Groundwater (GW) is a scarce and invisible resource, and is a significant concern in many countries. Pollution and depletion of it causes severe economic, environmental and social dislocations in many countries including USA. Water-intensive crops such as high-yielding variety (HYV) rice are grown intensively using GW and densely populated countries, such as Bangladesh, must grow irrigated crops to feed their large populations. Boro rice accounts for 57% of the total annual food grain production (33 million tons) in Bangladesh and about 80 percent of Boro rice is produced using GW irrigation. Many small farmers buy GW from neighbors to irrigate their rice and one-fourth crop sharing has been the dominant payment system for irrigation since the 1970s. Read the rest of the abstract at senr.osu.edu.