

## **Abstract**

The purpose of this research is to assess comprehensively about utilization renewable energy infrastructure that used communally by community, in this case is SWP (solar power pump) wich is developed by the ministry of agriculture as supporting infrastructure in the agricultural sector especially in dry land (non irrigation). As for aspects which are a focus of this research is the physical aspects, the system and human. On the physical aspects discuss about the condition of the infrastrucuture, capacity and design. While on the system aspects discuss about delivery mechanism. On human aspects discuss about the capacity of human resources (personal capacity, community capacity), network, and the impact (social and economic).

This research was conducted at two different locations namely Kedungmiri Hamlet, Sriharjo, Bantul (location I) and Tanjung Hamlet, Bleberan, Gunungkidul (location II). The data collection is done in several ways namely observation, interviews, questionnaires and documentation of data sources including the beneficiaries (users), providers and other stakeholders (government, private sector, university, NGO).

The result showed; on the management, a clear assignment division between executor of program and beneficiaries is important .On the human resources aspects, although farmers in the both locations have excellence respectively but generally have not shown an empowerment clearly, consequently on the economic and social impacts, although it looks pretty good, but this is not represent a sustainable system. Therefore it is necessary a deep understanding of the executor in implementing the top down program, where they must consider the readiness of beneficiaries not only in technical aspects.

**Keywrods :** infrastructure, renewable energy, solar water pump, agriculture