The Baglihar difference and its resolution process - a triumph for the Indus Waters Treaty?

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Abstract

On January 15, 2005, Pakistan approached the World Bank asking the Bank to appoint a Neutral Expert to address a "difference" which had arisen with India under the Indus Waters Treaty. The difference related to the Baglihar hydropower plant which was under construction by India. The Bank appointed a Neutral Expert four months later, following lengthy exchanges with the two parties. On February 12, 2007, about 20 months after his appointment, the Neutral Expert issued his decision on the difference. This article reviews the main provisions of the Treaty, examines the process for the appointment and for the decision of the Neutral Expert, and analyzes the decision.

Keywords: Baglihar difference; Indus Waters Treaty; International Centre for Settlement of Investment Disputes; Neutral Expert; The World Bank

1. Introduction: The Indus Waters Treaty

The Indus Waters Treaty, concluded between India and Pakistan in 1960, has a number of unique features. First, rather than divide the waters of the Indus river system between the two parties, the Treaty divided the six rivers comprising the Indus river system between them. India has been allocated the Eastern rivers (the Sutlej, the Beas and the Ravi), and Pakistan the Western rivers (the Indus, the Jhelum and the Chenab). The initial proposal of the World Bank to have the Indus irrigation scheme administered as one unit by the two parties, irrespective of the new borders drawn as a result of the partitioning of the sub-continent, was turned down by both parties, after a short period of discussion. Similarly, the attempts of the two parties and the Bank to divide the waters of the rivers, rather than the rivers themselves, failed to produce an acceptable formula. After repeated attempts, this approach was also abandoned. The only solution which emerged as viable was the division of the six rivers

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between the two parties, in addition to assisting Pakistan in the construction of storage reservoirs to make its overall share of water close to the share it had before the rivers were divided (Salman, 2003).

However, despite the specific allocation of the rivers between India and Pakistan, each country has been allowed certain uses in the rivers allocated to the other, subject to certain qualifications. Those uses are detailed in separate annexures to the Treaty. Annexure B deals with agricultural use by Pakistan from certain tributaries of the Ravi river which has been allocated to India, while Annexure C deals with agricultural use by India from the Western rivers allocated to Pakistan. Moreover, Annexure D deals with generation of hydro-electric power by India from the Western rivers, while Annexure E deals with storage of waters by India on the Western rivers. The use by India of the waters of the Western rivers which have been allocated to Pakistan was one of the major issues raised during negotiations of the Treaty in the 1950s. India felt that, as the upper riparian of the Indus river system which runs for large stretches in its territory before entering Pakistan, there would have to be some uses allowed for it. After lengthy and complex negotiations, agreement was reached on some qualified uses for agriculture, hydropower and storage, as discussed above (Salman & Uprety, 2002).

A second unique feature of the Treaty is that it is the only international water treaty co-signed by a third party. This third party is the World Bank which mediated the original dispute over the Indus basin, and assisted the two parties in reaching an agreement. The process which led to the conclusion of the Treaty took almost nine years of intensive negotiations and mediation by the Bank. The result was a lengthy and complex instrument of close to 150 pages. This instrument addresses the various pertinent issues in a general way in 12 articles in the main part of the Treaty, and in a very detailed manner in eight annexures to the Treaty. Some of the annexures have appendices attached thereto.

The World Bank signed the Treaty for certain specified purposes, namely, Articles V and X, and Annexures F, G and H. Article V "Financial Provisions" deals with India's contribution to Pakistan of Pounds Sterling 62,060,000 for the replacement works which Pakistan would construct as a result of the allocation of the Eastern rivers to India, and the termination of Pakistan's water rights on those rivers. The Indian contribution was made to the World Bank in ten equal annual installments, and credited to the Indus Basin Development Fund. Article V also deals with the Bank responsibilities to manage the Indus Basin Development Fund. The Fund consisted of close to 800 million dollars, mostly grant funding from a number of donors, World Bank loans, in addition to the Indian contribution (Michel, 1967). The Fund was used to finance the replacement works which Pakistan needed to end its reliance on the Eastern rivers, and to augment the flow of the Western rivers. Such works included, inter alia, eight link canals nearly 400 miles long for transferring water from the Western rivers to areas formerly irrigated from the Eastern rivers; two storage dams, the Tarbela on the Indus and the Mangla on the Jhelum; power stations; 2,500 tubewells; and other works to integrate the whole river and canal system within Pakistan (Ali, 1967). In 1964 it became clear that the original amounts subscribed to the Indus Development Fund would not be sufficient to cover the costs of those works. A supplemental agreement was concluded in that year which provided for the payment of additional contributions by the original participants to the Fund. The World Bank was again instrumental in getting those participants to agree to make such contributions (Baxter, 1967).

Article X deals with "Emergency Provision" and sets forth certain responsibilities for the Bank in case Pakistan was unable to obtain the necessary materials and equipment from abroad prior to March 31, 1965, because of the outbreak of large scale international hostilities. Annexure H deals with "Transitional Arrangements" to be undertaken during the transition period which started in 1960, and ended in 1970, in the course of which Pakistan was to construct the replacement works, and end its reliance on the Eastern rivers. The Bank's role and responsibilities under Articles V and X, and

Annexure H were fully completed some time ago. Annexures F and G deal with "Neutral Expert" and "Court of Arbitration", respectively, in connection with the settlement of differences and disputes, where the Bank has, and will continue to have, a limited procedural role (Salman, 2003).

A third unique feature of the Treaty is the varying process for the settlement of issues which may arise between the two parties under the Treaty. According to Article IX of the Treaty on "Settlement of Differences and Disputes" any question concerning the interpretation or application of the Treaty is first examined by the Permanent Indus Commission (The Commission) established under the Treaty, with one commissioner from each country. If the Commission is unable to resolve such a question, then the question becomes a "difference" which shall be dealt with by a Neutral Expert to be appointed by agreement between the two parties. If the parties cannot agree on a Neutral Expert, or on a third party to appoint a Neutral Expert, then, according to the provisions of the Treaty, the Neutral Expert shall be appointed by the World Bank. The World Bank was given the authority also to appoint the Neutral Expert itself during the Transition Period. Detailed provisions on the Neutral Expert are laid down in Annexure F to the Treaty, including the requirement that the Neutral Expert should be an eminent engineer.

The role of the Court of Arbitration is referred to in Article IX and Annexure F of the Treaty, but the details are laid down in Annexure G of the Treaty. Annexure F lays down a list of 23 questions which fall under the mandate of the Neutral Expert. Questions outside this list do not fall within the authority of the Neutral Expert, and would have to be settled by a Court of Arbitration. If the Neutral Expert determines that the difference referred to him, or part of it, does not fall under his mandate as prescribed by the Treaty, then the difference, or that part, becomes a dispute and would be dealt with by a Court of Arbitration. The Commission itself could also deem a difference as a dispute which would be settled by a Court of Arbitration. Although the Treaty states that the decision of the Neutral Expert is final and binding, it also states that if any question which is not within the competence of the Neutral Expert should arise out of his decision, such a question should be settled in accordance with procedures which could involve the Court of Arbitration. The Court of Arbitration consists of seven arbitrators, two of whom would be appointed by each party. The remaining three (also called umpires) would be appointed through a complex process, detailed in Annexure G and its Appendix. That process could involve the World Bank, as well as the United Nations, the President of Massachusetts Institute of Technology, the Rector of the Imperial College of Science and Technology in London, the Chief Justice of the United States, and the Lord Chief Justice of England.

It is worth noting that the process for settlement of differences and disputes under the Treaty is not a hierarchical one. A question is referred to the Neutral Expert not as an appeal of the decision of the Commission. Rather, it is referred to the Neutral Expert because the Commission cannot resolve it. This is to be expected with complex questions, given that the Commission consists of two persons, each representing one of the two countries. Moreover, the decision of the Neutral Expert is final and binding, and as such, cannot be appealed to the Court of Arbitration. Indeed, the Treaty states that such a decision is binding not just on the parties, but also on any Court of Arbitration to be established.

Closely related to the issue of settlement of differences and disputes is the concept of notification for planned projects which is widely viewed as a process for avoidance of disputes. Although negotiated in the 1950s when international water law was in its infancy, the Treaty includes progressive provisions on notification between the two parties. This is notwithstanding the fact that the Treaty has divided the rivers between the two countries. Article VII of the Treaty on "Future Co-operation" requires the party who plans to construct engineering work which would cause interference with the waters of any of the rivers and would affect the other party materially, to notify the other party. The notifying party shall supply such data as would enable the other party to inform itself of the nature and magnitude of

such work. If such work would cause interference with the waters of any of the rivers but would not affect the other party materially, the party planning such work shall, nevertheless, on request from the other party, supply such data, as may be available.

Another unique feature of the Treaty is that it entered into force and effect retroactively. This is very unusual because treaties are signed, and then ratified, and they enter into force either on the day of ratification, or on a specified date falling thereafter. In this case, the Indus Waters Treaty was signed on September 19, 1960 and the instruments of ratification were exchanged on January 12, 1961. Yet, Article XII (2) of the Treaty stipulated that entry into force of the Treaty would take effect retrospectively from the first of April 1960, more than five months before the Treaty itself was signed. The reason for this unusual arrangement related to agreements signed by India and Pakistan, starting in 1948, under which India was to supply Pakistan with water from the Central Bari Doab Canal of the Ravi river until March 31, 1960. Accordingly, it was agreed during negotiations of the Treaty that the Transition Period would start on April 1, 1960. It was therefore necessary for the Treaty to become effective as of that date.

Despite its comprehensiveness, the Indus Waters Treaty is a bilateral treaty which is confined to two of the four riparian states of the Indus basin. In this respect, neither China nor Afghanistan, who are the other two riparians of the Indus river system, is a party to the Treaty. The Indus and the eastern most tributary, the Sutlej, both rise in the Tibetan plateau in China. The Kabul and the Kuram, which are the main tributaries of the Indus river, originate and flow for a while in Afghanistan before crossing into Pakistan and joining the Indus river. In total, about 13 percent of the catchment area of the Indus basin is situated in China and Afghanistan (Gulhati, 1973). No consultations with China or Afghanistan took place during negotiations of the Treaty. Afghanistan, and to a lesser extent China, are now increasingly asserting their rights to an equitable and reasonable share of the waters of the tributaries of the Indus river system originating there.

The Bank played a crucial and substantive role in the negotiations and finalization of the Treaty (Kirmani & Le Moigne, 1997). The involvement of the Bank started and continued at the highest level, with the then President of the World Bank, Mr. Eugene Black, personally and directly engaged throughout the process (Salman, 2003). The Bank followed a flexible approach which resulted in abandoning earlier proposals, after it became clear that they would not work (Biswas, 1992). More importantly, the Bank agreed to be a party to the Treaty. Indeed, it was the Bank's acceptance of a major role and of responsibilities in the implementation of the Treaty which facilitated the conclusion of the Treaty (Alam, 2002). It was also the Bank's leverage and convening power which resulted in raising the necessary funds, mostly as grants, to assist in the implementation of the Treaty. As discussed above, the major part of the role and responsibilities of the Bank was completed, and only a procedural role in the settlement of differences and disputes still remains (Salman, 2003). It is this role which has been tested by the recent difference over the Baglihar plant between the two parties, and that brought the Bank again, 45 years later, as a key player in the Indus Waters Treaty.

2. Appointment of the Neutral Expert

Pakistan approached the World Bank on January 15, 2005, stating that a "difference" has arisen with India with regard to the Baglihar hydropower plant which India is constructing on the Chenab river. Although the Chenab river has been allocated by the Treaty to Pakistan as one of the three Western rivers, India has been allowed, as mentioned earlier, certain uses of the Western rivers. Those uses include run-of-river hydropower plants, subject to certain conditions specified in great detail under

Annexure D of the Treaty. Pakistan alleged that the design of the Baglihar plant was in violation of a number of those conditions. India, on the other hand, claimed that the Baglihar plant was in conformity with those conditions. Pakistan was concerned that the project would allow India to obstruct and control the flow of the Chenab river which is allocated to Pakistan.

This was the first time since the Treaty was concluded in 1960 that the Bank had been called upon by one of the parties to exercise its role and responsibilities under the Treaty with regard to the settlement of a difference or a dispute. The Treaty states that the appointment of the Neutral Expert would be made jointly by the two parties within one month of the request by one party to the other, or failing that by such person or body as may be agreed upon by them. In the absence of such agreement, then the appointment shall be made by the World Bank, after consultation with each of the parties. Thus, the role of the Bank in this respect seems quite a simple administrative process. However, the Baglihar difference proved that the role was not that simple. A number of difficult issues arose as a result of that request, and had to be addressed by the Bank.

The first issue related to the contention by India that the Baglihar plant was still being discussed by the Permanent Indus Commission, and as such it was still a "question" and had not yet reached a stage of a "difference" warranting the World Bank's intervention. The Bank asked Pakistan to substantiate its claim that the process had indeed reached that stage, and Pakistan sent a lengthy report to that effect. India was provided with Pakistan's documentation. In turn, India sent an extensive reply which was also shared with Pakistan who responded to it with an equally voluminous report. The exchange of documentation through the World Bank went on for three rounds. After a thorough analysis of the Treaty and those reports, the Bank concluded that it was required under the Treaty to appoint a Neutral Expert. That process took more than three months to complete. On April 25, 2005, the Bank informed the parties of this conclusion and started its consultation with them on the appointment of the Neutral Expert (World Bank Indus Waters Treaty Website, 2005–2007).

The second issue related to what would constitute "consultation" with each of the parties when the Bank is undertaking the appointment of the Neutral Expert. As indicated earlier, the Treaty requires that the Bank appoints the Neutral Expert after consultation with each of the parties. With no precedent under the Indus Waters Treaty to guide it, the Bank had to look for guidance elsewhere, the closest being one of its sister organizations, the International Centre for Settlement of Investment Disputes (ICSID). ICSID is one of the five institutions comprising the "World Bank Group". The other four are the International Bank for Reconstruction and Development (IBRD), the International Development Association (IDA), the International Finance Corporation (IFC), and the Multilateral Investment Guarantee Agency (MIGA). IBRD and IDA are together referred to as the "World Bank". ICSID was established under the "Convention on the Settlement of Investment Disputes between States and Nationals of Other States" which came into force on October 14, 1966. Currently 143 countries are parties to the ICSID Convention. ICSID assists member countries in settling their investment disputes with private sector corporations or individuals of other states.

The procedures which the Bank conducted in consulting with the two countries in the selection of the Neutral Expert were adopted from procedures used by ICSID to select arbitrators for the settlement of investment disputes. The ICSID procedures, are in turn, based on Article 6 (3) of the United Nations Commission on International Trade Law (UNCITRAL) Arbitration Rules, adopted by the United Nations General Assembly in 1976. Based on those procedures, the Bank compiled a list of highly qualified and eminent engineers from around the world, as stipulated in the Treaty. Furthermore, the Bank ensured that there was no conflict of interest on the part of any of the nominees. The names and curriculum vitae of three engineers out of this list were sent by the Bank to each of the two parties asking them to indicate, within

fifteen days, who of the three engineers was not acceptable to them to serve as the Neutral Expert. The procedures included a second similar round of three names if there was no agreement on one name in the first round. If more than one name was agreed upon by the two parties, then the choice from among them would follow an alphabetical order. If the second round ended without an agreement on a name, then the Bank would appoint the Expert itself without going back to the parties. The person to be appointed by the World Bank in this round would not have been included in the lists of the first and second rounds. However, none of those alternatives were needed because the parties agreed on one name in the first round.

The Bank also developed clear procedures for conducting its role. Those procedures were based on transparency and fairness. All communications from or to the parties would be in writing; every correspondence or document received from one party would be shared with the other party; and no meeting would take place with one party without the presence of the other.

Thus, the simple administrative task for the Bank to appoint a Neutral Expert if the parties fail to agree on one, and fail to agree on a third party to appoint such an expert, developed into a lengthy quasi-judicial process. Fortunately, the Bank did not have to deal with a situation where India would disagree with the Bank's determination that the issue at hand had indeed reached the status of a "difference" which needed to be referred to a Neutral Expert. Similarly, it was quite fortunate that the two parties agreed in the first round of consultation on a Neutral Expert, and the Bank did not have to appoint the Expert itself in the third round, as mentioned above. As will be discussed in the next part, five months after Pakistan approached the Bank, the Neutral Expert was in place, with full responsibility over the Baglihar difference. Hence, the major and most critical part of the Bank role was successfully completed.

3. The Baglihar difference within the Treaty context

The Baglihar hydropower project is a run-of-river plant being constructed by India on the Chenab river in the north eastern state of Jammu and Kashmir. Planning for this project began in the late 1990s, and construction started in 2002. The dam is of concrete gravity type, with a height of 144.5 metres above the deepest foundation. The plant has a capacity of 450 MW in its first stage, with 900 MW on complete design.

As mentioned earlier, the Indus Waters Treaty is a complex instrument, with an intricate process of references and cross references between its articles and paragraphs of the annexures. Although Pakistan claimed that the design of the Baglihar plant does not conform to certain requirements under Annexure D, the context of the Baglihar difference within the Treaty is far more complicated than that, mainly because of such cross-references.

Paragraph (2) (a) of Article IX of the Treaty on settlement of differences and disputes states that any difference which in the opinion of either Commissioner falls within the provisions of Part 1 of Annexure F shall, at the request of either Commissioner, be dealt with by a Neutral Expert in accordance with the provisions of Part 2 of Annexure F. Part 1 of Annexure F specifies 23 questions which fall under the mandate of the Neutral Expert. Those questions include a wide array of issues covered in more details in other annexures to the Treaty. Paragraph 1 (11) of Part 1 of Annexure F deals with questions arising under the provisions of Paragraph 7, Paragraph 11, or Paragraph 21 of Annexure D. Paragraph 11 of Annexure D states that "If a question arises as to whether or not the design of a Plant conforms to the criteria set out in Paragraph 8, then either Party may proceed to have the question resolved in accordance with the provisions of Articles IX (1) and (2)". Paragraph 8 of Annexure D lays down a seven part

criteria with which a design of any new run-of-river plant shall conform. Part 2 of Annexure F deals with the appointment and procedures concerning the Neutral Expert.

Moreover, paragraph 9 of Annexure D obliges India to communicate to Pakistan, six months before the commencement of construction of any plant referred to in paragraph 8 of Annexure D, certain information, specified in Appendix 2 to the Annexure, concerning such a plant. Paragraphs 10, 11 and 12 of Annexure D detail the procedures concerning the communication between the two parties on the said plant.

Pakistan claimed that the Baglihar plant did not conform to criteria (a), (c), (e) and (f) of paragraph 8 of Annexure D to the Treaty. Criterion (a) states that the works shall not be capable of raising artificially the water level in the operating pool above the full pondage level specified in the design. Pakistan alleged that the Baglihar plant did not meet this requirement. Criterion (c) requires the maximum pondage in the operating pool not to exceed twice the pondage required for firm power. In this connection, Pakistan claimed that the Baglihar pondage exceeded twice the pondage required for firm power. Criterion (e) states that if the conditions at the sight of the plant make a gated spillway necessary, the bottom level of the gates in normal closed position shall be located at the highest level consistent with sound and economical design. Pakistan claimed, with regard to this criterion, that the Baglihar plant design was not based on correct, rational and realistic estimates of maximum flood discharge at the site. Criterion (f) requires that the intakes for the turbines shall be located at the highest level consistent with satisfactory and economical construction and operation of the plant as a run-of-river plant. Pakistan considered that the intake for the turbines was not located at the highest level as this criterion mandates.

Hence, the Baglihar difference was clearly a complex engineering issue which required an eminent engineer to address it, as the Treaty has rightly required. Indeed, the whole Treaty was the result of the detailed negotiations of engineers, with a limited role for others, including lawyers (Salman & Uprety, 2002).

4. Process for addressing the Baglihar Difference

On May 10, 2005, the World Bank informed the parties, and announced to the world, that it had appointed Mr. Raymond Lafitte, a Swiss national, a highly qualified engineer, and professor at the Swiss Federal Institute of Technology, as the Neutral Expert to address the Baglihar "difference" (World Bank Indus Waters Treaty Website, 2005–2007). This followed the lengthy process described above, and the agreement of Mr. Lafitte to serve as the Neutral Expert for that purpose.

At the request of the Neutral Expert, the World Bank designated ICSID to coordinate the process, including communication with the two parties. Both parties endorsed the designation of ICSID. It is worth adding in this connection that Pakistan became a party to the ICSID Convention in 1966, while India has neither signed, nor acceded to the ICSID Convention. The Neutral Expert appointed an engineer as an assistant, and later, after approval of the two parties, engaged a legal adviser. Indeed the Treaty itself had envisaged the possibility of the Neutral Expert needing such assistance. Although the designation of ICSID and the appointment of the assistant were both endorsed by the two parties, the Neutral Expert took the prudent step of obtaining the prior approval of the parties for the appointment of the legal adviser.

The Treaty authorizes the Neutral Expert to determine the procedures for addressing the difference, provided that he shall afford to each party an adequate hearing; and in making his decision, he shall be governed by the provisions of the Treaty, and by the *compromis*, if any, presented to him by the Commission. The procedures adopted by the Neutral Expert replicated those followed earlier by

the World Bank of transparency and fairness. All communications from one party would be shared with the other party, and with both parties if it was originating from the Neutral Expert. Moreover, no meeting would take place with one party without the presence of the other. On the other hand, the Treaty also obliges each of the two governments to extend to the Neutral Expert such facilities as he may require for the discharge of his functions.

Under Annexure F of the Treaty, each of the two parties was required to pay to the Bank, once the Treaty entered into force, the sum of \$5,000. The Bank would hold this amount, together with any income therefrom, in a trust to pay the remuneration of the Neutral Expert and any assistance he may need. The \$10,000 paid by the two parties in 1960 reached over \$100,000 in 2005 when the Neutral Expert was appointed, as a result of the investment of the original amount. This took place despite the fact that the Treaty does not oblige the Bank to invest the contribution of the two parties. The balance in the trust fund provided the initial expenses needed to start the Neutral Expert process. The Treaty authorizes the Bank to ask the parties to pay in equal shares any amount required to cover the cost of the process after depleting the amount held by the Bank in the trust fund.

The Bank handed over the process to the Mr. Lafitte on June 9, 2005, following his acceptance to act as the Neutral Expert. The handover took place in the first meeting which was also attended by representatives of the two parties, and which was held at the World Bank Office in Paris. During that meeting the basic rules and procedures for the conduct of the process were laid down and agreed upon. The work program was also discussed and agreed upon, keeping in mind the Treaty requirement that the decision by the Neutral Expert should be rendered as soon as possible. A time-table was set, and was adjusted later, which would start with India providing by July 15, 2005, the information specified in Appendix II to Annexure D, referred to above. Pakistan would provide its memorial by August, and India its counter-memorial by September 2005. Pakistan would file its reply by January 2006, and India its rejoinder by March 2006. The draft determination of the Neutral Expert would be completed by early October 2006, and the parties' written comments would be submitted by end of October 2006. In November 2006, the parties would provide additional written comments. The final determination of the Neutral Expert would be rendered by February 2007. It was also agreed that four more meetings would be held before the Neutral Expert would finalize and issue his decision. The sequence of the written procedures was adopted from ICSID practice which provides for two possible rounds of exchange of documents between the parties, and also provides for following each written procedure by an oral one. It was further agreed that all meetings would be recorded, and that the minutes of each meeting would be prepared, approved by the two parties, and signed by the Neutral Expert and the coordinator.

The first meeting which was held at the World Bank Office in Paris in June 2005, was followed by the submission by India of the basic information on the project, the memorial by Pakistan, and the countermemorial by India. Subsequent to those submissions, the Neutral Expert, together with delegations from India and Pakistan, visited, in early October 2005, the Baglihar site, as well as the Baglihar hydraulic model. The second meeting of the Neutral Expert with the two parties took place in Geneva on October 19–21, 2005 at the World Meteorological Organization, and was devoted to questions which arose as a result of the Baglihar site visit. The third meeting took place in London on May 25–29, 2006, at the International Dispute Resolution Centre, subsequent to the filing of the rejoinder, and was devoted to presentations by the parties.

Five months later, the Neutral Expert finalized his decision and presented his draft determination to the two parties during the fourth meeting which was held at the World Bank Office in Paris on October 2–4, 2006. The practice of presenting a draft determination to the parties is uncommon in international arbitration, but it exists in other fields of dispute settlement. A similar feature can be found in the "Understanding on Rules and Procedures Governing the Settlement of Disputes" of the World Trade Organization (WTO). This feature is called "Interim Review Stage" and is intended to give the parties an opportunity to review and comment on the draft ruling. After the presentation of the draft decision by the Neutral Expert, the parties were given the opportunity to file written comments on the draft decision, and to further present these comments orally at the fifth meeting. The fifth and last meeting took place in Washington DC at the World Bank Headquarters on November 7–9, 2006, where the parties presented their comments on the final draft determination. The parties also filed additional comments on their respective presentations. Thereafter the Neutral Expert took three months to finalize his determination keeping in mind those comments. Accordingly, not only did the Neutral Expert give an opportunity to the parties to present their view and comment on his data and findings; he also gave himself the chance to obtain feedback on the basis and strength of his technical data, analysis and decision.

On February 12, 2007, the Neutral Expert delivered to the ambassadors of India and Pakistan in Bern, Switzerland, signed copies of his final decision on the Baglihar difference (referred to as the Expert Determination by the Neutral Expert). Copies of the decision were also delivered to the World Bank, as required by the Treaty. The decision consisted of a full comprehensive report, and a separate Executive Summary. The two parties agreed that the Neutral Expert and the World Bank could disclose and disseminate the Executive Summary of the Expert Determination. However, the full report of the Determination can only be disclosed and disseminated by the parties themselves, according to their own procedures. Based on this agreement, the World Bank placed the Executive Summary on its Indus Waters Treaty external web site on February 20, 2007 (Executive Summary, 2007).

The Neutral Expert considered his decision as not being rendered against one or the other party. According to the provisions of the Treaty, the decision of the Neutral Expert is final and binding. However, as indicated earlier, paragraph 13 of Annexure F of the Treaty states that without prejudice to the finality of the Neutral Expert's decision, if any question (including a claim to financial compensation) which is not within the competence of a Neutral Expert should arise out of his decision, that question shall, if it cannot be resolved by agreement, be settled in accordance with the provisions of Article XI (3), (4) and (5) of the Treaty. Those provisions call for resolving such an issue by agreement, and failing that, by a Court of Arbitration.

The Neutral Expert, his assistant and legal adviser were financed by the trust fund established under the Treaty in 1960, as discussed earlier. The Neutral Expert is mandated to decide which of the two parties should bear the cost of the process. In this case, he directed that the parties would share the cost equally. This direction underscored his conclusion that his decision was not rendered against one party or the other. The decision of the Neutral Expert with regard to the cost also meant that the parties would reimburse, in equal amounts, the trust fund held by the World Bank of the amounts disbursed by the Bank from the trust fund. As such, the trust fund would revert back to the same amount it had at the start of the process.

The above shows the extensive work undertaken by the Neutral Expert, as well as the two parties, which spanned over a period of more than 20 months. The schedule set by the Neutral Expert and agreed to by the parties was followed, with some adjustments agreed to by both parties. ICSID continued to coordinate the process throughout this period, replicating its experience in handling investment disputes. Only the travel and subsistence expenses of ICSID staff, in connection with the Baglihar difference, were charged to the trust fund.

5. Decision of the Neutral Expert

The Executive Summary of the decision of the Neutral Expert indicated that in interpreting the Treaty, the Neutral Expert had relied on the rules of the Vienna Convention on the Law of Treaties. This Convention was concluded in 1969, and entered into force in 1980. Neither India nor Pakistan is a party to this Convention. India has not signed the Convention, and Pakistan signed the Convention in 1970, but has not yet ratified it. However, it is widely agreed among experts in this field that the Convention reflects the rules of customary international law with regard to ordinary methods of treaty interpretation. The Executive Summary stated that the Treaty gives a clear indication of the rights and obligations of the parties, and that these rights and obligations should be read in the light of new technical norms and new standards, as provided for by the Treaty. It also stated that the interpretation of the Treaty was guided by the two principles of integration and effectiveness which "provide for the Treaty to find effect in its whole and to ensure that each of the object(s) and purpose(s) of the Treaty is given fullest weight and effect when interpreting the rights and obligations under the Treaty". Those purposes include attaining the most complete and satisfactory utilization of the waters of the Indus river system, and fixing and delimiting the rights and obligations of each party in relation to the other. The Summary indicates that the rights and obligations contained in Part 3 of Annexure D must be interpreted so as to allow fulfilling the purpose of the Treaty in "a spirit of goodwill and friendship" taking into account the best and latest practices in the field of construction and operation of hydroelectric plants.

The decision of the Neutral Expert on the Baglihar difference dealt with the issues contested under the four criteria of paragraph 8 of Annexure D of the Treaty discussed above, under six headings. Those headings were: (i) maximum design flood, (ii) spillway, ungated or gated, (iii) spillway, level of the gates, (iv) artificial raising of the water level, (v) pondage, and (vi) level of the power intake.

The first issue on the maximum design flood related to the calculation of the maximum amount of water which can arrive at the dam. In view of many uncertainties of flood analysis, the Neutral Expert retained the value proposed by India of $16,500 \, \text{m}^3/\text{s}$, as opposed to $14,900 \, \text{m}^3/\text{s}$ proposed by Pakistan, for the peak discharge of the design flood. He further stated that climate change, with the possible associated increase in floods, also encourages a prudent approach.

With regard to the second issue of a gated or ungated spillway, Pakistan considered that a gated spillway was not necessary, and would allow India to control the flow of the river. The Neutral Expert determined that the conditions of the site, including hydrology, sediment yield, topography, geology and seismicity, require a gated spillway. He added that the analysis of 13,000 existing spillways in the world demonstrated that the provision of gates on large spillways is common practice. He further indicated that an ungated spillway might create a risk of flooding the upstream shores, and that an elevation of the dam crest, which would prevent such a risk, would be costly.

On the issue of the level of the spillway gates, Pakistan stated that even if it can be assumed (without conceding) that a gated spillway was necessary, the orifice spillway proposed by India is not located at the highest level consistent with the provisions of the Treaty. The position of India was that the design of the chute spillway, sluice spillway and auxiliary spillway were necessary to ensure safe passing of the design flood. The Neutral Expert determined that the gated chute spillway on the left wing planned in India's design is at the highest level consistent with sound and economical design and satisfactory construction and operation of the works. He considered that the outlets composing the sluice spillway, planned by India, should be of the minimum size and located at the highest level consistent with a sound and economical design. However, the Neutral Expert determined that the outlets should preferably be

located 8 metres (m) lower to ensure protection against upstream flooding. On this issue, in particular, the Neutral Expert felt the need for the Treaty to be read in light of new technical norms and standards. He specifically stated "It appears that the Treaty is not particularly well developed with respect to its provisions on sediment transport. This is not criticism: The Treaty reflects the status of technology on reservoir sedimentation in the 1950s. The consequence is that the provisions of the Treaty which explicitly mention sediment acquire a special significance" (Executive Summary, 2007).

On the fourth issue of the artificial raising of the water level, Pakistan considered that the dam crest elevation proposed by India was exaggerated and could be lower. The Neutral Expert considered that the dam crest elevation should be set at the lowest elevation. He determined that the crest elevation submitted by India at 844.5 m above sea level (asl), resulting from a freeboard above the full pondage level of 4.50 m is not at the lowest elevation, and that the freeboard should be 3.0 m above the full pondage level, leading to a dam crest elevation of 843.0 m asl.

With regard to the volume of the maximum pondage, Pakistan argued that the value of the maximum pondage proposed by India exceeded twice the pondage required for firm power. The Neutral Expert determined that the values for maximum pondage stipulated by India as well as by Pakistan were not in conformity with the criteria laid down in the Treaty, and fixed a lower value.

On the sixth point relating to the level of the power intake, Pakistan considered that the power intake is not located at the highest level as required by the Treaty. The Neutral Expert agreed with this consideration and determined that the intake level should be raised by 3 m and fixed at elevation 821 m asl.

Two observations are worth making with regard to the process and the decision of the Neutral Expert: Firstly, as appeared from the composition of the two delegations, Pakistan seemed to have viewed the difference as largely a legal one, involving the interpretation of the Treaty, while India seemed to have viewed it mainly as an engineering one, regarding hydropower plants (Executive Summary, 2007).

Secondly, the Neutral Expert opined that the rights and obligations of the parties under the Treaty should be read in the light of new technical norms and new standards as provided for by the Treaty. This meant that the Baglihar difference was addressed bearing in mind the technical standards for hydropower plants as they have developed in the first decade of the twenty-first century, and not as perceived and thought of in 1950s when the Treaty was negotiated. The reference to modern technical standards is particularly clear in the discussion and analysis by the Neutral Expert of the issue of gated or ungated spillway summarized earlier. Climate change and its likely effects is another example of contemporary concerns not prevalent or thought about during the 1950s which was taken into account by the Neutral Expert in his decision. It should be added that, along the same lines, the International Court of Justice in the Danube dispute between Hungary and Slovakia (the Gabcikovo-Nagymaros case) required that the current standards must be taken into consideration when evaluating the environmental risks of the project (International Court of Justice, 1997 p. 66). This manner of interpretation will most likely influence the future interpretation of the Treaty, as well as other international water treaties.

The response from both India and Pakistan to the decision of the Neutral Expert was positive. Both countries claimed victory and highlighted the areas of the decision which they believed responded positively to their claims. The conclusion to be derived from those statements was that both parties have agreed to abide by that decision. This further underscored the successful completion of the Neutral Expert process.

6. Conclusion

The Baglihar difference posed major challenges to India and Pakistan, to the World Bank, as well as to the Indus Waters Treaty itself. This was the first time in 45 years that the Treaty's provisions on settlement of differences and disputes were tested. Understandably, there was apprehension in all quarters about how the process might unfold. Questions about whether there would be an agreement that the Baglihar question had indeed reached the stage of a difference, and about whether there would be an agreement on one person to serve as a Neutral Expert, were in the minds of those concerned. Equally concerning was the issue of how the Neutral Expert would handle the difference, and how the parties would deal with him and react to his final decision.

However, the Bank was again able to play a fair, transparent and constructive role which led to the appointment of the Neutral Expert. In turn, the Neutral Expert was able, with the coordinating role of ICSID, and the full cooperation of the two parties, to handle the process in a transparent and fair manner, and to deliver a decision which was accepted by the two parties. ICSID rules and practice provided guidance on a number of procedural decisions taken by the Bank and the Neutral Expert.

Undoubtedly, the process has set precedents in a number of aspects. Transparent and fair procedures for the appointment of the Neutral Expert, and for the conduct of the process, are now firmly in place, if the need were to arise again on another difference. Those procedures drew considerably from ICSID practice, the UNCITRAL arbitration rules, as well as the WTO disputes settlement rules. The result of this blend is a comprehensive and unique set of rules and procedures. On the substantive side, the notion that the rights and obligations of the parties under the Treaty should be read in the light of new technical norms and new standards, as provided for by the Treaty, will most likely influence any future interpretation of the Indus Waters Treaty. Similarly, interpretation of the Treaty keeping in mind the rules of the Vienna Convention on the Law of Treaties is likely to reshape many of the understandings about the Treaty. It is worth mentioning in this connection that neither of the two states is a party to the Vienna Convention, and only Pakistan is a party to the ICSID Convention. Nonetheless, both parties endorsed the designation of ICSID as a coordinator, and neither of them raised concerns to the invocation of the rules of the Vienna Convention on the Law of Treaties in connection with interpretation of the Indus Waters Treaty.

The World Bank, ICSID and the Neutral Expert no doubt handled the process in a fair and transparent manner. The cooperation of the two parties and their acceptance of the decision of the Neutral Expert was the ultimate triumph of the process. All in all, the manner in which the process started in January 2005, and ended in February 2007, twenty five months later, attests to the strength and credibility of the Treaty itself, and underscores the notion of the peaceful settlement of international water disputes.

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