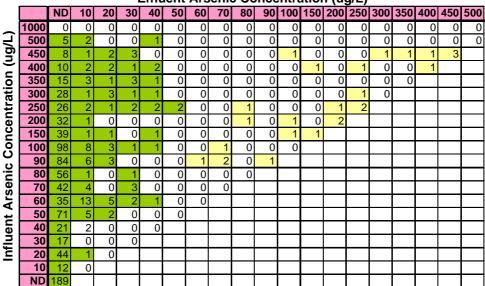
Arsenic Removal Effectiveness of the KanchanTM Arsenic Filter

Two rounds of blanket monitoring of all known (at that time) KAF in Nepal were conducted. The first table shows the arsenic results from the first monitoring round (Feb 2004, n=966). The second table shows the second round results (Feb 2005, n=1034). By that time, most of the filters have been in use for at least 12 months.

Figures in the table indicate the number of filters. Green shading indicates the filtered water met the Nepali interim guideline of 50 ug/L. Yellow shading indicates the filtered water exceeded the Nepali interim guideline. It was later found that many of the "unsatisfactory" filters were either installed incorrectly or maintained improperly. A key lesson learned is that adequate user training and quality control are very important to ensure safe water quality.

Arsenic concentrations of the influent (tube well water) and the effluent (filtered water) was measured using a Nepali-made ENPHO Arsenic Test Kit, and verified using Atomic Absorption Spectrometry instrument in the ENPHO Laboratory, Nepal.



Effluent Arsenic Concentration (ug/L)

Effluent Arsenic Concentration (ug/L)

1		ND	10	20	30	40	50	60	70	80	90	100	150	200	250	300	350	400	450	500
Influent Arsenic Concentration (ug/L)	1000	0	0	0	0	0	0	0	0	0	1	0	2	0	0	0	0	0	0	0
	500	2	2	4	2	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0
	450	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	
	400	0	2	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	350	0	2	1	2	1	0	0	0	0	0	0	0	0	0	0	0			
	300	2	3	1	1	1	0	0	0	0	1	0	1	0	0	0				
	250	7	3	0	0	0	0	0	0	0	0	1	0	0	0					
	200	49	11	3	3	1	0	0	0	0	2	3	0	0						
	150	50	14	5	1	0	1	0	0	0	0	2	1							
	100	132	11	3	4	1	0	1	0	0	0	0								
	90	91	4	4	3	0	0	0	0	0	0									
	80	50	11	1	1	1	0	0	0	0										
	70	39	1	0	0	0	0	0	0											
	60	42	2	0	1	0	0	0												
	50	53	4	1	0	0	0													
	40	35	0	0	0	0														
	30	52	1	0	0															
	20	45	1	0																
	10	85	0																	
	ND	157																		