Australian scientists aim to reduce sheep burps

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File photo of a farmer droving his sheep, northwest of Melbourne. Australian scientists are working to breed a sheep that belches less, as they look for ways to reduce harmful methane emissions from the country's woolly flocks, a researcher said Sunday.

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Twelve percent of Australia's total greenhouse gas emissions originate with agriculture, and some 70 percent of that amount is blamed on ruminant livestock, with most of it coming from burps, study leader John Goopy said.

With sheep, almost all of the methane produced comes out of their mouths.

"There's not very much passed out the animal's anus at all," said Goopy, from the New South Wales Department of Industry and Investment.

Scientists are measuring the sheep's methane emissions by herding them into a specially designed booth shortly after they eat and then calculating the amount of gas belched.

They hope to find whether there is a genetic link between the sheep that produce the least methane, which could then be exploited to breed low-emissions sheep.

Of the 200 sheep so far tested, about half produced much more than average while the other half belched considerably less methane.

"The biggest single determinant of methane production in cattle and sheep is the amount of feed they eat. But even once that is taken into account, I have found significant differences between individual animals," Goopy told AFP.

The scientist said methane has about 17 times the environmental warming capacity of carbon dioxide, a greenhouse gas blamed for global warming.

He said if the methane produced by Australia's 80 million or so sheep was reduced by just 10 or 15 percent in the next decade, it would have "a substantial and also a long-term impact on our greenhouse gas emissions".

"And if we can find a hereditary link and specifically breed for that outcome it will be an ongoing reduction, it won't be a one-off."