

# WADI Western Asian Desert Institute

پردیس کشاورزی و منابع طبیعی دانشگاه تهران برگزار می کند:

استارتاپ پایان نامه برتر رادیو بیابان جایزه ملی بیابان

عکس سال بیابان کشور جشنواره فیلم کوتاه

منابع طبیعی در آیینه ادیان الهی مسابقه کتابخوانی

واحده، بخش فرهنگی، هنری و ادبی رویداد ملی بیابان

ماراتن علوم بیابان نشست مفاخر بیابان اتاق فکر بیابان



## پویش ملی بیابان

@DesertIran

آیین رونمایی:

۳۰ خرداد ۱۳۹۶، ساعت ۱۹

مکان: مرکز همایشهای پردیس کشاورزی  
و منابع طبیعی دانشگاه تهران

This is the general poster of National Campaign for Desert. All 12 sub-programs are illustrated here. These sections include: Strat-up, Top Thesis, Radio Desert, National Desert Award, Desert Photo of the Year, Short Film Festival, Religions and Natural Resources, Reading Contest, Cultural, Artistical and Literary Section, Scientific Exam of Desert, Thinking Room for Desert and Professors' Meeting.



When it is raining, pray for Desert

اگر یادتان بود و باران گرفت، دعایی برای بیابان کنید



National Campaign for Desert

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## National Campaign for Desert

### 1- Who we are?

We are a group of students from University of Tehran from different levels of study and from 5 different department. In our team we have students from agriculture, arts, engineering and management disciplines. We are dedicated to increase public awareness about desertification, land degradation and drought issues. Our green programs is admitted by University of Tehran and now we have volunteer members from University of Shahid Beheshti, Tarbiat Modares University, University of Environment, University of Shiraz, University of Semnan, University of Yazd, University of Kashan, University of Sistan And Baluchestan, University of Kurdistan, Ferdowsi University of Mashhad, University of Hormozgan and Isfahan University of Technology.

## 2- What we have done?

We have started our programs from 2014. During these years, we have organized different lectures, seminars, conferences, workshops, festivals and competitions, all toward to have a more environmentally friendly society. From May 2017, we have started a campaign with 12 sub-programs, specifically for desert. In this campaign. By this date, we have organized 5 of the programs: National Scientific Exam of Desert, Seminar on “Dust Management in 12<sup>th</sup> Government of Iran, Challenges and Solutions”, Seminar on “Religions and Natural Resources” and Meeting of Desert Professors and International Green Idea Contest for WDCD 2017. During three years we have done following events:

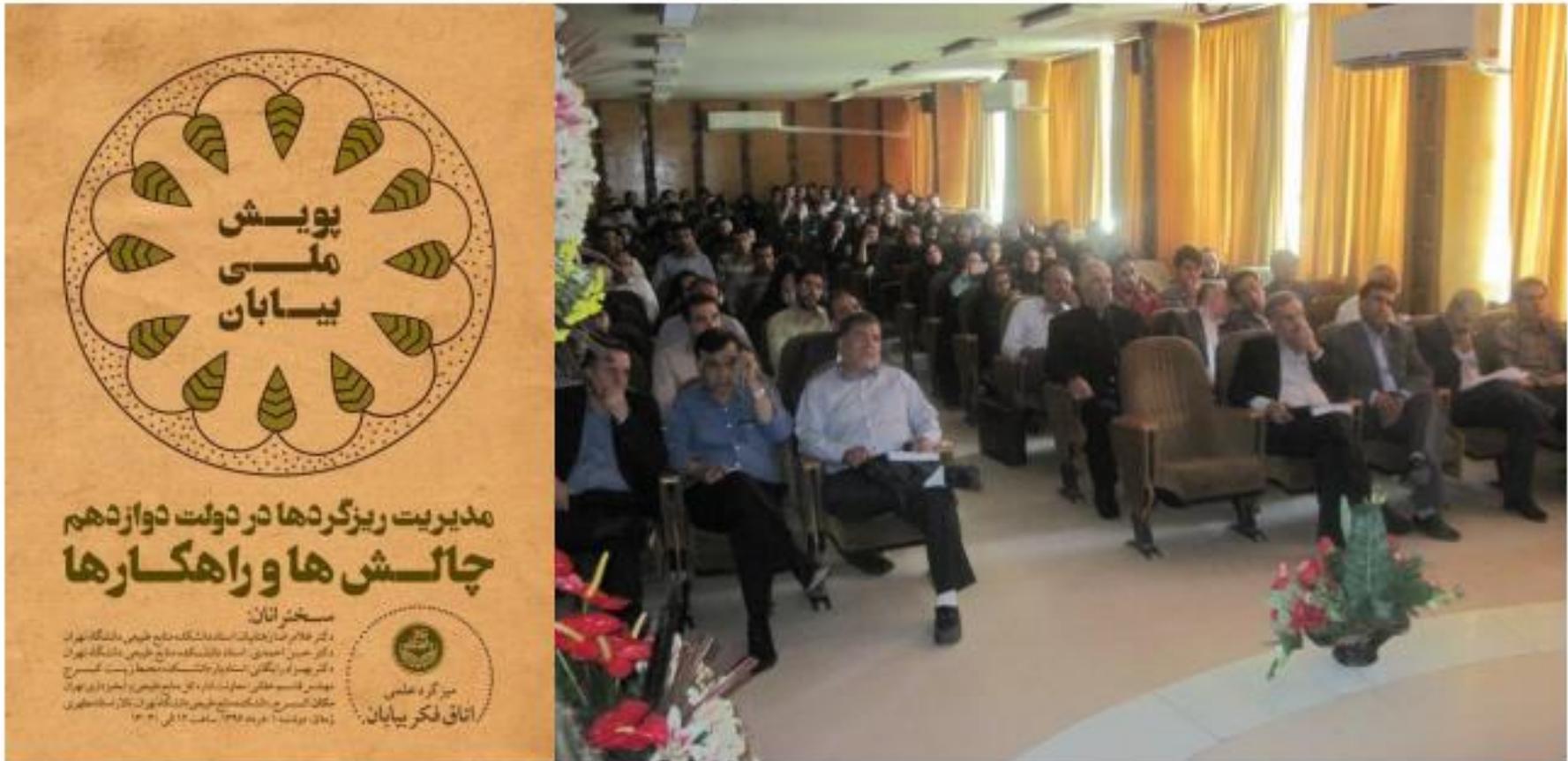
- Natural Resources Photo Contest 2014



- Natural Resources Photo Contest 2015
- Publishing a book entitled "Sand and Sand Dunes"
- Participation in National Exhibition of "Water, Soil and Environment Technologies"
- National Idea Contest for Environment Management in Iran
- National Meeting of Students' Club of Environment
- International Seminar on "Carbon Sequestration, Climate Change and Global Warming"
- International Seminar on "Grazing Management in Arid Regions"
- Seminar on "Research and Education in University of Cagliari"
- Lecture on Hydrology
- Green University Campaign
- International Seminar on "Climate Change in Vulnerable Regions"
- International Seminar on "Socio-Economic Assessment of Drought"
- National Green Earth Festival
- International Seminar on Desertification, Challenges and Opportunities
- Memorial Ceremony of Dr. Karim Saei, Founder of Natural Resources Sciences in Iran
- Movies Session: Water, The Element of Life
- Seminar on "Biologic Mulch, A Solution for Sand Dune Fixation and Dust Storm Control"
- International Seminar on "Novel Measuring Techniques for Environmental Monitoring"
- Seminar on "Research and Education in University of Rottenburg"
- Seminar on "Water Challenge in Iran"
- Workshop of SWMM Model
- Seminar on "Student and Their Role to Establish Green Universities"
- International Seminar on "Rangeland Management in Australia"
- Workshop for Derakhtkaran Green NGO
- Seminar on "Policies and Solutions of UNCCD"

## Seminar on “Dust Management in 12<sup>th</sup> Government of Iran, Challenges and Solutions

This seminar was held on 22 of May at University of Tehran. We had invited 4 experts from home university, University of Environment and FRWO Tehran. The topic was about dust control and management in newly established government of President Rouhani.



## National Scientific Exam of Desert:

This is a national test to measure the level of knowledge of students in field of desert. This is a test for students in the field of irrigation engineering, rehabilitation of arid and mountainous regions, environmental engineering, forest engineering and soil engineering. 40 questions of four alternatives in 4 studies, soli science, general ecology, meteorology and general hydrology, and 10 general information questions in the field of deserts are the subject of this test. The test was held on June 29<sup>th</sup>. 70 students from 10 different universities across the country have participated in the exam.



**جلسه باشگاه دانشجویان حامی محیط زیست**

این بار ۱۲

**پردیس کشاورزی و منابع طبیعی دانشگاه تهران**

محل: ۱۱ آبان، ساعت ۱۵

خانه فرهنگ (طبقه فوقانی) رستوران دانشگاهی

موضوع:

۴-۱۳۳: بررسی آمپروا، کرج، بهار شهید بهرمان

۴-۱۳۳: بررسی کرج، بهار شهید بهرمان

انجمن علمی دانشجویان احیا مناطق خشک و کوچه‌های دانشگاه تهران  
برگزار می‌نماید:

دستیار علمی

**زیب کربن در کنار دریا تا آن با تغییرات اقلیمی در کیش جهانی**

با سخنرانی استاد برجسته دانشگاه کوآپا

**Dr. M. Golabi**

دکتر استاد نظری، دانشگاه ساحل شرقی دانشگاه تهران

موضوع: ۱۱ مرداد ۱۳۹۲  
ساعت: ۱۰-۱۲

انجمن فرهنگی ایران و گروه احیا مناطق خشک و کوچه‌های با همکاری انجمن علمی دانشجویان احیا مناطق خشک و کوچه‌های دانشگاه تهران برگزار می‌نماید:

دستیار علمی

**میریت برای دام در مراتع خشک**

با سخنرانی استاد برجسته دانشگاه آلاباما آمریکا

**Prof. Victor Squires**

دکتر استاد نظری، دانشگاه ساحل شرقی دانشگاه تهران

موضوع: ۱۲ شهریور ۱۳۹۲  
ساعت: ۱۰-۱۲

انجمن علمی دانشجویان احیا مناطق خشک و کوچه‌های دانشگاه تهران  
برگزار می‌نماید:

دانشکده آبی، علمی

**Prof. Gianluigi Bacchetta**

استاد دانشگاه آلبانی

**جنگل روزانه از خشکسالی**

موضوع: ۱۱ بهمن  
ساعت: ۱۰-۱۲  
مکان: استاد نظری  
دانشگاه منابع طبیعی

آموزش و پژوهش در دانشگاه کشاورزی آلبانی

**International Seminar on Desertification**

**Challenges and Opportunities**

23-24 February 2019  
Kang, Iran

Provinc. Association  
Department of Soil  
and Watershed  
Engineering

۱۷ آبان، روز جهانی  
بیابان گردانج برایم باد

Land Belongs to the future

Let's Climate Proof It!

آب در آب سردیم، سردیم سردیم آب سردیم  
مثل مگس از میوه مثل مگس از کبوتر

انجمن علمی دانشجویان احیا مناطق خشک و کوچه‌های دانشگاه تهران برگزار می‌نماید:

موضوع آبی علمی

"Climate Challenges in Vulnerable Regions: Insights from Case Studies in Afghanistan and West Africa"

Dr. Yabeta Aeb

Global Climate Observation System (GCOS)  
World Meteorological Organization (WMO)

گروه: دکتر استاد نظری، استاد محو اقلیم، دانشکده کشاورزی و منابع طبیعی دانشگاه تهران

موضوع: ۱۱ آبان ۱۳۹۲

موضوع آبی علمی

**بحران آب ایران**  
روشهای نوین مدیریت

دکتر محو اقلیم  
دانشگاه Isfahan College of Sciences

**Dr. Yabeta Aeb**

موضوع: ۱۱ آبان ۱۳۹۲  
مکان: استاد نظری، دانشگاه منابع طبیعی

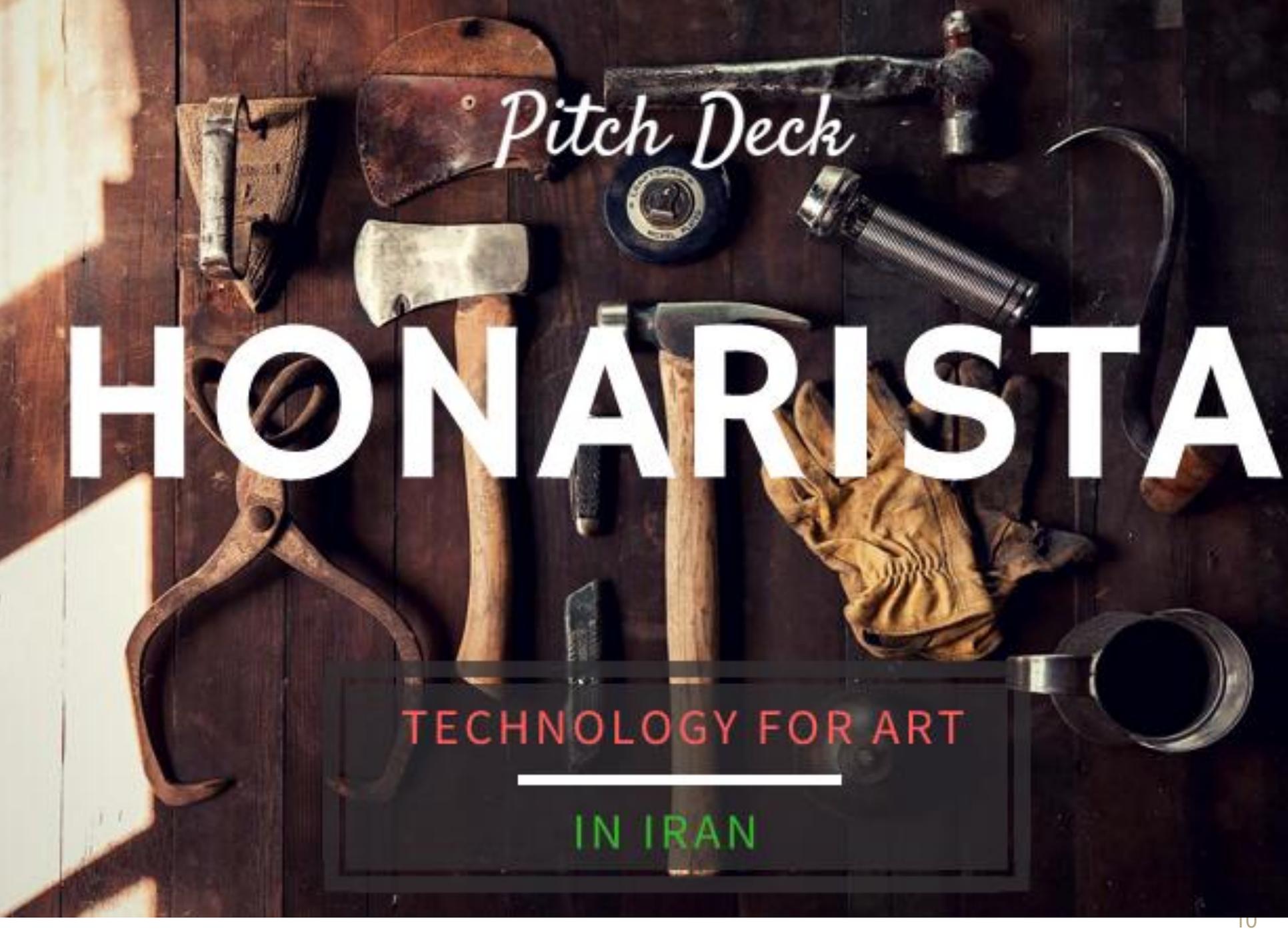
## Meeting of Desert Professors

In this meeting, we have invited 5 most experienced professor in the field of desert studies. During the meeting they discussed about the lesson they have learnt during these years, challenges and opportunities in this field.



## **International Green Idea Contest for WDCD 2017**

Green Idea Contest for World Day to Combat Desertification 2017 which is a part of National Desert Campaign of Iran. This is a green student-run project devoted to the global earth challenges such as desertification, climate change, land degradation, deforestation, biodiversity loss, water scarcity and ... . This contest has addressed all student around the world regardless to field of study, nationality and age. In order to apply for the contest, applicant must fill the form and write a short essay (no word limit is applied) about her/his ideas and solutions for desertification, dust storm, land degradation and water scarcity. Also if she/he has no idea or solution, she/he should kindly write a short essay about experiences of her/his country in the mentioned environmental challenges.



*Pitch Deck*

# HONARISTA

TECHNOLOGY FOR ART

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IN IRAN

# intro

HONAR+IST+A

OR

(ART)+ IST + (S)

"Honar" means art in Persian, "ist" is the noun suffix in English and "a" is an informal suffix in Persian turning nouns into plural form. Together they form Honarista which defamiliarizes the word "artists" in the Iranian mind but has the same meaning.

Honarista aims to be the leading space for handmade and fine arts in Iran. This type of multi-vendor market is new to Iran and only this year few similar experiences have started to clone international models with almost no change in implementing the borrowed idea.

With an experienced team, and effective analysis of the market plus our unique ideas we are optimistic to reach the top.

# 2016

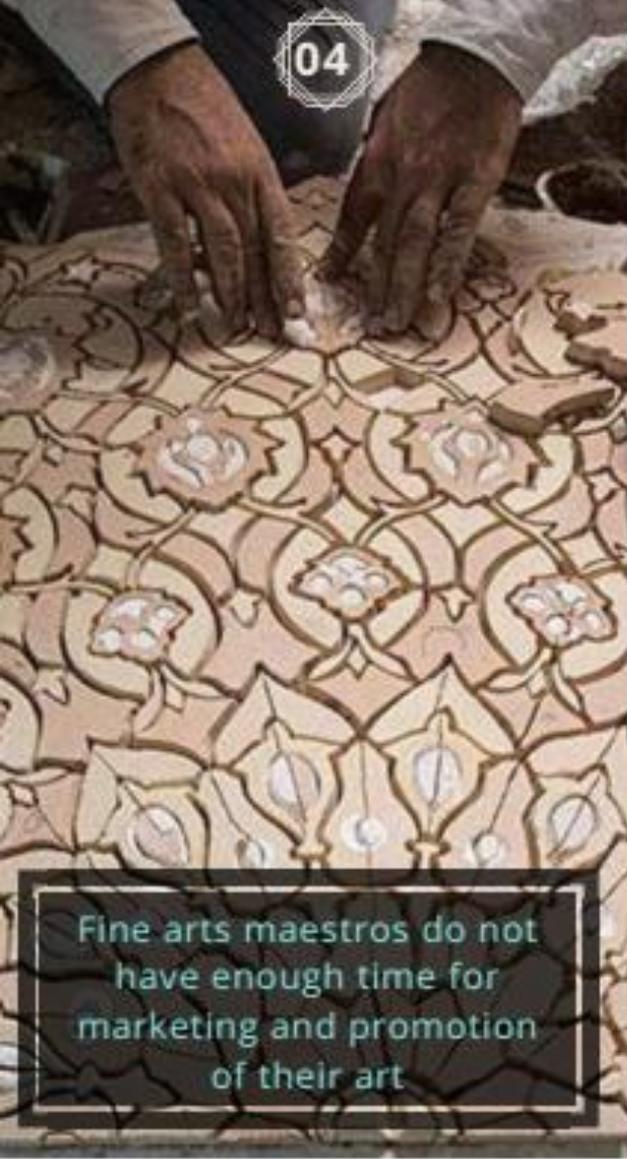
## A TURNING POINT IN IRAN'S WORLD OF HANDICRAFTS

BY HONARISTA

Iran is the heaven of handicrafts but has not yet benefited appropriately from this heritage of its culture.

Iran is capable of taking a much bigger percentage of global and local sales. Currently Iran is ranked 3rd in world handicraft production but remains in an unacceptable ranking when it comes to selling them. We are trying to help Iranians take what they deserve.





04

Fine arts maestros do not have enough time for marketing and promotion of their art



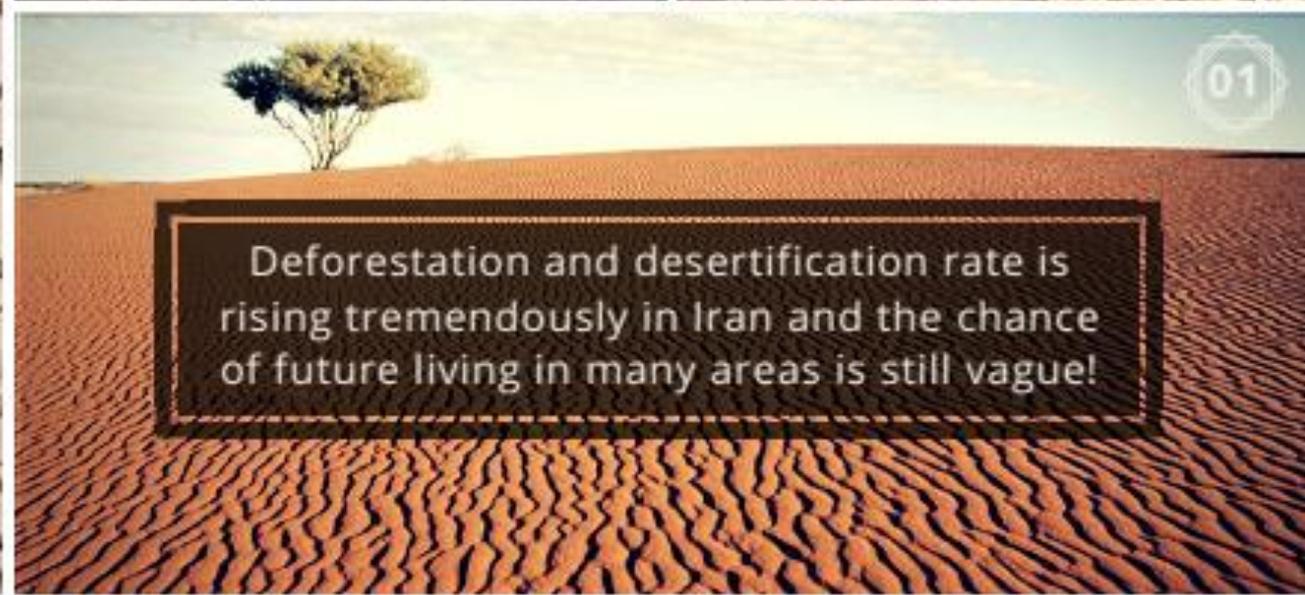
03

Nearly all the people in Iran use conventional methods of buying handmade products which causes many problem



02

Artists of Iran have no access to any efficient online selling platforms and use conventional methods of selling products.



01

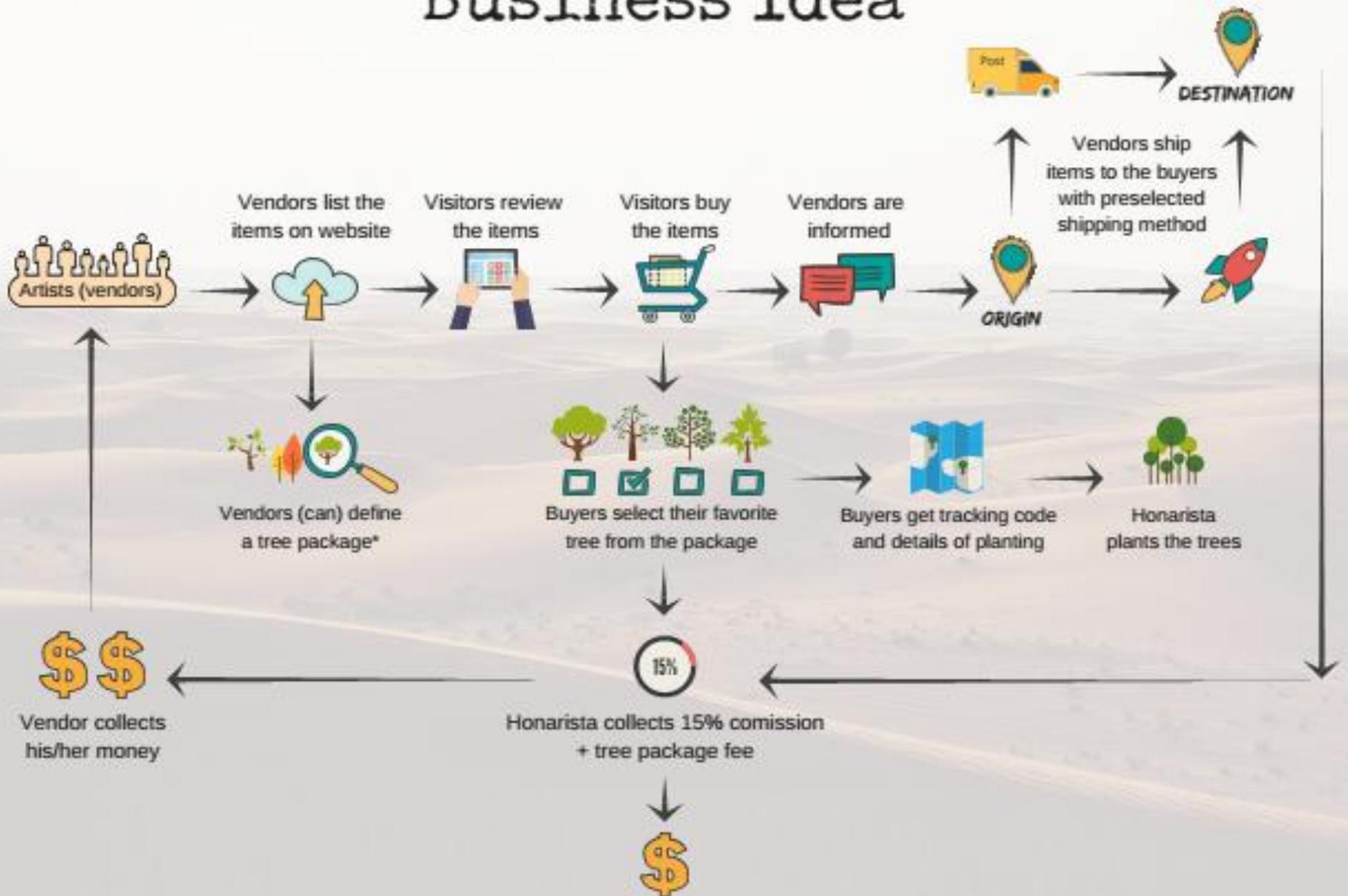
Deforestation and desertification rate is rising tremendously in Iran and the chance of future living in many areas is still vague!

# THE PAINS WE ARE TRYING TO RELIEVE

Let's see how they are all being solved together



# Business Idea



# REVENUE MODEL

## Primary Channel

### Transaction Fee

15% of items' listed price is collected by Honarista after the items are sold. For items above 1000\$, Honarista collects 50\$ + 5% of listed price

## Side Channels

### Tree planting Profit

The Green Purchase idea turns to be profitable when it is scaled in time

### Item Addition Fee

The first 50 items are free of charge. After that, Honarista charges 150 cents for each

### Featured Items/Vendors

Based on details of promotion packages, Honarista receives marketing costs from vendors

### Hall of Fame Sales

Hall of Fame members have private and personalized contracts with Honarista

Our goal is to make everyone happy, we make profit almost when our users make profit!

# Some facts about size and validity of this market

## Market Analysis

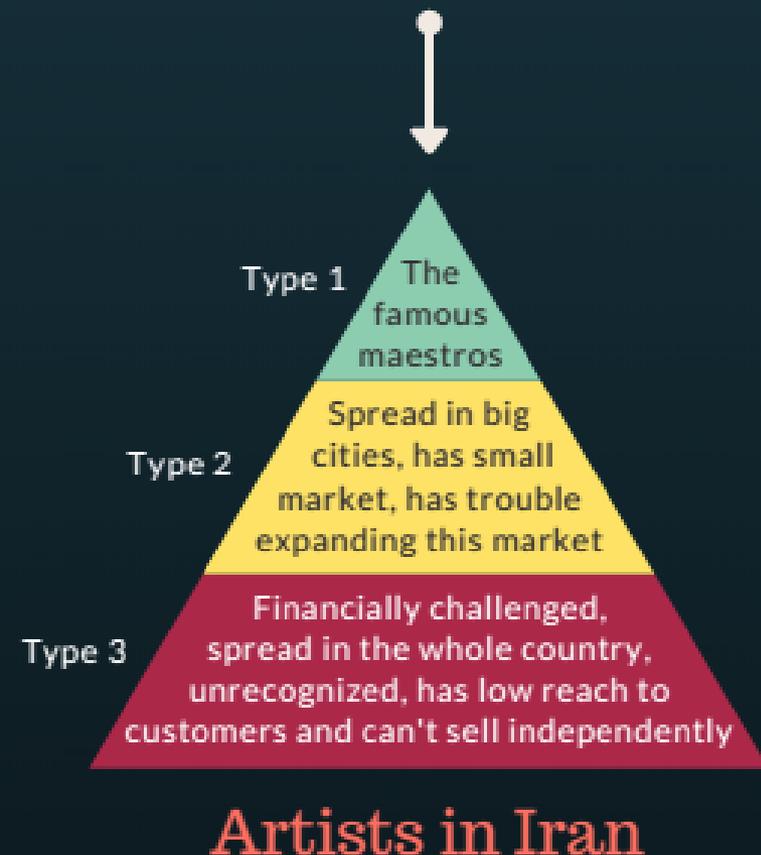
### Size

- Iran ranks third in world handicrafts
- There are 424,000 registered handicraft artists in Iran. (unregistered ones are estimated to be twice this number at least)
- 370 different fields in handmade arts have been recognized in Iran (out of worlds 405 fields)

### Validity

- Iran allocates \$1.4b for creating jobs in tourism, handicraft industry
- About 200 million rials (about \$5,500) is needed for creating a single job in the field of handicraft in Iran. Honarista makes it between 0-1000\$
- Iran's handicrafts sales in 2015 displayed a 400% raise compared to 2012

We will cover all 3 types of Iranian artists but we have a focus on empowering Type 3 (most in need of help)





THEY PLANT A TREE  
WHEN THEY BUY AN  
ARTWORK, ISN'T IT  
AWESOME?

# THE GREEN PURCHASE

## WHY USING AN IRANIAN PLATFORM

- International transactions are banned because of sanctions (Paypal, ...)
- Language problem for Iranians
- Shipping problems
- Big marketplaces like Etsy have banned Iranian IPs

## WHY USING HONARISTA AMONG OTHERS

- The green purchase/sale\*
- Lists fine arts as well (Hall of Fame)
- Management tools and statistics
- Professional blog and education team
- 1-to-1 support

## Ladan Pourvatan

Co-founder & Developer

Ladan, aka Queen of the Codes, is a full-stack developer responsible for majority of the technical part in Honarista. After 4 years of knowing each other, I am well aware of her capabilities and teamwork skills. She is going to be a Reykjavik University alumna by the end of next semester and has planned to return Iran FOR HONARISTA.



## Ermia Saharkhiz

Co-founder & CEO

For the past 5 years, I have been trying to develop my leadership and teamwork skills in various team-oriented atmospheres. Currently being the president of University of Tehran's Student Associations, I have the chance of working with the network of +190 presidents and +1300 members in different fields to grow the biggest and most dynamic community of the university.



## Ali Hamidian

R&D + Green Concept Director

A PhD student with huge research and work experience in the fields of natural resources specially deserts, forests and water issues.



## Hosna Falsafi

Customer Success Manager

Hosna is the symbol of commitment with excellent communication skills, I have had a 1-year work experience with her in AIESEC.



## Alireza Nazemzadeh

Social Media and Blog Director

With a brilliant background in writing for famous blogs, Alireza will soon be managing our social media and blog.



# The Competition

Since 2016!



 BAZARTCHE.IR



 PARVANEART.COM



 ARTZY.IR

## Cons

- High Possibility of fraud
- No sales management tools
- Lack of quality assurance on items (monitoring)
- Scattered services (users can also add events as items like concert, performance etc.)
- Located in Isfahan (not a start-up-type of city)
- No revenue model at all

## Pros

- Working on both web and mobile application
- Attractive for being totally free

## Cons

- Buyer lists an order instead of purchasing
- Vendor can cancel the order at any time (there is no trust)
- No transparent business or revenue model
- Improper categorization of products
- Late arrival of product (at least 2-3 days)

## Pros

- First to come in this market (however still new)
- Simple and minimalistic

## Cons

- Buyer lists an order instead of purchasing
- Vendor can cancel the order at any time (there is no trust)
- A meaningless brand to the Iranian mind
- Cloned Etsy with almost no innovation
- Late arrival of product (at least 2-3 days)

## Pros

- Has revenue model (15% closing fee)
- Offers its own shipping service in Tehran

Let's see how we are going to compete with them



# Honarista

## Competitive Advantages

### Angel Badge

Artworks of physically or mentally challenged persons can be verified to get an Angel Badge by their representative's request

### Ease of Use

We have a special look on user-friendliness of our platforms. We want to have all types of artists, even those escaping from technology!

### Hall of Fame

Honarista recognizes creators of masterpieces and offers special marketing services to them so they focus on the creative process of their art

### The Green Purchase

Buyers plant a tree when they buy an artwork. They get a tracking code on checkout page and Honarista plants the tree ASAP.

### Subdomains

Each shop can have a subdomain of Honarista (example.honarista.com) This helps them promote their shop in social media and other places

### Our Network

We are proud that we have a wide network around us in Honarista. Honarista is the offspring of student associations of UT, where +190 associations of different fields are inter-connected.

### Science & Technology Park

Honarista is in the process of joining University of Tehran's Science and Technology Park. This gives so many advantages including tax-free business.



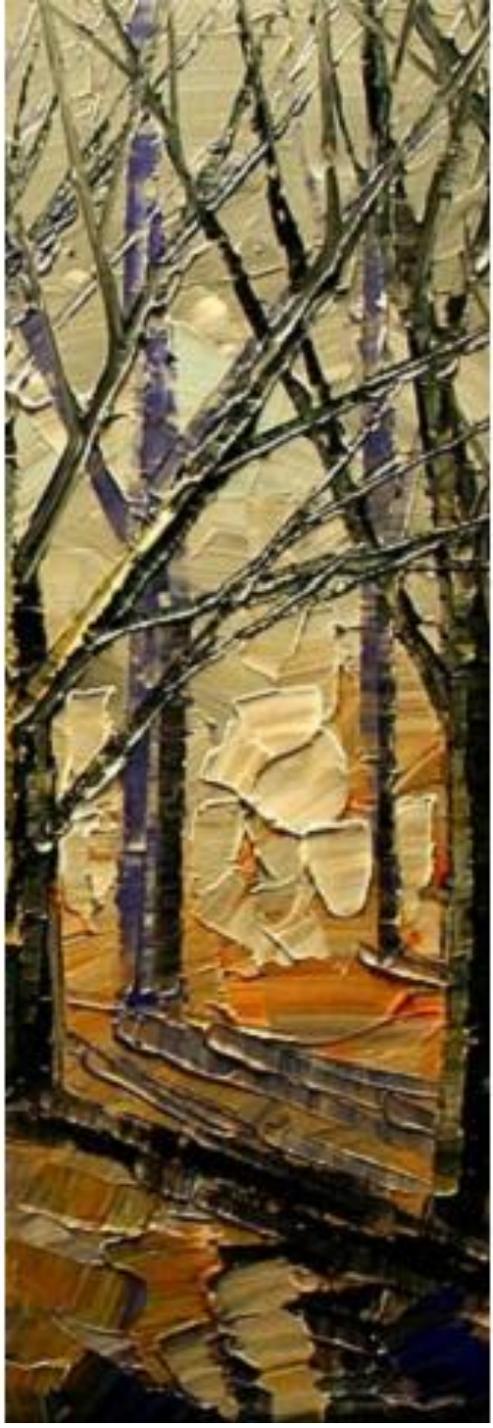
# We believe in what we do!

It may sound unrealistic or  
unprofessional for start-up experts to  
see us solving too big of a problem or  
two totally different problems

but

We are reasonably optimistic that this  
common dream will come true with the  
skills, experiences and networks of our  
team members.

[www.honarista.com](http://www.honarista.com)



# **Biological Mulch to Stabilize Shifting Sands, Principles and Practices**



In recent decades, population growth procedure, limitation of resources (water and soil) and humans' irregular exploitation of these resources has fluctuated the ecologic balance of the nature.

Destructive floods, severe erosion in upper lands and plains, desertification, dusts storm and rural-urban migrations are the most important problems caused by fluctuation of ecologic balance of the environment, which all are the result of not being attentive about natural resources tasks.



One of the today's world concerns is the matter of desertification and dusts storm. 35% of the total area is in arid region, which is habitat of 17% of the world population. Therefore, wind erosion is a challenge in a global scale.

Iran is located in desert belt and more than half of the country area is in arid and semi arid areas.



**This is necessary to combat desertification, because of effects on:**

- ✓ industry section**
- ✓ Roads**
- ✓ Cultivated lands**
- ✓ Air pollution**
- ✓ villages and cities**

**Iran organization of Forests, Rangelands and Watershed Management (FRWM) had been started to identify and classify the critical areas of wind erosion.**



Regarding to FRWM project 179 regions are vulnerable to wind erosion in 18 different provinces. 80% of which is detachment, 9.4% is in transport phase and the other is in sedimentation step.

Based on the FRWM project in Iran there is 5 million hectares of sand dunes. To control this large area, FRWM has started several activities such as planting, seeding, applying mulches and so on.

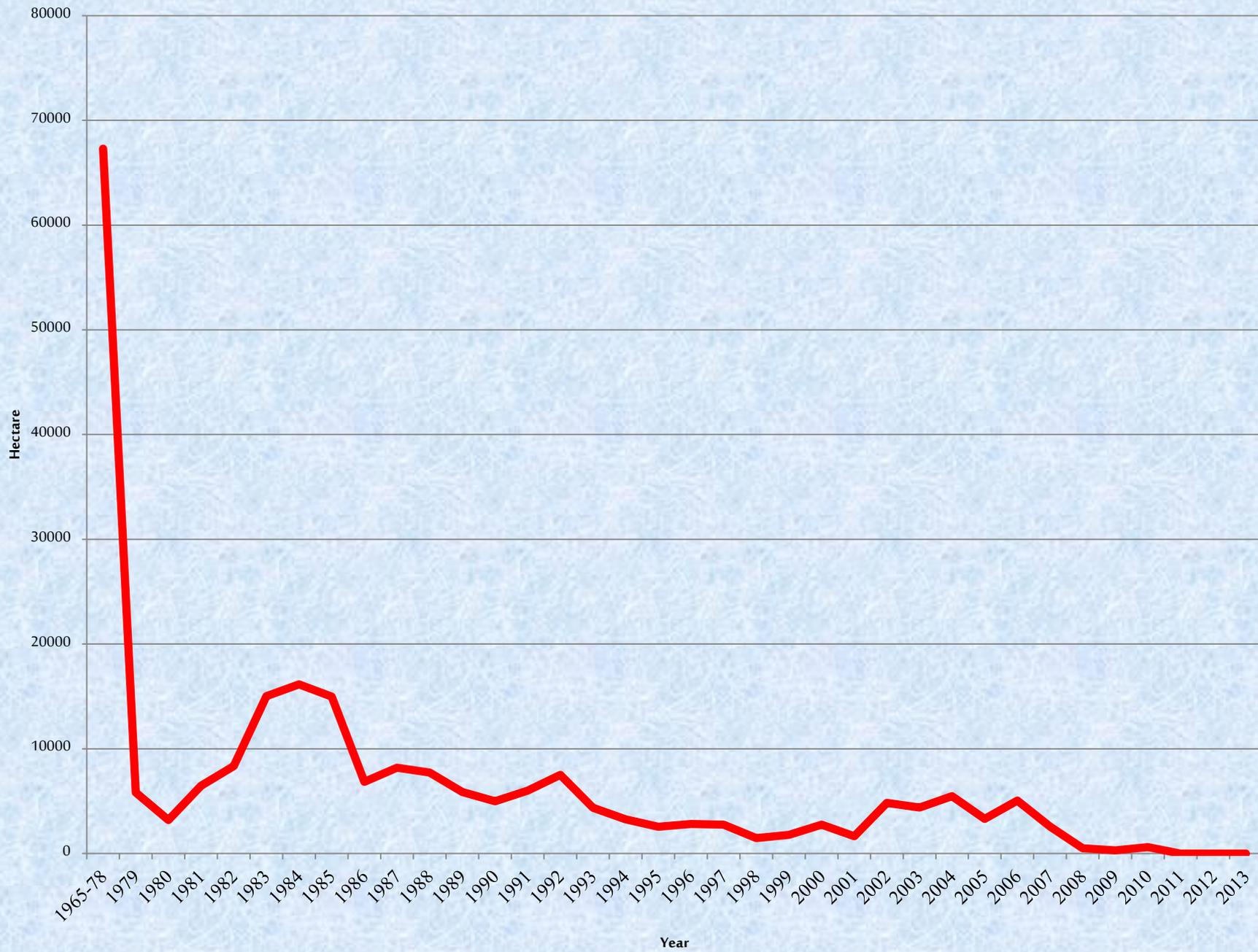


**Unfortunately, despite the efforts that have been done in this direction, the problem of desert developing and dusts is getting worse in most of the areas in the world. More than one hundred and seventy countries of the world, following their need to find new solutions, joined the United Nations Convention to Combating Desertification (UNCCD) in March 2002. The objective of concluding this convention is to improve of the effective attempts through innovative local plans as well as international supportive cooperation.**



In some areas, that erosion is so intense and nature make biologic practices impossible, mulching is used to stabilizing moving sands and controlling dusts. Mulching will cause stabilization of soil which in part allows plants to grow and establish in extreme condition of desert.

The first attempts in this case had been done in Russia in 1890 for Asian Railway. In Iran it was started in 1968.





With the progress of technology and increased use of petroleum products, today, petroleum mulch is not considered a waste compound any more; therefore, using it for stabilization process has come under question. On the other hand environmental problems caused by petroleum mulching had made it necessary to use more practical and cheaper compounds and methods.



Reviewing the consumption of alternative materials for controlling wind erosion and dusts is necessary considering the problems of the country caused by wind erosion and dusts and increase in this phenomenon in recent years as well as raise in petroleum mulching cost and environmental problems resulted by consumption of material.



In this direction, the present paper has taken place with the aim of reviewing the efficiency in stabilizing moving sands and controlling dusts in the Faculty of Natural Resources of University of Tehran. Recently produces material could be tested for this purpose. Therefore, we are evaluating the efficiency of some materials.

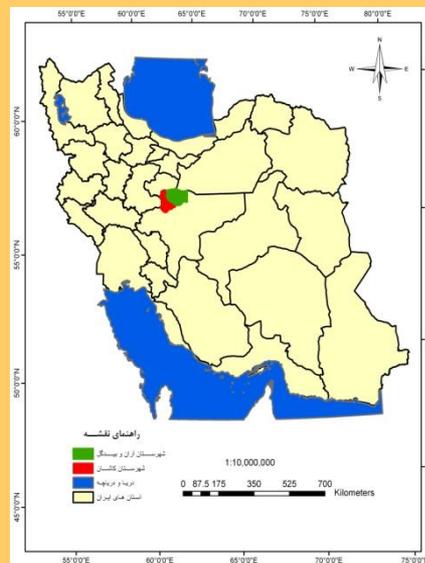
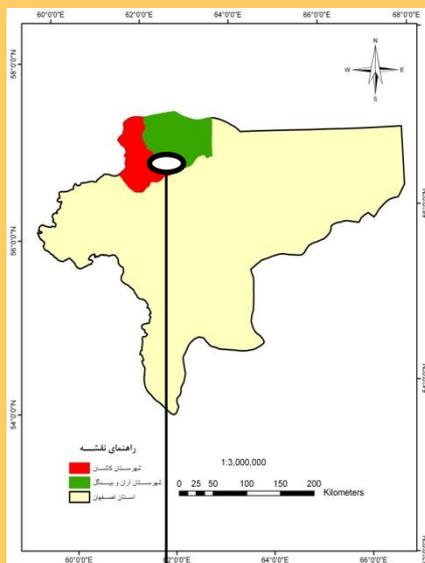
### Objective:

Presenting the results of the field study of the new materials named biological mulch.



## Materials and Methods







Investigation of Mulch performance to decrease wind erosion and fixing sand dunes:

In this step the selected mulch was sprayed on three barchans and also three other barchans as control. Area of each of the dune is approximately 1500 sm.



The spraying system combined tractor, tank and pump.





Chemical analysis showed this material consists of Calcium Chloride (30%), Magnesium Chloride (15%) , Sodium Chloride, Potassium Chloride (5 %) and water (50%). pH was between 5 and 6.



Fixing the wind erosion indexes on different parts



Planting *Haloxylon persicum*



Preparing process of mulch



Spraying



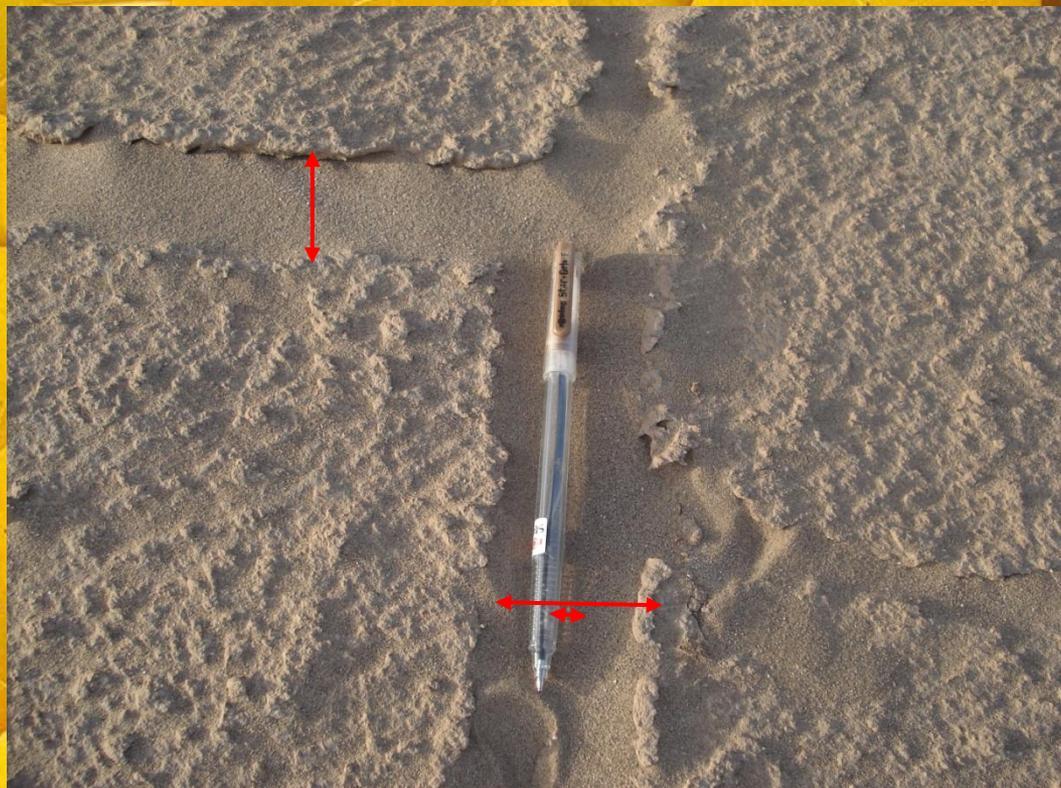
# Results



Micro cracks after 30 days

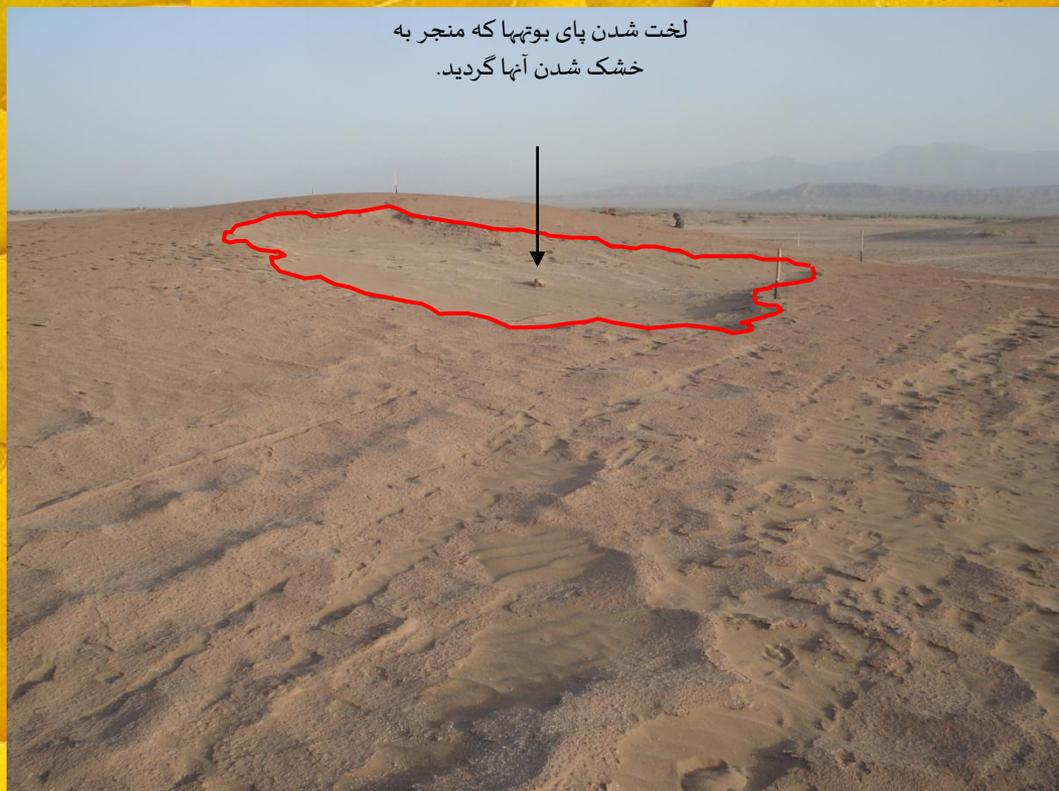


Macro cracks after 60 days



Macro cracks after 3 month

لخت شدن پای بوته‌ها که منجر به  
خشک شدن آنها گردید.



Erosive spots after 3 month



Erosive spot after 4 month



Erosive spot and degraded crust



سطح اوليه سله



Completely extinction of mulch after 5 month



This is **concluded** that the applied mulch is very strong at the beginning and can create a resistance covering by means of holding together the particles of sand dune but during the time, because of hard condition of desert such as extremely heat and coldness, daily temperature difference, UV, erosive winds and catastrophic raining, the mulch is going to be degraded by time.



Totally, after 3 month, intensity of degradation is accelerated, after 5 month, 70% of mulch is extinct. The process of degradation started with creation of micro cracks, which will be extended to a macro one by time. Then, wind will be canalize through the cracks and results in creation of erosive spots. The spots will joint together and make larger spots during the time.



This is recommended to produce more resistant mulches and also use mulch in more dozes in the field. We modified the mentioned mulch and now we are testing it in Iran and the results are coming soon!



Thank You for Your Attention and Patience

