

Solar Energy

An Irrelevant Debate

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The failure of solar installations in India is not primarily due to poor maintenance or lack of money, materials and skilled manpower as argued in “Solar Energy for Rural Electricity in India: A Misplaced Emphasis” (EPW, 13 December 2014). Solar is still not a visible product for the consumer. Rather than see the failure of solar installations in terms of a rural–urban divide, the author could have done well to locate his arguments in the context of the “new economy–old economy” divide.

Hippu Salk Kristle Nathan’s paper “Solar Energy for Rural Electricity in India: A Misplaced Emphasis” (EPW, 13 December 2014) makes interesting reading. It questions the relevance of promoting solar photovoltaic (PV) systems for lighting in rural areas of India. It has also been presented as a special case of the so-called rural–urban divide, and the inequality hypothesis of a spatial kind.

Rural–Urban Gap

The paper discusses the differences between rates of electrification and consumption in urban and rural areas. It shows that, though electrification rates in urban and rural areas show a converging trend, there is divergence in terms of the monthly per capita consumption of electricity. It highlights the rural–urban gap in electricity consumption, which has increased in the past two-and-a-half decades. On this basis, the paper questions the emphasis on solar PV systems in rural areas. Nathan doubts whether, rather than enhancing electricity access of a general nature, it will promote spatial inequalities in electricity consumption per head.

The paper sees the limited progress of solar PV in terms of both the paying capacity of people in rural areas and also the lack of supply chains and human skills required for maintaining PV systems.

The renewable energy programme in India has a long history in India. Following the energy crisis of the 1970s, the Commission for Additional Sources of Energy (CASE) in the Department of Science and Technology was set up in March 1981. CASE was responsible for formulation of policies and their implementation, creation of programmes for development of new and renewable

energy and coordinating and intensifying research and development in the sector. In 1982, a new department was created in the then Ministry of Energy—the Department of Non-conventional Energy Sources (DNES). DNES incorporated CASE under its umbrella. A decade later, in 1992, DNES became the Ministry of Non-conventional Energy Sources (MNES). In October 2006, the ministry was rechristened as the Ministry of New and Renewable Energy.

The more recent emphasis on solar PVs should be understood in the context of the “global warming” agenda. It has a clear political economy dimension, which should not be lost sight of. Therefore, it is important that the right questions are asked. What is the purpose of promoting solar in the Indian context? Should it be in the context of some international requirements and norms? Or, should it be for the benefit of the country as part of the objectives of social policy? Is solar an agenda for enhancing incomes and employment opportunities at the grass-roots level? If so, the issues raised by the author become non-issues.

Complex Issues

The non-conventional energy agenda in India dates back to 1960, when the scientific institutions of the country explored opportunities for alternative sources of energy. Subsequently, the now well-known renewable energy programme came to the fore with the setting up of a separate ministry. However, despite decades of initiatives by the ministry, India’s renewable energy programme did not make any major impact. Therefore, the question one should ask first, is, why did the non-conventional energy programme not catch up?

The findings of the author are, of course, correct. But his final conclusion fails to grapple with the ground reality. If the supply chain is the problem, one needs to ask why that is so. Even after 30 years of the renewable energy programme in the country, this fundamental question has never been raised. The issues here are complex. On the supply

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chain angle, the key question relates to scalability. Until the setting up of the Jawaharlal Nehru Renewable Energy Mission, the question relating to local manufacture was not seriously examined. If the policy on manufacture itself is ambivalent, the service points attached to the value chain also tend to remain imperfect.

A comparative analysis of the experience of India and Bangladesh is likely to be instructive. An earlier study by this author has shown that Bangladesh had a better system of rural servicing of PV installations than India. This study has reported that the renewable energy of Bangladesh had identified PV as a major source of subsidiary employment for women in rural parts of the country. This trust came as a corollary

of the microfinance movement in the country.

Questions pertaining to kind of linkages found in Bangladesh and their relevance in India need closer examination. But at least, as a growing economy India can think of better solutions. Massive programmes such as “Make in India” can provide the critical mass for a major PV programme. In this context, the Jawaharlal Nehru Mission itself should grow as a part of a large national agenda of energy security. In such a massive agenda, the conventional programmes, as directed by the government, should play only a catalytic role. The key role should come from private enterprises, which, in turn, will capture the market signals clearly and will respond to them instantaneously.

The failure of solar PVs, as discussed by the paper, is not primarily due to poor maintenance, lack of money, materials and skilled manpower. Solar is still not a visible product for the consumer. If mobile phones and internet connectivity have caught the imagination of policymakers in India, why cannot the same happen in the case of electricity?

Rather than an issue in rural–urban divide, Nathan could have better positioned his arguments in the context of the “new economy–old economy” divide. Globalisation has accelerated the use of new technologies. While the benefits of new technologies penetrate widely in a “rurban” fashion, there is still inequality in distribution of knowledge.

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