignty and not to satisfy their self aggrandisement.

In view of the above explanation the epigraphs under study may be taken as commemorative pieces of inscriptions set in the architectural monuments celebrating the victory of some illustrious sultan of Bengal. Both the inscriptions are undated, but in consideration of their calligraphic

[24]*Surah XXVIII, V. 13* (later part) in the first portion of the inscription; *Surah XIII, V. 13* (first part) in the last portion of the inscription.

[25] نصرمن الله وفتح قريب وبشرالمؤمنين - Help and near victory from Allah, and bear this good tiding to the believers.

[26] ويسبح الرعد بحمده والملائكة من خيفته - And the thunder pronounces His praise and the angles (do so) for awe of Him.

[27]See, *Tafsir al-Nasafi*, Vol. IV (Egypt: Husaynia Press, 1344 A.H.), p. 191.

characteristics they may be ascribed either to the later Ilyas Shahis or to the Husayn Shahis of Bengal sultanate. For their particularization some internal evidences lead us to presume that they belong to the reign of 'Ala' al-Din Husayn Shah (1493-1519 A.D.), the founder of the Husayn Shahi dynasty in Bengal. There is no denying the fact that among all Bengal sultans of various houses 'Ala' al-Din Husayn Shah is noted for conquest and expansion. Numismatic and epigraphic evidences can be cited in support of this contention. To celebrate the victory of Kamrupa, Kamta, Jajnagar and Orissa, he struck the commemorative pieces of coins which may be regarded as the *Fatihah* coins of 'Ala' al-Din Husayn Shah.[28] The same idea has clearly been depicted in one of his epigraphs.[29] Thus, we have every reason to believe that the inscriptions under review belong to the reign of 'Ala' al-Din Husayn Shah as they contain such theme which refers to the event of conquest.

As to their calligraphy both the inscriptions belong to the cursive group of Arabic writing, and the proportion of elongated shafts and horizontal curves betray the *Muhaqqaq qalm* of writing. The fine execution and the symmetry in the setting of vertical strokes and horizontal curves of the inscriptions bear witness to the height of excellence which the Arabic calligraphy reached in the Husayn Shahi rule of pre-Mughal Bengal.

The epigraphs as analysed above have brought to light some new materials for addition to historical contents of the period and have also focused on some calligraphic styles that were prevalent during the times of Bengal Sultanate.

[28]Nelson Wright, *Catalogue of the Coins in the Indian Museum, Calcutta*, Vol. II (London: Oxford University Press, 1907), No. 175;
A. Karim, *Catalogue of Coins in the Chittagong University Museum*, Coin No. 138, p. 59.

[29]*IB*, Vol. IV, p. 159.

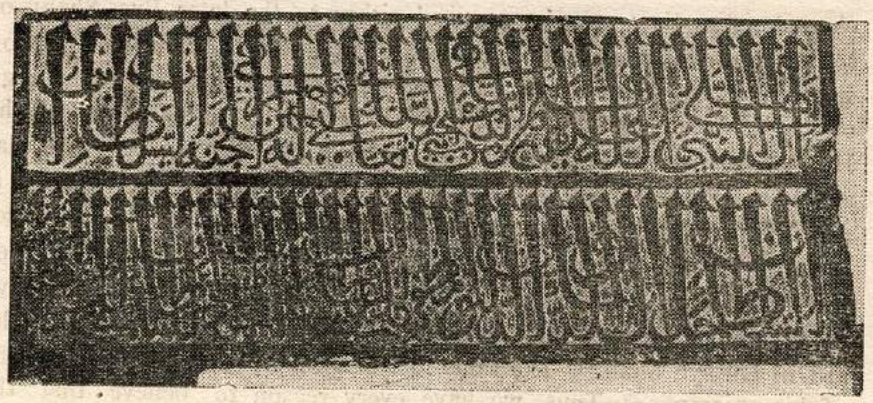


Plate I

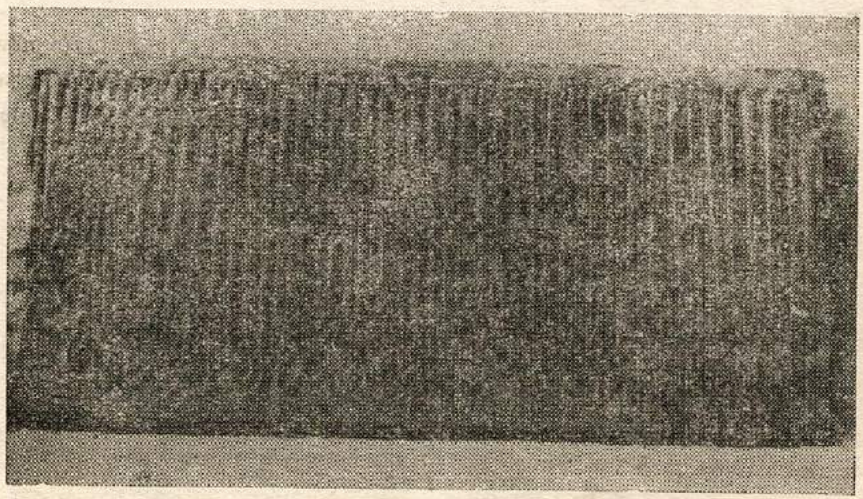


Plate II

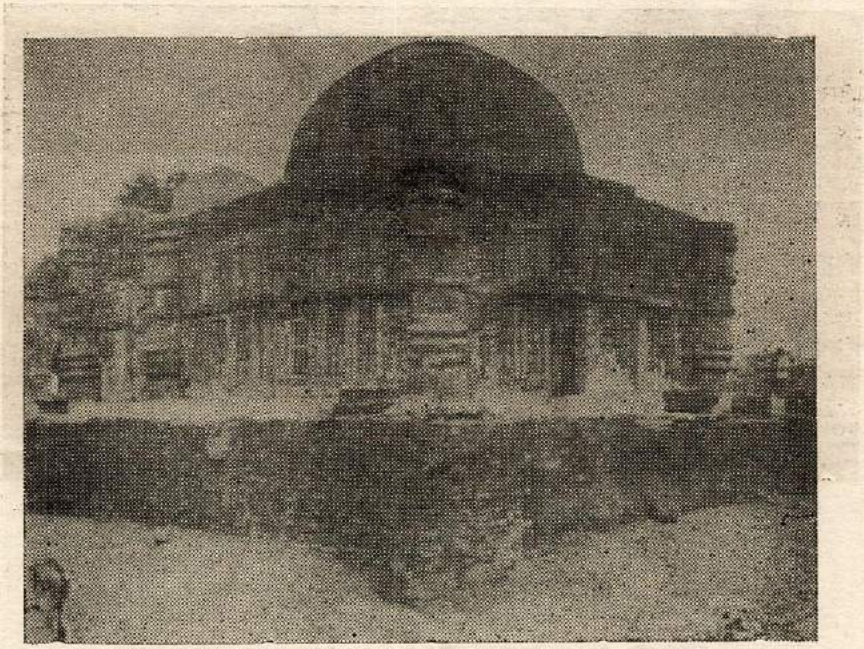


Plate III

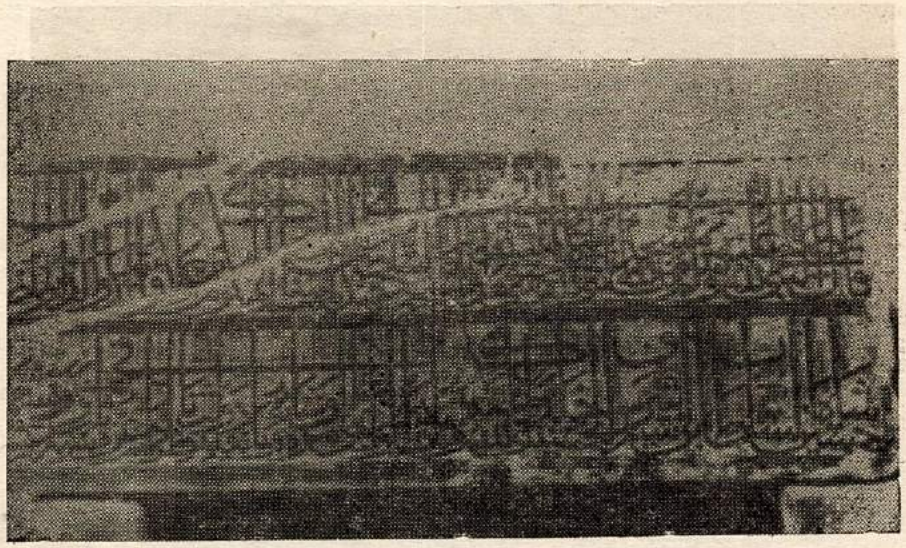


Plate IV

Plate V

Plate VI

The Impact of British Rule on the Society and Culture of the Muslims of Bengal : Some Preliminary Suggestions

M. A. Rahim

The literature on the impact of British rule on the Muslims of South Asia is scanty and its treatment of the Muslims of Bengal is at best general and peripheral[1]. It was in Bengal that the foundations of the British Indian empire which lasted for about two centuries were laid. As a result of this longest experience of subjugation, compared with the other provinces of the subcontinent, the fortunes of Bengal were the hardest hit. This long-continued rule undeniably left its imprints on the multifarious aspects of life of the different communities of the occupied territories. The impact of British conquest on the society, culture, economy, law, theology and education of the Muslim community had been massive and far-reaching. The image of the Muslims of the subcontinent, who once reigned supreme from the Himalayas to Cape Comorin, was not the same again since they were replaced by the British. Their position of a giver was reversed to that of a receiver. The circumstances in Bengal differed from those of the other Presidencies, so was the impact of British conquest on the Muslims of this Presidency[2]. The impact on the Muslims of Bengal must be understood in its proper perspective.

That the worst catastrophe that can befall a nation is the incidence of foreign domination upon it is a truism. Whatever advantages that domination may adventitiously bring to the vanquished, the indignity they undergo, the blighting effect to which their moral and intellectual psyche become subjected is a poignant story. The Greek supremacy

[1]A. R. Mallick, *British Policy and the Muslims in Bengal* 1757-1857, Dacca, 1961, and M. A. Rahim, *The Muslim Society and Politics in Bengal*, Dacca University, 1981, are relevant to this study.

[2]See S. A. Rizvi, "The Breakdown of Traditional Society", *Cambridge History of Islam*, Vol. 2, 1970, pp. 78-79.

over the Romans, the Roman conquest of Greeks and the British, and the British conquest of the subcontinent of India, for example, subjected the conquered peoples to more or less similar experiences.

This article will have served its purpose if it succeeds in drawing attention of the scholars to the need of a detailed and scientific study of the subject under discussion. The present writer is of course concerned that one of the possible deterrents to undertaking such a study, with an unfettered mind, is the fear which is generally found among the scholars of the developing countries that is the fear of being dislocated from the stereotypes of the entrenched academic microcosm.

In order to be able to understand the impact of British conquest on the Muslims of South Asia, a glimpse into the dynamics of British Indian imperialism which centred on the philosophy of white man's burden, is necessary. The consensus among the students of imperialism is that the imperialist creed is founded on the assumption that power is of divine origin, and its wielders are obliged to make humane and semidivine the use of it. Thus imperialism, sometimes merely a creed of strength, has also been envisaged as an obligation imposed upon those of superior strength to be used for the benefit of those whom they are enabled to conquer by transferring to the conquered institutions and teachings with which providence has empowered the conquerors.

British Indian imperialism was quite distinctive. "It was", according to Professor Eric Stokes[3], "the tradition of direct rule, of impartial law, of empire resting on power and the evangelical sense of duty swerving neither to right nor to left..." "British rule", according to him, "worked (in India) as a great levelling power, breaking down all local forms of independent political life, drained all authority to a common centre and pounded down the multifarious races and institutions into one uniform and atomised mass"[4]. The agency through which the imperial system operated was designed to subserve the desired purposes of the rulers. The entire organisation of the I.C.S., for example, was devised by the exports in England as a sort of scaffolding for erecting the edifice of the British-Indian empire.

After the British power was consolidated in Bengal, the Muslims were to look for their future, but they were to do so not on their own terms any longer. They were compelled to streamline their attitudes as Muslims to the changed circumstances separating the secular from the

[3]E. Stokes, *The English Utilitarians and India*, Oxford, 1959, p. 310.

[4]Stokes, *op. cit.*, p. 313.

religious strands of the corpus of Shari'a[5]. In other words, the Muslims were reduced to making the best use of the worst situation. As has been observed by Hardy, the Muslims of British India, deprived of political power, adjusted their position rather as Victorian Englishmen than as traditional Muslims.

When the British took over the administration of Bengal, they inherited Muslim law; but they gradually effected reforms in the legal system and introduced significant changes. This modification and grafting of foreign ideas and principles in the Islamic legal system and the juridical process were bound to affect the Muslims of Bengal who had been used to their own system of law and justice for centuries. This aspect of the impact of British rule is yet to be explored[6].

The sacred law of Islam, the *Shari'a*, occupies the central place in the Muslim society and culture, and in its history, runs parallel with the history of Islamic civilisation. "The *Shari'a*", as Professor Anderson has aptly pointed out, "has moulded the social order and community life of Muslim people and held the social fabric of Islam compact and secure through all the fluctuations of political fortune"[7]

Islam represents a political and juristic theory. It signifies a cultural whole encompassing religion and state, since the concept of Islamic state and the tenets of Islamic civilisation derive their authority solely from their foundation in religion. The ideal of life is the rule of religion on everything of life; as a religion it is at the same time the world philosophy and the way of life of its believers. Islam is not a religion of asceticism. Worldly life is very much within its purview. This concern for the world appears in the rejection of monasticism, in the natural respect for marriage and in the positive attitude towards trade and worldly goods. The widespread fatalism of the Orient, however, is not based upon religion but is a matter of education and temperament.

Since Islam had been from its beginnings a political entity as well as a religion its law is theoretically an infallible doctrine of moral obligations encompassing without limitation not only the entire religious and domestic life of believers in Islam but also their political and social activity[8].

[5]Peter Hardy, *Partners in Freedom and True Muslims*, Lund, 1971, is a stimulating study on how the Muslims made readjustment in their ideology under the British rule.

[6]Records of Court proceedings of cases of Muslim litigants scattered throughout Bengal are valuable material for such an investigation.

[7]J. N. D. Anderson, *Islamic Law in the Modern World*, London, 1959, p. 18.

[8]See Joseph Schacht, "Islamic Law", *Encyclopaedia of Social Sciences*, Vol. 7, p. 344.

What the present writer aims to do here is to suggest that reforms and changes which the British introduced into the Islamic legal system made serious dent into the Islamic way of life of the Muslims of this region. In regard to the reforms introduced by the British in the subcontinent Eric Stokes wrote that, "in the Bengal and Madras Presidencies the Muslim law had been retained, but had been overlaid by Regulations which differed widely in each Presidency. The effect was that the Muslim law had been dis-stated to such an extent as to deprive it of all title to the religious veneration of Mohammedans, yet retaining enough of its peculiarities to perplex and encumber the admininstration of justice"[9]. The discontinuance in 1832 of the *Fatwa*, the written opinion of the Muslim law officer, marked in fact the "end of the Mohammadan criminal law applicable to all persons"[10].

It must be noted in this connection that the British administrators of law and justice were not bound to maintain the highest ethical standards in law and justice while discharging their judicial duties. As a matter of fact, the British aim in reforming criminal laws in India was utilitarian ie. "the punishment should be variable, equable, commensurable, characteristic of the offence, exemplary, frugal, subservient to reformation, popular, simple and remissible"[11]. This is a heap of terms the tenor of which is patently convoluted, encumbering and perplexing.

In India, Muslim scholars and writers had preserved in their writing the ideal of classical Islam, that the truly Islamic temporal order was that in which the holy law, *Shari'a*, as understood by the consensus of the scholars, was the law of the *dar al-Islam* and was to be enforced by a God-fearing Muslim ruler whose sole *raison d'etre* was such enforcement[12]. He was to appoint pious judges, to collect the canonical taxes of *'Ushr* (tithe), *Zakat* and *Jizya*.

Mughal emperors such as Akbar had veered from traditional orthodoxy for reasons of political expediency; this acquiescence of the Mughal period seemed to be replaced by 'attitudes of a more puritan aggressiveness'[13]. By the time the British acquired paramountcy in India voices had been raised demanding the rejection of the religious *modus vivendi* of medieval India in favour of a classical and Arab Islam[14].

[9]Stokes, *op. cit.*, p. 225.

[10]G. C. Rankin, *Background to Indian Law*, Cambridge, 1946, quoted in Stokes, *op. cit.*, p. 223.

[11]Stokes, *op. cit.*, p. 231.

[12]See Hardy, *op. cit.*, pp. 24-25.

[13]See Hardy, *op. cit.* p. 24.

[14]*Ibid.*

Enforcement of *Shari'a* law in India did not follow immediately after the Muslim conquest of Sind in 712 A.D. Its enforcement, in the strict sense of the term, took place only in the beginning of the thirteenth century. There is no systematic account of the Muslim law, its development and administration of justice in medieval India.

During the Mughal rule in India the *Shari'a* was in force for the administration of criminal justice. For reasons of expediency the British left the system in operation for a century since they assumed power in Bengal, Bihar and Orissa. But the changes effected over the years by the British rendered *Shari'a* hardly recognizeable by the 1860s when Indian Penal Code was introduced. Henceforth Muslim law emerged into Anglo-Mus im law of crimes, because it had become detached from its base in the Muslim jurisprudence. The British desisted from effecting further changes in Muslim criminal law "until the minds of the people by a more intimate acquaintance with the enlightened principles of European policy are prepared for the reception of other laws consonant to reason and natural justice"[15].

The process of reforming Muslim laws went on unabated since 1772[16]. The reasons adduced in support of these reforms were mainly political as well as administrative. The method applied for such purposes was indirect and circuitious. Instead of superseding a rule directly attempts were made, in the first place, to effect changes in the attitudes of the Muslim law officers employed by the British. Then they were induced to give *fatwas* on the basis of which 'improvements' could be introduced subsequently[17]. For example, to avoid the rule of Muslim law allowing conviction on the testimony of a Muslim only, and not on that of a non-Muslim, the rule promulgated was that the law officers were to give their *fatwas* on the supposition that all the witnesses before the Court were Muslims, though, in fact, they might not be so[18].

It is often claimed that whatever reforms the British introduced in the systems of law and justice they did it in deference to justice, equity and good conscience. But the terms justice, equity and good conscience were very vague and unclear. Serious mistakes and blunders were often made by British Judges who, without knowledge of Islam and its culture, without acquaintance with Arabic, Persian, or even Urdu, attempted

[15]M. P. Jain, *Outlines of Indian Legal History*, Bombay, 1972, pp. 337-338.

[16]See R. Dutt, The Economic History of India, London, 1901, Vol. I, p. 83; P. Hardy, *Muslims of British India*, p. 51 ; M. P. Jain, *op. cit.*, pp. 337-338.

[17]See Jain, *op. cit.*, pp. 337-338.

[18]See Jain, *op. cit.*, p. 338.

to expound an highly developed and complicated system of law such as Islamic law[19]. In order to mitigate this deficiency the British Indian Government laid down a rule in Bengal in 1772 where Muslim Law experts and Hindu *Pandits* were to attend the Courts as *Juris Consuls* and assist the British Judge in discovering the exact rules to be applied[20]. This make shift device had the inevitable flaws of vicarious responsibility. Moreover, these 'native' juris consuls were often induced to twisting their hermeneutics to suit British ideas[21]. It is to be noted in this connection that in the contemporary Muslim world the rule of the *Shari'a* was that the school or subschool of a Muslim litigant was not taken into consideration, but the *Qadi* followed his own rules. But in British Bengal, contrary to the universal rule in Islam — as the Court in British India *qua* Court had no particular rite on religion — the law of the particular person was discovered and applied and in case of conflict the law of the defendant prevailed[22].

As the Courts of the East India Company gave place to those of the British Crown and more and more trained English lawyers took their seat as judges it was found that in many instances, the native law, Hindu as well as Muslim, was in conflict with the British common law. By 1871 British experts argued that the notions of justice, equity and good conscience were not valid and dependable legal principles[23].

Areas of Muslim laws and practices in which changes were brought about by the British were quite extensive. They ranged from criminal law, civil rights, age of maturity, law of gifts, to the extensive use of precedents. The law relating to *Pardanashin* women, the law of guardianship, the law of divorce, where, for instance, cruelty was to be defined had been modified to bring Muslim law in line with equity as understood in the western courts.

Changes were introduced equally in the law of procedure. The influence exerted by India's long connection with Britain was nowhere more pervasive and more subtle than in legal and judicial process. In Mughal India *Qadis* and local executive officials administered justice in accordance with the principles of *Shari'a*. The *Qadis* were specialists in religious law; they were pious people leading Islamic way of life,

[19]See A. A. Asaf Fyzee, "Muhammadan Law", *Comparative Studies in Society and History*, The Hague, Monton and Co., Vol. V, 1962-1963, pp. 401-415.

[20]See Fyzee, *op. cit.*, p. 412.

[21]See Jain, *op. cit.*, p. 338.

[22]See Fyzee, *op. cit.*, p. 412.

[23]See Fyzee, *op. cit.*, p. 413.

dedicated in the profession, and administered justice without fear or favour. According to tradition, the *Qadis* were chosen from among the pious and the learned section of the society. The pious specialists on religious law were held in respect both by the public and the rulers, and they owed their authority to their single-minded concern with the ideal of a life according to the tenets of Islam.

As regards procedural law, the *Quran* had not only endorsed the use of written documents as evidence, it has also provided for putting the witness on oath in certain circumstances[24]. In the absence of specific guidance, the *Qadi* takes an oath on the *Quran* and provides an interpretation according to his best judgement instead of delivering a dexterous interpretation dictated by expediency.

Muslims in Bengal, including the *Ulema*, had been slow to react publicly to British rule, perhaps because the British had departed only generally from the medieval *modus vivendi* between the religious and the political establishment. Muslim reaction to British rule evinced a dichotomy if not an ambivalence[25]. One group, in their bid to convince the West of their emancipation from medievalism, welcomed the spirit of the West. A second group decided that salvation lay in Muslim revivalism. The *Ulemas*' controversy on whether British India was a *dar al-harb* or *dar al-Islam* represented another conflicting issue. In the whirlpool of the revivalistic and puritanical movements which convulsed British India in the nineteenth century, Bengal Muslims were always involved. Haji Shariatullah, Dudu Mian and Titu Mir, who tried to confront the challenge of the British, have often been characterised as unwise disturber of peace and tranquillity in the British Bengal.

The impact of British rule on the education of the Muslims is a much talked-about issue. But there hardly exists any rational analysis of the question. No doubt, English education equipped the Muslims to carry out a dialogue with the critics of Islam, but it deprived them of the substance of their own educational resources. It blessed them with the crumbs of British education thrown before the 'natives' of British India. First-rate education was not intended for the natives; second rate education was considered enough for them[26]. Traditional Muslim theologians strongly opposed the modernism of the English-educated

[24]See J. Schacht, "Law and Justice". *Cambridge History of Islam*, p. 547. ff.

[25]See Hardy, *Partners in Freedom and True Muslims*, Lund, 1971.

[26]See Charles Woods Education Despatch, 1854.

Muslims. They were deeply concerned with the challenges that the Christian missionaries offered to Islam through their Evangelical preachings. They found the pseudo-intellectual fads of the westernised Muslims unsound and risky.

Muslims who acquired an English education in order to obtain higher government jobs were ultimately frustrated and disillusioned becuase of the want of adequate patronage from the British. Modern-educated Muslims were up to winning the favour of influential British officers. They were more than satisfied if their efforts won them the petty titles which, they imagined, established their superiority over the rest of the aristocracy, and certainly enabled them to obtain minor posts for their dependents. Since a literary education provided adequate opportunities for such ambitious as the Muslim youth possessed, hardly any one opted for technical education. So it was but natural that they should oppose the introduction of competitive examinations for services, and demand special privileges on the basis of their loyalty to the Government as a class or of their links with the Muslim aristocracy.

The Muslims of Bengal as well as members of the other communities failed to see that "one negative goal of the (colonial) educational system was certainly to detach the educated Indian from his cultural moorings so that he would gradually and surely subscribe to another set of values and other cultural patterns"[27].

Despite all the altruistic professions of those who brought about changes and reforms in the institutions of the Muslims on the assumption that the institutions of the latter were medieval and less humane, incalculable harm was done to the common run of people. Cornwallis had abolished the offices of *Qadi* of Bengal. Nawab Abdul Latif was to write about the great difficulties which the Muslims of East Bengal faced as a result of this abolition.

As in ancient history Periclean Athens had, in the flush of their political victory over their conquered neighbours, surprised all by their achievements, so the dazzle of British success, gained in the aftermath of the Napoleonic wars, obfuscated the minds of the conquered Muslims of Bengal who seemed to be apocalyptically believing in the permanence of their intellectual and cultural stagnation. But the long-continued Osmos-

[27]R. C. Vermani, *British Colonialism in India*, Delhi, 1983, p. 159 ff.

is of the Anglo-Muslim ideas and institutions gave rise to an intellectual and cultural symbiosis keeping alive the identity crisis of the Muslims of this region.

The present writer has not entered into any debate on what the British did to the Muslims of Bengal who had the longest experience of British rule; neither he made any quantitative analysis of profit and loss accounts. Rather, he has tried to focus the attention of the scholars on the actual dynamics of British Indian administration which determined British policy towards the Muslims of the subcontinent. The writer wanted to indicate that the impact of the British rule which manifested itself in terms of loss of fortunes of the Muslims and of their political power is insignificant compared with the impact on their moral and intellectual ethos and their ideology.

The Derozian Revolt : Rationalist Dissent and Orthodox Reaction in Nineteenth-Century Bengal

Priti Kumar Mitra

I. Derozio, the Derozians and the Preliminaries of their Rebellion

The age of Ram Mohan Roy (1774-1833) the first rebel of modern India was closely followed by that of the Young Bengal who burst on colonial Calcutta late in the eighteen-twenties. The group owed its origin to a young and brilliant teacher of the Hindu College named Henry Louis Vivian Derozio (1809-1831) who greeted the abolition of *sati*. (the contemporary Hindu practice of burning widows on the funeral pyres of their husbands) with a most impassioned ode.[1] While Ram Mohan was fighting through the final phase of his battle with the Hindu orthodoxy to vindicate his God and abolish *sati*, Derozio came forward with an exceptional spirit and eloquence to advocate free-thinking and empirical enquiry. Unlike Ram Mohan's, his was a purely intellectual movement that sought to demolish fixed ideas and traditional beliefs and lay everything open to question and enquiry. Derozio quickly flsashed through the Indian horizon in the last six years of his short life during which he definitely inspired a group of young men who were destined to administer the severest blow to contemporary Hinduism and also to sting a number of other orthodoxies.

Born of an Indo-Portuguese and English parentage[2] in 1809 in Calcutta, Henry Derozio was educated at a distinguished private seminary

[1]"On the Abolition of Sattee', Dec. 1829.

[2]C. Paul Verghese, "Preface: Derozio's Poetry", in P. Lal (ed.), *Henry Derozio : Poems* (Calcutta: Writers Workshop, 1972), p. xviii. Henry Derozio is usually referred to in contemporary sources as an Eurasian. His father, Francis, had descended from Portuguese settlers who had intermarried with Indian women. Pallab Sengupta, *Jhader Pakhi : Kabi Dirojio* [Bird in the Winds: Poet Derozio] (Calcutta: Pustak Bipani, 1979), p. 3 ; Sushobhan Sarkar in Lal, p. ii. Francis' father, Michael, has been described as a "portuguese Merchant and Agent" in the Bengal Directory of 1795 and as a "Native Protestant" in St. John's Baptismal Register of 1789. Elliot

known as Drummond's Academy.[3] The Academy's proprietor, David Drummond (1787-1843), a strong-willed free-thinker and religious non-conformist exiled from his native Scotland, was a scholar-poet who "never lost his relish for the metaphysics and the muse."[4] His 'metaphysics', however, was characterized by a robust humanism as well as the rationalism of Hume and of the French Revolution.[5] Drummond successfully inculcated his acumen and attitude in the brilliant Henry who registered in the school in 1815 at the age of six and studied with Drummond for eight years.[6] Susobhan Sarkar, well-known historian of the Bengal Renaissance, concludes that "Derozio derived from Drummond his taste in literature and philosophy, his love of Burns, his faith in the French Revolution and English Radicalism."[7] Thus, in the company of Drummond young and imaginative Henry grew into an indomitable individual and a free-thinker.

Academically, Henry was an exceptional student who received numerous prizes in successive years for meritorious performance in examinations.[8] Drummond's school not only had a high academic standard but was also exceptionally non-racist in bearing and cosmopolitan in enrolment.[9] The environment definitely liberated Henry from the common prejudices of his community at the time. Such upbringing helped him identify himself as an Indian and generated in him the ability to draw Hindu youths around himself.

W. Madge, *Henry Derozio: the Eurasian Poet and Reformer* (1905) ed. Subir Ray Choudhuri, (Calcutta: Metropolitan Book Agency, 1967), p. 2. Thus Francis was both Portuguese and "Native" Indian on account of his mixed ancestry. His father's Protestantism also indicates a certain dynamism in the religious history of the family whose Portuguese background could normally warrant only Roman Catholicism as their religion. Sophia Johnson, Henry's mother could be an English woman as she is reported to be a sister of one Arthur Johnson, an English indigo planter in Bhagalpur, Bihar. Madge, pp. 5-6.

[3]Regarding the fame and distinctive features of this school in the Dharmatala area of Calcutta see Madge, *Henry Derozio*, p. 4 ; and Benoy Ghose, *Bidrohi Dirojio* [Derozio the Rebel], 2nd ed. (Calcutta: Ayan, 1980), pp. 33-35.

[4]One of Drummond's friends dedicated a book to him with these and other words. Quoted in *ibid.*, p. 31.

[5]The description of Drummond in this paragraph is developed from information found in Ghose, *Bidrohi Dirojio*, pp. 30-35; Sengupta, *Jhader Pakhi*, p. 13; Sarkar in Lal, *Poems*, p. ii; Madge, *Henry Derozio*, p. 4; and Amar Datta, *Dirojio O Dirojiyans* [Derozio and the Derozians] (Calcutta: Manisha Granthalaya, 1973), pp. 2-3.

[6]Madge. *Henry Derozio*, pp. 4-5.

[7]Sarkar in Lal, *Poems*, p. ii.

[8]Ghose, *Bidrohi Dirojio*, pp. 33-34; Jogesh C. Bagal, *Unabimsa Satabdir Bamla*, [Bengal in the Nineteenth Century] (Calcutta: Ranjan Publishing House, 1963), pp. 136-37; Datta, *Dirojio O Dirojiyans*, pp. 3-4.

[9]Ghose, *Bidrohi Dirojio*, p. 34.

After finishing school at fourteen, Henry worked for a couple of years as a clerk in a business house where his father was the chief accountant.[10] Leaving the uninspiring job in 1825 he escaped to Bhagalpur, Bihar, where his uncle, Arthur Johnson, held an indigo concern.[11] During his stay (1825-26) in this eastern Bihar district of exotic natural beauty punctuated with thought-provoking historical relics, imaginative Henry blossomed out as a powerful poet — romantic and humane. Poems of considerable beauty (and some prose writings too) kept appearing in the *India Gazette* and immediately attracted the notice of the Calcutta literati. Consequently, Henry was recruited in May 1816[12] as an instructor in the Hindu College, an advanced English school founded in 1817 by a group of wealthy Hindus of Calcutta who wanted to make European knowledge available for their sons without prejudice to their religion and culture. Two slender volumes of Henry Derozio's poems came out successively in 1827 and 1828, while more poems kept flowing from his pen during and after these years. Besides, he did editorial work for and contributed to a number of periodicals in Calcutta.[13]

As a scholar Derozio is reported to have been extremely well-read and had impressive knowledge of "the best thinkers and writers of European celebrity."[14] According to his biographer, Thomas Edwards, Derozio maintained the best and most updated personal library in India.[15] As a visiting lecturer at another Calcutta school he is reported to have "delved into the ... thought of Bacon, Hume, Smith, Paine and Bentham."[16] He wrote a splendid criticism of Kant which, according to Dr. Mill, a Sanskrit scholar and principal of the Bishop's College at the time, was "perfectly original, and displayed powers of reasoning and observation which wouldn't disgrace even gifted philosophers."[17] He also translated a French essay, "On Moral", by M. Maupertins, an eighteenth-century

[10]Madge, *Henry Derozio*, p. 5.

[11]*Ibid.*, pp. 5-6.

[12]Bagal, *Unabimsa Satabdir Bamla*, p. 136; Datta, *Dirojio O Dirojiyans*, p. 5 and fn. 5 on p. 21.

[13]Sarkar in Lal, *Poems*, p. iii.

[14]Thomas Edwards, *Henry Derozio: The Eurasian Poet, Teacher and Journalist* (1884), as quoted in Mary Ann Das Gupta (ed.), *Henry Louis Vivian Derozio (1808-1831): Anglo-Indian Patriot and Poet* (Calcutta: Derozio Commemorative Committee, 1973), p. 24.

[15]*Ibid.*

[16]Quoted in David Cameronn "Derozio — The Poet", in *ibid*, pp. 24-25.

[17]Quoted in Datta, *Dirojio O Dirojiyans*, p. 10.

French philosopher who was close to the Encyclopedists.[18] Derozio's positive interest in Bacon and Hume is also evident from his writings.[19]

Derozio served the Hindu College for five years (1826-1831) before being forcibly ousted for being radical in thought and effective in imparting it to the youth. He taught European literature, both classical and modern, and also the history of modern Europe.[20] As a teacher, he soon emerged as the most popular of all the instructors of the school and attracted crowds of students to his classes. Many of his students were his contemporaries in age and found an inspiring friend in him. Even students not registered in Derozio's classes were found to flock to his classrooms eager to listen to his lectures.[21] "His enthusiasm, ready wit, quick sympathy, wide reading and originality of thought and above all his personal magnetism" gave him a lasting "ascendency over the minds and hearts of his students" —observes a modern writer.[22] This extraordinary teacher "strove with success 'to boraden and deepen the knowledge of his pupils' in Western thought and literature, the new fountain which emancipated and intoxicated."[23] Derozio encouraged his students to debate freely and question authority. He urged them to think for themselves, to steer clear of the Baconian idols and to "live and die for truth."[24]

An idea of Derozio's philosophy of education can be formed from a statement he made in a letter to sympathetic member of the Hindu College Committee on the eve of his expulsion from that institution. Declaring himself as a follower of Bacon, Derozio asks:

> ...Is it consistent with an enlightened notion of truth to wed ourselves to only one view ... resolving to close our eyes and ears against all impressions that oppose themselves to it?
>
> ...Entrusted as I was for some time with the education of youth ... was it for me to have made them pert and ignorant dogma-

[18]Suresh Chandra Moitra, "Hindu Kalej: Dirojio: Adhunikata" [Hindu College: Derozio: Modernity], in Azharuddin Khan and Utpal Chattopadhyay (eds.), *Vdyasagar Smarak Grantha* [Vidyasagar Memorial Volume] (Midnapore, West Bengal: Vidyasagar Sarasvata Samaj, 1974), p. 619.

[19]References alluded to in Sengupta, *Jhader Pakhi*, p. 64, fn. 7.

[20]A list of the texts Derozio used for his courses is found in Edwards, *Henry Derozio*, and has been reproduced in Sengupta, *Jhader Pakhi*, pp. 64-65, fn. 8 ; and Datta, *Dirojio O Dirojiyans*, p. 7.

[21]Bagal, *Unabimsa Satabdir Bamla*, p. 138.

[22]Verghese, "Derozio's Poetry", in Lal, *Poems*, p. xix.

[23]Sarkar in *ibid*, p. iii.

[24]Quoted in Sarkar in *ibid*, p. iv.

tists? ... I therefore thought it my duty to acquaint ... the College students with the substance of Hume's celebrated dialogue between Cleanthes and Philo, in which the most subtle and refined arguments against theism are aduced. But I have also furnished them with Dr. Reid's and Dougald Stewart's more acute replies to Hume...[25]

In no time the classroom proved to be inadequate for Derozio's mission of enlightenment, and he soon found himself instructing students out of school hours. An eye-witness reports:

> ...Meetings were held almost daily after or before school hours. ... Derozio's disinterested zeal and devotion in bringing up the students... were unbounded, and characterized by love and philanthropy. ...He fostered their taste in literature, taught the evil effects of idolatry and superstition ; and so far formed their moral conceptions and feelings, as to place them completely above the antiquated ideas and aspirations of the age.[26]

To crown his unique educational program Derozio founded, in 1828, in collaboration with his students, an intellectual forum called the Academic Association where free deliberations on social and moral questions took place. An eye-witness report goes: "...Opportunities were constantly presented for the advancement of counteracting statements and opinions on all subjects."[27] Thomas Edwards, Derozio's first biographer, wrote in 1884.

> ...In the meetings of the Academic Association...subjects were broached and discussed with freedom, which could not have been approached in the class-room. Free will, free ordination, fate, faith, the sacredness of truth, the high duty of cultivating virtue, and the meanness of vice the nobility of patriotism, the attributes of God, and the arguments for and against the existence of deity ... the hollowness of idolatry and the shams of priesthood, were subjects which stirred to the very depth the young, fearless, hopeful hearts of the leading Hindoo youths of Calcutta.[28]

The debates were richly punctuated by quotes from Gibon, Newton, Hume, Bentham, Locke, Byron, Tom Paine, Adam Smith and other luminaries of Western intellect.[29] These meetings were often attended

[25]Reproduced in Sarkar in *ibid.*, pp. vii-viii.

[26]Report of Hara Mohan Chattopadhyay, a clerk in Hindu College, quoted in Datta, *Dirojio O Dirojiyans*, pp. 10-11.

[27]Alexander Duff's report quoted in *ibid.*, p. 12.

[28]Quoted in Bagal, *Unabimsa Satabdir Bamla*, p. 142.

[29]Duff's report quoted in Datta, *Dirojio O Dirojiyans*, pp. 12-13.

by distinguished members of the intellectual elit of Calcutta. A further means of disseminating his ideas was Derozio's 'weekly moral and intellectual lectures' that he delivered in other societies and institutions. We have referred above to his exudite speeches at David Hare's School in Calcutta.[30]

A very broad curriculum and the critical and collective method of learning produced the desired result. The youths began to get emancipated intellectually. With amazement and satisfaction Derozio recorded his feelings in a beautiful sonnet:

Expanding like the petals of young flowers
I watch the gentle opening of your minds
And the sweet loosening of the spell that binds
Your intellectual energies and powers...
O! how the winds
Of circumstance, and freshening April showers
Of early knowledge, and unnumbered kinds
Of new perceptions shed their influence; ...
And then I feel I have not lived in vain.[31]

This blossoming group of young pupils was not very big — about a dozen teenagers born between 1808 and 1815. Four of them, dubbed "fire brands", included Rasik Krishna Mallick (1810-1858), Dakshina Ranjan Mukherji (1812-1878), Krishna Mohan Banerji (1813-1885) and Ram Gopal Ghosh (1815-1868). Other prominent figures included Radha Nath Sikdar (1813-1870), Ram Tanu Lahiri (1813-1898) and Peary Chand Mitra (1814-1883). These radicals, in collaboration with their celebrated *guru*, instituted the great Derozian revolt between 1828 and 1843.

The major intellectual base of the revolt was rationalism as it was transmitted to them by Derozio from the eighteenth century European rationalists. The rationalist motto of the Derozians was succinctly spelled out by Ram Gopal Ghosh: "He who will not reason is a bigot, he who cannot is a fool, and he who does not is a slave."[32] Hence the great popularity of Thomas Paine's *Age of Reason* among the students of the Hindu College. It is reported that they were willing to pay five or eight times of the advertised price for a copy. The stock was exhausted in no time and, in view of the frantic demand for it, someone published portions of the classic in Bengali translation in local magazines.[33]

[30]*Supra*. p. 3. "As a visiting lecturer at another Calcutta school" etc. See note 16 above.

[31]Derozio's poem "To the Students of the Hindu College", reproduced in Lal, *Poems*, p. 41.

[32]Quoted in Sarkar in Lal, *ibid.*, p. iv.

[33]Bimanbehari Majumdar, *History of Political Thought: From Rammohun to Dayanand (1821-84)* (Calcutta: University of Calcutta, 1934), p. 83.

The period between Derozio's joining the Hindu College as an instructor in May 1826 and the foundation of the Academic Association toward the end of 1828 [34] accounted for the formative phase of the Derozian revolt. The Academic Association marked the commencement of a radical phase that lasted for about five years (1828-1833) and was dominated by an acrimonious crusade against Hinduism. Apart from the dais of the Academic Association, four magazines run by the Derozians participated in the great war against Hinduism. These were: the *Parthenon* (1830), the *East Indian* (1831. Ed. Derozio), the *Enquirer* (1831-1834. Ed. K.M. Banerji) and the *Jnananveshan* [Search for Knowledge] (1831-1840. Bengali till 1834, then bilingual — Bengali and English. Eds. D. R. Mukherji and Later R.K. Mallick). The orthodox responses were carried in conservative Hindu organs such as the *Samachar Chandrika* [News Moonlight] and the *Samvad Prabhakar* (News Sun) (both Bengali).

However, Hinduism was by no means the only orthodoxy attacked by the Derozians. In fact, the decade-long second phase (1833-1843) of the Derozian recalcitrance was dominated by a growing criticism of Britain's performance in colonial India, Hinduism having been relegated to a second place in the priority list of the targets of attack. The *Enquirer*, the most relentless enemy of Hinduism, closed down soon after 1833, and the *Jnananveshan* shifted its emphasis from attacs on Hinduism to a growing protest against the shortcomings of the East India Company's government in India. A new and more anti-colonial organ, the *Hindu Pioneer*, was started in 1835 and, towards the end of the period, the *Bengal Spectator* (1842-1843) followed suit. Besides these journals, the Derozians, then better known as the Young Bengal, also founded, in 1838, the Society for the Acquisition of General Knowledge as a laterday version of the Academic Association. This society soon emerged as a platform of their protest campaign against the ills of colonial rule in India as well as against Hindu social evils.

Between the two major phases, the Derozians also found occasions of show-down with Christianity and Ram Mohan Roy's reformed Brahmo religion. These actually formed part of their rationalist emotional attacks, in the first phase, against the fixed ideas of and contradictions in religion. Politics featured prominently in the second phase and an attempt to critically examine the colonial administration was seriously made. Attacks against Hinduism tended to get confined to critiques of social evils. With age and experience the disciples of Derozio shed much of their emotionalism and displayed maturity and sobriety in their speeches

[34]These dates have been determined by Jogesh Chandra Bagal, a prominent researcher in the area. Bagal, *Unabimsa Satabdir Bamla*, p. 141.

and writings. In the following sections we shall examine in some detail the several dialectics btween the Derozians and the orthodoxies they encountered.

II. Revolt of the Derozians

a. Against Hinduism

The first phase (1828-1833) of the Derozian dissent was marked by a spirited emotionalism of its young votaries who exhibited an impatient eagerness for an instant revolution of intellect and culture in India. It took the form of a total revolt against Hinduism which was identified as the "orthodoxy". "The general tone of the discussion [in the Academic Association] was a decided revolt against religious institutions.... The young lions of the Academy roared out, week after week, 'Down with Hinduism ! Down with orthodoxy !" —reports Rev. Lall Behary Dey in his *Recollections of Allexander Duff*.[35] Another report by a contemporary records:

> The principles and practices of Hindu religion were openly ridiculed and condemned. ... The Hindu religion was denounced as vile and corrupt and unworthy of the regard of rational beings.[36]

The radicals' major charge against Hinduism was that it was intellectually hollow and socially baneful. Not only that Hinduism was held to be intellectually void, it was also held responsible for institutionalising ignorance and working against man's spirit to know by captivating his mind with myths, customs and superstitions. The Derozian view of Hinduism as a citadel of ignorance and an anti-wisdom force can be gleaned from their writings. Derozio deplored "the seal/that despot custom sets on deed and thought" of the *sati*-performing Hindus.[37] He also took delight in loosening "the spell that binds" his Hindu students' "intellectual energies and powers."[38] Krishna Mohan Banerji cherished the vision of the day of the "overthrow of ignorance", of "triumph of knowledge over ignorance ; of civilization over barbarism ; of TRUTH over falsehood !"[39] Here ignorance, barbarism, falsehood obviously stand for Hinduism. Banerji's magazine, the *Enquirer* (1831-1834) in which the quote occurs, launched an vowed crusade against his fore-

[35]Quoted in Datta, *Dirojio O Dirojiyans*, p. 13.

[36]Report of Hara Mohan Chattopadhyay in *ibid.*

[37]Henry Derozio, poem "On the Abolition of Sattee" reproduced in Dasgupta, *Henry Louis Vivian Derozio*, p. 46.

[38]See note 31 above.

[39]Krishna Mohan Banerji's article in *Enquirer*, Sept. 6, 1831, as quoted in Moitra, "Hindu Kalej", p. 593.

fathers' religion. He repeatedly denounced the orthodox Hindus as bigots and fanatics and wrote against all social and religious evils of Hinduism in his days.[40]

Once Hinduism was understood to be intellectually void, the woes of its votaries were quickly seen as stemming from the same shortcoming. In the Academic Association "the degraded state of the Hindus formed the topic of many debates; their ignorance and superstition were declared to be the causes of such a state. ..."[41] So, naturally, Hinduism's

> authority is questioned, its sanctions are unheeded, its doctrines are ridiculed, its philosophy is despised, its ceremonies are accounted fooleries, its injunctions are openly violated, its priesthood is decried as a college of rogues, hypocrites and fanatics[42]

by the Young Bengal who were proud of their intellectual emancipation.

Overenthusiastic and young as they indeed were, the Derozians evinced a tremendous amount of emotion in their expressions of dislike of Hinduism. One of them, Madhab Chandra Mallick, declared in arrogance: "If there is anything that we hate from the bottom of our heart, it is Hinduism."[43] Also quotable is the angry ebullition of Krishna Mohan Banerji, described to be "the most uncompromising denouncer of the national superstition".[44]

> Then let the fanatic and bigot bewail in silence the fate of their religion. The liberal, although now persecuted by the brutal tyranny of the priestcraft, will soon have occasion to seal his triumph in the overthrow of ignorance.[45]

Apart from expression through speeches and writings, the Derozian crusade against religion took some other forms of manifestation too. With their loss of faith and interest in Hindu rites and taboos the adolescent rebels transgressed caste rules and norms of food and dress, discontinued the daily Vedic prayers and some even recited lines from the *Iliad* in place of the *mantras*.[46] They rejected the Brahmanic

[40]*Ibid.*, p. 596.

[41]Hara Mohan Chattopadhyay's report quoted in Datta, *Dirojio O Dirojiyans*, p. 13.

[42]Ramchandra Ghosh, *Biographical Sketch of Rev. K. M. Banerjee*. Quoted in *ibid.*, p. 43.

[43]Quoted in Sarkar in Lal, *Poems*, p. iv.

[44]Rev. Lall Behari Dey quoted in Ghose, *Bidrohi Dirojio*, p. 101.

[45]*Enquirer*, Sept. 6, 1831, as quoted in Moitra, "Hindu Kalej", p. 598.

[46]Sarkar in Lal, *Poems*, p. v, Moitra "Hindu Kalej", p. 618.

garments and sectarian marks and ornaments and, in their place, adopted European clothes and shoes, grew long hair, and used to urinate in the standing position.[47] Above all, they took pride in eating beef and taking food and drinks from Muslim restaurants.[48]

These outward nonconformities were followed by insults and rudeness towards the orthodox. Under Paine's influence some despised Christianity, along with Hinduism, ridiculing missionary fathers on Calcutta streets and aping their gestures and language.[49] Others unkindly derided the Brahmans and Vaishnavas who used to rush to the Ganges early in the morning for a holy dip. The unruly youth shouted around them: "We eat beef, we eat beef". One lad, brought to a Kali temple for prayer greeted the goddess with a "Good morning madam" ![50] At the climax occurred the bizarre incident at Krishna Mohan's house where, in his absence, his radical friends ate beef and threw bones in the courtyard of a Brahman home next door.[51]

In the third place, there were a number of symbolic acts on the part of several of Derozio's disciples that boldly proclaimed their dissent from the orthodox way of life. Krishna Mohan Banerji and Rasik Krishna Mallick refused to swear by the Ganga water in a police office and a judicial court respectively.[52] Ram Gopal Ghosh refused to participate in his grandfather's funeral rites even at the request of his father whom he usually obeyed.[53] He also refused to "abjure his beliefs in spite of the threat of social ostracism."[54] Radha Nath Sikdar refused, in the teeth of family opposition and despite his mother's request, to marry a minor girl.[55] Dakshina Ranjan Mukherji, on the other hand, married a widow long before Iswar Chandra Vidyasagar's famous movement for widow remarriage was inaugurated.[56] Ram Tanu Lahiri heroically threw away the 'sacred' thread to correct the incoherence between his life and his belief.[57]

[47]Report in *Samvad Prabhakar*, July 16, 1831, as reproduced in Ghose, *Bidrohi Dirojio*, pp. 97-98.

[48]*Ibid.*, p. 102; Bagal, *Unabimsa Satabdir Bamla*, p. 143.

[49]Bagal, *ibid.*, pp. 142-43.

[50]Ghose, *Bidrohi Dirojio*, p. 98.

[51]*Ibid.*, pp. 102-103.

[52]Moitra "Hindu Kalej", p. 595; Bagal, *Unabimsa Satabdir Bamla*, p. 182.

[53]Moitra, "Hindu Kalej", p. 603.

[54]Sarkar in Lal, *Poems*, p. xv.

[55]Sib Nath Sastri, *Ramtanu Lahidi O Tatkalin Banga Samaj*, [Ramtanu Lahiri and the Bengal Society at the Time] (1903), New Age ed., (Calcutta: New Age Publishers, 1362 B.S./1955), pp. 134-135 ; Sarkar in Lal, *Poems*, p. xv.

[56]Datta, *Dirojio O Dirojyans*, p. 49.

[57]Sastri, *Ramtanu Lahidi*, pp. 176-78.

b. Christianity and the Derozians

Hinduism was the foremost but by no means the only orthodoxy the Derozians fought against. Christianity as an aggressive missionary force was very much there with all its traditional stuff of mystry, miracle and prophecy, eager to replace Hinduism and apparently oblivious of its own negative role in the great transformation of European intellect in modern times. It was equipped with sound church organizations, huge funds, numerous media organs, and a vast number of trained workers. It also enjoyed a self-elation due to the fact of its being the faith of the conquerors and of the advanced continent of Europe. Apart from the long established Danish mission of Serampore, the arch-Calvinist Alexander Duff (1806-1878), an energetic and talented Scottish missionary, settled himself in Calcutta in the middle of 1830.

The rationalism and empiricism Derozio and his pupils adored had come from Europe and had had a long history of duel with Christianity on that elightened continent. Naturally, it was hardly possible that the new votaries of free-thinking and empirical enquiry would let Christianity go unchallenged. Of Derozio's own view of Christianity the *Calcutta Gazette* of February 13, 1832, quotes another paper's (the *Indian Registrar*) comment: "That he did not view Christianity as communication from divinity to fallen man is well known..."[58] It is also said that a Christain priest met Derozio on his death bed and queried whether or not he considered himself a Christian. The dying skeptic did not declare himself a Christian and refrained from giving any definite opinion about religion and divinity, pleading that his investigation in the matter was still incomplete.[59] It is also reported that Derozio did not want to repeat Biblical hymns on his death bed and, instead, preferred to listen to Thomas Campbell's famous poem "The Pleasures of Hope" where the poet had dreamt of a free, strong and creative India.[60]

Voracious readers as they were of Paine's *Age of Reason*, Derozio's pupils also turned against Christianity and mercilessly derided the missionary religion.[61] Some of them locked the Christian preachers by aping

[58]Quoted in Datta, *Dirojio O Dirojiyans*, p. 39.

[59]Ghose, *Bidrohi Dirojio*, p. 124.

[60]Edwards, *Henry Derozio*, as referred to in Pallab Sengupta, *Unis Sataker Ingreji Sahitye Biolabi Bharater Chitrakalpa* [Portrait of Revolutionary India in Nineteenth-Century English Literature] (Calcutta: Subarnarekha, 1976), p. 27.

[61]Alexander Duff testifies that the secular education of the Hindu College did promote skepticism and atheism among its "more advanced alumni." Duff, *India and India Mission* (Edinburgh: John Johnstone, Hunter Square, 1839), p. 608. He also informs that a majority of the journals that mushroomed in Calcutta around 1831 as a manifestation of the "new spirit" bitterly attacked Christianity: "the evil genius of Paine was again resurrected"—Duff laments. *Ibid.*, p. 618.

their gestures and their funny accent in Bengali.[62] Krishna Mohan Banerji, whom circumstances compelled to embrace Duff's Calvinism, viewed the Roman Catholicism of Martin Luther's time as "the mansion of error and prejudice" and seems to have likened it to the Hinduism of his own time.[63] Later, in the maturer phase of their thought many Derozians would discover close collaboration between Christian missionaries and the colonial government and would often find occasion to protest. In 1833 the *Jnananveshan* strongly disapproved financial support by the government to Christian missionaries: "This is not only the most unjustifiable appropriation of the revenue of this country, but a violation of the pledge...not to interfere with the religion of the natives.[64] When in the same year one Mr. Grant proposed in the House of Commons to increase the number of bishops in India, the journal wrote:

> Now there can be no objection to Mr. Grant's or any other pious Christian's [proposal of] sending as many bishops or missionaries as he pleases for the purpose of evangelizing the "Heathens of the East" as long as he pays the necessary expenses out of his own pocket. But when recourse is had to the aid of government to preach ...the measure appears to be liable to unanswerable objections.[65]

Years later, the *Bengal Spectator* published a letter that, after furnishing statistics of increasing amount of money being taken away from Bengal revenue and spent for Christian missionary activities in the country, questioned such parochial use of public funds.[66] Last but not the least, contrary to Duff's hope that the emancipated Hindu College youths lacking any definite belief to cling to will soon submit themselves to his religion, only two (Mahesh Chandra Ghosh and Krishna Mohan Banerji) did so, while the rest of the Derozians (apart from Sib Chandra Deb (1811-1890) who, very late in his life, joined the Sadharan Brahmo Samaj) remained non-denominational throughout their lives.

C. The Derozians and the Brahmos

A third 'orthodoxy' the Derozians protested against on intellectual ground was Ram Mohan Roy's new denomination later called the Brah-

[62]Bagal, *Unabimsa Satabdir Bamla*, pp. 142-43.

[63]Datta, *Dirojio O Dirojiyans*, p. 9.

[64]Quoted in *ibid.*, p. 69.

[65]*Jnananveshan*, October 30 and November 1, 1833. Reproduced in Suresh Chandra Moitra, comp., *Selections from Jhananveshan* (Calcutta: Prajna, 1979), pp. 79, 81-82.

[66]Datta, *Dirojio O Dirojiyans*, p. 76.

Samaj [Society of the Worshippers of God] which Derozio viewed as simply "another sect"[67] of Hinduism. Ram Mohan's movement for fundamental reform in Hinduism, in the teeth of hostilities from two established orthodoxies—Hinduism and Christianity—was, in the late twenties, fast granulating into a new orthodoxy through the establishment of some sort of a formal church. The Brahma Sabha [The Brahmo Association] was found in 1828, and in 1830 it came to own a building. Theological eclecticism, a universal theism, use of scriptures for promoting social reform, and seeking spiritual-intellectual uniformity for all mankind were some of the features of Ram Mohan's movement which the rational-empirical approach of the Derozians could never have approved of. They advocated free deliberation and free choice for each individual in matters of conscience—a situation that would undoubtedly lead to a plural reality in human understanding. Moreover, so many contradictions characterized the lives of many Brahmos.

So, before long the Brahmos came under heavy criticism from Derozio and his young disciples. In September, 1831, the Brahmo Sabha made a ritual presentation of money to two hundred orthodox Brahmans who never subscribed to the Brahmo doctrines. Derozio promptly denounced the act as hypocritical:

> ... Charity is an excellent virtue; but when a select body of men are made the objects of it, to the exclusion of others, we would like to know the reason of such a distinction. ... We only think that to give Brahmins up on one account, and to take them back on another, is quite super derogatory. It is the same humbug in another name.[68]

Around the same time it was circulated in the Calcutta press that Prasanna Kumar Tagore (1801-1868), a prominent Brahmo of the city, had performed at his home the Durgapuja, the traditional Bengali Hindu religious festival considered idolatrous by monotheists. The *Enquirer* wrote a scathing criticism of this act of the wealthy Brahmo leader, and Derozio's *East Indian* at once supported the *Enquirer*.[69]

In questions of religion and social change the Derozians were clearly more radical than Ram Mohan and his followers. Ram Mohan was a committed monotheist accepting God without question, whereas Derozio and most of his followers were deeply skeptic about divinity and sought to subject the idea of God also to question and rational enquiry.

[67]Derozio's article in *East Indian*, Oct. 25, 1831, as quoted in Moitra, "Hindu Kalej", p. 611.

[68]Derozio's article in *East Indian*, Oct. 15, 1831, as quoted in *ibid.*, p. 608.

[69]*Ibid.*

They remained undecided about divinity, kept the question ever open and viewed themselves as constant seekers of truth. On education also Derozio and his followers were in favour of purely secular education, while Ram Mohan preferred missionary schools. For all these reasons, the Derozian study of Ram Mohan, his followers and their reform movement led them to the conclusion that "these persons" were nothing more than "half liberals", standing midway between orthodox Hinduism and genuine free thought.[70]

The Derozian criticism of Ram Mohan's ideas was however concerned with their epistemological aspect only. His ideas and certain efforts concerning social reform, education, government policies, and the like did receive warm welcome from the Young Bengal. Years later, Brahmoism was regenerated under the leadership of the wealthy Debendra Nath Tagore (1817-1905) in the 1840's. Later in that decade, a bitter controversy arose between Alexander Duff and Debendra Nath Tagore over the infalibility and divine origin of the Vedas. Debendra Nath upheld the cause of the Vedas and Vedanta and began to preach the doctrine of Vedic infalibility in his journal *Tattvabodhini Patrika*. The Derozians like Ram Gopal Ghosh immediately denounced this position of the Brahmos as hypocritical, and Ramtanu Lahiri discontinued his subscription to the *Patrika*.[71]

d. Derozians vis-a-vis British Colonial Administration

The colonial set up of the East India Company's government in India provided the Drozians with one more orthodoxy to raise a protest against. Right from the publication of the *Parthenon* magazine in Februay 1830 the Company's government remained a subject of the Derozians' serious concern. *Parthenon's* first issue criticized expensive justice in colonial courts.[72] It was however during the second phase of the Young Bengal's dissidence that the colonial administration came under wide-ranging criticism in their writings and speeches. In fact, as pointed out earlier, the entire post-1833 phase of the Derozian discontent was marked by this role of opposition to the established government. Although the Derozians considered British rule an improvement upon previous Muslim and Hindu regimes, they seem to have become increasingly a ware of the exploitative nature of the Company's rule. Like Ram Mohan Roy, what they really appreciated was the system that worked in England itself. Their rather credulous expectation of a quick

[70]*East Indian*, Oct. 25, 1831, as quoted in *ibid.*, pp. 610-611.

[71]Sastri, *Ramtanu Lahidi*, pp. 158, 164-65.

[72]Report in *Bengal Spectator*, September 1, 1842, as quoted in Bagal, *Unabimsa Satabdir Bamla*, pp. 143, 176.

and smooth extension of the English rule of law and democracy to India was bound to get frustrated as years went by. As early as April 8, 1833, the *Jnananveshan* showed definite signs of disillusionment:

> A body of merchants has been placed over us as our sovereigns... The administration of British India must necessarily be composed of a council of merchants, whose principal aim... will be to promote their own interests ... In a word, they will try to make their Government subservient to the one ignoble principle of gain.[73]

Between Hinduism and the colonial rule, the later now seemed to be more immediate, if not greater, an evil than the Hindu leviathan, and the Derozians prepared to employ their energies to expose it as they had done with Hinduism before 1833.

Around 1833 two great controversies regarding British policies in India provided them with specific issues to debate over. These concerned the question of the medium of instruction to be used in public schools, and that of the renewal of the Company's Charter in 1833. The debate over educational policy had already been waged for decade in which the Derozians, like Ram Mohan Roy before them, upheld the cause of secular and scientific education of the West through English medium against oriental curricula in Sanskrit, Persian and Arabic—thus aiding Macaulay in advancing his famous Minute on education (1835). The *Jnananveshan* under the editorship of Rasik Krishna Mallick played a very outspoken role in its advocacy for Western education.[74] Along with their support for the English medium the Young Bengal, to be sure, also advocated the cause of Indian vernaculars in the same breath. Mallick and Krishna Mohan Banerji spearheaded, in their magazines the *Jnananveshan* and the *Enquirer*—a movement for English and the vernacular against the classical languages.[75] Mallick also sponsored in 1834, a meeting of Indians in order to send a petition to Governor-General William Bentink (1828-1835) asking for larger governmment support for English and vernacular education.[76]

As to the Charter Act of 1833, Mallick denounced it as "bad and wretched"[77] and joined others in a detailed criticisms of the Act in a

[73]Reproduced in Moitra, *Selections*, p. 61.

[74]Datta, *Dirojio O Derojiyans*, pp. 67-68.

[75]As for example, *Jnananveshan* wrote on March 15, 1834: "We hope, now,... that they [the General Committee of Public Instruction] will henceforth be all for English and the vernacular dialects of the country." Moitra, *Selections*, p. 149.

[76]Bagal, *Unabimsa Satabdir Bamla*, p. 184.

[77]Mallick's speech quoted in *ibid.*, p. 181.

public meeting in the Calcutta Town Hall where he "exposed with great ability the utter want of consideration for his countrymen manifested in this measure."[78] A *Jnananveshan* article of November 27, 1833, had already criticized the Charter Bill on three counts—support for Christian missionary work, wide-ranging powers of the Governor-General, and continuation of the Company's salt and opium monopolies.[79] In other articles of 1833 the *Jnananveshan* expressed independent opinions on such subjects as educational policy, public service, revenue system, the judiciary and other aspects of the Company's administration.[80] These 1833 political involvements mark the watershade past which the Young Bengal would pay much more attention to the working of the country's politico-economic system than to the follies and foibles of Hinduism.

On January 23, 1834, the *Jnananveshan* published a letter detailing cases of racist brutalities perpetrated by Europeans against innocent Bengalis.[81] In fact, Derozio himself had taken up this issue in his *East Indian* and had criticized in 1831 the opinion of one Mr. Macnaghten, the editor of the *John Bull*, a foremost racist organ in Calcutta.[82] On March 6, 1833, the *Jnananveshan* attacked the colonial system of taxation.[83] Throughout the year the periodical continued critical observations on various policies and measures of the government. In 1835 Rasik Krishna Mallick joined the revived movement for freedom of press to fight against the same 1823 ordinance that Ram Mohan Roy had battled in vain. He fiercely protested against an Englishman's contention that the Indian press was not responsible enough to enjoy freedom. He particularly attacked the racist bias of the prejudiced Briton: "Why such distrust of the natives—there were good or bad of [sic] all races."[84] These Derozian efforts hastened the removal in 1836 of the notorious ordinance by Charles Metcalfe, the Acting Governor-General.

The *Hindu Pioneer* (1835-?) was even more emphatically political than the *Jnananveshan* and carried such articles as "Freedom" and "India Under Foreigners". The latter article, betraying strong influence of the French Revolution on the defiant author, is a rather late assessment by the Young Bengal of the real nature of British rule in India. A remarkable quote from the article reads as follows:

[78] *Calcutta Monthly Journal*, 1835, quoted in *ibid.*, p. 186 (fn.)
[79] Moitra, *Selections*, pp. 87-90.
[80] *Ibid.*, pp. 41-90.
[81] *Ibid.*, pp. 135-37.
[82] Ghose, *Bidrohi Dirojio*, pp. 108-09.
[83] Moitra, *Selections*, pp. 144-47.
[84] *Calcutta Monthly Journal*, 1835, as quoted in Bagal, *Unabimsa Satabdir Bamla*, pp. 186-87.

> The Government of India (under the English)is purely aristocratical; the people have no voice in the council of legislature; they have no hand in framing the laws which regulate their civil conduct... .The monopoly of the State Service, the law's delay, the isolence of office, the heavy expenses of Government, the retirement from India of all those who acquire wealth, and the enormous taxation to which the country is subjected—[these are] evils too well known in India. ...The violent means by which foreign supremacy has been established, and the entire alienation of the people of the soil from any share in the Government, nay, even from all offices of trust and power, are circumstances which no commercial, no political benefits can authorize or justify.[85]

In April 1842 the Young Bengal brought out the illustrious *Bengal Spectator*, an English-Bengali bilingual magazine that had a brief but brilliant career till November, 1843. This last organ of the group represented their maturer thoughts as well as bore signs of decline of the crusading ethos that characterized their youthful years. Hindu scriptures continued to be criticized for social taboos like prohibition of widow remarriage. The *Spectator* advocated such remarriage on purely secular grounds.[86] More frequently, however, the *Spectator* carried articles criticising various aspects of the East India Company's administration in India. The deplorable effects of the Permanent Settlement of 1793 remained a special area of exposure and adverse criticism.[87] Another issue, the *Spectator* wrote extensively on, was the racial discrimination in the recruitement of civil servants. One analysis sought to find the roots of corruption among the Indian employees in governmment offices in the discriminatory pay scales set by the Company for Indians.[88] The periodical also advocated, again, the use of vernacular as medium of instruction.[89]

In their politieal phase the Derozians seem to have been gradually grasping the evil of colonialism, although they never abandoned their admiration for British liberalism inside Britain. In fact, the first number of the *Parthenon* (Feb. 15, 1830) actually advocated colonization of India (which meant permanent settlement as residents) by cultured European immigrants.[90] However, at the same time a strong anti-colonial article was also published in the *Indian Gazette* (Feb. 12, 1830) that

[85]Quoted in Majumdar, "*History of Political Thought*, pp. 90-91.
[86]*Bengal Spectator*, as quoted in Datta, *Dirojio O Dirojiyans*, p. 81.
[87]Report on the content of two numbers of *Bengal Spectator* in *ibid.*, pp. 76-80.
[88]*Bengal Spectator*, October 1, 1842, as quoted in *ibid.*, p. 83.
[89]*Ibid.*, p. 84.
[90]Majumdar, *History of Political Thought*, p. 93.

surveyed the history of Western colonialism since the days of the ancient Greeks, and considered its modern manifestation in global context before arriving at a completely negative conclusion. Bimanbehari Majumdar, in his celebrated *History of Political Thought* (1934), suspects that the piece must have come from the pen of the famous Derozian, Dakshina Ranjan Mukherji.[91] Later in the 1830's the *Jnananveshan* also opposed colonization.[92] The *Bengal Spectator*, viewing contemporary European colonialism in broad perspectives, disapproved export of Indian coolies to overseas plantation colonies like Mauritius, since it involved extensive violation of human rights.[93] The journal also noted the contradiction between the provisions of the Treaty of Nanking (August, 1842) and the British opium interest in India and expressed doubts over the feasibility of the treaty being faithfully maintained by Britain.[94]

The Derozian penchant for intellectual associations did continue through the thirties and early forties of the nineteenth century. The first phase of their dissent was dominated by the Academic Association (1828-1839)[95] where the Derozians' early revolt burst forth. They also set up an Epistolary Association through which they exchanged opinions in the Renaissance humanist style. At the waning of the Academic Association a new and much broader association—the famous society for Acquisition of General Knowledge—was launched in March, 1838. This time the Derozians picked up an older friend, Tara Chand Chakravarti (1805-1857), as permanent president of the Society. originally a follower of Ram Mohan Roy, Chakravarti had recently joined the younger group and, in fact, would become their leader in the eighteen-forties. As was the case with the periodicals, the new society turned out to be soberer and more seriously intellectual than the noisy Academic Association of the Derozians' younger years.

Despite its rather objective interest in "acquisition of general knowledge" the Society however did not fail also to serve as a forum for its founders' profession of protest and criticism. Papers read at its platform between 1838 and 1843 included (1) social criticism: "Reform—Civil and Social", "Condition of Hindu Women", "On Polygamy", "Institutions of Hinduism Affecting the Interests of the Female Sex";

[91] *Ibid.*, pp. 93-96.

[92] Moitra, "Hindu Kalej," p. 594.

[93] Datta, *Dirojio O Dirojiyans*, p. 82.

[94] *Bengal Spectator*, No. 15, 1842, as quoted in *ibid.*, p. 84.

[95] For the latter date see *Calcutta Courier* as quoted in Moitra "Hindu Kelaj", p.587, and in. 20 on p. 622.

(2) educational innovations : "On the Importance of cultivating the vernacular Language"; as well as (3) political deliberations: "On the Present Condition and Future Prospect of the Educated Natives", "Present State of the Honourable East India Company's Courts of Judicature and Police".[96] The last paper presented by a prominent Derozian aroused the displeasure of the Hindu College principal, David Richardson, who considered it seditious from the colonialist point of view. We shall refer to the incident with more details in the next section.[97]

III. Orthodox Response to the Derozian Dissent

a. Hinduism

The Hindu orthodoxy in Calcutta, already aroused by Ram Mohan Roy's decade-long attacks in the 1820's, took no time to react fiercely to the radicalism of the Derozians. The fountain-head of this reaction was the Dharma Sabha [the Religious Association] founded in January, 1830, as a countermeasure against Ram Mohan's success in abolishing *sati* and founding the theistic and non-communal Brahma Sabha. In October, 1831, Derozio assessed the strength of the Hindu orthodoxy in the city in these words:

> The Hindoos of Calcutta are divided into several parties, the orthodox being the largest and most opulent. It has several public organs—the Chundrika, the Prabhakar, the Ratnakar, [and] other papers written in Bengallee language.[98]

With the first manifestation of outward change in the life-style of the Hindu College students, a propaganda campaign was launched against Derozio and his radical disciples both verbally and in print. Orthodox organs—the *Samachar Chandrika* and the *Samvad Prabhakar* raised a hue and cry about religion being in danger from the activities of the "atheist beasts" who aped the vagabond "Feringhis" [foreigners][99]. The Dharma Sabha had a nand in bringing about the suppression of the *Parthenon* magazine in February, 1830.[100] Twelve years later the *Bengal Spectator* recollects the circumstances of the *Parthenon's* demise in these words: "The good old man took fright and the sound of alarm was trumpet-

[96]Datta, *Dirojio O Dirojiyans*, pp. 92-93.

[97]*Infra.*, p. 33. Notes, 124 and 125 below.

[98]*East Indian*, Oct. 25, 1831, as quoted in Moitra, "Hindu Kalej," p. 610.

[99]Sarkar in Lal, *Poems*, p. vi.

[100]*Samachar Chandrika*, March 13, 1830. Quoted in Moitra, "Hindu Kalej,", p. 593.

ted by the Chundrica, the organ of the orthodox."[101] A contemporary report explains: "... As the writers were under the guardianship of parents and friends who became alarmed at the propagation of such liberal sentiments as the Parthenon cotained, they interposed their authority to effect its suppression."[102] The *Bengal Spectator* of September 1, 1842, confirms this report: "It [the *Parthenon*] startled the orthodox Hindoos; and their might and influence crushed it in the bud."[103] The Hindu College authorities forthwith prohibited publication of the mischievous magazine, confiscating all copies of its second issue toward the end of February, 1830.

Along with the anti-Hindu propaganda of the Derozian radicals came the organized attack against Hinduism by the spirited missionary Alexander Duff and his associates. The orthodox Hindus of Calcutta became deeply alarmed, and impassioned arguments were advanced in the press, in clubs, as well as in public meetings. The secular teaching of the Hindu College was identified as the root cause of the students' aberration. Many students were withdrawn from the College and many more stopped attending the College under one pretext or another. Frightened, the College management hastened to issue, in 1830, two circulars. The first of which prohibited teachers to hold discussions with students that could be prejudical to Hindu religion and its social practices. Violators were threatened with dismissal. The second circular prohibited the students' "habit of attending Societies at which political and religious discussions are held" under pain of the management's "serious displeasure."[104]

These circulars remained largely dead letter for Derozio and his followers who continued to do things not palatable to the authorities. The orthodox organs also persisted in their campaign against the Hindu College. Then came the extreme reaction. The Directors of the Hindu College held a "Special Meeting" on April 23, 1831, and considered proposals that included the following among others.

> Mr. Derozio being the root of all evils and the cause of public alarm, should be discharged from the College, and all communications betweeen him and the pupils be cut off.

[101]*Bengal Spectator*, 1, 7 (Sept. 1, 1842), quoted in *ibid.*, p. 594. "The good old man" was Bhavani Charan Banerji, the conservative editor of *Samachar Chandrika* (spelt in the quote as 'Chundrica') that served as the Bengali organ of the Dharma Sabha.

[102]*India Gazette* (1830) quoted in Datta, *Dirojio O Dirojiyans*, p. 61.

[103]Quoted in Moitra, "Hindu Kalej," p. 593.

[104]Bagal, *Unabimasa Satabdir Bamla*, pp. 143-44.

> All those students who are publicly hostile to Hindooism and the established custom of the country ... should be turned out.
>
> If any of the boys go to see or attend private lectures or meetings, [they are] to be dismissed.[105]

The management, while refusing to declare Derozio an unworthy teacher, nevertheless decided to dismiss him on the ground of the "present state of Public feeling amongst the Hindoo community of Calcutta. The decision was communicated to Derozio by Horace H. Wilson, the College Committee's vice president, who advised him to resign in advance in order to avoid a forthright order of dismissal. This utterly unfair wish Derozio immediately complied with (April 25, 1831), but not without registering a strong protest. In the resignation letter he questioned the resolution's validity in the absence of a formal trial with a definite charge and a chance for him to present his defense.[106]

The major orthodox charge against Derozio was that he had been corrupting the youth by eroding their attachment to traditional moral and social values through his mischievous teaching.[107] Corrupting the youth ! Here, the old ghost—the famous charge brought against Socrates over two millenia earlier in Greece—was resurrected. The other charge against Derozio was his supposed atheism which he was accused of having transmitted to his pupils. Derozio's own comment on this charge runs as follows: "That I should be called a sceptic and infidel is not surprising, as these names are always given to persons who think for themselves in religion ..."[108] Indeed, Mansur al-Hallaj (A.D. 858-922), Joan of Arc (A.D. 1412-1431), Galileo Galilei (1564-1642), Dara Shikoh (1615-1659), Ram Mohan Roy (1774-1833), Iswar Chandra Vidyasagar (1820-1891), and Kazi Nazrul Islam (1899-1976) were all charged with the same "crime" as Derozio. Atheism was a general charge also against the radical Hindu College youths. Somebody had once reported to Ram Mohan Roy that a student of the College moved from polytheism to deism and thence to atheism.[109] In 1831 the *Samachar Chandrika* reprimanded the disciples of Derozio for their being

[105]Sarkar in Lal, *Poems*, pp. vi-vii; Ghose, *Bidrohi Dirojio*, pp. 71-73; Proceedings of the Hindu College Committee, April 23, 1831, reproduced in Ghosh, p. 140.

[106]Ghose, *Bidrohi Dirojio*, pp. 74-78 ; Datta, *Dirojio O Dirojiyans*, pp. 23-26.

[107]Correspondence between Derozio and Horace H. Wilson, the vice-president of the Hindu College Committee, as reproduced in Bengali translation in Ghose, *Bidrohi Dirojio*, pp. 78-84.

[108]Derozio's letter to Wilson quoted in Sarkar in Lal, *Poems*, p. viii.

[109]Moitra, "Hindu Kalej," p. 618.

nastik or atheists.[110] Alexander Duff also worried about the spread of skepticism and atheism among the "more advanced alumni" of the Hindu College.[111]

The drama was repeated a year later in another Calcutta school where two of Derozio's students were working as teachers. Following the footsteps of their *guru*, Rasik Krishna Mallick and Krishna Mohan Bangerji chose teaching as their profession after they left Hindu College in 1830. They took up teaching positions in the Calcutta School Society's school at Pataldanga while still maintaining their unorthodoxy in food and social behavior. Before long the orthodox took note of it and their leader, Radha Kanta Deb (1784-1867), demanded to know from the school authorities "whether you are determined upon removing those *outcastes* from the school or retaining them to *corrupt the Hindu pupils*."[112] Under constant pressure from the Hindu society, the orthodox Hindu patrons of the school eventually compelled the authorities to dismiss the two malcontents from service.[113]

Much more fanatic was the reaction of Hindu orthodoxy when some of Krishna Mohan's friends threw beef into a Brahman home in August, 1831. Infuriated Hindus of the locality got Krishna Mohan's family to throw him out—a persecution that ultimately led to his conversion to Christianity. Although beef throwing provided an immediate provocation to the orthodoxy, their extreme reaction was in fact the outcome of a longer confrontation between them and the radicals. According to Benoy Ghose, renowned researcher and prominent writer on the Bengal Renaissance, Derozio's dismissal was followed by an unprecedented fury of malicious attacks and counterattacks between the two groups in and outside the press.[114] Krishna Mohan Banerji turned out to be "the most uncompromising denouncer of the national superstition"[115] and kept printing the most severe denigration of Hinduism in the pages of his *Enquirer* magazine that had "set sail in quest of truth and happiness."[116] The orthodox responses were equally fierce. The Dharma Sabha was pounding in anger and "rage of persecution is ... vehement ... Excom-

[110]*Chandrika*, May 2, 1831, quoted in Ghose, *Bidrohi Derojio*, p. 99.

[111]See note 61 above.

[812]Unpublished "Proceedings of the Calcutta School Society (1818-1831)" as quoted in Bagal, *Unabimsa Satabdir Bamla*, p. 178. Emphasis supplied.

[113]*Ibid.*, pp. 178-79.

[114]Ghose, *Bidrohi Dirojio*, pp. 96-106.

[115]Rev. Lall Behary Dey quoted in *ibid.*, p. 101.

[116]The motto of the *Enquirer* as announced in its first issue (May 17, 1831). Quoted in *ibid.*, p. 97.

munication is the cry of the fanatic"—complained Krishna Mohan in the *Enquirer* in July 1830.[117]

The rebels flocked around Krishna Mohan whose home became a rendezvous for them. Then followed the outrageous incident of beef throwing leading to Krishna Mohan's ouster from home. However, he kept encouraging the radicals through his fiery writings in his magazine:

> Persecusion is high for we have deserted the shrine of Hinduism. ... Our conscience is satisfied, we are right; we must presevere. ... If opposition is violent and insurmountable, let us rather aspire to martyrdom than desert a single inch. ...[118]

It is reported that Krishna Mohan's excommunication was actually followed by conspiracies of assassination.[119] It is also reported that parents of some of the defaulting boys throughly beat up their sons and locked them up. Some even attempted to take the lives of their erring offspring with poison.[120]

b. The British in India

A very similar reaction also came from the colonial orthodoxy. Derozio himself was bullied about in September 1831 by a racist Briton, Captain McNaghten, who as editor of the notorious *John Bull* had been adversely criticised by Derozio in his *East Indian*.[121] MacNaghten's chauvinism was in fact a representative attitude of British orthodoxy in India. Another Englishman, Mr. Osborne, during the freedom of press movement in the eighteen-thirties, "contended that the native press ... should not have been set free because it circulated not among the highly civilized but only among the wealthy natives, and that its contents were worthless."[122] Osborne, however, received a prompt and fitting rejoinder

[117]Quoted in *ibid.*, p. 100.

[118]*Enquirer*, quoted in *ibid.*, p. 105.

[119]*Ibid.*, p. 103.

[120]Bagal, *Unabimsa Satabdir Bamla*, p. 143.

[121]Correspondence among different parties regarding this incident was published in the *India Gazette* and has been reproduced in Benoy Ghose, *Selections from English Periodicals of 19th Century Bengal*, Vol. I, (Calcutta: Papyrus, 1978), pp. 48-59. See also Ghose, *Bidrohi Diroji;o*, pp. 108-09.

[122]*Calcutta Monthly Journal*, 1835, as quoted in Bagal, *Unabimsa Satabdir Bamla*, p. 186.

on the spot from Rasik Krishna Mallick, as noted earlier.[123] In early eighteen forties, the Young Bengal in their Society for Acquisition of General Knowledge were, as we have seen, turning more and more critical of British performance in India. This growing political dissent was soon taken note of in the English circles of Calcutta, and the group was grudgingly dubbed as "Chakravarti Faction" after its leader, Tara Chand Chakravarti.

Early in 1843 Tara Chand and Dakshina Ranjan Mukherji experienced a direct confrontation with the Principal of the Hindu College, David L. Richardson. At a session of the Society for the Acquisition of General Knowledge on February 8 in the Hindu College auditorium, Dakshina Ranjan read a paper "On the Present State of the Honourable East India Company's Court of Judicature and Police" that contained the following observation:

> Arms, ammunitions, and bayonets, which are the unfortunate boast of Leaden Hall-Street rule in Hindoosthan, may indeed, inspire terror, but can never win the affections of the people, in this or any other country in the ... world.[124]

As soon as Dakshina Ranjan finished reading up to this point, Richardson rose to interrupt declaring that he "could not permit it [the College Hall] to be converted into a den of treason, and must close the doors against all such things."[125] Tara Chand, as president of the session, took exception to Richardson's interference and retorted immediately:

> Captain Richardson !... I consider your conduct as an insult to the Society, and ... if you do not retract what you have said and make due apology, we shall represent the matter to the committee of the Hindoo College, and if necessary, to the Government itself.[126]

Dakshina Ranjan delivered a short speech in support of Tara Chand. Richardson, who of course had imbibed the liberal and democratic spirit of his own country while ambivalently sharing the imperialist ethos of his countrymen in the colonies, was then obliged to withdraw his comment. However, the Society no longer felt free to use the Hindu

[123] *Ibid.*, pp. 186-87. *Supra*, p. 22. Note 84 above.

[124] *Bengal Hurkaru*, March 2-3, 1843, as quoted in Datta, *Dirojio O Dirojiyans*, p. 105.

[125] The same source quoted in *ibid.*

[126] The same source quoted in *ibid.*, pp. 105-06.

College premises for any future session, and consequently decided to stay away from Richardson's den.[127]

This direct confrontation between the Derozian patriots and a representative of British imperialism produced repercussions in the Calcutta Press. Conservative English papers such as the *Englishman*, the *Friend of India*, and the *Star* rose in unison to deride and condemn the defiant politics of the hated "Chakravarti Faction". They at once denounced Mukherji's paper as highly treasonous wondering at the toleration of the British authorities in India.[128] Later in the year the *Bengal Spectator* disappeared (November 1843) for financial reasons and was probably succeeded by the *Quill*, an enterprise of Chakravarti, which criticised government policies and made Chakravarti very unpopular in government circles.[129] On the other hand, Mukherji's disillusionment was shared by his friend and fellow Derozian, Ram Gopal Ghosh, who lashed out at racist practices in the colonial administration: "Better far to declare openly that India shall be governed, not for the benefit of the governed, but for the sole advantage of the governors.[130] Here is a clear sign of the Young Bengal's eventual disillusionment with British justice and benevolence in India.

c. Christianity and Ram Mohan Roy's followers

The reactions of the Christian and Brahmo orthodoxies to the Derozian dissent were comparatively mild and were mostly confined to disapprovals in newspapers. Alexander Duff and other Christian missionaries remained ambivalent about the Hindu College radicals. While they heartily—sometimes even with glee—welcomed the boys' revolt against Hinduism, they were at the same time worried about their agnostic and atheistic tendencies.[131] Duff regarded the education provided by the Hindu College as dangerously irreligious,[132] and set himself, it seems, to the purpose of eradicating the influence of the Enlightenment from

[127]Bagal, *Unabimsa Satabdir Bamla*, pp. 169-70.

[128]*Ibid.*, p. 170.

[129]Sastri, *Ramtanu Lahidi*, p. 154. See also Bagal, *Unabimsa Satabdir Bamla*, pp. 170-71.

[130]C.C. Biswas, *Speeches of Ram Gopal Ghosh*, as quoted in Datta, *Dirojio O Dirojiyans*, p. 57.

[131]Ghose, *Bidrohi Dirojio*, p. 113.

[132]Duff, *India and India Missions*, p. 608.

the young rationalists of the Hindu College.[133] Hence his fierce resentment at the circulation of Thomas Paine's books—particularly, the *Age of Reason* and the *Rights of Man*—among the students.[134] On the whole, however, Duff cherished the confidence that the rebels of Hinduism will some day seek refuge with Christianity. With this hope he settled himself in a house close to the Hindu College and launched his attacks on Hinduism in consonance with those of the radicals, thus precipitating Hindu reaction against the students.[135]

Duff's hopes were, however, largely frustrated as merely two of Derozio's followers[136] embraced his religion. Duff's colleague, Hill, was however worrying much about Derozio's own salvation when the young rationalist fell ill with cholera in December, 1831. The disease came to kill the victim and, it is reported, Hill took the trouble of visiting the skeptic on his death-bed to enquire whether he considered himself a Christian or not. Derozio replied, as stated above, in the negative reasserting his indecision regarding the ultimate truth or God.[137]

The Derozians' confrontation with Ram Mohan Roy's followers led to an acrimonious dialogue between the *East Indian* and the *Enquirer* on the one hand and the *Reformer* on the other. The Derozians accused the Brahmos of being inconsistent "half-liberals."[138] while the latter denounced the former as "ultra-radicals".[139] Earlier, Ram Mohan himself, when informed that a Hindu College student had turned from a polytheist into a deist and then into an atheist, exclaimed in disgust that next the fellow was going to turn into a "beast".[140]

IV. Conclusion

The Derozian revolt represents the most radical phase of the "Bengal Renaissance". Interposed between two other major phases of that

[133]Note Duff's hostile comments on Paine and the *Philosophes* in *ibid.* pp. 616-18, 629-30.

[134]*Ibid.*, p. 616.

[135]*Ibid.*, "Appendix", pp. 607-84.

[136]Mahesh Chandra Ghosh and Krishna Mohan Banerji. Sarkar in Lal, *Poems*, p. xv.

[137]*Supra*, p. 10. Note 59 above.

[138]*East Indian*, Oct. 25, 1831, as quoted in Moitra, 'Hindu Kalej," p. 611.

[139]Ghose, *Bidrohi Birojio*, pp. 114-15.

[140]Moitra, "Hindu Kalej," p. 618.

renaissance as dominated by the towering personalities of Ram Mohan Roy (1774-1833) and Iswar Chandra Vidyasagar (1820-1891), the Derozian movement was uniquely characterized by youth, plural leadership, pure rationalism and intellectualism. Roy's "protestant" religious reform movement in the twenties and Vidyasagar's "humanist" social reform programme in the fifties were intervened by the Derozians' rationalist attempt to emancipate the intellect. For fifteen years (1828-1843) the young disciples of Derozio fought for liberation of the Indian mind from fetters of traditional irrationalities that characterized such systems as Hinduism and Christianity. They were also able to locate the latest evil that befell India, viz. the colonial rule of Britain; and in this discovery they unmistakably pointed their fingers to the future line of struggle in the subcontinent.

However, the futility of the whole enterprise cannot escape notice. Rootless as it was in India, the shiny bubble disappeared shortly without leaving any tangible legacy. It was rather an abrupt sprouting of the European Enlightenment in colonial Calcutta brought about by Henry Derozio who however did not live long enough to safeguard its growth and fulfilment, Apart from the progenitor's premature death and lack of originality in its content of ideas,[141] the movement also suffered from a number of other shortcomings. It developed an early ambivalence by combining Enlightenment rationalism with its enemy, the English romanticism of early nineteenth century. The disastrous result was their failure to develop any coherent philosophy of change that India could adopt to guide her transformation into a modern nation. The colonial environment of Calcutta was very different from the conditions in Europe that fostered a series of intellectual breakthrough since the Renaissance. The enlightened climate in Europe also helped gigantic political revolutions bring about great changes, whereas in India the nineteenth century witnessed an increasingly deadening colonialism that prevented the Derozian discontent from developing into an effective

[141]Dead at 22, Derozio had not have enough time to develop into a philosopher. As a thinker he was weeded to Enlightenment rationalism that he assiduously transmitted to his young students. For Derozio's encounter with Enlightenment thinkers see Moitra, "Hindu Kalej," p. 619. As a poet, however, Derozio was emphatically romantic, influenced both by the medieval Persian poets (such as Omar Khayyam) as well as contemporary English Romantics like Byron. For influence of the English Romantic poets on Derozio see Verghese, "Derozio's Poetry," in Lal, *Poems*, pp. viii-xiii.

political ideology or movement. Beyond a devastating criticism of Hinduism they had little to offer for a programme of national emancipation.

A second ambivalence that falsified the Derozian's political position originated from the colonial situation in India. On the one hand, they loved Europe for the Enlightenment and particularly England for her democratic culture. On the other hand, the same illumination generated in them a new patriotism that inevitably led them to a dismal frustration at the spectacle of colonial hypocrisies and exploitation perpetrated by the people of the enlightened continent. They failed to reconcile the two realities of English liberalism and British imperialism. They also failed to see any viable alternative to British rule and consequently their patriotism could not grow beyond what can at best be called a moderate criticism of the East India Company's government in India.

Thus, in spite of a brillliant take-off the immediate achievement of the Derozian movement was not as impressive. This urban-centered, highly intellectual movement often conducted in the English language had nothing to do with the common people of India. Their crusade against the age-old but politically powerless Hinduism had to be slowed down at the discovery of the more immediate and vicious an enemy — viz. colonial imperialism—the full implications of which they were yet to grasp. Failing to develop an ideology the Derozians did not produce even a single treatise on any aspect of their thought. In fact, by the time they reached their mid-thirties practically all of them[142] ceased to continue as intellectuals and rather quickly receded into various positions for making a living — strange as it may seem—mainly through jobs in the colonial administration. Indeed the Derozians socially belonged to the urban Hindu middle class that owe its origin and subsistence to the colonial set-up. Therefore, it may be said that the Young Bengal's limitations derived from the colonial situation in the country. It was beyond their power and imagination to alter that reality, and their struggle for freedom was bound to be cut off after an initial period of growth. It was not that much a failure as an eventuality imposed by inevitable circumstances, or by inexorable fate, as they say in India.

The most memorable achievement of the Derozian dissent, however, consisted, as a modern historian has determined, of "a fearless rationalism and a candid appreciation of the regenerating new thought from

[142]Except perhpas the Mitra brothers, Peary Chand and Kisori Chand, who continued to write through the sixties of the nineteenth century. Peary Chand made significant contribution to the development of Bengali prose fiction and his younger brother was a thoughtful essayist and a gifted journalist.

the West."[143] Kisori Chand Mitra (1822-1873), a younger colleague of the Derozians, observed in 1861: "The youthful band of reformers who had been educated at the Hindu College, like the tops of the Kanchangunga, were first to catch and reflect the dawn."[144] Thus although the Young Bengal failed to bequeath a direct legacy, they definitely prepared the ground for the vast humanist struggle of Iswar Chandra Vidyasagar, in the fifties, to emancipate women and transform education. They also set the stage for the appearance of the inconoclast, Michael Madhusudan Datta (1824-1873) who, in early sixties, would shatter the age-old idols in Indian literature to revolutionize Bengali poetry and rejuvenate the language. Indeed, Michael Madhusudan is generally acclaimed as the poet of the Young Bengal. Finally, Derozio and his disciples were among the first in India to impart a deep love for the motherland, and their patriotism, however literary and intellectual it might have appeared, laid a solid foundation for the rise of the great Indian nationalism late in the nineteenth century. In its short, two-phased span the Derozian dissent actually set the pattern for the entire century of educated Hindu response to the challenge of modernity: namely, the phase of struggle for emancipation from religious domination of life, closely followed by that of an urgent realization of the ultimate need to face the problem of foreign occupation of the country.

[143]Sarkar in Lal, *Poems*, p. xvi.
[144]Quoted in *ibid.*

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[10] Sarkar in Tal. Poems, p. xvi.

[11] Quoted in ibid.

A Contrastive Analysis of English and Bengali Phonologies

Md. Shahidullah

1. Introduction

This paper makes a constrastive analysis of English and Bengali phonologies with a view to finding out the problem areas for the speakers of Bengali in the pronunciation of English.

What accounts for the difficulties of the Bengali speakers in pronouncing English are some fundamental differences between English and Bengali phonologies. Bengali has equivalent consonant and vowel phonemes for most English phonemes. The Bengali equivalents have the same or almost the same accoustic effects as their corresponding English sounds. The Bengali speakers do not have much trouble in hearing and identifying English sounds. But they have problems in producing English sounds with an English accent. This is mainly because of the fact that many Bengali sounds have different places and manners of articulation from their corresponding English sounds and the Bengali speakers are not aware of these differences. They use the Bengali equivalents to produce English sounds and the accoustic effect is a Bengali one.

There are some other major differences between English and Bengali. English phonological rules, rules of elision and assimilation in English are different from those in Bengali. There are fundamental differences in the stress patterns of English and Bengali. It is difficult for the Bengali speakers to pronounce English correctly without a clear knowledge of the phonological rules and stress patterns of English.

This paper makes a detailed comparison and contrast between English and Bengali phonologies, lists some of the phonological rules of English, analyses the difference between English and Bengali stress patterns and deals with some aspects of the lexical and syntactic stresses of English and Bengali to develop an awareness in the students about correct English pronunciation. A clear analysis of these differences and similarities is made to help students use the rules of English phonology and phonetics and thereby to enable them to pronounce English correctly.

Bengali has more vowel and consonant phonemes than English. But, as this paper aims at the teaching of English pronunciation, only the Bengali equivalents of the English phonemes are compared and contrasted and if there is no equivalent of any English sound in Bengali, the substitutions that are made for it are compared and contrasted.

Two sample lessons are also planned for the teaching of English pronunciation.

2. Comparison between English and Bengali Consonant Phonemes

A. PHONEMIC DIFFERENCE

(i) Consonants of English

English has twentyfour consonant sounds. The consonant sounds of English have different places and manners of articulation. According to the different places of articulation English consonant sounds are divided into bilabial, labio-dental, dental, alveolar, post-alveolar, retroflex, palato-alveolar, palatal, vellar and glottal sounds. According to the different manners of articulation English consonant sounds are divided into nasals, stops, fricatives, affricatives, laterals and frictionless continuants.

The following list gives a detailed analysis of the consonant phonemes in English.

1. **Stops**
   - (a) bilabial : /p/, is a voiceless bilabial stop
     /b/, is a voiced bilabial stop
   - (b) alveolar : /t/, is a voiceless alveolar stop
     /d/, is a voiced alveolar stop
   - (c) vellar : /k/, is a voiceless vellar stop
     /9/, is a voiced vellar stop

2. **Nasals**
   - (a) /m/ bilabial : English /m/ is a bilabial nasal consonant phoneme.
   - (b) alveloar : English /n/ consonant phoneme is an alveolar-nasal sound.
   - (c) vellar : English /ɔ/ consonant phonome is a vellar nasal sound.

   All nasals are voiced.

3. **Fricatives**

(a) labio-dental : /f/, is a voiceless labio-dental fricative
/v/, is a voiced labio-dental fricative

(b) dental : /θ/, is a voiceless dental fricative
/ð/, is a voiced dental fricative

(c) alveolar : /s/, is a voiceless alveolar fricative
/z/, is a voiced alveolar fricative

(d) palato-alveolar : /ʃ/, is a voiceless palato-alveolar fricative
/ʒ/, is a voiced palato-alveolar fricative

(e) glottal : /h/, is a voiceless glottal fricative.

4. **Affricatives**

palato-alveolar : /tf/, is a voiceless palato-alveolar affricative
/d3/, is a voiced palato-alveolar affricative

5. **Lateral**

/l/, is a voiced alveolar lateral

6. **Frictionless continuant**

/r/, is a post-alveolar frictionless continuant. It is a voiced sound.

7. **Glides**

palatal : /j/, is a voiced palatal glide
labio-vellar : /ω/, is a voiced labio-vellar glide.

(ii) **Consonants of Bengali**

Bengali has 35 consonant phonemes. Many of these consonant phonemes go in pairs as voiceless and voiced phonemes with the same place and manner of articulation and in most cases each of the voiceless or voiced phonomes goes in pairs as aspirates or non-aspirates. According to the manner of articulation the Bengali consonants can be divided into 6 categories as follows:

(1) **Stops :** Bengali has 16 stops—/p/, /ph/, /b/, /bh/, /t/, /th/, /d/, /dh/, /ṭ/, /ṭh/, /ḍ/, /ḍh/, /k/, /kh/, /9/, /9h/. Of these 16 stops 8 are voiceless. They are /p/, /ph/, /t/, /th/, /ṭ/, /ṭh/, /k/, /kh/. Again, 4 of these voiceless phonemes are aspirates and four others are non-aspirates. The aspirated ones are /ph/, /th/, /ṭh/, & /kh/ and the unaspirated ones are /p/, /t/, /ṭ/, & /k/. Similarly the voiced stops have aspirated and non-aspirated forms. The voiced non-aspirates are, /b/, /d/, /ḍ/ & /9/ and the voiced aspirates are /bh/, /dh/, /ḍh/ & 9h/. The stops are bilabial, dental, retroflex and vellar stops.

(2) **Nasals :** Bengali has 4 nasal phonomes — /m/, /n/, /ṅ/, /9/. The /m/ phoneme is a bilabial nasal, the /n/ is a dental/alveolar nasal, /ṅ/ is a retroflex nasal and /ɔ/ is a vellar nasal. All are voiced.

(3) **Fricatives :** Bengali has 5 fricatives — /S̲/, /ˌS/, /ʃ/, /ɹ/, and /h/. The first 4 are sibilants and are respectively dental/alveolar, retroflex, palatal and dental/alveolar sounds. /h/ is a glottal fricative. All are voiceless sounds.

(4) **Affricatives :** Bengali has 4 affricatives—/tʃ/, /tʃh/, /d3/, /d3h/ The first two are non-aspirated and aspirated voiceless palatal affricatives respectively and the last two are non-aspirated and aspirated voiced palatal affricatives.

(5) **Flaps :** There are 3 flaps in Bengali — /r/, /ṛ/ and /ṛh/. The first one is a dental/alveolar flap and the second and third ones are respectively non-aspirated and aspirated retroflex. All are voiced. This / / is the same as the international phonetic symbol /r/.

(6) **Lateral :** The only lateral /1/ in Bengali is a dental/alveolar sound. It is voiced.

Some linguists are of the opinion that the Bengali strongly aspirated voiceless and voiced stops are compound sounds made up of stops+h (glottal fricative). But in Bengali, the aspirates are really single phonemes.

Bengali /ṭ/, /ḍ/ and /ṛ/ are the same as the international phonetic symbols, /t/, /d/ and /r/.

The Consonant Phonemes of English

p^h			t^h		k^h	
b			d		9	
				tʃ		
				d3		
	f	θ	s	ʃ		
	v	ð	z	3		h
m		n			ɔ	
		l				
			ɹ			
ω				j		

The Consonant Phonemes of Bengali

p	t	ṭ			K
ph	th	ṭh			kh
b	d	ḍ			9
bh	dh	dh			9h
			tʃ		
			tʃh		
			d3		
			d3h		
	S	ˌS	ʃ		h
m	n	ṅ		ɔ	
	j	r ṛ			
		ṛh			
		l	Y		

Table of English Consonant Phonemes

	Bilabial	Labiodental	Dental	Alveolar	Post-alveolar	Retroflex	Palato-alveolar	Palatal	Vellar	Uvular	Glottal
Stops	p, b			t, d					k, ɡ		
Affricates							tʃ, d3				
Nasals	m			n					ŋ		
Rolls											
Flap											
Lateral				*l*							
Fricatives		f, v	θð	s, z			ʃ, 3				h
Glides	(ω)							j	(ω)		
Frictionless Continuant					r						

Table of Bengali Constant Phonemes

		labial	dental	alveolar	retroflex	palatal	vellar	glottal
Stops	Voiceless	p, ph	t, th		ṭ, ṭh		k, kh	
	Voiced	b, bh	d, dh		ḍ, ḍh		ɡ, ɡh	
Liquids	nasals	m	(n)	(n)	ṅ		ŋ	
	flaps		(r)	(r)	ṛ, ṛh			
	laterals		(*l*)	(*l*)				
	Fricative		(s), j	(s)	s	ʃ		h
	affricates					tʃ, tʃh d3, d3h		
	glide					Y		
	Frictionless Continuant							

(iii) Comparison of English Consonant Phonemes and their Bengali Equivalents

Bengali has equivalent consonant sounds for almost all the English consonant phonemes except the voiced palato-alveolar /3/ sound for which a substitutions are used. Some Bengali equivalents have the same places and manners of articulation as the corresponding English consonant phonemes. So, they are accoustically the same as the corresponding English sounds. But some other Bengali equivalents have different places or manners of articulation than the corresponding English sounds. So, they are accoustically slightly different also.

In the following analysis, the similarities and differences between the English Consonant phonemes and their Bengali equivalents are explained.

1. **Stops**

   (a) Bengali equivalents /p/ and /b/ are voiceless and voiced bilabial stops exactly like the corresponding English voiceless and voiced bilabial stops /p/ and /b/.

   (b) Bengali equivalents /ṭ/ and /ḍ/ are voiceless and voiced retroflex stops quite unlike their corresponding English phonemes, voiceless and voiced alveolar stops /t/ and /d/.

   (c) Bengali voiceless and voiced vellar stops /k/ and /9/ are exactly the same as the corresponding English voiceless and voiced vellar stops, /k/ and /9/.

2. **Fricatives**

   (a) The Bengali equivalents /ph/ and /Bh/ are voiceless and voiced bilabial stops quite unlike their corresponding English sounds, voiceless and voiced labio-dental fricatives /ð/ and/v/. They are slightly different accoustically, but the closest sounds that Bengali has to these fricatives.

   (b) Bengali /th/ and /d/ consonant sounds are voiceless and voiced dental stops unlike their corresponding English phonemes /θ/ and /ð/, which are voiceless and voiced dental fricatives.

   (c) Bengali /S̲/ and /j/, voiceless and voiced dental/alveolar fricatives are similar to English voiceless and voiced alveolar fricatives /s/ and /z/.

   (d) Bengali voiceless palato alveolar fricative /ʃ/ is the same as the corresponding English voiceless palato alveolar fricative /ʃ/.

But the English voiced palato-alveolar fricative /3/ has no equivalent sound in Bengali. It is substituted by voiced dental/ alveolar fricative /j/. The accoustic effect is quite different. For example:

English word, pleasure=/pɭɛ3ə=/pɭɛjar/ (in Bengali).

(e) Bengali voiceless glottal fricative /h/ is the same as its corresponding English voiceless glottal fricative /h/.

3. **Affricatives :** Bengali voiceless and voiced palato-alveolar affricatives are exactly the same as English voiceless and voiced palato-alveolar affricatives.

4. **Nasals :** Bengali voiced bilabial, alveolar and vellar nasals /m/, /n/ and /ɒ/ are exactly the same as English voiced bilabial, alveolar and vellar nasals /m/, /n/ and /ɒ/.

5. **Lateral :** Bengali voiced dental/alveolar lateral /1/ is the same as its corresponding English voiced alveolar lateral /1/ consonant phoneme.

6. **Frictionless Continuant :** Bengali equivalent /ɾ/, of the English post-alveolar frictionless continuant /r/, is a dental (post-dental) alveolar flap. Their accoustic effects are also slightly different.

7. **Glides :** Bengali voiced labio-vellar glide /ω/ is exactly the same as English voiced labio-vellar glide /ω/.
Again, Bengali voiced palatal glide /y/ is equivalent to English voiced palatal glide /j/.

(a) In some sources Bengali /tʃ/, /ʃh/, /d3/, and /d3h/ phonemes are described as stops, not as affricatives and the symbols c, ch, J, Jh are used for these stops. (Ferguson & Chowdhury, 1960 and Hai & Ball, 1961). It is true that in standard colloquial Bengali of West Bengal and Bangladesh they tend to be stops, but in some other Bangladeshi dialects they are affricatives, and in some other dialects they are fricatives. When they are used as stops, their accoustic effects are different from the English affricatives /tʃ/ and /d3/. So, some Bengali speakers have genuine problems with English affricative sounds /tʃ/, /d3/.

(b) Bengali speakers confuse the alveolar and palato alveolar fricatives. They confuse /s/ and /ʃ/ and also /z/ and /d3/. They use /J/ for English /z/ and /d3/. Sometimes, they use /s/, /J/ and /z/ for /3/.

(c) The sounds /ω/ and /j/ are existent in Bengali. But in colloquial Bengali, these glides are hardly used. Sometimes the Bengali speakers miss /ω/ and /j/. For example,

The Bengali Equivalents of the English Phonemes and a description of both

English Phonemes	Descriptions	≈ / =	Bengali Equivalents	Substitutions	Descriptions
p^h	Voiceless bilabial stop	≈	p		Voiceless bilabial stop
b	Voiced bilabial stop	=	b		Voiced bilabial stop
t^h	Voiceless alveolar stop	≈	ṭ		Voiceless retroflex stop
d	Voiced alveolar stop	≈	ḍ		Voiced retroflex stop
k^h	Voiceless vellar stop	≈	k		Voiceless vellar stop
g	Voiced vellar stop	=	*g*		Voiced vellar stop
f	Voiceless labio-dental fricative	≈	ph		Voiceless (strongly aspirated bilabial stop
v	Voiced labio-dental fricative	≈	bh		Voiced (aspirated) bilabial stop
θ	Voiceless dental fricative	≈	th		Voiceless aspirated dental stop
ð	Voiced dental fricative	≈	d		Voiced dental stop
s	Voiced alveolar fricative	≈	s n		Voiceless dental/alveolar fricative

English Phonemes	Description	≈/=	Bengali Equivalents	Substitutions	Description
z	Voiced alveolar fricative	=	j		Voiced dental/alveolar fricative
ʃ	Voiceless palato-alveolar fricative	=	ʃ		Voiced palato-alveolar fricative
3	Voiced palato-alveolar fricative	—	———	s, J, z	Voiced dental/alveolar fricative
h	Voiceless glottal fricative	=	h		Voiceless glottal fricative
tʃ	Voiceless palato-alveolar affricatives	=	tʃ		Voiceless palato-alveolar affricatives
d3	Voiced palato alveolar affricatives	=	d3		Voiced palato-alveolar affricatives
m	Voiced bilabial nasal	=	m		Voiced bilabial nasal
n	Voiced alveolar nasal	=	n		Voiced alveolar (dental) nasal
ŋ	Voiced vellar nasal	=	ŋ		Voiced vellar nasal
l	Voiced alveolar lateral	=	*l*		Voiced alveolar (dental) lateral
r	Voiced Post-alveolar frictionless Continuant	≈	r		Voiced alveolar (Post-dental) flap
j	Voiced palatal glide	=	Y		Voiced palatal glide
ω	Voiced labio-vellar glide	=	ω		Voiced labio-vellar glide

In case of /j/ two seperate vowels are used.

(d) Bengali speakers confuse /h/ sound with /ω/ sound. They use /h/ in 'where', 'when', 'why', 'what' and 'which'.

They use, where =hʋiə (r), not ωɛr
when =hʋ'ɛn, not ωɛn
why =hvaɪ, not ωaɪ
what =hat, not ωɒt
which =hvɪtʃ, not ωɪtʃ

(e) In Bengali /pʰ/, /tʰ/, /kʰ/, /f/, /v/, /θ/, /ð/, /z/, /ʒ/, /ω/, /j/ are non-existent. Some substitutions are made, but the substitutions are different in place and manner of articulation which sometimes lead to confusion.

English (ph), and (kʰ) are aspirates, but Bengali (p⁼) and (k⁼) are unaspirated. But they are equivalents because they have other features in common — both are bilabials, stops and voiceless.

Bengali (ṭ) and (ḍ) are considered equivalents to English /th/ and /d/, because they have the same manner of articulation—they are stops. Their accoustic effects also are almost the same. Therefore, they are considered equals.

Bengali (ph), (bh), (th), (d) are considered phonetically equivalent to English (f), (v), (θ), and (ð), because Bengali has no labio-dental and dental fricatives. But (ph), & (bh) are close to the place of the articulation of (f), and (v). Moreover when the stops are followed by strong aspirations, they sound like fricatives. Hence, they are considered equivalents. (th) has the same place of articulation as (θ), and the release of (th) with strong aspiration is like a fricative. Therefore (th) is regarded as equivalent to (θ). As there is no dental fricative in Bengali, dental stop (d) is used as equivalent to English (ð), This is done also because, they have the same place of articulation and both are voiced.

Some linguists say that Bengali (ph), (bh), and (th) sometimes cause friction and are exactly the same as English (f), (v) and (θ) (Chatterjee, 1928).

Bengali has no (3) sound, but it uses (j) sound as substitution, because both are voiced, both are fricatives and are very close in place of articulation.

Bengali post-dental or alveolar flap is used as an equivalent to English post alveolar frictionless continuant /r/, because they are close in place of articulation, though not the same and because, flap and frictionless continuant have some similarities. Therefore, they are considered equals.

Other English consonant sounds have phonetically the same equivalents in Bengali.

B. Phonetie Differences

Some of the Bengali equivalents of the English consonant sounds are phonetically the same as their corresponding English sounds, but some others are slightly or greatly different. The followiug analysis show the phonetic similarities or differenes between English consonant sounds and their Bengali equivalents.

	English Consonant Sounds	=/≈		Bengali Equivalents
p^h	Voiceeless aspirated bilabial stop	≈	p	Voiceless unaspirated bilabial stop
b	Voiced bilabial stop	=	b	Voiced bilabial stop
t^h	Voiceless aspirated alveolar stop	≈	t	Voiceless unaspirated retroflex stop
d	Voiced alveolar stop	≈	ḍ	Voiced retroflex stop
k^h	Voiceless aspirated vellar stop	≈	k	Voiceless unaspirated vellar stop
ɡ	Voiced vellar stop	=	ɡ	Voiced vellar stop
m	Voiced bilabial nasal	=	m	Voiced bilabial nasal
n	Voiced alveolar nasal	=	n	Voiced alveolar nasal
ŋ	Voiced vellar nasal	=	ŋ	Voiced vellar nasal
f	Voiceless labio-dental fricative	≈	ph	Voiceless aspirated bilabial stop
v	Voiced labio-dental fricative	≈	bh	Voiced aspirated bilabial stop
θ	Voiceless dental fricative	≈	th	Voiceless aspirated dental stop
ð	Voiced dental fricative	≈	d	Voiced dental stop
s	Voiceless alveolar fricative	=	s	Voiceless dental/alveolar fricative
z	Voiced alveolar fricative	=	j	Voiced alveolar fricative
ʃ	Voiceless palato-alveolar fricative	=	ʃ	Voiceless palato alveolar fricative
3	Voiced palato-alveolar fricative	=	ra	Voiced alveolar fricative
tʃ	Voiceless palato-alveolar affricative	=	tʃ	Voiceless palato-alveolar affricative
d3	Voiced palato-alveolar affricative	=	d3	Voiced palato-alveolar affricative
h	Voiceless glottal fricative	=	h	Voiceless glottal fricative
l	Voiced alveolar lateral	=	l	Voiced alveolar lateral
r	Voiced post-alveolar frictionless continuant	≈	ɾ	Voiced post-dental/alveolar flap
j	Voiced palatal glide	=	Y	Voiced palatal glide
ω	Voiced labio-vellar glide	=	ω	Voiced labio-vellar glide.

A Distinctive Feature Matrix for the Consonants of English

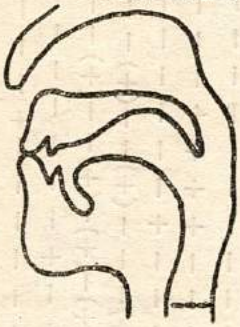
Distinctive Feature	p	b	t	d	k	ɡ	tʃ	dʒ	f	v	θ	ð	s	z	ʃ	ʒ	h	m	n	ŋ	j	ɰ	l	r
Consonant	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Voice	−	+	−	+	−	+	−	+	−	+	−	+	−	+	−	+	−	+	+	+	+	+	+	+
Stop	+	+	+	+	+	+	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−
Aspirated	+	−	+	−	+	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−
Affricate	−	−	−	−	−	−	+	+	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−
Fricative	−	−	−	−	−	−	−	−	+	+	+	+	+	+	+	+	+	−	−	−	−	−	−	−
Sibilant	−	−	−	−	−	−	−	−	−	−	−	−	+	+	+	+	−	−	−	−	−	−	−	−
Nasal	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	+	+	+	−	−	−	−
Glide	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	+	+	−	−
Lateral	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	+	−
Resonant	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	+	+	+	−	−	+	+
Labial	+	+	−	−	−	−	−	−	+	+	−	−	−	−	−	−	−	+	−	−	−	+	−	−
Dental	−	−	−	−	−	−	−	−	+	+	+	+	−	−	−	−	−	−	−	−	−	−	−	−
Alveolar	−	−	+	+	−	−	+	+	−	−	−	−	+	+	+	+	−	−	+	−	−	−	+	−
Palatal	−	−	−	−	−	−	+	+	−	−	−	−	−	−	+	+	−	−	−	−	+	−	−	−
Vellar	−	−	−	−	+	+	−	−	−	−	−	−	−	−	−	−	−	−	−	+	−	+	−	−
Glottal	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	+	−	−	−	−	−	−	−

A Distinctive Feature Matrix for the Consonants of Bengali

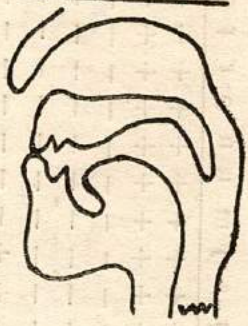
Distinctive Feature	p	ph	b	bh	ṭ	ṭh	ḍ	ḍh	ṭ	ṭh	ḍ	ḍh	k	kh	ɡ	ɡh	tʃ	tʃh	dʒ	dʒh	ṣ	s	ʃ	m	n	ṅ	ɲ	r	ṛ	ṛh	l	Y	j	h	ə
Consonant	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Voice	−	−	+	+	−	−	+	+	−	−	+	+	−	−	+	+	−	−	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	−	−
Stop	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−
Aspirated	−	+	−	+	−	+	−	+	−	+	−	+	−	+	−	+	−	+	−	+	−	−	−	−	−	−	−	−	−	+	−	−	−	−	−
Affricative	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	+	+	+	+	−	−	−	−	−	−	−	−	−	−	−	+	−	−	−
Fricative	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	+	+	+	−	−	−	−	−	−	−	−	+	−	−	−
Sibilant	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	+	+	+	−	−	−	−	−	−	−	−	+	−	−	−
Nasal	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	+	+	+	+	−	−	−	−	−	−	−	−
Glide	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	+	−	−	−	+
Lateral	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	+	−	−	−	−
Resonant	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	+	+	+	+	−	−	−	−	−	−	−	−
Labial	+	+	+	+	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	+	−	−	−	−	−	−	−	−	−	−	(+)
Dental	−	−	−	−	+	+	+	+	−	−	−	−	−	−	−	−	−	−	−	−	(+)	−	−	−	(+)	−	−	(+)	−	−	(+)	−	(+)	−	−
Alveolar	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	(+)	(+)	(+)	(+)	(+)	−	(+)	−	(+)	−	−	(+)	−	−	(+)	−	(+)	−	−
Palatal	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	+	+	+	+	−	−	+	−	−	−	−	−	−	−	−	+	−	−	−
Vellar	−	−	−	−	−	−	−	−	−	−	−	−	+	+	+	+	−	−	−	−	−	−	−	−	−	−	−	+	−	−	−	−	−	−	(+)
Glottal	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	+	−
Flap	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	−	+	+	+	−	−	−	−	−
Retroflex	−	−	−	−	−	−	−	−	+	+	+	+	−	−	−	−	−	−	−	−	−	−	−	−	−	−	+	−	−	+	+	−	−	−	−

Comparison between English consonants and their Bengali equivalents or substitutes in figures.

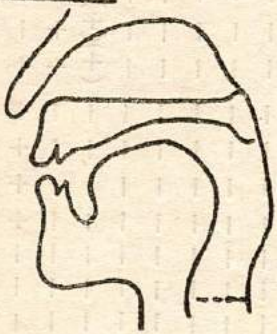
1. English /p^h/ and Beng /p/.



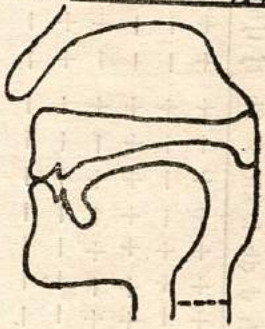
2. Eng /b/ and Beng /b/.



3 (a) English /t/.

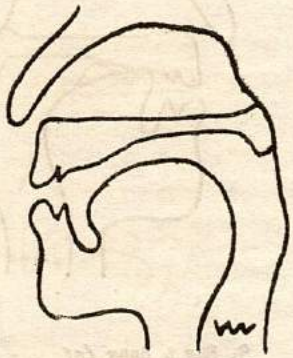


3 (b) Beng equivalent /t^h/.

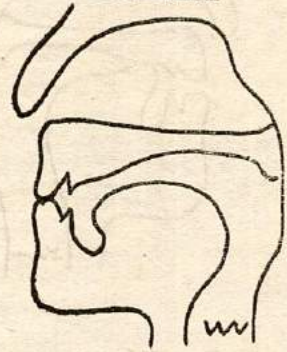


The figures show the comparison between English and Bengali sound with respect to places and manners of articulation. The dotted even lines and the uneven lines at the vocal cord indicate voicelessness and voicing respectively.

4 (a) English /v/.



4 (b) Bengali /Bh/.



5 (a) English /θ/.

5 (b) Bengali /th/.

6 (a) English *f*.

6 (b) Bengali /d/.

7 (a) Eng. /t/.

7 (b) Beng. /t̪/.

8. Eng. /d/ & Beng. /d̪/.

9. Eng. & Beng. /a/

10. Eng. & Beng. /ɔ/

11. Eng. & Beng. /ʃ/.

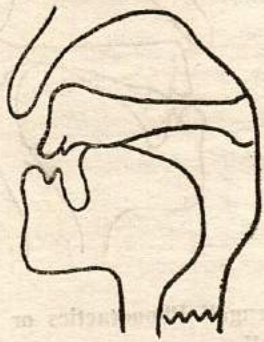
In 7(b) the dotted lines shows the place of Bengali /t̪/ and the unbroken line shows English /t/, as shown in 7(a).

In figure 8 the dotted line shows the place of Bengali /d̪/ and the unbroken line shows the place of English /d/.

12. Eng. /ʒ/

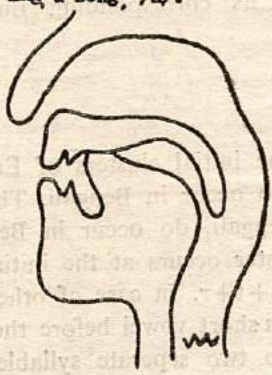
13. Eng. & Beng. /tʃ/.

14. Eng. & Beng. /dʒ/.

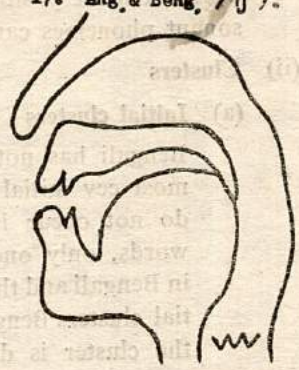


15. Eng. & Beng. /n/.

16. Eng. & Beng. /n/.



17. Eng. & Beng. /ŋ/.



18. Eng. & Beng. /ɯ/.

19. Eng. & Beng. /ɟ/.

20. Eng. Beng. /k/.

21. Eng. & Beng. /g/.

C. Comparison between English and Bengali Phonotactics or Phonotactic difference between English and Bengali

(i) Position

The Bengali Equivalents of the English consonant phonemes can occur in most positions where its corresponding English consonant phonemes can occur.

(ii) Clusters

(a) Initial clusters

Bengali has not got all the initial clusters of English. But most ccv initial clusters do occur in Bengali. The few that do not occur in pure Bengali, do occur in Bengali loan words, only one cccv cluster occurs at the initial position in Bengali and that one is s+t+r. In case of other cccv initial clusters Bengali takes a short vowel before the word and the cluster is divided into two seperate syllables. English

The Phonotactics of English consonants Phonemes and their Bengali Equivalents

I. Position

English Consonant	Bengali Equivalent/ (substitution)	Position					
		World Initial		World Medial		World Final	
		English	Bengali	English	Bengali	English	Bengali
p	p	√	√	√	√	√	√
b	b	√	√	√	√	√	√
t	ṭ	√	√	√	√	√	√
d	ḍ	√	√	√	√	√	√
k	k	√	√	√	√	√	+
ɡ	ɡ	√	√	√	√	√	√
f	ph	√	√	√	√	√	√
v	bh	√	√	√	√	√	√
θ	th	√	√	Rare	√	√	√
ð	d	√	√	√	√	√	√
s	s	√	√	√	√	√	√
z	j	√	√	√	√	√	√
ʃ	ʃ	√	√	√	√	√	√
3	j	Rare	√	√	√	Rare	√
h	h	√	√	√	√	√	√
tʃ	tʃ	√	√	√	√	√	√
d3	d3	√	√	√	√	√	√
m	m	√	— √	√	√	√	√
n	n	√	— √	√	√	√	√
ŋ	ŋ	No	— No	√	√	√	Rare
l	l	√	√	√	√	√	√
r	r	√	— √	√	√	No	√
j	Y	√	√	√	√	No	√
ω	ω	√	√	√	√	No	√

word 'splendid', for example, is pronounced by Bengali speakers as /ɪ/s-plɛndɪd/or the English word 'spring' is pronounced as /ɪs-pring/by most Bengali speakers.

(b) **Final clusters**

Bengali has no final clusters. In case of more than one consonant sounds at word finals, Bengali words end with a vowel sound. The following examples will clarify this point. The word 'bk*l*antɔ (untiring)' ends with vowel (ɔ), it does not end with /nt/ cluster, the word t*l*hidrɔ (hole) also ends in /ɔ/.

But absence of final cluster does not impose any difficulty to pronounce final English clusters.

II. Consonant Clusters in English and Bengali

a) Initial Clusters

In English all consonants occurs in cv (consonant vowel) form in initial position only except /ɔ/ and /ʒ/. Bengali does not have a /ʒ/ sound, and /ɔ/ does not occur at initial position in Bengali.

In ccv (consont, consonant, vowel) clusters both English and Bengali have many clusters.

English initial clusters	Bengali initial clusters
p + *l*, r, j	p + *l*, r, j (l, only in loan words)
t + r, j, ω	t + r, j
k + *l*, r, j, ω	k + *l*, r, j (j, only in loan words)
b + *l*, r, j	b + r, j
d + r, j, ω	d + r (only in loan words)
g + *l*, r, j, ω	*g* + *l*, r, j
m + j	m + j
n + j	n + j
l + j	*l* + j
f + *l*, r, j	*f* + —
v + j	v + —
θ + r, j, ω	θ + —
s + *l*, ṡ j, ω, p, t, k, m, n, *f*	s + *l* (*rare*), j, ω, p, k, m, n
ʃ + r	ʃ + r
h + j	h + —
cccv initial clusters in English	**cccv initial cluster in Bengali**
s + p + *l*, r, j	s + p + —
s + t + r, j	s + t + r
s + k + *l*, r, j, ω	s + k + —

b) Final Clusters

There are many final clusters in English, but Bengali does not have any final cluster. Bengali have vc endings but no cc(c) endings. Consonant clusters at word endings take vowels after them.

English final clusters	Bengali final clusters
i. vcc (vowel, consonant, consonant cluster :	Bengali does not have final clusters.
p + t, θ, s	
t + θ, s	
k + t, s	
b + d, z	
d + z	
ɡ + d, z	
tʃ + t	
d3 + d	
m + p, d, *f*, θ, z	
n + t, d, tʃ, d3, θ, s, z	
ŋ + k, d, z	
l + p, t, k, b, d, tʃ, d3, m, n, *f*, v, θ, s, z	
f + t, θ, s	
v + d, z	
θ + t, s	
f + d, z	
s + p, t, k	
z + d	
ʃ + t	
3 + d	

Final cluster

English	Bengali
ii. vcc (cluster at word Final	None
p + t, θ + s	
t + θ + s	
k + t, + s	
m + p, *f* + s	
n + t, θ + s	
ŋ + k, + s	
l + p, t, k, *f*, θ + s	
f + t, θ + s	
s + p, t, k + s	
p + s + t	
t + s + t	
k + s + t	
d + s + t	
m + p + t	
n + s, tʃ, + t	
ŋ + s, k + t	
l + s, p, k, tʃ + t	
s + p, k + t	
n + d + z	
l + b, d, m, n, v, z	
n + d3, z + d	
l + d3, m, v + d	
k + s + θ	
n + t + θ	
ŋ + k + θ	
l + *f* + θ	

Final clusters

III. Vccc : English has Vccc clusters also, though it occurs rarely. It sometimes occurs as the result of a suffixation of a /t/ or /s/ morpheme to Vccc.

The words life "prompts, exempts, glimpsed, nulcts, sculpts, twelfths, texts, sixths, thousandths" are some of the examples of Vccc find clusters in English.

Bengali speakers have some troubles with sk, sp, st, ʃt initial, ft, vd, lp final and medial rd, rb, rts, rp, rt, rth, dz, ns, nts, ntʃ, sw, dw, tw, nd, nt final clusters.

3. Comparison of English and Bengali Vowels

A. ENGLISH VOWELS

English has twelve vowel and eight dipthong phonemes. Of the 12 vowel sounds, four are front, another four are central and the other four are back vowels. Most English vowels are pronounced further back into the vowel quadralateral. The front and central vowels in English are pronounced with unrounded lips, but the back vowels are pronounced with rounded lips English has open, half-open, half-close and close vowels. The dipthongs also are open, half-open, half-close and close dipthongs in English and they are front, central and back dipthongs also. The front and central dipthongs are pronounced with unrounded lips and the back dipthongs are pronounced with rounded lips.

Front Vowels

/i/, /I/, /ɛ/ and /æ/ are front vowels in English. All the four vowels are pronounced with unrounded lips. Of these four vowels, /i/ is a close, /I/ is a half-close, /ɛ/ is a half-open and /æ/ is an open vowel.

Central Vowels

/a/, /ʌ/, /3/ and /a/ are central vowels in English. All these centra vowels are pronounced with unrounded lips. The /a/ is an open, /ʌ/ is a half-open, /ə/ is a half-close and /3/ is a close vowel.

Back Vowels

English vowels /a/, /ɔ/, /ʏ/ and /u/ are back vowels. These vowels are pronounced with rounded lips. Of these four, /a/ is an open, /ɔ/ is a half-open, /ʏ/ is a half-close and /u/ is a close vowel.

Dipthongs

The English /iə/ is a close front centring dipthong with unrounded lips.

/ɛə/ is a front middle centring dipthong with unrounded lips.

/ɛɪ/ is a front half-open rising dipthong with unrounded lips.

/aɪ/ is a central, open rising dipthong with unrounded lips.

/aʊ/ is a central open rising dipthong with unrounded lips.

/ɔɪ/ is a back half-close rising dipthong with rounded lips.

/ʊə/ is a back close centring dipthong with rounded lips.

/oʊ/ is a central middle rising dipthong with rounded lips.

Approximate position of English vowels and dipthongs

Vowels: Eng. /i/ = Cardinal vowel i

Eng. /I/ = Cardinal vowel e

Eng. /ɛ/ = Cardinal vowel ɛ

Eng. /æ/ = Cardinal vowel a

Eng. /ʌ/ = Cardinal vowel ɐ

Eng. /ɒ/ = Cardinal vowel ɐ

Eng. /ɔ/ = Cardinal vowel ɔ

Eng. /ʊ/ = Cardinal vowel o

Eng. /u/ = Cardinal vowel u

Eng. /ɜ/ = Cardinal vowel e o

Eng. /ə/ = Cardinal vowel e o

Eng. /a/ = Cardinal vowel a

Dipthongs

Eng. /ɪə/ = Cardinal vowel i

Eng. /ɛə/ = Cardinal vowel e

Eng. /ɛɪ/ = Cardinal vowel ɛ

Eng. /aɪ/ = Cardinal vowel a a

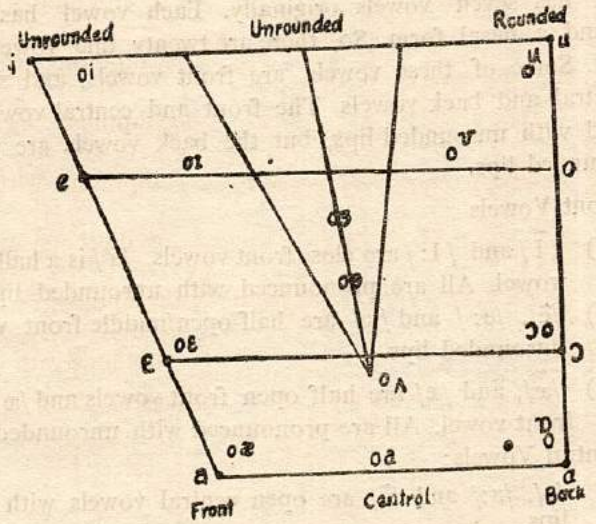
Eng. /aʊ/ = Cardinal vowel a

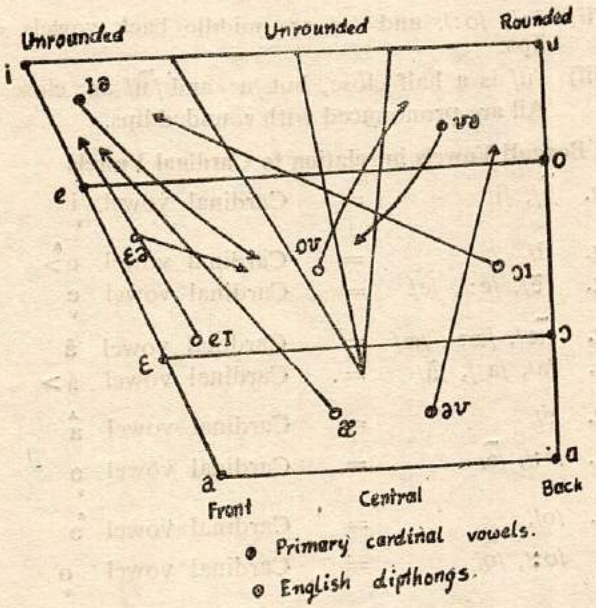
Eng. /ɔɪ/ = Cardinal vowel ɔ

Eng. /ʊə/ = Cardinal vowel o

Eng. /oʊ/ = Cardinal vowel { e o ; ɛ ɔ }

Vowels of English





B. Bengali Vowels

Bengali has seven vowels originally. Each vowel has a long, a short and a nasal form. So, there are twenty one vowels sounds in Bengali. Some of these vowels are front vowels, and some others are central and back vowels. The front and central vowels are pronounced with unrounded lips, but the back vowels are pronounced with rounded lips.

(a) Front Vowels

(i) /$\tilde{\text{I}}$/ and /I:/ are close front vowels. /i/ is a half close front vowel. All are pronounced with unrounded lips.

(ii) /$\tilde{\text{e}}$/, /e:/ and /e/ are half-open/middle front vowels with unrounded lips.

(iii) /$\tilde{\text{æ}}$/, and /æ/ are half open front vowels and /æ/ is an open front vowel. All are pronounced with unrounded lips.

(b) Central Vowels:

/a/, /a:/ and /$\tilde{\text{a}}$/ are open central vowels with unrounded lips.

(c) Back Vowels:

(i) /ɔ/, /ɔ:/ and /$\tilde{\text{ɔ}}$/ are half open back vowels with rounded lips.

(ii) /o/, /o:/, and /$\tilde{\text{o}}$/ are middle back vowels with rounded lips.

(iii) /u/ is a half close, but /u:/ and /$\tilde{\text{u}}$/ are close back vowels. All are pronounced with rounded lips.

Position of Bengali Vowels in relation to Cardinal Vowels

Beng.	/$\tilde{\text{i}}$/, /i/	=	Cardinal vowel i
Beng.	/i/	=	Cardinal vowel e$^{\wedge}$>
Beng.	/$\tilde{\text{e}}$/, /e:/, /e/	=	Cardinal vowel e
Beng.	/$\tilde{\text{æ}}$/, /æ:/, /æ/	=	Cardinal vowel â
Beng.	/a/, /a:/, /$\tilde{\text{a}}$/	=	Cardinal vowel a>
Beng.	/ɔ/	=	Cardinal vowel $\hat{\text{a}}$
Beng.	/ɔ:/, /$\tilde{\text{ɔ}}$/	=	Cardinal vowel ɔ
Beng.	/o/,	=	Cardinal vowel $\hat{\text{ɔ}}$
Beng.	/o:/, /$\tilde{\text{o}}$/	=	Cardinal vowel o
Beng.	/u/	=	Cardinal vowel $\hat{<}$o
Beng.	/u:/, /$\tilde{\text{u}}$/	=	Cardinal vowel u

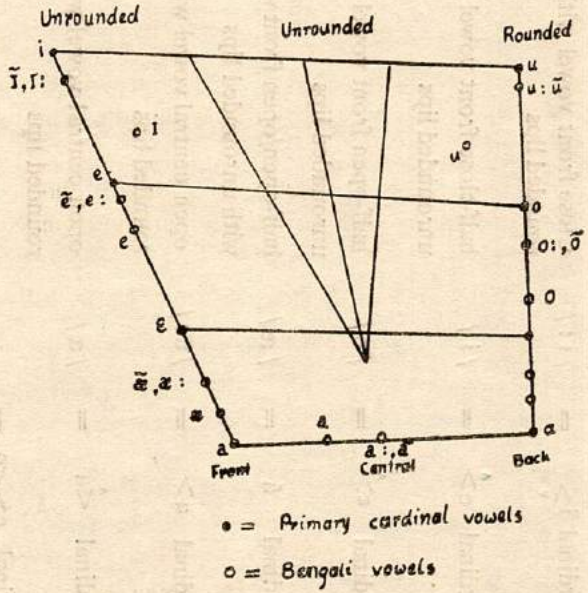
Bengali Dipthongs

Bengali has 25 dipthong sounds. They are:

ie, ia, io, iu: ei, ea, eo, eu; æ e, æ o; ai ae ao; av; oe, oa, oo; oi, ae; oa, ou; ui. ue; ua, uo:

Some tripthongal combinations also occur in Bengali.

Vowels of Bengali



Bengali has equivalents for most English vowels except /ə/ and /3/. There is no substitution for those vowels. So Bengali speakers have some problems with these vowel sounds.

One significant difference between English and Bengali vowel sounds is that Bengali vowels are mostly longer than English vowels. Another perceivable difference is in their tongue positions. Most English vowels have the tongue position along the lines of the cardinal vowel quadralateral, a little below the cardinal vowels, but Bengali vowels have tongue into the vowel quadralateral.

However, it is seen that Bengali speakers do not have any great difficulty with English vowels and dipthongs.

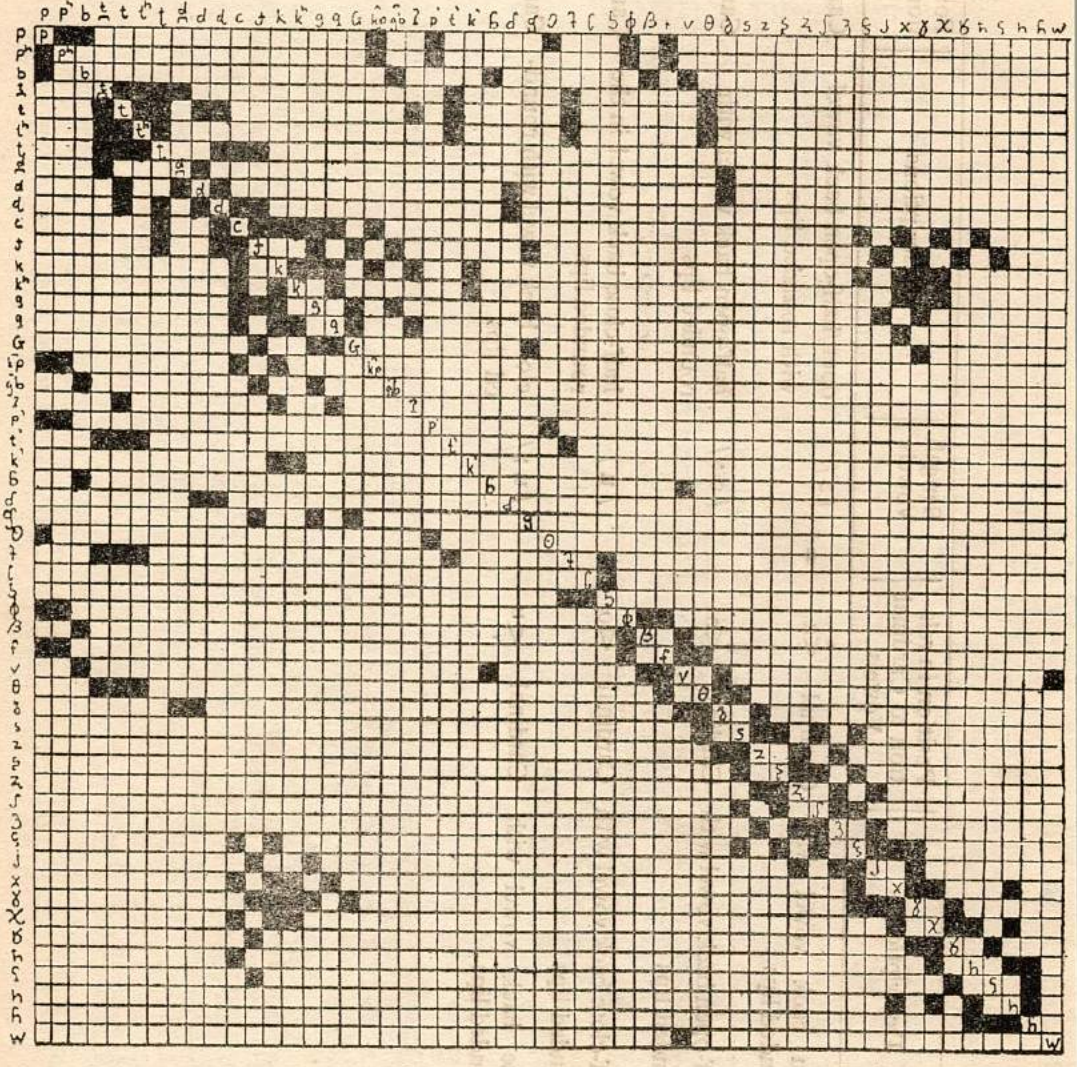
C. Comparison of English and Bengali Vowels

English Vowels	Descriptions	Position in relation to Cardinal Vowels		Bengali Vowels	Descriptions	Position in relation to Cardinal Vowels
/i/	Close front vowel with unrounded lips	Cardinal i>	=	/i:/	Close front vowel with unrounded lips	Cardinal i
/I/	half-close front vowel with unrounded lips	Cardinal e^>	=	/i/	half-close front vowel with unrounded lips	Cardinal e^>
/ɛ/	Half-open front vowel with unrounded lips	Cardinal ɛ^>	=	/e/	half-open front vowel with unrounded lips	Cardinal e
/æ/	open front vowel with unrounded lips	Cardinal â	=	/æ/	half-open/open front vowel with unrounded lips	Cardinal â
/a/	open central vowel with unrounded lips	Cardinal a>	=	/a:/	open central vowel with unrounded lips	Cardinal a>
/ʌ/	half-open central vowel with unrounded lips	Cardinal <^a	=	/a/	open central vowel with unrounded lips	Cardinal a>
/ə/	half-close central vowel with unrounded lips	Cardinal e><o	—	—	———	—
/3/	close-central vowel with unrounded lips	Cardinal e><o	—	—	———	—

English Vowels	Descriptions	Position in relation to Cardinal Vowels		Bengali Vowels	Descriptions	Position in relation to Cardinal Vowels	
/ b /	open back vowel with rounded lips	Cardinal	a̰	= / ɔ /	open/half-open back vowel with rounded lips	Cardinal	â
/ ɔ /	half-open back vowel with rounded lips	Cardinal	ɔ̰	/ ɔ : /	half-open back vowel with rounded lips	Cardinal	ɔ ˬ
/ ᗐ /	half-close back vowel with rounded lips	Cardinal	o̰	/ u /	half-close back vowel in the rounded lips	Cardinal	o̰
/ u /	close back vowel with rounded lips	Cardinal	u ˬ	/ u : /	close back vowel with rounded lips	Cardinal	u ˬ

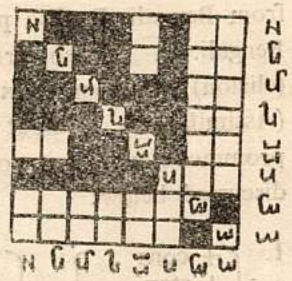
Suspicious Pairs

I. Stops and fricatives

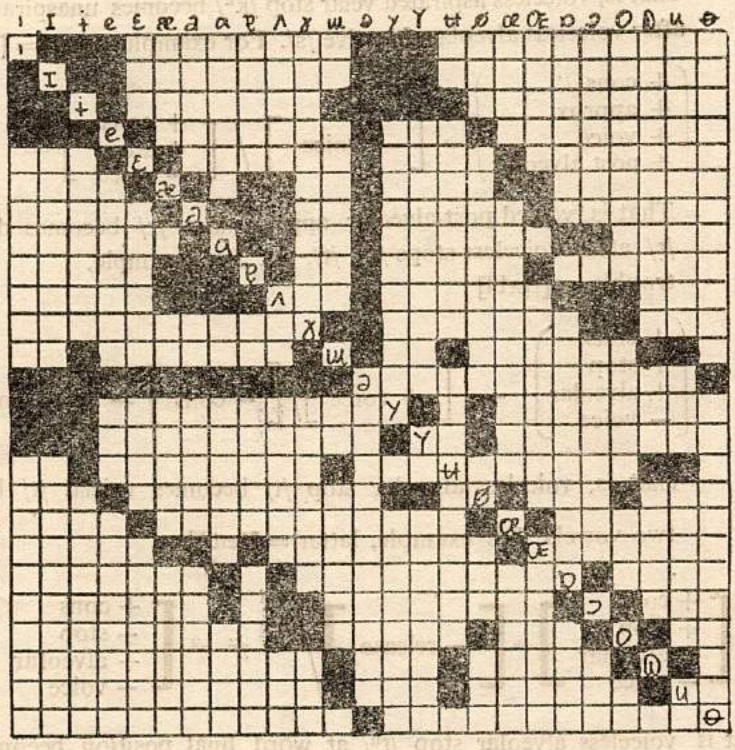


II. Laterals & Approximants

III. Nasals



IV. Vowels



4. Phonological Rules

In addition to the phonemic, phonetic and phonotactic features there are some other aspects in which English is considerably different from Bengali. English phonological rules are different from those of Bengali. In English pronunciation, sometimes sounds are dropped (elision) and sometimes sounds are slightly or completely changed (Assimilation). Without a knowledge of these features, correct English pronunciation is not possible. Some of these phonological rules are discussed below:

1. $\begin{bmatrix} +\text{ cons} \\ +\text{ stop} \\ +\text{ velar} \\ -\text{ voice} \\ +\text{ aspirated} \end{bmatrix} \rightarrow \begin{bmatrix} -\text{ aspirated} \end{bmatrix} / \begin{bmatrix} +\text{ cons} \\ +\text{ fric} \\ +\text{ alveolar} \\ -\text{ voice} \end{bmatrix} —$

That is, voiceless aspirated velar stop /k^h/ becomes unaspirated /$k^=$/ after voiceless alveolar fricative /s/. For example, scout = [sk$^=$aut]

2. $\begin{bmatrix} +\text{ cons} \\ +\text{ approx} \\ +\text{ voice} \\ +\text{ post alveolar} \end{bmatrix} \rightarrow \begin{bmatrix} -\text{ voice} \end{bmatrix} / \begin{bmatrix} +\text{ cons} \\ +\text{ stop} \\ -\text{ voice} \end{bmatrix} —$

That is, voiced post-alveolar approximant /r/ becomes devoiced /r̥/ after voiceless stops /p/, /t/, /k/. For example, trouble = [tr̥ʌbl]

3. $\begin{bmatrix} +\text{ cons} \\ +\text{ stop} \\ +\text{ alveolar} \\ -\text{ voice} \end{bmatrix} \rightarrow \begin{bmatrix} +\text{ voice} \end{bmatrix} / \begin{bmatrix} -\text{ cons} \end{bmatrix} - \begin{bmatrix} -\text{ cons} \end{bmatrix}$

That is, voiceless alveolar stop /t/ becomes voiced /t̬/ between two vowels. For example, latter = [lɛɪt̬ə]

4. $\begin{bmatrix} +\text{ cons} \\ +\text{ stop} \\ +\text{ alveolar} \\ -\text{ voice} \end{bmatrix} \rightarrow \begin{bmatrix} -\text{ release} \end{bmatrix} / — \# \# \begin{bmatrix} +\text{ cons} \\ +\text{ stop} \\ +\text{ alveolar} \\ +\text{ voice} \end{bmatrix}$

That is voiceless alveolar stop /t^h/ at word final position becomes unreleased when the following word begins with voiced alveolars stop /d/. For example, immediate decision = [Imɛdiat dɛsi3ən]

5. $\begin{bmatrix} +\text{cons} \\ +\text{stop} \\ +\text{alveolar} \\ +\text{voice} \end{bmatrix} \rightarrow \begin{bmatrix} +\text{dental} \end{bmatrix} / \_ \# \# \begin{bmatrix} +\text{cons} \\ +\text{fric} \\ +\text{dental} \\ +\text{voice} \end{bmatrix}$

That is, voiced alveolar stop /d/ at word final position becomes dental /d̪/ when the following word begins with voiced dental fricative /ð/. For example, mind then = [maɪn d̪ ðɛn]

6. $\begin{bmatrix} +\text{cons} \\ +\text{lateral} \\ +\text{alveolar} \\ +\text{voice} \end{bmatrix} \rightarrow \begin{bmatrix} +\text{velar} \end{bmatrix} / \begin{bmatrix} -\text{cons} \end{bmatrix} \_ \#$

That is voiced alveolar lateral /l/ becomes velarised or dark /t/ at word final position when preceded by a vowel sound. For example, will=[wɪt]

7. $\begin{bmatrix} +\text{cons} \\ +\text{voice} \end{bmatrix} \rightarrow \begin{bmatrix} -\text{voice} \end{bmatrix} / \begin{bmatrix} +\text{cons} \\ -\text{voice} \end{bmatrix} \_$

That is voiced consonant becomes voiceless after voiceless consonant. For example, Asked → [askt], looked → [lʊkt]

8. $\begin{bmatrix} +\text{cons} \\ +\text{alveolar} \end{bmatrix} \rightarrow \begin{bmatrix} +\text{dental} \end{bmatrix} / \_ \begin{bmatrix} +\text{cons} \\ +\text{fric} \\ +\text{dental} \\ +\text{voice} \end{bmatrix}$

That is, all alveolar consonants become dental consonants before voiced dental fricative /ð/. For example, that night there was a quarrel between them.

ðæt naɪ̪t ðɛə ωəz ə kʊərɛl bɪtωɪn ðəm.

9. $\begin{bmatrix} +\text{cons} \\ +\text{aspirated} \\ -\text{voice} \end{bmatrix} \rightarrow \begin{bmatrix} -\text{unaspirated} \end{bmatrix} / \begin{bmatrix} +\text{cons} \\ +\text{fric} \\ +\text{alveolar} \\ -\text{voice} \end{bmatrix} \_$

That is, aspirated consonant lose aspiration after voiceless alveolar fricative / s /. For example, Asked = askˉt

Just = d3ʌstˉ

10. $\begin{bmatrix} +\text{cons} \\ +\text{stop} \\ -\text{voice} \end{bmatrix} \_ \begin{bmatrix} -\text{release} \end{bmatrix} / \_ \begin{bmatrix} +\text{cons} \\ -\text{voice} \end{bmatrix}$

That is, voiceless stops become unreleased before voiceless consonants. For example, Next = [nɛkst̄] > [nɛ(k)st]

Attempt = [ætɛmpt] > [ætɛmpt]

11. $\begin{bmatrix} +\text{cons} \\ +\text{voice} \end{bmatrix} \rightarrow \begin{bmatrix} -\text{voice} \end{bmatrix} / \begin{bmatrix} +\text{cons} \\ +\text{stop} \\ -\text{voice} \end{bmatrix} -$

That is, voiced consonants become devoiced after voiceless stops.

For example, Quite = [kwaɪ̥], Stronger = [strɒn9ə]

Disputing = [dɪspj̊utɪŋ]

12. $\begin{bmatrix} +\text{cons} \\ +\text{voice} \end{bmatrix} \rightarrow \begin{bmatrix} -\text{voice} \end{bmatrix} / - \# \begin{bmatrix} +\text{cons} \\ -\text{voice} \end{bmatrix}$

That is, voiced consonants become voiceless when the following word begins with a voiceless sound. For example,

Have to = həv tə > hə*f* tə

Of course = əv kɔs > ə*f* kɔs

He used to = hi jʊsd tə > hi just tə

but voiceless consonants do not become voiced when the following word begins with a voiced sound. For example,

Nice boy = naɪs bɔɪ, not naɪz bɔɪ

13. $\begin{bmatrix} +\text{cons} \\ -\text{voice} \end{bmatrix} \rightarrow \begin{bmatrix} +\text{voice} \end{bmatrix} / \begin{bmatrix} +\text{cons} \\ +\text{voice} \end{bmatrix} -$

That is voiceless consonant becomes voiced when it is after a voiced sound. For example, Dogs = dɒ9z, not dɒ9s

Friends = *f*rɛn(d)z, not *f*rɛnds

14. In a CCC cluster when there are two alveolar sounds followed by another consonant sound or when all three consonants are alveolars, the second alveolar is dropped. For example,

Kindness = kaɪndnəs > [kaɪnnəs] > [kaɪnəs]

Handbook = [hænd bʊk] > [hænbʊk]

and if an alveolar sound is followed by a bilabial sound, the alveolar tends to be bilabial. In that case, hænbʊk > [hæmbʊk] because, alveolar nasal becomes bilabial nasal.

Loss of alveolar is very frequent in English. For example,

Facts = [*f*ækts] > [*f*æks]

Lastly = [ləstlɪ] > [lasli]

15. If there are two bilabials, one is dropped (generally the voiceless one) as in the historical elision, Cupboard ▷ [kʌbəd]

16. 1 : Prevocalic /l/ is clear /l/, but post vocalic /l/ is dark or velarised /ɫ/. For example, Lip = [lip] clear /l/
Peel = [pit] dark/ ɫ/

17. Aspiration : t^h, syllable initial. For example two = [t^hu]
t⁼, after /s/ in a cluster. For example,
Star = st⁼ar
Less aspirated when intervocalic. For example,
Apart = [əpart]

18. /h/ ▷ h̬ between two vowels. For example, Behind = [bih̬aind]

These are some of the rules of English phonology in which Bengali speakers do not have a clear idea and so, their pronunciation also is not an English one.

5. Stress

Besides the above segmental features, there are some other suprasegmental features in which Bengali and English differ remarkably. English is a stressed-timed language, but Bengali is not a stressed-timed language. English speech has a rhythmic flow. It has rise and fall, ups and downs in its movement. In English disyllabic or poly-syllabic words, some syllable(s) stands out to be prominent, but some others are not so prominent. Each English poly-syllabic word has one or more stressed syllable(s). Bengali, on the other hand, is a syllable timed language. All syllables have equal prominence. Bengali has no rise and fall in its movement. So Bengali is not a rhythmic language like English. For example, an English speaker pronounces the word 'insult' (n) as [ˊinsʌlt] but a Bengali speaker would pronounce it (Insʌlt). In the English pronunciation 'in' is prominent but 'sʌlt' is not prominent, but in Bengali both the syllables have equal prominence. Again when 'insult' is a verb, the English speakers would put stress on the second syllable. They would pronounce it [Inˊsʌlt] and in Bengali it would be the same as the noun, that is, [Insʌlt]. So, unstressed pronunciation of English by Bengali speakers sometimes makes their English unintelligible to the native speakers of English. If the Bengali speakers say [phɒtʊ9raphi] instead of [*f*aˊtɔ-9ra*f*i] or [phɒtʊ9raph] instead of [ˊfovtə9ra*f*] and the like, the native speakers of English would naturally be confused. So, some amount of knowledge about English stress pattern is very important for the Bengali speakers to pronounce English correctly. Bengali speakers must have an awareness of both lexical and syntactic stress patterns of English. Though,

it is a very wide topic, and there is no hard and fast rule about stress, they should have the basic ideas about stress pattern and know the types of words that are commonly stressed and also the types, that are not stressed. In English, the commonly stressed words are:

(1) Nouns: His wí fe's bró ther is a dó ctor.

(2) Adjectives: He is tá ll, dá rk and há ndsome.

(3) Lexical verbs: Té ll him to remé mber it.

(4) Adverbs: You walked quí ckly yé sterday.

(5) Interrogatives: Wh́ y did he dó it?

On the otherhand, the commonly unstressed types of words arei (1) Articles, (2) Possessive Pronouns, (3) Personal Pronouns, (4) Prepositions, (5) Conjunctions and (6) Auxiliary Verbs.

But yet, these types of words sometimes might receive prominence in a sentence and so they might become stressed. For example,

He saw á big cat.

(The point is, 'how many big cats did he see' ?

In the same sentence, different words can receive prominence according to the difference in the intended meaning.
For example,

(1) Hé saw a big red ball. (The point is who saw the ball)

(2) He sá w a big red ball.
(The point is, did he see a big red ball ?)

(3) He saw á big red ball.
(The emphasis is on the number of balls seen.)

(4) He saw a bí g red ball. (emphasis is on the 'size')

(5) He saw a big ré d ball. (emphasis is on the colour of the ball)

There are examples of syntactic stress in English. Bengali also has syntactic stress. For example,

(1) tumɪ kɪ Jɐ́ nɔ? (Do you knó w ?)
*emphasis on 'knowing'.

(2) tumɪ kɪ́ Jɐnɔ? (Whá t do you know ?)
*emphasis on the subject.

(3) tú mɪ ki Jɐnɔ? (What do yó u know ?)
*emphasis on person.

So, Bengali has similarity with English with regard to syntactical stress.

But as regards the lexical stress, English is completely different. Bengali disyllabic or poly-syllabic words have no stressed and unstressed

syllable pattern. But in English words having more than one syllable must have one or more stressed syllable(s). There are some rules regarding which syllable has to be stressed and which one, not, though the rules are not very strict. Generally in disyllabic nouns, the first syllable is stressed, and the second one is unstressed, but in verbs, the first syllable is unstressed and the second one is stressed. For example,

progress	(ʌ)	=	['prɒ9res]
progress	(v)	=	[prɒ'9res]
permit	(n)	=	['pamit]
permit	(v)	=	[pə'mit]

Prefixes are generally stressed, but suffixes are unstressed. In polysyllabic words there is no strict rule about stress. The more the number of syllables in a word, the more shifting of the place of stress in words. For example,

photograph = [ˈfovtə9raf] , but photography = [fəˈto9rəfi]
and photographic = [fovtəˈ9ræfik]

Moreover, in poly-syllabic words might have two stresses of which one is a primary stress and the other is a secondary stress. Again, there is no strict rule about what syllable should have primary stress and which one should have secondary stress. For example, 'in centralization' [sɛntrəlatzeɪʃ(ə)n] there are two stresses—primary stress on 'zeɪ' and secondary stress on 'sɛn'. But in 'administration' [əd, minˈstreɪʃ(ə) n] the primary stress is on 'treɪ' and the secondary stress is on 'mins'. The more the number of syllables in a word, the more the shifting of place of the stresses. But generally the syllable before the suffix has the primary stress as it is seen from the above two examples. According to Jons, 1967, syllables with ə, ɪ, o, or ʏ or a syllabic consonant are unstressed and syllables with e, æ, ɔ, ʌ, and the long vowels or dipthongs, they are pronounced with secondary stress and syllables with i, a, u, æ, ɔ, ei, ou, ai, au, ɔi, ɛə and ɔə are pronounced with primary stress. But they can sometimes unstressed also because the rules are not anything absolute.

There are many other rules of English stress and many exceptions to those rules also. Foreign learners might not know all of them, but they must know the basic aspects of English stress pattern. Otherwise, correct English pronunciation is really difficult for the Bengali speakers and the English they would speak would baffle the native speakers of English.

6. Conclusion

This analysis of the phonomic, phonetic and phonotactic similarities and differences between English and Bengali, the few phonological rules of English and the basic stress patterns of English and Bengali will develop an awareness of how English sounds are produced and also an awareness of how sometimes sound(s) is/are dropped and sometimes assimilated in English. This will help learners pronounce English correctly.

This awareness is very important, but only an awareness can not ensure good pronunciation for which it has to be supplemented by sufficient practice. So, for the teaching of English pronunciation teachers of English have to give the students an extensive practice in the arts of English articulation by clarifying the similarities and differences in places and manners of articulation between English sounds and the corresponding Bengali sounds and then giving practice in the production of English sounds only. Some amount of drilling is important. The lesson plans attached to this paper focus on the types of activities that can give some practice and thus facilitate the learning of English pronunciation.

As a whole, the problem areas for the Bengali speakers in the pronunciation of English are explored in this paper and attempts have been made to help Bengali speakers overcome those problems through an awareness of the similarities and differences between the articulatory processes of English and Bengali, the phonological rules and the basic stress patterns of English. The problems are dealt in the sample lessons and some practice is given to learners to help them overcome the problems and master correct English pronunciation.

5. Lesson Plans

Lesson Plan-1

Objective: Students will be able to identify and produce English voiceless and voiced labio-dental fricatives /f/ and /v/ sounds.

Time: 15 minutes.

Level: Advanced, but almost beginners in Phonetics and Phonology.

Assumptions : Students have no clear idea about the difference between the places and manners of articulation of English /f\|/, /v/ and Bengali /ph/, /bh/. They pronounce /f/ and /v/ as /ph/ and /bh/.

The Lesson

Step-1

Students listen to each of the following two sets of nonsense syllable for twice on a tape and they identify the consonant sounds in each set:

(i) *fɛ, fi, fu, fa, fæ*
(ii) vɛ, vi, vu, va, væ

Step-2

Students listen to each of the above sets for five times and repeat it with the tape.

Step-3

Students listen to the following sets of nonsense syllables, each set having an odd syllable in it. Students listen and identify the odd one in each set.

(a) *fa, fa, fa,* pa, *fa, fa, fa*
(b) *fi, fi,* bi, *fi, fi, fi, fi*
(c) *fæ, fæ, fæ, fæ, fæ, fæ, fæ*
(d) va, va, va, va, ba, va, va
(e) vi, vi, pi, vi, vi, vi, vi
(f) vɔ, vɔ, vɔ, lɔ, vɔ, vɔ, vɔ

Step-4

Students listen to the following minimal pairs and notice the difference between /f/ and /ph/, /v/ and /bh/. Next, they practise these differences by producing the nonsense minimal pairs.

Set-A		Set-B	
a*f*a	apha	ava	abha
a*f*i	aphi	avi	abhi
i*f*a	ipha	iva	ibha
ɛ*f*u	ɛphu	ɛvu	ɛbhu
u*f*i	uphi	uvi	ubhi

Step-5

Students are given diagrams illustrative of the places and manners of English /f/ and /v/. Teacher then demonstrates the places and manner of articulation and students then practise it by pronouncing the nonsense syllables with /f/ and /v/ in Step-4.

Step-6

Students are given diagrams illustrating place and manner of articulation of Bengali /ph/ and /bh/. Students compare the place and manner of /ph/ and /bh/ with that of /*f*/ and /v./ Teacher then demonstrates the difference and students practise the difference with the teacher.

Step-7

Students practise /*f*/ and /v/ themselves, tape record it and listens to it to check and confirm the difference with Beng. /ph/ and /bh/.

Lesson Plan-2

Objective : Students will be able to recognise and produce English voiceless and voiced dental fricatives /θ/ and /ð/.

Time: 15 minutes

Level: Tertiary, but almost beginners in Phonetics.

Assumptions: Students have not got any clear idea about the difference between English /θ/, /ð/ and Bengali /th/, /d/. They pronounce English /θ/ and /*f*/ like Bengali /th/ and (d).

The Lesson

Step-1

Students listen to two sets of nonsense syllables on tape for several times and notice the accoustic effect of /θ/ and /*f*/ in these sets.

(i) θæ, θi, θa, θu, θɛ
(ii) ðæ, ði, ða, ðu, ðɛ.

Step-2

Students listen to the above sets of nonsense words on tape for five times and repeat them with the tape.

Step-3

Students listen to 5 sets of nonsense syllables, each set having /θ/ or /ð/ more than once. Students listen to and count how many times /θ/ or /ð/ occurs in each set.

(i) ta, θa, pa, *f*a, ta, na, ma, θa
(ii) ʔa, ða, la, ha, ða, ma, tʃa, na
(iii) ri, li, θi, ki, pi, θi, bi, di
(iv) mæ, ðæ, læ, kæ, ðæ, hæ, sæ, væ
(v) ʔaɪ, ðaɪ, *f*aɪ, naɪ, haɪ, ðaɪ, t*f*aɪ, paɪ.

Step-4

Students are given two different diagrams, illustrating English /θ/ and /ð/ and Bengali /th/ and /d/. Students compare the place and manner of articulation. Teacher demonstrates both English /θ/, /ð/ and their Bengali equivalents /th/, /d/. Students practise the difference with teacher by pronouncing the nonsense words in Step-1.

Step-5

Students listen to some new words with /θ/, /ð/, /lh/ and /d/. They categorise the words into four classes, each with one of these phonemes.

Step-6

Students listen to some minimal pairs on tape and practise with the teacher.

The pairs are:

aθa	atha	aða	ada
aθi	athi	aði	adi
ɛθa	ɛtha	ɛða	ɛda
ɛθu	ɛthu	ɛðu	ɛdu
æɛð	æthð	æðə	æda

Step-7

Students practise /θ/ and /ð/, taperecord it. They listen to the tape and check these pronunciation.

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Pakistan's 1970 Elections and the Liberation of Bangladesh : A Political Analysis

Golam Morshed

Introduction

East Pakistan (now Bangladesh) seceded from Pakistan in 1971. Pakistan was created with ethnic, cultural, linguistic and economic differences that existed between her two far-flung wings — East and West Pakistan. The basic differences were further widened owning to the policies pursued by the ruling elites of Pakistan. The only bond of union was Islam — the religion of the majority of the population in both the wings of Pakistan. After independence the first major conflict between East and West Pakistan started on the language issue which laid the foundation of the Bengali nationalism in East Pakistan. Another very significant source of bitter regional feelings was demonstrated on the question of economic disparity between the two wings of Pakistan. But the major reason for the ever-increasing alienation of the East Pakistanis was the political domination of East Pakistan by the West Pakistani ruling elite.[1]

The separatist movement in East Pakistan started with the demand for maximum provincial autonomy as early as 1954.[2] The 1954 East

[1]Rounaq Jahan, *Pakistan: Failure in National Integration*, (New York: Columbia University Press, 1972, pp. 185-204. See also Richard Weekes, Pakistan: Birth and Growth of a Muslim Nation (Princeton: Van Nostrand, 1964), p. 3; W. H. Morris & Jones, "Pakistan Post-Mortem and the Roots of Bangladesh," *The Political Quarterly*, 43, Number 2 (1972), pp. 187-200; Khalid B. Sayeed, "The Breakdown of Pakistan's Political System," *International Journal*, XXVII (1971-2), pp. 396-403, S. A. Akanda, "Was Parliamentary System of Government a Failure in Pakistan? A Case Study of a Constitutional Debate in Pakistan during Martial Law, 1958-62," *Institute of Bangladesh Studies*, Rajshahi University, Vol. VI (1982-83), pp. 155-86.

[2]Golam Morshed, "East Bengal Provincial Elections of March 1954 and Germination of Separatist Movement in East Pakistan," *The Rajshahi University Studies*, Vol. VII (1976), pp. 76-89; see also *The Economist*, June 5, 1954, p. 702.

Bengal Provincial Elections and events afterwards demonstrated clearly that the basis of union between East and West Pakistan should be a greater measure of autonomy for East Bengal. The most crucial development in the relations between East and West Pakistan took place during the Auyb regime. The highly centralized and West Pakistan dominated political system of Ayub tried to substitute economic concessions to East Pakistan for political participation of the Bengalis. But as the regime failed to remove the economic disparity between the two wings this further increased bitter regional feelings in East Pakistan. The Bengali nationalists now demanded a confederation between East and West Pakistan on the basis of the Six-Point Programme of the East Pakistan Awami League.[3] The landslide victory of the Awami League in the 1970 Elections in East Pakistan and failure of political negotiations between the East and the West Pakistan relations brought about the final separation of East Pakistan in 1971. The integrating factors needed to maintain a union were weak in Pakistan. The bond of Islam alone could not maintain the desired union. The failure to accommodate the Bengali conter-elite in the decision-making process in Pakistan was the major reason for the growth of regionalism in East Pakistan and ultimate separation in 1971. The present article is an attempt to analyse Pakistan's 1970 Elections and the Post Election Developments leading to the independence of Bangladesh in 1971.

Pakistan's 1970 Elections and East Pakistan

Field Marshall Ayub Khan surrendered power to General Yahya Khan, the Commander-in-Chief of the Pakistan Army, on March 25, 1969 on the plea of his unwillingness—"to preside over the destruction of our country".[4] General Agha Muhammad Yahya Khan, after assuming power from Ayub Khan, declared that he had "no ambition other than the creation of conditions conducive to the establishment of a Constitutional Government". He expressed his concern for "transfer of power to the representatives of the people elected freely and impartially on the basis of adult franchise".[5] The elected representatives would

[3]G. W. Choudhury, The Last Days of United Pakistan (C. Hurst & Company, London, 1974), pp. 1-12. See also Golam Morshed, Separation of East Pakistan (1954-71): A Political Analysis, M. A. Dissertation (Unpublished), Queen's University, Kingston, Canada, 1975, p. iii, M. Rafiqul Islam, "An Enquiry into the Constitutionality of the Unilateral Declaration of Independence of Bangladesh," *Institute of Bangladesh Studies*, Rajshahi University, Vol. IX (1986), pp. 87-103.

[4]Ayub Khan's broadcast to the Nation, *The Pakistan Observer*, March 26, 1969.

[5]White Paper on the Crisis in East Pakistan, Government of Pakistan, August 5, 1971, p. 1.

be required to give the nation a "workable constitution".[6] Subsequently, he took two major steps to implement his scheme of transfer of power to the elected representatives of the people:

(i) The dissolution of One-Unit in West Pakistan

(ii) The principle of "one-man-one-vote".[7]

The first measure was to satisfy the long-felt demand of the regionalists in both the wings. The second principle gave the East Pakistanis a clear majority in the future political set-up of Pakistan. It was decided that the elections would be held on October 5, 1970. Later the elections were scheduled to be held on December 7, 1970 owing to severe floods in East Pakistan.[8] A Legal Framework Order regulating the manner of elections and the conditions and rules of procedure for framing the constitution was promulgated on March 28, 1970. Martial Law restrictions on political activities had been withdrawn on January 1, 1970 and the political parties had started their election campaign.[9]

The Legal Framework Order[10] contained certain fundamental principles to be included in the constitution to be passed after the elections:

(1) Adherence to fundamental principles of democracy shall be endured by providing direct and free periodical elections to the Federal and Provincial Legislatures on the basis of population and adult franchise.

(2) The Fundamental Rights of the citizens shall be laid down and guaranteed.

(3) The independence of the judiciary in the matter of dispensation of justice and enforcement of the Fundamental Rights shall be secured.

(4) All powers including legislative, administrative and financial, shall be so distributed between the Federal Government and Provinces that the Provinces shall have maximum autonomy, that is to say maximum legislative, administrative and financial powers but the Federal Government shall also have adequate powers including legislative, administrative and financial powers,

[6] *Ibid.*, p. 1.

[7] *Ibid.*, p. 1.

[8] *Ibid.*, p. 8. The Provincial Assemblies Elections were fixed to be held on December 17, 1970.

[9] President Yahya Khan declared the withdrawal of restrictions on political activities in a broadcast to the Nation, November 28, 1969. *The Pakistan Observer*, November 29, 1969.

[10] White Paper, *op. cit.*, p. 2.

to discharge its responsibilities in relation to external and internal affairs and to preserve the independence and territorial integrity of the country.

(5) It shall be ensured that (a) the people of all areas in Pakistan shall be enable to participate fully in all forms of national activities and (b) within a specified period, economic and all other disparities between the provinces and between different areas in a province are removed by adoption of statutory and other measures.

(6) The constitution shall contain, in its preamble, an affirmation that—(a) the Muslims of Pakistan shall be enabled, individually and collectively, to order their lives in accordance with the teachings of Islam as set out in the Holy Quran and Sunnah; and (b) the minorities shall be enabled to profess and practice their religions freely and to enjoy all rights, privileges and protection due to them as citizens of Pakistan.

The Pakistan National Assembly would be required to frame a constitution within one hundred and twenty days of its first meeting, failing which it would stand automatically dissolved.[11] The constitution was to be presented to the President of Pakistan and the National Assembly would stand dissolved if not authenticated by him.[12] Under these constraints, the National Assembly was to frame a constitution for the country. All the parties protested the provisions of the authentication of the constitution by the President. However, the first ever country-wide general elections to elect directly the National Assembly and five Provincial Assemblies were arranged to be held according to the time-schedule.

Contesting Parties in East Pakistan

As many as eleven parties nominated candidates for the elections in the two wings of Pakistan. Later two parties—the National Awami Party (Bhasani) and the Pakistan National League—withdrew from the elections in November, 1970. The National Assembly of Pakistan was to consist of 313 members (including 13 women members to be elected indirectly by the National Assembly).[13]

The major political parties in Pakistan were regionalized—the Awami League in East Pakistan, the National Awami Party (Wali Khan) in

[11] *Ibid.*, Appendix 'B', p. 25.

[12] *Ibid.*

[13] *Ibid.*, p. 19.

Baluchistan and the North West Fronter Province, and the Pakistan People's Party in Sind and Punjab. The Central National parties had little following in any of the five provinces of Pakistan. In East Pakistan, political parties could be grouped into three categories—Regionalist, Socialist, and Islamic Parties. The Awami League championed the cause of the Bengali Nationalists. The Pakistan National League was also another Bengali Nationalist Party with very little political support. The National Awami Party (Wali) and the National Awami Party (Bhasani) belonged to the Socialist group. The Islamic Parties were the three Muslim Leagues (the Pakistan Muslim League—Qayyum Group; the Pakistan Muslim League—Convention ; the Pakistan Muslim League—Council), the Pakistan Democratic Party, the Jamaat-i-Islami, the Jamiatul Ulema-i-Pakistan (Hazarvi Group), and the Markazi Jamitul ulama-i-Islam and Nizam-i-Islam (together known as MJU). With the withdrawal of the National Awami Party (Bhasani) and the Pakistan National League from the elections (at the last moment) the remaining parties contesting the elections in East Pakistan were the Awami League fighting for the cause of Bengali nationalism (Bangladesh), the lone socialist party—the National Awami Party (Wali Khan) and the Islamic Parties. The National Awami Party (Wali Khan) tried to forge an electoral alliance with the Awami League without success.[14] This party had its main political base in the North West Frontier Province and Baluchistan. Among the Islamic Party contained a few old leaders of former parties. The three Muslim Leagues had virtually few supporters in East Pakistan.[15]

Election Campaigns: Goals and Strategies of the Parties

During the year-long campaign which started from January 1, 1970 the Awami League propagated the Six-Point Programme as the basis of the future constitution of the country. The chanting of the "Jai Bangla" (victory to Bengal) slogan by the Awami League become the symbol of Bengali nationalism.[16] The Six-Point Programme of the Awami League aimed at ending the economic and political exploitation of East Pakistan by West Pakistan. The Six-Point Programme proposed a loose confederal type of government limiting the powers of the Federal Government to foreign affairs and defence only. Economic matters would be at the disposal of the unit governments. The central government would

[14]See G. P. Bhattacharjee, Renaissance and Freedom Movement in Bangladesh, (Calcutta, Minerva Associates, 1973), pp. 252-53.

[15]For further analysis, see Sharif al Mujahid, "Pakistan: First General Elections", *Asian Survey*, Vol. XI, No. 2 (February, 1971), p. 164.

[16]*Ibid.*, p. 167.

be dependent on units for its revenue. East Pakistan would have the power to raise a militia or para-military of her own.[17] The elaborate party manifesto of the Awami League was drawn up on June 6, 1970. The party manifesto stated:

> The glaring dispartities between the two wings of Pakistan have continued to widen at an alarming pace. As a result, the entire economy of East Pakistan is faced with destruction. This creates an irresistible pressure for radical change in the Constitutional structure whereby full regional autonomy, including the powers of management of the economy, would be granted to the regions, in order to enable their governments to undertake on emergency basis the task of saving the regional economies from ruination.[18]

The party wanted to nationalise some "key sectors of the economy" including banking and insurance.[19] The party manifesto believed in independent, non-aligned foreign policy".[20] The Awami league wanted to solve all outstanding "disputes".[21] The Six-Point Programme of Sheikh Mujib's Awami League was the most articulate expression of the Bengali nationalists' demand for self-government. The Six-Point Programme as originated during the Ayub regime had gained momentous support over the years and now became the "Magna Carta" of the Bengali nationalists. Sheikh Mujib in the course of his election campaign declared that the elections would be a referendum on the Six-Point Programme. He believed "that Bangalees who had long been denied their rights must show in the coming elections that this time they were determined to restore their rights either through elections or through struggle if their rights could not be achieved through elections".[22] Sheikh Mujib, the Awami League leader threatened to launch a country-wide movement if the peoples' demands were not realised through Assemblies. He said that the December elections were not for power but to decide the fate of Bengal, which continued to be exploited since independence. The Awami League wanted to realize its Six-Point Programme through elections which meant that the Bengalis should be the masters of their

[17]See Awami League Manifesto, *Bangladesh Documents*, Ministry of External Affairs, India (1971), pp. 66-82.

[18]*Ibid.*, p. 67.

[19]*Ibid.*, p. 71.

[20]*Ibid.*, p. 81.

[21]*Ibid.*

[22]*Morning News*, Dacca, October 26, 1970.

own resources.[23] Yet in another campaign in Dhaka Sheikh Mujib said: "We are 56 per cent of our country's population, we do not want to remain a colony and market for others. We want to live as independent people".[24] As the election campaign progressed, it become clear that the Awami League would gain a resounding victory in East Pakistan on the issue of its separatist demand for full regional autonomy as envisaged in the Six-Point Programme.

The National Awami Party (Wali) led by Professor Muzaffar Ahmed in East Pakistan believed in regional autonomy for East Pakistan leaving defence, foreign affairs and currency at the disposal of the centre. Their main argument against the Awami League was that it was a party of the Bengali bourgeoisie determined to secure their interests against the West Pakistani bourgeoisie. The party slogan was—"Arise and wake up the peasants and workers of Bengal".[25] The party believed in scientific socialism but considered that a democratic and secular government was necessary at first to secure the rights of the people. The National Awami Party (Wali) criticized the Islamic Parties as reactionary. Like the Awami League, the National Awami Party believed that the Islamic slogan was nothing but a means of exploiting the people in the name of religion. The party believed in an electoral alliance with the Awami League and the National Awami Party (Bhasani) to fight the reactionary Islamic forces in the province. But the Awami League refused to participate in any such United Front. The National Awami Party's (Wali) efforts to have such an electoral alliance was an indication of its weakness in the face of the tremendous popularity of the Awami League's Six-Point Programme in East Pakistan.

The National Awami Party (Bhasani) was in a dilemma as to whether or not to participate in the elections. The party believed in revolution as a method of securing the people's rights. Later the party decided to participate in the elections on the issue of maximum regional autonomy and demanded representation of the peasants and workers in the future legislature. The party believed that socialism was the only means of securing the rights of the exploited masses. Maulana Abdul Hamid Khan Bhasani, he party leader, also believed at the same time in Islamic social justice. The party accused the foreign powers of conspiring against the integrity of the country. However, the National Awami Party withdrew from the contest after the devastating cyclone in East Pakistan in Nov-

[23] *The People*, Dacca, November 1, 1970.

[24] *The Pakistan Times*, Lahore, October 19, 1970.

[25] *Ittefaq*, Dacca, April 27, 1970.

ember, 1970. The party, along with the Pakistan National League and the Pakistan Democratic Party, demanded that the elections be postponed.

The Pakistsn Democratic Party was in favour of a combination of a strong centre with regional autonomy. The party believed in Islam as the bond of unity between the two wings of Pakistan and was opposed to any other ideology. Nurul Amin, the Pakistan Democratic Party leader, decried the Awami League and socialist parties and charged them with "undermining the basis of Pakistan and parting the two wings of Pakistan".[26] He further believed that if the Six-Point Programme considered by the Awami League as a referendum in the forthcoming elections failed to secure support of the West wing "in that case East and West Pakistan would fall apart".[27] It is relevant to mention here that the Awami League's participation in the elections in West Pakistan was minimal. The Pakistan Democratic Party would give the central government jurisdiction over defence, foreign affairs, finance and currency, inter-provincial and foreign trade and communications. The removal of inter-wing disparity within a period of ten years would be a constitutional obligation of the central government, according to the party manifesto.

The Jamaat-i-Islami believed in the orthodox Islamic ideolgoy and accused the other Islamic Parties, including the Muslim Leagues, of using Islam for political reasons. Maulana Abul Ala Maudoodi, the Party chief, warned the people against the danger of "the three pronged attack on Pakistan's ideology, integrity and well-being by socialists, parochialists and parasites of dictatorship".[28] The Jamaat-i-Islami believed that the grievances of East Pakistan were mainly due to the wrong policies of the central government. The party wanted the restoration of the 1956 constitution with certain modifications, including the granting of provincial autonomy but not jeopardizing national integrity. The Jamaat accused the Six-Point Programme of the Awami League of disintegrating the country. Professor Ghulam Azam, East Pakistan Jamaat-i-Islami leader, attacked the Awami League and its Six-Point Programme, accusing it of undoing Pakistan by stressing Hindu-Muslim unity and Bengali nationalism. According to this party, the genuine economic and other problems of East Pakistan would be solved neither by the secular nor socialist policies of the other parties. The Islamic economy would be the real solution of all problems in Pakistan.

[26] *Dawn*, Karachi, June 1, 1970.

[27] *The Pakistan Observer*, June 6, 1970.

[28] *Dawn*, June 8, 1970.

The Council Muslim League headed by Mian Mumtaz Mohammad Khan Daulatana of Punjab believed firmly in the Islamic ideology of Pakistan and was opposed to Bengali nationalism and secularism. The party thought that the Six-Point Programme of the Awami League would undo Pakistan by making the centre ineffective and powerless. The party was opposed to socialism of any kind and believed in a strong centre.

The Convention Muslim League headed by Fazlul Qader Chowdhury firmly believed in Islamic ideology and a strong centre. The party believed in creating another province comprising the northern districts of East Pakistan. This party, like the other two Muslim Leagues, believed in an anti-Indian foreign policy. The party criticized and warned their countrymen of the twin dangers of socialism and Bengali nationalism.

The Qayyum Muslim League, like the other two Muslim Leagues, believed firmly in Islamic ideology and a strong centre. The party was highly anti-Indian and accused Sheikh Mujib of conspiring with India for undoing Pakistan. The party criticized all kinds of socialism and even capitalism.

The Pakistan National League headed by Ataur Rahman Khan was a secular and Bengali nationalist party. The party believed in full regional autonomy on the basis of the Lahore Resolution. The party thought Islam should be a secular religion and Pakistan should be a country with five regional nations. This party withdrew from the contest immediately before the election after the cyclone disaster in East Pakistan.

The parties in general believed in reducing economic and other disparities between East and West Pakistan. But the rightist and centrist parties behaved in maintaining the centre strong enough to uphold the integrity of the country. The two socialist parties –the National Awami Party (Wali) and the National Awami Party (Bhasani)—believed in full regional autonomy. But the Awaai League wanted to achieve autonomy resulting in a virtual confederation between East and West Pakistan. The Islamic and centrist parties placed much emphasis on Islamic unity as the real bond between the two wings of Pakistan. These parties also wanted to maintain a highly anti-Indian foreign policy which did not appeal to the East Pakistanis. The National Awami Party (Wali) and the Awami League wanted to resolve all disputes with India—through negotiations. Both the parties believed in secularism, while Bhasani's National Awami Party believed in blending of Islam and socialism.

Cyclone in East Pakistan and the Awami League

In the middle of November, 1970 a severe cyclone took the lives of over two hundred thousand people in the southern portion of East

Pakistan leaving behind trails of harrowing devastation and untold miseries. As pointed out earlier, most of the parties demanded the postponement of the elections. But the Awami League accused the government of utter negligence and opposed the move vehemently. Sheikh Mujib warned:

> if the polls are frustrated, the people of Bangladesh will owe to the million who have died to make the supreme sacrifice of another million lives, if need be, so that we can live as a free people and so that Bangladesh can be the master of its own destiny.[29]

Natural calamity provided further grounds for Bengali allienation and the Awami League utilized the situation in its favour. The response of the central Government and West Pakistani leaders were considered insufficient in matters of relief and rehabilitation and this infuriated the Bengalis and helped the Awami League achieve a landslide victory in the elections. Sheikh Mujib, criticizing the government's negligence, said:

> A massive rescue and relief operation, if launched within 24 hours of the occurrence, could have saved thousands of lives. Thousand of survivors could have been saved from death due to starvation, exposure and lack of medical attention. Had the Navy rushed into the area it could have rescued thousands who had been swept into the sea. The failure to launch such a relief and rescue operation is unforgivable ... we are confirmed today in our conviction that if we are to save the people of Bangladesh from the ravages of nature, as of their fellowmen we must attain full, regional autonomy on the basis of the 6-point/11-ploint formula.[30]

He further focused the attention of the Bengalis on the deliberate failure of the Central Government to solve the problems of East Pakistan:

> Our present experience has only brought into sharp focus and underlines the basic truth that every Bengali has felt in his bones, that we have been treated so long as a colony and a market. We have been denied our birth-rights as the free citizens of an independent state ... we have lived with floods and cyclone since independence. Today after 23 years of shared nationhood we are without even plans for flood control. Ten years after the cyclone and tidal bore which had ravaged these same areas, we have to live through the same dis-

[29]*Morning News*, November 27, 1970.

[30]Sheikh Mujib's statement at a press conference in Dacca, November 26, 1970 and November 27, 1970 cited in Bangladesh Document, *op. cit.*, pp. 121-23.

aster, magnified a thousand-fold. At that time plans were put forward for building permanent cyclone proof shelters, for replanning of our coastal villages, and improving communication facilities. A full decade later plans remain buried among a pile of plans which have never been implemented. ... Before a plan for flood control could be prepared, over one billion dollars could be allocated for building the Mangla and Tarbela dams in West Pakistan.[31]

Election Results

The elections were held on December 7, 1970 and the verdict was land-slide victory for the Awami League. The party secured all the East Pakistani seats, except two, in the National Assembly. One seat was captured by the Pakistan Democratic leader, Nurul Amin, and the other went to an independent candidate. Ten days later an almost similar verdict was given in favour of the Awami League in the East Pakistan Provincial Assembly elections. The votes in favour of the Awami League meant a clear mandate for an autonomous Bangladesh as envisaged in the Six-Point Programme. While it was relatively easy for the Awami League to defeat the Islamic and centrist parties of its more aggressive and nationalist manifesto calling for complete self-government for East Pakistan, it was also true that the leftists, particularly, the National Awami Party (Bhasani) did not maintain a consistent programme. The National Awami Party (Bhasani) initially opposed the elections, later decided to participate and finally withdrew from the contest. The Awami League policy of nationalization of major-sectors of the economy also over-shadowed the more moderate socialist party—the National Awami Party (Wali). Even though the major-constituencies of the Awami League in East Pakistan were the students, professional groups, the business and industrial interest groups, at the later stage it could enlist the support of almost the total population.

In the similar elections in West Pakistan, the Pakistan People's Party emerged as the single majority party, capturing 81 out of 138 seats in the National Assembly. Having no base in East Pakistan, the Pakistan People's Party had no candidate there. The party maintained its silence on the question of regional autonomy and did not react on the Six-Point Programme of the Awami League until the election results were out. The emergence of two regionalized parties victorious in the elections in East and West Pakistan brought the country to the final stage of polarized confrontation between the two wings. The situation was

[31]Statement of Sheikh Mujib at a press conference on November 26, 1970 and November 27, 1970 cited in Bangladesh Document, *Ibid.*, p. 122.

TABLE 1

Pakistan National Assembly Election, 1970-71

Party	Punjab	Sind	N.W.F.P.	Baluchistan	West Pakistan	East Pakistan	Total
AL	—	—	—	—	—	160	160
PPP	62	18	1	—	81	—	81
PML(Q)	1	1	7	—	9	—	9
CML	7	—	—	—	7	—	7
JU(H)	—	—	6	1	7	—	7
MJU	4	3	—	—	7	—	7
NAP (W)	—	—	3	3	6	—	6
JI	1	2	1	—	4	—	4
PML(C)	2	—	—	—	2	—	2
PDP	—	—	—	—	—	1	1
Independent	5	3	7	—	15	1	16
Total	82	27	25	4	138	162	300

Source : Craig Baxter, "Pakistan Votes - 1970" *Asian Survey*, Vol. XI, Number 3 (March 1971), p. 211.

13 women seats were shared by three parties as follows :—

(1) Awami League: 7 (Reserved for East Pakistan)
(2) Pakistan People's Party: 5
(3) National Awami Party (Wali): 1 } (Reserved for West Pakistan)

TABLE 2

Pakistan Provincial Assembly Elections, 1970-71

Party	Punjab	Sind	N.W.F.P.	Baluchistan	West Pakistan	East Pakistan	Total
AL	—	—	—	—	—	288	288
PPP	113	28	3	—	144	—	144
PML(Q)	6	5	10	3	24	—	24
NAP(W)	—	—	13	8	21	1	22
CML	15	4	1	—	20	—	20
MJU	4	7	—	—	11	—	11
JU(H)	2	—	4	2	8	—	8
PML (C)	6	—	2	—	8	—	8
PDP	4	—	—	—	4	2	6
JI	1	1	1	—	3	1	4
Others	1	1	—	2	4	1	5
Independent	28	14	6	5	53	7	60
Total	180	60	40	20	300	300	600

Source: Crag Baxter, *op. cit.*, p. 211.

further complicated by Maulana Bhasani's sovereign East Pakistan as spelled out in the Lahore Resolution".[32] The separatist demands of the Awami League's Six-Point Programme got a clear mandate in the elections in East Pakistan. During the yearlong campaigns the Awami League sought a referendum on the Six-Point Program which sought to establish a confederation of East and West Pakistan.

The student supporters of the Awami League were the most militant group to promote separatist movement in East Pakistan. The chanting of 'Jai Bangla' (Victory to Bengal) slogan meant to them the creation of an independent Bangladesh. Mujib utilized this group for the success of his party in the 1970 elections in East Pakistan. It looked as if it was difficult for the parties– the Muslim Leagues (three parties), the Pakistan Democratic Party and the Jamaat-i-Islami—which believed in the strong centre and integrity of Pakistan even to organize their election campaigns because of interferences from the militant Awami League workers and student supporters.[33] Bengali determination to free themselves from the domination of West Pakistani rulers became the prevailing political atmosphere in East Pakistan before and after general elections in 1970. Hence the Six-Point Programme which was based on intense Bengali nationalism meant that Mujib could not make any comprises over the question of a weak centre and semi-independent Bengal.

Post Election Developments: Confrontation Leading to Separation of East Pakistan

If the results of the 1970 elections (both in the National and Provincial Assemblies) in Pakistan were any indication of future political developments, it became a fact that Pakistan as it existed before was finished. One could see that Pakistan would sooner or later be dismembered. The Yahya regime could not correctly assess to what extent the Bengali nationalist resentment against the West Pakistani domination caused the landslide victory for the Awami League's Six-Point Programme in East Pakistan. The Pakistan People's Party of Bhutto kept silent on the very vital question of regional autonomy as envisaged in the Six-Point Programme of the Awami League until the elections were over. This provided an opportunity for playing the politics of delaying tactics and futile negotiations between the two victorious parties in the East and West Pakistan took place.

[32]*The Pakistan Observer*, December 5, 1970.

[33]Sharif al Mujahid, *op. cit.*, 165.

East and West Pakistan Confrontation

Immediately after the election results were declared in the wake of "a general feeling of euphoria"[34] in East pakistan, Sheikh Mujibur Rahman declared:

> I warmly thank the people for having given a historic verdict in favour of our Six-Point Programme. We pledge to implement this verdict. There can be no constitution except one which is based on the Six-Point Programme.[35]

The very next day Bhutto reacted that "no constitution could be framed nor could any government at the centre be run without his party's co-operation".[36] Further, he said that "the Pakistan People's Party had won majority in the Provincial Assemblies of Punjab and Sind and added that the real power of the centre lay in these two provinces".[37] Tajuddin Ahmad, General Secretary of the Awami League, stated emphatically that "the Awami League was quite competent to frame the constitution and to form the central Government".[38] He rejected the idea of a "bastion of powers" living in Punjab and Sind, as pointed out by Bhutto. He reminded Bhutto that the elections were held on the basis of "one-man-one-vote" principle.[39] Bhutto declared in Lahore on December 21, 1970 that the quantum of autonomy could only be determined in the context of national solidarity.[40] It is only relevant here to mention that Bhutto's stand on the question of autonomy could rely on the provisions of the Legal Framework Order:

> All powers including legislative, administrative and financial, shall be so distributed between the Federal Government and Provinces that the Provinces shall have maximum autonomy, that is to say maximum legislative, administrative and financial powers but the Federal Government shall also have adequate powers including legislative, administrative and financial powers, to discharge its responsibilities in relation to external affairs and to preserve the independence and territorial integrity of the country.[41]

[34]Robert LaPorte, Jr., "Pakistan in 1971: The Disintegration of Nation," *Asian Survey*, Vol. VII, Number 2, (February 1972), p. 100.

[35]*Dawn*, December 20, 1970.

[36]*The Pakistan Times*, December 21, 1970.

[37]*Ibid.*

[38]*The Pakistan Observer*, December 22, 1970.

[39]*Ibid.*, December 22, 1970.

[40]*The Pakistan Times*, December 22, 1970.

[41]*White Paper, op. cit.*, p. 3.

Thus the majority parties in East and West Pakistan stood for two opposite view-points—one (the Awami League) for a loose confederation on the basis of the Six-Point Programme and the other (the Pakistan People's Party) for a strong centre. The seriousness of the Awami League's stand on the Six-Point Programme was clearly demonstrated in the oath-taking of the elected Awami League members of the National Assembly at a rally in Dacca on January 3, 1971. Sheikh Mujib declared in that gathering:

> We want co-operation and help of the West Pakistani representatives in framing the constitution. But there could be no compromise on fundamental matters of policies.... we had suffered many an injustice. We know how it pinches. Therefore, we would do justice to the people of West Pakistan.

A referendum was held on the Six-Point and eleven-point programmes. The Awami League could not amend it now, he mentioned. "None would be able to stop us framing a constitution on the basis of the Six-Point Programme."[42]

Negotiations on the Future Constitution and Convening of Assembly Session Started

In mid-January of 1971 Yahya Khan discussed with Sheikh Mujibur Rahman for three days in Dhaka on matters relating to the future Constitution and transfer of power. Bhutto met Sheikh Mujib in Dhaka between January 27 to 29, 1971, and went back accepting only the first and sixth points of the Awami League.[43] On February 13, 1971 President Yahya summoned the National Assembly to meet in Dhaka on March 3, 1971, for the task of framing a constitution for Pakistan.[44] Bhutto threatened to boycott the session if his views were not heard: "We cannot go there only to endorse the constitution already prepared by a party and to return humiliated".[45] He stated:

> I think we can work out something which will satisfy both of us. But if we are asked to go to Dacca only to endorse the Constitution which has already been prepared by the Awami League and

[42] *The Pakistan Observer*, January 4, 1971.

[43] For a detailed analysis of Post-Elections Parleys, see David Dunbar, "Pakistan: The Failure of Political Negotiations," *Asian Survey*, Vol. XII, No. 5 (May 1972), pp. 444-61.

[44] *White Paper op. cit.*, p. 10.

[45] *Dawn*, February 16, 1971.

> which cannot be altered even an inch here or an inch there, then you will not find us in Dacca.[46]

Bhutto's attitude was criticized by other parties and fears were expressed in newspaper on the impending danger of the country falling apart.[47] Sheikh Mujib reiterated: "Our stand is absolutely clear. The constitution, will be framed on the basis of Six-Point"[48] But Yahya yielded to Bhutto's pressure and postponed the National Assembly meeting that was to be held on March 3, 1971:

> The position briefly is that the major party from West Pakistan as well as certain other political parties have declared their intention not to attend the National Assembly session on March 3, 1971... I have, therefore, decided to postpone the summoning of the National Assemb later date.[49]

He appointed Lieutenant-General Yakub Khan to replace a moderate Admiral, S. M. Ahsan as the Governor of East Pakistan.

East Pakistan Reacts: Non-Cooperation Movement and Failure of Negotiations

The reaction in East Pakistan was a total revolt. Sheikh Mujib declared a general strike in Dhaka on March 2, 1971 and the next day throughout the province.[50] The government was completely paralyzed and the province was cut off from the rest of the world. The students wanted nothing but a declaration of independence. On March 3, 1971 Yahya called for a meeting of "12 elected members of Parliamentary groups in the National Assembly to meet at Dhaka on March 10, 1971 in an effort to solve the constitutional crisis."[51] The Awami League refused to attend such a conference. Mujib's call for a non-co-operation movement continued.[52] Yahya in an address to the nation again called

[46] *White Paper*, *op. cit.*, p. 10.

[47] G. P. Bhattacharjee, *op. cit.*, pp. 297-99.

[48] *White Paper*, *op. cit.*, p. 10.

[49] *Ibid.*, p. 11

[50] Sheikh Mujib stated: "In this critical hour it is the sacred duty of each and every Bengali in every walk of life, including Government employees, not to cooperate with anti-people forces and instead do everything in their power to foil the conspiracy against Bangladesh". *Ibid.*, p. 11.

[51] *Ibid.*, p. 11.

[52] For a detailed account of the Government of Pakistan account of the deteriorating law and order situations and terror in East Pakistan, see *Ibid.*, 29-43.

for the National Assembly session to be held on March 25, 1971. But this time he sounded a strong warning:

> Let me make it absolutely clear that no matter what happens, so long as I am in Command of the Pakistan Armed Forces and Head of the State, I will ensure complete and absolute integrity of Pakistan. Let there be no doubt or mistake on this point.[53]

He appointed a hard-core military General, Tikka Khan, as the Governor of East Pakistan. Bengalis had already had clashes with the Pakistani Army which was the only element left to represent the central Government in East Pakistan.

Sheikh Mujib in a public meeting held in Dhaka on March 7, 1971, where many expected a declaration of independence, put forward four conditions of the National Assembly:

(1) Immediate withdrawal of Martial Law ;
(2) Immediate withdrawal of all military personnel to their barracks;
(3) Enquiry into the loss of life ; and
(4) Immediate transfer of power to the elected representatives of the people (Prior to the National Assembly session).[54]

He also declared that the non-cooperation movement would continue "till the objectives — the immediate termination of Martial Law and transfer of power to the elected representatives — were achieved"[55] Zulfiquar Ali Bhutto in a public meeting in Karachi said:

> Please remember this crisis had to come. It was inevitable. Some facts warranted it. On the one hand, East Pakistan wanted virtual independence, and on the other West Pakistan did not want to be exploited. But the crisis was destined to come. However, the question is of its timing. Was it come before the Assembly session? Or was it to come inside or outside the Assembly ?.... It was...advisable for this crisis to erupt before the Assembly, before the framing of the Constitution. It was desirable that what lay behind the scenes should come to the forefront".[56]

[53] *Ibid.*, p. 12.

[54] *Ibid.*, p. 15.

[55] The Awami League virtually set-up a governmental set-up in East Pakistan issuing directives. For a detailed study of the directives, see *Ibid.*, Appendix 'D', pp. 37-46.

[56] Hamid Jalal and Khalid Hasan, ed., *Politics of the People*, Vol. 3, (1970-71), p. 189 (A collection of articles, statements and speeches by Zulfiqar Ali Bhutto).

Yahya flew to Dhaka on March 15, 1971 and had further talks with Sheikh Mujib in an atmosphere where the authority of the Central Government was already finished, except for the Pakistan Army, which had clashes with the Bengalis everywhere during the month of March. Prolonged negotiations continued until March 24, 1971 and it appeared on different occasions that something would emerge out of it. Apparently an agreed formula, subject to legal validity, was prepared.[57] Meanwhile, Bhutto, who remained outside these discussions, came to Dhaka on March 21, 1971. His party pointed out the legal flaws of the declaration to be made as a result of the Yahya-Mujib negotiations.[58] It was alleged that the military regime with the backing of Bhutto was prolonging discussions until sufficient army personnel were brought to East Pakistan. It is relevant here to raise the question: Did Yahya Play the role of an arbitrator properly? Yahya miserably failed to bring together the two leaders from East and West Pakistan on a compromise solution. His yielding to the pressure of Bhutto caused irreparable damage to Pakistan. Perhaps he thought that it would be unwise to go against Bhutto, who had the support of Punjab, which was the major recruiting ground of the military and civil services in Pakistan. Moreover, the role Yahya was supposed to play in bringing politicians to a consensus was beyond his capacity.

Army Crack-down and Declaration of Independence in East Pakistan and War of Liberation

The patience of the Bengalis surpassed its limits and on March 23, 1971 the ceremonial unfurling of the Bangladesh flag at the residence of Sheikh Mujib took place on Pakistan Day.[59] It was on the night of March 25, 1971 that the coercive power of the West Pakistani military regime used the brutal logic of guns against the Bengalis. The excuse was an alleged plan of the declaration of independence by the Awami League to be made on March 26, 1971. The Awami League declaration did not come before the army crack-down, but followed it. Pakistan was undone and it took another nine months for the Bengalis to achieve independence from the West Pakistani army occupation in Bangladesh (East Pakistan).

The Yahya regime imposed a military solution to the problem which not only seemed unwise but struck the death blow to Pakistan's existence. The army cleared off the resistence they got from the Bengalis to

[57] *White Paper, op. cit.*, pp. 19-20 and Appendix 'E', pp. 47-59.
[58] *Ibid.*, pp. 21-22.
[59] *Ibid.*, p. 38.

restore the apparently full authority of the military regime in East Pakistan. A large section of the Bengalis, including the East Bengal Regiment, the East Pakistan Rifles, and the Police forces, fled to India. The War of Liberation started from March 26, 1971. A Provisional Government of Bangladesh-in-exile in India was established on April 10, 1971.[60] During a period of nine months, the Pakistani Army tried to maintain the breakaway province of East Pakistan through occupation and repression of the Bengalis. The Bengalis, using guerrilla tactics, harassed the Pakistani army and their few supporters during the entire period. The Awami League Government-in-exile got prompt support from all parties, except the righist-Islamic parties in East Pakistan.

Finally, the liberation came on December 16, 1971 as a result of a thirteen-day war between Pakistan and India. The unhappy union of East and West Pakistan ended and Bangladesh came into being to unsettle the 1947 partition of India.

The rigid stand of the Awami League on the Six-Point Programme meant that the Central Government would have barely adequate power and resources to keep the union going. Given this situation, the political sagacity on the part of the Central government should have been to hand over power to the Awami League and take the risk of persuading them to tone down their rigid demand on the Six-Point Programme. But the ruling elite, particularly influenced by Bhutto, did not want to take such a risk of handing over power to Mujib. They thought that the Six-Point Programme if implemented, would result in separation of East Pakistan.

Moreover, the Six-Point Programme which wanted to make the centre dependent on the provinces for its revenue alarmed the Pakistan military. The weakening of the financial powers of the centre was considered by the Pakistan military as a direct threat to their very existence. The raising of the para-military forces in East Pakistan would also mean loss of power of the Pakistan army. All these led General Yahya Khan to opt for the military solution and use the military power to crush the Awami League and the Bengalis.

Why East Pakistan seceded

The unhappy union of East and West Pakistan came to an end after twenty-four years of existence. The union was voluntarily entered into by both East Bengal and West Pakistan at the time of the partition of British India. The factors working in favour of such a union were the predominantly Muslim majority in both wings and the fear of domi-

[60]Bangladesh Documents, *op. cit.*, p. 281.

nation by the Hindu majority in a united India. These factors had resulted in a Pakistani nationalism based on Islamic unity.[61] But other background conditions were not favourable for such a union.

The two wings of Pakistan were separated by more than a thousand miles of foreign territory — India. Etzioni points:

> Ecological unity has often been considered so essential for political communities that there is a question as to whether a union of non-adjacent territories, that is, one in which the ecological base of the union is brokenup by a "no-man's land" (such as seas) or by non-member countries, can be successfully formed at all.[62]

The separating territory in the case of East and West Pakistan was considered an enemy state and the resulting effect was all time tension. The geographical discontinuity created the difficulty of movement of labour and capital in response to higher wages and prices between the two wings of Pakistan. The fact of physical separation meant that there were really two economies in Pakistan whereas the central government policy-makers seemed to operate always on the assumption of Pakistan being a single economy.

Another factor was the absence of a common language and culture in the two wings of Pakistan (though English continued to serve the purpose among the educated few). Although a shared culture is not always considered a prerequisite for political union, yet in the case of Pakistan the cultural difference between the two wings acted as a significant deunifying factor. Etzioni states "that shared culture is not a prerequisite for unification but a requirement that has to be fulfilled before the process can be advanced. No union, one might suggest, is highly integrated unless a shared culture has evolved".[63] But the attempt to impose Urdu upon East Pakistanis at the initial state of integration triggered bitter relations between the two wings of Pakistan. The cultural differences was sharpened by the assimilationist policy of the West Pakistani elite.

[61]For detailed analysis of the origins of Pakistan, see Keith Callard, *Pakistan — A Political Study*, (London: George Allen and Unwin Ltd. 1957), pp. 11-12, and see also K.B. Sayeed, *The Political System of Pakistan*, (Boston: Houghton Mifflin Company, 1967), pp. 1-8.

[62]Amitai Etzioni, *Political Unification*, (New York: Holt, Rinehart and Winston, 1965), p. 28.

[63]*Ibid.*, p. 36.

The integrating powers needed to maintain an effective union were not strong in Pakistan.[64] The utilitarian ties (powers) required to maintain a union were not favourable in the case of East Pakistan. The economic exploitation by the West Pakistanis was a major reason for ever-increasing alienation of the eastern wing.[65] The economics of the two wings were different in nature and had little to gain as a result of such a union.

The identitive power also declined in Pakistan. The support for Pakistan by the East Pakistanis was based on the concept of a union of Muslim provinces in a federal system on the basis of the Lahore Resolution. The increasing monopolization of control by the West Pakistanis was a major reason for failure of the identitive power. The increasing East Pakistani demand for autonomy was frustrated by the ruling elite in Pakistan. The East Pakistani counter-elite become highly alienated as they were denied participation in the decision-making process of the political system of Pakistan. The ideological basis of Pakistan on the slogan of Islamic unity did not appeal to the middle class Bengalis who constituted the most effective political force in East Pakistan.[66] The secular trend became significantly strong, specially among the younger generation in East Pakistan. The fear of India was considered essentially by the West Pakistani rulers to maintain the unity of the two wing.[67] But East Pakistan—both for cultural and economic reasons—believed in

[64]Etzioni recognises three integrating powers corresponding to three assets—"Coercive (weapons, installations, and manpower that the military, the Police or similar agencies command), utilitarian (economic possessions, technical and administrative capabilities, manpower, etc.) and identitive (values or symbols, built up by educational and religious institutions, national rituals, and other mechanisms)". See *Ibid.*, pp. 37-39.

[65]For detailed analysis see Rounaq Jahan's, *Pakistan: Failure in National Integration*, *Ibid.*, pp. 67-89.

[66]K. B. Sayeed states: "The two major integrating forces in Pakistan have been ideological or religious and utilitarian or economic. We have seen that the ideological or religious factor as an integrating force was somewhat over-estimated when Pakistan came into being. As long as the Muslim League was a nationalist movement waying its struggle for Pakistan against the congress and the British; Islam as a unifying factor was strong enough to overcome divisive forces like language, distance, culture, etc. But after the formation of Pakistan, politics, so far as the elites were concerned, became problem-oriented". K.B. Sayeed, *The Political System of Pakistan*, *op. cit.*, p. 208.

[67]In fact, the corner-stone of Pakistan's foreign policy was the fear of India. For a detailed study, see K.B. Sayeed, *Ibid.*, pp. 262-67.

good relations between India and Pakistan.[68] Bangladesh (formerly East Pakistan) was both physically and culturally separated from Pakistan. Moreover, the establishment of Bangladesh was helped by India, which was instrumental in defeating the Pakistan Army in December, 1971.

In the absence of the identitive and utilitarian powers necessary for its success, the use of coercive power wrecked Pakistan. The excessive use of coercive power caused the secession of East Pakistan in 1971. "When integrative power is ineffective, that is, it does not suffice or is not adequately activated, alienated units may seek either to alter the structure of a union or to secede."[69] When East Pakistan wanted to alter the political structure of the union to a confederal one after the 1970 elections, West Pakistan resisted and hence came the secession.

According to Etzioni, "existence of effective communication channels between member-units and elite (or elites) and the responsiveness of the elite to representation of politically effective groups, in relation to their power, were expected to enhance unification.[70] According to Karl W. Deutsch, unity cannot be maintained through naked power ('muscles'). Instead it, is through 'nerves'—channels of communication—that a union exists. He said: "... it might be profitable to look upon government somewhat less as a problem of power and somewhat more as a problem of steering; ... that sterring is decisively a matter of communication".[71] In Pakistan the ruling elite believed that the unity between East and West Pakistan could be maintained only through assertion of coercive powers. The linguistic and cultural differences created barriers of communication between the two wings of Pakistan. Moreover, East Pakistanis were highly alienated as a result of their under representation in the decision-making process. The highly centralised nature of the government failed to achieve "the representation of politically effective groups" in East Pakistan in the political system of Pakistan.

The question arises why the power elites in Pakistan followed such policies which alienated the Bengalis so much. The reasons are not difficult to seek. The military and civil service power elites of Pakistan

[68]The East Pakistan Awami League in its election manifesto in 1970 elections maintained that good relations with India would be the basis of its foreign policy. See K. B. Sayeed, "The Breakdown of Pakistan's Political System," *International Journal*, *op. cit.*, p. 396.

[69]*Etzioni., Ibid.*, p. 303.

[70]*Ibid.*, p. 310.

[71]Karl W. Deutsch., *The Nerves of Government: Models of Political Communication and Control* (New York: Free Press of Glencoe, 1963), p. IX.

were exclusively drawn from West Pakistan. In a heterogeneous country like Pakistan which had at least five different societies with varied cultures and diverse interests, the power elites drawn exclusively from West Pakistan pursued certain public policies which suited the interests of either their particular group or area. The economic infra-structure being more developed in West Pakistan, the central policy-makers tended to invest the bulk of the resources in West Pakistan because they felt that investment in West Pakistan would yield higher returns. However, economic policies pursued with such narrow perspectives are likely to produce, as we had seen in the case of Pakistan, politically explosive results.

The cultural policy pursued by the power elites of Pakistan was the outcome of their suspicions of the Bengalis. They thought that the Bengalis were neither good Muslims nor loyal Pakistanis. Moreover, they believed of Bengali language and literature were allowed to maintain contacts with the Hindu-dominanted neighbouring West Bengal (India), this would have adverse effects on the ideological unity of Pakistan. Hence time and again efforts were made to Islamicise Bengali language and literature which resulted in bitter resentment of the Bengalis against such moves. In view of the policies pursued by the power elites of Pakistan, the Bengalis demand for autonomy bordering on secesion was the natural consequence of such policies.

The ever-increasing alienation of the Bengalis remained unredressed in the hands of the West Pakistani rulers. The failure of the responsiveness on the part of the Pakistani elite to the political demands of the East Pakistanis had a serious disintegrative effect on the union.

Given the basic differences that existed between the two wings, the political domination by the West Pakistani elite alienated the East Pakistanis. The failure to recognize the political aspirations of the Bengali counter-elite ultimately caused the separation of East Pakistan in 1971.

"Disease Causation from Paradigmatic Points of View: The Relevancy of Anthropology in the Planning of Health Care Strategies for Rural Population of Bangladesh"

Ahmed Fazle Hasan Choudhury

Introduction

The increasing involvement of anthropologist in health issues has intensified debate concerning the substantive contributions to be made by this discipline and the types of strategies to be encouraged by its professionals in the promotion of culturally appropriate public health programmes. Here it is argued that anthropology directed to the analysis of bio-cultural processes and relationships offers a contribution to the study of health problems that is distinctively anthropological and at the same time is well suited to those plannings which seek to maximize programme-output in terms of credibility and adoption rate. There are many ways of approaching the problems of health and disease in a population. Anthropological investigations tend to focus conceptually on the complex changes in patterns of health and disease and on the interactions between these patterns and their biologic, sociologic and demographic determinants and consequences. In as much as the phenomenon of health and disease are integral components of societal dynamics, anthropological knowledge about these patterns may serve as a basis for improvement of health status and also as a source of hypotheses that can be further tested to refine causal theories and explanatory models. The central emphasis in such design of anthropological research on health issues is to go beyond the collection of overall epidemiological data, to the posing of appropriate deeper questions for generating qualitative informations that may cast insights into disease occurence in a population.

One of the primary requirements in accomplishing an anthropological study is to consider the manner in which health behaviour is perceived, interpreted and analyzed by the researcher. It is known today

that every culture developes an integral body of practices based on its own cognition of health and disease. The analysis of such patternings surrounding such issues have attained a great deal of attention from anthropologists in particular. The ethnomedical approach to health, one which is gaining wide currency in recent anthropological research, examines illness in terms of behavioral indicators along with their bio-medical implications. This essentially requires more concentration on relationship between cultural content and indigenous practices on the one hand and health problems immanating from such behavioral patterings on the other. These cultural patterns give substances to the manner in which health issues can be perceived and reacted to. By taking an emic frame of reference, anthropological paradigm unfolds community's own beliefs and interpretations that operate as a knowledge base and invokes actions and reactions in response to public health programmes. There are growing evidences that indigenous health and dietary practices hold the key for understanding the mechanism behind alteration of the pattern of health and disease in a population. The nature of cutural practices, geographical setting, and habits of the people often require that a more holistic, multi-level orientation be adopted in such studies. One of the practical implications stemming from anthropological holistic investigations of disease occurrence in developed countries is that disease control programme has been shifted from hospital based curative system to one of prevention. This paper emerges from the concern for the utilization of indigenous behavioral frame as a means of identifying etiological components of a health problem and also for coping with traditional diseases that are endemic in rural environments. It will be emphasized that the specification of major sociocultural parameters in conjunction with bio-physiological predispositions result in a complex etiological model which is not amenable to analysis unless an anthropological design is adopted. The present essay will focus on the following key isssues: (1) to offer an overview of paradigmatic developments in the analysis of disease causation, (2) to explicate an anthropological framework for explanation of epidemiological shift in disease and health, which may be applicable cross-culturally, and finally (3) to identify areas where anthropology can fruitfully contribute to current health care programmes for rural populations in developing countries in general and Bangladesh in particular.

Paradigmatic Breakthroughs in the Analysis of Disease-Causation

The conception of disease as a biological or medical problem has dominated for a long time. From bio-medical viewpoint, 'health' is a condition of equilibrium, whereas 'illness' can be defined as the dis-

ruption of that balanced bodily state. Defining characteristics of diseases refer to biologically construed processes, and indicators of disease are constituted of data derived from the examination of the bodily structure and functioning by means of specialized procedures (Weiner and Lourie 1981). Health professionals working within this framework examine the 'causes' of a set of measurable and empirically varifiable symptoms called as 'disease', and the unit of analysis is the individual organism (patient) itself. In such biologististic framework, health problems are studied with reference to criteria that are amenable to clinical diagnosis in western medical terms. The biomedical perspective as noted above, has been the most important aspect and organizing principle of modern medical science, and the major part of a physician's training is directed to biological examination of body functioning and disease. Although the specific details of the biological paradigm are outside the sphere of this paper, it needs to be mentioned that an essential emphasis in modern medical system entailts 'hospital based curative' approach, oriented to the measurement of particular symptom-complex, that is, emphasis is given primarily on the abnormality in the structure or function of any system of the body, and the evidence of malfunction in the biological system serves as indicators of disease. One practical implication stemming from this approach is that a bulk of medical studies tend to seek presumed causes within the narrow limits of an individual's biology in disregard of social context in which it occurs (Fox et al. 1970, MacMohon and Pugh 1970). Practices, habits and beliefs of the group are not emphasized, which are no less important factors in the pathogenesis of a health disorder. Despite invaluable contributions made by modern medical science to the understanding of the molecular and pathophysiological basis of human diseases, such a framework could hardly provide answers to the questions why and under what circumstances disease and health patterns undergo alteration in a population.

Eversince the study of health became gradually a focus of concern in other behavioural and health sciences such as anthropology, public health science, medical sociology, and epidemiology, there has been a substantial shift in paradigms dealing with the causation and distribution of diseases in time and space. Evidence of growing sophistication in the research strategies and designs, which have recently appeared in literature, made important contributions to our knowledge of the complex multi-factorial etiology of various diseases. Two distinctive trends in this area are particularly noteworthy. The first one can be designated as 'Epidemiological perspective, and the other as 'Anthropological paradigm', both of which require illustration by virtue of their own merits.

One of the most outstanding conceptual frameworks for the study of disease that emerged in recent years is the epidemiological frame of reference. Epidemiological approach as a research paradigm emphasizes the web of relationship and interdependence of various components within the whole and markedly identifies the socio-environmental variables as the influencing factors among other variables. In a recent formulation, Zimmet and King define epidemiology as "the study of the occurrence, distribution, and the determinants of health related status and events in population, and the application of this knowledge to the control of diseases" (1985 : 67). The primary goal of epidemiological research is to elucidate etiological factors involved in a disease incidence; and in its emphasis on population variation in incidence and occurrence that epidemiology contrasts with clinical investigations, the latter drawing inferences from the facts observed in examination of individual patients (Roberts 1983). The early classical epidemiologists did not conceive of experimental modification of any environmental factors to test hypotheses ; but today this experimental approach has been a guiding design in epidemiological studies, where investigators create a quasi-experimental context to test hypothses without an attempt at experimental alteration of environmental factors (Ward 1985, Singh et al. 1985). By contrast, in clinical studies, advances in management and treatment may be based on controlled trials in which there is experimental alteration of the internal environment of the body.

Biological anthropology shares with epidemiology in the attempt to specify how diseases distribute in relation to sociocultural as well as biological factors. In addition, anthropological research seeks increased specifity in diagnosis, understanding of pathogenesis and determination of transmission, reservoir mechanism, evaluation of contributing factors, and development of measures for prevention and control (Corruccini and Kaul 1983, Corruccini and Choudhury 1986). The clinical picture of disease is considered in such inquiries as an unrelaible guide to etiology, because clinically similar syndromes may be caused by several agents and a given agent may also elicit a wide-spectrum of clinical responses. Anthropology, a science with preoccupations for bio-cultural studies of human being, has immensely contributed to such analysis from greater analytic perspective. When such issues form the study design for an investigation, the focus is given on the documentation of the operation of complex factors involving man's biological nature and both physical and social aspects of their environment that have a bearing on the health and adaptation of the population. Human groups in anthropological paradigms are hypothetically viewed as standing in an open relationship with nature and society such that the biological and social

levels of human activity are structurally and functionally interdependent with nature. Anthropologists, therefore, attempt to determine, who in a particular population develops a disease, on what occassions and under what influences. Stated in a different way, it searches for the clues of disease by studying the incidence in different groups, defined in terms of their composition, their inheritance, their experience, behaviour and environment. Seen from this standpoint, it forms one of the most important investigative perspectives in the study of health and disease.

Two basic types of research desings are usually followed in anthropological studies. These are (a) retrospective (a backward-looking) design and (b) prospective or Cohort (forward-looking) design. Design of a formal retrospective study involves identification of a population with disease and an appropriate control group free of disease for comparison. Observation is focussed on events, chiefly possible 'exposures' and disease occurrence in a given sample in the course of normal living. The analysis consists of statistical comparisons of two study groups with respect to exposures. The retrospective method is often the method of choice, particularly as a first step, since it is quick and inexpensive. Such a study generates first hand informations to develop hypotheses that can be latter tested through longitudinal or cohort study. (Pelto and Pelto 1970, Ward 1983). Though such inquires may reveal association, retrospective data provide no direct measure of the risk related to exposure. Such design yields data from which indirect estimates of relative risk (exposure rate) may be obtained. More sophisticated in concept and design are prospective studies (forward-looking approach), in which sample is based on exposure to the determinants. An association would be indicated if researchers observe that a condition develops significantly with greater frequency among the exposed than among those unexposed. Here, both the groups are followed through time and the development of the defined condition is carefully noted. The key features of a cohort design are (a) use of appropriate procedures in dampling, (b) the availability of reliable methods for clinical diagnosis of defined traits, when develop, and (c) provision for continuing observation and recording with accuracy during follow-up stage. The advantages of prospective studies are indeed important. By following this procedure, the occurrence of the health disorders can be interpreted as incidence rates and thus it provides a direct measure of the risk attributable to suspect determinants. Information concerning exposure is usually current at the time of study, and so is less subject to misclassification. However, one great limitation of a prospective study is that both the original sampling efforts and the long period of follow-up mean that such a design may be expensive, labour-intensive and time consuming (Omran 1971), Nichter and Nichter 1983). It should

be nonetheless stressed that this approach usually requires a fairly extensive longitudinal study when appreciable time is needed for a physiologic response to occur.

Beyond these dominant paradigmatic traditions, as illustrated above, there is a new but different line of research in anthropology, more popular among ethnologists, which is best known as 'Ethno-medical' approach. The ethno-medical approach, which is an outgrowth of 'ethno science' method, involves study of the relationship between cultural content and people's cognitive scheme on the one hand, and responses to illness on the other. In other words, in ethnomedical studies, health problems are approached from the viewpoint of groups or individuals being studied. Illness comes to be viewed as a cultural category and as a set culturally related events. Behavioral and phenomenological indicators which are usually employed to define a state of illness in ethnomedical studies appear to be guided by the following dimensions of illness: (1) defining characteristics: An Illness involves a change in the state of being which is a) seen lebelled as discontinuous with routine every day affair, (b) which is believed to be caused by socioculturally defined agents or circumstances, and (c) to which there are specific forms of treatment. (2) Principal attention is given to changes in behavior, to bodily complaints and to verbalization regarding the perceived condition that represents illness — its genesis, mechanism and treatment having cultural significance (Nichter 1980, Choudhury 1981).

Recently, both the research and theoretical concerns of many anthropologists have been directed to the emic analysis of indigenous knowledge system in varied fields, such as in dietetics, health and medicine taking behaviour. Fundamental to this approach is the theoretical emphasis on discovering the cultural rules determining wide-ranging activities and behaviour generated by ethno-physiological notions. By emic analysis of the cultural framework of indigenous health related norm, anthropologists have elicited useful informations on how people structure their behaviour by imposing cultural rules (for details see, Choudhury 1986, Hossain and Choudhury 1986, 1987, Choudhury 1988, Nichter and Nichter 1983). It is this internalized information which is instrumental for promotion of culturally specific health care programmes. To quote from Pelto and Pelto:

> "Cutural (health) behavior should always be studied and categorized in terms of the inside view — the actor's definition of human events. That is, the units of conceptualization in anthropological theories should be 'discovered' by analyzing the cognitive processes of the people. Studied rather than 'imposed' from cross-cultural classification. This point of view has been referred to as ethno-science" (1970: 54).

Using this approach, many anthropologists have been successful to find out the underlying causes of folk dietary behaviour and could explain the problem of malnutrition among women in reproductive age period and also for rural women's reluctance to comply with modern medical therapies such as tetanus toxoid immunization during pregnancy. The triumph has been its utilities in helping researchers trace interdependence between lifeways of individuals and the alteration of health pattern (Choudhury 1988, Hossain and Choudhury 1987). One of the major innovations in anthropological research in health comes from the combinations of both emic (actor's orientation) and etic (analyst's orientation) tools of inquiry in the study-design. While disease entities are defined and analysed in modern medical terms working with etic categories, behavioral complexes are derived emically. The advantages accruing from such efforts are already visible when introducing public health programmes.

Epidemiological Shift in the Patterns of Health and Disease: A Cross-Cultural Framework

Findings obtained from carefully executed research, both retrospective and longitudinal, conducted in diverse cultural settings permit anthropologists to postulate a theoretical model and draw an empirical generalization on transition in disease pattern in terms of multi-factorial etiological complex. The analyses of such investigations lead to the following conclusions:

(A) Components in Etiological Continuum

Chronic diseases can be regarded as occuuring in a spectrum or continuun; at the one end of the continuum are infectious diseases that originate from environmental insult and are independent of the genetic constitution of the individual. At the other end of the spectrum are those disorders that are totally genetic in nature, which occur no matter what environment an individual grows in. The classic epidemiological approach has been particularly useful at the infectious and non-genetic end of the spectrum. There is little point for carrying an epidemilogical analysis for those disorders that belong to the genetic pole of the continuum. On the other hand, in the study of genetic diseases, geneticists have long been familiar with a variety of analytic techniques, namely, pedigree and segregation analysis, designed to evaluate the mode of transmission of linked genetic markers. There is a class of diseases in between genetic and infectious disorders which originates from the middle of the spectrum. Anthropological studies yield much knowledge on such disorders where both genetic and environmental factors interact — a point which will be dealt in depth in the followig section of this text.

Important to mention here, it is although supposed that etilogical components can be dichotomized into genetic and non-genetic, a more realistic approach is to consider etiology as a spectrum ranging from the wholly genetic to the wholly environmental. Three major categories could be recognized along the etiological continuum, The first category is represented by those diseases where the primary etiological component is due to some environmental insult. Here an arbitrary division can be made between diseases initiated by biological agents such as infectious or parasitic diseases, and those diseases caused by non-biological agents, often culturally derived (Omran 1971, Ward 1985). The germ model of diseases causation in this category continues to hold immense significance for understanding of the prognosis of an infectious disease. In the second category, both genetic and environmental factors operate to give a multifactorial etiology. To illustrate this point, it may be mentioned that environmental and genetic factors play a complex role in the etiology of degenerative disorders like, chronic elevated conditions of blood pressure (essential hypertension) and blood glucose (Type II diabetes). Few of the degenerative diseases are directly inherited according to simple Mendolian principle, even though most aggregate in families. As a class of diseases, the generative diseases as opposed to pure genetic disorders and infectious diseases, have a greater impact on the health of the adult population (manifesting at 40 years around) than the simple errors of chromosomal abnormalities (Choudhury 1988, Singh et al.1985, Weiss 1985). Central to the notion of gene-environmental interaction model which is an area where anthropologists have possibly contributed remarkably, is that genes express themselves differently in diverse environmental settings and that the alteration of gene expression is age dependent. Weiss expounds:

> "Genetic variants may arise in environments in which their phenotypic expression is only slightly different from that of the gene already present. In particular, such genes may be clinically 'silent' producing no ill effects. Major environmental changes (from agrarian to urbanization) could serve to exegerate the phenotype differences expressed by different genotypes to the point that some become pathological" (1985 : 182).

Weiss calls this model of causation a 'phenotypic amplification' which is basically an interpretation of gene-environmental interactions. Research done in quasi-experimental context for determining this interaction demonstrate that diabetes, hypertension and coronary heart disease are caused by continual operation of pathogenic processes over a period of time. Such processes neither instantaneously produce such degenerative

disease nor do they imply that such disorders will occur to all the exposed individuals. Only a fraction of the exposed individuals in a population may become victims as a result of that exposure. (Roberts 1983, Ward 1985).

This differential pattern occurs from the action of 'susceptibility genes'. Only in changed environmental conditions, inherent susceptibilities may produce pathological states. It is now accepted that ultimate expression and clinical variability of such degenerative diseases are governed by specific environmental determinants (such as, physical sedentism, intake of fat and cholesterol rich diet, acculturational stress, obesity, etc) which tend to interact with varying degrees of types of inherent susceptibility. The clinical manifestation depends to some degree on variations in the environmental circumstances in which individuals with abnormal genes are exposed. Many of the individuals acquire these traits in high risk societies, that is with exposure to urban deleterious lifestyles (Choudhury 1988, Corruccini and Choudhury 1986, Corruccini and Kaul 1983). In the present context it is sufficies to emphasize that the complexity of the etiological links between genetic and environmental variations and the endpoints for diseases, such as anaemia, diabetes, and coronary heart disease is characterized by (1) continuous variation in clinical biochemical, and molecular phenotypes that are measures of health, (2) environmental modification of the biological predisposition of an individual to diseases, and (3) multiple genotypes giving rise to the same disease end point.

In the third category are the traditional genetic diseases, whose proximal pathology tend to be genetically determined. This area falls within the sphere of geneticists predominantly, who emphasize the utilization of complex genetic analysis in an attempt to resolve which etiological components are genetic. These investigators stress the adoption of pedigree analysis in order to test hypothesis (Adams and Smouse 1985, Kirk et al. 1985). The demonstration that genetic factors are involved in any disease ultimately requires proof that the disorder in question is influenced by specific substances (genetic markers) transmittable from one generation to the next, i.e. from parent to offspring. The issue of defining an appropriate strategy is most starkly brought into focus when the problem of pure genetic causation is considered for any disease. In recent years, though scholars have continued their search for specific genetic markers associated with some presumed genetic diseases, such as insulin dependent diabetes (Type I), hypercholesterolemia, atherosclarosis, etc, results thereof have proven to be clusive. It is increasingly being recognized that the genetic dysfunction associated with such diseases may involve choromosomal aberrations at the gene level without neces-

sarily following Mendel's law. As a result, a stable pattern of transmission may not be established. These realization has produced an interesting shift from a momogenetic (single gene) theory to a polygenic (plural genes) explanation in the occurrence of most genetic diseases (Corruccini and Kaul 1983, Ward 1985). The current models allow discrimination between two conceptually distinct kinds of genetic influence — major genes whose effects segregate in families according to the dictates of Mendel's law and polygenic components. Although genetic and morphological variation may determine a large fraction of human disability, geneticists have been less successful in understanding the links between genes, environments, and endpoints for most chronic, degenerative (non-infectious) diseases. In contrast to the successes with the inborn errors of metabolism, only rarely has research revealed a simple relationship between the genotype and the endpoint for a chronic disease. Hypercholesterolemia is one disease where a single gene mutation is directly responsible for a discrete class of individuals (bi-modal distribution) who have extreme levels of the LDL cholesterol and are predisposed to early coronary heart morbidity and mortality (Singh et al 1985).

It should be reiterated that research on the genetic basis of the degenerative diseases begins often with an incomplete picture of the mechanism that are involved. Progress toward the understanding of heritable factors cannot be accomplished if such studies are not designed to detect the multiplicity of causative factors, incorporating the role of environmental etiologies at the same time, as Ward observes, "we are unlikely to learn anything of value about causation unless We take account of the both genetic and environmental influences on the distribution of disease" (1985: 153).

(B) Causal Mechanism for Alteration of Patterns of Health and Disease

Given the differential distribution of disease burden by etiologic category as discussed above, anthropologists postulate that different cultural gradient from simple traditional societies to complex urban societies is likely to be accompanied by a corresponding gradient in the changing distribution of types of disease. By focusing attention on attributes that have relevance to the functional adaptation of the population, biological anthropologists have proposed a theory of epidemilogiocal transition which explains the mechanism behind the alteration of disease pattern among variant population groups. The study of both types of infectious and degenerative diseases across different environmental conditions allows an investigation of a manner in which cultural evolution has interacted with biological evolution to yield the spectrum of adaptations that are currently recognized in different modernizing societies.

As a society undergoes changes in cultural patterns from rural. agricultural lifeways to modern, urban, industrial lifeways, morbidity and mortality pattern among populations follow a concomitant shift. The communicable, infectious diseases, a characteristic feature of rural environment, are replaced in phases by non-infectious, degenerative disorders (for example, cancer, stroke, circulatory disorders, diabetes etc) as the chief form of morbidity and mortality. Urbanization endows its population with a new level of adaptive capacity that tends to interact with behavioral patternings, nutritional balance, and the degree of energy expenditure level (physical activity). The altered conditions are not entirely beneficial, for some intrinsic aspects of urban lifeways often act adversely on the physiological mechanism in population undergoing transition, leading to a considerable change in health status. An importtant aspect of this sociocultural change is the emergence of new disease patterns. This complex alteration in the patterns of health and disease is conceptually characterized as the 'epidemiological transition' which as a process coincides broadly with the level of modernization of a society (Omran 1971, Corruccini and Kaul 1983, Choudhury 1987, Adams and Samouse 1985, Corruccini and Choudhury 1986). The process of epidemiological shift often begins with increasing distribution of ulcer, diabetes, and hypertensive disease, and eventually culminates in stroke, cancer, and several other kinds of complex cardiovascular diseases. The contemporary western industrialized nations have already reached the pervasive phase of this transition, in which the above cited disorders impose a significant burden of the total mortality and morbidity.

Typically the mortality patterns distinguish three major successive stages of epidemiological shift, namely the age of pestilence (predominant in simple agrarian traditional societies), the age of receding pandemics (prevalent in modernizing, transitional phase), and the age of man-made, degenerative diseases (common feature in urban, industrialized stage of a society). Both the first two ages, that is, the age of pestilence and the age of receding pandemics reflect the pre-modern pattern in health, wherein two important health parameters predominate. These are (a) an average shorter life expectancy rate at birth, oscillating between 35 to 50 years, and (b) an 'U-shaped' mortality curve in population, showing an unusual high rate of infant death. During these stages, infectious and chronic malnutrition exact a particularly high toll among children and women in the reproductive years ; only a small proportion of the population survives the high mortality of youths. The young dependency ratio is thus quite high and continues to be so untill the onset of the final stage of epidemiologic shift. During the transition, most profound changes in health and disease patterns obtain among children and young

women. Consequently, there is a progressive increase in the average life expectancy of the population which approaches about 70 years and the U-shaped mortality pattern which is pronounced in the premodern stage gradually disappears. The genuine improvements in survivorship that occur with the recession of pandemics are particularly beneficial to children and females in the reproductive age period, probably because the susceptibility of these groups to infection and deficiency diseases is relatively high (Scrimshaw 1977, Waterlow 1972).

Childhood survival in the final stage of epidemiological transition is significantly and progressively improved as pandemics recede in response to better living standard, advances in nutrition and early sanitation measures. Although all age groups benefit from this shift in disease patterns and the increase in life expectancy, the decline in childhood mortality is demonstrably the greatest. The overall alteration in health and disease patterns that characterize the epidemiological transition is closely associated with the demographic and socioeconomic changes that constitute the modernization complex. The shifts from infectious to degenerative disease predominance is more readily apparent for western urbanized societies. It may be useful at this point to mention three major categories of determinants of infectious diseases: (a) Ecobiologic determinants of mortality indicate the complex balance between disease agents, environment, and resistance of the host. (b) Socioeconomic and cultural determinants include standards of living, health habits, hygiene and nutrition. (c) Medical and public health determinants are specific preventive and curative measures used to combat disease. They include improved public sanitation, immunization, and the development of decisive therapies. The reduction of mortality in Western countries was determined primarily by ecobilogic and socioeconomic factors. The influence of medical factors was largely inadvertant until the 20th century, by which the pandemics of infection had already receded significantly. The mortality decline in currently developing countries has been more recent. Public health measures have been a major component of the imported, internationally sponsored medical package in setting the stage for curbing the incidence of epidemics and traditional pestilence, that were once widespread in most rural environments in developing countries.

(C) Nature of Epidemiological Shift in Bangladesh and in other Developing Countries

The course of epidemiological transition in Bangladesh, as in other developing countries, presents a paradoxical picture. Ample evidences have been cited to document a pre-modern pattern of health and disease among the vast rural populations where infectious and malnutritional

disorders tend to impose a major burden of morbidity and mortality among teen-age children and women in reproductive age. Only a small segment of upper urban population has drifted toward the non-infectious pole of the disease spectrum (Choudhury 1981, 1987, 1988). Although slow, the unsteady decline in mortality in contemporary developing countries began only in the past few decades. The introduction of several disease specific prevention programmes (such as control of cholera, Malaria, Pox, diarrhea, etc) have successfully manipulated mortality downward and improved adult survivorship to a great extent; yet infant and childhood mortality remains excessively high in rural areas. In addition, females of child bearing age continue to have a higher mortality risks than males in the same age group (Chen et al. 1981, D'Souza and Chen 1980). The results of national census of 1981 indicate a crude death rate of 11.5 per thousand population, whereas the death rate among infants aged between 0-1 years was estimated at 122 per thousand live births. The corresponding figure for children aged between 1-4 years was 17.5 per thousand population (Bangladesh Bureau of Bangladesh 1983). The average life expectancy at birth, which is close to 50 years, clearly indicates the extension of the pre-modern pattern of health of rural population.

A closer look into the age patterning of all deaths reveals that mortality pattern in rural Bangladesh is typical of U-shaped curve observed in most developing countries. The death rate starts at a high peak immediately after birth and falls to a minimum around the early teens (5-15 years), then rises slowly at first with increasing rapidity as age advances. A very high concentration is noticed within initial years of life cycle, within the first 10 months in the first year of life, and within first week of first month of life. A carefully conducted cohort study shows that of all infant deaths under the age of 30 days, more than half (56.7%) die within the first week of life, and more than one third (37.7%) occur in the first year of life (D'souza and Chen 1980). This trend is also observed in many low income countries of South Asia (Nichter and Nichter 1983, Singh et al. 1985). According to the World Bank report,

> "Mortality rates among children aged one to four in low income countries are frequently 20-30 times higher than those in industrialized countries and sometimes even more.... The very high death rates among younger children with high birth rates, mean that a tragically large proportion of the deaths in a developing country occurs among children under 5. The main causes of child death in developing countries are diarrheal diseases, and respiratory infections, especially influenza and pneumonia" (1980:54).

Difficulties faced in explaining trends in child mortality rates from various infectious diseases are typical of the problems that occur in the statistical study of such disorders. Demonstrating cause and effect relationship is complicated by the long latent period before some acute infectious diseases become evident. The following conditions are given as risk factors by most investigators: poor sanitation, lack of primary immunization, undernourishment at infancy, high exposure to infection, faulty feeding and child-care practices, and so forth (Chen et al. 1981, Choudhury 1987, 1988, Hossain and Choudhury 1987). Evidences are accumulating that malnutrition related deaths have become endemic in rural Bangladesh, particularly among infants. According to the findings of Matlab Food and Nutrition Survey, a significant number of teenage children in 0-5 age group suffers from socond and third degree malnutrition (Samad et al. 1977). The prenatal environment of the reproductive women results in the undernourishment of offspring. The excessive malnutrition in children to a great extent is caused by fetal undernutrition during gestation and pregnancy. It should be pointed out that a recent anthropological study by the present author found that the diets of the pregnant and lactating women in rural Bangladesh are deficient in several respects which is mediated by a number of cultural factors, for example, food taboos, food fads, (for details see Hossain and Choudhury 1986, 1987). As a result, mothers gain little weight during pregnancy. This further contributes to low birth weight babies. The low nutrient stores in infants from the early days of their life make them highly susceptible to infections. Additional risks come from mothers' termination of breastfeeding due to maternal chronic malnutrition and associated lactational failure (Choudhury 1988).

Malnutrition shares a synergistic relation with other disease conditions. It leads to a depleted state of immunological resistance, thus invites infection related morbidities. Scientific investigations carried out in underdeveloped countries validate the contention that the modification of energy balance through changes in the patterns of food intake and changes in the relative proportions of major nutrients may affect functional capactiy in most domains of biological fitness. Among children, malnutrition due to prolonged deprivation causes stunted growth, while due to immediate deprivation it causes wasting and deterioration (Waterlow 1972). Prolonged nutritional deficiency weakens body's immunizing mechanism and lowers its defenses against initial infection. Malnutrition and infections thus have been postulated to be 'synergistic'. It needs to be emphasised that in addition to food intake, the rate of infection is also critical for nutritional well-being, because through a series of biological mechanism, infection causes loss of appetite, gastro-

intestinal malabsorption of ingested nutrients and metabolic wastage of available nutrients in the body. Infections, in turn, are determined by host susceptibility and exposure to disease transmission. Judged from this a bi-directional causal relationship is postulated in which malnutrition and infection each predisposes and excerbrates the other resulting in a combined effects that is more deleterious than either alone (Scrimshaw et al, 1968, Scrimshaw 1970, 1977). These are both seperate and mutually reinforcing determinants of health. Recent investigations in rural areas of Bangladesh produced convincing evidences in support of association of high child mortality in combination with malnutrition and infectious diseases. Common childhood diseases such as measles, polio, anaemia and other malnutrition related disorders account for a high casualty in infants in rural areas. In addition, various intestenal and parasitic infectious diseases are frequently chronic and debilitating rather than the causes of acute illness or death. Of other diseases that usually cause debilitation — rather than death in both young and adult children, the enteric group of disorders remains extremely widespread (Choudhury 1981, 1987).

Turning to urban segment of population, evidences are accumulating that diabetes, ulcer, hypertensive disease and cardiovascular disorders are assuming greater importance as health problems — clearly indicating the beginning of the presumed epidemiological shift in urban Bangladesh. As noted before, chronic, degenerative diseases become important when the stage of modern urbanized society is reached. Several adaptational attributes associated with urbanization of lifestyles may be implicated for the increasing distributions of such degenerative diseases among modernizing populations. These include altered dietary pattern (intake of fat and cholester of rich diet), reduced energy expenditure (associated with sedentary urban occupations), and high accuulturational stress (Choudhury 1987). This suggests that the potential determinants of these degenerative disorders are likely to be a major constellation of socio-cultural and behavioral factors associated with environmental changes, which is supported by many anthropological studies (Corruccini and Kaul 1983, Ward 1985). This findings run contrary to the genetic postulate that chronic diseases like diabetes, hypertension and coronary heart diseases are genetically triggered physiological responses which are held to be associated with genetic changes in western populations. Geneticists often aim that such diseases occur in greater proportions in urban industrialized societies because of increased accumulation of genetic load against such disorders. The rapid acquisition of a high degree of such degenerative diseases by rural migrants in developing countries within relatively short span of time, most often in the generation, pro-

vides unequivocal empirical support to the paramount role of environmental factors (urbanization of lifestyle) in the shift as opposed to genet mechanism.

The environmental causation of diabetes, high blood pressure, and heart disease is growingly being supported in both longitudinal and cross-sectional studies. Corruccini and Kaul observe, "The change is too rapid to allow consideration of explanatory models of genetic adaptation or mutation" (1983:37). It is inconceivable that some kind of genet change could have triggered the process ; rather, far more likely, rapid changes in lifestyles accompanying urbanization constitutes the proper source of disease transition among the urban segments of Bangladesh population. It needs to be recognized that population's burden of morbidity and mortality accumulate because of the effects of altered spectrum of adaptation in lifestyle (Adams and Smouse 1985, Choudhury 1987). While concomitantly the rapid and accelerated rate of socio-economic development holds promise and should be desirable for any society, unrestricted changes in lifeways (like over-nutrition, excessive physical indolence, exposure to stress that invokes systemic response) at the same time harbour dangers to human health, and thus may become deleterious. Findings of this nature highlight the need for health education programme that stresses to minimize the medical fall-out of modernization for developing populations. Simultaneously, major inputs in health care plannings should centre around the problems of malnutrition, lower childhood survivorship, and recession of infectious diseases in rural communities.

Nutrition Intervention Strategies and Promotive Health Care Progamme: An Appraisal of Anthropological Inputs

One of the major challenges in anthropological research today in applied field is to devise conceptual and practical tools for improvement of the efficacy of the existing primary public health programmes in developing countries. Some innovative developments in this direction are noteworthy particularly in nutrition intervention strategies and fertility regulation measures.

(a) Use of 'Positive Deviants' Approach in Nutrition Intervention Efforts

The usual basis for establishing a food supplementation programme is to assess the nature of the prevailing dietary deficit, perhaps identify the categories of persons most in need, and introduce the needed nutrients in whatever source is economically and logistically available. The emphasis is to introduce more nutritious food and educate people on

nutritional superiority of such newly introduced foods. One gross drawback of the presently pursued approach like this is that such an approach lacks both an educational and a cultural foundation. It lacks an educational foundation in that it does not incorporate the premise—which is fundamental to education—that planners must start at the level and within the parameters of those they are trying to educate. It lacks a cultural foundation in that it fails to take into account the cultural context of food. This approach essentially deviates from the basic premise that there is no strict and universally accepted definition of food; each culture defines food not in terms of nutrition or eatability but through a complex metrix of cultural consideration. In other words, one has to recognize that food behaviour, like any other social phenomenon is culture bound.

The anthropological approach to an intervention strategy, by contrast, is somewhat opposite. It attempts to derive ingredients of change in behaviour from indigenous sources rather than exogenous culture. Indigenous knowledge system is given most priority in the planning of health and nutrition behaviour. It is important to mention two conceptual schemes in this context which deal with the removal of (i) child malnutrition and (ii) maternal malnutrition respectively. Wishik and Vynckt (1976) proposed an intervention strategy based on 'people's foodways' by which nutritional status of children can be significantly improved. They contend that by discerning a people's foodways, the positive attributes which lead some within that population to be nutritionally fit can be used as a basis for intervention for those within the population who are malnourished. This involves identification of those families in which a child between age six months and five years falls in the upper 25 percent in height and weight measurements. These families are lebeled as being "positive deviants" from the undernutrition that prevails in the population. They are then studied anthropologically to uncover any practices related to food sources, content, and consumption. The information would be used in designing food supplementation or other nutritional promotion in the population at large on the assumption that the observed 'favourable' practices, although atypical, are feasible and culturally acceptable because they are indigenously rather than exereneously derived.

The inherent emphasis in this approach is to identify the unusually well nourished members of the community and find out how they have managed to escape the prevailing insult of life there. If successful in finding an answer, the secret should be revealed to all. Beneficial food practice that are likely to be accepted would be introduced. The ensurance of such likelihood rests on the fact that the practices already

exist in the community. Such measures have a chance of being feasible and culturally acceptable because they are indigenously derived rather than imposed from exogenous sources. The practices which are already in tune with a given culture are emphasized in the planned change programme. This design entails five phases for implementation. In the first step, the positive deviant approach divides the population into four cells on the basis of two parameters: children who fall into the upper or lower nutritional group in terms of anthropometric traits (weight and height by age) and according to the definition of 'positive deviants' and 'negative deviants' (by the economic criteria). The next approach is to study the food habits of a sample of the positive deviants in comparison with a sample of others. Information for this phase is collected by in-depth observation of a small number of families rather than by a large sample survey. On the basis of these observations and after aberrations in food behaviour and practices have been identified, the third phase is the design of ways of adapting such unusual positive behaviour for more general use. The fourth phase is to introduce the adaptation into the general community. This is where the economic and distributions enter the picture. The last phase is to design and build in ways of evaluating the effectiveness of the programme.

The second problem in anthropological planning relates to maternal malnutrition. When introducing public health programmes, the importance of understanding indigenous health and nutrition practices is immeasurable. It has been observed earlier that rural women with the onset of pregnancy tend to restrict their dietary intake, both quantitatively and qualitatively (prefering less and cool food) in response to various ethnophysiological considerations, for example, preference for a small baby size, for minimization of bodily heat associated with preganancy which is conceived to a hot state of bodily disposition, and to make enhanced baby space in the womb (Nichter and Nichter 1983, Hossain and Choudhury 1987). From experiments in nutrition education, it became clear that village women could hardly be convinced to eat more during pregnancy. An alternative approach is to generate information on co-existing health concerns and notions of ethnophysiology that could be used as frames for culturally appropriate health promotion programme. Lack of sensitivity to such indigenous themes may prove detrimental to public health efforts. Attempting to alter diet and health behaviour without giving credence to folk dietetics is destined to meet failure. Controlling maternal malnutrition during pregnancy could be a first step in the prevention of child mortality. Crucial to the question of child survival among other problems is the manner in which mothers feed their children in early months of life. In rural areas of Bangladesh, poor lacta-

tional performance, which itself reflects maternal malnutrition, forces many women to switch from breastfeeding to other modes. Infant's high risk of infection in the initial years is the products of low birth weight, weaning from nutritious breast milk, as well faulty feeding practices.

Besides their deficiency in breast milk, lactational performance of rural mothers is further aggravated by some unfounded misconceptions. Most rural women finding that their new born children are chronically ill, re-judge that their breast milk is defective and faulty in quality. This negative attitude of mothers toward their own milk work against their ability to lactate, thereby indirectly contributing to lactation failure. This unfounded attitude also make women in developing countries more vulnerable to aggressive advertizing campaigns of milk companies urging them to shift to bottlefeeding (Whitehead and Rowland 1978, Jelliffe and Jelliffe 1978). Nutrition education should emphasize to remove these misconceptions and should stress on the nutritional superiority of breast milk (see for details, Choudhury 1988).

(b) Other inputs for Primary Health Care and Fertility Regulation Programmes

With the growing importance of public health sector, the government should develop effective primary health care system which emphasizes self reliance and partnership between communities and government. Such programme must focus on the protective value of immunization, water quality and sanitation. It is now well acknowledged that essential ingredients of health environment are hydraulic resources, public sanitation system and primary immunization services. Planned extension of the rural primary health care scheme should incorporate improvements in such facilities. Given the power of available modern medical technologies (anti-biotics) against many of the common childhood diseases and malnutrition (oral rehydration, feeding rehabilitation), much higher recovery rates are theoretically possible through the utilization of available, and effective curative health services. Rural women's reluctance to comply with modern therapies such as, iron sulphate, tetanus toxoid, and vitamins, as observed in some studies is a case in point. From field observations on medical behaviour, it came out that pregnant women in rural environment show reluctance to receive these preventive medications from primary health care control, because indigenous health concerns have not been addressed. (Nichter 1980, Choudhury 1981). Notions of ethnophysiology affect medicine-taking behaviour during pregnancy as in folk dietetics. Medicines like ferrous sulphate, tetanus toxoid and multi-vitamin tablets, which are provided to the rural women free of cost, are often rejected because of their attributed characteristics. For example, black ferrous sulphate tablets

were perceived as weakening the blood or interfering with digestive process, as opposed to producing blood. In indigenous conception, liquid tonic—and not tablets—constituted an appropriate medication form for use during pregnancy. This is one reason liquid Aurvadic (an indigenous medicine) is so popular during these times.

Another reason not for taking ferrous sulphate tablets involve the manner in which primary health care staff promote the supplement. The health staff commonly state that the tablets are 'good for health' and produces a 'big baby'. While this explanation might be appropriate in a western context, or those with cosmopolitan orientation, it seems quite inappropriate for the lay population. Village women perceive this tablet as a powerful and heating medicine capable of producing a large, but not necessarily healthy baby. In a like manner, tetanus toxoid is rarely named or explained to villagers in relation to tetanus, a disease for which an indigenous term, 'dhanustankar' exists. It is simply presented as a 'tonic for good health'. Otherwise folk health concern could have been employed judiciously to explain these medications more accurately and a more culturally sensitive manner. Some of these medicines are suspected to be associated with family planning activities, promoted by the government. Needless to mention that tetanus neo-natorum is a major cause of death for child as well as for maternal mortality in rural Bangladesh. Neonatal tetanus could be eliminated by a two-pronged attack giving tetanus toxoid immunization to pregnant women and training the traditional birth attendants in safe-birth practices. Provision of better domiciliary post-natal care through the improved functioning of the outreach services of FWC could gradually improve health education for mothers and treatment of respiratory and other infections in the neonatals.

To minimize maternal death, ante-natal check up should be properly enforced, and for safe delivery, traditional birth attendants should be provided with safe delivery kits and other essential tools. Since neonatal deaths are directly related to parity, the promotion of family planning practice would also have a beneficial effect. The use of fertility control devices in the rural areas is still far away from expectation, despite the government's persisting efforts in this respect. Low fertility as a value for good health is yet to develop in a traditional social setting. For small children to survive, the decisive factors affecting their survival would be the ability of parents to limit their parity, to lengthen birth intervals, and to provide appropriate care to their children when ill.

Conclusions

It has been emphasized in this paper that for understanding of disease pattern, contemporary transitional societies provide an ideal laboratory

condition, particularly for anthropological model-building. Since such societies present a quasi-experimental research context (having environmental contrasts like rural and urban sectors), it is often possible to make inferences about underlying causal relationships. When dealing with traits in which genotype environmental interactions play a role, such a study design has appreciable advantages, which are only surpassed by those studies which are analogous to clinical trials yielding the strongest level of epidemiological inference. Neither should an additional reason be ignored. While it is difficult to define the relevance of a study of social phenomena to the concerns of the populations being studied, the opposite is true for a medical study. Many populations in rural societies perceive that the trade-off in their partcipation in an anthropological study should not be solely to the anthropologists' benifit. A biomedical research not only gives rise to a more deserving set of scientific questions, but also provides an opportunity for the investigation to benefit the people being studied. As Ward maintains, "The current major challenge to biological anthropology is to identify such populations (transitional) and carry out appropriate studies which focus on the identification of etiological components. In so doing, biological anthropologists may also begin to repay the debt they owe to traditional societies, by helping to alleviate the burdens caused by the changing patterns of disease as societies adjust to new environments". (1985:175).

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Regional Pattern of Rainfall Reliability and Crop Risk in Bangladesh

M. Aminul Islam

Introduction

To understand the mechanics of precipitation we have had to carry our thoughts a long way above the surface of the earth but to the practically minded man, be he farmer, engineer or geographer, the vital questions are how much rainfall reaches the ground, how is it distributed normally and under exceptional conditions both in space and time, and at what intensities is to be anticipated?[1] In perspective to this the main object of this chapter is to provide the practical agriculturist with a simple method of assessing the reliability of rainfall in relation to agriculture in Bangladesh.

In the first part of this chapter an attempt is made to estimate probability per cent of rainfall exceeding the stated requirement over place and time (season) i.e., the chances of obtaining such amount of rainfall. Such a precognition would very naturally be of immense value where rainfall is irregular and uncertain at a period when it is needed or where it was likely to be marginal for agriculture. Too often pre-cultivation operations are delayed until the onset of the rainy season. This delay often handicaps deficient areas. Therefore, critical examination of these probabilities enables the agriculturist to formulate the agricultural operation best suited to rainfall expectation of the region.[2] In addition, such a probability analysis of seasonal rainfall pattern throws light on the risk factors which underline much of the agricultural activity of the region which is not apparent when mean value of rainfall alone is used.

The crop combination regions of Bangladesh devised by Islam[3] revealed that aman and aus paddy together occupy about 82 per cent

[1]P.R. Crowe, *Concepts in Climatology* (London: Longman Group Limited, 1971), p. 21.

[2]H. L. Manning, 'The Statistical Assessment of rainfall probability and its application in Uganda Agriculture', *Proceedings of the Royal Society*, B, Vol. 144 (1956), p. 460.

[3]M. Aminul Islam. "Crop Combination Regions in East Pakistan", *Oriental Geographer*, Vol. IX, No. 1 (Dacca: January 1965), pp. 1-16.

of the total harvested acreage. Under average conditions these two crops are by far the most important in Bangladesh economy and the farming system is basically a two-crop economy with regional specialization in other crops, especially the cash crops. The study also showed aman-aus or aus-aman combination as the first and second ranking crops over most of the areas and either aman or aus or jute as the leading crop. Especially in connection to this fact, it deserves to be mentioned that all of these three leading crops of Bangladesh are sown in March to May i.e., in the Norwester season when rainfall is most uncertain, irregular and extremely variable.

Drought may be of three different forms namely, permanent, seasonal or unexpected.[4] Bangladesh experiences seasonal or unexpected type of drought. Farmers make allowance for seasonal droughts, such as those that occur with regularity and irrigation water is, wherever possible, made available.

The most treacherous phenomenon is the unexpected drought, for, due to variations in rainfall, or for that matter, a long spell of dry weather finds the crop producer completely unprepared for making arrangements of water supply. In such a case either cultivation is delayed or almost total loss of a crop can occur. To avoid losses of this nature, it is necessary to find out the amount of water (rainfall) needed by a crop at its various stages of development and to ascertain the likelihood that these given amounts will be available at each stage. If the farmer is given this information, a farmer can arrange for protection against economy (cost) considerations. The present study is an attempt to give more precision to statements on the problem by close analysis of available statistics; accordingly, a detailed probability analysis in the first part and precise confidence limits of expected rainfall at selected level of probability has been studied in the last part.

Rainfall Requirement and the Problem

According to the research findings of Amla Experimental Farm of the Bangladesh Water Development Board, total water requirement during the period, March to May, for jute, aus and aman crops including land preparation is estimated to be about 12 inches of rainfall.[5]

The sowing of aman paddy should be completed in March to April because from a study report (Alim et al, 1962),[6] it was observed that

[4]F. Griffiths, *Applied Climatology*: *An Introduction* (London: Oxford University Press, 1966).

[5]Base on Study Report by M. A. Qasem, *Experience with HYV Rice in BWDB Projects*, Land and Water use Directorate, BWDB, Dacca.

[6]A. Alim, *et al.*, Review of Half a Century of Rice Research in Bangladesh, Ministry of Agriculture, Govt. of People's Republic of Bangladesh.

under average conditions, if sowing was completed within April, the crop could be protected against the onrushing floods. It was also observed that there was a sharp fall in yield when the sowing was delayed beyond April. Some conditions apply to the cases of jute and aus paddy also. But the cultivation of these crops is subjected to the occurrence of nor'wester rainfall. If the nor'wester rainfall is delayed sowing also delayed accordingly. Thus, it is seen that rainfall in the months from March to May determines the cropping practices in Bangladesh.

The next stage i.e., the growing period falls in the monsoon season and about 55 inches of rainfall requirement in this period are stated to be optimum for crop growth.[7] Keeping these in mind the present study is devoted to the analysis of finding the probability that rainfall, in these seasons, will exceed the stated requirement for successful cultivation.

Clearly, from such probability figures it would then be possible to estimate whether the years of sufficient rainfall were frequent enough to justify the assertion that paddy could be grown without irrigation unless there was to be undue hazard to the cultivation; and further, to provide the farmer with the knowledge whether the cost of irrigation could be justified in terms of the value of crops which would otherwise be lost based on this information.

In the second part of this chapter the concept of rainfall expectation at selected levels of probability has been shown to provide estimates of rainfall to be expected, and so to assess long term crop risk. This is particularly important as the use of means as an indication of likely expectation without reference to variability may be quite misleading. It is proposed to show that an efficient expression of rainfall variability is statistically practicable, and is of fundamental importance to the better understanding of seasonal crop variation.

A statistical method of forecasting is, however, limited in what it can be achieve because it is not based on an understanding of how the atmosphere behaves and it cannot cope with circumstances that lie outside the range represented in the basic data.[8] In perspective to this view statistical provisions to minimize the risk of conditions that occur very infrequently are unlikely to be forecast. An attempt is made here to give precise knowledge of the limits within which the rainfall may be expected to lie in 95% and 50% confidence limits. As we have 66 years' statistics of rainfall distribution, such limits as mentioned above

[7]Adapted from ICAR Research Series No. 28 (1961).

[8]Reliable long range weather forecasts not in sight, Editorial Report, *Span*, Vol. 20, No. 2 (1977), p. 49.

will provide what is thought to be the most likely outcome from the present or future state of the atmosphere based on statistical inference.

Practical applications of these confidence limits include the more accurate representation of rainfall patterns, valuable guides to the vital question of optimum time of planting, and finally, better estimate of the range of mean monthly rainfall.[9]

Studies of the incidence and reliability of rainfall of this kind make possible first a more efficient use of rain,

(1) by matching the timing of the crop to the pattern of the rain, and secondly,

(2) an assessment of the risk of crop failure, and hence a greatly increased confidence in the planning of development.

Estimation of Probability

As mentioned before, rainfall of Bangladesh follows mainly three types of distribution for the three agricultural seasons. Of these, the monsoon follows approximately the normal distribution.[10] The nor'wester rain on the otherhand, is seen to be normal in some places. The winter season rainfall does not follow the normal distribution. Following Glover and Robinson,[11] to avoid complicacies, the rainfall of nor'wester season in this study has been considered to be normal in its distributional pattern. Based on that assumption the rainfall probability has been estimated. The rainfall reliability result to some extent is to be considered valid for the monsoon and the nor'wester and it cannot give the assertion about the reliability of winter rainfall and hence it was not included in this study for analysis.

Monthly means of rainfall data have been transformed in terms of seasonal means and the standard deviation estimated by transforming the corresponding seasonal rainfall range from tally sheets of rainfall statistics.

Since the frequency distribution of seasonal rainfall is assumed to be normal, we can calculate :

[9]H. L. Manning, "Confidence limits of expected Monthly rainfall", *Journal of Agricultural Science*, Vol. XL, 1950.

[10]Normal distribution is also known as the normal probability law with two parameter (mean and standard deviation) which is often represented by $N(\mu, \sigma^2)$; see, for example, M. G. Mostafa, *Methods of Statistics* (Dacca: Anwari Publication, 1972), p. 165.

[11]J. Glover and P. Robinson, "A Simple Method for Assessing the Reliability of Rainfall", *Journal of Agricultural Science*, Vol. XL (1953), pp. 275-281.

$$Z = \frac{\text{Difference of minimum requirement from the seasonal mean}}{\text{Estimated Standard Deviation}} = Zo$$

(Particular value)

Here, Z=Standardized normal variate.

Accordingly, the probability of obtaining rainfall higher than the given expected value can then be determined from Z table.[12]

So, under the above assumption, rainfall probability is calculated from the expression.[13]

$$Z = \frac{x - \bar{x}}{\sigma}$$

Where x = the critical value

$\bar{x}$ = the mean value

σ = the standard deviation

Hence the probability of obtaining rainfall higher than the given expected value (critical value) can then be determined by

$$P(X \geqslant Xo) = P(Z \geqslant Zo)$$

$$= P\left(Z \geqslant \frac{x - \bar{x}}{\sigma} = Zo\right)$$

When $P\left(Z \geqslant \frac{x - \bar{x}}{\sigma} = Zo\right)$ is taken as the right hand side area of the Z=Zo.

As mentioned before the given expected requirement for nor'wester season was considered to be 12 inches and 55 inches for the monsoon season.

The derived values of probability, expressed as a percentage, were then plotted and an isopleth map was prepared. The key has been prepared so that the probability of receiving both more than and less than 12 inches for nor'wester season and 55 inches for monsoon season is indicated. Figures 4.1 and 4.2, for example, showing the probability of places in Bangladesh receiving more or less than 12 inches of rainfall during the months of the nor'wester season and 55 inches of rainfall during the month of the monsoon season, emphasise the significance of spatial and temporal differences in rainfall conditions in the

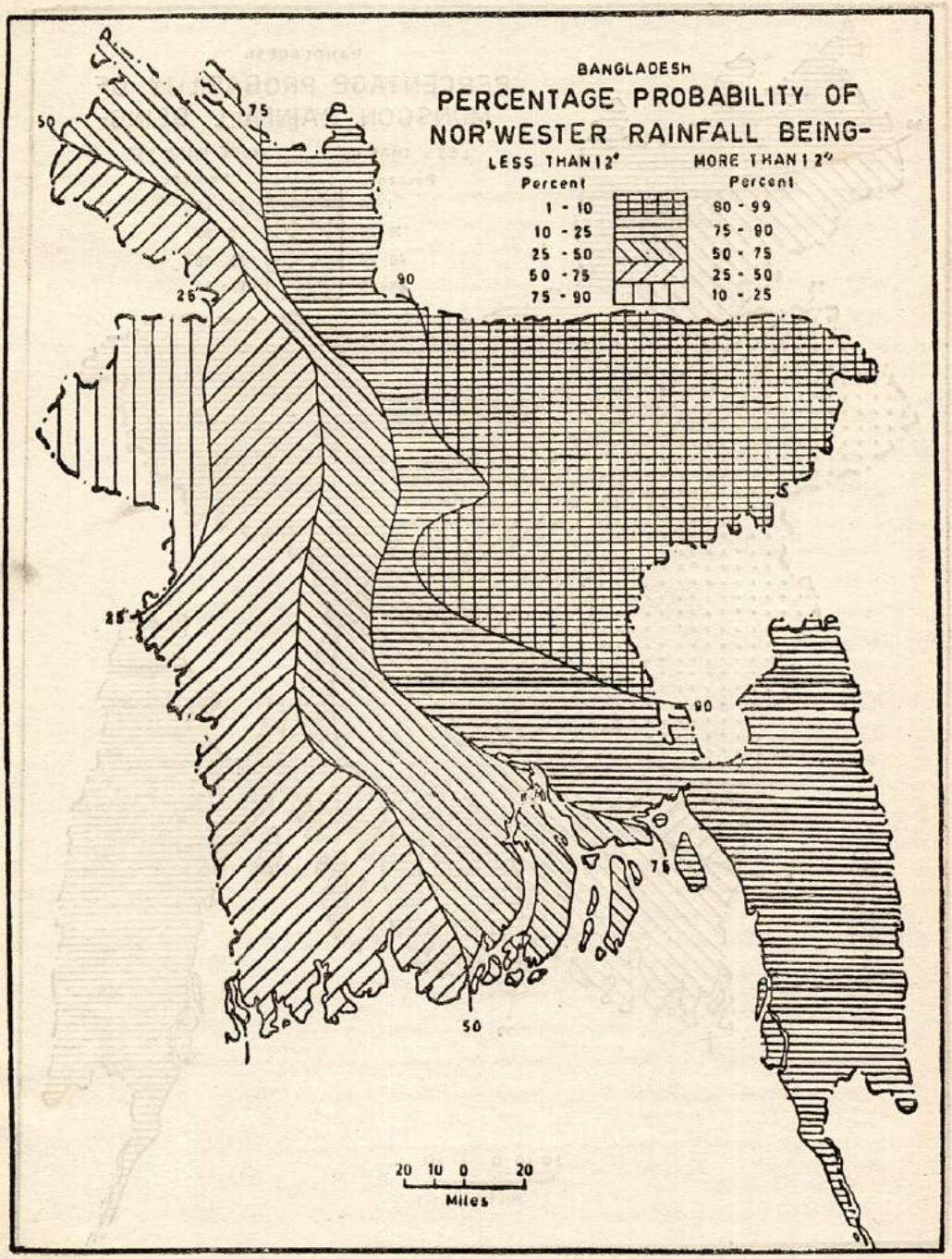
[12]"Z" Table is given in Appendix Table 2, Areas under the normal curve (Probability function of the normal distribution) as given in the book, G. U. Yule and M. G. Kendall, *An Introduction to the Theory of Statistics* (14th ed.; London: Charles Griffin & Co. Ltd., 1950)

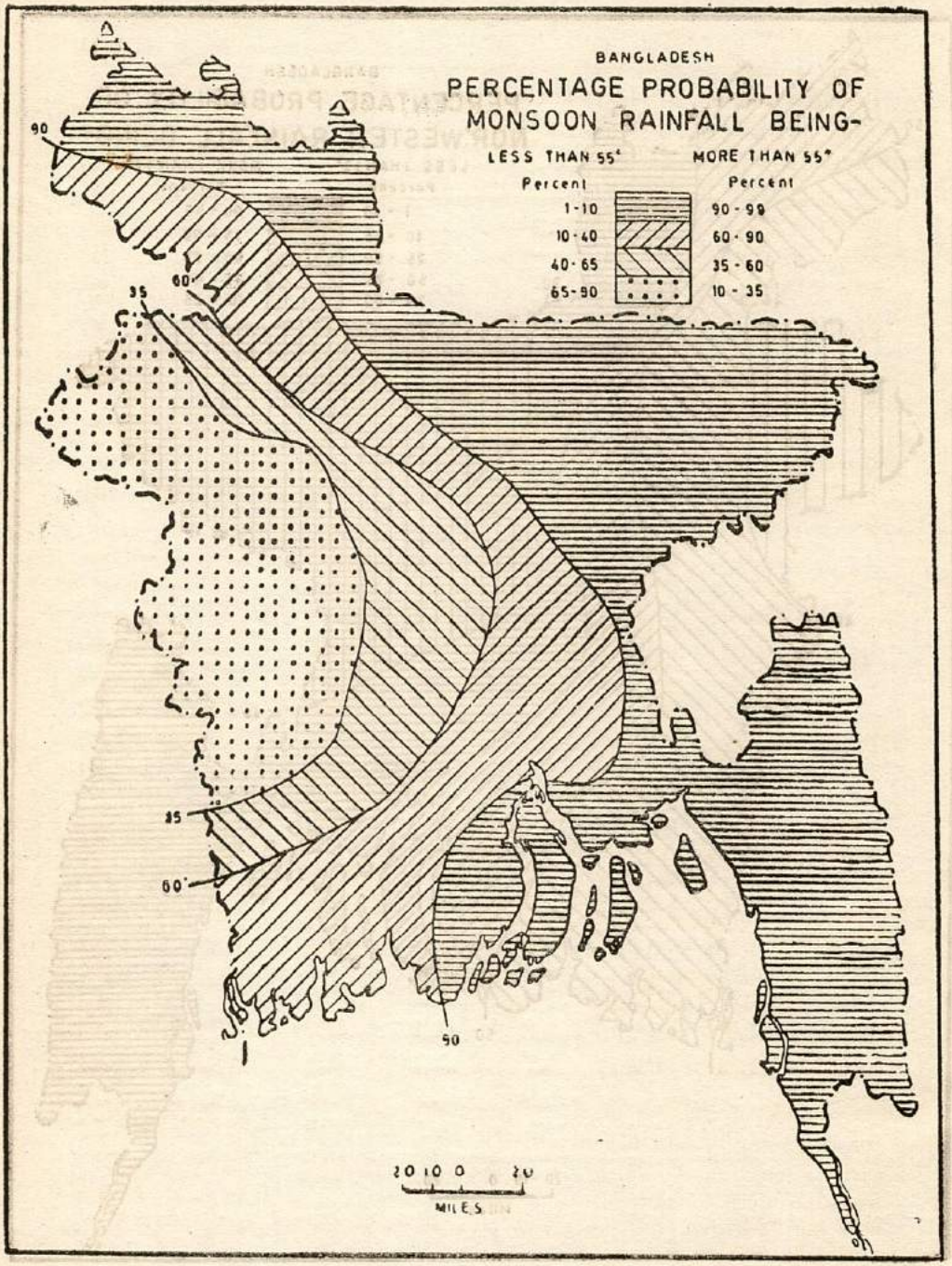
[13]I. R. Manners, "Problems of Water Resource Management in a Semi-Arid Environment: The Case of Irrigation Agriculture in the Central Jordan Rift Valley", in B. S. Hoyle (ed.), *Spatial Aspects of Development* (London: John Wiley & Sons), p. 112.

TABLE

Estimated Probability Percent of Total Nor'wester and Total Monsoon Rainfall Exceeding the stated Requirement

Station	% Probability of Nor'wester Rainfall being more than 12 inches	% Probability of total Monsoon Rainfall being more than 55 inches
1. Bogra	37.83	59.20
2. Thakurgaon	55.77	98.38
3. Dinajpur	25.50	68.80
4. Rangpur	74.54	92.70
5. Faridpur	75.50	45.00
6. Rangamati	83.65	99.72
7. Chittagong	84.38	99.88
8. Barisal	68.08	91.47
9. Serajganj	58.32	34.46
10. Rajshahi	11.10	12.00
11. Chauadanga	34.83	12.51
12. Mymensingh	93.19	96.41
13. Sylhet	95.82	68.19
14. Sunamganj	88.12	100.00
15. Chandpur	78.23	74.22
16. Kishoreganj	94.95	94.52
17. Dewanganj	80.51	92.71
18. Bhanga	39.80	51.10
19. Joydebpur	97.56	60.26
20. Jessore	42.86	10.00
21. Kaliganj	40.52	64.43
22. Noakhali	82.89	99.86


BANGLADESH
PERCENTAGE PROBABILITY OF
NOR'WESTER RAINFALL BEING-
LESS THAN 12"
Percent
1 - 10
10 - 25
25 - 50
50 - 75
75 - 90
MORE THAN 12"
Percent
90 - 99
75 - 90
50 - 75
25 - 50
10 - 25
50
75
25
90
25
90
75
50
20 10 0 20
Miles


BANGLADESH
PERCENTAGE PROBABILITY OF MONSOON RAINFALL BEING-
LESS THAN 55"
Percent
1-10
10-40
40-65
65-90
MORE THAN 55"
Percent
90-99
60-90
35-60
10-35
90
60
35
25
60
50
MILES

country. It will be noted that even within the comparatively small area of Bangladesh, the precise nature of the risk as far as agricultural activities are concerned is immensely varied and the range of uncertainty great. In the western regions of Bangladesh including the districts of Dinajpur (southern part), Bogra, Rajshahi, Kushtia, Jessore and Khulna, where there is less than a 50-90 per cent probability of receiving 12 inches rainfall in nor'wester season, the chances of drought occurrence are too great for regular rainfed cultivation. Without a supplementary irrigation agricultural practices, primarily the field preparation and showing in the nor'wester season, become a distinct gamble. The rest of the area is suitable for rainfed agriculture particularly the north eastern region.

Estimation of Confidence Limits of Expected Probability

An attempt is made here to estimate the reliability of rainfall by calculating the confidence limits for different levels of probability, that is, the limits within which the rainfall for the season may be repeated or expected to lie within any given level of probability. Thus, for a probability level of $P = 1 - \alpha$, the confidence limits (upper and lower limit) are calculated by using the following formula:

$$P\left[\bar{x} - \frac{\hat{\sigma}}{\sqrt{n}} Z_{\alpha/2} \leq \mu \leq x + \frac{\hat{\sigma}}{\sqrt{n}} Z_{\alpha/2}\right] = (1-\alpha)$$

which is derived from $Z = \dfrac{|\bar{x} - \mu|}{\hat{\sigma}/\sqrt{n}}$

Where $\bar{x}$ is the seasonal mean (month wise), μ is the expected value. $\hat{\sigma}/\sqrt{n}$ is the corresponding calculated standard error and $Z_{\alpha/2}$ is the critical value. For a probability level of $P = .95$, the 19:1 confidence limits can be found as:

$$P[\bar{x} - 1{\cdot}96\ \hat{\sigma}/\sqrt{n} \leq \mu \leq \bar{x} + 1{\cdot}96\ \hat{\sigma}/\sqrt{n}]$$

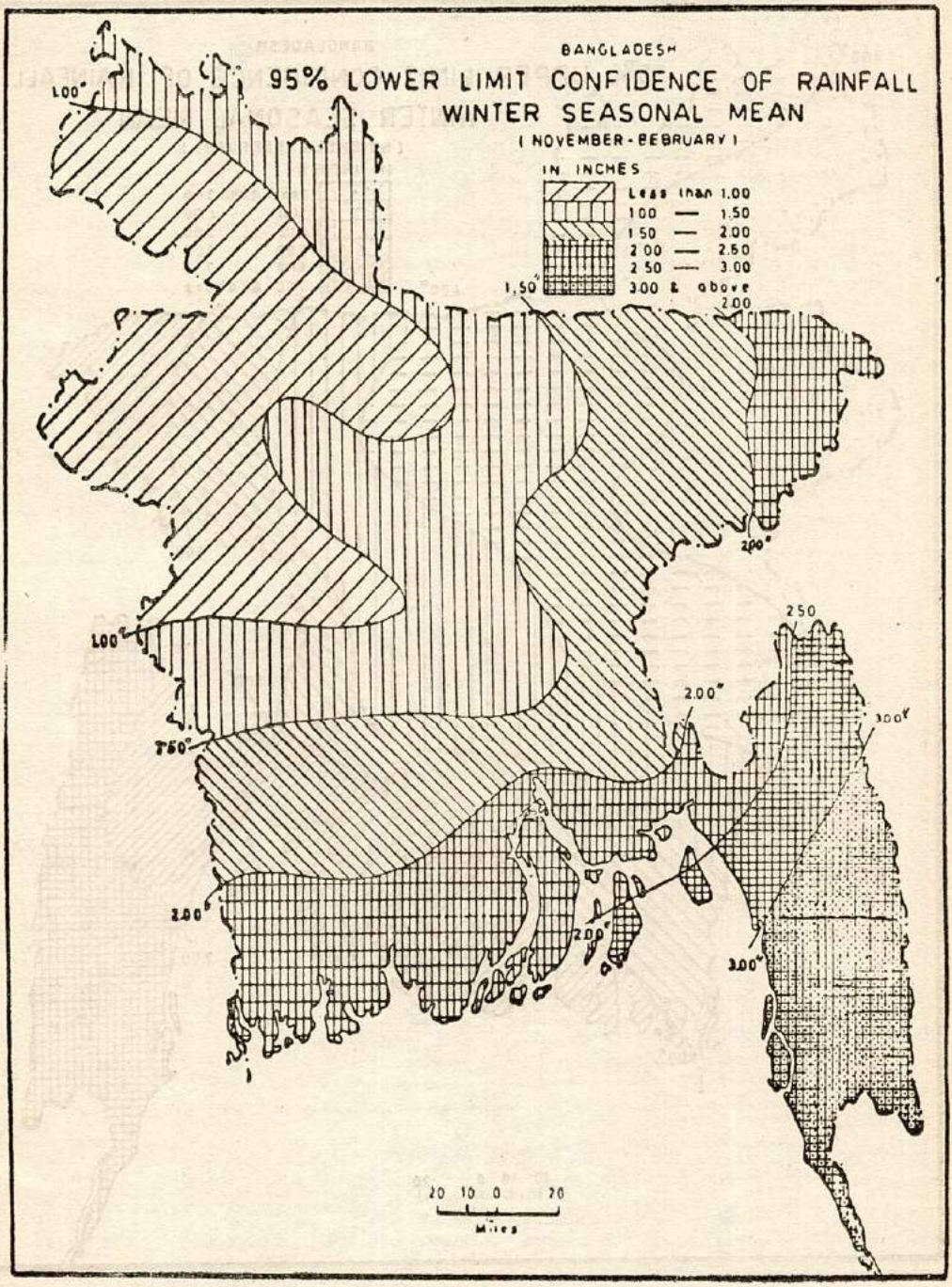
In the above confidence interval $(\bar{x} - 1.96\ \hat{\sigma}/\sqrt{n})$ is the lower limit and $(\bar{x} + 1.96\ \hat{\sigma}/\sqrt{n})$ is the upper limit and rainfall outside these limits would be repeated once in twenty years.

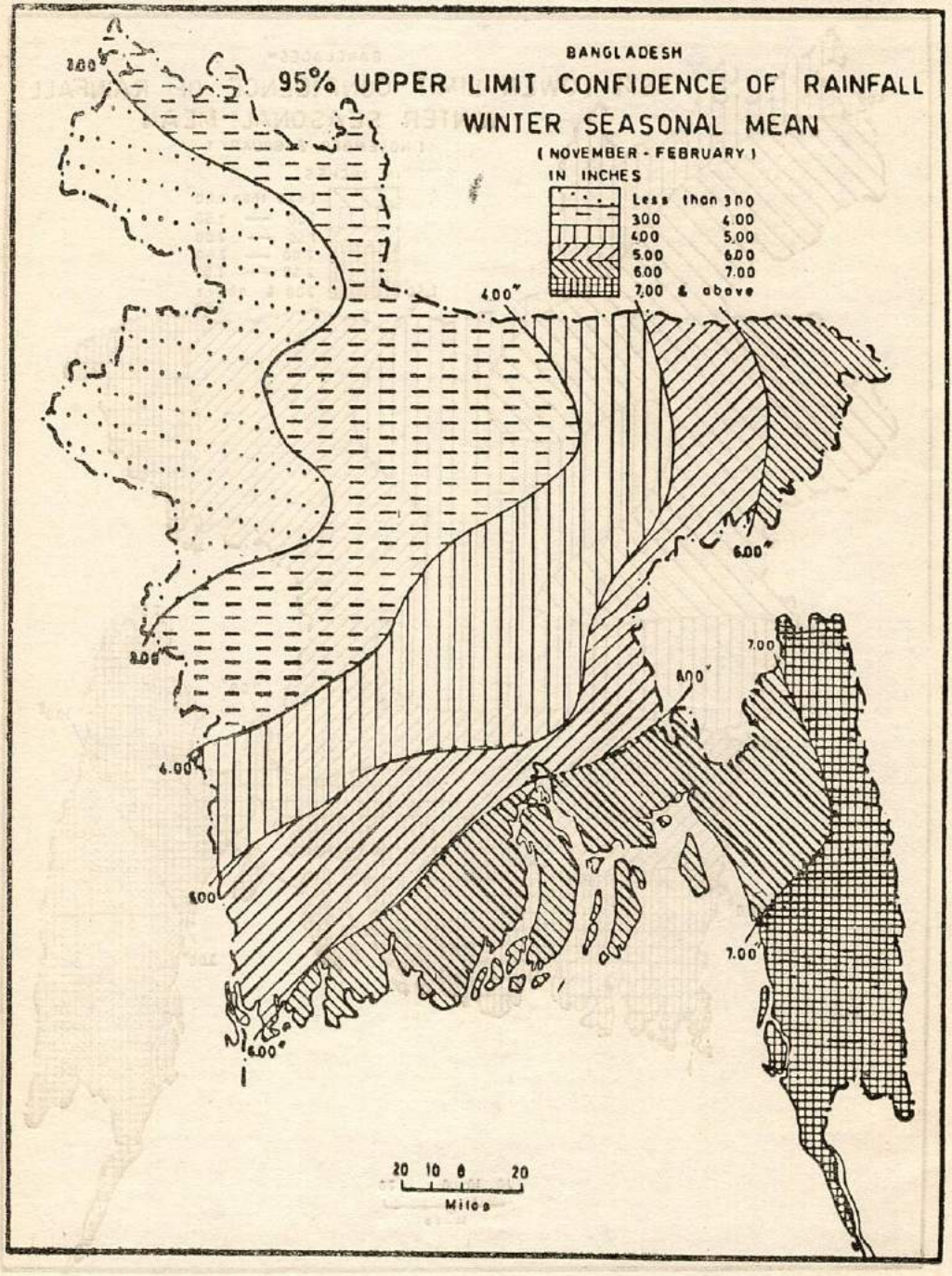
Confidence limits indicate the estimate of the risk of obtaining values for a given statistic that lie outside of the prescribed limit. As for example, 95 per cent confidence limit is used in this study. With this 19:1 limit, a figure outside the limit is to be expected once in twenty times and out of these (5%) occasions half (i.e., once in forty years) are

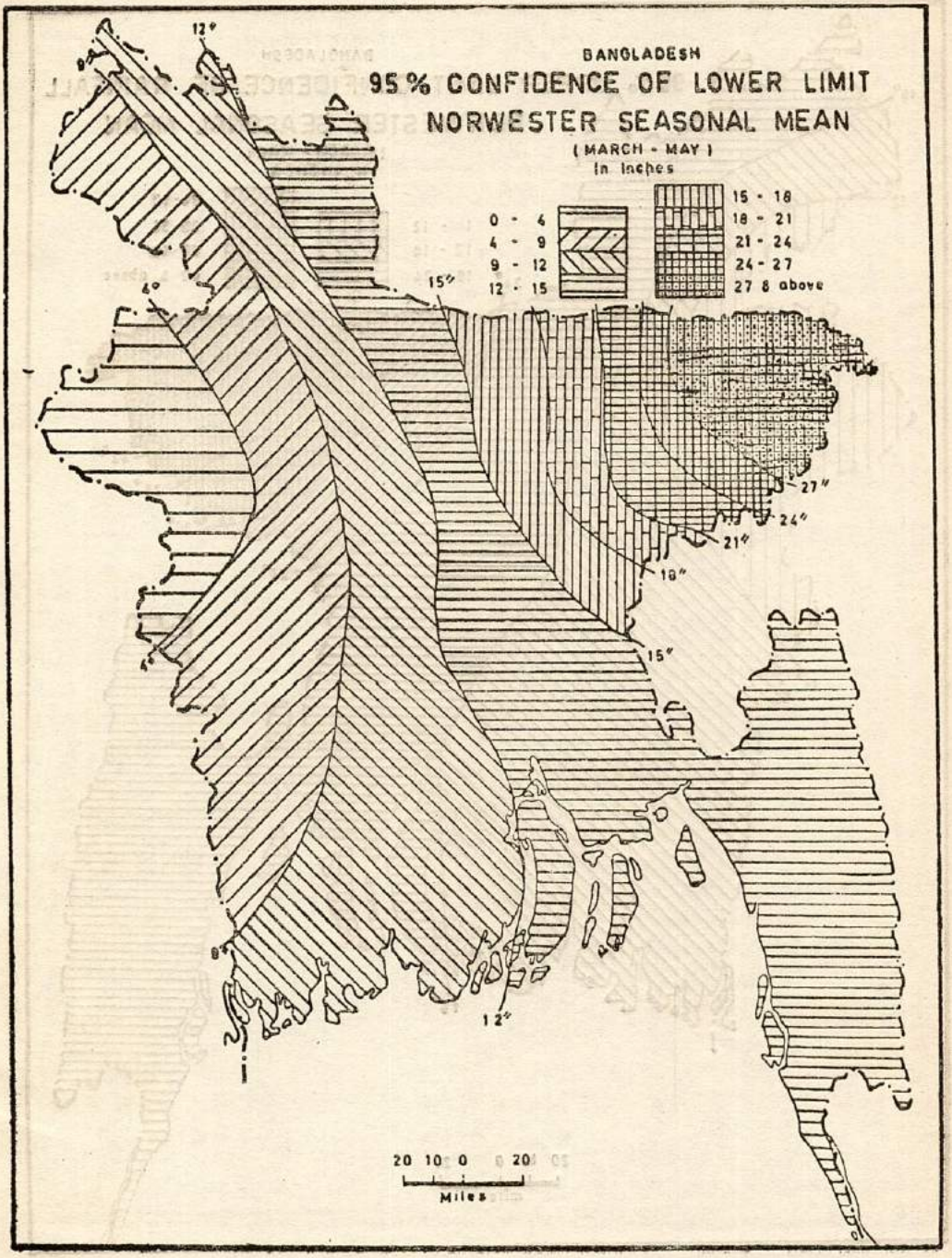
TABLE

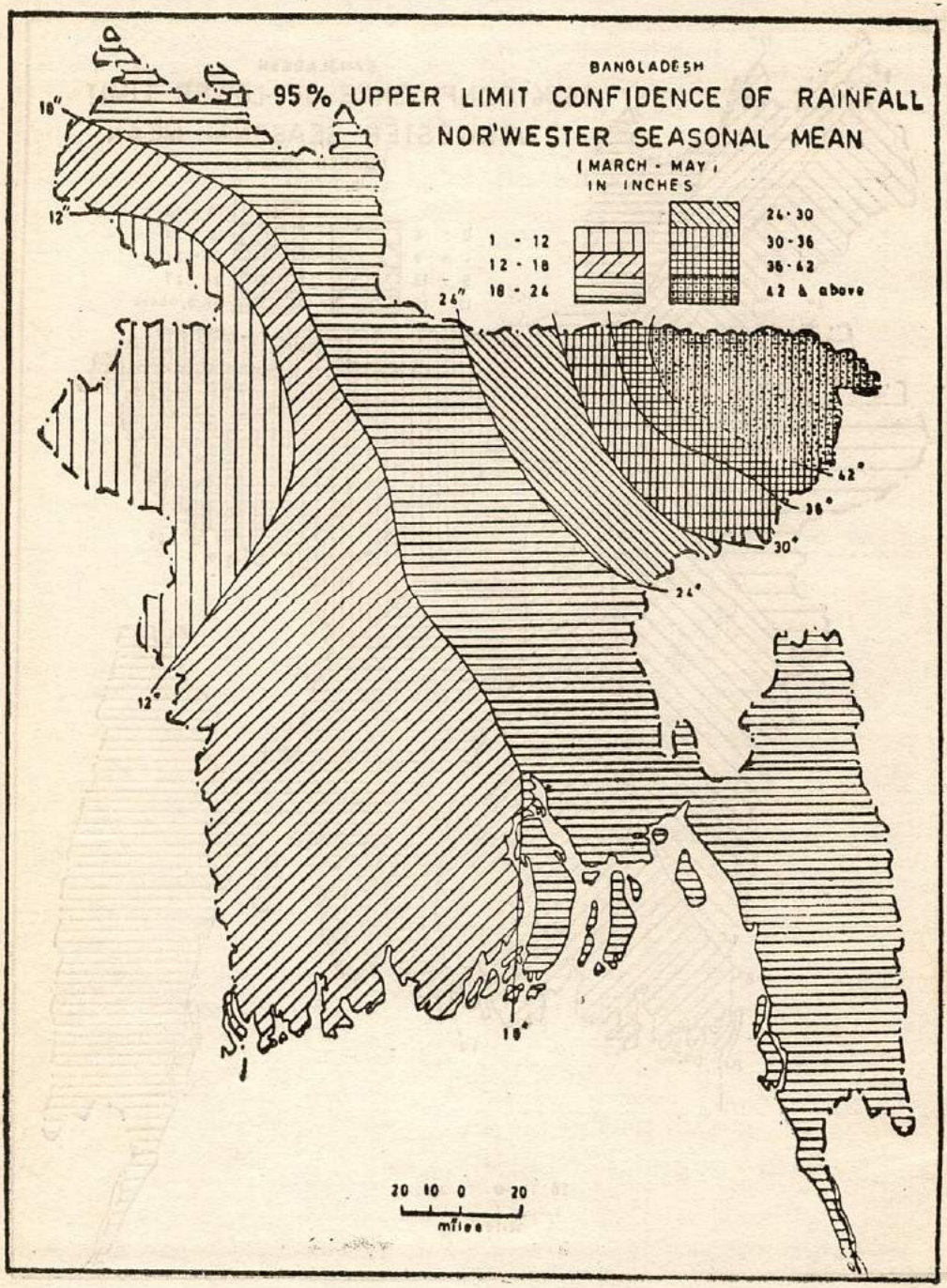
95 Per cent confidence Limits For seasonal Monthly Average Rainfall of some Selected Stations (In Inches)

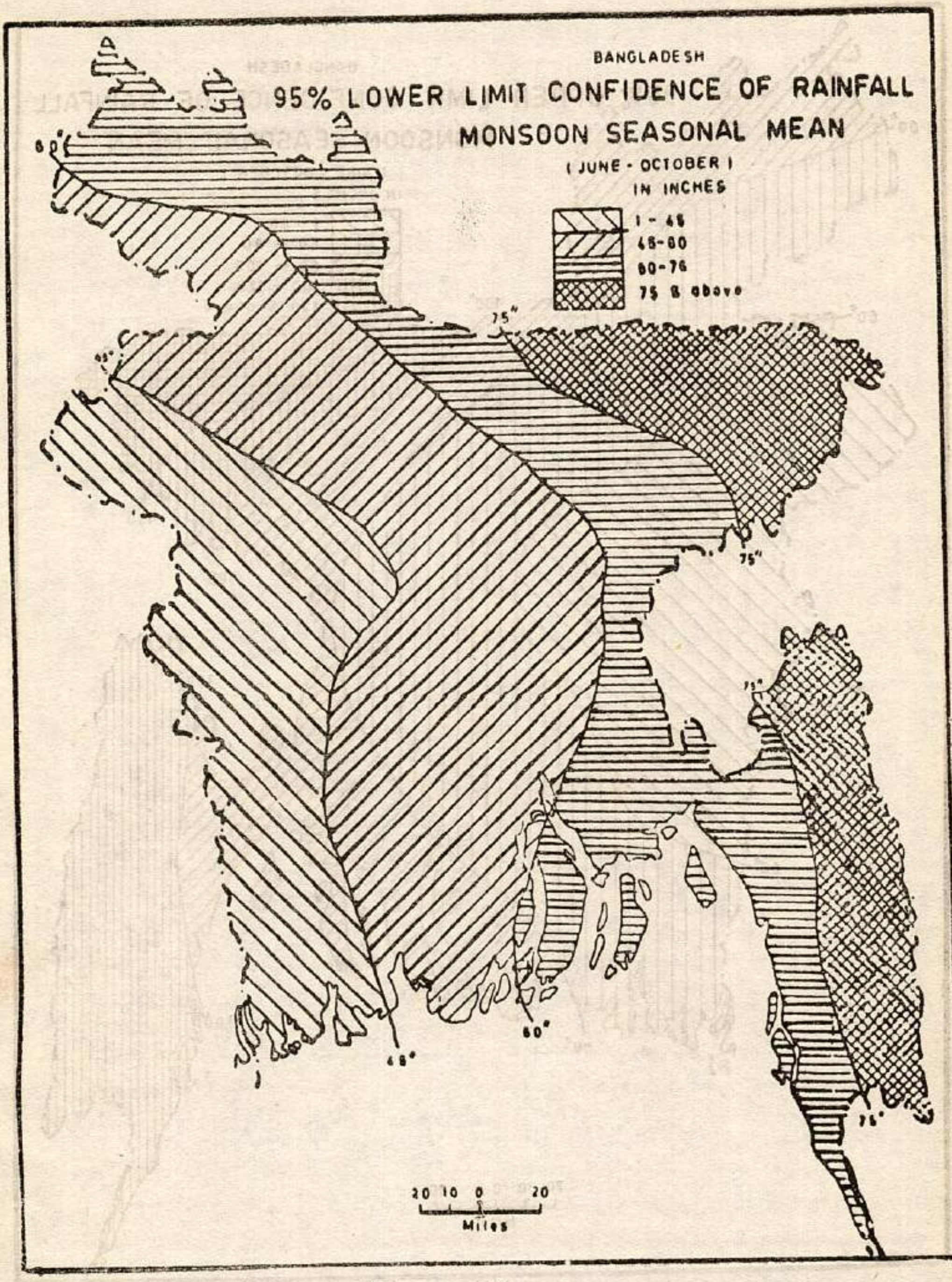
Station:	Winter season		Nor-wester season		Monsoon season	
	Lower Limit	Upper Limit	Lower Limit	Upper Limit	Lower Limit	Upper Limit
1. Thakurgaon	0.29	0.61	2.80	5.80	12.64	16.87
2. Dinajpur	0.22	0.69	2.26	4.07	9.80	14.00
3. Rangpur	0.29	0.73	3.89	6.40	11.48	16.16
4. Bogra	0.28	1.10	2.90	4.44	9.62	13.05
5. Habiganj	0.40	1.25	7.35	10.67	12.40	16.60
6. Rajshahi	0.33	0.85	1.71	3.37	7.69	10.39
7. Khulna	0.41	1.29	2.96	5.10	9.10	12.02
8. Faridpur	0.42	1.08	3.92	6.87	9.48	12.24
9. Jessore	0.45	1.00	2.24	5.00	8.00	10.90
10. Chuadanga	0.36	1.03	2.84	4.34	7.76	10.48
11. Sylhet	0.51	1.51	9.32	16.97	18.19	28.92
12. Sunamganj	0.43	1.23	9.49	15.34	29.61	37.82
13. Chandpur	0.39	0.96	4.08	6.30	10.03	14.22
14. Chittagong	0.72	1.80	4.54	7.29	15.59	21.65
15. Rangamati	0.80	1.46	4.45	6.96	13.20	17.74
16. Mymensingh	0.30	0.89	5.15	7.32	11.89	15.48
17. Dewanganj	0.21	0.82	4.27	7.05	11.49	16.16
18. Kishoreganj	0.39	0.92	5.90	8.13	11.70	15.95
19. Serajganj	0.40	0.89	3.37	5.13	9.11	11.95
20. Barisal	0.46	1.50	3.64	5.74	11.31	15.82
21. Bhola	0.53	1.33	3.74	6.16	12.18	16.24
22. Kaliganj	0.53	1.30	2.60	5.00	9.30	14.18
23. Bauphal	0.53	1.40	3.50	5.80	12.40	20.00
24. Manikganj	0.29	1.22	4.00	6.00	8.50	10.90
25. Noakhali	0.40	1.40	4.50	7.80	15.70	22.12

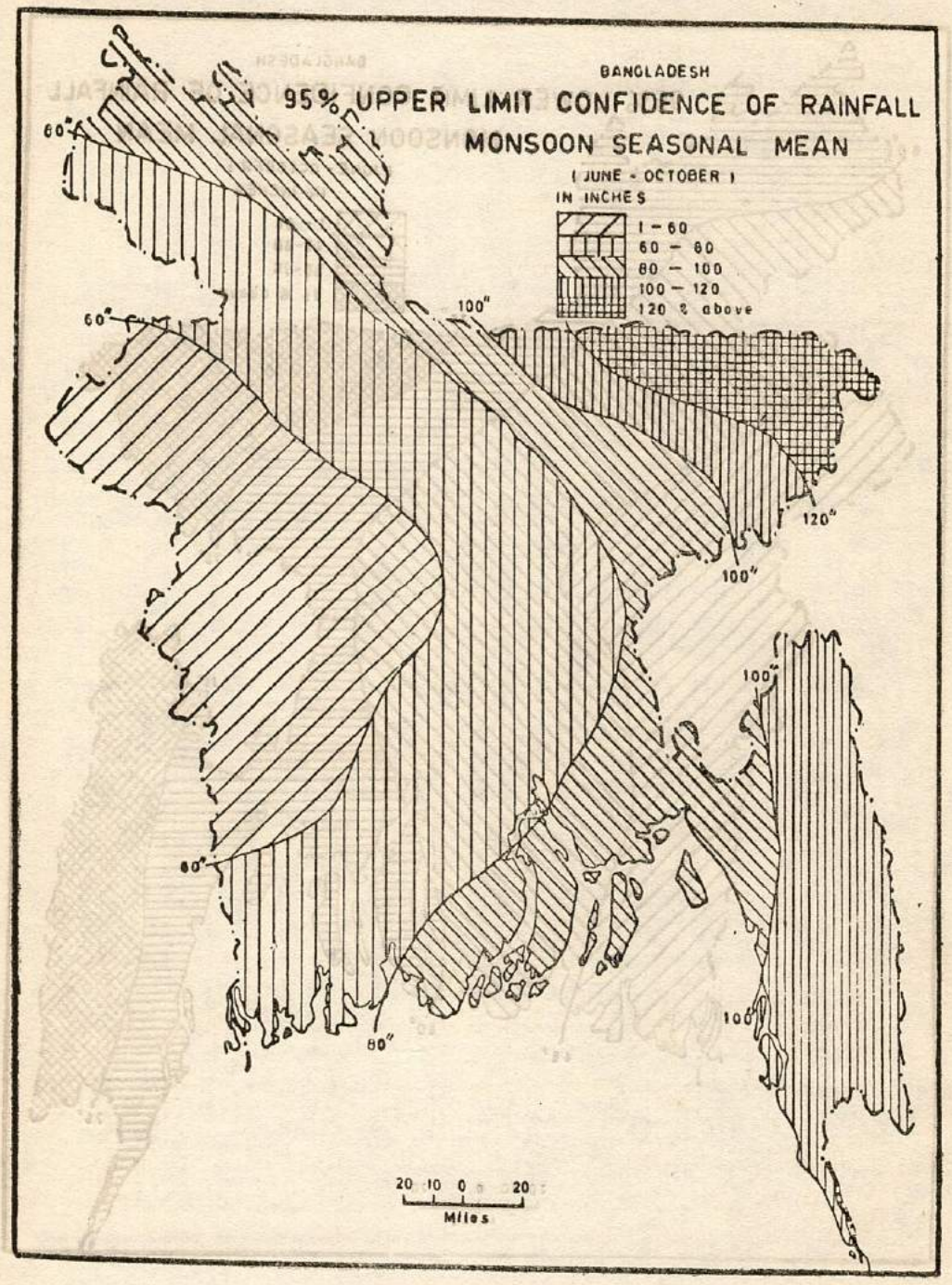

BANGLADESH
95% LOWER LIMIT CONFIDENCE OF RAINFALL
WINTER SEASONAL MEAN
(NOVEMBER - BEBRUARY)
IN INCHES
Less than 1.00
1.00 — 1.50
1.50 — 2.00
2.00 — 2.50
2.50 — 3.00
3.00 & above
1.00
1.50
2.00
2.50
3.00
20 10 0 20
Miles


BANGLADESH
95% UPPER LIMIT CONFIDENCE OF RAINFALL
WINTER SEASONAL MEAN
(NOVEMBER - FEBRUARY)
IN INCHES
Less than 3.00
3.00 4.00
4.00 5.00
5.00 6.00
6.00 7.00
7.00 & above
2.00"
4.00"
6.00"
7.00"
20 10 0 20
Miles


BANGLADESH
95% CONFIDENCE OF LOWER LIMIT
NORWESTER SEASONAL MEAN
(MARCH - MAY)
In Inches
0 - 4
4 - 9
9 - 12
12 - 15
15 - 18
18 - 21
21 - 24
24 - 27
27 & above
12°
8°
4°
15"
27"
24"
21"
18"
15"
12"
20 10 0 20
Miles


BANGLADESH
95% UPPER LIMIT CONFIDENCE OF RAINFALL
NOR'WESTER SEASONAL MEAN
(MARCH - MAY)
IN INCHES
1 - 12
12 - 18
18 - 24
24 - 30
30 - 36
36 - 42
42 & above
18°
12°
24°
42°
36°
30°
24°
12°
18°
20 10 0 20
miles


BANGLADESH
95% LOWER LIMIT CONFIDENCE OF RAINFALL
MONSOON SEASONAL MEAN
(JUNE - OCTOBER)
IN INCHES
1 - 48
48-60
60-75
75 & above
20 10 0 20
Miles


BANGLADESH
95% UPPER LIMIT CONFIDENCE OF RAINFALL
MONSOON SEASONAL MEAN
(JUNE - OCTOBER)
IN INCHES
1 - 60
60 - 80
80 - 100
100 - 120
120 & above
60"
60"
100"
120"
100"
100"
80"
80"
100"
20 10 0 20
Miles

to be expected below the lower limit and half of the occurrence above the upper limit. As for example, the findings of the 95 per cent confidence limits for Barisal assure that rainfall will lie within 11.31 inches and 16 inches during the monsoon season. Expressed in terms of confidence limits, values outside this given limit would be expected to occur only five years out of hundred years. Moreover, these deviations would tend to fall equally above and below the prescribed limits. In otherwords it is possible to state that, only 2.5 years in 100 years, the rainfall at Barisal will fall below 11.31 inches and similarly 2.5 years in 100 years it will exceed 16 inches during the monsoon season.

TABLE

50 Per cent Confidence Limits for Mean Monthly Rainfall in Nor'wester Season (In Inches)

Station	Winter season		Nor'wester season		Monsoon season	
	Lower limit	Upper limit	Lower limit	Upper limit	Lower limit	Upper limit
Bogra	0.58	0.89	3.40	3.94	10.74	11.93
Thakurgaon	0.35	0.49	3.78	4.82	14.02	15.49
Khulna	0.70	1.00	3.66	4.40	10.05	11.07
Jessore	0.63	0.82	3.16	4.13	8.98	9.95
Dinajpur	0.38	0.54	2.85	3.48	11.12	12.56
Rangpur	0.43	0.59	4.71	5.58	13.00	14.63
Faridpur	0.63	0.86	4.89	5.91	10.38	11.33
Rangamati	1.02	1.25	5.27	6.12	14.69	16.26
Noakhali	0.71	1.05	5.58	6.72	17.82	20.08
Manikganj	0.59	0.92	4.42	5.20	9.19	10.07
Chittagong	1.08	1.45	5.44	6.39	17.57	19.67
Barisal	0.80	1.16	4.32	5.05	12.78	14.35
Bhola	0.79	1.07	4.49	5.33	13.50	14.92
Serajganj	0.56	0.73	3.95	4.56	10.04	11.02
Rajshahi	0 50	0.68	2.25	2.83	8.57	9.51
Chuadanga	0 58	0.81	3.33	3.85	8.65	9.59
Magura						
Kaliganj	0.77	1.04	3.06	4.02	10.90	12.58
Mymensingh	0.49	0.69	5.86	6.62	13.06	14.31
Sylhet	0.84	1.19	11.82	14.47	21.69	25.12

TABLE

Regions of Bhadoi Crop Prospects in Sowing Period (March-May)

Stations	% Probability of getting rainfall exceeding (12″)	95% Confidence limits within which rainfall amount will lie		Average monthly variability of rainfall in this period (%)	Crop Prospect
		Lower limit	Upper limit		
Dinajpur	25.50	2.26	4.07	62.55	Highly Risky
Sunamganj	98.12	9.50	15.34	41.00	Very Good
Serajganj	58.32	3.87	5.13	55.38	Medium
Mymensingh	93.19	5.15	7.32	52.17	Good
Jessore	42.86	2.24	5.00	69.20	Risky
Rajshahi	11.10	1.71	3.37	70.57	Highly Risky

TABLE

Regions of Haimantik Crop Prospects in Growing Season (June-October)

Stations	% Probability of getting optimum rainfall (55″)	95% Confidence limits within which rainfall amount will lie		Average monthly variability of rainfall in this period (%)	Crop Prospect
		Lower limit	Upper limit		
Thakurgaon	98.38	12.64	16.87	38.11	Good
Rajshahi	12.00	7.69	10.39	43.16	Marginal
Rangpur	92.70	11.48	16.16	44.00	Good
Faridpur	45.00	9.48	12.04	40.00	Medium
Sylhet	99.19	18.19	28.92	34.00	Very Good*
Barisal	91.47	11.31	15.82	34.38	Very Good

*Subject to flood

Poverty Alleviation: A Study of the Efficacy of the Rural Social Service Project in Shibganj Upazila

Md. Ali Akbar
Gholam Mostafa

The basic reality of Bangladesh is its mass poverty which is essentially a rural phenomenon.[1] The primary goal of all development plans, since the mid-1950s, has been poverty alleviation. But there is consensus among the analysts that the material benefits of development plans have not "filtered down" to the poor and that the degree of inequality has been increasing over the years.[2] For the overwhelming majority of rural population, extreme economic distress and deprivation has become a permanent feature of their life, and the future prospect is also not bright either.[3]

The alleviation of mass poverty continues to be the prime national goal of development.[4] There is a large number of poverty alleviation programmes, schemes and experiments now being operated by the

[1]Urban poverty in Bangladesh is viewed as a transfer of rural poverty in an uglier form due to the limited capacity of agriculture to absorb the increasing number of the rural landless.

[2]Muqtada, M. "Poverty and Inequality: Trends and Causes" in Islam and Muqtada (eds), *Bangladesh: Selected Issues in Employment and Development;* International Labour Organisation, Asian Employment Programme (ARTEP), New Delhi, 1986, pp. 41-60.

[3]The Third Five Year Plan (1985-90) aims at raising the per capita income from Tk. 3511 ($135) in 1985 to Tk. 4119 ($158) in 1990. The Plan emphasises the "need for policies and institutional support so that the benefits of development reaches the poor also". But it is rather vague as to how this would be done. The rural development policy of the Third Plan aims at raising at least 10 per cent of the rural households above the poverty-line; the estimated rural households below the poverty line in 1985 was 64 per cent.

[4]Government of Bangladesh, *The Third Five Year Plan (1985-90)*: The Planning Commission, pp. 2-47.

government and by a large number of non-governmental organisations in the country. There is however an absence of a coherent national policy framework to deal with the multifacet problem of rural poverty. Each regime had initiated its own approach to rural development with new slogans. But the lack of continuity and consistency in anti-poverty approach indicates among other things, a divergence of views as to **why** the process of rural pauperisation continues and/or **what** should be done in order to ameliorate the condition of the rural poor. There is therefore an imperative need for an objective evaluation of the on-going policies and programmes for the rural poor. The present study was an attempt to assess the efficacy of the Rural Social Service (RSS) programme of the Department of Social Services in ameliorating the socio-economic conditions of the most disadvantaged segments of the rural population.

Objectives, Scope and Methodology of the Study

The specific objectives of the study were:

(i) To analyse the nature of strategies and programme components, and

(ii) To critically examine the impact of its poverty allleviation programmes.

The study was limited to 16 villages of a single RSS project in Shibganj upazila. The RSS programme being a government programme, its staffiing pattern, implementation procedures and resource base were more or less the same in all projects in the country. Moreover, the selected upazila was not an atypical one, and the socio-economic conditions of its target population were more or less the same as in other projects. We however recognise that all of the findings drived from a single project may not be equally applicable to all projects. The assessment of the Mothers' Centres was made of all 40 centres in the RSS project in Shibganj.

The relevant data for the study were collected from official records as well as from programme beneficiaries by administering an interview questionnaire. The critical analysis of the RSS approach to rural poverty was mainly based on official records and other secondary data. The impact of the poverty alleviation programme components was mainly based on the interview data. The study was based on a "before-after" design; the base year was 1982 and the terminal year was 1986. Due to the inadequacy of the base-line data, the study depended, to some extent, on the responses of the beneficiaries about their condition before and after the programme participation.

Analysis of the RSS Approach

The RSS project was initiated as an integral part of development plans and was viewed as a **comprehensive** rural development approach designed to assist the rural disadvantaged groups.[5] The programme emphasised both **area** and the **target-groups.** But in practice, except for the Mothers' Centres, the clients were not organised into formal or informal groups and no group planning or group activities were organised. The unit of service was the individual, but the individual was assessed in terms of his family situation.

The RSS projects were initiated at a time when the rural development activities were limited to BRDB cooperatives for small farmers. There were no specific programmes for the landless, women, children and youth. But by 1982, the RSS project was only one of the several poverty alleviation programmes of the Government. Besides, a large number of NGOs are operating various "innovative" programmes for the poor.[6] All these public and private agencies now compete for recognition and resources at the macro, and for the same target-groups at the micro-level. The project has lost its distinctiveness, and its approach is viewed as traditional welfare approach.[7] This approach failed to take into consideration the factors in the social and political milieau which relegate the poor to a position of subordination to the rural elites.

Programmes and Activities of RSS Projects

In early years, the RSS project attempted to cover a wide range of activities which were expected to benefit, directly or indurectly, **all** villagers. An examination of the nature of activities undertaken by the RSS project in Shibganj during early years indicated that the most of the activities undertaken were related to the peripheral aspects of the life of the rural poor. The few income-generating activities that were initiated could produce only marginal incomes having insignificant impact on rural poverty. It had broad objectives but meagre resources. The project therefore emphasised selfhelp and initiated activities which involved little inputs and money.

[5]Mia, Ahmadulla, "Social Welfare Policy in Bangladesh with Particular Reference to Rural Social Services", *Training of Trainers on Social Welfare Policy Formulation*: UN Social Welfare and Development Centre for Asia and the Pacific, Manila, 1980, pp. 169-181.

[6]Alauddin, M. *et al.*, *Combating Rural Poverty: Approaches and Experiences of Non-Government Orgnisations*: Village Education Centre, Savar, Dhaka, November, 1984. (Mimeo.)

[7]Government of Bangladesh, *The Third Five Year Plan (1985-90)*: The Planning Commission, p. 395.

By late 1979, it was apparent that the RSS project had neither resources nor manpower to realise the multi-dimensional objectives. On the other hand, internal evaluation of the RSS projects and of the performance of the Rural Faminly and Child Welfare Project (RFCWP) of the International Union for Child Welfare (IUCW) showed that the RSS projects should give priority to income-generating activities for the poor to be identified by an objective socio-economic survey. It was then decided that 75 per cent of the Development Grant should be used for Socio-Economic Schemes (SES), and the rest should also be used to assist poor villagers and the physically handicapped. The SES programme was strengthened and systematised by the introduction of the IUCW sponsored Rural Family and Child Welfare Project which was implemented in selected villages of the RSS project.[8]

By June, 1982 when this study was initiated, activities of the RSS project in Shibganj were limited to (1) income-raising activities for the poor families through supervised "interest-free" credit under the SES programme and skill training (2) promotion of family planning through the International Development Agency (IDA) assisted 40 Mothers' Centres (sometimes called Mothers' Clubs) and through the intensive Family Planning (FP)/ Maternal and Child Health (MCH) activities promoted by the Family Planning International Assistance (FPIA) in IUCW-assisted villages, and (3) raising socio-economic condition mainly through group-discussions on home-management, kitchen gardening, health and hygiene, etc.

Extent of Poverty in Shibganj Project

A socio-economic survey was conducted in 1982 in order to identify the target groups in 16 villages. The households were classified into three categories on the basis of per capita family income:

a. Category 'A' families with a per capita annual income of Tk. 800 or less (Tk. 1200 or less since 1984) were considered to be in absolute poverty and the primary target group for the SES programme.

b. Category 'B' families with annual per capita income of Tk. 801-1260 (since 1984 it was Tk. 1201-1770). These families were considered to be living below poverty-line and the second priority group for the SES assistance.

c. Category 'C' families were living above poverty-line and were usually not eligible for the SES assistance but were eligible for FP/MCH services and membership in Mothers' Centres.

[8]Ali, Mohammad, *The Poor Want to Exist*; published by Wazihullah Patwary and Maleka Rahman, C/o. International Union for Child Welfare, Dhaka, 1986.

According to the 1982 socio-economic survey of 16 villages, it was found that about 51 per cent of the families were in category 'A', 20 per cent in category 'B', and 29 per cent in category 'C'. During 1982-84, a total amount of Tk. 4,55,200 was invested in 847 schemes which benefited 689 families. The amount of loans varied from Tk. 150 to Tk. 2000, the average amount per scheme being Tk. 537.42. About 92 per cent of the recipients were from category 'A'. But it was not the hard-core poor families which had received the SES assistance. The main concern was loan-recovery. So the viability of a scheme was assessed in terms of the honesty and integrity of the recipient as well as the concurrence of the Village Committee which helped in the loan tecovery. During this period about 26.37 per cent of the 'A' category families, 5.62 per cent of the 'B' category, and 0.28 per cent of the 'C' category families were covered by the SES programme.

The loans including a ten per cent service charge were recovered usually, in 11 instalments over a period of 12-13 months. The service charge together with the repaid capital and bank interest constituted a **revolving fund** to be recycled to cover all target families. The revolving fund, if the recovery rate was satisfactory, would continue to grow. Thus by 1986 the revolving fund increased by about 25.1 per cent, the total capital of Tk. 4,55,200 invested had increased to Tk. 5,69,252. The revolving fund was not recycled during the last two years—1984-85 and 1985-86. The total amount of the fund would have further increased, and more deserving families could have been covered. By June 1986, only about 20 per cent of the below poverty-line families had received the SES assistance, most of them for only once. The target population or the Village Committees had no control over the revolving fund which was controlled by the project personnel who had neither the obligation nor the incentive to recycle the fund.

Characteristics of the Beneficiaries of the SES

In 1982, a total number of 255 (of whom 250 could be traced) families had received the SES assistance. About 95 per cent of the recipients were from category 'A', about 3 per cent from category 'B' and the rest 2 per cent were category 'C'. It was known from earlier studies that the selection of families for the SES assistance had not been always correct mainly due to the inadequacy of the base-line socio-economic survey, the difficulties in estimating family income and the nepotism of the influential members of the Village Committee.[9] But such cases were

[9]Ribouleau, Annick, *An Evaluation of the Rural Family and Child Welfare Project*: The International Union for Child Welfare, Dhaka, December, 1983. (Mimeo.)

only a few. Moreover, even the families classified as category 'A' were not living under the same economic hardship. Thus, the average per capita annual income of 250 recipients of the SES assistance was Tk. 597.58, about 57 per cent of the recipients had less than the annual per capita income of Tk. 580. The per capita average annual income of 'A' category recipients was Tk. 562. Thus, although almost all of the recipients came from very poor families, some of them were relatively better-off than others. This was evident from land-ownership pattern and the possession of other tangible assets by different families. It was obvious to us that some of the hard-core poor families were avoided because of the doubt about their ability and willingness to repay the loan.

The SES loans were given to individuals. About 74 per cent were male family-heads; about 75 per cent of the recipients were male; about 25 per cent of the recipients were female; about 9 per cent of the recipients could be viewed as socially handicapped—widow/divorced / de-deserted women.

In 1982, the average family-size of the recipients was 6.7 (ranging from 1 to 18 persons) of which 1.57 were earning members. Most of the recipients as well as the family-heads were illiterate. Very few of them had above primary level of education which might be considered to be the minimum level of education required to keep financial and other records. Most of the recipients, and their family-heads were day labourers, petty businessmen, craftsmen and share-croppers. Only a few of them were involved in "domestic work". Almost none of the recipients were unemployed. But most of them were involved in low-paid unstable income-earning activities. By occupational category, they were poorest of-the-poor in rural areas. The average monthly family income of the recipients was Tk. 321.52, and about 90 per cent of the households had less than a monthly income of Tk. 450 in 1982.

Type of SES Activities

According to our study, most of the socio-economic schemes supported during 1982-86 were of traditional type and involved no new skill. These activities dealt with the peripheral aspects of the rural economy. Most of the SES activities had no influence on the productivity of the poor and did not indicate that they were planned according to the needs and prospects of the rural economy. The type of the socio-economic schemes supported during 1982 indicate that about 26 per cent of the recipients were female and had received about 22 per cent of the total loans. The majority of the recipients had received the lion share of the loan for petty business. Most of the female recipients had loans

for rice husking. The most important activity for the male recipient was petty business ; the other economic activities for men were handicrafts, vegetables growing, rice husking (?) and other village crafts.

Impact of the SES Programme

Not all of the SES loans were used for the schemes for which loans were sanctioned. Four years after the sanctioning of the loans, about 83 per cent of the schemes involving about 84 per cent of the total loans, were still being continued; about 10 per cent of schemes involving about 9 per cent of the loans, had been discontinued; and about 7 per cent of the loans were being used in other economic activities. The loan-recovery was however quite satisfactory; about 99.9 per cent of the loans and about 97.5 per cent of the service charge were recovered.

We found that about 10 per cent of the recipients were no longer continuing with the schemes for which loans were given. Another 10 per cent recipients were continuing with the schemes but reportedly were not earning any income from those schemes. In all, 20 per cent of the recipients of 1982 were not earning any income in 1986. This means that about 18 per cent of the loans distributed in 1982 were not producing any income in 1986. The average share of the SES loans in the monthly income of the recipients in 1986 was Tk. 145.44. If we exclude those who were no longer using the loans, the average share of the SES loans in the monthly income in 1986 would be Tk. 194.44. This means that the average investment of Tk. 417.64 was producing, on the average, a monthly income of Tk. 194.44 which was about 46.6 per cent of the investment. This would suggest that properly implemented socio-economic schemes could be reasonably productive. As would be expected, different schemes had produced different rates of return. By and large, the investment in women's activities had lower returns. This was mainly due to the nature of the schemes and also due to the smaller supplementary capital used in these schemes.

It is already known that the problem of rural poverty is closely connected with the problem of unemployment and underemployment. It is not so much that the poor are sitting idle. But their incomes are so low because of the low productivity. But the SES programme did not go beyond providing concessional loans in activities generating meagure supplementary incomes. The real questions that confronted the SES programme were: how many schemes could be profitably funded in rural areas and how many of the unemployed and under-employed persons from poor households could be profitably employed in petty business

and other activities in the tertiary sector of the rural economy. It should be noted that the SES programme did not aim at raising any specific

TABLE 1

SES Investment and Returns

Investment and returns	Male (N=186)	Female (N=64)	Total (N=250)
1. Percentage of "successful schemes"	79	63	75
2. Average investment in successful schemes (Taka)	431.97	365.00	417.65
3. Average monthly returns* that could be attributed to the SES loans (Taka)	220.30	99.30	194.44
4. Average monthly returns as percentage of the SES loans	50.99	27.23	46.55

*Income from SES loans: $\frac{\text{Total Monthly Income}}{\text{Total capital invested in schemes}} \times \text{SES loans}$

number of the target population above poverty-line. It is therefore, not easy to assess the impact of the SES programme in terms of poverty alleviation. It is also difficult to determine how much revolving fund would be required for a particular village and to assess its absorption capacity in the traditional areas of investment promoted by the programme. The general idea was that "something is better than nothing".

Although the approach of the SES programme was multi-dimensional, the official criteria for evaluating the programe were : (1) whether loans were given to 'deserving' individuals/ families, (2) how many of the target families were covered (but there was no target), (3) the extent of loan-recovery, and (4) the number of family planning acceptors recruited. The other aspects of the programme were given no or minor importance.

This was an ex-post-fact "before-after" survey type evaluation. But the base-line data were weak. The limitation of the observations on the impact of the programme emanated from our inability to indicate what changes were **due** to the programme and what **followed** it. We simply report some of the relevant socio-economic changes in families which had received the SES assistance.

(1) The dependency ratio had declined and the average number of earning members had increased from 1.58 persons in 1982 to 1.84 in 1986.

(2) There was significant changes in the occupational pattern of the family-heads. There was decline in day labourers from 39 per cent in 1982 to 19 per cent in 1986 and increase in petty business, from 19 per cent in 1982 to 46 per cent in 1986. There was decline in sharecroppers from 20 per cent in 1982 to 16 per cent in 1986. There was no change in the proportion of the family-heads involved in different village crafts. While only 18 per cent of the family-heads had subsidiary occupation in 1982, this percentage went upto 45 in 1986. There was significant change in the participation of the women in economic activities, from 9 per cent in 1982 to 17 per cent in 1986. But the secondary occupation of the women declined from 20 per cent in 1982 to 15 per cent in 1986. Thus, the major change in occupation represented a shift of labourers from agricultural sector to relatively non-productive tertiary occupations.

(3) Changes in occupational pattern apparently had influenced the family incomes of the recipients. The average monthly family income went up from Tk. 321.52 in 1982 to Tk. 725.37 in 1986. If we deflate the average income by 12 per cent annual inflation rate, even then, the average monthly family income in 1986 would be Tk. 461.02, about 43.4 per cent higher. All of the families could not raise their incomes. Out of the total 238 'A' category recipients, about 23 per cent could raise their family incomes above Tk. 1770 which was defined as the poverty-line in 1986, about 34 per cent had moved up from category 'A' to category 'B', and the rest 43 per cent had remained in categorty 'A'.

(4) We found significant improvement in family wealth (money-value of family assets other than land). Although the money-value of other assets had increased by 272 per cent, the total land owned by these families had declined : (i) the total land for homestead decreased from 76.14 acres to 40.24 acres (decline by 47 per cent), and (ii) the total cultivable land decreased from 69.03 acres to 66.67 acres (about 3 per cent decline). The landlessness among the recipients had increased from 59.6 per cent in 1982 to 71.6 per cent in 1986 due to land-sale, river erosion and family disputes. While percentage of households without homestead had decreased from 21.6 per cent to 9.2 per cent, the average size of homestead had declined from 0.30 acre to 0.16 acre. The quality of housing of some of the recipient households had also improved.

(5) Irrespective of whether they benefited or not, all of the recipients thought that the SES programme was very useful, that it should be continued, and that the amount of loan should be increased so that the approved schemes could be more beneficial. About 8 per cent of the recipients had taken loans from other sources at exorbitant rates of interest, and they had paid up most of the loan. This indicates that the target population can use more concessional loans in order to improve their socio-economic condition.

(6) About 26 per cent of the recipients of the SES assistance were women, and they had been contributing to family income. We also found that the participation in different economic activities by women from the recipients' family had slightly increased. Of the total 728 female members of 250 recipient families, 343 (about 47 per cent) were in 15-49 age-group. But only 25 (7 per cent) of them were attending Mother's Centres in June 1986. Thus, only an insignificant number of the women from the recipient families were involved in Mothers' Centres.

(7) At the time of the field investigation, the contraceptive prevalence rate among the married women of reproductive age of the recipients' families was about 49 per cent. The majority of the current-users were relatively young in age but high in parity.

(8) Most of the recipients reported that if there was an illness in the family, they used the modern medicine prescribed by allopathic physicians. But a significant number (14 per cent) of them also consulted village quacks and used **kabiraji** medicine. Only about 27 per cent of the recipients had used the Government health facilities (clinics and doctors). Most of the recipients had no latrine of their own. Almost all of them used drinking water from the tube-well.

Mothers' Centres in Shibganj Project

The women were the major target-group of the RSS project. It was expected that they would be organised into village-based Mothers' Centres in order to improve their socio-economic condition. The IDA assistance was provided to these Centres under the scheme entitled "Use of Rural Mothers' Centres for Population Activities". The scheme expected that the Mothers' Centres would bring together the women of reproductive age to motivate them to adopt family planning and to educate them in

various aspects of homemanagement, child care, health and nutrition.[10] In order to attract women from poor families provisions were made for skill training and income generating activities by use of the working capital. One part-time Trade Instructor (T.I.) at a fixed monthly honorarium of Tk. 250 was appointed to each centre in order to motivate women to practise family planning and to train the members of the Mothers' Centres in different crafts. The name "Mothers' Centres" was little confusing because these centres were open to unmarried girls, widows and other old women (Table 2).

TABLE 2
Martial Status of the Participants in 1983 and 1986

Marital status	Percentage of participants 1983 (N=1038)	1986 (N=724)
Married fertile women	46	69
Widow/Divorced	16	4
Unmarried women	20	25
Unmarried girls (under 15 yrs.)	18	2

According to official record, the total number of members of Mothers' Centres in Shibganj upazila had declined from 1038 in 1983 to only 724 in 1986. In terms of economic category, about 62 per cent of the members were from category 'A', 20 per cent from category 'B' and the rest 18 per cent from category 'C'. The overwhelming majority of the regular participants came from poor families, and their major interest was in supplementing family incomes. The major activities of the Mothers' Centres were (1) skill training, (2) gainful economic activities by use of concessional loans from working capital, and (3) promotion of family planning.

Skill Training

According to official records, during 1980-83 about 85 per cent of the members had received skill training, and 83 per cent of the members were continuing with the training and working in production centres. But the average income from sale-proceeds of the products was very small. Almost similar pattern of skill training was found in 1986 but the participants in the production centres had declined from 85

[10]Mia, Ahmadullah, *et al.*, *Rural Mothers Centres: An Impact Study;* Institute of Social Welfare and Research, Dhaka University, 1985. (Mimeo).

per cent in 1983 to 46 per cent of the members in 1986. The areas of skill training were tailoring, sewing, (seasonal) wool-knitting, bamboo and cane works and embroidery. But these traditional craft in the days of old clothes and garment factories, seemed outdated and relatively unproductive. The quality of training and products and their marketing problems were also pointed out by the trainees themselves. The field workers did not keep track of the women trained in Mothers' Centres. The contribution of the skill training and of the production centres in alleviating the extreme poverty of the poor families was very limited. If skill training and production centres were to be made more effective for poverty alleviation, then new crafts, new designs and better marketing facilities should be included in the programme. Most of the TIs were not adequately trained to introduce any new design or crafts which have local market potentials. The TIs were appointed for Mothers' Centres but they were being used as front line workers, often as assistant to the USWs, for promoting all activities of the RSS project. Most of the time, they were busy in recovering loans and recruiting clients for family planning. They could not pay much attention to the organisational aspects of the Mothers' Centres.

Use of the Workng Capital

During 1982-85, a total amount of Tk. 108,000 was received as the working capital for 40 Mothers' Centres in Shibganj project. Of the total working capital, about 88 per cent was distributed to support 312 schemes in 23 villages. Even though there was Tk. 13,025 in the bank, about 17 villages were excluded. The loan-recovery was quite satisfactory (about 95 per cent, and about 89 per cent of service charge is included). The working capital was not recycled to cover more members from poor families. The members had received loans only once. The recovered loans were kept in the upazila account to produce bank interest. The idea of a revolving fund seemed to have been forgotten.

The loan-registers were incomplete and inaccurate which made us suspicious that some portion of the funds might not have been properly used. We had to find the uptodate situation of the working capital from the bank statement which indicated that by June 1986, the total revolving fund (including the bank interest) was Tk. 101,075/72 and a total amount of Tk. 12,029/50 was still to be recovered from the recipients.

A total number of 312 schemes involving Tk. 94,975 was sanctioned during 1982-1986. But we found record of 240 schemes involving Tk. 82,875 (about 87 per cent of the total investment). The average loan per scheme was Tk. 345.31; more than 51 per cent of the loans were of Tk. 300 or less ; and only about 16 per cent of the loans were of

Tk. 500 or more. Most of the schemes supported by the working capital were similar to those of the SES programme supported by the Development Grant. About 40 per cent of the schemes involving about 41 per cent of the total loans, were given for rice husking which was a declining occupation for the rural women. These schemes could be profitable only when these were combined with selling of the husked rice. But the average loan for these schemes was of only Tk. 352/60. About 28 per cent of the schemes involving about 30 per cent of the loans, was goat-raising which could seldom ensure a flow of income for poor families. Again, 10 per cent of the schemes involving about 8 per cent of the capital invested were for petty business. Except for weaving, tailoring and embroidery (which comprised about 13 per cent of the schemes involving about 13 per cent of the total investment), all other schemes were unrelated to skill training organised by the Mothers' Centres. According to the recipients, after the repayment of the instalments, the monthly income earned by them was very small—from Tk. 15 to Tk. 150. Such a meagre amount could hardly produce any impact on their economic distress.

The income generating activities of the RSS project for the women were of traditional type which required no new skill or large capital. Most of these activities could be operated by the recipients from home and within the villages. The loan received by an individual woman was not exclusively operated by her; often the man/or other members of the recipient's family played an active role (i.e., the woman was a mere medium of getting the loan). A significant portion of the loans supported on going economic activities. Since there was no recycling of the revolving fund, it could cover less than 20 per cent of the regular participants of the Mothers' Centres.

Promotion of Family Planning

One of the important objectives of the Mothers' Centre was to promote "responsible motherhood" by motivating women to practise family planning and to adopt improve home-management, child care and health practices. About 44 per cent of the eligible members had participated in occasional FP/MCH discussion sessions. Most of the participants thought that they had learned a lot about family life and home-management from these sessions.

About 69 per cent of the regular participants in 1986 were women of reproductive age. The contraceptive prevalence rate among them was very high, about 62 per cent. The majority of the acceptors were pill-users. About 11 per cent of them accepted sterilization, mainly ligation. About two-thirds of the acceptors were using female method—pill, IUD and

ligation. The contraceptive prevalence rate among the members however does correctly reflect the achievement of the Mother's Centres because, the TIs were expected to recruit acceptors from the members as well as from other eligible women from project villages. The contraceptive prevalence rate in the project villages was significantly higher than that in the whole upazila. The contraceptive prevalence rate had increased from 21 per cent in 1982 to 35 per cent in 1986. The overall performance of the family planning programme was good but not remarkable.[11]

Concluding Remarks

The RSS project started with multiple objectives, multiple target-group and a broad-based coverage of service-fields such as skill training in different crafts, income-generating activities, promotion of family planning, health, sanitation, nutrition, child care and home-management. planning, health, sanitation, nutrition, child care and home-management. The underlying idea was that comprehensive rural development should be attempted through an integrated approach. The programme was specially targetted towards the by-passed segments of the population. We, however, found that its programme-components, strategy and working procedures were decided by donor agencies. Being dependent on various sources of funds, it could not develop any new approach to rural development or poverty alleviation of its own. It was simply one of the many poverty alleviation programmes, in the country. It did not have any philosophy (of development) nor did it have any central direction. So far, due to the failure in the recycling of the revolving fund, it could cover only a small portion of the target population with short-term small loans. Such loans by themselves could not provide full-time employment to recipients and the income earned by them by utilisation of these loans could produce very limited impact on their extreme poverty.

Our study shows that the RSS programme did not make any attempt to improve the socio-economic condition of the rural poor by mobilising their resources and by building organisations of the poor for collective efforts in self-reliances or to create "critical awareness" of their situation The indicators of its achievement are presented in terms of how many clients have been trained, how many of them have gained, what amount of income and how many family planning acceptors have been recruited The persistence of the programme to work with **individual** clients has undermined the promising village-based organisations like Village Committees and Mothers' Centres. These committees have no control over

[11]Since the base-year couples were used in estimating the percentages of the terminal year, the contraceptive prevalence rate would be lower than 35 per cent.

the revolving fund, critical role in decision-making or planning activities in terms of the local conditions. The clients had little choice—they had to accept what were offered to them. The revolving fund was kept in the bank and was not recycled. But the officials were not accountable to the village committees for these lapses. The field workers however criticised the members of the Village Committees for their lack of interest in project activities and their nepotism in loan distribution. But most of the members did not now what or how much was available. They were expected to help and cooperate but not to decide about project activities.

In the RSS project there was no innovative approach or the application of new techniques in dealing with multifacet problems of rural poverty. Our findings of the RSS project in Shibganj did not confirm the conclusion of Professor Mia and his associates that the RSS project has achieved considerable success "in the forms of increased income, employment and formation of capital".[12] We however agree with them that "the poor families having small credit support on soft terms and close supervision ... can successfully strive to improve" their economic condition provided adequate and timely provision of equipments, raw materials, credit and marketing facilities could be ensured.[13] Such an improvement in the programme management can help a limited number of the rural poor to eke out a living. An effective approach should be to introduce technological innovation in order to increase the productivity of the rural poor. The RSS approach, in its present form, may make the poor somewhat less poor but cannot be expected to make any significant impact on mass rural poverty.

Since the RSS project covered a broad-based service fields, some of its activities were similar to those operated by other agencies in the same upazila. But there was no effective coordination and coooperation among these agencies. Each agency was operating its activities and claiming success. Some form of coordination among agencies working for the rural poor, rural development and population control was necessary.

[12]Mia, Ahmadullah, *et al.*, *Rural Social Services in Bangladesh: An Impact Study*; Institute of Social Welfare and Research, University of Dhaka, November, 1985 (mimeo), p. XII.

[13]*Ibid.*, pp. XII-XIII.

Landslides and Slope Stability Problem of the Nonhomogeneous Embankment Slope along the Padma River Bank in Rajshahi City*

M .Hamidur Rahman

1. Introduction

The stability of earth embankments or slopes should be very throughly analysed since their failure may lead to loss of human life as well as collosal economic loss. The failure of a mass of soil located beneath a slope is called a slide or broadly landslide. It involves a downward and upward movement of the entire mass of soil that participates in the failure. When the surface of the soil structure is not horizontal the component of gravity tends to move the soil downward and may disturb the stability of earth structures.

A through knowledge of shear strength and related properties of soil is essential to design the slope and height of the embankment. The possibility of the seeping ground water reducing the soil strength while excavating must also be taken into account. It may sometimes be essential to drain the subsoil water to increase the soil strength and to reduce the seepage force. The clay materials show an appreciable change in strength when these come in contact with water/Hossain. K. M., et al, 1986; Rahman. M. H., 1985/. It was found that the investigated embankment slope is composed of nonhomogeneous soil masses and for the estimation of the stability of embankment slope it involves the determination of the following physical properties, plasticity characteristics, specific gravity, particle size distribution, gradation of soil, permeability consolidation and compaction characteristics and shear strength parameters under various drainage conditions.

Therefore the testing of soil with relation to the determination of its physical properties and the perfect evaluation of effects of certain other

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factors such as surface of weakness seepage conditions etc forms the most essential part of the development of soil engineering.

The size and way in which the deformation takes place depends on many factors. The equilibrium of the slope is preserved by means of the strength properties of soil making up the slope. When the values of stress caused by the weight of the soil and external pressure reach or exceed the mobilized value of shearing strength of soil, then we have to do with a loss of equilibrium and the slope is completely deformed i.e. a landslide process takes place.

Thus the prediction of possible landslide processes lies mainly in the calculation analysis taking into account the properties of soil strength and the state of stresses in the slope. Both the state of stress and the strength of soil depends on many natural and artificial factors/Wright, S.G. 1973, Stefanoff. G. et al 1976; Rahman. M. H. 1987; Hoek. E. et al, 1980/.

Recently few minor landslides has been observed in different parts of the embankment. Landslides were occured where the slope angle is more than 16° but most of the investigated slopes are confined to the areas where embankment slope is above 12°. The chief constituent materials of the slope is mainly greyish brown to light yellowish brown, sticky plastic and hard mottling clay with silt and strongly calcareous silty loam.

During the dry season polygonal cracks develop in the colluvial type of soils due to shrinkage of materials. Most of the embankment slopes are affected by landslides due to the action of water. Landslides are also observed in the investigated area due to seepage of water when flowing bank into river after flood, internal shearing resistance is considerably reduced owing to saturation and seepage pressure.

Slumping is also the main type of mass movement that endangering the embankment slope in different sections. The satisfying results of the analysis of stability of the embankment lies mainly in a proper geoengineering recognition of the slope and evaluation of the physico-mechanical parameters of soils including their natural changeability/Rahman, M. H. 1985; Rybicki. S. et al, 1984, Chowdhury. R. N. 1978, 1979/.

2. Methodology

The determination of the physico-mechanical parameters of soil masses are very important for the analysis of slope stability and landslides. Field as well as laboratory investigations has been carried out for the physico-mechanical parameters of the soil masses formed the embankment slope along the Padma river bank in the Rajshahi city.

The work has been done in the following manner :—

(i) Detailed field investigations has been done to find out the problem of landslide of the embankment slope.

(ii) Collected sufficient quantity of qualitative undisturbed soil samples from different locations of the area under investigations for different laboratory tests.

(iii) In the laboratory the following tests were performed on the collected soil samples :

A. For Physical Parameters :—

a. Limits of consistency tests.

B. For Mechanical Parameters :—

a. Unconfined Compression Test

b. Triaxial Compression Test

c. Direct Shear Box Test

On the basis of the Physico-mechanical parameters of the soil masses the safety factor of the embankment slope has been calculated by different widely used traditional methods.

3. Results

a. Results of Limit of Consistency Test

The samples tested in the laboratory shows that the values of natural water content varies from 21.9 to 36.9 %, the values of plastic limit varies from 20.8 % to 35.8 %, values of liquid limit varies from 36.9% to 51.5 %, plasticity index varies from 13.6 % to 21.00 % (Table 1).

The above mentioned values of parameters of the soil mass indicates that the soil is suitable for the construction of earth structures like the existing embankment of the investigated area.

b. Results of Unconfined Compression Test

The Unconfined Compression Tests were done on the cylindrical soil samples having height 8 cm and diameter 3.8 cm. Sufficient quantity of soil samples were tested from different locations. The samples were undisturbed and contained the natural water content as in the field. The tests were performed in the compression apparatus without cell/horizontal pressure on the samples. The axial deformation have been observed by a dialgauge. The rate of axial deformation of the sample was 15.00 mm/h. Three sets of values of deformation modulus/Eo_1 Eo_2 and Eo_3

TABLE 1

Physical Properties of the Padma River Bank Sediments.

Sl. No.	Location	Natural Water Content (Wn) %	Plastic Limit (Pl) %	Liquid Limit (L_l) %	Plasticity Index I_p %	Liquidity Index I_l %
1	2	3	4	5	6	7
1	1	23.8	22.7	38.90	16.2	0.068
2	2	27.6	26.1	47.10	21.00	0.071
3	3	21.9	20.8	38.8	18.00	0.61
4	4	29.3	28.2	36.90	18.7	0.059
5	5	28.2	26.9	46.70	19.8	0.065
6	6	34.4	33.1	51.30	18.2	0.071
7	7	32.5	30.9	51.50	20.6	0.077
8	8	25.6	24.1	45.70	21.6	0.069
9	9	29.1	28.0	43.60	15.6	0.070
10	10	36.9	35.8	49.40	13.6	0.081

has been calculated on the basis of the following formula /Kidybinski. A. 1974/:

$$Eo = \frac{\Delta p.\, h}{F.\, \Delta h} = \frac{(P_k - P_w) / h}{F.\, (\Delta h_k - \Delta h_w)}$$

Where $\Delta P = (P_k - P_w)$ is an increase of force in an appropriate range/i.e. 75% to 10%/ of critical force.

$\Delta h = (\Delta h_k - \Delta h_w)$ is an increase of axial deformation in an appropriate range of increase of force.

h = height of sample, F = area of sample,

$Eo_1 = P_{10}\%$ to P 50 % of the critical force.

$Eo_2 = P_{50}\%$ to $P_{75}\%$

$Eo_3 = P_{10}\%$ to $P_{75}\%$ of the critical force

P = is the force

The results obtained from Unconfined Compression Tests varies from place to place. The values of deformability modulus/Eo_1/ varies from 23.10 KG/Cm² to 32.3 KG/Cm², Eo_2 varies from 4.70 KG/Cm² to 7.30 KG/Cm², Eo3 varies from 9.20 KG/Cm² to 13.90 KG/Cm². All these values indicate that the soil have medium strength in character /Figure 1/.

The values of cohesion varies from 0.20 KG/Cm² to 0.37 KG/Cm² and the average value is 0.30 KG/Cm² which is medium strenght in character. The values of angle of internal friction varies from 26° to 38° and the average value is 33° which is higher than average values of strength (Table 2).

The above mentioned values of modulus of deformation, cohesion, angle of internal friction indicates that the soil is good for construction of earth works like dam or embankments etc.

c. Results of Triaxial Compression Test

The Triaxial Compression Tests were performed on the cylindrical soil samples having natural water content and undisturbed. Sufficient quantity of soil samples were tested from different locations. The height of sample is 8 cm and the diameter is 3.8 cm. The tests have been done without consolidation, undrained and without measuring pore pressure. The soil samples have been tested at the increasing axial stress σ and a constant confining stress σ_3.

The rate of axial deformation of the sample was 3.50 mm/h. The confining pressure σ_3 was 2 KG/Cm² to 10 KG/Cm². The investigations and their interpretations were based on the suggestions and instruction presented by Bishop. A.W. and Henkel D.J. 962, Bishop. A. W and Bjerum. L. 1960.

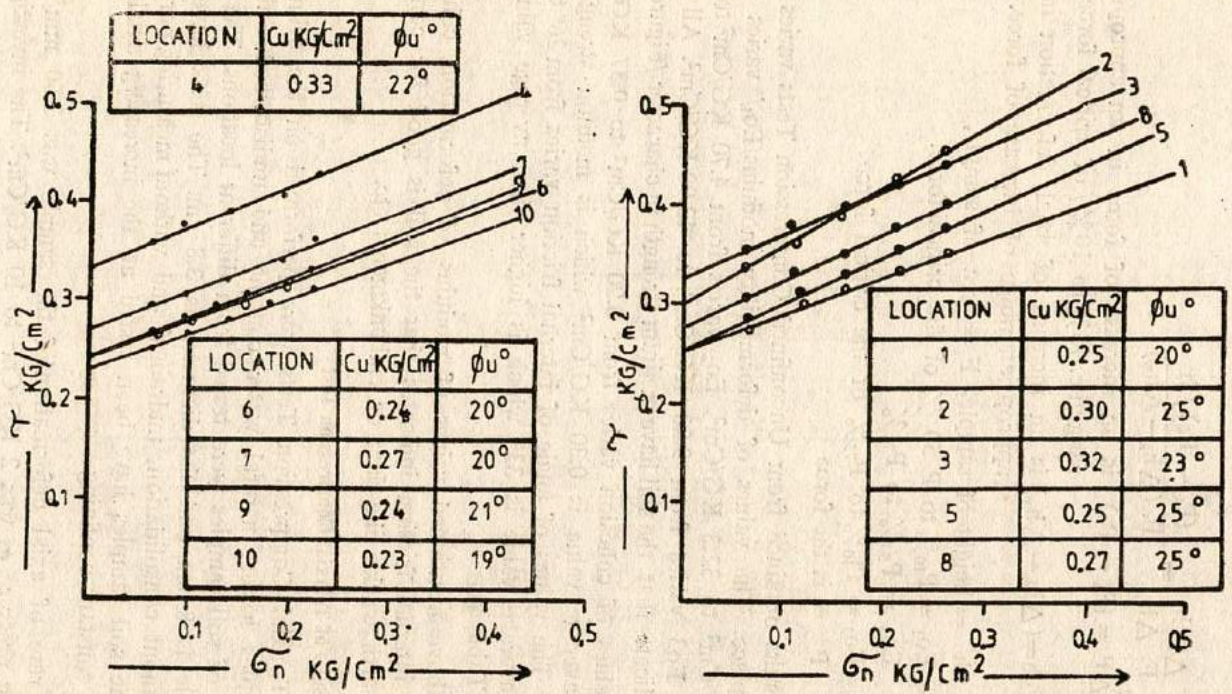

Figure 1. Results of Unconfined Compression Test.

TABLE 2

Results of Unconfined Compression Tests Performed on The Padma River Bank Sediments

Sl. No.	Location	Dimension of Samples		Natural Water Content (Wn) %	Cohesion (Cu) Kg/cm	Angle of internal friction (ϕ_n) (in Degrees)	Deformability Modulus (Eo).		
		Height Cm	Diameter Cm				Eo1 P_{10-50}% of critical force Kg/Cm²	Eo_2 P_{50-P75}% of critical force Kg/Cm²	Eo_3 P_{10-P75}% of critical force Kg/Cm²
1	2	3	4	5	6	7	8	9	10
1	1	8	3.8	23.8	0.20	33°	32.3	7.3	13.9
2	2	8	3.8	27.6	0.27	34°	31.0	6.6	12.8
3	3	8	3.8	21.9	0.33	38°	23.10	4.9	9.2
4	4	8	3.8	29.3	0.30	29°	27.7	5.8	11.3
5	5	8	3.8	28.2	0.33	38°	23.6	4.7	9.5
6	6	8	3.8	34.4	0.28	38°	24.1	5.2	10.1
7	7	8	3.8	32.5	0.32	32°	27.3	5.9	11.2
8	8	8	3.8	25.6	0.29	26°	26.5	6.1	12.1
9	9	8	3.8	29.1	0.37	30°	25.7	5.7	10.5
10	10	8	3.8	36.9	0.30	32°	30.3	7.3	13.3

From the Triaxial Compression Tests we have obtained the values of cohesion and the angle of internal friction. The calculations were followed by the diagrams and dependence $q = \int p$ /Simons. N.E. 1960/.

$$\text{where } q = \frac{\sigma_1 - \sigma_3}{2}$$

$$p = \frac{\sigma_1 + \sigma_3}{2}$$

$$Cu = \frac{b}{\text{Cos } \phi u}$$

$$\text{Sin } \phi u = tg\beta$$

The results obtained from Triaxial Compression Tests are also varies from place to place which has been shown in the/Figure 2/. The values of angle of internal friction varies from 24° to 37° and the average value is 29°. The values of cohesion varies from 0.27 KG/Cm² to 0.47 KG/Cm² and the average value is 0.35 KG/Cm² /Table No. 3/.

On the basis of the above mentioned parameters the soil can be used for the construction of earth works like embankment etc.

d. Result of Direct Shear Box Test

Direct Shear Box tests were performed on the soil samples collected from different locations of the Padma river bank along Rajshahi city. The size of the sample was 6.00 Cm X 6.00 Cm. The aim of the test was to obtain the parameters of shearing resistance at the surface parallel to laminations. The samples were undisturbed and having the natural water content as in the field. The results of the investigation shows the values of cohesion and the angle of internal friction are not similar to other types of tests.

The values of the angle of internal friction varies from 25° to 19° and the average is 21° and the values of cohesion varies from 0.24 KG/Cm² to 0.33 KG/Cm² and the average value is 0.27 KG/Cm² /Figrue 3/.

The obtained parameters of the soil masses indicate that the soil is suitable for the construction of earth structures like the existing river bank slope.

e. Calculation of Safety Factory /SF/

By using the obtained physico-mechanical parameters of soil composed the embankment the safety factor of the embankment slope has been calculated by widely used traditional methods:

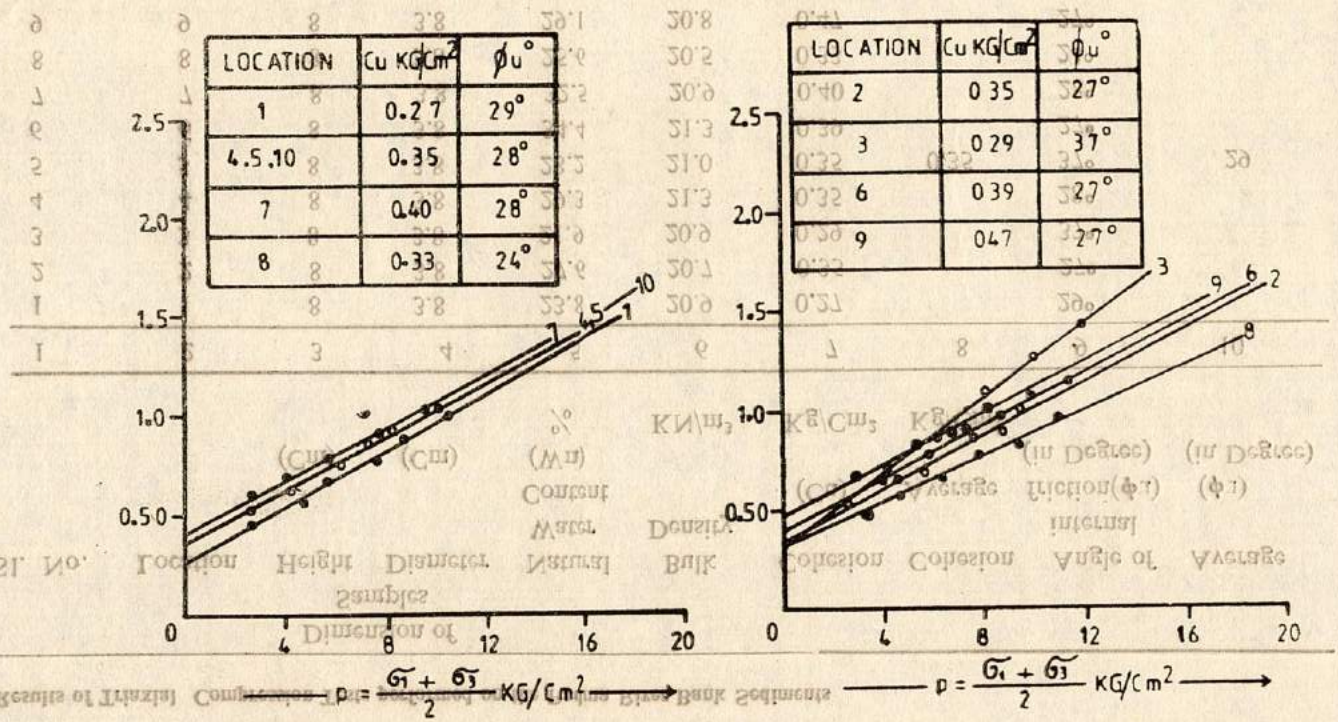

Figure 2. Showing the Relation between p and q Obtained by Triaxial Compression Test.

TABLE 3

Results of Triaxial Compression Tests performed on the Padma River Bank Sediments

Sl. No.	Location	Dimension of Samples Height (Cm)	Diameter (Cm)	Natural Water Content (Wn) %	Bulk Density KN/m³	Cohesion (Cu) Kg/Cm²	Cohesion Average Kg/Cm²	Angle of internal friction(ϕ_u) (in Degree)	Average (ϕ_u) (in Degree)
1	2	3	4	5	6	7	8	9	10
1	1	8	3.8	23.8	20.9	0.27		29°	
2	2	8	3.8	27.6	20.7	0.35		27°	
3	3	8	3.8	21.9	20.9	0.29		37°	
4	4	8	3.8	29.3	21.3	0.35		28°	
5	5	8	3.8	28.2	21.0	0.35	0.35	37°	29
6	6	8	3.8	34.4	21.3	0.39		27°	
7	7	8	3.8	32.5	20.9	0.40		28°	
8	8	8	3.8	25.6	20.5	0.33		24°	
9	9	8	3.8	29.1	20.8	0.47		27°	
10	10	8	3.8	36.9	21.3	0.35		28°	

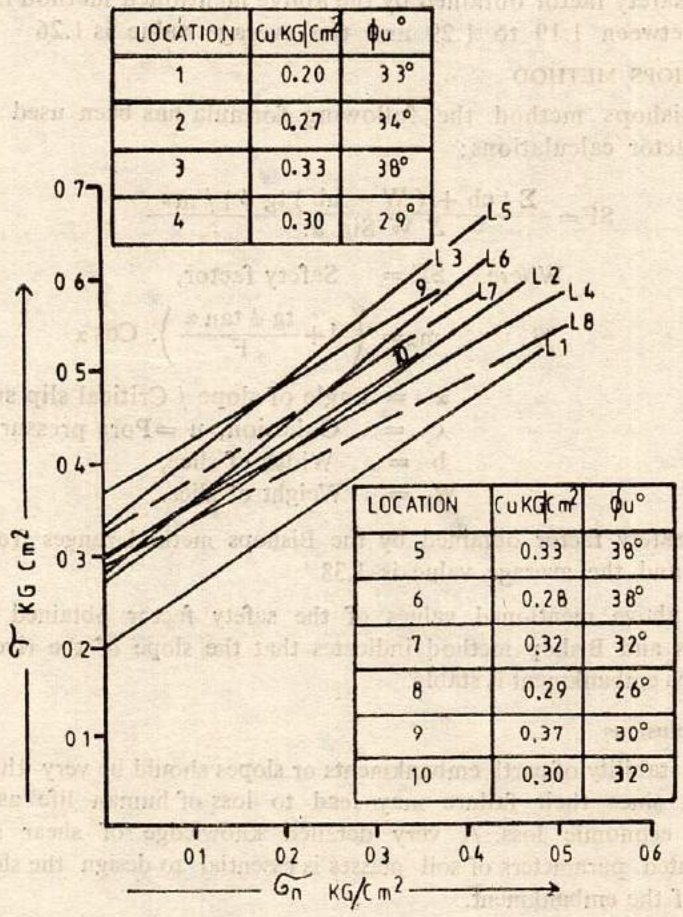

Figure 3. Shearing Strength of the Padma River Bank Sediments Obtained by Direct Shear Box Test.

(i) FELLENIUS METHOD

For the safety factor calculation by Fellenius method the following formula has been used:

$$SF = \frac{\Sigma (W \cos \alpha . \operatorname{tg} \phi) + cl}{\Sigma W \sin \alpha .}$$

Where SF = Safety factor
W = Weight of slice
c = Cohesion
l = Length of slice
α = Angle of slice

The safety factor obtained by the above mentioned method is in the range between 1.19 to 1.29 and the average value is 1.26

(ii) BISHOPS METHOD

By Bishops method the following formula has been used for the safety factor calculations:

$$SF = \frac{\Sigma \{ cb + (W - ub) \tan \phi \} / m\alpha}{\Sigma W \sin \alpha.}$$

Where SF = Safety factor,

$$m_\alpha = \left(1 + \frac{\tan \phi \tan \alpha}{F} \right). \cos \alpha$$

α = angle of slope / Critical slip surface/.
c = Cohesion, u = Pore pressure,
b = Width of slice,
W = Weight of slice.

The safety factor obtained by the Bishops method ranges from 1.31 to 1.43 and the average value is 1.38

The above mentioned values of the safety factor obtained by the Fellenius and Bishop method indicates that the slope of the river bank as well as embankment is stable.

4. Conclusions

The stability of earth embankments or slopes should be very throughly analysed since their failure may lead to loss of human life as well as collosal economic loss. A very detailed knowledge of shear strength and related parameters of soil masses is essential to design the slope and height of the embankment.

The causes of unstability of certain parts of the embankment slope along the Padma river bank depends on the following factors :—

1. Unstability of slope occurs when the critical slip surface develop and movements are initiated within the soil masses.
2. In different part the angle of slope of the embankment is greater than the angle of internal friction of the soil masses.
3. Soil particles from the bank are washed away by a strong current i.e. the erosion of river side by wave wash during very strong current.
4. Toe of the bank undermined by eddies currents etc. followed by a collapse of overhanging materials deprived of supports.
5. Seepage play an important role for unstability of the slope.

6. Saturation of water decreases the shear strength of soil masses and stability of slope is further reduced by the presence of seepage flow.
7. When the surface of the soil structure is not horizontal, the components of gravity tends to move the soil downward and may disturb the stability of earth structure.
8. High water content and fractures tend to encourage unstability and likely to lead to collapse the earth structures.
9. Landslide and creep, these two types of slope unstability phenomenas are endangering the existing embankment slope along the Padma river bank. These types of mass movements are also visible in surrounding areas.
10. Increasing the side slope of the bank results in sliding.
11. Steepness of slope as well as human activities on the earth structures have also disturb the slope stability of the embankment.
12. Development of fissures and fractures tend to encourage the failure of slope.
13. Infiltration of rain water inside the slope materials increases the pore pressure which reduces the shear strength of the soil masses.
14. Destruction of vegetation cover also highly disturb the slope stability,.

For any extention or modification of the embankment along the Padma river bank special care should be taken so that the angle of slope do not exceed the obtained values of angle of internal friction of the soil masses composed the river bank as well as embankment slope, otherwise it will lead to an unstable conditions.

To save the Padma river bank as well as the embankment from severe wave action during flood time special measures should be taken.

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National Income of Bangladesh: Some Methodological Issues*

M. Moazzem Hossain Khan

The problem of national income accounts is a controversial one. From the time national income accounts started its journey, lots have been done, things have changed enormously, but still there are innumerable questions which need to be answered. Since then two systems of accounts have developed—one for the capitalist world comprising developed capitalist and underdeveloped countries and the other for the countries of the socialist world. Basically they are different because of the difference in their social systems. But what's about the underdeveloped countries ? The fact is that these countries are historically tied up with the developed capitalist countries. This is no coincidence. In the recent past, these countries were the colonies of the developed capitalist (imperialist) countries. Whatever development took place there is linked with the colonial system as a whole. Obviously, no exception was made in respect of national income accounts. The present system of accounts of Bangladesh has been developed under the influence of the metropolis (U. K.) since the former had been a colony of the latter for nearly two hundred years.

In this paper, the author examines the actual problems of national income accounts of Bangladesh. In section I of the paper, he tries to define national income (NI) in the context of Bangladesh ; shows the differences between GDP and GNP, quantitative concordance of the basic indices of the national accounts of the country and also the peculiarities of calculating NI in the countries with different social systems. In Section II, the author discusses the methodological problems of estimating NI in an underdeveloped country like Bangladesh. Here, he makes an attempt to compare the methods of calculating NI followed by different countries with different socio-economic systems. In the last and concluding part, suggestions and recommendations to improve the present methodology of estimating NI and NI statistics are formulated.

*This paper is based on parts of the author's Ph.D. dissertation defended at the Leningrad Institute of Finance and Economics, Leningrad, USSR.

I

In the system of national income accounts of the United Nations' Organisation (UNO), three combined indices reflecting the general level of development of a national economy are used. They are: (a) GDP—Gross Domestic Product, (b) GNP—Gross National Product and (c) NI—National Income. But GDP has been taken as the basic economic index in most of the capitalist developed and developing countries, the UNO and other international organisations. GDP represents the total volume of final output produced within the territory of a given country for a certain period usually a financial year irrespective of the ownership of the enterprises, firms and organisations which produce them. Here final output means products without repeated accounts of raw materials, semi-finished products, fuel, electricity and services used in the process of production (current production expenditure).

The principle of final output is consistently observed under all methods of calculating GDP: (1) According to production method, the contributions of certain sectors and enterprises to GDP are their value added i.e., the difference between the value of their gross output and current expenditure as outlined above. Value added is the value introduced in the process of production as addition to the value of the objects of labour which have undergone processing. It is composed of amortization of fixed capital (carried-over value), wages, profit and taxes (when GPD is calculated in market prices). (2) According to expenditure method, GDP includes the value of buildings and structures, machines and equipments (total investment in fixed capital), consumption goods and services (private and public consumption).

Concordance of the index of GDP calculated by production and expenditure methods is ensured as follows. For example, sum of three components of internal expenditure of GDP (investment, private and public consumption) may be greater than the volume of GDP produced in the country as a result of exceeding import over export and also for reduction of carry-overs from the past years. The indices of export, import and changes in stock in the expenditure accounts of GDP help to determine the causes of similar divergence in the volume of produced and utilized resources in the country at every concrete case. Small amount of divergence between the produced and used GDP, arising usually out of difference in calculation methods is shown in a special column/"statistical discrepancy".

Unlike GDP, characterising the volume of production within the territory of a given country, GNP reflects the volume of production, controlled by the corporations and individuals of a certain nationality

(citizenship). In practice the concept of national affiliation of output is realized in GNP very inconsistently. In order to get GNP from GDP, the incomes of the foreigners within the territory of a certain country are deducted (profit of foreign corporations and wages and salaries of foreignworkers and employees) and the incomes received by the corporation and citizens of that country from outside world are added. Incomplete concordance of the indices of GDP and GNP becomes apparent particularly when adjustment does not include amortization which forms a substantial part of value added under foreign operations of capital. As a result, quantitatively, the difference between both the above indices is not significant which can be illustrated by the following statistics for 1977 (in current prices, evaluated in U.S. dollars on the basis of average official exchange rate of that year):

(million dollars)

Countries	Difference in foreign incomes (+, —)	GDP	GNP	Difference between GDP and GNP (%)
1	2	3	4	5
Bangladesh	+78.1	8282.9	8361.0	+0.9
India	+553.2	96692.0	97245.2	+0.6
Srilanka	—12.4	1730.9	1718.5	—0.7

Source : 12, 13

In connection with the obvious uselessness of GNP for determining the volume of output controlled by national capital in its own country and outside, the UNO in introducing the new system of national accounts has completely refused to use this index although, GNP by tradition has been retained in the statistics of many countries and international organizations. In the statistics of the UNO the above adjustment for difference in "foreign incomes" is now done only in calculating NI.

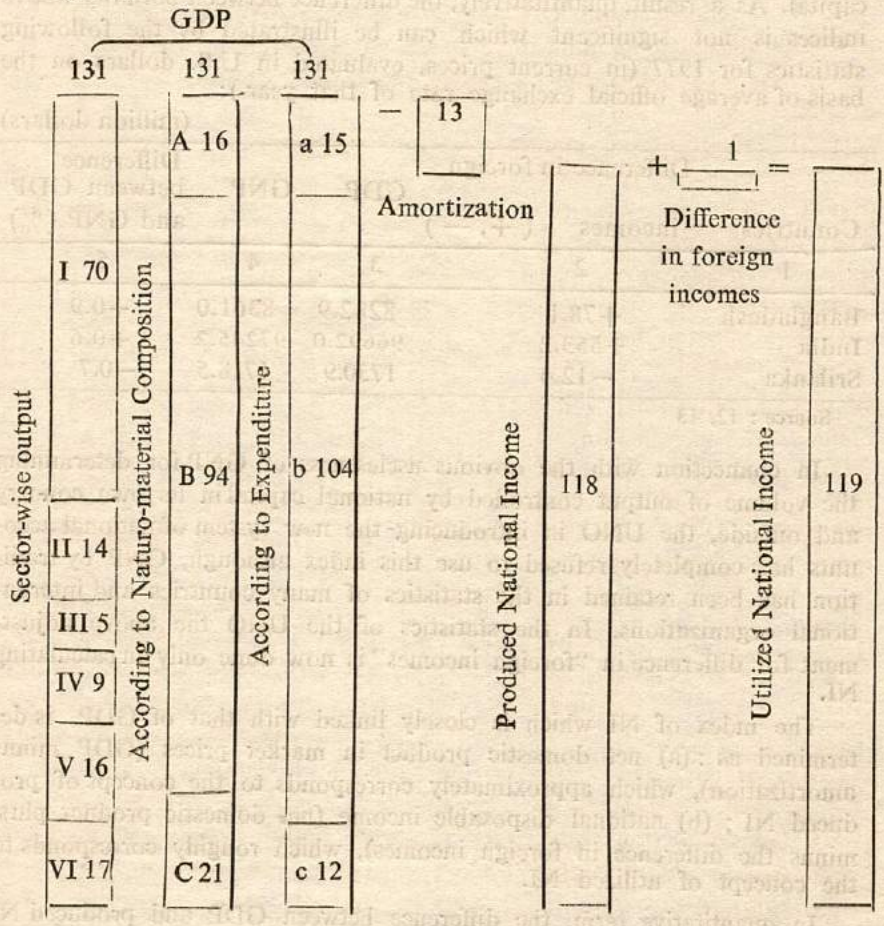
The index of NI which is closely linked with that of GDP, is determined as : (a) net domestic product in market prices (GDP minus amortization), which approximately corresponds to the concept of produced NI ; (b) national disposable income (net domestic product plus-minus the difference in foreign incomes), which roughly corresponds to the concept of utilized NI.

In quantitative term, the difference between GDP and produced NI is not significant and fluctuates within a very narrow limits (in Bangladesh share of amortization in GDP determining this difference roughly constitutes 7-11% in 1972-80). Since the value of amortization depends not on the current conditions of the economy, but on the accumulation

of fixed capital, share of amortization in GDP in the countries of the capitalist world slightly increases during "crisis" and decreases during "boom" periods. As a whole, the dynamics of produced NI in the long run almost completely reproduces the dynamics of GDP. For this reason and also because of the absence of statistics on the sectoral distribution of NI of Bangladessh, in this paper, we felt obliged to use the index of GDP only.

Quantitative concordance of the basic indices of the national accounts of Bangladesh has been shown in the following diagram :

Quantitative concordance of basic indices of the national accounts of Bangladesh for the year 1977 (billion taka in current prices with round figures)*



*GDP by production = Sum of value added by different sectors: I—agriculture, II—industry, III—construction, IV—transport and communication, V—trade and commerce, VI—services

GDP by naturo-material composition : A—buildings and structures, B—goods, C—services.

GDP by expenditure: a—investment, b—private consumption, c –public consumption.

Concepts and methodology of estimating the results of economic activities of the society in the countries of the non-socialist world are basically different from those of the socialist countries. In the countries of the socialist world two indices—aggregate social product (ASP) and national income (NI) are in use. They are based on the conception of material production i.e., only the labour which produces material things is productive and creates value. Accordingly, the following sectors are included in the composition of ASP (NI) in these countries: Industry, Agriculture, Construction, Cargo transport, Material and technical supply, Part of trade and communication which serves the above sectors.

On the other hand, the system of national accounts in the countries of non-socialist world which is constructed on the conception that all sorts of labour except manifested criminal, give rise to some form of incomes are productive. Accordingly, not only the results of activities of different sectors of the economy, but also the services of army, police so on are included in the general indices in this system. Besides these, the so-called "imputed" in essence fictitious value, for example, relative" "house rent for owner-tenants; "relative" rates for credits and loans etc. are included in these indices.

It follows from the above that GDP is broader in respect of inclusion than ASP which reflects the results of activities of the sectors of material production only. Hence, the first step towards transforming GDP into ASP is to deduct the value added in the unproductive sectors of the economy (part of transport and communication which serves the people and services except maintenance. Thus only final products are considered for the computation of GDP, while value added is used for the sectoral analysis of nationlational income. Again ASP is determined as sum of the total products of the sectors of the material production including the value of the objects of labour meant for processing. Herefrom, the second step towards transforming GDP into ASP is to add the current production expenditure to the value added i.e., replacement of value added in GDP by total output. This process of evaluating GDP into ASP may be logically presented in the following form :

GDP by production=Sum of value added in the productive and unproductive sectors of the economy	−	Value added in the unprod. sectors of the economy	+	
+ Current production expenditures	=	ASP=Sum of aggregate products of the sectors of material production		

II

Official statistics of Bangladesh especially the chapter on NI is quite imperfect. At present, attempts are being made to improve the informational basis of national statistics. But still very little attention has been given to the working out of a scientific methodology of calculating NI of the country without which it is impossible to expect correct statistics and consequently, better analysis of the level of economic development. As a result, inevitable miscalculations are there in all our plans and forecasts. All these call forth greater attention to the question of methodology and methods of estimating NI, their steady improvement and unification which is internationally very important as well.

In this connection, let us now examine the present methods of estimating NI of Bangladesh. Calculation of NI in Bangladesh as in other developing countries involves considerable difficulties. One of the fundamental difficulties is the presence of two different types of sectors in the economy of the country — modern and traditional. Apart from the difference in the methods of production, these two sectors (and respectively their incomes) are subjected to different influences from external factors. Modern sector is broadly open to outside world, penetratable for foreign capital and in it there is a great dependence of incomes on the level of prices in the world market. On the contrary, natural economy predominates in the traditional sector, oriented for self consumption and that is why badly subjected to any change and nearly unyielding to the development policies of the government.

Another difficulty of estimating NI in the prevailing conditions of Bangladesh arises in connection with the isolation of separate regions poorly connected among themselves because of the absence improved roads, transports etc. Very often prices of the same products are different in different regions of the country. In practice, Bangladesh has no single national market as in the cases of developed countries of the world. This in turn gives rise to the problem of estimating the value of the products, choosing the level of prices and so on.

Lastly, absence of statistical accounts, want of qualified cadres (statisticians) hamper the work of calculation of NI. As Alamgir and Berlage observed, "Before the achievement of independence in 1971, no serious attempts were made for estimating the NI of Bangladesh (then East Pakistan). Estimation was made only at the level of the economy of Pakistan as a whole. Obviously, it was connected with the attempts of the rulers to conceal the depth of exploitation of the eastern part of Pakistan (now Bangladesh) by the west (now Pakistan), (1, pp. 1-15).

Methodology of calculating NI in Bangladesh has been formed under the great influence of the western economic thoughts and corresponds to

the recommended system of accounts of the UNO and OECD. This system is based on the experience of the developed capitalist countries and for that matter cannot be fully realized in an economically back-ward country like Bangladesh. Not only that even some western economists put under doubts the applicability of western concepts and measures (GDP) in the conditions of the countries of third world (2, p. 15).

As in any developing country, calculation of NI in Bangladesh is carried out on the basis of GDP which pressupposes equality of three values: (1) newly created values; (2) sum of all expenditures; (3) sum of all incomes. Theoretically, GDP can be estimated in three ways: production method, income method and method of expenditure. Calculation of GDP by the first method reveals the structure of the economy and relative importance of agriculture, industry and other sectors of the economy. The second method of estimating NI shows the correlation of the factor incomes: wages, profits, rents and interests. The third method characterises GDP from its expenditure (on consumption and investment) aspect and distribution between state and private sectors.

In the conditions of Bangladesh where practically there is no income, statistics (with the exception of some of the branches of the state sector) it is very difficult to estimate GDP by the method of income. Calculation by expenditure method is also very unreliable. This is mainly explained by the unreliability of information about the basic componet of individual expenditure of the people—consumption of food-stuffs produced inside the country (30-40% of GDP). Estimation of this component is based on sample data received by way of statistical observation of a number of individual house-holds. Then these estimates are spread all over the country taking into account the norms of consumption per head, number of population and price indices of local food-stuffs. Another unreliable component of GDP estimated by the expenditure method is that part of expenditure on capital investment which is realized in the traditional sector (housing, roads, wells and so on). These are estimated conditionally based on the assumption that this sort of expenditure increases at the same proportion as does population.

In some fields production method is used. But it also has some approximation components particularly in the estimation of incomes of the basic sector of the economy agriculture. Taken into consideration the fact that about 50% of GDP of the country is accrued from this sector of the economy, it is not difficult to imagine the depth of inaccuracy in the estimation of incomes. Therefore, the greater the share of agriculture in the structure of GDP of a country, the more unreliable would be its total estimation.

In practice, in the estimation of GDP in Bangladesh no universal method is used. Methods of estimation of GDP vary from sector to sector depending on the availability of primary information. For example, while in agriculture and industry production method is used, service administration and transport sectors income method is used for estimating GDP. In this connection, it is noteworthy that in Bangladesh net product or income as such is not estimated, but gross product of the given year, implusive of net product and amortization, is estimated. In other words, this index is called "the conditional net product" or "value added". Here it is necessary to note that although in the statistics of Bangladesh the so-called net national product of the country as a whole is shown, it is not estimated as the sum of net incomes of the branches of the economy, but by way of approximation at macro level. It indicates the unreliability of estimating this index which is so important for planning and forecasting.

In the conditions of Bangladesh, GDP is much greater than the incomes of the domestic population as well as the state because a considerable part of the incomes is appropriated by the foreigners, Foreign sector in the economy and its incomes are associated first of all with the foreign companies and citizens living in Bangladesh. Concrete study of the influence of this sector on the growth of our economy calls for creating special accounts in the system of national accounts of the country. This account could show what part of individual expenditures of foreigners and what part of investments of foreign proprietors exert influence on the incomes of the local population. But this improvement in the statistics and national accounts of the country is at the moment absent. Official accounts of the incomes of the foreigners are not published only with the exception of inflow and outflow of incomes of the country. Therefore, it is not accidental that in the revised system of national accounts of the UNO, NI is used to be called only that income which is left in the country after the inflow and outflow of factor incomes (wages, profits, interests etc) from outside and inside the country. In comparison to GDP, this index is nearer to the incomes which the local population and the state dispose. But the new system of national accounts catches only the moment of transfered (outside the territory of the country) incomes of the foreigners, their incomes inside the country as before are included in the NI of Bangladesh. In this connection, accroding to our opinion, the term "internal income (II)" i.e., income received within the territorial boundary of the country more fully gives the contents of the existing method of estimation than "NI". From this, it follows that there is a considerable differences between incomes produced within the boundary of Bangladesh and NI which she has and disposes.

The other no less important problem of calculating NI in the conditions of Bangladesh is the calculation of "natural incomes". As in any developing country, in Bangladesh natural income i.e., income which is produced and consumed within a single farm or household and does not enter into the market occupies a very important place. That type of income predominates in agriculture and constitutes a considerable quantity over the country as a whole (nearly 40%).

Quantitative and value systems of estimation of natural incomes are extremely imperfect. Generally, it is done on the basis of sample calculations of per capita consumption of local food-stuffs in the traditional sectors and information about the number of population. These and other information suffer from imperfections. As the proportion of natural products is considerable, the existing method of its estimation introduces a conditional element in the whole process of figural manipulation with the NI of the country.

Apart from the difficulties of quantitative estimation of output of non-commodity food-stuffs, lots of problems arise in selecting prices for converting natural, indices into those of value. A number of researchers not that irrespective of what prices are taken as the basis (local market or purchase), there is a certain amount of arbitrariness in estimating the output, not entering into the market, in value term. At the same time, complete ignorance of natural output in the estimation of GDP is also incorrect because its amount is quite substantial. Its exclusion could artificially decrease the NI and per capita income of the people. Most of the authors consider that "the inclusion of natural sector in the economic calculations is of paramount importance (2, p. 260).

When natural incomes are included GDP in value term is overstated considerably. As a result, the picture of the dynamics of development of the commodity sector of the economy, its structure and proportions are fairly distorted. The role of the state sector in the economy is also distorted particularly the share of the state in spending the incomes from the commodity sector will be considerably higher than its share in the GDP of the country. Thats why for a more accurate evaluation of the role of the state sector in the economy of the country, the degree of influence of its expenditure on import, investment, employment ; the influence of state policies on the growth and distribution of NI, according to our opinion, it would be correct to correlate the state budget and investment not with GDP as a whole as is done at present but with its commodity part. The fact is that natural income does not have decisive importance for determining the course of economic policies in the country and its resources from the viewpoint of their expenditure

for development turn out to be passive, difficult of access with the exception of human resources. Therefore, according to us, it is expedient to single out money (commodity) and natural (non-commodity) sectors of the economy in the national statistics of Bangladesh and calculate their respective rates of growth. Such a subdivision of the GDP of the country would permit to trace back and measure the degree of transition of the economy from natural to money which by itself means development.

As mentioned above, there are lots of errors in the estimation of GDP of Bangladesh. The dynamics of GDP of the country does not always reflect the real processes which take place in the socio-economic sphere or vice versa ; the socio-economic changes are poorly reflected in the dynamics of GDP. In this connection, in our opinion, in the conditions of Bangladesh utilization of the index of GDP in the estimation of NI is limited on the following grounds: Firstly, there is a considerably difference in the incomes of urban and rural population ; secondly poor structural interconnection and interdependence of the sectors as well as regions of the economy, thirdly, inclusion of incomes of foreign companies and citizens (share of which is considerable) in the incomes of Bangladesh ; fourthly, imperfection in the statistics of incomes and methods of estimating GDP; fifthly, approximation in the estimation of agricultural output which as a rule is done by method of calculation on the basis of per capita consumption and number of population; and lastly, historically the index of GDP itself is based on the information and practices of developed capitalist countries and thats why has limited utilization in the conditions of a developing country like Bangladesh.

Despite the above shortcomings limiting the utilization of GDP in the conditions of Bangladesh, the economists and statisticians are compelled to calculate NI by the method of GDP since traditionally they followed western schools and their concepts of estimating NI. In this connection, it would be interesting to present the following scheme which reveals the basic differences in the methods of calculating NI in different countries with different socio-economic systems.

Scheme of comparison of the methods of estimating NI shows that in the COMECON countries, i.e., in the countries of the socialist world, activities of the unproductive spheres are not included in NI. In other countries (U.S.A., France and Bangladesh) incomes of the unproductive spheres are included in NI with the exception of France where some kind of activities of the unproductve sphere (administration and religious institutions) are not included in NI. As regards Bangladesh, here all kinds of activities except religious are included in the compoistion of NI (with the errors already mentioned above). Owing to the in clusion of the activities of the unproductve spheres in NI, it's volume is considerably overestimated. Thus, according to the estimate of Prof.

Scheme on the differences in the Methods of estimating NI in some of the Countries of the World

Kinds of activities included in NI	OMECON countries	U.S.A.	France	Bangladesh
1	2	3	4	5
Mining and manufacturing industries ...	+	+	+	+
Agriculture and forestry ...	+	+	+	+
Construction ...	+	+	+	+
Transport and communication ...	+	+	+	+
Trade (wholesale and retail) ...	+	+	+	+
Insurance ...	−	+	+	+
Housing ...	−	+	+	+
Administration ...	−	+	+	+
Restaurants ...	+	+	+	+
Laundry ...	+	+	+	+
Religious institutions ...	−	+	−	−
Other services ...	−	+	+	+

V. Kudrov, NI of U.S.A. evaluated by Soviet methodology in current prices for the period of 1929-1963 was lower than official American figures by 28.4/- 37.0% (7, pp. 144-145). Similar estimates done by the author show that the NI of Bangladesh for 1972-1980 is overstated by 15/- 20% approximately (12, pp. 392-394). All these indicate not only the variation of official figures of NI from it's real volume, but also the correlation of the levels of economic development determined by many complex circumstances.

III

In order to improve the existing methods and methodology of estimating NI of Bangladesh, according to our opinion, the following measures are necessary : (1) NI should be estimated on the basis of net products of the society, not GDP. Although, as mentioned above, for certain reasons, it will not be possible to reject GDP totally, but determination of the real volume of NI and material expenditure of the society (including amortization) is simply a necessity from the viewpoint of scientific analysis and decision-making. What is more, important is that it would have been correct to use the term GNP since it could enable the country to estimate the influence of foreign economic relations on the growth of her income. (2) At present, every year the planning and statistical agencies of Bangladesh work out many tables and indices on the basis of large factual information. But they are highly uncoordinated and unsystematic. We are of the opinion that it is necessary to make them systematic within the framework of a system of balances of the national economy in order to improve the quality of analysis and planning. The central element, or axis of the system must be the tables showing the formation and movement of the social product and NI both in material and value terms. Many complementary aspects for more concrete characteristics of relations and proportions of the reproduction of social products may be represented with the help of intersectoral balances to be worked out periodically. (3) As is generally known in conformity with the stages of reproduction, calculation of NI must be, made in three of its possible forms : as production, distribution and utilization. Moreover, with due accuracy of estimation, these three values must coincide with each other. In Bangladesh no particular method of estimating NI is used for want of necessary statistical information. But for the improvement of the quality of scientific analysis NI must be estimated with the help of all the possible methods. Therefore, no stone should be left unturned to improve the informational basis of statistics at all levels of the national economy of the country. (4) It is necessary to work out and fix in legislative order the system of compulsory statistical accounts for all enterprises and organisations including foreign. There should be detailed classification of the branches of national economy and also the peculiarities of calculating NI in each of them. In doing so attention should be given to the adopted system of classification of the UNO in order to unify it on international scale.

In solving the problems involving national income statistics, attention should be focussed on the following directions: (a) To divide the economy into sectors such as : state and private, commodity (money)

and non-commodity (natural), national and foreign; and show their relative shares in the creation of NI of Bangladesh. It would help follow the course of development of the national economy. (b) To group the branches of the economy as : productive and unproductive, light and heavy. It will help determine the degree of achieving the aims of development economic independence, self-reliance and self supported growth.

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Decentralization: What, Why and How?

Muhammad Abdul Wahhab

Introduction

One of the important debates in the developing countries is to measure the degree of control which central government exercises over development planning and administration. This debute has facilitated the increasing interest in decentralization among the governments of developing countries as well as the academic circles. But the discussion on decentralization is very complex and confusing. For the term decentralization is used to mean a variety of different organisational processes and structures from country to country and even from people to people within a country. The purpose of the present paper is to focus on some of the conceptual and analytical issues peratining to decentralization. The discussion that follows is divided into three sections entitled WHAT, WHY and How as suggested in the title.

What ?

What is decentralization ? The reply to the question is not an easy task. Because, as we have already mentioned that decentralization is used to mean different organizational structures. So the definition of decentralization in isolation may lead to confusion unless we relate it to centralization and discuss its (decentralization) various forms.

Centralization vs. Decentralization

Centralization is a system in which all authority and powers of the government lie in the central government. On the other hand when authority and powers are given to the local levels, decentralization takes place.[1] Rondinelli defines it as the transfer of authority to plan, make decisions and manage public functions from the national level to local levels. But this is the narrow definition of decentralization. It is

[1]Dennis A. Rondinelli, "Government Decentralization in Comparative Perspective: Theory and Practice in Developing Countries", *International Review of Administrative Science*. Vol. 4. (1981). p. 137.

limited to territorial decentralization and excludes the functional decentralization i.e. the transfer of authority from central toperipheral organizations at the national level, e.g. from government department to attached offices. Although the definition is narrow, it is consistent with the way in which the term (decentralization) is frequently used today specially in less developed countries.[2]

It should be noted here that the essence of centralization and decentralization lies in the distribution of powers for taking decision and the difference between the two is one of degree not of kind. For no government can completely be centralized or decentralized. Both centralization and decentralization can take place simultaneously and hence they "should therefore be envisaged as the processes of movement in either direction along a continum which has no finite ends."[3]

Forms of Decentralization

The question of measuring the degrees of decentralization gave birth to different forms of decentralization, viz. devolution, delegation, deconcentration and dispersal.

Devolution : It indicates the transfer of power to locally constituted political bodies. It has constitutional/legal connotation. The local government of Bangladesh or as in India it is referred to local self-government (Panchayati Raj Institutions) is essentially a form of decentralization under the spirit of devolution.[4]

Deconcentration : It connotes the transfer of power by administrative means to local representative of central government. The district collectorate in India and the office of the Deputy Commissioner in Bangladesh may be cited as the examples of deconcentration. Thus both devolution and deconcentration mean the transfer of power from one level to another with territorial jurisdiction.

Delegation: Delegation means the transfer of power by a superior authority to a subordinate one in which ultimate responsibility lies with

[2]Diana Conyers. "Decentralization: A Theoritical Framework for Discussion", H.A. Hye (ed.) *Decentralization, Local Government Institution and Resource Mobilization* (Comilla, Bangladesh : BARD, 1985), pp. 22-23.

[3]*Ibid.*, p. 26.

[4]M. A. Muttalib, "Decentralization: Local Self-government Institutions and Resource Mobilization—The Indian Experience", paper presented at the International Seminar on Decentralization Local Government Institution and Resource Mobilization (Comilla, BARD, 20-23 January, 1985) p. 1.

the transferring authority. The officers of the secretariate/directorate in India and Bangladesh exercise the power of government in the form of delegation.

Dispersal: Unlike the above "dispersal refers to the posting of officials outside the capital without any substantial transfer of powers and functions to them".[5] Some writers did not mention dispersal as the form of decentralization. In place of dispersal they regarded privatism i.e. transfer of authority from public to private sector as the fourth of form of decentralization[6]. Privatism is also called by other debureaucratization.[7]

It should be pointed out that under each form of decentralization powers are limited and may be withdrawn by the transferring authority. But generally the transferring authority does not withdraw powers under devolution unless there is constitutional/legal compulsion or where the national interest suffers. On the contrary, in case of other forms, the transferring authority does not require any formal authorization in annulling the transferred powers. Again in relation to accountability, there is difference among these forms. Devolution connotes responsibility to the respective electorate, not to the transferring authority, and hence it is downward. But in case of other forms accountability is upward i.e. to the transferring authority. And hence generally the transferring authority is responsible for the act of commission and ommission of those who act under deconcentration, delegation and dispersal.[8]

From the above discussion it is clear that of the four forms, devolution manifests the highest degree of decentralization and the dispersal refers to the least. Because in case of dispersal neither functions nor responsibilities are substantially transferred to the field level. What happens here is that the officers from the centre are sent to the different regions for the realization of certain purposes. Again delegation is more limited than deconcentration in the sense that under deconcentration some responsibilities are transferred to the field offices, but under delegation though functions are transferred to the lower levels, the responsibility lies at the centre.

[5]Muhammad Mohabbat Khan, "Process of Decentralization in Bangladesh", H.A. Hye (ed.) *op. cit.*, p. 242.

[6]Dennis A. Rondinelli, "Implementing Decentralization Programmes in Asia : A Comparative Analysis", *Public Administration and Development*, vol. 3, (1983), p. 189.

[7]Harry. J. Friedman, "Decentralized Development in Asia: Local Political Alternative." G.S. Cheema and D.A. Rondinelli (eds.), *Decentralization and Development: Policy Implementation in Developing Countries* (London: SAGE Publication, 1983), p. 47.

[8]M. A. Muttalib, *op. cit.*, p. 1.

Why?

Why decentralization is essential in modern states and why the governments in developing region are more interested in decentralization have been discussed in this section.

Need for Decentralization

Modern states are the welfare states. The governments of the modern states are to perform various developmental activities. With the passing of time these activities are expanding tremendously. Now without decentralization of administration it is impossible on the part of central government alone to perform all these activities efficiently. Thus decentralization not only relieved the central government of over burdened activities,[9] but it also provided more time for the central government to devote to more important issues, like the problem of policy-making.

Secondly, decentralization has its root in democracy. The political commitment to take democracy to the grass-roots and the growing demand of regional autonomy pushed the central government to adopt decentralization policy in administration.

Thirdly, the developmental scheme needs local support and popular participation. To secure local support and popular participation decentralization is essential. Sometimes the pressure of political parties of a particular area in the country, may also result in decentralization.

Finally, the central authority, far away from the people, may not have adequate knowledge about local conditions and problems which vary from place to place. Under the situations, the centralized planning and administration proved to be inadequate to local variations. Decentralization is the only alternative solution to this problem.

Reasons for Greater Interest in Decentralization among the Governments of Developing Region

In recent years there has been a growing interest in decentralization among the governments of the developing countries. This is perhaps due to the fact that most of the developing countries achieving independence after the World War II inherited a highly centralized administration which could not meet the requirements of independent nations. The centralized administration was introduced by the colonial rulers to serve their interest. Moreover, the policies taken under the centralized structure focused more on industrial and urban developments. The newly

[9]Henry Maddick, *Democracy, Decentralization and Development* (Bombay : Asia Publishing House, 1963), p. 26.

independent countries are predominantly rural and their development means the development of the rural areas where bulk of their population live. As a result the governments of these countries are showing more interest in administrative decentralization to develop their rural areas.

But the growing interest in decentralization among the developing countries does not mean that during colonial period neither they experienced some sort of decentralization nor the countries outside the developing region, adopted decentralization policy at all in their own governmental administration. In one form or another there has been decentralization in every state, not only for local development but also for effective administration at the centre. However, the increasing interest in decentralization among the developing nations may be regarded as the reaction against the earlier centralization. Their interest is also influenced by the fact that they have acquired independence through decentralized programmes and democratic rights given to them by the colonial rulers and subsequently they desire to demonstrate that they are more concerned with democracy and decentralized planning and administration to meet local needs than their colonial predecessors. Over and above, their interest has been paralleled by the interest of international development agencies, bilateral aid donors and accademic circles in Europe, North America and Australia.[10] Rondinelli pointed out five dominant causes for increasing interest in decentralization among the governments of the Asian countries. These are:

1. In many countries the disappointing result of centralized planning in directing development at the local levels.

2. The growing concern of equitable distribution of the benefit of development and reducing disparities in income and wealth between urban and rural; and among regions; and increasing the productivity and income of the poor.

3. The need for local level planning to deliver services necessary for development especially in rural areas.

4. In some countries crisis or external presures on the central government for transferring powers and authority to the local levels to solve serious social, political and economic problems quickly.

5. In some countries the ideological commitment to the principle of local self-reliance, participation and accountability.[11]

[10]Diana Conyers, "Decentralization: The Latest Fashion in Development Administration", *Public Administration and Development*, Vol. 3 (1983), p. 97.

[11]Dennis A. Rondinelli, "Implementing Decentralization Programmes in Asia", *op. cit.*, pp. 182-185.

The causes identified by Rondinelli for the popularity of decentralization in Asian countries, we think, are also applicable to the country outside the Asian regions.

How ?

The how aspect of decentralization is very important in the whole process of discussion. The design of decentralization and the institutional framework for its implementation along with the conditions essential to its success are the main issues to be considered in this connection.

The design of decentralization

The design of decentralization involves the following questions:

(a) Which functional activities are decentralized ?

(b) To what levels powers are decentralized ? and

(c) To whom powers are decentralized ?

The first question is to decide the type of functional activities over which the authority is decentralized. The second question is to select the level to which powers are decentralized. The third question is to identify who hold powers at this level e.g. the elected representatives or appointed officials, an individual or group. Generally the legal basis or sanction behind the design of decentralization is constitution and ordinary legislation. When constitution is suspended and the legislature is not constituted the order and ordinance of the Chief Executive act as the basis of decentralization.

Institutional Framework for Decentralization

There may be several levels where decentralization of administration works :

(a) National level peripheral organizations at the national level i.e. transfer of authority from government department to attached offices.

(b) Regional level: such as states in India, division in Bangladesh and province in Indonesia ;

(c) District level;

(d) Sub-district level, such as upazila in Bangladesh and block in India.

(e) Locality level, such as union in Bangladesh;

(f) Community level (village); and

(g) Group level, such economic enterprise, occupational group, etc.

The institutional channels through which decentralization can take place are of different types and their nature are governmental or quasi-governmental, membership or self-help and private or quasi-private. Each of these three sectors may be divided into two sets of institutions. Thus there are six kinds of institutions for decentralization. They are:

(i) Local administration (LA) i.e. local agencies of central government subject to bureaucratic control.
(ii) Local government (LG), elected local bodies accountable to the people of the locality, in contrast to LA.
(iii) Membership organizations (MOs) of self-help associations like mothers' club.
(iv) Cooperatives (Cops) where the members act for their mutual benefit, such as producers' cooperatives and marketing associations.
(v) Service organizations (SOs), like Red Cross and Fire Brigades.
(vi) Private business (PBs), the enterprise operating for profit.[12]

Objectives of Decentralization

The how aspect of decentralization is also closely associated with its objectives. Diana Conyers categoriesed the objectives of decentralization into three dichotomous pairs. These are managerial versus political, top down versus bottom up and explicit versus implicit.[13] Of the political, top-down and implicit objectives have the tendency to lead centralization rather than decentralization. But whatever may be the objective of decentralization, its success depends on popular participation and resource mobilization.

Popular Partcipation

Some degrees of popular participation is essential to any decentralized programme. Such participation excludes participation in the general political process of the country. There are three strategies of popular participation.

(a) Participation in the project cycle specially within the implementing institutions itself. This involves participation in planning, implementation, and evaluation stages of the project cycle;

(b) Participation in local organizations, and

[12]Norman Uphoff, "Local Institutions and Decentralization for Development", in H. A. Hye (ed.) *op. cit.*, pp. 48-49.

[13]Diana Conyers, "Decentralization: A Theoritical Framework for Discussion", *op. cit.*, pp. 27-30.

(c) Participation in local government institutions.[14]

Popular participation can be achieved by utilizing the concepts of social or people centered development, empowerment i.e. acquiring organising capability of the local people and their control over resources ; bureaucratic reorientation and social learning.[15]

Resource Mobilization

The available resource in a society may be natural financial and human. The act of resource mobilization refers to mobilization of these three types. But in popular notion resource refers to finance alone. This is because finance is the first requisite for the execution of any policy or plan of the government. In many developing countries the inadequacy of financial resources was the main factor that hindered the successful implementation of decentralized policies.[16] Resource mobilization for local government institution have two broad dimensions; first the local effort and second governments support.

Conclusion

It is clear from the above discussion that centralization and decentralization take place simultaneously. For complete centralization or decentralization is neither possible nor desirable. Although decentralization is variously termed as delegation, deconcentration, devolution and dispersal in relation to measuring its degrees, the governments of developing countries, who are showing more interest in decentralization, have been claiming of introducing devolution which manifests highest degree of decentralization. But does the wide devolution of powers and functions to the local bodies consistent to the development ?

In the context of Bangladesh it may be said that wide devolution of powers and functions to the local bodies is not consistent with our socio-economic conditions. Because we have neither skilled manpower nor sufficient financial resource for subnational development. Thus too much emphasis on devolution — vesting wide power to local bodies may lead to serious maladministration and consequently frustrate the goals of development. Hence for better performance of local development activities as well as for taking the administration nearer to the people, devolution and deconcentration with reoriented bureaucracy must procede simultaneously.

[14]Harry W. Blair, "Participatory Rural Development" in H.A. Hye (ed.) *op. cit.*, pp. 79-80.

[15]Muhammad Mohabbat Khan, *op. cit.* p. 243.

[16]G. S. Cheema and D.A. Rondinelli, "Decentralization and Development : Conclusions and Directions", in G. S. Cheema and D.A. Rondinelli (eds.) *op. cit.*, p. 304.

A Review of Sen's Analysis of Famine*

Asraul Hoque

Professor Sen's analysis of poverty and famines centres around entitlement relations. In this review, we shall bring forth the key ideas in his book about famines with illustrations from the famines of Bengal (1943), Ethiopia (1973), Sahel countries (1969-73), Bengaladesh (1974). While his analysis in terms of entitlement approach is extremely useful and valid in the explanation of famines, he virtually made no attempt to indicate the ways of solving famines except some passing comments that the social security measures should be improved. Since the identification and explanation of the problem is of revolutionary nature, one expects that the prescription for curing the problem should be of revolutionary nature. Probably Sen did not want to give a solution and expected the readers to guess. But his comment that social security measures should be introduced or improved might make someone worry. In fact, the lasting solution to famines involves the political question. Entitlement to food or to any other thing is a fuunction of the ownership of means of production or the purchasing power obtained through employment including self-employment. Famine-affected people cannot have this entitlement unless the political system in those countries changes which guarantees the minimum entitlement for survival to all citizens. Sen avoided this political question. We shall now discuss the main ideas of the book.

In understanding general poverty, or regular starvation, or outbursts of famine, it is necessary to look at both ownership patterns and exchange entitlements, and at the forces that lie behind them. This requires a careful consideration of the nature of modes of production and

*Amartya K. Sen (1981). *Poverty and Famines: An Essay on Entitlement and Deprivation*, Clarendon Press, Oxford.

the structure of economic classes as well as their interrelations. There has been a good deal of discussion about the prospect of food supply falling significantly behind the population. Indeed, for most areas in the world (with some parts of Africa excluded), the increase in food supply has been comparable to or faster than the expansion of population. But this does not mean that starvation is being systematically eliminated, since starvation is a function of entitlements and not of food supply as such. The overall food picture is too remote an economic variable to tell us much about starvation. In fact, some of the worst famines have taken place with no significant decline in food availability per head. Thus, starvation or famines depend not nearly on food supply but also on its distribution. The important question then would be; what determines distribution of food between different sections of the community ? The entitlement approach directs one to questions dealing with ownership patterns and to the various influences that affect exchange entitlements. The mesmerizing simplicity of focusing on the ratio of food to population has persistently played an obscuring role over centuries, and continues to plague policy discussions the same way today as it has deranged anti-famine policies in the past. If one person in eight starves regularly in the world, this is seen as the result of his inability to establish entitlement to enough food; the question of the physical availability of the food is not directly involved. The elimination of starvation in socialist economies for example in China, seems to have taken place even without a dramatic rise in food availability per head. The end of starvation in China reflects a shift in the entitlement system, both in the form of social security and more importantly through systems of guaranteed employment at wages that provide exchange entitlement adequate to avoid starvation. Famines imply starvation, but not vice versa. And starvation implies poverty, but not vice versa. Starvation is a normal feature in many parts of the world, but this phenomenon of regular starvation has to be distinguished from violent outburst of famines. While there is quite a huge literature on how to define famines, one can very often diagnose it like a flood or a fire even without being armed with a precise definition. Starvation is used here in the wider sense of people going without adequate food, while famine is a particularly virulent manifestation of its causing widespread death. If some people had to starve, then clearly, they did not have enough food, but the question is: why did not they have food ? What allows one group rather than another to get hold of the food that is there ? These questions lead to the entitlement approach going from economic phenomena into social, political and legal issues. A person's ability to command food — indeed, to command any commodity he wishes to acquire or retain depends on the entitlement relations that govern possession

and use in the society. It depends on what he owns, what exchange possibilities are offered to him, what is given to him free, and what is taken away from him. For example, a barber owns his labour power and some specialized skill, neither of which he can eat, and he has to sell shis haridressing service to earn an income to buy food. His entitlement to food may collapse even without any chane in food availability if for any reason the demand for hair dressing collapses and if he fails to find another job or any social security benefit. A general labourer has to earn his income by selling his labour power before he can establish his command over food in a free market economy; unemployment without public support will make him starve. He might die for no fault of his in the midst of abundance. While famines involve fairly widespread acute starvation, there is no reason to think that it will affect all groups in the famine affected country. Indeed, there has never occurred a famine in which all groups in a country have suffered from starvation, since different income groups typically do have very different commanding powers over food, and an overall shortage brings out the contrasting powers in stark clarity.

There are basically two approaches in the literature in explaining famines : the traditional approach and the modern approach. The traditional view is based on FAD (food availability decline) that is, famine occurs because food availability per capita declines. This is an aggregate approach and hence ignores entirely the inter-class, interregional and inter-sectoral relationship. The modern view is based on entitlement relations, a kind of ownership relations. In contrast to traditional approach, this avoids all the limitations of aggregation. This is a multi-class, multi-regional and multi-sectoral approach completely capable of explaining all the facets of famine and starvation. Professor Sen's analysis is entirely based on the modern approach and thus very useful not only for public policy formulation but also for creating general awareness among the educated people who still believe in FAD thesis. His book may be divided into two parts for the present purpose: analytical part and empirical part. We have already looked into the main contributions of the analytical part. Now, we shall turn to the empirical part. To establish the validity of entitlement thesis and reject the FAD thesis Professor Sen considers four case studies from Asia and Africa, These are : (a) The Great Bengal Famine (1943) ; (b) The Ethiopian Famine (1973) ; (c) The Drought and Famine in the Sahel (1969-73) ; (d) Femine in Bangladesh (1974). We shall describe them in turn.

(a) The Great Bengal Famine (1943)

The famine revealed itself first in the districts away from Calcutta, starting early in 1943. The FAD approach has been extensively used to

analyse and explain the Bengal Famine. But this explanation is not really supported by the facts even by data to be found in the body of the report of the Famine Inquiry Commission (Govt. of India, 1945) itself. While 1943 was not a very good year in terms of crop availability, it was not by any means a disastrous year either. The current supply for 1943 was only about 5% lower than the average of the preceding five years. It was, in fact, 13% higher than in 1941, and there was, of course, no famine in 1941. All available facts suggest that the disastrous Bengal famine was not the reflection of a remarkable overall shortage of food-grains in Bengal.

The Bengal famine was essentially a rural phenomenon. Urban areas, especially Calcutta, substantially insulated from rising food prices by subsidized distribution schemes, saw it mainly in the form of an influx of rural destitutes. In the famine period, the worst affected groups are fishermen, transport workers, paddy huskers, agricultural labourers, craftsmen, and non-agricultural labourers, in that order. The least affected were peasant cultivators and sharecroppers in the low income groups. This is in agreement with entitlement approach. Because the latter group of people have direct entitlement to food, however small that may be. The demands for the items like fish, milk, crafts, services, general labour etc. declined sharply—a phenomenon that has been observed in other famines as well. This foodback helped to plunge additional groups of people into destitution. Thus, the former groups of people lost their exchange entitlements completely and starved to death even in front of shops fully staffed with sweets and foods, as it happened in Calcutta in 1943.

There was a dramatic decline in the exchange rate against labour. Taking 1940 as the base year for wage index (100) and for foodgrains price index (100), we see wage index to be 125 in 1943 and foodgrains price index to be 385 in 1943. Thus, the index of exchange rate fell from 100 in 1940 to 32 in 1943. The exchange rate fell some more and stood at 24 in May, 1943. By July it had been below 30 for three months in succession. This implies that, on the average, 75% of the purchasing power of the age labourer was totally washed away during the famine. Being already on the verge of starvation, such a decline in entitlement to food will definitely spell death even if there is enough food in the country. The refusal of the British Government to permit more food imports into India through reallocation of shipping as an emergency measure to tackle the famine was severely criticized. Does the thesis that the femine did not arise from a drastic decline in food availability negate these criticisms? We do not believe it does, since no matter how a famine is caused, methods of breaking it call for a large

supply of food in the public distribution system (one curious aspect of the Bengal famine was that it was never officially declared as a famine).

The government's thinking on the nature of the food problem seems to have been persistently influenced by attempts to estimate the size of the "real shortage" based on requirements and availability; it was a search in a dark room for a black cat which was not there. The approach provided no warning of the development of a gigantic famine arising from shifting exchange entitlements. The approach also contributed to some reluctance to accept the magnitude of the disaster even after the famine did, in fact, appear.

(b) **The Ethiopian Famine (1973)**

Since the Ethiopian famine clearly was initiated by a drought and since drought caused crop failures, it is natural to accept an explanation of the famine in terms of FAD. But a drought causing an agricultural or pastoral crisis not only reduces food supply, it also cuts the earnings of those people affecting their command over food. Further, a picture of drastic food availability decline does not, in fact, emerge from the survey conducted by the Ministry of agriculture in November 1972. It appears that while 65% of the districts had normal output, 21% had below normal production and 14% above normal. Professor Sen arrives at a figure of 7% food shortage after allowing for all sorts of favours to FAD thesis. A 7% decline in the output of food crops is hardly a devastating food availability decline. Moreover, a modest increase in agricultural output for Ethiopia as a whole is recorded by the National Bank of Ethiopia (1976) for the famine year via-a-vis the proceding years. Indeed, no picture of a sharp fall in food availability per head in the famine year 1973 emerges from any of the available informations. While there was no noticeable FAD for Ethiopia as a whole in the famine year of 1973, there was clearly a shortage of food in the province of Wollo. This shortage could be explained in terms of entitlement approach. The fall in food output in Wollo resulted in a direct entitlement failure on the part of Wollo farmers and a trade entitlement failure for other classes in Wollo e.g. labourers and providers of service. There was not merely a decline in the food to which the Wollo population was directly entitled out of its own production, but also a collapse of income and purchasing power and of the ability of the Wollo population to attract food from elsewhere in Ethiopia.

Another explanation is to attribute the food shortage in Wollo to transport difficulties in moving food to the province from elsewhere in

Ethiopia. This explanation is not tenable. First, while roads are few and bad in much of Wollo, two highways run through it, and the main north-south Ethiopian highway linking Addis Ababa and Asmera runs right through the area most affected by the famine. Second, there were reports of movements of food out of Wollo throughout the famine period to Addis Ababa and Asmera. Third, despite the disastrous failure of food output, food prices did not go up very much and for long in Wollo. people starved to death without there being a substantial rise in food prices. In terms of the entitlement approach, there is, of course, no puzzle in it. Food did not move into Wollo, (in fact, some moved out) not so much because the roads did not permit such movement, but because the Wollo residents lacked the market command. Market demands are not reflections of biological needs or psychological desires, but choices based on exchange entitlement relations. If one does not have much to exchange, one cannot demand very much, and may thus lose out in competition with others whose needs may be a good deal less acute, but whose entitlements are stronger. Hence, food being exported from a famine-stricken areas may be a natural characteristic of the market which respects entitlement rather than needs. This was, in fact, found to be the case in Wollo in 1973 and also in Bangladesh in 1974. It was a major political issue in the Irish famine of 1840s: huge quantities of food were exported from Ireland to England throughout the period when the people of Ireland were dying of starvation.

(c) Drought and Famine in the Sahel (1969-73)

Sahel consists of six West African countries viz. Mauritania, Senegal, Mali, Upper Volta, Niger and Chad. Was the Sahelian famine caused by a decline in food availability ? The per capita food output did go down quite substantially. Apart from Senegal, the other countries had a decline on per capita basis, so that the FAD hypothesis does not stand rejected on the basis of the data (the FAO report). If the FAD approach to famines were to seek refuse in some comforting bosom, it probably could not do better in the modern world than choose the Sahelian famine : the food availability did really go down, and yes there was a famine during the drought of 1969-73 : Yet, it could be argued that even for the Sahelian famine, FAD approach delivers rather little. First in the peak year of famine, 1973, the decline in food availability per head was rather small. While the decline was much sharper for Chad (27%), Chad was one of the less affected countries in the region, the famine having been most severe in Mauritania, Mali, Niger, and Upper Volta. But none of these latter countries had a very sharp decline in food availability per head. As we move away from the gross

factual statements to a bit more detailed information, the FAD analysis starts limping straight-way. Second, the rationale of the FAD approach, concentrates as it does on the aggregate supply, rests in ignoring distributional changes. But there is clear evidence that dramatic shifts in the distribution of purchasing power were taking place in the drought years in the Sahelian countries, mainly between the dry Sahel regions in these countries and the rest of the regions. Third, we have direct evidence of the decline in income and purchasing power of pastoralists and farmers living in the dry Saheliam regions. The destruction of crop and the death of animals in these parts of the Sahelian countries were very substantial. Hence, there was the collapse of their entitlement to food. It is this collapse that directly relates to his starvation rather than some remote aggregate statistics about food supply per head. The situation here is comparable to Ethiopia. We conclude that despite the superficial plausibility, the FAD approach throws rather little light on the Sahelian famine. Moreover, FAD approach provides little guidance about the character of the famine like who died, where and why.

(d) **Famine in Bangladesh (1974)**

First the floods, then the famine so runs the capsule story of the Bangladesh famine of 1974. The price of rice rocketed during and immediately after the floods. The government of Bangladesh officially declared famine in late September.

It is worth mentioning that Bangladesh, like many other countries in the world, had been receiving regular food aid from USA. But the US food aid came under severe threat precisely at this point of time, since the US decided to seek stoppage of Bangladesh's trade with Cuba. Bangladesh had to cancel two purchase orders from American grain companies because she had very little reserve of foreign exchange for cash payment. Further, she had to cancel exports of jute to Cuba at a time when competition from Indian jute and low world market prices had substantially eroded her foreign exchange earnings. When America resumed food aid, the Autumn famine was largely over.

We do not disagree that food availability served as a serious constraint in government relief operations. But this would establish nothing about the causation of the famine itself. FAD approach has no future in Bangladesh, neither it had in the past. It can he seen that 1974 was a local peak year in terms of both total output and per capita output of rice (1971-75 period). If one went by overall food availability, one would expect a famine less in 1974 than in any of the other

years. And yet the famine did occur presisely in 1974. It appears from the data that output declined from 1973 to 1974 only in two districts (Barisal and Patuakhali) where famine was not felt much, but the most famine affected districts, namely Mymensingh, Rangpur, Sylhet had substantial increases in output (22, 17 and 10 per cent respectively). Also, the three famine districts had comfortable rises in food availability per head : 3% in Sylhet, 10% in Rangpur and 11% in Mymensingh. The food supply approach offers very little in the way of explanation of the Bangladesh famine of 1974. The total output, as well as availability figures for Bangladesh as a whole, point precisely in the opposite direction, as do the interdistrict figures of production as well as availability. Whatever the Bangladesh famine of 1974 might have been, it was not a FAD famine. The largest group of destitutes in the langarkhanas were labourers (45%), followed closely by farmers (39%). The three famine districts also turn out to be precisely the three top ranked districts in terms of decline in the rice entitlement of wages. The entitlement ratio fell by 58% in Rangpur and Sylhet and by 70% in Mymensingh, and with that kind of decline in the entitlements to rice, labourers would be pushed firmly towards starvation and death. Therefore, in underastanding the causation of destitution, one has to go much beyond the statistics of food availability. The output and availability food grains may have peaked in 1974, but the market forces determining the relative price of wage vis-a-vis rice was moving sharply against the former. Boatmen, transport workers and labourers had a high mortality in the Bengal famine in 1943 ; they had again exceptionally high mortality in the Bangladesh famine of 1974. Village craftsmen, producers of services, petty traders and a whole host of other occupations live by exchange and from time to time perish by exchange.

Although, the entitlement approach can be traced in the literature prior to Sen's analysis, no body made this approach so prominent and so challenging to FAD thesis as Sen did in his book. Empirically, he covered almost the whole population of famines world wide not only to show that FAD hypothesis is wrong but also dangerous if per capita calculations are given overwhelming importance. Shocking disameters can lie deeply hidden in comforting aggregate magnitudes when exchange entitlements shift against majority groups of people who cannot compete with the minority in sharing the national income.

While there cannot be any question about his identification and explanation of the problem, the readers might be little frustrated if they expect a kind of prescription from the author. Although, Prof. Sen has advocated, as a passing comment, social security measures for pastoralists in Ethiopia and Sahel countries, this is not consistent with the basic

approach of the book. The entitlement approach, in explaining the famine, is a socialist approach in nature. The solution of famines thus demands socialist approach. This apprach calls for socio-political change in the famine prone couuntries. Sen argues somewhere in the book that what is needed is just not ensuring food availability, but guaranteeing food entitlement. One might take this to be the actual spirit of the book. But since Professor Sen avoided the political question explicitly, the readers can only guess his opinion about the prescription for the problem. Readers can ask themselves, can one expect fair distribution of food from any government upholding private ownership, and law and order for the wealthy people, without changing the present system ?

Bangla Bhashay Muslim Lekhak Grantha Panji*

Md. Faruque Ahmed

Bibliographies are systematic lists of books and other reading materials and are compiled in various forms. It is a kind of padded list which one finds in doctoral dissertation, or just a list of all the books in a library. It is rightly said that, "without bibliography the records of civilization would be an uncharted chaos of miscellaneous contributions to knowledge, unorganised and inapplicable to human needs."

The Bengali Muslims have variegated, rich and long tradition of learning, scholarship and cultural heritage but they have been lacking far behind in respect of proper bibliographical control of published materials.

It is in this context that the compilation and publication of a set in 4 volumes entitled "Bangla Bhashay Muslim Lekhak Grantha Panji : 1400-1985" compiled by M.A. Razzaque is an invaluable contribution to the literary history of mankind in general and to that of the nation in particular. This is the first ever attempt by a scholar to compile a bibliography of books by Muslim authors in Bengali. It is primarily to introduce Muslim authors in Bengali writings to the nation and the rest of the world. It will be very helpful for selection of books and for looking information about individual book. Researchers depend largely on bibliographies for drawing heavily upon the accumulated knowledge, which serves as a basis for further research and progress and this bibliography tries to bring the required literature in an organised way to the notice of those who require them and help to avoid unnecessary duplication of works or delay in progress. Teachers, students, resear-

**Bangla Bhashay Muslim Lekhak Grantha Panji* (Bibliography of Books by Muslim Authors in Bengali : 1400-1985) compilled by M.A. Razzaque, Inspector of Colleges, University of Rajshahi, formerly Librarian of the University, 1960-1982 and published by Mrs. Rokeya Khatun, W/21/B, Motihar, Rajshahi University Campus, Rajshahi, in 4 Volumes, 1988, Price Tk. 750/-, £ 50 a set.

chers, both local and foreign, will immensely benefit from it as a useful reference tool. The present set of volumes will specially help researchers and persons working on any aspect of Bengali Muslim culture and Muslim authors in Bengali and for information about an individual book or all the books by a particular Muslim author in Bengali and other information relevant to their field of interest. The compiler has tried to compile a comprehensive bibliography of Muslim authors in Bengali from 1400-1985. This bibliography in its four volumes contains a total of 25,000 books by 6,000 Muslim authors in Bengali covering a period of about 600 years and it is the result of compiler's 27 years of honest labour and efforts.

The compiler attempted to bring the literature and their authors in an organised and scientific way in all its four volumes. The arrangement is in alphabetical order. This bibliography is a comprehensive one because it covers almsot all the authors and their works in Bengali.

The compiler has tried to mention the date of birth, death, place of birth, educational attainments and profession of each author as far as practicable. This bibliography contains a short description of subject matter of some of the important books and also indicates the location of rare and out-of print materials. It will definitely help us to compile national bibliography, and national union catalogue. Booksellers and publishers will also benefit from this bibliography because it will tell them the location of important manuscripts and out-of-print books and will also help them to avoid duplication of translation works. Libraries and documentation centres which coordinate and encourage higher studies and research will find it an effective reference tool for their users and it will also help them to select materials for their centres.

There are, however, some printing mistakes here and there in the volumes. The style of printing and letter setting not uniform althrough. It is also obvious that in spite of the best effort of the compiler some authors and their books did not find place in the bibliography and hence it is desirable to add a supplement.

We congratulate the compiler for this document of national importance.

Professor Kasimuddin Molla: Scholar and Educationist

Priti Kumar Mitra

Professor Kasimuddin Molla's life was cut short by cancer at 3 a.m., May 24, 1988. The killer disease had corroded his health to a point of no recovery before being diagnosed too late in January 1988. He died in the midst of honours and achievements, but the tragedy is that he was a rising star on the intellectual horizon of Bangladesh. Professionally Dr. Mollah was at the height of his career, but was just beginning to ascend as a historian of international stature.

The smiling face of Professor Kasimuddin Molla was a familiar sight on the spacious campus of Rajshahi University at Motihar. Remarkably youthful, slim, and most neatly dressed, he was often seen walking briskly from one building to another, running upstairs and downstairs, in pursuit of so many works he had undertaken in different capacities. Always in a hurry, Molla however remained the most courteous colleague on campus. A most assuring friend to his students, he proved the warmest mate for all. Despite differences of political opinion and intellectual bias, Molla remained equally courteous to and cooperative with all.

On a closer review of his personality we find Kasimuddin Molla a kindhearted man ready to help others, a friend of the poor and needy, an affectionate and dutiful father, brother, son, and husband. He was known for his generous hospitality to all friends from home and abroad. Another important feature of Molla's personality was his habit of maintaining day to day diary particularly of his travels. His hobby was photography and he has left behind lots and lots of pictures he had taken in different countries.

Muhammad Kasimuddin Molla was born on January 5, 1940, at village Khanjore, Naogaon, Bangladesh, to Muhammad Mosiruddin and Mrs. Samjan Molla. He was educated at Rajshahi and London obtaining B.A. Hons. and M.A. degrees of the Rajshahi University in

Islamic History and Culture in 1959 and 1961 respectively and a Ph. D in History from the School of Oriental and African Studies. (SOAS) University of London, in 1965. He joined the Gafargaon College, Mymensingh, in 1961 as a Professor of Islamic History and Culture and then left for SOAS on a Commonwealth Scholarship in 1962. He returned home to join Rajshahi University as an Assistant Professor of History in 1966. He was promoted to Associate position in 1974 and became Professor in 1982. At death Dr. Molla was holding the positions of Professor of History, Dean of the Faculty of Arts, and Administrator of the Varendra Research Museum. Meanwhile he served as Chairman of RU History Department for three years from March 1978, and Provost, Shah Makhdum Hall, also for three years from June 1979. He was elected Dean in December 1986. Apart from these, Professor Molla was member of RU Board of Advanced Studies, National Archives of Bangladesh (Dhaka), Chittagong University Syndicate, CHU Selection Board for Professors and Associate Professors, etc. etc. He also involved himself with sports and other extra academic activities on RU Campus.

Professor Molla was closely associated with the Institute of Bangladesh Studies right from its inception in 1974. At one level he served as a member of the Institute's Board of Governors. He was the author of one of the most important publications of the IBS, viz., *The New Province of Eastern Bengal and Assam 1905-1911*. He was a frequent contributor to the Journal of the IBS and also contributed to two seminar volumes published by this Institute. Professor Molla served as a guest teacher and an examiner of IBS and was superivsor to doctoral and M. Phil researchers. He enthusiastically participated in almost all IBS programmes contributing to seminars and symposia as paper reader, discussant or reviewer. Everywhere he did demonstrate remarkable intellectual abilities as well as social accomplishments. Indeed, we all at the Institute found in him a popular friend, a resourceful teacher, and a brilliant colleague.

As an intellectual, Professor Molla was an indefatigable seeker of truth in the scientific sense of the term. Despite his many administrative responsibilities and extra-academic involvements, he diligently continued his researches in history and published in a number of scholarly journals of Bangladesh and abroad. These include the *Journql of the Institute of Bangladesh Studies, Rajshahi University Studies, Journal of the Asiatic Society of Bangladesh, The Journal of History* (Indiana, USA), *Itihas* (History), and *Itihas Patrika* (History Journal). As a foremost historian of Bangladesh, Professor Molla attended many international forums such as the Bengal Studies Conference, Lake Geneva, Wisconsin, USA (May, 1986), the international Conference on US Constitu-

tion, Hong Kong (June 1986), All India History Conference, Calcutta (Jan. 1980 & Jan. 1981), SAARC History Conference, Dhaka (1988) and so on. He also travelled widely in Asia, Europe and America. The countries he visited include UK, France, Belgium, Holland, India, China, North Korea, Thailand, Pakistan, Hong Kong and the United States. Most of these visits were undertaken for field research, study tour, or attending scholarly conferences. After Molla's death Rifacimento International of Delhi, India, has asked for a biographical note of him for publication in *Reference Asia: Asia's Who's Who of Men & Women of Achievement*.

As has been already indicated, Professor Kasimuddin Molla was just beginning to emerge as a historian of international repute. He specialized in the history of the Muslims of Bengal in the twentieth century. Besides being an authority on the first partition of Bengal 1905-11, he wrote extensively on Nawab Salimullah, Khwaja Nazimuddin, A.K. Fazlul Haque, and Muslim politics in general. He authored a very special paper on Professor Shamsuzoha's murder by Pakistani troops in February 1969 as set in its proper political perspective. He also produce a few articles on nineteenth-century Bengal. On the other hand, he wrote on aspects of local history of Rajshahi, Dinajpur, Pabna and Chittagong. Outside Bengal, he wrote on Indian National Congress, the Jallianwallabagh massacre, and Hindu-Muslim relations in subcontinental context. Primarily a political historian, Dr. Molla occasionally wrote on social, intellectual and economic aspects of the history of Bengal, reviewed looks, and surveyed the condition of history-writing in Bangladesh. He also dealt with such topiecs as women's education, impact of the US Constitution and human rights.

Appreciating Professor Molla's scholarship, Representative Jon L. Summers of Dhaka Asia Foundation writes : "he possessed the finest qualities one could ask for in a committed scholar and educator." (Letter to Mrs. Molla dated May 26, 1988). Michael Kobori only complements Summers' observation when he remembers Professor Molla as a "kind and thoughtful man dedicated to bettering his home and country—Bangladesh." (Letter to Mrs. Molla dated June 7, 1988). Describing Molla as an "able and talented scholar," Dr. Rizaul Islam of the Institute of Central and West Asian Studies, Karachi, Pakistan, bemoans his loss with following observation : "He had already achieved much, but much more was expected from him in the years to come." (Letter to Mrs. Molla dated July 12, 1988).* And that is the real tragedy of Professor

*This part is based on the present writer's interview with Mrs. Shamsun Nahar Molla on April 11, 1989. Some other informations incorporated in this article are also supplied by her.

Molla's early demise. We lost a precious asset to our institution and our nation. Let the patriot-scholar live in the inspiration of research and enlightenment he imparted in so many young hearts.

Despite all his academic attainments and high social status, Kasimuddin Molla was a man real close to the common people of his country. He maintained intimate ties with the village of his birth and had won the love of the villagers a large number of whom, on hearing the sad news of his death over the radio, rushed to Rajshahi to pay last homage to their departed friend and fellow. This incident, uncommon as it is, unmistakably points to a far larger identity of Professor Kasimuddin Molla than was conceivable to his colleagues and friends at Rajshahi and other cities. This sincere lover of men and countrymen will continue to live in the memory of all who new him.

Professor Molla left behind his wife, son, aged mother, relatives, friends and a large number of students to mourn his death. His wife Mrs. Shamsun Nahar is an Associate Professor of Islamic History and Culture at Rajshahi University. Their son, Muhammad Shamim, is a student of M.A. Final year in Sociology at the same school. Mrs. Shamsun Nahar tells us that her husband was an ardent lover of peace. May his unappeased soul rest in peace and his only child prosper in life.

APPENDIX

Professor Muhammad Kasimuddin Molla: Index of Professional Growth

a. Academic and other responsibilities undertaken

1. Professor of Islamic History and Culture, Gafargaon College, 1961-62.
2. Assistant Professor of History, Rajshahi University, 1966-1974.
3. Associate Professor of History, RU, 1974-82.
4. Professor of History, 1982-88.
5. Chairman, Dept. of History, RU, 1978-1981.
6. Provost, Shah Makhdum Hall, RU, 1979-82.
7. Dean, Faculty of Arts, RU, 1986-88.
8. Administrator, Varendra Research Museum, RU, 1986-88.
9. Administrator, RU Central Cafetraia, 1969-70.

b. Membership of learned bodies, Administrative Committees and civic clubs

1. Member, Rajshahi University Library Committee, 1978
2. Member, Rajshahi University Board of Advanced Studies, 1978

3. Member, Rajshahi University Discipline Committee, 1980-82.
4. Member, Rajshahi University Academic Council since 1978.
5. Member, Executive Committee, Rajshahi University Sports Development Board, 1981.
6. Joint-Secretary, Executive Committee, Bangladesh Itihas Samiti, 1979-82.
7. Member, National Archives of Bangladesh, 1979-81.
8. Member, Chittagong University Syndicate, 1984-86.
9. Member, Selection Board for Professors and Associate Professors Chittagong University, Bangladesh, 1984-1988.
10. Member of various academic and administrative bodies as Dean, Faculty of Arts and Administrator, Varendra Research Museum, RU.
11. Member, Rotary Club, Rajshahi.
12. Member, Bangladesh North Korea Association, Rajshahi.
13. Member, Family Planning Association, Rajshahi.

C. Publications

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2. "Women's Education in Early Twentieth Century Eastern Bengal", *Women Development, Devotionalism Nationalism: Bengal Studies 1985*, South Asian Series 36, Michigan: Michigan State University, 1986, pp. 41-48.
3. "The Bengal Cabinet Crisis of 1945", *Journal of History*, (Indiana, USA), Vol. 14, No. 2 (1980) : 72-93.
4. "Human Rights: Principle and Practice," A Review Article, Abu Naser Shamsul Hoque ed. *Human Rights: Principles and Practice*, Rajshahi : Rajshahi University Press, 1984, *Journal of the Institute of Bangladesh Studies*, Vol. 9 (1986) : 143-146.
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9. "Some Aspects of the Bengal Cabinet Crisis in the Post-autonomy Days upto 1941," S.A. Akanda (ed.), *Studies in Modern Bengal*. (Rajshahi: Institute of Bangladesh Studies, 1979), pp. 1-55.

10. "The District of Dinajpur and the Mutiny of 1857," *Journal of the Institute of Bangladesh Studies*, Vol. 11 (1977): 73-74.
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12. "A Review Article" (David Kopf and Safiuddin Joarder) (eds) *Reflections on the Bengal Renaissance*, *Rajshahi University Studies*, Vol. 8, (1977): 126-30.
13. "The Port of Chittagong: A Study of Its Growth and Expansion at the Beginning of the Twentieth Century," *Journal of the Institute of Bangladesh Studies*, Vol. 1 (1976) : 30-42.
14. "A. K. Fazlul Huq: An Account of His Ministry, 1941-43 *Bangladesh Historical Studies*. (Dhaka : Bangladesh Itihas Samity 1976), pp. 61-90.
15. "A. K. Fazlul Huq and the Bengal Secondary Education Bill 1940." *Rajshahi University Studies*, Vol. 6 (1974-75) 43-54.
16. "Royot Revolt of Pabna in 1860 (An Account of the Indigo Uprisings)," *Journal of the Asiatic Society of Bangladesh*, Vol. 18, No. 2 (August, 1973) : 91-108.
17. "The Jalianwalabagh Incident and the Montague Chemsford Correspondence," *Rajshahi University Studies*, Vol. 5 (1973) : 36-99.
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Studies in Modern Bengal edited by S.A. Akanda, 1981.

The New Province of Eastern Bengal and Assam, 1905-1911 by M.K.U. Molla, 1981.

Provincial Autonomy in Bengal, 1937-43 by Enayetur Rahim, 1981.

The District of Rajshahi: Its Past and Present edited by S.A. Akanda, 1983.

Tribal Cultures in Bangladesh edited by M.S. Qureshi, 1984.

Bankim Chandra O Amra by Amanullah Ahmed, 1985.

The Journal of the Institute of Bangladesh Studies edited by M.S. Qureshi, Vols. VII-X, 1984-87.

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