



## WUR influential in SDG research

**WUR is a leading player in research aimed at advancing the sustainable development goals (SDGs), according to a study published by Elsevier on 23 September.**

Five years ago, the United Nations identified 17 sustainable development goals, including clean water and an end to poverty and hunger. Since then, 4.1 million articles have been published worldwide on issues relating to these SDGs, according to Elsevier's calculations. Most of these publications deal with improvements to global health.

The Elsevier report concludes that Dutch research on the SDGs is influential as it is often cited by other scientists. WUR is particularly influential in research on climate change for the climate action goal: there are 220 per cent more citations of WUR articles than the global average in that field. <sup>AS</sup>



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## Why biological pest control wasn't working in Bangladesh

Many farmers in northern Bangladesh have not managed to implement biological crop protection in the cultivation of aubergines. They still apply large quantities of pesticide every week to combat the brinjal shoot and fruit borer (*Leucinodes orbonalis*), a moth. Environmentally friendly alternatives are known but they need to be developed in partnership with the farmers, says PhD candidate Naznin Nahar.

### After a trial year, the farmers stopped using pesticides

Nahar's first step was to find out from the farmers what the main crop diseases were. In addition

to the moth, the key problems were two fungal diseases and bacterial wilt. The growers used chemicals to tackle these diseases too. The literature recommended a combination of biological methods but not all had been tested in practice. So Nahar started field trials together with the farmers.

For example, the aubergine seedlings suffered from a soil fungus. She was able to increase numbers of healthy seedlings by 25 to 64 per cent, compared with numbers when using chemicals, by treating the seeds with hot water

and applying the beneficial soil fungus *Trichoderma harzianum* to drive out the pathogen. *Trichoderma harzianum* also helped suppress the bacterium responsible for bacterial wilt.

### Too labour intensive

To tackle the moth, the literature recommended a combination of pheromone traps and the removal of infected shoots and fruits. The farmers rejected the second option as too labour intensive.

They wanted to combine pheromone traps with conventional spraying. So Nahar suggested biological products instead that could also be sprayed and are less damaging to the environment. This combination increased the farmers' yields and income. After one trial year, the farmers stopped using the pesticides as they no longer had any added value in combatting the moth. The field trials had let the farmers test for themselves whether integrated pest management worked for them and which elements helped most. Nahar's conclusion: biological crop protection is possible, but only in combination with integrated people management. <sup>AS</sup>