

V. CONCLUSIONS

- After the experimental work and result analysis , it was found that only seven sites has its drinking water quality fit for drinking while eleven sites were found to have its water unfit for drinking.
- Out of 18 samples, seven samples were found to have bacteriological contamination; four samples were found to have chemical contamination while only two samples was physically contaminated.
- It was also found that the chemical contamination was mainly due to the high amount of nitrate level in water, while physical contamination ,only at one site, was due to high turbidity level and the bacteriological contaminations indicates the presence of Fecal Coliform bacteria in drinking water.

VI. RECOMMENDATIONS

- Industrial waste and food processing waste should be properly treated before discharging into surface water bodies because they can cause Nitrate contamination.
- Septic Systems and manures storage should be properly constructed so that do not leaks or mix with drinking water pipelines because they also cause nitrate contamination in drinking water.
- The mixing of fertilizers into ground or surface water should be controlled as the cause nitrate contamination to drinking water.
- The overflow of domestic sewage should be controlled as they cause bacteriological contamination when mix with drinking water pipelines.
- The water supply pipelines should be properly distributed so that water supply does not mix with human or animal waste because these are the major sources of Bacteriological Contamination (Fecal Coliform).
- Water distribution system needs to be completely replaced with high quality pipes.
- Domestic water storage tanks should be cleaned and disinfected on regular basis.
- Effective awareness programs regarding importance of water quality should be created involving mosques, educational institutions and mass media.
- Government should install filtration plants throughout the district for general public.

REFERENCES

- Spatial Analysis of the Groundwater Quality in the Peshawar District, by S.Adnan & J.Iqbal
<https://www.sciencedirect.com/science/article/pii/S1877705814000058>
- CHEMICAL QUALITY ASSESSMENT OF DRINKING WATER IN DISTRICT PESHAWAR by Bushra et all...
- <https://www.semanticscholar.org/paper/CHEMICAL-QUALITY-ASSESSMENT-OF-DRINKING-WATER-IN-Iftikhar-Bashirullah/27cea95b0ac7b560b74cef10081b4acb45be75c0>
- Water quality assessment report of District Nowshera, Charsadda and along the banks of River Kabul by Saiqa Imran et al.... through PCRWR (Peshawar) in March 2018.
- Summary report of water quality assessment survey of “Clean Drinking Water For all Projects” Khyber Pakhtunkhwa (Volume II, book) through PCRWR in ministry of Science and Technology, Government of Pakistan.