

## Science will give farmers huge advantages

# KNOWLEDGE IS POWER



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**MAKING SURE**  
FARMERS have access to the right scientific know-how is a no-brainer.

If we're to lower environmental inputs, increase productivity, weather the unpredictable climate and improve water quality, we need to know more about our environment and have the necessary on-farm tools. Federated Farmers has been

relaying information to central government and science providers about where research is urgently needed. The aim is to achieve a science system that works better for farmers.

For example, farmers have been investing for decades in measures to control erosion, such as tree planting, stock exclusion and retirement of highly erodible land. They are keen to know that these investments are making a difference but to date no one has been able to answer that question with any certainty.

With sediment included in the current water reforms, it's increasingly on the national radar and particularly relevant to the debate around exclusion of livestock from waterways. So understanding the complexity of natural erosion processes, and what works and doesn't work to control sediment on-farm, is ever more important.

There is also work to do on the 'nitrogen cycle', the natural process that links nitrogen in air,



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Farmers have been investing for decades in measures to control erosion

knowledge. These critically impact environmental management, with farmers regularly wearing the results of inadequate data.

We also need more fundamental research on native fish, both from the water quality and biodiversity perspectives. This will help us work out how best to provide for native fish habitat and agricultural use.

Federated Farmers has also been working alongside researchers who want to crossbreed rye grass with some of its wild relatives. The aim is to produce rye grass varieties that need less water and fertiliser, are highly productive, adapted for different micro-climates and resistant to disease. This work could transform the quality and resilience of pasture, while giving farmers another way to shrink their environmental footprint. 'Knowledge is power' as they say. In this case, it's the power to do more, use less and keep our competitive edge on the world stage.