

Waters War on the Cards: Unflinching Rivalry between India & Pakistan shapes New Phase of Enmity

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ABSTRACT

This research aims to investigate the lurking perils of war between two nuclear rival countries of Pakistan & India on the issue of water. This research has explored that water is the main warfare strategical & psychological tack often used by India against Pakistan. The researcher employed qualitative methodology for the research underhand and adopted thematic analysis as research method for this study. The researcher analysed different research studies related to the issue and considered cases to the research-based statements of the individuals in power from both sides of the countries on the issue of water. The findings of the study revealed that the political individuals and uniformed personnel occupying key positions on Indian side used the threat of water as warfare tactic to achieve political gains specially to win the elections. The findings further concluded that Indian side aggressively treated Pakistani side while gratifying the hatred feelings of Indian elites converting to the feelings of masses through moulding the agenda of mass media. The findings showed that the masses on both sides of the regional countries desire sustainable global peace through consultative dialogue on tables. The study concluded with the recommendations that all issues including Indian Held Kashmir, terrorism, water crisis and other regional issues can be resolved through dialogue. The study may also open new avenues for future researchers.

Keywords: *Indian Held Kashmir, Water War, Terrorism, Global Peace*

Introduction

Truly it is generally believed that water is the most essential natural resource for human life on earth. Also, water will continue playing its due role in broader areas of social development, thus bringing improvement in quality of life as water is the vital component of human body (Arif, 2010). In many countries, rivers, lakes and streams serve as boundaries especially in the case of bilateral countries, even going one step ahead, this natural source crossed the boundaries of bilateral countries as is the case with rivers between Pakistan and India. Fluctuation of rivers and waters from upper to lower riparian areas was another big problematic management issues between two bilateral countries (World Water Day, 2009).

The Indus Water System, which covers around 1,165,000 km², is the largest rivers systems in the world (Swain, 2002, 2004). This Indus River system is collectively shared among various Asian countries including Republic of China, India, Islamic Republic of Pakistan and Afghanistan. Nowadays, it is generally believed that around one third population across the world has no access to one litre clean drinking

fresh water per day. The World Health Organization has concluded in one of its reports that dirty water was the major fifth cause of all chronic diseases across the world. The WHO asserted that consequently due to dirty water, around 900 million population of people suffer from severe diseases across the world while 24 million people die each year due to dehydration and diarrhoea. The World Health Organization, however, believed that although that was the huge figures of disease affected from the dirty water but these issue or diseases did not lead to severe conflicts that may amount to emergency of war on water. The conflict of water emerged due to disorganization of society due to political fragility and bad governance setups. The WHO in its report concluded that it was hard to digest that this planet's 71 surface was covered with water and still the human beings were supposed to suffer from shortage of water.

Albrech (2000) stated that in Libya, 'Great Manmade River' initiated by slain leader Muammar Ghaddafi has been considered as a gigantic project for proper utilization of water resources for his water hungry country and its first phase was successfully operationalized in 1992. Ghaddafi initiated the project with 20 to 25 billion US Dollar and introduced 750 kilometres long underground water systems through pipelines from upper to downward areas. Resultantly, 1 million cubic metres of water was shifted through underground successful water pipelines systems on daily basis and 86 percent of water from this project was used for irrigation in Libya. However, some historians believed that 'War on Water' has attracted worldwide attention due to global environmental changes in different countries since long. Although, no war has been fought between countries on this issue but various environmentalists have shown their serious concerns about this imperative global issue. Water is the need for the existence of human beings, animals and other livings on this planet. Like oxygen, water has also central position for smooth functionality of human body. This world has huge growing number of populations estimated to over 7 billion human beings on earth while more than half of the population resided here in the South Asian countries including China with estimated over 2 billion populations, India with 1.35 billion populations and Pakistan with 250 million populations. Albrech (2000) claimed that there would be no war on water because according to economic rules, water and air are always free goods and are found in abundant across the globe. He further believed that the issue of water war was new for the theorists of social sciences but the theorists and environmentalists believed there could be any conflict among the countries on the division of resources including water in future but natural resources are always in abundance.

Malin Falkenmark introduced the concept of water scarcity, where the researcher believed that around 1,700 cubic metres or even less than that of renewable water stocks was required per annum per capita. Falkenmark believed the theory of shortage of water in actual sense was applied when water was around 1,000 cubic metres or less than that. He, however, further identified around 28 existed in 1990 with total combined estimated population of around 335 million people which were affected by the shortage of water. By 2025, there could be some 46 to 52 countries which could be affected by the scarcity of water, therefore, it can be estimated that dependency may further cross from 3.3 billion people (IISS 1999, Engelmann/Leroy 1995). However, this investigation does not apply to the countries having stable political structures and well established cultures of good governance where serious water escalation has no potential problems including Parana, Brazil, Paraguay,

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Argentina, Amazon and Orinoco. Water escalation is always an issue for discussion where there was underutilization of modern technological advancements to secure water reservoirs (e.g. Indo-China and the Mekong; see Schiffler 1999:9) where there was always unequal distribution of water resources.

The subcontinent was divided into two dominions of Pakistan and India in 1947. A line was drawn between the two countries without any formal division of natural resources (Kazi, 2011).). Therefore, Indian government cut off the upper riparian areas in April 1948 while demanding Pakistan to admit Indian share on not only Indian Chenab River but also on Pakistani Chenab River. That the start of rivalry on water issue raised by Indian government to press Pakistani government and for that action Indian side believed Pakistan would not survive a single day without fresh water (Kasuri, 2015). In 1947, almost two million acres' land of Pakistani side was an agriculture land which was definitely dependent on river waters. That was an awkward situation rather unacceptable for Pakistani government because India had desired to have full control on rivers on riparian areas while Pakistan's right on rivers and fresh waters was admitted through signing a treaty with Indian government much later (Zingel, 2016). Although India restored some water supply of water in mid of 1948 but that water supply was insufficient to meet the needs of agriculture in Pakistan. So, proper issue was resolved between the two enemies after mediating role of the World Bank in 1952 in the form of signing Indus Water treaty in 1960 (Mirza, 2011).

Shah (2010) stated that the claim of shortage of fresh waters on Pakistani side was based on untruth realities as that was just because of improper management of waters by Pakistan. He believed that it was true that India was constructing dams on Pakistani rivers but what to say about the share of waters which went wasted due to lack of management of waters. He further believed that all major rivers flow from Himalayas and Indus River was only one of them, therefore, Pakistani claim of water theft by India was just a claim only. Brisco (2013) believed that water scarcity was a major vulnerable concern in Pakistan and may further become a security threat for Pakistani people in future. He further asserted that water threat has replaced all other issues including terrorism and Kashmir conflict between the two nations.

The Baglihar Case

Brisco et al. (2010) stated that the 450 megawatt project of Baglihar Dam initiated by India on Chenab River in 1999. However, Pakistani government believed that India was manipulating huge water shares of Pakistani side through gated spillways to India in violation of Indus Water Treaty. After failure of Water Commissions from both side, Pakistani government asked World Bank to intervene to resolve the issue through neutral experts in 2005. However, while allowing India to continue constructing Baglihar Dam on the pretext of "live storage", the World Bank expert given verdict in favour of India giving blow to Pakistan's stance.

The Kishenganga Dam Case

India initiated Kishenganga Dam Project in 1994 in Indian Occupied Kashmir on two westward main two tributaries from Nelum and Jhelum Rivers. Brisco et al. believed that the water commissioners in Pakistan very much knew that Indian government can build such kind of Dam on Nelum Jhelum Rivers and India started

establishing 330 megawatt Kishenganga Dam Project, whereas Pakistan has also launched 1,000 megawatt Nelum-Jhelum Dam Project on western tributaries. In the meantime, Pakistan government after disgruntlement from the decision of neutral expert decided to approach Court of Arbitration, but to no avail. Brisco further believed that such tense situation has worsen the condition of Pakistan as India can create problems for Pakistan at any time while manipulating the fresh waters of Pakistani share in the name of “live storage”.

Wullar Barrage

Wullar Barrage is yet another project of India started in 1984 on Jhelum River some 40 kilometre upstream on the Line of Control in Baramula District of Indian Occupied Jammu & Kashmir. Upon such illegal move, according to Pakistan, the government of Pakistan staged massive protest demonstration and involved international community consequently, the Indian government had to halt the construction on the project. Pakistan pointed out violation of Indus Water Treaty while Indian government considered it mere a “navigational use” which, according to Indian government, was allowed in Indus Water Treaty. Pakistan, however, brought the issue to International Court of Arbitration.

The International Court of Arbitration

Momin, (2011) stated that as Pakistan’s reservation on Indian illegitimate attitude was quite evident due to abovementioned steps of constructing dams on Pakistani waters, the Government of Pakistan decided to approach International Court of Justice. Momin further filed an appeal pleading that Indian government was ‘redirecting’ the courses of rivers on Pakistani side. The Court responded swiftly and the Court forbidden Indian government constructing any dam project on Pakistani rivers. India replied to the appeal while submitting rejoinder in order to highlight position of India. The ICA, however, ordered India to provide actionable information about environmental ecological dangers due to that project. The case is pending with International Court of Arbitration.

According the objective of the study in hand were designed in following way.

1. To analyse the existing issues between Pakistan and India
2. To observe survival issues between Pakistan and India
3. To analyse core issues between Pakistan and India
4. To analyse the magnitude of water issue between Pakistan and India
5. To analyse the genuine situation of water war between Pakistan and India

Theoretical Framework

The study in hand is deep rooted in Grounded Theory as the researcher found great linkage between inductive reasoning of the theory with current qualitative research through Thematic Analysis. Scarneci-Domnisoru (2019) believed that usually researchers employ thematic analysis in descriptive studies, but it will become a grounded theory when a researcher derives themes from the qualitative data. A theme generally seizes patterns across the dataset, which are commonly clustered data concepts. Grounded theory is the extension of qualitative analysis (Charmaz, 1990; Walsh, 2014), which began five decades ago (Glaser & Straus, 1967) and has

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since then Grounded Theory has developed to great extent (Heath & Cowley, 2004). Thematic analysis as discussed in the grounded-theory discussed the conditions ensures the course most suitable (Heydarian, 2016). Grounded theory usually compels researcher to refers back into the literature concerned which is related to the research underhand thus fostering the ways for qualitative data collection. Grounded-theory approach further involves critical review of responses in data for formulate themes and finally conduct thematic analyses based on the responses of interviews or statements taken as open-ended questions (Braun & Clarke, 2006; Pope & Mays, 1995).

Methodology

The researcher employed Qualitative Methodology for the current research and adopted Thematic Analysis to analyse secondary data in this qualitative research.

Data Analysis

In the aftermath of the Mumbai terrorists' attacks dated 26th November 2008, the tensions between India and Pakistan deteriorated further and even the both nations come at the verge of nuclear war. Analysts believed that war could destroy the both nations from the surface of world and even the entire world would be at stake and they further believed the "water war" could be more disastrous.

Iftikhar and Riffat, (2005) believed as,

"India's move of constructing dams on cross boundary rivers including Baghliar Dam, Kishanganga Plant and Wullar Barrage has raised serious conflicts between two nuclear powers. If not resolved in time, this can prove a disastrous for peace and security of not only both countries but the peace of the world".

Bagla (2018) says as,

"India has been using the issue of water as a powerful weapon against the state of Pakistan,".

Gandapur (2016) in Dawn wrote as,

"If India uses water as weapon then Pakistan first may face back-to-back famines, consequent, hunger, loss of crops, and the situation may lead to a nuclear war between Pakistan and India with worst consequences".

Yofee (2003) believed as,

"Scholars reveal the conflict of water issue generally arises when both states Pakistan and India start constructing hydrological power plants without having any treaty independently and without any joint cooperation framework,".

Khan, (1959) says,

"The Indus River along with its major tributaries including Jhelum, Chenab, Sutlej, Ravi and Beas showcase major water sources especially for irrigation setups for Pakistan and India. The water dispute had erupted soon after the partition between the two regional countries. Indus Water Treaty, however, resolved this issue wisely and this treaty was being considered by the entire world as a successful conflict-resolution. The Indus Water Treaty survived despite several

wars fought between India and Pakistan, until the Kargil War. The Uri Army Base Attack also fuelled the tension between the both countries and India used threat of water war against Pakistan”.

Lepawsky, (1963) says,

“Initially, the British created water dispute between both countries through Radcliffe using him as instrumental because British used to create disputes between states in colonial era to have absolute control on all states. The same was done by British between both states, as they provided the states in a manner that most of the Indus and its five major tributaries run in Pakistan while the upper 250 miles of the same river and tributary headwaters run in India. This was the origin of dispute”.

Tufail (1965) says as,

“The famous Indus Water Treaty was signed in former Capital of Pakistan, Karachi, by then prime minister of India Mr. Shri Jawaharlal Nehru and then President of Pakistan Mohammad Ayub Khan in 1960 in presence of the World Bank Vice President Mr. W. A. B. Iliff. This was the best treaty signed between two neighbouring countries on the issue of water and General Ayub on September 3 announced on radio and considered as an ideal solution between the countries”.

Douglas (2013) says as,

“This Treaty resulted in the creation of Indus Basin Development Fund of almost \$900 million. This fund was used to create network of irrigation in Pakistan. The treaty bound Indian government to pay \$174 million and \$640 million was provided by the participating governments in the treaty whereas \$80 million was provided by the World Bank as a loan to Pakistan”.

Wolf (2003) says as,

“The only genuine and true “water war” was fought between the fighting nations in over 4,500 years ago, between Lagash and Umma in the Tigris Euphrates basin. Therefore, there are least chances of such war between other nations”.

Findings and Conclusion

After detailed review of literature, statements and researches, the following findings/ conclusions have been derived. Salik (2017) concluded that Pakistan has been raising the issue of water scarcity and Indian aggression on water resources since long at different national and international forums.

- 1) It can be affirmed that unaddressed Pakistani issues and genuine demands can become a severe conflict between India and Pakistan.
- 2) Internal and external security and water security issues are becoming severe in the regions where several international river basins lie especially in Pakistan and India and can result into war
- 3) The two countries of Pakistan and India are having problems at national level and international level on different issues and water has become the major issue because groundwater is depleting between the both countries since long.

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- 4) Pakistan and India both are located at strategic geological position and thus both have geopolitical position for the entire world.
- 5) Both Pakistan and India have sharing borders, common happiness and worries.
- 6) Both countries have been running a rivalry on different social and political issues since inception of the both regional states
- 7) Both countries have fought several conventional and non-conventional wars on small and large scale area since their creation
- 8) Both the countries are nuclear powers and strong armies
- 9) Both countries have strong political rhetoric against each other on each sensitive issues
- 10) Both countries have made successful efforts in establishing peace and held dialogues on each sensitive issues including Kashmir
- 11) Both the states have signed an exemplary treaty on sharing of water in the history of world
- 12) Both countries can live together peacefully on condition of neutral negotiator if their sensitive issues are addressed
- 13) There is a wave of hatred on different issues including Kashmir and now Water which can fuel and war can erupt at any time between the both countries
- 14) The war between both states could be disastrous not only for the both states but it can damage the peace of the world as well
- 15) The global community and international players sometime try to take side the both countries for their vested interests
- 16) The water war is possible between both countries in presence of immature government from any side of the regional states at any time
- 17) Water has become the lifeline issue for Pakistani nation and if pressed by Indian government then Pakistan will have no option but to fight war for survival
- 18) Pakistani masses and Indian masses both want peace and resources to live a peaceful life but scarcity of water may lead to a catastrophic war between both states

Recommendations

Keeping in view the above-said discussion, the following recommendations are made for global peace thus paving the ways for future researchers to conduct research on the issue discussed in this study.

- 1) The world community should step forward and restore friendly relations between the both nuclear powers

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- 2) The world community can help the both countries to sit together and can help chalk out another agreement like Indus Water Treaty while addressing contemporary issues
- 3) The mature civilian leadership from both countries should step forward and list down the long standing issues and search the ways to redress them immediately
- 4) The Kashmir issue and Water issue both are threatening for world peace, therefore, the world community i.e., the United Nations should step in to develop friendly negotiations between the both countries.
- 5) Water is the lifeline for Pakistan and Pakistan has no option but to fight a war against India for its survival. In such situation, only the world community should step in to defer this war
- 6) The role of world community is quite important in wake of looming threats of war between Pakistan and India
- 7) The United Nations should immediately intervene into the tense situation between Pakistan and India and hold series of meaningful negotiations for global peace

References

- [1] Albrecht, U., (2000). "War Over Water" published in *Journal of European Area Studies*, Vol.8, No.1, 2000. Retrieved on 2nd Feb, 2019 and retrieved from <http://www.tandfonline.com/loi/cjea19>
- [2] Albrecht, Ulrich (1983) 'Wetter-Rüsten', in: *Nature*, No.8 (August), pp.50-9
- [3] Albrecht, Ulrich (1996) 'Krieg um Wasser?', in: *Prokla. Zeitschrift für kritische Sozialwissenschaft*, No.102, vol. 26. pp.5-16.
- [4] Albrecht, Ulrich (1999) 'Internationale Politik und Umwelt', in: same author, *Internationale Politik. Eine Einführung in das System internationaler Herrschaft*, Munich/ Vienna (Oldenbourg), pp.175-90.
- [5] Asif H. Kazi. (2011). "Misusing the Indus Treaty". Published in *The News*. Islamabad, July 01, 2011.
- [6] Bagla, P. (2018). "Along the Indus River". *Saber Rattling Over Water Security*. Retrieved from www.sciencemag.org and retrieved on February 05, 2019.
- [7] Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3, 77–101.
- [8] Briscoe, J. (2010). "Troubled Waters: Can a Bridge Be Built Over the Indus"? *Economic and Political Weekly (Mumbai)*, 11 December, 2010, *Regional Press* vol. xlv, no. 50,29.
- [9] Castillo, L. G., Perez, F. V., Castillo, R., & Ghosheh, M. R. (2010). Construction and initial validation of the Marianismo Beliefs Scale. *Counseling Psychology Quarterly*, 23, 163–175.
doi:10.1080/09515071003776036
- [10] Charmaz, K. (1990). 'Discovering' chronic illness: Using grounded theory. *Social Science Medicine*, 30, 1161–1172.
- [11] Engelmann, Peter/Pamela Leroy (1995) *Mensch, Wasser! - Die Bevölkerungsentwicklung und die Zukunft der erneuerbaren Wasservorräte, Hannover (Balance)*.

- [12] Glaser, B., & Strauss, A. (1967). *The discovery of grounded theory*. Hawthorne, NY: Aldine Publishing Company.
- [13] Guzmán, C. E. (2011). Toward a new conceptualization of marianismo: *Validation of the Guzmán Marianismo Inventory* (Unpublished doctoral dissertation). Retrieved from ProQuest. (3534136)
- [14] Heath, H., & Cowley, S. (2004). Developing a grounded theory approach: A comparison of Glasser and Strauss. *International Journal of Nursing Studies*, 41, 141–150.
- [15] Heydarian, N. M. (2016). Perspectives of feminine cultural gender role values from Latina leaders and community residents (Unpublished master's thesis). Retrieved from ProQuest.
- [16] Hill, Douglas P. (2013). Trans-Boundary Water Resources and Uneven Development: Crisis Within and Beyond Contemporary India, 'South Asia: *Journal of South Asian Studies*, Vol. 36 No. 2, p. 253
- [17] Iftikhar, A. and Riffat, F. (2015). "Water Issues and its implications over India-Pakistan Relations". *JPUHS*, Vol.28, No.2, July - December, 2015
- [18] International Institute for Strategic Studies (1999) 'Global Water Shortages. Root of Future Conflicts?', in: *Strategic Comments*, London, vol.5, issue 6 (July).
- [19] Jawed, Tufail (1966 b). _The World Bank and the Indus Basin Dispute: Indus Waters Treaty-III, *Pakistan Horizon*, Vol. 19, No. 2 (Second Quarter), pp. 133-35
- [20] Jawed, Tufail (1965).The World Bank and the Indus Basin Dispute: Background- I *Pakistan Horizon*, Vol. 18, No. 3 (Third Quarter), pp. 226-237 p. 229
- [21] K. M. Arif. (2010). *Estranged Neighbors*, (Islamabad: *Dost Publications*, 2010), 174.

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- [22] Kasuri, K., M. (2015). “Neither a Hawk Nor a Dove: An Insider's Account of Pakistan's Foreign Policy”. (Karachi: *Oxford University Press*, 2015), pp. 247.
- [23] Khan, Hafeez-ur-Rahman (1959). Indo-Pakistan Waters Dispute, *Pakistan Horizon*, Vol. 12, No. 4 (December, 1959), p. 323
- [24] Lepawsky, Albert (1963). op. cit. p. 543
- [25] Lugo-Steidel, A. G., & Contreras, J. M. (2003). A new familism scale for use with Latino populations. *Hispanic Journal of Behavioral Sciences*, 25, 312–330.
- [26] M.Nasrullah Mirza, Water, War and Peace Linkages and Scenarios in India Pakistan Relations, (*Sarbrucken: Lambert Academic Publishers*, 2011),5
- [27] Maini, T.S. “Now let’s tackle the tougher issues,” *Tehelka*, May 15, 2012,
http://www.tehelka.com/story_main52.asp?filename=Fw150512Now.asp
- [28] Mian Ahmad Naeem Salik, “Water Security: Challenges of Transboundary Water Issues between Pakistan and India,” *Research Paper, ISSI*, June 2016.
- [29] Mohammad, Jamil. “IWT — Kishanganga arbitration,” *Pakistan Observer*, <http://pakobserver.net/detailnews.asp?id=178785>
- [30] Momin, I. (2011). “Tackling the Kishanganga knot”. *The Nation. Islamabad*. October 03, 2011.
- [31] Pakistan Economic Survey (2011-12),
<http://cdn.onepakistan.com/content/2012/budget/16-Environment.pdf>.
- [32] Pakistan Economic Survey (2011-12),
<http://cdn.onepakistan.com/content/2012/budget/16-Environment.pdf>.
- [33] Panuganti, Sreya, “Desert Solitaire: Why India and Pakistan Should Collaborate to Combat Desertification,” *Stimson*, April 10, 2012,

<http://www.stimson.org/spotlight/desert-solitairewhy-india-and-pakistan-should-collaborate-to-combat-desertification/>

- [34] Planning Commission of Pakistan, Annual Plan 2012-13, <http://www.pc.gov.pk/annualplan2012-13.htm>
- [35] Ramanathan, A.L. (ed). National Workshop on Water Quality (Including Drinking Water). Book of Abstracts. *Jawaharlal Nehru University*. February 2002. New Delhi, <http://jnuenviis.nic.in/publication/waterquality.pdf>.
- [36] Scarneci-Domnisoru, F. (2019). "Thematic Analysis". Retrieved on Feb 15, 2019 and retrieved from https://www.researchgate.net/post/Can_themes_generated_by_the_matic_analysis_link_together_to_form_a_theory_without_becoming_a_grounded_theory_approach
- [37] Schiffler, Manuel (1995) 'Konflikte um Wasser - ein Fallstrick für den Friedensprozeß im Nahen Osten?', in: Aus Politik und Zeitgeschichte. Supplement to the weekly newspaper: *Das Parlament*, B 11/95, 10 March
- [38] Shah, J. A. (2010). "India Not Accused of Stealing Water". *The News*, Lahore. 27 June, 2010.
- [39] Swain, A. (2004). *Managing Water Conflict*. Routledge, London.
- [40] Teacher, Law. (November 2013). The India Pakistan water dispute. Retrieved from <https://www.lawteacher.net/free-law-essays/international-law/the-india-pakistan-water-dispute-international-law-essay.php?vref=1>
- [41] Wolf, A., S. Yoffe, and M. Giordano. 2003. International Waters: Identifying Basins at Risk. *Water Policy* 5(1): 31-62
- [42] Wolfgang, Zingel, (2016). "Economy and Ecology as Factors in South Asian Cooperation" in ed. Muhammad Iqbal Chawla (ed.) *Socio-Economic Cooperation Between India and Pakistan: Challenges and Prospects*, (Lahore: University of the Punjab, 2016), 140.

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New Phase of Enmity

- [43] World Bank. 'South Asia Water: Water Resources Management,' available at http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/SOUTHASIAEXT/0,,contentMDK:22022926_pagePK:146736~piPK:146830~theSitePK:223547,00.html.
- [44] World Water-Day, (2009). "Pak Engineering Congress- Transboundry Waters". Shared Water-Shared Opportunities (theme), Eng. Usman-e-Ghani, "Transboundry Waters-perspective of Indus Water Treaty 1960",17-18.
- [45] Yoffe, S., Wolf, A. T. & Giordano, M. (2003). Conflict and cooperation over international freshwater resources: indicators of basins at risk. *Journal of the American Water Resources Association*, 10, 1109–1126.