

EDEN IN IRAQ: The Wastewater Garden Project

Ecological and Cultural Restoration in the Mesopotamian Marshes



A PROJECT OF:



Nature Iraq (NGO)

Nature Iraq
Pak City Apartments
Block A2, Floor 1, Flat No. 8
Sulaymaniya, Iraq



Institute of Ecotechnics

1 Blue Bird Ct
Santa Fe, NM 87508
US

With artist Meridel Rubenstein, environmental engineers Dr. Mark Nelson and Dr. Davide Tocchetto, and Jassim al-Asadi of Nature Iraq (NGO).



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Adam and Eve in the Iraq Marshes, Near the historic Site of the Garden of Eden

Eden In Iraq is a humanitarian water remediation project, expressed through environmental art and wastewater garden design, which will provide urgently needed health and clean water for southern Iraqis, their children, and future generations to come.

We offer a solution to this predicament through the utilization of simple and sustainable wastewater recycling technology to support a garden that embodies the rich cultural heritage and tradition of the marshes and the Marsh Arab community.

After seven years of intensive fieldwork, groundwork, and design preparation, we seek 1.6 million dollars to build a 26,500 square meter (6.5 acre) Public Wastewater Garden with the support and aid of our in-country partner, the renowned environmental NGO, Nature Iraq. The wastewater garden features locally significant design details making it a public site that emphasizes cultural heritage, while restoring health and offering ecological education.





BACKGROUND

The marshes in southern Iraq, formed by the Tigris and Euphrates Rivers, are home to one of humanity's oldest cultures. The Marsh Arabs developed their unique way of life around the resources of the marsh, once the third largest wetlands in the world. The Tigris and Euphrates Rivers cross on the eastern edge of the marshes at the Shatt al-Arab, and this intersection is thought to be a possible site of the historic Garden of Eden.

In the early 1990s, Saddam Hussein's forces secretly drained the immense Southern Iraq wetlands, to punish the Shi'a rebels hiding there. They transformed it into a desert, murdering tens of thousands of Marsh Arabs and compelling hundreds of thousands more to flee. Conflict and violence altered the Marshlands into a desiccated parcel, disturbing its ecological composition, and leaving detrimental vestiges that pose serious challenges to its survival.

Since Hussein's demise in 2003, three hundred thousand of the expelled Marsh Arabs have returned to re-green and restore the marshes, with the help of Nature Iraq. Due to the rapid environmental changes in the marshes, with the return of inhabitants, serious sewage and health problems have ensued.

Where a symbiotic, sustainable relationship once existed in the marshes balanced perfectly by healthy reeds, water buffalo trade, and rice and date cultivation, the system is now unstable. Waste has been piling up and the Euphrates River has become seriously polluted, putting the Marshlands and the Marsh Arab community at peril.

There is currently no sewage treatment in the Marsh Arab towns and cities--at most, sewage is pumped into a collection site and discharged without treatment into a river or marsh. This is causing odor and damage to the long-term ecology of the marshes and the health of the community.





Exposed Sewage Pipes/ El Chibaish / Euphrates pipes

THE MARSHES (THE AHWAR)

The inauguration of Iraq's first national park in 2013, the Mesopotamian Marshes, demonstrates the country's hope for environmental restoration and future tourism.

In July 2016, UNESCO designated the marshes and surrounding ancient sites of Eridu, Uruk and Ur a World Heritage Site. Due to this recent designation, the traditional arts, crafts, and cultural heritage of the Marsh Arabs and the ancient Mesopotamian societies, as well as the landscape and biodiversity of the marshes, are being revived and preserved.

We plan to build the very first demonstration Wastewater Garden in El Chibaish, in Southern Iraq, in order to help the Marsh Arab communities, in the process of rebuilding their war-devastated homeland, solve issues of sewage, renew environmental stability and conserve a natural environment of Outstanding Universal Value (OUV). This first demonstration garden will also be a Public Environmental Art site that honors and celebrates the rich Marsh Arab culture.

Mudheif / Ziggurat steps / Hut on banks



SUPPORT WE'VE RECIEVED

Between 2014 and 2016, three of the largest town councils in the region enthusiastically approved of our garden by donating the use of five large sites, each serving 5-10,000 people. They understood that their current situation endangers both their health and the health of the wetlands.

During the design and planning process throughout the past 5 years, our project has been received and approved by local, provincial, state and environmental authorities.

With the support of mayor Mr. Badeaa Al-kayoun, and regional governor of Dhi Qar, Mr. Yahya al-Nasiri, we have chosen to build our first constructed wetland and wastewater garden at El Chibaish, along the north bank of the Euphrates River, in the Central Marshes. The city is an important urban area along the main road from Nasiriyah and Basrah. We hope this initial garden will serve as an important example of how this system could be implemented elsewhere within the country.

See pages 21–24 for letters of support from the communities.



Top to bottom: Dr. Mark Nelson and engineer Jassim Al Asadi with Al Fuhood Town Council, 2014.

Team meeting with Lieutenant Governor and advisors, Dhi Qar Governorate, Nasiriyah, March 2014.



IN 2013, THE INITIAL PART OF THIS PROJECT WAS FUNDED THROUGH A \$65,000 Ministry of Education Tier 1 Research Grant awarded to Assistant Professor Peer Sathikh and Visiting Associate Professor Meridel Rubenstein from the School of Art, Design and Media of Nanyang Technological University, Singapore, in collaboration with Dr. Sander van Der Leeuw, Dr. Mark Nelson, and Dr. Davide Tocchetto. This initial grant allowed our international team to research and design the garden, with numerous trips to the site. In addition, the university awarded \$36,500 to exhibit all aspects of the project (designs, photographs, videos and writing) at the National Design Centre in Singapore.

...Now, we are ready to build.



Eden In Iraq Singapore NDC exhibition





Man In The Marshes Cutting Reeds

YOUR HELP

WE NEED FUNDS to take our project to the next construction stage. We are approaching you because of your commitment to projects of environmental, cultural, and social value. We believe that our project is an important step in safeguarding the marshes and its exceptional ecosystem that sustains the economy and livelihood of the Marsh Arabs. It represents a significant cultural heritage and ecological site for Iraq, supporting a myriad of rare wildlife and rich biodiversity. More importantly, it contains invaluable imprints of humanity's ancient civilization – an archive of humankind's cultural achievement and heritage. Our project is a bid for you to invest in the marshes – to invest in universal heritage, global health, and human creativity.

YOUR CONTRIBUTION to the Eden in Iraq Wastewater Garden Project will generate positive economic, cultural, environmental and social impact for--and in collaboration with--the Marsh Arab community. The wastewater garden has the potential to bring new sources of revenue and business opportunities, as local arts and crafts are featured in the garden design, and exposed to new audiences through tourism. The garden will drastically increase air and water quality, filtering and transforming the community's waste into a site of environmental preservation.

Ehmad and His Boat, Central Marshes, 2011–2013



KEY MESSAGES TO INVESTORS:

- Investing in Eden in Iraq – the wastewater garden in the Marshlands – will generate immense spillover to the country's economy. In 2011, the United Nations Integrated Water Task Force for Iraq estimated that an investment of \$33,000 to restore 2.5 acres of the marshes would result in an economic benefit value of \$171,300 over 40 years. Our team expects that an investment of \$1.6 million for a demonstration wastewater garden, with a culturally significant design, will generate the same approximate benefits.
- The Marshland of Southern Iraq, known as the Ahwar, epitomizes an oasis in the middle of the vast desert. Wetlands have been aptly called “the kidneys of the planet,” for their ability to cleanse water of pollutants and remove carbon from the atmosphere. Fish and wildlife depend on these marshes, and over 280 distinct species of birds use these wetlands as a crucial rest and feeding stop on their migrations from Siberia to Africa. The Marsh Arabs have maintained a traditional water-based way of life, including distinctive reed architecture, weavings, and water buffalo trade. Their architecture appears unchanged on cylinder seals and stelae dating over 5,000 years old.
- Chronic illnesses have plagued local communities, especially children, since the inhabitant's return to the marshes after it's desertification. The wastewater garden is a simple and sustainable system that contributes to the resolution of these problems by collecting waste, treating wastewater, and advocating better health and sanitation practices. Our project is a collaborative attempt to renew the marshes and create a new and healthy Garden of Eden.
- Sustainable development of the Marshlands relies on help on national, regional, and local levels, including a confluence of aspirations from both public and private sectors. The Eden in Iraq project has garnered robust support from the Iraqi government and local and regional councils and civilians. With your financial contribution and support, efforts to preserve the Marshlands will be greatly bolstered. Cultural Heritage will be interconnected with Environmental Remediation for years to come.



Above: Marsh Woman Carrying Reed House

Right: Hassan Jarry at the Shat Al Arab, where the Tigris and Euphrates meet, 2011.



THE GARDEN

Our site in El Chibaish is 26,250 square meters (6.4 acres), which allows for treatment of the sewage wastewater of 7,500 people. Currently, this wastewater is being discharged along an open canal and channeled in to the marshes.

The constructed wetland treatment will start with 7,000 square meters of reeds, which grow 1.8 meters tall. This first reed bed will immediately diminish the odor from the sewage. The wastewater will then go into the second phase of the garden: the “subsurface flow wetland.” Here, organic material of the sewage will be transformed by bacteria into mineral substances, cleaning the wastewater and simultaneously creating a beautiful and culturally significant garden by providing nutrients for plants and fruit trees. Design elements will demonstrate the rich cultural heritage of the marsh people by incorporating local materials and crafts, including earthen brick (adobe), woven reed, and ceramic tile.

The garden will call attention to Mesopotamian design and history. Woven embroidered Mesopotamian Wedding blanket patterns have inspired the garden’s blueprint and layout of its planting areas. The designs of this ancient woven craft are inspired by “nature and its biological diversity and also the spirit of ancestors” within Marsh Arab culture, and are passed down to new generations.

3,000-5,000 year old Sumerian Cylinder seals will inspire graphic design elements and ceramic wall reliefs. We plan to utilize this style of ornamentation as a means of decorating the garden in collaboration with inhabitants.

Sustainable reed architecture, in use for over 7,000 years, provides shade and respite from heat while allowing fractal light to enter interior spaces. This easily assembled construction method will be used in the garden for shade structures and viewing towers. Earthen brick, an ancient building material well suited for the desert and prized for its thermal stability, will supplement the reed architecture. It is envisioned that small local businesses will be able use the site to sell crafts, produce, and food.



Detail: Mesopotamian woven embroidered blanket

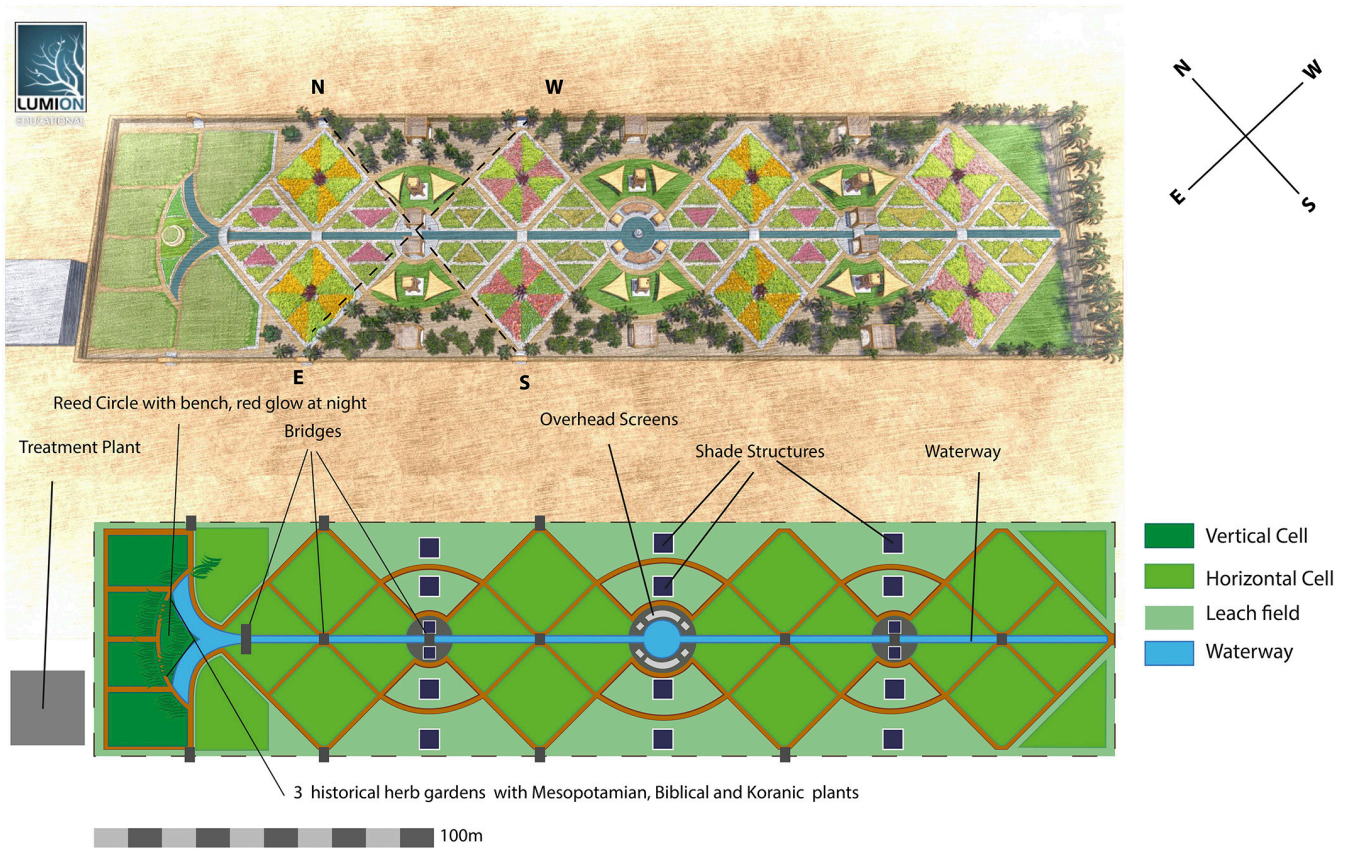


Above: From Uruk, magnesite with silver ram, 3100-2900 BCE. From Ancient near Eastern Cylinder Seals acquired by the Ashmolean Museum, Oxford, 1963-1973, by P.R.S. Moorey and O.R. Gurney, Iraq, Vol. 40, No. 1 (Spring, 1978), pp. 41-60

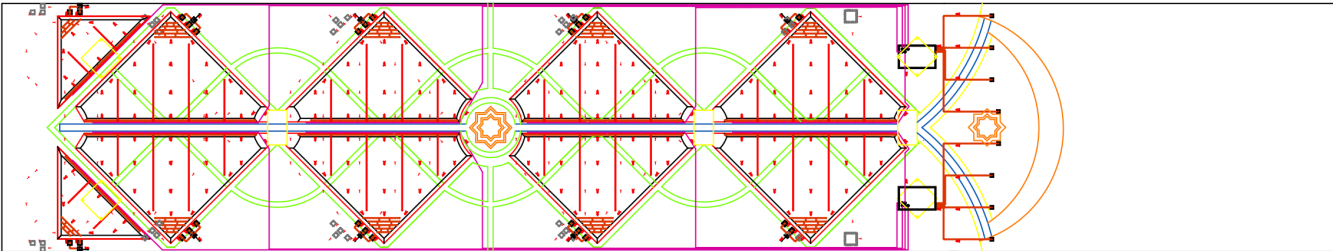
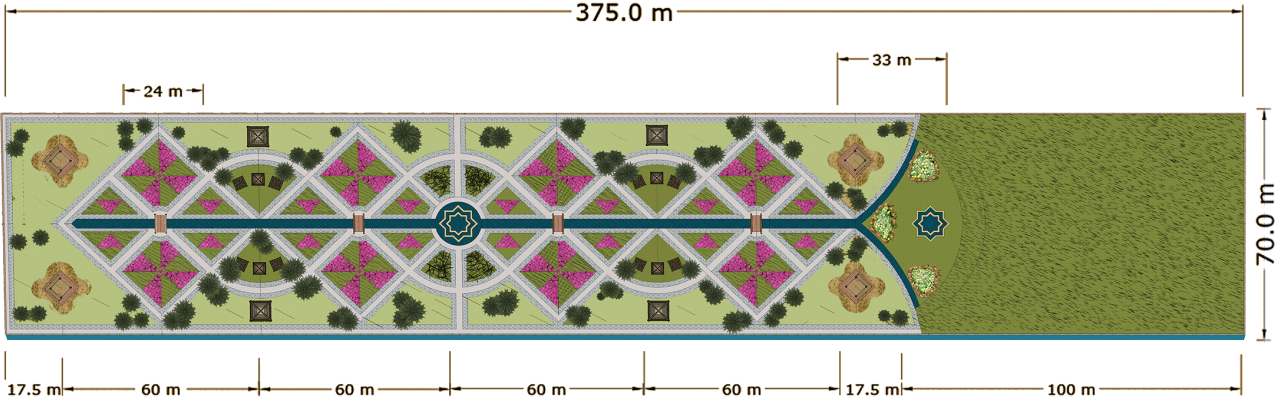
Right: Cylinder seal rollout.



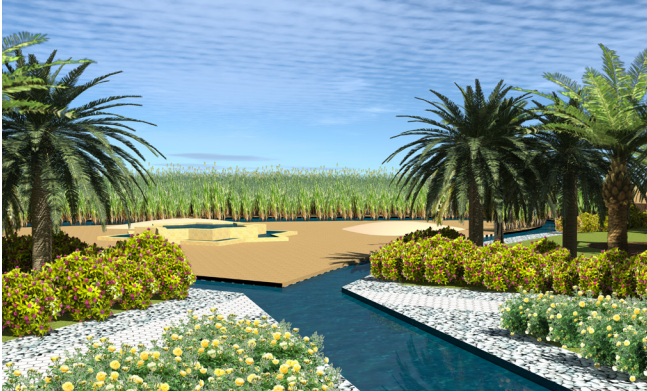
DESIGNS FOR EL MANAR SITE, 2014



EL CHIBAISH SITE 2017



EL CHIBAISH SITE



FUNDING GOALS

		DESIGN	
✓	Goal 1	Initial research and garden design	65,000
✓	Goal 2	Project outreach, education, fundraising	35,000
		Accumulated Funding	100,000
		BUILD WETLAND	
	Goal 3	wetland completion: site excavation, machine work, reed planting, pipeline from city	250,000
		Accumulated Funding	250,000
		BUILD GARDEN	
	Goal 4	excavation of main garden, machine work	200,000
	Goal 5	garden planting, shade structures, pathways, pipe-line for water distribution	850,000
	Goal 6	Local design elements, artworks, maintenance training, community projects	330,000
		Accumulated Funding	1,380,000

*As of July 2018, we have officially met our first two funding goals: all initial research has been conducted and the garden is entirely designed. Exhibitions have brought attention to this project and we have successfully funded outreach.

Reaching the third goal means diving into construction of the wetland: the portion of the garden which will immediately remove odor from sewage in the marshes and begin filtration of wastewater. Each additional funding goal will result in the direct construction of garden elements.

In Kind Services: NATURE IRAQ NGO All logistics, housing, drivers, translator, workshop, in land transportation, Visa procurement, office and staff, 5 team visits, 2-4 persons each, 2011-2016

Two planning visits to Singapore 2015 and 2017

Administration in kind costs

1. NI \$25,000
2. Project Direction \$25,000



PROPOSED BUDGET

		Description	Quantity	Unit	Cost	Total
Structure	Surface	Surface	7,000	m ²	-	
		Horizontal	7,500	m ²	-	
		Total	14,500	m ²	-	
	Beds	Number bed s	1		-	-
		Number bed h	16		-	
		Total beds	17		-	
Material		Bed inner surface (50x10)	690	m ²	-	
	Liner	Total liner HDPE surface	11040	m ²	25	276000
	Inner volume	Surface	4200	m ³	-	
		Horizontal	5250	m ³	-	
	Gravel	Total gravel volume	5250	m ³	50	262500
	Sand	Total sand volume	145	m ³	50	7250
	Excavation	Excavation cost	9450	m ³	60	567000
	Pipes	Materials for pipes (penetration, etc.)	20		75	1500
		Total linear meters x vertical	50	m	-	
		Total linear meters x horizontal	320	m	-	
		Connection pipes	170	m	-	
		Total pipes	540	m	7	3780
	Pumps	Pumps	4		1000	4000
	Tanks	Tanks (80x80x80)	34		100	3400
	Pants	Plants	14500		4	58000
Art material	Inner walkways	Pathways (labor + materials)	200	m	30	6000
	Inner structure	Inner structure (30x30 2 m h wall)	240	m ²	90	21600
	Tiles	Tiles			-	25000
	External wall	Perimetral great wall (soil, bricks, reed fence)	1000	m ²	25	25000
	Baths	Bathrooms (2 complete, male and female)	2		5000	10000
	Reed Construction	Shade structures			-	15000
	artwork	ceramic relief, ancient flora photographs			-	25000



PROPOSED BUDGET

	Educational signage				-	2000
Other costs	Travel, local cost, extra	3 principals and 2 assistants includes: documentation and translation			-	
	Flight		5		3000	15000
	Beds and food	30 days	5		3000	15000
	Car and driver	30 days	1		3000	3000
	Misc. equipment and supplies	Camera rentals, disc space, tools, apparatuses, fees			-	10000
Sub total					-	1348030
Administrative Costs		Project design (6% of cost)			8088 2	
		Wwg administrative fee (includes 6 month administrative position)			1600 0	
		Insurance: liability/travel for 2-6 people			5000	
		2 staff positions ni and ie	2		2000 0	40000
		Assistant stipend	1		1000	1000
		Misc. expenses including labor/project director funding office expenses			-	12000
Total					-	1481912
		Contingency 10%			-	148191
Final total					-	1,630,103

* please note all fiscal values refer to 2016/17 research and may change slightly due to shifts in the economy.



CURRENT GARDEN TEAM 2011-



Meridel Rubenstein conceptualized Eden In Iraq as a symbolic restoration of the fabled Garden of Eden. The Marsh Arabs are a preeminent example of refugees returning from exodus to their homeland.

Rubenstein is a Visiting Associate Professor at the School of Art, Design, and Media at Nanyang Technological University, where she teaches Art & Ecology and Contemporary Landscape in the photography department. She is also an internationally recognized artist working at the intersection of nature and culture, especially in relationship to ecological and social imbalance. Her photography, site-specific installations and research practice demonstrates skilled communication and collaboration with distinct groups around cultural and environmental issues. She has received numerous grants including a Guggenheim Fellowship, and her work has been featured in exhibitions and publications worldwide.

Her involvement in environmental remediation began in 2006 during the Green Belt Movement in Kenya under Dr. Wangari Maathai, as well as in Madagascar with field biologist and Macarthur fellow Dr. Steve Goodman. In 2007, she collaborated with Dr. Dan Schrag, Director of Harvard's Center for the Environment, on poetic visualizations of Carbon Cycles.

Rubenstein's projects often combine art and science and speak to dispossessed cultures. Critical Mass (1989-93), was a collaborative project and traveling museum exhibition that took as its subject the meeting of nuclear scientists and Native Americans during the making of the first atomic bomb at Los Alamos, New Mexico. In 2000, she photographed the oldest trees in the US and Vietnam to make an extended work about the American war in Vietnam and the resilience of the natural world. Her photo works from Southern Iraq have been featured in an exhibition, Eden Turned on its Side, at the University of New Mexico Fine Art Museum (2018), with a monograph (UNM Press) featuring an essay by environmental journalist Alan Weisman.



CURRENT GARDEN TEAM 2011-



Mark Nelson, PhD, is a founding director of the Institute of Ecotechnics and has worked for several decades in closed ecological system research, ecological engineering, the restoration of damaged ecosystems, desert agriculture and wastewater recycling. He is Chairman and CEO of the Institute of Ecotechnics (www.ecotechnics.edu), a U.K. and U.S. non-profit organization, which consults to several demonstration projects working in challenging biomes around the world; Vice Chairman of Global Ecotechnics Corp. (www.globalecotechnics.com), head of Wastewater Gardens International (www.wastewatergardens.com).

Dr. Nelson has helped pioneer a new ecological approach to sewage treatment, "Wastewater Gardens®" which are constructed subsurface flow wetlands with high biodiversity and has created over 90 such systems in Mexico, Belize, Bali & Sulawesi, Indonesia, West Australia, France, Spain, Portugal, Poland, the Bahamas, the Philippines, Algeria and the United States since 1996 (www.wastewatergardens.com). He was awarded the Yuri Gagarin Jubilee Medal, 1993 for outstanding service to international cooperation in space and the environment by the Russian Cosmonautics Federation; and elected a Fellow of the World Academy of Arts and Sciences (2008). Dr. Nelson's new book, *The Wastewater Garden-Preserving the Planet One Flush at a Time*, was released in June by Synergetic Press, Santa Fe, New Mexico. Pages 197-201 feature an essay on the Eden in Iraq Project with photographs by Meridel Rubenstein. A version of this article appeared in *Solutions Magazine* in July 2014.



Davide Tocchetto holds a PhD in environmental agronomy. Presently, he is a lecturer of Agronomy at an Italian high school. He developed his first career at Padova University with research in sustainable agriculture and wastewater treatment with constructed wetlands. He was a founding member of a University start-up to develop a water treatment patent. He was awarded an Innovation Prize for the "Techia" floating wetland patent and the "2008 startup of the year" prize in Italy. Tocchetto won the local entrepreneur prize for his project to develop a farm and cultivate ancient and minor fruits.

He is a freelance partner with numerous national and international companies in developing varying projects in different fields of operation outside of Italy (e.g. crop and vegetable production in Senegal, rural development in Brazil and water treatment in Algeria and Slovakia). He was also partner in the United Nations project "Green School for Gaza" where he studied and developed (with MCA Architects and UNRWA) the whole water circle and reuse system in a new school in the Gaza Strip. He has been a speaker at various national and international conferences, sharing his knowledge about wetland treatments and sustainable agricultural practices.



Jassim al-Asadi is the managing director of the regional Southern Iraq office of Nature Iraq (NGO). He has a Bachelor of Science in Engineering from the University of Technology, Baghdad, 1980, and extensive work experience as an engineer on water remediation projects throughout Iraq. He was Director of the socio-economic studies section for CRIM (Center for Restoration of Iraqi Marshlands) from 2003-05, and for MWoR (Ministry of Water Resources) from 1985-2003.

Throughout the past ten years, he has participated in numerous international meetings and conferences on the Iraqi wetlands, held in Switzerland, Italy, Jordan and Egypt. He also participated in preparing studies and surveys of the green villages, and the Strategic Plan for the Wetlands, the architectural sites in Iraq and the infrastructure planning in Southern Iraq.

He has lectured internationally: at the Workshop on Sustainable Communities, Cairo, 2006, UNEP meetings with Iraqi MoWR, Amman 2004, the International Conference of Donor Nations on Iraqi Marshlands, Venice, Italy, 2004, and workshops in Iraq related to the Iraqi Marshlands 2004-2012. He was the driving force at Nature Iraq responsible for bringing the designation of the UNESCO World Heritage Site to the marshes and the ancient sites in 2016. He frequently hosts State and World leaders in the Edenic marshes.



GARDEN DESIGN TEAM 2011–2014



Peer Sathikh is presently Assistant Professor and Academic Associate Chair at the School of Art Design and Media. He obtained a Master of Design (MDesRCA) in industrial design from the Royal College of Art (RCA), London and a Master of Design in product design from Industrial Design Centre, Indian Institute of Technology, Mumbai. He also has a Bachelor of Engineering (Hons) degree in Mechanical Engineering. He was awarded the Commonwealth Scholarship to study at RCA. While at RCA, Sathikh won the Thorn EMI Award for his project on air travel and won the first International Student Internship Award from Sony to work at the Sony Design Centre in Tokyo.

In 1996 Peer He co-founded Inovasia Design in Singapore. Sathikh has won several awards for work done as design consultant at Inovasia, such as the Good Design Award 2004 from the Chicago Athenaeum, USA and the Singapore Design Award.

Sathikh is the Chairman of the Advisory Committee for the Product Design and Innovation Course at the Ngee Ann Polytechnic, Singapore and the member of the Advisory Committee for the Industrial Design Course at the Nanyang Polytechnic, Singapore. Past President of the Designers Association Singapore (DAS). He is also a member of the Industrial Designers Society of America (IDSA), Product Design and Management Association (PDMA), USA and the Design Research Society (DRS), UK. Sathikh has been invited/guest speaker at design and product development conferences in Singapore, Japan and India, where he has given key note addresses and presented papers on the subject of design, design culture and branding. He heads the above surface design team.



Sander Van der Leeuw, PhD, was Dean of the School of Sustainability in Arizona State University's Global Institute of Sustainability. He also was a co-director of the Complex Adaptive Systems Initiative at ASU and is a professor in the School of Human Evolution and Social Change in the College of Liberal Arts and Sciences. Additionally, Van der Leeuw is an External Professor at the Santa Fe Institute in New Mexico. An archaeologist and historian by training, he is recognized in the science and innovation category for his research in human—environmental relations and the scientific study of innovation as a societal process. He is the United Nations 2012 Champion of the Earth in the science and innovation category.



Republic of Iraq
Dhi Qar province
Chibayish District
The General Administration



جمهورية العراق
محافظة ذي قار
قائمىة قضاء الجبايش
الإدارة العامة

العدد : ٨٥٨
التاريخ : ٢٠١٨ / ٦ / ٢١

إلى / السيدة / ميردل روبنستين / دافيدي توتشينتو
م/ معالجة مياه الصرف الصحي في الجبايش

نهدىكم أطيب التحيات

ونثمن جهودكم في مساعدتنا على معالجة مياه الصرف الصحي في الجبايش لما لها من أهمية بيئية وصحية وتؤكد على دعمنا لمشروع الفايوتكنواوجي الذي تسعون لاعداد تصاميمه وإيجاد التمويل الدولي لتنفيذه مع وافر مع التقدير .



عبد الكاظم ملك طاهر
قائمقام قضاء الجبايش

٢٠١٨ / ٦ / ٢١

نسخة منه إلى / مجلس قضاء الجبايش للعلم مع التقدير
/ منظمة طبيعة العراق / للتفضل بمتابعة الموضوع واعلامنا مع التقدير

From: Jassim Alasadi <jassim.alasadi@natureiraq.org>

Date: Thursday, 21 June 2018 at 9:18 AM

To: Meridel Rubenstein <meridel@nets.com>

Subject: Re: Could u translate the letter?? Re: Past letters from Chivayish and Dhi Qar

Dear Merudel

The translating of the letter as follow:

To/ Mrs Meridel Rubenstein / Mr. Davide Tocchetto

Subject/ Sewage treatment at Chibayish

We extend to you our best regards

We appreciate your efforts in helping us to treat sewage in Chibayish because of its environmental and health importance. We stress our support for this Phytotechnology project which you are trying to prepare for its design and to find international funding for its implementation.

Signature

Abdul Kadhim Mulek Taher

Qaymakam of Chibayish District



Republic of Iraq
Dhi Qar province
Chibayish District
The General Administration



جمهورية العراق
محافظة ذي قار
قائمقامية قضاء الجبايش
الإدارة العامة

العدد : ٢٤٦
التاريخ : ٢٠١٦ / ٨ / ٢٤

إلي / السيدة ميردل روبنسن - الدكتور دافيدي توتشيتو
م/ مشروع معالجة مياه الصرف الصحي في الجبايش

نهديكم تحياتنا :

يسرنا نيابة عن السكان المحليين في قضاء الجبايش أن نشكر جهودكم في مجال التصاميم والتحريرات وحمّلكم عناء السفر والبحث عن التمويل لمعالجة مياه الصرف الصحي في مدينة الجبايش والذي يصب في الاهوار الوسطى بشكل مباشر في الوقت الحالي .. ونود أن نعرب عن تأيدنا لفكرة المشروع بالخيارين الواردين في كتابكم ذو العدد (816 - : #) في ٢٣ / ٨ / ٢٠١٦ راجين لكم التوفيق واعلامنا بأخر المستجدات ليتسنى لنا تقديم المساعدة الممكنة .

مع التقدير
ر...



بإيجاز الجبايش
قائمقام قضاء الجبايش

٢٠١٦ / ٨ / ٢٤

On Tue, Aug 23, 2016 at 11:33 AM, ahmed alasadi <ahmed.alasadi@natureiraq.org> wrote:

> Dears
>
> Prof. Meridel Rubenstein
>
> Dr. Davide Tocchetto
> On behalf of the local people in Chibaish City, We thank you for your
> efforts for the designs and travel for getting the funds, for the treating
> of wastewater which flows in central marshes directly in current time.
> We would like to say we support the idea of making the project in both
> options which mentioned in your letter.
> Thank you and please keep in touch,
> With best wishes.
> Badeaa Al-kayoun
> Mayor of El Chibaish
>
> Please not that : the confirming letter is attached herewith.

>
>
> On Sat, Aug 20, 2016 at 3:10 PM, davide.tocchetto@libero.it <davide.tocchetto@libero.it> wrote:
>
>> Hello Jassim,
>> please can you transmit this letter to the mayor of el chibaish?
>>
>> thank you.
>>
>>
>> Davide
>>
>
>

