



Concours Libanais du Développement Durable Trophées du Phénix Vert du Développement Durable



Catégorie des Nouveaux Projets 2018





Le frigo du désert

une alternative écologique au réfrigérateur

Profil:

Prénom: Moham

Nom: Ezzedine

Age: 28 ans



Profession: Professeur d'histoire
et géographie

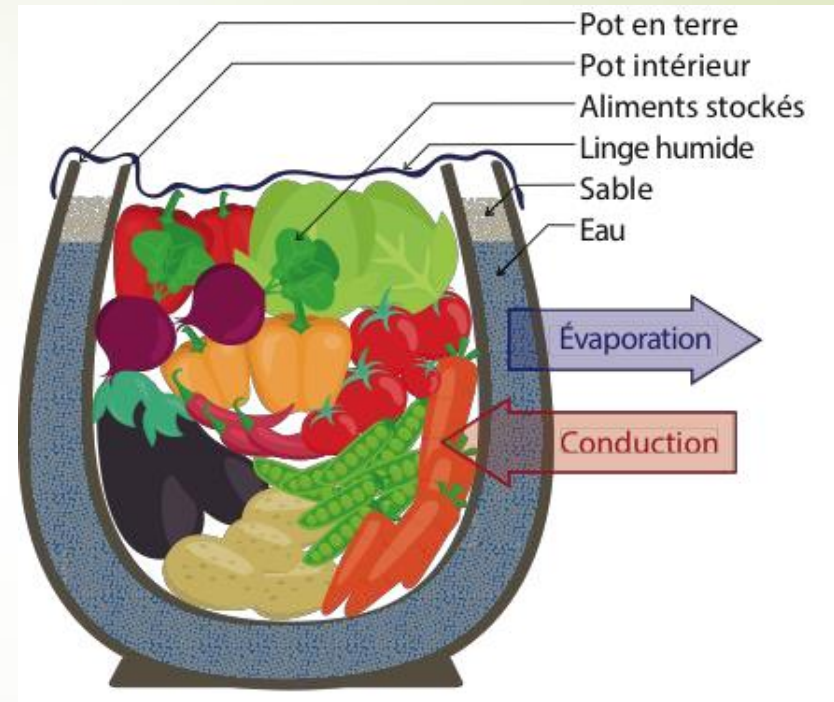
Lieu de résidence: Lund, Suède

Le projet:

Le Frigo du désert est un moyen simple permettant de rafraichir les aliments (notamment fruits et légumes), et ne demandant que très peu de moyens financiers. La fonction de rafraichissement est basée sur le principe de l'évaporation et ne nécessite pas d'électricité. Avec ce système, il est possible d'obtenir une température allant jusque 13 à 22°C, alors que la température extérieure peut avoisiner les 40°C.

Ce mode de rafraichissement représente donc un système très intéressant pour les pays dont le climat est chaud et sec.

Grâce à ce système de conservation, les aliments ont une durée de vie plus longue et sont plus longtemps comestibles.



DA'SUKA



Sustainable development Project
design for rearing beneficial insects in
Lebanon



What is DA'SUKA?

DA'SUKA is an Arabic word and it means the ladybird or ladybug, it's a beneficial insect, it controls pests without the intervention of any chemical product

Project managers

- ▶ **Mayssaa Cheayto** : Masters 2 agriculture engineer, working on how to control *dactylopius opuntia* (طاعون الصبر) pest with natural enemies such as the mealy bug destructor *cryptolaemus montrouzieri*. Miss Cheayto has also accomplished a full training in rearing the ladybird (coccinellidae) and a training in production of myco_entomopathogens (*beaveria bassiana* and *Metharizium anisopliae*).
- ▶ **Wael yamine**: Masters 2 agriculture engineer, working on the project of rearing bumble bees (*Bombus terrestris*) in arid areas. Mr. Yammine has also accomplished a year of full training in general entomology, and he has been working with entomopathogens nematodes as biological control pest.



DA'SUKA rearing center

is a center of different natural enemies multiplication which will provide farmers with basic and practical methods of mass propagation, storage, and distribution of beneficial organisms as an alternative to chemical control.

A pair of weathered, brown hands is shown from a top-down perspective, gently cupping a small, vibrant green seedling. The seedling has four leaves and is growing out of a dark, rich soil. The background is a dark, textured surface, possibly more soil or a dark fabric, which makes the hands and the plant stand out. The lighting is soft, highlighting the texture of the skin and the freshness of the plant.

AMANA

Un projet par: Elie BOUFAYSAL

A project by: Elie BOU FAYSAL

2018

8

Mini CV

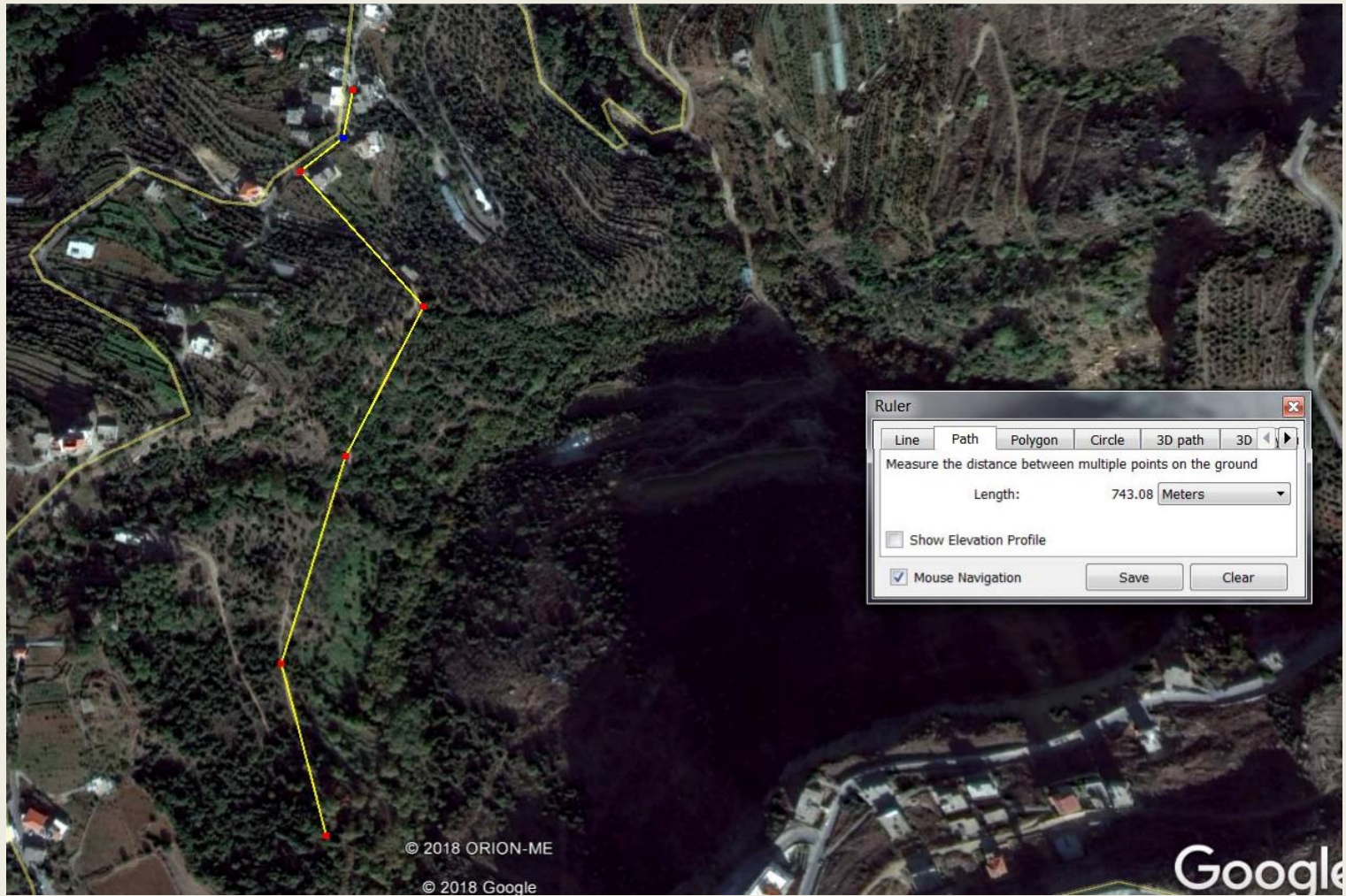


- ▶ Elie BOU FAYSAL
- ▶ 1^{ere} année génie agronomie et agroalimentaire à l'USJ ESIAM
- ▶ Née dans une société d'agriculteurs
- ▶ A l'Age de 12 j'ai écrit une conte concernant le triage des déchets qui eu le 1^{er} prix a la Bekaa.
- ▶ Intéressé dans le domaine de développement durable.
- ▶ En train de préparer une ONG écologique

C 'EST QUOI AMANA?

- ▶ AMANA c'est une système d'Eco fermes qui présente des solutions au niveau écologique, agronomique, agroalimentaire et spécifiquement le domaine de la santé humaine.
- ▶ Ce projet cible plusieurs objectifs de développement durable dans la liste de l'ONU des objectifs de développement durable.

Golden Spring



Golden Spring

- Ingénieur Civil et Environnement, ESIB 2007
- Mastère Génie Civil Européen à l'Ecole Nationale des Ponts et Chaussées, Paris 2008
- Entrepreneur (bureau d'étude) depuis 2013
- Consultant en efficacité énergétique et énergies renouvelables
- Consultant à l'Union des Municipalités de Jezzine
- Manager du domaine familial agricole (30 ha) à Houra (Marjeyoun)



Cadre du Projet

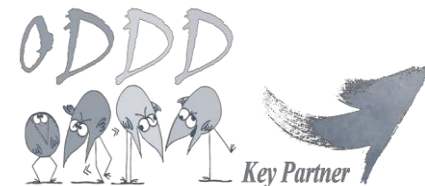
- Objectif 6 du DD: Garantir l'accès de tous à l'eau et à l'assainissement et assurer une gestion durable des ressources en eau
(ONU – Septembre 2015)
- Code de l'Eau (Loi 77 / 2018, 13/4/2018)



GROW 'IN

BEIRUT

Cities' Permaculture
urban Farming Invasion



Key Partner

UNESCO Global Action Programme on
Education for Sustainable Development

GROW'IN BEIRUT

TEAM

CV LEGEND

PERLA

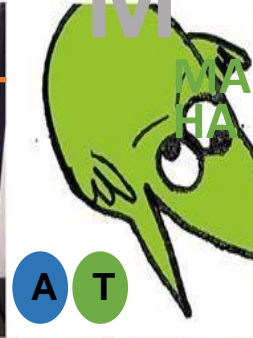


A A



MARIE-JOAO

A A U



A T



A A

GEORGES



ACTIVIST

A

ARCHITECT

A

GHALBOUN MUN. COMMITTEE

G

PRIMARY SCHOOL TEACHER

T

P

R

PERFORMER SUSTAINA DE BESEARCHER V.

C

CONSULTANT

U

L

UNESCO

UN.

LECTURER



MONA



A R C U L



A A



CEDR

A T

CYNTHIA



A A



A A G

CECILE



A A

DAN A



A A

CHRISTELLE



A A

RALPH



L C A A P R

ELYESH

FOCUS TOPICS

PERMACULTURE CONCEPT

- Permanent Agriculture.
- A creative design process based on whole-systems thinking of agricultural principles, sustainable farming and socially resilient communities.
- A guide to learn from nature, to apply its system and be inspired by its elements, their structure and the relationships between them / Biomimicry
- A transition from being dependent consumers, to becoming responsible producers.
- 12 design principles under 3 main targets: (i)Earth Care, (ii)People Care, (iii)Fair Share



SHARED URBAN FARMING

WATER COLLECTION & CONSERVATION

POLLINATION & INSECTS

HOTEL



EDUCATION/ARTISTIC/PLAYABLE INSTALATIONS

4. Apply Self-Regulation & Accept Feedback
5. Use/Value renewable resources & services
6. Produce no Waste

7. Design from Patterns to Details
8. Integrate rather than Segregate
9. Use Small & Slow Solutions



1. Observe & Interact
2. Catch & Store Energy
3. Obtain a yield

10. Use & Value Diversity
11. Use Edges & Value the Marginal
12. Creatively Use & Respond to Change

STRATEGY TO ENGAGE:

- CITY INHABITANTS
- CITY VISITORS
- CITY MAIN STAKEHOLDERS
- CITY SCHOOLS, UNIVERSITIES, etc.



IOP



Internet of Plants



by Nisrine El-Turky

About me

Education:

MS in CS, NDU

BE in CCE, NDU

Awards:

1st Prize Agrytech Hackathon, **2018**

1st Prize AgFoodWater StartupWeekend Mount Lebanon, **2018**

2^{de} Prize Mechatronics Category- Supervisor of AgroRobot,
LIRA 13th, **2017**

Berytech Incubation and Business Support Award- Supervisor of
NIS- LIRA 13th, **2017**



***I am Passionate about electronics and
agriculture ...***

My Solution





Sustainable Housing Solutions

Location: Thoum

Owner: Mr. Yaacoub Matta

Architect: Jad Bayram

Jad Bayram

EDUCATION

2013-2015 **Universitee du Saint Esprit Kaslik
Kaslik, Lebanon**

- Master in Architecture

2009-2013 **Universitee du Saint Esprit Kaslik
Kaslik, Lebanon**

- Bachelor in Architecture

• 1995-2009 **Collège des Sœurs des Saints Cœurs
Kfarhabab-Ghazir, Lebanon**

- Lebanese Baccalaureate in General Sciences

WORK EXPERIENCE

Green future Holding

- Program Architect for the NAGEEB program (National Action for Green Energy Efficient Buildings)
- Office work - Autocad drafting, Shop Drawings, Green and Sustainable Design Development, BOQs,
- Variation Orders and Site inspections.
- Permit Issuing.
- Meetings with clients.
- Presentation of the project to different municipalities and companies.



A composting toilet is a dry toilet that uses a predominantly aerobic process system to treat excreta, typically with no water or small volumes of flush water, via composting or managed aerobic decomposition.

- Low flush requiring as little as one cup of water per flush
- does not require frequent discharge and compost can be used as a fertilizer for plants



Composting toilet



A+ Rated Appliances



Solar water heater

Year round high energy yield, durable and low maintenance solar water heating system with over-heat protection.

- High efficiency collector
- high durability hot water storage tank with dual heat exchanger
- Solar station with automatic filling unit and mixing valve for low maintenance



Biomass boiler

- High energy efficiency boiler with low start-up power
- Advanced burning technology with multistage burning
- Online connectivity with remote technical support
- Quick start-up and feed into central heating system
- Connected to panel radiators or under-floor heating
- Fueled with high energy yield pellets produced locally



Grey water recycler

Full household grey water recycling and reclamation

- Physical separation and biological treatment of impurities
- water is odorless and clean hence can be used for irrigation or household
- Nutrients in the grey water (Such as phosphorus and nitrogen) provide an excellent food source for plants



Photovoltaic system

-High efficiency full black photovoltaic panels with dual inverter and a maintenance free, long life-time power storage battery bank

-Power autonomy for 2.5 consecutive cloudy days



Building management system

-Reduce dependence on utility water

-Provide clean and reliable potable water upon filtration

Sustain the needed household water during the dry season

-Use the collected water as a pool and landscape element



Rain harvesting



Université Libanaise - Faculté
d'Agronomie
Département du Paysage et
Aménagement du Territoire

Concours Libanais du Développement Durable

Un Eco-parc pour l'éducation
à l'environnement : Jezzine au
fil de l'eau

Présenté par :
Dr Nina Zeidan
Dr Victoria
Dawalibi



Jezzine au fil de l'Eau

Présenté par Université Libanaise -Faculté d'Agronomie
Département de Paysage et Aménagement du Territoire

Responsables Dr. Nina Zeidan (Chef de département)
Dr. Victoria Dawalibi (Professeur Associé)
Dr. Jad Abou Arrage (Professeur Associé)



Le projet

- Objectif: **préservation et valorisation du paysage rural et du patrimoine** naturel et culturel de la région de Jezzine à travers un sentier pour l'éducation à l'environnement
- Le sentier prend la forme d'une boucle matérialisant l'idée du cycle de l'eau
- Les activités pédagogiques principalement axées sur le cycle de l'eau et son interaction avec tous les éléments de l'écosystème, seront réparties tout au long du sentier en prenant en considération les différents points d'intérêt





Al BaqBouq Beach Nature Reserve

Green Southerners & Abbassyieh
Municipality



Baqbouq Beach Natural Reserve

- Green Southerners and Abbasiyeh Municipality





The beach sections

In Green+ Brown:
Scientific and
biodiversity section

In Brown: Sea turtle
nesting site

In Green: the coastal
bush, vegetation, the
stream and the
botanic garden

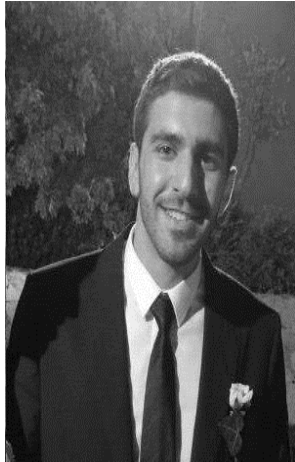
In Yellow: Public
beach (all nature
reserve regulations
and conditions apply)

Chain of Smart Bus Stops in Lebanon





Our team



Eng. Rodrigue HAIBI

Arch. Charbel EL HAJJ

Eng. Ralph EL HAJJ

BE. in Electrical Engineer

**Masters in Sustainable
Architecture**

**BE. in Civil and
Environmental Engineer**

NDU

**Polytechnic University of
Turin**

AUB

Lebanon

Italy

Lebanon



Main elements showing the importance of this project:



Organizing

the public transportation and realizing bus stops

Offering

more secured place by lighting up the bus stops all night

Integrating

the notion of sustainability in the urban Design

Giving

the opportunity for people to charge their phones for