

Abstract

This paper is concerned about the energy and water nexus for agriculture sector. The electricity requirement for irrigation is estimated based on the water requirement for major crops in Thiruvarur district. Paddy is the major crop the others being black gram, green gram, ground nut and gingelly. The main source of irrigation in the district is canals. Agriculture requires a lot of water and energy. Given climate concerns and resource constraints, it is important to conserve water and energy. In this context I want to estimate the energy requirement of the subsidized agriculture sector, which remains un-metered from early 80's. The estimates are based on the cropping pattern, water requirement of the crops, pumping efficiency, connected load, rainfall variations, source of irrigation etc., Thiruvarur district has been selected for this analysis. This methodology could be used to evaluate the electricity needs for irrigation in Tamil Nadu given that its consumption is not metered.