



In this area of Nairobi, rivers and shallow groundwater provide water for 91% of farmers in this mixed rural area. About 55% of them rely on dugout wells (1 or 2 m deep hand dug wells located adjacent to a water course or in a natural depression), at some time during the season. Pump operators draw water mainly from the perennial rivers (68%) or from stream pools (21%). The striking feature in this case is that 36% of farmers irrigate with raw or partially treated sewage (see sewage coming from picture 1). This is obtained either directly from settlement ponds, or from the sewers carrying sewage to the main sewage treatment works. These are blocked and the vents broken, allowing sewage to flow along contour canals that have been constructed along the upper edge of the irrigated area (Picture 1 & 2; there is a river stream running through Picture 2 that is mostly sewage).

Questions

1. What health problems might arise from the scenario depicted above?
2. Considering that 91% of the farmers rely on rivers and shallow ground water for their agricultural activities, discuss the effects of these activities on the water quality?
3. What interventions would you institute to control the health issues here?
4. Which stakeholders you would involve/approach in your management?