China sets 2020 "artificial weather" target to combat water shortages

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A man walks through the dried-up bed of a reservoir in Sanyuan county, Shaanxi province July 30, 2014. REUTERS/Stringer

BEIJING, Jan 13 (Reuters) – China aims to induce more than 60 billion cubic metres of additional rain each year by 2020, using an "artificial weather" programme to fight chronic water shortages, the government said on Monday.

China's water resources are among the world's lowest, standing at 2,100 cubic metres per person, or just 28 percent of the world average.

Shortages are particularly severe in the country's northeast and northwest.

China has already allocated funds of 6.51 billion yuan (\$1.05 billion) for artificial weather creation since 2008, the State Council, or cabinet, said in a document setting out the programme from 2014 to 2020.

"Weather modification has an important role to play in easing water shortages, reducing natural disasters, protecting ecology and even safeguarding important events," it added.

The figure of 60 billion cu m is equivalent to more than one-and-a-half times the volume of the Three Gorges reservoir, part of the world's largest hydropower plant.

Artificial rain is created by rocket-launching chemicals, such as silver iodide, into clouds to boost rain. China used the technology, known as cloud seeding, to scatter clouds ahead of the Beijing Olympic Games in 2008.

The target, an increase of a fifth from 2013 levels, aims to battle China's crippling water scarcity, which threatens a long-standing policy of self-sufficiency in food production, as demand from manufacturing and power generation grows.

The programme is also increasingly used to disperse smog in heavily polluted regions.

Around 70 percent of China's rivers and lakes have become too polluted to use.

Last month China kicked off the second phase of its South-North Water Diversion Project to send billions of cubic meters of water from central and southern China northwards to Beijing and its environs.

But frequent droughts in central and northern China keep the government under pressure to ensure sufficient water supply.

China launched its "human affected weather" programme in 1958, and has done extensive research in cloud

seeding. Last year the government said it had met a target of increasing artificial rain to more than 50 billion cubic meters per year.

China's "cloud water potential" is huge, with average water vapour levels standing at 1.82 trillion cubic metres, the government said in Monday's document.

Existing technologies would allow China to potentially induce as much as 280 billion cubic metres of additional rain each year, it added.

(Reporting by David Stanway and Stian Reklev; Editing by Clarence Fernandez)