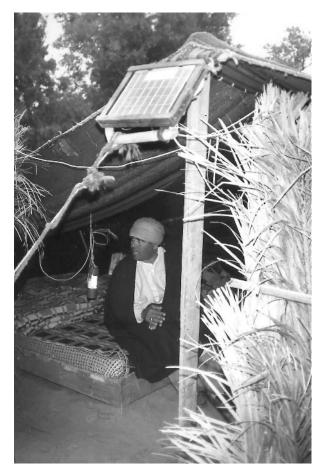
operates reliably. In addition to the original emergency call function, contact can be made to various emergency services and information can be obtained. Furthermore, information such as traffic flows and meteorological data can be recorded at the system location and communicated to predetermined central stations.

## 17.2.1.3 Solar lantern for rural households in developing countries

A photovoltaic application that is particularly interesting with regard to its ecological and social aspects is the replacement of fossil-fuelled light sources – usually petroleum lamps – in remote regions of developing countries with photovoltaically powered lights.

The robust lighting unit illustrated in Figure 17.5 consists of the light, an electronic ballast, the rechargeable battery and a charge controller. During the day, it is connected



**Figure 17.5** Photovoltaically powered light in a hut in Tunisia (*Source*: Ludwig-Bölkow-Stiftung, Ottobrunn)