

CHAPTER 6

CONTRIBUTION TO LITERATURE

6.1 INTRODUCTION

The contribution of this research to existing literature is highlighted in this chapter.

6.2 CONTRIBUTION

The crucial research gap was absence of understanding of the actual cost of supply. This is a major constraint, which is affecting all pricing decisions of Indian electricity sector, as the same are being undertaken on the basis of imperfect knowledge. Decisions on eventual tariff, subsidy needs, necessity of cross-subsidisation, introduction of competition, tariff of the end-consumer (once large consumers exit the system), cost implications of segregation of wire business and retail business (separation of carriage from content, which is conceived in the proposed policy structure amendments), proliferation of renewable generation through major initiatives, choice of grid expansion or distributed generation including solar sources - all need a comprehensive working base of cost. This study fills that void, by providing a logical framework for understanding cost-of-supply and consequent cross-subsidy in the perspective of the Indian electricity sector. The final implementation is in the hands of the policy-makers for whom it will serve as a reference point.

The three critically affected stakeholders are the distribution utility, the cross-subsidisers and the cross-subsidised, apart from the government and the investors. Absence of an inter-connected strategy to deal with the three segments is a manifest concern for the sector. Introduction of competition without addressing the issue of achievement of cost-of-supply for both the cross-subsidisers and the cross-subsidised is a non-sequitur, as competition is

being thrust upon a highly imperfect situation. Unless the payment of exit charge by the cross-subsidisers is adequately compensatory, the tariff of the cross-subsidised, who are left with the utility, inevitably moves up. Competition will always be handicapped if the exit charge is set at too steep a threshold, as the cross-subsidisers then have no impetus to move out of the system. There is also the overarching need to protect the financially distressed distribution utilities, which being mostly State-owned, often bear the brunt of imperfect or populist policies. Unless the issue of cost-of-supply based tariff is resolved satisfactorily, reform of the sector cannot be undertaken with a modicum of success. It is in this context that a cost-of-supply model has its contribution, as it would be of help to the policy-makers and other stakeholders. .

A holistic view of the problem is attempted in this study through comprehensive research to address this issue which extended into the design of an appropriate cost-to-serve model. A replicable model based on real life data of a utility, has been developed through the study. However, progression towards cost-of-supply based tariff without addressing the issue of the vulnerable section of the society may not yield the desired results. The present research additionally contributes by way of presenting an approach to addressing the problems of tariff / subsidy of the poor or vulnerable consumers of India.

Demographic profile of India indicates that it has the largest poverty headcount in the world. Dealing with such a number of stakeholders requires a defined strategy as is practised by some countries to satisfy the electricity needs of its vulnerable segments. Various literature highlighted that special benefits for the poor are not available in a competitive model and in a structured situation, special dispensations for the vulnerable consumers are usually secured through legislative intent. Global understanding was attempted through study of selected countries where electricity reforms have either been successful or countries which are undertaking a process of electricity reform. Lessons were culled out from this study and validated in the context of a developing economy with a large poverty headcount.

From the literature, it was found out that there are various factors which are affecting the policy processes. For instance, the pre-dominant view emerging from the literature is that there exists a lack of understanding of the selection process for the subsidised segment. Extensive survey of the tariff processes of utilities across India was undertaken to discover the policies and processes for understanding vulnerability. Attempts in this respect were found to be so motley, that it could be concluded that there is no concerted effort to give a coherent shape to the problem of identifying the vulnerable segments.

Economic aspects of protection for “lifeline customers” or “Below Poverty Line customers” (“BPL” customers) have been examined and the magnitude of support need for lifeline category has been assessed. Based on a detailed process of analysis, the study has recommended a framework which provides a satisfactory solution for all major stakeholders. The recommendations define the suggested framework and outlines the desirable policy and interventions at macro and micro levels.

Thus, the research also tries to give a rational shape to the problem of providing electricity to the Indian poor. The way forward suggested in the present research would be of real aid in policy-making on progression towards a more equitable environment. This research provides a view on how the alternatives available should be explored and understood, before policy decisions. The research also at the same time seeks to contribute to management practices. It is expected to enhance knowledge in the field of electricity affordability in the country with the highest poverty headcount in the world. Eventually, it tries to promote social equity or economic justice as a method to deal with the vulnerable consumers through a model of wealth redistribution. While the research is centred on one country i.e. India, the rationale can be easily extended to other countries which are similarly placed i.e. in a comparable stage of development with a high poverty headcount. Similarly, while the research deals with one good i.e. electricity, applicability of this research upon other items of public service like railways or water service cannot be ruled out.

However, the researcher feels that while all possible factors have been identified to understand the problem around lifeline or vulnerable consumers in India, the exact mechanism for identification of the lifeline segment has not been covered in minute detail, particularly from implementation aspects, due to limitations of scope of the present study (though some suggestions have been offered). Further research is needed on allied issues, including prevention of subsidy leakage and aspects of identification of the lifeline segment needing support. It would be an interesting future research as has been delineated in the Scope for Future Research / Limitations chapter (Chapter 7).

6.3 CHAPTER SUMMARY

Development of a replicative model of cost to serve electricity in the Indian context, to assist policy-makers and other stakeholders to formulate articulated strategies together with a view on addressing the socio-political need of economic assistance to the vulnerable segment for electricity service is the primary contribution to literature made by this study.