

Regulation Resources

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Regulation in Conflict Economies

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About the Author...



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Abstract

Access to energy has a well-known positive impact on quality of life. Yet, in countries undergoing war and conflict, the current practice is to suspend infrastructure reform during times of national strife and conflict. This is wrong; continued pressure for regulatory reform in infrastructure industries is a vital part of conflict resolution.

Introduction

How do you implement regulatory reform when war is raging all around, and the lives of utility personnel may be in danger? How do you stop? How can you NOT keep going?

My own recent experience in Nepal and Iraq will be focus of this article. Both countries have recently faced national security issues that directly impact infrastructure development. Both countries are seeking to expand infrastructure development. Iraq has obvious resources in petroleum. Nepal has less obvious resources in massive hydropower potential. Both nations face serious political and economic challenges, security concerns, gender issues and environmental considerations, with similar size populations.

Reform Amidst Conflict in Nepal and Iraq

Nepal has a population of approximately 27 million people, and the population is growing at a rate of 2.34% annually. Literacy, defined as the percentage of the population the age of 15 and over who can read and write. In Nepal this is only 45.2%; for males it is 62.7% and for females it is only 27.6%.

Iraq has a population of approximately 26 million people. Literacy is only 40.4% for the total population; 55.9% for males and only 24.4% for females¹.

Because of the ongoing conflict, both nations face very high unemployment. In Iraq it is 25-30%. Nepal is among the poorest and least developed countries in the world with nearly half of its population living below the poverty line. Unemployment in Nepal is estimated to be 47%!

Electricity production in Nepal is 95% hydro; capacity is 600+ MW. Capacity is among lowest in world per capita. Electricity consumption

¹ CIA World Factbook. Based on 2003 data for both Iraq and Nepal.

per capita in Nepal is 0.1328 kwh/day. The great water resources draining from the Himalayan Mountains could provide an estimated 80,000 mw of potential electricity generation. This represents the largest and perhaps only electricity generation resource that Nepal has. In the middle of their current conflict, affordable projects are very difficult, and will require significant investment in the power sector as soon as the new government is established. How will this happen?



Mary Webster delivering a regulatory training course in Kathmandu, Nepal, September 2005

Was reform suspended during the conflict? Yes, the monarchy suspended Parliament, and reform of any part of the economy became very difficult. With no permanent elected government, and with the Constitution preventing the King from issuing any decree that lasted more than 6 months, it was not possible to make the structural changes that Nepal needed. Yet, they continued to move forward with internal reform, capacity building and preparation for new legislation that would create the environment for investment they urgently sought.

In Iraq the situation is similar in some critical ways. Iraq is located in western Asia in the historic Fertile Crescent that lies between the Tigris and Euphrates Rivers. They have large oil reserves. These contribute to the national wealth, which produces a GDP - per capita: purchasing power parity - of \$3,400. Oil production varies but recently reached 2.5 million bbl/day².

Electricity production in the country averages approximately 4,625 MW, a total that services an estimated 13.9 million Iraqi homes³. They have 300 times the electricity available for the people

Electricity Consumption

Nation	Population	Pop Growth	GDP	GDP Growth	Per Cap GDP	Electricity Generation	Per Cap Consumption
Afganistan	27,755,775	3.43%	21,000	n/a	800	453,750,000	16
Bangladesh	133,376,684	1.59%	230,000	5.60%	\$1,750	12,548,000,000	94
Bhutan	2,094,176	2.15%	2,500	6.00%	1,200	308,650,000	147
Chile	15,498,930	1.09%	154,000	3.10%	10,000	39,577,000,000	2,554
China	1,284,303,705	0.87%	6,000,000	8.00%	4,600	1,308,000,000,000	1,018
Czech Republic	10,256,760	-0.07%	155,900	2.60%	15,300	69,580,000,000	6,784
Ecuador	13,447,500	1.96%	39,600	4.30%	3,000	10,395,000,000	773
Egypt	70,712,345	1.16%	258,000	2.50%	3,700	77,000,000,000	1,089
France	59,765,833	0.35%	1,540,000	1.10%	25,700	513,920,000,000	8,599
Germany	83,251,851	0.26%	2,184,000	0.40%	26,600	537,300,000,000	6,454
Haiti	7,036,722	1.40%	12,000	-1.20%	1,700	522,000,000	74
India	1,045,845,226	1.51%	2,660,000	4.30%	2,540	547,120,000,000	523
Iraq	24,683,313	2.70%	58,000	-3.00%	2,400	36,490,000,000	1,478
Laos	5,777,180	2.40%	9,200	5.00%	1,630	690,000,000	119
New Zealand	3,908,037	1.12%	75,400	3.10%	19,500	33,315,000,000	8,525
Nepal	25,873,917	2.29%	35,600	2.60%	1,400	1,454,000,000	56
Nigeria	129,934,911	2.54%	105,900	3.50%	840	15,900,000,000	122
Pakistan	147,663,429	2.06%	229,000	3.30%	2,100	58,229,000,000	394
South Africa	43,647,658	0.02%	412,000	2.60%	9,400	194,380,000,000	4,453
Sri Lanka	19,576,783	0.85%	62,700	-1.00%	3,250	6,156,000,000	314
Ukraine	48,396,470	-0.72%	205,000	9.00%	4,200	163,000,000,000	3,368
United States	280,562,489	0.89%	10,082,000	0.30%	36,300	3,799,994,000,000	13,544
Vietnam	81,098,416	0.81%	168,000	4.70%	2,100	25,775,000,000	318

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Source: Columns B-G: US CIA World Factbook for 2002, www.cia.gov/worldfactbook; Columns H: Mary Clark Webster, 2003.

² www.cia.worldfactbook.com

³ www.centcom.mil

of Nepal. The chart above was developed by the author based on publicly available information. It shows the level of electricity consumption per person in selected countries, including Iraq in red and Nepal in blue.

Was reform suspended in Iraq during the conflict? Not really; it was not so much suspended, as it never was started under the old regime, and has had little chance to be initiated what with difficulties supplying power every day. Individuals I spoke with at the Ministry of Electricity often mentioned that once Iraq had had a power sector that had rivaled any in the Middle East, and they were saddened to see the state that it had fallen into by the time of my visit in 2004.

Since the new government has been elected and a Minister of Electricity has been installed, they have again focused on capacity building, and creating the structural reforms that will enable the power sector to be rebuilt and provide power to more of the population for longer periods every day.

Special Considerations

Unlike countries with stable governments and predictable economies, pursuing an infrastructure reform agenda in conflict economies requires special considerations. Specifically, international investors who have access to capital will require greater risk mitigation than these countries can offer in the near future. These investors will call upon donor banks and other international financial institutions for greater intervention to help mitigate this risk. In these situations, governments, donors, and investors alike must remember that international utility regulation has proven to be one of the critical steps nations can take to reduce their risk profile.

Conclusion

Despite the tendency to forgo infrastructure reform during periods of national conflict, continuing the reform agenda is essential. Transition economies, including failing states and post-conflict economies, such as Iraq and Nepal, require massive investment in infrastructure to create job opportunities and stimulate economic growth. Establishing an environment where projects can compete for business from customers, in a regulated market, is the model that continues to gain traction around the world.

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