Revista Internacional de
Sostenibilidad, Tecnología y Humanismo
año 2007 nº 2

Sustainability re-examined through a Human Development perspective

Ivonne Cruz

Postdoctoral Research Associate.
Harte Research Institute for Gulf of Mexico Studies
Marine Policy and Law
6300 Ocean Drive, Unit 5869, Room 311
Corpus Christi, Texas, 78412-5869, USA
ivonne.cruz@tamucc.edu

Abstract

The paper's aim is to give an outlook to the intellectual effort made by the Human Development paradigm to incorporate the sustainability notion and the difficulties it has encountered to operationalise this conceptual relation. The paper stresses the idea of advocating for a wider and holistic framework to incorporate multidimensionality in Human Development practice to overcome complexity and interdependence in well-being issues defining Sustainability as an integrated attribute. For this purpose the Sustainability notion is analyzed throughout a more socially/human well-being oriented perspective to understand key issues of intersection with Human Development matters providing new ideas like the use of the systems view approach as a framework to analyze the two notions independently but by all means and all times interrelated.

Key words: Human development, Sustainability, Human Well-Being, Systems Thinking, Human-Scale Development approach, Capability Approach.

1 Introduction

The Sustainable and the Human Development (SD) (HD) concepts have for the latest years shaped many important development debates. The HD paradigm holds a referential conceptual framework with a multidimensional approach to well-being (WB) defined by the ability of people to be free to expand their choices and seek human freedom to participate in decision-making issues that affects their lives (Anand and Sen, 2000). This notion has stand as a new paradigm to assess well-being and human progress under the flagship of the United Nations Human Development Reports and many of the debates derived from them.

The Sustainability approach has continuously been interpreted and reformulated over various fields of study (Redclift, 1987; Lélé, 1991; Jacobs, 1999). The impact of its meaning has reached vast wideness in many major fields of study such as engineering, the humanities, and the social studies (only to mention a few.) Because of its openness the concept has found a very particular way of influencing transdisciplinary debates out of which social, economic, ethic, political and environmental paradigms have, as a corollary, emerged (WCED, 1987; WB, 2003). Therefore Sustainability, according to Najam et al. (2003) will remain a "moving target" because the more we deepen and better understand the notion, new challenges for application and operationalisation will need to be overcome by scientists and practitioners.

In this light, this paper's aim is to give an outlook to the intellectual effort made by the HD approach to incorporate the sustainability notion and the difficulties it has faced to operationalise this conceptual relation. This work would like also to advocate for wider and more holistic frameworks to incorporate multidimensionality (being a Sustainability feature) in HD practice thus questions on how to manage complexity within this approach and the trouble faced in incorporating multiple aspects (or dimensions) will constantly be analyzed in the following sections as in parallel, the sustainability notion will be characterized within this view. The SD original concept however will not be questioned about its gaps and/or attributes but the relevance of this characterization is to place the notion at a new study area where there has been some reluctance from before.

Indeed the Brundtland Report on *Our common future* in 1987 attempted to have human and other social dimensions integrated to its view aiming to define how Sustainable Development affected people. However, the more recent Human Development notion which became popular a decade later presented new elements and was keen on assessing human well-being from so many perspectives that the studying both concepts as corresponding notions became a real challenge. The Human Development Index (HDI) for example, was a first attempt to measure social progress and for the first time different approaches to evaluating development came to fore displacing econometric indicators such as GDP.

The application of the Systems View Approach is thus introduced in this paper as an alternative way to cope with complexity and trans-disciplinarity among these two topics. But the paper stresses the importance of adding elements from the more recent established HD paradigm

acknowledging other preliminary attempts that have defined and put forward integrated notions and goals for the same end such as the Brundtland or Brandt Reports which have already anticipated complex relations in achieving more fair ground for development through time and generations.

2 Sustainability and the expansion of people choices

> "We define our needs in ways which effectively exclude others meeting theirs, and in the process increase the long terms risk for the sustainability of their livelihoods. Most important however, the process through which we enlarge our choices, and reduce those of others, is largely invisible to us." -M. Redclift 1999-

The Brandt Report in the late 1970s expressed popular discontent with a particular world situation resulting from the failure of the international economic system. Poverty and population kept expanding uncontrollably, but also famines, epidemics, massive people migrations, environmental degradation and wars where part of the derange of the world economic development. The Brand Report emphasized on the often overlooked idea of greater human dignity, security, justice and equity as equally valid measures of development as economic betterment but pointed on the need to envisage a world where essential changes required to be made in order to provide social and economic equality for humanity (ICIDI, 1980). Perhaps this was one of the earliest attempts in the building of what literature now describes as Sustainable Human Development. The Report was already advancing future concern for peoples´ WB foreseen as a long run problematic issue, but certainly was not yet questioning environmental havoc as one key aspect to analyse within.

Most recently though, UNDP´s Human Development notion began to question the fact that yet through elaborated definition and examination of the development concept this was not really focusing enough on people. However the launch of their first report in 1990 represented a landmark in the settlement of a new well-being paradigm breaking with the old development debates that were strongly criticized from being blind to social aspects of human lives. This paradigm though has faced frustrations and broad agreements (Fukuda-Pharr and Kumar, 2003) but in a broader sense, the changing logic was that of emphasizing people as a means of development instead of an end. But also as other authors affirm (Ibarra and Unceta 2001) the philosophical horizons of the HD approach began to expand to other fields related to progress and economics.

In any case, famous for his work on HD and human capabilities Amartya Sen describes development as a process of expanding peoples' choices and freedom, but further thoughts on how this paradigm has incorporated the Sustainability dimension as an important feature for enlarging people's capabilities, has not yet been extensively mentioned. Authors like ul Haq, have affirmed that the HD scheme of thought on human WB is "the most holistic development model existing" up to date (1995, p. 23) defending that it has endeavoured the incorporation of a universal perspective and understanding of human progress through a proper practical and

operative way. So persistent with this universality, ul Haq (1995) defined what he understood as *Sustainable Human Development* (SHD) describing it as: the equal access to development opportunities for present and future generations. A type of development, where each generation must meet its needs without incurring in debts it cannot later repay (these debts referred to those concerning pollution and exploitation of resources, of financial, social and demographic implications, among others). This notion seemed very much atoned with Sen´s own conception of SHD departing from the traditional definition from the Brundtland Commission, not paying much attention to the need-centred approach but being reiterative about the need to focus on the broadening of human freedoms on a sustainable basis (i.e. time) (Constantinni and Monni, 2004.) Sen has defined a capability-centred approach to Sustainability stressing that it stands for the type of "development that promotes the capabilities of the present people without compromising capabilities of future generations" (Sen, 2000a, p. 5) but disagrees and argues about the incompleteness of the Brundtland definition discussing that, in his opinion, human beings are not only `people with needs´ but also agents of change who can –given the opportunity- think, assess, evaluate, resolve, inspire, agitate, and through theses means are able to reshape their environments. And certainly, elements of self-reliance and individual or collective freedom are not clearly defined in SD definitions for this is one of the reasons why HD notions have found it difficult to fit into their discourse.[1]

Arguments on how to embrace Sustainability within the HD scope refer to the following debates: According to Saha (2002) people enhance better opportunities due to capability expansion and freedom achievement and for this reason freedom is crucial to the SD process both in the specification of the ends of sustainability and in the identification of the means to achieve it. Therefore, Sen´s understanding of freedom of people functioning as "agents" is ultimately the key for the transition to sustainability (Sen, 2000b).

Yet, even when Sen tries to stay away from any "Needs Theory" when speaking about development and people at the same level, several Human Development Reports (HDRs) mention that the enhancement of human capabilities represent three essential characteristics without which, many choices are not available and opportunities remain restricted. For example UNDP's first Report in 1999 stated that: "People want and **need**: to lead long and healthy lives, be knowledgeable and have access to the resources necessary for a decent standard of living." (UNDP, 1999, p. 4) But are these three features the only acknowledgeable elements for HD? Or else, shall we question the paradigm on which dimensions are relevant to HD? (Considering that not only social aspects are essential to human well-being, or course!)

It is well know and said (within various HDRs) that other conditions for people to lead valuable lives must include; political, social, and economic opportunities to achieve empowerment, self-respect and a sense of belonging to a community. This will mean that HD will need to widen its approach by adding up larger spaces for WB evaluation, and this might not be easy because both; SD and HD are open-ended concepts (i.e.without fixed limits or restrictions, allowing for future changes or revisions) therefore they might need their own framework to operate jointly, which

has always been given for granted and has been very slightly discussed. Indeed, The Brandt and Brundtland reports (moreover Brundtland) included both notions describing it as one absolute concept. The reports envisioned a multidimensional approach to development acknowledging social equity, technological access, institutional change, economic growth in deprived areas and emphasizing on a planet facing serious environmental stress. However both paradigms have been philosophically, academically and scientifically enriched within the past few years.

A framework will be proposed along this paper, yet it must be taken into account that the main objective of this proposition is not to *green up* the HD notion adding economic, environmental discourses to WB issues[2], but also to understand how people participate and enhance opportunities for freedom and self-reliance in a multidimensional and dynamic space which should prevail to enjoy healthy and creative lives at "all levels, in all cultures and at all times" (as suggested by other HD approaches such as the Human-Scale Development theory and which might harmonize a concrete Sustainable Human Development definition.)

For this, a specific description of the Sustainability notion from the social science perspective -or better said- from the HD perspective will be exposed depicting different definitions which have incorporated a multidimensional approach to WB discourses. The importance of this is to give a wider comprehension of the concept from this scientific field and stress on that open-endedness mentioned earlier. Moreover the aim is to incorporate the complex multidimensional notion implied in SD to more strict social paradigms such as the HD one.

3 Characterization of the Sustainability notion

Although, the sustainability defining roots come largely from environmental-economic fields (Lumley and Amstrong, 2004, Sutton, 2004,) the concept of Sustainable Development incorporated other aspects questioning justice, poverty, inequality, and people's aspiration for a better life, only to mention a few. As a result, cultural, technological, ethical ambits have been most recently introduced in various innovative ways to better picture a multidimensional and integrated perception of the notion in an attempt to achieve progressively, what J.Herrero (2000) has called; a *dynamic equilibrium* between systems. Integrated Sustainability is a new appreciation of phenomena that must be taken into account when talking of people and their environment, not only on the things that affect them but also on things on which they have an effect. [3] Probably Brundtland mentioned it earlier, but as a new *Sustainability science* is emerging, different approaches and rationalizations to the concept are useful to enlarge previous debates. Under this idea, Sustainability has been recently defined with rather different and new terms and further characterizations demonstrating positive interaction between humans and nature originating thoughts from many authors; such as Norton (in Troyer, 2002), who has for instance defined it as:

> "a relationship between dynamic human economic systems and larger, dynamic, but normally slower changing ecological systems, such that human life can continue indefinitely, human individuals can flourish, and human cultures can develop—but also a relationship in which the effects of human

> activities remain within bounds so as not to destroy the health and integrity of self-organizing systems that provide the environmental context for these activities" (Norton, 1992 in Troyer 2002,p. 214).

Within the social science perspective, sustainability refers to the viability of socially shaped relations between society and nature over long periods of time. Thus Najam et al. (2003) suggests that environmental sustainability turns out to be closely linked to supposedly "internal" problems of social structure such as social justice, gender equality and political participation. More concisely, sustainability has become a research stream apparently becoming, according to other authors as:

> "Basically social, addressing virtually the entire process by which societies manage the material conditions of their reproduction, including their social, economic, political and cultural principles that guide the distribution of environmental resources." (Becker et al.1999,p. 4).

The sustainability query thus is indeed related to many aspects of human and natural WB but also to those regarding to justice and the so-called *intragenerational* solidarity[4] as mentioned by the WCED in 1987. The debate has been widely extended and the understanding of sustainability at present times looks more like a meta-objective of a process and not really a process in itself.[5] But from many of the popular approaches given from this concept[6], one has championed recent intellectual work. This is the comprehension of sustainability as a hypothetical state of an adapting process in which the social, the economic and the biological subsystems integrate a set of human attributed goals and functions. Tábara (2002) and J.Herrero (2000) explain this matter clearly but other authors refer to similar assumptions (e.g. Barraclough, 2001, Michalos, 1997, Robinson, 2004).

J.Herrero´s contributions (2000 and elsewhere) firstly; on the distinction and difference of Sustainable Development and Integrated Sustainability as two different notions; and secondly; on the introduction of the `integrated sustainability´ idea as a comprehensive framework in which HD might clarify philosophical implications, have been illuminating. He depicts that, SD entails social objectives according to human values scales and needs (2000) being restrictedly social achievement. These needs and values change through time and SD becomes an open-ended process; including and interrelating parallel and multiple objectives at once. Therefore, sustainability stands as the basic principle of global SD, where in other words, sustainability is no absolute philosophical base, but a principle, a belief that might help to achieve the end of whatsoever we want to make sustainable.

Integrated Sustainability will result from the interaction between social, economic and environmental sustainability, therefore no partial sustainabilities are possible since all of them are interdependent being the only possible way to achieve SD holistically. Interactions are represented multidimensionally embraced by the ethical sphere which defines and influences all other relations within the system (Figure 1).

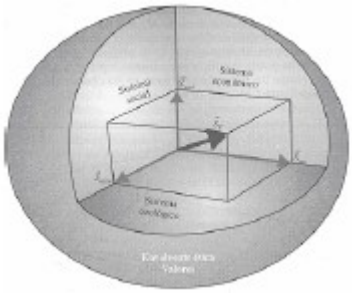

Figure 1. Sustainability scheme (J.Herrero, 2000).

Stahel et al. (2005) contribute to this idea stating that development does not follow any linear course but entails a network of interlinked dynamics which find their purpose as they interact. "Development changes continuously in time and space" (Stahel et al. 2005,p.83) for which there is no intrinsic ethic on such a universalistic perception. Consequently, if we are keen to achieve S-**Human**-D we must think on how to accomplish the *sustainability* (a principle, a belief, which might help to achieve the end of whatsoever we want to make sustainable) of the human systems for which we need to accomplish a series of targets in economic, politic, social, cultural and environmental levels, and which certainly allows for multiple context dependent answers.
These human systems must acknowledge different dimensions of WB resulting from the interaction of multiple systems within the vast diversity of development possibilit***ies***. Hence, sustainability is from now on, in this paper, represented in a plural form which might open widely the meaning and potentiality of the SD goal. Briefly, in order to achieve SD and [HD] genuinely -as I.Sachs suggested- multidimensional and open-ended attributes should be considered affirming the following:

> "the sustainability criteria must be met in each relevant dimension of [any] type of development. Social and cultural sustainability, ecological, environmental and territorial **sustainabilities**, economic sustainability and therefore political and institutional **sustainabilities**; all understood national and international wise" (I. Sachs 1999, p. 31-32).

Therefore, all the dimensions considered in the quote above reveal that the principle of sustainability should be tackled in a plural form and referring to sustainabilit***ies*** is by no means a futile term.

Finally, going back to the question on the importance of finding a framework for interaction for Human and Sustainable Development, it was identified that the study of dimensions "how they are framed as a matter of policy intervention, and how they are defined as subjects of scientific investigation" (Becker et al.1999, p. 9) defines how sustainability problem**s** are represented among economic, social, cultural, environmental, ethical and even in technological discourses. For all this, the human sphere can provide relevant insights into how societal relationships with nature are shaped, maintained and rendered open to transformation by exploring how "the agency aspect of social actors is constrained and enabled by natural and social conditions that have to be addressed by both material and symbolic terms" (Becker et al. 1999,p. 9). A word on dimensions is therefore worth of being mentioned.

4 Dimensions and Sustainabilit*ies*

In applying systemic approaches no clear hierarchy is appreciated, however a certain order always prevails at any dimension in the sense that even the very last component of a large structure implies interdependency with the rest of the elements of the system. However, what is important to keep in mind, is that the different levels and areas of influence are not about who has the power over, but rather how to organize complexity (Capra, 1982). He explains further:

> "To avoid confusion we may reserve the term "hierarchy" for those fairly rigid systems of domination and control in which orders are transmitted from the top down. The traditional symbol for these structures has been the pyramid. By contrast, most living systems exhibit multileveled patterns of organization characterised by many intricate and non-linear pathways along which signals of information and transaction propagate between all levels, ascending as well as descending. That is why I have turned the pyramid around and transformed it into a tree, a more appropriate symbol for the ecological nature of stratification in living systems. As a real tree takes its nourishment through both its roots and its leaves, so the power in a systems tree flows in both directions, with neither end dominating the other and all levels interacting in interdependent harmony to support the functioning of the whole. The important aspect of the stratified order in nature is not the transfer of control but rather the organization of complexity" (Capra, 1982,p. 305).

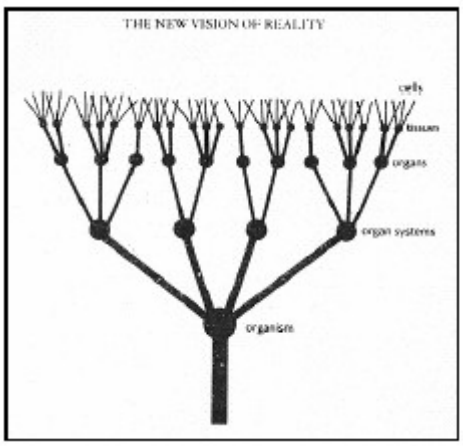

Figure.2 Interconnectedness within systems Capra (1982,304).

But there are other authors such as Colom (2001); J.Herrero (2000); Antequera et al. (2005) that have proposed individually, different frameworks to define sustainability dimensions. Antequera et al. describe the three subsystems best known to characterize SD (i.e. the social, economic and environmental) except that they refer and exchange simultaneously the terms subsystem and dimension. The other two, however, seem more innovative and will be depicted herein.

For Colom, dimensions entail the systemic aspect, the global, the environmental, the demographic, the local, the cultural, the politic, the moral and the technological. Whereas J.Herrero describes again only three: (the social, economic and environmental dimensions) but, these surrounded by a fourth elusive one known as the *ethical* dimension which embraces the

rest. Colom´s scheme defines his framework where, firstly, the systemic dimension provides an ideal structure for SD strategies where the coordinated action of multiple variables such as economic, politic, cultural, environmental, technological and so forth must result in an integrated action plan with common objectives. The global dimension recalls on the importance of the intrinsic global impacts regarding changes, challenges, attitudes, policies, etc. in the SD agenda. The environmental aspect covers those existing links among natural resources economy and the human problems regarding natural capital. The demographic scale refers to the equilibrium needed among resource consumption and population (particularly pointing to the immoral consumption models in the North). The local dimension is elaborated in order to give the multiple sustainabilit*ies* a particular space, affirming that smaller scale practices are always better objects of success. This one is strictly related with the cultural aspect arguing that culture is indeed a determinant of the types of development we are willing to pursue.

The politic, moral and technological dimensions are understood as inherent to a multidimensional perception of Sustainability as they represent correspondingly, the *mise en place* of relevant solutions pertaining to Sustainability (policies). These represent attitudes towards solidarity, cooperative action, consumption limits, an integrated view of humanity and a certain "faith" so to speak, in technology as part of the way to achieve its main goal considering an equal coverage among its users around the planet (Colom, 2000).

J.Herrero explains on how the three dimensions interrelate within other multiple variables and thus interact as a dynamic process. The environmental dimension embraces all elementary criteria which entails natural wealth and ensure ecosystems´ self-reproductive and depurative cycles. Meanwhile the economic aspect incorporates a biological approach but mostly centres in a process where human WB results from the accurate optimization of material progress. Lastly, the social dimension points out how human beings are key instruments to SD as they are main beneficiaries and even sometimes victims of development malpractice. Herrero stresses that all the above said will have no reason "if a given society is not able to share some type of solidarity values with all living forms to face a common future among human beings in a co-evolutionary process with nature" (2000, p. 14-118).

Other authors have claimed to add another dimension which seems to be always implicit but that in any case ought to be explained. Anand and Sen (2000) for example, have written about the time dimension entailed within the SD broad comprehension. They consider a violation of the universalistic principle of HD not raising attention on the moral obligation to protect and enhance the WB of present people who are poor and deprived, and being obsessed about **inter**generational equity without seizing the problem of **intra**generational equity. All the same, they state that; the moral value of sustaining what we now have depends on the quality of what we have, and the entire approach of SD directs us as much towards the present as towards the future (Anand and Sen, 2000,p. 2030).

HD as a universalistic approach cannot ignore the deprived people today in trying to prevent deprivation in the future. The prospects of people in the future should command respect in the

same way that the opportunities of the present generations do (Anand and Sen, 2000). Therefore, Sustainability under this view claims to extend the same concern for all human beings irrespective of race, class, gender, nationality, or generation as they set up this scenario of inequalities where not only the freedom of choices has been constrained, but because this intergenerational injustice has terribly limited social progress. The importance of "time" and its relevance in considering it a dimension has been expressed also again by J.Herrero (2000). Although he stresses on the importance of the ethical variables where global equity principles must lay and thereafter be extended to the whole social dimension attending present and future generations. So his perception points moreover to legitimate a universal moral framework which could prevail through time and generations.

In brief, in practice it has been exposed that a variety of dimensions could be implicit and omitted but certainly interact along and within the SD process. Despite of HD being perceived as a comprehensive strategy of development, no definition on the characterisation of the multiple dimensions implied has been appreciated. This marks the urgency of defining such, since further questions will still need to be answered. For instance, how could the multiple dimensions (e.g. those mentioned by Colom and J.Herrero) interact to acknowledge Integrated Sustainable Development for HD? Or moreover, how this interaction of variables regarding human, economic, social, cultural, ethic, and environmental aspects of life contribute to human flourishing and WB? In other words, how all these dimensions amalgamate and interact positively to enhance the sustainabilit***ies*** of the human systems to attain SHD?

Perhaps in this assumption, we can consider that for each dimension a particular strategy should be put into practice. According to the "Suva Declaration on Sustainable Human Development" (UNDP, 1999) SHD is overall connected to various global issues: Human Rights, collective WB and equity affirming that HD requires strong social cohesion and equitable distribution of the benefits of progress. Certainly, it has been acknowledged that development is more than about people and not about objects (Max-Neef, 1998b, UNDP, 1990-2005 and elsewhere) thus, people participation and equity are fundamental conditions to expand opportunities in the political and social fields where the need to promote effective policy-making. Political spaces should exist to encourage sustainable living to create better `opportunity spaces´ for the expansion of people's capabilities and human needs fulfilment. These spaces constitute the link between an improved government and the consolidation of the sustainability of their participatory, social and political systems; according to peoples own cultural understandings and aspirations. Policy changes include institutional implications as argued in the Brundtland Report (WCED, 1987) all these are complement and not substitute for the other. In this regard all policy commitments achieved will represent a continuing process and will therefore expect some outcomes out of it**.** Participation is a key issue and people are key players on the game.

5 Sustainability and its political implications within Human Development issues

> "Sustainability transcends its originally conceived environmental order to install itself in the misty area of human behaviour because more than taking measures it involves, the changing of attitudes"- Ramon Folch 1997-

As argued by Reboratti (1999) the use of the sustainability concept must be tackled from the analytical point of view but also through a normative and political dimension. The importance of this, he affirms, lays on the fact that on the correct use and application of the term to other related fields which have not considered the ideological spectrum will fall under a "chameleon-like" adaptation of the notion to old ideas such as sustainable growth, sustainable management, just to mention a few (Reboratti, 1999,pp. 208) . On the normative dimension he explains how as there exists a conceptual vagueness (or open–endness) of the term, Sustainability has become an unavoidable necessity. The eagerness of using the concept has raised questions like: "is there a normative path for SD? Or for instance; what would happen if we failed to apply a particular Sustainability policy in any dimension of the various comprehended in HD?" (1999,p. 210). Many of these are relevant question on wellbeing contemporary debates.

In this same logic, other authors like Tábara (2002) suggest that sustainability also functions as a political ideology. Dodds (1997) adds that this will be only when acknowledging that SD is an ethical position packed with political purposes. But the latter questions though, will never be answered without taking into account that SD is a process deeply rooted in historical contexts where the fact of making SD a normative query is something we still need to define according to cultural, social, environmental and political understandings. Societies and cultures have a collective mind therefore a collective consciousness or unconsciousness according to Capra (1982). We cannot deny that our ideals and aspirations are entrapped by our cultures and societies where enabling and/or constraining a type of development coherent with peoples' backgrounds must demand a combination and convergence of the preferences of individuals which constituted these societies and cultures.[7] Kasemir and colleagues (2002) have been eager to define the importance of the emergence of what they called the "sustainability culture" entailing a whole new way of perceiving, rationalizing, moralizing and prescribing potential Sustainabilit*ies* achievements. Therefore Folch (1997) suggests addressing sustainabilit*ies* through their physiology rather than their anatomy based on the awareness of the complex interrelations and interdependence of phenomena –physical, biological, psychological, social and, cultural- where new institutions, actors, principles, individuals, communities, models and theories need to be shaped trying to change a few things so that everything will be different. Changes entail political implications therefore this so-called `sustainability culture´ will only emerge if a significant change occurs within the expansion of the current cultural frameworks where actions happen and radical modifications of behaviour in people thus take place.

The aim of politicizing HD and Sustainability issues must be then to find coherence and balance between the means and the ends in order for them to coexist through time in freedom, equality

and solidarity (Tábara, 2002) so in this sense, Sustainability is packed with a `political purpose´ as it was mentioned earlier. Nevertheless, this could never be possible without incorporating multidimensional perspectives. Subsequently, the good performance of all these sustainabilit**ies** will reflect on people's WB and quality of life individual and collectively speaking keeping in mind what Max-Neef (1998a) has stressed saying that the best development process will be one that enables the improvement in people's quality of life; but one that must allow countries and cultures to be able to be self-coherent.

The latter idea of politicizing Sustainability and its intrinsic relation to HD has further explanation on the assertions done by Dodds´ (1997) and his characterization of well-being in four perceptions or levels, interacting actively springing from political philosophy and associated policy debates, to actual states of mind. These levels are respectively; WB as a state of mind, as a state of the world, as a human capability and as the satisfaction of underlying needs. But other sources assert that WB contains two personal dimensions i.e. people's satisfaction with their life and their personal development, but also within a social context (people having the sense of belonging to a community) (Shah and Marks, 2004).

Sen has as well suggested (in Dodds, 1997) that WB involves both *doing* (encompassing ideas of freedom and agency) and *being (*encompassing both mental and physical states). And argues that people WB has clearly political implications since "our opportunities and prospects depend crucially on what institutions exist and how they function" (Sen,1999,p.142). So, the questions like "What would politics look like if promoting people's well-being was one of governments' main aims?" -raised by Shah and Marks (2004,p. 1)- are quite stimulating when foreseeing that answer will certainly be much different from what they are now.

Governments promoting sustainable livelihoods must promote a WB economy, education systems to promote flourishing and reasoning, discourage materialism, strengthen civil society, social WB and active citizenship that contributes to their own query (Shah and Marks, 2004,p. 8). Governments should advocate for international justice, environmental protection, peace, sustainable population growth, democracy and human rights observation; enable participation and provide opportunities for the less well-off, according to Snarr and Snarr (1998). But more generally speaking, WB should be claimed across cultures at any point in time and aspired universally, at least to some of the elements here mentioned.

The logic of the politics of human needs and capabilities will acutely has to be defined under cultural-related contexts and thus this action will provide insights, hierarchies, and priorities attached to any particular dimension of development and/or people's life. This is according to (Stahel et al. 2005) an ethic, aesthetic and political exercise previous to any development model we are willing to pursue. Ethical, in the sense that each social group should define what is under their particular view of reality what is valuable to achieve and what is not. Aesthetical, as we agree that SD is seeking wellbeing and not only living and surviving. And finally, it is a political exercise, since the real power for decision-making lays on the means in which strategies are articulated and these might determine people's true capacity to influence decisions and to

participate in shaping them (Stahel et al. 2005, p. 78).

Concluding, these are ultimately the political implications of sustainability in HD issues. We observe that SD embraces a series of multiple variables interacting with one another and societies should collectively identify their aspirations considering a systemic framework of multiple human connections. So far, the previous sections where used as theoretical background in order to see how HD and Sustainability are two key issues relevant to WB. As the characterization of the sustainability concept and other relevant notes where given on the importance of identifying dimensions within both paradigms, this last part was engaged in highlighting the importance of making the policy breadth to understand the relation between the two concepts. Only if we are able to operationalise this connection through policy-making, we might one day assist to scrutinize whether Sustainable and Humana Development are touching people's lives. A full integration of the two is a difficult task as putting all their elements together is already a great challenge itself. Nevertheless, the thought of proposing the Systems View Approach as a framework in the next section for making the two concepts create a picture where a multidimensional perception of WB and human flourishing may take place, is only one example out of the various schemes that are perhaps being anticipated from other disciplines.

6 The Systems View approach: A multidimensional space for social paradigms analysis

The multiple levels of human interaction supposed in development processes -public, private, economical, political, social, cultural, and spiritual- entail a multidimensional comprehension of things. The systems view is certainly an ideal framework to describe and formulate new paradigms to understand, as Capra says, the "multilevel, interrelated fabric of reality" (1982, p. 67). The HD notion defends that the basic purpose of development is to enlarge people's choices; choices that can be infinite and that change over time. So, if there is more than one path to HD, according to Griffin and Mckinley (1992) how do we expand these capabilities recognizing these different paths? And/or as Max-Neef, (1998a) mentions; how do we satisfy fundamental human needs, generating a growing level of self-reliance through the organic articulation between human beings, and their multiple dimensions, recognizing these different pathways?

Certainly, many additional issues must be addressed within the HD central concerns (in addition to those mentioned for instance in the Human Development Reports as key aspects for people's life) Others could include, cultural freedom and identity, democracy, climate change, human rights observance, only to mention a few. Lazlo and Krippner find a way out to cover this distress affirming that the systems theory could actually help modelling complex "intrapersonal, interpersonal, inter-group, and human/nature interactions without reducing perceptual phenomena to the level of individual stimuli" (1998,p. 7). They continue: "The systems approach attempts to view the world in terms of irreducibly integrated systems, focusing attention on the whole, as well as on the complex interrelationships among its constituent parts" (Lazlo and

Krippner, 1998,p. 12).

Incorporating the systems view to the HD perspective therefore implies to address the concept in terms of relationships and integration, where all the systems are, paraphrasing Capra; "integrated wholes" (1982,286) whose properties cannot be reduced to smaller units, "where forms become associated with process, interrelation with interaction, and opposites are unified through oscillation" (1982; 288). To study human, environmental, economic, cultural, ethic and political interaction, Robinson and Tinker's model might help to elucidate the relationship among systems. They propose a three system interconnected model and overlapping process arguing an intrinsic self-organizing and co-equal aspect within each other:

> "**The biosphere** or ecological system; **the economy**, the market or economic system; **and the society**, the human social system. SD is thus defined as the `reconciliation of these three´ as they share many common characteristics, leading to an imperative."(Robinson and Tinker, 1995 in Eichler 1999,p. 183).

The first cares for bio-physical carrying capacity; the second, to ensure an adequate material standard of living and the third (the social), to provide an adequate political structure including governance systems that promote and sustain the values that people want to live by, to maximize WB (Robinson and Tinker (1995) in Eichler 1999,p. 183).

According to Capra (1982) all concerned systems must acquire the characteristic of self-organization (a certain degree of autonomy), of self-renewal (to renew and recycle their components maintaining the overall structure) and of self-transcendence (reach out creativity) additionally acknowledging that systemic approaches implies,

> that the network of interactions between its parts is never homogeneous and on the contrary is generally partial, where each system, has its own particular dynamic, mechanisms and shapes even when it is affected by others, according to Antequera et al. (2005,p. 105)

But also that systems define their own course and fluxes and can develop adaptive behaviours (these system take the name of complex *adaptive* systems " – those having the capacity to gather information from their environment as well as from the interaction among other systems-") (Mann, 1996 in Antequera et al. 2005) and considering that systems affect one another reciprocally, "although not every system will be affected with the same intensity and all of them are vulnerable to a greater or lesser degree" (Max-Neef, 1992a,p. 47).

The need for holistic thinking, comes to fore; recognizing Mebratu´s (1998) suggestion of always considering the parts, the whole, and, most importantly, the interaction between the parts and the whole. Even when people interact constantly throughout complex systems under daily bases, institutions and policy-making processes have found practical implementation quite difficult. Yet, theoretically speaking, this framework might help to start elucidating new streams in the sustainability-HD knowledge field.

Development theories such as the Human-Scale Development have expressed their sympathy with systemic approaches claiming on systemic human needs and fulfilments interaction whereas

others like the CA had stressed on freedom(s) interaction as they can re-enforce one another systemicall[8]. However, under a more institutional logic, it is considered that the HD paradigm has searched for conceptual frameworks of the kind through several International Organizations. The intrinsic need to face HD as a non-linear question urged practitioners to search for further schemes to assess socio-environmental systems. One of the most popular approaches in incorporating multiple interactions has been the Driver Pressure State Impact Response approach (DPSIR) developed originally by the OECD in the late 1970s. Further modifications have been made to this framework in order to widen its applications within SD problems and a revised version called the Pressure Activity State Impact Response (PASIR) framework proposed by Duraiappah et al. (2000) emerged representing the milestone of what is known today as the Millennium Ecosystem Assessment or MA.

Launched in 2001 and completed in 2005 by the former U.N Secretary General Kofi Annan, the MA has been used by a series of global Institutions such as UNEP, UNESCO, UNDP, WB, IUCN, WHO among many with the spirit of using methodologies for complex problems analysis. Its main focus is on ecosystem services (meaning the benefits that people obtain from ecosystems and on how ecosystems change and affect human WB) in order to adopt responses to improve ecosystems management and contribute to human WB and poverty alleviation (MA, 2005a). Overall, the MA provides a tool for planning and helps to identify response options to achieve HD and sustainability goals altogether.

Essentially the MA structure represents a good example of a systemic framework to evaluate and analyze complex interactions like the ones implied in Sustainability processes. Relations among elements are never linear and these affect the whole ecosystem functions and vice-versa. Some case studies where conducted in various countries applying the MA methodology in an attempt to build integrated poverty and environment indicators (MA, 2005b). The aim was to put forward indicators whose evaluative criterion was able to combine two or more problematic areas: e.g. poverty and environmental distress as a co-related matter (considering that both poverty and environment are already two complex multidimensional systems).

7 Last remarks and conclusions

As mentioned earlier, Sustainable Development is known as a process of systemic adaptation. Human adaptation could be the capacity of humans to respond to impacts from very different sources (Rothman and Robinson, 1996) though, the way how societies respond to these stimuli will determine the effects and therefore the possibilities to move either, towards positive or negative directions to achieve WB in the short and long run.

As Beker et al. (1999) say, the interactions of social actors with the environment are shaped and mediated by institutional arrangements, which should be tackled through the use of an hermeneutic (interpretive) dimension to sustainability i.e. “by exploring the cultural and social meanings that are attributed to social practices” (Becker et al.,1999,p. 9). So Sustainable Human Development should stand for and must defend coherence and consistency with people’s own

believes and absolute inclusion in the process or pursuing sustainabilit**ies** of all possible systems. Even when using different methods and theoretic frameworks to define sustainability we should always be aware that "we have reached the stage where our collective behaviour will determine not just the quality of life of future generations, but the existence of human life as we know it itself" as Eichler affirms (1999,p. 204).

Engaging the now included interrelated paradigms (i.e. HD and Sustainability) with the aim of operating under one integrated and systemic scheme of thought, might thus help to move to a broader notion of Sustainable and Human Development more comprehensive and human well-being oriented. This is very close to a type of development which Max-Neef has defined as one implying an "integral ecological humanism" (Max-Neef, 1992a, p. 54). He defines it as one;

> "Ecological[ly], based on the conviction that human beings, in order to realize themselves must maintain a relationship of interdependence and not of competition with nature and the rest of mankind fostering analogies for social order. But also humanistic, as ecological balance must be also subject to human knowledge, judgment and will in terms of conscious political action" (Max-Neef 1992a,p. 55).

All this should flourish in a particular space avoiding any concentration of power, as Max-Neef believes –and the author as well- that it alienates people from their environments and limits participation and sense of responsibility; restricting people's imagination, information, communication critical capacity and creativity. Being participation a key player in the game.

Lastly, the sustainability concept was intended to be analyzed in this paper through a well-being/ social approach which now falls into a multidisciplinary and multidimensional understanding. The latter implies that under this view, multiple sustainabilit*ies* and all of them should be pursued to achieve diverse SD goals. A basic description of the systems view approach was described to be used as a likely comprehensive framework to make Sustainability components and HD dimensions, somehow, look at each other more profoundly and respond to the urgent need of widening both concepts´ operationalization. However, strategies derived from this approach should learn to include one another in a re-adaptation process, and might yet take some time and experimental practice in the field.

The latter will actually enhance more holistic processes of human progress and will endorse as a result, new opportunities for action more attuned with those socio-political economic-environmental-cultural-ethical situations of a given group or society. Hence, this practice might as well help to fill in the gap and respond questions such as the ones raised by Sen who has expressed concern on things like which form of sustainability are we keen to pursue? And about which constraints or "main rival conceptions" will we be facing then? (Sen, 2000,p. 3).

On walking towards *sustainable societies,* as J.Herrero (2000) suggests, our actions need to be coherent with the sustainability ethics and work hence for sustainable living under a model coherent with our values. This must be in such case a gradual learning process in which we all must feel part of a changing motion and where we all should play a role in that tree of interconnected systems, dependencies and responsibilities proposed by Capra a few paragraphs

before. Yet, according to Faber et al. (2005) semantically, sustainability indicates a relationship of equilibrium,

> "The more effective the decision-making strategies are, the greater a society's overall propensities for sustainability will be, or conversely, the greater the propensity for sustainability is, the more conducive to greater sustainability decisions will be" (Choucri, 1999, p. 151).

Interactions occur without mutual detrimental effects and from this account a dual logic perhaps ought to start operating in policy-making issues. The decision making field entails larger series of discussions[9] which will not be depicted in this paper. Nevertheless the intention of characterizing Sustainability and Human Development under the same discussion was to make a clear statement on the dynamicity entailed within both concepts. Sustainability therefore, will no longer target an ultimate sustainable state (Faber et al. 2005) no matter if entailed economic, environmental and social aspects, instead, it should become a process of constant improvement of the sustainability of social, natural, political, economic and moral systems taking a look to their proper equilibrium and dealing with their very own particular behavioural changes, values and aspirations coherent with the people involved.

Acknowledgements:

The author is particularly thankful to Drs. Andri Stahel and Flavio Comim for their valuable comments in the realization of this work and to the two anonymous referees for their insights and suggestions in the improvement of this paper. Author would also like to thank CONACYT-Mexico for their financial support in the achievement of an extended version of this research as the author's PhD dissertation conveyed at the UNESCO Chair in Sustainability, Terrassa, Spain (2002-2006). This article is being revised and completed meanwhile holding a post-doctoral research position at the HRI for the Gulf of Mexico Studies.

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Notes

1 For this reason other approaches such as the Human-Scale Development Approach defined human needs approaches in more creative ways to cope with this gap. For example: this theory understands needs in a twofold existential condition: as deprivation and potential, where the lack of something might be motor to achieve the fulfilment of the need engaging the person as a key actor in the process. See Max-Neef 1992a in references for further explanation.

2 Most of Sen´s work insists on how freedom enhancement could be taken as an evaluative measure for well-being. Others working with the CA are identifying other means (e.g. Neumayer, 2000, Ciappero, 2000, to mention a couple).

3 This `integrality´ fact has bee described also by authors like Max Neef (1998a) and others (e.g. Perroux in I.Sachs, 1999,p. 29) as "the development of the whole man/women and all men/women".

4 Which means actions producing impact on this and future generations.

5 See e.g. Rios et al. 2004 and the characterization of the SD debates as conceptual, contextual, disciplinal and geopolitical.

6 For instance (WCED, 1987 and IUCN,UNEP,WWF, 1991)

7 Max-Neef (1998a) has developed this same idea when advocating for the stimulation of the creative role of communities from which solutions begin at the bottom and are built as an upwards process (top-driven), thus resulting in answers that are more congruent with the aspirations of the people involved.

8 Positive and negative (Sen, 1999)

9 The author has been working on special methodological systemic approaches to evaluate HD policies in multidimensional way. See: Cruz (2006) http://www.tdr.cesca.es/ type author's name.