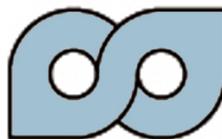


FEASTA
The Foundation for the
Economics of Sustainability



Tipperary
Institute



Development Studies Centre,
Kimmage Manor

And



Seminar Report

‘Strengthening the role of the Irish Higher Education community in support of sustainable development’

**Held on Wednesday 28th November 2001 at
Tipperary Institute, Thurles, Co Tipperary**

**The organisers gratefully acknowledge the support of the
Higher Education and Training Awards Council (HETAC).**

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Acknowledgements

The members of the FEASTA Education Group that were involved in the organisation of the seminar were:

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- Kevin Healion Tipperary Institute
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Thanks to all the participants who contributed so enthusiastically to the success of the event.

Background to the Seminar

The seminar was instigated by the Education Group of FEASTA (the Foundation for the Economics of Sustainability). The seminar was aimed at those involved in third level education, and was prompted by the issuing of guidelines on environmental awareness by the Higher Education and Training Awards Council (HETAC) in early 2001. HETAC is the Irish Government's accrediting body for the non-university third level sector.

The guidelines were issued by HETAC in response to a request by the then Minister for Education and Science, Dr. Michael Woods, T.D. The guidelines are about the Community Support Framework requirements on contributing to the protection and improvement of the environment through the promotion of awareness of global and local environmental issues. The Community Support Framework is the legal document which gives effect to the National Development Plan.

The guidelines offer a number of positive suggestions on how higher education institutes can play a crucial role in promoting environmental awareness and sustainability - through curriculum and course development, and by improving the environmental performance of the institutes themselves. The guidelines are applicable across all four disciplines in HETAC-designated institutions (Science, Engineering, Business, Humanities).

The seminar was organised by FEASTA in co-operation with the Tipperary Institute and The Development Studies Centre, Kimmage Manor and with the support of a grant from HETAC towards the costs of holding the seminar.

The seminar offered a forum whereby interested educators could come together to explore ways in which they can best respond to the HETAC guidelines and, more broadly, to identify what their needs are in terms of meeting the challenge of sustainability. There was maximum opportunity for participation and a set of workshops dealt with more specialised interests. While the seminar took the HETAC guidelines as a starting point it was intended to provide a forum for people from both the non-university (HETAC) and university parts of the third level education sector. To that end invitations were sent to universities, Institutes of Technology, and other HETAC-designated institutions.

The Organisers

FEASTA (the Foundation for the Economics of Sustainability) is a registered educational charity. Since it was launched in October 1998 it has organised three major public lectures in Trinity College, Dublin. In 2001 it published the Feasta Review, a collection of articles by David Korten, Herman Daly and other environmental economists. It has organised a number of conferences and has made detailed submissions to Irish Government committees on the implementation of its climate change strategy and on sustainable development.

TIPPERARY INSTITUTE opened its two main campuses in Thurles and Clonmel in September 1999. The Institute is a highly innovative initiative, integrating higher education with practical hands-on development work in the business and rural community sectors. This means that the Institute is both a provider of higher education at Certificate, Diploma and Degree levels in the areas of Computing, Business and Sustainable Rural Development as well as a resource and driver of local and regional development. Tipperary Institute courses are accredited by HETAC.

THE DEVELOPMENT STUDIES CENTRE, KIMMAGE MANOR, has been involved in education and training for development since 1975. It provides HETAC-accredited courses in Development Studies at undergraduate (National Diploma) and post graduate (Graduate Diploma and MA) levels, as well as offering a range of consultancy, training and research services in Ireland and overseas.

Objectives of the Seminar

The concept of sustainability challenges us to explore how the socio-economic objectives traditionally associated with economic growth can be reconciled with concerns for environmental quality, social justice and cultural diversity. It is imperative that Irish third level educational organisations respond to these challenges and take a leadership role in the transition to a more sustainable society. The objectives for the seminar were therefore:

- To determine how best Irish higher education organisations can respond to the requirement under the Community Support Framework to contribute to the protection and improvement of the environment and the promotion of sustainability
- To share information and experience from the field of education for sustainability in Irish higher education
- To be informed of what ecological economics has to offer to the debate
- To build a support network of interested individuals and organisations

Seminar Programme

- Opening by Ciarán Lynch, Director of Rural Development, Tipperary Institute
- Welcome by Pádraig Culbert, Chief Executive of Tipperary Institute
- Introduction by Tom Campbell, The Development Studies Centre, Kimmage Manor and FEASTA
- Address by Séamus Puirseil, Chief Executive, Higher Education and Training Awards Council (HETAC)
- ‘The Challenge of Sustainability’ – keynote address by Richard Douthwaite
- ‘Experiences in Education and Action for Sustainability’ by Ciarán Lynch, Director of Rural Development, Tipperary Institute
- Workshops / Discussion Groups on:
 1. Education for Sustainability in the Curriculum: Challenges and Opportunities
 2. Greening the Institution
 3. Ecological Economics
- Plenary Session – main points from workshops
- Presentation on the work of FEASTA by David O’Kelly
- Discussion on ‘Where to from here? Building a Network’, facilitated by FEASTA

Networking Exercise

Before the programme began, participants were invited to give examples of ‘good practice’ that they knew of, or were involved, in the area of ‘Education for Sustainability’ and to share their expectations for the day.

Examples of good practice in institutions and communities that are positively contributing to, or promoting, sustainability:

- Clean Technology Centre, Cork Institute of Technology. A centre for research and provision of consultancy services to business and NGOs on clean production technology.
- Tipperary Institute: The National Diploma in Business Studies (Sustainable Rural Development), raising awareness and promoting action on sustainability issues, for example double sided photocopying, raising awareness of issues such as racism and discrimination, plans for a wood-fuelled Combined Heat and Power plant in Tipperary Institute,
- Establishment of an ‘Environmental Committees’ in Waterford Institute of Technology and University of Limerick with representatives from academic and non-academic staff, and students.
- Energy management in Limerick Institute of Technology.
- Work under the National Committee for Development Education on ‘global’ education at many levels.
- Environmental officers in County Councils.
- Evening courses in Environment and Development run by the Development Studies Centre, Kimmage Manor

People's hopes from the day included:

- Better understand the meaning of the terms 'sustainability' and 'sustainable rural development'.
- Understand how teaching sustainability can be integrated into the objectives, syllabus and learning methods of courses (including business courses).
- Get ideas on how the HETAC guidelines might be practically implemented in an Institute of Technology.
- Find out what we, as individuals, can do to contribute to and promote sustainability.
- Explore what third-level educational institutions can do to change attitudes.
- Examine if economic growth can ever be achieved by using sustainable practices or will it always be in direct competition with sustainability of resources.
- Get directions on how to implement sustainability, economically, environmentally, socially and culturally.
- Networking – finding out about what is already going on regarding sustainability.
- Get an opportunity to mention the role of teacher training colleges as a sector of the higher education community that may be forgotten.
- Renewal of commitment [to sustainability].

Participants had a range of areas of activity including:

- Lecturers
- Students
- Buildings management and planning
- Research
- Community
- Adult education

The seminar was opened by Ciarán Lynch, Director of Rural Development in Tipperary Institute. The participants were welcome by Pádraig Culbert, Chief Executive, Tipperary Institute.

Address by Séamus Puirseil

Mr. Puirseil congratulated FEASTA, Tipperary Institute and Kimmage Manor for organising the event. He outlined the history to the HETAC guidelines on environmental awareness. The European Commission required that sustainable development be an important consideration in the Community Support Framework for Ireland's National Development Plan. HETAC were therefore requested by the Department of Education and Science to draw up guidelines for their section of the educational sector, in order to help meet this broad requirement from Brussels. HETAC does not have a firm legal basis on which to require course providers to include certain content in their course, hence the guidelines use language such as 'suggests' and 'encourages'. The guidelines apply to all areas of education under HETAC – not just 'environmental' courses. Mr. Puirseil concluded that there was a challenge ahead in finding how society could develop without damage to the environment, while also ensuring economic sustainability.

Introduction by Tom Campbell

The idea for this seminar came from a group of us who are members of FEASTA, the Foundation for the Economics of Sustainability, and who all happened to be working in the education sector.

As one of a number of working groups of Feasta, we have been exploring ways in which sustainable development, and ecological economics in particular, can be promoted at all levels within Irish education, both formal and non-formal.

We feel strongly that although Irish people are increasingly aware of, and concerned about, issues of the environment and the need for sustainable development at both the local and global level, there has

been little debate on the *policies* and *processes* that are necessary to bring about a more genuinely environmentally sustainable society, as well as asking what role our educational institutions can play.

We were pleased to learn that earlier in the year, HETAC had issued a set of what we believe are very positive Guidelines for HETAC designated institutions, in line with the commitments laid out in the Governments NDP, which deal very specifically with the need for greater integration of environmental and sustainability education, not just across the curriculum and in new course development, but also at the levels of the individual learner and, significantly, that of the institution itself. The concept of 'environmental responsibility' or 'greening the institution', is one which many of our colleagues in Europe have committed themselves to but, with a few honourable exceptions, has yet to become part of institutional culture in Ireland. A copy of these guidelines were sent out with the brochures for this event and we are very pleased that Seamus Puirseil, Chief Executive of HETAC, is with us this morning to give you the background to this initiative.

This event was thus organised with a view to providing a forum whereby interested individuals from the Higher Education community could get together to discuss how best we could respond to these Guidelines, as well as identify the opportunities and constraints in meeting this challenge. It would also be an opportunity to showcase examples of good practice and innovative ideas that are already happening around the country which could broadly come under the heading 'education for sustainability'. Furthermore we were keen to provide a platform to give you some idea of what 'ecological economics' has to offer and what role an organisation like Feasta can play.

Tipperary Institute was the ideal venue, not just because some of our members happen to work there, but also because it offers a model of an Institution that has made a deliberate effort to 'take on board' the principles of sustainable development and put them into practice. We will hear more about what Tipperary Institute are doing from Ciarán Lynch later this morning. The Development Studies Centre was keen to be involved in this event because we are interested in the global politics of sustainable development and the particular needs of the developing world.

Although we have lined up a number of eminent speakers to provide the first part of today's proceeding we hope the day will be as participatory as possible. There will be a number of workshops after coffee which I tell you more about a little later, as well as plenty of opportunity for more open discussion in the plenary session in the afternoon. I am sure people will also avail of the coffee and lunch breaks as an opportunity for more informal networking! For those of you who want to check out various books and publications on sustainable economics, or find out more about Feasta, a bookstall can be found in the lobby.

Tom Campbell
Development Studies Centre and member of Feasta

Keynote Address by Richard Douthwaite

Introduction

Many of the natural and social systems upon which the human race relies for its existence and enjoyment are under excessive pressure and could break down. Unfortunately, the global economy has developed in such a way that governments dare not risk relieving some of those pressures for fear that it might make their countries uncompetitive. Richard Douthwaite's paper explores a way out of that situation.

Good morning ladies and gentlemen. I was flattered to be asked to make one of the keynote addresses at this event which is organised jointly by FEASTA, the Tipperary Institute and the Development Studies Centre, Kimmage Manor. Firstly, a little bit about myself. After school, I worked as a journalist, then went on to study economics. That took me to Jamaica where I set up and managed a boatyard on behalf of the island's fishing co-ops before spending two years as Government Economist in the British colony of Montserrat. In 1974, my wife and myself moved to Westport where we set up

and ran a manufacturing and mail-order business for ten years. I then went back to journalism and writing, eventually becoming the author of 'The Growth Illusion', 'Short Circuit: Strengthening Local Economies in an Unstable World' and a number of other publications. So I would describe myself as a lapsed economist.

The origins of FEASTA

Let me start by introducing FEASTA, the Foundation for the Economics of Sustainability. As the name of the organisation, in English at least, indicates, FEASTA is all about sustainability. It is the Foundation for the Economics of Sustainability, but it's far more than that. Don't let the 'Economics' bit put you off. It was set up just over three years ago by six people who were brought together directly or indirectly by a small week-long private course on sustainability held in Glenbeigh in Kerry. I'd been invited to teach the course by somebody who had read one of my books because he hoped members of Kerry County Council would attend. He felt that Kerry, in common with the rest of Ireland, the rest of the world, was not moving towards greater sustainability, whatever that was. I felt that I couldn't give a week's course by myself, so I invited two friends to help me. The upshot was that a journalist who came to write about the course, the man who'd asked me to do it, my two friends and I, and another person brought in by the journalist went on to set up FEASTA. We've been going from strength to strength since. It's a bottom-up organisation, it's not official, we don't have a state grant, we don't have anybody on a full-time salary. It's a struggle to get money – things only happen within FEASTA because there is enthusiasm for them. There are a lot of things we could do, but only if people volunteer their time and effort does anything in fact take place.

Defining sustainability

After we launched ourselves, the first thing that we had to do was to come up with a definition of sustainability. There are many many definitions of sustainability and to some extent that profusion has been quite deliberate. Everyone can choose a definition which suits them quite safely because, so far, there's been very little risk that anyone else will say "that's an inadequate one". But saying that a lot of definitions are in fact inadequate is one of the things that FEASTA is about. Everyone gives lip service to sustainability but if it is ever to mean anything it's got to be turned into an actionable concept. That involves tightening up what it means. So FEASTA's founders reviewed a lot of definitions of sustainability - one 1992 book "The Blueprint for a Sustainable Economy" by David Pearce of University College London [and Edward Barbier] has an eight page appendix devoted to them, and many more definitions have been developed since – before they decided to come up with a definition of their own. We found that a sustainable system was easier to define than sustainability itself and so FEASTA defines a sustainable system as one which has the potential to be continued for hundreds of years into the future without having to be changed because it is undermining any of the factors on which it is based. In other words, a sustainable economic system does not undermine the environment, does not use up natural resources in an unsustainable way, and does not set up tensions in society that will prove insupportable and cause the system to change.

From crisis to crisis

You will see that under the FEASTA definition our current economic system is grossly unsustainable, a fact that conventional economists ignore (and that's why I say I'm a lapsed economist). Economists believe that the economic system doesn't have to be sustainable now, in this instant, because [if a sustainability crisis develops] we can move to another system, operate that system for a little while, and then move to another one. In other words, technology and human ingenuity will rescue us. But it can only rescue us if we have the resources required. In particular we need enough energy to be able to switch from one system to another.

If you look at what happened historically, you will see that whenever humanity came to a sustainability crisis we moved to a higher level of energy use. To give you a recent example - in the late 1960s and early 70s the US became concerned about the growing population in Asia and the likely food shortages there. The Americans were worried that if starvation increased in Asia it would provide fertile ground for communist ideas to develop and thus prove unhealthy for the survival of capitalism there. So they

persuaded the Ford Foundation and the Rockefeller Foundation to set up institutes like the International Rice Research Institute which is based in the Philippines, and these foundations put money in which led to the development of 'miracle rice' and the Green Revolution. Miracle rice could respond to high levels of fertiliser application. Previously if you'd put nitrogenous fertiliser onto traditional rice varieties they just grew a very long stalk, fell over and lodged and were difficult to harvest and you didn't get very much more grain from them. But Norman Borlaug and his colleagues developed dwarf rice that put all the energy from the nitrogenous fertiliser into the rice grains and not the stalk. This enabled increased hunger to be avoided and the population of South East Asia has grown to such an extent that

people are now talking about the need for another green revolution because the region is pushing up against the limits again. But the world doesn't have the energy left to work the miracle a second time, even if we could find the genetic material to do so.

So that was how energy and human ingenuity got humanity out of a sustainability problem in the past. But can this approach continue? Can we allow crises to develop before we respond, either by governmental action or through the markets because the price of something goes up so that people use less and substitutes are found. The latter is the way that conventional economists think that the system should continue to operate. Economists are of course against planning, because planning means that you have to intervene in the market, and for conventional neo-classical economists that is anathema, something you just shouldn't do. They want to see governments withdrawing as far from the market as possible.

Calling all disciplines

Progress towards sustainability means that we have to re-assess these ideas, and this is what FEASTA is doing. First of all we try to think about what a sustainable society would look like. An economy is only part of a society. If we can envisage what a sustainable future would look like, what characteristics it would have to have to be sustainable, and if we are fairly rigorous about defining those characteristics, then we can look at the characteristics of our society today and know what has to be changed. In my own work I have been concentrating on the economic aspects of sustainability, but as you will learn from what I'm going to say, and Séamus Puirseil was quite right in what he said, sustainability touches every discipline. You will see that in fact sustainability is far more than economics. Every discipline has to be involved in the process [of moving to a more sustainable future].

Indicators of sustainability

How do you know if you're heading towards sustainability or not? We're grossly unsustainable at the moment, because we all know that the system will have to be changed. To revert to the energy example – FEASTA held a conference last year [2000] at which we heard from Dr. Colin Campbell, one of the world's leading petroleum geologists. He was the man who convinced the International Energy Agency (part of the OECD) that world oil production from conventional sources would peak about the year 2005 or 2008. It will then decline in more or less a mirror image of the curve along which it rose, which means that by 2050 the world will be consuming roughly the same amount of oil as it was consuming in 1950. Yet there will be three or four times as many people on the planet needing that oil as there were a century earlier. In fact their dependency on oil could be even greater because of the way our systems have developed. We may not have the opportunity to convert, to use human ingenuity to move to another "sustainable" system, if we rely on market mechanisms to signal to us when to do so because the market's time horizon is very short indeed.

Four Capitals

If we can't use the market, how can we know if we are moving our system toward greater sustainability? The answer is through the use of indicators. A technique was advanced by Paul Ekins, one of the founders of the New Economics Foundation in London, in a book that he produced in 1992. He went to Washington [in 1992] and made a presentation to the World Bank and they adopted the technique that he advanced. This is one that FEASTA has adopted and is trying to popularise, and is termed the "Four Capitals" approach to sustainability. This approach sets out that the life that we live,

the benefits that we enjoy, are as a result of our living on the income from four different types of capital.

Natural capital

The first, but you can't say the most important for reasons I'll explain, is natural capital, natural resource capital. A recent book "Natural Capitalism" [by Paul Hawken] is all about this area. We enjoy a stream of benefits from the natural world. It provides our food, raw materials, renewable and fossil energy. It provides sinks for our wastes so that it makes them harmless and they re-enter the system. There are also benefits from its biodiversity and its natural beauty. We couldn't possibly survive without the natural world. So that's one form of capital which generates an income that meets some of our needs. But we also get benefits from three other areas.

Social capital

The second is social capital. Again this is an idea which is becoming very popular at the moment. Social capital is the source of the stream of benefits that you receive from being a member of a family, from having neighbours, from being a member of a community, having a network of friends. And also belonging to a country, because one's national identity and the support you get from that is important to you. One of the things therefore that we need to provide indicators for is the strength of community bonds - are they being undermined? You could look at all sorts of things to gauge this. For example, there is a correlation between the amount of time somebody spends commuting to work and the amount of time that is consequently left in which they can interact with others. One of the figures I've seen is that a 10 minute increase in commuting time means that there is roughly a 10% reduction in the amount of time that people have to interact with their neighbours and other members of their community. Television has to some extent weakened community bonds. Are people joining clubs and societies and interacting in those ways? Are neighbours as supportive as they once were? So that's another form of capital, social capital.

Human capital

The third form of capital is human capital. And that's primarily our health and strength, our vitality. Are we fit, mentally and physically, or are we degenerating? And it's also our knowledge and skills and dexterity. Although you might say that Irish human capital is increasing because of institutions like this [Tipperary Institute], you also have to look at some areas where skills are being lost - for example traditional craft skills and knowledge. So in some areas we are gaining and in some we are losing. You have to be able to assess a balance between losses and gains. What you are really looking for are skills which would be of relevance in a sustainable world, in a world where you weren't using natural resource capital in an unsustainable way as we are at the moment.

Physical capital

Finally, you've got physical capital. This room, the chairs within it, the cars outside, the building itself, tools and equipment and so on, all represent physical capital. We are increasing our physical capital in this country each year. But again we have to ask the question, are we increasing the types of physical capital that would be relevant in a truly sustainable situation? The Government is spending many millions of pounds on developing a road network, yet if we are coming to a peak in oil are we going to be able to have the capital, the natural resource capital, to operate vehicles on the new road system in the future? Are we going to have the income to be able to operate those vehicles?

Money matters?

Now you will probably have noticed an omission at this point. I have not mentioned monetary capital at all. That doesn't matter. Money just gives the holder the power to acquire other forms of capital so it can be left out of this sort of analysis. The British Government's overseas development agency in fact uses the four capitals approach, but they also, and I think they are mistaken in this, want to preserve financial capital. Of course that's all about preserving the wealth of the people who hold it. It is not

about [true] sustainability, it is about retaining the “sustainability” of one particular group and its set of interests. For us all [the human population as a whole] it is the other four capitals that matter. The other thing about money is that only in a very limited area can you measure the stocks of the four capitals in money terms. How do you set off a gain in one area, where one indicator, let’s say the number of butterflies, is increasing against a decline in another area, let’s say the health of people’s teeth? It is a case of judgement - you can’t do this by assigning monetary values. This puts the whole area of sustainability back into the political arena. It is for individuals to say “Look, we’re gaining in this area, we’ve lost in that area, but overall, my personal judgement is that we’re benefiting”. There is no hard and fast way of coming to such a conclusion. But what each person can do is to say “I think we mustn’t allow this particular form of capital to diminish beyond this particular point. No matter how big the gains we get in some other area, we must not allow this one to deteriorate any more.” For example, you could say “We can’t allow any more carbon dioxide to get into the atmosphere because of the risks that would present, or any more CFCs because of the effect they have on the ozone layer.”

Limits

So there are limits. This is one of the most significant things about the World Bank’s acceptance of the four capitals approach [in 1992]. For the first time, conventional economists were accepting that there were limits which ruled out further trade-offs between various components of the four types of capital.

We know that we have exceeded the limits in many areas – for example in terms of greenhouse gas emissions, global warming. The level of carbon dioxide in the atmosphere is now the highest it has been for 60 million years, as a result of human activities. We don’t know what’s going to happen to the climate. There is a real risk of a sudden climatic flip - that we will move from one stable climatic regime to another which might be warmer or colder, we just don’t know.

Priorities

Using the four capitals approach means that you have to track a range of indicators which you have selected as guides to the status of the four capital stocks. Any indicators which suggest that a component of a capital stock is declining you naturally want to reverse. You give priority to those that are getting close to the unacceptable area but you give absolute priority to those that have already passed the sustainability limit, that have taken us into the unknown. So you cut back on chlorine compound emissions and on greenhouse gas emissions and you do that before you attend to other indicators which might be falling but are still falling within the ‘safe’ area. You attend to the ones that have exceeded the limits first.

The current World Bank attitude to this approach is disappointing. There was a meeting in London about this time last year [November 2000] called by the World Bank to discuss their latest environmental policies. I asked one of the economists who was there what had happened to the four capitals approach. She looked rather embarrassed and told me that it wasn’t something they considered too much any more, because they realised that if they assessed their own programmes according to it, it would prove rather too hard a task master and very few would be able to go ahead.

Criteria for indicators

FEASTA has a major project on indicators. We’re looking to see whether over the last 10 years Ireland has become more sustainable or not according to the four capitals approach. At the moment we’re just gathering statistics. What is the difference between an indicator and a statistic? It’s important to distinguish them. Lots of people talk glibly about indicators but for something to be a genuine indicator, three things have to apply. First of all you’ve got to be prepared to act. If a statistical times series shows a deterioration you have got to be prepared to do something about it. Otherwise your statistics just stay statistics. And action means that ideologically you’ve got to be prepared to intervene in the market, something that conventional economists say governments should not do. But I’m not convinced, FEASTA generally is not convinced, that the market works well enough to be safely left

alone. It is very short term. It does not concern itself with the interests of generation after generation into the future in a way that enables it to act [for sustainability]. So collectively, through our governments, we have to be prepared to act. This requires a major ideological switch but it's coming about.

Secondly, you may wish to act in response [to an indicator], but you have got to have the freedom to do so. And generally we don't. Governments around the world are inhibited by the globalised system from acting to protect the environment or to stop society being eroded by the economic process. Let me explain a little bit more about why this is. Sustainability has to be achieved at two levels. One is short term sustainability – we need to eat tonight, wages have to be paid at the end of the week, you've got to pay your mortgage. This short term sustainability is the thing that governments have to pay most attention to. If as a result of jobs not being provided wages were not paid, then that would be a crisis. The trouble with our economic system is that, because of its over-competitiveness and other aspects which I don't have time to explain here, it takes all the government's efforts to achieve short term, immediate economic sustainability. Governments don't have the freedom to act to protect social sustainability or environmental sustainability if it adversely affects economic sustainability at all. The Irish Government has got to maintain Ireland's competitiveness, otherwise jobs will be lost here and the whole economy will wind down (in a way that it is threatening to do at present). So what we have got to do, and one of the things that FEASTA is looking at, is to find a way in which we can take the economic pressure off to give governments more freedom to go for these longer term and no less important forms of sustainability – social and environmental.

The third aspect is where every discipline taught in third level institutions comes in. You have got to know enough about how each system (represented by each indicator) works in order to be able to do something about a decline in an indicator. You need to know for example that if we change management practices in agriculture we will get more birds, will the decline of the thrush will be reversed? And so, as Séamus Purséil was saying, every discipline is involved in this process. We need all the knowledge that we've got to be able to make sustainability work. We've overexpanded human impact on the planet and the more limits we approach, the more indicators we're going to need to follow, because the more care is going to be needed not to go over those fatal thresholds.

Conclusions

So that's to some extent the picture of the world and how we should respond to it that FEASTA is trying to develop. You see what I mean when I say that every discipline needs to be involved – that it's not just a case of economics, of what is dictated by the market. We need to know much better how the market operates and how it can be adapted so that we don't have to respond so much to its immediate requirements and have the space to attend to social and environmental things. The total effort is something which I think everybody in this room can join in some way, whether it's privately as an individual or through the teachings of your institution. It is what FEASTA and its quest for sustainability is all about. Thank you.

Questions

Question: The ideas expressed are very logical, but there is always a big gap between the ideas and the actions. Having heard from Séamus Purséil's very honest presentation that there is no great momentum behind the HETAC guidelines, how would you foresee your ideas or the HETAC guidelines being incorporated into say the engineering department of UCD or the study of bonds and shares in the Smurfit School of Business, or even Tipperary Institute?

Richard Douthwaite: That is an interesting question. The more you look into what sustainability means the more you will see that there is a real relevance to the educational sector. Take for example engineering. Let's look at transport. Roughly 50% of all the fossil energy that we use is taken up by the transport system. That's not just the energy that is used to run motor vehicles, planes, ships and so on - which is roughly 30% of all energy used. You've also got to factor in the amount of energy that it takes to build the roads and build the vehicles that go on them, and then to scrap the vehicles at the end. So

that's obviously going to be unsustainable in an energy-short world. Yet we do need to be able to move things and people about so we need to be thinking of other solutions. There's a potential solution developed by John Gilmore at Dundalk Institute of Technology. He essentially says it is crazy that most cars have only one occupant, yet consist of a tonne of material that took a lot of energy to produce and takes a lot of energy to move around, and mostly it's only there to protect the car from other equally heavy vehicles. He's examining a lighter transport system and has come up with some very attractive potential solutions. Because a sustainable world is going to be very much different from the present one we need engineering solutions in so many areas. Where are we going to be getting our energy from? It is going to have to be coming from renewable sources - tidal power, wind turbines, photovoltaics and lots of other systems which haven't been devised yet.

You mentioned stocks and bonds. I was in Jersey on Monday to talk to 16 members of the Jersey legislature and some of their civil servants. Jersey has an acute sustainability crisis - 80% of the island's GNP comes from the financial services sector. They are worried about the sustainability of the sector because it is based on offshore money coming into Jersey and being lent out again. Because the world economy is going down people aren't borrowing so much. Jersey could be ruined. There is a real sustainability issue in the whole financial services area which people far beyond Jersey need to consider. Every area of life is going to have to change if sustainability is to come about and so every discipline needs to be thinking what that change will mean.

Question: We have had a short account of FEASTA and what it is. Does it have a national remit or does it take the world system as its 'palette' to influence? A related question is does FEASTA have a policy on population?

Richard Douthwaite: When FEASTA refers to itself we call it a Dublin-based organisation. We have organised a conference in Stockholm with the International Network of Engineers and Scientists for Global Responsibility [INES - see <http://www.inesglobal.org/>]. FEASTA is heavily Irish, but we have members overseas and we get involved in activities overseas. And there is a good reason for this - you can't have a sustainable Ireland unless the globe is also sustainable.

We don't have a policy on population. Certainly any sustainable community has a stable population. I'm not sure whether I can claim that this will be accepted by every member of FEASTA but it's an idea I put forward in my own books - I see a sustainable community as having to be able to meet its basic needs from the resources of its own area. By basic needs I mean its energy and its food. If a community can do that, you then trade with the outside world out of choice rather than out of necessity. The community can never be caught, it can never be trapped because it needs, for example, to buy oil in. Our systems are dependent on oil - we're "addicted" in that respect. So we have to sell whatever we can produce at whatever price we can get (because we are price takers in the rest of the world) in order to be able to buy that oil at whatever price the outside producers demand. This could mean that we destroy our own sustainability in producing the exports that are demanded. FEASTA as a whole does not see a sustainable world being possible on the basis of a global economy with a global monoculture - everybody living in the same sort of way and competing for the same things. We see a diversity of economic systems, of people devising cultures which enable them to live within the confines of their own place and meet their basic needs from that place. They can trade surpluses. They can trade apples for oranges, they can trade for luxuries, for inessentials, but trade, unlike in the present system, would not be central to what they're doing, and they wouldn't need to grow economically, and they wouldn't need to compete in order to be able to survive. This is of course going against the whole grain of the present system, and some people here may be unhappy with that, but it is certainly an idea that needs to be explored.

Greening the Institution Discussion Group

Name	Organisation
Mr. Joe Bourke	Tipperary Institute (student), Cabragh Wetlands, Holycross Development Society
Mr. Kevin Healion	Tipperary Institute (academic staff) (Discussion Group Facilitator)
Mr. John Horgan	University of Limerick (** academic staff **)
Mr. Seamus Hoyne	Tipperary Institute (academic staff)
Mr. Brendan McCann	Waterford Institute of Technology
Mr. Dónal Ó Béarra	Ennis Adult Education Centre
Ms. Kathleen Phelan	Tipperary Institute (student)
Mr. Davie Philip	FEASTA, Sustainable Ireland
Ms. Jenny Shanahan	Tipperary Institute (student)
Ms. Rona Sorrell	Tipperary Institute (student), RES Q
Ms. Linda Stevens	University of Limerick Campus ** Services
Ms. Christine Walsh	Tipperary Institute (student)

The outcomes from the discussion group were as follows:

- Educational institutions must ‘walk the walk’ of sustainability – not just talk about it. Otherwise students will become cynical if their institution is not practising what it is preaching.
- Education was seen as an important element on the road to improved sustainability. There was discussion as to how best to get the message to students (in all levels of education).
- Schemes in which students can see the benefit of their actions were considered likely to succeed – e.g. where the efforts of the students resulted in a guide dog being purchased for the blind.
- For institutions, the benefit of saving money by reduced resource use and reduced waste production could be used to sell the idea of improving environmental performance.
- In recycling schemes, it is essential that all links in the chain are in place – make sure the materials being collected are in fact recycled!
- Attention-grabbing advertisements (e.g. a stark post-oil world) were also considered an option to promote sustainability.
- The Government has an important leadership role to play.
- Planning and design (of the campus and buildings of educational institutions) is another important consideration.
- Simple actions that can be taken include: photocopy double-sided; don’t photocopy pages with just a few lines of text per page (consolidate the text); use refillable whiteboard markers with washable ink.
- We must demonstrate positive action to others in order to promote change.

“Sustainability in the Curriculum” Discussion Group

Participants:

Marie Quirke O’Gorman – Tipperary Institute (Discussion Group Facilitator)
Tom Campbell – Development Studies Centre, Kimmage Manor, Dublin
Kingsley Goodwin – American College Dublin
Melanie Lorien - Irish Seed Savers Association
Grace Maher - An t-Ionad Glas, Organic College, Dromcollogher
Padraig Fahy – Roscommon VEC and IOFGA
Nancy Serrano – University of Limerick
Jacinta French – Independent Environmental Consultant
Barbara Gill – Development Education consultant
Gabriel J. Costello – GMIT
Brid Crotty - L.I.T
Erik van Lennep-Hyland – Sustainable Ireland Co-operative
Desmond O’Malley - TI student

Opportunities for promoting sustainability in our curriculum:

- Economic Climate – the vulnerability of our ‘open economy’ to global recession is creating a growing interest in more localised/sustainable economics
- Market our institutes as 'green', integrate this culture into our institutes and curriculum
- Need for Primary and second level teachers to incorporate awareness into their curriculum.
- Need to change attitudes generally at pre-service level e.g. Teacher Training, H.Dip., etc and at in-service level - teachers, lecturers and educators in general.
- Need to market sustainability as being trendy and fashionable.
- The need to respond to climate change may open up opportunities
- Need to have a mass circulation of HETAC guidelines
- Need to develop business links to provide funding for course development, however need to be careful about the business ethics of the funding organisation.

Constraints at the level of the curriculum:

- HETAC *need to more proactive when it came to promoting* the guidelines they circulated regarding the protection and improvement of the environment.
- Reluctance of single discipline faculties to engage in the kind of interdisciplinary approach that sustainability requires

Information/Resources/Supports required:

- Need for regular workshops to keep people up to date with issues
- Need for handbook, specific websites, academic resources - journals, articles etc.
- Need for the issue of sustainability to enter and inform all mainstream text books across all disciplines.
- Need for more Irish based material - it was mentioned that the group might get together and compile a text on topics e.g. engineering, agriculture, organic farming, water treatment etc.
- Need to question our teaching methodologies - need to be more creative and experiential in our teaching.
- Need for a regional database and network, so members could support each other.

Ecological Economics Discussion Group

Based on report to plenary session from Mr. Michael Walsh, Department of Business, Cork Institute of Technology.

The group had discussed how the so-called 'world' economy was in fact a Western world economy, and worked to the disadvantage of less developed countries. The example was given of indigenous people in less developed countries being pushed off their land by the expanding areas planted under cash crops. The FEASTA Boora Bog *eco village project* was also discussed in the group. The group also considered the issue of indicators (as addressed by Richard Douthwaite in his presentation). Finally, the group considered energy to be the big issue in sustainability.

Discussion - Recommendations

Item	Recommendation	Resp.
1	Feasta should add participants at the conference to a mailing list. This list should be mailed with links to relevant web sites including the Feasta web site.	
2	While it is assumed that there are few or no courses available with content related to sustainable economics we do not have any facts. Research should be done to establish the base line in this area.	
3	Any material that is to be produced should, if possible, present the positive aspects of sustainability with good news stories rather than just projecting the doom and gloom. A list, handbook or video of positive projects would be useful.	Noted
4	Any initiative that may be launched in the area of 3rd level colleges should promote a co-operative approach. This would be novel given the current climate whereby colleges are increasingly competing with each other for students and funds. Links could be developed with FETAC and the HEA – perhaps to develop national modules on environmental awareness. Perhaps unions involved in education (INTO, TUI, ASTI, USI) could adopt motions on sustainability?	Noted
5	People working in 3rd level institutions are overloaded with e-mailed literature. Any educational material that is to be sent out should fit on one page so as to maximise its readability. For example, the Little Earth Book could be broken into a number of segments and then distributed over a year (subject to copyright sanction).	
6	A potentially fertile source of support for issues of sustainability would be certain sporting organisations or special interest groups. For example the question of water quality is one that is of keen interest to sailors, surfers and fishing enthusiasts.	
7	Feasta should seek representation on the National Community and Voluntary Platform as a means of having its voice heard at Government level.	Joe Bourke

8	Public transport is a key feature of sustainability given the imminent energy crunch. The National Development Plan should be revised with a greater emphasis on public transport and a reduced emphasis on roads. This would also have considerable public support.	
9	A key sustainability indicator would be the amount of free time that people have to devote to their families and non-work interests.	
10	Contact groups should be grouped by regional to allow for easier contact and meeting when appropriate.	
11	The fact that so many asylum seekers are displaced by economic pressures should make for a ready linkage between Feasta and the Asylum Seeker Groups.	
12	A one day conference on sustainability should be organised for educators to learn more about these issues and possible solutions. The idea was put forward of an annual Sustainable Colleges Conference.	
13	FEASTA could undertake a promotion linked to the Transition Year programme. One idea put forward as a project to stimulate students was 'Write the newspaper headlines for 2020'.	

List of Participants

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