

## OPINION

# There are no easy fixes

WELL-MEANING people are trying to sell me products to improve our soil nutrition.

I am aware from my farm managers that soil quality is decreasing. But it was the tripling in price of phosphates, and learning that artificial fertiliser is the worst greenhouse gas polluter, that encouraged me to ask if there are some easy wins.

We know the future needs us to produce more food off less land yet, thanks to artificial fertiliser, the world's soils have never been more productive.

At the same time organic matter levels have declined, soil structure has deteriorated and soil erosion can be a problem. Sorting these issues out will improve soil fertility, its workability and its productivity.

Organic matter levels have declined consistently over the last 50 years. Before that most farms had a livestock enterprise, significant areas of grass and horses so manure was returned to the land. All that stopped with the arrival of tractors and chemical fertilisers.

For a long time we were able to 'mine' the organic matter with no immediate impact on productivity. That is now catching up with us.

Soil structure is another issue. Drainage systems are easy to neglect and soils are often worked when wet with inappropriate wheels.

The industry has invested very little in drainage since the grant schemes came to an end in the early 1980s. The drains installed



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then are out of sight, out of mind and often in dire need of attention.

We can also damage our soils with machinery. Even good quality tyres on grain trailers will do considerable damage when the soil is wet. Pressure of work and variable weather dictates we have to run on soils when we shouldn't.

Soil erosion is also an issue in the UK. A late harvested crop on a large field can leave bare land at a wet time of year and, if on a slope, soil erosion can be severe.

So what should we do?

It seems as if we should grasp every opportunity to put manures

on our land. I think it is an inescapable fact that sewage sludge, now more attractively called biosolids, should be part of this.

The Co-operative Farms had previously banned sewage sludge on its land, but we are about to start our first trial.

We have started a massive programme of drainage and drain maintenance spending – the heavy rains of 2007 and 2008 showed us how important it is.

Drain outlet inspection needs to be part of a regular maintenance programme, as well checking the need for mole draining and subsoiling. This is a huge undertaking and it is not easy to prove a commercial return. Maybe Pillar 2 money should be channelled towards drainage?

Tyre pressures, although boring, will get greater attention. We are also going to trial, on one farm, a controlled traffic system with all machines using the same tracks year after year, to protect the soil on the rest of the field.

And training is important too – it might be operator training in tractor slip control, or perhaps engine management for example.

So my message to the salesmen with soil nutrition products is that there is no easy fix they can sell me. We just need to better understand our soil and farm it with greater respect.

■ *Christine Tacon is general manager of the 24,291-hectare (60,000-acre) Co-operative Farms and was awarded the CBE for services to agriculture in 2004.*