Definition of the concept of sustainability within USBE

Overall definition (October 2014)

Concept use is dynamic and may be revised over time.

The concept of sustainability within USBE has its origins in the Brundtland definition and includes all three dimensions: *environmental, social and economic sustainability.*
Environmental sustainability is related to the earth's ecosystems and natural conditions and how these are affected by human economic activity. It also includes environmental policies and financial and societal aspects, as well as tools and instruments for environmental sustainability.

Social and economic sustainability are related to such structures that we humans have created to organise our societies. Social and economic sustainability includes issues concerning allocation policies, ethics and social responsibility at the individual, organisational and societal levels. It also includes the stability of the basic structures of society such as economic and financial systems, and questions about demographics, health and prosperity, yet also social responsibility in business and society, human rights and fair working conditions from a global and local perspective.

Marketing
Sustainable marketing is marketing that is ecologically-oriented and which is ethically, technically and economically feasible, while at the same time being relationship-based:

- Ecologically-oriented - taking into account/studying/problem-focusing relating to the ecological limits and seeking to satisfy basic human needs for minimal resources and taking into account the long-term health of the ecosystem and its ability to continue to deliver ecosystem services in the future for people and nature.
- Ethically - seeking greater social justice and equality between people, both geographically and across generations, or at least trying to avoid that the prevailing patterns are perpetuated or aggravated.
- Technically and economically viable - bases itself on legislation as a minimum level for competitive reasons in markets and within the boundaries of law regarding technology and economics.
- Relationship-based - moves from a transactional approach, in which each transaction is seen as superior, and instead focuses on long-term sustainable relationships between companies/organisations, their customers and stakeholders.

Sustainable marketing is also about teaching/ interacting/studying both the sustainable and unsustainable phenomena and processes to increase the understanding of the problems, opportunities and solutions that are sustainable in the long term. This also incorporates studies such as (un)sustainable consumption patterns/behaviours and marketing, "green" marketing, telecommunications/greenwash, corporate (un)accountability, CSR, as well as community-oriented marketing such as social marketing.

Finance
Within the Finance discipline, sustainability issues are naturally focused on in the context of Corporate Governance. Issues relating to the company's responsibilities towards society and the environment are central in the field, as well as steering towards sustainable solutions in all areas of the company. A central concept in the field is CSR (Corporate Social Responsibility) in which corporate responsibility includes economic factors (profitability and returns to shareholders), environmental factors (e.g. current use of resources, transport, environment-friendly products and carbon offsetting), social factors (e.g. existing company community

involvement, well-being of employees, diversity and equality) and ethical responsibility factors (e.g. applicable codes of conduct and values).

For financial institutions, the concept of sustainability is reflected at a growing rate through the application of global standards for environmental and social risk management and the development of sustainable, financially-sound products. Sustainability initiatives are reflected mainly by an increased focus on the evaluation of environmental and social risks associated with lending and investment activities, and through a focus on identifying and capitalising on opportunities for new financial products that support commercial activities directed towards the area of sustainability.

From an investor's perspective, sustainable investment strategies have been focused on at an increasing rate. Sustainable investment strategies based on UN Principles of Responsible Investments integrate financial objectives with social, ethical and environmental considerations.

Accounting

The risks and threats to our common sustainability are great and require actions to be taken. Meanwhile, we have more alternatives and opportunities to deal with the situation today. This allows transparency - with regard to economic, environmental and social impacts - to have an essential role for effective stakeholder relationships, investment decisions and other market conditions. An important step towards greater transparency is sustainability accounting which involves companies and organisations communicating sustainability issues to the stakeholders.

Sustainability is about measuring, presenting and accepting responsibility towards the stakeholders, both within and outside the organisation, for what the organisation has achieved in its work towards sustainable development. Sustainability is a broad term to describe the accounting of economic, environmental and social impacts. The financial responsibility means that the company has a responsibility to operate their business as profitable as possible to ensure its survival and its shareholders' return on investment. The environmental responsibility, in turn, involves companies needing to take care to minimise the impact they have on the environment. Finally, companies also have a social responsibility aimed at upholding a level of consideration for those who interact with the company, either as an employee or as a consumer. Areas covered are often economics, environment, working environment, human rights, society and product responsibility.

Sustainability accounting is voluntary and is geared towards providing a balanced and reasonable picture of the reporting organisation's sustainability performance, both the positive and the negative. An important distinction is that the sustainability report can have a high level of quality and give good information to stakeholders without this necessarily meaning that the organisation is sustainable. Global Reporting Initiative (GRI) is an international organisation that develops global guidelines for sustainability accounting. However, there is still a considerable variation in the design of sustainability reports, both nationally and internationally. According to a study by KPMG in 2011, 72% of the 100 largest companies in Sweden carried our sustainability accounting in 2011.

Management

Management is a broad field that deals with different organisation-theoretical aspects such as organisation, strategy, business ethics, human behaviour and leadership. Research in the management section is extensive and lively. The main research areas are projects and temporary organisations, contemporary organisation and forms of organisation, and ethics and

corporate responsibility. A sustainability perspective in management touches on several of the above areas and can be connected to:

- critical perspectives which focus on that which is taken for granted, minority and alternative perspectives where mundane or seemingly small events, which may nevertheless have substantial impact, are focused on.
- social and ethical issues in relation to human relations and organisation which includes both health and working environment issues, social and economic justice, yet also leadership and organisational relationships both within, but also between organisations in different business relationships.
- sustainable organisation which is about how different strategies for long-term thinking can permeate through organisations and businesses while the environmental impact and the consequences for society's stakeholders are taken into account.

Entrepreneurship
The entrepreneurship field puts great emphasis on how the ability to identify opportunities provides a natural connection to sustainability issues. On this basis, entrepreneurship can be about development and transition towards more sustainable solutions in production and consumption, where "sustainable" can refer to both reduced environmental impacts and increased basic needs satisfaction or fairer distribution of resources. Entrepreneurship can also drive new sustainable solutions of the institutional or structural types, from the organisational level to the regional and global levels, which promote exchange and regulation. Concepts that are relevant to study and teach about relating to these types of change include the likes of eco-entrepreneurship, environmental technologies, green innovations, social entrepreneurship and institutional entrepreneurship.

The entrepreneurship area's importance to the individual, but also upon interaction and dependency, are other grounds to weave into sustainability in relation to education and research connected to entrepreneurship. By embracing the entrepreneur and entrepreneurship, driving forces and responsibilities for conversion towards sustainability, among other things, will be important fields of study. Meanwhile, the entrepreneur's relationship to others, such as in networks or clusters, is essential for the outcome of entrepreneurship. Entrepreneurship's processes in such interactions and dependencies are significant areas of study in order to understand how sustainable development appears and thus achieves success. Also touched on are issues about barriers to sustainable entrepreneurship and more structural issues. Here, among other things, financial and legal prerequisites for sustainable entrepreneurship are interesting. Examples can be issues relating to access to micro-finance for small-scale social projects, such as female entrepreneurs in developing countries, or how taxes and subsidies can hinder or stimulate environmentally-friendly products and processes.

Within the Business School's entrepreneurship unit, work includes research about transitioning towards sustainability in the food sector through the perspective of institutional entrepreneurship. Together with the University of Dar es Salaam Business School, research is conducted on entrepreneurship-related issues of importance in developing countries; primarily through a postgraduate collaboration. As another example, based on an 'agentship' perspective, case studies are carried out relating to the conditions for development of new ecologically sustainable business models. Focus is on the tensions between the entrepreneur's commitment to the environment and prevailing institutional rules and norms.

Economics
Within the field of Economics, the concept of sustainability is used in a broad sense, with the basis stemming from the aforementioned Brundtland Report's definition. Today, there is a

comprehensive, economic literature resource about sustainable development and how this concept can be measured.

Central, in terms of economic analysis, sustainability is the result of market failure - the market may fail in its task of achieving an efficient allocation of resources. Market failure creates a wedge between private-economic and social-economic efficiency. Important market failures which affect sustainability are incomplete markets, external effects, non-excludable use, public commodities and imperfect competition.

Within economics, sustainability issues and related insights and skills are central elements of our programmes. It is also important to point out that sustainability-related elements, at the same level as other courses in our programmes, shall be based on scientific grounds and have a strong connection to current research.

Currently at the Department of Economics in Umeå, research is conducted primarily in:

- Labour economics
- Econometrics
- Environmental and natural resource economics and
- Public economics

Some research is also conducted in health economics, development economics, time allocation within the household sector and financial economics.
Within the research field *of Environmental and natural resource economics*, sustainability issues are entirely central, foremost in terms of the sustainability dimension of ecological sustainability, and affects, among other things:

- *Social accountability issues, in other words theories relating to welfare measures and the connection of welfare measures to national accounts (welfare theory).*This may include measuring if welfare resulted in various market failures (which can be connected to e.g. environmental problems). It can also be about the step from traditional welfare measurements in usage metrics to corresponding dimensions in money metrics.
- *Environmental and climate policy*. Here, among other things, it can be about economic-theoretical studies of optimal taxation in economies where environmental resources play an important role in the economic system, as well as theories about social-economic viability assessments. Another example consists of empirical research on how environmental policies affect individual companies or industries; e.g. how the supply of goods or the demand for factors of production is affected by environmentally motivated taxes. Another focus could be called international environmental policy; e.g. relating to issues that have to do with international policy coordination.
- *Natural resource economics*, in other words the study of renewable and non-renewable resources. Examples of the first are studies relating to wildlife management and forest economics; e.g. in terms of production problems and the effects of economic policies. Examples of the second may involve optimal extraction of a non-renewable resource, such as oil.

Within the Centre for Environmental and Resource Economics (a research centre run jointly by UMU and SLU), several research projects are being carried out that include various aspects of sustainable development. Examples of some projects (spring 2014) are: The effect of energy and environmental policies on the sustainable development and competitiveness of

Swedish industry, Conflicts relating to natural resource management: reindeer herding and forestry from an economic perspective, Limits to growth in a sustainable society, Energy Consumption and area use in early-modern Sweden and Carbon dioxide convergence: driving forces and political implications.

Even in the field of public economics, the concept of sustainable development plays an important role. The public sector redistributes incomes (both between individuals of the same generation and between generations), and provides both collective goods as well as some private goods/services. In this area, sustainability issues, among other things, can be connected to research relating to:

- *Optimal taxation and providing collective goods*. Focusing on how short-term and long-term distribution goals can be achieved (or that a given tax revenue is generated) in the most efficient manner possible. At Umeå University, research about optimal taxation has a clear link to the field of behavioural economics. It is, for example, about the role that taxation and government spending can play in economies where consumers are trying to promote status through their consumption behaviour, or when they have self-control problems and therefore are not fully rational. Another example is the study of taxation and public expenditure in economic federations, where different levels of the public sector make more or less independent decisions relating to income and expenditure. The research is partly motivated by the level structure that the public sector in a single country usually has, and also by the interaction of supranational decision-making bodies such as the EU and its member governments. Another example is research about the tax role in economies with equilibrium unemployment and environmental problems.

- *Links between welfare measurements and the financial system's functioning.* This field of research is about finding welfare indicators in dynamic economies. One example is how welfare measurements such as the green net national product, need to be modified as a result of imperfect competition, external effects or distortions as a result of taxation not being designed in the best possible way. Another is the public sector's contribution to this type of welfare measure as well as measures of genuine savings (which is an indicator of sustainable development within a small time interval). A related area of research is the cost-benefit analysis in dynamic economies, e.g. to evaluate the effects of economic-political reforms.

- *Economic growth and economic policy.* Studies can be mentioned which involve economic growth at the regional and local level in Sweden, and how differences in growth and population mobility between different parts of the country are related to economic policy at the local and central levels.

The research conducted within labour economics, health economics and third world economics at USBE can also be linked to sustainable development, in particular the dimension of sustainability called social sustainability.

Statistics
Statistical work can be divided in theoretical and applied parts. The theoretical parts, to a great extent, involve investigating, developing and creating different statistical approaches to analyse the data. These techniques are inherently difficult to link to the concept of sustainability as they are only mathematical formulas and algorithms that can later be used in statistical analyses.

Because statistics is a topic that is in demand, skill-wise, in many different disciplines, it is natural that the statistical work also includes applicable parts. As the statistician, in their work, depends on collaboration across disciplinary boundaries, a great deal of work with sustainability is in consultation with experts from other fields who are involved. Here, the statistician has an important role in their work to ensure that the analyses carried out are correct.

Within the unit for Statistics at the Umeå School of Business and Economics, a lot of research is carried out relating to causal inference. Such research has applications across a wide spectrum of fields, such as in medical research, which has clear connections to the concept of sustainability.