



Methods for Irrigation and Agriculture
لتطوير أساليب الري والزراعة

Decentralized Wastewater Treatment and Reuse in Institutions: Mafraq Pilot in 3 Schools

Jan. 1, 2019 – Jan. 31, 2019

RFP#: WASH/JOR/PCA2018178/PD2018188/2018/MIRRA/Mafraq

Second Progress Report

Jan 1st 2019 – Jan 31th 2019

PROJECT FACT SHEET

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| PROJECT TITLE: | Decentralized wastewater treatment and reuse in institutions |
| FUNDING AGENCY: | The United Nations International Children's Emergency Fund (UNICEF) |
| START DATE: | December 1 st , 2018 |
| END DATE: | August 31 st , 2019 |



IMPLEMENTING PARTNER IN JORDAN:

Methods for Irrigation and Agriculture (MIRRA) - a Jordanian non-governmental organization that specializes in the development of water and agricultural sectors including optimizing pressurized irrigation networks at the field and network levels, wastewater reuse in agriculture and capacity-building activities for individuals and institutions.



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| General Information | |
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| Country: | Jordan |
| Programme Code & Title: | WASH/JOR/PCA2018178/PD2018188/2018/MIRRA/Mafraq |
| Project Code & Title: | WASH/JOR/PCA2018178/PD2018188/2018/MIRRA/Mafraq |
| Responsible Officer(s): | Alham Al-Shurafat |
| Workplan Code & Title | WASH |
| Implementing Partner Name & Code: | MIRRA |
| Project Name: | Decentralized wastewater treatment and reuse in institutions |
| Project Period: | From 1/12/2018 to 31/8/2019 |
| Reporting period | From 1/1/2019 to 31/1/2019 |
| Report Submission date: | 11/2/2019 |
| Section One: Summary | |
| <p><i>This project is a collaboration between MIRRA and UNICEF that works within the framework of decentralizing most of the services in Jordan. This project focuses on sanitation and wastewater management by targeting three schools in Irhab district within Mafraq Governorate. Irhab district has a population of 23,874 residents, of which 2,970 are Syrians. The district is an agricultural area with no sewer network coverage relying on cesspit for disposal of wastewater, water needs for agriculture are usually met through the piped water network that is supplied for domestic use. Alternatively, water trucking for agricultural purposes from privately owned boreholes is also practiced.</i></p> <p><i>The collaboration aims to pilot a new approach to wastewater treatment at a decentralized level within institutions but also communities to achieve the following objectives:</i></p> <ul style="list-style-type: none"> <i>• Safe management of wastewater at a decentralized level to prevent groundwater pollution and to reuse water for agricultural purposes.</i> <i>• Greywater reuse to reduce the volume of fresh water consumption</i> <i>• Solar power as an alternative sustainable energy source for the operation of the WWT system including the operation of the irrigation network.</i> <i>• Increase awareness between students and teachers on the importance of water conservation, environmental impacts of poor management of sanitation, and renewable energy as a sustainable source to provide energy.</i> | |

Section Two: Activities and Progress

Briefly listed below are the activities implemented during the month (Jan 2019) of the project.

- Finalizing two tender offers: 1) A tender offer for WWTPs, GWS, and Sanitation facilities maintenance and 2) A tender offer for SPS.
- Tender announcements on Al-Ghad newspaper, Tender online platform, MIRRA website and MIRRA Facebook Page for the two tenders. The deadline for the purchase of WWTPs, GWS, and Sanitation facilities maintenance tenders is 16:00 on Tuesday 5/2/2019 and the deadline for submission of tenders is 16:00 on Tuesday 26/2/2019. The deadline for the purchase of tender solar systems is at 16:00 on Tuesday 12/2/2019 and the deadline for submission of proposals is at 16:00 on Thursday 28/2/2019.
- The team made a visit to the site on January 13, 2019, to consult with the school cadres about successful plantations in the region and discuss new varieties and the system of re-planning and planting the different zones within the schools and the purpose of that and the necessary work and infrastructure for that. The visit also included a visit to agriculture nursery in the village of Irhab to learn about the varieties they have and their ideas about agriculture and how to provide them, where MIRRA intends to supply most required seedlings from Irhab nurseries.



Figure 1: MIRRA team visit to Irhab schools and a local agriculture nursery on January 13, 2019, to consult about agriculture scheme.

- Finalizing the design of the reorganization of agriculture (~ 3 dunums) and cultivation of empty spaces (~ 3 dunums) inside the three schools. Note: It's important to have the crops and planting zones fully prepared by the end of January because It is well known that saplings or seed dispersal should be extended from mid-February to mid-March in Mafraq.
- Starting the purchasing process of all required materials for the reorganization of agriculture (~ 3 dunums) and cultivation of empty spaces (~ 3 dunums) inside the three schools.
- Making a project brochure on the project and announcements about the project on all MIRRA media channels.
- Recruitment of "Field Officer" to supervise, follow up and report on all the field activities on WASH, irrigation, agriculture and renewable energy for the project. The field officer is based on Irhab

secondary school of Girls where the school offered him an office once the school receives the necessary official approvals for the project.

- The team made a visit to the site on January 31, 2019, to further consult with the school the planned reorganization of agriculture (~ 3 dunums) and cultivation of empty spaces (~ 3 dunums) inside the three schools.



Figure 2: MIRRA team visit to Irhab schools on January 31, 2019, to consult with the school cadres about agriculture scheme.

Section Three: Outputs and Deliverables

Deliverables:

1. A plan for the reorganization of agriculture (~ 3 dunums) and cultivation of empty spaces (~ 3 dunums).
2. Two tenders. One for WWTPs, GWS, and Sanitation facilities maintenance, the second for SPSs.
3. Tender announcing and lunch of tendering process.

Section Four: Internal Evaluation

The overall project is progressing in terms of accomplishing the objectives and adhering to the overall timeline.

Section Five: Risks, Issues, and Challenges

- *The implementation of hygiene promotion and soft activities may face timeline restrictions due to the school schedule and final exams. The schools are available during the dates between mid-February through mid-June. Furthermore, there is a month-long period from mid-July to mid-August the students from the agricultural branch at the Irhab Secondary School for Girls have a mandatory training period at the school.*
- *Decentralization projects are still being tested in Jordan, this may cause challenges in terms of the distribution of tasks to fully ensure the sustainability of the project.*
- *The absence of official approvals of the project by the Jordanian government may lead to delays in the executive work at the site from the time specified according to the work plan.*

Section Six: Collaboration

Thus far there have been no collaborations.

Section Seven: Financial Statement

MIRRA received the first installment of 70,016 Jordanian Dinars on 17 December 2018. A number of bureaucratic roadblocks, however, initially complicated MIRRA's collection of the funds. The Jordan Kuwait Bank asked again by the end of January for an official letter written approval from the Ministry of Environment. Meanwhile, the Ministry of Environment notified MIRRA that is was unable to give approval until the Prime Ministry also granted official approval. After numerous conversations, the Jordan Kuwait Bank agreed to receive and consider a letter from UNICEF clarifies the current situation.

Section Eight: Official Requests

- MIRRA asks if you can send an **official letter to the Ministry of Finance** asking for exemption from sales tax for the project because it is a development project.

Section Ten: Next Steps

Briefly listed below are the main activities planned during the month (Feb 2019) for the project

- Scoping workshop for a stakeholder in Amman at MIRRA addresses the work plan, the implementation procedures, stakeholder participation plan, and monitoring and evaluation plan.
- Receive all tender offers and start the evaluation.
- MIRRA team visit to the schools and the Directorate of Education in Mafraq to discuss the implementation of earthing works and planting.
- Starting the process of purchasing Laboratory equipment for treated water quality testing at Irhab Secondary school for Girls.
- Starting the design of the automatic drip irrigation systems

Section Eleven: List of Equipment

No equipment was purchased from the budget of this project yet.

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