FOOD COMES FROM THE SOIL AFTER ALL!

When people think of food they usually think about the supermarket. Asked where bread comes from, children say from the shop. Somehow, we seem to have lost the connection between the food we eat and where and how it is produced. That's why I think it is important that in this Year of Food we all think more about the land, and the soil, as the source of our food and not just about nutrition and diet.

Scotland is naturally blessed with a great variety of soils for producing food. Decades ago this was surveyed and its capability for agriculture assessed. This means its potential for producing food. The resulting map produced by the then Macaulay Institute for Soil Research (now part of the James Hutton Institute). The Prime Quality Agricultural Land, as the map shows, is in the east. Arable areas of the north east for growing barley for bread and for whisky and beer. Friable sandy soils in the Strathmore and Fife for root crops, especially potatoes and carrots. Soils for producing vegetable oils for cooking and food blending again in the east. Clay soils in the south west for diary for milk, cream and cheeses. Damp acidic soils in the uplands for prime Scottish lamb. And so on. But are we looking after these priceless food producing assets as well as we should. No!

Why is this happening and what should be done about it?

First, we must stop the thoughtless covering over of our best agricultural land and the soils it comprises with concrete for industrial development and housing. Currently, Scottish Panning Policy, published in 2016, states that development on Prime Quality Agricultural Land should not be permitted. But then makes the following exceptions which totally undermine this primacy: 'this land can be developed as a component of settlement strategy, or is essential to meet an established need such as major infrastructure development, or for small-scale development directly linked to rural business, or the generation of energy form renewable sources'. In other words, the traditional safeguarding of agricultural land is no more. We can cover over and loose for ever our natural capital for producing food. Surely, this is short sighted in the extreme!

Second, field observations by geographers over many years have charted the continuing erosion of soil. This is prevalent on autumn sown crops and on ploughed land. The soil is left bare during the winter season when wind and rain have the most erosive effects. The loss rates are greater than the natural formation rates. So, there is cumulative net loss of good quality soil. Changes to patterns and timing of cultivation could considerably help to reduce the loss of soil. Why is this not happening? Simply because there are no incentives for farmers to change their practices and no inhibitions placed on them to act differently. Put simply, the current agricultural support regime is focused primarily on producing food without thinking about the capacity of the land to produce food in the future.

Third, the concept of 'natural capital' is not at the heart of agricultural policy and practice. What do I mean? The soil, as a growth medium, is an essential component of the physical and biological capital of our country produced naturally which can be used over generations to produce nutritious food for ourselves and for all of the plants and animals in nature. If we look after it properly, as good stewards, then we will be able to take the interest and maintain the capital asset. This is after all how we think about property we own for example. We should do the same for the land and the soil. This means, as we move remorselessly to leaving the EU and its Common Agricultural Policy, that we adopt approaches attuned to maintaining that capital and taking an income from it. The Scottish Land Rights and Responsibilities Statement is the ground-breaking way forward. But, unless it becomes a fundamental component of support for farmers and food production it will remain just a

statement. It needs to be fully implemented in practice as part of the support package for the future of our land and the food it produces.

The arguments in this article comprise part of a wider talk *Scotland's Land: failures and successes, challenges and opportunities* given as the 2018 Peter Wilson Lecture. See www.rogercrofts.net for summary and action agenda, and https://youtu.be/fbq4EbOT55E to hear the talk in full.