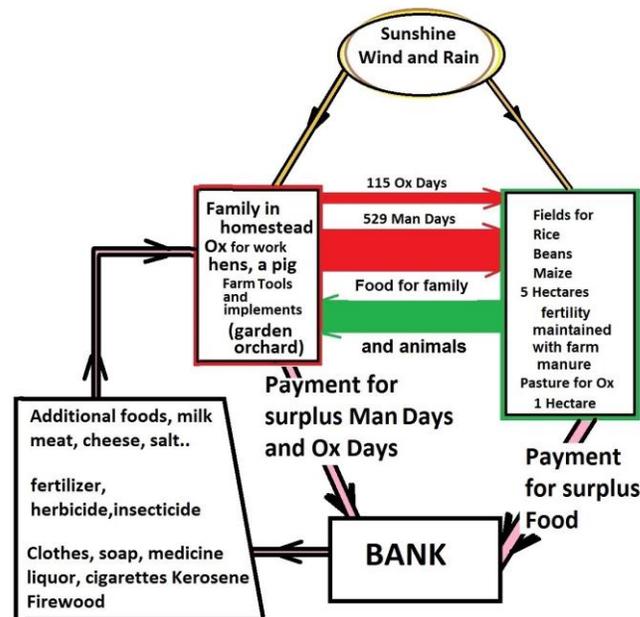


Farming – some distant memories.

Since the Agricultural and Industrial Revolutions, our human population has experienced a period of explosive growth. It reached 1 billion by the year 1800 and to date, at 7.8 billion, we see that over-population threatens animal and plant life, ecosystems and the long-term sustainability of the Earth. In 1968, Paul Ehrlich of Stanford University highlighted the problem of feeding this massive number of people in his book “The Population Bomb” in which his first statement was: **“The battle to feed all of humanity is over –and humanity has lost”**.

So, **farming**, the manner in which we produce food from the land is crucial for human existence and, as the book suggests, it looks as if we may be losing the battle to provide enough food to feed each person on the planet.

Until the end of the 19th century most farming, at a global level, was what is known as “subsistence farming” and this is explained by the diagram below :-



An example of a small farmstead in Hoduras, Central America.
(Scientific American magazine 1980)

From the diagram we see that crops are grown on a relatively small plot of land with most of the food being used to feed the animals and family. Any surplus food is sold to provide an income for the family. Working away from the homestead will also generate income so that the farmer will be able to buy essential items for the well-being of the family.

This type of farming is almost 100% sustainable and the soil retains a high fertility as nutrients and essential elements are returned to the land through farm manure. Plant diseases, pests and weeds still prevail in this system but crop rotation helps to minimize their effects. During the WWII years almost 80% of our food was provided from farms not dissimilar to this, though the labour force was enhanced by prisoners of war and the Land Army girls.

With not too many modifications this was the farming method that my family used in North Yorkshire even up to the mid-1950's when I was growing up.

Western farming, and indeed that of North Yorkshire, has been transformed in the latter half of the 20th century. Far fewer people are now working on the land and it is inevitable that machinery has had to be employed. In the UK at least 10% of good agricultural land has been lost for urban and roadway developments and half of our hedgerows and woodlands have been destroyed to accommodate “industrial” farming. This has been at the expense of wildlife. In the war years the necessity for high levels of food production was obvious and mechanization together with the copious use of chemicals and selective plant and animal breeding has resulted in very efficient farming with crop yields increasing FOUR fold. The European Common Agricultural Policy (CAP), set up in 1962, originally welcomed these increases and paid subsidies to farmers on the *amount* of produce. We all know how this got out of hand and wine and milk lakes suddenly appeared together with butter, beef, and grain mountains. The CAP is presently trying to address farming in a more holistic way and offering grants for environmental initiatives.

So, what kind of farming do we plan to have in the future?

There are basically three blocks to the diagram above – labour, land and weather.

Worldwide the reserves of labour in rural areas is diminishing rapidly as a drift to urban living intensifies. Good land is at a premium as urban sprawls are taking more and more land out of agricultural use and so the temptation to chop down virgin forests is very persuasive. The weather is presently being driven by **climate change** and has resulted in many cases of crops being destroyed by floods or drought or hurricane force winds.

One may therefore ask “Are there solutions to these problems?”

Intensive farming would help in cases of land shortage, mechanization and robotics could alleviate some of the shortages of labour and covering large areas with poly-tunnels would separate farming from the ravages of the weather; but is this farming?

In Japan there are some people who wish to restore “natural” farming-

https://www.ideassonline.org/public/pdf/Natural_Farming_Fukuoka_Panos_Manikis_ideassonline.pdf

BUT, would this system feed the world and is it a method that requires at least a 90% rural population to cultivate the land?

Sustainability, as so simply enshrined in the above diagram, looks to be pointing in an opposite direction to “industrial farming” which forges ahead in spite of all those ill effects on the natural world.

Many questions present themselves and an immediate concern for UK farmers is that relating to the new Parliamentary Bill -

Number CBP 8702, 10 November 2020 – briefing paper (all 146 pages!)

<https://commonslibrary.parliament.uk/research-briefings/cbp-8702/>

Brexit takes us out of the CAP and this legislation shows how the government intends to support UK farming in the future.

My nephew, David Welford, has been a farmer for over thirty years and for ten of those years his farm was “organic” . Recently, he reverted back to traditional farming but felt that his experiences would be worth saving, hence the small book “Forty shades of Green” (2018) .

(copies of the book are available for loan from Frank).

Can we possibly hope that Erhlich does not have the last “say”.

Further thoughts are given on a very ancient web-page that was set up for students:-

www.energyandhome.co.uk/Folder6.

(PS a nonsecure warning comes up but this is just due to the fact that https:// is not used)

Frank Thompson