

Hunger for concrete eats away at mountains

September 1 2019, by Isabelle Wesselingh And Emily Irving-Swift



Herder Jamal says he will have to leave the mountain in northern Cyprus—where his goats have grazed for years—due to quarrying

Soon, Jamal's voice will no longer ring out over the mountain slopes he's roamed for years with his herd in northern Cyprus.

To feed the concrete demands of hotels, holiday homes and road-

building, quarries are eating away at the mountains where his goats graze.

"I will have to leave because I don't have a future here," said the 55-year-old herder and lover of poetry.

From Cyprus to New Zealand, Lebanon and beyond, environmentalists worry about the proliferation of quarries in a world ever more greedy for concrete.

Between 40 billion and 50 billion tonnes a year of sand and gravel are extracted around the world from mountains, rivers, coastlines and [marine environments](#), the majority for construction, according to UN environment agency figures.

Concrete consumption has tripled over the past 20 years and with the [global population](#) expected to grow by two billion by 2050, demand can only go up, the UN says.

But the extraction process often comes with deforestation, air pollution and disruption of traditional human activities.

Near the hut where Jamal makes traditional "hellim" cheese, trucks come to collect rock, kicking up clouds of dust and frightening the animals.

On the quarried area of the mountain slope, vegetation has disappeared.

A policeman asks the goat herder to stay back as an explosion triggers a huge cloud of smoke and part of the rock face collapses.

'No other choice'

On another mountain, Jamal was injured and lost animals to quarrying work.



The quarry extraction process often comes with deforestation, air pollution and disruption of traditional human activities

Rocks "rained down on us," he said.

While he understands the "need for rock to build", he hopes the company running the site will help him find quieter pastures.

With some 355,000 inhabitants according to Turkish Cypriot planning

officials, the breakaway Turkish Republic of Northern Cyprus (TRNC) walks the line between development and conservation.

Established in the northern third of the Mediterranean island after Turkey's 1974 invasion, the TRNC is not recognised internationally and is faced with export constraints.

"Today, the island is fed by tourism so we need hotels, guest houses, roads and airports. We don't have any other choice than to exploit the quarries," Cenk Sarper, head of the Stone Quarries Union, told AFP.

He said the quarries operate in areas far from residential zones "where there are no trees or animals".

More than 12,000 tonnes of rock are extracted every day in the TRNC, according to quarry operators—or around 33 kilograms (73 pounds) per capita.

The world average is 18 kilograms, according to the UN.

Around the world

Asking to remain anonymous, a contractor said that key actors "did not do everything possible to limit visual pollution".

The gnawed mountain near Degirmenlik is a prime example.

Some accuse companies from Turkey of being less vigilant than Turkish Cypriot ones.



Quarries feed the demand for concrete to build hotels and other tourist infrastructure in northern Cyprus

The secretary general of the biologists' association in northern Cyprus, Hasan Sarpten, regrets that a large quarry was authorised far from a reserved area, in the west.

"They are not applying the best methods" environmentally, he said, criticising the lack of regulation by Turkish Cypriot authorities.

These authorities declined to comment when contacted by AFP.

Environmentalists are equally worried in the internationally recognised Republic of Cyprus.

"The growing extraction of raw materials for the construction industry is one of the main threats for protected areas," environment expert Klitos Papastylianou said.

Green Party MP Charalampos Theopemptou noted that "marinas and coast protection works require huge amounts of rocks".

An audit recommended increasing fines to discourage illegal quarrying.

Calls for stricter controls resound around the world.

In Lebanon, where illegal quarries have cleared entire mountains and hundreds of thousands of trees, activists are pushing back, despite death threats.

In the South Island of New Zealand, a 170-hectare (420-acre) quarry project near the town of Templeton has sparked outcry over the potential health risks of silica dust.

'Enormous waste'

But environmental advocates, experts and quarry operators agree on one point: consumers bear some responsibility.



Experts point to the extraction of raw materials for construction as a key threat to the environment

"On the one hand, people talk about the environment, on the other hand they say 'we want roads, we want houses, we want villas with pools', but where will the material needed come from?" asked Sarper, lamenting what he called "hypocrisy".

For Pascal Peduzzi, director of the UN Environment Global Resource Information Database in Geneva, "there is enormous waste—we are not at all in a position of sustainable development".

His organisation advocates maintaining existing buildings and "avoiding surplus construction... for speculation or prestige."

He said the alternative was a proliferation of ghost estates like those left behind in Ireland, Spain and Cyprus when boom turned to bust.

But in northern Cyprus, construction goes on.

An airport expansion is underway to welcome more than five million travellers per year.

On the eastern coast near Famagusta, a hotel with 2,500 rooms and thousands of apartments is sprouting up.

Outside the summer months, it will be empty, residents say.

Advertisements in Russian and English vaunt it as a "place of peace and happiness".

The billboards leave Jamal with a bitter taste.

© 2019 AFP

Citation: Hunger for concrete eats away at mountains (2019, September 1) retrieved 13 August 2024 from <https://phys.org/news/2019-09-hunger-concrete-mountains.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.