

Task 5 **Project Dissemination**

- The first in-person workshop was conducted on 4/05/2019. It was the Kick-off and Stakeholder workshop and was organized in the Faculty of Engineering, Zagaizg University. Several presentations were presented by both Egyptian and UK team members, Representative from Desert Research Institute (DRI), Agriculture Research Center (ARC), Faculty of Agriculture, Egypt-Japan University of Science and Technology (E-JUST), and others. The activities and presentations are presented in ([Appendix E-PR#1](#)).
- An in-person stakeholder workshop was organized on 08/11/2020 at the Faculty of Engineering. The attendees were from the Ministry of Water Resources and Irrigation, Ministry of Agriculture and different research institutions. The PI and the Co-PI, Prof. Hassan Awaad, Dr. El-Sayed Mansour attended Face-to-Face while other members attended online ([see Appendix E, PR#3](#)).

Additionally, the following dissemination activities were conducted during the current reporting period:

- The project website have been updated to include almost all the project activities (www.smart-gh.net). The website includes almost the project activities and it will be updated shortly once the university is able to release the maintenance payment of the website.
- Publishing 13 (+1 in EMCEI2022, Nov. 1-4) have been presented international ([Appendix A \(A1 to A6\) with A6 presents citations of some journal papers](#))
- Conduction international webinars ([Appendix B2 \(B2.1, B2.2, B2.3\)](#))
- Participating in several national and international events ([Appendix D \(D1 to D6\)](#))
- Presenting the project at different international conferences in Egypt, South Africa and Romania ([Appendix D2, D5 and D6](#)).
- Talking about the project in TV twice ([Please visit the website of the project \(www.smart-gh.net\)](#)).
- It is planned to talk again about the project the channel no. 4 (Egyptian TV) on 24/010/2022 in the period from 12:30 pm to 02:00 (not yet specified).

Task 5.1 **Papers presentation in conferences**

We presented 3 papers and one poster in an international conference in UK ([See Appendix A1](#)) during this reporting period. But, the total no. of papers presented

by the team over the life span of the project are 14 papers (+1 in EMCE2022) and 1 poster (all are international conference but one of them (IWTC) was organized in Egypt where we presented 4 review papers during the first 9 months of the project).The following list represents the papers presented in international conferences

List of Conference papers during the first reporting period (Appendix G- PR#1)

- 1- Fath, H., Javadi, A, Akrami, M, Farmani, R, Negm, A and Mallick, T (2019) A Novel stand-alone solar-powered agriculture greenhouse-desalination system; increasing sustainability and efficiency of greenhouses, IAPE '19, 14-15 March, Oxford, United Kingdom, ISBN: 978-1-912532-05-6.
- 2- Akrami, A., Javadi, A. Hassanein, M., Farmani, R., Tabor, G., Negm, A., Fath, H. (2019) Analysing the greenhouse ventilation using computational fluid dynamics, 2019 UKACM Conference City, 1-3 April, University of London. <http://hdl.handle.net/10871/36791>
- 3- Salah AH, Fath HES, Negm A, Akrami M, Javadi A. (2019) **Modelling of a novel Stand-Alone, Solar Driven Agriculture Greenhouse Integrated With Photo Voltaic /Thermal (PV/T) Panels**, 17th International Computing & Control for the Water Industry Conference, Exeter, United Kingdom, 1st - 4th Sep 2019.
- 4- Porcheron M, Akrami M, Javadi A, Farmani R, Negm A, Fath HES. (2019) **A stand-alone Zero-Liquid-Discharge greenhouse model with rainwater harvesting capability**, 17th International Computing & Control for the Water Industry Conference, Exeter, United Kingdom, 1st - 4th Sep 2019.

List of Conference papers during the second reporting period

- 5- Hassan Awaad, Abdelazim Negm , Mohammed M Abd- El- Hamed Ali1, El-Sayed Mansour and Mohamed Abu-hashim, Greenhouse Productivity Using a Recirculating Desalination System Supported By Solar Energy: A Review, IWTC2019, Ismailia,10-13 Sept., 2019, <http://iwtc2019.website2.me/iwtc-2019> (Appendix B-PR#2).
- 6- M. A. A. Abdrabbo, Abdelazim Negm, Hassan E. Fath and Akbar Javadi, Greenhouse Management and Best Practice in Egypt, IWTC2019, Ismailia,10-13 Sept., 2019, <http://iwtc2019.website2.me/iwtc-2019>. (Appendix C-PR#2)

- 7- Ahmed A. Elkhoully, Abdelazim M. Negm and Akbar A. Javadi, Propagation and Cultivation of some common Halophytes As Fodder Crops in Egypt”, IWTC2019, Ismailia,10-13 Sept., 2019, <http://iwtc2019.website2.me/iwtc-2019>. (Appendix D-PR#2)
- 8- Khalid Z. Kewan, Ahmed A. Elkhoully, Abdelazim M. Negm, and Akbar Javadi, “Feedstock Values of Some Common Fodder Halophytes in the Egyptian Desert”, IWTC2019, Ismailia,10-13 Sept., 2019, <http://iwtc2019.website2.me/iwtc-2019>. (Appendix E-PR#2)
- 9- Hassan Awaad, Abdelazeem Negm, Hassan Fath, and Akbar Javadi (2019), Feasibility of Crop Production using Greenhouse Fed by Desalination: A Review, EMCEI 2019, 10-13 Oct., Susse, Tunisia. (Appendix F-PR#2)

List of Conference papers during the third reporting period

- 10- Salah, A.H.; Fath, H.E.S.; Negm, A.; Akrami, M.; Javadi, A , Simulation Of Agriculture Greenhouse Integrated With On-Roof Photo-Voltaic Panels: Case Study For A Winter Day, IAPE '20, Second Edition of the International Conference on Innovative Applied Energy, 15-16 Sept. 2020, Exeter, UK, ISBN: 978-1-912532-18-6. (The draft was reported in PR# Appendix I).

List of Conference papers during the fourth reporting period

- 11- Abdrabbo, M.A.A, Javadi, A.A., Negm, A. (2021), Microclimate and irrigation requirement under greenhouses in Egypt, The virtual conference of AQUA≈360: Water for All - Emerging Issues and Innovations 31st August 2021 – 2nd September 2021, University of Exeter, United Kingdom.
- 12- Fath, H.E.s., Salah, A.H, Akrami, M., Javadi, A.A., and Negm, A. (2021), Novel Standalone Solar Driven Agriculture Greenhouse Desalination System: Self Sufficient of Energy and Irrigating Water, The virtual conference of AQUA≈360: Water for All - Emerging Issues and Innovations 31st August 2021 – 2nd September 2021, University of Exeter, United Kingdom.
- 13- Abd-Elaty, I., Attwa, M., Abu-hashim, M., Javadi,A.A., Negm, A. (2021), Hydrogeophysical investigation of aquifer potentiality to sustain brackish water supplies for greenhouses in coastal aquifers, The virtual

conference of AQUA≈360: Water for All - Emerging Issues and Innovations 31st August 2021 – 2nd September 2021, University of Exeter, United Kingdom.

- 14- Mansour E., Arisha, M.H., Al-Sagheer, A.A., Javadi, A.A., Negm, A., Awaad, H.A. (2021), Feasibility Of Producing Indoor And Outdoor Crops Using Solar-Powered Desalinated Water: Prospects For Mena Region, The virtual conference of AQUA≈360: Water for All - Emerging Issues and Innovations 31st August 2021 – 2nd September 2021, University of Exeter, United Kingdom (Poster)

Coming soon in Nov. 2022

- 15- Negm, A., Bassiony, H., Salah, A., Fath, F., Gamal, G., Javadi, A.A. (2022) Techno-financial Prefeasibility Study of a Stand-alone Solar-driven Agriculture Greenhouse- Desalination System, Proc. Of 4th International Euro-Mediterranean Conference on Environmental Integration, 1-4 Nov., Sousse, Tunisia (Accepted for presentation), Springer Int. Publishing House.