

Fog harvesting could provide water for dry cities

27th February 2025



Many regions in the world have very little rain. It is a daily challenge for people to get water. Scientists have found a new way that could help some of the driest towns and cities in the world. Capturing water from fog could provide drinking water to

millions of people. Researchers in Chile have been studying how fog harvesting could help to collect water. Fog harvesting is a simple process. Water from fog is collected on large mesh screens that are hung between poles. When fog and clouds pass through the screens, droplets of water stick to the mesh. This water then drips into pipes below the screens and ends up in storage tanks. It is a cheap and easy way of collecting water in dry areas.

The researchers are from Universidad Mayor, a private university in the capital city Santiago. They have been testing fog harvesting in the desert town of Alto Hospicio. The town gets an average of less than 5 mm of rainfall a year. Many people who live there get their drinking water delivered by truck. Researcher Dr Virginia Carter Gamberini said fog harvesting could bring a "new era" to the town. She said her research "represents a notable shift in the perception of fog water use - from a rural, rather small-scale solution to a practical water resource for cities". She added: "Water from the clouds could enhance our cities' resilience to climate change, while improving access to clean water."

Sources: eurekaalert.org / sciencenews.org / gizmodo.com

Writing

People in areas with no rainfall should move to areas with rainfall. Discuss.

Chat

Talk about these words from the article.

regions / rain / challenge / drinking water / fog / mesh / clouds / storage tanks / dry / researchers / capital city / desert / era / rural / solution / resource / climate change

True / False

- 1) The article says most regions in the world will get very little rain. T / F
- 2) It is easy to collect water by using fog harvesting. T / F
- 3) With fog harvesting, water sticks to poles that hang between screens. T / F
- 4) Fog harvesting is an expensive way of collecting water. T / F
- 5) The fog harvesting experiment took place in the capital city of Chile. T / F
- 6) Many people in the town of Alto Hospicio get water from a truck. T / F
- 7) A researcher said fog harvesting could help cities one day. T / F
- 8) Fog harvesting could be useful to protect us against climate change. T / F

Synonym Match

(The words in **bold** are from the news article.)

- | | |
|----------------------|------------------|
| 1. regions | a. age |
| 2. challenge | b. gather |
| 3. provide | c. trialling |
| 4. collect | d. problem |
| 5. cheap | e. countryside |
| 6. testing | f. inexpensive |
| 7. delivered | g. areas |
| 8. era | h. making better |
| 9. rural | i. give |
| 10. improving | j. brought |

Discussion – Student A

- a) What do you think about what you read?
- b) Would you like to live in a desert town?
- c) What water problems are there in the world?
- d) What water problems will there be in the future?
- e) What other ways are there of collecting water?
- f) What three adjectives best describe the word 'water'?
- g) What will Earth be like after 100 years of climate change?
- h) What questions would you like to ask the researchers?

Phrase Match

- | | |
|---|-------------------------------|
| 1. Many regions in the world | a. water in dry areas |
| 2. provide drinking water | b. to clean water |
| 3. Fog harvesting is a simple | c. have very little rain |
| 4. This water then drips | d. less than 5 mm of rainfall |
| 5. It is a cheap and easy way of collecting | e. city Santiago |
| 6. in the capital | f. process |
| 7. The town gets an average of | g. for cities |
| 8. get their drinking water delivered | h. to millions of people |
| 9. a practical water resource | i. into pipes below |
| 10. improving access | j. by truck |

Discussion – Student B

- What do you know about fog?
- What do you think of harvesting water from fog?
- Does your town have any water problems?
- What would living in a very dry region be like?
- Has the amount of rainfall changed in your town?
- What would you do if there was little water to use?
- Would you rather live in a dry or rainy place?
- How cheap is the water in your town?

Spelling

- Many erngios in the world
- It is a daily elgeahcni for people
- podevir drinking water to millions
- Fog harvesting is a simple oecpsr
- screens that are hung between slpeo
- ends up in soeratg tanks
- in the aptalic city Santiago
- an earvgae of less than 5 mm
- drinking water eerdvdeil by truck
- a lurar, rather small-scale solution
- a practical water rrcueeos for cities
- nchenae our cities' resilience

Answers – Synonym Match

1. g	2. d	3. i	4. b	5. f
6. c	7. j	8. a	9. e	10. h

Role Play

Role A – Thick Fog

You think thick fog is the worst weather event. Tell the others three reasons why. Tell them why their weather events aren't as bad. Also, tell the others which is the least annoying of these (and why): heavy rain, heatwave or hurricane.

Role B – Heavy Rain

You think heavy rain is the worst weather event. Tell the others three reasons why. Tell them why their weather events aren't as bad: thick fog, heatwave or hurricane.

Role C – Heatwave

You think a heatwave is the worst weather event. Tell the others three reasons why. Tell them why their weather events aren't as bad: heavy rain, thick fog or hurricane.

Role D – Hurricane

You think a hurricane is the worst weather event. Tell the others three reasons why. Tell them why their weather events aren't as bad: heavy rain, heatwave or thick fog.

Speaking – Weather

Rank these with your partner. Put the worst weather at the top. Change partners often and share your rankings.

- | | |
|------------------|--------------|
| • Heavy snow | • Thick fog |
| • Sleet and hail | • Heavy rain |
| • Dust storm | • Hurricanes |
| • Drought | • Heatwaves |

Answers – True False

1	F	2	T	3	F	4	F	5	F	6	T	7	T	8	T
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Answers to Phrase Match and Spelling are in the text.