

LIVESTOCK

THE GOAT ECONOMY

Since Saudi Arabia lifted an export ban on Somaliland's livestock in 2009, the breakaway state has seen a boom in the trade of livestock, particularly goats

The autonomous region of Somaliland in north-western Somalia, is a long way from being an independent state. But while the country's politicians wait for a seat at the United Nations, the region has become a modest economic superpower in one commodity - goats.

The country's wealth is livestock, with 90 per cent of export earnings coming from cattle, sheep, and the all-important goat. Last year, Somaliland exported over three million goats, according to the Ministry of National Planning and Development. Almost as an afterthought it shipped around 250,000 cattle as well.

Demand in the Middle East, especially during the Hajj, stimulates production by ensuring a ready market for goats, according to Nadhem Mtimet, an agricultural economist at the International Livestock Research Institute. 'On the supply side, the climatic conditions in Somalia leave producers with few possible alternative activities apart from livestock keeping,' he says. There is a down side. 'The negative implications could be in terms of the dependency of the Somaliland economy on livestock production and exports.'

Trade bans could also severely damage the Somaliland economy. During the 1990s and 2000s, Saudi Arabia refused to buy goats from Somaliland due to a Rift Valley Fever outbreak.

There's also an environmental aspect to be mindful of. 'Overgrazing leading to land [and] environmental degradation could also be considered another negative externality of sheep and goat production,' adds Mtimet.

He also cites severe drought as another risk factor that can cause losses of livestock. 'Climate change and overgrazing have negative impacts on the availability of feed, which in turn threatens sheep and goat survival.'



OLI SCARFF/GETTY

CARTOGRAMS

EARTH AT NIGHT

BY BENJAMIN HENNIG

Some of the most iconic views of our planet have been made from space. The so-called *Blue Marble*, a photograph of Earth taken by astronauts in 1972, became a symbol for environmental activism showing 'our planet's frailty, vulnerability, and isolation amid the vast expanse of space'. Satellite images continue to amaze us with their unique perspectives that most of us will never experience by ourselves.

The Earth at Night is a much more recent image, not taken by a human in space, but taken by satellites as a series of several separate post-processed images that provide a consistent clear sight of the night views of all human and natural matter that glows and can be sensed

from space. The most recent composite image released by NASA in 2012 uses data acquired by a sensor on the Suomi NPP satellite which 'detects light in a range of wavelengths from green to near-infrared [...] to observe dim signals such as city lights [...]'

Reminiscent of the famous *Blue Marble* 40 years earlier, the *Black Marble* of 2012 is an equally iconic display of human activity on our planet, which in many parts of the world does not even halt when night falls. What NASA's image cannot show, however, are the stark differences between those who do have lights and those who that live without any lights at all at night.

The above gridded equal-population cartogram shows the satellite image resized according to how many people live in an area. Depopulated areas disappear, while the map gives the most densely populated areas the most space. The world's largest city regions such as the Nile Delta in the north-east of Africa, or the Pearl River Delta in the south-east of China become visible in stunning detail. Even single cities, such as Moscow, clearly stand out as if a magnifying glass were being put over them.

More sobering are the differences between the illuminated - or light-polluted - night skies in much of the wealthy world (such as Europe and North America), while the poorer parts of the planet appear as dark areas (as on much of the African continent).

The so-called emerging economies, most prominently China and India with their large populations, are

characterised by much more of a patchwork of bright and dark areas.

In 2007 nature conservation organisation WWF initiated the Earth Hour campaign 'encouraging households and businesses to turn off their non-essential lights for one hour to raise awareness about the need to take action on climate change'. Earth Hour can be a reminder of what a unique planet we live on and that it should take more attention than switching off the lights one evening a year to remind ourselves of the fragility of the blue marble that is far from being a black one at night. Reflecting on our wasteful use of energy in the brightest spots shown in this map is only the start for living a more sustainable future.

This image is the real Earth at night, the world of people that can afford to waste light and shine up into space, and of those who are having no light at night, sometimes by choice, but much more often without. This *Earth at Night* is much more than just a gorgeous image of where humans are active. It is an iconic reminder of the unequal frailty, vulnerability, and isolation of the poor amid the vast expanse of over seven billion people that now populate this planet.

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