

ENGLISH LEARNING FOR CURIOUS MINDS



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Episode #012

The Sea That Disappeared

December 27, 2019

[00:00:00] Hello, hello, hello, and welcome to the English Learning for Curious Minds podcast.

[00:00:08] I'm Alastair Budge.

[00:00:10] Today we are going to be talking about a sea that quite literally [**shrunk**¹](#) to a fraction of its original size.

[00:00:20] The Aral Sea used to be the fourth largest lake in the world, but there's probably a good chance that you have never heard of it.

[00:00:29] Before we get right into the podcast, I just wanted to give you a quick reminder that you can grab a copy of the transcript and key vocabulary for this podcast over on the website, which is leonardoenglish.com there's also a load of material on there about how to learn English with podcasts, so it's well worth a look if you haven't done so already.

¹ became smaller

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[00:00:50] If you're listening to the podcast on the website with the key vocabulary and transcript in front of you, then congratulations, you are [one step ahead of the game²](#).

[00:01:00] Okay then. The Aral Sea, have you ever heard of it?

[00:01:05] Well done if you have, and extra bonus points if you know exactly where it is.

[00:01:10] The Aral Sea is located in central Asia, with its northern part in Kazakhstan and the southern part in Uzbekistan.

[00:01:19] [Crucially³](#) until 1991 this was all part of the Soviet Union and therefore fell under Soviet central planning.

[00:01:29] Even though it's called a sea, it's actually a [freshwater⁴](#) lake and has no roots to the sea at all.

[00:01:37] Anyway, it's name is the Aral Sea, so we'll continue to call it that.

[00:01:42] Up until 1960 the Aral Sea was still the fourth largest lake in the world. Its water came from two large rivers called the Amu Darya and the Syr Darya.

[00:01:55] By 1995 the sea had lost three quarters of its water volume, and by 2014 the eastern part of the sea had completely dried up for the first time in 600 years.

[00:02:11] It's now split into several parts. The northern Aral Sea, which is in Kazakhstan and the southern part, which is in Uzbekistan.

² ahead of everyone else, already ahead

³ very importantly

⁴ of or found in freshwater; not of the sea

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[00:02:20] As large parts of the seabed are now completely dry, you can see [shipwrecks](#)⁵, abandoned cars and buses, and a [plethora](#)⁶ of Soviet era [junk](#)⁷ that is just left abandoned on the ground.

[00:02:37] On the Western part of the sea you can drive along what used to be the bank of the sea and look over what is a cliff to see the [carcasses](#)⁸ of old vehicles that had fallen into the sea when it was, well, still a sea.

[00:02:52] I'll put some photos up on the Instagram account of these [carcasses](#) of ships. It's really quite amazing.

[00:02:59] The drying up of the sea has caused a huge [shift](#)⁹ in the local environment.

[00:03:05] [Thriving](#)¹⁰ fishing communities have had to leave, and entire villages have been turned into [ghost towns](#)¹¹.

[00:03:12] Evidently, this has caused huge pain for the local inhabitants who have either had to [up sticks](#)¹² and leave or adapt to a completely new situation.

[00:03:24] But how is this even possible? Seas don't just disappear. Where did all the water go?

⁵ abandoned ships

⁶ a large or excessive amount of something

⁷ rubbish, trash

⁸ the structural framework or remains of a building, ship, or piece of furniture

⁹ change

¹⁰ prospering, flourishing, doing very well

¹¹ uninhabited towns

¹² (informal) go and live elsewhere

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[00:03:32] Well, we had a little clue at the start of this podcast about what might have caused the fate of the Aral Sea: Soviet central planning.

[00:03:41] As part of the old Soviet Union, the Aral Sea fell under Soviet central planning. What this means is that policy, from political right through to agricultural, came from Moscow.

[00:03:55] In plain English, this means that everything was decided centrally from Moscow, even decisions that would affect places thousands of miles away.

[00:04:06] In the late 1950s Moscow decided that the [arid](#)¹³ plains of Kazakhstan, Uzbekistan and Turkmenistan were to become a [hub](#)¹⁴ for cotton farms.

[00:04:18] You can perhaps imagine the central planners looking at a map of the vast Soviet Union, trying to decide which areas should focus on which particular [crops](#)¹⁵.

[00:04:28] I imagine it like a group of people playing Risk, pushing armies and settlements over borders in a bit of a [haphazard](#)¹⁶ way.

[00:04:38] The central Asian [basin](#)¹⁷ is huge.

[00:04:42] It's mainly a desert and the idea of turning it all into a massive centre for supplying cotton to the rest of the country, I imagine it could have looked interesting on paper.

¹³ very dry, without water

¹⁴ centre, main area

¹⁵ plants used for farming

¹⁶ without any obvious principle of organisation

¹⁷ a circular or oval valley or natural depression on the earth's surface, especially one containing water

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[00:04:55] The plan was for it to create more than 10 million [acres¹⁸](#) of land that could be used for crops, but it turns out there were a few problems with this idea.

[00:05:08] Firstly, cotton is a pretty thirsty plant. It requires a lot of water to grow. Specifically, it requires 7.8 megalitres per hectare to grow.

[00:05:20] Now, that might not mean a huge amount to you, it didn't mean a huge amount to me, but if we bring it down to the level of a tee shirt. There's research from Oxfam that suggests even now it can take up to 2,700 litres of water to make a single cotton t-shirt like the one that you might be wearing at the moment.

[00:05:42] So trying to start a [hub](#) for cotton production in a desert, well, you're going to need a lot of water and deserts are not famous for having a lot of water.

[00:05:54] So the Soviet central planners decided to [irrigate¹⁹](#) these new farms, to provide water for them, diverting almost all the water from the two large rivers that fed the Aral Sea, by building these canals away from the Aral Sea and taking the water towards these new thirsty cotton plants, they built a vast [irrigation](#) network of more than 45 dams, 80 [reservoirs²⁰](#), and a total of 20,000 miles of canals.

[00:06:27] On top of this, these canals were pretty inefficient, they didn't work very well.

[00:06:33] They lost somewhere between a quarter and three quarters of the water to the desert, so it never reached the cotton plants in the first place.

[00:06:44] All of this fresh water was cut off from reaching the Aral Sea.

¹⁸ a unit of land area equal to 0.405 hectares

¹⁹ supply water to (land or crops) to help growth, typically by means of channels

²⁰ large natural or artificial lakes used as a source of water supply

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[00:06:48] The water that was there continued to [evaporate](#)²¹, and as the water evaporated, the [salinity](#)²² of the water, that means the amount of salt that there is in it, continued to rise going from about 10 grammes of salts per litre to a hundred grammes.

[00:07:06] This has had a huge effect on the entire ecosystem, as you might imagine, you can't just 10 times the saltiness of the water and expect nothing to happen.

[00:07:18] And what happened?

[00:07:19] Well, it wasn't good news. Fish and marine life died [in their masses](#)²³, and commercial fishing catches, so that's the, um, the amount of fish that were caught commercially, not personally, commercial fishing catches fell from 43,000 tonnes in 1960. So 43,000 to zero in 1980.

[00:07:45] Imagine that - a sea that used to supply one sixth of the Soviet Union's entire fish catch, 20 years later, all the fish had died and commercial fishing was no longer even possible.

[00:08:00] It wasn't just the fish that died out though.

[00:08:02] The salty [bed](#)²⁴ of the dry sea blew onto the farmland nearby and as the bed was [contaminated](#)²⁵ with [fertilizer](#)²⁶ and [pesticides](#)²⁷, it wasn't just a public health

²¹ turn from liquid into vapour

²² the amount of salt in a liquid

²³ in large amounts

²⁴ the bottom of the sea

²⁵ having been made impure by exposure to or addition of a poisonous or polluting substance

²⁶ a chemical or natural substance added to land to increase its fertility

²⁷ a substance used for destroying insects or other organisms harmful to cultivated plants or to animals

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hazard, it also settled onto agricultural fields, damaging the [soil](#)²⁸ and plants. The result of this was that between the years of 1960 and 2018 the sea has reduced in size by 90% and split in two.

[00:08:35] Indeed, one interesting thing you can do yourself is to Google the Aral Sea, have a look at the view on Google Maps, and then look on to the satellite view. It's pretty amazing.

[00:08:48] You can see that the Aral Sea is now practically two seas, both of them continuing to dry up year after year.

[00:08:56] So is there any end to this? What's happening now?

[00:09:01] Well, there are some attempts to [halt](#)²⁹ the disappearance of the Aral Sea.

[00:09:05] The World Bank funded a project to build a dam in Kazakhstan in 2005 which should help improve the health of the Syr Darya, which is one of the two rivers that provides water for the Aral Sea, as well as help fill up the northern Aral Sea.

[00:09:23] There is some evidence to suggest this is working, with water levels in the north Aral Sea having risen three metres since 2005, and three metres, that's quite a lot in terms of rising sea level.

[00:09:37] What this means - again, you can have a look at Google maps if you're interested - is that Kazakhstan, which is to the north of the sea, has in effect dammed the northern part of the Aral Sea so that the Syr Darya river, which is one of the two main sources of water to the sea, will only supply water to the northern part.

[00:09:59] So the southern part won't get any water from this main river that used to provide all of its water.

²⁸ the upper layer of earth in which plants grow

²⁹ stop

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[00:10:06] Understandably, the Uzbeks are not happy with this as it's [cutting off](#)³⁰ the southern part of the sea completely from this source of water.

[00:10:16] Unfortunately, there isn't much [light at the end of this tunnel](#)³¹ for the southern Aral Sea, for the Uzbek part.

[00:10:23] For a [rejuvenation](#)³² of the Aral Sea, a mass project would be required to [divert](#)³³ water away from the cotton fields and back towards the sea.

[00:10:33] I mean, the water is still going to the cotton fields. Things haven't really changed.

[00:10:37] Uzbekistan is still the fifth largest cotton producing country in the world and the Uzbek government is reluctant to do anything that would [jeopardise](#)³⁴ the [livelihood](#)³⁵ of its farmers.

[00:10:49] It is a unfortunate but not unfamiliar story of countries putting economic development above environmental restoration. The reality is that the fate of the Aral Sea is [inexorably](#)³⁶ linked to cotton - the [flourishing](#)³⁷ of one can't happen without the demise of the other.

³⁰ an act of stopping or interrupting the supply of something

³¹ an indication that a long period of difficulty is nearing an end

³² restoration to its previous glory

³³ move away from

³⁴ put (someone or something) into a situation in which there is a danger of loss, harm, or failure

³⁵ a means of securing the necessities of life

³⁶ in a way that is impossible to stop or prevent

³⁷ developing rapidly and successfully; thriving

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[00:11:10] If you are waiting for the good news part at the end of the podcast, well, I'm afraid there really isn't one, at least for the Uzbekistan part

[00:11:18] What I will say though, is that if you ever have the chance to visit Uzbekistan, just do it.

[00:11:25] I was there in 2012 and it is a fascinating place.

[00:11:29] Of course, if you do manage to go there, make sure you visit the Aral Sea. It is one of the most amazing places in the world and seeing these ships that are upside down, just there in the middle of the desert, well, it is very impressive in the most literal sense of the word impressive.

[00:11:47] As always, if you have enjoyed the show, please do tell colleagues, friends, family members, or anyone who might listen.

[00:11:56] And if you want to tell future internet friends and make a new friend in me, then you could always leave a review.

[00:12:02] If you are on Apple Podcasts, I think you can probably do it in under 15 seconds and it'll put a big smile on my face.

[00:12:10] You have been listening to the English Learning For Curious Minds podcast by Leonardo English. I'm Alastair Budge and I will catch you in the next episode.

[END OF PODCAST]

Key vocabulary

<u>Word</u>	<u>Definition</u>
Shrunk	became smaller
One step ahead of the game	ahead of everyone else, already ahead
Crucially	very importantly
Freshwater	of or found in freshwater; not of the sea
Shipwrecks	abandoned ships
Plethora	a large or excessive amount of something
Junk	rubbish, trash
Carcasses	the structural framework or remains of a building, ship, or piece of furniture
Shift	change
Thriving	prospering, flourishing, doing very well
Ghost towns	uninhabited towns
Up sticks	(informal) go and live elsewhere
Arid	very dry, without water
Hub	centre, main area

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Crops	plants used for farming
Haphazard	without any obvious principle of organisation
Basin	a circular or oval valley or natural depression on the earth's surface, especially one containing water
Acres	a unit of land area equal to 0.405 hectares
Irrigate	supply water to (land or crops) to help growth, typically by means of channels
Irrigation	see 'irrigate'
Reservoirs	large natural or artificial lakes used as a source of water supply
Evaporate	turn from liquid into vapour
Salinity	the amount of salt in a liquid
In their masses	in large amounts
Bed	the bottom of the sea
Contaminated	having been made impure by exposure to or addition of a poisonous or polluting substance
Fertilizer	a chemical or natural substance added to land to increase its fertility
Pesticides	a substance used for destroying insects or other organisms harmful to cultivated plants or to animals
Soil	the upper layer of earth in which plants grow

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Halt	stop
Cutting off	an act of stopping or interrupting the supply of something
Light at the end of this tunnel	an indication that a long period of difficulty is nearing an end
Rejuvenation	restoration to its previous glory
Divert	move away from
Jeopardise	put (someone or something) into a situation in which there is a danger of loss, harm, or failure
Livelihood	a means of securing the necessities of life
Inexorably	in a way that is impossible to stop or prevent
Flourishing	developing rapidly and successfully; thriving

We'd love to get your feedback on this podcast.

What did you like? What could we do better?

What did you struggle to understand?

You can email us at hi@leonardoenglish.com.