

SIN initiates global collaboration to support food security

As a result of SIN USA work in the area of global food security and Phosphorous, there have been five high impact joint papers and £1.2 million in joint research proposals. An additional £1.5 million proposed project is currently under review which will look at the role of Phosphorous in the UK's food system as a whole.

Why Phosphorous?

Agriculture depends on Phosphorous (P), a significant, and limited non-renewable element used to produce fertilizers. The UK relies on importing P, and with over 90% of the world's P mines controlled by 5 nations, the UK is risk from swings in P prices and availability. In addition, P runoff generates ecological and economic damage through the effects of P on freshwater and marine ecosystems. **Challenges in the sustainability of phosphorous pose geological, geopolitical, and economic questions for the future of UK food security.** Due to the importance of this issue, there is a need for both transatlantic policy and technological collaboration.

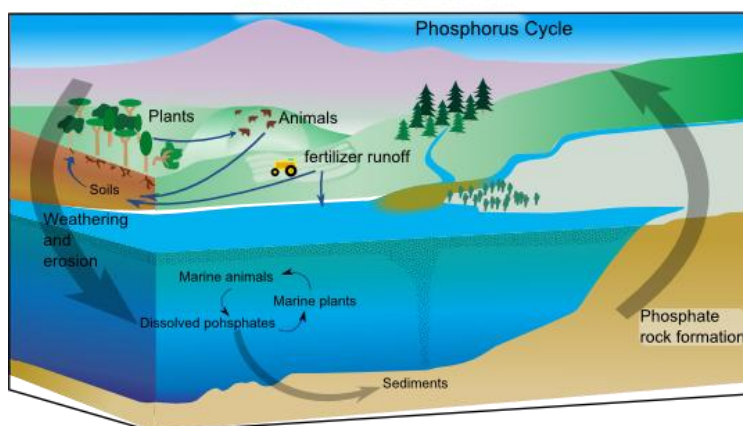


Photo Courtesy of Wikipedia: https://commons.wikimedia.org/wiki/File:Phosphorus_cycle.png

SIN steps in

SIN brought together leading phosphorous researchers from the US and the UK in a series of meetings and workshops over two years in two locations: Washington DC and Phoenix, Arizona. The UK researchers represented a wide geography from across the country, from Queen's University in Belfast, to Bangor University in Wales. During this time, UK researchers engaged with a US National Science Foundation-funded academic research network to explore a wide variety of topics, from reducing the impact of agricultural runoff on water quality to methods of recycling phosphorous for a more sustainable food supply.

This activity is part of a broader SIN USA effort on food security. Since 2014, we've hosted several workshops on plant and animal health, and most recently, using advanced digital tools to improve crop breeding.

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