SUMMARY

In today's world, where people are more self-centred, focused and career-oriented, futurist still expect a World War III. And to everyone's dismay, it won't be for power but water.

Its high time that we should make ourselves aware of the water of our surroundings, so that we can try our level best to prevent this war from happening.

With inspiration, instruction and support from Kentucky State University, Kentucky, United States, along with the continued dedication of our team members, helpful attitude of the students and guidance from our teachers, we, the students of D.A.V. Model School, Durgapur, are hereby presenting our accomplishments on the project which is known as "Exploring Water Quality in India and Kentucky".

The main focus of Module I was to "Identify water bodies (reservoirs) of the water (hydrologic) cycle."
We select four water bodies in four different regions with varied soil type or population factor. One was from Durgapur township, one from a nearby suburb. Another one from a nearby coalfield and the remaining one from another nearby town. We selected only those water reservoirs which are used by communities for different purposes and also found out about its usage from the people living around the water reservoirs by asking the question KSU provided us with.

Under "Identify processes by which water moves from one reservoir to another ("fluxes")", we compared the water level in ponds and a nearby well. We took measurements and also asked communities living around them about the water level change in Summer, Monsoon, Winter or Fall. This helped us to know a bit about the water flux from the Ponds to wells through underground water channels.

Based on "Speculation about variability in the movement of water in the water cycle in their home area", we conducted an online survey to get a data on average water footprint among our school student. The detailed data on this along with graphical comparisons is attached hereafter.

The distribution of water on the Earth's surface is extremely uneven. Only 3% of water on the surface is fresh; the remaining 97% resides in the ocean. Of

freshwater, 69% resides in glaciers, 30% underground, and less than 1% is located in lakes, rivers and swamps. Looking by a different perspective, only one percent of the water on the Earth's surface is usable by humans, and 99% of the usable quantity is situated underground.

We identified connections between personal water use and flux within local water bodies. For this we conducted surveys on how a person or a group of people is depended on a river, pond, lake, or well and to what extent he/she is exploiting (or using) it. We also calculated water usage rate and water flow rate of rivers and also tried to compare them.

At the end, we designed a pamphlet and presentation for sharing our synopsis with the peers of our school.

We hope that our work will spark an excitement in you.