Dealing with misconceptions on the concept of sustainability

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Abstract Although there is a great degree of acceptance in relation to the importance of pursuing sustainable development, there are some areas within the higher education sector where the concept of sustainability is not yet fully understood. Based on the negative impact misconceptions can have, it is useful to look at the problem and develop approaches to address them. This paper, first delivered at the conference on environmental management systems at universities (EMSU 99) held in Lund, Sweden in May 1999, tries to discuss some of the misconceptions seen in respect of sustainability at universities and suggests some measures aimed at moving ahead.

Introduction: sustainability as a concept
Sustainability is today one of the most widely used words in the scientific field as a whole and in the environmental sciences in particular, but the analysis of the evolution of such a concept is a difficult exercise. This is because the records of the systematic use of such an expression, whose reference in the current vocabulary and political discourse is nowadays so popular, are scattered around. Until the late 1970s, the “word” sustainability was only occasionally employed, in most cases to refer to ways through which forest resources should be used. It has, in other words, strong connections with the forestry sector from where, some believe, it originated.

Other than that, the expression “sustainability” has been traditionally used as synonymous with words such as “long-term”, “durable”, “sound” or “systematic”, among others. Indeed, out of the context of the English language, sustainable development is very often referred to as “durable development” in French, while word-by-word translations are found in the German (nachhaltige Entwicklung), Spanish (desarrolo sustenible) and Portuguese (desenvolvimento sustentável) languages.

A key question which one might ask at this stage – a question which is posed over and over again, every day, by millions of people all over the world – is what does sustainable development really mean? Depending on the ways it is looked at, it may have many meanings, such as:

• the systematic, long-term use of natural resources – as defined in the Brundtland Report described elsewhere in this chapter – so that these are available for future generations (here referring to country and local policies);
• the modality of development that enables countries to progress, economically and socially, without destroying their environmental resources (here referring to country policies);

• the type of development which is socially just, ethically acceptable, morally fair and economically sound (here referring to the social ramifications of development);

• the type of development where environmental indicators are as important as economic indicators (here referring to the close links it bears with economic growth).

Many other variants may be listed and are indeed used by different organisations, taking into account their political perspectives and institutional aims. IUCN, which in liaison with UNEP and WWF produced “Caring for the Earth” (IUCN, WWF, UNEP, 1991), suggested at the time that the expression “sustainable development” be replaced in some context by “sustainable living”, since although the suffix “development” is associated with governments and refers to a government’s responsibilities, the word “living” is closer to an individual’s life.

The author defends the view that there is unlikely to be a consensus – at least a total one – on the meaning of sustainable development, although most people would agree on what it is all about. The reason for this is rather simple: one’s own definition will be influenced by one’s training, one’s working experience and one’s political and economic setting. There is nothing negative in that, but, equally, there is the need to establish some ground rules so that the search for a consensus, on what it is and what it means, may not be made hopelessly impossible due to individual differences in opinion and perspectives. Another way to overcome the problem is by looking at approaches to sustainability – meaning the processes which may ultimately lead to sustainable development. This paper will thus refer to sustainability, as opposed to the broad spectrum of sustainable development, having universities as a focal point.

A significant step forward in the international efforts towards recognising the value and usefulness of sustainability was the momentum generated by the publication of Our Common Future, also known as the Brundtland Report (WCED, 1987), which reported on the deliberations of the World Commission on Environment and Development (WCED), an official group set up by the UN to investigate ways by which environmental conservation could be systematically pursued, internationally, paying due attention to economic, social and political considerations. After nearly three years of work, a panel composed of specialists from various disciplines and from different geographical regions provided an in-depth examination of what the matter of sustainability is, what is required to pursue it and the measures that countries should adopt so as to put it into practice. Also, the definition of sustainability proposed by the WCED, and referred to above, has contributed towards some degree of acceptance of what it means. This is an important achievement since, before that, emphasis on it was piecemeal.

The process leading to the UN Conference on Environment and Development (UNCED) in Rio de Janeiro in 1992 – set in motion partly thanks to the
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*Brundtland Report* – the national meetings which preceded the conference and the preparation of the so-called *National Environment Reports* by many of the countries represented at Rio, gave a new impetus to the debate on sustainability. The publication of *Agenda 21* (UN, 1992) as the ultimate framework of action in the environment sector and its subsequent endorsement by over one hundred governments, reiterates the value the international community affords – at least in principle – to sustainability. *Agenda 21* emphasises the importance of sustainable development time and time again, over its 40 chapters.

In a recent volume on sustainability in the context of agriculture education (Leal Filho, 1999c), the author has discussed the fact that, since Rio, a lot has been said, written and published on the broad subject of sustainability at various levels, from planning (Blowers, 1993) to the broad field of policy (e.g. Selman, 1996; Baker *et al*., 1997; Brown, 1997) and local environmental initiatives (Whittaker, 1995; ICLEI, 1997), also including at the university level. Within the tertiary sector, there have been various landmarks in the process of design of approaches and mechanisms to bring in environmental concerns to university policies – some of which were set in motion well before UNCED – which include many important documents such as:

- the Magna Carta of European Universities (1988) (see Leal Filho *et al*., 1996)
- the Talloires Declaration of University Presidents for a Sustainable Future (1990)
- the “Urgent Appeal from the CRE” to the Preparatory Committee of UNCED (1991)
- the “Universities Charter for Sustainable Development” (1994)
- the Lund Declaration (June, 1999).

Moreover, over the course of the past five years, the literature has registered various works which have attempted to throw some light on the ways by which sustainability – seen as both a process and as a goal – may be effectively implemented, emphasising what can be done at university level.

More recently, a publication outlining practical examples of the introduction of sustainability components into university activities has complemented the pool of publications on the topic, but with one particularity: instead of purely describing views and perspectives, the publication, entitled “Sustainability and University Life” (Leal Filho, 1999a), provides concrete examples of action at various fronts such as administration, planning, teaching, extension and research. The ultimate aim of the book is to show the hows of sustainability and the practical problems experienced as part of the process (Leal Filho, 1999a).
Sustainable what? An overview of misconceptions

However, despite the progress here outlined there is still a deficiency, in the literature, of empirical works which have tried to ascertain, first hand, what is hoped, expected or otherwise among those in charge of sustainability policies, from attempts to promote sustainability in the framework of institutions of higher education. On the basis of the need to fill in such a gap, an informal study has been performed among some European institutions. The hypothesis was simple: if sustainability is so important and so useful, why are only a few universities active in this area?

Box 1 – Costing less

A proposal was made, in a university in northern England, to replace ordinary paper used in administration and stationery, with recycled paper. After comparing the prices of both modalities of paper, the administration decided that it should continue to purchase non-recycled paper, since it would cost less. The fact that bulk purchases would substantially lower the costs and that the use of recycled paper would be a good example of environmental concern were ignored.

Another rationale of the study was the intention to build up a rough profile of the reasons why universities may be reluctant to actively pursue efforts towards sustainability. To this purpose, an informal set of consultations was performed with the Rectors, Vice-Rectors, Presidents, Vice-Presidents and Deans of Faculties of Natural Sciences of a sample of 40 randomly chosen European universities. The technical basis of the consultations was to identify, by means of informal interviews and informal discussions, the themes or factors which might be responsible for the above outlined reluctance, and which might ultimately prevent some universities from being actively engaged in sustainability-oriented efforts or activities.

Based on the fact that the consultations took place in the context of conferences and visits and were informal, added to the fact that confidentiality in treating the impressions deriving from them was promised, no mention will be made of the specific universities, nor will any names be provided. However, in order to offer an overview of the breadth of the discussions, the distribution of countries is herewith provided (Table I).

<table>
<thead>
<tr>
<th>Country</th>
<th>Universities consulted</th>
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<tr>
<td>Austria</td>
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<td>Denmark</td>
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<tr>
<td>France</td>
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<tr>
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<td>Italy</td>
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<td>Sweden</td>
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<td>United Kingdom</td>
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Table I.
Countries and number of universities involved in the consultation.
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Box 2 – Saving money
A university in the eastern part of Germany decided to invest in a new power-station. In addition to the purchase of a new system, measures were put in place to cut consumption out of hours and to improve the efficiency of the illumination of rooms. Savings of around 6 per cent of the total energy bill were seen in the first year alone.

It should at this stage be stated that the findings deriving from the above outlined process should be viewed with care, since the sample is rather small and the nature of the collected data is subjective since they are based on the personal opinions of the individuals involved. On the other hand, since these people occupy key positions in the administration of their institutions, it is assumed that their own personal opinion and views might have an effect on their decision to favour a certain approach. Hence, albeit not conclusive, the findings may be regarded as symptomatic of the current state of affairs and therefore as being relevant to the present appraisal.

Box 3 – Teaching stuff to staff
A college in northern Italy started to run seminars on matters related to sustainable development and gender issues to staff. In addition to being popular, such seminars have motivated the creation of “green teams” within the institution, with staff getting together to discuss ways of making the institution’s initiatives less environmentally harmful.

Owing to the level of seniority of the interviewees and the fact that the main thrust of the consultation was to identify possible misconceptions, only two central questions were asked in the context of the consultations, being thus of direct relevance to this paper. These were:

1. What is the interviewees’ personal opinion on the concept of sustainability?
2. What do they perceive as being the major barriers in pursuing sustainability in the context of their institutions?

The rationale behind these two questions is simple: by identifying the opinions on the concept of sustainability, it is possible to infer whether it is regarded as a matter of relevance or otherwise. In addition, by determining the items seen as barriers to its implementation, it is also possible – by default – to identify where action is needed. Because of their strategic value and potential implications, each finding is discussed individually and contextualised.

Personal opinion on sustainability
There was agreement among 34 of the interviewed officials, that the matter of sustainability is important. This is the equivalent of over 80 per cent of the total. Only six of the persons involved in the consultations have shown some degree of reservation on the relevance of the topic, classifying it as a “fashion” (3), as “abstract” (2) or as “difficult to implement” (1). On the other hand, there were representatives of institutions quite enthusiastic about it. One institution
has indeed taken the step of creating a chair on sustainable development, that should have “sustainable businesses” as a focal point, while another has set in motion doctoral programmes to investigate the various aspects of sustainability.

The fact that personal opinions may be overall regarded as optimistic has a strong meaning, since it shows that the thematic sustainability may count on some sympathy. But, by the same measure, the fact that some respondents had negative opinions also shows that there is a perceived need for clarification on what it means and on what it may achieve.

**Box 4 – Spreading the word**

In an attempt to raise the profile of the subject-matter of sustainability, a university in northern Germany chose to set up a Commission on Sustainability right in the heart of its decision making: the Senate. By doing that, it is making sure that all important players are aware of what the institution is doing in this field.

**Barriers to sustainability**

When asked about the items that might pose an obstacle to sustainability, the sample provided a range of opinions, which fall into five main fronts: “it is too abstract” (12 respondents), “it is too broad” (19 respondents), “no personnel to deal with it” (four respondents), “it demands substantial resources which we do not have or can justify” (three respondents) and “it lacks a scientific basis” (two respondents).

The above shows that there are many misconceptions of what the process of sustainable development is and what sustainability represents to an institution. Such misconceptions and the contradictory interpretations associated with them are usually translated into a negative view, which in its turn usually reflects an institution’s willingness – or lack thereof – to join in efforts towards making their activities more environmentally-friendly and the university business more sustainable. Let us examine the bases of such misconceptions:

1. **Sustainability is too abstract**: partly because of the scope of the theme and partly because of lack of information, some respondents see the theme as too abstract and as too distant from reality. The truth is that, if carefully looked at and properly referred to the activities of higher education institutions such as teaching, research, extension or even purchasing and electricity use, sustainability is as close to their lives as it could be.

2. **Sustainability is too broad**: second to “abstract”, the adjective “broad” is also often used, as an argument against the undertaking of sustainable measures. Once again, a mistake is being made, since one can apply the principles of sustainable development to different parts of the university life, contextualising it.

3. **We have no personnel to look after it**: such a misconception finds its basis in the fact that, traditionally, a job at a university (e.g. tutoring, counselling) is performed by someone formally qualified. This is especially the case in countries which attach a great value to formal education, such
as Germany, where practical and operational skills (also greatly valued elsewhere) usually come in second place. The reality is that anyone familiar with the principles and practices of sustainable development and sensitive to the impact university activities have on the environment is in a position to potentially do good work in this area. It is often a question of having someone sufficiently motivated to do the job and undertake the necessary consultations and liaisons needed to do it effectively.

(4) The resources needed do not justify it: this misconception is not based on facts. Although financial considerations do not always come at the top of the list of what higher education institutions expect by conforming their work with the principles of sustainability, they do play an important role. As exemplified by the pilot project “50-50” now widespread in Germany, savings in areas such as energy consumption can be translated into immediate financial benefits, which institutions can then use to purchase goods or services, or re-invest in infrastructure.

(5) The theme has no scientific basis: this was not often mentioned, but unfortunately still was referred to as a problem, which shows ill-information. Sustainability is now an item found at the very top of the scientific agenda. In many European countries, substantial resources are available for research on sustainability and in the European Commission’s 5th Research Framework Programme sustainability is a research topic for which considerable funding is available. Universities which deny the scientific basis of sustainability are not only wrong, but also losing valuable opportunities for research.

These two items show that, although there is, on the one hand, quite a broad support basis for sustainability, there is a need, on the other hand, to deal with the misconceptions above outlined so that universities may be in a position to take full advantage of the potential sustainability offers.

The problem of misconception

When carefully examined, the above outlined misconceptions have deeper roots than one may in principle be able to identify. Some of the factors that influence an individual’s attitudes towards sustainability are described in Table II. The list, albeit not exhaustive, does illustrate some of the key items to which attention should be focused.

It should be acknowledged that, although most of these factors may be regarded as subjective and – when individually looked at – disconnected, combined, they help to clarify why there are so many misconceptions in relation to sustainability. True, mention of a single item may not have much of a meaning, but together they provide a rough overview of some of the key features of the problem.

A key question one may pose at this stage is why is sustainability – as a process – in some contexts so difficult to understand? There are various reasons for that, for example:
Sustainability is not a subject per se. Since it is not classified as being of the domain of any given science – rather being a component which may be incorporated into all disciplines – there tends to be a trend towards perceiving it as an abstract concept. Another aspect of the problem is that items such as sustainability or specific variables such as "Local Agenda 21" are often ill-defined (Patterson and Theobald, 1999), being implemented under great financial and administrative constraints.

Sustainability is too theoretical. Here part of the difficulty lies in the fact that sustainability and sustainable approaches are seen as theoretical matters, part of the political discourse and hence a mere theoretical expression.

Sustainability is too broad. This feeling is felt in some contexts (e.g. the Civil Service, the engineering profession), where the subject is seen as too broad and, by default, as impossible to handle.

Sustainability is too recent a field. This is observed in some southern European countries, which see it as a new issue and a new field of action, as opposed to having being part of the process all along. As a result of this misconception, some universities think they should wait and see how it develops, as opposed to taking a more proactive role.

Sustainability is a fashion. This is unfortunately observed in many situations and derives from the suspicion of the real purpose of sustainability.

Perhaps the most worrying feature in relation to the above state of affairs is that one or more of the above points are used, every day, as an excuse for not taking action. It is crucial that these are duly addressed.

Moving ahead
Much more can be said in relation to misconceptions and the need to address them. For example, as stated elsewhere (e.g. Leal Filho, 1999b) mention could be made of the importance of financial incentives, rewards and motivation as
tools to foster engagement on sustainability. But moving on from the theoretical sphere into a pragmatic perspective of what can be done – in other words, moving on – it can be stated that there are various ways of addressing the above problems. Some of the measures that can be undertaken without a great deal of extra resources are:

(1) Fostering the links between the theory and the practice of sustainability: by means of case studies, pilot projects and initiatives on-the-ground, it can be illustrated how close to reality sustainability is. There are various good examples of initiatives related to Agenda 21, for example, which provide an excellent basis against which the real value of sustainability efforts can be seen.

(2) Going into the specifics: although the broader, theoretical discussion on sustainability is helpful, there ought to be more attempts to get into specific issues and themes. For example, energy use, sustainable water consumption or sustainable production are some of the contexts where there are clear approaches and clear outcomes.

(3) Disseminating the value of sustainability: a major problem, seen in both industrialised and developing nations alike, is that the value of approaches towards sustainability is not widely acknowledged. A further problem is that not all good experiences are duly documented, a problem which Sustainability and University Life (Leal Filho, 1999a) has tried to address. Here there is a clear need for more demonstration and information, so as to raise its profile, which may lead to increased acceptance and, hopefully, further use.

Within the topic of agricultural education, for example, The Concept of Sustainability in Higher Education (Bor et al., 1999), there are signs that the subject-matter of sustainability is progressively being disseminated as both an aspect of teaching programmes and as a context for research. As demonstrated by Rasul (1998), who examined a number of higher agricultural education and research programmes in a developing country, namely Pakistan, the ground for the introduction of concepts of environmental education and sustainability is fertile. However, prior to being able to take advantage of the degree of acceptance which sustainability has, it would be important to cater for the training needs of university staff, so that they feel confident to introduce concepts of sustainability as part of their work.

As seen in the consultations described in this paper, which are symptomatic of the reality in many institutions of higher education in Europe, a certain degree of preparedness to pursue sustainability may be felt. This state of affairs is also seen in some developing countries, where innovation at university level takes place at a relatively slower pace than in industrialised nations and where the lack of resources sometimes prevents active engagement on the debate on
international themes. But a number of features need to be put into place so as to enable all universities to fully engage in the debate on sustainability and take advantage of the opportunities it provides. Some of these are:

1. reliable in-service training provisions on matters related to sustainability;
2. setting up of working groups to debate how best to pursue it via specific initiatives;
3. development of networks (intra-institutional and inter-institutional) to exchange ideas and experiences;
4. the setting-up and execution of specific projects.

Last but not least, attempts to implement initiatives related to sustainability at universities should be followed according to a time-table and action plan. Although this is not always possible or easy, it helps to provide a sense of direction as to where efforts are going. They also help to measure results against aims within a number of months or years. Such results are, without any doubt, the most persuasive arguments in dismissing, once and for all, misconceptions about sustainability.

Conclusions

One of the first documents outlining the need for further engagement of universities into environmental affairs, the “Magna Carta of European Universities”, promulgated in Bologna in September 1998, states that:

...universities must give future generations education and training that will teach them, and through them, others to respect the great harmonies of their natural environment and of life itself.

Among the most effective ways of achieving this, mention can be made of the need to afford sufficient emphasis to sustainability, since it deals not only with “ecological” matters, but also with the pool of factors that influence the environmental balance and quality of life.

Although the value of sustainability is broadly acknowledged within the university community, there are still various misconceptions that need to be addressed so as to clear the way for action. Prior to being able to undertake long-term works in this area, it is important that such misconceptions are duly addressed. One of the ways to do that is via concrete initiatives, in which the practicality and efficiency of sustainable approaches are shown. This need, which has been largely overlooked in the past, should be duly addressed, since not only is it responsible for the lack of action in the past, but also future, long-term progress is depending on it.

References


**Further reading**


