By mid 1999 nearly 1000 rural villages in Thailand have been installed with photovoltaic water pumping units. The cumulative wattage is close to 1 MWp. Over 80% are in the Northeast. We conducted a survey between 1995 and 1998 on 489 units, representing over 80% of the units installed then in that region. Interviews were conducted with 360 water users from 18 villages. The results indicate that 45% of the units have been damaged and broken down. Important sources of damages are motor/pump units (35%) and inverters (19%). Inappropriate siting, lack of adequate preparation of villagers and follow-ups by respective agencies are major factors contributing to the untimely damages and breakdown.