



# The future of Bourzakan Qashqai

Transition to sustainable medicinal plant cultivation in Bourzakan region



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- Advice and recommendations

## **Background Information**

- Qashqai settled down
- Early agricultural activities successful
- Recent activities challenged due to climate change



# Project problem

Broad: Landscape degradation in the Fars province

Specific: Decline in agricultural performance by the Qashqai tribe due to constant droughts in the Bourzakan region

#### Aim

- Improve the livelihood
- Minimize environmental impact of the Qashqai people in Bourzakan
   by introducing sustainable medicinal plant cultivation



## Main research question

What agricultural and business strategies are needed to create a local sustainable medicinal plant producing business, with the aim of both securing the livelihoods of the Qashqai and protecting the local natural environment?

#### Methods

Selection of medicinal plants

Selection of cultivation methods

Processing possibilities

Long-term business ideas



## Selection of medicinal plants

Literature research and experts opinion:

- Environmental situation
- Selection criteria

## Selection of medicinal plants

#### The plant should ...

- be present in the specific area;
- grow in the specific environmental conditions;
- be able to cope with climate change;
- be known by the Qashqai people of Bourzakan;
- have medicinal properties;
- have a demand on local and regional markets.

#### Selection of cultivation methods

Literature research and experts opinion:

- Landscape morphology
- Plant categorization
- Soil quality improvement
- Spatial planning

## Processing possibilities and Business ideas

Literature research and field trip to an Iranian shop:

- Processing methods to create secondary products
- Feasibility for long-term business ideas

#### Results

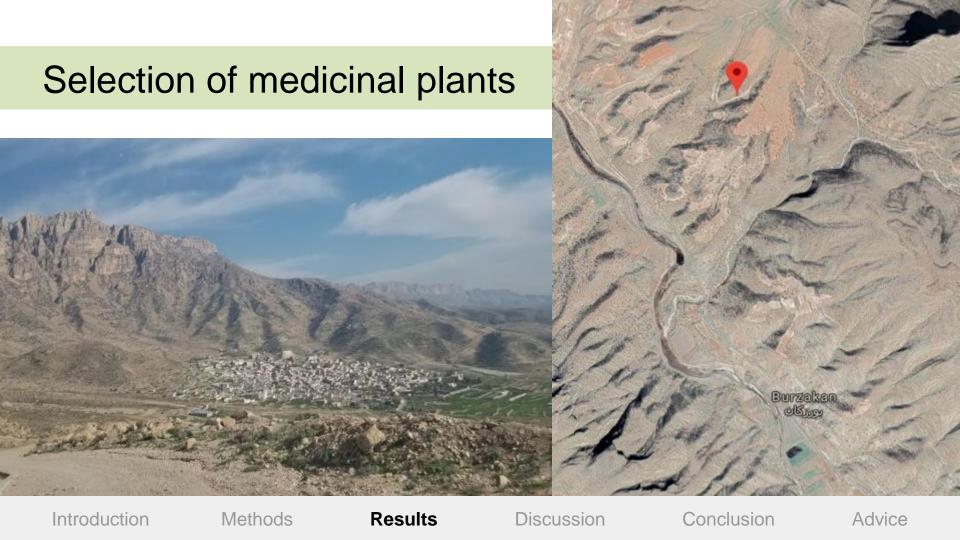
Selection of medicinal plants

Selection of cultivation methods

Processing possibilities

Long-term business ideas





## Selection of medicinal plants



Qashqai tribe:
List including Persian
names and pictures
Familiarity

Shop-owner:
Products
Insights



#### Selection of medicinal plants

Final list: 19 medicinal plants

Herbs	Shrubs	Trees
Crocus sativus	Alhagi maurorum	Amygdalus communis
Glycyrrhiza glabra	Myrtus communis	Ficus carica
Medicago sativa	Rhus Coriaria	Olea europaea
Melilotus officinalis	Vitex negundo	Punica granatum
Nigella sativa	Vitis vinifera	
Origanum vulgare		
Papaver rhoeas		
Peganum harmala		
Rumex acetosa		
Trigonella foenum gracum		



## Cultivation methods



Agroforestry



Manure application



Natural hedging



Compost



Herb cropping

Introduction

Methods

Results

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Conclusion Advice

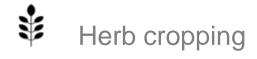
# Spatial planning

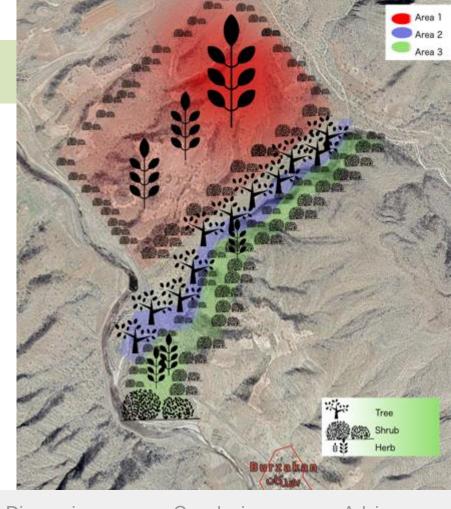
Cultivation areas northwest of Iran

Advice on placement of plants









# Processing possibilities

5	Common myrtle,	Essential Oil	Leaves, Flowers
	مورد	Syrup	Fruit
	(Myrtus communis)	Jam	Fruit
6	Common poppy خشخاش زراعی (Papaver rhoeas)	Powder Oil	Seeds Seeds

11	Oregano,	Essential Oil	Leaves
	مرزنگوش	Tea	Whole plant
	(Origanum vulgare)	Spice	Leaves
12	Pomegranate, انار (Punica granatum)	Fresh and dried fruit Juice Jam Essential oil	Fruits Fruits Fruits Seeds, Bark

Dried Foods

Tea

Jam

Essential oil

Herbal water

Honey

Introduction

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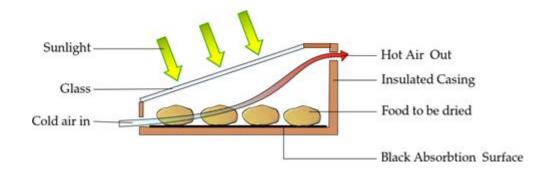
Advice

#### **Dried Foods**

- Open sun drying
- Solar drying

Tea

Jam

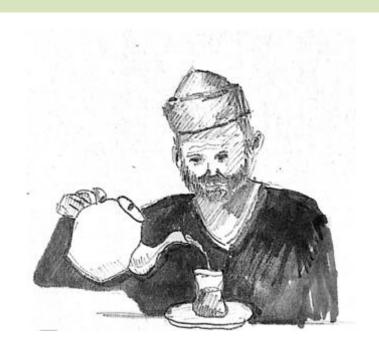


#### **Dried Foods**

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- Open sun drying
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Tea

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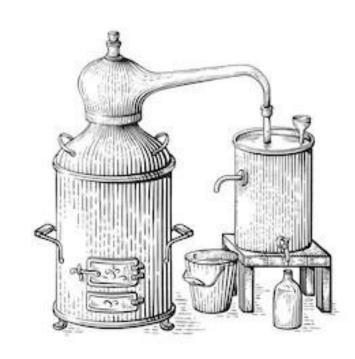


#### **Essential oil**

- Steam distillation
- Water distillation

Herbal water

Honey



#### Essential oil

- Steam distillation
- Water distillation

#### **Herbal** water

Honey



#### Essential oil

- Steam distillation
- Water distillation

Herbal water

Honey



#### Discussion



#### Strengths

- Multi-disciplinary background
- Expert opinions
- Bottom-up approach







#### Limitations

- Scientific knowledge and measurements
- Local insights
- Time
- Distance

"Seems so close, yet so Fars, that's why I ran."

#### Conclusion

Our consultancy report suggests multiple possibilities regarding suitable medicinal plants, cultivation methods and processing methods to combine the ideals of NGO Simba and of the Qashqai people of Bourzakan for harmony and prosperity between nature and mankind.

#### Advice

- 1. Deepen scientific knowledge
- 2. Gain more local insights into the practical feasibility
- 3. We provide a **roadmap** showing necessary future steps

#### Roadmap

**Step 1:** Obtain information on the soil in the specific area.

Step 2: Choose medicinal plants for cultivation.

Step 3: Choose area for medicinal plant cultivation.

**Step 4:** Determine the spatial planning of the medicinal plant cultivation.

**Step 5:** Looking for subsidy and support from the government.

Step 6: Obtain the required resources for plant cultivation.

Step 7: Planting, further treatment and harvesting.

**Step 8:** Deepen knowledge of suitable processing methods.

**Step 9:** Sell the secondary products on local markets.

Step 10: Reflection.



## Thank you for your attention

And best of luck, NGO Simba, and Bourzakan!



Drawings by Michel Hamakers. Insta: @michel\_dessiner

