Gather At The River: The Case for Canceling   
the Diamer-Bhasha Dam in Pakistan

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“Energy shortages in Pakistan” – Response: Diamer-Bhasha will be too late to do anything about it 13

“Pakistan needs the electricity” – Response: Big dams aren’t the solution. Too expensive, and the poor will not benefit 14

“Pollution from alternative sources if we don’t use hydro-electric” – Response: Dams produce GHG (Greenhouse Gas) emissions 14

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Pakistan is a troubled country with many crises and many needs. The United States today is backing a massive hydroelectric and water storage dam in Pakistan in the false belief that it can solve that country’s problems, when in fact it will only make things worse. Please join us as we affirm that The United States should significantly reform its policy toward one or more countries in the Middle East.

OBSERVATION 1. Our DEFINITIONS

**Significant**: “large enough to be noticed or have an effect” *(Merriam-Webster Online Dict. 2014* [*http://www.merriam-webster.com/dictionary/significant*](http://www.merriam-webster.com/dictionary/significant)*)*

**Policy**: “a high-level overall plan embracing the general goals and acceptable procedures especially of a governmental body”*(Merriam-Webster Online Dict. 2014* [*http://www.merriam-webster.com/dictionary/policy?show=0&t=1402599657*](http://www.merriam-webster.com/dictionary/policy?show=0&t=1402599657))

**Middle East** is defined in the Turkish Journal of Politics in 2011 as:

Turkish Journal of Politics Vol 2 No. 2, 2011 (Osman Nuri Özalp, Kırklareli University) “Where is the Middle East? The Definition and Classification Problem of the Middle East as a Regional Subsystem in International Relations” <http://tjp.fatih.edu.tr/docs/articles/112.pdf>

In a broad meaning, we can state that the Middle East covers a region from Ethiopia in the south, Turkey in the north, Afghanistan and Pakistan in the east to Morocco in the west.

OBSERVATION 2. The STATUS QUO. The US is supporting construction of the Diamer-Bhasha dam in Pakistan. We see this in two key FACTS

FACT 1. US government supports Diamer-Bhasha.

Associated Press of Pakistan 2014. (news agency) “Energy woes: US pledges support for Diamer-Bhasha dam” 9 Oct 2014 <http://tribune.com.pk/story/772634/energy-woes-us-pledges-support-for-diamer-bhasha-dam/>

The United States on Wednesday pledged support for Pakistan’s massive $14 billion 4,500MW Diamer-Bhasha dam project as top officials and business leaders explored investment prospects, amid exponential energy needs of America’s ‘critical partner’ nation. Both the US officials – including US Agency for International Development (USAID) Administrator Dr Rajiv Shah and US Special Representative Dan Feldman – and Pakistan’s Finance Minister Senator Ishaq Dar and Minister for Water & Power Khawaja Muhammad Asif, who is also defence minister, highlighted tremendous opportunities for American and international investors in the ‘transformational’ power generation and water storage project. The officials spoke at a joint platform that brought together senior leaders and experts and business leaders at the US Chamber of Commerce at a meeting, co-hosted by the USAID and the US-Pakistan Business Council. Pakistan’s Ambassador to the United States Jalil Abbas Jilani and US Ambassador in Islamabad Richard Olson participated in the daylong conference, spread over several sessions.

FACT 2. US funding is key to the entire project.

Saeed Shah 2011. (journalist) JEWISH WORLD REVIEW, US considers funding $12 billion Pakistani dam project, despite dissipating anti-terrorism cooperation and the angering of India <http://www.jewishworldreview.com/0811/america_pakistan_dam_project.php3>

The U.S. would provide only a fraction of the $12 billion needed to complete the project. However, the American money would be crucial in enabling other international finance sources to support the dam, especially the Asian Development Bank. The U.S. official indicated that some $200 million would be provided initially, with the possibility of hundreds of millions more as the project develops. "We want to see the Diamer Basha project launched. We believe that putting down some money at the beginning will act as a catalyst, accelerate the process," the official said.

OBSERVATION 3. We have a PLAN to substantially reform the Status Quo. It has 5 steps:

1. Congress votes to cancel all funding for any US government policies aiding the Diamer Bhasha Dam in Pakistan.
2. The President revokes US support for the Diamer Bhasha Dam at all international lending institutions.
3. Funding through existing budgets of existing agencies, with net savings to the federal budget.
4. Plan takes effect the day after an Affirmative ballot.
5. All Affirmative speeches may clarify the plan.

OBSERVATION 4. The JUSTIFICATIONS, or reasons why canceling US support for the Diamer-Bhasha Dam is a good idea.

JUSTIFICATION 1. Excess cost and national bankruptcy. Cost overruns will lead to a total price of $35 billion, which is around 25% of Pakistan’s entire economy, and could lead to national default.

Dr. Atif Ansar, Dr. Bent Flyvbjerg, Alexander Budzier & Dr. Daniel Lunn 2014. (Ansar – PhD; lecturer at University of Oxford - Blavatnik School of Government. Flyvbjerg –PhD; professor and chair of Major Programme Management at University of Oxford - Said Business School . Budzier – PhD candidate at University of Oxford - Said Business School . Lunn – PhD; Associate Member of University of Oxford Department of Statistics. ) ENERGY POLICY, March 2014, “Should we build more large dams? The actual costs of hydropower megaproject development” <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2406852> (brackets added; PKR = Pakistan rupees. USD = United States dollars. GDP = Gross Domestic Product – the sum total of all the goods and services produced in the entire country during one year. “Not a remote possibility” means the possibility isn’t remote, it’s close at hand.)

Experts estimate, for instance, that Pakistan's Diamer-Bhasha dam, whose construction began shortly after the 2010 floods, will cost PKR 894 billion [Pakistan rupees] (~USD12.7B[illion dollars] in 2008 prices and exchange rates and about 9% of Pakistan's 2008 GDP) (WAPDA, 2011). The dam is forecasted to take 10 years from 2011 and become operational in 2021. Using our first approach, the reference class forecast for cost overruns suggests that planners need to budget PKR 1,788B (USD25.4B) in real terms to obtain 80% certainty of not exceeding the revised budget. Including the effects of unanticipated inflation the required budget is PKR 2,467B[illion rupees] (USD35.0B[illion dollars]) or about 25% of Pakistan's 2008 GDP [Gross Domestic Product]. A future sovereign default in Pakistan owing to this one mega-dam is not a remote possibility. Using our second approach, our multilevel Model 1 predicts that given the 10 year estimated duration and a long-term inflation rate of about 8% the expected (average) cost overrun of a large dam in Pakistan will be 44% (PKR 1,288B or USD 18.3B). Combining the two methods, a conservative estimate for the cost overrun on the Diamer-Bhasha dam is 44% at which point there remains a 4 in 10 chance of the revised budget being exceeded.

JUSTIFICATION 2. Negative net benefits. The Diamer-Bhasha dam will return benefits to Pakistan that are less than its total cost

Dr. Atif Ansar, Dr. Bent Flyvbjerg, Alexander Budzier & Dr. Daniel Lunn 2014. (Ansar – PhD; lecturer at University of Oxford - Blavatnik School of Government. Flyvbjerg –PhD; professor and chair of Major Programme Management at University of Oxford - Said Business School . Budzier – PhD candidate at University of Oxford - Said Business School . Lunn – PhD; Associate Member of University of Oxford Department of Statistics. ) ENERGY POLICY, March 2014, “Should we build more large dams? The actual costs of hydropower megaproject development” <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2406852>

Using their “inside” cost estimates, the net present benefits to cost ratio of the dam according to experts is 1.43 (WAPDA, 2011). Even assuming experts' calculations about potential benefits are accurate, although this is a doubtful assumption, the de-biased cost forecasts require an uplift of 44 – 99% in constant prices suggest that the benefits to cost ratio will be below one. The Diamer-Bhasha dam is a non-starter in Pakistan. This is without even discussing potential effects of inflation and interest rates, potential social and environmental costs, and opportunity cost Pakistan could earn by committing such vast amount of capital to more prudent investments.

JUSTIFICATION 3. Blocks more effective solutions. Energy solutions that could quickly help Pakistani villages are being drowned out by the call for the massive Dam.

Ann-Kathrin Schneider 2008. (South Asia programme director and policy analyst at International Rivers; Master’s degree in Development Studies from the School of Oriental and African Studies in London ) Fast Track Power Generation Will a Large Dam Increase Access to Electricity in Pakistan? Sept 2008 <http://www.internationalrivers.org/resources/fast-track-power-generation-1834>

Yet it is not a project that will increase access to electricity in rural Pakistan. The houses in 40,000 Pakistani villages without access to electricity will not suddenly light up after the construction of the Diamer-Bhasha Dam. Decentralized energy options, such as small-scale wind turbines, solar systems and micro-hydropower for those not connected to the national grid are neglected at the expense of mega-projects that hold many promises, and are beset with many risks.  The lives of the men in the market north of Islamabad, the lives of the women queuing up in front of the public bread shops and the lives of the people in the 40,000 villages in Pakistan will not change with the decision to construct the Diamer-Bhasha Dam. If the government decides to build the dam, the electricity supply in Islamabad and other big towns might be more steady – albeit, in ten years time, and only if climate change doesn't reduce the region's river flows. If the government decides to construct the dam, 50,000 rock carvings will be destroyed. If the government decided to implement energy efficiency measures, industrial power use could rapidly be cut by a quarter. But for now, the calls for Pakistan's largest hydropower project drown out the more silent and cautious calls for energy efficiency measures and small-scale renewable energy projects.

JUSTIFICATION 4. Short life-span. Himalayan rivers have high silt content, which shortens the lifespan of mega-project dams in the region

Dr. Kenneth Pomeranz 2009. (PhD; Professor of History at the Univ of Chicago) THE GREAT HIMALAYAN WATERSHED, [New Left Review 58, July-August 2009](http://newleftreview.org/II/58) <http://newleftreview.org/II/58/kenneth-pomeranz-the-great-himalayan-watershed>

Mega-projects that take a long time to complete are thus especially vulnerable, economically speaking, to any shortfall in power generation. Three factors, at least, could make the lives of these new projects shorter than anticipated. First, the Himalayas are comparatively young mountains with high rates of erosion, and their upper reaches have relatively little vegetation to hold soil in place—a situation exacerbated by deforestation in recent decades. This tends to make for high sediment burdens in rivers descending from the Himalayas. A 1986 study found that almost 40 per cent of the small hydro-dams built in Tibet since 1949 had become defunct or unusable by being silted up; similar problems have developed on a number of Pakistani dams, which have lost their capacity for seasonal water storage and irrigation, as well as power generation.Ironically, this loss of storage capacity has become an argument for building more dams.

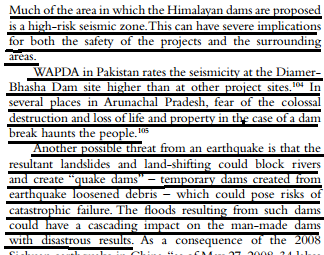
JUSTIFICATION 5. Submerged villages. At least 24,500 people live in the area to be flooded by the Diamer Bhasha reservoir

Shripad Dharmadhikary 2008. ( founder of [Manthan Adhyayan Kendra](http://www.manthan-india.org/), a center to research, monitor and analyse water and energy issues; Bachelor of Technology degree from the Indian Institute of Technology (IIT) Bombay ) Mountains of Concrete: Dam Building in the Himalayas <http://cdm16658.contentdm.oclc.org/cdm/fullbrowser/collection/p267501ccp2/id/2208/rv/singleitem>

Direct submergence of a large number of houses, villages, cultivated lands and forests remains a serious issue. For example, the Tehri project in Uttarakhand, India has led to the direct submergence of the town of Tehri, 37 villages fully and 88 partially. More than 10,000 families have been displaced. The Tipaimukh project in Manipur, India, is going to submerge an area of 292 km2 . The Environmental impact Assessment (EIA) of the project boasts that it will have a “meagre impact,” as it will submerge a population of only 2,027 in 313 households in 12 villages. Although it does note that lands and farms of 91 villages will be submerged by the reservoir, they are inexplicably not considered to be “impacted” by this project. In Pakistan, the reservoir of the Diamer-Bhasha Dam will spread over 130 km2 (32,000 acres) and 24,500 people will be affected. [See Box 5, page 25] Given the size of the reservoir, the resettlement figures seem to be an underestimate.

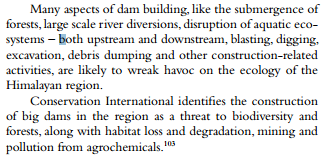
JUSTIFICATION 6. Earthquakes. Pakistan’s own Water and Power Development Authority (WAPDA) admits that Diamer-Bhasha is located in a high-risk earthquake zone

Shripad Dharmadhikary 2008. (founder of [Manthan Adhyayan Kendra](http://www.manthan-india.org/), a center to research, monitor and analyse water and energy issues; Bachelor of Technology degree from the Indian Institute of Technology (IIT) Bombay ) Mountains of Concrete: Dam Building in the Himalayas <http://cdm16658.contentdm.oclc.org/cdm/fullbrowser/collection/p267501ccp2/id/2208/rv/singleitem>



JUSTIFICATION 7. Environmental Destruction. Big dams in the Himalayas wreak havoc on the region’s ecology

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2A Evidence: The Case for Canceling the Diamer-Bhasha Dam

TOPICALITY / DEFINITIONS

Where is Diamer Bhasha Dam?

**You can’t hold up a map and show it to the Judge, but you can describe where it is, and/or you could also show this map to the Negative team if they have an issue with not knowing where it is. It’s on the northern edge of Pakistan right near the Indian border in the disputed Kashmir region, which is claimed by both India and Pakistan. The arrow was drawn by the writer of this case on top of the published map that came from this source:**

Shripad Dharmadhikary 2008. ( founder of [Manthan Adhyayan Kendra](http://www.manthan-india.org/), a center to research, monitor and analyse water and energy issues; Bachelor of Technology degree from the Indian Institute of Technology (IIT) Bombay ) Mountains of Concrete: Dam Building in the Himalayas <http://cdm16658.contentdm.oclc.org/cdm/fullbrowser/collection/p267501ccp2/id/2208/rv/singleitem>



INHERENCY

US Agency for International Development (USAID) is giving $200 million for Diamer Basha

**Note: USAID is the part of the U.S. State Department that handles foreign aid**

HYDRO WORLD 2014. (hydro-electric power industry newsletter) U.S. extends call for engineering review of Pakistan's 4,500-MW Diamer Bhasha hydro project, 3 Nov 2014 <http://www.hydroworld.com/articles/2014/10/u-s-extends-call-for-engineering-review-of-pakistan-s-4-500-mw-diamer-bhasha-hydro-project.html>

USAID has [pledged US$200 million toward development of Diamer Basha](http://www.hydroworld.com/articles/2014/10/u-s-government-actively-promoting-providing-funding-for-development-of-4-500-mw-hydro-project-in-pakistan.html" \t "_blank), with funds to be used for assessment of environmental and social effects of the proposed project as well as preparation of a financial package. The project is to include a 272-meter-tall roller-compacted-concrete dam, two diversion tunnels, two underground powerhouses of 2,250 MW each, a permanent access bridge, and hydro-mechanical and steel structural equipment.

U.S. Agency for International Development is bidding out contracts for work on Diamer Bhasha. Example: Financial Advisory Services

USAID 2014. “Financial Advisory Services for Diamer Bhasha Dam Project (FAS/DBDP)” 10 Sept 2014 Solicitation Number: SOL-391-14-000055 Agency: Agency for International Development Office: Overseas Missions Location: Pakistan USAID-Islamabad <https://www.fbo.gov/index?s=opportunity&mode=form&id=a9205d9bb3cfe17994ee0a602ecfd4b3&tab=core&_cview=1>

The U .S. Agency for International Development Mission to Islamic Republic of Pakistan (USAID/Pakistan) intends to award a contract for Financial Advisory Services for Diamer Bhasha Dam Project (FAS/DBDP) in Pakistan to support the Government of Pakistan (GOP) and Water and Power Development Authority (WAPDA) regarding financing of the Diamer Bhasha Dam Project (DBDP).

Obama Administration is doing fund-raising for Diamer Bhasha

Dipanjan Roy Chaudhury 2014. (journalist) ECONOMIC TIMES of India 21 Oct 2014 “US fund flow into Pakistan occupied Kashmir dam floods Delhi with concern” <http://economictimes.indiatimes.com/articleshow/44893459.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst> (brackets added)

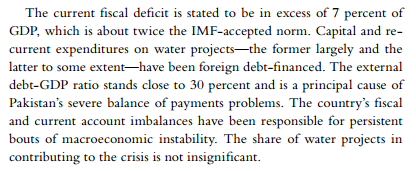
There are also fears that the reservoir of this dam would inundate large parts of land in northern part of Jammu and Kashmir adjoining PoK [Pakistan-occupied Kashmir]. The project site is 165 km downstream of Gilgit, capital of northern areas of PoK. Last week, the Obama administration had organized a fund-raising event in Washington to seek support for the 4,500 MW Diamer-Bhasha project. USAID Chief Rajiv Shah, who was once in the race to become envoy to India, and Dan Feldman, US Special Representative for Afghanistan-Pakistan, attended the event. 

JUSTIFICATIONS

Expensive / Debt Burden

Water projects contribute substantially to Pakistan debt problems, leading to economic instability

Dr. Kaiser Bengali 2009. (PhD; economist; former head of Social Policy and Development Center (SPDC), Karachi and Sustainable Development Policy Institute (SDPI), Islamabad) “Water Management under Constraints: The Need for a Paradigm Shift” RUNNING ON EMPTY – PAKISTAN’S WATER CRISIS <http://www.wilsoncenter.org/sites/default/files/ASIA_090422_Running%20on%20Empty_web.pdf>



Negative Net Benefits

Large dams, like Diamer-Bhasha, take productive land and resources out of the economy

Dr. Atif Ansar, Dr. Bent Flyvbjerg, Alexander Budzier & Dr. Daniel Lunn 2014. (Ansar – PhD; lecturer at University of Oxford - Blavatnik School of Government. Flyvbjerg –PhD; professor and chair of Major Programme Management at University of Oxford - Said Business School . Budzier – PhD candidate at University of Oxford - Said Business School . Lunn – PhD; Associate Member of University of Oxford Department of Statistics. ) ENERGY POLICY, March 2014, “Should we build more large dams? The actual costs of hydropower megaproject development” <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2406852>

The Diamer-Bhasha dam is a non-starter in Pakistan. This is without even discussing potential effects of inflation and interest rates, potential social and environmental costs, and opportunity cost Pakistan could earn by committing such vast amount of capital to more prudent investments. Our reference class forecasting techniques suggests that other proposed large dam projects such as Belo Monte, Myitsone, or the Gilgel Gibe III among many others in early planning stages are likely to face large cost and schedule overruns seriously undermining their economic viability. Large dams also exert an opportunity cost by consuming scarce resources that could be deployed to better uses, sinking vast amounts of land that could have yielded cashflows and jobs from agricultural, timber, or mineral resources. Risks related to dam safety, environment, and society further undermine viability of large dams. Decision-makers are advised to carefully stress test their proposed projects using the risk management techniques of the outside view proposed here before committing resources to them.

Blocks Other Solutions

Pakistan wastes time trying to raise money for Daimer Bhasha when they could be focusing on more realistic projects

*Asif Faiz 2013. (infrastructure specialist; was* sector manager of World Bank's infrastructure programs in Latin America from 1992-2000 and operations adviser in the World Bank's Islamabad Office from 2010-2012) 26 Aug 2013 The Political Economy of Pakistan's National Energy Policy <http://www.atlanticcouncil.org/publications/articles/the-political-economy-of-pakistan-s-national-energy-policy> *(brackets added)*

Likewise, why is it that the government does not forcefully implement the Water and Power Development Authority's (WAPDA) master plan for hydropower development (also well-articulated in NEP), similar to what India has done in relation to its hydropower potential, and remains mired in a fruitless chase of donors to fund Daimer Bhasha Dam? Here again, the NEP [National Energy Policy] offers attractive alternatives like the proposed Indus cascade dams scheme, which includes a string of hydropower investments including the Tarbela Tunnels (work has started on Tunnel #4 and needs to be extended to #5), Dasu (which some donors are willing to fund without much hesitation as it does not involve significant resettlement), Pattan and Thakotbesides Bhasha, along with numerous smaller dams on Jhelum and the Western tributaries of Indus. The potential is huge; ultimately, an installed hydropower capacity of 22,000 MW within the Indus Cascade and a strong possibility of realizing some 10,000 MW of new generating capacity within the next 10-15 years, shifting the power mix in favor of renewable and cheap hydropower, the way it was before the misguided leap to thermal generation started in the 1990s.

Short Life-Span / Silt Loading

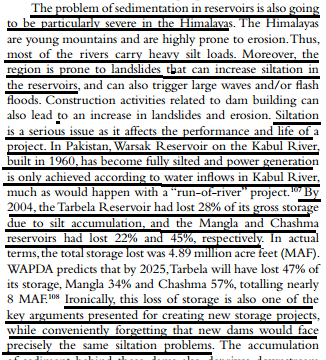
Pakistan / Himalayan dams fail due to heavy sedimentation. Advocacy for new dams is driven by failure of the old ones

Shripad Dharmadhikary 2008. ( founder of [Manthan Adhyayan Kendra](http://www.manthan-india.org/), a center to research, monitor and analyse water and energy issues; Bachelor of Technology degree from the Indian Institute of Technology (IIT) Bombay ) Mountains of Concrete: Dam Building in the Himalayas <http://cdm16658.contentdm.oclc.org/cdm/fullbrowser/collection/p267501ccp2/id/2208/rv/singleitem>

The World Bank’s “Pakistan Country Water Strategy” argues strongly that there is “the urgent need for onstruction of major new storage on the Indus.” It is ironic that a major argument for the necessity of new big dams is that heavy sedimentation has led to the loss of storage capacity of the biggest existing dams like Tarbela and Mangla, and so new dams are needed as replacements. This ignores the fact that the proposed new reservoirs in the Himalayas would face the same sedimentation problems, as these rivers carry heavy silt loads.

Silt build-up clogs Himalayan dams: Advocacy for new dams is based on failure of old ones, but the same failures will happen again

Shripad Dharmadhikary 2008. ( founder of [Manthan Adhyayan Kendra](http://www.manthan-india.org/), a center to research, monitor and analyse water and energy issues; Bachelor of Technology degree from the Indian Institute of Technology (IIT) Bombay ) Mountains of Concrete: Dam Building in the Himalayas <http://cdm16658.contentdm.oclc.org/cdm/fullbrowser/collection/p267501ccp2/id/2208/rv/singleitem>



Social Impact

Himalayan hydropower dams have big social impact even if the population density is small in the affected region

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The World Bank says that “the Himalayan hydropower sites are, from a social and environmental perspective, among the most benign in the world.” This is a patently false assertion. Dams in the Himalayas will have social and environmental impacts similar to dams in other parts of South Asia, which have proven very harmful. The low population density in these areas is sometimes put forward to argue that the projects are benign from a social impact point of view. Indeed, this very fact can mean that the populations are actually more vulnerable to displacement and that the impacts of displacement would thus be more severe. In fact, due to the peculiar geographical and cultural circumstances, dams in the Himalayas will have some serious impacts not seen elsewhere.

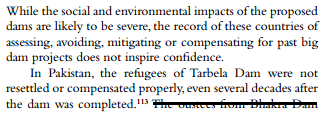
Compensation for displaced villagers will not be done correctly: The process is corrupt and confusing

Sustainable Development Policy Institute 2008. (non-profit research organization in Pakistan) Diamer-Bhasha Dam in Pakistan: Report from a Field Trip , Oct 2008 <http://www.internationalrivers.org/files/attached-files/bhasha_fact_finding_october_2008_final.pdf>

The people also reported uncertainty regarding the compensation payment process. The district administration is not happy with the way WAPDA officials are handling the payment of compensation. Looking at the previous experience with large infrastructure projects in Pakistan, people have often had to pay large sums for receiving their legitimate compensation, and only after having visited government offices multiple times. People in the area fear that this practice will be repeated, because the area lacks functioning institutions and efficient information channels. People also told the fact finding team that they had already seen first signs of corruption in the compensation process, especially when the land and the commercial property was categorized and assessed. People reported that money had been paid to the “patwaris” during the assessments. In addition to instances of corruption, people also criticize the experienced delay in compensation payments, and informed the fact finding team that many times, compensation was paid much later than planned.

Decades after another big Pakistan dam was built, the displaced villagers have not been resettled nor compensated properly

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DISADVANTAGE RESPONSES

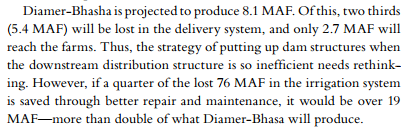
“Leaving a half-finished structure – waste of money to abandon it” – Response: No construction has begun yet. They’re still trying to raise the money

The International News 2014. (Pakistan news agency) 12 July 2012 Wapda clarifies report on delay in Bhasha Dam <http://www.thenews.com.pk/Todays-News-2-261329-Wapda-clarifies-report-on-delay-in-Bhasha-Dam> (brackets added)

Unfortunately, Wapda [Water and Power Development Authority of Pakistan] spokesman still has no time-frame about the completion of this highly important water sector project, commissioning of which has become a matter of survival for all of us. He does not bother to given any date about commissioning of this project despite the fact that the foundation stone laying ceremony at dam site has been organized at least at two occasions. If project is to complete before 2037, it must be announced to give some relief to masses. As far as present government’s resolve to give priority to Bhasha Dam and details of funding for early construction of the project is concerned, it is pity that the cost of this mega project has been doubled since first groundbreaking made in 2006 by the then President Pervez Musharraf. And government is still taking steps for arranging funds for the project. The ministry of Finance is reportedly planning to organize a function in USA in October, 2014 in this regards. In this backdrop, one can imagine that the project is virtually off track as physical work is yet to be launched at dam site.

“Water shortages in Pakistan” – Response: 2/3 of the water from Daimer Bhasha will be lost. It will produce 8.1 Million Acre Feet (MAF) but 5.4 MAF will be lost

Simi Kamal 2009 (**Chairperson and Chief Executive Officer, Hisaar Foundation, Pakistan;** has been a consultant to government agencies, United Nations agencies, the World Bank and the Asian Development Bank and has served on many boards, task forces and committees in Pakistan and abroad, including six years on the Technical Committee of the Global Water Partnership) Pakistan’s Water Challenges: Entitlement, Access, Efficiency, and Equity , RUNNING ON EMPTY – PAKISTAN’S WATER CRISIS <http://www.wilsoncenter.org/sites/default/files/ASIA_090422_Running%20on%20Empty_web.pdf>



“Energy shortages in Pakistan” – Response: Diamer-Bhasha will be too late to do anything about it

Dr. Atif Ansar, Dr. Bent Flyvbjerg, Alexander Budzier & Dr. Daniel Lunn 2014. (Ansar – PhD; lecturer at University of Oxford - Blavatnik School of Government. Flyvbjerg –PhD; professor and chair of Major Programme Management at University of Oxford - Said Business School . Budzier – PhD candidate at University of Oxford - Said Business School . Lunn – PhD; Associate Member of University of Oxford Department of Statistics. ) ENERGY POLICY, March 2014, “Should we build more large dams? The actual costs of hydropower megaproject development” <http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2406852>

Since Diamer-Bhasha is expected to take 10 years to build (2011–2021), planners need to adjust their schedule estimate upwards to nearly 17 years (i.e. an actual opening date of 2028). Using our second approach, our multilevel Model 3 predicts that given that the dam's final decision to build was made in Pakistan by a democratically elected government, when the per capita income was USD 497 in 2000 constant dollars, a dam wall length of 998 m, and an installed capacity of 4500 MW, the expected outcome is a 60% schedule overrun. Thus, using either approach, Diamer-Bhasha can be expected to only open in 2027 when there remains a 20% risk of further delay. Pakistan is facing an energy crisis today (Kessides, 2011). A dam that brings electricity is 2027 will be a little late in coming.

“Pakistan needs the electricity” – Response: Big dams aren’t the solution. Too expensive, and the poor will not benefit

Ann-Kathrin Schneider 2009. (South Asia programme director and policy analyst at International Rivers; Master’s degree in Development Studies from the School of Oriental and African Studies in London ) March 2009 Big Dams: A Dirty, Risky Business <http://www.boell.de/de/node/273120> (brackets added)

Hydropower dams in the Himalayas are being advanced as a solution to the growing energy and electricity needs of the region. Yet, [Shripad] Dharmadhikary says: “There is little evidence to establish that big dams are the only, the best or the optimal solution to the electricity question. In particular, while these projects will undoubtedly generate many thousands of units of electricity, it does not follow automatically that they will help improve access to power for the poor and the vulnerable sections of society. Indeed, the way the hydropower programs are structured, the high cost of these projects, their long distances from the load centres and privatisation of many of them are all likely to result in high costs of electricity and hence most of the benefits will accrue to sections of society with a high paying capacity.”   
Dams Are No Cheap Option  
The planned 4,500 MW Diamer-Bhasha Dam on the Indus in Pakistan is, at US$12.6 billion, one of the largest and most costly planned dams in the world. Yet it will not increase access to electricity in rural Pakistan, where some 40,000 houses have no access. Most of these houses are not even connected to the grid – they would benefit from a connection to the electricity grid, or from the installation of decentralized energy options, but not from the construction of this large hydropower project.

“Pollution from alternative sources if we don’t use hydro-electric” – Response: Dams produce GHG (Greenhouse Gas) emissions

Shripad Dharmadhikary 2008. ( founder of [Manthan Adhyayan Kendra](http://www.manthan-india.org/), a center to research, monitor and analyse water and energy issues; Bachelor of Technology degree from the Indian Institute of Technology (IIT) Bombay ) Mountains of Concrete: Dam Building in the Himalayas <http://cdm16658.contentdm.oclc.org/cdm/fullbrowser/collection/p267501ccp2/id/2208/rv/singleitem>

