

## The Third Coordination Meeting of the Syrian Water Resources Platform

Gaziantep 29 - September -2022

### Minutes of the meeting

#### 1. Introduction

The Syrian Water Resources Platform in coordination and cooperation with the WASH Cluster held the third coordination meeting in 2022, which was held in Gaziantep on September 29, 2022, at 1:00 pm. The meeting lasted for three and a half hours and was attended by a group of active organizations working in northern Syria, in addition to WASH Cluster coordinators.

#### 2. Meeting title

Sewage systems and wastewater treatment plants.

#### 3. Meeting Objective

1. Studying and discussing the effects of untreated wastewater on society, public health, and the environment, in addition to its direct and significant role in transporting and spreading dangerous diseases, especially cholera, which has recently begun to spread in Syria, thus discussing the priorities and plans that we must follow and apply to limit the spread of this pandemic.
2. Studying and discussing the importance of treating wastewater drainage randomly, with a special focus on the current different techniques applied in northern Syria based on realistic data for the efficiency of all systems.
3. Studying and discussing the best ways and recommendations to develop the reality of sewage and the current treatment methods in northern Syria, which leads to making the wastewater more sustainable in terms of health, environmental and social sides.

#### 4. Meeting Participants

40 persons representing 28 international and local organizations attended the meeting. The following table shows the organizations that participated in this meeting.

IYD -WASH Cluster	Shafak
Assistance Coordination Unit (ACU)	ATAA Humanitarian Relief Association
Al-Seeraj for development and healthcare - SDH	Binaa for dev

Basma for relief and development /BRD/	GIZ
Bahar Organization	Maram foundation
Orange Organization	Hand in Hand for Aid and Development
Social Development International (SDI)	WATAN Foundation
Syrian Engineers for conduction and Development	Relief International
Global Communities	CARE International
Ihsan for relief and development	Solidarities International
IOM	Syria Recovery Trust Fund
Save the Children International	Space of Peace
International Humanitarian Relief (IHR)	ACTED
Qatar Charity	Syria Relief

## 5. The key points discussed in the meeting

1. A quick overview of what has been done during the previous period and the introduction of new members.
  - Providing an overview of the platform's achievements during the previous period.
  - Introducing the members of the Syrian Water Resources Platform.
  - Updates regarding mutual meetings held with members of the platform aimed at developing ways of cooperation and participation between the platform and its members in a larger way.
  - Welcoming new members of the platform (9 local and international organizations joined the platform during the last two months).
2. Types of Sewage systems
  - Mixed and separate sewage systems.
  - Gray water and black water.
3. Discussing the effects of untreated wastewater
  - The health, environmental and social impacts of using untreated wastewater.
  - Sanitation and the spread of cholera and discussing its spread in northern Syria and the priorities that we must follow and apply to limit its spread.
4. Systems and challenges of treating wastewater in Syria (Current reality and various techniques used in wastewater treatment)
  - The importance of wastewater treatment.
  - An overview of wastewater treatment methods.
  - Discussing the different techniques used in treating wastewater in northern Syria and sharing experiences and expertise in this regard. In addition to reviewing a

realistic comparison of the efficiency of the three systems types applied in northern Syria through the data and information collected by ACU, which includes a measurement of the most important indicators of wastewater treatment plants such as COD, and BOD TSS. Our comparison showed that the treatment efficiency in the "anaerobic barrier reactor" method is the best in terms of stability in performance for a long time, while we noticed that the efficiency is fluctuated in the other methods and the performance is more affected by changes that may occur during operation such as changing flows or increasing the organic load in the water, temperature, weather, and other factors.

1. Upflow Anaerobic Sludge Blanket Reactor (UASB)
  2. Wetlands
  3. Anaerobic Baffled Reactor (ABR)
- Wastewater analysis in northern Syria through the only laboratory operated by ACU.

## 6. Key messages from participants

1. Emphasizing the importance of sterilizing water that is pumped or transported to the population in northern Syria (Chlorine must be added to the water on a daily basis and the recommendations of the WASH cluster in this regard must be followed, so that the level of the free residual chlorine (FRC) should be 1 mg/liter at the source of water and 0.5 mg/liter at the point of consumption and use whether it is a house, a tent, a residential center or a commercial store. Also, it was emphasized the importance of increasing the provided support to the water stations that can contribute to providing sufficient water for the population, especially in light of the spread of cholera thus immediate support must be provided to the water stations, including the necessary maintenance, running costs, and chlorine to operate these stations, as the inability of the current water stations to provide the sufficient quantities of water for the population is considered as the main reason that pushes the population to rely on other unsafe sources. Currently, the field team of WASH cluster is monitoring and tracking the FRC at various points in northern Syria. Despite the large number of tests that compile with "water sterilization recommendations", however, there are many tests that showed that there is no "Water sterilization", therefore it should be noted the importance of emphasizing the daily chlorination of drinking water.
2. Since sewage is one of the main factors that transfer diseases and germs, it was emphasized the importance of finding a quick and effective solution to the random and opened sewage which is drained around villages, towns, population centers, and

camps which has become a real threat to public health, soil and water sources, and a main source of transportation of many diseases, including cholera. The importance of treating wastewater that accumulates in wastewater collection pits, especially in camps and villages, was also emphasized. In this regard, the WASH cluster coordinators confirmed that a set of relevant recommendations will be worked on. It was also emphasized that rainwater in camps and residential communities should have separate drainage channels away from the wastewater collection pits. Therefore, with the approach of winter, it was recommended to increase the support provided in this regard, which contributes to reducing the spread of contamination through rainwater. In addition, it was clarified that the WASH cluster will provide infrastructure training in the camps in the mid of October, and there will be a section talking about sanitation in the camps, which will carry many important relevant ideas and suggestions.

3. It was recommended that the idea of "treating wastewater" should be presented to the main donors with the support of WASH cluster to adopt it as a priority for the next stage. In the same way, it was emphasized that advocacy to support such solutions and technologies should be based on the importance of addressing the dangerous impacts on health, the environment, and society that result from untreated wastewater. The estimated quantity of wastewater drainage from the city of Jarablus (26000 residents) to the Euphrates River is around 8000 cubic meters per day, therefore we can imagine the environmental disaster that threatens the residents of those areas, especially with the receding river. The International Organization for Migration (IOM) has implemented an anaerobic wastewater treatment project in a camp, and they will share their experience and lessons learned from this project in a workshop that will be held soon. In the same context, the Assistance Coordination Unit (ACU) has implemented a wastewater treatment plant in the city of Qabasin using the "Anaerobic Baffled Reactor (ABR)" technology, where the experiment was successful, and the treatment efficiency of this method was reviewed based on the data and indicators collected during the operation period.
4. It was ensured the importance of working to raise health awareness among the local population in northern Syria, with a special focus on the spreading mechanisms of cholera such as drinking water from unsafe sources, ice, touching, contaminated foods, and eating vegetables irrigated with untreated wastewater, etc. Irrigation of crops with untreated wastewater was also discussed to find a proper solution that

could be supported by donors, decision-makers, and local authorities, especially irrigation of vegetables with this contaminated water contributes directly to cholera spread, therefore this contaminated water must be treated, and controls should be set up before using it for irrigation purposes.

5. Urging local and international humanitarian community and decision-makers to increase the provided support and provide additional support to the health, water, and environmental health sectors so that they can respond better such as funding the establishment of well-equipped health isolation centers according to the recommended standards and can be able to receive patients and provide the necessary remedy for the infected cases, as well as to enable WASH response staff to improve environmental conditions and ensure safe, clean and sufficient water sources in addition to stop the contamination caused by random sewage, and raise awareness among the local population and local authorities, that can contribute significantly to monitoring water quality and open sewage, also, obligating water and ice distributors, and restaurants to abide by the recommended standards in this regard. There is coordination between the WASH and Health clusters to identify 4 sites in northwest Syria to equip them to be reception centers for cholera If the number of cases increases.

