PUBLIC-PRIVATE INFRASTRUCTURE ADVISORY FACILITY

2009 Technical Advisory Panel Report

Ex-post Review of selected PPIAF Activities For presentation to annual meeting June, 2010 Nairobi;

Contents
Introduction
Annual Portfolio Review
Summary & Overview

Annex 1 Terms of reference of the TAP

Annex 2 Thematic & individual activities review report

Annex 2.1 Global knowledge dissemination activities. Anton Eberhard

- Emerging issues in infrastructure regulation: taking stock of issues, options and resources available for supporting policy-makers and regulators;
- The impact of internal and external governance on the performance of infrastructure service providers;

Annex 2.2 Global knowledge dissemination activities. Robin Simpson

- Survey and Mapping of Small-Scale Private Service Providers;
- Small Providers of Water and Electricity II;

Annex 2.3 Thematic review of small scale private providers in water and electricity. Robin Simpson

- **Senegal:** Involvement of small scale service providers in the maintenance of rural water infrastructure;
- **Indonesia**: Capacity & knowledge development for small-scale water providers;

Annex 2.4 Individual activities. Dianne Rudo

- Macedonia: Facilitating Private Investments in Mini-Hydropower Plants;
- Uganda: Private Water Service Delivery: Access to Finance;
- Ethiopia: Public-Private Partnerships (PPPs) in Irrigation Infrastructure; Development Democratic Republic of Congo (DRC): a) Pilot Water Sector Private Sector Participation (PSP) Strategy and Institutional Framework; b) Road Show for Water Management Contract;

Annex 2.5 Individual activity. Anton Eberhard

 Development of the power market and competitive tender framework for thermal IPPs in Vietnam; -----

Annex 2.2 Global knowledge dissemination activities. Robin Simpson

Activity: Survey and Mapping of Small-Scale Private Service Providers

Lead TAP Member: Robin Simpson **Activity Completed:** November 2007

Deliverables: Surveys on Small-scale Private Service Providers in water and

electricity in Cambodia, Philippines, Bangladesh and Kenya;

PPIAF funding: \$343,000 (co-funding \$70,000)

Date of Review: January - April 2010.

1. Intended and actual results/outputs/ as per:

- **PPIAF application;** Survey and Mapping of SPSPs in water and electricity in 4 countries; entry of survey results into national and global databases; comparative review with presentations to global and national audiences. The survey was meant to take place in 4 countries in three regions; these turned out to be Cambodia, Philippines, Bangladesh and Kenya (with an intended scale-up under new funding to 8 countries in two other regions). This scale-up has yet to happen and is to be taken up by donors in further phases.
- Consultant ToRs The assignment was contracted out at two levels: firstly to an international firm responsible for developing the framework for collection and analysis of results, designing and setting up the survey, overseeing the collection and analysis of data, and preparation of reports which included comparative reviews of country data. The local firms were to administer the survey and conduct interviews with key informants on existing policy, regulatory and business environment. They were to review and adapt the survey for local use in consultation with national clients and present findings to local audiences. The international consultant was responsible for supervision of the work of the local consultants. (see below)

2. Impact of the activity in terms of mobilisation of private participation;

It can safely be said that this body of work has had an impact on provision by SPSPs. It is more difficult to attribute particular activities to particular reports because this is part of a bundle of work, and the scale of SPSPs activities is so vast. But to take one national example, following the survey work in the Philippines, a supreme court judgement in favour of the legal recognition of SPSPs has helped to facilitate an extension of OBA to include their activities. More globally it is clear that the extent of SPSPs and their potential role is now 'a given' (in the words of the TTL concerned), whereas previously it was frequently only grudgingly accorded. Regulatory changes similar to what happened in the Philippines are hoped for in Ghana, Mozambique and Kenya (one of the survey countries).

However, it should be emphasised that this work was essentially data gathering in both its first phase (not a part of this particular allocation) and this survey phase. It in

turn prepared the ground for the subsequent phase of this sequence of activities which is the review of SPSPs which was edited by Judy Baker and which is reviewed separately. Furthermore the intense methodological work in preparing the questionnaires and tackling issues surrounding samples for example, is of great 'carry-over' significance for future programmes.

3. Quality of Reports/other outputs: recommendations for:

• Improvement of quality;

The main consultants report is remarkably economical and concentrated, focussing as it does on the evidence from each of the subsectors in the four countries. This was no easy task. For even limited as it was to surveying providers, (as opposed to users), the survey programme actually comprised 22 surveys (typologies/countries) resulting in a total of 674 interviews. The 'fully fledged' questionnaires (used for 18 out of the 22) had 168 questions and as some had possible multiple entries, the questionnaires contained 348 items. Clearly such a mass of data starts to strain at the limits of even the best resourced enquiry, when it comes to interpretation. And the consequence is that in presenting the findings in a single volume, it is not an 'easy read'. That is not to say that it is excessively technical, on the contrary, each section is comprehensible and the results are clear and divided up between country reports, sector reports and thematic reports with brief conclusions. It is simply that with so many sub-sectors, and so many acronyms to describe the different types of provider, it is difficult for the reader to keep track.

Consequently it is not a matter of improvement of quality, the report is of high quality in its own terms, and its sub-sections can be 'mined' for future reference. It is a matter of making the material accessible to a wider readership (much of which will be expert). This is dealt with below under dissemination.

• Work with local consultants (where relevant);

Being a multi-country study it was inevitable that it would be implemented by an international consultancy (IC). Furthermore their operations had to extend deep into the 'national' activities in order to ensure a consistent approach in, for example, sample selection. So many of the local contacts were initiated by the IC before handing over the actual survey questionnaires to the local teams after briefing. This therefore leaves relatively little scope for the local consultants to vary their approaches but that is the nature of such a study. This said, field testing in each country did allow for a degree of local variation. One would also hope that the experience gained from carrying out the surveys at local level with the intensive briefing that preceded it, would carry over to other infrastructure work at national or local level.

• Strengthening of recommendations, including usefulness for final clients;

It was not the job of this survey set to make recommendations, but to present findings, in the belief that clarifying local situations is an essential pre-requisite to evidence based policy, and that this would be of use to final clients as governments and regulators.

4. Recommendations for dissemination:

The results of the surveys are being disseminated in the publication that has just been completed, edited by Judy Baker: *Opportunities & Challenges for small scale private*

service providers in electricity & water supply. (WB/PPIAF 2009) That is reviewed concurrently. This is a logical way to move from the evidence gathering phase to the interpretive phase in a document that is rather longer and thus more digestible than the project report described above. As PPIAF has given good coverage to this topic in Gridlines, it should be possible to continue to 'mine this seam' for some time yet. Given the huge numbers of people dependent on these services and their great significance for the poor, and yet their still relatively low level of discussion in public debate, this is material that lends itself to dissemination at many different levels.

5. Value Added/ Cost Effectiveness

It is important to place this work in the context of other PPIAF funded activity both preceding and following. PPIAF has played a key role as partner, with the World Bank and the Bank-Netherlands Water Partnership in the Policy Framework & Global Mapping Initiative, a global initiative to improve knowledge and understanding of small scale providers in water and electricity. (Coordination links have subsequently been developed with WSP, ESMAP, regional development banks and DFID, whose own studies were covered in the literature review). The project started in 2003 and Phase 1 operated through an extensive literature search, set the groundwork by proposing a common typology of SPSPs summarising their key characteristics, developed a database comprising 600 documents of which 215 were analysed in detail, and developed a methodology for more in depth survey analysis. This work was led by Mukami Kariuki and Jordan Schwarz and resulted in their joint publication WB Policy Research Working Paper 3727 published in October 2005 and led on to the survey work that was carried out in 2006-7 and favourably reviewed by this reviewer for TAP while under way (see TAP report 2007).

The total cost of this project was \$413k of which PPIAF provided \$343k. This makes it a relatively large allocation in PPIAF terms, although smaller than other analogous surveys. However, given the large numbers of people dependant world wide on the services of SPSPs this can certainly be justified. Furthermore the project should not be judged only on its merits in terms of findings. The methodological discussion is extremely important and also the accompanying questionnaires. These elements are easily replicable, and adaptable of course, at national and local level and so can be used to benefit far larger populations than the inhabitants of the countries covered.

As was pointed out in 2007, there is a limitation in the survey design in that no survey was made of users. This is at first glance surprising, and the more so in the light of the eventual participation of WSP as a partner, given WSP's experience in consumer surveys. However, it has to be acknowledged that consumer surveys on this scale would be hugely expensive as WSP experience has shown, and that such a survey would have taken the budget far above the norm for PPIAF.

With the benefit of hindsight, one might consider that a further limitation is the lack of consideration given to solar provision of electricity which has become more prominent subsequent to the time of the surveys being designed. However, this should not be taken to be a shortcoming on the part of the survey designers. At that time, solar provision was considered too expensive for widespread use, and information on the extent of use of PV systems was sparse. Since then, costs have fallen, energy prices have risen, and development programmes have taken off, some using subsidies. Clearly the role of SPSPs in this context is potentially very important and this could

be borne in mind for future work. Where SPSPs are not using solar technology, then this makes for a rather different survey, one that takes into account potential as well as actual provision.

6. Final Observations

This project was the first attempt of its kind to survey SPSPs on a global scale, and as such is of great significance, both in terms of findings and of methodology. Reading the survey methodology and results impresses the reader with the sheer scale of this activity and the difficult circumstances of its realisation ie informal settlements, remote rural areas, provision at times on the edge of legality. Indeed some of the survey work was disrupted by civil disturbances.

There is not the space here to go over the findings in detail. As in the two surveys already reviewed in 2007 (Cambodia and Kenya) the four surveys taken together broadly confirm the picture of SPSP unit prices being higher, but to a variable extent. The greater the comparability with public sector services (eg small scale piped water networks), the less the difference, there being only a 10% differential for example between the Filipino water cooperative and Manila water in terms of unit price. At the other end of the spectrum, 'value added' water services which serve also business and higher income groups, have a vastly higher differential with unit prices about 300 times higher in Bangladesh for example. This is however an outlier as the market for such filtered water distributed to the consumers' premises is not the same as for other basic water distribution services. Generally the differentials in electricity are lower than for water.

Perhaps unsurprising is that the greatest obstacle to the operation of the services was access to finance which was a severe constraint for 42% of surveyed SPSPs. The second barrier came from the lack of other infrastructure services, such as poor roads and poor electricity supply, whose interruption affected battery chargers and water purification for the value added services, for example. This illustrates that the interrelated nature of infrastructure services extends right down from the industrial to the domestic level.

The survey set engages with some preconceptions. For example the review of licensing arrangements indicates a perhaps unexpectedly high degree of licensing. Where there is a lack of licensing, this is attributable to the inefficiencies of the licensing system or indeed political hostility to SPSPs as much as, or more than, any reluctance on the part of the providers to undergo licensing. Furthermore when licensing takes place it is not generally onerous, and incidences of corruption seem rare. This said, it is possible that positive biases arose from the nature of the survey samples. In some cases, SPSPs were selected from lists of state licensed providers, although sampling was also attempted from unlicensed providers. Local authorities were the usual entry point to the construction of survey samples, and so it seems reasonable to assume that these would exclude at least some providers with the lowest standards that may have been unknown to those authorities.

Similar biases may result from the fact that providers are from time to time used as the surrogates for consumers. This may well lead to some over-estimation of the standards of service, where the survey reports relatively few complaints about quality or safety. The reviewer is thus left with the sense that there might be some elements of the methodology which have led to SPSPs appearing in a more positive light than would be the case if a 'counterpart' survey were done eliciting evaluations from consumers. In an ideal world a more direct route to such issues as quality of service would be to ask consumers themselves. Given the greater complexity and cost of such surveys, it will have to be for others to take up this baton, building on this very important work.

Activity: Small Providers of Water and Electricity II

Lead TAP Member: Robin Simpson

Activity Completed: 2009

Deliverables: Report: Opportunities and Challenges for Small Scale Private Service Providers in Electricity and Water Supply; Evidence from Bangladesh, Cambodia,

Kenya, and the Philippines

PPIAF funding: \$50,000 (co-funding \$62,000)

Date of Review: January – April 2010.

1. Intended and actual results/outputs/ as per:

- **PPIAF application;** The intended output was very simple: the report was to use the fieldwork carried out in the four countries (reviewed above) amplified by further literature review and to draw up lessons and policy options. The typology of SPSPs would draw upon the work done by Kariuki & Schwartz in their previous work in this field.
- Consultant ToRs: consultant contracts were drawn up for the work on electricity and water separately and the team was completed by a research assistant providing support with research including the literature search. The four country reports which take up about a half of the report in the form of appendices, were prepared by Ada Karina Izaguirre of WB.

2. Impact of the activity in terms of mobilisation of private participation;

There should be a clear distinction between national impacts in the four countries, which one would hope to be seeing soon, and the global impact which will take longer to develop. It is still too early to tell as the document has only just been published and not yet widely disseminated. Like other PPIAF global knowledge products, the full impact will be long term as the messages emanating from the study are digested. But, for reasons discussed in the earlier review of the surveys, there is good reason for optimism concerning the impact.

3. Quality of Reports/other outputs: recommendations for:

• Improvement of quality;

The study, like the original report from *Economisti Associati*, is both rich in detail and dense, requiring that the reader concentrate. In further dissemination, care should be taken to avoid 'blinding' the reader with acronyms that lead inevitably to interruption of the flow of the narrative while the reader checks the glossary. This may seem trivial but is a major factor in comprehension of such a definitive study. The publication lends itself to being broken up into distinct parts, the appendices in particular could stand alone, each one being set out as country reports.

The executive summary and the final summary as well as the sectoral chapters all have standalone potential. Perhaps because the structure of the team involved detailed sectoral consultancy, the 'lessons and options' part of the study is relatively

concentrated into the brief section entitled: *Summary & emerging policy issues*. But this is not a criticism, the chapter is a very clear synthesis of a subject which is very difficult to synthesise, indeed that difficulty is itself a finding.

• Work with local consultants (where relevant);

The report builds on the work of *Economisti Associati* who carried out the field work in the four countries with local consultants reviewed in other project review. Thus for this final stage there are no 'local consultants' as such. It is worth noting however that there were severe delays in the delivery of the report largely because the TTL was redeployed by the World Bank to work firstly on the global food crisis and then the financial crisis. This does indicate the vulnerability of PPIAF to dislocation due to events within the WB.

• Strengthening of recommendations, including usefulness for final clients;

The findings of the summary chapter are very clear and at the same time relatively 'light', and the report concludes with 'emerging policy issues' rather than recommendations. The key issue of recognition and legitimacy is in effect a major recommendation, and links to the recommendation concerning the facilitation of SPSP associations with whom regulators can negotiate. Other major recommendations concern partnership with utilities, technical assistance and regulation, all likewise involving recognition. These are very simple recommendations to emanate from a very complex study and are relatively easy to put across along the lines of: whatever their defects, the SPSPs have the merit of their existence. Failure to recognise that existence in service development, despite the paradox that SPSPs often hold a licence, is a serious failure of governance.

4. Recommendations for dissemination:

There are three levels of dissemination that suggest themselves. The first is within the four countries concerned and should be reasonably self-evident. The second is within the policy making fraternity at whom the publication is explicitly targeted. As with other 'definitive' PPIAF studies, word will get round and to some extent the study will disseminate itself among policy makers. But depending on that process would be to miss an opportunity, for as indicated above, the study is very rich and would gain from being disaggregated into smaller documents for purposes of further dissemination. The most obvious disaggregation is by sector, and indeed the sponsorship of WSP and ESMAP provides an obvious opportunity for that to happen. In the meantime the overall conclusions are sufficiently simple and clear for the usual means of dissemination via *Gridlines* or other media available to PPIAF to be successful, as has been the case for previous publications in this series.

There are very significant possibilities for spin off publications. For example, there are interesting sub-themes such as the role of donors in some SPSPs in Kenya, where dependence on grant finance seems to be connected to a more casual approach to revenue collection, and so to financial losses among small networks. Another sub-theme of a generic nature is the social segmentation of the different types of SPSP, notably the tendency for small fixed networks to serve better off groups than do the point-source or mobile systems with the exception of the 'value added' water services which have become in effect analogous to the drinking water delivery services to businesses in rich countries. Such important 'sub-plots' merit articles in their own right and risk being lost in consideration of the study taken as a whole.

5. Value Added/ Cost Effectiveness

For PPIAF this was a relatively modest budget of \$50k out of a total of \$112k to which contributions were also made by ESMAP, WSP and WB, PPIAF being the largest single contributor. Given the potential impact, this represents excellent value for money, and indeed it would have been a false economy not to have proceeded to this stage, given the much larger sums in excess of \$400k expended on the earlier field work.

6. Final Observations

The reviewer's feeling is that the potential interest in this study is enormous, and, seen as the culmination of a long sequence of studies of SPSPs and their services, represents a major contribution by PPIAF to the state of knowledge of the infrastructure services for the poor in particular, during the last 7-8 years. Given the huge scale of the clientele, for example, 25% of the urban population of LAC and 50% in Africa, the justification for this work seems obvious. And given the huge logistical/political problems involved (which caused some delays) and volume of data collected it is an achievement to have finished within budget.
