WATER FOLLOWERS by LIVING WATER HISAR

In the presentation of our teachers on rainwater harvesting (RWH) at our school, we once again noticed how limited the water resources in the world are. So we got the motivation and decided to do a project on this subject. So, we determined the aim of our project as to reduce water use in our school, raise awareness in our community, and to ensure that it is implemented in daily life. In our project, we targeted to draw attention to the unnecessary and careless use of water that results in depleting the limited amount of water resources. We have learned that the amount of available freshwater resources in our world is very low as well as being polluted day by day. The problem we want to solve is the fast depleting of water resources and the unfair distribution of water for all humankind. We set ourselves some goals by associating each with the United Nations Sustainable Development Goals No.6: Clean Water and Sanitation for all, No.12: Responsible Consumption and Production, and No.15: Life on Land.

Our goals are:
- *Reducing water consumption by ensuring the reuse of water with various methods,*
- *To raise awareness of the society and the new generation on this issue*
- *To contribute to the natural continuation of the water cycle in nature*

To reduce water consumption we took a series of actions. We conducted a survey to Hisar School students to see what they know about RWH. According to survey results we made a plan to build a RWH system and a greywater treatment unit. We organized a meeting with our administrators and Internal Services and Assistant Manager to explain our plan and get their advice and permission to apply our plan. We provided the materials, intellectual, labor and financial support required to create the RWH system and water treatment prototypes from the Science Department, internal services and financial affairs department. We decided to establish a unit to provide greywater treatment from the water used in the hand-washing sinks. After making necessary research we started to design our greywater model. Then, we established our unit and ensured that the greywater we obtained was used in school cleaning. Our plan was to use the savings thanks to our RWH system and greywater treatment unit in the tree planting activity. However we encountered some unforeseen problems in application. For greywater treatment, we previously identified the sinks next to the cafeteria, but as a result of the meetings we held with the officers, we moved this project to the disabled toilet in line with the expert opinion due to the improper installation and infrastructure. Also, since we had to make improvement changes for efficiency and work safety 3 times, and wait for the materials to build our RWH, we couldn't manage to collect as much water as we expected. In addition, the fact that it did not rain at the expected level has not yet enabled us to save enough water to reach the desired tree planting target.

The fact that the concrete roads are high in some areas in our school shows that the water cannot reach the soil. We asked student's opinions about rain gardens with a survey and according to the results and our observations we chose the spot for our rain garden. So, we built a rain garden to facilitate water reaching the soil and continue its journey in the water cycle.

To raise awareness on this issue we organized and made a series of activities. We made presentations to share the information about rainwater harvesting, talk about the methods and urge people to try at least one of those methods themselves. Step by step, we reached 1582 people directly with the campaign and activities we had such as rain garden construction, our informative presentations, upcycling T-shirt activity, our sister school visit and announcing the launch of our website. Visiting our sister school was also a great opportunity for us to interact with our friends via peer learning. Our website and social media accounts continue to announce and inform us about this method, and the number is increasing since we are still working on it. We organized a bag design workshop from old clothes to draw attention to water consumption in the textile industry. During our T-Shirt activity, we made most students realize how much water they were using as virtual water. Our unconsciousness in consumption causes us to use virtual water too much. We also saw this once again by measuring our water footprint. It is important that we reduce this. But we had to make our voices heard to more people so we decided to design a website. On our website, we prepared pages that give information about UN sustainability goals, RWH methods, and all of our activities along with photographs from them. Preparing an awareness video was our next step. We wrote a script, acted and edited the video for publishing. Our video explains the importance of water resources and includes measures to be taken in this regard. You can reach our video here. We published it on the announcement screens of our school for all middle school students. We visited Akpınar Primary school which is our sister school in Akpınar village and made a presentation to their students and teachers about RWH. We also screened our video there to younger students and held a discussion about it.

To measure the effect of our project we conducted a survey that served as a pre-test and a post-test application in order to understand how much students benefit from our project. We gathered the data and compared the results.

As a group, we exchanged ideas and shared our responsibilities fairly so everyone was involved in all parts of our project. At the end, we realized that water saving is not difficult at all and that we can make a great contribution to the water cycle in nature with small measures. We also found it very important to lead in informing those around us.

We are sure to say that as a result of our project, the students' awareness of this matter has increased. The results of the surveys we made to draw attention to the amount of unnecessary water consumption in our daily lives showed valuable results. The feedback we got from our friends showed us how valuable our project was once more. Along with other reasons the latest events of COVID-19 outbreak affected us a lot. Nevertheless we managed to keep working together even though the school-closure. We are very confident and happy about our project since we have managed to work in many different sub-projects under this big umbrella in such a short span of time.

For the following year we want to continue our project by planting trees from the remaining money with the savings we achieved. We will get help from local non-governmental organizations. For a more professional opinion we contacted Prof. Dr. Tuğba Ölmez Hancı from ITU Environmental Engineering Department and asked her opinions on how to develop our project for the following year. We've set up new areas to make rain gardens in our schoolyard and our sister school, in the upcoming school year we plan to be working on this. With the feedback we will get from professionals we are sure to be replenished with valuable resources and ideas on how to improve our project. We were making plans to get in touch with the local municipality and share our project details with them as well as our ideas on what could be done in collaborating with them. We were planning to get information from them about the areas where floods were common after the rain and give our assistance to them in building new rain gardens in our local area to give back to the community that we are a part of. It makes us content to know that all the facilities and mechanisms we built will be available and in use for the following years to provide sustainability for our project and save more water. We will keep updating our social media accounts regularly. We believe we will reach more and more people day by day.

During this project, each member of our group had experience in collaboration, communication, action taking, decision making, social media account managing, using tools and appliances, digital video and visual graphics editing, green screen video effects editing, website designing, Google Analytics data keeping, data collection and analysis, planning with flexibility, adaptation to different circumstances, being prepared to unforeseen conditions. We also developed organizational and presentational skills, understood the value of peer learning, and real life experience in project managing.

We put a lot of effort into our project and this era that the world is facing for the past few months has shown how much sustainability and fair distribution of all resources of mother nature is important for all humankind. We kept working from home, planned online meetings and discussions, collaborated on shared documents, and moved our project into social media by quickly adapting it to the times we are all having. As world citizens, we believe we are all aware of what we do as individuals have a much greater impact on each and every other individual in this world.