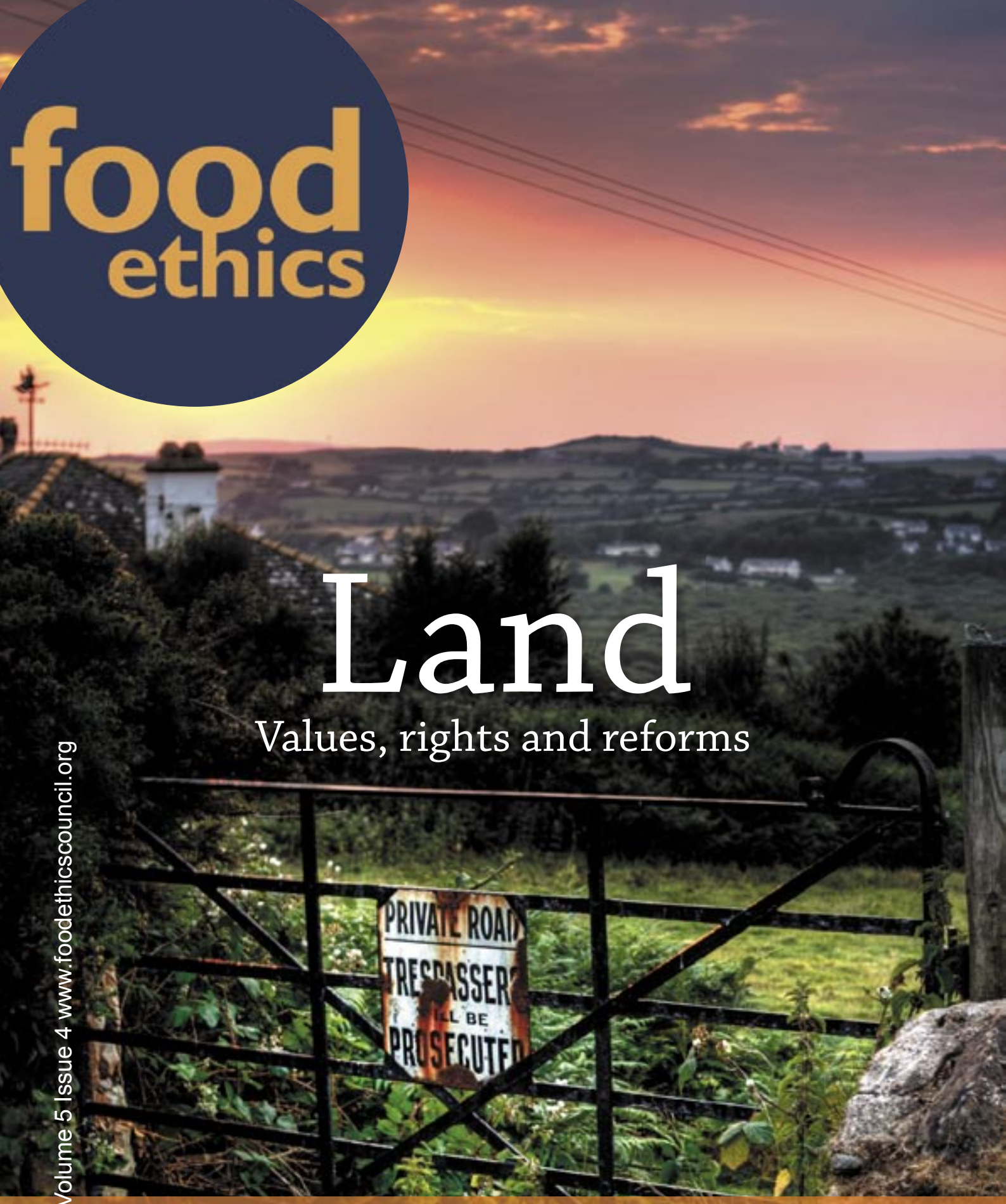
food ethics



Land

Values, rights and reforms

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FOOD ETHICS COUNCIL

Food Ethics, the magazine of the Food Ethics Council, seeks to challenge accepted opinion and spark fruitful debate about key issues and developments in food and farming. Distributed quarterly to subscribers, each issue features independent news, comment and analysis.

The Food Ethics Council challenges government, business and public to tackle ethical issues in food and farming, providing research, analysis and tools to help. The views of contributors to this magazine are not necessarily those of the Food Ethics Council or its members.

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Land reform is fair and fruitful

What with 'fighting' hunger and tackling food 'insecurity' we're used to macho metaphors in talk about food. But when it comes to land, these get literal. The quiet and creeping violence that malnutrition inflicts on the poorest is compounded by strong-arm tactics: forcible evictions and land clearances, armed security guards and military intervention.

Large-scale acquisitions in Africa by water-poor countries have brought land issues to the fore. However, as Michael Taylor reports (p.4), the most prolific big buyers are western-based companies, and smaller, speculative land grabs by national elites are a bigger source of pressure in many countries.

In some respects, this accelerated drive for land tenure is just the latest turn in an epic conflict over agricultural resources. Tenure has been at the forefront previously, for instance in the Scottish land clearances or, recounts Robin Palmer (p.7), in the Victorian sequestration of Rhodesia. Yet a combination of other factors – unequal bargaining, credit arrangements, labour laws and sheer purchasing power – have also contributed to the reality that as consumers in wealthy countries our footprint extends far beyond the territories that we occupy, could claim equitably, can readily reach or have even heard of.

Nevertheless, tenure matters hugely to improving nutrition and tackling poverty. The groups at greatest risk of dispossession include precisely those whose access to land is most crucial to global food security, those who grow the food eaten by the people most vulnerable to hunger. According to Taylor, the majority of the 500 million small-scale producers who grow around 80% of food in the global south use land under customary tenure regimes, leaving them as 'tenants of the state', without legal protection or recognition.

In a recent report to the United Nations General Assembly Olivier De Schutter, the UN special rapporteur on the right to food, says that many such small-scale producers are being driven onto smaller plots, more marginal territory or off the land.[1] Their livelihoods and food security, already fragile, are further compromised. He finds that "access to land and security of tenure are essential to ensure the enjoyment of not only the right to food, but also other human rights, including the right to work (for landless peasants) and the right to housing".

The bulk of De Schutter's report is about solutions to this problem, not only securing tenure to protect existing land access but also, more radically, agrarian reform to redistribute land rights more fairly. Protecting tenure for poor people means protecting them from eviction, providing legal tools and support to defend their rights, and combating corruption. Benin and Burkina Faso are among countries that have implemented low-cost and accessible forms of land use registration.

Among the most controversial land reform efforts globally has been Zimbabwe's 'fast-track' programme of the past decade, which has been seen as violent, chaotic and harmful to the country's economic and food security. Yet even in that instance, say Ian Scoones and colleagues reporting on a major study of its outcomes (p.9), the results are mixed: notwithstanding the widely reported abuses, their findings have "shot holes in the myths that there is no investment going on, agricultural production has collapsed, food insecurity is rife, the rural economy is in precipitous decline and farm labour has been totally displaced".

The more voguish alternative to state-led agrarian reform is to privatise parcels of land, yet this is not without problems. According to De Schutter, the expectation that land will underwrite poor people's access to credit, so they can invest and lift themselves out of poverty, has often proved naïve in the face of actual lending practice and the reality that vulnerable people don't want to gamble their only security.

At first glance, the contrast between market and state-led approaches to distributing land tenure looks to be founded on a simple clash between different logics of development: one utilitarian, focused on resource efficiency; the other egalitarian, placing a priority on secure tenure as a safety net. But it isn't. The contention is that non-market approaches can be fairer and more efficient. In De Schutter's words, "land sales tend to favour not those who can make the most efficient use of land, but those who have access to capital and whose ability to purchase land is greatest". The case for agrarian reform hinges not only on its contribution to reducing poverty, but also on World Bank analysis showing that more equitable land distribution has been associated with greater per capita economic growth.[2]

With higher rents but lower human stakes, this debate is paralleled in Britain. For Simon Fairlie (p.24) the reason to fight the sale of county council-owned farms is not simply that they provide a rare chance for small-holders to enter a market in which the cost of small parcels of agricultural land dwarves their production value, but also that small-holders can provide economies of distribution where larger operations offer economies of scale. If energy becomes very tightly constrained, then economies of distribution could become more important.

The overall message is that we don't face a trade-off – whether in the UK or the global south, we aren't forced to choose between land equity and efficiency. Securing tenure for small-producers who can't afford it in the market is important to achieving both.

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Increasing commercial pressures on land

Where are we heading?

The International Land Coalition (ILC) is working to create open debate on large-scale land acquisitions, and the alternatives. A global alliance of 83 civil society and intergovernmental organisations, their mission is to promote secure and equitable access to and control over land for poor women and men through advocacy, dialogue and capacity building. **Michael Taylor** reveals why their work has never been more important.

By John Atherton

Since the food crisis in 2008 the world has woken up to a new phenomenan – land acquisitions by cash-rich but water-poor countries such as South Korea, Libya, Saudi Arabia, Qatar and Abu Dubai. Concentrated largely in countries that are unable to meet their own food security needs, the moral dilemmas it poses are stark.

The World Bank's recent report 'Rising Global Interest in Farmland: Can it yield sustainable and equitable benefits?'[2] estimates that 42 million ha of land was subject to investor interest in 2008 alone. Because of the lack of transparency in many such deals, the true figure is unknown, but work being done by the ILC, Oxfam-Novib, CIRAD and the University of Bern (due for release in 2011) indicates that it is probably many times higher than current estimates.

Debunking myths

The way land is allocated and managed plays a central role in enabling or hindering economic development, food security, social justice, and environmental sustainability at local, national and global scales.

High profile deals by countries like Saudi Arabia make the headlines, but most reported large-scale land acquisitions are made by western-based companies motivated by profit, not national security. And although largescale acquisitions are most visible, the cumulative effects of many small and medium 'land grabs' by national elites is in many cases a greater source of pressure on land in host countries.

In many cases this involves privatising common-pool resources for little or no cost and holding it for speculative purposes, including eventual commercial production by foreign investors. And the myth that there are swathes of unused, unimportant and available land is just not true, despite its continued use as justification for land acquisitions.

Four-fifths of food production in the global south comes from 500 million small-scale farmers, livestock-keepers and fisher-folk. Most of these producers are among the 1-2 billion people on the globe today that are 'tenants of the state', [3] using land and natural resources under customary tenure regimes, the land and natural resources on which they live classed as 'state land'. Their land rights are not legally recognised or protected, and so it's this land that's most vulnerable to being 'grabbed' by governments.

Protecting the commons

Increasing global demand for energy, a rising population and an expected doubling in demand for food raises the stakes in competition for land and natural resources. Research undertaken by the ILC amongst its members on the links between land tenure and food security[4] emphasises some basic principles: insecure and inequitable access to land have fuelled, facilitated and increased vulnerability to food price volatility; secure and equitable access to land works as a safety net to mitigate risks related to food price volatility and assured long term food security; and equitable and secure access to land and diversified production are key to protect ecosystems, combat land degradation and ensure food security.

The competition for land and natural resources has always been an uneven competition with the poorest losing most. But this competition is no longer simply a factor of increasing population, a shrinking resource base due to degradation, or the speculative efforts of local elites. Land is becoming a globalised commodity; local producers competing for the same resource with large international companies that produce food, fuel and fibre, sequester carbon, sell large 'unspoilt' landscapes to tourists, extract minerals, or – increasingly – seek to realise short and medium term gains for investor capital.

As land, which was often held for the common good, is being individualised and commodified, it becomes a good of increasingly transnational significance. Traded across countries, the idea of land being sovereign property that aligns with territorial boundaries no longer holds.

One of the findings of the World Bank report is that investor interest in large-scale land related investments is highest where governance is weakest. Here we see a gradual rolling-back of the state from ensuring accountability and providing services. Studies in Peru[5] 's areas converted from smallholder production to large production estates of private companies paint a picture of rural 'communities' relying on companies for employment and every form of service provision including water, electricity, health, education and road maintenance..

Such rural private 'fiefdoms' can bring economic gains, but create a situation of extreme vulnerability for the rural populations within them to the desires and demands of a private enterprise driven by interests that may not be aligned with those of local populations.

Counterbalancing the trend towards territorial control by private companies are the successes in gaining recognition for the legitimacy of 'territorial development' for local communities. Indigenous groups in particular have been successful in gaining tenure and management rights over extensive areas of land based on customary land use and management practices. This allows local communities to define for themselves the trajectory of land and natural resource-based development that they would like to work towards.

It also gives local communities some autonomy in managing the competition for land and natural resources. By recognising a legitimate 'owner' of extensive tracts of land, the vulnerability of common-pool resources to being individualised soothe economic or political elite is reduced. And so the large-scale registration of tenure rights at community-level over the commons is a key priority.

In parallel to these two competing forces are global imperatives relating to food and fuel security, climate change and carbon sequestration, biodiversity conservation and human rights

Playing catch-up

Initially the rise in land acquisitions caught governments unawares, and they lacked the tools to adequately interpret or manage these phenomena. Now they are trying to catch up. New Zealand, Brazil, some states of India, for example, are moving towards banning the sale of agricultural land to foreigners. Donor and UN agencies are working on proposals to provide global benchmarks for good land governance and responsible agricultural investment, in particular FAO's Voluntary Guidelines on good governance of land and natural resources, and World Bank/FAO/IFAD/UNCTAD's Principles for Responsible Agricultural Investment. Some form of global benchmarking, accountability, or regulation is necessary, but exactly what forms these should take is open to question.

Moreover, the relative influence of these processes in the face of the overwhelming influence of global markets and trade regimes is at best limited.

Building an informed global response to the increasing tide of land-related investments depends on understanding more fully its drivers, impacts and trends. ILC is finalising a series of case studies and thematic studies undertaken with over 30 partner organisations world-wide. One of the emerging findings across the case studies is in relation to who wins and who loses from large-scale land related investments. Inevitably those that are already poor lose most, particularly women and common-property users.

The growing body of empirical evidence has the potential to feed a more informed debate on appropriate responses. Evidence of this is the World Bank's report, whose empirical basis gives an unprecedented opportunity to examine the winners and losers in large-scale land-based investments.

The report admits that 'many investments... failed to live up to expectations and, instead of generating sustainable benefits, contributed to asset loss and left local people worse off than they would have been without the investment' (p.51). Although

the optimistic conclusions of the report may still be somewhat out of sync with its empirical evidence, a shift is discernable in the increased caution with which the World Bank now appears to be balancing the opportunities and risks posed by large-scale land-based investments.

Investment in agricultural production in the south is sorely needed after two decades of declining support to agriculture by donors and many governments. However, what kind of investment is needed should be carefully considered. As the Special Rapporteur on the Right to Food, Professor Olivier De Schutter, warned in a recent address to the General Assembly, [6] the current crisis and fear of food shortages should not lead to short-sighted solutions that undermine both the food security of the poorest and their land rights.

Prof De Schutter has made the link between access to land and food security a major focus of his tenure as the Special Rapporteur, arguing that foundational to the right to food is an inferred a right to land. He emphasises the need for both socially and environmentally sustainable solutions to overcoming hunger; including the promotion of investment models that do not lead to evictions, disruptive shifts in land rights and increased land concentration.

He also calls for land redistribution to landless and near-landless farmers to counter the trends towards land concentration. Countries in Latin America such as Peru that underwent land reform in the 1970s, now find themselves after two decades of trade liberalisation with higher levels of land concentration than existed prior to their land reform. This concentration of political and economic power is an almost insurmountable obstacle to meaningful land reform in many countries.

Agricultural development

At the heart of the debate about large-scale investments in land, agriculture and other natural resources is the question of agricultural development models in the 21st Century, and the part small-scale producers play in achieving food security. Clearly, industrialised agriculture and family farming are both needed.

But agricultural, trade, investment and land policies usually favour one over the other, and so far it is evident that small-scale producers have been net losers from predominant policies. The IAASTD report,[7] released in 2009 and authored by hundreds of agricultural experts, identifies small-scale farmers as a key target group to successful food systems of the future, and calls for a shift in paradigm in this direction.

The debate between small-scale and large scale agricultural production models is not new, and remains controversial. It is now taking place within a context of increasingly fierce – and uneven – competition for scarce resources. The implications of not taking action, or taking the wrong action, are far-reaching and hard to undo once done.

Attempts to devise global-level mechanisms to guide questions of land governance and land-related investments deserve wide debate, and to include in that debate those most affected.

The International Land Coalition, with farmers' organisations in Latin America, Asia and Africa, Action Aid and Oxfam, has launched an initiative to expand dialogue on large-scale land acquisitions and their alternatives. This will provide a platform for open debate among all stakeholders. It will allow voices currently sidelined to be heard, provide a wider array of evidence and opinions to influence decision makers in the choices they make on this question.

We are living in a world of increasingly scarce land, water and natural resources. It is a world where factors influencing access to land are interconnected at the global level, with rising concentrations of land and power. Opening up space for all who have a stake to influence decisions on how their land and natural resources are used, whether at local, national or global levels is an important task in the struggle for peace, food security and equity.

(Footnotes)

1 This article is based on the personal views of the author, and should not be taken to represent those of the International Land Coalition

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INTERNATIONAL ISSUES

Land grabs

A new scramble for Africa?

Robin Palmer discovers there's nothing new under the sun, as he looks back on an early chapter in his 1977 book *Land and Racial Domination in Rhodesia* called 'The Age of the Fortune Hunters'.

The book describes how, in late Victorian times, the British Government granted a Royal Charter to the millionaire imperialist Cecil Rhodes, giving him carte blanche to exploit for 35 years the territories we now know as Zimbabwe and Zambia. That Charter was based on highly dubious land and mineral concessions signed with local chiefs spuriously claiming to rule all of those lands.

After Zimbabweans rose up against the misrule of Rhodes' British South Africa Company in 1896, a new administrator ruefully observed that his predecessor had 'given nearly the whole country away' to speculators who 'promise any amount of things, but the execution thereof is delayed till the Greek Kalends'[2] (i.e. forever).

One hundred and twenty years later new concession hunters are on the march, seeking control over African land and water to augment food security back home, principally in the Persian Gulf and East Asia. They are finding willing local accomplices, eager to lease out vast tracts of land in return for derisory payments and illusory promises. As in colonial times, local people are almost never consulted.

I have been collecting material on biofuels, land rights in Africa, and global land grabbing[3] and it worries me greatly, for it carries strong echoes of Cecil Rhodes and his merry men. It worries me because of the nature, scale and secrecy of land grabbing, the power imbalances involved, the muted responses to it, and the seemingly limited capacity of anyone to do much to either halt or modify it.

A key driver of this new imperialism has been the recent global food crisis, driven by rising fuel prices and the switch from maize for food to maize for fuel in the American Midwest. This, combined with a number of countries banning the export of food, persuaded many Gulf States to look elsewhere for places to grow food for their rapidly growing populations. China, India and South Korea are also looking to outsource agriculture to feed their expanding populations, which are eating increasing amounts of meat and milk.

There is a recognition globally that population growth (expected to rise from 6-9bn by 2050) will outstrip the world's ability to feed itself unless there are radical changes in agricultural production. There is also a recognition that agriculture in Africa has been chronically underfunded for decades – but not a recognition that this is a consequence of decades of externally imposed structural adjustment driven by an almost religious belief in the magic of the free market.

This combination of factors has led to the phenomenon many now refer to as global land grabbing. Others prefer more decorous terms such as 'responsible land-based investment'. The private sector is at the forefront – led by agribusiness, corporations and food traders, with investment banks, private equity and even pension funds jumping on board. But there is also considerable government involvement, both foreign and domestic.

Parts of Africa are being targeted because the price of African farm land is so low. Many African leaders – and foreign investors – peddle the myth that there is a vast amount of vacant, unused land, owned by no one, and hence available to outsiders.

So, with the willing consent of many such African leaders, there has been extensive acquisition of land, usually in the form of long leases, across the continent, but especially in Sudan, Ethiopia, Kenya, Tanzania and Mozambique. The foreign companies come principally from the Gulf States, India, South Korea and China, but also from Europe. As in Cecil Rhodes' time, they promise much in terms of job creation and technological transfer. But such promises have rarely been honoured.

No one knows how much land in Africa is involved or how many people are affected. The Global Land Project cites a minimum of around 10 million hectares in each of Mozambique, DR Congo and Congo, and in 27 African countries screened, it noted 177 deals covering between 51 and 63 million hectares.[4]

Advocates of 'win-win' situations argue that many of these are 'paper deals' which may never come to fruition. I think that misses the point. Are those whose land rights are threatened expected to sit patiently and wait to see what happens?

Already one government toppled because it took such things lightly. Outrage at a 'free land' deal with a South Korean company, Daewoo, led to the overthrow of the government in Madagascar. A Financial Times editorial (19 November 2008) suggested that 'Pirates are not the only source of concern off the African

coast. The deal looks rapacious', and it warned against resurrection of old-style colonialism: 'That day must not come.'

In comparable vein, concerns that 3,000, possibly rising to 10,000, Chinese settlers would be allowed to run farms in the Zambezi Valley caused such an uproar that the Mozambique government was forced to dismiss the story as false, while further north, newspapers reported that Tanzania suspended investments worth millions of dollars after protests over the eviction of farmers to make way for biofuels.

Biofuels are indeed a contributory and hugely controversial factor relating to global land grabbing. The recognition that the world's oil reserves are finite, coupled with oil price rises, led to a frantic search for alternatives globally. Biofuels were initially seen as a strong option and were hugely hyped. Brazil, which has been using them as fuel for decades, was widely cited as a success story and a model for others to follow. Indeed, 15 African countries have now made arrangements for the use of Brazilian technology.[5] But Brazil has been criticized for adopting a monoculture approach which has destroyed the livelihoods of many peasants.

American Midwest farmers were given huge financial incentives to turn their maize into biofuels (ethanol). This contributed significantly to the global food price crisis of 2007-8, which led to well documented riots and deaths in many countries like those that have recently recurred in Mozambique.

EU countries signed up to an undertaking to use a greater proportion of transport fuel from biofuels (10% by 2020). This contributed significantly to the global land grab by encouraging EU countries to find land for biofuels production elsewhere, particularly in Africa. The EU approach provoked withering attacks in reports by ActionAid[6] and Friends of the Earth.[7]

For desperately poor countries such as Ethiopia, Malawi and Mozambique, biofuels are seen by many as a magic route out of poverty. Mercifully, much of the early optimism over the potential of biofuels is now dimming, as recognition grows that some of the claims made by its advocates were inaccurate. What was once regularly described as a 'miracle cure' has now become more of a 'problem'.

Responses to global land grabbing have been remarkably muted, at least until very recently. Researchers and policy makers seem somewhat timid and complacent in their conclusions, desperately eager to seek painless 'win-win' solutions, and quick to retreat to 'each case is different, the devil lies in the detail' formulations.

I find it curious that enormous amounts of time and resources are being invested in drawing up international, but always voluntary, codes of conduct or guidelines in an attempt to regulate land grabbing. It will be impossible to bring to account companies which violate them. They will increase the likelihood of poor people losing their land, and, as Jun Borras and Jennifer Franco argue, are 'likely to facilitate, not block, further land-grabbing and thus should not be considered, even as a second-best approach'.[8] I also agree with Ian Scoones that such principles are 'doomed to failure, given the lack of capacity, failures of institutional authority, corrupt practices and so on'[9] highlighted in the World Bank's much delayed report, Rising Global Interest in Farmland, published in September 2010.

> "No one knows how much land in Africa is involved or how many people are affected"

Based on studies in 14 countries, the Bank found 'several cases' of investors circulating rumours to 'create the impression that the investments had been finalized and had already been approved at a higher level, either strengthening the investor's negotiating position or allowing the investor to strategically co-opt local leaders.'

Researchers noted 'an astonishing lack of awareness of what is happening on the ground even by the public sector institutions mandated to control this phenomenon', while 'a key finding from case studies is that communities were rarely aware of their rights. All this implies a danger of a "race to the bottom" to attract investors... the risks associated with such investments are immense...land acquisition often deprived local people, in particular the vulnerable, of their rights without providing appropriate compensation. In a number of countries, investors are treated more favourably than local smallholders.'[10]

The Telegraph (12 September) felt that 'the World Bank appears deeply torn. While the report endorses the Bank's open-door globalisation agenda, the sub-text dissents on every page.'

At an AAPG meeting at the House of Commons in January, I asked the Tanzanian High Commissioner, 'what if, at a time of great food insecurity, a foreign company working in your country exported food back home?' She replied 'we would not allow it; we are in the process of drawing up a code of conduct which would prevent such a thing happening, and if any company refuses to sign it, they won't be allowed to operate.' Well, we must fervently hope that she is proved right.

Much of what is currently happening is illegal, such as the fencing off of large stretches of Mozambique's coastline by the elite, depriving fishing communities of their livelihoods. I suggested to Oxfam (my former employer) that it might be an excellent use of its resources to issue local activists with wire cutters to restore open access to the coast. Sadly, this is unlikely to happen, but a great deal of imaginative thinking and action are needed to address this highly dangerous new Scramble for Africa.

Robin Palmer is a land rights activist.

INTERNATIONAL ISSUES

Zimbabwe's land reform
Challenging the myths

During the past decade, Zimbabwe has undergone a major process of land redistribution, with many new farmers on the land. How did the new farmers fare? What are the challenges ahead? **Ian Scoones and colleagues** have been finding out.

Ian Scoones, Nelson Marongwe, Blasio Mavedzenge, Felix Murimbarimba, Jacob Mahenehene and Chrispen Sukume

Zimbabwe's land reform has had a bad press. Images of chaos, destruction and violence have dominated the coverage. While these have been part of the reality, there have also been successes, which have thus far gone largely unrecorded. The story is not simply one of collapse and catastrophe. It is much more nuanced and complex.

As Zimbabwe moves forward with a new agrarian structure, a more balanced appraisal is needed, requiring solid, on-the-ground research aimed at finding out what happened to whom, where, and with what consequences. This was the aim of work we carried out in Masvingo province over the past decade. The question posed was simple: what happened to people's livelihoods once they got land through the 'fast-track' programme from 2000?

The answers are extremely complex, and discussed in detail in the new book 'Zimbabwe's Land Reform: Myths and Realities'. The research involved in-depth field research in 16 land reform sites across the province, involving a sample population of 400 households. The study area stretched from the higher potential areas near Gutu to the dry south in the lowveld.

What we found was unexpected, contradicting the overwhelmingly negative images of land reform presented in the media and much academic and policy commentary. There were problems, failures and abuses, but the overarching story was much more positive: the realities on the ground did not match the myths.

Radical change

Across the country, the land formal re-allocation since 2000 has resulted in the transfer of nearly eight million hectares of land to over 160,000 households. If the 'informal' settlements, outside the official 'fast-track' programme are added, the totals are even larger.

Two main 'models' have been at the centre of the process – one focused on smallholder production (A1 schemes – village-based arrangements or small, self-contained farms) and one focused on commercial production at a slightly larger scale (A2 farms). In practice, the distinction between these models varies considerably, with much overlap.

Events since 2000 have resulted in a radical change in the nation's agrarian structure. At Independence in 1980, over 15m hectares was devoted to large-scale commercial farming, comprising around 6,000 farmers, nearly all white. This fell to around 12m hectares by 1999, in part through a modest, but in many ways successful, land reform and resettlement programme, largely funded by the British government under the terms of the Lancaster House agreement.

The Fast Track Land Reform Programme, begun in 2000, allocated more than 4,500 farms to new farmers, making 20% of the total land area of the country, according to (admittedly rough) official figures. This represents over 145,000 farm households in A1 schemes and around 16,500 further households occupying A2 plots – a significant shift to many more small-scale farms focusing on mixed farming, often with low levels of capitalisation.

There are still more than four million hectares of large-scale commercial farms. But only around 200-300 white-owned commercial farmers are still operating, most having been displaced, along with a substantial number of farm workers.

Mixed results

This major restructuring has had knock-on consequences for the agricultural sector. The transfer of land from the narrowly-controlled, large-scale farm sector has resulted in heavy hits on certain commodities and markets.

Wheat, tobacco, coffee, tea and beef exports have all suffered. On average, from 2001 to 2009, wheat production decreased by 27% and tobacco production by 43%, with more dramatic declines from 2006. Maize production has become more variable too, with average production over this period down by 31% from 1990s levels.

However other crops and markets have weathered the storm and some have boomed. Aggregate production of small grains has increased by 163% compared to 1990s averages. Edible dry bean production has expanded even more, up 282%, Cotton

By Ian Scoones

production has increased slightly, up 13% on average. The agricultural sector has certainly been transformed, and there are major problems in certain areas, but it emphatically has not collapsed.

Yet aggregate figures – with all the caveats about accuracy – only tell one part of the story. Understanding the consequences of land reform requires finding out what is happening in the fields and on the farms.

In Masvingo province about 28% of the total land area was transferred as part of the Fast Track Land Reform Programme, according to official figures. Much of this land was previously cattle ranches, with limited infrastructure, low levels of employment and only small patches of arable land, often irrigated patches around homesteads.

This was taken over by over 32,500 households on A1 sites (making up 1.2m hectares) and about 1,200 households in A2 areas (making up over 370,000 ha), alongside perhaps a further 8,500 households in informal resettlement sites, as yet unrecognised by the government. At the same time 1m hectares (18.3% of the province) remains as large-scale commercial operations, including some very large farms, conservancies and estates in the lowveld that remained largely intact

Stepping up, stepping out

This radical transformation of land and livelihoods has resulted in a new composition of people in the rural areas, with diverse livelihood strategies. In order to understand more about who was doing what, we undertook a 'success ranking' exercise in all 16 sites across Masvingo province. This involved a group of farmers from the area ranking all households according to their own criteria of success. A number of broad categories of livelihood strategy emerged from these investigations.

> "Joining the land invasions and establishing new farms... was not easy"

Over a half of all the 400 sample households – across A1, A2 and informal resettlement sites – were either 'stepping up' – accumulation of assets and regular production of crops for sale – or 'stepping out' – successful off-farm diversification. These households were accumulating and investing, often employing labour and increasing their farming operations, despite facing many difficulties.

Not everyone has been successful – 46.5% of households were finding the going tough, and not regarded as 'successful'. Some were really struggling and only just 'hanging in'; others were in the process of 'dropping out' through a combination of chronic poverty and ill health. Joining the land invasions and establishing new farms in what was often uncleared bush was not easy. It required commitment, courage and much hard work.

By Ian Scoones

Others without start-up assets have been unable to accumulate, continuing to live in poverty, reliant on the support of relatives and friends. Some joined a growing labour force on the new farms, abandoning their plots in favour of often poorly-paid employment. Within the 'stepping out' category some were surviving off illegal, unsafe or transient activities that allowed survival but little else. Still others were straddling across two farms – one in the communal area and one in the new resettlement – and not really investing in the new areas, while some simply kept the plot for sons or other relatives.

Such variable outcomes are unsurprising; in the period since 2000 there has been virtually no external support. Government was broke and focused efforts on the elite few, and NGOs and donors have shied away from the new resettlement areas for political reasons. Instead, most new farmers have been reliant on their own connections, enterprise and labour. Without support to get going, many have found it difficult, and it has only been through a combination of access to assets, hard work and luck that they have really made it.

Some have done so due to the widely reported phenomenon of patronage. These are the 'cronies' of the party, well-connected to the machinery of the state and able to gain advantage. So-called cell phone farmers, they preside over areas of often under-utilised land. Yet, despite their disproportionate influence on local politics, they make up less than 5% of the total population in Masvingo province. And even in the Highveld provinces the situation is much more diverse than mainstream portrayals suggest.

Overall, in our study sites there is a core group of 'middle farmers' – around half of the population – who thrive because of sheer hard graft. They can be classified as successful 'petty commodity producers' and 'worker peasants' who are gaining surpluses from farming, investing in the land from off-farm work and so able to 'accumulate from below'. This is having a positive impact on the wider economy, including stimulating demand for services, consumption goods and labour.

Our decade of research in Zimbabwe has addressed the abuses of the land reform programme, but has also dispelled the myths and engaged with the realities of the majority. Solid, empirical evidence has shot holes in the myths that there is no investment going on, agricultural production has collapsed, food insecurity is rife, the rural economy is in precipitous decline and farm labour has been totally displaced.

There are many institutional and policy challenges ahead, but from our research we believe it's possible to define a positive, forward-looking agenda for the future.

Zimbabwe's Land Reform: Myths and Realities is published by James Currey (http://www.jamescurrey.co.uk/store)

Ian Scoones is co-director of the ESRC STEPS Centre at the University of Sussex and joint convenor of the IDS-hosted Future Agricultures Consortium. He is an agricultural ecologist.

Gender and land reforms
A hidden issue

Gender relations and women's rights are central issues within land reforms, but discussion of these has been marginalised, writes **Susie Jacobs.**

Most land reforms, historically and in the contemporary developing world are based on the 'household' model, in which land is redistributed to individual households or families.[1] Women tend to be viewed primarily as wives and mothers; accordingly, land titles or land permits [2] are commonly granted to the 'head of household', nearly always considered to be a man.

Within smallholder households as in other types of household, women usually play crucial roles in food processing as well as in domestic labour and caring work within and outside the household. Smallholder or peasant farms are also units of production, and women work on the land to raise crops for consumption and for sale, and in associated work such as small livestock husbandry. This is particularly true in some parts of the world such as sub-Saharan Africa, where women predominate in agricultural production. Women take active roles in agriculture in other societies, however, even where their roles are less acknowledged. [3]

Yet despite their active roles within agricultural production and their responsibilities for provisioning, in many societies women do not hold land and do not have decision-making powers over agricultural production.

By raising household incomes, improving food security and reducing rural poverty, agrarian reform affects the economic conditions of people as well as the political realm (for example weakening the landlord class; giving democratic rights to the rural poor; lessening social differentiation). It also has an effect on the socio-cultural sphere, by enhancing autonomy for smallholder/peasants. [4] Realisation of these objectives, however, remains highly gendered, with women [5] usually affected differently to men within their households and communities.

Comparative studies on women, gender relations and land reform across 18 countries in Asia, Africa and Latin America [6] show mixed results for women.

Many land reforms programmes, particularly in recent years, have allowed female-headed households (widows or divorcées) with dependents to hold land or land permits. Many redistributionist land reforms raise incomes within households and increase food security [7]. Household income is not always redistributed equally among family members, but some redistribution usually takes place and this has often benefited wives. This was the case in Andra Pradesh, India, where women saw stability and food security as an important marker of success of redistribution of land.[8]

Less beneficial outcomes are, unfortunately, more numerous. Many stem from the near-universal propensity to award land titles or land permits to the 'head of household'. Negative outcomes include loss of women's land rights - even when, as in sub-Saharan Africa women had previously had customary rights to 'women's' plots of land to cultivate food crops.

Another common effect is the diminution of women's own incomes and income-sources. This takes place for a number of reasons including loss of trading niches where the family moves or is resettled. Or, more importantly, because the land is perceived to be the husband's, so wives spend more time working on the land, but without controlling the fruit of their labour.

Changes in family structure are also common outcomes of land reforms; particularly because most land reform planners promote a nuclear family model. Wives in nuclear families often feel they have more influence over the husband. [9] However, a trade-off often takes place in which the husband gains more control and formal power, both because he holds land rights and because he is more constantly present to monitor his wife. In Libya, in theory rural women could participate in training schemes set up during resettlement and land reform; however, in practice they became more isolated within housewife roles and took less part in decision-making either outside or inside the home.[10] In Chile in the agrarian reforms enacted under Frei and then later under Salvador Allende, women's dependence increased as they had less need to work outside the home. At the same time, land reform also bolstered the pride of male beneficiaries. Men's authority in the home increased as they were eager to display a reinvigorated masculinity, previously denied them as peones and subjects of the landlord. As Tinsman (2002) writes[11], many men incessantly policed the parameters of female domesticity. Men often gain power and control at the wife's expense – despite the democratic intent of land reforms. Moreover, loss of income for wives means that women's livelihoods become more contingent upon individual men's propensity to share.

Impediments

Women face a range of impediments in accessing land and land rights within land reforms, apart from the rules and regulations internal to land reform programmes. Some of these have to do with very broad social factors. Here, three are noted.

The first concerns law and custom in many regions, which either prohibit or discourage women's landholding, or which grant women inferior rights. Examples include some interpretations of shar'ia law, and African customary law which prohibits women from holding land except on a temporary basis.[12] 'Custom and practice' in other regions has similar effects.

A second concerns interlocking beliefs and orientations that stigmatise women as embodied beings, apart from their mothering roles. Examples include taboos on women undertaking ploughing in south Asia[13]; or fears about pollution in China, where traditionally women should not undertake fieldwork during their menses[14]. More widely, where agriculture is socially important, masculine identity is often seen as bound up with landholding, as well as with control over women's labour and their bodies. Hence, land comes to be bound up with sexuality. The idea that women should control land and agricultural decision-making is sometimes met with shock or fear. [15]

Not surprisingly, agrarian movements are sometimes driven by similar attitudes. Historically often led by men, they are seen as movements for landless or land-hungry men to gain or to regain land (see below).[16]

> "Masculine identity is often seen as bound up with landholding"

Thirdly, women's attempts to gain land or land rights are frequently met with violence. In China's 1950s post-revolutionary (and pre-collective) land redistribution, the largest in history, women gained unprecedented (and rarely repeated) rights to land. However, women asserting land claims were often attacked. "Hundreds of thousands of women lost their lives attempting to assert land rights" (Davin 1988: 143). [17]
Although the scale of these events is unusual, in contemporary settings women continue to face intimidation.

What is to be done?

To some extent, the marginalisation of women within land reforms simply repeats widespread attitudes about women's 'place' within rural societies. Nevertheless, some issues can be addressed through legal and political change, and within agrarian reform programmes themselves. Where women face legal discrimination, the law should be amended to give them rights to land equal with men. In much of Latin America, for instance, wives are now able to have independent title or else joint titles to land with husbands.[18]

Where land is held communally - as in some parts of Africa - mechanisms other than privatisation of land should be sought; 'titling' or individualisation is usually part of market-oriented reforms. Rural women are often poor and so are particularly likely to lose any newly-acquired land in the marketplace.[19] It is crucial, however, that women are able to claim the same rights as men in their own groupings (such as communities, kin groups, households).
Land reform programmes and their administrators need to take women's agricultural roles seriously, offering training, extension advice and opportunities for credit. Provision of infrastructure also helps combat male bias. Lack of, or shortfall in provision of schools, clinics and roads affects women disproportionately.

Historically, women have made most gains within agrarian reforms where there exists state backing for gender equitable measures – for example rights for female-headed households, practical training and advice, and mechanisms for adjudication of disputes between husband and wife.

One of the most contentious areas concerns wives' rights to remain on land in case of divorce. It is common for wives to be ejected from land and to lose their livelihoods along with their marriages. Divorced or deserted women have lost rights to land even in areas controlled by the progressive Brazilian land movement, the MST. [20] Women also need safeguards against violence – both in general, and in cases of violence precipitated a backlash to their land claims. But whilst changes in legislation are important, they are often insufficient in themselves. For instance, in China, women – who have legal rights to land – have won legal cases, but village leaders sometimes bluntly refuse to implement the judgement. In Anhui province, 45 married women in one village had land taken away forcibly by the village committee. They went to court and won, but the village leader said, "You may have won the suit but we are not going to give you anything!." (Li and Bruce 2005: 319–20).[21] This scenario indicates that any legal pronouncements about women's land rights must be enforced (literally) 'on the ground'.

State-backed redistributionist land reforms only take place after hard-won battles, but present opportunities to enhance women's as well as men's livelihoods, rights and life-chances. Campaigns for women's land rights have had few advocates: women's movements are often urban-based and many agrarian movements avoid the issue of gender equity. This is, however, beginning to change. The MST has female leaders, and some land reform programmes have targets for women beneficiaries. The World March of Women participated in the Nyelini forum on food sovereignty in 2007, [22] at the invitation of Vía Campesina. Participants focused on women's access to land, water and seeds and on the need for recognition of women's roles in food production.

By and large, however, the struggle for recognition that land is a gender issue remains to be won. Women's contributions and rights need to move 'from the margins to the centre' within social movements and in policy-making to achieve more equitable and sustainable agrarian reforms.

Dr Susie Jacobs is a Reader in the Department of Sociology at Manchester Metropolitan University. Her most longstanding research interest concerns gender issues in land rights, agrarian reforms and agrarian movements.

The big question

What is the biggest pressure on land and how can it be managed?

Tim Rice, ActionAid, wrote 'Meals per gallon: the impact of industrial biofuels on people and global hunger.

Land use for resource extraction in developing countries has been a contentious issue for centuries, be it for cash crops, precious stones, wood products, minerals or fossil fuels. The vast majority is exported in raw form to be processed elsewhere for the benefit of rich countries and their companies. Too often, it has been exploitative – of people, land, water and air.

Increasingly, richer nations are turning to land in developing countries to supply two more resources for export; food and bioenergy. At a time when nearly one billion people are hungry, this is highly controversial. Access to food is a basic human right, but people in many developing countries are food insecure. ActionAid has already witnessed conflicts with people who have been displaced off the land, often without proper consultation and compensation (see ActionAid's campaign on biofuels at www.actionaid.org.uk/biofuels).

Poverty and insecurity often exists because of the lack of access to and control over resources. Take land – those who use it often don't have security of tenure or food security. Without that, people can easily be displaced by industrial farming interests, like in Brazil with soya production. Governments need to provide security of tenure for smallholder farmers, pastoralists, indigenous peoples and all others dependent on land for their livelihoods. Where land is sought for any project, in the first instance, the free, prior and informed consent of communities and people who use the land must be obtained.

If consent is given to use land, communities must have a stake in the project, from ownership structures through to the decision making procedures. This should include decisions about sustainable resource use, local content and employment, fair remuneration, the adding of value in situ, and how much is used domestically as opposed to export.

Klaus Deininger is Lead Economist in the World Bank's Development Research Department.

The 2007/08 food price crises set off a land rush, focused mainly on Africa where deals announced in less than one year totaled some 40 million hectares. As land is finite, many assume availability of fertile land will be the major constraint to future production of food, fuel, and agricultural raw materials.

A World Bank study suggests that, rather than land availability, policies to protect existing rights, allow right holders to make the best use of it, and protect biodiverse areas from being encroached because of the new 'land rush' are a more serious constraint. Two findings stand out: First, as no African country with recent surges in investor interest achieves more than 25% of potential yields, there is ample scope to expand output of currently cultivated land by providing smallholder producers with the technology, infrastructure, and institutions. Second, there is enough fertile non-cultivated, non-protected, and sparsely populated land to satisfy demand for decades to come.

In many cases, neglect of existing rights and a lack of environmental and social safeguards caused irreversible damage. To avoid this, countries need to carefully assess their agricultural endowment, identifying ways to improve property rights and find ways to provide technology and infrastructure to allow an optimum balance between closing existing yield gaps and area expansion.

Moving ahead, governments and investors should adhere to seven principles:(i) respecting land and resource rights; (ii) ensuring food security; (iii) ensuring transparency, good governance, and an enabling environment; (iv) consultation and participation; (v) economic viability and responsible agro-investing; (vi) social sustainability; and (vii) environmental sustainability.

1 Deininger, K. and D. Byerlee. 2010. "Rising Global Interest in Farmland: Can it yield sustainable and equitable benefits?" Washington DC: The World Bank.

Rt Hon Caroline Spelman MP is the Secretary of State for Environment, Food and Rural Affairs.

Our land provides us with vital natural resources such as clean water to drink and food to eat, protects us from flooding, stores carbon and provides green spaces. Land today faces a mixture of pressures, from a population in the UK that is expected to grow to over 70 million by 2033, increasing the need to grow more food and build more homes, to the damaging effects of climate change. All of these challenges mean our land must be managed better, balancing the need to protect nature with growing our economy. This is not an either/or scenario – there is an economic value to nature. We are facing the loss of species and habitat at record rates and this needs to be addressed.

Sir John Lawton recently provided a report, 'Making Space for Nature', which suggests that climate change could have one of the biggest impacts on land, affecting England's wildlife and habitats. We are looking at ways to enhance the role of farming in managing land to deliver ecological benefits and strengthen our network of wildlife sites.

Sustainable food production and supporting British farming are priorities for Defra, but this cannot be done at the expense of the natural environment. Agri-environment schemes have a key role to play and it's important that farmers select the best option for their area. Advice and support to farmers is available through Natural England or the Campaign for the Farmed Environment.

We are committed to reducing the loss of species and habitats while supporting our farming industry, Our plan for achieving this will be set out in the Natural Environment White Paper next year.

Jenna Hegarty is an Agricultural Policy Officer at RSPB, working to ensure food security and the protection of farmland wildlife and traditional European landscapes through Common Agricultural Policy.

Over 70% of the UK is farmland, producing vital food, fibre and fuel. At first glance, this doesn't leave much room for anything else – so where does nature fit in?

In the UK, land has been heavily influenced by man for millennia. Wildlife co-existed, and often thrived, in farmed landscapes, from lapwings which nested in bare patches in fields to wildflowers which flourished in hay meadows. But this relationship has been devastated by changes in farming practice, driven largely by the Common Agricultural Policy. The need for food security post-war led to production-linked payments that drove agricultural intensification, creating problems like water pollution and soil erosion. Within a few decades, much of what defined the countryside – hedgerows, mixed farming and once common species like tree sparrows – had all but disappeared.

The reform of CAP has been painfully slow – less than a third of its budget is channelled to environmental schemes. The remaining £2.75bn spent annually in the UK is largely used for Single Farm Payments, with no clear public benefit. If this money were channelled into environmental public good delivery, not only would the health of our farmland be restored along with its long-term capacity to grow food, farmland biodiversity would also recover. For too long the CAP has artificially divided land for food and land for nature. As we enter a fresh round of CAP reform, the opportunity is ripe to make the CAP fit for both.

Shaun Spiers is Chief Executive of Campaign to Protect Rural England (CPRE), an organisation which campaigns for a more sustainable countryside through research and lobbying in a network of local groups.

Before I joined CPRE, I let whole days go by without giving any thought to the planning system. Now it sometimes seems that I think of little else (I have lost some friends). But in truth, if we are to manage the many conflicting demands for land in a crowded country, we will need to plan, however old-fashioned such an idea might seem.

A charity such as CPRE – which receives much of its support because of people's concern that every change to the countryside has 'uglified it or destroyed its meaning, or both', in W.G. Hoskins's words – has to whisper it, but many changes to land use in the last thirty years have been beneficial for both people and nature.

The challenge now is to replicate the good examples and avoid repeating the many mistakes in development and farming practice over the last thirty years. An effective, democratic planning system is crucial to achieving good outcomes and popular consent. So too are incentives for farmers that encourage sustainable production, rather than mere production with no thought for wildlife, amenity or the long-term health of the land.

CPRE's vision for the countryside in 2026, our centenary year, paints a picture of a beautiful and living countryside with vibrant local food economies and flourishing farms, a countryside which contributes to both climate change mitigation and adaptation, and where 'the wild flowers, birds, insects and mammals that had so dwindled over the previous 70 years have returned in a rush of sights and sounds and smells'.

This is a heady vision – we decided against producing one that was dull and unambitious – but one that is achievable.

The big question

Jeremy Iles is Chief Executive at The Federation of City Farms and Community Gardens, an organisation which supports, represents and promotes community-managed farms and gardens across the UK.

The Federation of City Farms and Community Gardens (FCFCG) represents the growing movement of community groups in the UK, which are driving increased demand for land to cultivate.

There has been a surge in take-up of existing statutory allotments, at a time when cuts to local authority budgets means that management of many allotment sites is likely to be devolved to community committees.

As a result, new approaches and innovative solutions are needed. Local authorities and community groups will need support and training in making these dramatic changes and find a way forward which meshes with the Government's Big Society agenda.

Research by FCFCG into a 'Community Land Bank' has clearly identified that community groups require land for a wide variety of purposes, including:

- Food growing
- Therapeutic farming
- Play areas
- Wildlife sites
- Informal pocket parks.

The research also suggests that facilitation is key, taking away the risk-averse and confrontational nature of land negotiations. Some local authorities and other land owners in the research areas are willing to start this process if safeguards are in place.

Low-level investment in new projects would be beneficial, especially if working on a new 'social enterprise model' with members of the community contributing rent or share capital in return for use of land.

FCFCG suggests instigating 'vanguard' projects, or a Community Land Bank national demonstration model, to move this into the next phase. The Federation is at the forefront of this thinking – we've got the links to community groups, we are increasingly able to 'hand hold' local authorities, and we've got models that work.

Jim Smyllie is the Executive Director responsible for the delivery of land use functions, land management schemes and of local biodiversity and access at Natural England.

"'Buy land – they're not making it any more!" Mark Twain makes a good point: land is finite. In a densely populated country like ours, it's in short supply. The 13 million hectares of England support a diverse natural environment, provision of food, fibres and fuels, places for people to live, breathe and enjoy themselves, and more. As population increases, so too do our demands on land for these services.

To get the most services from our fixed amount of land, we need each piece to deliver more than one benefit – to be 'multi-functional'. This way we can get the most from land: wildlife and climate regulation, healthy food, clean water, inspirational landscapes and flood mitigation – to name a few. Of course there are limits to 'multi-functionality', as land can only provide so much, and the different landscapes of England will support a different mix of uses.

To help this happen, we need to include values for the natural environment in decision-making on land use, such as cost-benefit analysis. This can help us decide whether to protect a stretch of coastline or manage a retreat, whether to create a wetland or continue agricultural production, whether to plant trees or build houses. We also need to reward land managers where their actions benefit society. Environmental Stewardship, which Natural England delivers on behalf of government, is a vital first step – helping farming and environment coexist, and providing multiple services from over six million hectares of England. Through these values and incentives, the natural environment and the services it provides will be fully recognised, and our society will be richer in many ways.

Vicki Hird MSc FRES RSA is a Senior Campaigner on the Food Team at Friends of the Earth, and a writer/ commentator on all aspects of food, environment and farming.

Take Greater London and double it. That's how much Brazilian wilderness is estimated to have been destroyed last year as a result of British beef and soy imports. A new report – 'Forest to Fork' – estimates that 1,200 square miles of Brazil's forest and grassland were lost in 2009 thanks to demand for Brazilian soy animal feed for British factory farms, along with imports of beef, poultry and pork. Friends of the Earth's report includes the first estimate of the link between the meat we eat in the UK and damage in Brazil. It is a complex picture of interactions between soy, cane and beef ranching and global commodity markets, but the analysis shows that:

- Demand for beef, soy and sugarcane is placing a huge strain on the environment and people's livelihoods in Brazil.
- This pressure can only be tackled by reducing demand for these globally-traded commodities.

The 2009 global land use report 'Eating the Planet' modelled how it is possible to feed the world sustainably, ethically and healthily. But we need to tackle the underlying drivers of damage, tackle consumption patterns and use the global land resource far more wisely. The UK can lead the way. Friends of the Earth's Sustainable Livestock Bill was one way of helping achieve that. Although it failed to get enough votes to reach the next stage in becoming law, FoE was encouraged by the statements of support from the public and parliamentarians, which shows that people in the UK want to choose a planet friendly diet.

Join the campaign at www.jointheMOOvement.com. A fully referenced version of this article is available from info@foodethicscouncil.org

UK land use
A waste of space?

Land is a resource that has been argued and fought over throughout history, probably for as long as human beings have walked on it. Yet the demands we make upon it are increasing, say **Professor Philip Lowe and Ann Liddon.**

In the UK, World War II was a defining moment in our attitudes to land and food production. Long before the vogue for guerrilla gardening, roadside verges sprouted crops, flower gardens were turned over to vegetables, and heath and downland ploughed in order to feed the population. Costs and efficiency were secondary considerations and the supply of human labour was seen as the only limiting factor.

This set the scene for post-war productivism – the economically efficient expansion of food and timber. Throughout the 1950s and 1960s the focus was on boosting the productivity of land and labour through mechanisation, intensification and specialisation. There was little concern about whether the most effective use was being made of natural resources such as water or soils. Moreover, raising productivity relied heavily on cheap energy from fossil fuel. Farming turned from being a net generator of energy to a net consumer.

Global food supplies expanded enormously, eclipsing fears of food shortage in the UK, but the imperative to expand domestic production was boosted by the extension of the Common Agricultural Policy to the UK, when it joined the European Community (later the EU) in 1973. In the 1980s the resulting 'butter mountains' and 'wine lakes' were dumped on world markets and there was growing disquiet and scandal over costs, waste and trade tensions. Agricultural policy makers were obliged in the mid-1980s to take what at the time seemed the extreme step of introducing measures to limit farm output, including milk quotas and the compulsory idling of land through arable set-aside.

The time was ripe for other claims on rural land to prevail and environmentalists could at last make their case heard. Dedicated schemes introduced in the mid-1980s targeted geographical areas with the aim of protecting valued habitats and landscapes.

A complex system of regulations and rewards emerged through the 1990s to safeguard and promote what came to be known as 'multifunctional' farming. Farmers were given incentives to maintain biodiversity, landscapes and access to the countryside, and to protect water resources. Care for the environment was seen as another potential source of product differentiation that could be realised through 'green marketing'. Consumers could express their environmental concerns through discretionary food purchases, with initiatives such as 'Eat the View'.

Where does this leave us today? Over the past couple of years, volatility in commodity prices has led to increasing concerns about food security, and the farming lobby often takes this as a call to increase production. But the UK is already 75% self-sufficient, a higher figure than in the 1950s, and, in an increasingly globalized world, the pursuit of self-sufficiency for its own sake is no longer regarded as necessary or desirable. Yet, undeniably, the global population is growing and, in an era of climate change, the UK may be called upon to play a major part in providing food.

Is there an argument for returning to production at any cost? Many farmers, and some scientists, think that the balance has been tipped too recklessly towards environmental sustainability and away from food production. Environmentalists, however, fear that this risks forfeiting the improvements to the countryside that they have seen over the past two decades. Boosting food production is possible, but must be done in ways that respect environmental limits and minimise damaging trade-offs with other ecosystem services if system functionality is to be maintained.

Multifunctional agriculture, which in the past relied on farmers tolerating, or being paid to maintain, sub-optimal production, must now emphasise both ecological and economic efficiency – what we might term 'smart production'. One means of promoting this is the 'ecosystem services' framework, which provides a new way of thinking and working, a move away from looking at natural environment policies in separate 'silos' – for example air, water, soil, wildlife – and towards a more holistic or integrated approach based on whole ecosystems.

This ecosystem approach requires a distinct mindset – one which will be new to many of those concerned with the use of land. Can farmers, used to seeing themselves as 'food producers', countenance becoming 'integrated land managers' who provide ecosystem services? The ecosystem approach means accepting the possibility that, regardless of its current main use or uses, any area of land has the potential to deliver a very wide range of services, such as food, flood management, biodiversity or recreation.

The challenge lies in enabling the pattern of land use to change, to create a landscape which provides this wider range of ecosystem services. The shifts in attitudes required pose challenges for some long-standing policy concepts and

By Mark Connell

significant mechanisms. These are often sectoral, focus on one interest in land to the exclusion of others, and emphasise land use segregation rather than multifunctionality.

To identify the potential for land to deliver different ecosystem services to society means stepping back from current or recent land use and considering what range of services could realistically be delivered, given appropriate management.

Determining priorities for any one area – which services should actually be delivered there to meet society's needs – is quite another matter. Any such decision is the sum of interactions between the market, land managers and policymakers. The decisions can often be contested. Complications arise because priorities will alter over time, in response to new pressures. Priorities agreed today may be far from appropriate in 2020, 2050 or 2100.

The challenge of reconciling public and commercial interests, short-term considerations and long-term requirements, and local and global concerns, is underlined by the imperative to respond to climate change.

The science and politics of climate change have so far focused on mitigation. Increasingly, however, the focus is expanding to include the steps needed to adjust our economy and society to unavoidable changes in climate and their consequences. Both demand that we learn to manage under conditions of uncertainty

How we use land is central to both mitigation and adaptation. On the one hand, land is both a source of emissions and a means for decreasing them. Land can produce low-carbon energy – from wind-farms, solar power, biomass crops and anaerobic digestion of waste. Equally, forests and peatlands have potential to 'lock up' substantial amounts of carbon.

> "How we use land is central to both mitigation and adaptation"

On the other hand, land is central to our capacity to adapt and adjust to the effects of climate change. Flood management areas, changing cropping zones and shifts in the geographical ranges of species are examples of this. Much of the medium-term growth in greenhouse gas emissions is already in the pipeline, so adaptation is a necessity. But we have to ensure that short term adaptation does not add to long term problems.

Agriculture is responsible for 7% of UK greenhouse gases. There are steps that can help to reduce this – reducing direct and indirect energy use, replacing fossil fuels with biomass and anaerobic digestion; using cultivation methods that increase carbon storage in soils; reducing methane emissions from animals by altering diets and improving manure storage and developing renewable feedstocks and products to substitute for those derived from fossil fuels.

Land managers are already being encouraged to pay greater attention to carbon accounting through voluntary initiatives. Agriculture will also have to adapt to climate change and its consequences, including more extreme weather events. Shifts in growing seasons and water availability, new pests and diseases all pose challenges. There will also be changes in the geography of crops, with new opportunities as well as losses.

Of course, wildlife has no option: it must adapt or perish, and adapt not only to the direct effects of climate change, but also to the indirect effects from human reactions to climate change. New strategies will be needed to enable specialised species, in particular those that are relatively immobile, to disperse and establish in new locations.

But there are dangers in rushing to address any one problem. An instructive case of a damaging clash between short- and long-term objectives is provided by biofuels. Replacing fossil fuels with renewable biofuels would seem, in principle, to offer benefits in mitigating climate change, yet 'first generation' biofuels (grains, vegetable oils) have diverted resources from food production, forcing up food commodity prices while consuming considerable amounts of fossil fuel in their production. Second generation biofuels (that is, dedicated energy crops or waste by-products) may offer a more attractive prospect.

There are thus multiple demands on land from different sources and directions. How can we guide these demands effectively in ways that are both flexible, to allow people and businesses to adjust to environmental change, and strategic, to ensure that the long-term public good is pursued? Any approach has to recognise the full ecological capacities of land and the ecosystem services it provides, to promote initiatives such as precision farming and establish mechanisms that facilitate flexible local responses for landscape-level action.

Finally, it is important to develop a long-term strategic vision for land use which integrates diverse objectives for ecosystem services. Boosting production in a sustainable fashion involves careful trade-offs with other ecosystem services.

Reform of the Common Agricultural Policy seems likely to play a major role. Land managers need to be involved in the process and to engage much more with local communities. Perhaps a charter of rights and responsibilities could support such an approach within the 'Big Society' agenda.

Further reading: 'What is land for? The food, fuel and climate change debate' edited by Michael Winter and Matt Lobley, published by Earthscan 2009. Further information is also available on the Relu website www.relu.ac.uk.

Professor Philip Lowe is Director, Rural Economy and Land Use Programme, and Anne Liddon is Science Communications Manager, Rural Economy and Land Use Programme.

Agricultural land use

Current UK trends

There are about 17.5 million hectares of farmland in the UK, an area which has remained virtually unchanged for the last 25 years. In addition to this there is an extra 1.2 million hectares of "common rough grazing" giving a total agricultural area of just under 19 million hectares. This land area supports 6.2 million hectares of arable cropping, 32 million sheep, ten million cattle and almost five million pigs. **Carl Atkin** charts recent developments in this landscape.

Cereals, such as wheat, barley and oilseeds make up almost 80% of the arable land area; other arable crops, such as proteins and sugar beet make up 13%, horticulture (fruit, vegetables and ornamentals) make up 4% while potatoes use 3% of the land. The UK is the fourth largest producer of cereals and oilseed crops in the EU, accounting for around 8% of total EU production. Wheat, barley and oilseed rape are the most important combinable crops grown in the UK.

According to DEFRA statistics, there are about 300,000 active farmers in the UK with an average unit size of 57 ha – almost three times the EU average of 20 ha. Yet this figure is highly misleading as 41,000 farms are greater than 100 ha of land and account for over 65% of the productive area. There's also the problem of dealing with 'statistical farmers' who are not food production decision makers but may hold a small area of land for amenity or recreational purposes.

Despite popular opinion the industry is still a reasonable player when it comes to employment – in 2009 almost 535,000 people worked on agricultural holdings, a slight increase on the previous year. This breaks down into 152,000 full time farmers, 198,000 part time farmers and 184,000 farm workers. In 2008 the value of UK agriculture to the UK economy was about £6.8 billion.

The distribution of farming systems is principally driven by the underlying agroecology – soils and climate in common parlance – which tends to favour arable farming and horticulture to the south east and pastoral farming to the north and west. Dairy farming

> "In 2008 the value of UK agriculture to the UK economy was about £6.8 billion"

has become increasingly concentrated in north west and south west England, with pigs and poultry tending to favour the Eastern counties, Lincolnshire and Yorkshire. The area of land registered organic has risen steadily and is currently about 4% of the current farmed area.

On a global basis, UK arable and horticultural production is some of the most competitive in the world with our maritime climate allowing long crop-growing seasons and crop yields which are the envy of many. Nowhere else in the world can compete with the regular 10 tonnes per ha of wheat that much of East Anglia can boast. However parts of the livestock sector have always struggled to compete with lower cost producers in Latin America and Asia, and depend on production linked support to show positive margins.

Land ownership trends have also stayed surprisingly static. About 90% of the agricultural land in the UK is privately owned; 56% of this is owner occupied and 34% tenanted. There has, however, been a dramatic shift in the tenanted sector away from traditional secure tenancies under the Agricultural Holdings Act 1986 to shorter, more flexible tenancies which were introduced in the Agricultural Tenancies Act 1995. The remaining 10% of farmland is owned by public bodies, semi public bodies and institutions. The largest public owner is central government (principally via the Forestry Commission and Ministry of Defence) who control about 2.6% of the UK farmland area. The next major owners are local authorities (2.1%), water authorities and similar bodies (1.3%), the Crown (0.9%), conservation bodies such as the National Trust and RSPB (0.7%) and the balance of 2.1% is held by Universities and religious institutions (principally Oxbridge colleges and the Church).

Current trends

There has been increasing specialisation of production activity. Specialist enterprises such as dairying and root crop production in particular have become concentrated in the hands of significantly fewer producers over the last two decades – in the case of potatoes more than half. Specialisation has also tended to drive increased efficiency – over the last decade alone the average milk yield per cow has risen from under 6,000 litres per cow to over 7,000 litres per cow.

There continues to be an increasing divergence of land ownership, occupation and operation – the volume of land traded (freehold and leasehold) continues to decline, principally as a result of the favourable income and capital taxation treatment of owning and occupying farmland. Flexible models, such as share farming, contract farming and joint ventures have become more commonplace, allowing land owners and occupiers to retain the fiscal benefits of farming whilst delegating operational matters. This often means that many large farming businesses may undertake the operational decision making on half a dozen or more different 'statistical farms' skewing the statistics still further between 'farmers' and 'operators.'

Policy as a driver of agricultural land use has diminished – the substantial reforms of the Common Agricultural Policy (CAP) in 2003 finally broke the link between production and support payments. Prior to this, different crops and livestock production systems attracted varying area-based and headage payments. Since 2005, all support has been bundled into the 'single farm payment'; a decoupled support payment paid regardless of production decisions and paid for adherence to baseline environmental management standards. To give an example of the distorting effects of the old policy: at its peak in 2000, almost 800,000 ha of UK farmland were in compulsory set-aside under the old CAP regime; the figure is now zero as the policy was finally abolished in 2008.

Intervention in agricultural markets has diminished substantially, with the virtual dismantling of the old intervention system which created the politically embarrassing grain mountains and wine lakes of the 1980s. This has had a positive effect in making production agriculture more market-focussed, but has exposed individual farm businesses to great volatility and they need to adopt more robust risk management and marketing strategies more than ever.

Balancing the needs of food production and the environment has become more important. Agri-environment schemes first came into being in the late 1980s, but there has been a surge in uptake over the last decade with the introduction of 'entry level stewardship' in 2005 encouraging all farmers to manage small areas of land for environmental goods and a new industry backed initiative in 2009 called the 'Campaign for the Farmed Environment' to retain the environmental benefits lost through the abolition of compulsory set-aside.

Land Prices in the UK have risen substantially over the last decade. Land in the UK, along with Germany, is some of the most expensive farmland in Europe. Only Ireland and Scandinavia

> "Share farming, contract farming and joint ventures have become more commonplace"

stand out as having higher land values per ha – and in both these geographies land prices have softened during the last two years as the financial crisis has hit purchasers coming in to farmland investment from other sectors. The average figures quoted, which have shown a steady rise over the last five years also masks another trend: an increasing divergence between the most productive land and land which supports a less flexible range of enterprises or activities. Farmland ownership in the UK has (and still does) create a modest income return – often less than 2% – but the asset class has shown steady capital growth and is becoming increasingly attractive to the non-farming investor as a non-correlated inflation hedge in investment portfolios.

Farms of the future

Agricultural economists tend to split future farm types into three groups: commercial (those which will almost entirely generate their incomes from production activity), residual/recreational (those who will generate their income from environmental management, and/or from hobby farming for those with non-agricultural income sources) and original (those who develop marketing systems to deliver premium products such as branded milk and meat; perhaps marketed direct to the consumer). In the period 2000-2007 there was a substantial shift to differentiation but the recent upswing in commodity prices has also favoured those who have focussed on low cost commodity production as their principle business model. The relative balance between commercial commodity production and differentiated niche production is hard to determine as market economics will continue to be the major driver but with access to one of the most discerning and segmented consumer markets in the world differentiation remains the obvious strategy for those sectors which will simply never be internationally competitive.

One thing which is certain is that the land use policy debate – specifically how we manage the interplay of food production, delivery of environmental services (and other public goods) and climate change mitigation will become more important. With some of the most productive farmland in the world many may argue we have a moral obligation to use it to its full productive capability, and measuring calories produced per ha of land and litre of water would be one obvious metric. Yet this does not take into account the environmental goods which the market does not yet fully pay for. These discussions around land use choices need to be be factored into the national and international debate on farmland use.

Carl Atkin is Head of Research at Bidwells Agribusiness.

Back to the land

Uncertainty in the food system



The 'rationalisation' of agriculture that took place in Britain in the second half of the 20th Century is radical and far-reaching. **Ruth West, Tom Curtis and Colin Tudge** ask whether the situation is coming full circle.

These changes saw an increase in the size of farm holdings, the application of large-scale, capital intensive technologies, a move from mixed farms to specialisation – meaning monoculture – and a growth in bulk institutional buying with often draconian terms and conditions.

This resulted in the production of industrial quantities of food for an increasingly urban population. It was based on a model that required industrial style top-down planning, 'vertical integration', subsidies, inputs, equipment, and perhaps most notably, industrial levels of fossil fuels.

When systems like this work, they work on an impressive scale. For example, to feed itself for a year, a city the size of Manchester in effect secures ⅓ million acres of growing land, 1½ million barrels of oil, and over a billion tonnes of fresh water.

But many would argue that systems like these – which presume access to these finite resources – are prone to disruption, or even collapse, on an equally impressive scale. While we have yet to see serious disruptions to the UK's food supply, uncertainty in the system has already been felt by farm businesses in the form of price hikes in essential commodities such as fuel, nitrogen fertiliser, phosphate, animal feed and straw. Elsewhere it has cut deeper; a near doubling in price of many staple foods in 2007 and 2008 led to riots in more than 30 countries and an estimated 150 million extra people going hungry.

Farming based on Biology

To keep the food system going in the long-term, we need agriculture that is productive (to feed 9.5 billion by 2050); sustainable (numbers seem likely to fall eventually, but not for some decades or centuries); and resilient (able to withstand the changes in conditions that we know are coming). Instead, farming today is designed primarily to be maximally profitable – and indeed more profitable than anyone else, so as to compete. Farms that are maximally profitable in the present economy are as big and simple as possible – monocultural – partly to minimise labour (the agrarian workforce has been cut to the bone – the average age of farmers is around 60). Fertility is based on fossil fuels because fossil fuels are still relatively cheap.

The problem is that this results in an industrial agriculture operating as if it can transcend biological realities. In reality the sharp focus on short-term profit is reliant on taking capital from the future: soils, water, energy, fertility, and even skills.

Common sense and basic biology tell us that the solution might best be found by emulating nature, which is enormously diverse, with different species complementing each other. Nature too is maximally conservative, making the best use of whatever is available in situ (although always with significant inputs from elsewhere – for example from flooding rivers), and above all, it recycles. Every creature's waste is somebody else's provender.

In farming, diversity means a greater range of crops – lending choice and adaptability to the farmer and their customer. Being maximally conservative with resources means integration – using the capacity of farms to generate and internalise energy, nutrient, and biomass flows by passing resources from one part of a mixed farm system to another. Basic biology and a very short chain of reasoning tell us that it's hard to do this if all you produce is wheat or milk. The basic unit for a biologically-based agriculture is therefore more likely to be a small, mixed, low-input, labour-intensive farm – a polyculture.

Scales of action

To have more polycultures, we need more farms, and farmers to run them. This might be seen as a rural issue, outside the domain of the 80% of Britons who live in cities. But, the magnitude of the stakes if we get this wrong means that agriculture, and food, is everybody's business. So, what are the options for being an active participant in the food system, and having a stake in the land?

The Campaign For Real Farming (www.campaignforrealfarming.org) has a straightforward answer; step by step – 'Eight Steps Back to the Land'.

Stage 1 is to be a wannabe. Stage 2 – the concerned observer. 3: Start growing; window box, garden, allotment. 4: Allotments grow to become small farms – actually selling surplus produce.

5: Take on livestock – starting with poultry and working up through pigs to the grazing animals. 6: Preferably with a consortium, a cooperative, start marketing. 7: Acknowledge that you are, at this point, a part-time farmer.

Part-time farming, in the history of the world and now, is huge. All of Scotland's crofters, historically, were part-timers. John Adams was a farmer and lawyer – and found time to be the second president of the United States. Perhaps in future most farmers should be part-timers, so stage 7 is as far as it might be sensible to get. Stage 8 is to be a full-time farmer. Good luck.

We need action at all of these stage, and there's currently a tremendous amount of creativity and action in the first few steps. Landsharing, promoted on television by Hugh Fearnley-Whittingstall, is unlocking allotment scale land across the country for people to grow veg on other people's land. 'Incredible Edible Todmordon' is one of several communities that are leading way in creating edible neighbourhoods.

These are critical steps. But if we're serious about changing the food system, we can't stop at the city limits. The next step, at farm scale, is reflected by 'Future Farms', in Martin, Hampshire who have formed a co-operative to produce as much of their daily diet as possible from fields and barns within their parish boundary.

The group started by providing a means of distributing surplus produce, and now runs its own small farm. Other, less rural groups have forged links to the land through collective investment – Community Supported Agriculture. Others still work through strategic buying policies, such as 'Growing Communities' in London, which structures its procurement into 'Food Zones', working concentrically outwards from the city.

Access to land

In all cases, more farms means more farms on land which is already owned. In Britain, around 5,000 families own half of all the land, and the rest is mostly carved up between very big institutions, from pension funds to Oxford colleges. So there is a huge discrepancy between the units of land ownership, and the units of production needed to feed us all well and sustainably. At current rates – less than one half of one percent of farmland put up for sale per year – we would need a century or more to make an impression on this through change of ownership.

We may reasonably feel that sooner rather than later, Britain needs massive land reform. Indeed so: yet this is not the sine qua non or the most immediate task. Many landowners are very well informed and responsible, and it would be hard to improve on their stewardship. In any case, land ownership is not all that it's cracked up to be. Land in Britain these days like everything else has become a commodity; its price hiked as high as the market will stand, which in practice is way out of proportion to the monetary value of what it can actually produce (unless of course it is sold off for building or golf). Those who own land that is not snapped up by speculators sink huge sums – £5,000 to £10,000 an acre – in land that returns very little; and whoever buys land, as opposed to inheriting it, has to fork out vast sums to the banks, in mortgage.

Land partnerships

In response to this challenge, two initiatives, FarmStep at the Northmoor Trust in Oxfordshire and LandScope at the Dartington Hall Estate in Devon, have pioneered an approach which starts to square the scale of land ownership with that of land 'usership'.

In both cases, they have recognised the value of mixed, integrated farm systems. But they have also recognised that creating and managing complexity at a farm scale comes with its own challenges. The development of new enterprises involves capital investment, risk, and steep learning curves. And diversification can increase management burden and direct labour costs; creating the need for diverse and complex systems and skills that may be beyond the scope of small or medium sized farm businesses. To get around this they have progressively parcelled land out to new, independent, small farm businesses, for rent or as joint ventures.

In simple terms, these types of 'Land Partnership' involve landowners allowing others to operate farm businesses on their land. More specifically, both the LandScope and the FarmStep projects have set selection criteria to ensure complementarity between the new enterprises. The key here is to build an estate or farm system which has better 'system integration' – so that energy, nutrients, equipment, skills from one enterprise have applications in other, nearby enterprises.

An important starting point for planning this is to conduct strategic level system analyses; for example quantifying and tracking energy usage and generation potential around the estate. This can point to some obvious 'vacant system components' that one can then look to fill with new enterprises.

Of course, Land Partnerships are not a new thing. There are between ten and fifteen thousand tenant farmers in Britain, farming around one third of our agricultural land. And before the 'Inclosure Acts'(sic) much of Britain was covered by common 'usufruct' arrangements, where property and usage rights were exercised separately, by different people on the same piece of land. Such rights included, for instance: pasture – grazing cattle, geese, sheep; pannage – allowing pigs to forage acorns and other tree mast; and estovers – for gathering firewood.

The opportunity now is to build on this heritage; developing a new wave of Land Partnerships based on mutually beneficial business arrangements between landowners and farmers

The promise of Land Partnerships lies in the benefits it brings to all parties. They provide the landowner with a mechanism for diversifying their landholding, whilst at the same time avoiding many of the risks and liabilities associated with establishing a clutch of new businesses in-house. For new entrants into farming, partnership arrangements can provide a way around the high costs and intransigence of land markets.

From a wider perspective, a well-planned cluster of land enterprises has the potential to manage natural resources more efficiently, and has the complexity required to penetrate local markets with a wider range of products. This could result in the sort of resilience, flexibility, and increased emphasis on localisation that we will all need if we are to cope with future uncertainty in our food system.

Colin, a biologist with a special interest in agriculture; Ruth, with a background in human rights; and Tom, a forester, founded LandShare in 2008 -- a project bringing together their various interests and expertise in the future of land and food. Colin and Ruth now run the Campaign for Real Farming.

Local food production

Access to land the key ingredient

Simon Fairlie calls on county councils to stop hindering local food production, and start helping.

Local food production, often by small scale farmers, does not benefit from economies of scale, but becomes viable through economies of distribution. Small volumes of each commodity are required and transported over short distances to feed a relatively small population. Waste and nutrients accumulate in relatively small quantities, and require little effort to return them the short distance to the land whence they came.

In 2006, I was one of a group of local campaigners who squatted Balham Hill Farm, a county farm with Grade 1 land which Somerset County Council was selling off on the grounds that it was "uneconomic". The figures showed that two thirds of the 90 acre farm was probably loss-making. But the other third provided food – fresh milk, eggs, pork, beef, potatoes, fruit – for a farm shop close to the village of Chiselborough which was highly profitable.

Our analysis showed that the shop was supplying the locality with a wide range of fresh food sufficient for about 300 people. Only about a third was produced on the farm; the rest (vegetables, fruit, lamb , cheese, honey, cider and more) was bought in from nearby farms. In our report presented to the county council we proposed that by scrapping the unprofitable large-scale dairy, and focussing producing a full range of fresh local foods to sell through the shop, the land could support three families, rather than one, with a corresponding increase in rent for the council.

The Lib Dem dominated council didn't listen. They insisted that the farm was too small to be viable, while we argued that 90 acres was too big for one family providing local food at retail prices. The farm was divided up and auctioned off. The farm bungalow, yard and 15 acres had a guide price of £350,000 but sold for over £400,000 – well above the agricultural rental value and considerably more than someone making a living from farming could afford. The new owners held it for a year, letting the docks and thistles grow, then put it on the market again at an asking price of £550,000. Now it is a horseyculture establishment.
And the percentage of the profits (around £50,000) the County Council pledged to put towards local food? Spent on a feasibility study to establish a "local food centre" at Barrington Court, a nearby National Trust property – which eventually concluded that the project wasn't feasible.

County farms are the agricultural equivalent of council houses. Mostly created between the two World Wars, under the aegis of the 1908 Smallholdings and Allotments Act, they were designed to provide affordable smallholding opportunities for landless agricultural workers and soldiers returning from the war. Now nearly a century later, there is a revival in demand for smallholdings from people wanting to make a living from the production and sale of local foods, but most county councils are blind to the opportunity that this presents.

Some , such as Oxfordshire, have already sold off all their holdings, while others, such as Somerset (now under Tory control) and Buckinghamshire, are intent on getting rid of theirs to pay off their debts. Even those counties that maintain their estates now focus mainly on awkwardly middle sized farms of around 100 acres – too large for intensive local food production and processing, too small to thrive on the tiny profit margins that large scale industrial farms have to work to. Since 1990, England's county farm estate has declined from 350,000 acres to not much over 200,000 acres.

> "There is a revival in demand for smallholdings"

Since county smallholdings are now more or less inaccessible to smallholders, most people wanting to start a local food enterprise are forced to acquire land on the open market. This is by no means impossible, but new entrants are likely to encounter a number of obstacles, mostly connected either with the high price of land, or with the difficulty of getting planning permission.

There is an interesting passage in the 'Wealth of Nations' where Adam Smith observes that the price of agricultural land normally fluctuates between about 10 times its annual rental value and 30 times, rising in price when bank interest rates decline, and vice versa. In other words it would take between 10 and 30 years to pay it off through normal agricultural activity.

Currently the rental value of decent pasture land is around £80 per acre, whereas the price is at least £5,000 per acre, and up to £10,000 for a small acreage. In other words the cost of land is now between 60 and 120 times its agricultural rental value; unaffordable for anyone trying to buy it on a conventional farming income. One reason for this perverse situation is that the price of small plots of land is dictated by wealthy people

By Dan Maudsley

who require it for amenity activities, notably horseyculture.

There are a number of ways around this obstacle. Prospective smallholders may have sufficient capital to meet this expense, for example by selling a house in London, or through a legacy. They may have a second income which subsidizes their agriculture. Or they may convert pasture to some form of intensive agriculture, such as horticulture, which requires relatively little land to produce a given income. As noted, it's currently better to rent, provided the tenant can obtain an agreement that provides sufficient security.

Increasingly, and somewhat curiously, one of the main sources of rented land for pioneering smallholders seems to be the large estates of the landed gentry who for centuries made land so inaccessible to the peasantry. My own hunch is that over the last fifteen years, a good many of these estates have been inherited by gentlemen of my generation; that is to say they reached adulthood around 1968 and imbibed (or perhaps I should say inhaled) the same alternative ethos that lies at the root of the organic and local food movement. Large swathes of rural England are now owned by a generation of second rank Prince Charles's, who are refreshingly open to innovative green proposals.

The other, and probably greater obstacle is planning permission. It is virtually impossible to operate a complex mixed smallholding whilst living off site, particularly with children to look after; and in any case it is usually impossible to make it pay enough to afford a house in the nearest village. For the last 14 years, as director of Chapter 7, I have been dealing with this issue, advising smallholders how to apply for permission and how to go to appeal when (nine times out of 10) they are refused.

In our experience at Chapter 7, most smallholders meet obdurate opposition from the local planning authority, but, if their enterprise is competent and productive, tend to obtain planning approval at appeal. It is a highly stressful way of establishing a new farm, but one can sympathise with the planners who have to distinguish between genuine farmers on the one hand and people who are only putting up a pretence in order to acquire a dwelling in the countryside on the other. The problem lies in the weak conditions applied to agricultural dwellings, which can be sold off from the land as soon as permission is granted (a loophole which the Welsh Assembly have recently abolished).

Where the planning system is most at fault is not in its development control, but its planning policy. All around the major towns of England lie green belts, areas where by popular demand housing and industrial development is not permitted. These areas are the prime sites for local food operations, small satellite farms supplying food for the metropolis, recycling its organic waste and providing hands on farming experience for urban schoolchildren who are so deprived of contact with nature. Does the government supply policies that enable and encourage local food providers to set up enterprises to tap such a ready and needy market? No, it lets such areas fester under a blighted regime where landowners sit on their land waiting for planning policies to be relaxed while disconsolate nags nibble between the docks and thistles sprouting under the pylons.

The apathy is similar in the countryside. A few years ago a group of campaigners, operating under the name of 'Farm Villages', came up with a proposal to establish a farm shop in every village in Britain. They envisaged farms not unlike like our proposal for Balham Hill, which would provide the bulk of the fresh food for 250 or 500 inhabitants in the neighbourhood, and sell it through a farm shop in the village, which might also supply cans of baked beans and packets of Kleenex, or even a post office counter. The shop would support the farm, and the farm would support the shop.

It is such an obvious solution for villages that currently have no facilities and one that could be very easily promoted through policies in the local plan. Does this happen? No it doesn't. Few planners have any understanding of things agricultural, and councillors of all political persuasions are normally dismissive. "Agriculture is not our core business" the Tory leader of Somerset County Council stated when quizzed about the sale of county farms. Meaning, of course, that access to agricultural land is a matter for the market to decide, or more precisely, the supermarkets.

Simon Fairlie has been agricultural labourer, vine-worker, shepherd, fisherman, builder, stonemason and farmer. He co-edited The Ecologist magazine, runs Chapter 7, which provides planning advice to smallholders, is editor of The Land, sells scythes and writes books.

Who owns the land?

Myths about food and houses

From housing market boom and bust to scare stories about concreting over rural England, the way we pay for, own and record land in Britain needs radical reform, writes **Kevin Cahill**.

The UK comprises around 60 million acres. Roughly 62 million people live here, with over 90% of us inhabiting less than 5%, or 3 million acres.

Between 4.2 million acres and 6 million acres (a maximum of 10%), is under bricks, mortar and tarmac. Fifteen million acres is waste, bog and moor. The remaining 39 million acres is heavily subsidised rural and agricultural land.

There are about 25 million dwellings in the UK, of which about 17.7 million are private and the remainder are council, housing association or private rented. There is an average of 10 dwellings per acre, and the urban housing footprint is around 2.5 million acres, less than 3% of UK land.

The most valuable land in the UK is urban. It is heavily taxed (around £6,000 per acre), producing around £22bn a year for the exchequer. By contrast, the UK's agricultural land (around 69%) receives subsidies of around £3.6bn per year. That's about £87 back for every acre.

Food and land are commodities that are essential to survival, yet subject to market forces. In a world where nature produces scarcity and surplus in unpredictable (and unregulated) circumstances, how do we ensure that the market is 'reasonable'? In other words, how to make the market pay out a decent return for the producer or owner of the commodity, and a fair price for the buyer?

Part of the answer is reliable information about the availability of the commodity, and ready access to that information by buyers and sellers. However, reliable information about land in the UK is not readily available.

A few facts

In financial terms, the housing market (the essential commodity of shelter), at the peak of the boom in 2007, was the biggest single market in the UK in financial terms. It provided jobs, money for banks and mortgage companies, and (occasionally) satisfaction for the buyers. But it was a sellers' market based on the myth of scarce land in the UK.

That myth is sustainable because the key information source on land, the Land Registry, was constructed to conceal, not reveal, information. Here are some statements about the Land Registry in the Government's Land registration Act of 2002:

"The Land Registries of the UK do not record ownership of land. That is because there is only one owner of land in the UK, the Crown in the person of the Queen, Elizabeth II." The Land Registries record is "…an interest in an estate in land, in fee simple".

It gets more bizarre. The Land Registry, the government tells us, has no idea how much land there is in the UK, as it does not record such information when titles to estates in land are registered.

And that's without mentioning the Crown's hidden and rather significant interest. The government summed it up like this.

"The Crown is the only absolute owner of land in England & Wales (and in Scotland and Northern Ireland); all others hold an estate in land. Estates, which derive from feudal terms of tenure, originally took many forms but were reduced by the Law of Property Act 1925 to two, an estate in fee simple, absolute in possession, generally known as 'freehold' and an estate for a term of years absolute generally known as leasehold."

Serious issue

When the Land registry for England and Wales was created in 1925 landowners were given 65 years through rolling registration, to be brought within the terms of the Act relating to mandatory registration. That was completed in 1990. But the legal requirement to register related to transactions in estates, and not to actual possession. This left about 50% of the acreage of England and Wales unrecorded in the Land Registry (about the same for Northern Ireland, but less for Scotland). That situation persists today.

So when we talk about land in the UK our starting point is ignorance, without knowing the key facts. This can create situations like the recent Council for the Protection of Rural England warning that if we went on building homes at the rate we were doing, England would be concreted over by about 2035.

The media reported it without asking how big England was (32 million acres) how much was urban (10% or 3.2 million acres) and what the current build rate was (14,000 acres a year, and falling). The estimate of complete concretisation by 2035 was out by about 2,285 years.

It is easy to perpetuate this myth when the facts are seldom or ever available, but using the figures that are available, it's easy to see that there is no threat to rural Britain from the current level of development. There is a threat though, and that's to the economic well being of Britain's inhabitants, by a false myth of land scarcity and a Land Registry that cannot tell us who owns the land.

Kevin Cahill lives in Devon, and is the author of a number of books on business, trade and landownership including 'Who Owns Britain'. He was a researcher on the original Sunday Times Rich List.

Meat: Three Perspectives
Richard Twine | 2010 | Earthscan | ISBN: 978-1-84407-830-1
Joyce D'Silva and John Webster (ed) | 2010 | Earthscan | ISBN: 978-1-84407-903-2
Simon Fairlie | 2010 | Permanent Publications| ISBN: 978-1-85623-055-1
'Animals as Biotechnology: Ethics, Sustainability and Critical Animal Studies' is a sociologist's view on the increasingly scientific approach to farm animal breeding. Making compelling links between both the consequences of the detached way we treat our animals and also seeing it as symptomatic of a shift in society itself, Richard Twine takes a novel approach. 'The Meat Crisis: Developing More Sustainable Production and Consumption' (ed. Joyce D'Silva and John Webster) looks at livestock issues in terms of welfare, environment, health, ethics and policy, drawing on the academic expertise in each field to offer up some tactical solutions to the over-consumption of animals. 'Meat: A Benign Extravagance' is a helpful provocation to environmentalists and the farming industry alike, with Simon Fairlie's recipe for 'default livestock' – where animals eat the leftovers from land management – showing that it is the current system of producing meat that is at issue, not simply the act of consumption. In these three excellent books, Fairlie provides a very personal, experiential argument, D'Silva and Webster provide a number of the most prominent arguments for reducing meat consumption, and Twine takes an innovative approach by questioning why society has reached this point.

Zimbabwe's Land Reform: Myths and Realities
Ian Scoones, Nelson Marongwe, Blasio Mavedzenge, Jacob Mahenehene, Felix Murimbarimba and Chrispen Sukume | 2010 | James Currey | ISBN: 978-1-84701-024-7
The result of a 10 year project in Masvingo province in Zimbabwe, this book debunks the myths that Mugabe's land reforms have been disastrous for his country. Whilst refusing to ignore corruption, malpractice and mistakes, Scoones and colleagues find a resilient and enterprising core of small-scale farmers surviving and even profiting from land reform. LB

Empires of Food: Feast, Famine and the Rise and Fall of Civilisations
Evan Fraser and Andrew Rimas | 2010 | Free Press | ISNB: 978-1-43-910189-6
Here are fascinating tales of how political and economic power and urban needs have shaped food throughout history, coupled with a warning that ignorance or neglect of ecological realities can undermine any civilisation, not least ours. And that lesson requires us to rethink the way we feed ourselves now. GT

The Whole Earth Discipline
Stuart Brand | 2010 | Viking Books | ISBN: 978-0-67-002121-5
This is a controversial book that has sparked fierce debate in the green movement and beyond. Here we see Brand, an original 'eco hippy' argue in favour of some of the most vilified technologies in the history of the environmental movement, including nuclear power and GM technology. Pragmatist or apologist? The jury's out. LB

Food Policy: Integrating Health, Environment and Society
Tim Lang, David Barling and Martin Caraher | 2010 | OUP | ISBN: 978-0-19-856788-2
This book looks at food policy's ability to integrate three elements: human health, the environment and social relations. Drawing on examples of global, national and personal food worlds, the authors gently tease out from the complex interplay of issues that is food policy, a clear justification for a completely new holistic approach to the governance of the food system. KB

Rebels for the Soil: The Rise of the Global Organic Food and Farming Movement
Matthew Reed | 2010 | Earthscan | ISBN: 978-1-84407-597-3
The popularity and credibility experienced by the organic movement today is the result of decades of work. Reed looks at the various incarnations of the campaign from the 1920s to its modern day reinvention, giving a fascinating historical context to how a mass movement was built to address pollution, GMO cultivation and market dominance. KB

The Recipe Reader: Narratives, Contexts, Traditions
Janet Floyd and Laurel Forster (ed) | 2010 | University of Nebraska Press | ISBN: 978-0-80-323361-4
This collection of essays combines an explorations into the histories of publishing and domesticity, providing a diverse, detailed analysis of recipes from various approaches and contexts. With subject matter ranging from the preservation of cultural values and the use of food writing in fiction to the relationship between food and feminism, there will most likely be something to interest everybody. VED

Food Ethics
Franz-Theo Gottwald, Hans Werner Ingenseip and Marc Meinhardt (ed) | 2010 | Springer | ISBN: 978-1-4419-5764-1
With an introduction that seeks to bring classical philosophy to bear on the proceeding articles about global trade, GMO cultivation, water rights and policy, Gottwald et al. delve into the current dialogues within the multifarious discipline of food ethics. With well-balanced chapters, the reader gains a sound understanding of the contemporary movements in ethics. KB

Forthcoming events

1st Dec ‘10	Can the UK ever be sustainable? Royal Geographical Society | www.21stcenturychallenges.org/focus/meet-the-panel2/ London, UK
1st Dec ‘10	Understanding soils: getting the basics right | Soil Association | www.soilassociation.org/Events | Hampshire,
2nd Dec ‘10	Food labelling: annual update seminar campden BRI | www.campden.co.uk/food-labelling-seminar.htm Gloucestershire, UK
2nd Dec ‘10	GM foods: genetic manipulation or global malnutrition? | SCI Food Commodities and Ingredients Group www.socio.org | London, UK
2nd Dec ‘10	Our farming system and the knowledge we need to run it profitably and for low-impact | Rothamsted Research | www.northwyke.bbsrc.ac.uk/pages/workshopseminars.html | Devon, UK
5th - 11th Dec ‘10	Wheat science to textbooks | CIMMYT | www.cimmyt.org/en/services-and-products/events | Texcoco, Mexico
6th -7th Dec ‘10	Making food security work: matching supply to demand | Chatham House | www.chathamhouse.org.uk/food10/ London, UK
6th - 7th Dec ‘10	Scientists centre for animal welfare winter conference | SCAW | www.scaw.com | Texas, USA
6th - 8th Dec ‘10	Middle East natural and organic product expo | www.naturalproductme.com/index.php | Dubai, UAE
7th Dec ‘10	Agronomists’ conference | HGCA | www.hgca.com/event.aspx?eventId=3270 | Northamptonshire, UK
7th Dec ‘10	Ideotypes - Is the Understanding of Physiology Relevant to the Future of Plant Breeding? | The Association of Applied Biologists | www.aab.org.uk/contentok.php?id=111&basket=wwsshowconfdets | Reading, UK
7th - 8th Dec ‘10	Sustainable agricultural partnerships summit | London Business Conferences | www.sustainable-agriculture-partnerships.com | London, UK
7th - 9th Dec ‘10	BioFach India international organic trade fair | NürnbergMesse | www.biofach-india.com/en | Mumbai, India
11th - 14th Dec ‘10	The pacific rim summit on industrial technology and biotechnology | www.bio.org/pacrim | Honolulu, Hawaii
4th - 6th Jan ‘11	Oxford farming conference | OFC | www.ofc.org.uk | Oxford, UK
13th Jan ‘11	Biofuel production systems | Rothamsted Research | www.northwyke.bbsrc.ac.uk/pages/workshopseminars.html | Devon, UK
13th - 15th Dec ‘10	AgriPro Asia | Vertical Expo | www.verticalexpo.com | Hong Kong, China
15th - 16th Dec ‘10	Water and nitrogen sse efficency in plants and crops | The Association of Applied Biologists | www.aab.org.uk | Lincolnshire, UK
17th - 18th Jan ‘11	Organic producers’ conference | The Organic Research Centre | www.organicresearchcentre.com | Gloucestershire, UK
18th - 20th Jan ‘11	LAMMA 2011 | Lincolnshire Agricultural Machinery Manufacturers Association | www.lammashow.co.uk/ Nottinghamshire, UK
19th - 20th Jan ‘11	7th waste management finance forum | Euromoney Energy Events | www.euromoneyenergy.com/ London, UK
24th - 26th Jan ‘11	Farm & more: the farm diversification show | Farm & More | www.farmandmore.org.uk/home2011 Bournemouth, UK
24th - 26th Feb ‘11	British cattle conference 2011 | British Cattle Breeders Club | www.cattlebreeders.org.uk/conference Shropshire, UK
25th Jan ‘11	Freight transport: integration, modal shift and technological innovation | Westminster Forum www.westminsterforumprojects.co.uk/forums/event.php?eid=204 | London, UK
29th - 30th Jan ‘11	National potato day | Garden Organic | www.gardenorganic.org.uk/events/show_event.php?id=632 Warwickshire, UK
29th Jan - 2nd Feb ‘11	LabAutomation 2011 | Association for Laboratory Automation | www.slas.org/LA11/index.cfm | California, USA
2nd Feb ‘11	Food and Health Debate: A Coalition | The Grocer | www.foodandhealththegrocer.co.uk | London, UK
8th Feb ‘11	City shoots: sprouting sustainable action in schools | Happy Kitchen | www.sustainweb.org/foodcalendar/ London, UK
8th Feb ‘11	Obesity - time for a new approach? | Westminster Forum | www.westminsterforumprojects.co.uk/forums/event London, UK
9th Feb ‘11	Interaction of pesticide application and formulation on residues in fruit and vegetables | The Association of Applied Biologists | www.aab.org.uk/contentok.php?id=101&basket=wwsshowconfdets | Berkshire, UK
9th - 10th Feb ‘11	Soil association annual conference: food and the big society | Soil Association | www.soilassociation.org/ Manchester, UK
9th - 12th Feb ‘11	Wheat productivity enhancement under changing climate | University of Agricultural Sciences and Indian Council of agricultural research | www.dwr.in/images/banners/igm.pdf | Karnataka, India
10th Feb ‘11	Insecticide-free management of soil insect pests | Rothamsted Research | www.northwyke.bbsrc.ac.uk/pages/workshopseminars.html | Devon, UK
10th - 12th Feb ‘11	Leveraging agriculture for improving nutrition and health | International Food Policy Research Institute | www.2020conference.ifpri.info | New Delhi, India
16th - 19th Feb ‘11	BioFach 2011 world organic trade fair | NürnbergMesse | www.biofach.de/en/default.ashx | Nuremberg, Germany
23rd - 24th Feb ‘11	Crop protection in Southern Britain | The Association of Applied Biologists | www.aab.org.uk | Cambridge, UK
23rd - 26th Feb ‘11	Changing crops for a changing climate | Under 40s Fruit Growers Study Tour | www.u40s.co.uk | Loire Valley, France
24th Feb ‘11	South West climate change trade fair | Farming Futures | www.fwag.org.uk/Events-562.htm | Exeter, UK 24th
Feb ‘11	Why we eat how we eat: food choices, nutrition and the politics of eating | Goldsmith’s College | www.gold.ac.uk/anthropology/news-events/eventtitle,20311,en.php | London, UK
2nd - 4th Mar ‘11	Drought predictability and prediction in a changing climate | World Climate Research Programme www.drought.wcrp-climate.org/workshop | Barcelona, Spain
3rd Mar ‘11	Improving nutrition in hospitals, in social care and in the community | Westminster Forum | www.westminsterforumprojects.co.uk/forums/event.php?eid=187 | London, UK

Robert Palmer, page 7. Footnotes:

1 This is an updated version of an article which first appeared in the Mokoro Newsletter, 52, May 2010

2 Robin Palmer, Land and Racial Domination in Rhodesia (London: Heinemann Educational Books, 1977), 35, 75 n41

3 See my select bibliographies at http://www.oxfam.org.uk/resources/learning/landrights/general.html

4 Global Land Project, Land Grab in Africa: Emerging land system drivers in a teleconnected world, August 2010, 42 http://www.globallandproject.org/Documents/GLP_report_01.pdf
5 François Houtart, Agrofuels: Big Profits, Ruined Lives and Ecological Destruction (London, Pluto Press, 2010), 89.

6 Meals per gallon: The impact of industrial biofuels on people and global hunger, February 2010, http://www.actionaid.org.uk/doc_lib/meals_per_gallon_final.pdf

7 Africa: up for grabs. The scale and impact of land grabbing for agrofuels, August 2010, http://www.foeeurope.org/agrofuels/FoEE_Africa_up_for_grabs_2010.pdf

8 Saturnino M. Borras and Jennifer Franco, ‘Towards a Broader View of the Politics of Global Land Grab: Rethinking Land Issues, Reframing Resistance’, ICAS Working Paper Series No.001, May 2010, 32-3 http://www.tni.org/paper/towards-broader-view-politics-global-land-grabbing

9 Ian Scoones, ‘Investing in land: the World Bank report on rising global interest in farmland’, The Crossing, 20 September 2010, http://farmlandgrab.org/15657/print/

10 The World Bank, Rising Global Interest in Farmland: Can It Yield Sustainable and Equitable Benefits?, 7 September 2010, 48, 2, 99, xv, 102 http://siteresources.worldbank.org/INTARD/Resources/ESW_Sept7_final_final.pdf

Susie Jacobs, page 12. Footnotes:

1 Within state socialist societies in the past, agrarian reforms were often enacted along collective lines.

2 In some land reforms: e.g. in Zimbabwe and South Africa, the state retains ownership of the land and so smallholders are issued land ‘permits’ rather than titles.

3 See e.g. R. Dixon-Mueller, Women’s Work in Third World Agriculture: Geneva: International Labour Office, 1985

4; D. Christodoulou, The Unpromised Land, Zed Books, 1990; S Barraclough, An End to Hunger? Zed Books, 1991; S Jacobs 2010, “Agrarian Reforms” Sociopedia (e-encyclopedia) of the International Sociological Association, July, 2010
www.isa-sociology.org/publ/sociopedia_isa.htm

5 ‘Women’, of course, differ from one another in many respects, including social class, ethnicity, age, marriage status, etc. Space does not allow for full discussion of differentiation.

6 The countries included are: Brazil, Burkina Faso (Upper Volta), Chile, Ethiopia [non-collective sectors] Honduras, India, Iran, Kenya, Libya, Nigeria, Peru, the Philippines, Poland, South Africa, Sri Lanka, Tanzania, Viet Nam and Zimbabwe.
See S. Jacobs, “Gender and land reforms: comparative perspectives” Geography Compass, 3 (5), 2009, for a longer discussion. This article discusses 29 cases: a thirtieth is:
N. Mudege “Gender roles in agricultural knowledge in a land resettlement context: the case of Mupfurudzi, Zimbabwe” Development Southern Africa 25 (4): 455-468, 2008

7 see. e.g. M. R. El-Ghonemy, The Political Economy of Rural Poverty: the Case for Land Reform, Macmillan, 1990; M. Lipton, “Land Reform as Commenced Business: the Evidence against Stopping”, World Development, 21 (4), 1993; K. Griffin, A.R. Kahn, A.R. and A. Ickowitz, “Poverty and the Distribution of Land” J. Agrarian Change, vol. 2 (3), 2002.

8 U. Raghunath, “Land reforms and women agricultural labourers: case studies in Nellore District”, in B. N. Yugandhar (ed) Land Reforms in India: Andhra Pradesh, Vol. 3, London: Sage: 340–66, 1996.

9 Land reform programmes often presume a nuclear family model. This can disenfranchise second or subsequent wives, who may not be able to benefit from the reform; however, the wives or first wives often feel that they can exert more influence over the husband in a smaller family. Additionally, men as well as women often feel that they have more autonomy away from extended family members..

10 F. Allagi “Rural women in a resettlement project: the case of the Libyan Arab Jamhiriya” in International Labour Organisation (ed) Rural Development and Women in Africa, Geneva: ILO: 137-45, 1984

11 Heidi Tinsman, Partners in Conflict: the politics of gender, sexuality and labor in the Chilean agrarian reform, 1950-73, Durham, N.C: Duke University Press., 2002

12 With regard to African customary law: more precisely, women heads of household with minor children do sometimes hold agricultural and grazing land, but this is normally on a temporary basis and on behalf of a son. The ‘women’s plots’ [or `gardens’] referred to here, are usually granted or lent by the husband, although women did have customary rights to plots; in the past, access to such land would not normally have been withheld.

13 Bina Agarwal, A Field of One’s Own: women and land rights in South Asia, Cambridge, Cambridge University Press, 1994

14 Norma Diamond “Collectivization, kinship and the status of women in rural China”. Bulletin of Concerned Asian Scholars, 7 (1): 25–32, 1975; Huayin Li,. “Life cycle, labour remuneration and gender inequality in a Chinese agrarian collective’. J. Peasant Studies, 32 (2): 277–303, 2005

15 Bina Agarwal, op. cit, cites the reactions of a state official to the proposition that women should have land rights. See also: Catherine Cross, Catherine and M. Friedman, “Women and land: marginality and the left-hand power” in S. Meer (ed) Women, Land and Authority, Oxfam, 1997.

16 Judith Stacey, Patriarchy and Socialist Revolution in China, Univ. of California Press., 1983, N. Wiergsma “Peasant Patriarchy and the subversion of the collective in Vietnam”, Review of Radical Political Economics: 23 (3-4): 174-97, 1991; S. Jacobs, Gender and Agrarian Reforms, Routledge, International Studies of Women and Place, 2010.

17 Delia Davin “The implications of contract agriculture for the employment and
status of Chinese peasant women” in S. Feuchtwang, A. Hussain, and T. Pairault (eds) Transforming China’s economy in the eighties London: Zed., 1988; see R. Haripriya, R. and M.Gilmartin, “Gender, Traditional Authority and the the Politics of Rural Reform in South Africa” Development and Change 33(4): 633-58, 2002

18 Carmen Diana. Deere and Magdalena León, Empowering Women, Pittsburgh Univ Press, 2001

19 see e.g. A. Manji “Remortgaging Women’s Lives: the World Bank’s Land Agenda Feminist Legal Studies 11: 139-63, 2003.

20 Cristiani Bereta Da Silva, “Relações de g□nero e subjectividades no devir MST” , 2004 Available at www.scielo.br/scielo.php?script=sci_issuetoc&pid=0104–026X20040001

21 Zongmin Li and J Bruce “Gender, landlessness and equity in China” in P. Ho (ed)
Developmental dilemmas: land reform and institutional change in China, London: Routledge, 2005.

22 The World March of Women, “A Decade of Feminist Struggle: 1998-2008”, São Paulo: 2009: 40 Also available at:
http://www.marchemondialedesfemmes.org/publications/libro1998-2008/en/