

Needless to say, the risk assumed by the service supplier also has a cost, which reflects on the monthly fee charged. According to some estimates, the added monthly fee for service over a period of 10 years could double the life cycle—costs of the same PV system when purchased on credit [27]. Current PV projects in the fee-for-service model show a large dispersion in the amount of the monthly fee charged to individual users. A number of factors may be responsible for this. For instance, some projects may involve some sort of subsidy, and in other cases, service suppliers may not follow the same rules to define the scope of their responsibility: some may retain responsibility over the PV module and charge controller only (the least troublesome parts of a SHS), while dumping on the user the responsibility of replacing the battery (the weakest link in the system) and the lamps.

Selecting a particular route for a given project is not a matter of personal preference only. The landscape is very important and has to be taken into account, since a number of its elements influence this choice, including local social and energy policies officially established in each country. For instance, some countries do not allow private sale of electricity, so that the fee-for-service model could not be applied, unless prevailing laws and regulations are changed as necessary. Low rural population density, difficult access to the communities, long distances from the supply centers and complex logistics to deliver goods and collect fees, can make both fee-for-service and financed sales schemes difficult to implement and geographically limited. In many cases, monthly fee/payment collection may be an expensive task, due to the time and effort it may take for the supplier or the service men to reach the customer. This fact has already been noted by PV companies operating in Sri Lanka, for instance [27]. Timing is another important factor, considering that people may not be home when the fee collector arrives, and that many peasants have money only during the postharvest period. Such difficulties have led some utilities, for many years, to give up on monthly fee collection from remote clients connected to their grids, basically because of very small bills and comparatively larger billing expenditures. Thus, unless fee collection schemes better adapted to the local conditions can be found, one can theorise that the fee-for-service and purchase models will be applicable basically to the most accessible and higher density rural communities. The fraction of the rural population meeting these criteria in many countries seems to be inversely proportional to the degree of rural electrification by grid extensions.

Local culture and idiosyncrasy are two additional elements to be considered for the choice of a delivery model. The notion of common property embedded in many native communities or the lack of familiarity with commercial practices, or even with money, could lead to unsustainable operations in many rural areas. Some academicians studying the process of introduction of PV systems in rural communities, argue that freedom from any financial burden is one of the most cherished values for rural people, and hence could be an important barrier for them to take on any financial obligations. Hence, government intervention may be indispensable at some point to deliver the PV solution in which the business route cannot be applied.

Over the past ten years delivery models in the business route have been tested through a number of projects financed by the GEF and the World Bank in various countries. A recent review [12] of the GEF solar PV portfolio suggests the following emerging lessons, warning that it is still too early to draw definite conclusions: