

»» Project Information

Implemented by:



Water – Peru

Clean water for the metropolis of Lima

Peru's capital city Lima is located on a desert-like expanse of land where it hardly ever rains. Lima is supplied with water from the Andes but this source is becoming increasingly scarce. The municipal water utility company SEDAPAL is implementing a huge reform programme for water supply and waste water disposal. This initiative is supported by international donors including Germany through KfW Development Bank.

Context

After Cairo, Lima is the second largest city in the world that is located in a desert. The Peruvian capital has more than 8 million inhabitants and this figure is rising by the day. It is difficult to specify the exact number of inhabitants as many people live in slums, predominantly on the slopes in the northeastern part of the city. In these districts there are many houses that are not connected to the public water supply. There are 1 million people in Lima with no access to clean drinking water. Around 1.5 million are not connected to the waste water disposal network. Their waste water flows into rivers or directly into the Pacific.

The water shortage in the Peruvian capital is further heightened by climate change. It hardly ever rains in Lima. The city is supplied with water from the Rimac River that is fed by glaciers in the Andes. However, the glaciers are retreating as a result of climate change. During the dry season from May to November, the Rimac does not provide enough water to satisfy the consumption level of Lima's inhabitants. Thus water from reservoirs in the Andes is also fed into the river. Downstream from the city of Lima, the Rimac River is already dried up for most of the year. The water shortage is

exacerbated by the fact that the supply networks are in poor condition. Up to 40% of the drinking water in the north of the city seeps out of the leaking piping system and remains unused.

Furthermore, the waste water is inadequately purified. Only 20% of the waste water is redistributed to waste water treatment plants. The majority of what remains flows untreated into the Pacific. In the 1990s a cholera

Project name	Waste water disposal in Lima (SEDAPAL), Local Aid Infrastructure Fund (LAIF) grant in Lima, rehabilitation of water and waste water networks in northern Lima
Commissioned by	Federal Ministry for Economic Cooperation and Development (BMZ) European Union (EU)
Country/Region	Peru – Lima
Lead executing agency	Servicios de Agua Potable y Alcantarillado en Lima (SE-DAPAL)





KfW Development Bank is financing the construction of treatment plants for the city of Lima. Source: KfW / Charlotte Berkenfeld.

epidemic broke out along the coast, which was traced back to the unpurified waste water from the city of Lima. Industrial waste water also flows untreated directly into the sea.

Project approach

In collaboration with the Japanese development agency JICA, the Inter-American Development Bank IDB and the World Bank, KfW Development Bank is supporting the expansion and rehabilitation of the water supply and waste water disposal and purification in Lima. It is promoting three types of project:

1.) Limitation of water losses.

KfW is supporting the rehabilitation and part of the expansion of the water supply and waste water disposal, primarily in Lima's northern districts where many people are living in poverty. The quasi-public water utility company SEDAPAL is one of the largest in the country and obtains a loan for this purpose.

2.) Cleaning and recycling of water.

KfW is supporting SEDAPAL with a further loan to construct a treatment plant in Lima. The purified waste water is to be used later down the line to water parks and green areas. There are plans to build additional treatment plants. The industrial waste water is always taken into consideration during

planning.

3.) Adjustment to climate change.

The water shortage in Lima is amplified by climate change. Accompanying projects are aimed at modernising existing plants and improving operations. KfW is therefore advising SEDAPAL on how to manage industrial waste water. It is committed to a "Plan Verde" ("Green Plan") in order to allocate more green areas in the capital city of Lima where the population can relax.

Impact

The projects financed by KfW will help to supply the inhabitants of Lima's poorer city districts with clean drinking water. The price of water will fall in these districts as previously lots of families procured their water from tank trucks, which is particularly expensive. Those who cannot afford the new water charges will be given subsidised rates.

In future, some industrial companies will also be connected to the new treatment plants in order to dispose of industrial waste water that is particularly harmful to the environment. The treated water will be fed into a channel used to water the city's parks and green areas. This solution relieves the drinking water network that was also used in the past for watering the green areas. The aim of the city administration is to increase the city's green areas by half before 2020, as so far Lima has far too few parks by worldwide comparison. Thanks to the new watering solution using process water, the city administration is one step closer to implementing its ambitious plan.



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