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Editor's Note

The ISSRA Papers (The Journal of Governance and Public Policy) 2nd Half 2013 is significant in the sense that its focus is now on the policy issues impacting Pakistan. In this issue, we have included the papers of high academic value, which are expected to benefit the researchers and academics.

The First paper, 'The Problem of Islamization in Pakistan: A Policy Perspective', written by Manzoor Ahmed Abbasi & Ms Qurratulain Jalil, analyzes the existing debate on an important policy issue. The paper argues that the policy debate about Islamization in Pakistan needs to aim at bringing about social justice, tolerance and a wider interpretation of Islamic injunctions.

The Second paper, 'Cyber Security in Pakistan: Emerging Threats and Preventive Measures', written by Muhammad Shabbir, deals with an important dimension of national security i.e. emerging cyber security threats to our society. The paper argues that the place of computer technology in today's life could not be imagined a few decades ago. Every household, Government or private establishment is depended on computers. Whereas, this technology has brought about an enormous ease in our lives, it has also added a new dimension of threat to our security apparatus, which needs to be taken seriously.

The Third paper, 'Resurgence of Taliban in Afghanistan: Impact on Pakistan', written by Ms Maryam Mastoor, analyzes the impact of resurgence of Taliban on Pakistan. The paper argues that ISAF/NATO forces could not achieve their stated objectives in Afghanistan. Resistance forces are not only intact but they are also operating at will in various parts of Pakistan. Terrorism has caused irreparable loss to

the state and society of Pakistan. Hence, all instruments of the state may be employed to root out this menace.

The next paper 'Philosophy and Social Science Research', written by Ehsan Mehmood Khan, is an extremely useful contribution by the writer for academics and scholars, which provides a detailed perspective on philosophy and its relevance to the social sciences. The paper argues that it is imperative that the scholars should be acquainted with philosophical reasoning, logic, dialectics, discourse and methods of argumentation and analysis.

Ms Beenish Sultan in her paper 'Maritime Choke-points in the Indian Ocean: Significance and Potential Threats' analyzes the maritime issues of Indian ocean and their impact on the region. The paper amply distills the maritime chokepoints and their security and commercial implications.

The next paper in the sequence 'Hydro Environment of Pakistan: An Analysis', written by Abdul Rauf Iqbal, covers yet another important problem that our society is confronted with. Water scarcity has started impacting the lives of people in South Asia at an unprecedented magnitude in the last a few years. It is likely to emerge as a bigger challenge, which can result in conflicts among the states. The paper argues that though Pakistan is a water stressed country, yet situation like drought can be avoided, if the available water is well managed and equitably used.

The last paper, 'Periodic Socio-Economic Development in Balochistan: Perceptions and Realities', written by Muhammad Usman Asghar, consists of a detailed analysis of socio-economic development in Balochistan, both before independence after independence. The paper argues that the perception about Balochistan that it has been neglected by successive governments in Pakistan does not find any

empirical evidence. Contrarily, the traces of bad governance and inefficient utilization of resources are easily discernible.

The Problem of Islamization in Pakistan: A Policy Perspective

*(Manzoor Ahmed Abbasi & Ms Qurratulain Jalil)**

Abstract

The issue of incorporation of Islamic provisions in the constitutional, legal, economic, socio-political order as well as policy structures of the Government of Pakistan emerged on the policy agenda in the last years of Pakistan movement and immediately after independence. This issue, commonly known as 'Islamization', however, remained a hotly debated topic. The paper in hand aims at analyzing the dynamics of Islamization, as a policy perspective, with a view to identifying the direction of policy debate that should take place in the policy-making institutions about this issue. The paper argues that Islam, as a way of life and the embodiment of universal human values of social justice, tolerance, equity and fair play, was undoubtedly the most motivating and inspiring factor in the struggle for creation of Pakistan. It was visualized by the founding fathers of Pakistan that despite the fact that Islamic sciences have been suffering from ossification and stagnation spreading over centuries, Islam could still emerge as a dynamic system of life, which should help human beings to rid themselves of perpetual hatred, exploitation and bloodshed. It was also believed that the enormity of the task of reconstruction of Islamic thought notwithstanding, it would not be

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beyond the resources of Pakistan to convert itself into model Islamic welfare state, where all citizens, irrespective of their caste, colour, language or creed, would live in an atmosphere of tolerance and mutual accommodation. However, both the policy-makers and academia could not come up to embrace this challenge and evolve a system of education, which should have been representing a fine blend of the best practices in Eastern and Western sources of knowledge, and socio-economic and geopolitical developments. The paper further pleads that a lot of ground has already been covered as far as evolution of balanced constitutional and legal structures are concerned. The policy debate in connection with the issue of Islamization should, therefore, be directed towards the provision of social justice and promotion of a society which should be more tolerant, just, equitable and prosperous. It would, in turn, require the evolution of a balanced and uniform system of education, in which the existing religious stream of education i.e. 'Madaris' should also be integrated.

**The Problem of Islamization in Pakistan:
A Policy Perspective**

1. Prelude

The debate about Islamization in Pakistan existed even before its creation and it ensued in the subsequent history of its existence. A close scrutiny of historical record envisages that the top leadership of All India Muslim League, the party which led the struggle for independence, had only the 'tentative idea' about the policy implications of Islamization in the newly born state. The creation of Pakistan, as an Islamic state, after a subjugation of more than a century, was a unique experience in that point of time, therefore, hardly any established practices could be found, which could be replicated in a modern Islamic welfare state. The system of governance in Muslim India, prior to the arrival of the British, was dynastic in nature. Notwithstanding the cultural permeation of Islam in the social fabric of Muslim polities, Islam as a system of governance and body politics has never been practiced, barring the life time of the Prophet (S.W.S) himself and his four companions, let alone in India.

Hence, the ideologues of Pakistan, particularly Allama Iqbal, took upon themselves an enormous task of: one, creating an awakening, inspiration and understanding about Islam, as a system of life, which is capable of solving the problems of man in all times and in all places, without discrimination, two; distilling the prevalence of stagnation and ossification in the body of knowledge of the Muslim scholarship and literature, three; initiating a dialogue to incorporate modern scientific and technological knowledge in the corpus of Muslim literature in India and, fourth; carving out of a system of governance and politics which should be democratic in nature and spiritual in spirit. Dr I.H Qureshi¹ alludes to this

problem and argues that “the Quaid-i-Azam was not an educationist himself, but he was fully aware of the importance of laying down correct guidelines for educational policies in Pakistan. He appointed, in his capacity as the President of the All India Muslim League, a committee in 1946 of some educationists to prepare an outline of the system of education that should be adopted in Pakistan, if it came into being because it was still doubtful if the Muslim dream of an independent homeland would find some fulfillment. The Committee did meet at Aligarh and invited a number of eminent Muslim educationists from all over the Subcontinent to help it in its deliberations. It was obvious to those who had assembled there that it would be necessary to impregnate various disciplines with the philosophy and ideology of Islam. This was the most pregnant idea and at that time it was naively believed that even though the task was stupendous and bristling with difficulties, it would not be outside the resources of Pakistan to undertake it in all seriousness. This possibly fruitful idea could not be pursued much further for various reasons, the most of important of which was that its importance was not grasped even by most of those who participated in the deliberations.”¹

This enormity of task of recasting not only the whole colonial politico-economic system into a new way of life but also the philosophy, aims and objectives of education, was a challenge that neither the political leadership nor the policy managers in Pakistan were well trained to confront to. Qureshi has wisely concluded in his pithy style that “it was necessary for the country to build up a

¹ Ishtiaq Hussain Qureshi, ‘Education in Pakistan: An Inquiry into Objectives and Achievements’. MA’AREF Publishers Limited, Karachi, 1975.p.28.

reservoir of inner strength which alone could counter the machinations of its enemy and their agents. How did its leaders expect it to withstand the onslaught of foreign intrigue and internal subversion by itself? If there is a country, where the situation demands purposeful policies in the field of education, it is Pakistan. Without such policies it could hope neither for peace nor stability.”² Once a nation remains split about its ideals, basic philosophy of life, world-view and the values that should form part of policy processes, the whole journey of that nation would remain directionless and clueless, and Pakistan has been the case in point.

The paper in hand aims at analysing the issue of Islamization in Pakistan, through the lens of public policy, with an underlying assumption that sufficient provisions of Islam had already been incorporated in the constitutional and legal structures of the state. What, however, had not been done, was the promotion of a tolerant, just, equitable and enlightened society, which was more essential than feuding over polemics. The paper further argues that the debate about Islamization in Pakistan, presently centered around polemics, should change its course towards the evolution of state structures, which may help promote more accommodative, and tolerant world-view of Islam, integration of religious seminaries in mainstream education and evolution of a politico-economic system, which should encompass the broader principles of human dignity, justice, equity, fair-play and tolerance, founded on the spiritual elements of Islamic teachings.

² Ibid.p.49.

2. Revival of Muslim Nationalism in Subcontinent and Pakistan Movement

Islam was not born on 14th of August 1947 in the Subcontinent. It was very much the part of Muslim life even during the colonial period of more than a century, though reduced to a private affair of a Muslim's life. Before dwelling on the post independence dialectics related to Islamization in Pakistan, a few assertions about revival of Muslim Nationalism need to be made.

First, contrary to general perception about revival of Muslim Nationalism in the hands of traditional religious scholars, it was the modern educated youth, trained in Western dialects that took up the banner of revival of Muslim nationalism in Subcontinent in the late 19th and the first half of 20th Century. The most ardent and articulate of those revivalists somehow gathered under the leadership of Quaid-i-Azam Muhammad Ai Jinnah and they were the ones who chartered the troubled ship of Muslim politics to a safe destination.

Second, whereas, the Quaid-i-Azam provided statesmanship and strategic leadership, it is Allama Iqbal, who emerges as an ideologue, to whom any reference pertaining to ideological foundations of Pakistan needs to be made. Because he was the one who had the insight about both Islamic and Western sources of knowledge and he was the one who dreamt for a separate homeland, where Islam as a dynamic system of life was envisioned to emerge.

Third, even in the post independence period, these were not the religious scholars who were mainly responsible for bringing Islam on the policy agenda. Majority of religious parties, particularly the affiliates of Darul-Aloom Deoband, were against the creation of Pakistan, barring a few individuals like Maulana Shabbir Ahmed

Usmani, therefore, they had a marginal role in the policy debates of the newly born state of Pakistan. The most effective religious influence on the politics of Muslim League was of the mystics, particularly of Punjab, who had vehemently supported Pakistan movement, right from Banaras Conference of 1946 to the day of independence and afterwards. Their tendency to remain low profile has somehow resulted in lack of appreciation of their role in the Pakistan Movement, however, their names are not infamous e.g. Pir Sahib Manki Sharif, Pir Jamaat Ali Shah and Hafiz Pir Jamaat Ali Shah, Pir Ghulam Mohyuddin Golra Sharif, Pir Sher Muhammad Shariqपुरi, Pir Qamar-ud-Din Sialvi, Pir Said Muhammad Sahib Pakpattan Sharif and other mystics of Punjab, Sindh, Bengal and Kashmir. It was the mystic Islam, which created enthusiasm and fervour among Muslims to take part in the Pakistan movement. Since mystic interpretations of Islam are more tolerant, humane, pluralistic and accommodative, they rallied all sects of Muslims under the banner of Muslim League. Allama Iqbal himself was profoundly influenced by Allama Jalal-ud-din Rumi, one of the most learned and philosophical mystics of the world. The exclusivist and militant Islam had nothing to do with the state that Allama Iqbal and Quaid-i-Azam wanted to create. The spirit of Islam that permeated the body politics of India since Allama Iqbal's Address at Allahabad in 1930 needs to be appreciated, if the rationale for demand of Islamization is to be correctly understood.

Fourth, the argument that Islam had nothing to do with the creation of Pakistan seems to be out of context and afterthought. By excluding Islam from Muslim politics of 1940s, the very 'raison d'être of Pakistan' is challenged.

Fifth, the geo-political and geo-economic environment of the world between and after World Wars need to be taken into account. The civilizational and cultural pride of the West was badly dented by unprecedented losses in men and material during these Wars. In result thereof, the Western system, whether capitalist or communist, were no more attractive for the colonial states. Therefore, those who dissipate their energies to prove that Pakistan was created to embrace Western liberal doctrines need to reconcile with the historical evidence.

Fazlur Rahman, the first Education Minister of Pakistan, dwelt on this aspect in these words: "I attach the highest importance to the spiritual element for its neglect, which has characterized modern education, has had disastrous consequences. The experience of two World Wars, as also the vast technological inventions of recent years, fraught as they are with incalculable possibilities of destruction, have brought home to us the realization that unless the moral and spiritual growth of man keeps pace with the growth of science, he is doomed to utter destruction. It is surely a disturbing thought that every step forward in the domain of knowledge should be attended with not a diminution but an increase in barbarism and frightfulness so that the pursuit of knowledge becomes a self-defeating process. To arrest this process, to purge man's minds of barbarism and turn them to humanitarian purposes is the great task, which our education must attempt, if we are to help mankind survive. The provision for instruction in the fundamental of religion in schools is, therefore, of paramount necessity for without such knowledge we cannot hope to build character or lay the foundations for an adequate philosophy of life. What form this instruction should assume is a matter for your

careful and detailed consideration, but you will agree with me that it must be catholic in outlook and must eschew sectarian or narrow doctrinal lines.”³

3. Emergence of Islamization on Policy Agenda

It is again a misperception that the demand for incorporation of Islamic provisions in the constitutional and legal structures of Pakistan was initiated by religious scholars i.e. Ulema. It had already been brought into policy debate by the Government, under the leadership of the Quaid-i-Azam and Nawabzada Liaqat Ali Khan. The following important historical facts provide ample evidence:

3.1. The Debate about the Educational Philosophy of the State of Pakistan in 1st Educational Conference

It was the most important Educational Conference ever held in Pakistan, in which the fundamental questions of educational philosophy of newly born state were not only discussed but also the resolutions were passed on basic policy directions. The Resolution No.7, 8 and 14 pertained to educational ideology and religion, which were as under:-

3.1.1. Resolution No.7: Ideological Basis of Education.

“Resolved that education system in Pakistan should be inspired by Islamic ideology, emphasizing among many of its characteristics those of universal brotherhood, tolerance and justices.”⁴

3.1.2. Resolution No.7: Religious Instruction. “Resolved that religious instruction should be compulsory for Muslim students in schools. Attendance in religious instruction should be compulsory

³ Fazlur Rahman, ‘The Proceedings of First Education Conference, held at Karachi from 27 November to 1 December 1947’. p.8.

⁴ ‘The Proceedings of First Education Conference, held at Karachi from 27 November to 1 December 1947’. p.44.

for Muslim students in colleges. Same facilities may be provided for other communities in respect of their religions, should they so desire.”⁵

3.1.3. Resolution No.14: Central Institute for Islamic Research. “Resolved that a Central Institute of Islamic Research should be established for the purpose of organizing and stimulating Islamic Research with special emphasis on the needs of modern time.”⁶

The timing of this Conference is of critical importance. It was the time when the Government of Pakistan was facing the formidable challenges related to settlement of refugees, setting up of Government offices and Kashmir War. Despite all this the Quaid-i-Azam ensured that the Conference should take place. The Proceedings of this Conference somehow could not attract attention of the scholars and policy-makers. The significance of this Conference was that the Quaid-i-Azam, as the head of the state, sent special message for the participants of the Conference, which was read by Mr. Fazlur Rehman, the Education Minister of Pakistan. Apart from other policy directions, the Quaid’s message clearly elucidates the need for evolving a new system of education. He wrote, “You know the importance of education and the right type of education cannot be over-emphasized. Under the foreign rule for over a century, sufficient attention has not been paid to the education of our people and if we are to make real, speedy and substantial progress, we must earnestly tackle this question and bring our policy and programme on the lines suited to the genius of

⁵ Ibid.

⁶ Ibid.

our people, consonant with our history and culture and having regard to the modern conditions and vast developments that have taken place all over the world”.⁷ A number of committees were formed to formulate policy recommendations on various issues.

3.2. Quaid-i-Azam’s Policy Statements

The following statements of the Quaid-i-Azam reflect his vision of Pakistan as an Islamic welfare state and his speech of 11 August 1947 should, therefore, be seen in the context:-

3.2.1. Muslims are a Nation²

“We maintain and hold that Muslims and Hindus are two major nations by any definition or test of a nation. We are a nation of a hundred million people, and, what is more, we are a nation with our own distinctive culture and civilization, language and literature, art and architecture, names and nomenclature, sense of value and proportion, legal laws and moral codes, customs and calendar, history and traditions, aptitudes and ambitions – in short, we have our own distinctive outlook on life and of life. By all canons of international law we are a nation.”⁸

3.2.2. A Democratic and Islamic Constitution for Pakistan

“The constitution of Pakistan has yet to be framed by the Pakistan Constituent Assembly. I do not know what the ultimate shape of the constitution is going to be, but I am sure that it will be of a democratic type, embodying the essential principles of Islam. Today, they are as applicable in actual life as they were 1,300 years

⁷ Ibid .p.5.

⁸ Jinnah’s Reply of 17 September 1944 to Gandhi’s Contention of 15 September 1944, accessed through [http: // www.nazariapak.info/Quaid-e-Azam /Qoutes.php](http://www.nazariapak.info/Quaid-e-Azam/Qoutes.php)

ago. Islam and its idealism have taught us democracy. It has taught equality of men, justice and fairplay to everybody. We are the inheritors of these glorious traditions...as framers of the future constitution of Pakistan. In any case, Pakistan is not going to be a theocratic State – to be ruled by priests with a divine mission. We have many non-Muslims – Hindus, Christians, and Parsis – but they are all Pakistanis. They will enjoy the same rights and privileges as any other citizens and will play their rightful part in the affairs of Pakistan.”⁹

3.2.3. Islam – Democracy, Equality, Justice, Freedom, Integrity, Fairplay

“Islam and its idealism have taught us democracy. Islam has taught equality, justice and fairplay to everybody. What reason is there for anyone to fear democracy, equality, freedom on the highest standard of integrity and on the basis of fairplay and justice for everybody.....Let us make it (the future constitution of Pakistan), we shall make it and we shall show it to the world.”¹⁰

3.2.4. Islamic Economic Theory and Practice to Suit Pakistan

“The adoption of Western economic theory and practice will not help us in achieving our goal of creating a happy and contented people. We must work our destiny in our own way and present to

⁹ The Quaid’s Broadcast to the People of USA, February 1948, accessed through <http://www.nazariapak.info/Quaid-e-Azam/Qoutes.php>

¹⁰ The Quaid’s Address to Bar Association, Karachi, 25 January 1948, accessed through <http://www.nazariapak.info/Quaid-e-Azam/Qoutes.php>

the world an economic system based on the true Islamic concept of equality of manhood and social justice.”¹¹

3.3. Fazlur Rahman’s Address to First Education Conference, 1947

Dr Qureshi reflects on the significance of First Education Minister’s Address in these words: “His address to this Education Conference is of great value to a student of history of education in Pakistan”.¹² This address encompasses all essential elements that an initial policy should have brought out. He says, “It is, therefore, a matter of profound satisfaction to me, as it must be to you, that we now have before us the opportunity of reorienting our entire educational policy to correspond closely with the needs of the times and reflect the ideals for which Pakistan as *an Islamic State* stands. This is a great, indeed, a unique opportunity, but even greater is the magnitude of the task which it imposes on us. For the task is no less than building up a modern democratic state, whose citizens are equipped by the requisite training of body, mind and character to live the good life and to make their contribution to the common efforts of a tormented humanity for the establishment of global peace and security. This calls for a supreme act of dedication, for which I can think of no higher sanction than that of Islam, which came as a mission of mercy to the world and unfolded the vision of universal brotherhood of man. It is this vision which was translated into reality by the followers of Islam in its early days that the materialistic civilization of the West is at last directing its eyes after

¹¹Speech at the Opening Ceremony of the State Bank of Pakistan, Karachi, 1 July 1946, accessed through <http://www.nazariapak.info/Quaid-e-Azam/Quotes.php>

¹² I.H.Qureshi.op.cit. p.28.

more than thirteen centuries of human misery, strife and bloodshed. And it is for making this vision a living reality, once again that Pakistan stands....where but in Islam could we find the democratic virtues of tolerance, self-help, self-sacrifice, human kindness, the protection and the succour of the weak and oppressed. And what better ideals could we postulate for our educational theory than these.”¹³

Whether the aforementioned philosophical narratives had the support of the then Government of Pakistan? Dr Qureshi, who was himself the member of Educational Committee constituted by the Quaid-i-Azam in 1946 and who also participated as an invited delegate in the First Education Conference, wrote: “It is doubtful whether the sentiments expressed by Fazlur Rahman did represent the views of the Government of Pakistan, even though he claimed to be speaking on its behalf. There are strong reasons to believe that there was a strong dissident view inside the Government, as can be proved by reference to subsequent events. This was the unimaginative and bureaucratic view of the Ministry of Finance, which was headed by a former bureaucrat, Ghulam Muhammad. In all probability, Fazlur Rahman had been able to make such a statement because he had the support of the Prime Minister, Liaquat Ali Khan and the Quaid-i-Azam himself, whose interest in education has been mentioned above.”¹⁴

It is a considered opinion of this researcher, after a detailed scrutiny of earlier educational policy documents of Pakistan, that the political leadership of Pakistan as well as academia had a fair

¹³ Fazlur Rahman, op.cit.p.6.

¹⁴ I.H.Qureshi.op.cit.p.29.

understanding and a sense of direction about the broader contours of educational philosophy, undercurrents of state ideology, likely constitutional framework and the role required to be played by Pakistan in the comity of nations. It was, however, the bureaucracy, both civilian and military, who was somehow afraid of Islamic injunctions, perhaps, due to the reason that they would bring them to the level of common man.

3.4 Objectives' Resolution of 1949 – An Important Milestone in Policy Formulation

It would be pertinent to incorporate the views of Sharif al Mujahid, who is considered as a scholar, who is well conversant with the ideological debates in Pakistan. He says “over the decades, the Objectives’ Resolution has continued to be relevant to Pakistan’s body politics. It has been included, with minor adaptations, as Preamble to three constitutions (1956, 1962 and 1973). It means, despite political upheavals and convulsions, despite periodic shifts in the political, social and economic orientation of those in power, the Resolution has continued to remain the primary source of inspiration on the ideological front to all shades of opinion on the political spectrum.Its importance has been affirmed and attested to by political theorists, jurists, and scholars. In a recent pronouncement,³ the then Chief Justice of Pakistan, Justice Sajjad Ali Shah, underscored the fact that the Resolution represents, as it were, the cornerstone of the constitution of Pakistan. The constitution could be amended in conformity with the procedure laid down therein, without, however, tampering with the salient features of the Objectives’ Resolution, and he listed ‘federalism, parliamentary democracy blended with Islamic provisions,

including independence of the judiciary' among its 'salient features'."¹⁵

3.5. Liaqat Ali Khan's Speech on the Occasion of Objectives' Resolution

Two speeches are often referred to, in the context constitutional debate, particularly pertaining to the Objectives' Resolution. One delivered by the then Prime Minister of Pakistan, Nawabzada Liaqat Ali Khan, the second delivered by Iftikharuddin, a leftist member of Constituent Assembly, which was surprisingly in favour of the Resolution.¹⁶ These speeches clearly reflect the thinking of the generation who created Pakistan, therefore, it is the responsibility of the researchers to bring forth at least the facts, which are being deliberately distorted in today's policy debate on the ideals that Pakistan espoused on its creation .

3.6. Second Educational Conference Held at Karachi (4-5 December 1951)

This all Pakistan Educational Conference was again held at Karachi from 4th December to 5th December 1951. The opening address of Mr. Fazlur Rahman covers all issues of policy-formulation in Pakistan and problems associated with them. This speech is again very important to understand, as to what type of education system the initial policy-makers wanted to give to the State of Pakistan. They had not only a vision for Pakistan but also for the mankind. Mr. Fazlur Rahman concluded his speech with these words, which are vital regarding the debate on education philosophy of Pakistan:

¹⁵ Sharif al Mujahid, 'Ideology of Pakistan'. Services Book Club 1974. p. 141.

¹⁶ Ibid. 163.

“I have taken a very great deal of your time, ladies and gentlemen, but the issues facing us in the field of education have such a vital bearing on our State that I felt it necessary to deal with them at some length. Quaid-i-Millat Liaqat Ali Khan had proclaimed repeatedly that he wanted to make Pakistan a ‘Laboratory of Islamic Socialism’. Now that he is no more with us, let us redouble our efforts to bring Pakistan nearer the ideal he cherished. Thus alone can we honour his memory and thus alone can we contribute to the progress and prosperity not only of our own people, but also of mankind at large.”¹⁷

3.7. Islamic Provisions in the Constitution of Pakistan

All three constitutions of Pakistan contained Islamic provisions, but the 1973 Constitution went much further.¹⁸ Abdul Hafeez Prizada, the then Law Minister, who piloted the constitution, claimed that “a serious effort has been made to take out the Islamic provisions (of the constitution) from the cold storage of the principles of the policy...and convert them into substantial parts of the constitutions. The Islamic provisions of the constitution would transform the basic injunctions and tenets of Islam into law and give them legislative effect.”¹⁹

The following inferences of Sharif al Mujahid also merit attention: “Besides Part-IX, the 1973 Constitution, with or without amendments made by General Ziaul Haq during the 1980s, contains

¹⁷ Proceedings of Second Educational Conference, Held at Karachi on 4th and 5th December, 1951.p.4.

¹⁸ Sharif al Mujahid.op.cit.146.

¹⁹ The National Assembly of Pakistan, Constitution-Making debates, 19 February 1973.DD.103-114. Qouted by Sharif al Mujahid in ‘Ideology of Pakistan’. Services Book Club1974.p.146.

several provisions bearing on Islam, which call for notice, for instance:

3.7.1. **Article-2** designates Islam as the state religion. This provision, the jurists opine, is not merely ritualistic as in Malaysia, but has administrative and political thrust.

3.7.2. **Article-2A**, promulgated by General Zia on 2 March 1985, makes ‘the principles and provisions set out in the Objectives’ Resolution ...substantive parts of the constitution... (which) shall have effect accordingly. This makes, the Preamble an integral part of the constitution, enforceable in a court of law. It has been included as an annexure, so that if the constitution is abrogated, the Objectives Resolution is not automatically suspended, diluted, or abrogated.

3.7.3. **Article-6, 9, and 12** also have a bearing on Islam.

Article-31, which concerns the Islamic way of life, is in the nature of a constitutional command. It reads as follows:

3.7.4.1. “Steps shall be taken to enable the Muslims of Pakistan, individually and collectively to order their lives in accordance with the fundamental principles and basic concepts of Islam and provide facilities whereby they may be enabled to understand the meanings of life according to the Holy Quran and Sunnah.”

3.7.4.2. “The State shall endeavour, as respects the Muslims of Pakistan: (a) to make the teachings of the Holy Quran and Islamiat compulsory, to encourage and facilitate the learning of Arabic language and secure correct and exact printing and publishing of the Holy Quran; (b) to promote unity and the observance of the Islamic moral standards; and (c) to secure the proper organization of Zakat, (ushr), auqaf and mosques.”

4. Analysis and Findings

The researcher has made a deliberate to collect, collate and present not only the original texts of the policy documents pertaining to Islamization in Pakistan but also the gist of speeches made by different leaders on those occasions, so that the textual language and its underlying ideological spirit could be understood in the context. The following inferences can be drawn from the foregone discussion:-

1. The issue of incorporation of Islamic philosophy, the '*weltanschauung*', and value system in political and economic policies was brought on the policy agenda by the Government of Pakistan, most probably under the directions of Quaid-i-Azam but clearly with the consent of the then Prime Minister Liaqat Ali Khan.
2. It also envisages that the founding fathers of Pakistan, including the Quaid-i-Azam, wanted the constitutional framework of Pakistan to be guided by the principles of Islam. The creation of Pakistan for them was a unique opportunity to re-construct a new socio-economic and politico-religious order, which should rid the humanity of exploitative and tormenting western capitalist as well as communist systems. It was the reason that the world '*laboratory*' has repeatedly been used by none else than the first Prime Minister and First Education for the '*state of Pakistan*', where the universal teachings of Islam would be practiced and presented as model to the rest of the world.²⁰

²⁰ Address of Fazlur Rahman recorded in 'Proceedings of Second Educational Conference', Held at Karachi on 4th and 5th December, 1951.p.4.

3. No dichotomy was found between embracing the Islamic ideals and pursuing the knowledge of modern scientific and technological developments as well as social sciences. Similarly, the democratic practices in the politics were found to be in no contradiction with Islamic teachings, provided these were based on the principles of human dignity, justice, equity and fair play.
 4. The Objectives' Resolution is a comprehensive policy document and it contains all essential elements for framing a balanced constitution, meeting the needs of all citizens, irrespective of their caste, colour or creed. That is why this Resolution formed part of all constitutions of Pakistan. However, it is generally misinterpreted in the public debate.
 5. After many a vicissitude, Pakistan has been able to come up with a widely agreed upon/consensus Constitution of 1973, including all subsequent amendments. Such an Islamic as well as democratic constitution can hardly be found in any other Muslim country. It has sufficient provisions to ensure that the ideals for which Pakistan was created could be realized. But it has also provided enough safeguards to the minorities to enjoy their freedom as full citizens of Pakistan and nothing less and nothing more.
 6. The existing society of Pakistan, however, does not reflect the polity that the founding fathers of Pakistan envisioned or the public at large yearns for. It is not only un-Islamic but also inhumane. Injustice, exploitation, intolerance, extremism, misconstrued interpretation of the religion are
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the symptoms of bad governance practices, inadequate education and lack of training of citizens, and a long neglect of prioritization of policies. These have nothing to do with Islam, as a religion or the vision of the founding fathers about the state of Pakistan.

7. Whereas, Pakistan has made substantial progress in achieving the realistic constitutional and legal structures, the successive governments have not been able somehow to translate these in to effective policies which could improve the lives of the common people.
8. The policy debate in the context of Islamization in Pakistan should, therefore, revolve around practical mechanisms as to:
 - (a) How a balanced and uniform system of education can be introduced in Pakistan, in which Madaris (religious institutions) should also be incorporated.
 - (b) How a wider interpretation of Islamic teachings can be ensured, which should be acceptable to all sects. Expansion in the role of the Council of Islamic Ideology, Islamic Research Institute, Dawah Academy, International Islamic University and Federal Shariat Court can also be explored, so that the authoritative Fatwas (self-imposed verdicts) of half educated religious practitioners can be replaced by the balanced interpretations of Islamic provisions, by Ulema who are well versed with traditional as well as modern sciences.

- (c) How the real teachings of Islam, aimed at dignity of human, provision of justice, equitable access to political and economic rights, purification of inner-selves, prevalence of truth, love and kindness can be fostered in our day-to-day lives.
- 9. These are the areas of debate that need to be brought to the political agenda as far as Islamization in Pakistan is concerned, not the ones which result in further fragmentation of the society.

5. Conclusion

The issue of Islamization in Pakistan needs to be seen dispassionately. Those who think that Islamic sciences compiled centuries ago cannot provide solution to modern problems; their argument also needs to be weighed seriously. Is it not a fact that the Muslim world could not make any worthwhile development in the field of modern sciences, which could influence modern mind? Are the Muslim countries not dependent on the West for acquisition of modern technology? Have the worst kinds of social evils like injustice, corruption, sectarianism, intolerance and economic exploitation not crept in the Muslim societies? If it is so, then, all Muslims; including their leaders, academia and intelligentsia, should accept the challenge and make deliberate effort to evolve various systems of life in the light of Islamic teachings; a concept that Allama Iqbal called 'the Reconstruction of Islamic Thought', which should not only be acceptable to all Muslims but also attract the humanity as whole.

Similarly, the modern scholars on other extreme of the pendulum should also consider the viewpoints and aspirations of the majority of the people in Pakistan, who believe in Islam not as 'a

set of rituals' but a way of life, which if followed in a balanced way, helps human beings gain success in this life as well as in hereafter. The Government of Pakistan should own Islam, as enshrined in the Constitution, and snatch the 'Islamist Card' from the hands of terrorists and extremists, who are using religion for their personal vested interests. In the nutshell, 'Islamization' now means simple reformation and refinement of the society, not 'under gun point' but through effective education, which should make human beings what Professor Ansari calls 'the spiritual beings and the refined servants of God on earth'.²¹ It should also aim at bringing about social justice in Pakistan, around which all the teachings of Islam revolve.

²¹ Dr Sarfraz Hussain Ansari, the Assistant Professor, at NDU, speaks with a lot of conviction, passion and knowledge on this subject in classes and public lectures.

Endnotes

¹ Ishtiaq Hussain Qureshi was a member of the Committee, constituted by the Quaid-i-Azam in 1946, to prepare the outline of education system for the 'to be state of Pakistan'. He was also an invited delegate of First Education Conference, held at Karachi from 27 November to 1 December, 1947. He remained Federal Minister for more than two years in 1950s.

² The Quaid-i-Azam sent this reply to Gandhi on 17 September 1944, in response to his statement of 15 September 1944, in which he said "I find no parallel in history for a body of converts and their descendants claiming to be a nation apart from the parent stock."

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Cyber Security in Pakistan: Emerging Threats and Preventive Measures

*(Muhammad Shabbir)**

Abstract

Cyber security in today's times is not only the concern of individuals worldwide but also of corporations and even countries. Pakistan is currently among the countries with no cyber crimes law or cyber security policy. In absence of cyber security laws, Pakistan is exposed to the threat of cyber attack, and at several occasions, important web-portals such as: OGRA, HEC and Pakistan Air Force have been victims to cyber attacks, both from within and outside the country. This comes directly under cybercrime or cyber terrorism that needs to be dealt with iron hand by the authorities. But simultaneously there is also a need of creating a general awareness about Cyber Security and Cyber Terrorism, so that everyone can at least be able to handle the basic level of cyber security. It is an issue that needs great degree of attention by all who are directly related (i.e. the authorities) and the general public. In view of this, the paper in hand examines the emerging threats posed to the cyber world in Pakistan. After analyzing the cyber security policies of US and China, the study also recommends some preventive measures to secure Pakistan's digital frontiers. The paper argues that the best defenses against those threats should be built into every day practices. Our

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government and corporate sector need to strengthen people's understanding of cyber attacks and make cyberspace safer. Decision-makers in the public and private sectors need to think strategically about how to organize cyber-defenses in government, business, and the military. Such coordination is the only way to secure today's internet- dependent societies.

Cyber Security in Pakistan: Emerging Threats and Preventive Measures

Introduction

Security is one of the fundamental requirements for each and every digital network, just like it is a requirement for each and every human. Without proper security, a network is just like a house without doors and windows. In case the network has a lot of valuable information and resources, it's like a bank full of money without any guards and security cameras. Just like the bank in the example will be a serious place for potential theft or robbery, same is the case with the insecure networks. But, there is much difference in human perceptions about the unsafe bank and insecure networks. People don't understand the ultimate results of insecure networks and in Pakistan the situation is the worst. Public and private sector enterprises don't even consider it to be an element that needs consideration. In this context, this paper examines the emerging threats posed to the digital networks in Pakistan. After analyzing the cyber security policies of US and China, the study also recommends some preventive measures to secure Pakistan's digital frontiers.

Background

In today's high-tech globalized world, negligence in cyber security can have terrible consequences for individuals as well as for states. It is not difficult to imagine the chaos created, if an ill-intentioned person gains access to the country's most trusted news channel's website. Imagine the implications, if he just adds one single headline that a bomb has been placed at a specified place in the city or on some road side, what would be the troubles faced by

the people? Let's take another example, if someone adds just one line on The News or Dawn's website that "prime minister has said that we are going to attack our neighbor soon". It may end up in a bloody feud between the two countries or at least create misunderstandings between the countries and can seriously damage the relationships between the two states. Trend Micro Data-stealing malware focus report of June 2009 says, "In March 2008, data from 4.2 million credit card numbers were stolen in transmission as a result of malware installed on all of Hannaford Brothers' servers in 300 stores".¹ There are hundreds of other examples of attacks performed "to achieve malicious objectives.

Pakistan is currently amongst those countries that have no Cyber crimes law or Cyber Security policy. In the absence of Cyber security laws, Pakistan is exposed to the threat of Cyber attack. Many important websites of Pakistan have been hacked due to weak security systems, including website of Supreme Court of Pakistan, Pakistan Navy and lot of other websites of extremely important organizations.² This comes directly under cybercrime or cyber terrorism that needs to be dealt with iron hands by the authorities. Simultaneously there is also a need of creating general awareness about Cyber Security and Cyber Terrorism so that everyone can at least be able to handle the basic level of cyber security.

There is very little work done on analyzing information security of Pakistani organizations. The first study to address the concern about the need of information security in Pakistan is by Syed Amir Hussain (1998), which proposes that it is very important for Pakistan to have both offensive and defensive Information Warfare capabilities.³ Vorakulpipat, C. et. al have explored information security practices in Thailand and have emphasized the need for

information security bench-marking of an organization with the best security practices.⁴ Ahmad A. Abu-Musa had conducted a survey to evaluate Computerized Accounting Information Systems security controls in Saudi organizations.⁵ Rafael et. al have performed a survey to analyze Canadian information technology security practices. Three hundred information technology security specialists were the subject of this survey to evaluate the Canadian information technology security practices.⁶ Australian Taxation Office conducted a review of information security practices at the Australian Tax Office, to prevent any potential breach of data.⁷ US Environmental Protection Agency has conducted an audit to determine whether the Office of Administration's Integrated Contract Management System (ICMS) is complying with Federal and Agency information system security requirements.⁸

The related work shows that where other people are concerned about their already secure information systems and are working to avoid any potential attack, Pakistani organizations are not putting any efforts into information security.

Dynamics of Cyber Security in Pakistan

Presently, Pakistan is not adequately prepared to counter any determined cyber attack. A cursory survey of our existing communication systems and computer networks of Internet Service Providers (ISPs), bank, PIA, NADRA, Statistics Division and most of the educational and computer training institutions reveals that these systems are highly vulnerable to cyber attacks.⁹ With the present expertise indigenous software base, our adversaries have the capability to disrupt our communication and other electronic systems through various cyber techniques. The ambitious Indian satellite and space programmes further support her developments

and focus on cyber field. The low level of cyber security awareness can be gauged from the fact that many scientists, professors, politicians and even the military personnel exchange information, at times even classified through public servers.¹⁰

On the other hand, India is attempting to use information technology to enhance offensive cyber attacks abilities from the standpoint of national security. In this regard, “it is rapidly establishing itself as a software development capital of Asia.”¹¹ India exports internet related products amounting to US \$9 billion and producing more than 100,000 IT professionals every year. With this formidable advantage in IT and cybernetics, it is logical to conclude that should India attempt to wage cyber attacks against Pakistan, the threat could be quite potent.

There are hundreds of highly professional hackers operating in India. There are various hacker groups among whom the H2O or the Hindustan Hackers Organization is a famous one. The Pakistani websites were hacked, seven times in 1999 and 18 times in 2000. From 2002 to 2009, the cyber attacks were also witnessed on important websites of Pakistan.¹²

In Dec 2010, At least 36 government websites were hacked by a group of hackers by the name ‘Indian Cyber Army’. Websites of Pakistan Navy, the National Accountability Bureau (NAB), the ministries of foreign affairs, education and finance, as well as NADRA and the Council of Islamic Ideology were among some of the key websites hacked, aside from other local websites.¹³ Though it is not to say that Pakistani individuals and private organizations are sitting idle. In a recent attack, on 26 January 2014, Pakistani hackers hacked more than two thousand Indian websites including the website of the Central Bank of India. ¹⁴ But the problem with the

cyber security is that unlike military security, your offensive capabilities do not make your defence stronger.

The situation, in Pakistani context is further compounded by the lack of coordination amongst various security and cyber related agencies. Pakistan's electronic and computer system are mainly vulnerable as it still lacks a dedicated and cohesive national policy on cyber-security, lack of awareness amongst the general public even in mostly educational institutions about cyber security and warfare, and its implication on national security. While several limited initiatives have been undertaken to counter cyber threats, there is lack of an effective central body to coordinate, augment and strengthen efforts against cyber-threats at national level. A general lack of security culture, vis-à-vis, electronic sources of information, greater automation may lead to more security leaks unless checked conscientiously.¹⁵

Most importantly, the possible significant military targets of cyber attacks could be command, control, computer, communication and intelligence, information (C4I2) systems, early warning and surveillance systems, electronic warfare systems, various weapon systems, logistic and inventory control data base, and armed forces strategic communication. The system has software controlled exchanges, which are prone to hacker attacks as it is possible to access and exchange parameter from a remote site. Likely, civilian targets could be PTCL and other private mobile communication networks like Warid, Ufone, and Mobilink etc; power houses, grid stations and energy distribution control networks; air and land transportation systems; and financial institutions. Like military targets, all civilian communication networks or computer networks use microprocessors to control

their operations, thus, these can be potential targets for cyber attacks.¹⁶ At this stage it seems essential that what practices other countries in the globalized world are following to secure their cyber domains.

Dynamics of Cyber Security in Globalized World

With rapid advancements in information technology, countries are now focusing to secure their digital networks. For further clarity, the policies of US and Chinese cyber security are discussed below.

US and Cyber Security

US realized the importance of cyber security as late as 2001, when under Bush administration; a separate office was set up in White House to handle the coordination aspects. Efforts of the team assembled in White House, resulted in the formulation of 'National Strategy to Secure Cyber Space'.¹⁷

The 'Comprehensive National Cyber Security Initiative' focused on securing the government's networks; however, it did not address the vulnerability of financial sector to cyber war.

In 2009, a number of cyber security experts, called 'Black Hats' were asked to arrive at consensus to give recommendations to the Obama Administration for securing cyber space. The group recommended that federal government must spend more on cyber security research and development. Focus should be on resilience rather than attribution finding so that people must prepare themselves against the disruptive as well as the destructive nature of attack through advance planning. In this regard, the government needs to take a lead role to address cyber security issues.

Similarly, it was in 2009 when President Obama declared America's digital infrastructure to be a "strategic national asset,"

and in May 2010 the Pentagon set up its new US Cyber Command (USCYBERCOM), headed by General Keith B. Alexander, the Director of the National Security Agency (NSA), to defend American military networks and attack other countries' systems.

In the US, Cyber Command was set up to protect the military, whereas, the government and corporate infrastructures are primarily the of responsibility respectively Department of Homeland Security and private companies.

Furthermore, to meet the threats and operational demands of cyber warfare, the US military is embracing new models and agendas for training its troops. The efforts range from mandatory cyber education for those in the lowest ranks to elite training for new, highly specialized careers in network defense. The transition is eased somewhat for a generation that is well-versed in the technologies of the Information Age.

Under the umbrella of the US Cyber Command, launched in May 2010, the Air Force, Army, Marine Corps and Navy have all made progress in preparing troops for cyber conflict. Collaboration among the services and with the private sector, each having their own training, is helping the military incorporate best practices and the latest tools into cyber training. Through those partnerships, the services are building on their collective knowledge and sharing classrooms – sometimes even while students are physically seated thousands of miles apart. The efforts are already paying off. The U.S. Naval Academy's class of 2013 had three times the number of computer science and IT majors that the class of 2011 did.¹⁸

China and the Cyber Security

China is perceived to have acquired both offensive and defensive cyber war capability systematically. It has tried over the years to

enhance its cyber warfare potential: created citizen hacker groups, engaged in extensive cyber espionage, including US computer software and hardware, taken various steps to define its own cyberspace, established cyber war military units and allegedly laced US infrastructure with logic bombs.¹⁹ China listed ten examples of weapons and techniques used in cyber space, both in offensive and defensive role. These are: planting information mines; conduct information reconnaissance; changing network data; releasing information bombs; dumping information garbage; disseminating propaganda; applying information deception; releasing clone information; organizing information defense and establishing network spy stations.²⁰ In this regard, Chinese government is believed to be involved in a string of penetrations in European and US networks, successfully copying and exporting huge volumes of data.

Securing Pakistan's Digital Frontiers

Pakistan's quest for modernization of communication systems, growing dependence on computer and computer assisted systems, both in military and civilian fields is likely to expose Pakistan to cyber threats. This may leave it vulnerable to hostile actions of Pakistan's adversary due to its advantage in computer literacy and software dominance. Therefore, it should identify the threat and vulnerabilities and suggest an appropriate response to counter this threat with possible options. Thus, Pakistan needs to formulate a national cyber security policy. In this regard, a set of seven-fold recommendations is proposed:

- Firstly, Pakistan does not have a national Information Security Policy based on common standards across the entire length and breadth of the country. The Government

needs to chalk out, in consultation with the corporate sector, Information Technology Division and military authorities, a comprehensive National Information Security Standards.

- Secondly, there is a need to introduce mandatory Information Technology literacy courses to all levels of civil and military personnel and to make Information Technology literacy a prerequisite for induction into a particular position of influence in both civil/ military domains. It should gradually lead towards creating cadres of experts in it in each department.
- Thirdly, a comprehensive legislation to combat cybercrime and terrorism needs to be brought into effect. Any future Information Technology policy needs refinement in a dynamic cyber environment and has to be bolstered with provisions for easy implementation across international borders.
- Fourthly, as we progress and use more sophisticated equipment, we become more vulnerable to cyber attacks; hence, it is important to create awareness in all ranks of civil and military leadership regarding Cyber Warfare. This can be done with a two-fold approach: first, awareness through issuance of relevant material and delivering lectures/seminars; and second, computer training to be imparted as special subject in all training institutes/colleges of instruction in the civil and military services. In addition to that, from time to time, refresher courses should also be conducted.
- Fifthly, all communication and computers relying set-ups must be shielded through cyber and net war security systems

as part of a comprehensive cyber security strategy. In addition to that, there is also a need to establish an Information Technology Security Task Force.

- Sixthly, there is a need to create Research and Development facilities to undertake research on the following areas:-
 - To understand the effects of computer viruses on the systems.
 - Design the counter measures to these viruses.
 - Develop hacking expertise for offensive and bring out the vulnerabilities to logic bombs and its counter measures.
- Seventhly, the government needs to offer certain incentives to private sector for both computer hard and software development and manufacturing. Priority should be accorded to the development of indigenous hacking expertise to target adversary's electronic and computer system.

Conclusion

To sum up, cyber world makes it easier to inflict damage with impunity and sometimes with altered identities. It goes without saying that the spectrum of future cyber warfare is going to be far more devastating than being conceived presently. The low cost of cyber activities has enlarged the field of potential targets and complicated efforts to provide protection to electronic assets. In foreseeable future, there would be hardly any activity, which would remain unaffected from the cyber phenomenon.

It is in this back drop, that it is visualized that a comprehensive developmental strategy has to be evolved at national and joint services levels, not only to effectively neutralize this growing threat in our defences , but also exploit the technological advantage in a

manner that same can be employed against our adversary in an offensive way. The best defense against those threats should be built into our every day practices. The government needs to strengthen people's understanding of cyber attacks and make cyber-space safer. But at the same time, officials and ordinary people alike also need to learn to live with the threats and learn to secure themselves. Decision-makers in the public and private sectors need to think strategically about how to organize cyber- defenses in government, business, and the military. Such coordination is the only way to secure today's internet- dependent societies.

End Notes

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Resurgence of Taliban in Afghanistan: Impacts on Pakistan

*(Maryam Mastoor)**

Abstract

Afghanistan has proved to be a conundrum for the world. Its history demonstrates that it has never accepted any foreign presence on its soil. Even today, in the post 9/11 context, world's best militaries are trying to find a way out from Afghanistan and a safe exit is urged. War on terror with all its grandeur has failed to achieve its objective; which was to bring an end to terrorism. Thirteen years have passed since the war against terror has started, and still there is no end to terror, and Taliban have become an uncontrollable monster that has cursed not only Afghanistan but Pakistan also. In this perplexing situation, it's imperative to pen down the factors that have played a role in Taliban's resurgence, the policy lines of United States under Bush and Obama administrations to tackle the menace of Taliban and eventually the impacts of Taliban resurgence on Pakistan. Re-emergence of Taliban has become a test for the United States. With all its technological advancements, deployment of best troops, implementation of strategies which were a success in Iraq, ways to impinge upon reconciliation, Taliban stand as a dilemma, unresolved.

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Resurgence of Taliban in Afghanistan: Impacts on Pakistan

Introduction

On the eve of re-election of Karzai in 2004, rockets and bombs dazzled the cities of Afghanistan. This shriek of Taliban re-emergence heightened tensions in Afghanistan and perturbed the US and the international community. Lack of a comprehensive strategy in Afghanistan during the reign of Bush administration led the Taliban to re-emerge. Despite a bulk of the US forces and coalition forces who were 30,000 and 50,000 respectively in 2006, the insurgency could not be controlled. In comparison, the number of Taliban fighters is small. The *Council of Foreign Relations* says that it is difficult to gauge the exact number of Taliban fighters. However, *Aljazeera*, while quoting a U.S. intelligence report, mentioned that in 2005, seven thousand Taliban fighters were fighting in Afghanistan.¹ According to *New York Times*, they were roughly ten thousand Taliban fighters in 2007 and a smaller faction of them is full time insurgent. However, they presume that the number of Taliban has increased in 2008.²

Insurgency in South and West of Afghanistan

Taliban insurgency has spread in Afghanistan like an epidemic, uncontrollable, painful and chronic. Almost three fourth of territory of Afghanistan is under the control of Taliban. The number of Taliban fighters is growing as much as the distrust and disgust for the foreign troops is aggravating in local Afghan population. A great strategist Sun Tzu propounded a significant war strategy of 'empathizing with the enemy' it does not mean to sympathize with his aims or feelings but to understand why he fights and how his world view influences the tactics and strategies, he will employ. ³

Bruce Hoffman, who is currently a fellow at the Wilson Centre and a professor in Security Studies at Georgetown University says that it must be understood that what radicalizes the people and what factors make them violent. In other words ‘the root causes’ must be targeted for understanding the problem. A more comprehensive approach is needed, says Hoffman that, ‘adjusts and adapts’ to changes on the ground that are much complex rather confusing to be ‘vanquished by mere decapitation’.⁴

There are various factors that led to a forceful resurgence of Taliban. The study will analyze those factors and will shed some light on the current situation in insurgency stricken South and West of Afghanistan. It will also discuss the counter insurgency strategies adopted by Bush and Obama administrations to knob the insurgency in Afghanistan, and eventually the impacts of insurgency on Pakistan.

Factors behind Resurgence

The history of Afghanistan clearly illustrates that the Afghanis have always been a very hard nation to deal with. Various foreign nations tried to use the land of Afghanistan for their own vested interests but they all met with serious consequences and eventually withdrew from this land of difficulty.⁵ The U.S. war against terrorism was initially fought with competence in Afghanistan. The US forces bombarded Afghanistan, dispersed Taliban and victory was declared in November 2001. Later on, this early announcement of victory proved to be wrong and Taliban fired back and this time by launching full spectrum of war. Various factors contributed in resurgence of Taliban, the most important was the ineffective government in Afghanistan, which failed to deliver to the local Afghan population.

➤ **Shaky Governance**

From 2006 onward a loose functioning Afghan government became more explicit with the growing insurgent attacks of Taliban. John D. Negroponte, Maples (former US Deputy Secretary of State) said on March 1, 2006 that attacks within Afghanistan were increased "almost fourfold".⁶

Amid growing insurgency, the Government is indulged in corruption and nepotism. Karl Eikenberry currently serving as the U.S. ambassador to Afghanistan called the Afghans government as 'extraordinarily weak'. Hamid Karzai's brother Ahmed Wali Khan was accused of having link with opium trade in Afghanistan. He is the chairman of provincial legislative in Kandahar. The recent Kandahar operation has been delayed as the local support could not be geared for the operation. Some analysts believe that Ahmed Wali Karzai, against whom no evidence could be found of his involvement in opium production, is said to have more influence in the province, which hinders careful execution of this operation.

The power politics played by the Afghan authorities and the lack of attention on part of the government on state affairs left more room for Taliban to fill in. According to Council of Foreign Relations till December 2008, the Taliban established control over 72 percent of Afghanistan.⁷ However, International Council of Security and Development (ICOS) has indicated that 80 percent of the Afghan land is under the Taliban control.

Barnet Rubin considers Ministry of Interior and Judiciary to be weakest parts of the government. He argues that Ministry of Interior patronizes opium trade as positions of Police Chief are 'sold' to the highest bidder.⁸ The governmental structure of Afghanistan is filled with corrupt officials, various analysts state the incompetence and

lack of decision making ability in President Karzai as a fundamental reason for this down turn. He is not favored by Americans any more.⁹

However, some analysts believe that the US interferes in Afghan Governmental affairs to serve their own vested interests. Caroline Wad Hams, a senior analyst says that the U.S. favours key local power brokers, and local militias who provide it with intelligence, security assistance, and aid project implementation and ‘ this circumvention weakens the Afghan government and fragments the political system without establishing any coherent, sustainable alternative’.¹⁰

➤ **Security Entrusted to Local Warlords**

In the beginning, the Bush administration heavily relied on warlords, who were disliked by local population, to bring about security in Afghanistan. This immoral support of Warlords became a bone of contention between the US and the European Union.¹¹ Hamid Karzai in an interview to *New York Times* said that he was more ‘worried about Afghan militia than he was about the Taliban’.¹² The warlords, who were once trusted as ‘regional leaders’, strengthened themselves with the economic and military support of the US., then, they started exerting their influence and declined to accept a central government. Francesc Vendrell, a former European Union envoy to Afghanistan, sees warlordism as a root of the insurgency. He asserts that ‘in Muslim society, justice is the most essential element, and here in Afghanistan, people simply don't see it exist. They see impunity, they see a few people become extremely wealthy, and they see cruelty.’ And he rejects the notion of fighting the war without addressing the problems of local population.¹³

On the contrary, in 2008, the U.S and NATO had sought to engage rural tribal leaders to curb the lawlessness. Recently, the Deputy Minister for Policy at the Independent Directorate of local Governance (IDLG), Barna Karimi, said that the only way to bring peace and stability in this country is to revive the traditional rule of people. But on the other hand Afghan parliamentarian Shiukria Barakzai told Reuters that there was inter-fighting and distrust among the tribal leaders, therefore, they cannot be trusted for maintaining security.¹⁴

Making the situation more complex, President Karzai has also become wary of American ambitions in Afghanistan. He criticized the US and the other countries for establishing a “parallel government” in Afghanistan, which operates on its own, without consulting the elected government of Afghanistan. The central government is skeptical of US ambitions, as the US supports warlords due to their stronghold in Afghanistan. The Afghan government also accepts the pertinence of warlords and is unable to function without warlords and the US support. Hence, there is no central authority in Afghanistan which also questions the compatibility of western implanted democratic system with its traditional making of tribal Afghanistan.

➤ **A Western Implanted Governing System**

The question arises whether the democracy implanted in Afghanistan addresses all needs of different groups in Afghanistan or not? A pashtun President, aiming to establish a strong central government, would be successful in a society where other ethnic groups like Tajiks and Uzbeks are militarily armed? Would such groups accept a central command? The answer is ‘no’.

The western model of democracy may not be compatible with the structure of Afghanistan, a tapestry of multi ethnic groups living on its territory. The democratic values cannot be established where identity is based on ethnic lines rather than the nationalist affiliations. Secondly, the low literacy rate, as less as 28 percent also impedes the strengthening of democratic values in Afghanistan.¹⁵

Democracy implanted by the western countries proved to be a fragile in Afghanistan. It could not correlate with the ground realities of Afghanistan where ethnicity structures the power system. Despite installing a central government, the provinces have their own governing systems, which eventually helped the Taliban to re-emerge. The U.S and the NATO could not understand the dynamics of the Afghan political culture.

➤ **NATO Exacerbating the Problem**

Ahmed Rashid attributes the working of NATO forces in Afghanistan as that of “scared rabbits”, who were more concerned about their caveats than the task of maintaining peace in Afghanistan.¹⁶ They heavily depend on the air raids which eventually led to unavoidable collateral damage. According to Associated Press count, based on reports from U.S., NATO and Afghan officials, at least 2,800 people had been killed nationwide in 2006.¹⁷

Taliban attacks on NATO forces were mounted in 2006. British Army commanders said that the fighting in the south was the toughest the British Army had faced since the Korean War in the 1950s. There were only two suicide operations in all of Afghanistan in 2002 but in 2006 one occurred every five days of the week.¹⁸

In June 2007, 90 civilians were killed in attacks by the coalition forces.¹⁹ According to a report of Congress Research Service, the

Taliban attacks using improvised explosive devices (IEDs) on international forces have tremendously increased from 1,920 in 2006 to 7000 in 2009.²⁰ IEDs only cost about Rs 150 and is able to blow up military vehicles costing millions of dollars.²¹ The growing number of casualties and growing unrest in Afghanistan and the region led to eventual decline in local support for the US operation against the militants.

➤ **Decline in Local Support**

The Bush administration's attitude towards war prisoners was also a determinant factor in Taliban insurgency. Critics argue that Bush's detention policy arose from a mixture of 'political and legal incompetence, strategic ignorance and moral laxity'.²² Sibylle Scheipers, Director of Studies at Oxford Leverhulme programme on *Changing Character of War* writes that Afghan prisons are notoriously over crowded, which result in prison break.²³ Secondly, the house searches by US forces, the torture and the disgusted behavior towards the accused creates resentment and develops a fatal feeling of revenge in local Afghans.²⁴ The house searches conducted by NATO to search for Taliban in a highly conservative society of Afghanistan is also reducing the local support for the NATO's operation in Afghanistan. Putting down a guerrilla movement in any country without winning the support of its local population is near impossible.

➤ **Huge Collateral Damage**

Owing to lack of sympathy for Afghans, the Alliance heavily relies on air raids to combat the enemy which eventually results in unavoidable collateral damage. According to a report prepared by UNAMA presented in January 2010, at least 5978

civilians were killed in 2009.²⁵ Karzai's utmost rage over the collateral damage was seen when he said that he wish to "bring down US planes bombing villages, if he could."²⁶ Recently, he has shown distrust over the capability of the US and the international community for winning the war against Taliban.

➤ **Limited Reconstruction**

The US never intended to undertake reconstruction of Afghanistan; therefore, no significant structural development was seen in Afghanistan. The executive, judiciary and legislature all three pillars of governance are weak and unstable. Lawlessness has made the government of Afghanistan a 'dead organ'. When the local Afghans are confronted with any problem, they are unable to plead anywhere for justice.²⁷ Reconstruction in terms of infrastructure is also seen at a slow pace. Over the years even the construction of roads has been reduced. From 11373 roads in 2006-07 only 1686 were built in 2008-09.²⁸ Education and health sectors are also under developed. Insecurity propelled by resentment of Taliban against presence of foreign nations on their territory is resisting every step taken for reconstruction of Afghanistan.

➤ **Resistance to Foreign Influence or Control**

U.S Deputy Secretary of Defense Paul Wolfowitz said in November 2001 that "one of the lessons of Afghanistan's history, which we have tried to apply in this campaign, is if you're a foreigner, try not to go in. if you go in, don't stay too long, because they don't tend to like any foreigners who stay too long".²⁹ Adam Roberts seconds this opinion and for endorsing this point of view quotes David Loyn, a BBC correspondent, who charges that the international community has failed to

understand the magnitude of resistance the Afghans could show to a structure which looks like a foreign control.³⁰ Afghans present a peculiar kind of people who hardly change. “The turbulent and independent spirit of these tribal peoples is one of the great constants of Afghanistan’s history. They have changed little, despite the many invasions, since the time of Alexander”.³¹

- **Taliban – a Resistant Group of Transnational Character**
- Afghans have always shown resistance to the foreign occupation. They adhere to their ethnic identity rather than any other identity. Taliban have originated from the chaotic soils of Afghanistan, where it takes ages for ‘change’ to take place. They are a group of strong willed people, most of whom are product of indoctrination provided by ‘some’ politically motivated minds who played on their religious sentiments. During the Soviet invasion in Afghanistan their resilient nature had been directed towards fight against foreigners. Karen Armstrong says that fundamentalism is a product of the “fear” most of the Muslims have that the domination of western values would endanger their religion.³² This sentiment was ‘fueled’ in 1980’s against the Soviet invasion, which now has become a threat to the regional security. On the other hand, Ahmed Rashid defines Taliban as ‘lumpen population, the product of refugee camps, militarized madressas’, who were unable to get any opportunity for their livelihood in the borderland of Pakistan and Afghanistan and they eventually joined ‘Jihad’.³³ He further illustrates their transnational character, by arguing that they are neither sincere to Pakistan nor to Afghanistan, but originate from both these countries.³⁴ Therefore, when reconstruction was conducted on a disappointing pace, these unemployed, demoralized and rootless

people gathered under the umbrella of the so called religious brand of Taliban. Joining Taliban provided them a lot employment and a significant reason of saving the “religion” for their survival. Ahmed Rashid may be right in his approach yet this fact cannot be negated that Afghans preferred to join Taliban rather than ANSF. Their number is growing and so is the sphere of their influence in the region.

➤ **Unchecked Ethnic Support from Neighbouring Areas**

Taliban were also supported by the neighboring areas of Afghanistan, especially by Pakistan. The frontier character of Afghanistan has also contributed in escalating insurgency.³⁵ Various Scholars blame Pakistan’s military for supporting Taliban who operated from centers in Quetta and Mohmand, Bajour and Waziristan agencies of FATA. Bush administration was increasingly blamed for not pressurizing Pakistan in the beginning of insurgency.³⁶ On the other hand, Pakistan raises two issues, *first* it calls for recognition of Durand line which is not accepted by Afghanistan, to cordon off the area through fencing and patrolling, *second*, Pakistan is highly concerned about growing influence of India in Afghanistan, which is the second largest donor after the U.S. in Afghanistan. Some analysts believe that Pakistan is using Taliban as their ‘strategic asset’ to ensure its security in the region. The recent report presented by *London School of Economics* mentioning close linkages of Pakistan’s Inter-Services Intelligence Agency (ISI) and Taliban can be seen in this context. However, the writer of this report, Matt Waldman declines to take responsibility for accuracy of this report.³⁷ In fact, Pakistan is also a victim of numerous terrorist attacks, it shall be discussed in the later part

of the paper.

➤ **U.S. Attention Diverted off to Iraq**

Another important factor that contributed in insurgency was a diversion of Bush administration's focus to Iraq. Various analysts believe it to be an unnecessary venture.³⁸ More troops were deployed and more money (almost seven times to that spent in Afghanistan) was spent in Iraq.³⁹ President Obama has also expressed his dislike for the war in Iraq, which according to him is a burden on the U.S. economy.

➤ **Unbridled Opium Production**

Secretary of State Hillary Rodham Clinton said Karzai presided over a "narco-state."⁴⁰ Since the Bush administration toppled the Taliban regime, opium production in Afghanistan has increased from 185 tons in 2001 to 3,700 tons in 2002 — an increase of twentyfold.⁴¹

Of Afghanistan's 29 provinces, 10 grow poppy. Of these the richest are Helmand in the south, still under Taliban control, and Nangrahar in the east, which has fallen to local warlords. With massive riches gained from opium, the province is experiencing fierce factional fighting.⁴² It is also believed that Bush administration was lenient over the drug lords as they provided them with the information about Taliban and Osama Bin Laden. Impunity for drug lords was also noted in US Senate report in August 2009.⁴³ The Bush administration sent one expert to Kabul to assess the 'drug problem', he admitted in an interview in early 2004 that "the only sensible way out is to legalize drugs." But this notion was rejected by the administration.⁴⁴

➤ **International Community Losing the Spirit to Win**

The American public has become skeptical of this war in

Afghanistan; the growing number of casualties of American troops is decreasing the level of public support for this war. The Americans will not tolerate an indefinite military occupation in Afghanistan that continues to strain their armed forces and financial coffers in the midst of their own economic crisis.⁴⁵

All factors described above still linger on and the Obama administration is confronted with the worst form of insurgency in Afghanistan. Various counter insurgency (COIN) strategies were implied by Bush administration in Iraq and Afghanistan. Many of which are replicated by Obama administration, however, the scale of these strategies has been widened.

Impacts on Pakistan

‘Tehrik e Taliban Pakistan (TTP) is an offshoot of Afghan Taliban’, is not a verified statement. Some scholars are of the view that they are related to Afghan Taliban, as they wish to fight and ‘defeat’ Pakistan’s security forces owing to their support for the United State’s war on terrorism launched in Afghanistan.⁴⁶ Some say that they are a group of disgruntled, unemployed youngsters, who find it fascinating and meaningful, to fight the supporters of ‘kufar’ (disbelievers).⁴⁷ Both the theories carry weight. Pakistan has lost about 50,000 lives of citizens and security forces since 2001. According to National Internal Security Policy (NISP) document, from 2001 to 2013, there were 13,721 peace threatening incidents in Pakistan. The number of suicide bombings between 2001 and 2007 stood at 15 only, but from 2007 to November 2013, suicide attacks jumped to 358 – the highest anywhere in the world.⁴⁸

In fact, Tehrik e Taliban (TTP) Pakistan has posed serious threat to Pakistan. It has challenged the constitution of Pakistan by demanding Sharia law implementation in courts. It is trying to

impose its world view on the state of Pakistan by coercive measures. There are four major impacts on Pakistan of this uncontrollable terrorism i.e. on political atmosphere, society, security and economy.

Impact on Politics

Elections 2008 were marred by the threat of terrorism. Pakistan Peoples Party and Mutahida Qaumi Movement alleged Tehrik e Taliban Pakistan for intimidating them and targeting them during their election campaigns. Baitullah Mehsud, a Taliban leader was accused of murder of Benazir Bhutto, ex-prime minister of Pakistan. Pakistan Peoples Party still considers TTP as the biggest threat to their survival in Pakistan. Bilawal's various statements against the TTP can be considered in this context. Table below shows attacks waged by TTP against politicians and polling stations of Pakistan during elections of 2013.

Table 1
Attacks on Politicians, Polling Stations by TTP (January 1- May 15, 2013)

Province/ Region	No. of Attacks	Killed	Injured	Targeted Political Parties
FATA	12	33	133	ANP, JI, JUI-F, independent candidates
Khyber Pakhtunkhwa	50	55	222	ANP, JUI-S, JUI-F, PPP, QWP, PTI, AJIP, JI, Independent
Baluchistan	14	2	---	---
Sindh	4	---	---	---
Punjab	1	1	1	---

Source: Elections 2013: Violence against Political Parties, Candidates and Voters, a report by Pakistan Institute of Peace Studies, May, 2013

Other than fighting Pakistan's security forces, they wish to implement Sharia law in Pakistani courts. Recent initiative taken by the Government of Pakistan to initiate talks with the TTP also appears to aggravate dismay in the society. The talks might serve as a way to buy time before the withdrawal of NATO forces from Afghanistan. The most likely post-withdrawal scenario is civil war in Afghanistan, amongst the Northern Alliance and the Taliban. Such scenario might provide high time for all Taliban forces in Pakistan and Afghanistan to maximize their share in politics.

Impact on Society and Security Apparatus

Owing to threats of terrorist attacks, people in Pakistan are highly affected. In cities many areas have been cordoned off, because of ever emanating threats of terrorism. Secondly, citizens have to face time consuming security checks. Often citizens have to tolerate harsh comments from security personnel during security clearance procedures, as each citizen is looked at with suspicion. An aggravating sense of insecurity in Pakistanis has amounted to mental illness mostly in urban areas of the country. Insecurity coupled with lack of opportunities to ensure peaceful and prosperous living has resulted in the making of an intolerant and restless society of Pakistan. Consequently, Pakistanis have become prone to various psychological problems. Dr Amin A Gadith, Professor of Psychiatry at Memorial University of New Foundland, Canada, said that the incidents of violence and terrorism and their effects on society of Pakistan were taking its toll on the mental health of the nation as a whole. There is also an upsurge of physical illnesses in Pakistan because of the stress related diseases that affect different body systems especially the cardiac system. ⁴⁹

Table 2
Suicidal Attacks in Pakistan (2007-2013)

Years	No of Attacks	Killed		Total
		Security Forces	Civilians	
2013	46			
2012	13	11	75	86
2011	45	199	477	676
2010	68	156	1049	1187
2009	87	249	1056	1305
2008	63	195	772	967
2007	60	174	596	770

Source: Pakistan Institute of Peace Studies, (PIPS)⁵⁰

Economic Losses

Terrorism is proving to be a glaring reason of total loss to economy in the last ten years, estimated at \$78 billion.⁵¹ The investment rate has declined. The GDP growth rate is on a decline since 2007. Foreign Direct Investments have fallen to base. The economy of Pakistan is in shambles. A state functions on the basis of economy. Therefore, there is a dire need to improve security situation of the country to boost economic growth in Pakistan.

Table 3
GDP Growth Rate in Pakistan (2004-2011)

Year	GDP \$ Billion	Growth Rate %
2011	217	3.7
2010	176.8696	4.14

2009	161.819	3.6
2008	163.8917	1.6
2007	143.1712	5.68
2006	127.5	6.18
2005	109.6	7.67
2004	97.9778	7.37

Sources: World Bank .

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(Rs. 20.45 Trillion converted to 217 Billion USD, according to American system

Concluding Remarks

Taliban have menaced Afghanistan and they are now using tactics of intimidation and terror to get a power share in Pakistan also. Reasons of Taliban emergence are evident, now the question is how this resurgence can be curtailed. If Pakistan wishes to clear the menace of terrorism from its territory, it must secure its porous border of Afghanistan to bring halt to infiltration. There might be a thorough registration of individuals, who enters the territory of Pakistan. It will help in separating the black sheep. A full scale effort, encompassing rehabilitation for IDPs, strict implementation of state laws on miscreants, curtailing transnational movement, and introduction of developmental projects in FATA including rewards for those who abandon Taliban, is needed. It is a long-term and demanding effort but it's the only possible solution of getting rid of this militant ideology, espoused by Tehrik-e-Taliban. Otherwise, it

will eat the roots of nation state and eventually threaten the sovereignty of Pakistan.

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Philosophy and Social Science Research

*(Ehsan Mehmood Khan)**

Abstract

Philosophy literally means love for wisdom and has been taxonomically presented somewhat correspondingly by various philosophers. For centuries, it has acted as a mother discipline, which allowed interactivity and interplay between various sciences. It serves as a vehicle for creation of knowledge, discovery of truth and evolvement of wisdom. Alongside natural sciences, philosophy also plays an important role in the social science research. It is of paramount importance for the research scholars to understand philosophy and its role in the research process. They need to be acquainted with philosophical reasoning, logic, dialectic, discourse, and methods of argumentation and analysis. This would work well towards making of an apt methodology, and finding the truth apropos social phenomena through social science research.

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Philosophy and Social Science Research

Introduction

Knowledge and wisdom have reached the 21st Century human societies through various processes, which continued to evolve over time. This, in turn, multiplied the human knowledge in a manner that today we have encyclopedias, almanacs, manuals and reference books to define, describe and classify various disciplines of science and knowledge. Philosophy, all through, acted as a mother discipline which allowed interactivity and interplay between various sciences. It is of the essence to note that philosophy serves as a field (and its fertilizer) over which the crop of knowledge is cultivated and fruit of wisdom produced. Thus, philosophy works to augment human knowledge through its foundational role in all hitherto known branches of knowledge, and eventually works to bolster human acumen and wisdom. If it does not, it is not philosophy.

Alongside natural sciences, philosophy also plays an important role in the social science research. A well evolved philosophical paradigm is expected to help craft a winning and workable research methodology. It is of paramount importance for the research scholars to understand philosophy, its interaction with the social science at various levels and its interplay with research and, thus, knowledge. This paper is a modest effort towards the same purpose.

Contextualizing Philosophy

When we discuss philosophy as of today, we indeed refer to science and the scientific process that had developed in the ancient Greece around 500 to 300 years BC. The Greek philosophers contributed a great deal of knowledge towards evolution and progression of philosophical thought. Inter alia, these included

Xenophanes, Pythagoras and Heraclitus in the pre-Socratic era and Socrates, Plato and Aristotle in the Socratic era. All of them have contributed in their own way to the study of philosophy. Their contribution, for instance, that of Plato can be gauged from Bertrand Russell's conviction who once said that all of philosophy was but a footnote to the work of Plato.¹ In response, Mark Robert Polelle contended: "It might be more accurate to say that Plato's own philosophy is itself a footnote to the work and life of Socrates, the mentor of Plato."² Irrespective of the fact that all these are conjectural tributes to the great philosophers of the Greek era, the impact of their work can be determined from the fact that it is alive and relevant in today's postmodern era.

The word philosophy literally means "love for wisdom."³ Etymologically speaking, philosophy comes from a Greek word *philosophia*: *philia* (the love) and *sophia* (the wisdom).⁴ In various traditions and languages, philosophy is understood as follows: (1) *Darshana* in Sanskrit means "sight, vision or philosophical system."

It has the dual meaning of 'seeing or being seen' and 'reflecting', which can refer to self-reflection and mirroring. It also means 'vision of reality';⁵(2) *Je Shwe* in Chinese means 'wise study'; (3) *Tetsugaku* in Japanese, means 'philosophy' or 'science of seeking wisdom';⁶ (4) *Hikmah* in Arabic literally means wisdom,⁷ and is part of Islamic philosophy including the Divine commandment i.e. the Holy Quran. Philosophy is also referred to as *Hikmah* and *Falsafa*;⁸ (5) and *Hikmat* in Urdu is synonymous to *Hikmah* in Arabic and indeed has the same etymology. *Ilm-o-hikmat* in Urdu and Persian has the same connotation and debate as is for 'knowledge and wisdom' in Arabic and English.

Philosophy has evolved into a host of phrases, expressions and meanings. It is often taken as a notion, concept, theory, and even a strategy or plan of action. We repeatedly hear phrases like “I have a philosophy,” “my philosophy is to approach this subject in ABC manner”, “my philosophy is to speak the truth under all circumstances”, and so on. We cannot reject such expressions to be “incorrect” for not conveying the exact meanings of philosophy, as a science or study. In one way or the other, all these are true. Such phrases show philosophical approach, method, technique or approach towards an issue or a subject matter.

According to a senior psychologist, Mr. Kamran Saadat, who was interviewed by the writer, “Philosophy is science of the whole-part relationship ... it may also be termed as a science of human survival or existence in face of threat from the fellow human beings or other organisms in the universe.”⁹ For sure, all disciplines of science revolve around human life or at least interact with the human affairs in a number of ways. As for his concept on the philosophy to be a science of the whole-part relationship, it is similar to that of Albert Einstein, whereby, he says:

“A human being is a part of the whole, called by us “Universe”, a part limited in time and space. He experiences himself, his thoughts and feelings as something separated from the rest, a kind of optical delusion of his consciousness. This delusion is a kind of prison for us, restricting us to our personal desires and affection for a few persons nearest to us.”¹⁰

To understand philosophy, the related sciences and pertinent concepts, it is imperative to glance over the basic definitions of belief and knowledge. Various philosophers and epistemologists

have taken the subject and presented these concepts in different ways, words and expressions. Douglas J. Soccio, an accomplished philosopher, defines these as follows: ‘Belief’ refers to the ‘subjective mental acceptance’ that a claim is true. ‘Knowledge’ is ‘justified true belief’ – JTB (agreed by most philosophers). ‘Theoretical knowledge’ involves the accurate compilation and assessment of factual and systematic information and relationships. ‘Practical knowledge’ consists of skills needed to do things like playing the piano, using a band saw, removing a tumor, or baking a cake.¹¹

Is philosophy Knowledge or Wisdom?

The definitional etymology notwithstanding, philosophy *per se* is understood differently by different philosophers. For instance, Douglas Soccio maintains that *Philosophy* in the archetypal sense is an activity as well as a fixed body of knowledge.¹² Contrarily, Will Durant strongly views that “Epistemology has kidnapped modern philosophy, and well nigh ruined it.”¹³ He goes on to say that “Analysis belongs to science, and gives us knowledge; philosophy must provide a synthesis for wisdom.”¹⁴ Ostensibly, this creates a sort of conceptual confusion the very basic question as to what philosophy is. At any rate, most of philosophical traditions and approaches consider it to be a science of wisdom, whereas, the knowledge is the part of the process. Thus, while we cannot subscribe either of the two propositions i.e. by Douglas Soccio and Will Durant, the ultimate outcome of philosophy is wisdom.

Knowledge

‘What is knowledge’ is the basic and one of the most important questions of epistemology, which is the cornerstone of philosophy. Over 2,000 years ago, Plato grappled with this question in his dialogue entitled *Theaetetus*. He looked for a definition of

knowledge but could not find one, and eventually the dialogue ended inconclusively.¹⁵ Philosophy spent the last 200 years defining all kinds of approaches towards knowledge about the world and its application in life. As a result, knowledge, instead of wisdom, is at the centre of academic inquiry.¹⁶

Knowledge, as popularly known today, is a ‘justified true belief (JTB)’. However, there is unending discussion on what a belief is, what and what not is a justification, and what is truth.¹⁷ We may not actually ‘know’ something that we claim to ‘know’. We may not have actually ‘seen’ something that we ‘saw’. These are purely epistemological questions, and are not the focus of this paper. We would reflect on this question at the meta-epistemological level. To this end, Socrates is quoted to have said, “I know that I know nothing,” albeit, his maxim has generated debate being self-contradictory for some.¹⁸ Baba Bulleh Shah, a Muslim saint, philosopher, humanist and poet (1680–1757) is quoted to have said, “I know not who I am.”¹⁹ The French mathematician and philosopher René Descartes (1596-1650) is cited to have said, “I think, therefore I am.”²⁰

There is a long winded debate on what is thinking; why and why not should it point to one’s existence. However, in the realm of knowledge of the self, Descartes has made an important philosophical contribution. Knowledge of ‘self’ engenders foremost truth-seeking questions that one needs to consider. A few to cite are as follows: who am I; why am I; what do I believe; why do I believe; what all do I want to do; why do I want to do that; what all do I need to know to do that; do I know; what do I know; and how do I know that I know?

In Qur'ānic terms, knowledge and wisdom are Divine attributes and blessings. Human beings are bestowed with these characteristics by Allah (SWT). To quote from the Holy Qur'ān, the angels prayed: "Glory be to You, we have no knowledge except what You have taught us. Verily, it is You, the All-Knowing, the All-Wise."²¹ Indeed, human knowledge continues to bolster, yet remains unrealized given the breadth of the universe.

Human knowledge is attaining newer heights with each tick-of-the-clock. For instance: Physics found an atom in the universe, a universe in the atom and eventually a god particle. Biology has reached the point of cloning. Physiology has discovered inexhaustible organs in every organ. Psychology has found mystery in every dream. Anthropology has constructed and reconstructed the antiquity of man. Archeology has dug out buried cities and forgotten states. History has traced back the chronicles of millions of years.²² But this all pertains to knowledge in physical term. A social scientist needs to know the interaction and interface of philosophy with various social phenomena, and how it contributes to knowledge.

To understand the philosophical process and consequently its interaction with social science research, there is a need to know interaction and interface of philosophy with other sciences. One also needs to know the extent to which one must know. To this end, Nicolaus Copernicus, a Polish astronomer (1473 – 1543), is quoted to have said, "To know that we know, what we know, and to know that we do not know, what we do not know, is true knowledge."²³ Confucius simplified the issue by saying, "Real knowledge is to know the extent of one's ignorance."²⁴

Wisdom

Wisdom, which is the end product of philosophy, is yet another aspect to understand keeping forth various perspectives. To Charles Haddon Spurgeon, a Christian priest, “Wisdom is the right use of knowledge.”²⁵ This denotes that knowledge and wisdom have a direct and somewhat linear linkage. To be wise, a person needs to obtain knowledge and be able to apply it fittingly to a given situation. Albert Einstein asserts that “Wisdom is not a product of schooling but of the life long attempt to acquire it.”²⁶ However, this does not spurn the knowledge-wisdom interface. It only points to the approach of seeking knowledge. It is an apt observation by Einstein that knowledge is neither a formal effort in entirety nor a product of books and schooling alone. Lifetime experience, encounters, incidents and occurrences play a vital role in adding to a person’s knowledge; both theoretical and practical. Positive psychology defines wisdom as the coordination of “knowledge and experience” and “its deliberate use to improve well being.”²⁷ Correct application of knowledge in different kinds of situation is wisdom. This denotes that an otherwise knowledgeable person may or may not be wise. Knowledge and wisdom may not be necessarily found together, not as a rule though.

The Qur’ānic Concept of Wisdom. Wisdom is God gifted. According to a Qur’ānic command, “He [Allah] gives wisdom to whom He wills, and whoever is given wisdom is certainly given a lot of good. Only the people of understanding observe the advice.”²⁸ The Holy Qur’ān calls itself “the Book and the Wisdom,” “the Book of Wisdom” and “the Message that is full of wisdom.” At a number of places in the Holy Qur’ān, one finds the expressions such as “O people of wisdom.” This means that some people are wiser than the

others. The words 'knowledge and wisdom' have appeared in the Holy Qur'ān a number of times. It has also been commanded to learn. The first revelation of the Holy Qur'ān was *iqra* meaning *read*. It has also been decreed that wisdom can be learnt.

Biblical Concept of Wisdom. According to one of the sources, the word wisdom is mentioned 222 times in the Hebrew Bible. In biblical concept, it was regarded as one of the highest virtues among the Israelites along with kindness and justice. Both the books of Proverbs and Psalms urge readers to obtain and to increase in wisdom. Some of the roles that the Hebrew Bible ascribes to wisdom are as follows: building and establishing civilization; elevating life; safety and avoiding misery; and giving of patience and glory.²⁹ It also mentions that wisdom is the primal architect of creation that existed with God before the universe was formed.³⁰ Thus, it points to wisdom as a Divine attribute i.e. similar to the Qur'ānic concept.

The Confucian Concept of Wisdom. Confucius stated that wisdom could be learned by three methods: reflection (the noblest), imitation (the easiest), and experience (the bitterest).³¹ This means that wisdom can be learnt methodologically with reflection, imitation and experience being the key threads. Reflection and imitation can be done. Experience is, however, incidental. It is subject to the life process. Confucius is also quoted to have said, "Love for learning is love for wisdom."³² As a matter of fact, Confucius clarifies an important point that whether philosophy means 'love for knowledge or love for wisdom' as contended and understood differently by different philosophers and epistemologists, he equates both. Thus, even though philosophy is

largely known as 'love for wisdom', it is not wholly wrong if someone calls it love for learning or love for knowledge.

The Buddhist Concept of Wisdom. The Buddha taught that a wise person is endowed with good bodily conduct, good verbal conduct and good mental conduct.³³ This is a different and very important angle, indeed. It means that knowledge must be applied in the best interest of humanity. One's conduct, may it be in terms of thought, expression or action, demonstrates the magnitude of one's wisdom.

The Hinduism's Concept of Wisdom. Wisdom in Hinduism is considered a state of mind and soul where a person achieves liberation or salvation. Hindus believe in a separate god of intellect or wisdom, Lord Ganesha, and of learning and knowledge, goddess Saraswati.³⁴ This shows that learning, knowledge and wisdom are important parts of Hinduism's theological philosophy.

The Taoist Concept of Wisdom. In Taoism, wisdom is construed as adherence to the three treasures (also called three jewels) to include charity, simplicity and humility.³⁵ Thus, the Taoist concept is virtually akin to the Buddhist concept in that it stresses on virtues and values. The people with higher character and superior personality attributes are wiser than others. We can also consider that the theological philosophy falls in the ambit of ethics with the taxonomy of philosophy.

Discussion in the preceding paragraphs corroborates that philosophy leads to knowledge-turned-wisdom. Will Durant notes: "Science gives us knowledge, but only philosophy can give us wisdom."³⁶ In reality, philosophy steers various sciences to create or discover knowledge. Herbert Spencer notes: "Philosophy is concerned with everything as a universal science."³⁷

Knowledge can be obtained and wisdom, too, can be learnt. Wisdom is synthetic application of knowledge attained through various processes. Wisdom is the ultimate goal of philosophy. The significance of knowledge notwithstanding, if the process does not lead to wisdom, it is not philosophy. It is also of note that knowledge does not always bring about wisdom. To this end, Baba Bulleh Shah, a Muslim philosopher, saint and humanist said, “The mean-spirited people cannot become wise by seeking knowledge. Brass cannot turn into gold even if fixed with gems.”³⁸ Each reader should evaluate own education, and thus knowledge up to this point in life, and examine as to how and in what way it supported or thwarted the love for wisdom.

The Taxonomic Construct of Philosophy

The question as to what is philosophy has been responded by various scholars and philosophers differently. However, the choice of words and terms apart, the nucleus of discussion and conclusions have remained virtually the same. Will Durant noted in 1926: “Philosophy means and includes five fields of study and discourse: logic, aesthetics, ethics, politics, and metaphysics.”³⁹ According to Y.K. Singh and Ruchika Nath the philosophical field includes epistemology, logic, philosophy of science, semantics, metaphysics, axiology, philosophy of religion, social philosophy, political philosophy, philosophy of history, philosophy of education, etc.⁴⁰ In the words of Roy Wood Sellars, “Our subject [philosophy] is a collection of sciences, such as theory of knowledge, logic, cosmology, ethics and aesthetics, as well as unified survey.”⁴¹ Douglas J. Soccio maintains that “philosophy consists of the systematic, comprehensive study of certain questions that center on meaning, interpretation, evaluation, and logical or rational

consistency.”⁴² Based on this view, he considers the primary areas (branches) of philosophy to be as follows: metaphysics, epistemology, ethics, social and political philosophy, logic, axiology, aesthetics, and ontology.⁴³ This vividly shows that, whereas, different philosophers have ostensibly presented a different construct of philosophy, in fact, all of them have the same argument on the issue.

Philosophy orbits around three basic questions: What is what i.e. reality; what is good i.e. value; and what do we know / what is true i.e. knowledge / truth. Eventually, this leads to wisdom. Metaphysics, axiology and epistemology, explained herein briefly, deal with these three questions.

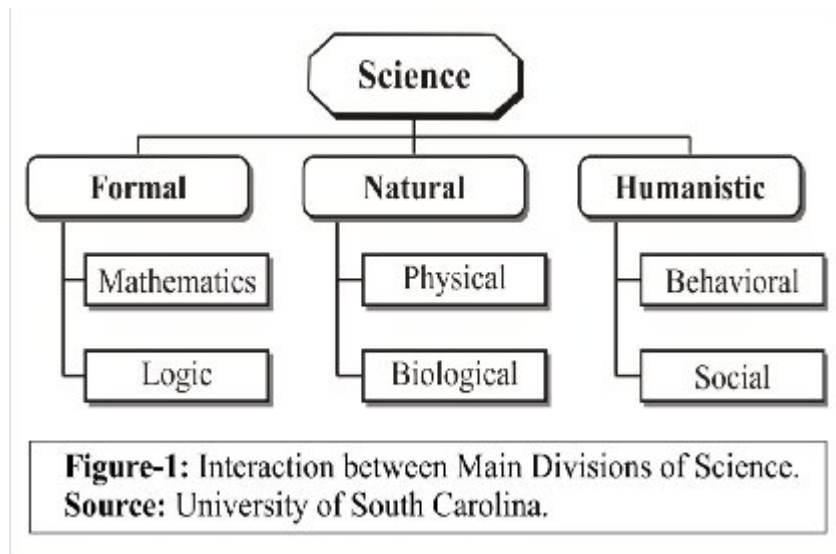
Metaphysics: Metaphusika, meta i.e. above, beyond, after and *phusika* i.e. the scientific study of the world (*phusis* i.e. nature). Metaphysics is the “branch of philosophy investigating what is real.”⁴⁴ The taxonomy of Metaphysics includes Ontology which deals with “the study of being,”⁴⁵ Philosophical Cosmology (the *cosmos*, the universe), Philosophical Anthropology (human nature and existence – *anthropos*) and Philosophical Theology (God and the gods – *Theos & theoi*).

Axiology: Axiologia, axios, axion i.e. value and *logia* i.e. the study, theory or science of something. Axiology is the “branch of philosophy dealing with the study of values.”⁴⁶ Its taxonomy includes: Moral Philosophy (ethics, goodness); Philosophy of Arts (aesthetics, beauty); and Social and Political Philosophy (security, justice, liberty, equality).

Epistemology: Epistemologia, episteme i.e. knowledge and *logia* the study, theory or science of something. Epistemology is the “branch of philosophy dealing with the study of knowledge, what it

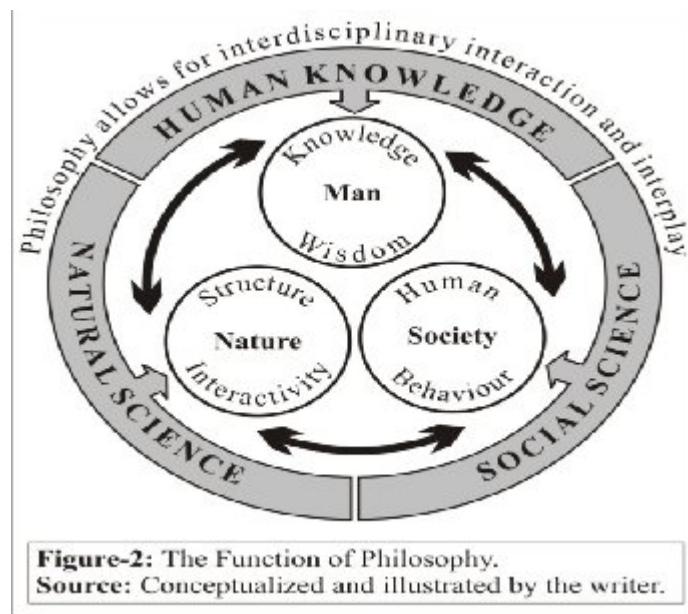
is and how we acquire it.”⁴⁷ Put simply, epistemology is theory of knowledge. It deals with what and what not is knowledge. *Inter alia*, it encompasses knowledge as justified true belief (JTB), epistemic evidence, epistemic justification, foundationalism, coherentism, reliabilism, the Gettier problem, internalism, externalism, scepticism, epistemic circularity, the problem of the criterion, *a priori* knowledge, virtue epistemology and naturalized epistemology.⁴⁸ Epistemology does not have a taxonomic make-up like Metaphysics or Axiology. However, there are trends, tendencies, traditions and schools of thought, which represent opinions as well as eras and epochs in epistemic timeline. A few to cite are essentialism, perennialism, progressivism, empiricism, feminism, materialism, structuralism, unilateralism, realism, idealism, rationalism, positivism, post-positivism, instrumentalism, functionalism, constructivism, modernism and post-modernism.

Philosophy, Social Science Research: Interactive Models



Philosophy interacts with the natural and social sciences at various levels. A number of models can be found that explain this interaction and interface. University of South Carolina's model (Figure-1)⁴⁹ calls philosophy the Formal Science and shows it as one of the main divisions of science having Logic and Mathematics as the main branches. The other two divisions are Natural Science to include physical and biological sciences, and Humanistic Science to include behavioural and social science. Thus, humanistic or social sciences are key fractions of science that interact with the philosophy. However, this model does not illustrate the interplay clearly.

Man remains in search of knowledge and wisdom. Whereas the number of disciplines and branches of learning are increasing



steadily, the main divisions of science or knowledge have finally abridged to two: natural and social sciences. Natural sciences deal

with the structural and physical make-up of the universe besides interactivity of various structures, beings, creatures and edifices. Social sciences deal with human behaviour, both collective and individual. Philosophy steers the scientific processes, and allows for interdisciplinary interaction and interplay. This may be called the function of philosophy, which is neither linear nor tiered. It facilitates scientific interface at all levels and steps. Figure-2 illustrates.⁵⁰

University of Virginia's Model (Figure-3)⁵¹ exemplifies hierarchy of science. It is one of the best models that show scientific interactivity. Being hierarchical, it is linear and tiered, yet wholly interactive, and provides for intra-science and inter-science linkages. This model classifies science into five branches: formal, physical, life, social and earth & space sciences. Formal science includes Logic (reasoning, philosophy) and mathematics (which also includes computer science besides statistics). In the hierarchy of science, philosophy has been placed at the root of all other sciences somewhat like a source that fuels, energizes, encourages, steers or facilitates other scientific processes. The scale of the universe (which is certainly an approximation) shows the estimated diameter of various entities e.g. particle, atom, cell, human (which is the metric unit indeed), Earth, Solar System, Milky Way, and the visible universe. It also shows relationship and connection of these entities with a given branch of science but not with the formal science, which itself provides for a hierarchical connection with all other sciences. Social science, which can be seen as tier-4, interacts with all other sciences including philosophy. It also interacts with social, political and moral philosophy both in theoretical and applied forms. Thus, social science research has a solid connection

with philosophy as well as other branches of science. However, this relationship can be seen in lucid and practicable terms only in a specific case and at a given level. For instance, a particular facet of human behaviour (social science) may be researched applying the process of logic (philosophy) but it may also have a linkage with the genetics, which fall in the realm of biology.

The Purpose and Process of Research

All research is aimed at knowing two things: how the world is, and how best it can be. However, each person has a different perspective on a matter. In the words of a professor of research philosophy, “we are living in a multi-perspective world.”⁵² As a matter of fact as a picture gives a different look from different

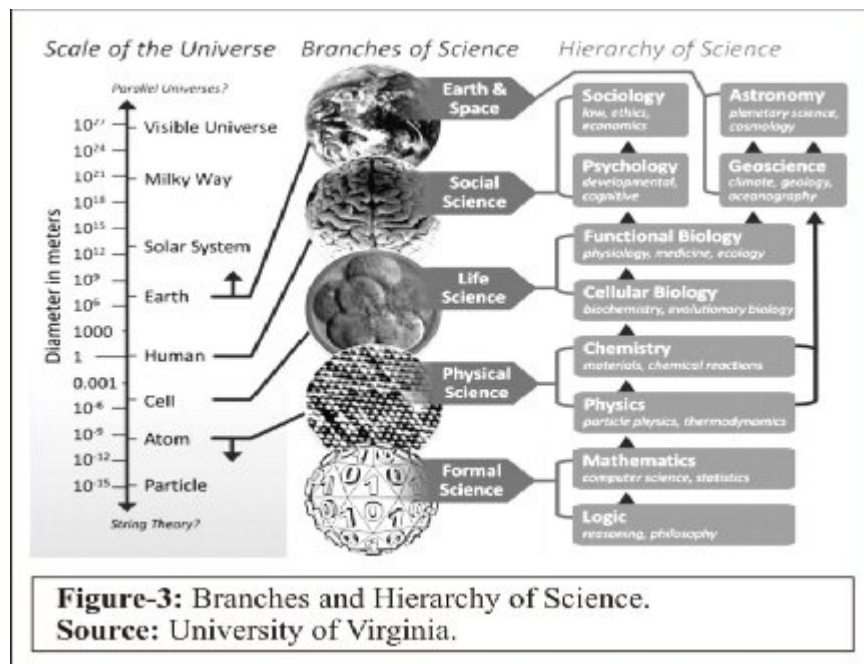


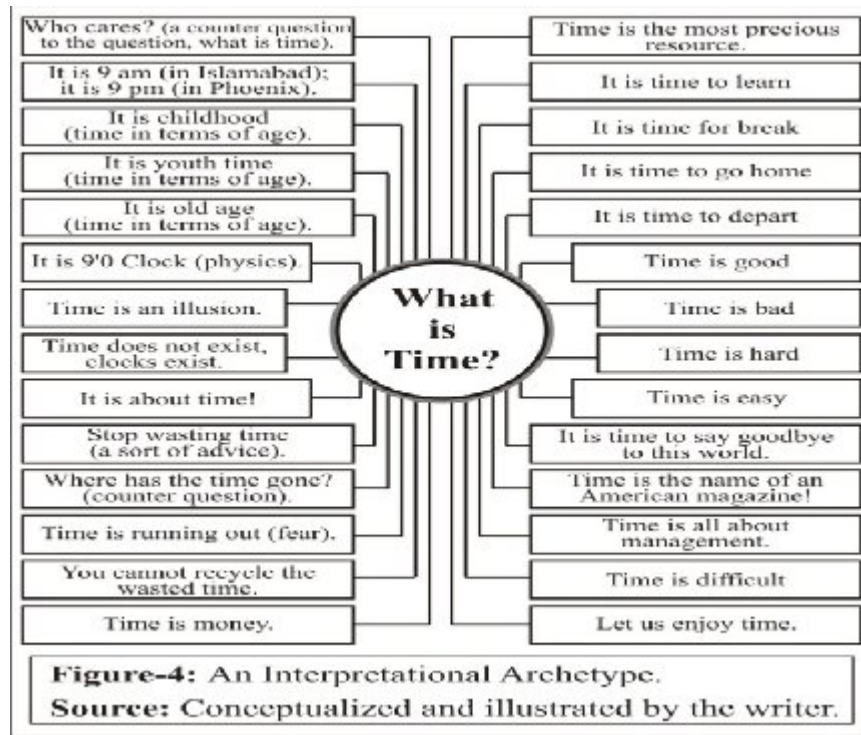
Figure-3: Branches and Hierarchy of Science.
Source: University of Virginia.

angles, similarly the world looks different from different perspectives and to different people. No one knows how best we can know the world. Philosophers have been reflecting and the

researchers have been exploring this for thousands of years. The research scholars need to understand the basics of philosophy, besides an appropriate philosophical approach to a given research project.

An Interpretational Archetype

A philosopher or a social science researcher must bear in mind



that a single phenomenon is interpreted by different people differently. It is the position or location of the viewer that shows a given dimension of an image or picture. A person's or a group's mindset, understanding, gender, age, education level and condition (economic, political, psycho-social, etc) engender a given interpretation. A research scholar has to be cognizant, and rather mindful, of the fact that each interpretation may not suit the research process and bring about the desired conclusions. Let us

view a hypothetical archetype based on an ostensibly simple and straight question, *What is Time?* Figure-4 illustrates.⁵³ The varying answers show huge difference, a sort of gulf of opinion, in interpretation of the same situation.

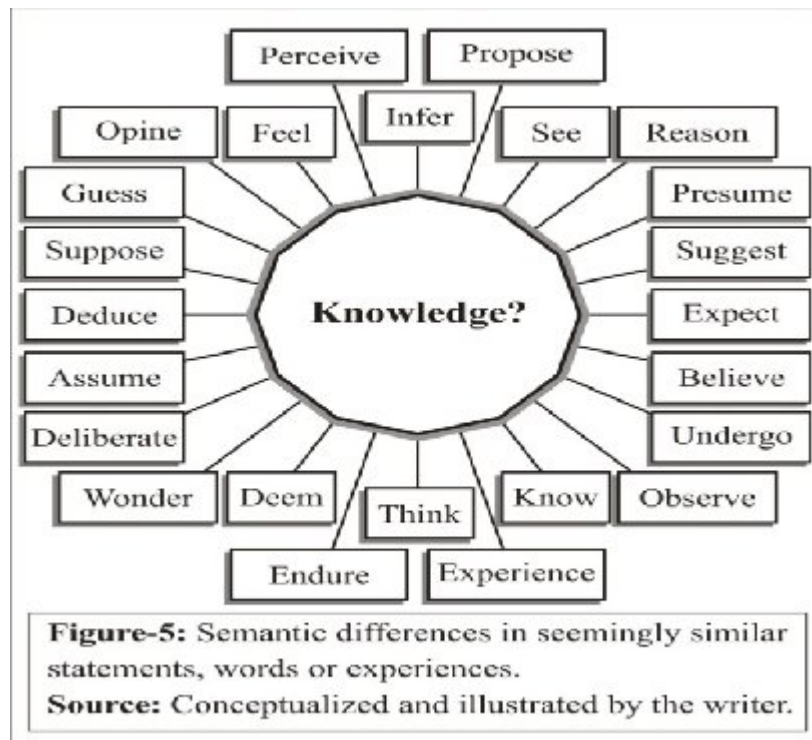
It may be seen that each response to the question “What is time?” is different, yet correct. It is up to the research scholar to know as to what means what, and does a given response suit the situation a respondent is facing or the researcher is posing or both. It is of note that sometimes two persons living together may have different answers to a situation. For instance, in August 2009, Admiral Mike Mullen, US Chairman of the Joint Chiefs of Staff, commenting on the situation in Afghanistan, said, “We are running out of time in Afghanistan.”⁵⁴ During the same days (August-September 2009), a Taliban commander was quoted to have said: “We never have calendars, watches, or calculators like the Americans do. From the Taliban point of view, time has not even started... You have the watches, we have the time. We were born here. We will die here. We aren’t going anywhere.”⁵⁵ Is it not strange, if two persons sitting across the table in the same room over the same menu are feeling different taste of the same food? Not quite strange, indeed. It depends on where an opinion or response is coming from. In this (virtual) US-Taliban *mêlée* of information narratives, we find both standing on different sides of the strategic barricade. The US was looking for the exit strategy, whereas, the Taliban for the staying strategy. Thus, even though the element of time may be constant for a theoretical physicist, it is “over” for the US and “yet to start” for the Taliban. The research scholars must comprehend each communication correctly so as to be able to apply it appropriately.

Communicational Differences: Divergence in Diversity

As has been discussed in the interpretational model given above, a research scholar must bear in mind that each phrase, saying, expression or axiom has different meanings and different applicability. Someone saying, “I think,” “I deem,” “I feel,” “I guess,” “I perceive,” or “I know” have different meaning. The predicament is that even the person showing some kind of knowledge or belief, sometimes, does not know the connotation of a given utterance. In some cases, the listener may not exactly understand all that the speaker or narrator wants to convey. At any rate, each piece of communication may not be knowledge. Some words, statements or utterances clearly show their semantic inclination. Figure-5 shows an archetype.

It is of note that a research scholar may not have seen what he / she seemingly saw personally. You may not actually know what you know! View, observation, perception, notice, insight, awareness, assessment, examination, experience, image, glimpse, creation, discovery, recollection, reminiscence and reflection have different connotations and, thus, application.

Towards Evolution of Research Methodology



To evolve an appropriate research methodology, embedding the philosophic methods and concepts, a research scholar must first consider own background and research experience. The next essential is to consider the research topic, its theoretical basis and desired knowledge. A research scholar must know that there may be many (often contrasting and contradictory) views within a single school of thought. So, know the philosophical approaches, outlooks or schools of thought you want to emulate. It is important to note that while we are living in the post-modern era in terms of timeline, at any rate the earlier research traditions are not obsolete or obsolescent. As a matter of fact no research tradition wholly discards its antecedents. Modernism, positivism, post-positivism,

feminism and other thoughts are still relevant. It is the way we look at an issue and the nature of the research topic. In most cases, more than one research traditions play a part.

The relationship of a social science research philosophy with philosophy as a subject is that of a star with a galaxy, or the tip with the iceberg. In other words, it is a part-whole relationship. Yet, it remains an inalienable part of philosophy in that it is steered and guided by philosophy. A plausible philosophical paradigm for social science research projects should provide for all round reflection, multi-dimensional and deep thinking, sound analysis employing workable methods of argumentation, and effective logic using inductive and deductive reasoning as and where may be applicable.

A research scholar needs to engage in philosophical debate with peers, scholars and supervisors. Collective wisdom is always preferred over individualistic approach, outlook or understanding. More so, conventional wisdom must not be embraced or accepted without ado. It must be challenged and accepted only if it proves true. This is true for the entrenched theories, concepts, notions, paradigms, dogmas and doctrines.

No subject, however monographic, unimodal or unidimensional, can be researched or cogitated over in isolation. Today, social science has evolved into a host of branches. Yet, all must interact with each other at various levels. Likewise, to succeed, social sciences must be studied and advanced further in juxtaposition with relevant facets of natural sciences. Thus, intertextuality and interdisciplinary approach is imperative for each social science subject and project. This may lead to a suitable research philosophy or epistemic methodology to discover or create new knowledge,

which may aptly transform into wisdom applicable to real life situations.

Conclusion

It is not necessary to be an accomplished philosopher to act or reflect logically. Any research scholar, with requisite curiosity and thoughtfulness, can contemplate on physical and metaphysical matters to seek the truth. Likewise, there is no right or wrong research philosophy or epistemic methodology. Philosophy triggers the process of research and analysis through thoughtful ideas and hypothesization. Subsequently, the philosophical methods steer and support the scientific process all through its course. The success of a research scholar is contingent upon sound reasoning, argument, logic, conceptual understanding, knowledge attained and thus, love for wisdom. Honesty of purpose is of paramount importance at each stage of the research.

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Maritime Chokepoints in the Indian Ocean: Significance and Potential Threats

*(Beenish Sultan)**

Abstract

This research is an endeavor to analyze the significance of the chokepoints in the Indian Ocean Region (IOR), along with the probable threats and subsequent challenges posed to the littoral States in dealing with them. The IOR enjoys a significant place in the international arena. It acts as a gate way to international maritime trade and the maritime chokepoints in the ocean serve as a linkage from the West to the East. However, strategic importance may sometimes turn into a potential point of conflict amongst States. Similarly, the littoral and foreign states in the Indian Ocean have also experienced numerous threats and challenges. The threats being diverse and range from both traditional to non-traditional fronts. This presses on the importance of invoking significant avenues for enhancing a regional security apparatus. The research article, hence, examines first the importance of the Indian Ocean in the global maritime trade and, then, further deliberates upon the importance of the chokepoints in the ocean along with potential challenges posed to the states in dealing with the potential threats. Furthermore, it provides tangible recommendations for dealing with the challenges at the regional level.

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Key Words: Indian Ocean Region (IOR), Maritime Choke points, littoral States, Traditional and non- traditional challenges, Sea Lanes of Communication (SLOC).

Introduction

Sea is a common heritage of mankind and provides equal opportunities to every State in order to maximize its security. This seems to be true where Mahan states that '*greatness and strength is the product of wealth, derived from the sea*'.¹ Therefore, the world is now at a dawn of a "Maritime era". These days, seas not only facilitate transport of raw material, food, energy i.e. oil but also pave the way for technological advancements in energy development and other commercial activities.

Consequently, maritime routes and chokepoints serve as a conduit for facilitating maritime linkages. They have been vital for maintaining linkage between regions since pre-historic times. However, on the one hand they provide a link for securing the national interests of States, on the other hand, they also fuel competition amongst them.

In this regard, the Indian Ocean Region (IOR), the birthplace of maritime civilizations, is considered as a playground of rich industrial nations.¹ It borders many choke points, i.e. the Straits of Hormuz, Straits of Malacca, Lombok and the Sunda Straits. Any chaos in traffic flow through these points can be alarming for the littoral states.² Particularly, the disorder of energy flow is a significant security concern, as their energy lifelines are sea-based.³

Since energy is critical in influencing the geo-political strategies of a nation, any turbulence in its supply has serious security consequences. Given the rise in demand for energy from India, China and Japan, it is inevitable that these countries are sensitive to the security of the sea lanes of communication (SLOCs) and choke points of the region.

Consequently, the chokepoints in IOR being the busiest in terms of maritime traffic and energy flow suffers from increased military activity and presence of Extra Regional Forces (ERF). The situation further becomes complicated when regionalism is at the lowest. Traditional rift between Pakistan and India, least cooperation between states like Srilanka and Bangladesh, instability in Afghanistan, political global pressure on Iran, and piracy in the Gulf of Aden all lead to maritime insecurities for the entire region.

The Objective of the Study

This study is aimed to focus on the essential position of the maritime choke points in the IOR in the global lanes of communication. In addition, it also analyzes the contemporary security concerns of the littoral states in terms of traditional and non-traditional threats along with the probable challenges in dealing with them.

The entire study is conducted by keeping in view the international law of the sea. Hence, it covers the subject with a five-fold focus: firstly, it specifies the international law of the sea in relation to the maritime chokepoints, secondly, it gives a bird eye view of the geography of this region, thirdly, it takes the reader into account of the significance of this region; fourthly, it highlights the potential threats it faces and lastly, it contains findings and appropriate recommendation in this regard.

Maritime Chokepoints - The Legal Framework:

It is important to bring forth the legal footing of maritime chokepoints at this juncture, in order to press upon their existence as a proper legal entity. Major concerns include; *does any foreign state have a right to exploit these strategically important lanes for their own benefit? What are the rights of littoral states in order to deal with the threats posed in these lanes? And most importantly, what is the legal status of these passage-ways for facilitating maritime trade and linkages?*

The maintenance of the freedom of the high seas- *mare liberum*, articulated in the year 1608 by Hugo Grotius, has long been at the heart of the customary international law of the sea.⁴ In this regard, maritime chokepoints-straits were registered as comparatively narrow passage-ways connecting two large bodies of water.⁵ The United Nations Convention of the Law of the Sea 1982⁶ - UNCLOS, exclusively deals with these strategically important bottlenecks at sea. One of the central disputes among the countries negotiating this treaty concerned the width of the territorial sea, coastal State control of its adjacent off shore resources, and the navigational rights of commercial and military vessels to pass through straits and island archipelagos.⁷

In this regard, major states including the United States were particularly concerned about their continuing ability to navigate warships, through key international straits such as the Strait of Gibraltar (into the Mediterranean Sea), the Strait of Hormuz (into the Persian/Arabian Gulf), the Strait of Bab el Mandeb (into the Red Sea), the Strait of Malacca (connecting the Indian Ocean with the Pacific), the Dover Strait (through the English Channel), the

Bering Strait (in the Arctic), and the Strait of Lombok (through the Indonesian archipelago)⁸; most of them are present in the Indian Ocean, signifying its strategic importance.

Consequently, the aforementioned convention defines the legal status of waters forming straits used for international navigation, as invariably complete legitimate right of coastal states over straits despite of their usage as international waters. No foreign state has the right to threaten their sovereignty or the legitimate jurisdiction over these waters.⁹

However, the UNCLOS accepted twelve nautical miles as the maximum extent of a state's territorial sea but, in order to ensure freedom of navigation through key international straits, UNCLOS established a regime of 'transit passage' applicable to 'straits used for international navigation.'¹⁰ In addition, in the case of an island and baseline of the coastal state forming a strait, there is ample chance of presence of other passageways through the high seas. Thus, in this situation the transit passage right becomes null and void.

The same convention authorizes the bordering states to legislate laws regarding the activity of the foreign ships passing through the straits, including mobility of Warships. The one who fails to abide by their laws are subject to international responsibility.¹¹ However, almost every state oversees the rules promulgated in the convention for securing their own national interests. Practically, the impact of such limits was that a few geographic straits or natural choke points fell entirely within the territorial sea of one or more coastal states.¹² As in the case of the Strait of Hormuz falling within the territorial limit of Iran. In this case, the UNCLOS gives the right of 'innocent passage' to the states who desire to pass by the strait. Irrespective of

the fact that Iran is a signatory to the convention and has not ratified it.

Nonetheless, the UNCLOS provides a loose framework for governing the narrow passageways at sea. There is ample chance for major powers to exploit the loopholes in these laws for their own strategic gains. Pursuant to this, the littoral states have to one way or the other mobilized an individual mechanism to deal with the upcoming situations, by taking lead from the convention. The Indian Ocean Region, home to major littoral states faces the same dilemma. The subsequent study further deliberates upon the importance of this region and the way the littoral states have to deal with diverse challenges that too in a vacuum of laws.

Geography of the Indian Ocean:

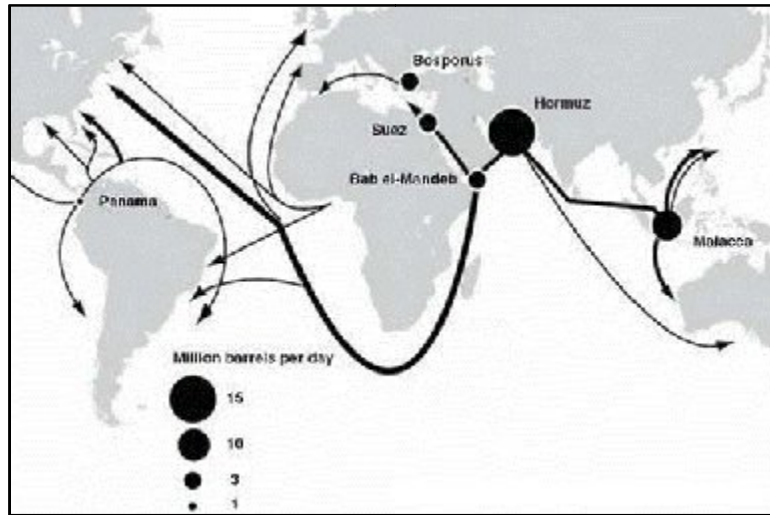
The water body between Africa, the Southern Ocean, Asia and Australia makes up the Indian Ocean.¹³ It is a unique juncture of several tectonic plate boundaries including the Rodriguez Triple Point where African, Indo-Australian and Antarctic Continental plates merge¹⁴. Their junctures are marked by branches of the mid-oceanic ridge forming an inverted Y, with the stem running south from the edge of the continental shelf near Mumbai, India. The eastern, western, and southern basins, thus, formed are subdivided into smaller basins by ridges.

The ocean also borders several marginal water bodies including: Andaman Sea, Arabian Sea, Bay of Bengal, Flores Sea, Great Australian Bight, Gulf of Aden, Gulf of Oman, Java Sea, Mozambique Channel, Persian Gulf, Red Sea, Savu Sea, Strait of Malacca, Timor Sea, and other tributary water bodies.¹⁵ It is artificially connected to the Mediterranean Sea via the Suez Canal,

accessible via the Red Sea. The major choke points include Bab el Mandeb, Strait of Hormuz, the Lombok Strait, the Strait of Malacca and the Palk Strait.

Significance of the Chokepoints:

The Indian Ocean is home to important Sea Lanes of Communication (SLOCs) and maritime choke points. A large volume of international maritime cargo from the Persian Gulf, Africa and Europe transits through this ocean.¹⁶ Some of the primary items transported are energy products - mainly oil and gas.¹⁷ The map below indicates the major oil transit routes through significant chokepoints



Source: US Government Accountability Office. Available at: <http://www.usa.gov/directory/federal/government-accountability-office.shtml>

Note: Circles represent millions of barrels per day transported through each chokepoint. Arrows represent common petroleum maritime routes.

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Particularly, imports to South Asia from West Asia utilize the Strait of Hormuz. Experts agree that the Hormuz strait is the transport bottleneck of the global oil. The Persian Gulf countries, i.e. Iran, Saudi Arabia, Iraq, Kuwait, Qatar and the United Arab Emirates exported 18 million and 200 thousand barrels of oil per day, in 2006, out of which 17 million barrels of this was transported from Hormuz strait to the international markets. This is the fifth of world oil consumption. These countries have 728 billion oil barrels' storage, and they have 55 percent of the oil of the world. In addition, also more than 5.3 billion cubic feet of natural gas is transferred by gas tankers from this strait to the Asia, Europe and North America.¹⁸

On average, 14 crude oil tankers per day pass through the Strait in 2011, with a corresponding amount of empty tankers entering to pick up new cargos. More than 85 percent of these crude oil exports go to Asian markets, with Japan, India, South Korea, and China representing the largest destinations.¹⁹ Closure of the Strait of Hormuz practically cuts off Gulf supplies to the East altogether and also affects the West considerably.

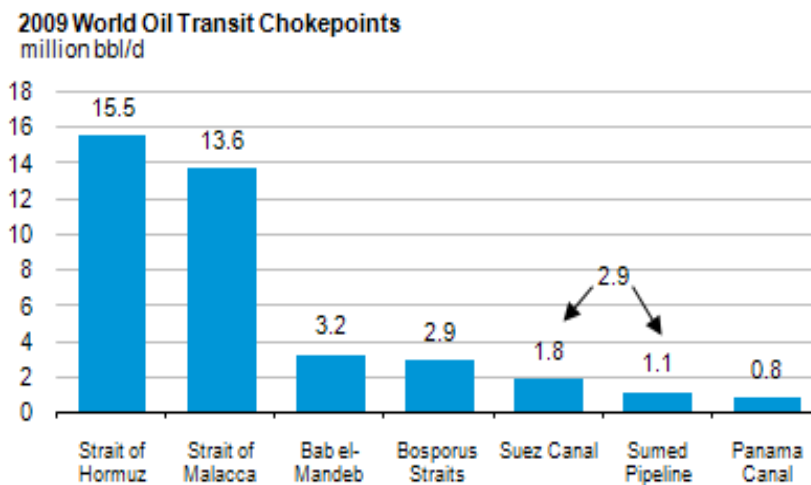
Similarly, the closure of the Straits of Malacca, through which nearly 9.4 million barrels of oil per day flows (according to the EIA), can seriously threaten the economies of Southeast Asia and the energy intensive economies of China and Japan. Over 60,000 vessels transit the Strait of Malacca per year. If the strait were blocked, nearly half of the world's fleet would be required to re-route around the Indonesian Archipelago through Lombok Strait, located between the islands of Bali and Lombok, or the Sunda Strait, located between Java and Sumatra.

China imports more than 56 percent of its oil from abroad and is likely to go up to two-thirds of its oil by 2015 and three-quarters by 2030. Eighty percent of imported oil flows from the Indian Ocean with 47 % (Strait of Hormuz) passing less than 270 kilometer (km) from Pakistan. Chinese reliance on this economic corridor provides opportunities to India and the United States to disrupt energy supplies in the straits of Malacca. The Chinese call it the *Malacca Dilemma*. Pakistan has an opportunity to provide an alternate assured corridor. The distance shortens to only 3500 km from Gwadar to Urumqi in Xinjiang province (1,150 mile link delivers petroleum products from Urumqi to Lanzhou in Gansu Province). Closure of some chokepoints would require the use of longer alternate routes, thereby, increasing transportation costs, but for other chokepoints, there are limited alternate routes. As a result, there are existing planned and proposed pipelines in many of these areas to bypass such chokepoints. EIA has compiled and analyzed data for seven major world oil transit chokepoints, summarized below:

- The Strait of Hormuz, connecting the Persian Gulf to the Arabian Sea, saw an oil flow of 15.5 million barrels per day (bbl/d) in 2009 when flows through this Strait accounted for roughly a third of all seaborne traded oil or 17 percent of oil traded worldwide.
- The Strait of Malacca, located between Indonesia, Malaysia, and Singapore, links the Indian Ocean to the South China Sea and Pacific Ocean. Malacca is the shortest sea route between Persian Gulf suppliers and the Asian markets. It is the key chokepoint in Asia with an estimated 13.6 million bbl/d flow in 2009.

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- The Suez Canal and SUMED Pipeline in Egypt are major routes for transit from the Persian Gulf to Mediterranean Countries and North America. Their closure would add an estimated 6,000 miles of travel around the continent of Africa. In 2009, total oil flows through the Suez were 1.8 million bbl/d, and SUMED flows were approximately 1.1 million bbl/d.
- The Strait of Bab el-Mandeb , links tankers originating in the Persian Gulf to the Suez Canal/SUMED pipeline and beyond. Its location, between the horn of Africa and Yemen, has made transit through this Strait vulnerable to piracy in recent years. An estimated 3.2 million bbl/d flowed through this waterway in 2009.
- The Bosphorus Straits separates Asia from Europe, connecting the Black Sea with the Sea of Marmara. The 17-mile waterway



Source: data available at: <http://www.eia.gov/countries/regions-topics.cfm?fips=wotc&trk=p3>

supplies Mediterranean countries with oil from the Caspian Sea Region. In 2009, approximately 2.9 million bbl/d of oil flowed through these Straits²⁰.

Projected Threats:

The Cold- war era brought forth interplay of competition of interests between ‘superpowers’. The Asian and African states were exposed directly to the contest. The resultant security balance in the region degenerated when the Cold War came to an end. After which, the post-Cold War era saw the region becoming a little unstable, with a great deal of rivalry, antagonism, doubts and chaos.

Moreover, the environment in the Indian Ocean with regard to the maritime security also transformed to a great extent; owing to fragile structures of government and inadequate capacity to manage the maritime domain. Hence, the IOR became a ‘playground’ for all kinds of illegitimate activities. Resultantly, now the threats posed to the littoral states from the maritime domain are significant in quantity and quality both, one reason being the increased need of raw materials of the Asian economies. This also includes access to the energy from the Middle East, to provide for their economic growth. In addition, ongoing crises in Iraq and Afghanistan have diminished the importance of the Atlantic and boosted the importance of the Indian Ocean as a medium for Western military supplies.

The security of chokepoints in the region have become a matter of great strategic importance for all maritime powers. Indian Ocean security is now no longer the domain of colonial states or superpowers, but has become multi-faceted and dynamic. New role players such as India and China have become major powers, and new national alliances are changing the scenario. Resultantly, major

threats emerged including militarization, presence of extra-regional forces and non-traditional security threats. They are discussed separately below:

Militarization:

Since the Indian Ocean is an area of much geo-strategic rivalry between the largest IOR states, considerable militarization has taken place. This pursuit may be characterized in three broad trends: first, in view of the US strategic interests in the IOR along with its partners, namely India, Australia, Japan, Singapore, United Kingdom, France and Canada. Since the Cold War the US strategic umbrella in the Indian Ocean has widened. Besides its base on Diego Garcia, the US Navy also uses bases in littoral states such as Bahrain, Kuwait and Qatar. Following the US anti-terrorism campaign in the wake of 9/11, the whole Indian Ocean region came under US military surveillance, while the US Navy was able to translate its commanding position at sea into military interventions. With the assistance of both regional and extra-regional coalition powers, the US has consolidated its naval grip on the region.

These states maintain their physical presence and command in this region in order to achieve their key strategic objectives, secure the necessary SLOC and decrease influence of States like Iran, Russia and China.²¹

Second, endeavor by countries such as China, and perhaps even Iran, Pakistan and to some extent Russia, to strengthen their positions in the Indian Ocean and increase their ability to counter the potential threats that may be posed by the US-aligned states.

And third, the activities of the littoral Indian Ocean states, which are concerned with national or regional maritime security in

relation to specific rivals within their own sub-regions, as demonstrated by many maritime boundary disputes and jurisdictional claims in the region. Other tendencies may include efforts of IOR states to manage the large variety of transnational and non-traditional threats they face, including environmental challenges, fishing infringements, smuggling and trafficking, piracy and the security of offshore installations.

Consequently, the littoral States are pressed on maintaining their armed forces in the region. Currently, armed forces of five states in the Indian Ocean region exceed 400 000 men. Although military analysts will be quick to point out that the size of an armed force is not necessarily an indication of an efficient, competent and well-equipped force, many Indian Ocean states are certainly placing much emphasis on their military preparedness.

Presence of Extra- Regional Forces:

Maritime security in the Indian Ocean is characterized by a considerable extra-regional naval presence. Although the focus is obviously trade and energy security, many countries are also providing assistance to the maritime security forces of IOR states. Concurrently, a considerable number of IOR states, specifically those situated in Africa, lack the resources and budgets necessary to properly enforce their maritime sovereignty. In many instances, their navies or coast-guards cannot even be considered to be token navies. The dilemma is that sovereignty must be exercised to be recognized. In the absence of this, a double jeopardy situation arises: as it is not possible to police and control the maritime domain effectively, and maritime domain awareness is low, illicit activities of all types flourish, preventing these countries from

exploiting their own ocean resources properly and drawing full benefit from the potential revenue this might bring.

Due to the ocean's strategic importance and the fact that the free flow of traffic can easily be interfered with, many extra-regional forces operate in its waters. Keeping the SLOCs open are vital to the global economy. Furthermore, the volatile security situation and the tensions in the Persian Gulf have stimulated foreign military intervention (the Iran-Iraq War in the 1980s, the Iraq-Kuwait War in the early 1990s, the Iraq War in 2003 and the war in Afghanistan are recent examples), while piracy, the asymmetrical threat and the flow of vital energy resources have recently caused much anxiety and the deployment of many navies.

Hence, the security of shipping and sea lanes of communication (SLOCs) in the Indian Ocean is an issue of major strategic concern. In the first instance, sea-lane security is important to the national economies of Indian Ocean countries, specifically to their industrial and commercial sectors, since trade is their main link to global markets. The Indian Ocean is a vital transit route between the Pacific region, Africa and Europe, with vast cargoes passing through the region. The world's most important oil and gas routes pass through the Indian Ocean. The maritime aspect of the war illustrates how vulnerable military and civilian shipping is to attack in the Persian Gulf. The narrow Strait of Hormuz is the main maritime link between the oil-rich Persian Gulf region and the rest of the world. Roughly 17 million barrels, or a fifth of the world's oil supply, moves through the strait a day.²² In the year 2012, the strait had yet again been at the centre of a tense standoff between Iran and the West, following Iran's warning that it would shut the strait,

if Western nations did not remove the economic sanctions over Iran's apparent nuclear research programme. Closing this route would cause extensive international response, including the likelihood of American military intervention.

Non-Traditional Security Threats

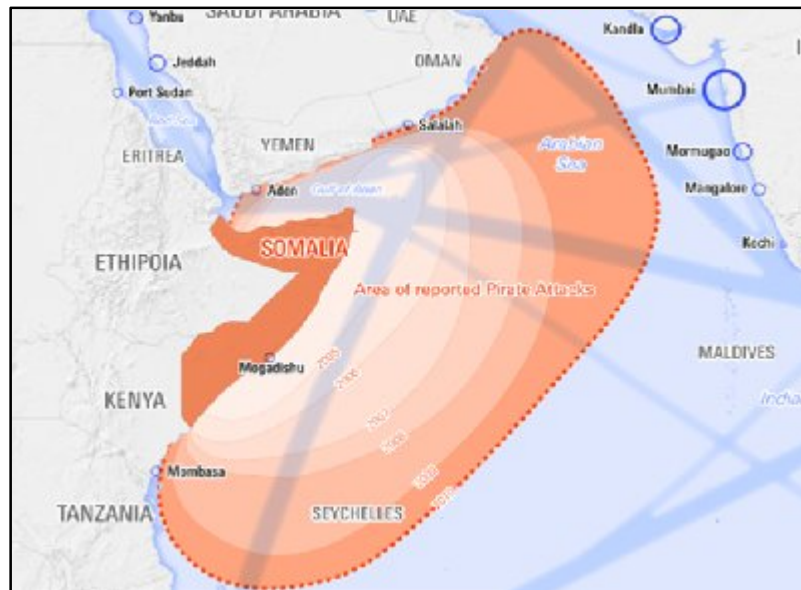
Piracy: Piracy rose as a major threat to shipping and sailing in the Indian Ocean. It bears consequences resonating from the Somali shores that have political, geo-strategic, naval, economic and human security aspects.²³ In 2009 Forbes Magazine termed the East African country and the Gulf of Aden as 'the World's Most Dangerous place'. In fact, this problem is one of the oldest menaces globally. There have been times that it was suppressed in one area but it simultaneously arose in another one.

Attacks in South-East Asia and around the Indian subcontinent usually occur at anchorages or in approaches. As this type of attack is often conducted by robbers armed with handguns, knives or machetes, many attacks are unreported. Piracy around Somalia is different – the pirates are well armed and use a range of weapons, including automatic weapons, handguns and rocket-propelled grenades. In 2008 there were 184 reported pirate incidents off the Somali coast. Out of these 41 were hijackings and 53 were attempts on commercial vessels.²⁴ The Indian Ocean is one of the greatest maritime highways, with 50 percent of world's merchant shipping passing through the straits of Malacca.²⁵ Whereas, Somalia is present at the neck of 'Bab-al-Mandeb', which itself has a strategic importance. Ships passing through these areas face a lot of problems due to rise in piracy. As shipping is important for trade, thus, any effect even on the routes has direct impact on the nation's economy.

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Considering the Somali civil war in 1991 as the causes of piracy, which eventually fuelled poverty and frustration in the locals²⁶. Illegal fishing and dumping of toxic material at the coast is one of the other reasons. Nevertheless, whatever the cause may be it has grave consequences for vulnerable targets: first due to the immense volume of commercial freight that sails through the ocean and, second, the ships passing through the chokepoints, the most important of them are 'Bab el- Mandeb', The Malacca Strait and the Straits of Hormuz.

A map indicating the extent of how piracy swelled up in the Arabian sea.



<http://www.icc-ccs.org/piracy-reporting-centre/live-piracy-map>

(International Maritime Bureau Live Map, showing attempted and actual pirate attacks till 2010)

This area in the recent history had witnessed a rise in the levels of piracy. Such piracy could lead to some future traffic being routed

through the Sunda and the Lombok Straits within the geographical ambit of Indonesia. However, political uncertainty and instability in Indonesia dampened this trend. Due to the geo-strategic importance of Malacca Straits to almost all the South and Southeast Asian countries, any maritime contingency in this traffic congested region would have profound consequences. However, as of today piracy has subsided to a greater extent.

The Straits of Malacca is a vital sea space connecting the Indian Ocean to the Pacific Ocean, which experiences a high density of shipping traffic. Over 60,000 vessels transit the Straits each year, carrying a variety of cargo including the critical energy needs of the Asia-Pacific countries. According to the London-based International Maritime Bureau (IMB), a global watchdog monitoring crime and malpractice at sea, in 2008 and 2009 only two incidents of attempted/ actual piracy of armed robbery were recorded each year for the Straits of Malacca, which is in sharp contrast to the 38 attacks recorded for 2004.²⁷

The IOR is endowed with many good, albeit often neglected ports. Many of the ports do, however, suffer from serious security problems and are prone to a variety of illicit activities. Some IOR countries lack efficient customs and excise controls. African countries in particular lose shipping business because of such problems. The majority of piracy incidents reported in the Indian Ocean region occurred while ships were lying at anchorage, in roadsteads or were berthed.

The attacks were generally opportunistic as ships were boarded for purposes of theft. For example, in 2009 the four attacks and one attempted attack that occurred in Tanzania took place on ships that were anchored, the 12 reported attacks in India were all on berthed

or anchored ships, and of Malaysia's 16 reported attacks two occurred on berthed vessels and six on anchored ships.²⁸ Of the 14 ports worldwide in 2009 that reported more than three incidents, the following ports or anchorages were in the Indian Ocean or adjacent to it: 17 incidents in Chittagong, Bangladesh (the highest in the world), three incidents each in Kakinda and Kochin, India, three incidents each in Balongan and Belawan, Indonesia, four incidents in Sandakan, Malaysia, and five incidents in Dar es Salaam, Tanzania.²⁹ It should be noted that many incidents in ports and anchorages go unreported as ship masters and shipping companies are often reluctant to become involved in potentially lengthy and futile prosecution processes.

Other Threats: In addition to the threats mentioned above, an important appendage to maritime terrorism is drug trafficking. The nexus of these two phenomena is admittedly so deep that they are often analyzed under the same parameters. With profit margins running into hundreds of percent, drug trafficking is by far the most lucrative means of generating funds to fuel ever-growing terrorist activities and insurgencies around the region.

Additionally, terrorist groups often work hand-in-hand with drug cartels. While this relationship provides established routes for drug and arms smuggling, it also provides terrorists with the logistical infrastructure to move people, arms and material according to their desires. Considering the geo-political set-up of the Indian Ocean region, Iran and Pakistan form a major portion of the drug-infested "Golden Crescent," while Myanmar and Thailand constitute the majority of the "Golden Triangle," notorious for its illegal drug production. As all these states are in the IOR, it is

natural that narco-terrorism is a major security concern for littoral states like India, which has seen its own emergence as a transit point for a majority of the drugs that emanate from these two areas.

Findings:

Maritime security in the Indian Ocean Region has assumed a new dimension after the Cold War era. The fight against old and persistent issues particularly at straits in the Indian Ocean has received a boost with the backing of the international community.

In this regard this study envisages the following findings:

- The strategic importance of the Indian Ocean has in fact become a curse for the littoral states.
- The countries in the Indian Ocean lack sufficient individual and regional capacity to deal with the evolving threats.
- Indian Ocean Region is a playground of opportunities for major powers. In order to protect their strategic and political interests, especially with the SLOC and maritime chokepoints, they maintain continuous physical presence in the region. This fuels militarization.
- Most of the trade of the countries in the Indian Ocean Region is sea borne. Despite the importance it bears, still the countries pay less attention towards eradicating projected threats to the regional maritime security.

Recommendations:

States in the Indian Ocean should re-define their conventional role in order to evolve with the changing nature of threats posed. Deploying Warships and Aircraft carriers is, indeed, a requisite in view of participation in conflicts such as Afghanistan and Iraq. However, now there should be a guarantee of decrease in military

presence in the Ocean and more diplomatic duties should be taken up. This will ensure maintaining 'good order' at sea.

Navies of littoral states can ensure immense diplomatic activity and resultant regional stability. This may include alliance building and international maritime assistance, such as training and capacity-building. Furthermore, navies are versatile instruments, capable of providing valuable assistance in maintaining a stable maritime environment. This can range from the protection of a littoral nation's maritime resources to performing constabulary roles at sea.

Nonetheless, challenges posed by various maritime threats to the littoral states in the Indian Ocean may be dealt with by improving the port security. This is in view of traditional and non-traditional threats both. Although it is unrealistic to expect navies to cover the area fully, the naval contribution is specifically valued for 'increased intelligence gathering coupled with strategic placement of naval assets. Port security can be improved through better situational awareness, which is achieved by employing sensors, gathering intelligence, implementing patrols and improving physical security. It is important that all role players cooperate and that port authorities adhere to the international regulations applicable to port security.

In a nutshell, the establishment of joint maritime centers (JMCs) at important ports and near ocean choke points would prove to be a giant step towards maritime cooperation. The Indian Ocean may bring together the countries with common interests that, in turn, to influence the region's strategic insight. Indeed, the old saying: "*the sea unites while the land divides*" seems to be true even in this point in time.

End Notes

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⁹ UNCLOS – Article "The regime of passage through straits used for international navigation established in this Part shall not in other respects affect the legal status of the waters forming such straits or the exercise by the States bordering the straits of their sovereignty or jurisdiction over such waters and their air space, bed and subsoil".

¹⁰ UNCLOS (1982), Part III, 'Straits Used for International Navigation'. "the exercise in accordance with this Part of the freedom of navigation and over flight solely for the purpose of continuous and expeditious transit of the strait between one part of the high seas or an exclusive economic zone and another part of the high seas or an exclusive economic zone. However, the requirement of continuous and expeditious transit does not preclude passage through the strait for the purpose of entering, leaving or returning from a State bordering the strait, subject to the conditions of entry to that State"

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Hydro Environment of Pakistan: An Analysis

*(Abdul Rauf Iqbal)**

Abstract

Water is life and no living being on earth, in any form or shape, can exist, grow or reproduce without it. The other primary need of the human being is food, which is again dependent upon the availability of water for crops and livestock. Lack of rainfall or water shortages during a dry year or season in arid areas often rings the alarm bell for an impending food crisis. Keeping in view the critical importance of water, this paper evaluates the hydro environment of Pakistan. The paper is divided into three parts; first part briefly discusses the availability of global water and other global indicators related to water. Second part discusses the hydrological environment of Pakistan and gives a brief account of different sources of water in Pakistan vis-à-vis water requirement in different sectors. Third part narrates salients of Indus River Basin. The paper argues that although Pakistan is a water stress country, yet situation like drought can be avoided provided that the water is used equitably.

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Introduction

Water is life. No living being on earth, in any form or shape, can exist, grow or reproduce without it. The human body itself consists of 70% of water. “One begins to feel thirsty after a loss of only 1% of body fluids and risks death if fluid loss nears 10%”.¹ The other primary need of the human being is food, which is dependent upon the availability of water for crops and livestock. Lack of rainfall or water shortages during a dry year or season in arid areas often rings the alarm bell for an impending food crisis. Irrigated agriculture sector not only supplies food but also fiber and other cash crops. Therefore, contribution of agriculture sector to Gross Domestic Product (GDP) growth, in countries like Pakistan to a great extent, depends upon availability of sufficient water resources. Recurrent famines in African countries and consequent human deaths and miseries have drawn attention of world media, and international organizations on food shortages and the underlying factors.

Keeping in view the critical importance of water, this paper evaluates the hydro environment of Pakistan. The paper is divided into three parts; first part briefly discusses the availability of global water and other global indicators related to water. Second part discusses the hydrological environment of Pakistan and gives a brief account of different sources of water in Pakistan vis-à-vis water requirement in different sectors. Third part narrates salient of Indus River Basin. The paper argues that although Pakistan is a water stress country, yet situation like drought can be avoided provided that the water is used equitably.

Water – A Source of Life

Water is the most important element after air to sustain life on earth. Apparently it is available in abundance, however, contrary to

this universal impression, fresh water is a finite resource, of the total quantity, only less than half percent is available as fresh water on the surface of the earth. A large quantity of water is also present underground. Apart from domestic and industrial use, bulk of it is utilized for agriculture. The importance of water for the survival of the people, animals, plants and eco-systems cannot be over emphasized. However, scarcity of this resource is increasing in several parts of the world and Pakistan is also close to be classified as a water scarce country.

Water as an issue has evoked extreme position in contemporary developmental discourse. The issue of cross border water distribution, its utilization and management has gradually taken the centre position in defining inter-state relations.² Pakistan today is facing the problems of water scarcity, increasing population and distribution inequalities. The country is struggling to meet incremental demand for more irrigation water. Estimates show that “Pakistan has a population of 180 million, of which at least 45 million (25 percent) are below the poverty line; 98 million rely on agriculture; 50 million do not have access to safe drinking water; and 74 million have no sanitation”.³ According to the World Bank, “Pakistan became a water-stressed country (1,700 cubic meters per capita per year) around the year 2000”.⁴ According to a government source, “Pakistan reached 1,700 m³ in 1992 and became a water-short country, and then declined further to 1,500 m³ in 2002”.⁵ Water scarcity (1,000 m³ per capita per year of renewable supply) is expected in about 2035.⁶ However, a United Nations Development Programme source gives Pakistan’s current water availability as 1,090 m³ per capita per year.⁷ This is because the terms “water shortage” and “water scarcity” are often used interchangeably –

while both use the 1,000 m³ per capita measurements as a benchmark. It is noteworthy that 'shortage' is an absolute term and 'scarcity' is a relative concept.

The UN has already warned that the deficiency of water will emerge as the most pressing problem for Pakistan in the coming years. The United Nation Environment Programme reported that "200 scientists in 50 countries had identified water shortage as one of the two most worrying problems for the new millennium – the other being the global warming".⁸ Therefore, it seems that in future, these problems will over-shadow the political, territorial, ethnic, economic and cultural disputes and will have the potentials to destabilize the countries, sub-regions, regions and even the growing population and expansion of industrial sector. This will put a great strain on our economy and food security situation.

Water – A Global Vista

"Water is one of the most widespread substances on earth. It covers more than 70% of the earth's surface. It forms oceans, seas, lakes, rivers and the underground water. In a solid state, it exists as ice and snow cover. A certain amount of water is contained in the air as water vapour, water droplets and ice crystals, as well as in the biosphere. Huge amounts of water are present in the composition of the different minerals in the earth's crust".⁹

Water supply to mankind by nature is not only finite but also exhaustible. About 70% of the earth's surface is water, but only about 1% is easily accessible surface freshwater.¹⁰ Moreover even the accessible total water is not distributed evenly around the globe, over all seasons and years, because the humankind "lives under the tyranny of fickle hydrological cycle", as observed by a hydrologist, Malin Falkenmark.¹¹ The earth's solar-driven hydrological cycle, on

which the supply of fresh water for humanity depends acts like a giant water pump that continually transfers freshwater from oceans to land and vice versa.

Out of the total volume of water amounting to 1.4 billion cubic kilometres (Cu. km) more than 97.3% is ocean water and only 2.70% is fresh water that can be productively withdrawn for agriculture, domestic use, irrigation, hydro-power and industrial uses etc. An estimated 77.01% of fresh water is stored in ice caps and glaciers, 22.4% is ground water and soil moisture, 0.35%, in lakes and swamps and 0.04% is in the atmosphere.¹² While ice caps, glaciers and ground water account for most fresh water resources, for all practical purposes it is the water in the streams lakes and ground water that constitutes basic available supply for most people for different uses. Being renewable resource, water's annual flow through hydrological cycles determines the manner in which water supplies are made available to innumerable needs. About 206 Cu km evaporates from the land. The hydrological cycle is balanced by about 100 Cu km of daily run off from land to sea through rivers, streams and underground water flows.¹³ Lakes and man-made reservoirs are an important part in regulation as a source of supply.

Despite availability of enormous fresh water reservoirs, hyper increase in world population coupled with mass industrialization, the demand for water has increased to an un-manageable extent. Consequently, direct and indirect human demands for water have increased and continue to be increasing day by day. Exponential human population growth has put tremendous pressure on the available water resources. With every passing day, this precious commodity is gradually diminishing. "By the year 2050, out of the total world population of 9.4 billion people (projected), 18% will

face water scarcity and 24% will become water stressed".¹⁴ "Another nine countries, including Pakistan, will be approaching water stress. Beyond the impact of population growth itself, the demand for freshwater has been rising in response to industrial development, increased reliance on irrigated agriculture, massive urbanization and rising living standards. In the 20th century, while world population has tripled, water withdrawals have increased by over six times".¹⁵ The world population reached just over 6 billion in year 2000, and it is expected to peak at about 8 to 10 billion sometime in 21st century. It is estimated that about 7.8 billion people will inhabit the Earth by 2025 and by 2050 it will reach 9 billion. More than 90% of this growth is expected to take place in less developed countries, many of which are already over populated and stressing their water and other resources. If these population projections are proved to be reliable, many regions on Earth will be facing significant water shortages within the next 50 years¹⁶. "Moreover, the supply of freshwater is shrinking, because many freshwater resources have become increasingly polluted. Caught between finite and polluted water supplies on one hand and rapidly rising demand from population growth and development on the other, many developing countries face uneasy choices."¹⁷

Pakistan's Scenario

In Pakistan needs of human consumption, industry and agriculture are putting ever increasing demands on the available limited water resources. Very rapid growth of population is the main factor, which is disturbing the balance. Being the predominant sector of the economy, agriculture is the main user of available water. A report noted that the largest user of water in the world is agriculture which takes 70 to 80% of that used by humans.¹⁸ In

Asia, approximately 86% of all freshwater use is for agriculture, 8% for industry, and 6% for domestic purposes.¹⁹ The Indus Basin of Pakistan has been home to the world's ancient civilization. The topography, the soil and the climate all combine to make the basin suitable for multi seasonal agriculture and is blessed with a variety of agro climatic zones. The availability of water has led to a high concentration of population, irrigation, investment, infrastructure and markets in the basin.²⁰ According to the current estimates over 90% of the available water is being diverted for irrigation purposes.²¹

Despite the fact that the share of agriculture in Gross Domestic Product (GDP) has fallen from 53% in 1947 to 25.9% in 1992-2000,²² agriculture is the single largest contributor to the GDP and the single largest employer. It employs 45% of the total employed labour force in the country.²³ Furthermore, Shams ul Mulk²⁴ observes that it is the:

- Principal source of income for about 70% of the total population,
- Major supplier of raw materials for industry and
- The biggest consumer of production of non-agricultural sectors.

No less important is the fact that the major source of energy for all sectors, including agriculture and industry, is the hydel energy, which is a by-product of water resources management in Pakistan. Availability of more water for all purposes, including fisheries and aqua culture can bring more prosperity. From another angle, failure to adequately manage excessive flows and floods can have a devastating effect not only on crops but also on physical infrastructures. In the year 1992, rain and floods caused a loss of

about 15% of cotton and rice crops, along with 10% of sugarcane crop. Consequently growth fell to 3.2% and exports tumbled.

The crucial importance notwithstanding, unfortunately no notable extension in the irrigation water resources and canal system has been made after independence except some major replacement works which were undertaken in the wake of Indus Basin water treaty. The initial stages of development have been dominated by building of water regulating structure. National and international experts have been ringing the alarm bell of emerging food shortages in Pakistan as a result of population growth.

Determinants of Water Resources in Pakistan

The wealth of water resources and its nature are dependent primarily on the location of country on the globe, with relation to other relevant factors in the cosmic order. Geographical situation, hydrological cycle and topographical features determine quantities of water supply and its natural flow during different seasons of the year. In particular, quantities and patterns of rainfall, snow and sunlight, as spread over different regions and seasons, determine the total annual supply of water in conjunction with climate and nature of soils shapes, patterns of cropping and water use. These factors also go into the making of agro-climate zones and their productivity. The issues relating to gap between demand and supply and management and development also hinge upon these basic determinants.

Pakistan is situated between latitude 24 and 37 North and longitudes 61 and 73 East. In the north are snow capped peaks of Himalayas and in the south is the Arabian Sea. Major water resources are the products of rainfall generating surface flow, particularly in the catchment areas of rivers, and snow and glaciers

on the northern mountains. Water originating from these is temporarily stored in Siwalik Hills, and banks of rivers before out falling into the sea. The Siwalik Hills are the hills which are adjacent to plains and rarely exceed an altitude of 400 ft.²⁵ In addition; the Indus River Basin holds extensive underground water aquifer, re-charged by rain fall and surface water in the irrigation system.

The hydrology of the Indus Basin is influenced by the annual metrological cycle divided into the following four climatic seasons:-

- Cold weather season (December through March)
- Hot dry weather (April through June)
- Monsoon season (July through September)
- Post monsoon (October to November)

Rainfall

Pakistan is a semi arid country. The rainfall widely varies from season to season and from region to region. In most parts 60 to 70% of the annual rainfall is received from the months of July to September. There is a wide spread mild rainfall for several days at a time in northern parts of the country. During monsoon heavy rains generate high run off by the middle of July. The monsoon moves up to the Indo Gangetic plains and, by the time it reaches Punjab plains, it almost reaches the end of its travel and is unpredictable as to the amount of rain it produces.

At times the monsoon causes heavy rainfall over the Indus River catchments, generating high flows in the rivers. The Sutlej and the Beas Rivers are the first to be affected and generally receive the highest intensity rains in their catchments. The intensity decreases steadily to the north-west along the foot of Western Himalayas. There is minimum rainfall during hot and dry weather season. Little rain falls in Balochistan. Precipitation in Sind province is also rare.

The annual average effective rainfall is about 9 inches over approximately 80,000 sq miles of the Indus Plains and Peshawar valley. It amounts to about 38.5 MAF about 25 MAF of which falls on controllable commanded areas.²⁶

Snowfall

Snowfall on the Hindu Kush, Karakorum and Himalayan Ranges during winter feeds the glaciers over there. Even during summer large quantities of precipitations fall as snow. The pattern of spread of this accumulated snow and melting temperatures over the hydrological year ensure that only a fraction of whole Upper Indus Basin probably less than 30% contributes an estimated more than 80% of the river's flow.²⁷

Glaciers

The upper Indus catchment has a large number of glaciers, which act as great natural reservoirs that feed and regulate the Indus and its tributaries. Glaciers exceeding 4 miles have an aggregate length of 1100 miles in Shyok valley which is replete with big glaciers storing about 100 MAF of water. Other glaciers such as Siachin are 45 miles, Hispar 38 miles, Biafo 38 miles, Braldo 35 miles etc. It is estimated that these glaciers may be holding, in aggregate, more than a billion acre feet of water. Man-made Tarbela and Mangla reservoirs with a total live storage of about 15 MAF are miniatures compared to these natural resources.²⁸

Water Resources of Pakistan

Thanks to the nature for giving us sufficient water resources with three main drainage basins namely Indus Basin, Kharan Closed Basin and Makran Coastal Basin. Out of these, Indus Basin occupies over 70% of the region, which makes Pakistan one of the largest nations of the world that depends on a single river system.²⁹

According to the estimates, annual flow of water available in Indus River System (IRS) is 141 Million Acre Feet (MAF) and only 106 MAF reaches the farm gate, with the remaining lost due to seepage, evaporation and other reasons. The ground water availability stands at 44 MAF making total availability of water to the tune of 150.0 MAF. According to the estimates, total shortage of water in 2008 is 9 MAF, which is likely to grow to 20 MAF by year 2020 and 25 MAF by year 2025.³⁰ This includes 10 MAF which is required for drainage to Arabian Sea in order to check environmental degradation.

Water resources and its nature primarily depend upon the geographical situation, hydrological cycle and topography of a country. These factors usually determine the quantity and quality of the water in a particular region. Environmental factors such as seasons, rainfall patterns, sunlight and glaciers determine the total annual supply of water in addition to other factors like climate change, nature of soil, cropping patterns and utilization of waters. Although Pakistan has a suitable climate for agriculture yet the economy of Pakistan primarily depends upon the river irrigated agriculture.

Hydrology of Pakistani River Basins

Pakistan is divided into numerous stream basins which, in turn, make up the following three hydrologic units:

- Indus Basin
- Kharan Desert Basin
- Makran Coastal Basin

The area of the hydrologic unit falling both in mountains as well as plains is indicated in the following table.

Area of Hydrological Units³¹

Units	Mountains (sq. km)	Plains (sq. km)	Total (sq. km)
Indus River Basin	241,647	311,771	553,418
Closed Basin Of Kharan Desert	87,542	32,634	120,176
Makran Coastal Basin	85,470	37,037	122,507
Total	414659	381442	796,101

Indus Basin

It is apparent that the Indus Basin is the largest of all hydrological units. The Indus River System is, in fact, one of the world's most significant river systems. It is Pakistan's primary water resource. The major right bank tributary of the Indus River is the Kabul River. However, the major irrigation works in the Indus Plains are located on the Indus main stem and its left bank tributaries namely the Jhelum, Chenab, Ravi and Sutlej Rivers. As shown in the following table, average annual flows in the western rivers (at rim stations) are estimated at 138.4 MAF.

Rim Station Inflow (mean) Western Rivers 1922-23 to 2008-09³²

	MAF
Indus at Kalabagh	89.60
Jhelum at Mangla	22.66
Chenab at Marala	25.60
Total	137.86

However total flows in these western rivers are estimated at 145.14 MAF, as reflected in the following table.

Water Flow – Western Rivers³³

Mean of Recorded Inflows at the Rim Stations	138.40 MAF
Diversion above Rim Station (Swat Canals & Civil Canals)	5.5 MAF
Tributary Inflow Below Rim Stations	2.37 MAF
Total	145.14 MAF

Kharan Desert

The main streams in the area are Pishin, Lora, Baddo, Rakhshan and others. This basin also includes the Kharan desert and the dry lakes. The water resources of the region are meager, generally unexplored and under-developed. All the streams have virtually very little or no base flows. Most of the basin area is highly arid.

Makran Coastal Basins

The main streams, such as Malir and Huub Porali constitute this basin. They rise in the hills and discharge into the Arabian Sea. The limits of the coastal basin extend to a maximum of about 200 miles (321 km) in the interior. Some cultivation takes place on flood flows or as and where any of the streams has some perennial base flow. Although all the streams in the area are grouped in one hydrologic unit, each stream has its own well-defined sub-basin and characteristics.

Ground Water Resources

The fresh ground water zones of Indus Basin are a very valuable resources. Ground water resources, dependent for recharge on rainfall and seepage from surface water, are secondary in nature. The quality of ground water varies widely from completely fresh to extremely saline. However, about 24.7 million acres are under lain by useable quality ground water. The Indus Basin Aquifer contains

reservoir with a usable volume much greater than all the existing and potential surface storages, free from sedimentation and large evaporation losses and usually located close to the area of use. It provides considerable economic advantage to the users for irrigation, domestic and industrial water supplies. Therefore, conjunctive use of surface and groundwater in sweet water zones is very popular, as it provides the opportunity to regulate supply according to crop requirements. The ground water in Indus Plains as estimated in 1998 gets recharged by seepage from various sources as described in the table given below.

Recharge to the Groundwater – System of the Indus Plains³⁴

Sources	MAF/Annum
Seepage from Irrigation Canals	17.84
Losses from Watercourses & Fields	17.84
Seepage from Link Canals	2.91
Recharge from Precipitation	6.33
Seepage from Rivers	1.38
Total	45.57

Usage and Demand of Water in Pakistan

Pakistan has been blessed by nature with great wealth of freshwater. It can boast of having the world's largest contiguous gravity based irrigation system (IBIS) in the plains of the Indus Basin. The suitability of the soil and availability of large big irrigated agricultural economy. It is the predominant user sector.

Agricultural Use

Agriculture is the largest user of water in Pakistan. It is heavily dependent on irrigation and 90% of its output comes from irrigated lands. Rains in the areas of Indus Basin Plains are either little or the

pattern thereof is unreliable while evaporation rate is very high. However the soil is good. Used in conjunction with irrigation, it is providing food and fiber for the population. The irrigation system has over the past century turned this part of the world into a rich agrarian economy. Following table gives the break-up of land use with reference to its dependence on various water resources.

Land Use in Pakistan

Ser	Category	Area (Million Acres)
a.	Geographical area (total acre)	196.0
b.	Cultivated area (area suitable for agriculture)	77.1
c.	Cultivated area (Irrigated +Barani)	54.5
d.	Irrigated area (By all sources)	44.5
e.	Potential Irrigable area for new development	22.6

Source: Agricultural Statistics of Pakistan 2012-13

Following table shows the increase in availability of irrigated water along with increase in canal commanded area from 1960 onwards.

Water Availability and Irrigated Area

Ser	Description	1960-61	1975-76	1999-2000
a.	Availability of Water at Canal Head (MAF)	81.0	101.0	106.0
b.	Canal Irrigated Area (Million Acres)	24.2	31.0	36.0

Source: Agricultural Statistics of Pakistan 2012-13

Conjunctive Use of Surface and Ground Water

The conjunctive use of surface water along with ground water, pump out by large number of public and private tube wells, can pay high dividends to the irrigated agriculture. The hydrological conditions are mostly favourable for pumping by tube wells. Ground water is available with about 79% of area in Punjab and 28% of the area of Sind as fresh ground water for irrigation. About 70% tube wells are located in the canal commanded areas, while the rest provide irrigation based on water alone.³⁵ Excessive use of tube wells causes serious damage to the ground water reservoir by surface movement and tables. The intrusion, excessive re-circulation of ground water may deteriorate its quality, besides increasing soil salinity.

Municipal and Domestic Use

Allocation of water resources for human consumption i.e. the domestic and civic use of must be on top priority. The human population has increased tremendously. World Health Organization has expressed concerns about the provision of safe drinking water for human beings now and in time to come. Not only is supply of water for municipal uses very expensive but inadequate. Contaminated water supplies bring disastrous results in the shape of diseases. Therefore, degradation of natural sources of water costs heavily to the national economy and economic growth efforts. About 65% population of Pakistan lives across the country in over forty five thousands villages and the rest lives in 415 urban population centres. It has been estimated that only 53% of population have access to safe water out of which 80% is in urban areas, while 20% in rural area. 50% villages get their water supply

from privately installed hand pumps. In urban areas only half the population has piped water supply connections.

The sources of water available for drinking and other non-agriculture purposes comes from surface water drawn from the Indus River and tributes and fresh underground water pumped out from the aquifers with the exception of Karachi. Out of the annual available surface and ground water of about 155 MAF, about 4.3 MAF is annually drawn for drinking purpose. This is about 2.8% of total available water. In areas where ground water is saline irrigation canals are main source of domestic supply as well.

Use for Hydropower Generation

Hydropower is a one of the products of surface water resources. It is the main source of energy in Pakistan. It is the most environment friendly kind of power generation. Blessed with large rivers emanating from high mountains Pakistan has great potential for hydel power generation. Indus River, which has large flows and steep falls on its 500 miles long journey from Skurdu to Kalabagh as the biggest potential for Hydro Electric Power Below Skurdu and west of Nanga Parbat the river before emerging with relatively gentle slow falls through a total of seven thousand feet in gradients exceed about 20 feet per mile. One estimate tells that the Indus canyon alone holds potential of about thirty thousand Mega Watts on its full realization. The River Jhelum between its confluence with Nelum and Mangla has a potential of about 5700 Mega Watts. Kabul Swat Chitral Basins also hold promise for hydel power production.

The reservoirs are operated under priority to irrigation. This sector at times generates conflict over assigning priority to water releases for power generation or irrigation. Here too there is a wide

gap between demand and supply. Some increase in the thermal power has reduced this potential conflict. A number of sites have been identified since 1967 with a potential estimated by WAPDA as 41720 Mega Watts.

Conclusion

There is no doubt that water is an important element for not only human survival but also for a sustainable development. The water usage has also changed according to the changed pattern of life style and increased population. World wide water availability is declining day by day and the states are confronted with the issue of water scarcity. Some states are facing 'water stresses and some are suffering with 'water scarcity'. In this connection, water is emerging as a critical issue in the national and global politics.

It is the blessing that Pakistan enjoys various resources of water like rainfall, glaciers, ground water, rivers etc. But Pakistan's hydrological environment is under great stress because of various reasons. Also, Indus River Basin holds pivotal position in Pakistan as the irrigated economy of the country is heavily dependent on it. Furthermore, the increased use of water in different sectors is also a reason for the water scarcity in the country.

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Periodic Socio-economic Development in Balochistan: Perceptions and Realities

(Muhammad Usman Asghar)¹

Abstract

Balochistan is a mineral rich land, with abundant natural resources and strategically important Gawadar deep sea port. In spite of this natural wealth, people of Balochistan lack basic necessities and face the lowest development rate in Pakistan. With this premise, this paper explores the variables and factors of social and economic development in Balochistan, starting from British era to contemporary trends. The paper also provides a comparative analysis of levels of socio-economic developments in Pre-British Era, British period and post independence era. In this entire study, data availability has been key constraint. A effort has been made to develop a comprehensive paper depicting the developmental profile of Balodhistan in a historical perspective. The paper argues that this perception does not have any empirical evidence that the successive Governments in Pakistan have deliberately neglected Balochistan. Contrarily, there is an ample evidence of bad governance and inefficient utilization of funds in the province.

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Periodic Socio-economic Development in Balochistan: Perceptions and Realities

Introduction

*“Might was the right in the days gone by,
and the position of the party aggrieved
was the principal factor in determining the
price to be paid for blood...”*

(District Gazetteers of Balochistan, 1906)

The past of the Balochistan region might have been unexplored due to its vast geographical area but in the present days, it is not wrong to claim; “Balochistan as land of opportunities”, laden with natural resources and assets. This characteristic of being “land of opportunities” is not new to Balochistan as this region dates back centuries in past, but its true potential had been unexplored. History is witness that Balochistan region had been used as a route both for trade and expeditions but remained unattended in terms of development. Credible national and international surveys indicate the wealth of resources in Balochistan, estimating that the area is home to one of the biggest copper reserves in the world with over 11 billion pounds of copper and nine million ounces of gold.¹ Balochistan is mineral rich land, which provides 40 out of 50 minerals mined in Pakistan.² Gawadar deep sea port has added very vital geo-strategic value to Pakistan both in terms of defence and international trade. Despite these attractive facts, people of Balochistan lack basic human necessities and face the lowest development rate in Pakistan. According to The Balochistan Economic Report (2009) from 1972-3 to 2005-06 Balochistan’s economy grew by 2.7 times, whereas, Khyber Pakhtunkhwa (KPK) and Sindh by 3.6, and Punjab by 4 times.³ This low level of

economic growth resulted in the low social and human development in the province. Balochistan also scores the lowest in the ten key indicators, including health, water, sanitation and education for 2007-08.⁴ In the absence of basic needs of human life, social security dilemma is born. A parliamentary committee on Balochistan in 2005 mentioned that “the province generates revenue of only Rs. 1.6 billion that is just enough to pay one month salary of government officials”.⁵ In the light of these arguments, a question surfaces for further analysis that why not these opportunities have been explored to its maximum so far to meet the basic and genuine needs of the province? This paper is an attempt to explore the variables and factors of social and economic development in Balochistan, ranging from British era to contemporary trends. The paper seeks to describe the comparison of levels of socio-economic developments in Pre-British era, British period and the post independence period.

Balochistan and Socio-economic Development:

The term ‘Socio-economic’ is most widely referred as the “use of economics in the study of society”.⁶ It is inevitable to achieve the objective of socio-economic development in the country, by choosing the essentials like efficiency, equity and justice for the prosperity and well-being of the country. Pakistan is a federal parliamentary republic which comprises four provinces. Balochistan is the largest province of Pakistan with an area of 347,190 km², containing the world’s largest juniper forest in Ziarat.⁷ This massive piece of land is bigger than many countries in Europe. It is quite interesting to mention here that Balochistan forms 47% area of Pakistan, while it possesses merely 4.96% population of Pakistan.⁸ Balochistan has population of 6.51 million according to the 1998

census, with population density of 19 persons per km², whereas, 47% of its population is living under poverty line, with 20% of population having access to drinking water as compared to 86% of Pakistan.⁹ These facts show the level of development and welfare in the largest province of Pakistan. These statistics provide a sense of deprivation in the local inmates of the Balochistan which is one of the factors for unrest in the province. The situation before 2010 was even worse due to the allocation of National Finance Commission (NFC) award on population basis. In the new NFC award, the allocation was re-balanced to take account of poverty and revenue generation which meant 9.09% share of Balochistan, as compared to the previous 7%.¹⁰

This is not the whole story to blame for low development in the province. It is significant to mention here that as of 2009, out of sixty five members of Balochistan Provincial Assembly, sixty two were in the provincial government as ministers (ministers without portfolio or advisers with ministerial rank), extracting Rs. 50 million personal share of Balochistan's development budget each to spend on projects of their own district.¹¹ Many members of the Balochistan provincial assembly have pieces of land greater in size than some small towns of the country. They use precious vehicles rarely seen even in big cities and have glamorous and inviable lifestyle. According to a statement of assets and liabilities submitted to the Election Commission for 2010-2011, Balochistan's Chief Minister Nawab Muhammad Aslam Khan Raisani was the owner of a luxury sports utility vehicle (Hummer H2) gifted by an unnamed friend from United Arab Emirates (UAE) and a Harley Davidson motorcycle brought to Pakistan after a waiver on customs duty along with a safety and security firm and a mining company with a

capital investment of Rs 106.5 million. He also owns over 30 real estate properties valued at Rs.150 million in his own and wife's name.¹² He was not alone in this race of material resources. His cabinet minister for Home and Tribal Affairs, Mir Zafar Ullah Khan, owned 24,338 acres of land, most of which he had inherited and was yet to be distributed.¹³ Pir Abdul Qadir Gilani owns 3,200 acres of land in Kalat and Lasbella, and an under-construction farm in Lasbella on 400 acres and Rs.33 million.¹⁴

In this situation, it seems that the representatives of the Baloch leaders have difference of priorities as compared to their masses. It is difficult to apporation the responsibility of current miserable situation of the province, either on the federal government or on the provincial side, but the victim is undoubtedly the population of Balochistan.

Historical Perspective

Balochistan has an eventful history dating back to the Stone Age.¹⁵ This region which comprises today's 'Balochistan' has been reported to be 9,000 years old civilization at Mehrgarh in recent research and archaeological excavations. Alexander the great passed through Balochistan in 325 B. C. The province has also witnessed the march of a number of great conquerors and warriors such as Macedonians, Arabs, Ghaznivids, Mongols and Mughals in the past.

The Muslim rule began in 712 A.D. The parts of Balochistan which were ruled by the Arabs were called by them Turan (Jhallawan area), having capital at Khuzdar and Nudha or Buddha (Kachhi). In the 11th century, Balochistan fell into the hands of Nasir-ud-din Subuktagin, marking the beginning of Ghaznivid dynasty. Ghorids succeeded the Ghaznivids. In 1219, it was annexed to the dominion of Sultan Mohammad Khan of Khwarizm (Khiva).

The year 1223 saw the danger of the Yellow Peril, the Mongols, in the south of Mekran. In the 1595, it became a part of the Mughal Empire and later Nadir Shah of Persia captured it. Ahmed Shah Durrani of Afghanistan was successful to establish his rule in 1747. The Khanate of Kalat emerged in 1758, when Nasir Khan-I revolted against the Afghans.

The Muslim rule was followed by the British rule in 1839. The British arrived in the region in 1830 and from 1839 to 1847 fought a fierce war with the Bughti tribe for dominance in the region.¹⁶ Two Afghan wars between 1839 and 1879 helped the British to consolidate their power in Balochistan. Sir Robert Groves Sandeman, who later became the Chief Commissioner of Balochistan, was the architect of British strategy in the region and he negotiated a number of treaties with the Khan of Kalat during 1854 to 1901. In 1876, Sir Sandeman signed a treaty with Khan bringing Kalat and its dependent territories under British suzerainty.¹⁷ Through these treaties the British Government gained control over the leased territory of Chaghi, Bolan Pass, Quetta and other areas. The princely states of Mekran, Kharan, Lasbela and a little later Kalat state acceded to Pakistan after it came into being in 1947. In 1955, Balochistan was merged into one unit of West Pakistan. After the dissolution of one-Unit, Balochistan emerged as one of the four new provinces of Pakistan.

Pre-British Era

It is narrated in the historical account of a British government officer Lala Hatto-Ram (1907) that the situation of the district Dera Ghazi Khan was not good as it has its geographical boundary up to Damn-e-Koh in Balochistan.¹⁸ Baloch tribes like Mizari, Dareshak, Gorchani, Leghari, Khosa etc were in a state of continuous conflict

and war like situation with Murri and Bughti tribes. Dera Ghazi Khan and its public property also had to suffer the attacks from fighting tribes from time to time. Lieutenant Robert Groves Sandeman, (1835–1892) took charge of Deputy Commissioner of Dera Ghazi Khan in 1866 and focused on his jurisdiction to maintain law and order. This was not less than a challenge for newly appointed officer to manage the deteriorating situation of peace and security in the region. Lieutenant Sandman managed to develop good relations with Baloch tribes and he honored them with dignity and respect. He was the first officer of the British Raj to break through the close-border system of Lord Lawrence, by extending British influence to the independent tribes beyond the border.

In the same context, crux of a speech delivered by Robert Sandeman in the court of Wali-e-Kalat is described as:¹⁹

“It is great pleasure to have almost all Sardars (Tribe heads) in the court of Wali-e-Kalat...I am here to announce that British government acknowledges all honorable Sardars as friends...Government does not intend to interfere in their areas...but Government desires peace and cordial relations with neighbours, enabling secure trade through the region...”

This speech clearly mentions that the British Government intended to have good relations with Baloch tribes to ensure the secure trade. The importance of region can be realized due to its trade routes and geo-strategic location at that time. Kalat region’s income and expenditure are narrated by Rai Bhadhur in his book which is given as under for reference of fiscal position, approximately in 1890’s time period:²⁰

Table 1: Fiscal Position of Kalat State in 1890's

Kalat Region	Amount in Rupees
Income	836,500
Expenditure	285,650
Net Total	550,850

It is important to mention here that state of Kalat was used to spend the interest money earned from British Government on welfare works like roads, hospitals which shows that the socio-economic situation of that era would have been good. District Quetta's income and expenditure are also recorded with slight deficit balance in the said time period.²¹ The division of income is narrated division-wise rather item-wise, which makes it difficult to clarify the contributing factors of production, whereas Quetta's expenditure is reported more than its income.²² There is another source of reliable information that is the official District Gazetteers of Balochistan, which provides the information and accounts of data district-wise.²³ District wise details of socio-economic situation of the Balochistan in early British period are given in table as under:

Table 2: Socio-economic Status of Balochistan Districts in 1895-1905²⁴

District	Population	Density ²⁵	Occupation	Major Crops	Income	Expenditure
Kharan	19,215	1	Agriculture	Wheat	100,000	80,000
Quetta-Pishin	114,087	22	Grazing,	Wheat	254,631 ²⁶	183,643
Sarawan	65,549	13	Agriculture,	Wheat	126,728	25,522
Jhalawan	223,692	10	Flock Owning	Animals	32,198	52,952
Lasbela	56,109	9	Flock Owning	Animals	209,000	193,702
Makran	78,585	3	Agriculture	Wheat	38,031	72,610
Loralai	67,864	8	Agriculture	Wheat	213,875	N/A
Bolan	1,936	2	Agriculture	Wheat	8,616	N/A

Post-partition Era

Balochistan is the one of the four provinces of Pakistan and this current administrative status is from 1971 onwards. There have been unpleasant situations in the province's political history since independence of Pakistan, which has left the pace of social and economic development far behind than other provinces. The very low population density of Balochistan also makes it less developed area, because it costs more to cater all geographically scattered chunks of inhabitants. Quetta is the only big city of the province, which comes in the top ten populated cities of Pakistan.

Developmental work is based on the budgetary allocations of the federal and provincial government individually. A comparison of revenue and expenditure of Pakistan and Balochistan is shown in the graph (figure 1 in the annexure) to explain the equation and share of respective stakeholder.

This figure shows that there has been very nominal rationality in the federal revenues and expenditures as compared to that of Balochistan. The largest province of Pakistan has very minute linear relationship with the federation. Factors of production and their share in the provincial revenue also forms the little pie that can be the one reason for the low growth in revenue generation and in the same way, expenditure for development in the province. If one entity has greater amount of revenue then it is definitely in a position to exert more expenditure on its welfare and basic needs appropriately. NFC Award also had been awarded in these years on the population formula, which was not in favor of Balochistan, due to its very low population as of other provinces.

A detail of provincial expenditure and its amount for education and health is shown in the given figure in an effort to define the

composition of Balochistan expenditure and revenue. Federal grants to Balochistan in the given years are also shown to portray the share of these grants. Balochistan and Its Fiscal Break-up is shown in graph (Figure 2 in the annexure).

It is quite difficult to augment that Balochistan has been generating more revenue than its expenditure in the given years and still it has very low situation of social life and indicators. It may be interpreted as the provincial government had never consumed the funds available for the development to the maximum tune or their priority areas had been other than of public welfare. Federal grants are also on declining trend in those years when the gap between provincial revenue and expenditure widens.

Education and health are two basic social indicators and the expenditure on these two sectors, as compared to total expenditure, is comparatively low, resulting in the low social development among its population.

A very critical indicator to judge the level of development and allocation of resources is the population of provinces. This indicator should not be understood wrongly. For example, Punjab with a population of 73.6 million (1998) has 33,944 villages/settlements electrified, making 2,168 person per electrification facility benefitted. In the case of Balochistan, a population of 6.6 million (1998) had 3,046 villages/settlements electrified, making 2,167 person per electrification facility, that is fairly at par with Punjab. The results of the given figure should not be mistaken in this regard, assuming that Balochistan is deprived of electricity facility. There is also another wrong notion that is aroused among ignorant masses that Punjab is taking the larger pie of cake. This is wrong argument that needs to be evaluated empirically. Balochistan also lacks in the

infrastructure and basic facilities like electricity due to its population size and scattered population but it does not imply that it is far behind than any other province of Pakistan. Figure 3 in the annexure shows the Province-wise Electricity Facility in Pakistan.

Education is another key indicator in the development of any region. In modern world, it is impossible to progress without a reasonable educational background of the population. Schools play primary role in the achievement of high literacy rate and educational goals of a country. Economic development is also dependent on the skilled and educated labor. Data of schools at three levels (primary, middle and secondary) are shown in the figure (Figure 4 in the annexure) in comparison with other provinces of Pakistan.

There can be higher levels of education than secondary but in this paper up to secondary level data is analyzed for the purpose of research, which means 10 years of education level attained by the population.

Literacy rate is another indicator of education. Balochistan has grown well in the education, as its literacy rate shows the progressive trend in the figure 5. Balochistan still lags behind from Punjab and Sindh in literacy rate, which have 60 and 59 percent respectively in 2011. Millennium Development Goals also lay strong emphasis on the minimum level of education and literacy rate in Pakistan. Population density is a big hurdle in the educational sector in Balochistan, as it demands more and more schools, but enrollment is low due to scattered population in the province. Figure 5 in the annexure shows the comparison of Literacy Rate in Pakistan and Provinces.

Pakistan with its all provinces show a constant line in last two years in the literacy rate that demands increased budget and concentration on this sector for development and progress.

Population density and its impact are very important and influential in almost all indicators of the socio-economic development in the case of Balochistan. This also implies that facilities might be available in the province but are out of reach of common man. It is analyzed that this is due to the population density that is scattered. For better understanding, a comparison of Pakistan and Balochistan population and density is shown in the figure (Figure 6 in the annexure).

Balochistan comprises almost half of Pakistan but the total population of this province is least one and same is the case in the density. The low number of population and density creates many problems for the province in the federation. In most of the studies, the real problem of Balochistan is missing because they look on only one side of the picture. By applying the criteria of equity, Balochistan is at par with other provinces but lags far behind on the scale of efficiency.

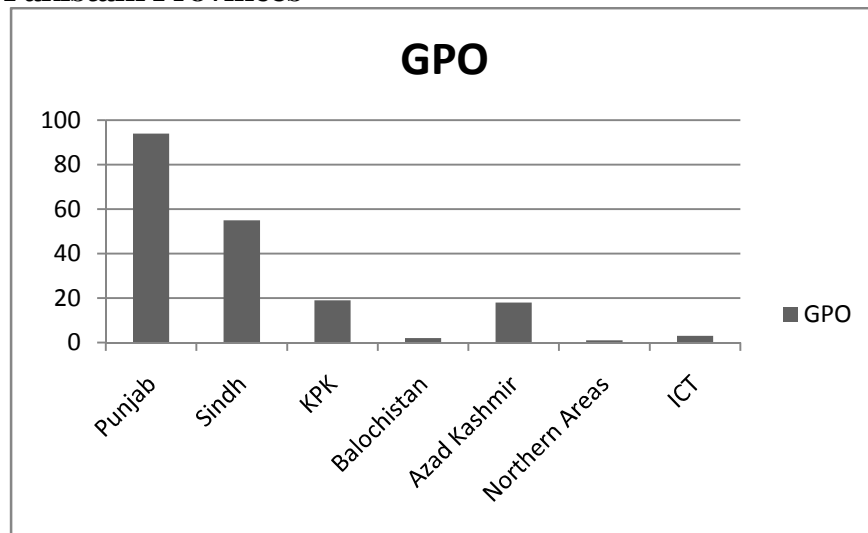
This problem gives birth to other problems as well, which may include the basic facilities of routine life. These may include electricity, tapped water (inside piped water), supply of gas, Kitchen, washrooms etc. As a matter of fact, each development initiative has a specific cost and it is aimed for the specific number of population to benefit. This criteria is void in the case of Balochistan as the cost increases and the beneficiaries decrease. A comparison of such facilities is given in the table below.

Table 3: Housing Accessibility to Municipality Services in Pakistan by Provinces (%)²⁷

	Electricity		Inside Piped Water		Gas Piped		Kitchen		Latrine	
	1973	1989	1973	1989	1973	1989	1973	1989	1973	1989
	Pakistan	13	59	8	18	2	9	20	38	29
Punjab	15	58	7	16	1	7	20	31	19	25
Sindh	21	58	13	27	5	20	17	45	48	56
KPK	24	68	5	22	0.1	4	22	46	48	58
Balochistan	5	38	5	11	0.1	3	29	37	19	29

This shows a clear picture of available facilities to the Balochistan public as compared to the other provinces and Pakistan. Balochistan is the lowest scoring in three out of the five indicators. Balochistan possesses larger number of tap water facility for its population as compared to the Punjab.²⁸

Figure 7: Number of General Post Offices (GPOs) in Pakistani Provinces²⁹



Economy of Balochistan

Balochistan is area-wise the largest province of Pakistan, but it contributes too little to the agriculture sector. Agriculture, animal husbandry and mining engage the largest segment of the population in the province but trade is also a major component in the economic activity of the province.³⁰ According to a study, over 90% of trade in Balochistan is undocumented and is in the informal sector, due to Balochistan's geographical location and its borders with Iran, Afghanistan, Central Asian States and Arab Emirates across the Indian Ocean.³¹ Major crops and their areas with respective production are given in the table to give a glimpse of agriculture share by the provinces.

Table 4: Major Crops and Their Share 2008-09³²

Crop	Punjab	Sindh	KPK	Balochistan	Pakistan
Wheat (Area)³³	6,836	1,031	769.5	408.9	9,046
Wheat (Prod)³⁴	18,420	3,540	1,204	868	24,032
Rice (Area)	1,977	733	61	190	2,962
Rice (Prod)	3,643	2,537	128	643	6,952
Maize (Area)	534	2.7	509	5.5	1,052
Maize (Prod)	2,627	1.7	957	6.2	3,593
Sugarcane (Area)	666	263	98	0.8	1,029
Sugarcane (Prod)	32,294	13,304	4,408	38	50,045
Cotton (Area)	2,223	561	0.2	34	2,820
Cotton (Prod)³⁵	8,751	2,978	0.5	89	11,819
All Fruits (Area)	400,136	154,865	47,364	254,695	857,060
All Fruits (Prod)	4,337,947	1,015,416	522,412	1,175,737	7,051,512

At the time of independence, the major share of (West) Pakistan's gross domestic product was from agriculture, which contributed around 53% and more than 65% of Pakistan's labor force worked in agriculture.³⁶ Land degradation has universal effects that causes one-third (4 billion hectares) of world's land area and more than 250 million people in developing countries.³⁷ Balochistan constitutes area-wise almost half of Pakistan that adds on its importance due to this physical feature. Unfortunately, this vast area of land available with Pakistan yields the lowest in the agriculture sector share in gross domestic product. A study points out the causes of land degradation in Balochistan, which are deforestation, over-grazing and over-exploitation of vegetation, because almost 90% of the rangelands, livestock rearing are the mainstay of the rural population in Balochistan.³⁸

Economic Opportunities and Potential:

*"It is estimated that known gold deposits in Balochistan exceed the value of twelve billion dollars, and the proven iron-ore deposits are in excess of twenty-three million tons."*³⁹

Economic development can be defined as the simultaneous occurrence of a growing per capita income and improvement in the standard of living of low income groups.⁴⁰ In this definition, efficiency is the first element and equity is the second one.

Dr Mehboob ul Haq described the economic planning and policy framework in his book that the underdeveloped countries must consciously accept a philosophy of growth and shelve for the distant future all ideas of equitable distribution and welfare state. It should be recognized that these are luxuries which only developed countries can afford. The immediate problem is the creation of 'surplus value', and the best form of social security is the extension

of productive employment opportunities to all.⁴¹ Available labor force is required to be engaged in productive activities, resulting in the generation of revenue for themselves and as well as for Pakistan. In the absence of economic activities, the bulk of labor force will be more prone to derail from the path. This deviation may bring severe consequences. Economic disadvantages and deprivations like discrimination, poverty, and resentments about restricted access to political positions, participation, and recognition are correlated with economic and social grievances leading to demand for greater political rights.⁴²

Communication plays very vital role in the economic development of any region. Roads and Railway lines are key factors of communication in Pakistan. Road density in Balochistan is shown in the table for explanation of road structure.

Table 5: District-wise Road Density of Balochistan⁴³

District	Road Density
Quetta	1.43
Pishin	0.15
Chagi	0.03
Loralai	0.06
Zhob	0.06
Sibi + Ziarat	0.09
Kohlu	0.04
Dera Bughti	0.05
Nasirabad	0.08
Kachhi	0.04
Kalat	0.05

Khuzdar	0.08
Kharan	0.07
Lasbella	0.06
Turbat	0.02
Pangjur	0.07
Gawadar	0.06

Balochistan has immense potential to grow and develop industry-wise, due to its large reservoirs and natural minerals. In this context, there are certain competitive advantages, which Balochistan possesses; like availability of raw material, coastal belt and developed Gwadar deep sea port which ensures access to Central Asian Countries, Gulf States & other neighboring countries. The potential areas for investment in Balochistan are minerals, Horticulture, fisheries, livestock and handicrafts. Main-types of minerals are coal, chromites, barytes, sulphur, marble, iron ore, quartzite and limestone.

Conclusion

Balochistan is a gift of nature for Pakistan, which strengthens its geo-strategic position and self-sufficiency of mineral resources. This vast piece of land contributes to a half of Pakistan's area. Despite these facts, Balochistan feels deprived of basic human needs and facilities by the federation. This is true to some extent but does not exactly portray the whole problem. Empirically, Balochistan is also better than other provinces or at par in some aspects. The issue is with the population which is credulous in its nature and blindly follows in their political leaders. Politicians play the musical chairs and once they are out of the game, they start blaming the federation. Real problems remain unattended or deliberately ignored as they fear that the real development will challenge their dominance.

Education and awareness are the key solutions in Balochistan along with economic activities in the province, which could provide employment opportunities to the ordinary public. Communication outreach can play vital role in the making of positive public opinion towards Pakistan. Dialogue on open media can negate the anti-state sentiments, ensuring security and allowing the opportunities of investment in the province.

There is a difference in the perceptions and realities of socio-economic developments in Balochistan and this need to be advocated empirically to the masses to show them the real problems, which demand immediate attention. This will help to boost the social and economic development of Balochistan and ultimately for Pakistan.

End Notes

¹ Rabia Aslam, "Greed, creed, and governance in civil conflicts: a case study of Balochistan", *Contemporary South Asia*, 19:2, (2011): 189-203.

² Ibid.

³ Rabia Aslam, "Greed, creed, and governance in civil conflicts: a case study of Balochistan", *Contemporary South Asia*, 19:2, (2011): 189-203.

⁴ Ibid.

⁵ Senate of Pakistan, Report of Parliamentary Committee on Balochistan, (Islamabad, 2005).

⁶ John Eatwell, Murray Milgate, and Peter Newman, [1987] 1989. *Social Economics: The New Palgrave*, p. xii. Topic-preview links, pp. v-vi. <http://en.wikipedia.org/wiki/Socio-economic>

⁷ M. R. Kazimi, *A Concise History of Pakistan*, (Karachi: Oxford University Press, 2009).

⁸ *Issues in Pakistan's Economy*, Oxford, Karachi.

⁹ Senate of Pakistan, Report of Parliamentary Committee on Balochistan, (Islamabad, 2005).

¹⁰ Anatol Lieven, *Pakistan A Hard Country*, (London: Allen Lane The Penguin Press, 2011), 364.

¹¹ Ibid.

¹² Dawn Newspaper, <http://dawn.com/2012/03/22/balochistan-ruling-elites-lifestyle-outshines-that-of-arab-royals/>

¹³ Ibid.

¹⁴ Dawn Newspaper, <http://dawn.com/2012/03/22/balochistan-ruling-elites-lifestyle-outshines-that-of-arab-royals/>

¹⁵ Government of Balochistan, official web portal, <http://www.balochistan.gov.pk/menu-history.html>

¹⁶ Anatol Lieven, *Pakistan A Hard Country*, (London: Allen Lane The Penguin Press, 2011)

¹⁷ Ibid.

¹⁸ Rai Buhadar Lala Hatto Ram, "Taarekh-e-Balochistan", (Quetta: Balochi Academy, 1973 (First Ed. 1907)) 446.

¹⁹ Rai Buhadar Lala Hatto Ram, "Taarekh-e-Balochistan", (Quetta: Balochi Academy, 1973 (First Ed. 1907)).

²⁰ Ibid.

²¹ Ibid.

²² Rai Buhadar Lala Hatto Ram, "Taarekh-e-Balochistan", (Quetta: Balochi Academy, 1973 (First Ed. 1907))

²³ District Gazetteers of Balochistan, Government of Balochistan, 1997

²⁴ The Gazetteer of Baluchistan, Published by Gosha-e-Adab, Quetta, 1906.

²⁵ Per square mile

²⁶ Income and Revenue include only Quetta district for the year 1892-93.

²⁷ Issues in Pakistan's Economy, Oxford, Karachi Table 16.23.

²⁸ Statistics Division, Federal Bureau of Statistics, Government of Pakistan, *Social Indicators of Pakistan* (Islamabad: Official Printers, 2008) 71.

²⁹ Graph is designed by the author using the data from 50 Years of Pakistan in Statistics, Federal Bureau of Statistics, Government of Pakistan, 2000

³⁰ Syed Nawaz-ul-Huda, Farkhunda Burke, and Muhammad Azam, "Socio Economic disparities in Balochistan, Pakistan – A multivariate analysis", *Malysian Journal of Society and Space* 7 issue 4 (2011): 38.

³¹ Ibid.

³² The data is taken from the Ministry of Food and Agriculture, Government of Pakistan's report on "Crops, Area and Production by District 2008-09".

³³ Area in "000" Hecters

³⁴ Production in "000" Tonnes

³⁵ Production in "000" Bales

³⁶ Issues in Pakistan's Economy, Oxford, Karachi.

³⁷ S. Qasim, R.P. Shrestha, G.P. Shivakoti and N.K. Tripathi, "Socio-economic determinants of land degradation in Pishin sub-basin, Pakistan", *International Journal of Sustainable Development & World Ecology*, 18:1,(2011) 48-54.

³⁸ Ibid.

³⁹ Mohammad Asghar Khan, *We have learnt nothing from history* (London: Oxford University Press, 2005), 202.

⁴⁰ W. R. Brock, J. J. van Dijk, E. B. K. van Koesveld, and S. Wagenaar, "Economic development and Infrastructure: The Case of Balochistan Province", *The Pakistan Development Review*, Vol. 35, No. 1 (Spring 1996), 85-93.

⁴¹ Mahbub ul Haq, *The Strategy of Economic Planning, A Case Study of Pakistan* (Karachi: Oxford University Press, 1966)

⁴² Rabia Aslam, "Greed, creed, and governance in civil conflicts: a case study of Balochistan", *Contemporary South Asia*, 19:2, (2011): 189-203.

⁴³ W. R. Brock, J. J. van Dijk, E. B. K. van Koesveld, and S. Wagenaar, "Economic development and Infrastructure: The Case of Balochistan Province", *The Pakistan Development Review*, Vol. 35, No. 1 (Spring 1996), 85-93.

BOOK REVIEW

(Manzoor Ahmed Abbasi)*

Title of the Book : Review of Evaluation Frameworks
Author's Name : Barbara Kahan, Evaluation
Consultant, Kael Consulting and
University of Toronto, Canada
Publisher : Saskatchewan Ministry of Education
Place of Publication : The Province of Saskatchewan,
Canada
Year of Publication : 2008

It is an important booklet, sponsored and published by the Ministry of Education of Saskatchewan province of Canada. It has been compiled by a renowned scholar, Barbara Kahan, whose books, research papers and evaluation reports are wide-spread on the web-pages. She is a prolific writer, particularly on the health affairs. 'A Guide to the Interactive Domain Model (**IDM**) Best Practices Approach to Better Health', co-authored and developed by her, in collaboration with Michael Goodstadt, sponsored by Center for Health Promotion, University of Toronto, has received world-wide acclamation.

The booklet in hand, consisting of 65 pages, contains 'excerpts from Review of Evaluation Frameworks'. It goes to the credit of the author that she has been able to present invaluable key concepts pertaining to evaluation in such a condensed and brief booklet. Starting from executive summary, followed by introduction, guiding principles, evaluation concepts, overview of approaches, evaluation

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practices and finally references, the review encompasses all essentials of evaluation and helps the reader to distil the subtle differences among various concepts. A gist of the book is being presented in the succeeding paragraphs:-

- **Introduction.** The introductory part is a specimen of academic research. The objective of the study, research methodology, literature review, sources of data collection, context as well as limitations of the study have clearly been delineated.
- **Guiding Principles.** It is an important section, which deals with the philosophical basis of evaluation frameworks viz: values and principles, evaluation standards, evaluation ethics and organizational practice guidelines. Dilating upon the significance of incorporating values and principles in evaluation framework, the author says, *“Making values and principles explicit increases the likelihood they will be integrated into the practice and promotes a reflective approach”* (p.2). The author has enlisted two sets of values, the first one containing eleven values and the second set consisting of five core values (p.7 & 8). Similarly, the author has included the ethics set by the Canadian Evaluation Society for the Conduct of Evaluation, which cover the following areas: ‘competence, integrity and accountability’, whereas, the research ethics are: respect for persons, beneficence and justice (p.9.).
- **Evaluation Concepts.** This section gives an exhaustive elaboration of key concepts of evaluation, including various definitions of evaluation itself. The sub-section ‘Evaluation Types’ seems to be a must ‘read’ for the students of public

policy, as it contains the finer shades of differences in important evaluation concepts viz: 'preliminary, formative, process, outcome, summative, economic, meta evaluation and ongoing review etc. (pp. 11-22).

- **Approaches to Evaluation.** This section is, by and large, the most detailed description of evaluation approaches. The writer correctly opines that “no one approach is the best for all situations, as each approach has its own particular set of strengths and cautions. Often two or more approaches are combined when conducting an evaluation.” The writer has discussed the following major approaches: results focused, utilization focused, collaborative, balanced scoreboard and appreciate inquiry (pp.23-55).
- **Evaluation in Practice.** The writer dilates upon the consideration of potential benefits, challenges and suggestions for success of the evaluation in this section. She also enlists the potential benefits, challenges and suggestions (pp.56-60).
- **Incorporating Evaluation into an Organization.** This is the last section of the Review, which deal with the questions as to how the evaluation should be incorporated into organizational frameworks. She referred to Stufflebeam’s Institutionalizing Evaluation Checklist (2002), which contains 18 point, out of which this author has chosen only four i.e. context dependent, evaluation purposes, evaluation team and funds/facilities etc. (p.60).

Personal Analysis of the Review

Although the book under review is not a typical book, rather it is itself a review. However, it was a fruitful read, which helped a great

deal to understand various concepts of evaluation. It is a crisp summary of entire evaluation framework, which assists an evaluator to grasp the essence of evaluation before practically undertaking any evaluation specific assignment. The book presents in only sixty pages so much information about evaluation, which would be difficult even to compose in a voluminous treatise.

List of NDU Publications

1. Pakistan – India Wars 1965 & 1971
2. Selected Reading in Military History: Napoleonic Art of Warfare, Battles of Tannenberg & Masurian Lakes – 1914
3. Evolution of Military Thought
4. Post Workshop Report on Balochistan Situation, 2012
5. World War -1: The Western Front
6. ‘Kashmir: Looking Beyond the Peril’
7. NSP: Non-Kinetic Challenges to the State of Pakistan, 2012
8. Urdu Translation of Art of War by Sun Tzu
9. NDU Journal
10. Margalla Paper
11. ISSRA Papers