

The answer lies in economics

Summary of talk by Anders Wijkmann organised by Caritas

Former MEP Anders Wijkmann is co-President of the Club of Rome, a grouping of current and former heads of state, UN bureaucrats, high-level politicians, government officials, diplomats, scientists, economists and business leaders from around the globe which aims 'to act as a global catalyst for change through the identification and analysis of the crucial problems facing humanity'. As part of the Club of Rome's 2052 campaign, Wijkmann, with Johan Rockström, has produced a book, 'Bankrupting Nature, Denying our Planetary Boundaries' that argues that only a radically-changed economic system can respect planetary boundaries and human development. He was in Luxembourg on 26 March to present the book and its main conclusions. Introducing him, Luxembourg Environment Minister Carole Dieschbourg pointed out that although the world average biocapacity is 1.8 global hectares per person, Luxembourg's environmental footprint is 9.6 hectares per person. But the new Government would work together with the people to improve this situation. Past political decisions had not reflected the value of nature, but growth would be possible by promoting a green, circular economy.

Wijkmann started by outlining the familiar problems facing the planet: not just global warming and ecosystem breakdown but also other problems – scientists have identified 10 areas of concern: climate change, ocean acidification, depletion of the ozone layer, the nitrogen cycle, the phosphorus cycle, global fresh water use, change of land use, loss of biodiversity, aerosols in the atmosphere and chemical pollution. According to this study¹, three of these areas of concern (biodiversity loss, nitrogen and climate change, in that order) have already gone beyond the levels that the planet can cope with, while several others are close to a tipping point, past which the problem will be hard to remedy.

The world economy is forecast to double its current size within 20 years if it continues to grow at the same rate. Growth will help to alleviate poverty, but will place further stress on already depleted ecosystems. We have reached this situation because populations and economies have grown without concern for nature, demonstrating the shortcomings of mainstream economies which do not place a value on natural capital. The financial sector concentrates on short-term profits and has failed to take future values into account. The solution is a green economy which would look beyond short-term GDP growth to long-term prosperity and manage natural resources.

There are already what Wijkmann calls 'vital signs' which would help in this regard. World energy demand, he says, can be met by solar, wind and water power (including wave power), and costs of such installations are falling. However, the pace of new installations is slowing because of shale gas. The digital revolution, the use of ultra-light materials, zero-energy building design, green chemistry and circular economies² will all promote sustainability.

We need to aim at a sustainable society which recognises when we have enough goods, takes quality of life and values into account, and reforms economies towards growth in quality rather than quantity. We need to merge the different green agendas and develop transformative solutions. What we consume must be sustainable in a world with nine billion people.

He then outlines specific elements of a strategy to bring this about:

¹ 'A safe operating space for humanity' in *Nature*, 2009

² Wikipedia defines this as 'an industrial economy that is, by design or intention, restorative and in which material flows are of two types, biological nutrients, designed to re-enter the biosphere safely, and technical nutrients, which are designed to circulate at high quality without entering the biosphere'.

- Rethink education,
- Bring in neuroscience and behavioural science, to help people make the right choices,
- Reform economic, financial and political frameworks,
- Replace economic growth with specific welfare goals,
- Assign value to natural capital,
- Carbon tax,
- Circular economy – using energy and resources more efficiently, using objects like phones etc for longer before replacing them, using what we have instead of making new things, changing business models from selling a product to offering a service,
- Public procurement,
- Strengthen global governance,
- Stabilise population,
- Proactive research agenda,
- New business models – leasing and recycling rather than manufacturing.

Financial institutions such as pension fund managers must take climate risks into account. If the Paris meeting³ is a success, there will be restrictions on fossil fuel use, which will affect the stock market.

It will require leadership to bring this about – Europe, and in particular Sweden and Luxembourg, could show the way – Europe has transferred its economic model to the rest of the world and we can't expect developing countries to take the lead, especially as new technologies are initially more expensive. The US is unlikely to lead the way because of internal disagreement. There are practical and reasonable ways to make it happen.

In answer to a question about financial systems, pointing out that the Federal Reserve has three times the amount of money that would be needed for the required transition to sustainability, Wijkmann answered that the expected rate of return is ridiculously high, and sustainable investment is not interesting. Only 25% of banking sector investment goes into the real economy, the rest is used for real estate speculation. It is difficult to get normal banks to invest in renewables – political systems don't put enough pressure on bankers. The vast majority of MPs don't understand how the financial system works and are embarrassed to talk about it.

Another questioner pointed out that we give 163 bn a year to Russia for oil – why could we not shift to renewables earlier? Wijkmann responded that the first step would be to oblige financial institutions to report on carbon emissions. This would make the market more transparent. Many renewable technology companies are not listed on the stock market, and financial institutions are very reluctant to abandon established mathematical models. We should use our money inside the European economy, not give it to the Russians. It is becoming more expensive to extract crude oil, but there is massive investment in it, more than in renewables.

³ The United Nations Climate Change Conference, COP21, to be held in Paris in December 2015. Its objective is to achieve a binding and universal agreement on climate from all the nations of the world.

The answer lies in agriculture

Summary of talk by Benedikt Härlin, organised by Caritas

Benedikt Härlin, former MEP, former Greenpeace activist, member of the International Commission on the Future of Food, and a representative of North American and European NGOs on the Bureau responsible for the World Agriculture Report⁴ 2004–2008, spoke in Luxembourg on 31 March on 'Feeding the world without destroying it', and presented a booklet produced by the organisation 'Meine Landwirtschaft' (my agriculture) and supported by a number of environmental NGOs.

He began by quoting Gandhi: 'The world has enough for everyone's need, but not enough for everyone's greed'. Of the current approximately 7 billion people in the world, 842 million regularly do not have enough to eat. 70% of these live in rural areas, 50% are small farmers and 60% are women. The worst-affected geographical areas are in sub-Saharan Africa and Asia, but there is also hunger in the EU, for example in Romania and Greece. At the same time, the harvest in 2013 was the biggest ever, not only globally but also per capita. If all of this harvest had been used and distributed effectively it could have fed up to 14 billion people. Worldwide, only a handful of governments are really unable to feed their populations; if people in other countries are hungry, it is because feeding them is not a political priority.

Meanwhile, 1.5 billion people in the world today are overweight – many of them in countries where there is hunger, such as India and China – and 2 billion are malnourished, i.e. although they eat enough calories, their diet is lacking in essential vitamins and minerals. Thus almost half of the world's population are eating too little, too much or the wrong foodstuffs, leading to illness and early death.

Against the background of the ten areas of concern outlined in Wijkmann's presentation (see above), agriculture will play a key role in the survival of humanity.

The 2008 World Agriculture Report by the UN and World Bank looked at how to reduce hunger and poverty and improve rural livelihoods by promoting fairness and sustainability. The panel responsible for producing it included not only government representatives (as on the IPCC) but also representatives of industries and farmers', scientists' and consumer protection organisations and NGOs. It concluded that 'business as usual is no longer an option' and that new tools are needed to tackle the challenges of the coming decades.

Härlin identified eight main messages in the report:

1. There are no patent remedies – first identify the problem, then seek a solution.
2. Agriculture is multifunctional, it produces food and raw materials, looks after ecosystems, provides employment, social security and health – in many countries it's the only social security system – and has cultural and spiritual dimensions.
3. Small farmers are vital – and are not helped by the EU's CAP, which favours large farmers. 90% of the world's farmers are in Asia and Africa, and most farms cover less than 2 hectares. The average size of farms in North America is 186 ha and in Europe 14.7 ha.
4. Women make a big difference. They do 70% of farm work, not just for traditional or cultural reasons but also because if a farm doesn't produce enough to feed the family, the men will seek work elsewhere. It is difficult for women to get the best out of the land – in many places they are not legally entitled to own land or animals or have a bank account. Improving women's rights would be the best way to combat hunger in Africa and Asia.
5. Hunger can only be overcome at local level, not through world trade or other global measures.
6. There must be an agro-ecological revolution – small environmental actions are not enough.

4 Full title: International Assessment of Agricultural Knowledge, Science and Technology for Development

Farmers all over the world – not just in the EU – should be paid for preserving the environment, e.g. water management, maintaining biodiversity, reducing carbon emissions, etc.

7. More research is needed, with public investment and drawing on farmers' knowledge.

8. People have a right to democratically determine their own agricultural and food policies (food sovereignty).

Five years on, the report has to some extent changed the discourse from a focus on productivity to sustainability, 'enough rather than more', and a recognition of the value of natural resources, and some new problems have emerged.

The population has doubled since 1961, but agricultural production has increased threefold, mostly in the developing countries. Although the area of land under cultivation has not grown very much, the use of mineral-based fertilisers has increased, and the decisive factor has been irrigation.

Despite this increased productivity, food prices have tended to go up, the main determining factor being the oil price. In the West particularly, a lot of energy is used in food production. There is also a lot of waste – 13% through poor storage or transport, 26% through converting grain into animal food, and 17% from food remaining unsold in shops or being thrown away by the end consumer.

So there is plenty of food, and potential for even more through reducing waste, but there are also some looming problems.

- Global meat consumption has gone up nearly everywhere in the period 1989 – 2007 as developing countries have become more affluent – except in India, which shows that it is a cultural issue, and greater wealth doesn't necessarily mean more meat. The FAO predicts that if the rise in meat-eating continues, we will need to produce 70% more grain by 2050, just to feed the animals we slaughter for meat.
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- More intensive food production will increase greenhouse gas emissions – which we need to reduce by 80% by 2050 if global warming is not to have disastrous consequences – and these consequences will be particularly bad for agriculture, reducing harvests and increasing plant diseases. We have to step off the 'growth treadmill'.
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- 80% of the calories we eat worldwide come from only four plants – maize, rice, wheat and barley. And 54% of seeds come from only three companies: Monsanto 26%, DuPont 18.2% and Syngenta 9.2%. This is dangerous for food security; we should aim for more diversity of crops and producers, and we also need more variety of species within each plant type. The market is over-concentrated, not only for seeds, but also for biotech products, pharmaceuticals etc. An egg-timer-shaped diagram clearly shows that a large number of consumers obtains foodstuffs from a large number of farmers, but the route from one to the other goes through a small number of marketing and processing companies. They make good profits, while prices go down for producers and up for consumers.
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- World trade measures will not help to reduce poverty, this has to be done at local level. In fact action by the World Bank and IMF in the past has been harmful. When they banned state intervention in national agriculture, less developed countries were no longer able to export more than they imported, and they got into debt buying food.
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- Europe is the area which both imports and exports the most agricultural products. Our exports are fairly high-value – wine, cheese, etc and until recently they were generally in balance with the main imports of coffee, tea, bananas etc. Now, with the growth of meat consumption, most agricultural imports are animal feed and biofuels. Taking into account the hectares used to grow these products, Europe is effectively importing 35 million ha per year from other countries. The most important contribution the EU could make to reducing

global hunger would be to reduce these imported hectares, e.g. by not importing so much animal feed.

We need research and development, and should aim to:

- reduce dependence on oil,
- improve efficiency of water use,
- preserve soil fertility - overuse has depleted essential minerals,
- replace agrochemicals with organic fertilisers,
- increase plants' tolerance of stress (e.g. heat, floods, salt), not focusing on particular species but on the whole agricultural system,
- promote agro-ecological system research,
- adapt production and consumption to each other.

When it was published in 2008, the World Agriculture Report was dismissed as 'ideological' in many quarters. Syngenta and the international farmers' organisation CropLife withdrew from the process, and some countries, particularly the USA, Canada and Australia, refused to sign it. In both cases the main reason was the report's critical attitude to gene technology. Since then, various publications and reactions to them are showing a gradual shift of opinion from dismissing the report's findings to adopting and continuing it. It is now acceptable to quote it in scientific works.

There was support for further objectives, such as:

- welfare rather than growth,
- access to land,
- reform of patents on seeds,
- support for local food systems,
- agro-ecological farming methods,
- charter of small farmers' rights.

He said he was now more hopeful than when the World Agriculture report was published, and concluded by citing the example of a small farmer he met in Thailand, who now earns three times what he did when he grew crops for export. He has diversified his ½ ha farm to grow a variety of vegetables and keep a cow and some chickens and is able to sell his surplus produce locally.

Some further points emerged in response to questions from the floor.

Trade must be fair. Food in European supermarkets should be labelled to show how much of the price goes to the producer. European producers should stop dumping products such as cheap frozen chicken on African markets, thus undercutting local producers.

In answer to a question about 'landgrabbing' – where state or private investors take over ownership of large tracts of land to grow certain crops, to the detriment of the small farmers who farmed the land before, Härlin said there were no reliable statistics to show the extent of the problem – it tends to happen in places where there is no proper land registry or strong democratic government.

The EU should take seriously the need not to support biofuels from public funds.

Under the EU's CAP, most subsidies are paid per hectare, so that a lot of our taxes support wealthy landowners. If we want to change this, we must act now. Green policies have come up against powerful farmers' lobbies in the European Parliament which want to maintain the status quo. If EU agricultural reform gives more power to national governments, they should act.

The answer lies in being content with what you have

Summary of talk at Luxembourg University by Dr Mathias Binswanger, Professor, Northwestern Switzerland University

I found this talk, entitled 'Growth, happiness and sustainability – the dilemma of modern economies' not as detailed or insightful as the one by Steve McCarthy to the EFG in January 2011 entitled 'How to rediscover the Good Life in the face of Climate Change and Environmental Degradation' (summary available on the Anglican Church of Luxembourg website). Although Binswanger outlined some interesting results of various research into what makes people happy, he did not go into the environmental implications of people stepping off the treadmill of continually running after more stuff, and did not suggest ways in which the global economy could cope without growth. Below is a summary of his main points.

It is difficult to measure happiness - you have to ask people, there is no objective way.

Generally, once basic needs are met, more money doesn't mean more happiness.

A main factor for unhappiness is unemployment. Yet in a study of the activities people enjoy, work was way down the list.

The strongest effect of happiness is improved health, particularly in old age.

Status is important for happiness. Earning more than colleagues is more important than the actual amount earned.

'Economics is the art of making the most of life' – G. B. Shaw. It's not necessarily about money.

Some geographical areas (Latin America, Scandinavia) seem to be happier than others.

People choose behaviours that don't necessarily make them happier – they are bad at predicting their own happiness, e.g. commuting, which nobody seems to enjoy, but people tend to spend more time commuting as they get richer.

The excitement of new possessions wears off and people have to buy more new things.

More choice, above a certain level, doesn't mean more happiness, e.g. the plethora of goods in supermarkets and the number of TV channels.

As time-saving devices are invented we tend to do more activities, so are still stressed for time.

A zero growth economy is problematic as firms could go out of business if they don't make profits.

Win-win situations are possible, e.g. if people commuted less they would be happier and there would be less pressure on the environment and less time wasted in traffic jams.

People would be happier if they sacrificed some income for less stress.

Religion is a factor in happiness. Although there is a great deal of inequality in the US, Americans generally are not unhappy with the unequal society as they think that everyone has an opportunity to get to the top. This attitude is in some ways like a religion.