

Ben Cohen

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Education

Ben-Gurion University of the Negev

Sde Boker, Israel

Ph.D. in Desert Studies and Hydrology

2021-present

Thesis: Desalination of brackish water by electrodialysis method for specific ion separation, Under the supervision of Prof. Naftali Lazarovitch & Prof. Jack Gilron

Description:

Development design of experiments related to electrodialysis and prosses optimization. Membrane modification for specific ion exchange along with resulting water quality analysis.

M.Sc., in Desert studies and Hydrology

2016-2018

• Specialized in Desalination and Irrigation, summa cum laude

Thesis: Selective desalination of brackish groundwater for irrigation use, Under the supervision of Prof. Naftali Lazarovitch & Prof. Jack Gilron

Description:

Optimization studies on selective desalination using monovalent selective ion exchange membranes. Conducting greenhouse experiments to study plant nutrients uptake under different irrigation regimes and water types. Modeling water and solute movement in the soil and its uptake by plant using Hydrus 2D

Academic works & Publications:

Cohen et al. (2018) Upgrading groundwater for irrigation using monovalent selective Electrodialysis, *Desalination*, 431, pp. 126-139

Grants and Academic awards:

- O Research grant -The Daniel Koshland fund for interdisciplinary research
- Full MSc scholarship The Albert Katz International School for Desert Studies
- 2016 prize for student excellence in MSc studies- summa cum laude, Albert Katz Foundation for Excellence in Desert Studies

The Hebrew university, Faculty of agriculture

Rehovot, Israel

B.Sc., Agr. Soil and water Sciences

2014-2016

- Minors: Soil physics and chemistry, Water & Irrigation management, Plant physiology, Plant nutrition
- Academic work & publications: Examine novel practices for measuring and predicting potassium availability in the soil, under the supervision of Prof. Moshe Shenker.

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Professional Experience

CultivAid, Co-founder and Chief technology officer (CTO)-

2016-Present

CultivAid is an Israeli-international NGO, specializing in capacity building and knowledge and technology transfer initiatives with a focus on the agricultural and water sectors. CultivAid emphasizes the development of skilled local professionals through hands-on training programs, field work, and joint research in order to build a sustainable knowledge infrastructure.

Role description: Direct management of all company professional activities. In this context, responsibility for the planning and execution of agricultural projects in East African countries, professional communication with technology companies, management of agricultural activities in the organization's research and training farms, management of R&D activities, etc.

Specialized in water system design, Irrigation management, water treatment, horticulture protocols and management of production, R&D activities. Training development, establishment of research and training materials. Lecturing in courses on a variety of topics in the fields of water and agriculture management.

Consultant, Big Win Philanthropy and Ethiopian Ministry of Health

2015-Present

Program delivery unit member in the **Sequota Declaration** taskforce. Planning, design and implementation of agricultural, water and energy interventions. The sequota declaration promises to end child undernutrition in Ethiopia by 2030 by implementing a three-phased multisectoral plan. The declaration aims to "to end hunger, achieve food security and improved nutrition, and promote sustainable agriculture" in order to enhance development.

Rural water development works in collaboration with the Water trust Uganda 2015

Monitoring and analyzing water quality of potable water from wells and surface water in rural Uganda. The 1 year mission included preliminary research on potable water quality parameters, field methods in practical hydrology, different applications of GIS, and training of locals on WASH issues.

Lead Agronomists, Engineers Without Borders, Israel –

2012-2016

Engineers without borders is an International NGO works on sustainable development projects in Israel and abroad. EWB strives to improve the quality of life for developing communities through the implementation of environmentally and economically sustainable engineering projects. An additional goal is to develop internationally oriented students' capabilities for students of different disciplines.

Role description: Responsible for agricultural protocols and general oversight of ongoing projects mostly in Ethiopia, Design and implementation of small scale agricultural and WASH projects, Training and guidance of all staff in various topics.

Projects manager and assistant to senior agronomist, Kibutz Tzuba Agriculture 2008-2014

The kibbutz holds and operates a 300 Ha farm and specialized in various type of crops namely fruit trees, olives, vineyard, hydroponic growing of herbs, lettuce and more.

Role description: Pest management, heavy machinery operation, overall supervision and management of harvest.

Other relevant experience

Team leader - Sunflow Project In collaboration with 'Eilat-Eilot Renewable Energy'

2015-2016

The 'Sunflow' unit is a mobile solar pump and generator designed to supply large amount of water for irrigation in remote and off grid areas. The project was funded and executed as part of the Eilat Eilot technological incubator ('hamanbeta').

Role description: Design and production of a prototype unit, responsible for general oversight of the team, working closely with electrical engineers and product design engineer, Training and guidance for correct use and demonstration.

Languages

English (fluent); Hebrew (Native); Arabic, French, Amharic (beginner)