IV.
FABRICATING OMAN

ETH Studio Basel
Contemporary City Institute
Leon Faust, Benedikt Zweifel

Prof. Roger Diener, Prof. Marcel Meili
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Spring Semester 2013

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PRODUCTION, CONSTRUCTION, DISTRIBUTION

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– Introduction –

GOVERNMENTAL WELFARE

In the last 40 years, since Sultan Qaboos bin Said Al Said overtook from his father, the Sultanate of Oman developed rapidly. The success to bring the country out of a condition of backwardness and isolation into a safe and prosperous modern state is unique.

1982 Near Nizwa

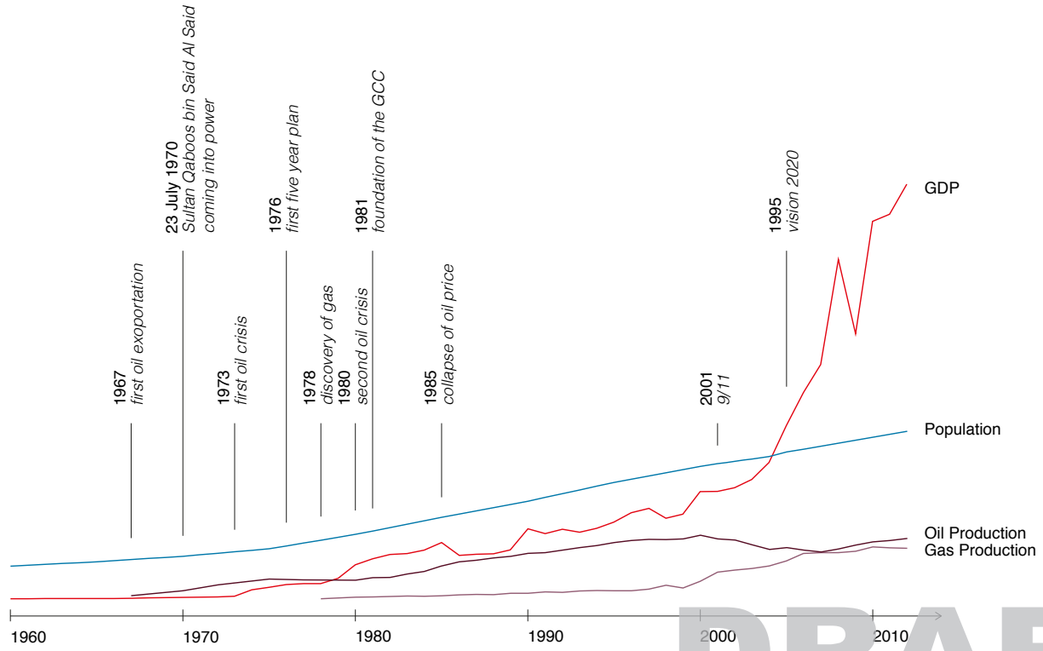
40 Years of Progress

In the following it is explained briefly what made that progress possible, what the results of this enormous development are and whrere the future concerns porbably are emerging.

2013 Muscat Expressway

Sultan Qaboos bin Said Al Said

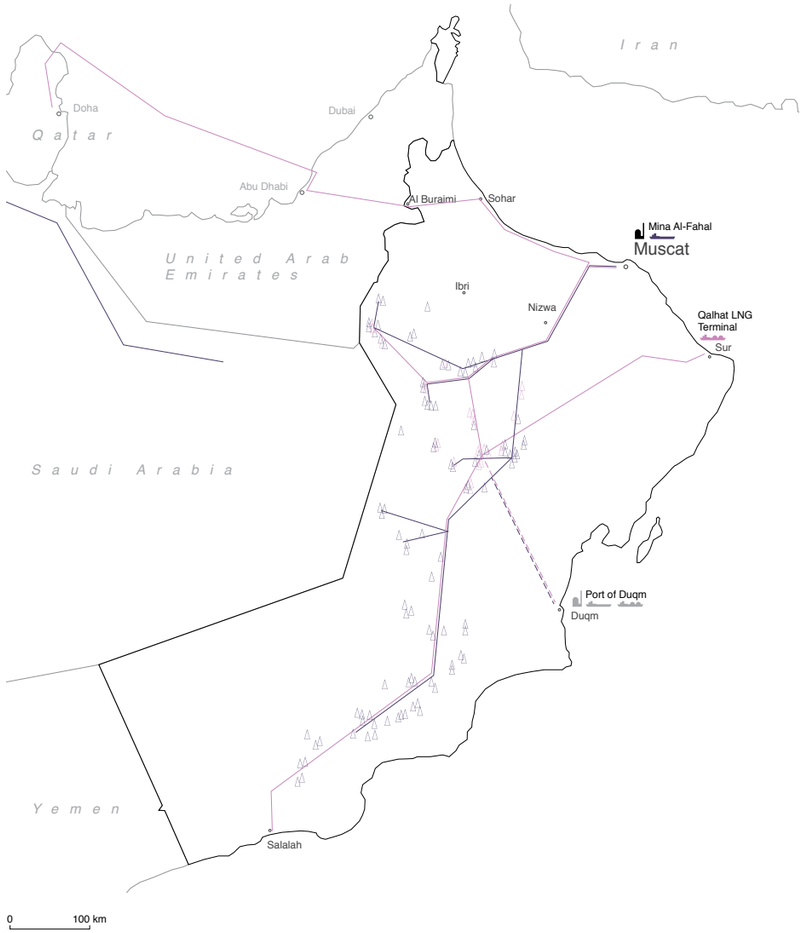
Sultan Qaboos bin Said Al Said accceded to the throne on 23 July 1970. His main aims were ending the country's isolation and using its oil revenue for modernization and development. Trough the so called Five Year Plans he implemented remarkable economical reforms which turned the Sultanate of Oman within 40 years from a developing country into a prospering welfare state.



Policy and Economy

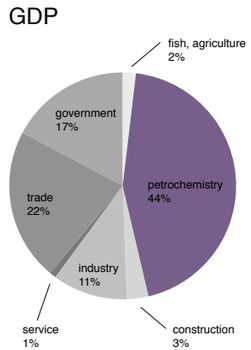
Oil and Gas

The oil and gas industry is Oman's most important sector. Almost half of the economical power relies on the petrochemical industry. As the resources are finite the main aim is to diversify and fund the economy on more sustainable sectors

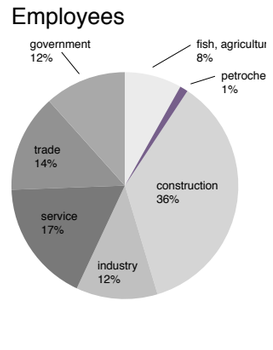


Oil and Gas Infrastructure

The oil and gas deposits are locatet in the inland of Oman. Pipelines transport the crude oil and gas to the harbours, weher it gets refined and exported. Currently they are consructing a new oil and gas terminal near Duqm, with the aim to relocate the industry away from the capital



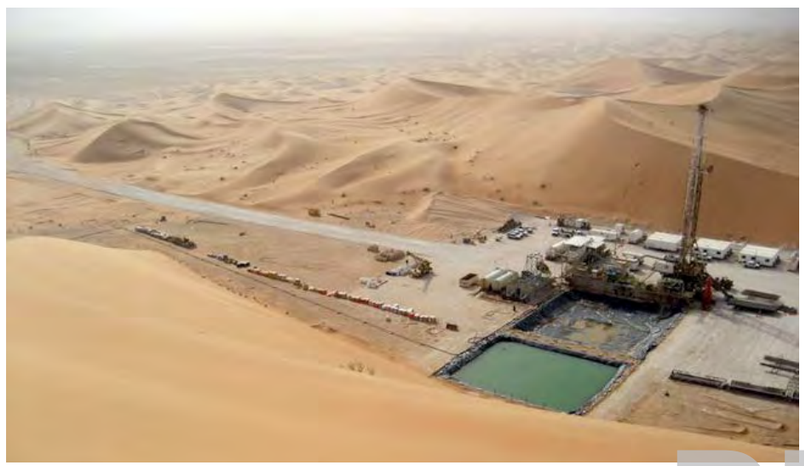
23.4 Billion USD GDP



1.2 Million Employees

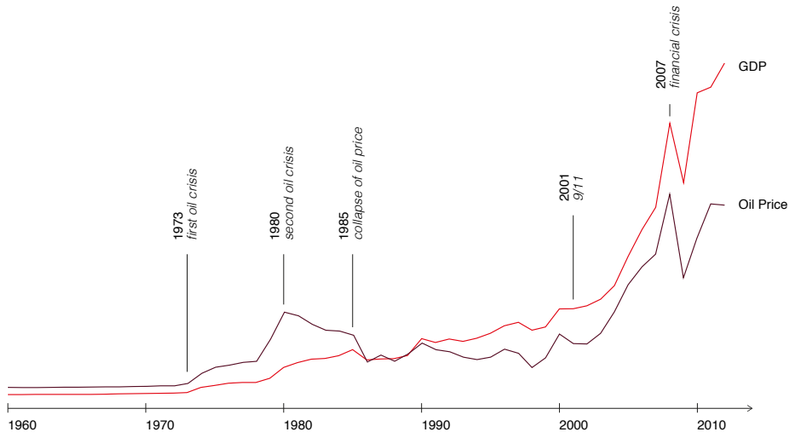
Economic Power versus Work Force

Almost half of the GDP is beeing generated in the petrochemical sector. But only 1% of Oman's workforce is there employeed.



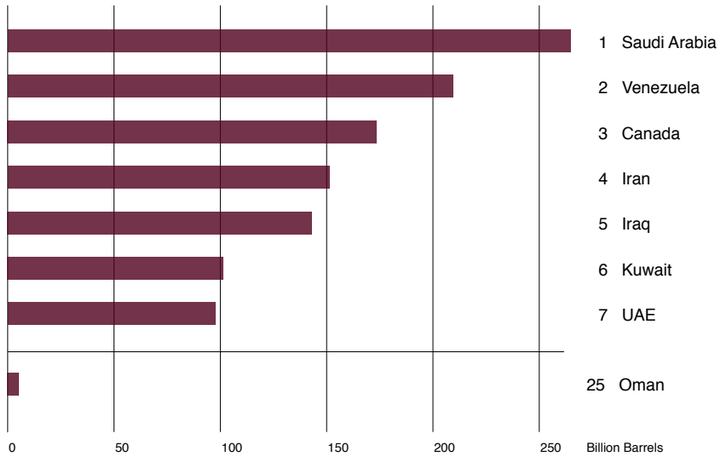
Safah Oilfield

One of the biggest oilfields in Oman.



Dependency on Global Economy

As the economy of Oman depends mainly on the oil and gas, its GDP runs almost parallel to the oil price.



Oil Reserves for 15 Years

Oman's oil reserves will last at least for 15 years, but due to the geology the exploration becomes always more difficult and therefore the costs increase.

PDO

Petroleum Development Oman
about 9000 employees
wealth distribution
60% Oman, 40% Shell
is responsible for exploration and production
hires subcontractors. (often LCC)

Wealth Division

LCC
LCC Local community contractor
Bedu get shares (genossenschaftsmodell)
history: were mostly uneducated, living in the desert where the oil, wealth was exploited, wanted share -> HM introduced LCC
work as subcontractors for pdo, do maintenance, exploration, production

Opal

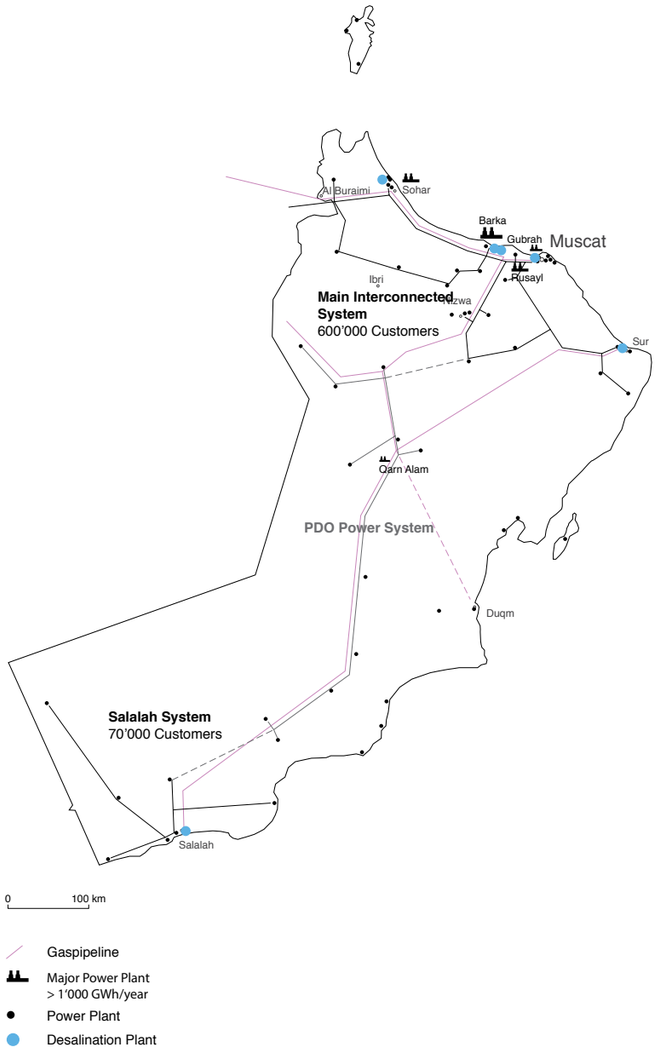
Oman Society for Petroleum Services
economical union of X companies
train omanis, give them work

Shaleem Petroleum Company SAOC

Example of LCC
Local Community Company
Taxes 12%
Omanisation 85%, Beduisation 45%

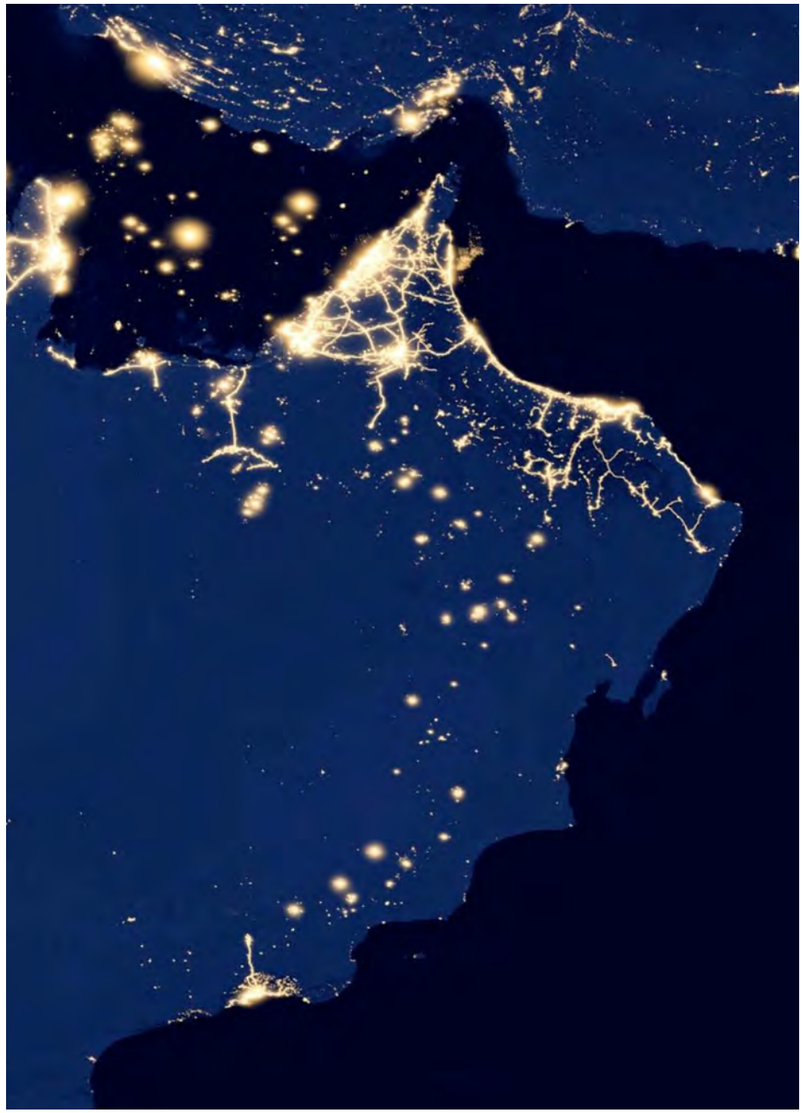
Energy and Water

The distribution of energy in Oman bases mainly on the natural gas grid. The gas resources will last for another 30 years, but the consumption increases rapidly. Therefore an alternative to today's energy sources will soon play an important role.



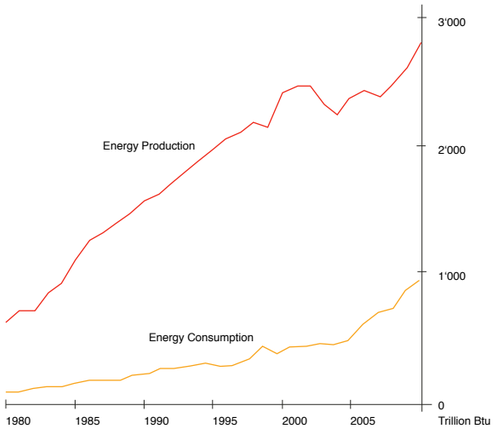
Oman's Energy Infrastructure

From the gasfields in the inland of Oman the natural gas gets transportet trough the gaspipelines to the power plants in the urban areas. There are three electricity networks; the biggest is the Main Interconnectet System which supplies mainly the capital area and the Batinah Plain, in the south there is the Salalah System and in between the indipendent PDO System supplies the oilfields. For stability reasons and the supply guarantee all the networks can be connected to each other.



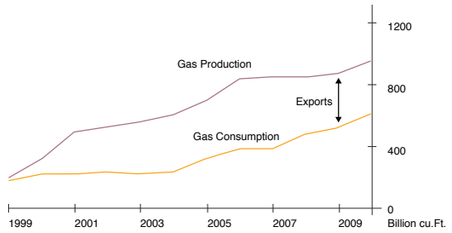
Energy 100% from Fossile Fuel

All electricity in Oman is beeing produced from fossile fue only; mainly from nautral gas, petrol as alternative.



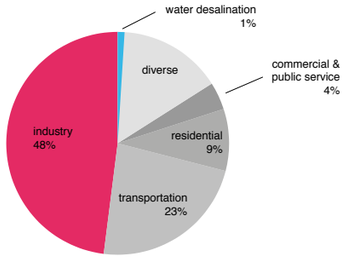
Energy Production/ Consumption

Over the last 30 years the energy production tripled but also the consumpiton increased exponentially.



Production/ Consumption of Gas

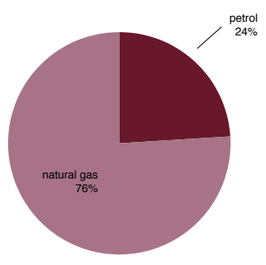
Natural Gas is the main energy source and for price reasons already today 11 % of the consumed gas is imported.



867 Trillion Btu

Energy Consumption by Sector

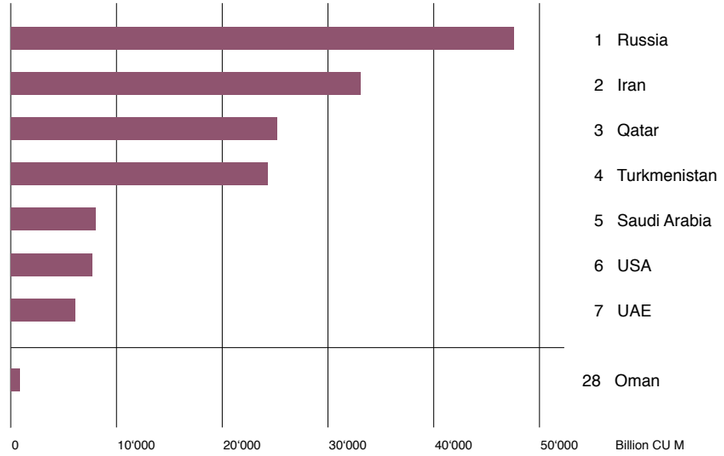
The industry sector makes almost halfpart of the energy consumption.



867 Trillion Btu

Primary Energy Consumption

Three-fourths of the energy consumed relys on natural gas. Just one quarter comes from petrol.



Natural Gas Reserves for 30 Years

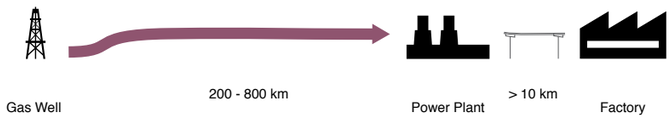
The nautral gas resevers will last at least for 30 years. But the consumption increases exponentially. 98 % of industries relies on oil and gas. In the region Qatar owns still the biggest reserves and there are contracts in the GCC for oil and gas supply. Already today exists a gaspipeline from Qatar trough the UAE to Oman.

Oman's Five Major Power Plants

Barka Power Plant	2'200 (GWh/year)
Rusayl Power Plant	1'700
Sohar Power Plant	1'500 (see above)
Gubrah Power Plant	1'300
Qarn Alam Power Plant	1'000

Typical Gas Fired Power Plant

The Al Kamil Power Plant is located nearby Sur in the inland. With its output of 460 GWh per year it is a typical midsize gas fired plant. In case of a gas balckout it can be run also with petrol, stored in tanks nearby.



From the Gasfield to the Factory

The electricity in Oman is produced locally. The gas is beeing transported from the wells trough pipelines to the power plants, which are for the reason of less energy loss located close to the facties.

Al Ghubrah Desalination Plant

The Al Ghubrah Desalination and Power Plant is a hybrid plant, which produces electricity and uses the rejected heat for desalination. They use the multistage flash distillation (MSF), wich is based on steam injection and heat exchanger.

From the Sea to the Factory

Desalinated water is beeing produced mainly by the three big desalination plants. For efficiency reasons they are combined with power plants. The water is mainly distributed by trucks (see below).

Today's Road Infrastructure

The great road infrastructure as it exists today all over Oman would not have been possible without the revenue from the oil. The way it impacts on the landscape is unique and an expression of the enormous development over the last 40 years.

Road Infrastructure

In Oman the traffic is totally dependent on the road system. There are four lane highways connecting the main urban areas in Oman and to Abu Dhabi and Dubai in the UAE. The population depends completely on the car, therefore six to seven cars per family are normal. A big issue is the land consumption by the roadsystem and consequently relocation problems.

Through the Mountains and over the Valleys

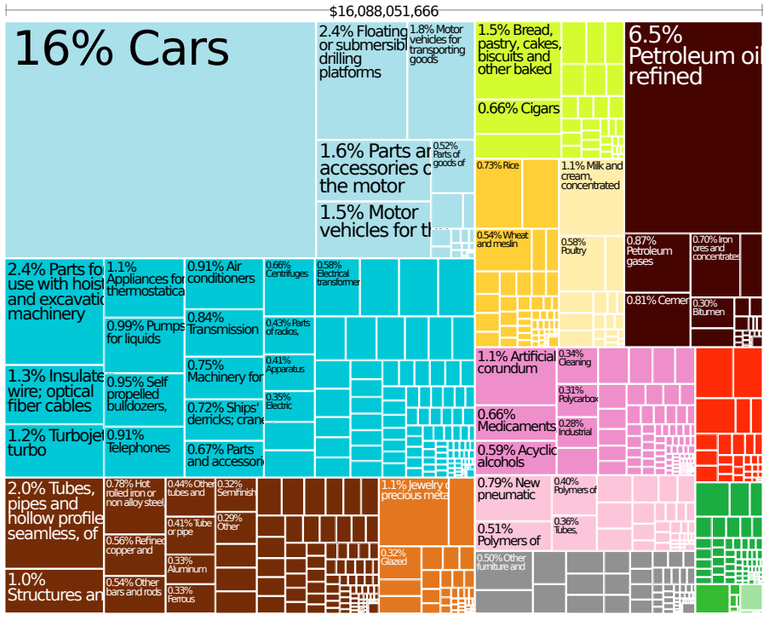
The construction of the roads has an enormous impact on the landscape. By cutting the mountains and filling up the valleys in between there is beeing moved an incredible mass of material. That cut and fill can be seen as an expression of the extreme development pressure in Oman.

Engineering Construction

Because of the higher complexity and therefore the higher costs, bridges and other engineering constructions are very rare and used only in the earlier stages and where it's absolutely necessary, mainly because of Wadis or crossing of another road.

Bausher - Amerat Road

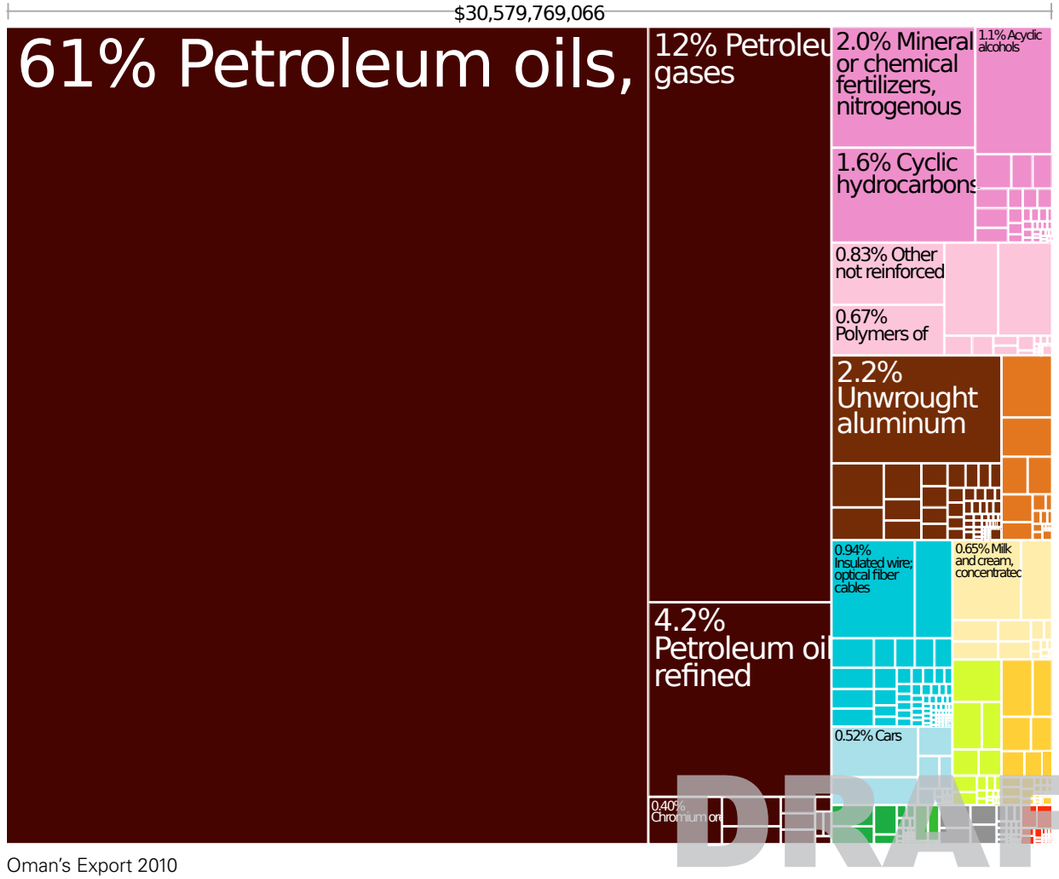
N 23° 33' 37" E 58° 25' 42"



Oman's Import 2010

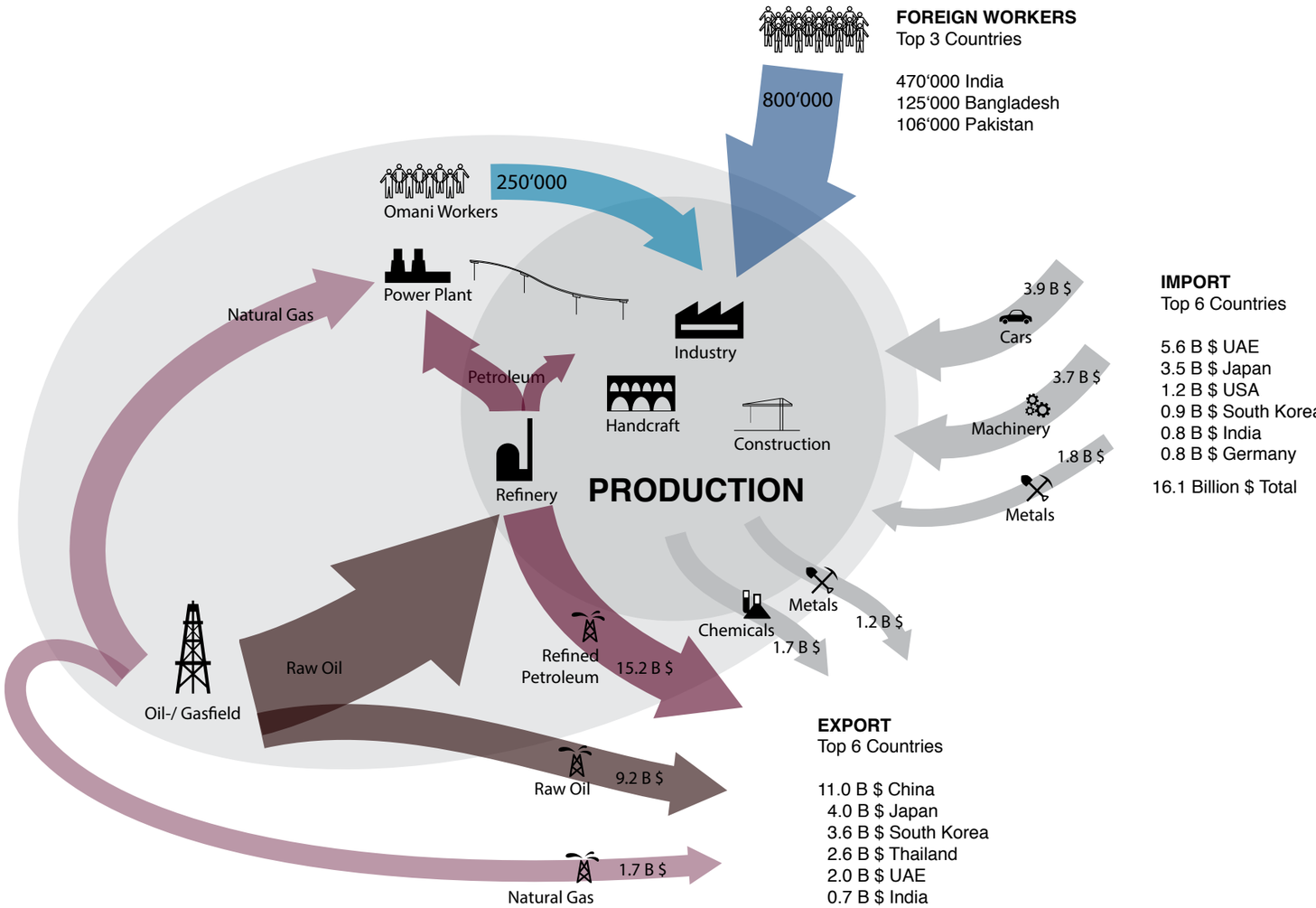
Commercial Driving Forces

Oman's export is clearly dominated by the petrochemical industry. The whole economy bases on the oil revenue. In importing the dominating part consists of cars, machinery and accessories mainly used in the construction sector.



Oman's Export 2010

WORKFORCE



FOREIGN WORKERS
Top 3 Countries

470‘000 India
125‘000 Bangladesh
106‘000 Pakistan

IMPORT
Top 6 Countries

5.6 B $ UAE
3.5 B $ Japan
1.2 B $ USA
0.9 B $ South Korea
0.8 B $ India
0.8 B $ Germany

16.1 Billion $ Total

EXPORT
Top 6 Countries

11.0 B $ China
4.0 B $ Japan
3.6 B $ South Korea
2.6 B $ Thailand
2.0 B $ UAE
0.7 B $ India

30.6 Billion $ Total

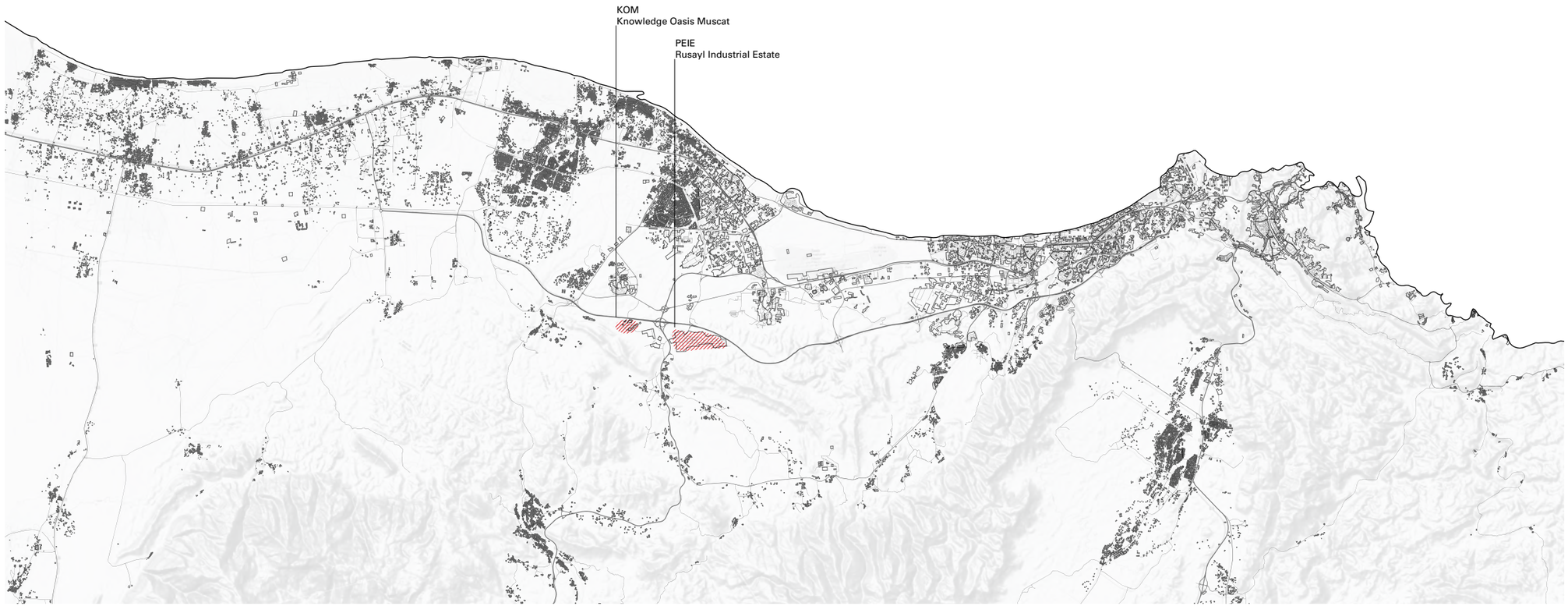
RESOURCES

TRADE

Driving the Machine

DIVERSIFICATION AND FOREIGN INVESTMENT

As Oman depends highly on the oil revenue one of the main goals is to diversify the industrial production. Therefore the government stimulates systematicly the non-oil sector to be prepared for the time after the oil. One important part in this approach is the attempt to attract foreign companies.



Public Establishment for Industrial Estates

The so called Public Establishment for Industrial Estates (PEIE) is an organisation which administrates so far about ten industrial parks all over Oman. In 1993 PEIE was established in response to the expanding industrial estates with the objective of planning, establishing, managing and developing the industrial estates across Oman. Currently, in addition to the industrial estates, PEIE also manages one IT park, the Knowledge Oasis Muscat (KOM), and Al Mazunah Free Zone.

Oman's Industrial Estates

The first industrial estate in Oman was established at Al Rusayl in 1983. As new industrial estates were set up, the Public Establishment for Industrial Estates (PEIE) was formed a decade later to give substantial impetus to industrial development all over the country.
The infrastructure within an industrial estate, which contains power and water supply as well as facility management, is provided by the PEIE. The plots are rented to the several companies.

Rusayl Industrial Estate

Rusayl Industrial Estate is situated 45 kilometres from Muscat and occupies around 750 hectares, of which 240 hectares have been fully developed and subdivided into plots of various sizes. Established in 1983, Rusayl is Oman's flagship industrial estate. From its initial 12 factories, Rusayl continously expanded to over 154 factories in operation, 13 under construction and 40 in consideration. Factories in operation produce a wide spectrum of goods as well as industrial-oriented products, ranging from: chemicals, batteries, electrical and building materials, fibre optic cables, foodstuff, textiles, stationery and paints

PEIE Office and Infrastructure

As on all PEIE managed estates, Rusayl provides its renter with serveral facilities and services which include: factory and office space, electricity, water, gas, telecommunications, sewage treatment, disposal of solid and other waste, internal and external road networks, mosques, banks, restaurants, a supermarket, a postal office and a clinic. Rusayl is also home to offices of the Customs Department and the Royal Oman Police

Areej Vegetable Oils & Derivatives

Areej Vegetable Oils and Derivatives S.A.O.G is manufacturing and marketing vegetable oils, ghee, margarines, specialty fats and butter products. Areej imports crude vegetable oil trough the Port of Muscat. They are licensed by Thomy, Nestlé, etc. Half of their export goes to GCC countries, the other half is distributed all over the world. 60% of the 653 employees are Omani.

Factory Site

Europoles Middle East

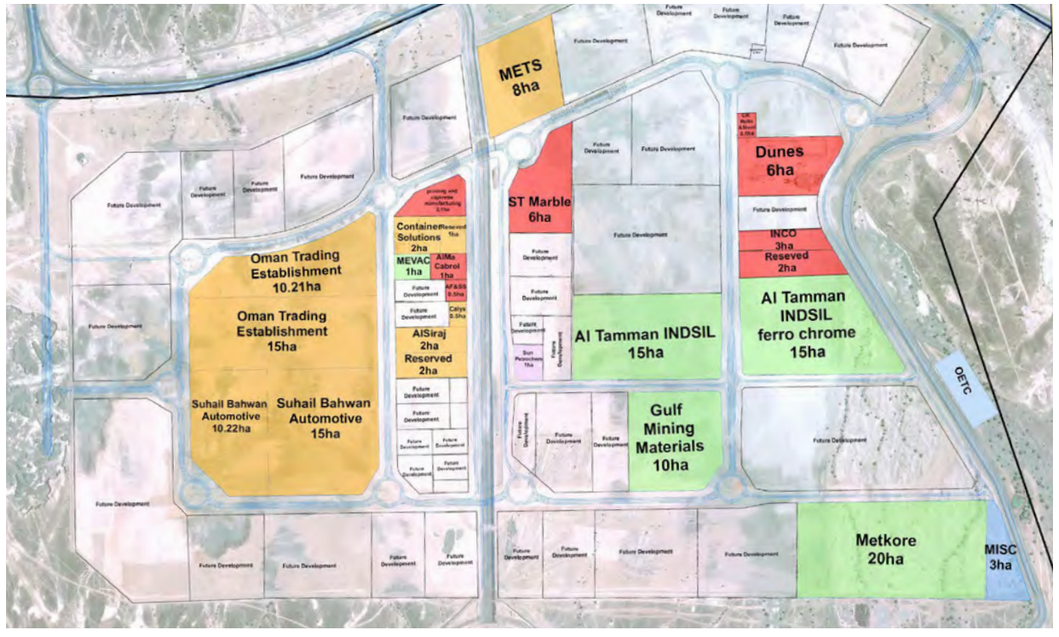
Europoles Middle East was established in 2010 as a Joint Venture between Europoles and RAY International L.L.C. With a total production capacity of 40,000 masts, Europoles Middle East should be able to replace the wooden masts currently used in Oman in short order.
For quality reasons the machinery for production is imported from Germany and Italy.

Production Process

For the production of spun concrete masts there is a high qualtity concrete needed. For this reason the cement is beeing imported, while the aggregates come from the region. For the mixing process of the concrete they use ice instead of water due to the high ambient temperature.

Port of Sohar and Free Zone

The Sohar Industrial Port is the main commercial harbour in Oman. It is a joint venture between the Omani government and the Port of Rotterdam and therefore a prime example for Oman's international collaboration. The Sohar Free Zone is located nearby the port and offers ideal conditions for companies integrated in international trade.



Sohar Industrial Port

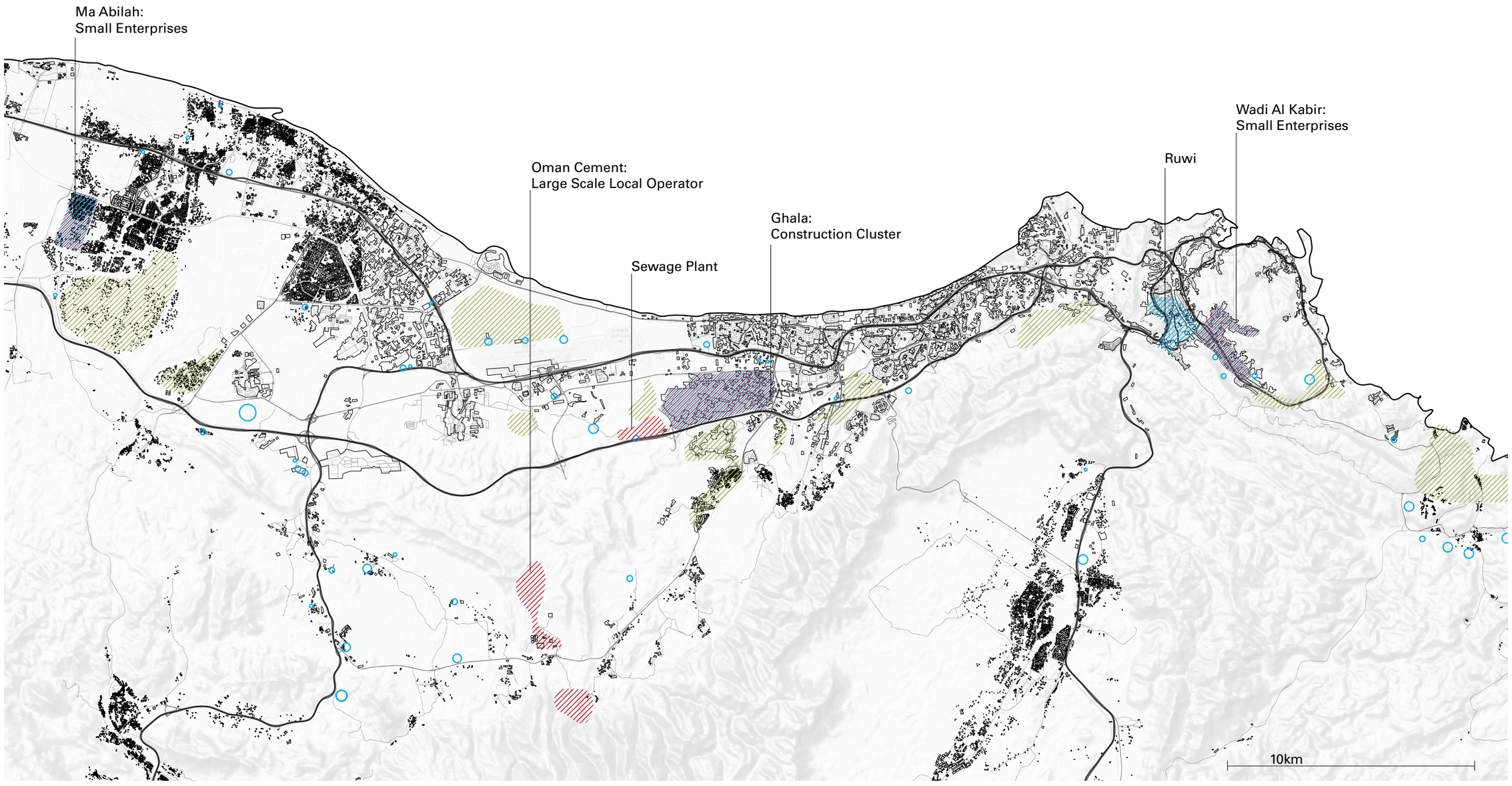
Port of Sohar is the biggest commercial harbour in Oman. The management of this industrial port lies with Sohar Industrial Port Company, a 50/50 joint venture between the Government of Oman and the Port of Rotterdam.

Free Zone Sohar

The Free Zone of Sohar is located nearby the Sohar Industrial Port and offers an ideal environment for foreign investments to a strategic location on the Arabian Peninsula. The One-Stop-Shop solution simplifies the permit procedure.

CONSTRUCTION

In the past 40 years the population of Oman has multiplied. The increasing need for new houses and investment of oil money in large scale infrastructure projects have created a construction industry which accounts for 1/3 of the labour force in Oman. The construction industries around Muscat are concentrated in clusters with specific functions.
The pressure and speed at which infrastructure projects like the Muscat Express Highway are built, produce an urban landscape formed by the economy of construction and the geological qualities of the earth.

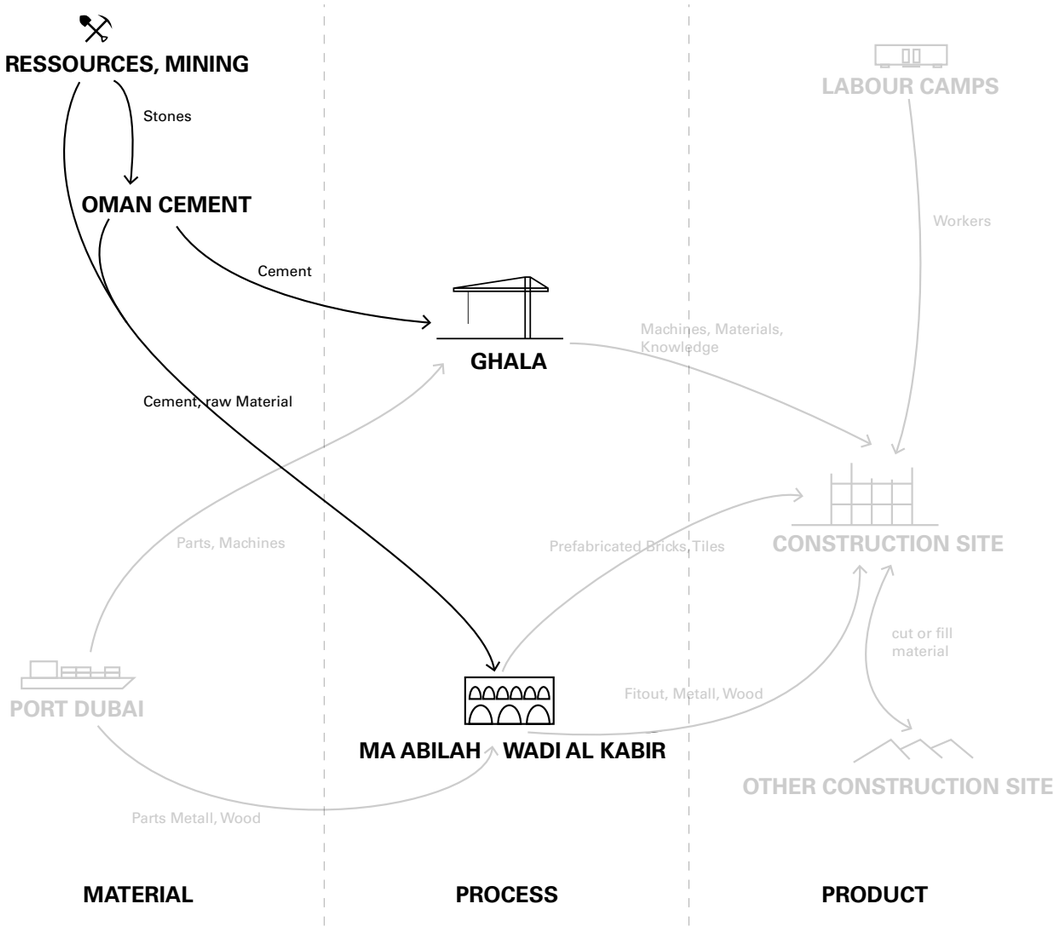


Transforming a City: Actors and Places

- Major Development Areas
- Construction Industries
- Expatriate Living Areas
- Labourcamp

Oman Cement: Large Scale Local Operator

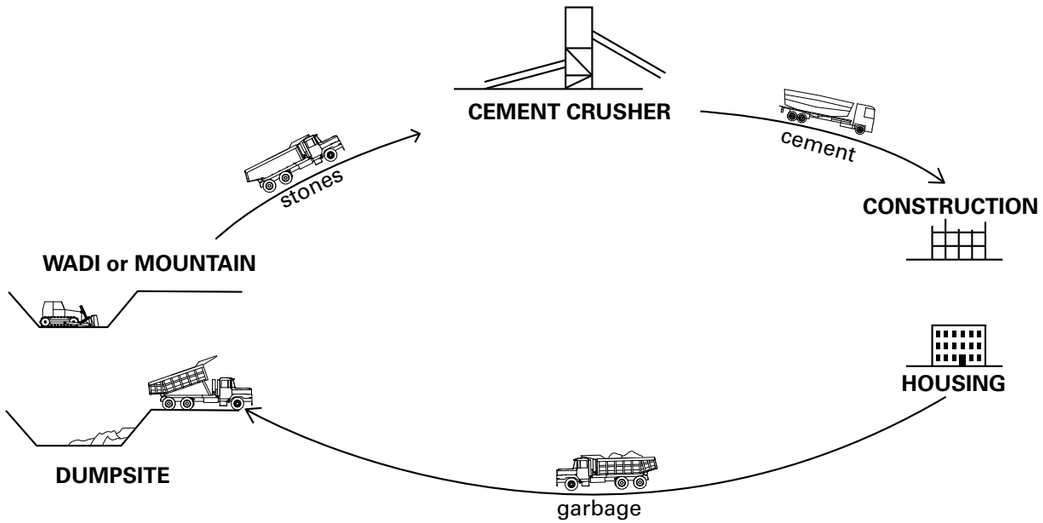
The majority of the raw material derives from local suppliers. The biggest one is Oman Cement, hidden in the mountains on the way from Muscat to Nizwa. This machinery produces about 1/3 of the cement used on Omans construction sites.



Extraction of Raw Material

Oman Cement: Mining and Production in the Mountains

Founded in 1982 Oman Cement is 60% government owned and has 550 employees, with an Omanisation rate of 70%. It produced 9000t cement daily.



Material Flow

The Wadis are excavated to a depth of 2m. The extracted stones are crushed and used as raw material for examples as paving or for the cement production.

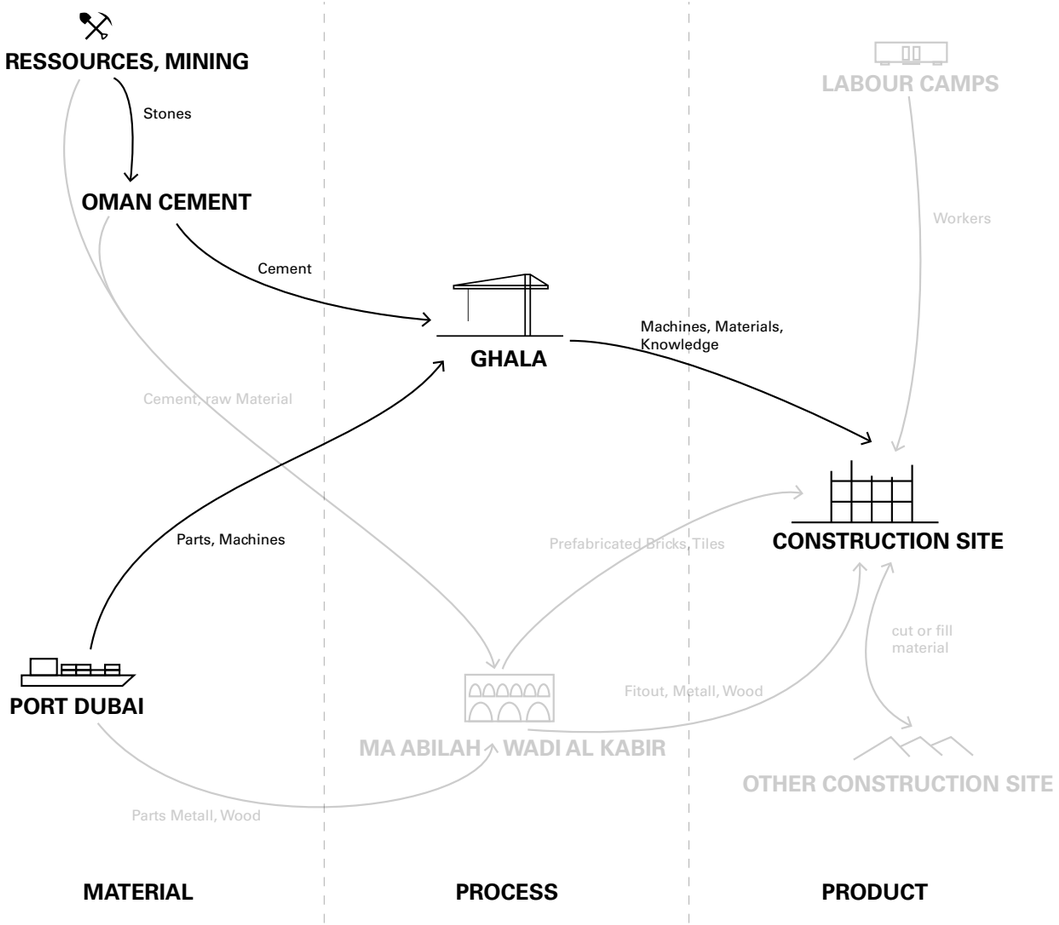
Construction Material

Landfill: Dump Site in the Wadis

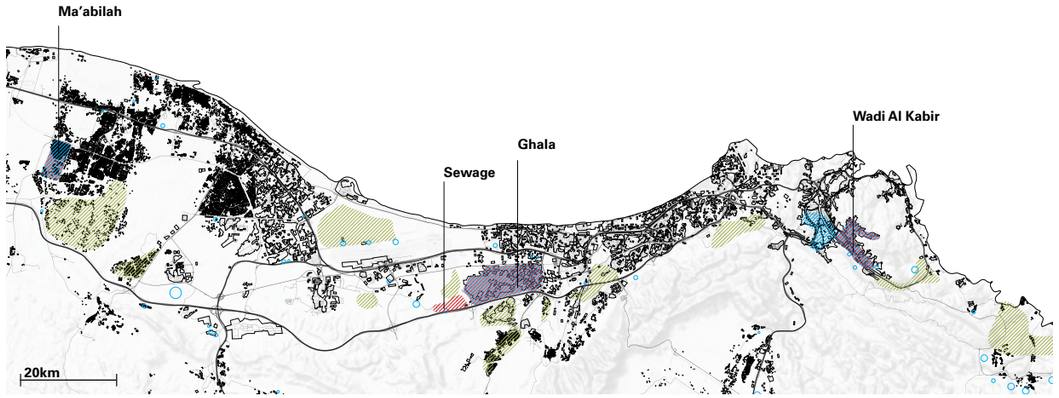
Later the excavated wadis are used as dump site and filled with the garbage of the city of Muscat.

Ghala Industrial Area: Construction Cluster

Ghala is the organisational centre from which all construction sites are coordinated and supplied with material, machines and knowledge.



Ghala: Machines, Material Depot and Headquarters

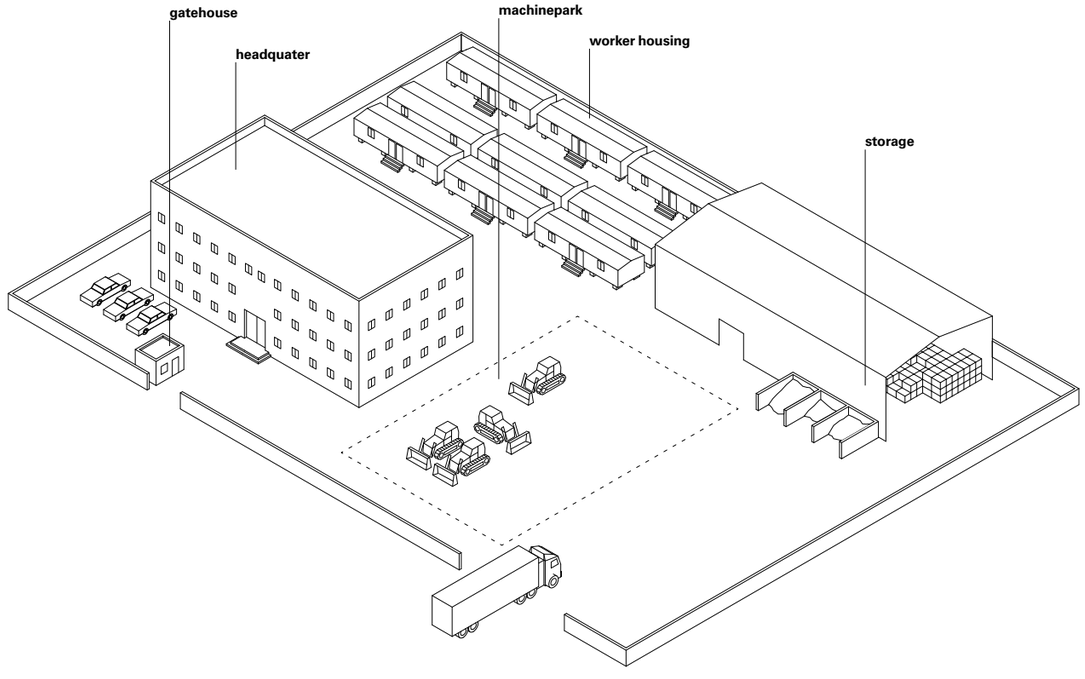


Stratetic Location

The Location was determined in 1980 by the masterplan of Fred Scholz.

Situated Between two Highways

The area is well connected through the access to highways. This was the basic precondition for Ghala to become a distribution centre for the construction industries.



Organisation Model of Operation Centres

The companies are organized in lots, leased by the government for a time span of 20–25 years. Within the lots the companies have all the key elements nearby. Larger companies like Galfar have several lots that are scattered over entire Ghala, making a total area of several hectares.

Galfar Headquarter

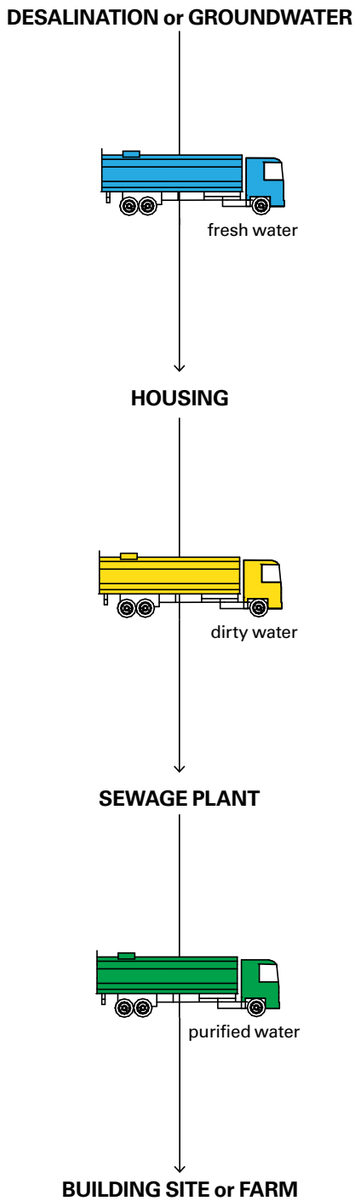
Construction companies are foremost all owned and runned by expatriates from India, Pakistan, Bangladesh, Jordan and Germany. The biggest firm with about 27'000 foreign workers is Galfar from India. Founded in 1974 with 6 workers, they build everything from oil plantation to the major highway projects.

CCC White Camp: The first Labour Camp in Oman

Founded in 1973, it is organized like a small town and has for example a restaurant and a carpentry. Besides all the workers, also about 50 engineers are living there with their families.

Machinepark

There are dozens of hectares of desert sand on which hundreds of machines are burning at 50° in the sun.



Cascade of Water Usage

Although the cascading usage may seem efficient on first sight, there is a lot of loss. For example the transportation by pipes would be much more efficient.

Barka Desalination Plant

Water is desalinated at the seaside under huge consumption of energy (gas).

Ghala Sewage Plant

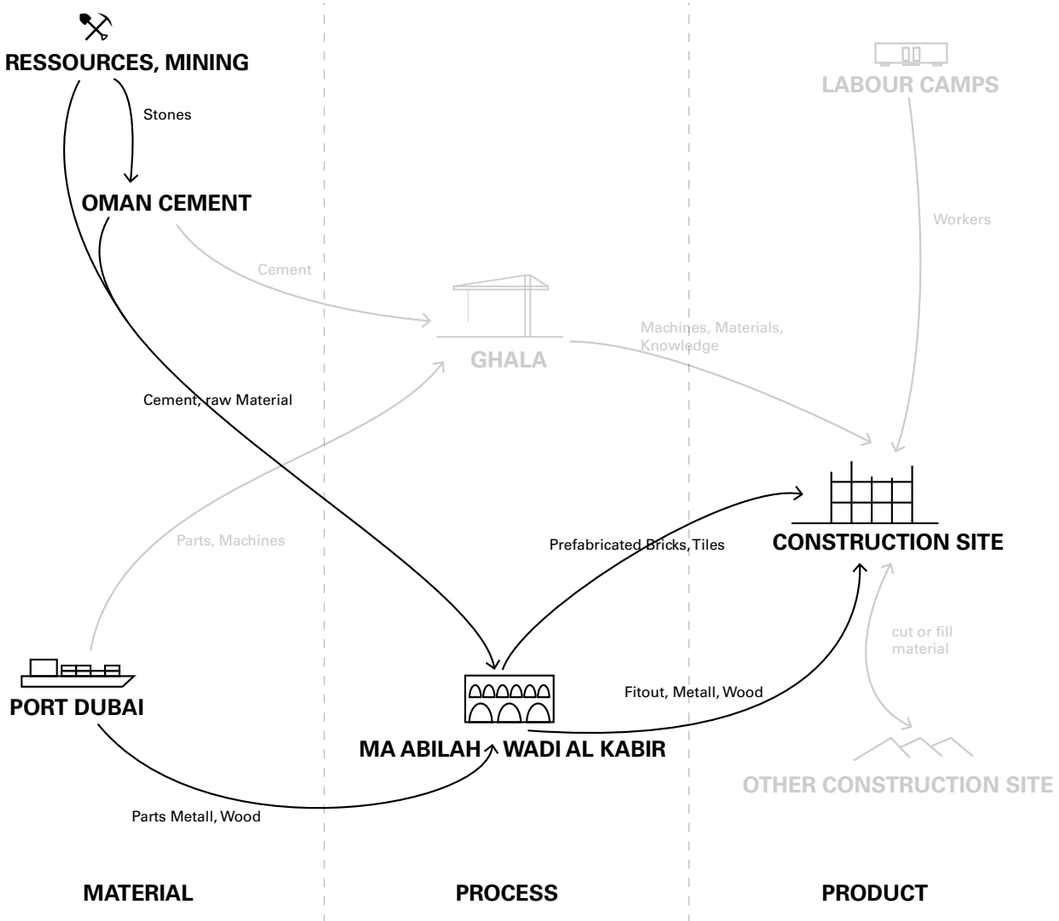
Situated right next to the industrial area, the sewage plant is cleaning the water of the entire Muscat region.

Landfill with Compressed Earth and Poured Water

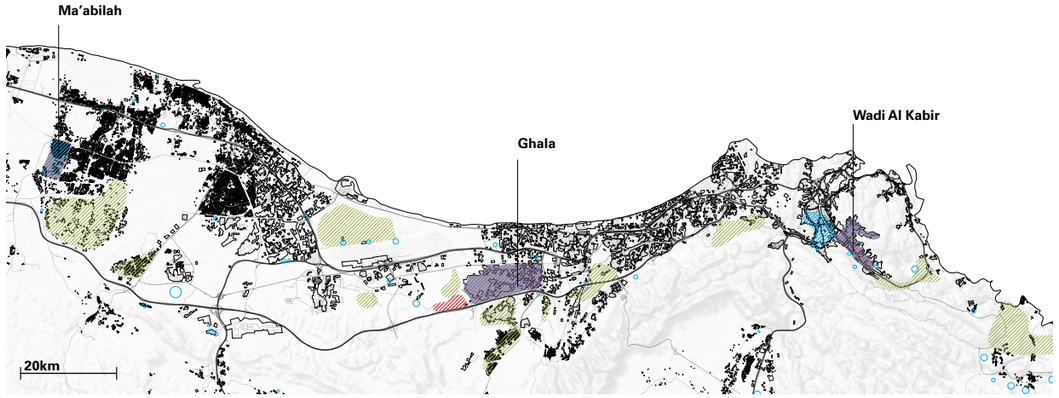
The purified water is used on building sites for the landfilling. This is quite water intense: the earth needs to be compressed and watered to become a physically stable clay mixture.

Ma'Abilah and Wadi al Kabir: Small Enterprises

Ma'Abilah and Wadi al Kabir are two industrial zones with congruent services. Small enterprises pre-fabricate simple building materials and there are also little shops that produce custom designed goods on demand (e.g. decorated wooden furniture, metal gates, ...)



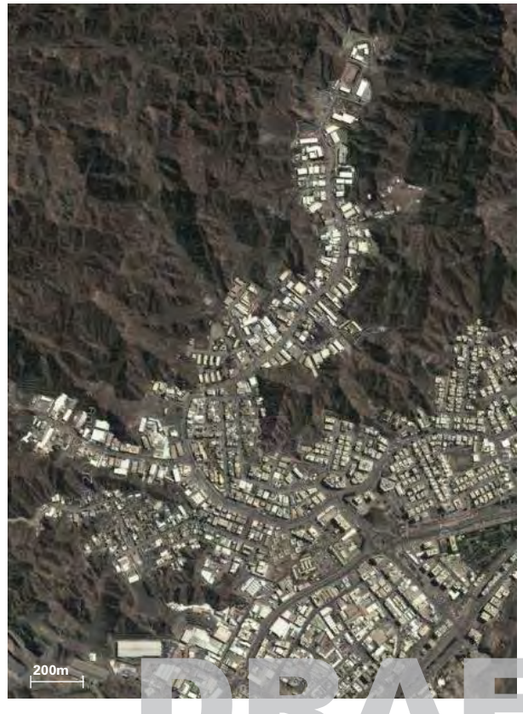
Ma'Abilah and Wadi al Kabir: Prefab on Demand



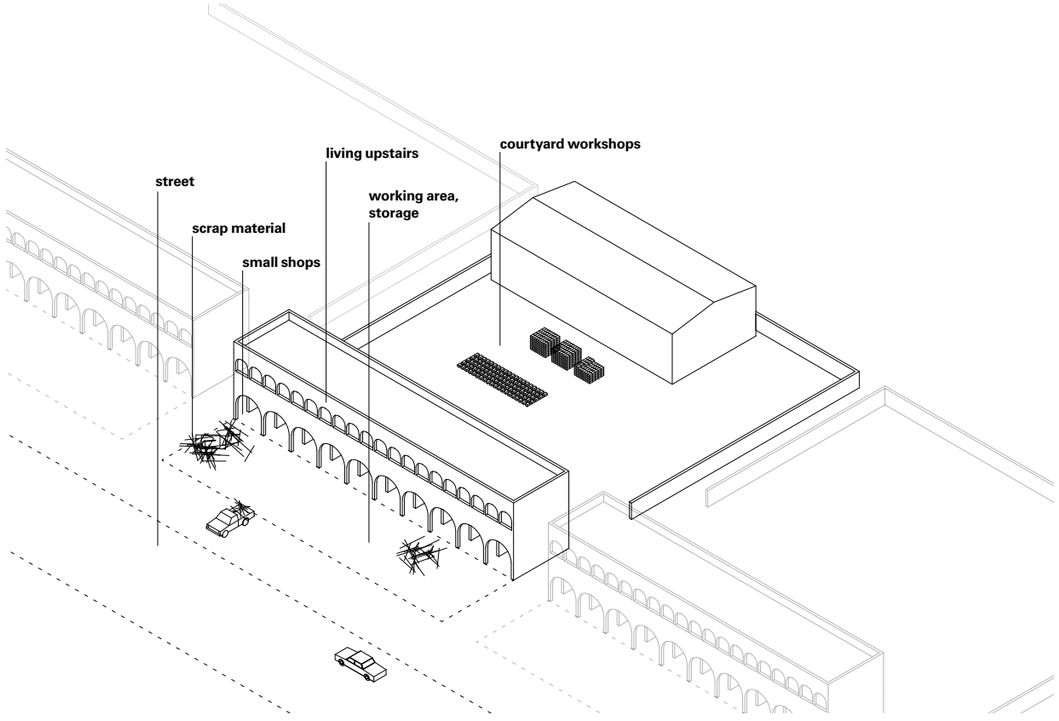
Service Coverage

Although they have typological differences, both Areas feature very similar services and products. Ma' Abilah customers come rather from the Batinah Plane, while the customers of Wadi al Kabir are foremost Muscat Citizens.

Ma'Abilah: Grid on the Plane



Wadi al Kabir: Built into the Mountains



Organisation Model of Production Unit in Ma'abilah

In the smaller front shops services like carpentry, metal-work, car maintenance are offered. Production on larger scale happens in courtyards independently.

Products: MDF Carpentry

The wood is imported from Asia, Africa, comes in through the Emirates, Dubai.

Products: Metallgates

Metal works are produced by commission by cataloge examples.

Street Typology

Streets are specialized in certain materials. The shops are owned by Omanis and are leased to expatriate managers for about 200–300 Rial per arc unit.

Low-Tech Manufacturing

Most procedures are half automatized, but need still a lot manual operation.

Living and Working in One

The workers live all nearby, in the slabs upstairs of the frontshops. This two room appartment is shared by 8 workmen, they earn about 80 Rial monthly and pay each 20 Rial for the rent.

Prefabrication in Courtyards

In the courtyards bigger companies of 10–20 workers produce basic building materials like bricks, tiles etc.

Recycling of Broken Cars

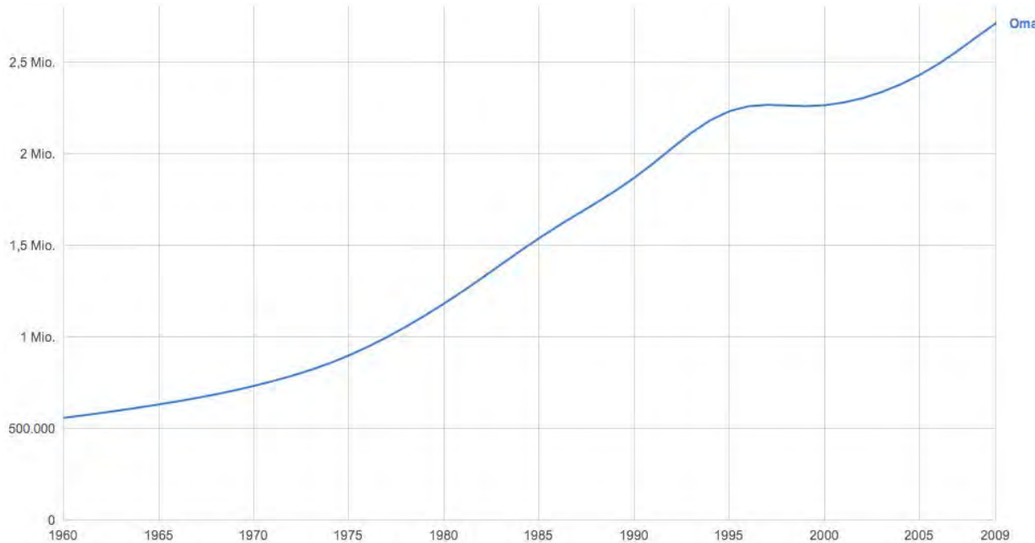
Huge lots are filled with broken cars, which serve as spare parts. New parts are imported from Asia over Port Dubai.

Maintenance of Cars

The automobile as the instrument of mobility is maintained and repaired in Ma' Abilah and Wadi al Kabir. The growing upgrade and tuning industry, is serving the car as status symbol. To quote Mr. Yaqoob, HR Areej Vegetables: "If you want to know a company, you have to look at the parking lot of their employees."

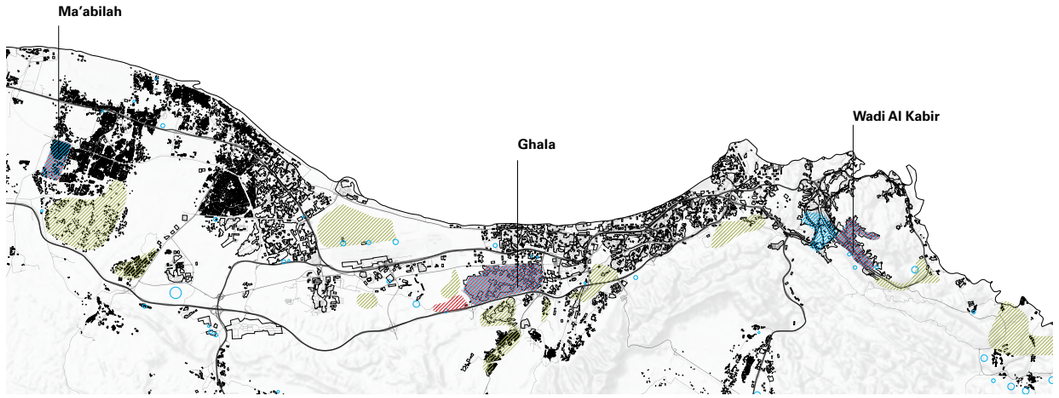
The Emerging Urban Landscape I: Housing

With the political change and the new gained wealth from oil, the population has quadrupled within 40 years. The need for houses has developed a market where new building sites pop up at high speed, but are put on hold shortly thereafter or are delayed due to the lack of money, thus leaving an fragmented urban territory under constant construction.



Growing Need for new Houses

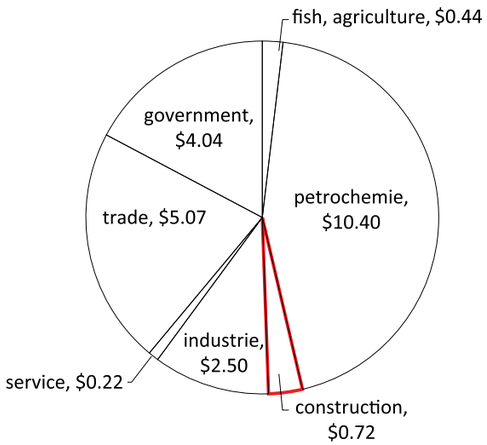
Since His Majesty has taken the power the population has quintupled from 600’000 to almost 3 million inhabitants. Omani living abroad came home after the change of power. Hospitals were built all over the country and the health care enhanced.
Another factor that led to a higher demand for houses is the atomization of families. While it was common to live with the relatives in the same house, nowadays every family wants their own home.



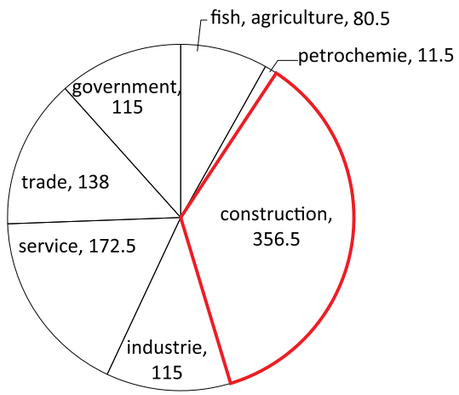
Development Areas

Fragmented Territory

As an instrument to distribute the wealth among the people, an Omani when turned 23 has the right to a piece of Land to build his own house. The lots are distributed by a lottery. First the new owners build the wall and from there on it can take years until they have the money to construct the entire building.



GDP in Bio US $



Employees in 1000

Construction sector accounts for 1/3 of the labourforce in Oman and consists foremost of expatriate workmen of India, Pakistan and Bangladesh. Most of them are living in labour camps as introduced in the fourth chapter.

Living on Site

In housing construction the workers live in the unfinished structure on site or in improvised huts nearby.

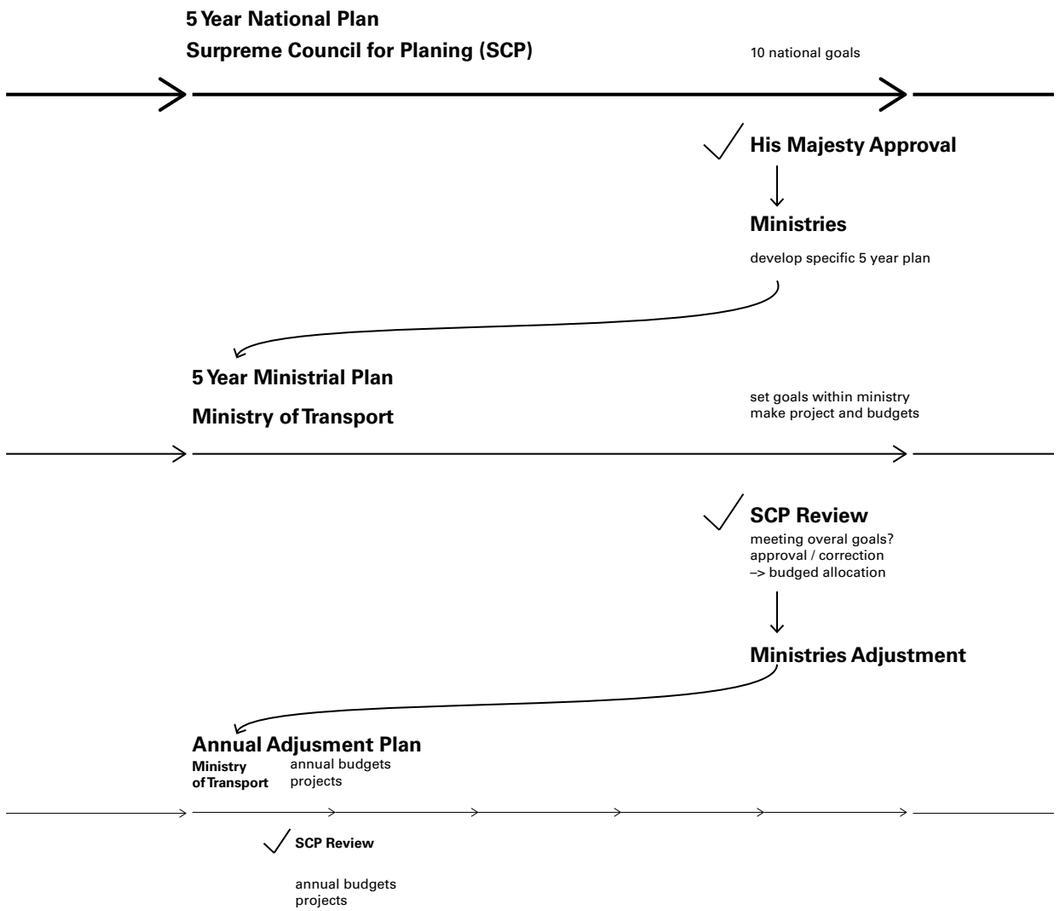
Improvised Toilet

Fragmented Construction

Unfinished houses under construction are appearing everywhere and mark the urban landscape.

The Emerging Urban Landscape II: Infrastructure

Omans overall national strategy of the past 15 years was focused on the building of infrastructure at large scale. Enormous amounts of earth have been moved around to build projects like the Muscat Express Highway or the new airport.
Intervention at large scale resemble a Roman approach of dominating the nature, although this newly built structures are surprisingly well integrated through layers of sand and dust that covers everything.



Decision Making in Investment

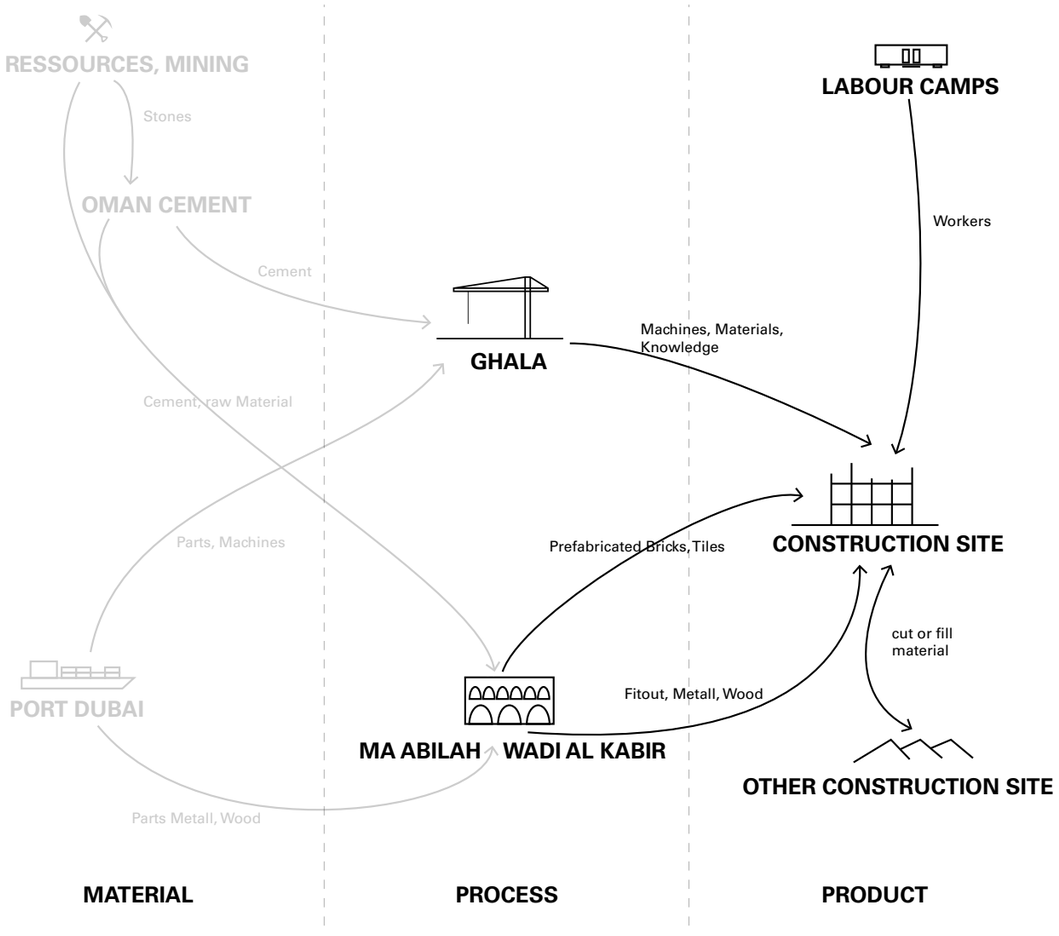
The longterm strategies are defined by His Majesty and the Surpreme Council for Planning with the instrument of the 5 year plan. The goals are implemented into the ministries and controlled through several layers. The budged is revised and new allocated annually.

Fragmented Bridges

Especially expensive engineering work like bridges are discontinued. For example a dozen of unfinished bridges stand along the Batinah Highway.

Budget Cut: Project on Hold

Due to the international finance crisis 2008 some projects were put on hold.



Product and Source

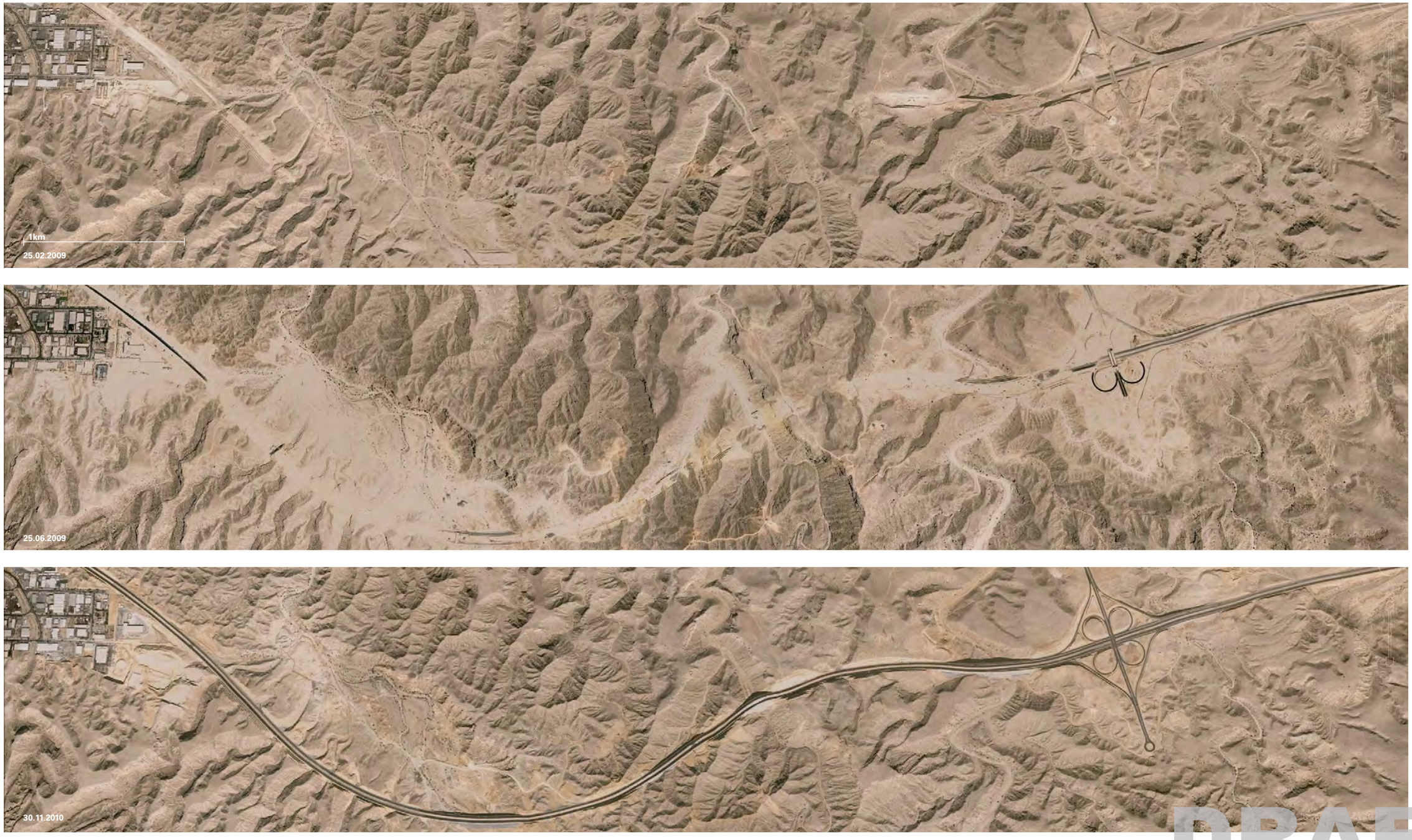
Mountain Cutting as Source

Extracted earth is brought to the next filling site or depot.

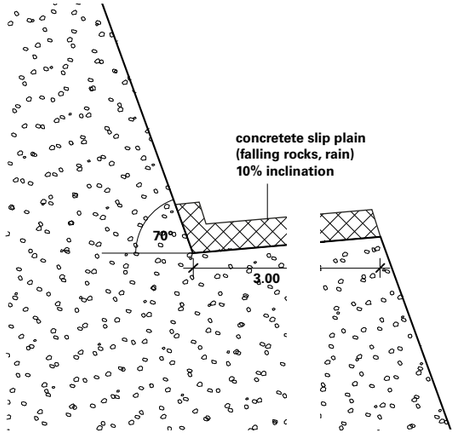
Settlement built on Excavations

Flattening the Landscape for the Airport

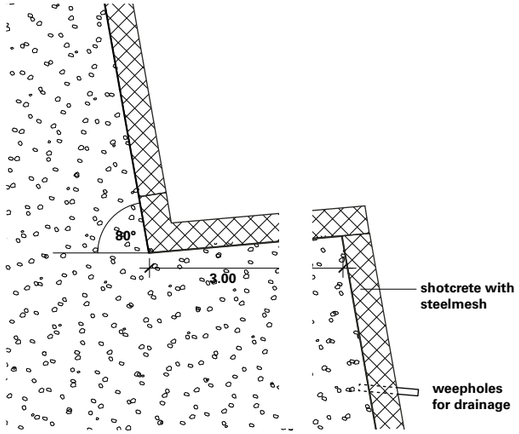
The airport is the biggest landfill project in Oman. Trucks from construction sites all over the region deposit waste material which is then used for flattening the landscape for the rollfields or the building up of ramps for bridges.



Muscat Expresshighway 2009–2010

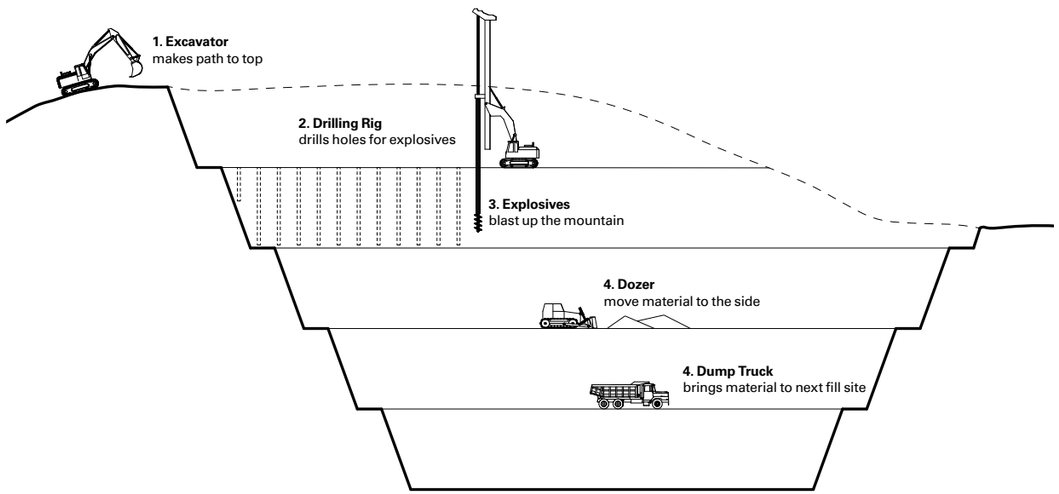


raw rock 1:20



shotcrete 1:20

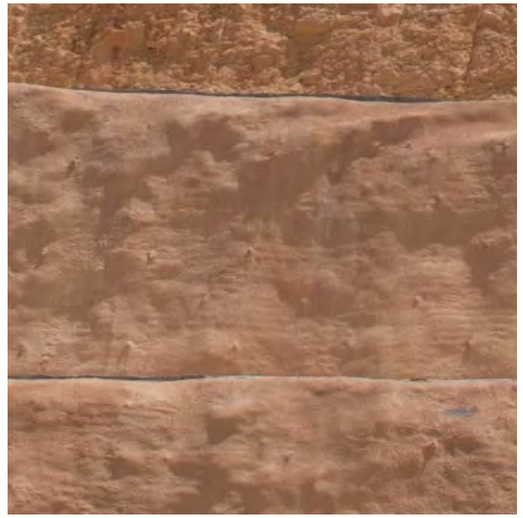
With shotcrete steeper cuts are possible. This is adopted for porous stones or very high cuts of 80–100m. Because the angle can be up to 80° less material has to be excavated.



Cutting Process 1:1000

The inclination of the road is limited with 6–7%. The assimilation is made by cutting passages through the mountain, because its the cheapest method. Cutting an average mountain takes about 3–4 months.

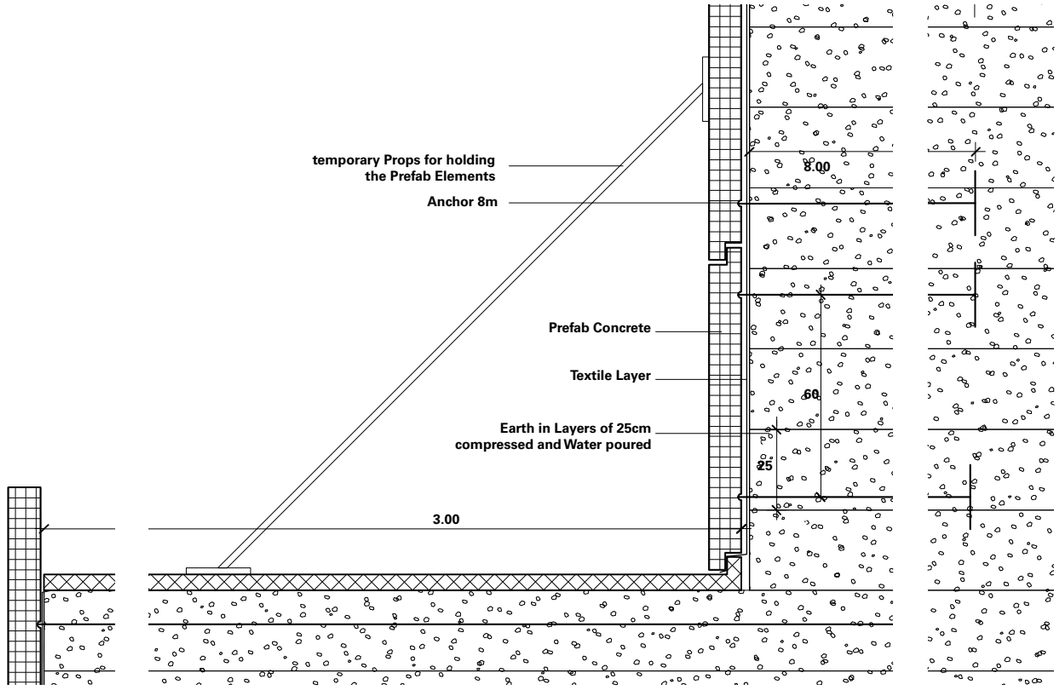
Raw Rock with Slip Plain



Shotcrete with Weepholes

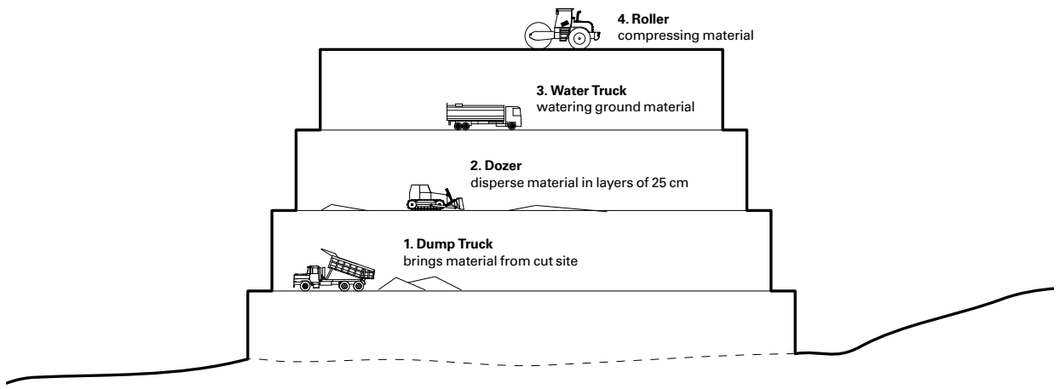
Movement of Material

Material is moved at large scale to the next filling site.



Compressed Earth Wall 1:20

The earth is scattered in layers of 25 cm, then water is poured and the layer compressed.



Filling Process 1:1000

Instead of expensive bridges which require engineering work, wadis are filled with the earth from cutting sites. In principle it is an oversized clay wall. An average wall is built within 7 months.

Concrete Curtainwall

The curtainwall princip protects the clay wall from rainfall.

Wadi Passage

For the annually floating waters there are orthogonal tubes because of the lack of bridges. These are often the only ways to pass a highway without risking your life.

Production of Landscape

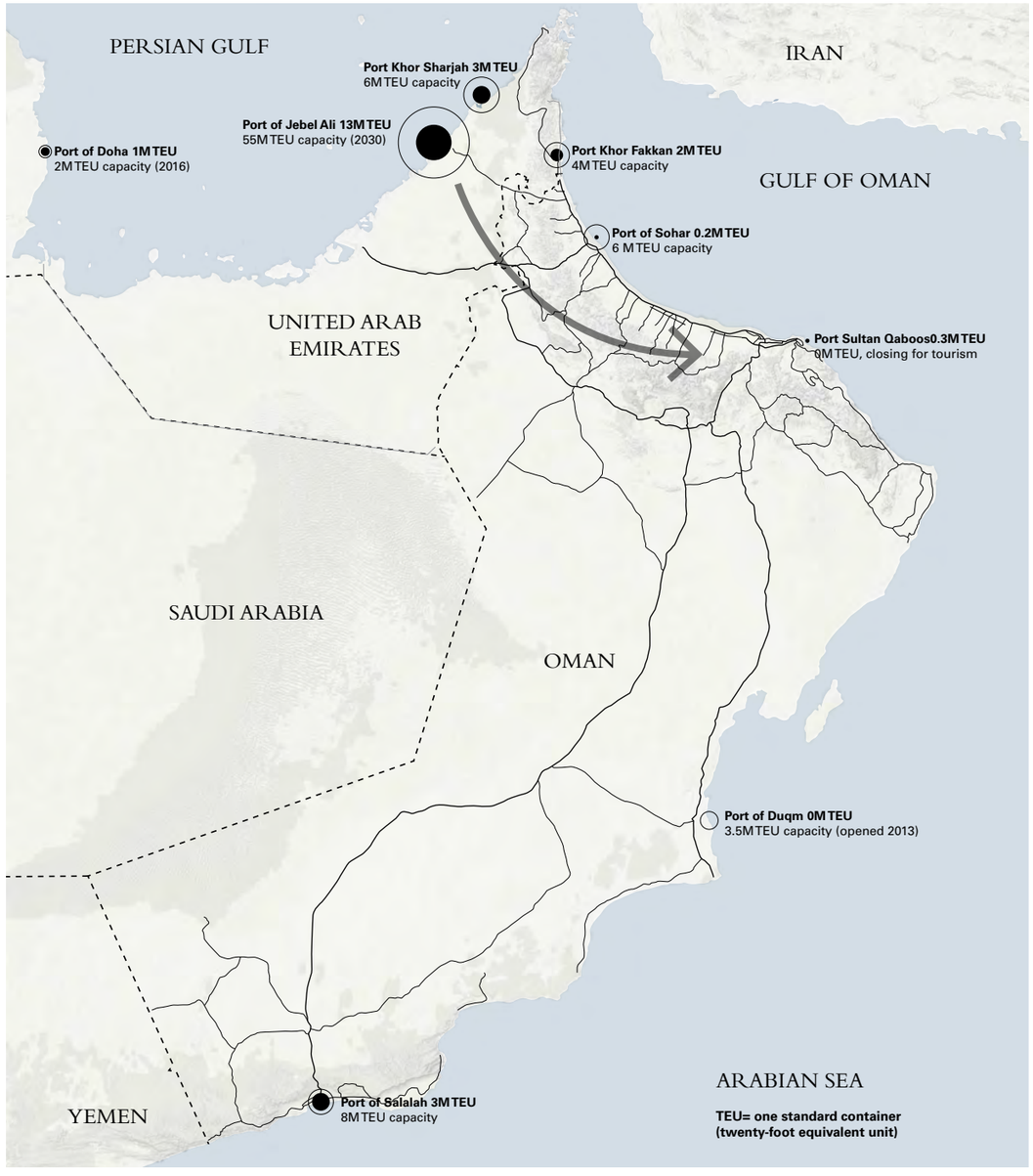
Consequences for the ecosystem yet unknown.

MOVEMENT OF GOODS AND PEOPLE

The road infrastructure is the backbone of the distribution system of Oman. In this network goods as well as people are fast and individually distributed. This infrastructure is built up by an army of workmen, which are only temporary visitors in Oman. Expatriates accounts for about 80% of the workforce in the private sector and build as this the backbone of the economy.

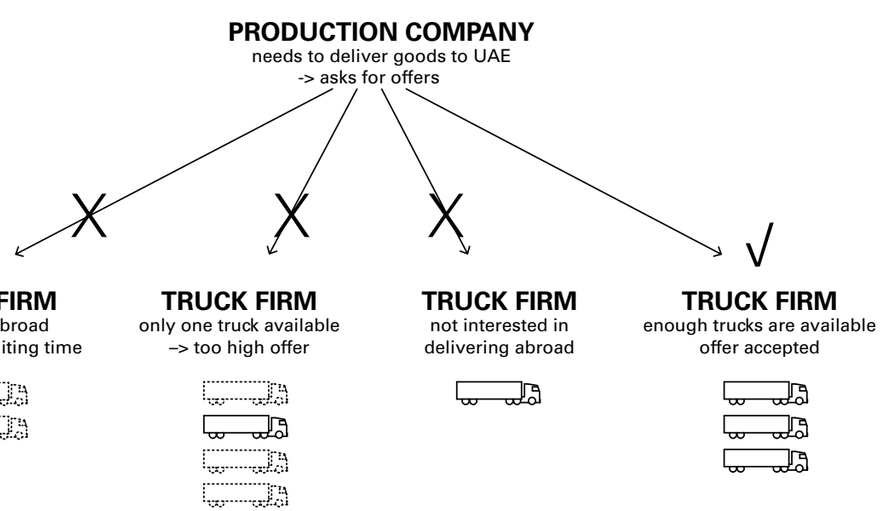
Flow of Goods

The road network built in the past 30 years has become the backbone of Omans economy. All goods are moved through this system by independent small enterprises.



Ports Scales and Capacities

In the past 10 years Oman has made major investments in ports, still most goods are imported through Dubai, which is an established distribution centre. Like in most GCC countries the market in Oman is too small to take up the volumes of direct imports.



Small Shipping Enterprises distribute Goods

The distribution system of Oman is very decentralised, hundreds of small enterprises with about 1–3 trucks offer shipping services. The transportation rate is not fixed but has to be bargained about. Companies with goods to ship call up truck owners to see who is available at which rate. The prices vary from day to day, for example when there is a traffic jam in Saudia Arabia because of strict customs.

Waiting for a Comission

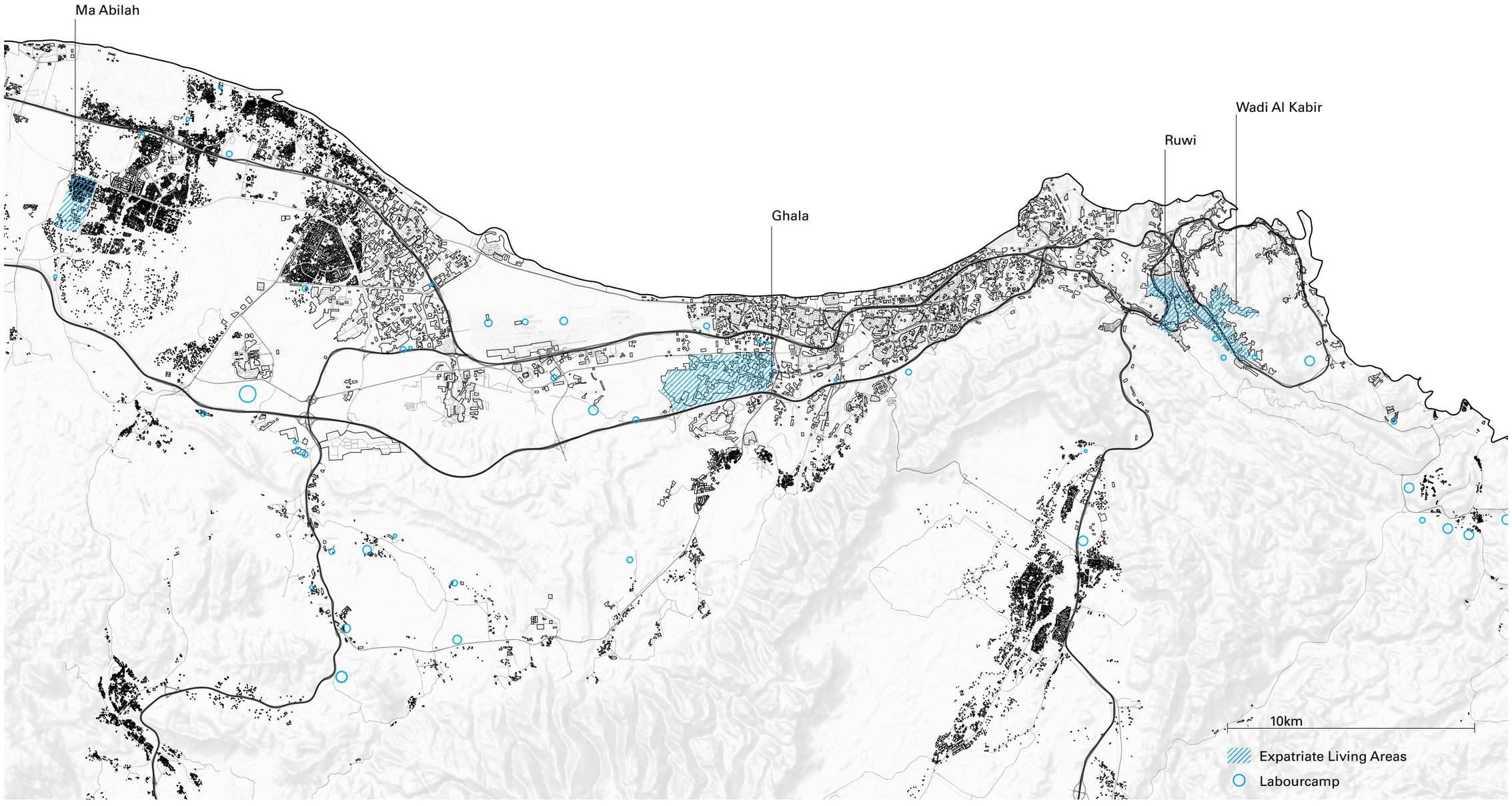
Like a taxi driver in front of a hotel truck owners wait in front of industrial areas like Rusayl or Ghala to be called up.

Trucks without Logos

No major truck company dominates the road.

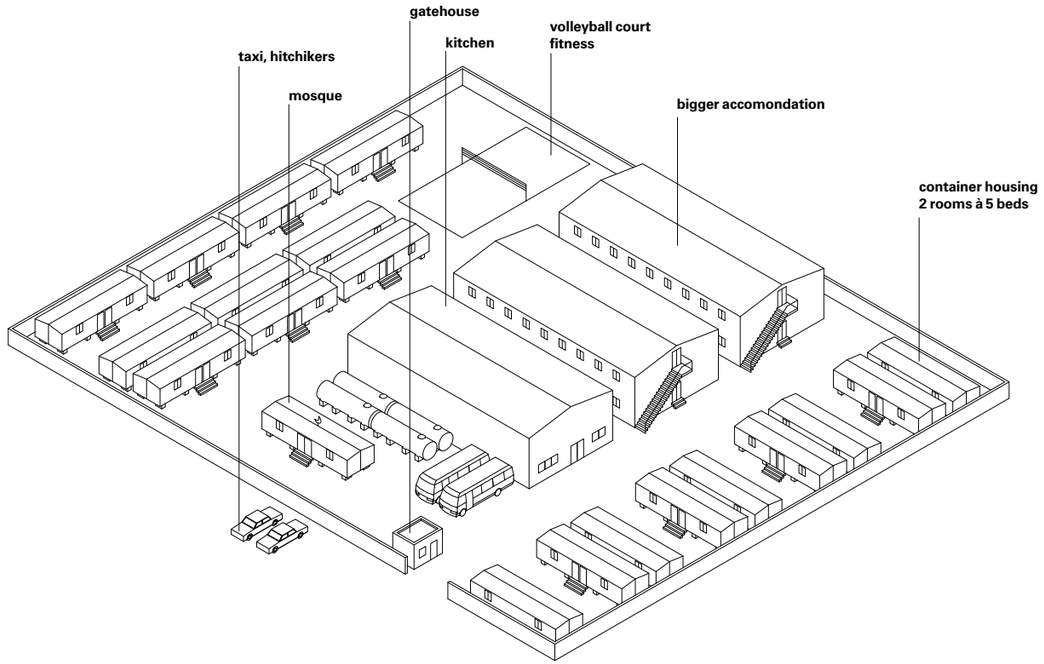
Expatriate Work Force and Omanisation

Expatriates account for 1/3 of Omans population and with about 80% of the labour force in the private sector Oman is highly dependent on this people. At the same time it is made clear that they are only temporary visitors by naming them expats rather than immigrants.
Oman is trying to enforce its independency with laws, foremost the Omanisation rate. This demands the employment of a certain amount of Omani and has an huge impact on Omans economy.



Living Areas of Foreign Workers

The employer has to provide his employees with food and housing by law. About 1/3 of all expats are employed in the construction sector. These workmen are living foremost in so called labour camps (blue circles).



Organisation Model of a Labourcamp

The camps are semi-temporary structures, they need a building permit and have to persist for a minimum of 2 years to be economical.
The organisation resembles a military camp. Seen from satellite they are distinguishable only by the lack of an exercising square.

Container Mosque

Selfmade Fitnesscenter

Built out of leftovers from construction sites.

Flowers for the Hindu Altar

The workmen grow flowers next to their containers. They need them for their prayers on small altars inside.

Direct Access to Highway

The easy access to a highway is crucial for the distribution of workforce. On large construction projects the camps are built directly on site.

Bus for Work

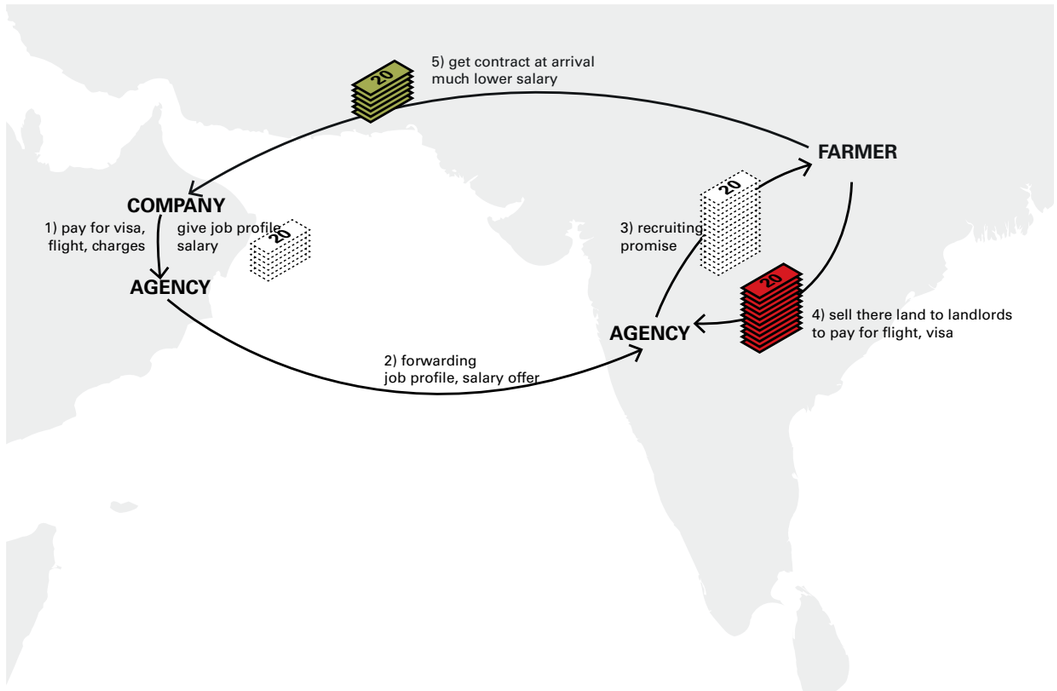
The workmen are transported by bus to the construction sites. The drivers are Omani by the Omanisation law.

Taxi, Hitchhiking for Free Time

Transportation is shared, one can often see expatriates waiting on the side of a road for somebody to pick them up.

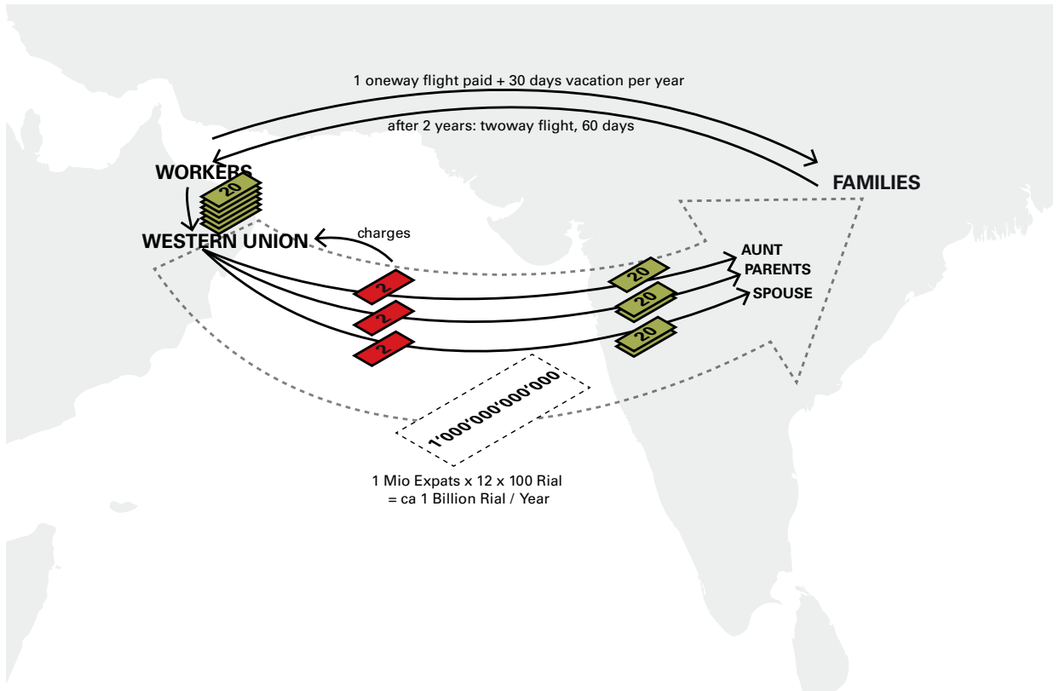
Weekend Destination: Ruwi (Little India)

The workmen have one day off per week on the weekend (Friday). They go to Ruwi by taxi or hitchhiking, where they meet friends and family members.



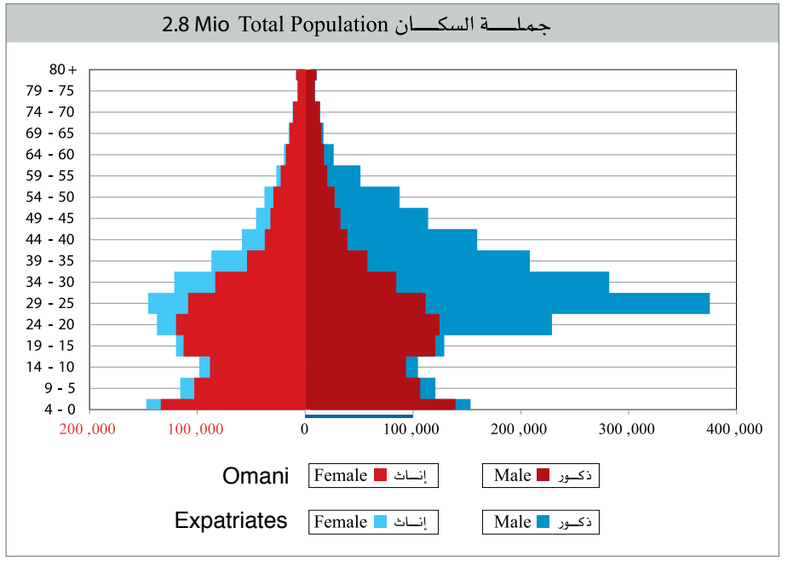
Recruitment of Workers

Uneducated farmers are promised a high salary and get the real contract only after landing in Muscat. That way they are forced to sign. A common workman earns about 80–100 Rial. To bring their familiy along expatriates need to earn at least 350 Rial.



Connection to Homeland

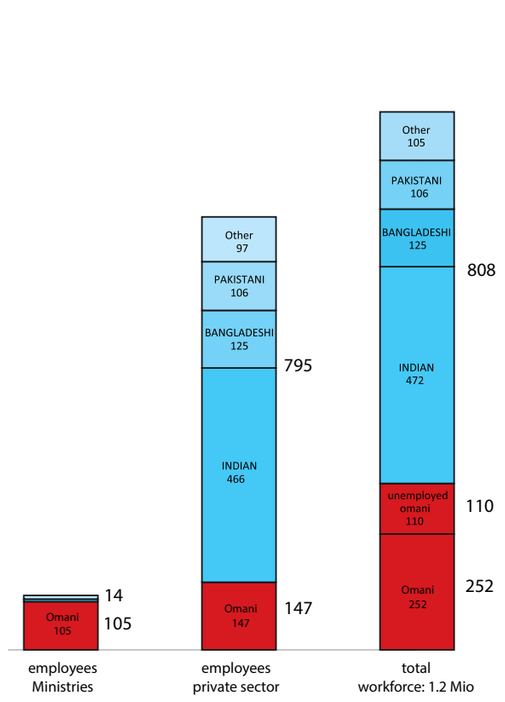
The workmen send the majority of the money to their families back home. Because the relatives back home do not share it equally, they have to send it separately to the different family members and spend a lot of money on transfer fees.



Demographics

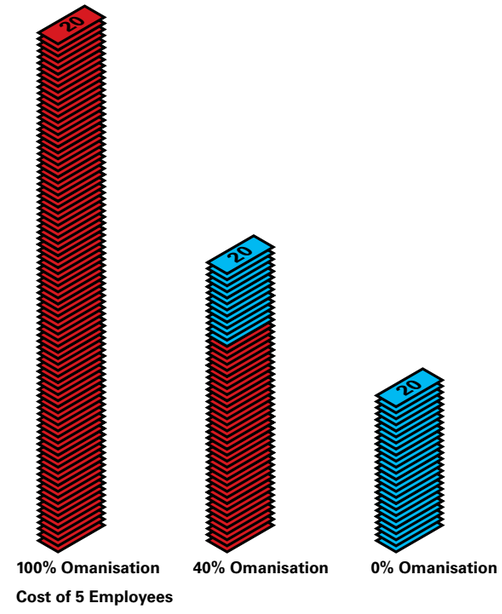
About half a million of young expats are working in Oman. They are named expats and not immigrants which already indicates that they are only temporary visitors. With the visa they also get a so called labour card which serves as an ID.

Women working as housemaids are most likely missing in this diagram because they are not registered. Almost every family has a housemaid. The employer is legally responsible for them.



Omanisation: You want Expats – You need Omanis

Omani people prefer to work for the state even if they are paid only half of what the would earn in the private sector. On the one hand it's a question of prestige, on the other of securing the future: state employees are de facto non-callable. Expats account for 80% of the public work force. This problem is targeted by the Omanisation law which prohibits a certain amount of Omani employees, depending on the sector and job profile.



Competition Market: If you Want to Survive you Need Expats.

If you want to run a business you need expats because they costs 2–3 times less than Omani worker: the Omani minimum salary is now 325 (before 2013: 200), compared to the expats with no minimum salary but a market salary of 60–100 Rial monthly. In addition they are better motivated because they are only in Oman to earn money and have no family or other conflicting interests.

So expats are needed to run a business and to be competitive in regard to other companies but also for Oman as country. The massive development would never have been possible without this work force.

Omanisation Award

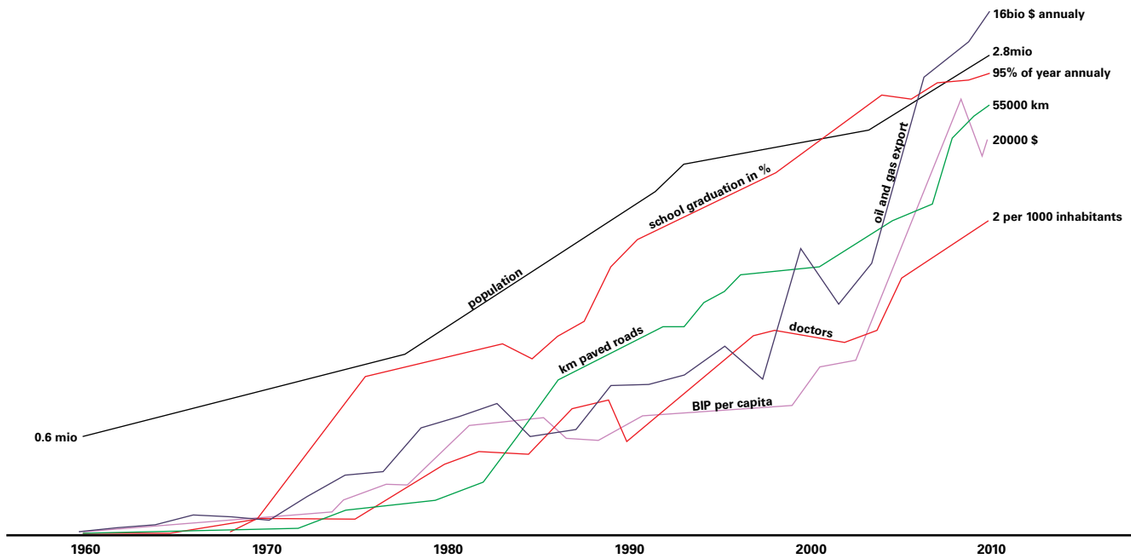
The Omanisation rate is a very important business factor. Awards are proudly presented at the entrance of companies.

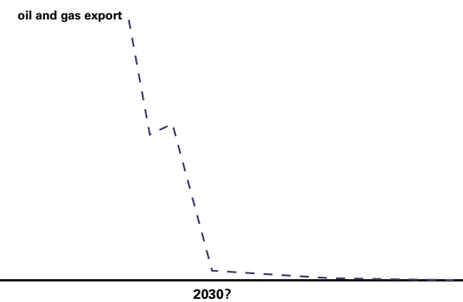
Taxi Driver: Jobs of 100% Omanisation

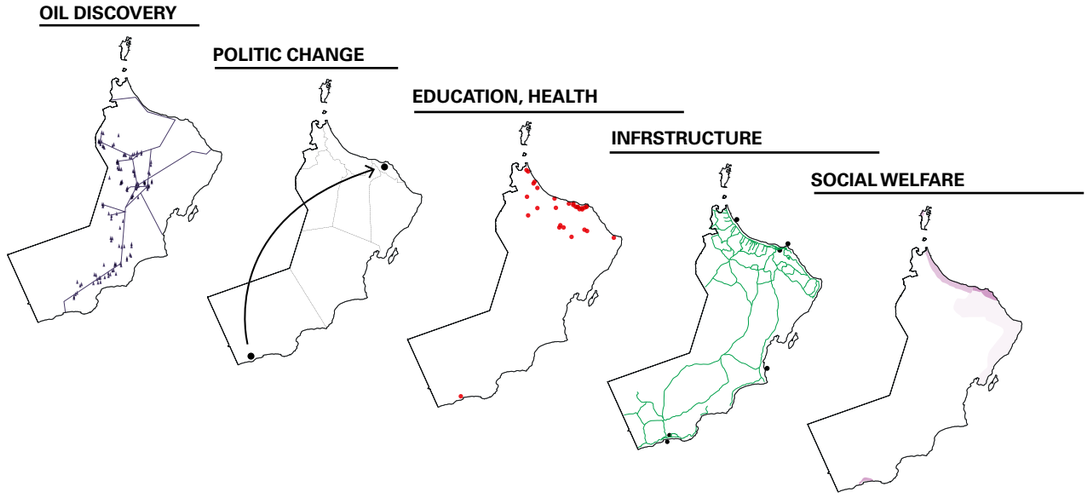
Certain jobs have an Omanisation rate of 100%: HR manager, busdriver, taxi driver. This can become a problem for example due to the lack of knowledge transfer and new inputs.

Construction Sector: 99% Expatriate

The Omanisation rate in the construction sector is 25%. Because it's very difficult to find Omanis who are willing to work in construction companies offer them about 100 Rial for giving their signature, that proofs that they work for them.







Securing a Future without Oil

In the past 40 years Oman has undergone massive change. In 1970 it was the least developed country in the world with only 5 km of paved roads, one hospital and one school. There were medieval conditions. After the political change, HM Sultan Quaboos started to use the oil money to rapidly develop the country. Starting with building up schools and hospitals in the 80s. This health and educational programs were succeeded by investments in infrastructure at large scale. Now the development is focusing on the social welfare, generating jobs and attracting foreign investments.
It seems that Oman is in a rush to build a base for an unknown future. So far the direction is only pointing up, but the machinery is slowly running out of oil. Oman has a serious problem in finding an alternative source of money, so far diversification from oil is only the export of gas.

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P. 26,29,30,33,34,36,39,40,43
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ACKNOWLEGMENTS

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Peter Hamel
Hussain Yousuf Al-Bulushi
Mohd Yaqoob
Anikumar R. Pillai
Sophie Loschert

Institutions
GUtech, Muscat

Students
Sami Al Habsi
Safaa Al Shukairy
Fatma Al Harrasi
Hawa Al Harrasi
Yomna Mohamed
Meriam Osman