

# **HOW WATER GETS CONTAMINATED IN RURAL SETTINGS:**

## **A STUDY OF UPPER RIVER NJORO WATERSHED, KENYA.**

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### **Abstract**

Under guidelines established by the WHO, water intended for human consumption should contain no microbiological agents that are pathogenic to humans, but these guidelines and others being effected are expressed in terms of water quality at the point of delivery, thus imposing no obligations to ensure quality through to the point of consumption. This study was undertaken in 350 households to investigate how water used by rural households in Upper River Njoro watershed gets contaminated at source and at point of consumption. Questionnaire, observation and sanitary surveys were used to collect data. Paired water samples were collected and analysed for faecal coliform from 20 most populous watering points and from the stored household water supplies of 100 households (5 from each source), randomly selected from the 350 households. Results indicate that activities carried out along and around the watering points encourage contamination of water. This is confirmed by the large counts of faecal coliform of 717, 320 and 307 per 100ml water at points from major and minor tributaries of the river and springs respectively. 82% of households perceive the water to be good, therefore no treatment takes place before consumption. The extent of water contamination at household level ranges from 40.4% to 152.4%. These results point to the need to enforce regulations that protect drinking water quality at source and implement strategies that reduce contamination at point of consumption.