

Title: The Political Economy of Aid for Power Sector Reform

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**Publication Date:** 

(insert date)

Series:

EEG State-of-Knowledge Paper Series

Permalink:

(insert link)

#### **Keywords:**

Electricity, economic development, economic growth, energy policy

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The characteristics of the power sector makes reform intensely political in almost all countries and donor projects have sometimes failed because of an inability to navigate the local politics of reform. This paper reviews what is known about how donors have taken politics into account in designing and implementing power sector reform programmes in Sub-Saharan Africa and South Asia. It illustrates the challenges which donors have faced with reference to case studies of donor attempts to support power sector reform in Tanzania and in the Indian state of Orissa. The paper draws on documentary evidence from the major donors to the sector in each country as well as a set of qualitative interviews with experienced project supervisors. It concludes with a set of recommendations for further research designed to provide insights on how best to design and implement power sector reform programmes given the political context in which they are working.

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Series Name: EEG State-of-Knowledge Paper Series

Paper No.: 2.2

Issue Date: (insert date)

# The Political Economy of Aid for Power Sector Reform

## Neil McCulloch, John Ward, Esme Sindou

# **EEG State-of-Knowledge Paper Series**

Oxford Policy Management Center for Effective Global Action Energy Institute @ Haas







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# The Political Economy of Aid for Power Sector Reform

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December 2016

### **Abstract**

Recent literature on the effectiveness of donor programmes points to the importance of understanding the political context within which reforms are taking place. A body of evidence is now emerging suggesting that programmes that are more flexible and iterative are often more successful in achieving their objectives than programmes that adopt a more rigid, linear approach to reform and recent experiments with projects that "think and work politically" appear to show promising results.

The characteristics of the power sector makes reform intensely political in almost all countries and donor projects have sometimes failed because of an inability to navigate the local politics of reform. This paper reviews what is known about how donors have taken politics into account in designing and implementing power sector reform programmes in Sub-Saharan Africa and South Asia. It illustrates the challenges which donors have faced with reference to case studies of donor attempts to support power sector reform in Tanzania and in the Indian state of Orissa. The paper draws on documentary evidence from the major donors to the sector in each country as well as a set of qualitative interviews with experienced project supervisors. It concludes with a set of recommendations for further research designed to provide insights on how best to design and implement power sector reform programmes given the political context in which they are working.

# **Acknowledgements**

We would like to thank Catherine Wolfram and Paul Gertler for their overall intellectual guidance of the Energy and Economic Growth applied research programme for which this paper was produced, as well as Marcela Tarazona, Carson Cristiano, and Felicity Le Quesne for their excellent management of the process. John Besant-Jones, Anton Eberhard, Vivien Foster, Catrina Godinho, Alan Lee, Joyashree Roy and Jonathan Walters, as well as two anonymous reviewers, provided helpful comments and advice. We are grateful for financial support from UK Aid, through the Department for International Development. Our principal debt is to the senior aid officials from a range of agencies who gave generously of their time to explain how donors have attempted to engage with the complex political economy of power sector reform.

The Applied Research Programme on Energy and Economic Growth (EEG) is led by Oxford Policy Management in partnership with the Center for Effective Global Action and the Energy Institute @ Haas at the University of California, Berkeley. The programme is funded by the UK Government through UK Aid. The views expressed in this paper do not necessarily reflect the UK Government's official policies.

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### Introduction

There has been a resurgence of interest in recent years, amongst both practitioners and the academic community, in the political economy of donor engagement in reform processes (Carothers and De Gramont, 2013). A series of studies have suggested that projects that take a flexible and adaptive approach to reform have been more successful. For example, Andrews et al (2012) and Andrews (2014) have argued that programmes should focus on problem solving through an iterative process; whilst Pritchett et al (2013) have argued that projects should "crawl the design space" for solutions. Similarly, Booth (2015) argues for the need to "think and work politically", whilst Levy (2014) provides a theoretical framework for how reform can "work with the grain" of the domestic political reality. There is also a growing literature of comparative case studies (e.g. Booth and Unsworth, 2014) that argues that aid programmes which are flexible, long-term and locally owned are likely to be much more effective in achieving sustainable change than more traditional "linear" programmes.

Donors have been paying attention to (and funding) this literature and are increasingly recognising that an appreciation of the politics of the sectors and countries in which they are operating is essential for successful and sustainable reform. One of the consequences of this work has been considerably greater interest and uptake by donors in "Political Economy Analysis" (PEA) (Fritz et al, 2014). Many donors now routinely conduct a PEA as part of the preparation of a project and some embed regular sectoral or issue-based PEAs into the operation of projects. Some have gone even further – for example, DFID has sent several hundred of its staff on a training course about politics and institutions in order to try to change the mindset of technical staff about the importance of political considerations in projects. What is less clear is the extent to which such analysis is translating into different designs and different approaches to the implementation of projects. A recent review of DFID experience suggested that, whilst PEAs have been mainstreamed in many areas, this has resulted in relatively little change in the types of projects that are actually implemented (Piron et al, 2016).

This paper examines how donors have tried to take political context into account in their support of reform efforts in one particular area - power sector reform – and focuses on two regions – Africa and South Asia – where the provision of power is worst. Although there is politics associated with reform in all sectors, the characteristics of the power sector – usually centralised, providing through a network, part of the development narrative of most countries, controlled by a domestic elite, and a significant source of rents – would appear to make accounting for political considerations particularly important for success.

There is already a literature on the political economy of power sector reform. Numerous papers have looked at the politics of reform (see Gratwick and Eberhard (2008) and Eberhard et al (2016) for descriptions of reform in Sub-Saharan Africa; Dubash and Rajan (2001) and Tongia (2006) describe the political economy of reform in India; Victor and Heller (2006) describe the politics of reform in five major developing economies; Scott and Seth (2014) provide a literature review of reform of electricity distribution in developing countries; Kojima, Bacon and Trimble (2014) review the literature on reform of power sector subsidies). But this literature focuses on the political economy of the reform process within individual countries, where the main actors are government, business and voters.

By contrast, rather little has been written about the role of donors and the extent to which they have taken knowledge about the politics of reform into account in the design and implementation of their programmes in Africa and South Asia. To what extent have donors analysed the underlying political constraints that they face? Have donors significantly shifted the nature of the power sector reform programmes which they implement as a result of a better understanding of the political context? Are they taking on board the lessons from recent research on "thinking and working politically" and, if so,

how? Are there general lessons that can be learned about what sorts of approaches to power sector reform are more, or less, successful and how this varies by context?

This paper reviews the existing studies – both published and, where available, donor evaluations - looking at how donors have navigated the political economy of power sector reform. It complements this by collecting documentation on power sector reform projects implemented by the major donors in two places - Tanzania and the Indian state of Orissa (now Odisha) over the last decade or so. This is supplemented with qualitative analysis based on a set of interviews with experienced donor officials responsible for the implementation of power sector reform projects. We conclude with a summary of the lessons from the literature and our case studies about how donors might respond more effectively to the political challenges associated with power sector reform and provide some suggestions for further research.

## Methodology

Our methodology has three components.

First, we examine the literature about the political economy of aid in the power sector (including reviews conducted by donors such as Deloitte, Touche and Tohmatsu (2004); Besant Jones (2006); and Deloitte (2015)). We limit the scope of this review to studies that have examined the role of donors in power sector reform in developing countries and how they have designed and implemented such programmes in the prevailing political context in the countries of operation. Thus we do not review all studies on the political economy of power sector reform, but focus on synthesizing available literature on how this has influenced donor programming in South Asia and Sub-Saharan Africa in particular.

Second, we have attempted to obtain information and documentation about the power sector reform projects supported by donors over the last decade (or longer where appropriate) in two locations – Tanzania and the Indian state of Orissa. These locations were chosen because of the length and intensity of donor engagement in power sector reform in both places, providing a literature and experience to draw on. In addition, they provide nicely contrasting examples given that donors pursued the same kind of reform in both locations but with different results. The documentation for these projects was then used to answer a set of questions including: how political considerations were taken into account in the design of the project; how challenges and blockages were handled during the course of implementation; and what the overall performance of the project was and what lessons were learned in terms of project design and implementation.<sup>4</sup>

Third, we conducted a series of qualitative interviews with experienced project supervisors from the major donors who were supporting power sector reform for Tanzania and Orissa in order to obtain their views about the critical success factors for power sector reform projects and, specifically, how projects have attempted to take into account the politics of sector reform.<sup>5</sup>

## A brief history of donor engagement in power sector reform

Although donors have been involved in supporting power sector investments since the 1950s, the nature of development partner involvement in power sector reform in developing countries is rooted in

<sup>&</sup>lt;sup>4</sup> Unfortunately, the limited number of projects and the paucity of evaluation data meant that it was not possible to construct a database with a sufficiently large number of projects to conduct an econometric analysis along the lines of Ika et al (2012). However, we believe that our case studies do provide useful information about how donors have approached power sector reform and the challenges that they have faced.

<sup>&</sup>lt;sup>5</sup> Donors interviewed include: DFID, USAID, Power Africa, MCC, SIDA, World Bank and the African Development Bank.

the transformations that affected the sector in OECD countries in the 1980s. During that time, a combination of political, financial and technical factors triggered power sector reforms in the UK, Chile and Norway (Gratwick and Eberhard, 2008). These countries' experiences appeared to demonstrate the benefits of such reforms, which were then followed by several other industrialised and some developing nations from the early 1990s. Since then, power sector reform has been advocated by the development community, including the World Bank, the Inter-American Development Bank, the European Bank of Reconstruction and Development, as well as other international agencies, such as the World Energy Council (Bacon and Besant-Jones, 2002). Thus, donors have played a major role as the architects of reforms in the power sector, and have often attempted to initiate reform through the provision of technical assistance and capacity building programmes in developing countries (Wamukonya, 2003; Dornan, 2014).

At first, most development partners typically implemented a somewhat uniform approach to power sector reform. The approach taken in OECD countries crystallised into a "standard" or "textbook" approach to restructuring the sector, which aimed at fully unbundling and liberalising the power sector following a logical sequence of distinct steps: corporatisation, commercialisation, legislation, regulation, restructuring, privatisation and competition (Gratwick and Eberhard 2008, Joskow, 2006; Littlechild, 2006; Hunt, 2002).

The development community promoted power sector reform out of a belief that the standard "model" would enable the transformation of poorly performing energy systems in developing countries, promoting growth and improving access for poor populations. It was felt that the recommended structure and regulation of the sector would benefit consumers by allowing their participation in the market and by ensuring consumer protection (United States Government Accountability Office, 2005). There was, in the words of one former senior donor official, a genuine belief that "one size did actually fit all."

However, the application of the "standard model" of reform in developing countries yielded rather modest results, as it faced significant political barriers (Besant-Jones, 2006, Choynowski, 2004). The consensus in the literature is that the standard model failed for three main reasons.

First, it often failed to take account of the vastly different circumstances prevailing in developing countries from those in the OECD countries where it was first implemented. For example, the textbook model for power sector reform did not make sense in many small African countries, where the necessary degree of competition in the generation segment cannot be obtained due to the small size of the power system and insufficient generation capacity (Barnett, 2014).

Second, the model struggled to map out a feasible pathway for reform. As Victor and Heller (2006) summarise "The standard textbook for reform focusses on the end point, namely an unbundled, privately owned and competitive power sector, not on the steps that governments need to take towards that end." In practice, governments tried a wide variety of approaches to reach the end point, not all of which were successful (Chikuni et al, 2011).

Third, and perhaps most important, many reform attempts failed to understand or, at least, to take account of, the underlying political constraints facing decision makers. In almost all countries, reform of the power sector is an extremely sensitive area. Electricity is part of the development vision of all countries and therefore brings significant political benefits to leaders who can control the price of and access to a key developmental service. Economies of scale mean that large financial flows are involved in procuring power production, transmission and distribution systems. The centralised nature of the technology concentrates control in the hands of relative few powerful individuals.<sup>6</sup> As a result,

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<sup>&</sup>lt;sup>6</sup> There is, of course, a live debate about how developing countries might "leapfrog" Western centralised power systems by adopting technology which allows a more distributed form of production, transmission and distribution.

the location of transmission and distribution lines can be driven by electoral considerations, power may be rationed to influence voters and power generation may fluctuate with the election cycle (Tripp, 2012; Mesquita and Smith, 2009). Utilities have historically been used to serve the broader patronage system and became large employers (Barnett, 2014). As reforms often emphasize restructuring utilities, they have faced strong resistance from labour unions (Eberhard, 2004; Dubash and Rajan, 2001). Reforms also encouraged cost-reflective pricing, but the associated price increases have resulted in popular uprisings in several countries including Argentina, India, Indonesia, Ghana, and South Africa (Dubash and Rajan, 2001).

Thus, rather than the "standard model", the reforms of last two decades have generated a wide variety of "hybrid" structures (see Eberhard et al (2016); Trimble et al (2016) for a recent classification of different systems in Africa). In each case, these reflect the outcome of a complex and context specific contestation both between domestic actors (utilities, independent power producers, regulators, finance ministries, energy ministries, and political leaders) and between domestic and international actors (independent power producers, donors and other financiers).

Donors responded to the challenges of implementation in different ways. Some development partners had considerably more leverage than others due to the scale of the resources which they were providing. The literature points to examples, predominantly from the 1990s, where countries were effectively forced to implement the reforms suggested by donors because of the conditions included in loan packages (Wamukonya, 2003; Lefrevre and Todoc, 2000).<sup>8</sup>

There is also evidence that pressure to implement the recommended reforms was strengthened by coordination amongst donors. The World Bank, for example, refused to fund more capital investments until specific reforms had been implemented and most other donors would only support programmes that the Bank had approved (Barnett, 2014).

Some donors also responded by attempting to insulate reforms from politics. For example, in Argentina, Bouille, Dubrovsky and Maurer (2002) describe how a small group of politically powerful bureaucrats, supported by multilateral agencies, designed the reforms without engaging with other relevant public agencies or civil society. However, this opaque process created political opposition and resulted in a lack of ownership of the reforms by key stakeholders.

By the early 2000s, the donor community was conscious of the difficulties being encountered in the implementation of power sector reform in developing countries. The World Bank commissioned a major review of its power sector operations which has been extremely influential in shaping the approach taken by most development partners over the last decade (Besant-Jones, 2006). It concluded that "The most important lesson from reforming power markets in developing countries is that "cookbook" solutions for reforming their power markets are ruled out by the extensive range of economic and institutional endowments of these countries."

The consequence of this reappraisal was the abandonment of the "one size fits all" approach. The World Bank issued new Operational Guidance to its staff (World Bank, 2004a), which emphasized context specificity and the importance of the political dimensions of reform. In particular, a stronger focus was put on identifying "stakeholders with the incentive and influence to press for improved performance" and "top-level political decision makers", who will be able to champion the reform process (Levy 2007; Fritz et al. 2014).

<sup>&</sup>lt;sup>7</sup> Hall et al (2005) document civil society opposition to water and electricity privatisation in developing countries; Wood (2005) notes that fundamentally different understandings of public participation amongst stakeholders have stunted meaningful dialog around reform.

<sup>&</sup>lt;sup>8</sup> It should be noted that the literature may be somewhat skewed in this respect since few senior government officials in favour of reform are likely to say this to external researchers, whereas those against reforms are happy to discuss their misgivings.

The last decade has therefore seen a considerable amount of experimentation by development partners and closer attention to understanding the political context. But donors still face considerable challenges in navigating the complex politics of power sector reform and it is not clear whether the deeper understanding of context has yet translated into donors undertaking different interventions in the countries that they support. Thompson and Bazilian (2014) assert that donor-funded technical assistance and capacity building activities still avoid "the fundamental political issue of who wields political power and how that power is wielded". And Naqvi (2016), in examining the role of development actors in power sector reform in Pakistan, highlights how awareness of the complex political problems associated with reform is not sufficient to avoid them, pointing to a higher order of structural obstacles within development partners that remain unaddressed.

To understand these obstacles further and assess how donors have addressed them, the next sections examine reforms in Tanzania and in the Indian state of Orissa and the role of development partners in these processes.

### Power Sector Reform in Tanzania

# The Tanzanian reform experience<sup>9</sup>

The Tanzanian power sector is dominated by a state-owned and vertically-integrated utility, Tanzania Electricity Supply Company (TANESCO), which has been struggling financially for many years. Its precarious financial situation has led to chronic underinvestment in the sector, from both public and private investors, which in turn resulted in significant underperformance for decades, both in terms of quality of supply and coverage. The lack of reliable electricity supply has been identified as one of the three major constraints to growth in the country (Partnership for Growth, 2011).

Reforms began in the 1990s, when the country's structural adjustment programme supported by the IMF and the World Bank, was expanded to the power sector. Restructuring and privatisation were deemed the solution to TANESCO's financial deficits and the generation segment was opened to independent power producers (Ghanadan and Eberhard, 2007).

In the mid-1990s, reflecting the expectations that the private sector would fill the investment gap in the generation segment, donors mostly withdrew their direct support to the development of power projects. Consequently, between 1997 and 2006, the utility suffered from a critical lack of investments, in its workforce, systems and infrastructure, reflecting the view that long-term investments would not benefit the government or the managing entity, as TANESCO was expected to be privatised. The 'generation gap' left in TANESCO by the lack of recruitment in the last decade is still a major concern for the utility. The utility also requires a technological turnaround and related capacity building, as its systems have not kept speed with the revolution in industry-specific technologies.

From 2002 until the end of 2006, the management of TANESCO was outsourced to a private company. However, the results of this were also unconvincing – whilst commercial performance improved, there was little improvement in service quality or transmission and distribution losses. In 2005, newly elected Government terminated the management contract at the end of 2006 and despecified TANESCO for privatisation.

Notwithstanding the difficulties in reforming TANESCO, the 2000s saw significant changes in the legal, regulatory and institutional environment. The Energy and Water Utilities Regulatory Authority (EWURA) Act was passed in 2001 (although it only came into being in 2006). On paper, the

<sup>&</sup>lt;sup>9</sup> We include here a brief summary of the Tanzanian case study – a more detailed account is available on request.

institutional structure and governance of the sector is excellent, as the legislation guaranties the autonomy of the regulator and the participation of the public. However, in practice, the Ministry of Energy and Minerals can exercise political pressure and intervenes on regulatory issues, in particular, tariff setting. Other changes included the creation of a Rural Electrification Agency in 2005, to focus on extending access. And in 2008 an Electricity Act was passed that encourages private participation in the sector.

Whilst these legislative and institutional changes might signal a renewed commitment for creating a conducive environment for private investments (Kapika and Eberhard, 2013), the deals struck with private investors have not always been transparent, which has heightened suspicion about private sector investments. For example, the lack of planning in the sector, combined with severe droughts, forced TANESCO to resort to emergency power producers (EPPs) in 2006 and 2011. The absence of competitive and transparent tendering resulted in one of the largest scandals in the country's history (Kapika and Eberhard, 2013) and put TANESCO on the verge of bankruptcy, as the negotiated cost of electricity with EPPs greatly exceeded the tariff.

The sector has also been influenced by the large gas field discoveries in recent years. This has already led to a significant shift in the fuel mix for electricity generation and holds the potential for much cheaper generation costs. This will depend on the transparency and efficiency of negotiations between the Tanzanian government and the major investors, including British Gas, Exxon Mobil and Statoil.

More recently, the Big Results Now agenda of 2013 again promised reform of the sector (Government of Tanzania, 2013) including unbundling, commercialisation and sale. This has been followed by a new Roadmap which was approved by the Cabinet in 2015. However, the latter was funded by the African Development Bank and was undertaken by a Western consultancy company. Its recommendations bear a strong resemblance to the "standard model", promising to unbundle and liberalise the power sector by 2025.

### The role of donors

Traditionally, the dominant approach to influencing power sector reform in Tanzania has been through general budget support. Combined commitments from donors were substantial and represented a potentially influential tool, since some donors have made the disbursement of their loans conditional to the adoption of reforms.

Since the Busan Partnership agreement on development cooperation, several donors have strongly focussed on "results", leading to concentrating more effort on "low hanging fruit", than on the longer-term reform agenda. Also, despite some willingness amongst donors to develop a common Performance Assessment Framework, there has been a lack of alignment between the framework and the conditions of loans. This was due to both the complexity of the results framework and competing donors' interests and approaches. Coordination is also made more difficult by the large number of development partners working in Tanzania. In an attempt to address this, donors have formed the Energy Development Partners' Group, intended as a platform for dialogue with Government. However, as each country's presence in Tanzania is founded on bilateral diplomatic relationships, the Government has no incentive to deal with development partners as a united block of donors.

Commercial interests have not been absent from the considerations of bilateral donors when promoting reforms. This has undermined trust between the Government and donors, since it is not always clear to the Government that the approach being promoted is in the long-term interest of Tanzania. Furthermore, some development partners have a particular ideological position about unbundling and liberalisation, despite the limited number of actors in the sector, which makes it

difficult to achieve enough competition in the market, and the lack of high-level expertise necessary to manage the independent system operator required. In other cases, the relatively rapid rotation of staff in donor agencies can mean that there is a lack of skill in supervising and monitoring reform recommendations produced by independent consultants to ensure that they are consistent with the local context. Independent consultants, in turn, frequently recycle the standard model with relatively little modification for country context.

The experience of donor engagements in Tanzania exemplifies some of the key challenges faced by external actors in promoting power sector reform. Frequent changes in government policy and attitude towards reform, combined with a mistrust of the motives of foreign partners and an historical antipathy towards the private sector, make it hard for development partners to support a reform process. For their part, a lack of serious analysis of the underlying political constraints, combined with rapid turnover of donor officials, has resulted in a reliance on a standard model of reform with seemingly little attempt to tailor this to Tanzania's context. The result has been *de jure* reforms which satisfy the donors and release funding, but with little *de facto* reform in the way in which the sector operates. However, the efforts of specific individuals to build trusting relationships with key government counterparts and tailor interventions accordingly have yielded important practical reforms in some areas.

# **Power Sector Reform in Orissa**<sup>1011</sup>

## The Orrisa reform experience

The case of Orissa provides a paradigmatic case of many of the challenges faced by donors wishing to support power sector reform process. Facing acute operational and financial challenges, the state government initiated a power sector reform process in the early 1990s, with DFID and the World Bank quickly supporting the initiative. The objective of power sector reform in Orissa was to unbundle the transmission and distribution functions of the Orissa State Electricity Board, to privatize the resulting distribution entities to limit the government's financial exposure to them, and to establish an independent regulator to manage the sector.

Through the 1995 Orissa Electricity Reform Act, the Orissa State Electricity Board (OSEB) was split up into the Grid Corporation of Orissa (GRIDCo) and the Orissa Hydro Power Corporation (OHPC): the former was involved in transmission and distribution of energy, the latter comprised the government-owned, hydro-power generating stations. In 1996, the Orissa Electricity Regulatory Commission (OERC) was set up as an independent regulatory body for issuing licences, setting tariffs, and limiting the extent of political interference in tariff setting. In 1998, GRIDCo was further split into NESCO, SOUTHCO, WESCO and CESCO, each of which acted as energy distributors in a specific area of Orissa, and the Orissa Power Transmission Corporation Ltd (OPTCL). Each of the new distribution companies (discoms) were then privatized via a 51% share sale: Applied Energy Services (AES), an American power company, bought CESCO, and Bombay Suburban Electricity Supply Company (BSES) bought the remainder, in 1999 (Deloitte, 2015). In a complementary aspect of the reform process, Talcher Thermal Power Station (TTPS) was transferred from OSEB to the National Thermal Power Corporation (NTPC) in 1994.

The Orissa power sector reform achieved some of its objectives. In 2004, the World Bank declared that the 'biggest single achievement of the project' was that Orissa was the only state in India in which the power sector was a contributor to, rather than a drain on the state budget. In addition, the total

<sup>&</sup>lt;sup>10</sup> The name of the state was changed from Orissa to Odisha in 2011. However, we have used the name Orissa throughout since the reforms described mostly occurred when the state was known by this name.

<sup>&</sup>lt;sup>11</sup> We include here a brief summary of the Orissa case study – a more detailed account is available on request.

installed power generation capacity in the state increased from about 2.7 GW is 1997 to 3.4 GW in 2002 and 7.7 GW in 2014 and the transfer of the Talcher Thermal Power Station led to a significant improvement in its performance. The experience of Orissa was also successful in paving the way for similar reform programmes elsewhere in India, notably in Delhi and Andhra Pradesh.

On the other hand, the privatization programme was not successful in the long-term, with most of the discoms reverting to public ownership over the decade following reform. The super-cyclone in 1999 imposed major financial losses on CESCO, and AES withdrew when its license was suspended in 2001. Eventually, CESCO was replaced by the Central Electricity Supply Utility (CESU), owned by the Orissa Electricity Regulatory Commission (OERC). With persistent problems servicing their debt, aggravated by continuing high levels of technical and non-technical losses (Deloitte, 2015), the other three discoms also gradually passed into effective state ownership. The financial position of the pubic transmission company also only improved modestly as the discoms defaulted on their payments to GridCo.

The causes of the failures of the reform process are multi-faceted and contested. An official inquiry undertaken by the Kanungo committee found that the new distribution companies failed to provide significant new investment, increase collections, or reduce T&D losses. This is corroborated in the World Bank Implementation Completion Report (ICR) which notes that 'BSES/Reliance in particular singularly failed to put adequate managerial resources on the ground'. The super-cyclone of 1999 also came at an unfortunate time given the financial fragility of the system partly resulting from the slowness with which World Bank funding flowed from the Government of Orissa to the implementers (World Bank, 2004b) and the unwillingness of the state government to provide any additional transition financing to the privatised discoms (Deloitte, 2015).

However, there were also political factors. The treatment of distribution losses was a key driver of financial unsustainability. A key challenge was that discom remuneration was based on assuming it could meet a loss allowance of 35% for 1999-2000, based on an assumption that opening T&D loss levels in 1996-97 were 39.6%. It subsequently emerged that opening losses were around 48-49% (World Bank 2004; Deloitte 2015). However, the regulator was unwilling to make any adjustments when the additional information became available, allegedly due to political pressure from the state government to not amend the target so as to avoid politically unpopular price rises. This set the discoms on a consistent path of under-recovery and undermined their financial viability and investment plans. Similarly, the failure to appoint seats in the regulator between 1999 and 2000 undermined the regulator's independence (World Bank, 2004b). AES also claim that the Government of Orissa interfered with the management of CESCO, forcing redeployment of employees and preventing the firm from disconnecting defaulting customers (World Bank, 2004b).

#### The role of donors

The World Bank and the UK government (as ODA before 1997 and the Department for International Development thereafter) were involved in Orissa's reforms, providing both financial and technical assistance. The World Bank assisted the project from the outset both financially and non-financially, allocating US\$ 225.5 million over the period 1996-2004. This financing had four main objectives: implementing a program of regulatory, institutional and tariff reforms; supporting the institutional development of the regulator; reinforcing and rehabilitating the power system and improving its demand side management capability; and upgrading the environmental performance of thee sector (World Bank, 2004b).

The Department for International Development (DFID) mainly provided technical assistance, valued at \$109m, between 1996 and 2004. DFID assisted with organizing employment transfers between the OSEB and the newly created OHPC and GRIDCO, creating a human resources database for these

transfers and providing actuarial valuations of terminal benefits funds. As the new companies became operational, DFID also helped them to set up detailed financial reporting systems and accounting systems. The Core Skills Training Centre, which provided specialist training to staff, was established in 1996, and the GRIDCo Management Training Centre was established in 2006. In total, 6 800 employees underwent specialized training programs, and 33 senior-level staff participated in an overseas Executive Development Program (Deloitte, 2015; World Bank, 2001). DFID also developed a specialized energy billing system, although this was discontinued as soon as the newly created discoms were privatized.

Reflecting the overall challenges faced by the reform process, the success of donor support to the reform process is mixed. There were some successes. For instance, DFID's contribution in providing technical training to GRIDCo personnel was crucial to ensuring the good operation of the privatized transmission and distribution companies, and its support to OERC was sound, especially in the early stages of reform (World Bank, 2004b). However, a broader assessment of the donor programmes suggests overall success was limited with the World Bank's ICR rating its performance in the sector reform process as unsatisfactory, a particularly negative rating. DFID rated its contributions to the power sector reform process as satisfactory.

The experience in Orissa suggests a number of possible frailties in the design and implementation of the donor programmes, especially in responding to political economy pressures, that may have contributed to the challenges in the broader reform process.

- Over ambitious target setting. A number of stakeholders suggest the ambition and pace of the
  reform process expected in Orissa failed to reflect the contextual realities of an undercapacitated sector. In particular, they point to a presumption that successes in developed
  country contexts could be replicated in the more challenging environment of Orissa.
- A failure to plan for political interference. The challenges associated with setting ambitious plans were compounded by a failure to consider potential sources of failure. In particular, the privatisation agreements were based on an assumption that any challenges or disagreements would be dealt with by the regulator in a way that satisfactorily balanced the concerns of different parties. While the programme started with strong political support, DFID itself was aware of the possibility of this changing. A UK government concept note describing the rationale for its support to the process noted that 'there remain risks that GoO [Government of Orissa] will try to interfere in the workings of the new arrangements for political ends (in the ways of old); and that the full ramifications and implications of these pioneering reforms may yet not have been wholly grasped' (Overseas Development Agency, 1995). However, limited time was given to testing how support could be effective if the assumption of no political interference did not hold. 13
- A need to develop multiple points of engagement. Greater contingency planning might have led to the design of more comprehensive programmes involving more players in the sector. In particular, there was limited donor support for the state government. This became problematic when the government refused to get explicitly involved in resolving problems, leaving donors

<sup>12</sup> In the documentation uncovered for this analysis, there is no evidence that a formal Political Economy Analysis was undertaken in advance of the support being provided, although it is unlikely that all of the relevant project documentation was available.

<sup>&</sup>lt;sup>13</sup> Once again, in this sense the experience in Orissa confirms broader experiences. Williams and Ghanadan (2005) note that: 'A key lesson of this experience is that laws and frameworks alone do not guarantee success. Effective regulators must have the political independence, professional capacity, and financial resources to design and enforce regulations in the public interest. Regulatory capacity does not emerge overnight, but through the long-term development of public institutions…'

with limited entry points to try and effect change. DFID's Project Completion Report (PCR) notes that one of the key lessons from the project was to 'be prepared to support consultants by maintaining pressure on political leaders' (Department for International Development, 2001).

• A need for more flexibility. The World Bank's Implementation Completion Report (ICR) notes that initial delays in selecting contractors and implementing the investment programme 'might have provided Bank staff with an opportunity to re-visit aspects of the sector development plan, but in practice the Bank tried to get better performance on implementing the program as planned, rather than on making mid-course changes (World Bank, 2004b). This lack of flexibility was particularly problematic given the inaccurate load forecasts on which the investment programme was predicated. Similarly, DFID, while identifying some ways in which its programme responded flexibly to changing circumstances, also notes that one of the major lessons from its programme was that 'DFID should adopt a flexible attitude to requests for reallocation of resource inputs' (Department for International Development, 2001).

Some of the lessons from the experience in Orissa have been reflected in subsequent reform processes, both in the power sector in India and elsewhere. However, some stakeholders suggest that the lessons taken were 'narrow'; they focused on ensuring that future regulatory arrangements had sufficient flexibility to accommodate the uncertainty in regulatory baselines. While valuable, concerns were expressed that the more valuable lesson that should be taken would be to ensure flexibility so that programmes could respond to any number of possible political economy challenges that may present themselves, rather than planning for a repeat of the problems encountered in Orissa.

### **Lessons and Conclusions**

This paper has reviewed the challenges faced by donors in navigating the political economy of power sector reform in Africa and Asia. Our analysis of the academic literature and documentation from donor projects, along with an extensive set of interviews with donor officials suggests a range of general lessons which may be of value for policymakers both in development partners and developing country governments.

#### 1. Analysing the underlying politics of change in a country is valuable – but only if used.

Given the politically sensitive nature of reforms in the power sector, one of the key findings from our case studies was the absence of any significant analysis of the political context in which reforms were being undertaken. Reforms were viewed as technical with the result that the only analysis undertaken prior to the implementation of projects were assessments of the different technical aspects of the project, rather than assessment of the wider political context and the incentives facing the various stakeholders. This is surprising since at least two of the development partners involved in Tanzania and Orissa (World Bank and DFID) are thought leaders on the political economy of change. However, there seems to be little connection between the somewhat theoretical assessments provided by political economy analysis and operational programmes implemented on the ground (Levy and Palale 2014, provide an exception for Zambia). There is also a clear tension between those that believe that developing a deep understanding of the local political context is essential to success and others who believe that remaining politically "neutral" requires focusing only on technical aspects.

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<sup>&</sup>lt;sup>14</sup> One reviewer pointed out that donors may undertake these assessments but not publish them because of their sensitivity. Whilst this may be true, our interviews suggest that formal assessments of this kind are rare and that these issues, if tackled at all, are typically addressed informally through discussions around assumptions and risks.

Notwithstanding this, almost all of the donor officials interviewed displayed a detailed understanding of the political context in which they operated, with many arguing that success depended far more on intensive engagement with counterparts in government than any formal analysis of the context. However, the instruments at their disposal, and the processes with which they had to comply seemed to, at best, discourage taking a slower and more reflective approach to engagement. For all donors, it appears to be difficult to *not* pursue reform, even if there is evidence that the particular pathway being proposed is unlikely to be successful. Indeed, most projects provide an optimistic view about what will be achieved and only mention political interference as a potential risk to implementation. This is despite the fact most donor officials accepted that political interference in the power sector was a near certainty and that many previous projects had cost two or three times as much as originally anticipated and taken two or three times longer than originally planned. It would appear that the internal approval processes for such projects may sometimes discourage honesty about the practical political challenges that they entail.

Moreover, there would also appear to be a reluctance to apply such analysis *ex post* as well. With the exception of the World Bank (and one good DFID evaluation), no other development partner had readily available project completion reports for power sector projects and virtually no donors appear to have assessed in a systematic fashion the political factors that determined success or failure. There would appear to be a strong case for more systematic *ex post* evaluation of power sector projects.

#### 2. Flexibility is important – but there are reasons why it is difficult

Much of the recent mantra about project design is that donor programmes (in all sectors) should be flexible and adaptive (Andrews et al, 2012). Indeed, some of the successes reflect the ability for development partners to act in a flexible and opportunistic way (e.g. one respondent said that the initial reforms in Orissa "had to allow for continuous response for political economy"). Flexibility also allows donors to shift focus to take account of changes in government and key personnel in counterparts, as well as enabling implementing partners to experiment with alternative approaches to solving problems.<sup>15</sup>

However, respondents also pointed to significant structural and procedural reasons why flexibility is difficult. One obvious constraint, is that specific activities are often large in value and bound by contracts which cannot be easily changed. The design of those contracts therefore matters, as the experience of Orissa shows.

Structural aspects of donors can also inhibit flexibility. For example, USAID receives funding from Congress that is allocated by sector and by country, inhibiting the flexibility to shift resources from less effective to more effective areas. Internal structures can also matter – complex reforms often require multi-disciplinary approaches, but donor staff are often arranged by sector and discipline making building a multi-disciplinary team difficult. Different types of donors can also work with different counterparts. Bilateral donors generally have the capability to work with a range of counterparts in developing countries, including sometimes, the private sector and civil society and to work through contractors. Multilateral organisations, by contrast, are typically constrained to work through government which can restrict the nature of programmes that they can operate. This is a particular problem in the power sector, where projects often must work through the Ministry of Energy, even where political influence by the Ministry is a key constraint in progressing reform.

Flexibility is particularly difficult when it comes to stopping things. Once approved, the obligation on donor officials and implementers is to make a success of a project. This provides strong incentives to

<sup>15</sup> This said, flexibility is not always seen as positive – one experienced donor official commented that "flexibility in reform tactics is often necessary, whereas flexibility in reform strategy is seldom advisable".

continue activities, even when external, often politically induced, changes have made the chances of success slim. Conversely, officials have greater flexibility to add components to programmes, with the result that programmes evolve by growth rather than by re-allocation.

Flexible programmes are also more difficult to evaluate. Building a good relationship may be key to achieving reform, but is hard to assess in a results matrix. Flexible programmes typically consist of multiple initiatives which are not known in advance, making it much harder to design a monitoring and evaluation framework for such programmes.<sup>16</sup>

Donor programmes are evolving to address some of the challenges created by flexible programming, but difficulties remain. For example, some of the recent programmes designed by DFID have deliberately built in flexibility to allow a response to changing and emerging needs of the host country government. This may be easier in larger programmes, especially those backed by a longstanding relationship between donors and host country governments. At the same time, the monitoring and evaluation can be facilitated by retaining a clear sense of the overall outcomes that the donor programme is seeking to effect. But the stakeholders interviewed for this case study suggested that, despite some progress towards more flexible programme design, institutional norms remain a significant barrier to more flexible and politically informed ways of working.

#### 3. Dialogue, trust and personal relationships are of critical importance for reform

Perhaps the most consistent message from our interviews related to the critical importance of dialogue, trust and personal relationships with key decision makers. Again, this is true for all sectors, not just the power sector – but the long-term nature and sunk costs of power sector reforms make the issue of particular salience. Respondents often attributed programme failures to a lack of trust between the government and donors. Almost every instance of successful reform was related to the construction of an effective working relationship through intensive and repeated interaction, often over a long period of time. A number of respondents pointed to the need to understand the nature of the constraints facing policy makers and the need to "listen more and lecture less". One respondent argued that loan conditionality was only effective when the conditions were suggested by the government as a mechanism to help them to handle domestic resistance. Overall there was a consensus that "There is no substitute for an experienced and credible [donor] staff member who has the trust and confidence of the key decision maker."

Notwithstanding the almost universal support for the importance of building trust, there was a sense from some respondents that donor structures and training are making this more difficult than before. Many officials complained about the burden of process compliance taking time that might otherwise be spent engaging key stakeholders. Whilst some of this is true for all sectors, it is particularly pertinent in the power sector due to the lengthy and complex due diligence and social, economic and environmental impact assessment processes required for major infrastructure investments.

Some donor officials related the bureaucratic burden to risk aversion associated with (donor country) domestic political concerns; others pointed to the results agenda as a source of additional administrative work to "prove" that aid is working. A number of respondents suggested that the frequent rotation of donor staff undermines the ability to build long-term relationships with key government counterparts and noted the difficulty of maintaining institutional memory as well as a good understanding of the country's recent history. For example, one official suggested that the reticence of Tanzanian officials to pursue certain types of reform was rooted in the experience of

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<sup>&</sup>lt;sup>16</sup> Although not impossible – see Ladner (2015) for recent work in this area.

reform attempts in the early 1990s; failing to understand this might result in pursuing reform models which, although technically sound, were politically infeasible.

#### 4. Mental models matter

As noted in the literature review, the application of the standard model has not generally been successful in developing countries. Notwithstanding the growing body of evidence supporting this, the core elements of the standard model – unbundling, commercialisation, privatisation, competition - still appear to hold sway in the thinking, both of development partners and some government officials. However, some senior donor officials argue that this view is mistaken, firstly because, whilst tried, the standard model was rarely actually implemented in practice and so cannot be deemed to have failed; and secondly, because adherence to the model was abandoned in the early 2000s, notably by the World Bank, as evidence of its unsuitability came to light.

Although both of these are true, our research leads us to believe that the "standard model" still holds considerable sway as a "mental model". The standard model is clear, coherent and logical. It was generally regarded as a success in England and Wales, Chile and Norway. Despite accepting the need for context specificity, development partners have struggled to adjust because there is no other compelling "mental model" to which to refer. Rather, a set of path-dependent 'hybrid' models has begun to develop (Gratwick and Eberhard, 2008) based on local experimentation within different political contexts. However, most international consultants, on whom donor officials depend, are still most familiar with the standard model. As a result, it has been difficult for donors to shift their advice, whilst developing countries have found it hard to gain donor acceptance of the somewhat expedient and path-dependent approaches that have been implemented in practice.

#### 5. There may be an opportunity to build domestic demand for reform

One of the surprising findings from the project documentation and interviews was that development partners have put relatively little effort into building a wider domestic constituency for reform in the countries in which they operate. None of the projects reviewed in Orissa or Tanzania included activities to build support for reform outside of government.

There are several reasons for this. First, in some countries donor projects are tightly controlled by the government who may be unsympathetic towards activities that attempt to support advocacy activities. Moreover, many donors, particularly the multilateral development banks, typically work directly with government counterparts making work with other stakeholders more challenging. Indeed, some respondents argued that, in certain countries, it was neither possible nor necessary to engage with wider civil society since all the key decisions were taken by a narrow group centred on the government.

Second, several donor officials said that engaging groups outside of government in favour of support was not possible because there simply wasn't a constituency of support for reform. For example, large industrial customers, who constitute the majority of electricity demand, can have significant influence over policy - but their interest is primarily in maintaining low prices. Small businesses without electricity might be expected to support improvements in access, but generally don't wish to pay a significantly higher tariff to obtain it. And the majority of households in both Tanzania and Orissa are poor and are not believed to support cost-reflective tariffs that would significantly increase the price of access and supply.

<sup>17</sup> Note that this may be true, despite their willingness to pay much higher costs for their own generators. The reluctance to pay higher tariffs is because firms don't believe that the government will actually deliver a higher quality of service after the price rise.

This lack of interest in building coalitions in support of reform is nonetheless surprising, given the growing literature on the importance of building broader coalitions to achieve sustainable reform (see Faustino and Booth, 2014; Buckley et al, forthcoming). Whilst no one is likely to be in favour of price increases in the short-term, there are constituencies that would benefit from reform in the longer-term (e.g. businesses that obtain more reliable supply; households and communities that can be connected because the utility is able to invest in expansion; civil society groups campaigning against corruption in the sector etc). There are strong parallels with the literature on fuel subsidy reform, where effective communication about the issue to build a wider constituency of support has been an essential part of successful reforms (Beaton et al, 2013, Kojima et al 2014).

## Priority areas for further research

Our review suggests several potential new areas of research:

- What is the link between the underlying political settlement of a country and the success of power sector reform? There is now an extensive literature on political settlements (see the review by Laws and Leftwich, 2014), but very little work linking this work to power sector reform. Yet our review of the literature showed that the applications of the standard model of reform often failed because the measures were incompatible with the local political economy. This begs the question of whether there are generic aspects of a country's political settlement which are associated with the success or failure of power sector reform. This question might be examined through a multi-country study examining not merely the step-by-step politics of why power sector reform succeeded or failed in each case, but also a synthesis exploring how different political structures and settlements made success more or less likely. This could also provide policy recommendation for donors about how their approach might be better tailored to context.
- Why is it so difficult to incorporate political analysis into donor programming? Our review showed that few donors undertook formal political economy analysis around power sector interventions, despite having a good informal grasp of the key challenges. Political analysis appears not to have had much influence over the design and operation of most interventions, despite the fact that most projects that failed, did so for political reasons. This suggests research that would ask: to what extent do development partners really try to understand the deep political economy of power sector reform in the countries in which they are operating?; where they do make a serious effort to take this into account, how do they do so?; what are the structural or institutional impediments to incorporating such analysis into programming?; and are projects which attempt to take political considerations into account actually more successful than those that don't? This might entail a study looking at the way in which a number of development partners have attempted to incorporate political analysis into their programming and a comparison of the relative effectiveness of the different approaches taken.
- What can we learn from successful power sector reforms? Some countries have been much more successful in reforming their power sectors than others. It would be illuminating to undertake a series of country case-studies to examine what approach was taken in each case: what was the influence of external factors and actors?; how did the government build support for reform?; what obstacles were faced and how did they overcome them? (Another variant of this idea would be to focus more narrowly on successful reforms of power utilities).

• What do people think about power sector reform? There is a new literature emerging about how people's opinions about reform are shaped by information (Cheng and Urpeleinen, 2015). However, the overwhelming majority of the literature on power sector reform focuses on the actions of governments and large actors in the power sector whilst very little is known about what the wider set of actors involved in the sector believe and think about reform. This study would apply a survey experiment to a wide range of stakeholders including both the central actors: government, regulators, generators, utilities and system operators, distribution companies; but also other actors which a strong interest and influence on reform: parliamentarians, large and small businesses, households, academia. The aim would be to understand the framing of the issue by the different stakeholders. However, the survey experiment would also test the extent to which ideas about reform shift as a result of the provision of new information. This might provide useful policy recommendations about the kinds of messages that are most likely to build support for reform.

#### • How are new energy technologies shifting the political economy of power sector reform?

The political economy of aid for power sector reform has been very influenced by the fact that the power sector has traditionally been a centrally managed sector with strong economies of scale. However, new energy technologies have the potential to change this radically. The roll out of mini-grids in many countries is likely to change the political relationship between communities, towns and the central authority in a country. Similarly, household systems have the potential to "democratise" energy, eroding the ability of centrally managed institutions to capture rents and allocate resources as before. New metering technologies may change the nature of the political economy challenges associated with false metering and electricity theft. This suggests there would be value in a study that explored how new energy technologies may be modifying the traditional political economy challenges of reform and the implications this might have for the way in which development partners intervene.

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