Edited by

Marko Ulvila & Jarna Pasanen

Sustainable Futures

Replacing Growth Imperative and Hierarchies with Sustainable Ways

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Editors
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MINISTRY FOR FOREIGN AFFAIRS

The ideas, opinions and conclusions expressed in this report are those of the authors only, and do not necessarily represent the views of the Ministry for Foreign Affairs of Finland.

Illustrations by Pia Westerholm

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http://www.sustainablefutures.fi/

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Summary

The starting point for this project, Sustainable Futures, has been a search for sustainable cultures past, present and future. For more than four decades, there has been an intense, ongoing search for a balance between modern industrial development and the environment. However, the results of this search are far from impressive: complex environmental problems, such as climate disruption, impoverishment of ecosystems and toxification, are still threatening the future of humanity, more than ever before. There is a clear need for reassessing the cultural foundations of the present modes of industrial development. The search should be for agendas for transformation.

The authors of the articles and essays in the present book define culture in a broad sense as all patterns of human behaviour that include thought, expression, action, institutions and artefacts. A sustainable culture is understood as one that incorporates environmental sustainability and promotes human dignity for all.

Using these two criteria for sustainable culture, three global cultural classes can be defined. The over-consuming class meets its human needs but not the criteria for sustainability, since it exceeds its environmental space. At the other end, there is the struggling class that lives within its environmental space, but does not meet its human needs and suffers from malnutrition and other symptoms of powerlessness. In between these two is the sustainable class that both meets basic human needs and maintains an ecological balance. Roughly one-third of humanity belongs to each of these three classes.

This book also presents a global assessment of sustainable cultures in different countries, based on four sets of data. First, the ecological footprint data for a given country was combined with that country's Human Development Index (HDI) data. Then data from the Happy Planet Index, created by the New Economics Foundation, along with data from the Environmental Performance Index of Yale and Columbia universities, were combined with the HDI and footprint data. The resulting outcome highlights Colombia, Cuba, Costa Rica and Sri Lanka as the top four nations that should receive special attention when discussing sustainable cultures.

This book identifies two features of all modern industrial cultures as the root causes for unsustainability: the growth imperative and hierarchic structures. Alternatives are presented for both, and the changes that would result are discussed.

First, the idea of ever-increasing economic growth, using Gross Domestic Product (GDP) as its indicator, is shown to have been a dominant objective of modern cultures and societies. This book shows further how the imperative to increase GDP is dysfunctional in terms of the environment, welfare and poverty reduction. As an alternative to the growth imperative, achieving a sustainable economy is proposed as a replacement. A sustainable economy rests on understanding and taking into account the complete economy, including the informal economy, and is built on the principles of last-person-first and environmental sustainability. The future scenarios this book presents are: degrowth for the over-consuming class, steady-state for the sustainable class, and empowerment for the struggling class.

Domination through power hierarchies leads to environmental unsustainability and lack of human dignity. This is because the elite at the top of the hierarchy have become detached from and ignore the basic rules of nature and humanity, including interdependence and inter-connectedness. Paths to egalitarian relations are presented here for achieving balanced relationships in five areas: gender, ethnic traits, the economy, knowledge, and nature. Here, it is considered necessary that human relationships in all these areas should be balanced and equal, since together they create a coherent structure and foundation for human cultures and society.

Cultural transformation supporting changes leading to balanced egalitarian relationships includes measures for halting over-consumption, strengthening democracy, and learning from indigenous worldviews. Drawing on past experiences with practices such as smoking in public places, the authors show here that cultural transformation in egalitarian directions is both feasible and possible.

Part I of the book concludes with a summary of future agendas for the three cultural classes defined here. For the struggling class, the future should strive toward enhancing power and resources; for the sustainable class, the goal should be respecting, protecting and promoting its existing sustainable ways. And over-consuming classes should undergo a profound transformation into a sustainable culture.

This book also presents a thematic selection of interventions presented during eleven dialogues convened and supported by the Sustainable Futures Project, as well as sum-

maries or excerpts from articles commissioned by the Project. The excerpts and summaries are grouped in four sections: analyses of sustainability, sustainable livelihoods, processes of destruction, and pathways to sustainable futures.

The complete dialogue reports and full articles may be found on the Sustainable Futures Project website: *http://www.sustainablefutures.fi/*

Tiivistelmä

Modernin teollisen kehityksen ja ympäristönsuojelun välille on yritetty etsiä tasapainoa viimeisen neljän vuosikymmenen ajan. Ympäristön tila on kuitenkin entisestään heikentynyt. Vakavat ympäristöongelmat, kuten ilmaston häiriintyminen, ekosysteemien köyhtyminen ja ympäristömyrkkyjen leviäminen, uhkaavat ihmiskunnan tulevaisuutta enemmän kuin koskaan aiemmin. Tämän vuoksi tarve uudelleenarvioida nykyisen kulttuurimme perusteita on ilmeinen.

Kirjoittajat määrittelevät kulttuurin laajasti: se sisältää ihmisen kaiken toiminnan, kuten ajattelun, ilmaisun, instituutiot ja esineet. Kestävä kulttuuri taas tarkoittaa kulttuuria, jossa toteutuvat sekä ekologinen kestävyys että ihmisarvoinen elämä kaikille.

Tätä kestävän kulttuurin kriteeriä käyttäen kirjassa jäsennetään kolme maailmanlaajuista kulttuurista luokkaa. Ylikuluttavassa luokassa ihmisten tarpeet täyttyvät, mutta ympäristövara ylittyy, joten se ei täytä kestävyyden kriteerejä. Kamppailevaan luokkaan kuuluvat eivät ylitä ympäristövaraansa, mutta he kärsivät aliravitsemuksesta ja muista vallanpuutteen oireista, joten ihmisarvon kriteeri ei täyty. Näiden kahden luokan välissä on kestävä luokka, joka elää tasapainossa ympäristön kanssa ihmisten perustarpeet täyttäen. Maailman väestöstä noin kolmannes kuuluu kuhunkin luokkaan.

Kirja sisältää myös maakohtaisen arvion kestävistä kulttuureista neljään eri aineistoon perustuen. Ensimmäisessä tarkastelussa on yhdistetty ekologista jalanjälkeä koskeva aineisto inhimillisen kehityksen indeksiin. Sen lisäksi on käytetty New Economics Foundationin luomaa Happy Planet Indexiä sekä Yalen ja Columbian yliopistojen kehittämää Environmental Performance Indexiä. Näiden aineistojen perusteella Kolumbia, Kuuba, Costa Rica ja Sri Lanka ansaitsevat erityisen huomion kestäviä kulttuureja tarkasteltaessa.

Tutkimuksessa on havaittu kestämättömän kulttuurin perimmäisiksi syiksi kaksi modernien teollistuneiden yhteiskuntien piirrettä: taloudellisen kasvun vaatimus ja hierarkkiset rakenteet. Molemmille esitetään kestävämpiä vaihtoehtoja.

Taloudellinen kasvu, jonka indikaattorina toimii bruttokansantuote, on ollut vallitseva yhteiskunnallinen tavoite. Tutkijat osoittavat sen toimimattomaksi ympäristön ja hyvinvoinnin vaalimisen sekä köyhyyden poistamisen suhteen. Kasvuihanteen tilalle

kirjoittajat ehdottavat kestävää taloutta. Se perustuu kokonaiseen talouteen, joka sisältää pelkän BKT-talouden ohella myös epävirallisen talouden. Kestävän talouden lähtökohtana ovat viimeinen ensimmäiseksi -periaate ja ekologinen kestävyys. Sopiva tulevaisuuden skenaario ylikuluttavalle luokalle on täten rahatalouden supistuminen (degrowth), kestävälle luokalle vakaa talous (steady state) ja kamppailevalle luokalle voimaantuminen.

Valtahierarkiat johtavat kestämättömään luontosuhteeseen ja ihmisarvon puutteeseen. Tämä johtuu siitä, että eliitti on vieraantunut luonnon ja ihmisyyden perussäännöistä, kuten keskinäisistä riippuvuuksista ja yhteyksistä. Raportissa käsitellään viittä hierarkkista suhdetta ja esitetään niiden muuttamista tasa-arvoisiksi: sukupuoli, etnisyys, talous, tieto ja luonto.

Modernin teollisen yhteiskunnan kulttuurinen muutos kestävämpään suuntaan tapahtuu poistamalla ylikulutus, syventämällä demokratiaa ja oppimalla alkuperäiskansojen maailmankuvasta. Kulttuurisia muutoksia tapahtuu jatkuvasti, joten mainitut muutokset ovat hyvinkin mahdollisia ja toteuttavissa olevia.

Johtopäätöksissä eritellään muutosagenda kolmelle kulttuuriselle luokalle. Kamppailevalle luokalle se sisältää vallan ja resurssien vahvistamista ja kestävälle luokalle nykyisten kestävien elintapojen kunnioittamista, suojelemista ja edistämistä. Ylikuluttava luokka tarvitsee perinpohjaisen muutoksen kestävämpään kulttuuriin.

Kirja toinen osa sisältää otteita puheenvuoroista, jotka nousivat esiin hankkeen järjestämissä yhdessätoista dialogissa. Kolmas osa sisältää yhteenvetoja tai katkelmia hankkeen pyytämistä artikkeleista. Ne on ryhmitelty neljään osaan: kestävän kulttuurin piirteet, kestävien elämäntapojen esittelyt, tuhoavat prosessit ja polut kestävään tulevaisuuteen.

Dialogien raportit ja täysimittaiset artikkelit ovat hankkeen www-sivuilla osoitteessa *http://www.sustainablefutures.fi/*

Foreword: Reuniting the Divided

The concept of "Class" is back. But it is not the same "Class" that sparked countless debates and clashes in the 20th Century. Instead the authors in this book sketch three global classes in terms of how people use the world's resources and meet their basic needs.

As debatable as the methodology clearly is, this classification is useful for illustrative purposes. It carries two important messages:

First, the world is currently divided. A large proportion of the world's people lives well below the levels of consumption needed for tolerable living conditions. At the same time, another large group of people binge on consumption of the world's resources with massive harm to ecosystems and other people.

Second, what we have come to define as "The South" and "The North" continue to exist: not so much as groups of countries, but as groups of people within all countries. According to this book, the number of over-consumers in China already equals the number in the United States.

To reunite our divided world we need a radical transformation – what some would call a disruptive change. We need to do this because of two imperatives: ecology and equity.

Countless studies show that politics as usual is leading to an environmental dead-end. The result of continuing on our present path would be an aggravated ecological crisis with potentially apocalyptic consequences.

At the same time, hundreds of millions of our fellow global citizens live in abject poverty and misery. The fact that we let this happen is a continued insult to the humanity of us all.

There are few studies looking at radical transformations to change this dire picture. The authors in this book try to fill the gap. Particularly welcome is the attempt at a holistic view which looks at the social, political, structural, cultural and, indeed, moral dimensions of change.

Many of the proposals the authors come up with merit further debate and analysis. While some of the suggestions may seem outlandish at first, measures of this and perhaps even greater magnitude are required to meet our daunting challenges.

However, I would invite the readers to take a critical look in particular at the following assumptions:

- economic growth and growth in the use of natural resources are synonymous
- non-hierarchic systems lead to the sustainable use of resources
- degrowth is the preferred strategy for the over-consuming class
- the sustainable class is, in fact, socially or ecologically sustainable
- an indigenous worldview can be successfully applied in large populations

This should not be seen as downplaying the value of the authors' work. On the contrary, whenever a reader raises a strong objection, the authors have managed to provoke further thinking and fuel debate.

And in this they succeed, indeed.

Oras Tynkkynen
Member of Parliament
Climate Policy Specialist in the Prime Minister's Office

PART I:

Transformation Scenarios To Sustainable Economy And Equality

Marko Ulvila and Jarna Pasanen[1]

[1] Marko Ulvila and Jarna Pasanen are free lance researchers and activists living in Tampere, Finland. They have been active in the World Social Forum process as well as organisations such as the Friends of the Earth Finland, the Democracy Forum Vasudhaiva Kutumbakam, the Network Institute for Global Democratisation and the Coalition for Environment and Development.

1. **Introduction:** In which we introduce the concepts, provide a backdrop, and explain the project

"We've been taught that we were put here to rule our earth. But the truth is that we need the environment more than the environment needs us." **Jhikolabwino Manyika, Bagamoyo Dialogue**

Sustainable Culture: Environmental Sustainability + Human Dignity

The starting point for this project, **SUSTAINABLE FUTURES,** has been a search for sustainable cultures past, present and future. We understand culture in a broad sense to incorporate all patterns of behaviour, including thought, artistic expression, actions, institutions and artefacts. Our working definition for sustainable culture is that such a culture contains the elements of environmental sustainability and provides for the human dignity of all. When both these factors are present, the positive notion of sustainable culture can be applied.

Environmental sustainability has been most famously defined by the World Commission on Sustainable Development, chaired by Gro Harlem Brundtland, as "development, that meets the needs of the present without compromising the ability of future generations to meet their own needs."[1]

Human dignity is a more elusive concept, yet very useful for the purpose of our study. Human dignity hasto do with being able to respect one's self based on the qualities and characteristics one has, while getting such respect from others as well. We find it important to operate with concepts that intuitively makes sense to all peoples around the world, even if these concepts cannot be measured by modern sciences and administrations.

The word *development*, and the concept it represents, has become very challenging in the context of sustainability. In English, 'development' can mean anything from building a shopping complex for conspicuous consumption to providing food for starving communities in Africa or Asia.[2] As 'development'does not capture precisely enough the positive notions of international solidarity, humanitarian concerns, or fulfilling human potential, we have more or less avoided using the term.

Background

Since the Limits to Growth report of the Club of Rome in 1972 and the first United Nations Conference on Environment and Development in Stockholm in the same year, there has been lively debate about the sustainability of the modern industrial culture. The work of the Brundtland Commission in the 1980s revitalised the discussions, paving the way to the Earth Summit in 1992, and eventually led to important, new, multilateral environmental agreements. Climate change and biodiversity became

[1] WCSD 1987, p. 42.
[2] For a critique of the development discourse, see e.g. Sachs 1992 and Rahnema 2005.

household words. As soon as the full impact of the fall of the Soviet Union was felt, the neo-liberal economic agenda began to dominate the world scene, however, and environmental concerns faded into the background. Only recently,with the worsening of environmental problems and advances in democracy, have concerns about sustainability once again captured the attention and imagination of the world's people.

Despite the growing evidence and increasing concern about the risks posed by the growth imperative ofmodern industrial society, the growth-oriented model has until now continued more or less unchallenged. Some cracks, however, are beginning to appear. There is an everyday experience that the weather is not like it used to be, and more and more people link this to human induced climate change. The depletion of the natural resource base has been felt not only in terms of loss of species, but also in an unprecedented hike of commodity prices during 2007–2008. The economic crisis that hit the headlines in the Autumn of 2008 is having an impact on millions, and is now challenging confidence in the corporate capitalist economy of the neo-liberal type. Finally, the loss of meaning and purpose in life which is evident inconsumerist cultures, expressed for example in the mental depression epidemic, is raising questions about the present cultural and economic model.

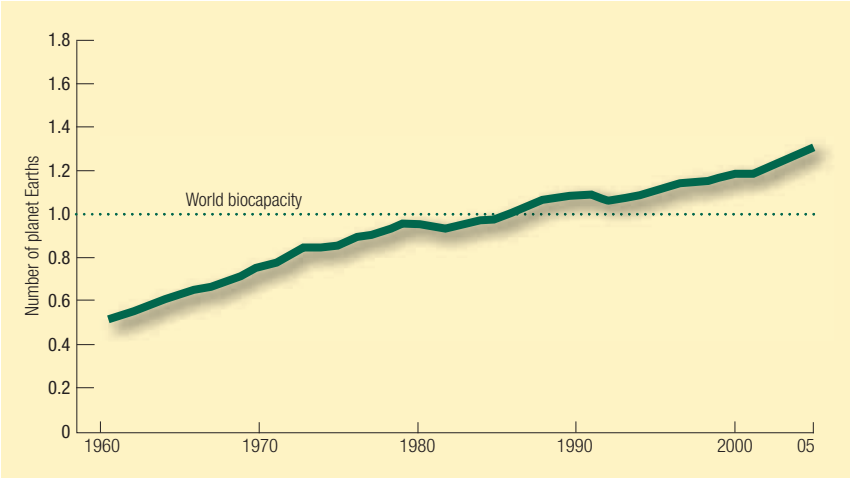
The scientific research findings indicating the environmental unsustainability of the present culture have increased year by year. The latest assessment report by the rather cautious Inter-Governmental Panel on Climate Change (IPCC) states that the resilience of many ecosystems to recover from environmental damage is likely to be exceeded this century by an unprecedented combination of climate change, associated disturbances and other global change drivers.[3] The Millennium Ecosystem Assessment is more straightforward in stating that the past gains for humanity have been achieved at growing costs in the form of the degradation of many ecosystem services and the aggravation of poverty. Furthermore, these problems, unless addressed, will substantially diminish the benefits that future generations can obtain from ecosystems, and will also become a barrier to achieving the Millennium Development Goals.[4]

There are many voices, especially in the academic community, as well as in civil society, that use much stronger language when speaking about the adverse impact of human behaviour on the environment, and the risks humanity is facing in future. The notion, perhaps first expressed by M.K. Gandhi, that continuing the modern industrial ways of life would require several planet Earths, has obtained scientific backing from the work led by the WWF in calculating the biocapacity of the earth on the one hand, and humanity's ecological footprint on the other. According to the latest Living Planet Report, the ecological footprint of the whole of humanity exceeded the

[3] IPCC 2007, p. 26. The conference of core IPCC members in Copenhagen in March 2009 concluded that "worst-case IPCC scenario trajectories (or even worse) are being realised." See. Climate Congress 2009.
[4] Millennium Ecosystem Assessment 2005, p. 15.

planet's biocapacity in the late 1980s (Figure 1).[5] Since then, continued resource use has meant excessive damage, and borrowing from the future generations.

Figure 1: Humanity's Ecological Footprint 1961–2005



Source: WWF 2008.

Most of the time the dominant discourses about environmental sustainability fall short of capturing the essential aspects of our contemporary cultures and societies. This is because our modern cultures have produced a very fragmented and isolated worldview. One could argue that this worldview extends to the level of a collective denial when it comes to the climate issue. Already at the end of the 1980s, the fundamental message from a majority of scientists was clear: if we continue burning fossil fuels and producing greenhouse gases as before, humanity will be in serious trouble. Instead of analysing all causes of the excessive emissions, including the deeper and more complex cultural ones, and taking effective measures to deal with the results, the path has been one of 'business as usual' with only minor adjustments here and there. Blaming others has been all too common a response.

Some action, nevertheless, has been taken over the past decades. Governments and intergovernmental organisations have responded to environmental concerns to varying degrees. Intergovernmental Environmental Agreements have been signed and government policies written.

In the case of Finland, the Development Policy Programme of the Government of Finland for the year 2007 aggressively tackles environmental issues. The title of the Programme itself sets the tone and presents a challenge for all actors to work: "*Towards a Sustainable and Just World Community.*" According to the Programme:

[5] WWF 2008.

"development policy should ensure that development in all countries is ecologically sustainable; therefore sustainable patterns of production and consumption must be promoted in both developed and developing countries." [6]

Furthermore, The Finnish Development Policy Programme for 2007 states that the human economy must be brought into harmony with the natural environment, and that the current Western patterns of production and consumption cannot be applied everywhere. The Programme calls for "profound changes in those Western patterns of production, consumption and living, which are now spreading all over the world. Ultimately, it is a question of the values we live by." [7]

The Project

This report is an outcome of a Project commissioned by the Ministry for Foreign Affairs of Finland in the context of development cooperation and carried out by an activist research group, the Coalition for Environment and Development (CED). The Project Team was asked to brainstorm ideas on the cultural dimensions of sustainable development. The central point of departure for the Project was the passage in the project brief issued by the Ministry that stated:

"Finland advocates change in production and consumption patterns and supports the inclusion of the principles of environmentally sustainable development in the poverty reduction strategies of its partner countries to avert the most serious environmental damage caused by economic growth…a culture conducive to sustainable development … requires a balanced development and justice on global, regional and local levels." [8]

The working title of the Project was *'Sustainable Cultures – Cultures of Sustainability: Africa-Asia-Europe Dialogues on the Future of Low Ecological Footprint Communities'*. The primary idea was to achieve three goals: work out definitions of sustainable culture, find living present day examples of sustainable cultures, and propose transformation agendas for currently unsustainable cultures. Following on this, the method chosen to attain the goals was to hold dialogues among various actors in three continents to obtain direct inputs on the ground at different levels, and to have balanced representation of different realities.

For the Project, eleven dialogue workshops on sustainable futures were conducted in six countries: Finland, India, Kenya, Nepal, Sweden and Tanzania. The purpose of these dialogue workshops was to obtain inputs from the rich oral system of communication and knowledge that exists particularly in the Global South. In each dialogue workshop, ten to fifty people came together to discuss the topic of sustainable futures, following on papers presented by invited speakers. The participants came mainly from

[6] Ministry for Foreign Affairs of Finland 2007a, p. 5.
[7] Ministry for Foreign Affairs of Finland 2007a, pp. 11-12.
[8] Ministry for Foreign Affairs of Finland 2007b.

civil society. Besides the dialogues, twenty background papers were commissioned from researchers in the same six countries, to feed into the process of reflection. Conventional research based on published texts was also part of the process.

On the basis of the dialogue workshops, we felt there was a need to bring some common sense to the debates about sustainable futures. When common sense is added to the mix, addressing over-consumption and the role of economic growth rise to the fore. There is increasing evidence to show that infinitely expanding growth in human activities is not possible in a finite natural environment.

The conclusions and results of the Project studies, papers, and dialogues are presented here in three parts: Part I is an extended study by researchers based in Finland, highlighting their principal observations and suggestions in regard to sustainable futures. It begins with a global analysis of world cultures, classifying them according to their sustainability into the 'over-consuming class', the 'sustainable class', and the 'struggling class'. This is followed by a discussion of two key features of modern over-consuming cultures, namely, the growth imperative and hierarchic societal structures; and a presentation of an agenda for the transformation of over consuming cultures into sustainable ones. The last section of Part I describes the potential that democracy and indigenous worldviews have for cultural transformation.

Part II includes summaries from the dialogues that took place in the workshops. The dialogue contributions, taken from workshop reports made by participants, have been organised thematically for ease of reading and locating related information. Although the dialogues took place in very different cultural settings, from traditional Tanzanian villages to the European Social Forum held in a modern Nordic city in Sweden, many of the messages echoed surprisingly similar themes and ideas.

Part III is a selection of the full text of the commissioned papers, and summaries or excerpts from the other papers. These texts are grouped into four categories: analyses of sustainability, sustainable livelihoods, processes of destruction, and pathways to sustainable futures.

2. Class Perspective on Sustainability of Cultures:
In which we describe the classification of the world's population according to the sustainability of cultures, and present initial challenges for each class

"Premature death by under-consumption and premature death by over-consumption are both perversions of the humanity principle." **Wahu Kaara, Nairobi Dialogue**

For the purpose of this study, we have defined sustainable culture as a combination of environmental sustainability and human dignity. In this chapter, we will attempt to illustrate the various cultural classes that follow from our definition by applying different combinations of the environmental sustainability principle and the human dignity principle.

In regard to the **environmental sustainability principle,** our focus is on pollution and resource use on an industrial scale. The justification for this focus is that, in the context of climate change, the emissions from using land for food production or firewood for cooking are different from the burning of fossil fuels in three important ways.

Firstly, there is the *ethical difference* of causing emissions for survival needs compared to emissions caused for luxury consumption. Food, shelter and clothing are universal survival needs, whereas excessive meat eating, large air-conditioned houses, and sizeable wardrobes, fall into the category of luxury. Secondly, there is the *political difference* between pollution caused by people who are not the beneficiaries of industrial modernisation and that caused by those who are. For example, if we consider the case of people causing pollution by clearing new fields after having been forcefully evicted from their lands, that is very different when compared with the pollution by those in cities who have benefited from the unjust acquisition of land and other natural resources. Thirdly, there is the *conceptual difference* between emissions from small-scale clearing of land and that from burning of fossil fuels. The biomass cleared by people can be regenerated, either by intentional human activity, or by nature if human activity on the land is discontinued. However, the greenhouse gases from the burning of fossil fuels formed millions of years ago are additions in the atmosphere for eternity when looked at from the time span of the human species, and therefore irreversible, and the fossil fuels themselves are gone forever.

In regard to the **human dignity principle,** our focus is two-fold. On the one hand, we look at the fulfilment of basic material human needs such as food, shelter and health. On the other hand, we also consider human socio-cultural needs such as respect, freedom and meaning of life. When both these sets of needs are met, then human dignity is realised. When either set is missing or incomplete, the realisation of human dignity for everyone in that culture is questionable.

Three Cultural Classes: Over-Consuming, Sustainable, and Struggling

By applying the combined principles of environmental sustainability and human dignity, four possible **cultural classes** come out. They are indicated in Table 1 below.

Table 1: Four Cultural Classes as Defined According to the Sustainability and Dignity Principles

	Sustainability Principle MET	Sustainability Principle NOT MET
Dignity Principle MET	Sustainable Class	Over-Consuming Class
Dignity Principle NOT MET	Struggling Class	Morbidly Over-Consuming Class

Both 'dignity' and 'sustainability', or a 'good life' for that matter, do not lend themselves easily and reliably to quantifiable and measurable assessment. At the same time, without some statistics, these classes remain vague, and our proposed definitions and method do not take the debate forward. Therefore, we have also estimated the numbers of these classes in different regions of the world on the basis of available, measurable data. However, at this stage we have merged the 'morbidly over-consuming' class with the 'over-consuming' class because making acceptable definitions and finding relevant data to differentiate the two would have been too difficult. Thus, there are three classes left for comparison. The estimated numbers presented here are more an invitation for debate and further elaboration, rather than final scientific findings.

The starting point for our calculations is the work of Matthew Bentley in defining a member of the 'consumer' class as a person who has an annual income exceeding USD 7,000 in terms of purchasing power parity. Bentley calculated the numbers in the 'consumer' class in the world population for the year 2002 and came up with a total number of 1.7 billion.[9] This is a group that we have named the **over-consuming class**. The justification for this label comes from the idea of climate justice, whereby each person should take equal responsibility for keeping the climate system and other natural processes in balance. Or in other words, no one should exceed a given amount of resource use or pollution. This limit, when defined and calculated, is called *environmental space*, and the concept of social justice is applied to arrive at 'fair' limits. In the case of carbon dioxide emissions, this would be less than 2 tons of CO_2 per capita per annum.[10] Amounts beyond that are indications of overuse. Since it has been found that income correlates strongly with the level of CO_2 emissions, the relatively well-established statistics for income can be used for a rough estimation of CO_2 emissions as well as other excessive burdens on the environment.[11]

The numbers in the over-consuming class in selected major countries are given below in Table 2. An important fact to note here is that there are sizeable over-consuming classes in populous industrialising countries such as China and India. On the global scale, nearly an equal number of over-consumers are located in the developed and developing groups of countries. Therefore the problem of over-consumption is not limited to the 'old' industrial countries that are listed in Annex I of the UN Climate Convention.

[9] Worldwatch 2004, pp. 6-7.

[10] Carley and Spapens 1998, pp. 77-81.

[11] The Greenhouse Development Rights Framework has arrived at a similar figure, USD 7,500 (ppp) per person, as a *development threshold* beyond which people should contribute to the costs of climate change mitigation. See GDR 2008, p. 42.

Table 2: Over-Consumers in Selected Countries and Regions 2002

Selected Countries	Over-Consumers (Millions of persons)	Share of Population
United States	243	84%
China	240	19%
India	122	12%
Japan	121	95%
Germany	76	92%
Brazil	58	33%
WORLD	**1,728**	
Of which		28%
- in industrial countries	912	
- in developing countries	816	

Source: Worldwatch 2004.

The second set of figures we have calculated is for the group that we have named the **struggling class**. The thinking here is that, although poor people hardly contribute to industrial greenhouse gas emissions, the hardships in their lives reduce their human dignity in such ways that the cultures are not considered sustainable. The figures used as the basis for our calculations are the statistics available on extreme poverty. We have taken for each region either the UN figure for malnutrition or the World Bank figure for extreme poverty, defined as living below 1$/day, whichever is higher.[12] We have then multiplied the figure by two because even with more resources than those available to people living in extreme poverty, life is a precarious struggle. For the industrialised regions, we have added a minimum five per cent to the struggling class, since homelessness, unemployment and inadequate access to health care prevent living a dignified life for at least this share of the population even in the high income societies.

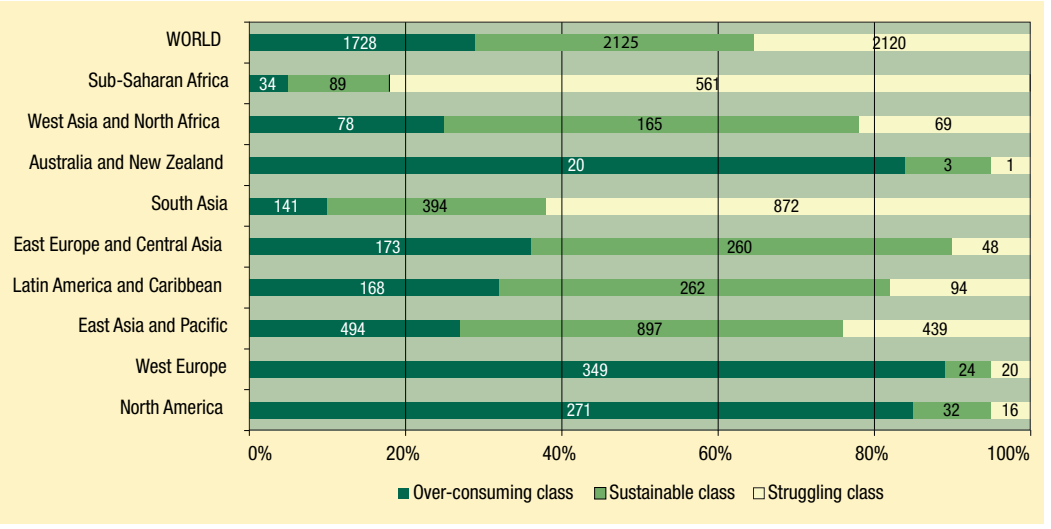
What is left between these two groups, we have consider members of the **sustainable class**. They have their basic needs met by livelihoods that do not cause excessive industrial greenhouse gas emissions; and they lead ways of life that do not consume excessive amounts of energy or non-renewable resources. This class of people is large, yet it receives very little attention in the debates about environmental sustainability. By presenting data on this sizeable class, which we define as having an annual per capita income between USD 750 and 7,000, we hope to bring more optimism to the otherwise gloomy picture for sustainable futures. If one-third of humanity has made it into this class, it should be very much possible also for the rest! In reality, this class faces constant challenges, with the appeal of the 'consumer paradise' on the one hand and the precarious existence of people in the lower rungs of the power structures on the other.[13]

[12] World Bank 2007; FAO 2008.

[13] For aspects about the ways of the sustainable class, see Bhatt; Jha; Mahajan and Valovesi in this volume.

The number of people belonging to these three classes and their relative share in the total world population and in the populations of the main geographical regions of the globe is indicated in Figure 2 below.

Figure 2: Size of Cultural Classes in Global Regions (in Millions in 2002)



Looking at the figures we can see that Western Europe and North America are dominated by the over-consuming class, while the sustainable class has the largest share of the population in Latin America, Eastern Europe, Central Asia, West Asia, North Africa and East Asia. In Sub-Saharan Africa and South Asia, members of the struggling class are the most dominant group.

Gender and Cultural Classes

The discussion of the three classes below did not pay attention to gender, as the income statistics used did not readily have gender-specific data. Since gender-specific data is difficult to find, only some rough estimates of the gender aspects of the our cultural classes are presented here.

According to Hemmati and Gardiner, the poorest 1.6 billion people in the world are 70% women.[14] Since we have called the poorest people the 'struggling' class, we can assume that the same proportion holds for the 2.1 billion people we have put in that class.

In regard to the over-consuming class, we may make reference to the estimate that 99% of the world's wealth and 90% of the world's income is held by men.[15] Therefore,

[14] Hemmati & Gardiner 2002.
[15] Robbins 1999, p. 354.

the over-consuming class would be predominantly male.

Table 3 below presents the gender division of the three classes, based on the above figures. Our estimate, then, is that two out of every three members of the over-consuming class are male, and similarly two out of every three members of the struggling class are female. The sustainable class would appear to have equal shares of both genders, since the gender division of the global population is about equal.

Table 3: Proportional Estimate of the Gender Division within the Cultural Classes

	Male	Female
Over-consuming class	2/3	1/3
Sustainable class	1/2	1/2
Struggling class	1/3	2/3

The purpose of Table 3 is to highlight the fact that the income and consumption patterns in the different classes differ considerably in terms of gender. This should be kept in mind when thinking about the transformation agendas and sustainable futures.

Geographically the gender differences among the three classes play the clearest role in regions where the sustainable class is large. Thus in regions where the sustainable class is sizeable, such as Latin America, much of Asia and North Africa, you can find within the same household that the women will belong to a different class than the men, because of gender variations in the amount of disposable income available to the members of the household. The amount of disposable income available has significant effects on a person's way of life. Men travel long distances by private while women use public transport or walk, for example. The relatively lower incomes of female-headed households across all income groups play a large role in determining the way of life of all members of such households.

Gerd Johnsson-Latham has studied the issue of gender and consumption and made pertinent observations. Her first observation is that women and men have different social conditions and lifestyles and consume differently, and man-the-polluter emerges both among the rich and among the poor. Even though family is often taken as a single socio-economic unit, she further observes that 'family' seldom represents a balanced distribution unit, and that the gender differences in access to resources and in consumption are most pronounced in poor families. She concludes: "If women's consumption levels were to be the norm, both emissions and climate change would be significantly less than today."[16]

Johnsson-Latham makes two proposals, based on gender, for sustainable futures. The first is to make clear how women live more sustainably for the benefit of oth-

[16] Johnsson-Latham 2007, p. 50.

ers, often at the cost of ill-health to themselves, and take action on this. Her second proposal is to question male roles and/or forms of masculinity that lead to unsustainable ecological and social development. She also calls for an analysis of the patterns relating to gender-specific consumption on the basis of four prototypes: a rich man, a rich woman, a poor man and a poor woman. This would introduce data concerning the actual consumption of these classes, which is now missing, and which could be applied to the cultural classes introduced here.[17]

The globally male-dominated over-consumption is creating significant hardship among the women of the struggling classes. It is the poor women in developing countries who bear the heaviest burdens of environmental degradation. These women typically lack access to essential resources while at the same time they are responsible for the food, fuel and water supplies of the whole household. Environmental loss and degradation considerably increase women's workloads in obtaining these essential resources. This increased pressure also places heavy emotional and psychological burdens on women and family relationships.[18]

[17] Johnsson-Latham 2007, p. 32.
[18] Hemmati & Gardiner 2002, p. 24.

3. Countries and Sustainable Culture

In which we present the key features of four different assessments of sustainable cultures

"We have plenty of varieties of bananas in Tanzania, why should we go to GMOs? They are saying that we are hungry, but we think that it is the big corporations that are hungry to make more profit from us."
Loyce Lema, Dar es Salaam Dialogue

Assigning individual countries to the classes defined in the previous chapter requires an assessment of the dominant cultures of each country, using the combined criteria for environmental sustainability and human dignity set for each of the three classes. Such an assessment is also useful to understand notions of the sustainability of cultures. Since nation states can be very heterogeneous entities, the results of these assessments are by definition approximations only, to serve as examples and illustrations.

Since the late 1990s, some interesting work has been done in assessing the environmental sustainability of countries, ranking them according to previously set criteria to create indexes of sustainability. In this chapter, we first present data from an Ecological Footprint study conducted by the Global Footprint Network, along with the Human Development Index. This is followed by a description of two global indexes of nations: the Happy Planet Index and the Environmental Performance Index. The data from these four sources are then combined to find examples of individual countries with sustainable cultures.

Ecological Footprint and Human Development Index Combined

The **Ecological Footprint calculation** provides a global assessment of the environmental burden different countries put on the Earth. It is perhaps the best known effort to assess the environmental impact humanity has on the environment. The Ecological Footprint measures how much land area is required to sustain a given population at its present levels of consumption, technological application and resource efficiency, and is expressed in global-average hectares (gha). The largest components of the ecological footprint are the amount of land used to grow food, trees and biofuels for the population to sustain its present levels of their consumption, and the size of the areas of ocean used for fishing, as well as the amount of land required to support the plant life needed to absorb and sequester CO_2 emissions from fossil fuels being burned by the population in question. The Ecological Footprint takes account of the fact that in a global economy people consume resources and ecological services from all over the world. The footprint of a country is thus best understood as a measure of the worldwide environmental impact of that country's consumption. The Ecological Footprint is calculated by the Global Footprint Network and promoted by the World Wide Fund for Nature (WWF, still known in North America as the World Wildlife Fund), among others.

The Global Footprint Network has calculated the maximum biocapacity of the

world's natural resources to be 2.1 global hectares (gha) per person. Therefore, any country where the per capita ecological footprint is below the 2.1 gha figure, can be considered to be within the limits of global environmental sustainability. Of the some hundred countries analysed by the Global Footprint Network, about half fall on each side of the threshold.[19]

Human Development Index (HDI) was developed by the United Nations Development Programme (UNDP) in the 1990s as a way to present a broader picture of the human condition in various countries than that provided by the figures for Gross Domestic Product (GDP) alone. In addition to the size of the economy as measured by GDP, the HDI adds a health indicator in terms of life expectancy and an educational indicator in terms of the adult literacy rate. HDI does not pay any attention to environment.[20]

Combining the data from these two sets, the Ecological Footprint and the HDI, gives us an idea as to which countries might be representative of sustainable cultures. In the HDI Category 'High Human Development', only one country out of the seventy in the Index has an ecological footprint of less than 2.1: Cuba (1.8 gha). All the top countries in the High Human Development category exceed the maximum biocapacity footprint by several times. For example, Norway 6.9 gha, Australia 7.8 gha, Canada 7.1 gha and Finland 5.2 gha.

In the high end of the Medium Human Development category, a number of countries can be found with an ecological footprint of less than the world biocapacity limit of 2.1 gha per capita. These countries include, in the order of their HDI rank, Colombia, Dominican Republic, Armenia and Jordan.

Happy Planet Index

The Happy Planet Index (HPI) is an index of human well-being and environmental impact introduced by the New Economics Foundation (NEF) in 2006.[21] The HPI is designed to challenge well-established indices of countries' development, which are not taking sustainability into account.

The HPI is defined as a measure of the ecological efficiency of delivering human well-being. It reflects the average years of happy life produced by a given nation, per unit of planetary resources consumed. Put in another way, it represents the efficiency with which countries convert the earth's finite resources into the well-being experienced by their citizens.

The HPI incorporates three separate indicators: self-reported life satisfaction, life

[19] WWF 2008. See also www.footprintnetwork.org.
[20] UNDP 2007.
[21] NEF 2006a. See http://www.happyplanetindex.org/ for the 2009 HPI report.

expectancy and the country's ecological footprint. Although the statistical calculations that underlie the HPI are quite complex, conceptually it is straightforward and intuitive:

$$\text{HPI} = \frac{\text{Life satisfaction x Life expectancy}}{\text{Ecological footprint}}$$

The combination of the **life satisfaction** and **life expectancy** is called the Happy Life Years, an indicator devised by the Dutch sociologist Ruut Veenhoven and defined as the degree to which people live long and happily in a country at a certain time. Happy Life Years correlates with factors such as affluence, education, political freedom and gender equality – however, it is not completely explained by them. The main source for the life satisfaction data is the World Database of Happiness, which uses data primarily from the World Values Survey, a massive global survey carried out every five years. The life expectancy data is from UNDP's Human Development Report.

Ecological footprint data is the same as described above.

The best scoring countries in the 2006 HPI report are Vanuatu, Colombia, Costa Rica, Dominica (Dominique, not to be confused with the Dominican Republic), and Panama, while Burundi, Swaziland and Zimbabwe are at the bottom of the list.

Environmental Performance Index

The Environmental Performance Index has been developed by Yale University and Columbia University in collaboration with the World Economic Forum and the Joint Research Centre of the European Commission. The idea of the EPI is to use outcome-oriented indicators in assessing environmental performance. Its method of calculation is to quantify and numerically benchmark the policies and practices of countries. This index was first published as the Pilot Environmental Performance Index in 2002, and was designed to supplement data for calculating progress on achieving the environmental targets set forth in the U.N. Millennium Development Goals.

The EPI has a set of 25 indicators relating to environmental health and the ecosystem's vitality. The indicators include things such as local water and air pollution, sulphur and carbon emissions, water stress, conservation, and natural resource use.

Unlike the Ecological Footprint, the Environmental Performance Index does not pay attention to the level of consumption in the countries in the index, but rather looks mainly at the local environmental impacts in the production processes.

In EPI for 2008, the top five countries were Switzerland, Norway, Sweden, Finland and Costa Rica, while Sierra Leone, Angola and Niger were at the bottom end.[22]

Combined Outcome: Colombia, Cuba, Costa Rica and Sri Lanka

As we find some merit in all three ways of looking at sustainable cultures in a national context, a cross tabulation of the results should shed more light on the topic. The top ten countries in each of the three assessments are presented in Table 4 below.

Table 4: Top Ten Countries in the Three Assessments

	Ecological Footprint with Human Development Index	Happy Planet Index	Environmental Performance Index
1	Cuba	Colombia	Switzerland
2	Colombia	Costa Rica	Norway
3	Dominican Republic	Panama	Sweden
4	Armenia	Cuba	Finland
5	Jordan	Honduras	Costa Rica
6	Peru	Guatemala	Austria
7	Philippines	El Salvador	New Zealand
8	Tunisia	Vietnam	Latvia
9	Georgia	Bhutan	Colombia
10	Sri Lanka	Sri Lanka	France

Note: In the HPI column mirco-states such as Vanuatu and Dominique have been excluded for comparability.

Despite the differences in the criteria and approaches, remarkably one country appears in the top-ten ranking of all three of the assessments: **Colombia**. Should we, therefore, conclude that Colombia is the ideal country as far as sustainable culture is concerned? If we would ask ordinary people in Colombia, perhaps the answer would be positive. But responses by the indigenous populations or communities affected by the violent conflict of the left, the right and the could be quite different. Nevertheless, Colombia should definitely feature in our mind-map when sustainability of cultures is under discussion.

Cuba, Costa Rica and **Sri Lanka** each feature in two of the assessments and are therefore also candidates for countries with a sustainable culture. Cuba is an interesting case, as it underwent rather heavy restructuring during the 1990s after the oil supplies from the Soviet Union were cut off. During this special period of decarbonisation, Cuba had to cut energy consumption, improve energy efficiency and harness renewable energy sources. Costa Rica is known as a proactive member of

[22] EPI 2008.

the international community in environmental agreement negotiations. Perhaps their word should carry more weight, given the outcome of this assessment. Sri Lanka has recently made the news because of the escalation of the civil strife. However, if these assessments of sustainability are any grounds for merit, perhaps Sri Lanka should also be in the forefront of the sustainability debate.

We are not saying that these four countries are now examples and role models of sustainable culture. The purpose of this exercise was to present and illustrate for discussion various quantifiable definitions of sustainable culture, along with the indexes and rankings of countries based on these definitions. To conclude this chapter, we would like to restate that the quantifying and measuring presented here should not be taken too seriously, as the idea of sustainable culture defies quantification. However, for the purposes of discussing how modern society can function in an environmentally sustainable way, such presentations can be quite useful when done truthfully. The discussions in this section should be primarily seen as an invitation for further work on and debates about the criteria and methods used for assessing countries in the context of sustainable culture.

4. From Growth Imperative to Sustainable Economy:
In which we show the unsustainability of GDP growth, and outline elements for an alternative

"Markets and consumerism have changed the way of doing things on a sustainable basis. We no longer get ghee from milk, manure from animals, use our indigenous knowledge, respect our traditional governance and management systems, and the list is endless. We also promote policies that deny peoples' access to their livelihood, and infrastructure development that destroys nature. Where is the future?"
Martin Simotwo, Nairobi Dialogue

The economy is one of the most contested areas of culture. This is because of the way power and money are interconnected. In the debates about environmental sustainability and human dignity, the question of economic growth has been central for some decades. In this chapter, we attempt here to show a way out of the economic growth dilemmas by assessing the impacts of growth and introducing different paths for the three sustainable culture classes in the context of a sustainable economy.

GDP as a Fraction of the Complete Economy

To understand economic growth, one has to understand what this 'economy' that is supposed to be growing really is.[23] According to Wikipedia, "an economy is a set of human and social activities and institutions related to the production, distribution, exchange and consumption of goods and services."[24] However, most of the time when 'economy' is discussed, the concept refers only to that part of the economy which is measured in the national accounts as Gross Domestic Product (GDP). This partial and fragmented way of dealing with 'economy' is the first reason why economic growth is a questionable societal objective.[25]

Since the Second World War, a nation's economic growth has been almost universally measured as the growth of Gross Domestic Product (GDP). The GDP is technically the total value of final goods and services produced within a country's borders in a year. Yet only those goods and services are counted which are included in the so-called system of national accounting. This system was developed during the Second World War in the USA. To make the accounting process easy and exact, and to measure mostly those activities that are interesting to the powers that be, a vast array of economic processes was – and continues to be – excluded from the system.

Thus, for example, the production of goods and services within households or at home are not included in growth calculations. This economic section is large even in rich countries – especially in families with small children – but it is vast in poor countries. It covers, for example, food preparation, cleaning, small repairs, home maintenance, care for the young, the sick and the old, teaching small children and psychological and spiritual support given to family members and peers.

Another important chunk of the 'economy' excluded from GDP is the informal

[23] This section on growth and economy draws from Olli Tammilehto's supporting work. See also Tammilehto 2003.
[24] http://en.wikipedia.org/wiki/Economy
[25] For critiques of the mainstream economics, see for example Bakshi 2007 and Marglin 2008.

exchange of goods and services such as gifts or in barter. This, too, is significant even in the Global North. It comprises, e.g., the gifting and exchanging of e.g. child care services, children's clothes, and homemade food, as well as products of subsistence farming and handicrafts.

What may come as a surprise is that even part of the monetary based exchange of goods and services is also excluded from the economic growth concept. These exchanges take place within economic activities that do not show up in official tax or other statistics and do not leave other paper or computer trails. Examples of such activities are flea markets and other small trading. In rich countries this is not estimated at all; and even in the case of poor countries, it is often underestimated because it is calculated on the basis of economic evaluations of informal exchanges. Some of these activities are illegal (the so-called 'black' or 'underground' economy of drugs, bribery, etc.) but some of them are fully legal.

But by far the greatest omission in the GDP calculations is the sum total of production and services provided by nature without human mediation. These include sunshine, wind, breathable air, tolerable temperatures and the life-supporting chemical processes of the environment. By leaving out such natural services, the GDP calculations totally miss an essential element of human economy.

However, even part of the human mediated services of nature are excluded. These are services and production opportunities mediated not by private or state property, but provided by common property regimes, or commons, comprising e.g. common forests, pastures, fisheries, and so on.

In addition, cultural commons are also largely excluded from the GDP accounts. These are typically knowledge and information spaces in the public domain, such as folk wisdom, public libraries, the Internet, and open source computer programs.

All these excluded parts together can be called the 'informal' economy. When the official GDP-measured economy is added together with the informal economy, we call the *complete economy*. For human welfare and for future of the life in the planet, it is essential that what actually happens to the global complete economy is monitored. There is rich empirical evidence and many conceptual links showing that growth of GDP-economy is connected with shrinking of and damage to the informal economy, so that the net result is actually negative.[26] Some of these situations are discussed below.

Growth and the Environment

It is commonly suggested that it is GDP growth that provides the resources needed to improve the environment. In this reasoning, it is assumed that today's environmental

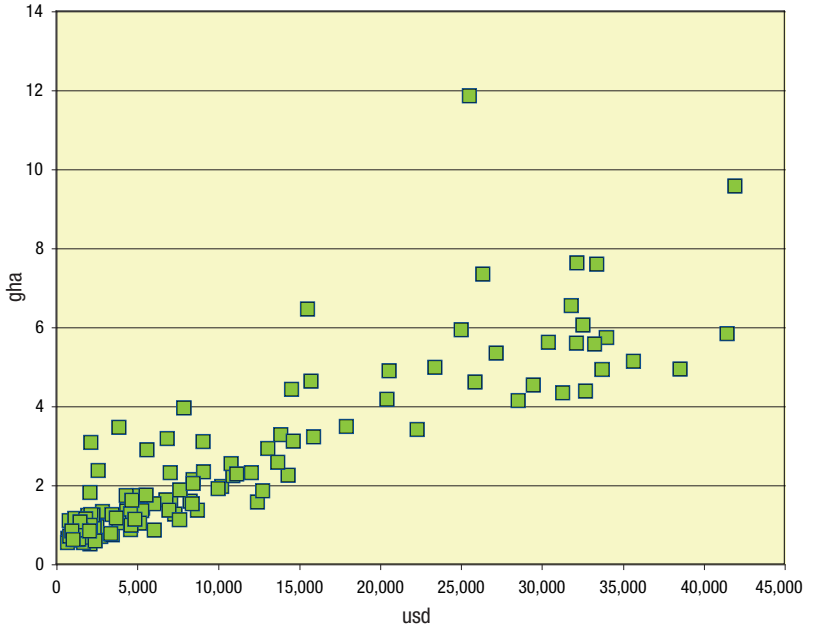
[26] For overviews of the problems with economic growth, see for example Lamba 2005, Shiva 2008 and Meadows, Randers and Meadows 2005.

problems are marginal and not structurally related to the character of the modern official economy.

Environmental problems have been externalised; and our modern societies and international trade have allowed the ecological debt to grow unchecked for centuries. Since externalising environmental and other costs is one of the main factors that enables the growth of GDP, environmental problems are increasing rather than being solved by economic growth. This view of growth in GDP being a cause of environmental problems is gaining wider acceptance year by year. For example, according to the former Administrator of the UNDP, Gus Speth, "In the recent past and in the present, the economic growth actually experienced has been and remains a principal source of our major environmental problems."[27]

Those believing in the blessings of growth are misled by the illusion created by the progress made in solving local ecological problems in old, established industrialised countries. Economists have constructed theories stating that after the economic development of a country reaches a certain point, the country's ecological problems are going to decrease almost automatically. Such economists speak about the overturned, U-shaped, "Ecological Kuznets Curve" in which economic growth leads to a situation in which environmental problems first increase and then start to decrease. While it is

Figure 3: Per Capita Ecological Footprint and GDP of Countries (xy scatter plot)



Source: http://finder.geocommons.dynalias.com/overlays/93

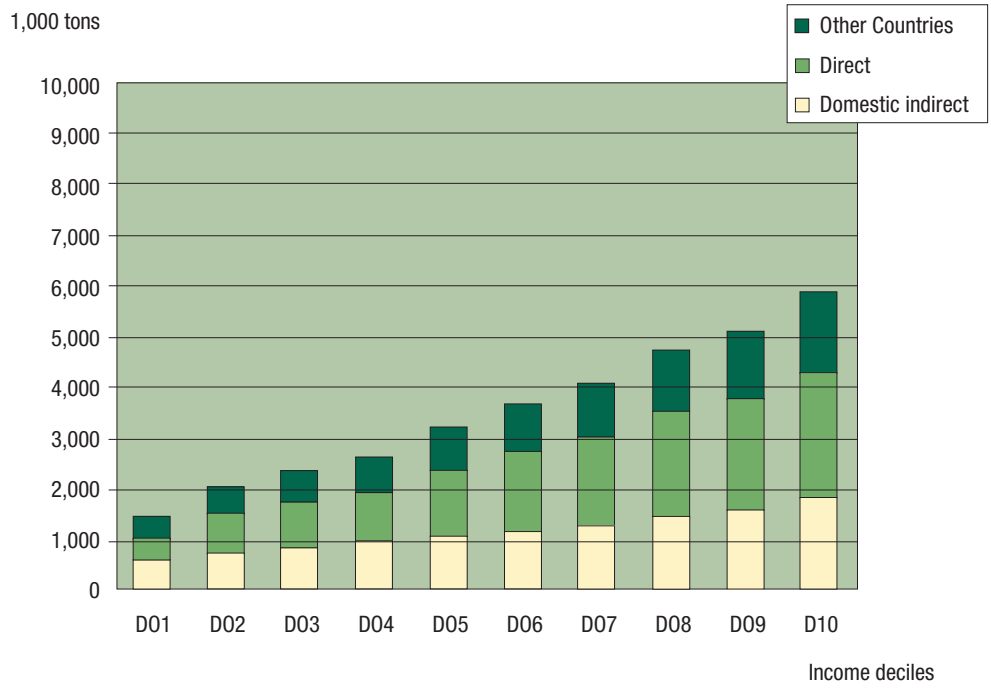
[27] Speth 2008, pp. 111-112.

true that in recent decades the industries in the North have successfully been forced to clean up industrial processes that are polluting the local environment, the unforeseen global problems, such as climate change or the relocation of polluting and destructive activities to countries in the South, prove that there is no factual support for the idea of greater wealth leading to less pollution.[28]

Another way to assess the relationship between the size of the formal economy and its environmental impact is to process the two together. When using the Ecological Footprint and GDP data for 126 countries, a clear correlation between these two emerges. Per capita income of 13,000 USD per year seems to be a threshold. With a higher national income, no country manages to stay within the annual 2.1 gha per capita sustainability threshold based on biocapacity. The result of the calculation of Ecological Footprint in relation to GDP growth is presented in Figure 3.

Similar pattern emerges from household data. For example in the case of Sweden, the per capita CO_2 emissions correlate perfectly with the per capita incomes of the households. The richer the people are the more they pollute. In Figure 4 the data is presented from year 2000.

Figure 4: Per capita CO_2 emission of income deciles in Sweden, 2000



Source: http://www.scb.se/statistik/MI/MI1202/2004A01/MI1202_2004A01_BR_MIFT0408.pdf

[28] Empirical criticism against this so-called "Ecological Kuznets Curve", see Fischer-Kowalski & Amann 2001; Seppälä et al., 2001.

In this case from Sweden, the members of the richest decile (ten per cent of the population) cause almost four times more CO_2 emissions than the poorest. In countries with larger income inequalities, the difference would be higher.

One common line of thinking is that growth is needed for the development and diffusion of environmentally better, green technologies. In this hypothesis, the technological risks associated with new innovations are ignored or underestimated. There seems to be a pattern that the harmful effects of a promising technology are realised only decades or generations after their initial application, by which time the repair costs may easily outweigh the benefits. The risks and problems surrounding and accompanying new production methods and products – such as cellular phones, genetic engineering, nanotechnology and new chemical substances – may be such that the growth for green technologies hypothesis proves to be a dead end.[29]

Growth and Welfare

The conventional wisdom that "growth leads to improved welfare" is also very controversial. While we agree that there is a historical link between growth of the formal economy and improvements in human wellbeing up to a point, we want to underline that such a link has become weaker, or even become negative, as soon as the level of the formal economy has exceeded a certain level. For example, in the case of food and nutrition, we can globally see a pattern that people with minimal incomes have too little to eat, people with an adequate income have enough to eat, and people with high incomes tend to eat too much and end up ill or in poor health.[30]

In the case of the national and international economic systems, all aspects of the complete economy have an impact on well-being of humans. When the sphere of the formal economy grows at the cost of the other spheres of the complete economy, the net result can become negative.

This has been convincingly demonstrated by the efforts to adjust the GDP calculations by deducting harmful elements such as crime and pollution, and adding positive elements such as voluntary work and community service. The first Index of Sustainable Economic Welfare (ISEW) was published for the United States in 1989 by Herman Daly and John B. Cobb.[31] Later, the methodologies for calculating economic growth have been further revised, and a more refined variant, the Genuine Progress Indicator (GPI) is becoming more popular.[32]

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[29] For discussions on health and environmental problems caused by mobile telephones; see Firstenberg 2004 and Nordstrom 2004; on genetic technology similarly, see Smith 2003; and on nanotechnology, see ETC 2003.

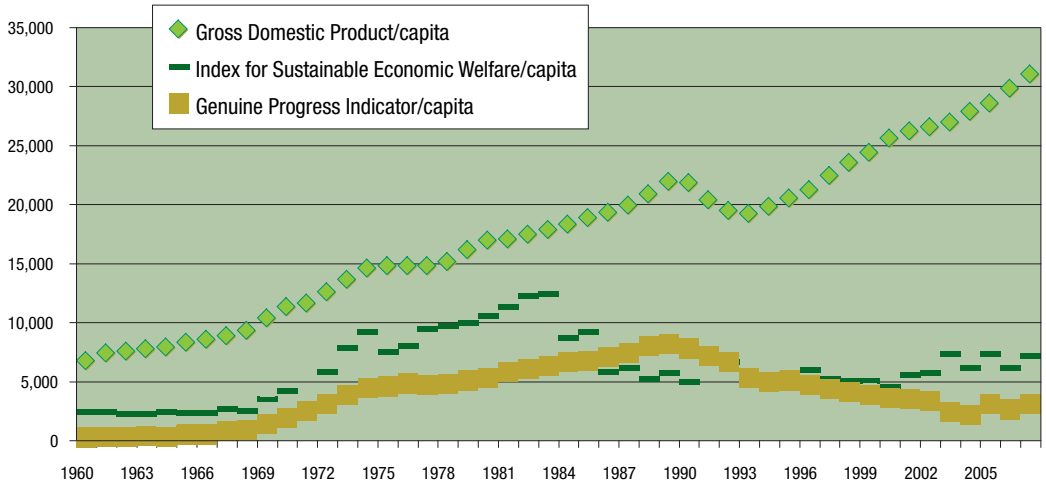
[30] In the industrial countries, the high-income groups tend to be more health conscious and follow more healthy diets than low-income groups, however.

[31] Daly and Cobb 1994.

[32] http://www.rprogress.org/

Typical outcomes of such assessments show that the link between growth in the GDP and improved wellbeing has not been there in the industrialised countries during the last few decades. For example, in the case of Finland, presented in Figure 5, the ISEW figures became delinked from the GDP in the early 1980s and the GPI in the early 1990s.

Figure 5: Per Capita GDP, ISEW and GPI for Finland 1960-2007



Source: Rättö 2009.

Although happiness is a difficult thing to measure, attempts have been made to asses it. One way to approximate it is to conduct survey questionnaires about subjective wellbeing. Comparing the historical trends in these questionnaires with GDP data gives a straightforward answer: the rapid economic growth of the past decades has not improved subjective life satisfaction. Figure 6 below illustrates the data for Japan and the UK.

Perhaps this is enough evidence to show that growth does not correlate with wellbeing or happiness in industrialised societies. This was noted already by Robert Kennedy in the year 1968:

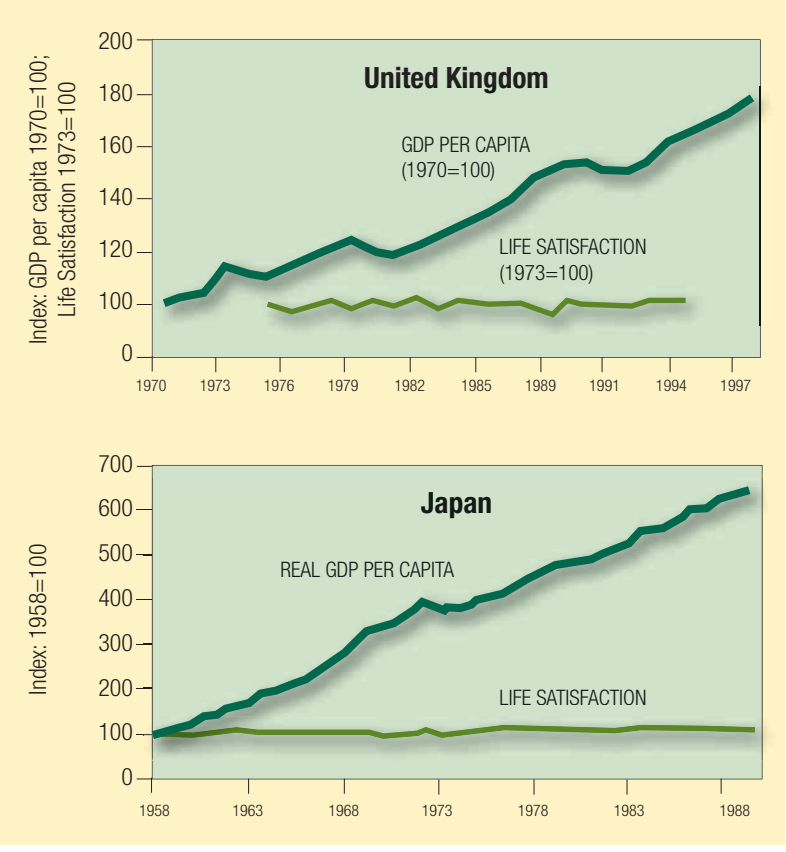
"*The GNP counts air pollution and cigarette advertising, and ... the destruction of the redwood ... Yet [it] does not allow for the health of our children, the quality of their education, or the joy of their play ... it measures everything, in short, except that which makes life worthwhile.*"[33]

However, we are not claiming that the formal economy and human welfare are totally unrelated. In the cases of health, longevity and modern education, there is a

[33] Quoted in NEF 2009.

correlation up to a point where growth of the GDP economy tends to go together with improvement of health and basic education. The causal explanation of the correlation, however, can be seen from two directions. One can say that the formal economy grows because of improvements in health and education of the poor majority. Healthy, educated people are more active in the formal economy, and thereby there is growth. Or one can say, as is the case more often, that economic growth enables better health and education services, which are also reflected in people's improved wellbeing. We conclude here that economic growth and people's wellbeing are interrelated phenomena; and for a better balanced view, more emphasis should be placed on how the real improvements in the condition of human wellbeing influence the GDP statistics, rather than vice versa.[34]

Figure 6: Subjective Wellbeing and GDP in the UK and Japan



Source: Speth 2008, p. 132.

[34] See also Dhar in this volume.

Growth and Poverty

It is commonly argued that economic growth increases the incomes of the poor, and therefore growth is absolutely necessary for reducing poverty. This argument, too, is very controversial.

There are many studies which show that, especially in poor countries, and particularly after 1980, both the economy and inequality grow side by side.[35] Thus, the rich get richer but the poor stay poor. Further, according to one study, the structural adjustment loans given to poor countries during the last decades decrease substantially the connection between growth and the income of the poor.[36] For example, in spite of fast growth in India in the 1990s, poverty was not alleviated – on the contrary, according to many studies it was aggravated.[37]

It is also disputable whether an increase in monetary income of the poor is a measure of decrease in poverty: when the economy is growing, many other things, besides incomes, that have an effect on the amount of misery in people's lives, change. In new circumstances there may be many more necessary expenses. Also, the utility of one inflation-corrected dollar may decrease.[38]

For example, the official consumer expenditure surveys in India show that the structure of consumption of the poor has changed considerably in recent decades. More money is needed than before for non-food expenditures. Furthermore, part of the food expenditures were diverted from cereals to other food items. These changes were, first of all, related to structural changes in the society: many formerly basic foodstuffs have become much more expensive because rural people have lost access to common property resources. Many villages have lost their markets and job opportunities, and much more money is needed for transportation. The quality of public health care has deteriorated and trust in village home remedies and practitioners has been undermined, so that people resort to private practitioners who charge substantial amounts for treatment. Thus, even though many poor people have more money, their income is less sufficient to cover their costs than earlier.[39]

A recent study on growth and poverty carried out by the New Economics Foundation looked at the way growth relates to the incomes of the poorest segment of the population. This study concluded that, "global economic growth is an extremely inefficient way of achieving poverty reduction and is becoming even less effective."[40] The study revealed that during the 1990s, for each 60 cents spent to benefit the extreme poor, the world economy needed to grow by 100 dollars. With such inefficiency, it

[35] See e.g. Cornia 2001; Galbraith et al., 2001.
[36] Easterley 2001.
[37] See e.g. Mehta 2001.
[38] See e.g. Sen 2001, pp. 109-110.
[39] Mehta & Venkatraman 2000; Mehta 2001.
[40] NEF 2006b.

is no surprise that the poor remained poor despite rapid economic growth globally until 2008.

Growth and Displacement

One case where economic growth is most clearly juxtaposed with sustainable culture is the case of displacement of people by industrial development projects. Over the centuries cash crop plantations, open cast mines, high dams and other industrial projects have taken over large areas of land, displaced hundreds of millions of people, and transformed diverse natural habitats into monocultures, deserts, lakes or built-up areas. In national statistics, all such industrial development projects have boosted economic growth since they began to be implemented in the 1950s. The informal household and agricultural cultivation economies of the affected people and areas did not feature in the statistics at all, so that the shift to a monetary economy created huge growth in the GDP calculations.[41]

When such projects have taken place in a situation where the affected people have very little political power and information resources such as education, the impacts have been devastating. During the colonial period, people were driven off their lands without having any say in the process, and with only a token compensation at best. Not much has changed since the start of the independence of former colonies. The decades of fast modernisation in the newly independent countries which has taken place since the Second World War have witnessed unprecedented volumes of forced evictions.

According to Jason Stanley, some 10 million people become displaced annually because of dam construction, urban development, building of infrastructure and natural resource extraction projects. Besides the people who are forcefully evicted, there are many more whose livelihood is adversely affected in the project areas. Moreover, those communities who have to receive the displaced populations are also often facing difficulties themselves. Therefore, the number of people adversely affected is clearly larger than the number of displaced people alone.[42] If we take the conservative figure of 10 million displaced people as an annual average starting in the year 1950 when development took off in many parts of the world, this translates into some 600 million people displaced by industrial development over the years until today. One can therefore say that **during the past 60 years, for every three persons of the over-consuming class one person has been displaced** to provide space for the demands of consumption. This figure is staggering, but corresponds to the ground level experiences in many parts of the world.

[41] For accounts of displacement caused by mining, see Dash and Rodrigues in this volume.
[42] Stanley 2004.

So, Why Growth?

Why then is economic growth so important even though its benefits are limited and the damage it causes is increasingly serious? And why is there so much faith in unlimited growth in a finite world – a proposition which common sense should tell us is impossible?

One explanation is that the formal economy works like a giant ponzi scheme,[43] providing easy, continually growing profits to the people on top of the economic power hierarchy. As long as increasing numbers of people are ready to invest more and more labour and resources in the GDP economy, the scheme holds up and participants are hopeful. When the trust and faith is gone, it collapses. It is not clear whether the current contraction of the GDP in industrial countries is such a collapse or an ordinary cyclic change, but clearly a ponzi scheme cannot go on forever.

Another explanation is that the dynamics of the modern economy require increasing growth, because technological changes and competition among companies will make workers redundant unless demand continues to increase. Social unrest caused by unemployment would be so destabilising that the society is oriented towards an ever-growing formal economy. Since the beginning of the 19th century, European economists and politicians have agreed that state policies must encourage and stimulate general growth in production in order to avoid social chaos.

A third explanation is that economic growth functions as an ideology that promises better living and prosperity for all. It works as a surrogate to democracy. Under the growth ideology, large gaps in power and wealth generated by capitalism can be maintained. People who are waiting for the trickle-down effect to reach them are less prone to revolutionary activity.

Sustainable Economy

Finding an alternative to the growth imperative is an urgent task for cultures and societies. Given the above evidence, it should not be too difficult to motivate our societies to find more sustainable objectives. Basically, the question is one of finding and maintaining a good life. There are some common principles that define good life for all, and economics should serve those goals.[44]

The first step towards a sustainable economy would be to construct a holistic understanding of the *complete economy* instead of focusing only on the monetary formal economy. Based on the current mainstream understanding of the concept of an 'economy' in economics, a comparable understanding in biology would mean

[43] A Ponzi scheme is a fraudulent investment operation that pays returns to investors from money paid by subsequent investors rather than any actual profit earned. It is named after Mr. Charles Ponzi, currently the most infamous ponzi schemer in the world is Mr. Bernard Madoff.
[44] See Pietilä and Kailo in this volume.

Text Box 1: The Complete Economy

OFFICIAL ECONOMY, included in the Gross Domestic Product (GDP):
Private consumption + private investment + government spending.
Includes undesirable things such as the formal costs of dealing with illness, crime, pollution, military build-up, war, and natural calamities.

INFORMAL ECONOMY, not part of the GDP:
Household gift economy (care economy): Food preparation, cleaning, small repairs, and care for the young, the sick and the old; teaching small children, and psychological and spiritual support given to family members and peers.

Production for own use: Subsistence gathering, fishing, cultivation, artisan production.
Gift economy and barter exchange beyond the household: Sharing and exchanging products and services with neighbours, relatives, friends, community members.
Legal non-recorded monetary exchange of goods and services: Trade in open sky markets, informal sector employment.
Nature's free services: Production and services provided by nature without human mediation: Sunshine, winds, breathable air, tolerable temperatures and life-supporting chemical compounds and processes in the environment.
Material commons: Services and production opportunities mediated not by private or state property but provided by common property regimes, or commons. They comprise common forests, pastures, fisheries, etc., where informal or formal social arrangements regulate resource use.
Cultural commons: knowledge and information spaces in the public domain such as folk wisdom, public libraries, the Internet and free software.
Black economy: Production and trade of illegal services (drugs, prostitution, arms, bribes) and illegal informal employment, etc.

constructing an understanding of all living organisms by focusing exclusively on only mammals. Put in those terms, that seems silly and unacceptable, but in economics such exclusion and bias is considered normal. Moving towards consideration of the complete economy in economic studies and discussions of economic growth means major transformation of both the study and management of the economy as we know them now.

The second step towards a sustainable economy would be to apply the *principles of human dignity for all and environmental sustainability* as primary objectives of the economy. In the case of human dignity, the criteria for successful economic theory or practice would be how the application of the theory or practice benefits the weakest members of the society. Such a last-person-first idea has been proposed by M.K. Gandhi who referred to the moral teachings of various religions and thinkers.

In the case of environmental sustainability, we would recommend the definition worked out by the UK Sustainable Development Commission, that a sustainable economy should be regarded as the means for reaching a strong, healthy and just society that lives within environmental limits.[45]

Applying these two principles would replace the universal growth imperative with a sustainable economy through the application of different scenarios for each of the three cultural classes indicated earlier: contraction of the economy for the over-consuming class (degrowth), steady-state or an economy of permanence for the sustainable class, and empowerment for the struggling class.

Degrowth for the Over-Consuming Class

For the overgrown, over-consuming societies, following the principles of sustainable economy would lead to contraction of the monetary wealth/income as measured in the GDP. There is a need in this class to cut consumption to return to a sustainable environmental space and biocapacity levels. This change would reduce the volume of the formal economy among the members of the over-consuming class. Such a *degrowth scenario* is being welcomed by an increasing number of scholars and actors.

Proponents of degrowth argue that current economic growth is not sustainable over the long term because it depletes natural resources and destroys the environment, and because it fails to help populations improve their welfare significantly. The challenge is to work out degrowth policies that would be just and bring about the required changes in a democratic and incremental manner, rather than through economic collapse and an unfair burden on the least powerful.

A landmark of the degrowth approach was the conference 'Economic De-Growth for Ecological Sustainability and Social Equity' in Paris in April 2008, where some two hundred scholars met to present and discuss views on degrowth in a spirit of coming out of the growth imperative. The objective was to overcome the decoupling thesis that efficiency in technological systems will solve the environmental problems, as the rebound effect of ever-growing consumption reduces the overall benefits. Thus degrowth proves to be the best option. In the conference declaration, degrowth, *decroissance* in French, is defined as "a voluntary transition towards a just, participatory and ecologically sustainable society."[46]

According to Fabrice Flipo, degrowth is not a unified doctrine of ideology, but a coming together of several sources which cross today without even being convergent. The dominant source here is environmental research and ideologies within the tradition of the limits to growth debates. Another related source is bio-economics, as

[45] Jackson 2009, 108.
[46] Flipo & Schneider (eds.) 2008.

established by Nicholas Georgescu-Roegen. Three additional sources are degrowth research, primarily the work of Serge Latouche; democratic sources in the spirit of Ivan Illich; and a crisis of direction in modern societies, as already noted by M. K. Gandhi.[47]

How can the degrowth scenario become a reality? We can see that it is and will continue to be resisted by the over-consuming classes, as degrowth would involve not only reduction of monetary wealth, but also loss of associated political power. The scenario only becomes feasible through a process of democratisation whereby the interests of the majority of the humanity, including future generations, will begin guiding the behaviour of the elites. When this happens, giving up over-consumption will come naturally, and the advantages of sustainable living will appear as an attractive option.

Steady-State Economy for the Sustainable Class

For the sustainable class, a *steady-state economy scenario* of an economics of permanence would be the natural one to choose. Such steady-state sustainable communities and societies would continue to change and evolve, but within the current level of environmental impact and further improvement in human dignity on the last-person-first philosophical basis.

The phrase *steady-state economy* originates from ecological economics, most notably the work of Herman Daly.[48] The idea connotes constant populations of people and constant stocks of capital. It also has a constant rate of throughput; i.e., energy and materials used to produce goods and services. Constancy does imply stagnation. In the short run mild fluctuations in population and throughput are normal, with the aim of stable equilibrium in the long run.[49]

Even before the growth debates began in earnest, the Gandhian economist J. C. Kumarappa coined in 1948 the term *economy of permanence* as the desirable societal goal for liberated India. Observing the natural economy, Kumarappa noted that nature ensures the cooperation of all its units, each working for itself and in the process helping other units to get along. When this works out harmoniously and violence does not break the chain, there is an economy of permanence. Its highest form is the economy of service which "functions neither for its present need nor for its personal future requirement, but projects its activities into the next generation, or generations to come, without looking for any reward."[50]

For the sustainable classes the steady-state or permanence scenario will come natu-

[47] Flipo 2008.
[48] Daly 1977.
[49] See Czech & Tietenberg 2007, Goldsmith 1992, 193-194.
[50] Kumarappa 1997, pp. 4-7.

rally with only a little processing to liberate the imagination from the ideas of economic growth and material progress. The entertainment industry dominated by advertisement interests currently tries to attract the members of the sustainable classes to invest heavily in monetary economy and join the over-consuming culture. When this pressure can be reduced through regulation of advertisement and through protecting and nurturing the material and cultural basis of sustainable livelihoods, the economics of permanence can flourish.

Empowerment for the Struggling Class

For the struggling class, achieving a sustainable culture would take place primarily through an *empowerment scenario*. The current poverty of the struggling class is clearly a symptom of powerlessness. Successful transformation into a sustainable culture would mean a situation in which the poor would have the right to those natural resources that they depend on, the right to have their basic needs met by their own efforts whenever possible, and the right to an equal say in matters that affect their lives, through having a voice in a political process. When all these positive changes take place and someone observes that economic growth using the GDP formula subsequently occurs, then further growth should not be a problem.

The *last-person-first economics* would be of primary importance for the empowerment of the struggling class. Current economic planning and understanding is too much focused on national or regional averages, leaving the conditions of the weakest and most vulnerable sections of the society out of the equation. The foremost principle in last-person-first economics is in the maxim of M. K. Gandhi that the condition of a culture can be determined by the way it treats its weakest members. Following this principle of putting their weakest members first, societies would strive not for the growth of the national GNP, nor for increasing the per capita average, but for the well-being of the last, weakest person. In such striving, redistribution of resources from the top to the bottom, which would thereby reduce economic and other inequalities, would become the natural process.

The empowerment of the struggling class will not happen without a struggle, though. Throughout human history, the position of the last person has improved mainly through self-organising of the weakest people in the form of popular movements. Such struggles are now taking place in all parts of the world. Often the movements face violent oppression by the establishment, and the first move in the struggle to empowerment should be putting an end to the killing of movement workers, and stopping all other extreme forms of suppression. If such movements are allowed to flower and grow into democratic forces, many positive changes will occur.

Since the members of the struggling class are predominantly women, the role of

women's movements is of central importance in empowerment. One of the demands of the women's movements is to obtain recognition and respect for the productive work done by women in the informal sector, work that is currently ignored in the GDP accounts.

5. From Hierarchies to Equality

In which we show how eliminating hierarchies provides a comprehensive base for environmental sustainability and aspirations to human dignity

"Man and nature are to be taken as one whole and not in terms of dichotomies. The moment I am told 'relations with nature', I am really shocked. As if nature is external to me! Nature is inside me as well! Nature is not outside." **Devdutt, Delhi Dialogue II**

Hierarchies as a Cause of Unsustainability

In this chapter, we discuss another trait of the over-consuming culture, namely culturally constructed hierarchies. We argue that the hierarchic structures present in modern societies lead to environmental unsustainability and create barriers to human dignity. The reason for this is the way powerful elites at the top of social hierarchies inevitably become alienated from the laws of nature and the laws of humanity. Since these elite groups are in powerful decision-making positions, such alienation easily leads to decisions that are detrimental to the environment and to other people, even in places far distant in time or geographical space.

For example, let us take an imaginary case of the comparison of two factories in a tropical location producing shoes for export. These two factories are identical in all respects except one is owned by a rich capitalist in the North, and the other is owned by a local cooperative. The foreign industrialist is alienated from the realities of the factory site, and in maximising his profit may easily ignore environmental or social harm caused by the plant, as long as it keeps producing well. The local cooperative, however, will tend to face the pollution and social tensions first, and has a strong incentive to deal optimally with both local issues.

The key relations in modern industrial societies are structured as hierarchies which are both power structures and valuation structures. People or other beings are arranged in pyramid organisations in which power is concentrated in the topmost strata. Members at the top levels have the most power and the orders flow from the top down to the bottom. At the same time, those on the top are regarded as the best and those on the bottom worst. Such structures are almost absent among indigenous cultures depending mainly on gathering, horticulture, fishing and hunting, but are present in both centralised agrarian and industrial cultures.[51]

There are good reasons to state that such hierarchical structures of thinking and organising are a major contribution to the unsustainability of the dominant over-consuming culture. Hierarchies alienate people, especially the powerful ones on the top, from both nature and fellow humans in a detrimental way. Running a hierarchic organisation is a complicated task which requires a lot of resources. In addition, more materials and resources are needed to manifest the superiority of the upper strata compared to the lower. A set of five such hierarchies are discussed here, those based on: gender, ethnic traits, economic class, knowledge & technology, and the natural environment.

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[51] See Harman 2008 and Zerzan 1994.

The first set of hierarchic relations are associated with *gender*. The domination of male over female in human societies, and the exaggeration of differences between the two, are culturally produced features resulting in a hierarchy where men are always superior to women. In many cultures both genders, female and male, are constructed through a dichotomy where women are associated with weakness and emotion, and men with reason and strength. A hierarchy is present in all concepts associated with the dichotomy: the concepts defined as masculine are more valued and seen as more developed than the feminine ones, therefore justifying domination of male over female.[52]

Secondly, in multi-cultural contexts, hierarchies based on one or more *ethnic traits* can be very oppressive. These hierarchies can be constructed on physical traits such as skin colour and physical appearance, or on cultural traits such as religion, language, a and caste. Some of the worst forms of exploitation, such as slavery or the creation of an 'untouchable' caste, are legitimated by attaching to slaves or untouchables certain qualities of inferiority based on one or more ethnic traits. *Racism* in many cases has become an important structure in societies, where it is used explicitly to break up the lower strata in order to make their exploitation easier.[53]

Hierarchies based on *economic class* are as old as iron and the formation of the first states. We believe that state formation and the disconnection of the powerful elites from an intimate relation with nature, have contributed significantly to the 'going off balance' of modern societies. Whenever the elites have subdued other human beings, they have at the same time deprived the 'lower classes' of their human dignity, which has thereby caused enormous suffering.[54] In addition, subduing other people has probably given rise to the ideology of subduing nature, with all the anti-ecological consequences which follow.[55] Much historical evidence from past urban civilisations points to this conclusion, i.e., that the complex urban economies have moved away from a balance with the surrounding and life-supporting natural world to an exploitative relationship with nature, and have then collapsed as a result.[56]

The fourth set of hierarchies discussed here pertain to *scientific knowledge and technology*. The problem is that a certain kind of knowledge and type of technology emanating from institutions subscribing to the European academic tradition is considered the only valid way of knowing, and of constructing technology. Therefore, deep, rich local knowledge systems have been made invisible, or put into the same category as fairy tales. This monopoly on knowledge and valid technology has greatly supported the concentration of power in the hands of a few. Top scientists, and those who apply knowledge in increasingly large corporations, have distanced themselves from the laws

[52] Mies 1986; Merchant 1992; Plumwood 1993.
[53] Linebaugh & Rediker 2000.
[54] See e.g. Rosenthal 2006.
[55] See Bookchin 1982.
[56] Mumford 1967, Mumford 1970; Perlin 1989.

of nature and are engaged in evermore pervasive and exploitative intrusion into natural processes. The hubris of scientists who put aside the precautionary principle in the application of their expert knowledge has led to increasing environmental disasters and risks. These include problems such as the depletion of the ozone layer and the spread of toxic substances, along with the risks emanating from genetic manipulation and radiation.

The fifth hierarchy that we find detrimental to environmental sustainability is that based on relationships of the *species*, either with each other or vis-a-vis *nature*. When humans consider themselves the kings and queens of all the living species, and make all of nature subservient to the species *homo sapiens*, the relation is that of exploitation and domination rather than interdependence. Exploitation can continue for some time, but will eventually lead to a loss of balance and subsequent crisis. The separate dualities of human-natural environment [Man and Nature], mind-body [Mind and Body], and culture-natural environment [Culture and Nature], all have a long history in the Judeo-Christian culture, and reached their apex in the thinking of René Descartes.[57]

We hypothesise here that all of these culturally produced hierarchic structures just described go hand in hand with each other, and constitute an important basis of modern industrial culture. When a society emphasises a hierarchy in one context, it enforces similar hierarchical thinking in another. A good example of this is European thinking in the so-called 'Age of Reason' in the 18th century. At that time, the Christian religion played an important role in society: it was considered a God-given eternal fact that some people are born in upper classes and some in lower and cannot change their class, that Christians could dominate, convert and enslave non-Christians, that women were born to be subservient to men, and that the natural environment is there for man's exploitation.

The reason that such hierarchic societies are inevitably unsustainable is that the elites become alienated from the rules of nature and the norms of human dignity. In a set-up where all members of the society obtain their living from direct engagement with the natural environment in association with other people, the importance of mutually beneficial inter-relations are obvious. It is clear that one cannot destroy the forest or enslave other members of the society without inflicting harm on one's self or one's children. However, when surpluses are accumulated and controlled by elites, this simple fact seems to be lost. As long as the flow of surpluses continues, the elite may assume that the system is working – until it collapses.

When looking at the past two centuries, we can see many movements and trends towards reducing hierarchies and creating greater equality. Single events such as the French Revolution, the Universal Declaration of Human Rights in 1948 or the Youth Movement of 1968, are remarkable milestones in such struggles. As a result of these

[57] See e.g. Turner 1986; Merchant 1992; Plumwood 1993.

events and such trends as the struggle for equal rights for women and former slaves, we can see that remarkable changes have occurred in the case of gender and ethnicity. In contrast, in the case of the economy, knowledge and technology, and the natural environment, the hierarchies have kept growing. The agendas for transformation towards greater equality are discussed below in separate sections for each of the five sets of hierarchies discussed here.

Gender Hierarchies: Building on Positive Trends

There has been a positive trend toward gender equality in women's rights over the past two centuries. Over the last 50 years or so, the basic economic and political rights of women have been realised in most of the countries in the world. Many of the inequitable gender practices have also changed, and women can now participate in economic activities and political processes to varying degrees.

The changes have been driven by the feminist women's movements. In the context of the West, the Suffragettes were among the first to demand the right to vote and take part in elections. Gradually the focus of western women's movements has shifted from voting to issues such as reproductive rights, access to higher education, property rights, and lesbian and gay rights.

However, in no culture or country do we find perfect gender equality, and in many cases and many places there is still considerable domination by men over women. It is evident that a great deal of work in the field of gender equality is still required. Since the status of women has improved in the Western countries, one easily assumes that gender relations have become equal. However, if one looks more closely this may not be the case in all situations. The fact that we have many women in high positions in the society should not make us close our eyes to the everyday discrimination against women. As long as the stereotype for 'head of the family' is a man, and women are not paid the same as men for exactly the same work, gender equality is still not a reality.

Moreover, because women can climb to even the highest posts, the assumption often is that they already have the same opportunities as men. In this type of thinking it is claimed that it is only the weakness of an individual woman, her personal failure, if she is not equal to men, and thus gender inequality is not a larger social problem that needs to be solved together.

It is important to remember that for men gender equality does not necessarily mean giving up their present status, but that actually gender equality also serves men. Breaking the hierarchic gender system also means more freedom for men who are delivered from the stereotypes that presently bind them as well as women.

In many countries, even the most basic women's rights, such as the right to education or property, are still only a dream. It is therefore crucial to support the demands

of the feminist grassroots movements, especially in the Global South, as their actions touch the lives of the marginalised majorities.

In its Women's Assembly Declaration at the World Social Forum 2009, in Belém, Brazil, the World March of Women stated:

> *"We, feminist women, propose radical and profound changes in relations among human beings and with the environment, the end of lesbophobia, of hetero-normative and racist patriarchy. We demand the end of control over our bodies and sexuality. We claim the right to make free decisions in relation to our lives and the territories we inhabit. We are against the reproduction of society through the super-exploitation of women."* [58]

The World March of Women is one of the most interesting international feminist movements at the moment. It wants to connect grassroots groups and organisations working to eliminate the causes at the root of poverty and violence against women, and to make political, economic and social change.

Ethnic Traits Hierarchies: Pursuing the Positive Trends and Meeting Further Challenges

Since the 19th century, some of the extreme hierarchies or binary oppositions of ethnic traits, dominant in many cultures around the world, have been successfully challenged by various popular movements. The ideas of the French Revolution in the late 18th century reached all the way to Haiti where the black slaves rebelled against racial oppression and eventually created an independent state in 1804. Other pioneering challenges to hierarchies based on ethnic traits include the anti-slavery movements in the West and the struggles for abolishing the untouchable caste in South Asia.

By the time of the making of the United Nations Charter (1945) and the Universal Declaration of Human Rights (1948), the egalitarian demands by various social movements had achieved broad legitimacy. In creating the UN the state representatives conceded that discrimination on the basis of colour, religion, language and other ethnic traits should be phased out. Later these ideas were written into various international agreements and UN resolutions, and this 'human development agenda' has continued to advance, especially after the movements of the late 1960s and 1970s radicalised the discourses.

As a consequence of this trend, in countries where some degree of democracy guides the power relations, we can today have people of colour as heads of government. One case in point is the election of Mayawati, a lady from the former untouchable caste, to the post of Chief Minister in India's largest state, Uttar Pradesh, in the year 1995.

Despite the positive trend, racism and other systems of oppression based on eth-

[58] World March of Women (2009).

nic traits still plague many cultures around the world. Even in case where laws have changed, the social, cultural and economic practices may continue. Therefore, we still see intense struggles against racial discrimination and caste oppression around the world, with demands for equal rights and opportunities irrespective of colour, religion or language.[59]

Economic Hierarchies: Reversing the Trend by Limiting the Size of Corporations

In the case of economic institutions and relations, however, the trend is clearly different. Our modern, increasingly hierarchic economic system, commonly referred to as capitalism, has constantly expanded and brought more and more communities, people, resources and spheres of life under its influence. The gift and barter exchanges which are common in household and rural agricultural economies have been increasingly replaced by monetary exchanges dominated by industrial forces. Accumulation of capital in large corporations, especially in the finance sector, has created hierarchic institutions of unimaginable size. Many such corporations have a turnover larger than the government budgets of some populous low-income countries. As a result, the income differences have increased to historical levels, environmental destruction has worsened, and such things as hunger, which is one of the symptoms of the absolute deprivation of power and resources, have stayed constant or even increased.[60]

One of the features of the current corporate capitalist economy is that. due to the ever-increasing size of the economic and financial corporations, and their increasingly diffused ownership through stocks and bonds, economic hierarchies are becoming stronger and their alienation from the rest of the world starker. Due to their size, the mega-corporations have been able to influence political processes through lobbying, election financing and other anti-democratic means, thereby reinforcing the corporations' processes of accumulation and consolidation.[61]

Since a market economy is a popular way of organising economic exchanges, the most acceptable solution to the problems caused by concentrated corporate power would be **to limit the size and ownership of economic institutions**. A maximum size limit would be set for corporations and other economic institutions either in terms of number of persons employed or value of turnover; and their ownership would be limited to human, not legal, individuals. Further, the number of individuals owning a company would also be limited. For example, any one person could own only two companies, and each company could have a maximum 5,000 employees or

[59] See Shaba in this volume.
[60] See e.g. Kempf 2008.
[61] For other measures to deal with the problems of mega corporations, see Korten 1996 and Speth 2008.

a maximum turnover of USD 250 million. In this way, direct personal ownership – a direct chain of responsibility – would be established for the owner, and accumulation of immense power and wealth in the hands of very few, and the creation of mega-hierarchies would be prevented. Setting such limits would break up and phase out large corporations, and create a market-economy that would encourage private enterprise without the societal risks and dysfunctional elements of corporate capitalism.

Such a proposition for limiting the size of corporations should be most welcome at this time, when large corporations in the finance sector and the automobile industry would have gone bankrupt, a normal process in a market economy, but for their size. Because of their share in a national economy and the numbers of people they employed, they needed to be supported with government intervention and massive public spending. In the countries involved, there are small banks and car manufacturers that are not insolvent, and this government subsidy to the large ones is against any principles of fairness. In the name of fairness and social justice, the lesson here is that no economic institution should be allowed to grow so large that its bankruptcy would threaten the society at large.

Obviously the traditional agendas of empowerment of workers in relation to capital, democratic control over the means of production, and reducing income disparities, are still as timely as ever.[62] However, in the current state of the discourse, we have felt there is a need to emphasise the issues of scale and size in promoting economic democracy.

Knowledge and Technology Hierarchies: Reversing the Trend with Principles of Precaution, Liability and Sharing

Another sphere in which increasingly large and growing hierarchies have developed over the past centuries is knowledge, or more precisely, that scientific knowledge and technology that help to turn labour and natural resources into evermore useful forms for the generation of monetary wealth. The problem here is that typically technological development is primarily geared to short-sighted profit-making by large corporations, not the benefit of the people and the planet.[63]

The current, globalised, intellectual property regimes have enabled oligopolies and monopolies to be established around knowledge intensive high-tech products and services. particularly in areas such as information technology and health care. One outcome of such hierarchic knowledge and technology structures is that drug development is geared towards diseases caused by over-consumption among the wealthy classes, who can pay for the drugs. Another outcome is that the poor do not have access to life-saving medicines because of the pricing set by patent-holding pharma-

[62] For an analysis of how small income differences contribute to societal wellbeing, see Wilkinson & Pickett 2009.
[63] See Kelles-Viitanen is this volume.

ceutical companies.

During the past 200 years, scientific knowledge and technology have played an ever-increasing role in our societies. The idea of human progress being geared to education and knowledge has boosted investments in specialist education and in research and development. Innovation, especially technological innovation, is nowadays considered one of the keys to advancement within a society, as well as to the advancement of the society as a whole; and the high-ranking experts at the top of the knowledge hierarchy are rewarded. However, there are a number of serious problems in this sort of technological progress. There is a pattern emerging that innovations and their applications at first sight seem like great achievements, but subsequently prove to be the causes of serious problems.

The experience with technologically induced change has shown that such change is very unpredictable. Although we anticipate positive outcomes and may be aware of negative ones, there is always a whole range of unanticipated negative outcomes that we will realise only later. For example, the chlorofluorocarbons (CFCs) were hailed as a great innovation eighty years ago, but were later realised to be the source of an environmental disaster. The case of CFCs as representative of the unexpected outcomes of technological change is presented in Table 5.

The case is the same for all technologies; we can hope for the best, but the worst may result. Such risks are evident in the medical, biological, and information and communication technologies. Technological development directed from the top of the power hierarchy is very likely to produce unintended negative consequences to the people in the lower strata of the hierarchy.

Table 5: Four Possible Different Outcomes of Technological Change: The Case of Chlorofluorocarbons (CFCs)

	ANTICIPATED	UNANTICIPATED
POSITIVE	When invented in the late 1920s, CFCs were hailed as safe and stable substance for use in a wide range of applications.	-
NEGATIVE	–	After some 50 years of increasing use, CFCs were understood to be a major contribution to the depletion of the ozone layer. The Montreal Protocol was made to phase out the damaging technology.

Currently the innovators and the companies that bring new products into the market take hardly any responsibility for the unanticipated negative outcomes of their work. As a response to this, the **precautionary principle and polluter-pays principle both need to be strictly enforced for an extended period of time**. It is not enough that the producers meet the present day requirements set by governments, since unknown problems often emerge much later. The system regulating the **pro-**

ducer's liability has to extend for, say, seven generations, that is, about 150 years. Whoever wants to introduce a new product should have an adequate an insurance scheme or other system for dealing with the potential future problems caused by the application of their new technology.

Another set of problems in the sphere of knowledge is related to the innovation system. The dominant model of innovation is based on profit-making for the top levels in the knowledge hierarchy through patents, copyrights, and other means made possible through the present intellectual property regimes.

In environmental sustainability debates, many place new technologies in a central problem-solving role, without thinking how the present innovation system only encourages work on profit-making technologies which are not necessarily those that would bring about maximum common good or solve current problems. The present technology regime can hardly provide answers to the pressing environmental problems, because new technology is patented by profit making institutions that do not have an economic incentive to create such answers and make the resultant technology widely available within the countries in the struggling class, where it could make the most difference.

We think that new technologies can be a partial solution to the environmental problems only if they are implemented in an **innovation system based on freedom and sharing and aiming at the common good.** The models of the public library, open source software, and public domain academic publishing should be followed for new technologies. Otherwise, a great deal of public research and development spending will go to technologies that will be patented by private entities, in practice blocking the wide dissemination of the new technology.

Species Hierarchies: Reversing the Trend by Relating to Other Species with Respect and Care

The third sphere in which the hierarchies have increased over time is the relations of humans with other species. One clear sign of this is the increasing extinction of species caused by human activity. The way human behaviour is selfishly transforming ecosystems, be they local or planetary, diminishes the space for other species to the extent that they keep disappearing. The most recent expression of this extreme hierarchy is the way scientists and corporations have started manipulating the building blocks of life, DNA and the genomes of living organisms. The anthropomorphic and evermore exploitative attitude of humans towards animals as machines in industrial agriculture is another expression of the species hierarchy.[64]

Humans are portrayed as the highest outcome of billions of years of evolution,

[64] See Bakewell-Stone and Achoka in this volume.

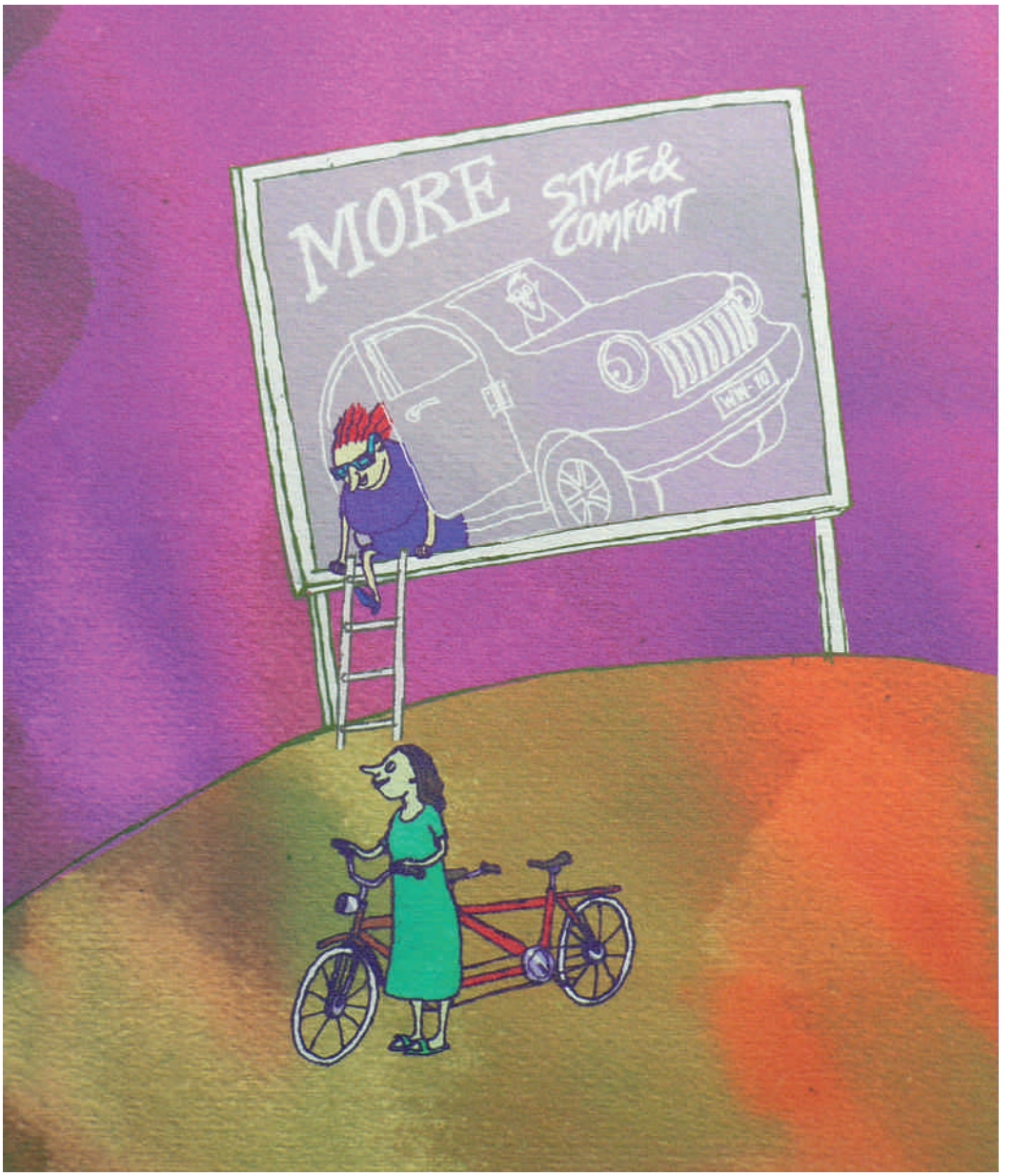
fundamentally different from any other animal and in a natural position to exploit the rest of the natural world as they please. However, during the past decades, dissident voices and movements have resisted and challenged this notion. The animal rights movement is the most notable example of this.

In animal rights thinking, the fundamental idea is that the most basic interests of animals should be given the same consideration as the most basic interests of human beings. At the heart of the animal rights movement is the principle that animals have an intrinsic value. Animals are worthy of moral consideration, and they have the right to be free from human cruelty and exploitation, just as humans possess this right. Animal rights advocates approach the issue from different philosophical positions, but they agree that animals should no longer be regarded as property, or used as food, clothing, research subjects, or entertainment.[65]

In addition, the movements and efforts that aim at conservation of biological diversity strive for a caring relationship between humans and the rest of the natural environment. The decades of conservation efforts, however, have not managed to reverse or even stop the growing extinction of species from the planet. To boost its effectiveness, the conservation community should address underlying causes such as these above sets of hierarchies, and work toward solving the problems the hierarchies create and eliminating hierarchies as a cause.

[65] See e.g. Singer, 1991.

6. **Cultural Transformation:** In which we present a possibility for cultural transformation by halting over-consumption, democratisation, and learning from the indigenous worldviews



"Richness of culture has to be protected, and for that we must come out of our dependence upon Western elites and their consumerism. To make a social sense of community, the rights of people of different regions must be respected, and we must fight for the basic rights of everybody."
Shobha Gautam, Kathmandu Dialogue

In previous chapters, we have highlighted the need for the over-consuming societies to transform themselves into sustainable ones, thereby making space for the struggling classes to work to improve their welfare. Giving up the growth imperative and excessive hierarchies require deep cultural changes that may not happen very fast. Therefore, it will be useful to illustrate that transformation is nonetheless possible. Following this, we will consider areas of life where changes should be put into motion to create sustainable societies out of the over-consuming ones.

Cultural Transformation Is Possible

In this book so far, we have shown the unsustainable nature of the modern industrial consumer culture and made suggestions for its transformation. Making the required changes for this transformation can be compared to a revolution, a religious awakening, or the collapse of the Soviet Union. Such things do happen, and can also take place in the context of environmental sustainability. Cultural changes can be slow and gradual, but they may also be rapid and transformative.[66]

In Table 6 below, we present three cases of cultural norms and practices that have changed completely over only a few decades, in one or two generations. Trophy hunting, smoking in public places, and physical abuse of children as a method of childrearing, all used to be normal and respected cultural practices. However, today they have been discredited and forbidden in a number of countries. Such is the fate we foresee for over-consumption, also.

Table 6. Examples of Cultural Transformation

	Long Ago	Recently	At Present
Trophy hunting	Stylish	Questionable	Strictly regulated
Smoking in public places	Stylish, normal	Annoying, inconsiderate	Forbidden
Child abuse as a method of upbringing	Advised	Questionable	Forbidden
Over-consumption	Elite affair	Everyone's aspiration and right	Questionable

What could trigger the change from over-consumption to a sustainable culture? In addition to the two underlying changes presented before, i.e. giving up the growth imperative and hierarchies, we present below some more specific triggers within a set agenda with three main goal. These goals, which are also processes, are: drastically reducing and eventually eliminating overconsumption, strengthening democracy with

[66] See Tammilehto in this volume (Rapid Social Change).

the goal of an egalitarian society, and moving from a modern worldview towards a traditional, indigenous one. For a sustainable future, all these changes would ideally take place simultaneously.[67]

Halting Over-Consumption

Over-consumption has been clearly identified as one of the main causes of environmental problems.[68] Yet surprisingly little work has been done on structural solutions for over-consumption, while a great deal of emphasis has been put on individual and voluntary consumer behaviour. Therefore our focus here is on structural changes.

This history of consumer society can be traced back to the age of industrialisation and colonialism when people in both the colonies and in the colonising countries of Europe were moving off the farms where they had been self-sufficient and taking up industrial jobs in urbanised areas. With the earned money from these jobs, people began purchasing the new, mass-produced commodities and imported substances now known to be addictive. Earlier these substances, including tobacco, sugar, cacao, tea and coffee, had been too expensive for the masses and had been only for the elite. Since then, **mass consumption has served a double purpose by holding together the capitalist economy: keeping workers content through increasing their access to unnecessary but often harmful 'luxury goods' and substances, and by generating profits for the corporations through sales of these things.**[69]

With new technologies and modifications in the capitalist economy, new methods and ranges of products have emerged. An important shift in consumption occurred in the 1920s when the efficacy of propaganda through modern mass media was discovered and channelled to increase mass consumption. The rise of the PR and advertisement industry, along with ever more intrusive technologies such as radio, motion picture and television, ensured the growth of mass consumption. Through the propaganda, people are made to feel miserable unless they purchase the goods or services being promoted.[70]

Because of the manufactured nature of over-consumption through advertisement, the obvious line of action is to **regulate advertisement** heavily so that its dysfunctional role in the society is minimised. The practice is already in place in many countries in the case of alcohol and tobacco; now it needs to be expanded to include all resource intensive, and thereby environmentally harmful, products and services. Banning of all advertisements and allowing only neutral, fact-based and verified product information to be disseminated, would be a straightforward way of replacing misleading

[67] For some more suggestions for the directions of the transformation, see Isomäki; K. Kaara; W. Kaara; Nordlund and Wallgren in this volume.
[68] See e.g. Dauvergne 2008, Kempf 2008, Speth 2008.
[69] Tammilehto in this volume (History and Politics of Over-Consumption).
[70] See Nandy 2005, 46-47.

advertising. In this case, the mass media dependent on advertisement income would have to be reorganised, for example, through a growing degree of public support. A democratic and participatory way to do this would be to provide each adult citizen with media coupons with a monetary value, that people could use to subscribe to non-profit papers, magazines, TV channels or internet services that have a democratic function, excluding mere entertainment.

Since the over-consuming culture is so well established, regulating advertisement will not be enough to halt over consumption. **Economics instruments** are nowadays considered one of the best ways to influence individual and institutional behaviour: subsidies could be given to activities that are to be encouraged, and taxes and fees set on those to be discouraged. The polluter-pays principle provides another justification for the use of economic instruments. So far, however, the case for environmental taxes has been challenged from two sides. On the one hand, the large corporations that would be affected have used their power to prevent rational reforms such as the carbon emissions tax. On the other hand, parties on the political left have pointed out the regressive nature of taxes on everyday commodities in comparison to progressive income tax, and have not supported any proposed changes through such economic instruments as environmental taxes.

Now that the need to halt over-consumption is becoming clearer and clearer, the use of economic instruments needs to be introduced with more vigour. The way to overcome the two objections is to establish a **progressive resource consumption tax**. Besides being more just, by affecting different income groups similarly, it would be also be more effective by making a difference in the higher income groups at the same time. For example, energy could be sold without any tax for a given 'survival' level of use, and at ten times the basic market price for excessive consumption. The system would be complex, but this is the case with all modern tax systems, such as income tax or the value added tax (VAT).[71]

In the case of the super rich, even a progressive tax would probably not create a large enough incentive to end wasteful consumption. Therefore, some of the clearest cases of **excessive consumption should be forbidden**. Things such as private palaces, private jet planes and space tourism would naturally fall into this category.

Democratising Democracy

The over-all process for dismantling hierarchies can also be called democratisation. In this definition, democracy is understood as government by the people in all spheres of life. Our intended meaning is that freedom from oppression is a basic human aspiration; therefore democracy has a universal appeal. Our definition is well captured by

[71] In a similar line, a progressive climate tax has been proposed by the Greenhouse Development Rights Framework, see GDR 2008, 59-61.

Wangari Maathai when she writes that: "Democracy does not solve problems. It does not automatically combat poverty or stop deforestation. However, without it, the ability for people to solve problems or become less poor or respect their environment is, I believe, impossible."[72]

The idea of people collectively as the sovereign governing power has gained growing support among the people across the world over the past few centuries. In different contexts, it has had different emphasis, such as liberal democracy in the West and people's democracy in China. However, in no place has it has been anywhere near perfect.[73] In liberal democratic governance in the West, the sphere of the economy has been left primarily outside the people's control; in the communist variation of democracy, the right of the people to organise on the basis of politics has been limited.

The future ideas and practices of true democracy would be quite different from those we now know. Currently there are rich debates about, and experiments with, new forms of democratic governance that go beyond representative democracy. The various streams of thinking have contributed new qualitative labels for democracy to elaborate and identify the direction of each stream.[74]

Direct democracy, also termed 'pure' democracy, comprises a form of democracy and theory in which sovereignty is lodged in the assembly of all citizens who choose to participate. Depending on the particular system, this assembly might pass executive motions, make laws, elect and dismiss officials, and conduct trials. Many countries, such as Switzerland, that are representative democracies, allow for three forms of political action that provide limited direct democracy: initiative, referendum and recall. Referendums can include the ability to hold a binding referendum on whether a given law should be scrapped; a referendum can be based on a citizen's initiative. Recalls give the people the right to remove elected officials from office before the end of their term.

Participatory democracy is a process emphasising the broad participation of constituents in the management and operation of political systems. The idea is to strive to create opportunities for all members of any political group to make meaningful contributions to decision-making within the body politic; and to broaden the range of people who have access to such opportunities. The term participatory democracy has been used particularly by the New Left, beginning in the early 1960s and continuing on through the 1980s.

Deliberative democracy, also sometimes called discursive democracy, refers to a system of political decision-making based on a combination of direct democracy and representative democracy; it relies on citizen deliberation to make sound policy. In contrast to the traditional theory of democracy, which emphasises voting as the central

[72] Maathai 2008, 289.
[73] About the limitations of current systems of democracy, see Lummis 2005.
[74] The following presentation of democracy initiatives draws on information from Wikipedia.

democratic institution of democracy, deliberative democracy theorists argue that legitimate lawmaking can only arise from the public deliberation of the citizenry. Some of the new constitutions in Latin America have moved in this direction.

Grassroots democracy is a tendency towards designing political processes in which decision-making authority lies maximally at the lowest geographic level of organisation. To cite a specific hypothetical example, a national grassroots organisation would place as much decision-making power as possible in the hands of the local chapters collectively instead of in the head office. The principle is that, for democratic power to be best exercised, it must be vested in the local communities. Devolution and autonomy are important elements of grassroots democracy. The idea is accepted and put into practice by many mass movements in the South, such as the Zapatistas of Mexico.

Inclusive democracy is a political theory and practice that aims at: direct democracy; economic democracy in a stateless, moneyless and marketless economy; self-management; and ecological democracy. The theory of Inclusive Democracy has emerged from the work of political philosopher and activist Takis Fotopoulos. Anarchism is an important category within this stream, which makes a commitment to direct democracy, municipalism, and abolition of the state, money, and the market economy.

Comprehensive democracy has been proposed by the activists of the Vasudhaiva Kutumbakam network, that is also an active participant in the World Social Forum process. Comprehensive democracy would include political, social, cultural, ecological, and economic dimensions, as well as gender, knowledge and education, and so on, to make democracy a complete way of life. Comprehensive democracy builds on Gandhi's concept of **swaraj**, or self-rule, which includes the ideas of political devolution and non-violence.[75]

Radical democracy, horizontal democracy, and earth democracy are yet more streams of thought that attempt to stretch the ideas and practices of democracy further in order to respond to the needs and aspirations of today. Also the debates about global democracy are of great importance.

By introducing these political initiatives for democratising democracy we want to underline the growing popular support for major reforms in the systems of governance that would give people much larger say. Since on formal level there is firm support for democracy, such initiative should naturally be considered very favourably by the establishment.

Adopting an Indigenous Worldview

Cosmology, or worldview, combines various elements of a culture. Earlier we have described various shortcomings of the unsustainable, modern industrial worldview in

[75] See Pratap and Priya in this volume, and Gandhi 1938.

which the growth imperative and hierarchies dominate. The most obvious alternative would be something we call an "indigenous worldview".

By 'indigenous' we mean a way of life that depends to a great extent on natural, uncultivated flora and fauna in the environment. What we have in mind is those livelihoods and ways of life that are based on gathering of wild vegetation, hunting and fishing for local game, and cultivation in a way that does not permanently change the natural landscape. Such gathering-horticultural communities, conventionally also called hunter-gatherers, have sustained human life for millennia without adverse impacts on other species or ecosystems.[76]

Such indigenous cultures have proven to be the most sustainable ones found on the earth so far. Till today, members of such communities can be found in tens of millions mainly in the tropical regions of the world. However, the pressures of modern industrial society for natural resources from evermore remote areas, and the missionary zeal of the Western culture to homogenise all, is gradually leading to a decimation of such cultures.

Indigenous worldview is relevant for our topic in two ways. We can look at what are the common features of such communities directly living from the wild growth of the nature. Further, we can draw inspiration from the processes how such cultures have evolved.

Common features of the indigenous worldview include the *belief that all life and the natural world itself is sacred.* God is not an abstract entity in heaven or in the sky, but is present in all living powers in nature. Such animistic beliefs also include worship of various living and non-living entities in the nature. Human relations in an indigenous worldview are typically oriented toward *communal harmony and cooperation*. The idea of individuals competing for private profit would be very alien. Instead, *sharing, gifting and barter exchange* would be the modus of social interaction. The understanding of time would have elements of *cyclical rotation and permanence*. While all living things are part of the cycle of birth, life and death, the idea of the permanence of lineage, tradition, culture, and other features of life, plays an important role.[77]

The second feature in an indigenous worldview that is of interest here is the way such a worldview has been formed. As we understand it, the most important element in the formation of an indigenous world view is that the significance and meanings of the natural world are created through the work of human beings. In many indigenous communities, the *living environment is seen as an outcome of generations of human labour,* and as a space for the humans presently living in that environment to continue that tradition of labour to create and preserve the world. Many a forest with huge trees and rich bio-

[76] While it should be noted that such non-modern ways have also altered the ecosystems and contributed to the extinction of large mammals such as mammoths, the scale of damage is minuscule when compared with the modern industrial civilisation that creates climate change and mass extinctions through the wide destruction of ecosystems.

[77] For an account of contemporary indigenous communities, see e.g. Siemenpuu 2008.

Text Box 2: UNESCO and Sustainable Culture

"We have no longer a choice: either we adopt behaviours that respect sustainable development, that is we stop polluting the environment, allow for the renewal of natural resources and contribute to the improvement of the well-being of all, or sooner or later we sign our own death warrant."

Koïchiro Matsuura, Director-General of UNESCO[i]

UNESCO is an important actor in the field of sustainability and culture. **The Unesco Convention on the Protection and Promotion of the Diversity of Cultural Expressions**[ii] confirms sustainable development as a cornerstone in its approach. This Convention entered into force in March 2007; and Finland is among the signatories.

According to the Convention, "the protection, promotion and maintenance of cultural diversity are an essential requirement for sustainable development for the benefit of present and future generations."

The Convention emphasises "the need to incorporate culture as a strategic element in national and international development policies, as well as in international development cooperation, taking into account also the United Nations Millennium Declaration (2000) with its special emphasis on poverty eradication."

The Convention recognises "the importance of traditional knowledge as a source of intangible and material wealth, and in particular the knowledge systems of indigenous peoples, and its positive contribution to sustainable development, as well as the need for its adequate protection and promotion."

i) UNESCO 2005.
ii) UNESCO 2007.

diversity is, according to the indigenous communities who live there, only in existence because of the caring labours of generations of ancestors. Nature is not something to be consumed, used or exploited, but to be maintained with respect and love.

All these elements combine to create a powerful example of a worldview for those members of the over-consuming classes who want to change direction and find a more balanced place in the environment. However, instead of only reading ethnographic books or watching documentary films about tribal life, one can use the same method as the indigenous tribal communities, and create a different worldview for oneself: *using one's own labour for regenerating nature*. Gathering or growing even a tiny part of one's own food can have a powerful impact on a person's self-understanding and

orientation. Planting food-producing trees is a well-appreciated act of love directed towards future generations. The more one engages with the natural world in this way, the easier it is to adopt a more sustainable worldview.[78]

Reorienting Development Cooperation

An interesting question in regard to sustainable futures is that of sustainable development, and the effect on development policies and practices if the transformations recommended in this book were implemented and applied. This is one area of human activity where all the issues discussed here are very much present on a day-to-day basis. On the one hand, there would be policies which would guide development activities to promote human dignity and environmental sustainability. On the other hand, the current practices of development cooperation have been are very much in thrall to the idea of growth-oriented development.

The growth imperative has created an image of a unilinear path for non-modernised countries to follow from under-development to development. This idea is already crystal clear in the vocabulary that labels *developed* and *developing countries.* The modern West/North is developed, and the rest of the world should follow the path to development. Furthermore there is a great deal of catching up to do, because the GDPs in the North keep growing and the gap between developed and developing countries, as measured by growth in GDP, becomes ever greater.

The sustainable cultures perspective provides very different imagery. Neither the rich countries nor the over-consuming classes can serve as role models, since they actually need to transform themselves considerably over a rather short period of time if major catastrophes are to be avoided. From the perspective of sustainable cultures, the growth imperative should be replaced by the *transformation imperative*. Similarly, for the struggling countries or classes, transformation is the call of the day, albeit in a very different way from the transformation of the rich over-consumers. In these two processes of transformation, both the struggling and over-consuming countries or classes should find a natural ally in the sustainable ones. Already sustainable cultures can take the lead and show the way forward on their path. They qualify as role models and guides for sustainable futures.

The sustainable cultures perspective can be illustrated by placing Finland and her partner countries in the South in the Ecological Footprint/Human Development Index matrix, as presented in Figure 6. All of Finland's partner countries in development cooperation are situated below the 2.1 gha (global hectares) per capita threshold, while the average Finn exceeds the biocapacity by 2.5 times. Finland is located in the high human development category, Nicaragua and Vietnam in the medium category,

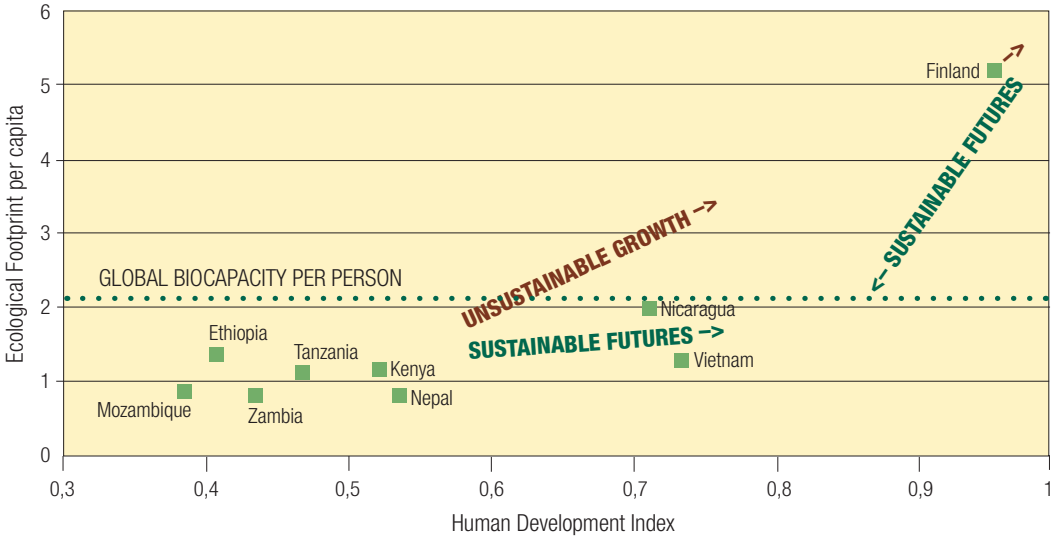
[78] See Ghanshyam in this volume.

and the rest of Finland's partners in the low category.

Using the growth imperative for development, all the partner countries would aim hard at the high development category, which they could achieve through conventional means only by exceeding the sustainability threshold. Finland, at the other end of the growth imperative development path, would find that in order to keep up the present high rate of employment and consumption despite her ageing population, growth would be a must: and further damage to the environment would follow.

Shifting to the transformation imperative would mean that Finland would make a 180 degree turn and start aiming at the lower than 2.1 gha (global hectares per capita) threshold, and would be ready to compromise her status in the human development index to the extent necessary. Vietnam and Nicaragua are already happily placed in the admirable category of sustainable culture. Ideally, they should nurture the best elements of their culture and focus on improving the lot of the last person. Mozambique, Ethiopia, Zambia, Tanzania, Kenya and Nepal will still have a fairly difficult struggle ahead of them as they strive to improve human development without exceeding their environmental space. Figure 6 also presents the alternative paths that would result from following the transformation rather than the growth imperative.

Figure 7. The Status of Finland and Her Partner Countries in the Ecological Footprint/Human Development Index Matrix: Two Alternative Scenarios



With a new scenario and an orientation based on the transformation imperative, Finland and her partner countries could engage in a creative mutual learning exercise. Finland would have a lot to learn, especially from Nicaragua and Vietnam, on how to maintain good human welfare within global biocapacity. All need to have constant focus on meeting the basic needs of the last person.

7. **Conclusion and recommendations:** In which we summarise future scenarios for the three cultural classes defined here and make recommendations to popular movements and national governments on how to achieve sustainable futures

"If we still want to have balance in nature, and if we really want to stop global warming in the coming years, if we want to stop the Himalayan glaciers from melting down; we better start re-looking at our lifestyles. We better begin our way of responding to the whole notion of development." **Mamata Dash, Delhi Dialogue II**

Change Happens

In this book, we have presented a challenging transformation agenda, pointing in various new directions. The obvious question arises that, even if we agree with the agenda, how the major transformations could take place within the relatively short time frame that the urgency of environmental protection has set for us.

We have presented two perspectives here on the dynamics of change. Implicit in this are two different scenarios for cultural change. One scenario is that **cultural change may happen almost by itself**. In human history, sometimes things just begin happening simultaneously in various places at around the same time when the time is evidently ripe for such change. One such occurrence in the distant past was the emergence of centralised agricultural systems and the building of urban civilisations based on them, about 10,000 years ago, in the Indus valley, Mesopotamia, and the Andean range in South America, without any communication between these sites. In modern times, many technical innovations have tended to appear around the same time in various places, as has also similarly happened with many cultural and social phenomena. For example, the radical youth activism of the 1968 emerged in many metropolitan cities in an era without satellite TV or the internet. Against this background, it might be thought that a new, sustainable, global culture could begin flowering as the result of some kind of natural evolution, a subconscious response to the multiple unfolding crises in the world.

Another scenario for cultural change is one in which the **members of the classes that have the most to gain from a transformation to sustainable cultures will rise up and force the changes necessary for transformation**. For this reason we have taken keen interest in the popular movements of the struggling and sustainable cultural classes. An important contemporary gathering place for such movements, which often represent marginalised majorities, has been the World Social Forum process, where many people who belong to these movements come together and energise each other with the slogan 'Another World is Possible'. The non-hierarchic structure of the 'open space' created by the World Social Forum, and its minimalist joint agenda of non-violence and rejection of neo-liberal corporate capitalism, resonate well with the content of this report.

The looming environmental crisis, and the inadequate responses made so far, can easily create an atmosphere of hopelessness and even despair. However, in the round of dialogues sponsored by the Sustainable Futures Project and held in East-Africa, South-Asia and Northern Europe, there was nary a trace of pessimism. In Kenya,

it was noted that Kenya lies in the region where human life and our first ancestors were born hundreds of thousands of years ago, and we can be confident that life will continue. Against all the odds of hunger and disease, the African people just refuse to die, carrying on the struggle to survive, and living vibrant lives. We hope to leave the readers of this book with the same spirit of optimism. Focusing on life itself gives us answers and the resources to imagine and build a sustainable future for us all.

Enhancing the Power and Resources of the Struggling Classes

The popular movements of the struggling classes have provided us with detailed suggestions for transformations that would enhance the power and resources of the people in these classes, thus creating a more sustainable world. Such movements include the Via Campesina of the rural workers and small farmers, the World March of Women which unites feminist groups and actions across the World, the Friends of the Earth International which addresses environmental concerns and in a way represents future generations, and War Resisters International which promotes peace and non-violence in many aspects of society.

In the enhancing of power in any group, the first step is to recognise the rights of the poor. *The right to food* and a dignified place in the society are primary basic needs which require our attention first and foremost. This is also an issue of the customary *right to the natural resources* of the local environment, such as common forests and lands, the *right to vote* freely for a preferred, freely chosen candidate, and the *right to information* about policies and programmes that will affect the lives of the people. Since most members of the struggling class are female, all these rights are of particular importance to women.

The end of violence against members of the struggling class is also a must, be it beating or harassing of women, atrocities against minority groups, or genocidal processes inflicted on indigenous people. Since compensation for people facing forced evictions by development projects has proven to be non-existent or inadequate, communities should also have a right to reject such projects.

In sharing of resources, *land reforms* are more acutely necessary than ever. For the struggling members of rural communities, even a small plot of land for a dwelling and a kitchen garden makes a great difference. In the urban context, giving title deeds to the families, also called squatters, who have built their huts on common lands, would be one place to start.

If demands stemming from the visions of the popular movements of the struggling classes are placed alongside the dominant discourses of poverty reduction, several differences stand out. One is that in most of the pro-poor interventions, power relations

and resource allocations are not properly considered. Real empowerment, in which the poor would be able to escape from the domination of the wealthy and obtain access to a fair share of natural and other resources, is missing.

A case-in-point is agriculture, from which most of the struggling classes derive their meagre livelihoods. In the World Trade Organisation negotiations, the powerful industrial countries primarily advance the case of their own subsidised and export oriented farmers and multinational agribusinesses. The national leaders in the South are mostly concerned about the largest farmers in their own countries, and their nation's companies. In the village, the feudal landlords are using every means at their disposal to make the life of a landless tenant farmer vulnerable and dependent on the landlord. The whole world is, therefore, against uplifting and empowering these fellow humans struggling against hunger. The problems of the poor farmers, most of them women, cannot be solved without the sharing of power and resources among all who depend on them, be they multinational corporations local landlords, or poor farmers who would need only a small plot of land to survive.

Respecting, Protecting and Promoting the Ways of the Sustainable Classes

While the sustainable classes also have a case for achieving a more fair share of power and resources through development, the development agenda in these countries has also a notable dimension of respect, protection and promotion. So far, this sizeable class has been to a large extent ignored in the debates about environmental sustainability. Instead, the focus in these debates has been on the environmental dynamics of over-consumption on one hand, and poverty on the other. Between these two extremes, the large middle ground has gone unnoticed.

If we gave more recognition to the ways of living in the sustainable classes, we might begin to see that **the good life** might be something different from the image produced by the entertainment-advertisement industry and experienced by the over-consuming classes. The members of the sustainable class should, therefore, be considered experts and contemporary examples and role models for living well within one's fair and sustainable share of environmental space.

An urgent task ahead would be to conduct **a global mapping of presently sustainable livelihoods and ways of living in the sustainable classes**. We should have clear ideas and definitions of the typical occupations, resource bases, housing arrangements and other features of such communities. Many people in sustainable classes probably obtain their living directly from the land through gathering, farming, animal husbandry; in addition there is probably small scale artisanal production and the provision of non-industrial services. It would also be important to study the cultural

dynamics of the sustainable classes, such as how members of this class perceive the attractions of the consumer culture, what are the elements of resilience in dealing with environmental disaster, what are the threats that would cause a member of the struggling class to fail, and so on.

Transforming the Over-Consuming Culture

In this book we have identified the *economic growth imperative* and *hierarchies* as root causes contributing to environmental unsustainability and reductions in human dignity. We have suggested alternatives for both these problems, arguing the need for a thorough cultural and societal transformation of the over-consuming classes. We have shown that cultural transformation is indeed possible when sustainable economics and equality become the dominant societal objectives. If this happens, then natural policy directions will include halting over-consumption, democratising society and moving towards an indigenous worldview.

Since the over-consuming class is predominantly male, the transformation places greater responsibility with men. There is a clear need to come up with new roles and aspirations for all people, particularly for boys and men. Becoming more caring, empathetic and responsible should not be a negative scenario. Instead of driving new large cars as fast as possible, men will find other ways to express themselves.

We should see transformation towards sustainable cultures as an adventure leading to something clearly better than what we have now. There is no need to be fearful or worried. Embracing degrowth should be a very empowering experience, since by giving up unnecessary but environmentally and socially costly luxuries one could discover the truly valuable things in life. Furthermore, lending support to and calling for political and structural transformations towards sustainability should be saluted by the world majority and by future generations. There are many rewards awaiting us in the sustainable future.

Recommendations

To conclude, we would like to make a few recommendations for popular movements and national governments around the world. Implementing these recommendations would take humanity a huge step forward towards a more secure and satisfying future for all.

We begin by making two suggestions for popular movements to adopt, since we believe such movements are the key agents for positive, transformative change. We have a particular trust in the movements created by the members of the struggling and sustainable classes, as they will be the beneficiaries of the transformation towards sustainability, as outlined in this report. In addition, these classes have proven to

be more innovative than popular movements in the over-consuming classes in their ways of organising, as for example, in the case of liberation from colonialism. Similar creativity, energy and solidarity are needed for the present struggle for liberation from oppressive hierarchies and unsustainable economic structures.

We recommend the following two-pronged line of actions to be taken by the popular movements of the struggling and sustainable classes:

1. Demand radical democratisation of the society so that the idea of people's power can flourish, people's sovereignty can be realised, and the marginalised majorities of the World can become a dominant political force.

Through true democracy, it will be possible to have non-violent change of the balance of power in favour of the marginalised majorities belonging to the struggling and sustainable classes. The systems of governance can become more democratic only when there is strong popular demand for such change. Therefore, all participants in the global justice and solidarity movements everywhere should put democratisation at the top of their agendas, both within the movements themselves and within the society at large. The best ideas and practices of democratic conduct and governance should grow and spread from the movements to a force that will democratise the whole society, starting from equality within families and moving all the way up to national governments and international organisations.

2. Seek, through dialogue, mutual support, joint action, and convergence among the many, diverse movements that are all aiming at an equal society free of violence, exploitation and oppression, be it on the basis of economic class, gender, ethnic traits, species or knowledge.

Past decades have been a golden age for single-issue movements. In many cases, their campaigns have been effective, but they have still not been able to change the foundations of the society and remove the root causes of the problems. Therefore, it is vital to start connecting the issues and actors of the movements so that they may combine to become a transformative force that can grow and eventually rebuild a more just, equitable, and sustainable society. Democratisation and transformation must be done as a joint creative effort of many movements combined since monolithic ideologies and authoritarian leadership are unlikely to satisfy the democratic urges of the people. Organic networking and unity in diversity are natural principles for organising today's popular movements.

We recommend that national governments adopt the following policies:

1. Reorient economic policy by replacing the growth imperative with the objectives of at-

taining environmental sustainability and human dignity for all.

The time is now ripe for a new set of economic policy objectives that should replace constant striving for growth of GDP with achieving a *sustainable economy*. In order for a government to be recognised today as being just and responsible, it is imperative that environmental sustainability is also taken seriously in economic policy. Similarly, a just government will focus on improving the economic conditions of the weakest members of the society.

Pursuing sustainable economy will require the introduction of sustainable economics as a school of thought and by creating a pool of expertise in sustainable policies of all kinds. Therefore, *creating chairs and programmes of sustainable economics at universities and research institutions* is an urgent task. Such academic programmes would need to create a new understanding of the complete economy that would fully comprehend and take into account the value of unpaid work, gift exchanges, material and non-material commons, and production of goods and services in household and cultivation economies. This complete economy should be constructed so as to enable all humans to live with dignity without harming other forms of life or compromising the well-being of future generations.

2. Adopt a degrowth policy and prepare a degrowth scenario for the over-consuming classes.

The surest and fairest way to resolve environmental problems is to *reduce overall resource use and pollution, starting with the highest income groups*. Since income correlates almost perfectly with the amount of environmental destruction, this can be done most easily by reducing the income and wealth of the over-consuming classes. This process is called degrowth, meaning the contraction of the formal and monetised economy. Since the present power relations will not allow immediate and effective action in this direction, we recommend that a scenario to achieve degrowth should first be worked out.

Fiscal policy provides the easiest tools for a degrowth scenario because the existing tax systems can be used. *Progressive income tax* that would take into consideration both salaries and capital income would be an effective tool. The highest marginal income tax percentage could be well above 60 per cent in the highest brackets. Also, progressive taxation of wealth would prove useful. These measures would be easy to apply as the systems are already in place.

Economic instruments in the field of energy policy would also be needed for the degrowth scenario, with the focus on primary energy consumption, which is a factor that correlates with environmental destruction even more than income does. *A progressive energy tax* could be created for energy users. A minimal, survival level should be tax free; but through tax imposition, excessive use would be made, say, ten times more expensive per unit than the tax at just above survival level. Implementation of

such a new tax policy would require a good deal of careful preparation and should also take into consideration the basic parameters of privacy and effectiveness.

3. Prepare an action plan for the empowerment of the struggling classes and the sustainable classes.

We have argued that the suffering within the struggling classes and the instability within the sustainable classes are both basically symptoms of powerlessness. Therefore, a process of empowerment, or power sharing, is needed to reduce and finally eliminate this suffering and instability.

For the members of these two cultural classes, obtaining *through land reforms the rights to natural resources they depend on* would be the surest way to greater sustainability. For communities that traditionally depend on gathering, pastoralism or shifting cultivation, the need is to obtain recognition of their claims and rights to their ancestral lands. For farming communities, land reforms should provide farmers with sufficient land allocations for self-sufficient subsistence. In the urban context, holding title to the informal dwellings, or squats, would make a great difference to the people who live in them. In such a process, ensuring that women can hold title to land would be crucial. Such land reforms would enormously benefit the poorest two billion people in the world, without causing any significant hardship to the rest.

Processes that would add *respect for and promotion and protection of the livelihoods and ways of life of the sustainable classes* would also be empowering. One such exercise would be a global mapping of all such livelihoods and ways of life, carried out by a competent international agency with suitable partners. This should be followed by an educational campaign in the over-consuming countries to inform them about these livelihoods. The world should be made aware of how the sustainable classes live, in order to give due recognition to sustainable livelihoods and ways of living, and to learn how these could be adapted to their own lives by members of the other classes.

On the basis of this respect, understanding and knowledge, *mechanisms of compensation to low-energy consuming communities* for not emitting excessive amounts of industrial greenhouse gasses could be developed. Several mechanisms have been presented in the proposals for allocating universal carbon quotas on a per capita basis; these and others could be developed.

Recognition of and support to the popular movements of the struggling and the sustainable classes would be important. The first step, as said above in regard to livelihoods, would be to learn about them, their visions and demands. There are thousands of grassroots movements around the world that articulate the aspirations of the people. Usually such movements are barely mentioned in the mass media, and are granted little space in the mind map of the powerful elites. It is only when there are violent deaths related to a popular movement that it may make the news, with a brief men-

tion of how many were killed. Specific media campaigns, along with documentation and dissemination programmes, should be planned and implemented to amplify the voices of grassroots movements. *Support for interaction and communication, among these movements, for example in the World Social Forum process*, would be an effective way to make them more visible and ensure their voices are heard.

4. Include increasing equality and diminishing hierarchies as a goal in all policies.

There is growing popular support worldwide for an egalitarian society, and governments should respond to such aspirations. We have argued that equality as an overriding societal goal would be good for sustainability and would eventually benefit all sections of the society.

Here we shall discuss only the case of primary education as an example of an egalitarian goal. The sphere of formal education plays a very important role in the way societies are structured. The Nordic countries[79] should share their experiences with their *primary education system in which almost all children go to a nearby school (within walking distance) run by local governments*. In countries with private schools for the better-off children, government schools for children of the middle ranks, and no school for the poorest, the Nordic system would appear utopian and revolutionary. Nevertheless, there are studies which show that the Nordic schools system is producing very good learning results and benefiting the society as well. The main underlying goals of the Nordic system are to provide an equal educational opportunity for all children, and to create a culture of equality.

5. Consider reorganising media in order to halt over-consumption.

We have emphasised the negative role of the advertisement industry and the entertainment media in creating the culture of consumerism that is driving humanity and which will lead us into a serious environmental and cultural crisis. Therefore, media and information policy should be reoriented so that *promotion of dysfunctional behaviour through advertising would be diminished, and media would be reorganised to serve the democratic functions of sharing factual information and cultural expressions, and creating spaces for debates*.

Public spaces, be they outdoor walls, newspapers or radio waves carrying TV programmes, should not be used for commercial propaganda aimed at manipulating people into short-sighted consumption, but for content that would help people to create their own meanings in life and to share free forms of expression. Therefore, even drastic measures should be considered in order to reduce the overall volume of advertisement to only a small fraction of the current level. The remaining advertis-

[79] The Nordic countries are Denmark, Finland, Iceland, Norway and Sweden.

ing should be regulated so that it would be solely factual information about useful products and services. Such a policy would phase out most present day advertisement funded media.

To facilitate the growth of new and diverse, public service media houses, governments should create support schemes for non-profit press, broadcast and internet services. One participatory method for channelling such support would be to issue media vouchers to all citizens, who could redeem the vouchers to subscribe to the media of their choice. The volume of such government support should be large enough so that the democratic media houses become the dominant channels for information sharing.

6. Democratise all systems of governance from local to global.

Formally, there is a strong commitment to democracy around the world, but the actually existing systems of governance are far from the ideal yet practical types. The new constitutions in some of the Latin American states have taken impressive steps to incorporate new elements of popular power into their systems of governance: these constitutions should inspire other countries to embark on similar and more far-reaching reforms.

An urgent task is to *bring the globalised economy under democratic control*. Internationally, the role of undemocratic institutions, such as the World Bank and the International Monetary Fund, should be reduced; and the role of more democratic ones, such as UNCTAD, should be increased. The *maximum size of private corporations should be limited* by international agreements so that they could be controlled and regulated effectively even by smaller governments or weaker international agreements. In addition, the undue influence exerted by corporations in political processes, either nationally or within international institutions, should be prevented. Corporate interference in political matters is anti-democratic and feudal, and should not be allowed.

The scope for *direct, participatory, and deliberative democracy* in local, regional, national and even international governance is vast. Government should begin by improving the systems of representative democracy by incorporating proportional electoral systems, to ensure wider and fairer representation of various sections of the society in elected bodies. Citizens' initiatives, referenda, recall, and many other tools should find their way into political systems.

7. Launch an innovation programme for green technologies that would be based on freedom and sharing and would incorporate full producer's liability.

The present systems of innovation and the application of technologies are very problematic, as they create private monopolistic ownership of knowledge and technologies that by their very nature have come out of social and cultural commons. Moreover, very few precautionary measures or producers' responsibility are incorpo-

rated into the way new technologies are being put into practice. The present system has introduced many fancy gadgets and toys, but falls short of delivering the public goods that are needed in our troubled times. Therefore, there is a need for a U-turn in industrial policy and in the way innovation, knowledge production and technological change is organised.

An alternative innovation system would be based on the principles of freedom and sharing of information for maximum benefit to the society. Such an innovation system could be organised even within the existing intellectual property regime by using the *examples set by public libraries and open source software*. In these, the copyright remains with the authors, but the work is licensed so that it can be used maximally. The 'viral license' used in the free software encourages making improvements, but binds the better product to be licensed with the same terms. Such systems of innovation should be developed and put into practice in other products with potential public benefits, such as environmental technology, and health and education products. This would be the most effective way to facilitate a wide application of cleaner energy systems and other useful technologies in order to come to terms with the limits set by the environment.

The second major reform in the technology system would be to introduce producer's liability. The current system, in which governments try to set norms and regulate use of new substances and technologies, is failing on many counts, as unforeseen problems continue to surface only after longterm use of some products and technologies, at a point in time at which the companies that have benefited from introducing them will not take any responsibility for the costs of dealing with the problems. A fair way to deal with the risks and unforeseen problems of new products and technologies would be to institute strict, long-term, *producer's liability* for all new technologies that are put on the market. Enforcing this liability would probably be implemented through some sort of insurance scheme with guarantees, so that help would be available even in the cases when the companies that introduced the problem are no longer in operation.

In a society in which free distribution and producer's liability would form the basis of technological innovation and diffusion, the best possible returns on public investment for public good, such as in the creation of green technologies, would result. An *inter-governmental organisation for R&D* for the public good should be set up: governments would provide funds for the R&D investments of multiple actors and would ensure that producer's liability applied to innovations from this R&D. The umbrella organisation would own the intellectual property of the innovations and would give free or inexpensive licences to any institution working in the member countries that are ready to submit to strict producer's liability. This should become the main channel for public investment in technology development. Some 0.2 per cent of national GDP could be channelled to fund such a system to begin with.

References

Bakshi, Rajni (2007) *An Economics for Well-Being*. Centre for Education and Documentation, Mumbai.

Bookchin, Murray (1982) *The Ecology of Freedom, The Emergence and Dissolution of Hierarchy.* Cheshire, Palo Alto.

Carley, Michael and Philippe Spapens (1998) *Sharing the World: Sustainable Living & Global Equity in the 21st Century.* Earthscan, London.

Climate Congress (2009) *Key Messages from the Congress* http://climatecongress.ku.dk/newsroom/congress_key_messages/ (retrieved 14.3.2009)

Cornia, Giovanni Andrea (2001) Globalization and health: results and options. *Bulletin of the World Health Organization*, no. 9/79, 834-841.

Czech, Brian & Tom Tietenberg (2007) Steady State Economy. In: *Encyclopedia of Earth* (ed.) Cutler J. Cleveland (Washington DC: Environmental Information Coalition, National Council for Science and the Environment). http://www.eoearth.org/article/Steady_state_economy (Retrieved 20.3.2009)

Daly, Herman E. (1977) *Steady-State Economics: The Economics of Biophysical Equilibrium and Moral Growth.* Freeman, San Francisco.

Daly, Herman E. & John B. Cobb Jr (1994) *For the Common Good: Redirecting the Economy Toward Community, the Environment, and a Sustainable Future*. Beacon Press, Boston.

Dauvergne, Peter (2008) *The Shadows of Consumption: Consequences for the Global Environment.* MIT Press, Cambridge, MA.

Easterley, William (2001) *The Effect of IMF and World Bank Programmes on Poverty.* WIDER Discussion Paper, No. 102/2001.

EPI (2008) *Environmental Performance Index 2008.* Yale Center for Environmental Law & Policy, New Haven. http://epi.yale.edu (retrieved 2.2.2009)

ETC (2003) *The Big Down: Atomtech – Technologies Converging at the Nano-scale*. ETC Group, Ottawa. http://www.etcgroup.org/upload/publication/pdf_file/171

Firstenberg, Arthur (2004). Killing Fields. *The Ecologist,* No. June/2004, 22-27. http://www.theecologist.org/archive_detail.asp?content_id=285

Fischer-Kowalski, Marina & Christof Amann (2001) Beyond IPAT and Kuznets Curves: Globalization as a Vital Factor in Analysing the Environmental Impact of Socio-Economic Metabolism. *Population & Environment,* No. 1/23, 7-47.

Flipo, Fabrice (2008) Conceptual Roots of Degrowth, In *Proceedings of the First International Conference on Economic De-Growth for Ecological Sustainability and Social Equity*. http://www.degrowth.net/ (retrieved 26.8.2008)

Flipo, Fabrice and Francois Schneider (eds.) (2008) *Proceedings of the First International Conference on Economic De-Growth for Ecological Sustainability and Social Equity*. http://www.degrowth.net/ (retrieved 26.8.2008)

Galbraith, James K, Pedro Conceicão & Hyunsub Kum (2001): *Inequality and growth reconsidered once again: some new evidence from old data*. The University of Texas at Austin, UTIP Working paper, no. 17/2001.

Gandhi, M.K. (1938) *Hind Swaraj or Indian Home Rule.* Navajivan Publishing House, Ahmedabad. First Published in 1909.

GDR (2008) *The Greenhouse Development Rights Framework: The Right to Development in a Climate Constrained World.* A report by Paul Baer, Tom Athanasiou, Sivan Kartha, and Eric Kemp-Benedict. Heinrich Böll Foundation, Berlin.

Goldsmith, Edward (1992) *The Great U-Turn: De-Industrialising Society.* Ashis Publishing House, New Delhi. Originally published in 1988.

Harman, Chris (2008) *A People's History of the World: From the Stone Age to the New Millennium.* Verso, London. Originally published in 1999.

Hemmati, Minu & Rosalie Gardiner (2002) *Gender and Sustainable Development.* World Summit. Papers of the Heinrich Böll Foundation, No. 10. Heinrich Böll Foundation, Berlin. http://www.worldsummit2002.org/publications/wspaper10.pdf (24.3.2009)

IPCC (2007) *Climate Change 2007: Synthesis Report. An Assessment of the Intergovernmental Panel on Climate Change.* http://www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4_syr.pdf (retrieved 25.2.2009)

Jackson, Tim (2009) Prosperity without growth? The Transition to a Sustainable Economy. Sustainable Development Commission, UK. http://www.sd-commission.org.uk/publications/downloads/prosperity_without_growth_report.pdf (retrieved 31.3.2009)

Johnsson-Latham, Gerd (2007) *A Study on Gender Equality as a Prerequisite for Sustainable Development.* Report to the Environment Advisory Council, Sweden 2007:2. http://www.genderandenvironment.org/admin/admin_biblioteca/documentos/rapport_engelska.pdf (24.3.2009)

Kempf, Hervé (2008) *How the Rich are Destroying the Earth*. Green Books, Devon.

Korten, David C. (1996) *When Corporations Rule the World.* Earthscan, London.

Kumarappa, J.C. (1997) *Economy of Permanence.* Sarva Seva Sangh Prakashan, Varanasi. First published in 1948.

Lamba, Harinder S. (2005) *Rethinking Progress: Towards a Creative Transformation of Global Society.* Daanish Books, New Delhi.

Linebaugh, Peter & Marcus Rediker (2000) *The Many-Headed Hydra; Sailors, Slaves, Commoners, and the Hidden History of the Revolutionary Atlantic.* Beacon Press, Boston.

Lummis, C. Douglas (2005) Democracy. In *The Future of Knowledge & Culture: A Dictionary for the 21st Century. Ed. by Vijay Lal and Ashis Nandy. Pp 43-47. Viking, New Delhi.*

Maathai, Wangari (2008) *Unbowed: One Woman's Story.* Arrow Books, London. First published in 2007.

Marglin, Stephen (2008) *Dismal Science: How Thinking Like an Economist Undermines Community.* Harvard University Press, Cambridge, MA.

Meadows, Donella & Jorgen Randers and Dennis Meadows (2005) *Limits to Growth: The 30-Year Update*. Earthscan, London.

Mehta, Jaya (2001) Give Poverty a Face Please! In Alternative Survey Group (ed.): *Alternative Economic Survey 2000-2001, Second Generation Reforms: Delusions of Development.* Rainbow Publishers, Azadi Bachao Andolan, Lokayan, Delhi, pp. 29-34.

Mehta, Jaya & Shanta Venkatraman (2000) Poverty Statistics, Bermicide's Feast. *Economic and Political Weekly*, July 1. http://www.epw.org.in/showArticles.php?root=2000&leaf=07&filename=1487&filetype=htm

Merchant, Carolyn (1992) *Radical Ecology, The Search for a Liveable World.* Routledge, New York.

Mies, Maria (1986) *Patriarchy and Accumulation on a World Scale, Women in the International Division of Labour*. Zed, London.

Millennium Ecosystem Assessment (2005) *Ecosystems and Human Well-being: Synthesis.* Island Press, Washington DC.

Ministry for Foreign Affairs of Finland (2007a) *Development Policy Programme. Towards a Sustainable and Just World Community, Government Decision-in-Principle.* Ministry for Foreign Affairs of Finland, Helsinki.

Ministry for Foreign Affairs of Finland (2007b) *Annex 3, Terms of Reference, Climate Change and Sustainable Development*. Ministry for Foreign Affairs of Finland, Helsinki.

Mumford, Lewis (1967) *The Myth of the Machine I, Technics and Human Development.* Harcourt, Brace & World, New York.

Mumford, Lewis (1970) *The Myth of the Machine II, The Pentagon of Power.* Harcourt Brace Jovanovich, San Diego.

Nandy, Ashis (2005) Consumerism. In *The Future of Knowledge & Culture: A Dictionary for the 21st Century. Ed. by Vijay Lal and Ashis Nandy. Pp 43-47. Viking, New Delhi.*

NEF (2006a) *Happy Planet Index: An Index of Human Well-being and Environmental Impact.* New Economics Foundation, London.

NEF (2006b) *Growth isn't Working*. New Economics Foundation, London.

NEF (2009) *National Accounts of Well-being: Bringing Real Wealth on the Balance Sheet.* New Economics Foundation, London.

Nordstrom, Gunni (2004) The Invisible Disease: The Dangers of Environmental Illnesses Caused by Electromagnetic Fields and Chemical Emissions. O Books, Winchester

Perlin, John (1989) *A Forest Journey, The Role of Wood in the Development of Civilization.* Norton, New York.

Plumwood, Val (1993) *Feminism and the Mastery of Nature.* Routledge, London.

Rahnema, Majid (2005) Development. In *The Future of Knowledge & Culture: A Dictionary for the 21st Century.* Ed. by Vijay Lal and Ashis Nandy. Pp 70-77. Viking, New Delhi.

Robbins, Richard H. (1999) *Global Problems and the Culture of Capitalism.* Allyn and Bacon, Boston.

Rosenthal, Susan (2006) *Power and Powerlessness.* Trafford Publishing, Victoria, BC.

Rättö, Hanna (2009) *Hyvinvointi ja sen rahamääräisen mittaamisen kehittäminen.* Tilastokeskus. Tutkimuksia 250. Helsinki.

Sachs, Wolfgang (ed.) (1992) *The Development Dictionary, A Guide to Knowledge as Power.* Zed Books, London.

Sen, Amartya (2001) *Development as Freedom.* Oxford University Press, Oxford.

Seppälä, Tomi; Teemu Haukioja & Jari Kaivo-oja (2001). The EKC Hypothesis Does Not Hold for Direct Material Flows: Environmental Kuznets Curve Hypothesis Tests for Direct Material Flows in Five Industrial Countries. *Population & Environment*, No. 2/23, 217-238.

Shiva, Vandana (2008) *Soil – Not Oil: Climate Change, Peak Oil, and Food Insecurity.* Zed Books, London.

Siemenpuu (2008) *Wild Forests: Making Sense with People.* Siemenpuu Foundation, Helsinki. http://www.siemenpuu.org/wildforest.pdf (retrieved 20.2.2009)

Singer, Peter (1991) *Animal Liberation*. Thorsons, London.

Smith, Jeffrey M. (2003) *Seeds of Deception, Exposing Industry and Government Lies About Safety of the Genetically Engineered Foods You're Eating.* Yes! Books, Fairfield, Iowa.

Speth, James Gustav (2008) *The Bridge at the Edge of the World: Capitalism, the Environment and Crossing from Crisis to Sustainability.* Yale University Press, Net Haven and London.

Stanley, James (2004) *Development Induced Displacement and Resettlement.* http://www.forcedmigration.org/guides/fmo022/fmo022.pdf (retrieved 30.1.2009)

Tammilehto Olli (2003) *Globalisation and the Dimensions of Poverty.* Ministry for Foreign Affairs of Finland, Helsinki.

The World March of Women (2009) *Women's Assembly Declaration – World Social Forum 2009, Belém do Para, Brazil.* www.marchemondialedesfemmes.org/alliances_mondialisation/fsm2009/womensassembly/en/ (retrieved 24.3.2009)

Turner, Frederick (1986) *Beyond Geography, The Western Spirit Against the Wilderness.* Rutgers University Press, New Brunswick. Originally published in 1983.

UN/FAO (2008) *Number of Undernourished Persons.* http://www.fao.org/faostat/foodsecurity/index_en.htm (retrieved 25.2.2009)

UNDP (2007) *Human Development Report 2007/2008. Fighting Climate Change. Human Solidarity in a Divided World.* Palgrave MacMillan, New York.

UNESCO (2005) *UNESCO and Sustainable Development.* UNESCO, Paris. http://unesdoc.unesco.org/images/0013/001393/139369e.pdf (retrieved 25.2.2009)

UNSECO (2007) *The Unesco Convention on the Protection and Promotion of the Diversity of Cultural Expressions* (2007) http://unesdoc.unesco.org/images/0014/001429/142919e.pdf (retrieved 25.9.2008)

WCSD (1987) *Our Common Future: World Commission on Environment and Development.* Oxford University Press, Oxford.

Wilkinson, Richard & Kate Pickett (2009) *The Spirit Level: Why More Equal Societies Almost Always Do Better*. Allen Lane, London.

World Bank (2007) *Annual Report 2007.* World Bank, Washington DC. http://web.worldbank.org/WBSITE/EXTERNAL/EXTABOUTUS/EXTANNREP/EXTANNREP2K7/0,,contentMDK:21507855~menuPK:4187926~pagePK:64168445~piPK:64168309~theSitePK:4077916,00.html (retrieved 25.2.2009)

Worldwatch (2004) *State of the World 2004*. Worldwatch Institute, Washington DC.

WWF (2008) *Living Planet Report*. WWF International, Gland.

Zerzan, John (1994) *Future Primitive and Other Essays*. Autonomedia, New York.

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PART II:

Insights from the Dialogues

Part II presents selected insights from the eleven dialogues organised by the Project in six countries. The locations, dates, themes and rapporteurs of the dialogues are indicated in the table below.

Table 1. Dialogues Organised by the Sustainable Cultures Project

Location	Theme	Rapporteurs
Tampere I, Finland 16.5.2008	Sustainable Cultures – Cultures of Sustainability	Marko Ulvila and Jarna Pasanen
Tampere II, Finland 17.5.2008	In Search of Sustainable Societies	Marko Ulvila and Jarna Pasanen
Delhi I, India 4.6.2008	Future of Low Ecological Footprint Communities	Vagish K. Jha
Nairobi, Kenya 6.-7.8.2008	Global Dialogue on Sustainable Cultures	Peter Kuria and Kiama Kaara
Bagamoyo, Tanzania 11.8.2008	Global Dialogue on Sustainable Societies	Petra Bakewell-Stone and Jhikolabwino Manyika
Kaole, Tanzania 12.8.2008	Global Dialogue on Sustainable Societies	Petra Bakewell-Stone and Jhikolabwino Manyika
Dar es Salaam, Tanzania 14.8.2008	Global Dialogue on Sustainable Societies	Petra Bakewell-Stone and Jhikolabwino Manyika
Helsinki, Finland 15.-16.9.2008	Transformations for Sustainable Futures	Marko Ulvila and Jarna Pasanen
Malmö, Sweden 19.9.2008	Degrowth and Social Rebirth – The Logical Steps to Global Survival	Marko Ulvila and Safania Eriksen
Kathmandu, Nepal 16.-17.10.2008	Strivings for Sustainable Futures & Learning from Struggles	Vagish K. Jha
Delhi II, India 1.11.2008	Sustainable Futures	Vagish K. Jha

Selected extracts from the dialogues are presented here grouped under fifteen topics. The selection below presents representative voices from among the dialogue participants, many of whom are activists and intellectuals in the forefront of the struggles for sustainable futures. Many participants stated more or less the same thought in different dialogues at different times and places: due to lack of space, such oft repeated thoughts are illustrated here by only one quote.

The Fifteen Topics are listed below:

Destruction of Sustainable Ways of Life
Colonialism
Modernity
Economy
Consumerism
Development
Displacement
Food Security and Biofuels
Technology
Knowledge and Education
Pathways to Sustainability
Indigenous Peoples
Tradition
Cultural Transformation
Degrowth

Full reports of each dialogue can be found at http://www.sustainablefutures.fi/

Destruction of Sustainable Ways of Life

Vijay Pratap in Tampere I: It would be worthwhile to go through the documentation 200 years back and see what were the debates then on sustainable ways of life. **How did the destruction of the ecologically sustainable ways of lives happen? What were the social and political discussions?**

Tuuli Hirvilammi, Tampere I: It is good that the discussion is not only about consumption, but also about a more profound transition. In this, the social dimensions are very important, as well as understanding how our Western society has also become socially unsustainable. Perhaps increasing consumption is a result of decreasing social relations in families and communities. Also, the relation with Nature is important, and a culturally sustainable society is a good theme to study. *"We should talk about the values behind this consumption society and also relations to Nature. I think when we consider Nature and natural resources as something we can use, and consume as much as we want, then we will do it."* It is necessary to analyse how the societies have become unsustainable, and have dialogues with cultures that are in a process of transition towards unsustainability.

Martin Simotwo in Nairobi: Markets and consumerism have changed the way of doing things on a sustainable basis, we no longer get *ghee* from milk, manure from animals, use our indigenous knowledge, respect our traditional governance and management systems, and the list is endless. We also promote policies that deny people's access to their livelihood, and infrastructure development that destroys Nature. Where is the future?

Basilius Kagwe in Nairobi: There has been a gradual and deliberate process of disconnection from Nature. We have promoted production systems that have undermined our cultures and literally killed traditions that might have averted our ecological disasters. This process has been so intrusive that it has also taken human health and packaged it as a consumer culture – leading to a changing of local cultures, eventually culminating in the destruction of environments. New media has also ensured that there are no dialogues or communication about what matters to the local people; it is focused on a multinational driven agenda as a kind of an alternative. The legal instruments have also tended to ignore local context, while the national policies are hardly informed about local needs.

Jhikolabwino Manyika in Bagamoyo: *"We've been taught that we were put here to rule our Earth. But the truth is that we need the environment more than the environment needs*

us. If we destroy the environment, we are finished; but the environment could continue to exist without us."

John Sombi in Kaole: The wealthy do not invest in culture or the environment; they invest in breweries so that people get drunk. They invest in casinos, and cultivating and trafficking of drugs. **Rather than investing in building our culture, we are investing in destroying culture.**

Fatma M. Muhidin in Kaole: *"In the past you could not find someone polluting the place with rubbish, cutting forests. Now you cannot say anything to the people who are destroying the environment. You just look at them, and it is considered normal."*

Mtumwa Mrisho Makilimla in Kaole: Two things are destroying the environment of the world – craving and losing one's own culture because of copying. *"Because in our traditions, culture is where we learn humanity. New things are brought and different ways are coming and we love to copy. A European comes from Europe, maybe there it is very cold, so here it is very hot for him so he has to walk in underwear and we think its fashion and copy."*

Fi Habiba Amiri in Kaole: *"The big facilitators, the big companies, aid agencies and national factories also bring a lot of problems, for example, in the atmosphere. In the past we did not have much asthma, but now everyone is suffering from it. It used to be a genetic problem that was inherited, but now everyone can suffer from it. Now it's like a fever, like malaria, anyone can fall sick any day."*

Ulla Valovesi in Helsinki: The limits of our natural resources have become visible, be that energy, metal, land, water, etc. We have actually come to a crossroads: if we continue this way, all life on this Earth is seriously under threat. If we want to have any future on this planet we have to unlearn our destructive ways of life and actively relearn sustainable ways for a whole society.

One reason for our destructive way of life is our rootlessness: we have lost our connection to the Earth or with any place for that matter. That makes it possible for us to destroy our surroundings and just move on to new places, or to steal what is needed from other places. In that process we end up displacing many other people as well, who also become rootless.

Marko Ulvila in Kathmandu: This kind of dialogue is needed because the world is at a crossroads because the last 500 years have been utterly unsustainable – environmental sustainability and climate change seem to be getting into a dangerous cycle.

This is largely because of reckless use of fossil fuel, and modern agricultural practice, without paying any heed to the warning of scientists for the last 20 years or so. The result is that the problem is precipitating the crisis faster, which is coming towards us sooner than we expected. Therefore, we need to review our relationship vis-a-vis energy consumption patterns.

Colonialism

Marie Shaba in Bagamoyo: Actually nothing has changed since the slave trade; Who sets the agenda? Who defines what development is? The multinational companies are the modern day slave catchers, and they use the IMF, the World Bank, the UN, our governments, and even us as NGOs without our knowing it. Many times we promote agendas which have originated from the multinational companies.

Northerners have to have a self-examination to see whether they have really changed. And Southerners also need to question whether today they can still say they are to blame.

Maria Cidosa in Bagamoyo: How do you expect us to go back to our roots and develop when my partner is not ready? When he comes to my country he has ulterior motives, takes my land, and at the end of the day, I'm going to be a pauper. I have to go back and beg for my bread, whereas originally I used to bake my own bread. That is not a fair deal.

You hear about dumping of chemicals and the establishment of big manufacturing industries, which are being condemned in the developed world. These are brought to the third world because they get cheap labour and can dump the waste. Yes, it is a dumping ground.

"We were too blessed (in the developing world), there is no harsh weather, we are kind of living in the Garden of Eden. I think this is what attracted our fellows to come here and take and take. So actually it's not now that we're getting donation from them. It's bringing back what they took from us, so let's share it."

Jhikolabwino Manyika in Bagamoyo: People are lost – even with regard to food and drink. A source of life in the real sense has become 'refreshment'. A lot of energy goes into producing profit and pleasure, despite the fact that this is killing us. We need to take time off to remember and discover the root of our problems. "*Even those colonialists have to reach a stage where they acknowledge their crimes, they admit crime, and if possible they pay us a compensation for the wrongdoings that they did to us."*

Marie Shaba in Bagamoyo: "*We have no identity at the moment. We look at ourselves*

with the image of other people and that's why we're getting confused, why we're getting all these problems. We're just copycats and therefore the mentality of slavery still continues."

Marko Ulvila in Bagamoyo: It has emerged very clearly from the dialogue that the development model and success of the North are based on violence, exploitation and de-linking from Nature, de-linking from the Spirit. I'm happy to take this message back to my colleagues in the North.

Azaveli Lwaitama in Dar es Salaam: Solidarity with whom? They say you do not look like me so you do not belong with me. So if you die it does not matter. In the Iraqi war, people counted how many American soldiers died. That is more important, than how many Iraqis have died. In the world we are not the same, we do not treat each other as same.

Your mind is already trapped. "*Even this business we are doing here of dialoguing, I mean dialoguing means seeing, smelling, sharing, accessing each other's smells, each other's voices, but how can you access my Mother's voice in English?"* My Mother is threatened by more serious things than climate change – it is you! And education which takes away her children, and she is left on her own in the village.

What is this American fellow doing in Tanga distributing mosquito nets? You think it is from compassion? It's developing acclimatisation, access to culture, so they are engaging in dialogue to dominate. "*To dominate you need to finance cultural dialogue."* Do not forget that the sociologists and the anthropologists were very crucial for colonisation.

Ras Makonnen in Dar es Salaam: The political system has neglected us; and this is no different from the days when our chiefs were selling our fathers, children and mothers to slavery. This is generating intense rivalries and conflicts between and within nations, exposing a great scramble for power and material supremacy.

Partnership with Europe and America depends on them realising the fact that the African continent has passed through a lot during its dark ages, the atrocities committed during the colonial occupation has deprived the state, which now means that we depend on foreign aid. **All that has been ripped from us has strengthened the capitalists. "*They have controlled us using our own resources."***

Loyce Lema in Dar es Salaam: We are also raising awareness on **biopiracy**, people taking knowledge from the community for their own use. **People who come to do research work, they are just stealing knowledge from you and later they will sell this knowledge back to you in a very expensive way.**

Vijay Pratap in Kathmandu: Exploring 'strivings for sustainability' is the vantage

point. The imperial powers laid their own structures in 500 years and destroyed sustainable ways of living by the indigenous people. Yet, a good number of people, the marginalised majority, still retain their system of meaning and sustainable lifestyles. *Tharus* are one such example of an important indigenous community in Nepal. There are a total of about 80 million indigenous people in India who maintain a sustainable way of living. But they are clearly marginalised by development fundamentalists.

Marko Ulvila in Delhi II: The age-old issue of justice is linked to the process of colonisation and formation of a hierarchy. **The process of colonisation goes hand in hand with the issue of the hierarchy visible in the class relations, patriarchy, and also between species where certain species place themselves above others and exploit them.** My objective is to find out ways to reduce/remove hierarchies and lead to a more equitable society.

Modernity

Vijay Pratap in Tampere I: "*Social psychologist Ashis Nandy has worked on what he calls the Intimate Enemy, how we all have been colonised and we have a mind in ourselves which looks at the industrialism and modernism as lucrative things.*"

Ville-Veikko Hirvelä in Tampere II: The modern way of life is the major source for destruction. The material consumption is not physically needed, so it is rather a social and cultural need. The prevailing society is actually a minority phenomenon, as most of the people live differently.

Why do modern people feel they need things that are not really required? The whole of our culture has been teaching us that we live by consuming meanings and significances that are available, rather than creating the meanings and significances ourselves.

The people who have lived more sustainably in the past or live sustainably at present, believe that they are bringing some significance to the natural world from themselves, to the stones, rivers and forests. Modern scientific understanding is denying this idea, that we should rather add significance to the nature, not consume it. *"Those other cultures, from our science point of view, we think that they do not understand the real Nature because according to our science you cannot really create or be part of the significance of the stone."* If one relates to living and non-living Nature by adding significance to them, this is not only rejected as a foolish idea, but also considered unhealthy in the western culture.

If we take samples from around the world, the most modern educated people consume the most. And the ones with the least modern education live most sustainably.

There is something strange in the modern scientific thinking: the more sophisticated knowledge of biology, ecology, etc., one has, the more destructive way of living one leads.

Harsh Mander in Delhi I: The history of our times seems to be marked by the exile of the dispossessed from the collective consciousness. It is evident in the content of the various art forms such as cinema, etc. Modern popular cinema seems to have forgotten that poor people also exist in this world. We can see two standards prevailing in the Indian society today – one for the minority of 120 million [Muslims], and the other for the majority of 650 million.

Calvin Mbugua in Nairobi**:** I work in the two slums of Mathare and Huruma in regenerating these communities. The slum situation is a crisis of modernisation where things get swept under, if one set of management principles fails, which is then followed by another set of prescriptions.

Devdutt in Delhi II: The present day financial crisis in America is the most definitive proof of the fact that modern civilisation has reached its limits and has arrived at a saturation point. It has lost its innovative capacities. The starting point for the debate should be the rejection of the modern civilisation and understanding of the parallel systems of civilisation in the world. If we are conditioned by the structure of modern civilisation, we cannot formulate the road ahead.

Vijay Pratap in Kathmandu: The irony is that global neo-liberal economic reforms, started in the 1980s, have failed, even for their own elite. The intervention of modernity has not been working even in the countries where it was started, and history is testimony to it. Their relationship with Nature has been totally opposed to what we have. We always look at the Earth as our Mother – vasundhara putra – whereas the more radical of the Northern environmentalist friends call themselves 'Friends of the Earth'. It would be considered sacrilegious to call ourselves 'Friends of our Mother', so to say.

If these are our friends, you can well imagine about our enemies – the way they are consuming oil, water and so on. A matter of concern is that in the name of resolving the crisis, they are compounding it. Take the example of the energy crisis, the option of bio-diesel was floated which eventually created a food crisis. Thus, the minority elite of the world are following a sure recipe for the destruction of the Earth that virtually amounts to self-destruction.

Marko Ulvila in Kathmandu: The history of modernisation has been the history of cultural homogenisation.

Vijay Pratap in Kathmandu: Modernity comes in a package. **An important feature of modernity is that it creates hierarchies that are more complex**. Hence, sustainable cultures become extinct and new culture is thrust upon us. We need to decide between the two. We are dependent on corporations so how can we go against them? Same is true for donors. So what to do?

Vagish K. Jha in Kathmandu: *"Just as modernity and industrialism are a package, its response also has to be total and integrated. Thus, a piecemeal approach may not work and learning the way to look for an integral relationship between say, health, education, livelihood and environment, has to be appreciated."*

Economy

Hilkka Pietilä in Tampere I: The whole human economy should be seen from the subsistence perspective, where the household and a cultivation economy are the basis of the human economy. The household serves people instead of making use of them as workers and consumers, as in an industry-trade-business economy.

At the moment, the terms of the business economy are being imposed on the other two economies, household and cultivation, and this is very destructive. Households are becoming totally dependent on the market economy, ending up in something that can be called market slavery. The more dependent the households are on the market economy, the better for the market.

The problem is that business economy does not take ecology into consideration at all, whereas the household and cultivation economies do. This problem has become worse over the time. Trying to solve the present food crises with money and markets does not work – a more profound change in the structures is desperately needed. The structural adjustment policies turned agriculture towards cash crops production instead of helping farming families to provide themselves with food. A profound change is needed in agriculture for long-term improvement.

These are the key issues when we talk about sustainability. How to make this total picture of human economy more sustainable? So far only feminist-ecological economics has the holistic approach to economics.

Vijay Pratap in Tampere I: Some comments on Pietilä's presentation on market economy. In India, farmers who have been facing problems have been committing suicide in large numbers. While scrutinising this phenomenon, it has been found that it is suicide that is being committed by those farmers who have been able to take loans and mortgages and then lost all what they had. In the prevailing system, the market mechanism is the element that robs them of their dignity. But our society discusses

only suicides and not the market mechanism that makes the modern agriculture a losing proposition and contributes to the suicides.

Olli Tammilehto in Tampere I: **Capitalism is a power system rather than an economic system**. If we want to find out what is capitalism today, we need to examine the history of the 20th century. When the demands for universal suffrage were becoming impossible to turn down in the early 20th century, capitalists and other elite circles got worried. They examined "how to take the risk out of democracy", to use the phrase of the time. **To minimize the risks of democracy to the elite powers, the modern propaganda was invented to manipulate people at a subconscious level**. There were other political innovations as well, such as the Volkswagen or people's car, and the television, which contributed a lot in changing workers' lifestyles and dwelling patterns to more solitary and less communal ones.

Harsh Mander in Delhi I: It is assumed that only the market can help us develop, and the role of the government is to facilitate the functioning of the market. This has drastically altered the political culture of governance in our country. **The moot question is not how much we produce, but how is it being produced and for whom. We need to question the paradigm of economic growth as an ultimate aspiration.**

Asit Dass in Delhi I: Whether one invests in 'sin stocks' or socially responsible investing, the essential nature of capitalism does not change. Unless we go beyond the idea of 'homo economicus', we cannot ensure the well-being and dignity of human beings.

Rajni Bakshi in Delhi I: It is true that exploitation and inequity indeed cover a canvas much larger than simply economics. I would like to point out the fallacy of mainstream economics, which concerns itself with 'wealth' and not 'well-being'. The fallacy lay in separating economy from the social, moral and ecological. Now there are people who are trying to bridge this rupture through mechanisms such as the **social development index**. In fact, it goes even further by taking into account explicitly the environmental costs into the calculation of GDP. **In the US, people are questioning the calculation of GDP as a measure of human progress, by pointing out that the sale of anti-depressants, like the drug Prozac, would add billions of dollars to the GDP, but actually it should be reckoned on the negative side.** While capitalism may not mean the same thing to everybody, the fight is to put society above economy.

Pramod Chawla in Delhi I: The Indian economic policy has shifted from 'SELF-reliance' to 'Reliance'. *"India is no longer a welfare socialist economy but a predator-led*

capitalist model. Our leadership has wedded capitalism for their own survival. The development has to go back to the grassroots."

Wahu Kaara in Nairobi: In discussing her paper, "Visions of Alternative Lifeworlds", she [Wahu Kaara, this volume] took a retrospective look at our past, espousing that it will help us face the future challenges and transform the future. **The overpowering presence of capitalism has subdued all the existing options of natural survival embedded in our cultures. The whole crisis can be summed up by looking at the consumption patterns of the 'Haves' and 'Have Nots'.**

John Mulingwa in Nairobi: The government is in the centre of the conflict. He wondered where he and his colleagues who have been working and living along the Nairobi river will go when the government finally gives the restoration work to private groups. It is most likely that **those contributing most to the pollution of the river will be the ones given the financial contract, while we, the people who live by the river, will be obstacles that will need to be evicted for progress to be realised. This was a classic example of the failures of a governance at the whims of capital.**

The system of governance that exists is flawed and will continue to oppress the masses as long as private ventures are the preferred developers of such resources. **For them it is a profit, for us it is a way of life**. My place is the slum. All the new developments, the modern buildings surrounding us, but for us it is still the same mud houses here. The slum has a history, culture, and a people. One of our main problems has been the oppression and opportunistic approach used by the local government as a tool of oppression.

Anyambilile Mwakatole in Dar es Salaam: When I want to buy a Land Rover from England, I do not determine the cost, but if I want to sell my gold and cotton to England, they would determine the price. I do not think that we will ever come to a compromise because that is the culture of the North, or the culture of Englishmen, to conduct trade in that way.

Sushovan Dhar in Helsinki: There is an unfair trade-off between production and free-time. **It has been amply evidenced that human beings overwork, at times beyond their physical, emotional and psychological capacities, to sustain consumerist lifestyles, even as a number of studies suggest that once a level of material comfort is attained, 'non-positional goods' such as free time, make a greater contribution to human welfare than additional consumption of material goods.** However, labour productivity in the last hundred years has overwhelmingly been translated into economic output and conspicuous consumption rather than shorter work-hours. This

demonstrates industrialism's bias towards producing more goods than leisure.

In fact, globally even in Europe, **we witness the convergence towards the 'flexible' American model that intensifies exploitation and reduces free time**. This whole trade-off between production and free-time is being resolved without "debate" due to the enormous power enjoyed by capital to shape social developments or social direction in accordance to its system and benefits. **Therefore, the productivity gains, coming from the ever revolutionising technologies which are also benefits of successive human labour, goes in favour of capital and not labour**. This is because of the fact that in case the productivity gains resulted in shorter working hours, the benefits of the increased productivity would have passed on to workers. However, the absence of economic growth would have made it harder for the profits to grow. Although this is true for consumption as well, since it might result in lower levels of consumption, the workers would be otherwise benefited as they have much more free time and are in command of more 'non-positional goods'.

Unnecessary longer working hours also drain people of their energy and they are left under-resourced to pursue in their free time creative activities, demanding and challenging, which can substantially increase satisfaction. However, in the absence of sufficient free-time, people prefer low demanding activities, like going to shopping malls or watching television, which are either consumption-intensive or expose us to endless advertisements.

Jean-Marie Robert in Malmö: The degrowth movement encourages application of economic instruments so that harmful misuse is made expensive.

Devdutt in Delhi II: In fact capitalism and Marxism are cousins, howsoever quarrelsome and antagonistic to each other they may be. Both of these shared the same dualistic worldview.

Marko Ulvila in Kathmandu: The world economy based on capitalist structures is in deep crisis, financial institutions are in deep turmoil. In other words, faith and optimism in free market economy have come under a big question mark. Also, especially in our part of the world, I would say, there is a serious crisis of meaning. Despite no shortage of food, habitation or other basic needs of life, people are not finding satisfaction in life. In all the industrial societies there is an epidemic of depression; more and more people are resorting to medical treatment.

Consumerism

Olli Tammilehto in Tampere I: **Consumption is a political project, not an individual choice. The whole idea of consumption society is to make people dissatisfied, so that they want to consume trying to satisfy themselves**. Democracy in a consumption society is a surrogate democracy.

After the 1960s and the emergence of the ecological movement, the capitalists faced a new task: how to take the risk out of ecology? One answer to this has been **the market solution to climate change by Al Gore and his fellows: global market on greenhouse gases**! This quasi-solution gives a new legitimacy for consumption-capitalism but does not help in the global climatic emergency we are facing. Instead, it delays the necessary revolutionary change in social structures.

Vijay Pratap in Tampere I: On the discussion on climate justice, Pratap stated that the Southern elite does not think of its own people, but **the Southern and Northern elites are in collusion. Therefore, the Indian elite is only worried about securing their consumption and does not say anything about the 90% of the Indians who hardly burn fossil fuels at all**. This is not only racist but also inhuman.

Olli Tammilehto in Tampere I: Consumption is a political tool of those in power. The idea that people are consuming to live better is contradicted by the fact that generating dissatisfaction to fuel consumption is most essential in modern capitalism. To think that the individual is the key in consumption is very naive, the capitalist power structure and corporate manipulation are producing that kind of behaviour.

Ville-Veikko Hirvelä in Tampere II: Currently the modern people do not feel good with their lifestyles. They are very dependent on several different things of the consumerist life. **Giving up the consumption of goods and meanings can improve life. Now freedom is considered the ability to choose from given alternatives in a market. This is a fake idea of freedom. Real freedom is to create your own meanings and significances.**

Rajni Bakshi in Delhi I: The consumer class in the world is about 1.7 billion, while the segment left out constituted about 4.3 billion. It is a disturbing phenomenon. We need to think about the inclusive arrangement. However, it is not possible to include the 4.3 billion people in this model, as it is not sustainable.

Gandhi had seen this way back in 1946 when he decried the few countries for their high consumption level, which cannot be sustained if all the countries

tried attaining that level of consumption. In response to the worsening ecological crisis, the West is coming up with innovations like hybrid fuel, which requires a much lower level of fuel.

Calvin Mbugua in Nairobi: On the role of pervasive media, **the media changes our tastes and proposes conveniences that are destructive to our societies**. Why would you prefer to drink Coca Cola rather than soup? Why would you prefer to eat bread over cassava? There is no comparison of the nutritional values. Humanity has been enslaved through manipulating tastes and conveniences; these two stand in the way to a sustainable future. Alternative education is the key.

Jhikolabwino Manyika in Nairobi: We need to call for a new world that connects us back to our roots. It is only by shunning consumerism that we can have a future guaranteed, we must embrace a culture of self-control over what we as humans can and should be consuming.

Julius Muchemi in Nairobi: If the 500 million Africans would be living within the consumerist lifestyle of the West, would this not pose a security threat to the world? How does Africa locate itself in this geo-political set-up? What would be the implications to the global resources?

Azaveli Lwaitama in Dar es Salaam: The media is very clever in advertising consumerism. "*Every time you use the mobile phone dollars leave the country, but everyday Vodacom is telling you, 'why are you not talking to someone?'*" Also, everyday you are being socialised into the culture of violence as pleasure. Because your gun is nicely put under your belt, you look smart with a necktie, but since the Maasai is seen with a spear, he is a violent, primitive fellow.

Olli Tammilehto in Helsinki: Commodities are bought because of their social, cultural and spiritual meanings and connotations, but they do not satisfy social, cultural and spiritual needs. As far as they satisfy, they do it only for a short while. It lasts as long as the meanings are moved by advertisements from old things to new ones. You cannot buy the new ones at once, or perhaps ever. This creates frustration and dissatisfaction. Charles Kettering of General Motors stated already in 1920s: "The key to economic prosperity is the organised creation of dissatisfaction."

The consumer society is the cultural imperialism of today. The consumer society is marketed as a model for the whole world, and the political reasons for its development get obscured. Sociologists and philosophers cook up political modernisation theories, and they only add to constructing this political project as

a natural evolution. To see the truth an earthquake is needed – maybe the climate change will work as one?

Eija Koski in Helsinki: We should also start to ask some basic, but important questions about sufficiency: "Do I really need it? Time is limited – how much to use it for earning money for consumption? Home is limited – does new stuff bring more harm than joy? The money is limited – who decides how to use it? The world is limited – is it more worthy than excess consumption?"

After a certain, rather low level, more consumption doesn't increase measured happiness. In the new economics of happiness we should consider the following things: Space use at home – the amount of useless clutter makes life unpleasant. **Never ending pursuit for more brings dissatisfaction**. Getting used to luxury deprives us of joy as there are no challenges in life any more. Consumption takes time from more important things, as friends, family and hobbies. And finally: the one who consumes less has to work less; less material means more life.

Instead of greed we should value moderation. **In the limited world, too much for one means too little for the other.** Moderation may not be giving up something, but gaining something more important. Interviews of those who consume less reveal that people search for communality, peacefulness, safety, contentedness in life as a whole, good consciousness, deepness and time to concentrate on things.

Marko Ulvila in Delhi II**:** Firstly, it is the relationship with Nature which has really gone out of balance. The consumer class, though a minority in the world, is creating havoc with Nature by indulging in consumerism. Not just the present, but also the future generations will find it hard to have a dignified livelihood. This debate can be traced back to at least a century when Gandhi warned of the dangers of consumerism, to which various movements in the North starting from the 1960s and 1970s are now waking up.

Mamta Dash in Delhi II**:** We need to confront the inter-linkages between the consumption pattern, world economic order and its impact on Nature. **There has been a tremendous shift in the consumption pattern all over the world. The needs, which are being created, are energy intensive and high in the use of metals, which require mining of natural resources.** Manufacture of all the modern gadgets like cameras, mobile phones, computers, cars and refrigerators involves large quantities of metal, especially aluminium. In the automotive industry alone, the use of aluminium has increased from 3 percent to 70 percent in the last two decades. A large segment of the defence-based industry also uses metals. Aluminium is extracted from bauxite, which is found below the densely tree covered mountains. It is obvious that mining of bauxite would damage the environment.

Earlier too the communities did engage in mining, but it was only in the neighbouring territory and catered to their local needs. Now **the new capitalist order or world order has changed the pattern of consumer behaviour. Companies like Sterlite, Jindal or Mittal, were not new, but space has been created for them to come and draw out raw materials from Nature. It was a strategic and well thought out process where there was a very strong amalgamation of market forces and the State, as if the common man did not exist.**

Vagish K. Jha in Delhi II: I disagree with the conspiracy approach to analyse this issue. We should also look at our role in falling prey to the seduction of modernism and consumerism. It is no use blaming somebody else for providing the seduction and feeling guilt-free about our own role.

Marko Ulvila in Delhi II: Till now over-consumption has been seen as a matter of individual choice. However, I hope that over-consumption would be looked at not just as irresponsible behaviour, but a criminal act. It is in fact a structural problem of our culture and societies. Such cultural transformation in the conscience of people is not new. The Western elite was earlier indulging in shooting of rare wild animals in Asia and Africa, and proving its exclusivity from the masses. Smoking also falls in this category. However, over a period of time they are no longer associated with social status or exclusivity of the elite but questionable or forbidden acts.

Modern commercial media runs on advertising revenue for promoting socially irresponsible consumerism. Unless and until we deal with the advertisement and commercial media, there seems no hope of changing the discourse from over-consumption. We need a socially relevant, non-profit public media in its place. Let's hope that the cultural resource of the majority of people who are actually leading exemplary lives will be able to change the discourse of over-consumption in the right direction.

Over-consumption is a global problem caused by a minority subculture; a minority lifestyle is causing problems for all. *"This is an utterly unjust situation and the class perspective to look at this phenomenon is very helpful. Secondly, we see that consumer population in China is equal to that in the US. In India, it is just half, yet the number of people is bigger than any other European country. The amount of carbon emission is proportionate to that. So, cutting across industrialised and developing countries, the North and the South, it is clearly a global problem and this study proposed to look into the class context to understand it."*

We need to look at this class perspective to realise that it is not a natural process, but a created one. Thus, in creating consumerist culture, the production of dissatisfaction is the key factor – the more people are dissatisfied the more they consume. Looking at the consumption pattern figures, it becomes clear that the majority of people are living sustainable lifestyles – especially in the developing world.

Heini Salminen in Kathmandu: *"People are consuming more for happiness without realising that resources would end sooner than they expect. The West must try to unlearn many things and discover the real meaning of happiness".*

Development

Tuuli Hirvilammi in Tampere I: I would like to note the different social structures, for example, here in Finland, and in India. When I was travelling in India and told people that I live alone in Finland, they thought it was very weird. When I pointed out to them that is what our so-called development has done, they got thinking about "development" from a slightly different angle.

James Maina Mugo in Nairobi: Forceful evictions have become part of real development and an acceptable form of human rights abuse. More and more people are being made destitute in the face of capital development.

Simon Kokoyo in Nairobi: There is a strong feeling that **the North always wants to control and dominate any agenda in order to gain access to resources from the South**. The creation or reinvention of failed institutions which rebrand for convenience, introduces concepts in which the real meaning of community is lost. Therefore, the focus goes to things that do not matter to the people, such as empowerment as a measurable indicator, and mainstreaming as an integrative development output; but the agenda is geared more towards subsuming the South into the North.

This is a co-optioning //co-opting??// of the civil society and it is a reflection of the power struggles between the North and South and the dependencies that have evolved in these new institutional arrangements. I see new problems as an excuse to develop new contracts with multinationals and shifting the centres of the problem. For example, the North should be taking a greater role in dealing with global warming, but instead it is shifting the blame and creating an environment that will create complacency.

Petra Bakewell-Stone in Bagamoyo: The language that we use is very important in shaping our conceptual worldviews and even our behaviour. We need to look carefully at the types of words that we use; if we say 'developing' and 'developed world', we are just perpetuating the idea that the West is more developed.

Marie Shaba in Bagamoyo: Instead of talking about aid, let us talk about reparation. Economic affirmative actions. Let us completely take out the word 'aid' from our vocabulary, because 'aid' is not aid. **They have looted a lot for centuries, so now they**

are giving back aid but it is not aid as far as I'm concerned.

Then we should also speak about global peace because we do not manufacture guns. Those who manufacture guns are the same people that preach peace. In this dialogue we need to address this culture of violence and destruction in the name of democracy, free market, globalisation and sustainable development, because without that we shall be talking hot air every day.

Marie Shaba in Dar es Salaam: I'm allergic to certain terminologies, like "poverty" and "less developed countries" – would rather use "less industrialised countries", because I do not understand development. As civil society organisations, we have to have our own glossary of these terms and interpret them differently because part of the unsustainability of our efforts is due to the abuse of these terminologies. *"We the global citizens are the majority so we have nothing to fear. We are not poor and everybody needs to know that."*

Aruna Roy in Malmö: The investments by transnational companies in India do not create jobs for the ordinary people, but displaces them from land and livelihood in large numbers. The establishment of Special Investment Zones escalates this. They were modelled by China where there are two of them, in India 300 are planned. In Goa, the plans have been removed after a movement and large protests have taken place. Current protests are there for example, in Nandigram in West Bengal.

Per Råberg in Malmö: In the processes around the Bruntland Commission and the Rio Summit of 1992 the social aspect of sustainability was not defined as change in industrial countries, but a process for developing countries to adapt a western lifestyle. I think that is what has been the problem in the sustainability debate.

Mamata Dash in Delhi II: We need to understand the politics behind this consumerism and the very notion of development. Only then we would understand how a district like Kalahandi, known as the rice bowl of Orissa, has turned into a symbol of starvation and death today. If we still want to have balance in nature and if we really do not want to stop global warming in the coming years, if we want to stop the Himalayan glaciers from melting down; we better start re-looking at our lifestyles. We better begin our way of responding to the whole notion of 'development.' The change in the consumption pattern would require us to redefine our lives.

Suresh Dhakal in Kathmandu: Development is an 'imperialist' projection, we need to think beyond 'development'. The whole term 'development' has to be questioned.

Secondly, the issues of sustainability of culture need to be mapped on a larger politi-

cal-economic canvas. *"The sustainability/development issues are political issues. In Nepal all the social movements are NGO-driven, but all of them start by saying they are non-political. These are grassroots movements co-opted by NGOs, who claim to be non-political. This is absolutely wrong – either they are cheating people or they are not doing what they say they are."*

Mamata Dash in Kathmandu: We need to look into the notion of development, politics of development and the agenda of the nation state. The socio-economic fabric is being destroyed by their own government. Referring to the plight of people of such displacement, a victim was quoted as saying, *"We used to grow gold in our country and we can't even break brick on the roadside."* If we are fighting against global forces, our struggle has to be globalised.

Suresh Dhakal in Kathmandu: Development has already destroyed our happiness which is on the wane. The moot question is to clarify if we are looking for alternative development, or an alternative to development? Development has been an imperialist project, and 'resilience' was another word we need to reclaim to find methods and ways to a sustainable roadmap for the future. Since we see ourselves with a Western lens, we actually do not know as to what we do not know.

Prakash Mahat in Kathmandu: *"Parties are also thinking to make their own constitution democratic giving representation to all sections. Alternative development and sustainable development are talked about. But we have not got even basic mainstream development. So we will have that first, then we will be able to appreciate the importance of alternative development"*.

Aruna Roy in Malmö: A society which has not seen modernism will not have an alternative system. It wants the formal system. It wants formal politics. It wants the schools. It wants the hospitals. The argument of the Left is being given for years, as in, why have an alternative school for the poor? Why not the formal school for the poor? Why do you need to have an alternative system of health? Why a barefoot doctor? So **it is only when you have everything, the alternative becomes acceptable. When you don't have it, then mainstream is what is most attractive.**

So whether it's politics, or whether it's development or whether it's access to basic livelihood systems that we have, there is no choice. I remember what a right-wing Indian, with whom I shared the podium once many many years ago, said, and his argument was that bringing in condoms to India was an international multinational plot, therefore, what you were doing was using modernism to influence Indian thought. We went into convolutions and I felt **the real question is not whether it's tradition or modernity, the question is whatever the process we adopt, will it bring in equality, will it bring in social justice, will it bring in a better society**? So I think

some of those trappings in India are very very different for us and we haven't solved some and we have solved some.

Uddhab Pyakurel in Kathmandu: *"Since we have not tasted mainstream growth, most of us are for it and political parties don't have really any idea of growth."* Kosi, the Indian dam project, is a great example that we need to learn from. This is the right time to chart out a roadmap, though actually we are late by 60 years. *"We can still learn from the experiences from our neighbours, i.e., whether it was reservation or development."* For example, India claims 9 percent growth rate and has 21 percent middle class, but hardly 17 percent of the Dalit children go to school.

Displacement

Basilius Kagwe in Nairobi: The policy of decimating local knowledge systems, governance systems, and plundering resources by introducing new development concepts understood by only a few, are the root of the crisis we are facing today.

At Karima sacred forest, the community is fighting to conserve a resource that has been handled and managed by local government in the most unsustainable manner. They cleared the original forests and introduced exotic species leading to loss of water and grazing lands. When there is no water, people are forced to migrate to other areas, which has a potential for conflict.

Mamata Dash in Delhi II: In Orissa the state has been trying to seduce the people by offering **compensation for land acquisition and displacement**. Earlier the government was offering Rs. 150 as compensation, but now it is offering Rs. 50,000. **However, this is being rejected by the people because they feel that no amount of money can really substitute land as it provides livelihood to people over a number of generations**. BALCO had to move out of its proposed site despite spending scores of rupees, due to the resistance of the people. We should infiltrate politics if we really want to make a change.

Sudhirendra Sharma in Delhi II: We need to draw attention to the political economy of the dams which benefit the politicians, engineers and bureaucrats alike. Many a time people live better with floods, rather than building dams, which cause devastation on a much larger scale. Before the modern dams were built, people of the Kosi area had a better standard of life and the migration was also quite low. People of this area knew how to live with floods. He urged upon the policy makers and political leadership to take into account people's opinion and technical/ecological opinion before deciding on any future course of action for Kosi.

Krishna Bhattachan in Kathmandu: I would like to cite an example of the Tharu community who used to live in a dense forest in Terai. Until 1950, they conserved, preserved and protected the *sal* trees, rhinos, crocodiles, all the flora and fauna. This was the time when only they could live there. Any outsider would not dare to enter the forest due to mosquitoes which would cause malaria, whereas the Tharus were biologically immune to the disease. **After 1950 with American 'aid' DDT was sprayed into these dense forests. As a result, all the mosquitoes vanished and the Tharus also went away; their land was confiscated**. In the area of Chitawan/Bardia National Park, where they are found now, they are surviving merely as petty help. Even today, every Saturday they go inside the forest to worship, because their Gods are there only.

Mamata Dash in Kathmandu: I doubt if India really is the largest democracy in the world. The constitution of India commits itself to protect people's right to live with dignity and ensuring human rights, taking all diversity issues in its stride. But today we are at crossroads as far as industrialisation, globalisation and destruction of people's life and livelihood are concerned. India claims to have achieved a growth rate of 9 percent, yet it seems to be heading towards a civil war, which is already taking place in various parts. We can look at **the paradox of robust economy vs. large number of people losing their home, displacement, people living on pavements, etc.**

Suresh Dhakal in Kathmandu: I would like to highlight the shifting paradigm where we always use Western lenses to understand indigenous people. For example with a few hydro-electrical projects in Nepal, the policy of compensation favours landlords and no one cares about those poor landless people who depend on the land and lose their livelihood without compensation.

Food Security and Biofuels

Jhikolabwino Manyika in Tampere II: The Rasta people are trying to get back to nature. For some it means a physical move from the West to Africa, while for others, a mental and spiritual move towards a natural way of living. One aspect of this is to consume naturally produced vegetarian food – *ital* food in the Rasta expression. Also, in Africa the natural way of living is under threat. The Rastas are trying to get people to value the traditions and the traditional knowledge in agriculture, but then the people from the Ministry and University come and teach how to harvest by using chemicals. *"The problem for Tanzania is that the people have been told that their indigenous knowledge is backward. So it is now another way to make them believe and really understand that their ways were the real ways."*

Phyllis Nduva in Nairobi: It is not a question of embracing top–down development models, but harnessing traditional local knowledge to secure livelihoods. In the face of the ongoing food crisis, local people and communities are not interested in grand plans of a vision 2030, but where their next meal will come from. What are the opportunities for asserting people's control over food production, distribution and consumption in the way they know best and have practiced over years? It is criminal to have instances where food, land and environment are used as political tools. We need to eschew the principles of food sovereignty, both as a framework and as policy advocacy.

Garhuru Mburu in Nairobi: We need to really move down and work with communities, so that one can create resilience at the community level and talk of food issues. We do not need genetic engineering, we do not need AGRA, but we need to go back to what our people used to eat. We do not need to rely on maize as food security for Africa, that is not working. We need to use our own knowledge, the knowledge of our people, and the materials that we have. Endogenous development can be traced by what people have, the materials, the knowledge – getting a little bit from what is coming from outside. What we need to do is to look back so that we can see ahead.

Marie Shaba in Bagamoyo: Through corporate globalisation, "*utandawizi"*, and especially through organisations such as the WTO, there is patenting and the TRIPS. They have stolen the ability of citizens to continue with their various experiments, e.g., on seeds, which is traditional knowledge. Corporate globalisation robs especially from women because seeds have been in their domain. They were freely sharing, but now with patenting, a lot of our indigenous seeds are no longer ours. We have bought those seeds which one must buy every season, so it is big business for the seed companies. This has robbed the women and the Tanzanians of the ability to use seeds freely in order to ensure food security.

William Genya in Bagamoyo: The introduction of cash crops has affected indigenous knowledge and the sustainability of our agriculture. Similarly, industrial biofuels are problematic, since in many places people are now growing Jatropha and other types of crops which cannot be used for food. We should consider our food needs primary.

Mtumwa Mrisho Makilimla in Kaole: *"The economy drives us to destroy the environment. In farming people used to invite each other to go harvest together but now there is no community and togetherness. Now people just do it as a business. In the past we used to just share and there was generosity. This culture does not exist any longer. It's very dangerous."*

Hawa Kimolo in Dar es Salaam: The Green Revolution and modern agriculture is a great threat that will jeopardise the environment. **We should not forget about smallholder farmers who are farming sustainably because they are not using chemicals, they are using the little water which is available.**

Before the coming of colonialists, I do not think there was a problem of food in this country. The people who were feeding Tanzania were the smallholder farmers. In Kagera there was a strong administration, a chiefdom, and the household was obliged to produce their own food and the one who could not produce the food, was given a small task by the chief so he could produce, or if he did not produce, then he had to do something. So those systems were dismantled. "*If we go back to our small farmers and organise things, I think we can feed the world."*

Loyce Lema in Dar es Salaam: There is a big push from the government to use fertilisers, new seeds, new varieties. This is not sustainable at all. ***"We have plenty of varieties of bananas in Tanzania, why should we go to GMOs? They are saying that we are hungry, but we think that the big corporations are hungry to make more profit from us."***

Maya Kshetri in Kathmandu: The food crisis connected to biofuel should be attributed only to developed countries who were using edible crops like corn, soybean and sunflower for biofuel. But in India, Jatropha is being cultivated for biofuel. For this we are making use of marginal land and with non-edible oil seeds. We have close to 0.5 billion acres of land available world over, which is degraded and abandoned. This land is being reclaimed for growing biofuel.

Mamata Dash in Kathmandu**:** From Indian experience I want to reiterate that no land is barren land. *"No land is degraded or abandoned land, the premise on which we proceed. In the case of Jatropha, the reality is that in most of the cases farm land is being used – farmers are coaxed to abandon traditional agriculture and take up Jatropha cultivation – to take loans for it and so on. Thus, a new way of life and agriculture is being thrust upon us."*

Vijay Pratap in Kathmandu: The logic put forward for the biofuel was nothing but propaganda of the automobile industry and they did not survive the test of truth. *"Most of the people in our part of the world are non-fuel dependent pedestrians or cycle users, etc. No land is barren. Dry land farming has been traditional practice for ages, but modernity has erased the skill and even memory from popular conscience. Now even Kellogg's and McDonald's want to talk about natural agriculture. They have grown by displacing or decimating marginal farmers. Biofuel rationale rests on the premise of irrational*

use of automobiles – if you look at the chain it involves – paint-chemicals contaminating water, the consequences are far more devastating."

Technology

Jhikolabwino Manyika in Tampere II: I would like to explain the Rasta understanding and way of life. The Rasta movement has its origins among the African-Caribbean communities particularly in Jamaica. The Rasta try to live in harmony with nature. *"Nature and God are one of us. So whatever harm we do to nature we are harming ourselves. We consider the Western technological development as evil. That will kill mankind. So we call it Babylonia."*

J.P.S. Uberoi in Delhi I: There is a need to have more discussion of 'truth' and not of 'reality'. We need a deeper analysis of the question of technology in the process of sustainable development. *"Technology is just the other side of ecology. It is the main management of the relationship between society, between humanity, the species, the non-human nature."*

Rajni Bakshi in Delhi I: The dominant view certainly looked at technology as something which could be used to evolve a sustainable development. However, the question is whether we treat the Earth as our home or a large marketplace.

Devdutt in Delhi I: The role of technology, which was the villain of the piece, in this process needs deeper probing. *"Modern technology is exploitative and extractive."* Could there be a development which is inherently sustainable and does not require constant corrective measures to remain sustainable? I don't agree with the nomenclature of the discussion, 'culture of sustainability'. The concept of sustainability itself needs to be examined and we need to find out the process through which it operates.

Anita Kelles-Viitanen in Helsinki: It is important to understand that technology is never value free. It is embedded in social practices of power, and controlled by its norms and values. **Technology comes with strings attached and it is embedded in value systems that do not necessarily work in the interest of the poor.**

The latest agricultural technologies such as GM seeds – and like my cheap printing machine – come with expensive strings. In my machine, ink costs more than the machine. Since I need ink continuously, Lexmark has managed to hook me into a costly ink-dependency. GM seeds work only if you use certain pesticides to which the genetic code will respond. The price of pesticides reflects global market prices over which poor farmers have no control. Nor do they have control over crop prices. They are set by global market speculators, using futures and other financial instruments.

Therefore, we need to explore the nexus of science, technology, culture and power and how it is increasingly driven by the market's logic. According to this logic, technology is a resource with benefits going mainly to transnational companies.

Knowledge and Education

Vijay Pratap in Delhi I: **There is a need to de-learn many of the things that we have acquired in the formal educational process, so that we become receptive to learning from people.** I knew a well-known journalist, editor of a newspaper in Rajasthan, who resigned from his job to go and live with the local people. He was amazed by the people's deep sense of understanding and wisdom on issues such as dignity, livelihood, empowerment, environment and their surroundings, despite their not having any formal education. These people coined the slogan *'Samant raj kee roti nahi chahiye, vote raj kee izzat chahiye'* i.e., 'We do not want bread provided by a feudal system; we want our dignity in a democratic system'.

Razia Abbasi in Delhi I: How could all these sustainability issues form a part of the actual learning process at schools and colleges? Even though environmental studies are now a part of the school syllabus, the situation is pathetic. *"Has anybody looked at the text books? They make you cry. There are questions like how many dams are there in India and where are they."* These school books do not have any 'why question', no 'impact question'. The process of the transfer of knowledge is based either on profit, or a decision by someone in the government about what is to be learnt by the students, and that is included in the syllabus.

Avinash Jha in Delhi I: The traditional knowledge is not static and constant. It has changed – adapting and evolving over time. Unfortunately, now it has become culturally irrelevant and is no longer considered part of knowledge. It is neither economically rewarding nor politically effective. The need is to create an order of knowledge from which we all could benefit and take advantage.

Maria Cidosa in Bagamoyo: We are ignoring local knowledge. As we are not passing it on to the new generation, it is dying hard and the people are just living with it.

We are becoming modernised and commercialised, but are we ready to proceed into the modern globalisation? Or are we just following and becoming like robots? "*We are no longer dancing on our culture, we are dancing on other peoples' cultures."*

We are trying to eat like Europeans, not our indigenous food, nor are we preserving our indigenous seeds. In terms of food as medicine, we have a lot of indigenous vegetables and herbs which are also passing out of existence and giving way to

new vegetables. Actually, if you look back at our people, they were healthy, very strong, and there was no blood pressure. However, today we find that even young children have high BP due to being overweight. They eat junk food, the food is not really originating from the indigenous people but from the Western world. It is not prepared in the way it should be; because it is not their food.

There was a wealth of knowledge about food: what type of food we should eat? In which season should it be eaten? How should it be preserved so that it is not contaminated? How should we select the best seeds for our cultivation, for healthy eating? Which herbs should be preserved in which particular season so that it sustains, e.g., which herb for the dry season? All this knowledge was really put together for the benefit of the society.

Mzee Madongo in Bagamoyo: Our major challenge now is to see where we went wrong. When it comes to a point that you are depending even on ideas, then you are getting very, very low. "*Our policies are killing the knowledge that we have inherited from our forefathers."*

Maria Cidosa in Bagamoyo: There are many researchers but the "owners" of the knowledge are not informed what becomes of it. It should be two-way, to have mutual understanding, not just one-way, where someone comes and we are treated like experimental grounds and then it disappears.

I remember during those days I used to hear a lot of tales from my own people – the forests were sacred places, you were not supposed to collect even a dry stick from there. If you did, you would be told to take it back to that place. And the forests were really thick, they were so quiet, so beautiful. The waters were flowing throughout the year. But when we went for commercialisation, see, look what we have done!

Jhikolabwino Manyika in Bagamoyo: "*There's nothing as beautiful as the truth. When people know the truth, then that truth will set them free. But if we want to cover it over, and not make certain things open, so that we look good, then the resulting problems could be even bigger."*

"Africans had their ways. They were told that this is not the way, God is not in the mountain, God is in heaven. Until the African returns to that mountain, he will know that my strength and my being is within this mountain, because the mountain gives me water, it gives me rain, this mountain gives me fruit, therefore my God is there. When the African returns to that consciousness a solution will be found. But the African also needs to know where he was lied to."

Petra Bakewell-Stone in Bagamoyo**:** We have talked about the importance of docu-

menting local culture, but the dominant forms of documentation are written, and that is why knowledge has been in the domain of the "North", or the "West", because they have been especially advanced in writing. Is there not another, more African way of documenting, which is more appropriate to the place and the culture? If there is no culture of reading and writing, what is the point now of compiling all this indigenous knowledge just for it to accumulate in reports on shelves?

Maria Cidosa in Bagamoyo: There were a lot of messages on items and utilities in the families, like the *kawa* (traditional food cover). When the woman is very close with the husband, then she will use a certain food cover, and when the husband comes to eat the food, he will understand that message. They used the rock paintings. They used to have their meetings and the old people would do story-telling in the evening, they would pass on the knowledge, the skills, and the education.

Jhikolabwino Manyika in Kaole: "We *have our professors, our educated people who study a lot, but their education doesn't help us that much.* ***All challenges that face us environmentally and culturally, if you want to tackle them and find solutions you have to go and search and learn from the people who are still living natural ways."***

Rashid Chua in Kaole**:** *Educated people, when they return from Europe, start their own farms and private hospitals where you have to pay, rather than help people. We are heading in the direction where there will be more destruction because the root cause of this destruction is those who are educated.*

John Sombi in Kaole: "[The educated] *don't want to hear that this tree treats a certain illness or if we preserve this forest it will be of what benefit in the future. They just think about building a factory that takes about a hundred acres. And on all those 100 acres, you have to cut down the trees."*

Education is also contributing to the destruction of our cultural values. For example, when elders, who have not been to school, tell you something, you don't respect them because you think that you are educated and more intelligent than they are.

Mtumwa Mrisho Makilimla in Kaole**:** ***"****If we don't have education we'll become captives. But if we're too educated also it's a problem, because that's when we start imitating."*

Mzee Rashid Yusuf Sekamba in Kaole: Education has changed the environment of our culture. We send our youth to Europe to study. If they come back, they should go to the villages to teach agriculture. But they return with money, they buy 100 acres

and establish a private project.

Mtumwa Mrisho Makilimla in Kaole**:** *"For us who think that we need to go forward we have to reclaim our ways. We think we do not have knowledge, so we look for knowledge. But what we think is 'knowledge' is actually the thing that is misleading us. Knowledge is getting lost. Someone does not know even how to prepare food. She/he goes to buy a tin of readymade food. But if she/he prepares his/her own food, they do not kill the vitamins. Does not put in cooking oil if cooking cassava leaves, just use vegetable and salt in order to get the nutrition. People are getting heart diseases from this same industrial cooking oil. They add it thinking that it makes it sweeter, actually it kills!"*

Hawa Kimolo in Dar es Salaam**:** *"The worst of all is semi-educating our people."* From the time they are born, that is when we should start teaching our children skills. Even affluent people do not know how to eat. "*I call it 'no-food' because if you put rice, chips, meat and fish, and no fruit and no vegetables, is that food? That is not food, that is pollution, polluting your own body, actually this is the aftermath of semi-education."*

Pathways to Sustainability

Hilkka Pietilä in Tampere I**:** One should have a priority order of different sustainabilities, and the ecological sustainability should be the Number One, as it is the basis of our existence.

Marko Ulvila in Tampere I: The common view of seeing modern, industrialised countries as natural models for the rest of the world has to be challenged; and the sustainable societies of the developing countries should rather show the way instead.

Kai Vaara in Tampere II: Someone centrally placed in the eco-village movement in Finland explained the thinking among the eco-village or eco-community initiatives and movements. There is a pre-history here, with particular spiritual and ideological tendencies. In Russia, there is a new way of community movement that is combined with a political demand for one hectare of land for everyone to have to cultivate, called the "Anastasia Movement", inspired by a series of books by Vladimir Megre. That may have a wider impact also in the future. In hundreds of cities in Russia, people are gathering to form new communities on this line.

Vijay Pratap in Tampere II**:** *"I am not a religious person. I don't belong to any religious community. But the religiosity, that spirituality, the ideal of morality, gives us a sense to perceive our past, imagine a future and live the present in a manner which combines the*

understanding of the past and the dream of the future simultaneously. So in the sustainability of cultures we don't switch off from the institutions of our religion."

Jaya in Delhi I: Culture is a process through which a family, society and community define themselves. We should examine if a community is a low-carbon community by default, or it has decided to be like this: *"Is it incidental that is has a very small or low footprint, or is it an enabled, conscious decision to stay that way?"*

Basilius Kagwe in Nairobi: Soil is the basis for life, and there is a need to get connected and be with the soil. This connection will help us define what we mean by lifestyles, life, livelihoods, traditional norms, ancestral lineage, and traditional practices – all with a bearing on climate change! Let us be practical.

"*Let's go tracing our way back and see where we lost the path. A major option is to go to the Mountain, the Lake, to the sacred places which are only being taken care of by our ancestors. There we will find the answers. Local communities do not spoil their own environment. It is those people who have no passion with the environment that show contempt for it. We have taken the first steps by walking the baby.* ***The initiative has to come from us. We will be considered backward and unprogressive. But we would have chosen a noble engagement****."*

Julius Gikundi in Nairobi: "O*ur traditional methods have been very successful in the protection of natural resources as has been shown by the Gitune forest community.* ***Our traditional ways have systems of governance that are more in concert with Nature, as opposed to the imposed systems of management being promoted by the powerful today. We have shown that the traditional ways can work!"***

Wahu Kaara in Nairobi**:** We have to remember that democracy is not a statement; it is a way of life – a life not dictated by the corporate.

Awori Achoka in Nairobi: The Uhai Model is a search for a tool to negotiate with Nature. The model seeks to clarify how planners of development should think, how consumers should react, what inputs are required for our ecosystem and how Nature will balance and counter-balance the shared responsibility of production and measured consumption. The model is based on working closely with Nature and ecosystems, and letting ecosystems define how we as humans relate to Earth.

The definition of zones closely corresponds with how humans over centuries have learnt to co-exist with Nature, and how they have also been able to relate closely with Nature and their neighbours. This model offers a retrospective view on how cultures have evolved over time, the risks that have evolved over time and become accepted as

normal and mainstream, and forms the baseline for our thinking ahead.

Achoka proposed an Eco Forum, which is the unification of people, culture, natural resources and geo-space. What have we done to safeguard the dignity of Nature and natural resources? Only by reflecting on such key questions can we start to define a new way of engagement as proposed by the key discussants and what Wahu calls the visions of alternative lifeworlds.

Marie Shaba in Bagamoyo: "*As an African I believe in the human race, I believe in co-existence. There are things that I'm fighting, like the whole system of segregation, based on colour or gender, because I believe that we were all created with the same needs. But if you want to be sustainable you have to consider that you co-exist with other human beings, with other species. Because that's where you can get perfect balance and harmony among all creatures of the world. So the issue of sustainability very much needs groups that can respect customs and traditions and the way in which people do their things.*"

Mzee Madongo in Bagamoyo: Sometimes I think a good idea is to go tribal because that is the only way you can understand each other. We can concentrate on what a tribe has to offer, because that is an entity which believes in itself.

Jhikolabwino Manyika in Dar es Salaam: Our people in Africa have been brainwashed for a long time, so before we can take action we have to educate our people and be ready to learn from people who are still living in the original ways. **In the West the problem is greed. "*They want it all, and at the end of the day they lose their soul. So these problems of sustainability link with spirituality, that the morals are not there in the world.*"**

Ras Makonnen in Dar es Salaam: We would stress our solidarity with the West to be based on mutual agreements. We are not seeking charity. This African continent, especially Tanzania, I would say, it is having humans, labour and natural resources at its disposal, which can make a new way of life of sustainability. We stress the use of agriculture to improve the standard of life of our people. Land reform is imperative.

Azaveli Lwaitama in Dar es Salaam: What is 'we'? To me, 'we' means animals and plants, people of different nations. **If we accept that 'we' are '*we*', not just animals, not just *homo sapiens* but 'we', then we will have environmental sustainability.** *"What brings us together is like-mindedness. The idea that some people are from the North, and some people from the South, to me is not the issue."*

Devdutt in Delhi II: In the third-world countries, people do not really think of their

'relation with Nature', which presupposes two entities – Man and Nature. This is a typically Western understanding. In India, Man and Nature are not seen as dichotomous, but together they are seen to constitute a continuum, the warp and woof of life. Nature is perceived as part of the human being.

Anupam Mishra in Delhi II: In India even today a large part of society is outside the purview of both the market and the government. This section of society has sustained itself over the millennia on the basis of the collective wisdom it has acquired. However, this section is ignored.

Bhuvan Pathak in Kathmandu: I have been documenting life histories of common people. We have found tremendous ideas and insights in the process. Sustainable production is not possible without sustainable consumption, there are a number of sustainable practices existing among people and we need to record them, document them and learn a lesson or two from them.

Indigenous People

Vijay Pratap in Delhi I**:** It is important to note that the majority of the people still lead a sustainable life. *"They [the Adivasis and peasants] are still believing in their own world views which are ecologically more sound. They have a sense of dignity, they have a sense of meaning, and they have a sense of creativity."* However, gradually they are also being forced into urban slums and ecologically destructive livelihoods. While a life of dignity and creativity is possible to maintain within a number of non-modern lifestyles, the modern market fundamentalism is trying to destroy such lifestyles. One can see the impact of this forced transition in lifestyles in the form of increasing numbers of suicide by farmers, Naxalite violence and *Salwa Judum,* an anti-Naxalite militia.

Julius Muchemi in Nairobi: The fundamental question is who defines where people are, and how do we define other people's values? Indigenous communities have a different relationship with the Earth and have internal processes that govern their thinking. For sustainability to take root, we need to internalise these processes and play by the rules as defined by the insiders, especially when relating to the environment.

Naini Meriwas in Nairobi: Indigenous knowledge systems and management practices are not recognised over land and natural resources management, yet they have been shown to have all the capacities.

Anita Kelles-Viitanen in Helsinki: With indigenous people, poverty does not result from the lack of productivity. **Poverty is not a technical issue. Now as in the past, pov-**

erty has its roots in dispossession, lack of rights and territorial abuse of indigenous resources. Outside forces have always tried to control, restrict and even reduce their living space, at the same time blaming indigenous peoples for unsustainable practices. **This process of marginalisation continues with global extractive industries, bio-fuel plantations, land speculation and even when establishing nature parks.** The root cause of poverty is structural. Social exclusion is built into social and economic systems.

Ulla Valovesi in Helsinki: One distinctive feature in indigenous cultures is that they tend to be more democratic than dominant cultures. The respect they have for Nature includes also respect towards people. That can be seen as a key element in a sustainable way of life. When people are denied real democracy, equality and dignity, they will continue to fight that deprivation by any means available, from subjugating other people to subjugating Nature. That situation is itself disharmonious and leads easily to destruction.

The Maris in Central Russia understand that Nature is alive: every tree has a spirit, so does the forest, every lake, the sea, stones, even things made by people. **The sustainable way of life starts from their connection to this living Nature.** It starts from a respectful attitude towards life: towards Nature, with all the living creatures in it, towards other people, towards ourselves and towards the gift of life that we have been given.

This deep emotional, social, spiritual and practical unity has made the Mari very strong as a people, and capable to defend their places and traditions, standing together against formidable forces through centuries. Sacred groves can be seen as a very delicate technique to preserve the connection of a whole society with Nature, and that way also a sustainable future.

Mamata Dash in Kathmandu: There is a need to be careful before we uncritically accept the notion that the indigenous communities are backward, which is clearly a colonial construct. Our uncritical Western way of thinking does not allow us to look for other alternatives which may be there, but are denied.

Krishna Bhattachan in Kathmandu**:** In terms of indigenous people, respect, protection and promotion hold the key; and the present political disposition must give them due consideration. Discontentment has started brewing and people from eastern Nepal have already picked up guns. If indigenous people do not get their rights ratified by ILO 169 and the UN Convention, then we, the State, will be culprits for destroying the community, Mother Earth and the world. If the State respects 'people's will', they must respect ethnic communities and their rights.

The "upper caste" people are like the sugarcane-tip, and indigenous peoples are like the radish. *"The first is like 'upper caste' people which wants to go up; it could grow anywhere*

you transplant, and if one burns them, they would grow greener next year. Whereas the indigenous peoples, like the root of a radish, go down into the earth; they like to be there but you can't transplant them in another kitchen garden, even with utmost care. That was why indigenous people are not found everywhere, whereas the 'upper caste' can be found anywhere."

Shobha Gautam in Kathmandu: Structural violence is increasing all over, and the real issue is to protect the rights of indigenous people. Indigenous people have a clear idea about the sources of water, for example. Today when multi-storey buildings have come up all over, and there is severe water crisis in Kathmandu, indigenous people must be consulted to give us a clue in this regard. There is a need to understand the struggle of indigenous people in Nepal [in order] to find a clue to sustainable development, and for this the Government, poor people, and movement groups need to interact and understand each other.

Savyasaachi in Kathmandu**:** We have to be careful in choosing the terms of reference. For example, the word 'indigenous' needs to be defined properly. Rather than being born in a particular class or ethnic group, one's relationship with Nature or ecology should be the principal criterion for defining 'indigenous'. Learning from Nature and being close to Nature could be crucial parameters.

I propose we replace the word 'sustainability' with 'resilience'. Indigenous communities can be sustainable but may not be resilient enough. After all, unless we are threatened with dire consequences, resilience does not come to you. By trying to read about Gandhi and trying to understand the three words of the title of the autobiography 'My' 'Experiments' With 'Truth', many things will suddenly start revealing their true meaning. This is a very good part of the struggle.

Prabha Kaini in Kathmandu: For indigenous people, their own skill, own knowledge and participation, have to form the core of cultural sustainability. We should give alternatives to the big models and show that bigger projects are not working for poor people. We should start with indigenous people's own experiences rather than imposing from outside.

Narendra K. Guru in Kathmandu: A 'horrendous situation' prevails in Nepal, and indigenous people like Sherpa and Gurung have a very difficult choice; their situation is terrible – they cultivate land but that does not give them enough return. Neither NGOs nor government come to help them.

Mamata Dash in Kathmandu**:** Though 36 percent of the population in Nepal are indigenous people, dominant social groups continue their sovereignty. If indigenous peo-

ples' issues are not addressed, the situation will become explosive. Inclusion is a must, but in practice it is hard to find a solution.

Nine percent of the world's indigenous population lives in India, and 23 percent of India's population comprises indigenous people. But as we march on the path towards development, we alienate them further through a number of legislations. Marginalisation and exclusion of indigenous people are not recent phenomena.

There are various forms of struggles taking place. On the basis of my association with five campaigns of fighting against mega projects, I have seen how they [indigenous people] have organised and fought against imperialism. To begin with, we need to understand as to why India focuses on developmental projects especially in the areas where indigenous people live.

The states of Orissa and Chhatisgarh, having a thick indigenous population, are mineral rich areas. They have rich deposits of bauxite, coal, chromite, aluminium, etc. **Once mining begins there, it destroys the ecological system and displaces thousands of people, those who have preserved Nature through their integral cultural practices**. For example, bauxite is like a sponge, it releases water regularly. Thus, indigenous people of this area preserve the lush green mountain of this area as their God, through a symbiotic relationship developed over ages. In the name of irrigation, mega dams are constructed to get water. The areas around the dam are least irrigated and least electrified; water travels 200 kilometres for the miner's need but would not be given to peasants just two kilometres away from the source.

What is most disturbing is the fact that the State appears as a handmaiden of the corporations and remains oblivious of the problems of its own people. Same is the story of Kalingnagar, where government came to support the corporations and not the people, never if they were indigenous people. **As a result, in India a new definition of poverty has emerged where people were never poor before. Suddenly we find them at the bottom of sustenance**.

Tradition

Petra Bakewell-Stone in Bagamoyo: *"I think that Tanzanians are blessed in their attitude towards Time, of taking things more slowly. It seems as though Tanzanians are trying to copy the Western attitude towards Time, which I think is part of the problem, this relentless drive towards efficiency, growth, and so on. Could the traditional ways and attitudes towards Time be valuable in creating better lives?"*

Mzee Rashid Yusuf Sekamba in Kaole: I want to go back to the customs, traditions and the taboos that we used to respect. "*We respected certain forests which could not be cultivated, it was taboo. And surely and truly nobody dared to cultivate them. We cultivated*

but we reserved this forest that is forbidden to cultivate on. We got enough food for two or three years from the land that we cultivated, without using any fertilisers but just farming. Each place that we cultivated we could use for three or four years and then moved to another place while the last one rests."

"The other thing is the type of food. In those days I didn't hear anything about heart disease and people lived for a long time and there was no blood pressure. If you cook you use cucumber, sesame, those were our ingredients which did not cause diseases. Now that these modern things are different, things are made in the factories, they come with oil made with machines, I don't know where from, cottonseed oil. But in the past things were prepared by the Mama, roasted and peeled and pounded, and she made the spices and ingredients."

The root cause of deterioration of behaviours is the abandoning of the good culture we see in taboos and not taking care of our own health, we are modernising it and then it becomes harmful. And this "expert" ignores the knowledge of the past, and claims that it is out-of-date.

Rashid Chua in Kaole: "*We are killing the traditions of medicine and tradition in general. We human beings have to know that money is killing our culture. Something called money has sprung up. Money is involved and it's destroying. Because of that these people who know medicine, they don't teach their knowledge and eventually they die with their knowledge. Money is valued more than civility."*

Mzee Rashid Yusuf Sekamba in Kaole**:** "*Nowadays, especially in Bagamoyo the truth is even if someone is bitten by a snake, people start bargaining, when you say my child has been bitten by a snake. How much will you pay me? I have the medicine, but need payment. That's how it is."*

"In the past, it was a taboo for healers to ask anything for children's diseases. There was no certainty that they would recover. If someone is bitten by a snake you cannot ask for money. Sometimes you don't know exactly what kind of snake or poison it was. In the past it was not just one person who healed, it was a group of healers coming together to heal such a patient, and everyone brought their own medicine."

Omari Suleiman Musa in Kaole: "*Some of the traditions are also harmful, like female circumcision. We just have to be straightforward and open, we shouldn't be afraid of each other. If you see someone doing something wrong just tell them. If you see someone polluting the environment, throwing the garbage, just tell them."*

Mzee Rashid Yusuf Sekamba in Kaole: *"It's true we're fighting against those customs that are not productive, we are leaving them. In some customs in the past we killed one another.*

Suspected wizards and murderers were burnt. So this was our tradition but we realised that we don't need it anymore. ***So we say that these backward customs are not acceptable, but the ones encouraging respect sustain our culture."***

Shobha Gautam in Kathmandu: There is a need to be on the cautious side in dumping religion as such. We can take examples from Hindu religion like the worship of Tulsi and Peepal that help preserve ecology. The Vedas have many things to relate to the present, which in fact were very close to the ecological process. **Richness of culture has to be protected, and for that we must come out of our dependence upon Western elites and their consumerism**. To make a social sense of the community, the rights of people of different regions must be respected and we must fight for basic rights of everybody.

Aruna Roy in Helsinki: One of the biggest problems that we face is that when you say that all in tradition is wonderful, that all small is beautiful, but you ask the communities what are the smaller traditions. Tradition is also untouchability, and it is also gender oppression. Tradition is also putting a woman in a position of inequality. Tradition is also prejudices against the Muslims or Hindus or Jews or Christians. That is why Dalits (members of the untouchable community) in India want globalisation, because they'll have freedom from tramples of a traditional society, which has kept them subjugated for years. It is extremely complex.

Cultural Transformation

Thomas Wallgren in Tampere I: How to manage the transition from the modern practises to sustainable ones? What practises are there that help people to move from the harmful ones to sustainable ones?

We can make two new definitions for the societies around the world:
1) Societies in Ecological Transition (SET), i.e., the modern societies that have to transform themselves culturally.
2) Societies in Ecological Balance (SEB), i.e., traditional societies that do not use excessive amounts of energy or natural resources.

We have three paradigms from which we can examine the transition: Market optimism, Social democratic paradigm, and the Gandhian system. The market optimism is the dominant paradigm in the West at the moment. The social democratic paradigm does not consider the culture as transition, but as the result of development. The Gandhian paradigm, which is basically a critique of technology, states that technology prevents the transition to sustainable societies, and we should shift away from technological cultural solutions. Wallgren suggested that as a part of this Project we should visit the Tolstoy archives and search for the correspondence of Gandhi, Wittgenstein and Tol-

stoy, and find inspiration from there.

Tere Vadén in Tampere I: There is consensus among the participants that the Western way of life has a very bad track record regarding sustainability. Until today it has not produced a sustainable way of life, whereas in other parts of the world there are sustainable communities and cultures.

It is very good to make a clear-cut difference between the sustainable and unsustainable cultures, and their understanding and use of technology. For the West, the magnitude of the needed change is not dissimilar from some kind of religious rebirth: the change has to be of that size and kind. The challenge is that many people feel that technology delivers and brings improvements in life.

It would be interesting to look at the sustainable cultures and their interaction with the dominant cultures. For example, the Saami of the Nordic Arctic have culturally survived the push of the dominant societies. It is important to note that societies can be transformed, like what happened in the collapse of the Soviet Union, and that sustainable culture can exist along with the non-sustainable one.

Anja-Riitta Ketokoski in Tampere I: Agenda 21 has also a cultural dimension, but it is not noted much in Finland. Artists are good at speaking about life. The topic of culture and sustainability was discussed in the Nordic conference a year ago, and various ways of understanding sustainability were presented. For the Project it would be good to have a dialogue among ordinary people as well, and not only the academically trained. The tendency is to move from culture as expressions, to cultural industry as consumable commodities. **The domination of 'homo-economicus' is a major challenge. We in the North need development aid from the South to become more sustainable.**

Wahu Kaara in Nairobi: There is a need for a United States of the World as part of the political solution and division of political work. This model needs to be defined by the appreciation of each other and working together towards similar goals of world justice. In this vision, the development of a grand Master Plan on Development is compatible with the lifestyles of the people who represent the majority of the world population. This will be a more organised world that represents the majority view, as it were.

A shift from the mainstream persuasions and perspectives of life sequences becomes a critical anvil on which to forge our common outlook for a shared, common and mutually reinforcing future. **It is imperative that we discern through critical thought and reflection, the exigencies of an intense corporate-led neo-liberal globalisation as the basis on which our current futures are founded, and resolutely make the statement that this is not sustainable! We must unequivocally state that our lives, culture and futures cannot be commodified.**

This raises the question of modernisation, saturation, and life options. Do we have a future? And in that future, do we make linkages to the interplay of environmental demands and lifestyles? We need to locate our power – where is it? We also need to look for that new vision and define how it will play out in the future. In a global process, we need to find that critical mass to drive change, positive social change, by pushing each other to push a resistance. **This should be a North and South struggle through resistance, solidarity and resilience! Throughout history, the dominant forces have tried to diminish our purpose, but from the current trends we can comfortably state that dispossession is no longer a way of life, we have refused to die!**

Martin Simotwo in Nairobi**:** A minority in the world, whom we also tend to worship, have plundered the global resources. "*There is a need to awaken the world on the issue that global commons cannot be part of the shared Global burden! We are in the wild and have neglected our Mother, yet we cannot be able to feed ourselves. We need to go back to Her, take Her breasts so that we can be well nourished; we also need to take care of Her if we are to depend on Her. Go back to your Mother, to Her bosom so that She cares for you, do not ignore Her, do not inherit a curse, go to your grandfather and learn, let us coordinate our ideas! Our common experience will create a common future."*

Marko Ulvila in Nairobi: Can a future with concentration of power among the representatives of finance capital and big corporations be sustainable, or should we start thinking in terms of limiting their size and power? **To break the status quo, a transformation in the political structures is needed.**

Professor Kavetsa Adagala in Nairobi: There is **need to capitalise on local social and cultural activities and to support their growth.** Also **there is a need to build strong networks that will ensure long established celebrations and festivities, and also act as a catalyst for other initiatives**. It is only through such home-grown and well-grounded activities that we can be assured of nurturing the spirit of sustainability and look at the question of sustainable cultures pro-actively.

Marko Ulvila in Bagamoyo: There has been a realisation that some kind of societal or cultural transformation is needed. "*What kind of transformations do people we are meeting in these countries foresee, or what kind of background and what kind of visions are there for a more sustainable future? We would like to highlight the existing sustainability in the world community, which can be found mainly outside the industrialised societies."*

Farida Nyamachumbe in Bagamoyo**:** Most of our work is driven by donor wants. "*One of the things that we as agents of change have to look into is: are we going to go on being*

ceremonial dancers; we dance to the tune but we don't know the ritual? Or are we going to be questioning and say hey, wait a bit. What is this whole ngoma *(dance) about?"*

Marie Shaba in Bagamoyo: We have been dialoguing for many, many years. Now it is time for action. *"When the donor demands the agenda, demands the copyright, then we would rather not have a donor at all."* If we have a donor that recognises that we as Tanzanians have a very important concern, that of food security and if they can support us without any strings, then we would agree.

We need to preserve and promote local knowledge and demand a community patent. We need participatory action research which will document traditional knowledge. When we talk to the elderly people, there unfolds a whole encyclopaedia of knowledge. We need to document whatever we can at this time because old people are dying.

"Part of the outcome that I desire from this dialogue is a process whereby we collect, document and then promote, and demand our patent because if we don't do that they will continue to patent everything, and some say they will even patent our ovaries and our sperm!"

Jhikolabwino Manyika in Bagamoyo: I think that we are talking a lot about 'now', but before we reach 'now', we have to go back at least 500 years. Otherwise there will be no direction. We are not living as free beings; we are just standing as shadows of others. We are trying to be something else, but we do not want to be ourselves.

We should not ignore the fact that there are other problems that people design. Even when we try to make strategies to move forward, these people are sitting down to make this impossible. Many problems stem from greediness and selfishness. We should just keep our culture and move according to our ways. And many cultures worldwide are suppressed, not only ours, but also in Europe, China, etc. So if we know each other then we can have some kind of network, or coalition of a kind.

Anyambilile Mwakatole in Dar es Salaam**:** This sort of dialogue about global cultural sustainability is very sophisticated and complicated, because you are bringing these cultures together, and these cultures are always reacting. This dialogue has been initiated from the North so one may question whether it has sinister motives.

Such intrinsic dialogue would have been easier if it was only in Tanzania or the African region, but interacting with North and South and putting together the cultures which will produce a sustainable culture, I cannot imagine.

Loyce Lema in Dar es Salaam**:** We contribute as an organisation by describing the 'Culture and Biodiversity Project', which connects children with teachers and elders at schools with story-telling on environmental issues (seeds, trees), and how they were preserving Nature in the past. A small village is created in the school, with huts where the

elders sit, and surrounding them are traditional crops and indigenous trees. Children collect seeds, do the planting, and while doing so, the elders explain about the trees, how they can be used in medicine, food, or water conservation. This has worked very well.

Ulla Valovesi in Helsinki: Do we dare to change our mind set from compromised technical fixes to building families, communities and societies with respect towards Nature and other people? Are we able to find and build on those roots in our own culture that support real democracy and sustainable ways of life and separate them from those that have led to destruction?

Francois Schneider in Malmö: In the Paris Degrowth Conference in 2008 we had various outcomes. We aim at making "degrowth" an international concept, shifting to new paradigms. In the Conference, the growth politics were identified as destroying solutions, and there was a consensus that sustainability means a lower level of resource use, and to reach that, degrowth is needed.

Degrowth joins those who wish to collectively survive through crises, and those who wish to collectively manage a soft landing. The Conference initiated international convergence, and a network of citizens who desire less and different consumption and production.

Right sizing at the world level is identified as a desired goal, meaning degrowth among the affluent and influential, and post-development for the global South. Sustainability and equity within democratic frameworks are agreed as important goals and conditions of degrowth.

Aruna Roy in Malmö: As a result of the Right to Information campaign, a new Right to Information Law was passed in India in 2005, which has turned the colonial secrecy policy to transparency and responsiveness. Through the Law, water privatisation and GM plans have been exposed and reversed.

Another important campaign for sustainability has been on the Right to Work, passed also in 2005. The Rural Employment Guarantee Act ensures employment in the rural areas. This will help in political mobilisation also, when people do not need to worry about getting food for the evening, but can also think ahead.

Per Råberg in Malmö: The point of departure is that of eco-crisis. The outcome of the global mega crisis is not only the destruction of life forms and expressions. A rescue operation requires much more than radical ecological and economic systems, a complete paradigm change is needed. A diagnosis and solutions have been the core of the Ecolife Project. An ecological model has been developed. It includes a self-reliant political regional system. Are the sustainable models realistic? A metropolitan development fuels

deterioration of the hinterland. Who would be the allies for a regional vision? Social rebirth and global survival should be the new catchwords.

Vijay Pratap in Kathmandu: The idea of sustainability should be seen not only in the context of the relationship between human beings and Nature, but should percolate down to all other aspects of life. We need to respond holistically. Unfortunately, whenever a solution is proposed, it only compounds the problem. **For example, billions of dollars, taxpayer's money, is being pumped into the market to save the tottering economy (which is a subsidy to the borrowing lifestyle) but no one is questioning it**.

We have only one way out. We must have a databank of the right kind of questions, dilemma, and learn to chart out a future course of action – a collective journey to a more egalitarian world, a sustainable future in terms of Nature, socially, culturally, etc. Also, **we need to realise that the crisis of meaning is a global phenomena – it comes as a package, only specifics are different. In the North they are breaking nerves, in the South we are quietly following suit**. We need to put our heads together to work out a sustainable collective goal.

Degrowth

Mauro Bonaiuti in Malmö: Why do we need degrowth or "bem vivir"? Because growth is the common denominator of the complex dynamics causing the crisis. The absence of a common understanding of the multiple crises is missing and this is the main hindrance for the social movements. Social systems react to the shared imaginary – so shared imaginary is needed.

Even the social movements are not aware of the urgency of the multidimensional crisis. Most of the movement themes could be interconnected with a degrowth/bem vivir narrative. This would include issues of war, poverty, exclusion, unemployment, Tobin tax, IFI reforms, energy saving, defence of commons, solidarity economics, lifestyle, etc.

Shifting from growth to degrowth means moving from unsustainability to sustainability. Degrowth is a technological and social revolution starting from the energy system. The new system should be based on energy saving, renewable resources and local network of energy distribution. Financial resources may be provided by a progressive "internalisation" of environmental costs.

The new model would also mean shifting from competition to cooperation. On a global scale, this would be democratisation of international institutions, such as WTO, IMF and UNO, and moving from policies based on competition to policies based on cooperation and non-violence.

Degrowth also means shifting from dependence to autonomy. This requires educational methods that tend to favour awareness, autonomy, critical sense, creative leisure

time, well-being as opposed to well-having; reform of the media and educational policies having the purpose of changing styles of life and consumption.

Olli Tammilehto in Malmö: If economy is defined differently to include household work and commons, the current economy is not growing but destroying, and is actually a degrowth society. *"I would rather have a positive concept that would not link to the 200-year-old concept of economy. Actually, originally economy meant household economy, now household is outside the economy. Degrowth is a misleading concept. This society is not growing, it is destroying the world."*

Francois Schneider in Malmö: Regarding the problems in using the dominant notion of economy in the concept of de-growth: there have been attempts to have totally different paths, such as simple living. What is strong about the concept of degrowth is that it challenges the concept of growth. Some things must degrow.

Mauro Bonaiuti in Malmö: It is a clear choice to use the word 'degrowth' to describe the new thinking. It is provocative, as it clearly notes the need for turning to the opposite direction. Household economy and subsistence production are perfectly part of the vision. On the question about jobs, moving to a two-hour workday has been proposed. In a competitive system this is not possible. **There are at least two meanings of degrowth: a utopia for intentional transformation, or forced real degrowth from a collapse.**

Maria Gjerding in Malmö: The Danish degrowth network started a year ago at the Danish Social Forum. Ecological destruction and social erosion, with the eminent crisis, call for alternatives. While the symptoms are clear, the causes are less obvious. To the network, such a root cause is the striving for economic growth. The network is working on five themes: search for alternatives, definition of degrowth, international networking on degrowth, historical understanding, and working out a societal and human development vision.

Jonathan Korsár in Malmö**:** The definition of degrowth is not so important, but the big challenge is to bring about the needed change. In Sweden, the debate about the issues is very limited, only one problem gets attention at one time. For example, the issue of peak oil was very popular at the time when the then Prime Minister Pärson was talking about making Sweden an oil free society, but it disappeared from the agenda when climate change became the new topic. Some individuals in environmental and political organisations are talking about degrowth while the majority trusts green growth and new technologies.

PART III:

Insights from the Papers

Part III contains summaries or excerpts from the twenty-two papers that were commissioned for the Project. They cover a wide range of issues concerning sustainability, from portraits of low-energy consuming communities in India and Russia, to conflicts on the ground caused by the mining industry, as well as outlines of paths towards sustainable futures.

The photographs in this section have been taken by the authors of the papers they illustrate, unless otherwise indicated.

The full papers can be found on the Project web site: http://www.sustainablefutures.fi/

Understanding Sustainability

Gender, Technology and Sustainable Development

Anita Kelles-Viitanen[1]

In Maharashtra, Kalavati became a widow, and a female head of household, when her husband committed suicide because of his debts. More than 90,000 farmers have committed suicide since 2001 in India: 87% of these farmers had debts they were unable to pay back. //Since 2001, more than 90,000 people have committed suicide in India: 87% of these people were farmers who were had debts they were unable to pay back. A number of analysts blame the industrial approach to farming as one cause for such suicides, while others refer to the role of globalisation and increasing producer costs. At the same time as the prices of crops are being pushed down – often even below cost of production – the prices of inputs such as seeds, fertilizers and pesticides have gone up. After two years of drought in 1965 and 1966, the Indian government turned to high-yielding modified seeds. Unfortunately, the adverse effects of the overuse of chemical fertilizers in connection with the use of these seeds led to infertile soil, reduced genetic diversity of crops, and decreasing yields. Later liberalisation of imports opened Indian agricultural markets to unfair competition with countries that highly subsidise their farmers. In order to compete, Indian farmers turned to high-cost seeds, fertilizers and pesticides. Because modified seeds cost twice as much as normal seeds, farmers needed large loans to purchase them. However, the financial infrastructure in India is not geared to support farmers. Many small farmers do not qualify for bank loans, leading them to turn to private moneylenders to obtain loans with huge interest rates, using their land as collateral.

In the case of both small farmers and indigenous people, poverty does not result from lack of productivity. Poverty is not a technical issue. Now as in the past, poverty has its roots in dispossession, lack of rights, and territorial abuse of resources. Outside forces have always tried to control, restrict and even reduce the living space of indigenous people while at the same time blaming them for unsustainable use of local resources. This process of marginalisation continues today with pressure on indigenous people from global mining industries, biofuel plantations, land speculation, and even from the establishment of national parks and nature preserves.

The root cause for poverty is structural. Poverty has its basis in social exclusion which is built into social and economic systems.

[1] The author is a senior expert on development issues, based in Helsinki, Finland.

When I was promoting women's livelihood in Sri Lanka, we came across a vicious cycle faced by women. When women were given major agricultural tools or farm animals, men quickly grabbed them. A somewhat similar situation arose with financial credit and loans. Major sums of money attracted wealthy, usually male, villagers to quickly grab the benefits. Women seemed to be doomed to marginalisation by being allowed access only to small technical gadgets such as flour grinders – no doubt required, but only in alleviating their poverty, not eradicating it.

Development can reproduce social exclusion. Social exclusion does not mean being excluded as opposed to inclusion. It is not a binary concept. Social exclusion also means being included, but in a marginal capacity. This 'marginal' concept is useful in understanding why even well-meaning developmental efforts can end up in simply reproducing poverty instead of eliminating it. Everybody wants to give jobs to the poor, micro credit to women and basic education to girls. But the poor tend to be included only in marginal jobs without contracts, working in poor conditions and with a wage that only perpetuates their poverty. ILO aptly talks about the 'working poor'. Education of the poor can mean poverty of education. The poor are given crumbs from the rich men's table: some education, some rights, some health and some whatever – as long as it does not threaten the position of the wealthy and the powerful.

There are also dangers in providing powerful technology to the poor. Such dangers come when technologies are introduced or huge loans provided without safeguards, and without enabling and supportive infrastructure. Buffaloes could be provided to women, but only together with actions which strengthen the social position of women. High-cost inputs need to be accompanied by a small-farmer-friendly credit system, along with extension services to teach sustainable agricultural practices and care of domestic animals, and provision of animal and crop insurance schemes, weather safeguards, and a fair market system.

It is also important to understand that technology is never value free. It is embedded in social practices of power, and controlled by the society's norms and values. Technology comes with strings attached: it is embedded in value systems that do not necessarily work in the interest of the poor.

The latest agricultural technologies such as GMO seeds come – like my cheap printing machine - with expensive strings attached. The ink for my printer costs more than the machine. Since I need ink continuously, Lexmark has managed to hook me into a costly ink-dependency because only Lexmark ink cartridges will work in my printer. GMO seeds only work if you use certain fertilisers to which the genetic code of the seeds will respond. The price of fertilisers reflects global market prices over which poor farmers have no control. Nor do they have control over crop prices. They are set by global market speculators, using futures and other financial instruments.

Therefore, we need to explore the nexus of science, technology, culture, and power,

and how it is being increasingly driven by market logic. According to this logic, technology is a resource with benefits mainly accruing to transnational companies. These companies are driven by increasing their profits at the cost of the needs of small-farmers, the health of consumers, increased pollution, reduced biodiversity, and loss of micronutrients in the soil. For poor people, unequal outcomes result from dependency built into the technology system. Small farmers have to buy the seeds every year, together with particular types of expensive fertilisers and pesticides.

Analysis of gendered patterns of vulnerability and exclusion has always been the task of feminist oriented researchers. We need to broaden our analysis. We need to also study global cycles of market dependency. We need to understand the gender impact of global dominating structures. We must analyse how women are affected by the new industrialised agricultural systems that come with built-in food supply chains and benefit global supermarkets. We need to understand the gender impacts of free trade agreements. These are the challenges. But there are also new opportunities to be tapped in efforts to help marginalised people. There are opportunities in the changing consumer behaviour which includes an increasing demand for organic food, and from fair trade practices that provide consumers with ethical, ecological and ethnic products.

A major opportunity can also come from the responses to climate change. But first we must get rid of reactionary approaches which blame citizens and seek solutions solely from changes in lifestyles. Citizens are not in control of market solutions. Both citizens and market solutions are dominated by an environmentally exploitative economic system which is constantly racing toward limitless growth and quick profits.

We need a new type of '*eco*'nomy, where natural resources are not private property, owned and abused by the elite social strata. Such a new *eco*nomy should start from the principle that we only have a temporary usufruct right over natural resources. We only have them only on loan from the future generations. Their use should not be allowed without provisions to regenerate them and safeguard biodiversity. Industries should also include in production costs all costs, direct and indirect, of the use of public commons and natural resources.

This *eco*nomic model is already used at the grassroots level by many indigenous people. The agricultural system of "*tul*" in Colombia consists of simultaneous production and conservation activities. This indigenous concept of sustainability is also based on a culture of distribution with traditional farmer-to-farmer interchange systems, based on solidarity, such as "*truegue*" system in Guatemala and "*trafkintun*" in Chile.[2] Even when producing for market, indigenous people also safeguard indigenous cultural practices. In Congo, the Baka tribe combines the rationale of money in the mod-

[2] Kelles-Viitanen, 2008.

ern economy with indigenous collective exchanges: they sell part of the meat from the hunt (bush meat) in the local market, but only on strict condition that at least half of each kill has first been shared out through traditional Baka kin networks[3].

But even without the new *eco*nomy, it is important that people retain their economic and cultural autonomy, and their dignity, in an era of globalisation. The key question is how to influence change that incorporates cultural values and human dignity; how to ensure people remain in control of their own personal future; and how to bring the gift of culture and biodiversity to benefit all of humanity, without people being robbed of their dignity by greedy multinationals and reducing dignity into a quickly consumed commodity.

References

Kelles-Viitanen, Anita (2008). Custodians of Culture and Biodiversity. Indigenous People Take Charge of Their Challenges. IFAD, Rome.

Widlock, Thomas & Tadesse, Wolde Gossa (2005). Property and Equality. Vol. II. Encapsulation, Commercialisation, Discrimination. Berghahn Books, New York.

[3] Widlock & Tadesse, 2005, 25.

Cultivating Eco-Literacy: Inspirations from Tanzania

Petra Bakewell-Stone[1]

Usipoziba ufa utajenga ukuta
If you don't fill in the cracks, you'll have to build a wall
(Swahili Proverb)

For the greater part of the history of human habitation on Earth, human impact on the environment has been sustainable, due to both low population densities and the types of technologies being employed. With increasing population, and an increasing dependence on oil coupled with a growing culture of consumerism, the destruction of natural balances (e.g., in the composition of gases in the atmosphere) has reached alarming proportions. There are well-founded fears that current changes in the global climate, biodiversity, and ecosystems all over the world, are irreversible.

Yet the perpetrators of this rapid degradation of natural resources are a small minority concentrated in industrialised countries. The great majority of the world's population is having a negligible impact on climate change. Rather than being viewed as time-honoured strategies that are appropriate to the circumstances and have minimal negative impact on the environment, however, the practices of such cultures are often viewed as lacking in intrinsic merit and even 'primitive', 'backward', and 'unproductive'; and the people of these cultures are considered 'poor', and 'disadvantaged'.

It is the purpose of this paper to acknowledge and explore the myriad ways in which traditional cultures in Tanzania and other places worldwide not only sustain people, but actively protect natural resources in the atmosphere, hydrosphere, and biosphere.

Towards a Sustainable Society

Lord Buddha distilled his teachings into the Four Noble Truths: the existence of suffering in the world, the causes of suffering, the cessation of suffering, and the way to cessation of suffering. The current crisis could be thought of in these terms:

The existence of suffering is epitomised in the environmental, economic and social crises of our time.

As for **the causes of suffering**, a growing number of authors and thinkers are now attributing global crises to the internal dynamics of capitalism and neoliberal economics.

[1] The author is an agricultural consultant with Afrikabisa Organics in Bagamoyo, Tanzania.

When global trade policies and a barrage of bilateral agreements force countries to open their markets to global agribusiness and subsidised food imports, fertile lands are diverted away from serving local food markets to producing global commodities, or off-season and high-value crops. In addition to undermining household livelihood strategies and food security, this also leads to greater dependence on fossil fuels. Related societal trends include industrialisation, urbanisation, commercialisation, democratisation, militarisation, consumerism and materialism. The whole system also promotes and perpetuates a technocratic approach to environmental management.

The historian Lynn White points to the biblical notion of humans having "dominion over the earth" as a major factor leading to the Industrial Revolution and its attendant devastation of the environment. In Genesis 1:28 we are told "fill the earth and subdue, and have dominion over the fish of the sea and over the birds of the air and over every living thing", which leads directly to a human-centred and domineering attitude towards Nature. Thus, Christianity has established a duality between humankind and Nature and insists that humans exploit Nature for their own ends.[2]

Despite the dawning of a so-called post-modern era in which multiple truths are said to co-exist, this destructive 'domination of Nature' system is expounded as *the one and only* model for development. It has been meticulously institutionalised in the "development agenda" and is enshrined in our language (which I call "Microsoft English"[3]). For example, we refer to Nature as "the environment" , which implies that it is an object separate from ourselves, whereas our full dependence on and active relationship with the environment suggests otherwise. We are in fact *part of* Nature, our minds and bodies in seamless continuity with our surroundings.

Within the "development agenda", we have embraced literally suicidal[4] agricultural policies and interventions, which are constantly pushing for modernisation and commercialisation without sufficient proof that industrialised production of cash crops is the most sustainable approach.

Furthermore, the current system is manifested in the monetarisation of values and cultural homogenisation.[5] This is in turn further causing an unprecedented breakdown

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[2] Although Christian theology has played a key role in cultural and ecological malformations by giving impetus to the rational, scientific conquest of Nature, ecological reformation is now underway as Christians are reinterpreting basic doctrinal themes in ways that integrate ecological insight and value, and re-conceiving Christian ethics to encompass human relationships with other beings in the biosphere. Certain norms illuminate a biblically-informed imperative to pursue what is both ecologically fitting and socially just. These include solidarity, which comprehends the full dimension of the earth community and of inter-human obligations; and sustainability, which gives high visibility to ecological integrity and judicious behaviour throughout the resource-use cycle.

[3] In order to install QwarkXpress (a popular desktop publishing programme) into computers running on Microsoft systems, the user is forced to adopt the American English spelling settings and all other words and spellings are either not recognised or are automatically changed to American English. This type of mechanism insidiously forces all computer users to use the same "Microsoft English" and invalidates all other equally valid forms of expression.

[4] Here I refer to the case of India, where at least one million farmers are said to have committed suicide in the last decade, and others are selling their kidneys as a result of dependence on loans, agro-chemicals and hybrid seeds. Nevertheless, interventions in Africa such as the Alliance for a Green Revolution in Africa (AGRA) are also imposing similar, corporate techno-fixes for food security problems.

[5] terms of food habits, cultural homogenisation has been called "MacDonaldisation" as people switch to fast foods that have been heavily processed and denatured.

of communities and natural support systems. The psychological expressions of this degeneration include widespread depression, social alienation, crime, drug addiction, religious fundamentalism and terrorism. The concurrent health problems of such so-called Western lifestyles include obesity, cancer and diabetes, whilst those in the Global South are *de facto* subsidising affluent lifestyles and consequently facing widespread malnutrition and starvation. We can, therefore, recognise a complex web of interrelated factors that are wreaking havoc with our means of survival and social stability.

An End to Crisis

Nevertheless, wherever there are humans, there is hope, and we do not cease to imagine a better future. As such, we may interpret **the cessation of suffering** as a vision of self-sufficiency, whereby people not only meet their basic needs for food, fuel, water and shelter, but become active creators of wealth and abundance. This is far from being a novel concept in Tanzania, whose founding father, Mwalimu Julius Nyerere himself taught self-reliance (*kujitegemea*).

As a whole, our relationship with Nature needs to change radically. Rather than viewing the natural environment as a set of circumstances that need to be controlled in order to bring maximum profits or short-term benefits, we are challenged to realise the intrinsic value of Nature. This concept has been encapsulated in the values of the 'deep' ecology movement, whose adherents include the Norwegian eco-philosopher, Arnie Naess, and American writer and conservationist, Aldo Leopold. This approach is in direct contrast to the 'domineering' or 'stewardship' relation with the natural environment.

In terms of protecting all life-forms, we need to move to a level where we see Nature (including each other and ourselves) as sacred. This view is espoused, for example, in Rastafarian ideology. A great deal of research has shown that plants are capable of extrasensory perception.[6] As one of the basic building blocks of life, water has also shown sensitivities towards intention.[7] Nevertheless, the far-reaching implications of this non-human consciousness have yet to be widely recognised and are certainly far from being reflected in our treatment of Nature. Since there is a great deal about Nature that we do not fully understand, we would be well advised to first and foremost observe (also the first principle of permaculture[8]). From this act of merely observing, we would naturally grow to admire Nature and feel a desire to preserve it.

[6] Tompkins, P. and Bird, C. (1973). The Secret Life of Plants.

[7] This is visually reflected in the photographs and research of the Japanese creative visionary, Masaru Emoto, who published "The Hidden Messages in Water" in 2004. This provides factual evidence, that human vibrational energy, thoughts, words, ideas and music, affect the molecular structure of water, scientifically demonstrating that we can positively heal and transform ourselves and our planet by the thoughts we choose to think and the ways in which we put those thoughts into action.

[8] Permaculture is a system for designing sustainable human habitats by mimicking Nature's patterns. It uses the diversity, stability and resilience of ecosystems as a framework to guide people to develop sustainable solutions.

Ways to End Crisis

If we now consider **the way to cessation of suffering**, we can see that far from there being only one single way, there are several different paths. Indeed, diversity should be one of the cornerstones to our approach to sustainability.

Rather than dividing the world into two mutually exclusive spheres (e.g., cultures of permanence versus cultures of disaster, or the North versus the South), I would argue that each place is unique, and there are elements to learn from in every human society. Moreover, elevating dualisms such as Capitalism versus Communism, Christianity versus Islam, East versus West, is rarely productive, and potentially divisive and dangerous. It is, therefore, proposed that we try to downplay these dualisms and instead create and nurture more eco-literate modes of living.

Just as it is dangerous to reject indigenous cultures, the wholesale rejection of what we call "Western Civilisation" may be 'throwing the baby out with the bathwater'. There are some manifestations of the modern age which can be positive if used wisely, e.g., Information and Communication Technologies such as the internet, photovoltaic cells for solar energy, and in the arena of plant sciences, effective micro-organisms that speed up the process of decomposition in compost heaps.

Unless we adhere to ecological values, we run the risk of adopting harmful technologies for short-term ends. Therefore, it is recommended that we discern between useful and destructive technologies, just as Gandhi rejected large machinery, but embraced the spinning wheel and bicycle.[9] On the other hand, dangerous technologies such as nanotechnology and genetic modification in agriculture are being aggressively imposed and it is, therefore, necessary to re-assert local sovereignty over the means of production.

Selection of technologies also needs to be grounded in a good understanding of local conditions and will therefore be place-specific. Thus, we should encourage decentralised approaches to water conservation, energy production, and so on.; and combine modern scientific knowledge with indigenous knowledge in order to best manage locally available resources for local production and consumption. The application of appropriate technology (both environmentally-friendly and labour-saving) to meet basic needs will not only allow people to live in dignity, but will also alleviate the crazy busy-ness of modern life, and free more time for artistic and intellectual pursuits. This is an alternative conception of civilisation.[10]

Similarly, in relation to agriculture, there are numerous examples of alternative approaches, including agroecology, organic farming, permaculture, bio-intensive agricul-

[9] Again, the writings of Schumacher (1973) are illuminating with respect to "technology with a human face", or "intermediate technology".

[10] Taking time to greet one another and to develop quality relationships is a defining characteristic of Tanzanian culture, which also gives Tanzanians the reputation of friendliness and hospitality. Such patience and care is also apparent in the way in which women take time to produce good meals, keep their households clean and make handicrafts. In a world without processed foods, laundry machines and other appliances, this may be a painstaking process, and yet it is borne without complaint, and indeed with relish, which illustrates maturity in terms of relationships to time.

ture, and low external input sustainable agriculture, to name a few. Whilst industrial agriculture is considered to be one of the main contributors to climate change (not to mention the effect that a 100% rise in fertiliser prices is having on food production), ecological agriculture opens up a wealth of options for reducing such change, including planting nitrogen-fixing trees, composting, nutrient-recycling and green manuring. Although these practices are yet to be strongly supported in mainstream agricultural policy, they are just a few of the many survival strategies already available that will allow us to keep eating without exacerbating the greenhouse effect. As an emerging holistic discipline, agroecology recognises the need to develop our skills, knowledge and attitudes in order to improve the sustainability of food and farming systems.[11]

The scale at which we act is crucial. I am not convinced that the Nation State is always the most constructive concept, nor the most beneficial system of governance,[12] particularly in Africa where it was imposed under oftentimes tyrannical colonial rule. The concept of bioregionalism[13] has been advanced as an antidote to destructive societal structures. "Bioregionalism**"** is a term used to describe an approach to political, cultural, and environmental issues based on naturally-defined regional areas. These areas are usually determined by a combination of physical and environmental features, including watershed boundaries, and soil and terrain characteristics. In addition, bioregionalism also stresses that the determination of a bioregion is a cultural phenomenon that places emphasis on local populations, knowledge and solutions, and reflects a "terrain of consciousness".

In order to counter the negative effects of globalisation, there is a growing move towards acting locally. For example, the Soil Association organic certifier in the UK is actively promoting local food and has even made their standards more stringent in order to reduce the "food miles" involved in global food distribution networks.[14] Thus, the organic approach, with its focus on providing locally produced food for local people, can help to tackle the detrimental effect that our practice of buying cheap, imported food is having on the environment. Localisation goes hand in hand with valuing indigenous knowledge and taking greater pride in local culture and ecology. The Slow Food Movement, with its emphasis on local cuisine and regional specialities, is a good example of taking this thinking to its logical conclusion.

In fact, all over the world, there are positive initiatives springing up which deal with the underlying flaws of the current system of dependence on fossil fuels (e.g., the Transition Towns movement in the UK) and capitalism (e.g., the Local Exchange Trading

[11] Miguel Altieri and Jules Pretty are two prominent agroecologists working on this issue.
[12] This view is supported in Schumacher, E.F. (1973) Small is Beautiful; and Kohr, L. (1957) The Breakdown of Nations.
[13] Sale, K. (1985) *Dwellers in the Land*: The Bioregional Vision. University of Georgia Press.
[14] In the UK there are increasing numbers of "locavores" who are devoted to the 100-mile diet and pledge to eat only produce that is farmed or gathered from within 100 miles of their homes, not only reducing their carbon footprints, but also eating more nutritious food in the process.

Systems, or LETS, local community-based mutual aid networks in which people exchange all kinds of goods and services with one another, without the need for money).

In order to make the transition to more localised economies, there are several concepts that can be illuminating. In addition to bioregionalism, there is the idea of "topophilia", literally the love of place. This term was coined by the Chinese-American geographer Yi-Fu Tuan in his 1974 book entitled "Topophilia: A Study of Environmental Perception, Attitudes, and Values", which defines topophilia as all emotional connections between a physical environment and human beings. It is closely connected to appreciating the spirit of place – the unique, distinctive and cherished aspects of a place. Such a phenomenon is said to reside not only in the invisible weave of culture (through stories, art, memories, beliefs, histories, etc.), but also in the tangible physical aspects of a place, and in interpersonal associations.

Furthermore, the natural sciences are revealing the inherent logic and efficacy of cooperation amongst living organisms, as supported by James Lovelock's Gaia hypothesis.[15] Whereas capitalism pits individuals and groups in competition against one another, symbiotic and cooperative relationships promise greater mutual benefits. This type of behaviour arises naturally when we understand the interdependencies that exist amongst living organisms and within the environment.

African cultures have traditionally embraced a collective existence. The *Nguzo Saba* (the Seven Principles of Kwanzaa) include *Ujima* (collective work and responsibility) and *Ujamaa* (cooperative economics). Structural adjustment programmes of the 1980s and modern market fundamentalism have eroded such ways of living, but nevertheless, in Tanzania they are often close to the surface. In living memory, Nyasa communities in southern Tanzania would come together to build a house in one day for a member of their community, with the job becoming a big social occasion and joyous event. It should not be difficult to reignite this will to cooperate, especially considering the fact that the major spiritual traditions also advocate cooperation, compassion and altruism.

With a few notable exceptions (e.g., the Group of 20+, a bloc of "developing" country nations which have formed a consortium to counter the economic power of the Group of Eight economic powers), South-South cooperation is currently limited. Often countries in the global South just coexist and fill different niches, rather than actively cooperating. A greater amount of exchange would certainly bring great benefit, although such solidarity calls for increased interaction, a greater willingness to learn, and an ability to empathise with fellow humans.

In terms of North-South cooperation, it is suggested that it should follow certain key principles such as: *empowerment* to strengthen capabilities to make well-informed

[15] This views Earth as a living super-organism that can regulate its own environment. The idea argues that Earth is able to maintain conditions that are favourable for life to survive on it, and that it is the living things on Earth that give the planet this ability.

and goal-oriented livelihood decisions; *responsiveness* to authentic demands; *inclusiveness* to take into account cultural diversity; *precaution* to minimise client trade-offs that threaten livelihoods, and *facilitation* to promote the interplay among and nurture synergies within a total information system. Such cooperation could usefully take the form of an exchange of ideas, knowledge, and skills on the basis of equal and mutually supporting relationships.

Overall, I would advocate a strategy that withdraws support from the current system, rather than direct resistance. We need to create space for initiatives that channel our energies towards developing livelihoods that are more positive. Often the most promising projects are entrepreneurial in nature and based on multi-stakeholder partnerships for locally-led sustainable development. In Bagamoyo, for example, the pineapple could be a source of great wealth and overall health of the local population. By transitioning to certified organic agriculture and processing the pineapple pulp to a juice, people could produce a high quality nutritious drink that does not compromise soil fertility and biodiversity, and concurrently would increase food security and incomes.

Whilst there must be space for campaigning, advocacy and lobbying amongst civil society in order to transform the current system, I also see a great role for practical grassroots activity in the development of innovative and sustainable enterprises. Furthermore, actions speak louder than words; and we need to *show* greater commitment to our values, rather than just proclaim them. Tangible examples of sustainable living may be the most powerful messages that we can send, just as Gandhi showed passive resistance through the use of home-spun cotton, and his non-violent stance was made evident in his dietary experiments. A good starting point would be to adopt a compassionate attitude towards all sentient beings.

Conclusion

In light of the above-mentioned cultural peculiarities, it is recommended that communities develop their own strategies for achieving genuinely sustainable development, and driving a "real green revolution" that is holistic in its approach. For this, it will be necessary to identify the basic components needed, in terms of the necessary skills, knowledge, attitudes, technologies, social structures, and so on.

On a global level, it is necessary to continue to research and monitor climate change, and to raise awareness about its causes, e.g., through measuring carbon footprints. The latter action would encourage people in the Global North to take more responsibility for their actions. Facilitating a dialogue between different cultures, as the present Project does, is considered an exemplary way of deepening joint learning not only in regard to the characteristics, causes and implications of climate change and other global crises, but also in regard to the most promising and practical responses.

History and Politics of Over-Consumption

Olli Tammilehto[1]

Modern consumer societies are a grave danger to all life on the Earth. Increasing consumption is threatening to generate a global catastrophe of unparalleled dimensions, through climate change. The threat is being accelerated by the spread of the consumer lifestyle among the middle class of the newly industrialised countries. Technical fixes of one or another detrimental types of consumption do not change the general pattern. Often they just move the situation out of the frying pan into the fire.

A common reaction to this quandary is to accuse consumers as individuals. For some, this leads to more ecological consumption. However, those who make this more than just a cosmetic gesture, are only a small minority. For most people, these accusations result in a bad conscience and no real action.

This deadlock has created despair in many people who see the precariousness of our ecological situation. When they see no prospect of changing human behaviour, they instead want to change the physical characteristics of the planet Earth. Some scientists, in a state of panic, plan risky geo-engineering projects to avert the approaching climate catastrophe.

However, before embarking on these dangerous endeavours, it may be wise to enquire why people in the North – and in the islands of North inside the South – are consuming so much. The standard – usually implicit – answer is that consumption makes people's life better. Yet a great number of surveys and studies show that this is not the case. After a certain, rather low, threshold is crossed, an increase in consumption more does not make people more satisfied or happier. For example, when asked in the beginning of the 1990s, whether people are happy or not, over 90% of the Indonesians, the Filipinos, the Malaysians and the residents of Hong Kong answered affirmatively, but only 64% of the rich Japanese regarded themselves as happy. In the USA, people were happier in 1950 compared to 1990, although the GNP per capita doubled in that period.

Why then, is consumption increasing if it does not bring any improvement in life? A short historical survey may help to find an answer. What was life like when everyone was consuming modestly? Thomas Hobbes gave his well-known answer in 1651: "the life of man [was] solitary, poor, nasty, brutish, and short".[2] Other similar versions of the quality of life abound in history and in the present day. But even Hobbes' contemporaries had other answers. For example, William Shakespeare in his play *The Tempest* sees "savages" in a rather favourable light. The first contacts with people outside civilisation

[1] The author is a free-lance researcher and activist living in the village of Fiskars in Finland.
[2] Thomas Hobbes (1651): *Leviathan*

created a great number of stories about Noble Savages: people living an admirable life with low consumption. In fact, modern anthropological research has found a large number of cases of "primitive" societies leading a satisfying life. Marshall Sahlins writes about the original affluent society where people work/worked much less than in modern societies, but do/did not suffer from hunger or any other deprivation.[3]

How was life organized in such societies? The work necessary to get food and shelter was not only material activity, but was carried out concurrent with cultural and spiritual work to forge relations with other people and life forms. This cultural and spiritual activity continued during the "free time" and even in sleep. The distribution of "products" was organised as gift giving, but even that had simultaneous cultural and spiritual dimensions – creating relations among groups of people, and between people and Nature.

These cultural models or their remnants posed a great obstacle for colonists and developers. They could not get people to work in their projects no matter what they promised workers. Regularly they had to resort to forced labour or slavery. Even as late as in 1963, development expert Lucian Pye wrote: "It is no longer possible to assume that people in traditional societies will readily experience a revolution of rising expectations simply by being exposed to the prospect of new standards of material life... Instead of having to cope with an agitated population carried away with exaggerated expectations, most governments in transitional societies are confronted with the problem of a disturbingly apathetic public which is inured to all appeals for action."[4]

How then were the consumer society and "rising expectations" created in the first place? The beginning stage in the historical development of consumer societies was the formation of domination, social hierarchies and the state. This was a difficult task, because those to be subdued resisted strongly.[5] It was essential to show that the king and other elite members are different – even godlike. Myths were produced and bodies were mutilated. But the most important method to prove the difference was conspicuous consumption. The items included jewels, precious metals, rare skins (e.g., sable) and strange food (e.g., nightingale tongues). Initially, capitalists provided for this purpose by importing rare things from far away regions.[6]

When capitalists became stronger, they gradually started supplying the masses as well with certain items. One of the first mass-consumed products was silver coins. In the 16th century the Chinese government forced all their people to pay their taxes in money. Therefore, the demand for silver increased enormously. The metal was imported

[3] Sahlins, Marshall (1981[1972]): Stone Age Economics. Tavistock, London.
[4] *Communications and Political Development* (cited in C. Douglas Lummis: *Development as Forced Labour*, New Internationalist, June 2000).
[5] For an example of the history of state formation in Africa in the 18th and 19th century see Sigrist, Christian (1994): *Regulierte Anarchie, Untersuchung zum Fehlen und zur Entstehung politischer Herrschaft in segmentären Gesellschaften Afrikas*. Europäische Verlagsanstalt, Hamburg.
[6] See for example Wallerstein, Immanuel (1983): Historical Capitalism. Verso, London and Fernand Braudel: *"La dynamique du capitalisme"*.

by European traders from horrible mines opened in America and run with slave labour.

In Europe the first mass consumed capitalistic product was tobacco. In the England of 1669, its consumption reached 0.93 pounds per capita, and every fourth adult was using it. In the 1690s sugar was already being consumed widely: in England 4 pounds per capita. Much of it was taken as rum. Tea was already being drunk on a mass scale in England in the 1730s.

These economic achievements meant no improvement in the life of the common people. The items were consumed only because traders worked like drug traffickers to addict people to their products.

At a later stage, capitalists provided the masses with clothes, food and household items. This was possible only by destroying small-scale farming and handicrafts as livelihoods, and transforming people into industrial workers who could hardly produce anything by themselves. This change, too, was forced upon people and meant no improvement. Industrial products were of poorer quality than earlier handmade products. Work did not give any satisfaction, but was mere drudgery. The quality of human communities deteriorated and ecological relations between humans and Nature were destroyed. Mass unemployment and hunger were created in areas meant to be industrialised later (first for example in Germany).

At the same time, the circles of the elite were extended, and their consumption and power increased. This created enormous tensions in society. Popular education and workers' movements poured oil on the flames. In this situation, new elite strategies and methods of governing were needed. In the beginning of the 20th century two such were invented: propaganda machinery and the consumer society.

The modern disinformation society had two starting points: the astoundingly good results of the war propaganda put out during the First World War, and the discovery of psychoanalysis and the human subconscious. The key figure in developing propaganda machinery was Sigmund Freud's nephew, Edward Bernays. He began to apply Uncle Sigmund's theory systematically to commercial and political propaganda and invented a politer term for it: "public relations" or PR.

One of Bernays' first customers was the American Tobacco Company. Its problem was that men's tobacco demand had been saturated long time ago, while very few women were smoking. Bernays organised a group of young models to march in the New York City suffragette parade. He informed the press that a group of women's rights marchers would light "Torches of Freedom". On a previously agreed upon sign, the models lit Lucky Strike cigarettes in front of the press photographers. On 1st April 1928, The New York Times wrote: "Group of Girls Puff at Cigarettes as a Gesture of 'Freedom'."

However, for Bernays. PR was not only a marketing tool, but also a political weapon. As a member of the North American upper class, he identified strongly with the

fears of European and American elites: after the First World War, the widening voting franchise and social movements threatened to diminish the power and privileges of the top. As they themselves put it, the problem was "how to take the risk out of democracy." For Bernays the solution was his new propaganda technique. In his book, *Propaganda* (1928), he writes: "The conscious and intelligent manipulation of the organized habits and opinions of the masses is an important element in democratic society. Those who manipulate this unseen mechanism of society constitute an invisible government which is the true ruling power of our country."

PR-techniques were used successfully to manipulate political elections; and they became part and parcel of 'normal democracy'. But propaganda functioning on a subconscious level had an even more important political effect. By creating mass demand for luxury items, it diverted people's energies from risky political and collective activities to harmless individual aspirations.

During the 20th century, the motor car was the most important of these political objects of mass consumption. In Europe mass motorisation was started by the Nazis. Once in power, they suppressed all genuine collective action of industrial workers. But existing workers' quarters in Berlin and other large cities were a cause of concern for the Nazis: the informal communities in the cities could regenerate the workers' movements. It was impossible to detonate all of these quarters, and workers could not be gassed. So the Nazis invented an *Endlösung* (Final Solution) for this problem: it was a new political technology called people's car or Volkswagen.

Hitler met the French car industrialist, Renault, in 1935. He explained why the Nazis backed the people's car so strongly. After the rearmament boom, workers were going to create trouble again. But Volkswagen was going to make organising more difficult. The "cheapened vehicle" was supposed to help "diffuse the industrial labour force by transferring them from the factory location to the country." In 1938, Hitler laid the foundation stone for the Volkswagen factory near Braunschweig.

Later in the nineteenth century, the consumer society was refined in North America. To complete the automobilisation of society, General Motors, Standard Oil of California, and Firestone, decimated the mass transit systems of American cities in the1930s – 1950s: they bought transport companies simply to close down tram and bus lines. During the Great Depression, General Electric and other companies invented planned obsolescence: the pauperised people who had all but stopped consuming were forced to buy new commodities because the lifetime of products was consciously shortened.[7]

Shopping centres and supermarkets were invented and patented for boosting consumption: daily consumption items were put at the far end of the premises so that the customer would make many impulse purchases before reaching the necessities. Cities were re-planned to accommodate enormous flows of cars. The weakened community

[7] Slade, Giles (2006): Made to Break: Technology and Obsolescence in America. Harvard University Press, Cambridge, Massachusetts.

life was given a deathblow by television which opened out new vistas for commercial and political manipulation.

After the Second World War, this new "American Way of Life" was made into a patriotic calling that was to be preached all over the world. As a result of cultural imperialism, the political reasons for the creation of the consumer society became obscured. Sociologists and philosophers began inventing apolitical modernisation theories which made the political project appear to be a natural evolution.

How then does a mature consumer society function nowadays? Although economic theory postulates humans as material beings, marketing – taught in another corner of the academic institutes of economics – regards people as social and spiritual beings. In advertisements, commodities are made into symbols of widely varied things: strength, beauty, artistry, skilfulness, trustfulness, intelligence, social success, masculinity, femininity, sex, naturalness, experiences in Nature, a social group, dominance, etc. Commodities are bought because of their social, cultural and spiritual meanings and connotations. Usually however they do not satisfy social, cultural and spiritual needs. Even if they do satisfy, it is only for a short while: soon meanings are shifted by advertisements from old things to new ones. Yet you cannot buy the new ones at once – or perhaps ever. The consequence is frustration and dissatisfaction. Way back in the 1920s, Charles Kettering of General Motors stated: "The key to economic prosperity is the organized creation of dissatisfaction."

Meanings are also manipulated in a wider cultural arena in the commercial media. Leaders and public figures are made into idols representing certain consumer lifestyles. Living according to the models is possible only for a few. The results include eating disorders and the current epidemic of mental depression.

But even more dangerous than the effects on health of the consumer society are the political consequences. The media manipulation creates the illusion that the official economic and political system will eventually satisfy all your desires: you just have to wait patiently. Do not worry if you do not participate in decision-making: the economy will produce the things that all of us want. Consumer choices seem to be the essential arena for democracy. Communal and social goals are replaced by individual goals. The result is that social movements are a phenomena involving only young people whose socialisation is unfinished. Thus, when a social or political need shows up, the common women and men do not have the strength to struggle against keepers of power.

Therefore, the consumer society is a power project that has nothing to do with well-being or happiness. The 'good life' lies beyond consumerism. In many ways this is obvious, but to see it is difficult because it is clouded by a thick layer of lies. It seems that for many people an earthquake is needed to clear their vision. Perhaps the first unignorable signs of the approaching climate catastrophe will provide them with the needed tremor.

Free Time and Profits

Sushovan Dhar[1]

It has long been a widely-held opinion that the consumerist living standards of the rich capitalist countries cannot be universalised without inflicting irreparable damages on the planetary eco-system. Hence, the "small islands of mass consumptions", which were earlier regarded as models of development for the underdeveloped countries, which are largely the countries of the South, are now seriously being questioned. The current doubts revolve around the sustainability of such models as seen from an ecological point of view. Therefore, the challenge is to struggle for not just exclusion and exploitation, but also for secure livelihood standards and consumption norms that can be generalised to apply to all. In fact, our task is to look forward to the future, for alternative policies (and politics) that will support such standards and norms.

We have witnessed the inability of the capitalist social relationships to translate technological and productive development into a richer and more satisfying life for the human race. Capitalism's irrational use of technological potential generates a virtually universal interest in a democratic, non-capitalist society capable of putting this potential to better use.

A number of studies have clearly shown the fact that, beyond a certain level of income, the average reported level of life satisfaction in a given country or a region does not increase with the economic growth. This draws our attention to the limits and the confines of the *productivist* developmental paradigms. However, the existing accounts do not point to these limits and lack of connections between economic growth and the 'good life'. Instead, they are largely focused on consumption races triggered by individual pursuit of 'positional' goods, and on the existence of a conflict of individual self-interest with the social outcomes. We must make clear the connections between such consumer races and the huge wastes generated by consumerist patterns, along with the missed opportunity for enhanced human welfare that such waste entails, taking into account both the squandering of materials and the misuse of human potential.

It has been amply shown by the evidence that human beings generally overwork, at times beyond their physical, emotional and psychological capacities, to sustain consumerist lifestyles. Still, a number of studies suggest that once a certain level of material comfort is attained, 'non-positional goods', such as free time, make a greater contribution to human welfare than additional consumption of material goods. However, labour productivity in the last hundred years has overwhelmingly been translated

[1] The author is a free-lance researcher and activist based in Kolkata, India.

into economic output and conspicuous consumption, rather than shorter working hours. This sufficiently demonstrates industrialism's supposed bias towards producing more goods than leisure.

In fact, globally, even in Europe, we are witnessing a convergence towards the 'flexible' American model that intensifies exploitation and reduces free time. This whole trade-off between production and free-time is being resolved without "debate", due to the enormous power enjoyed by capital to shape social developments or social tendencies in accordance with the capitalist system, and to its benefit. Therefore, the productivity gains that come from the ever-revolutionising technologies (which are also the successful results of human labour), go in favour of capital and not labour. This is because of the fact that if the productivity gains resulted in shorter working hours, the benefits of the increased productivity would have passed on to workers, something the system works to prevent.

The absence of economic growth would makes it harder for profits to grow. Although this is true for consumption, and it might also result in lower levels of consumption, the workers would be otherwise benefited as they have much more free time and would be in command of more 'non-positional goods'. The reverse of this situation is that increased economic growth leads to growth of profits, with the benefits coming at no cost to the owners of capital. Thus, capital is able to buy higher profits through other people's sacrifice of their free time and leisure. From the point of view of capital, shorter working hours cannot be viewed as the ultimate conclusion of productivity gains, since shorter hours would siphon off these benefits in the directions of workers. There have been historical forces in operation since the early 19th century to make work an end in itself.

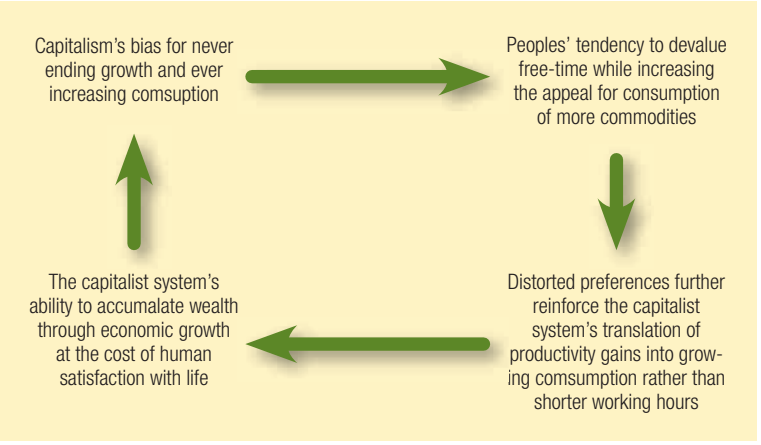
It is important to raise demands for an alternative, regulatory, legal-political-social framework which would put a cap on maximum weekly work, and also to increase demands for entrepreneurial re-organisation into co-operatives. In this context, the Erfurt Programme first proposed in 1891 is an important reference, as it idealises leisure time and advocates shorter working hours and the universality of education.

For mainstream economists, as well as social thinkers, the amount of work that people do is seen as a preference, as a sort of 'free choice'. However, if the issue is analysed more deeply, it will not be a matter of great surprise to find that options do not exist for the workers without paying a heavy economic penalty such as lower pay rates. Hence, painstaking toil to eke out a living is not an alternative, but a compulsion for workers – both material consumption and the hegemony of capital make hard work look like a 'god-given' natural order or an unavoidable system.

Unnecessary longer working hours also drain people of their energy, and they are left under-resourced to pursue creative activities in their free time, doing demanding and challenging, freely chosen tasks which can substantially increase personal satisfac-

tion. However, in the absence of sufficient free time, people prefer low demanding activities such as going to shopping malls or watching television, which are either consumption-intensive or expose the viewer to endless advertisements.

Thus, there is a vicious cycle that can be summarised as follows:



The spectacle of the advertising, sales and marketing efforts has evolved hand in hand with the capitalist system to reinforce this consumerist pattern of 'growth'. In fact, the model could not have been so successful without the emergence of a rapidly growing apparatus for marketing commodities. The consumer culture is also capable of reducing labour's resistance in the workplace, and containing any tendencies of the capitalist system toward an economic crisis by turning people's discontent with the system into fuel for further consumer accumulation of the products of the system. Consumer fetishism also creates meritocratic illusions which separate people into winners and losers on the basis of the things they own or can acquire. Consumerism begets unequal class relations mediated by market competition, although there is a certain degree of socio-economic mobility which lends credence to the ideological portrayal of those on top as worthy individuals who owe their success to talent and hard work. Examples of such ideological portrayals could very well be found in the top levels of the corporate hierarchy of Tatas and Ambanis of India, and Nokia of Finland.

In order to defeat this disproportionate assault by capital's using hordes of advertisements, we have to think of an alternative framework that can radically reshape the balance of forces. Let us envisage another regulatory framework in which advertising on behalf of business is carried out by independent public bodies, not to pursue consumers of products but to provide reliable and trustworthy information for users of products. This might also include an objective comparison of the advertised commodities to similar substitutes. These public advertising bodies should be funded by private companies, but should be independent of any control by business groups.

Ecological Counterplanning for Sustainable Futures

Kiama Kaara[1]

After three decades of neoliberalism, a policy approach meant in theory to establish market relations as superior to all else, authorities on the global political economy have returned to themes of imperialism grounded in extra-market power relations. For Africa's popular struggles, one of the main objectives is to transform power relations in order to end. conflict and underdevelopment. This in turn, requires applying this theoretical approach of extra-market power relations to a critique of capitalism. Such a critique would reinvent and invigorate a new approach to the dynamics of emergent maladies related to capital intensification, including climate change and the net negative effects of a fossil-based economic model, Although finite, these maladies of capital intensification continue to wreak havoc on the environment.

The grand narrative must be challenged. In an article which I co-authored with Wahu Kaara for the premier African electronic social justice journal, *Pambazuka News*, in the run-up to the World Social Forum in Nairobi at the beginning of this year, we concluded by saying:

> *"We must shame the Economist notions of 'Africa: A Hopeless Continent'. Tony Blair says that we are a 'scar on the conscience of the world'. But that needs to be qualified. Their world. That of excesses, exploitation, control and domination. We are a scar because we refuse to die and to refuse carrots to sell our souls... There is need to develop a social policy on Africa based on rights and entitlements. A policy that puts Africans in the leadership of control, utilization and benefit from their multiple and varied ever occurring natural resources."*

To assert our people's sovereignty over their destinies, we must be able to develop new cosmologies and new metaphors that are devoid of violence and exploitation. We must reconstruct ethics and spirituality.

Judaism's teachings about the "Jubilee Principle" stress that land is lent, not given, to human cultivators. Land requires "sabbatical" years, and its value is not to be seen in terms of absolute possession, but as a source of a limited number of harvests between the sabbatical years (Lev.25). Similarly, Christianity has its sacramental tradition which presents the material order as raw material for the communication of God's Love – the Eucharist as the symbol of God's action in creating a radically differ-

[1] The author is the coordinator of IBON Africa and a researcher for the Kenya Debt Relief Network (KENDREN).

ent society, not characterised by rivalry and a struggle for resources. At the centre of Christian practice is a rite in which all are equally fed by one gift.

Writing approximately thirty years ago, Mwalimu Nyerere, talked about changing another "realistic world" of his time, that of apartheid South Africa, and made reference to natural evolution:

> *".... And there were other species, which became extinct; their teeth were so big, or their bodies so heavy, that they could not adapt to changing circumstances and they died out. I am convinced that, in the history of the human race, imperialists and racialists will also become extinct. The only difference between them and these other extinct creatures is that their teeth and claws are more elaborate and cause much greater harm – we can see this even now in the terrible use of napalm in Vietnam. But failure to co-operate together is a mark of bestiality; it is not a characteristic of humanity. Imperialists and racialists will go."*[2]

In the clarion call of the World Social Forum process, it says: *"Another World is Possible".* This world is not only possible, but is already in the making. Our meeting, sharing and communion here is not only a testimony to the fact that we are in the trenches and terrains of modelling this world, but it also reinforces our connectivity across cultures, boundaries and territories.

[2] Nyerere, Julius (1973). Freedom and Development: A Selection from Writings and Speeches. Oxford, London. p. 371.

Reflections on Sustainable Cultures

Marie Shaba[1]

My contribution to the dialogue starts from what Anja-Riitta Ketokoski (Ministry for Foreign Affairs of Finland) said in the Tampere Dialogue – I, *"The domination of 'homo-economicus' is a major challenge. We in the North need development aid from the South to become more sustainable."*

This is a very important observation, and it points to the direction we in the South want the dialogue to go. For centuries, the Africans have been the focus of research, the topic in all forums where nations discuss development issues, and Africa has been the scene of violence even though Africans do not produce or sell arms. In 2001 at the Helsinki Global Village, I gave a presentation on the "voices in the margins" and called on the governments and global institutions to focus on the North to find the causes of impoverishment, violence and suffering in the world.

When you examine international trade agreements like the WTO processes, and especially the ongoing Economic Partnership Agreement, you will see how the legalisation of inequalities begins there. For example, even though all WTO members are supposed to be equal, it is clearly stated that trade between the EU and the least industrialised countries, i.e., LICs (better known as Least Developed Countries – LDCs) shall not involve LIC selling arms to the EU – Everything But Arms (EBA).

Africa sells one or two major products of small producers into what they call a 'buyers' market'. The people to whom we sell these products set the prices. For the same products, we are now paid less and less than say just 30 years ago. However, when they sell back the processed goods, the price keeps getting higher! For every flower a European woman wears, a woman in Tanzania or Kenya has become contaminated with chemicals, has been raped and infected and is dying slowly, leaving children orphaned. For every Nile perch fish fillet from Lake Victoria, the Africans who catch the fish are left with rotting carcasses and an ecological disaster. Is this the culture we want to sustain as civilised people?

Europe of the 16th century was backward and poorly resourced, but with their guns they were capable of spreading death and destruction across huge distances. Europeans interpreted military superiority as being intellectual and even biological superiority. Still today, black Africans are accepted as equal or beautiful in the western countries only if they are talented in the commercially beneficial fields such as sports, fashion or music.

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[1] The author is a daughter of the African revolution and associated with Activists without Borders. She lives in Bagamoyo, Tanzania.

Imagine a world where over 5,000 land mines are planted each year, and a world where for every dollar spent on education for every child whose job is to learn, 25 dollars are spent on one soldier whose job is to kill. More children are being killed by firearms than by all the natural diseases combined!

The human race needs to be rejuvenated with new energy, new hope and a strong belief that a better and alternative world is possible in our lifetime. We need power to act, to operate in the corporate world, to deal with the corporate world. In this dialogue, we need to address this culture of violence and destruction which exists in the name of democracy, the 'free' market, globalisation and sustainable development. Justice and Peace are the two sides of the coin, and around the sides of the coin runs coexistence, our one hope to create a culture of sustainability as renaissance people.

Glimpses of Sustainable Ways

Bishnois: The Ecological Stewards

Rakesh Bhatt[1]

Runkh lila nahi ghave – Not to fell green trees
(One of the Bishnois' Twenty-nine Commandments)

The stories of hunting are often narrated by hunters, never by those who are hunted. Until the prey narrated the story of the game, the hunter could continue patting his own shoulder. But when the hunted took the role of the narrator, the story did not die in the pages of history. Rather it created history, throbbing in the hearts of humanity.

The Massacre of Khejarli

It was in the year 1730 when Maharaja Abhay Singh of Jodhpur needed wood for the construction of a new fortress. Since the Bishnois (a community of nature worshippers in Rajasthan and its surroundings) neither obeyed the demand for the delivery of timber nor made any payments instead, the ruler sent his soldiers into the villages with the order to chop down Khejri trees (Prosopis cineraria). These trees, which proliferate even under extremely harsh conditions, have always been worshipped by the Bishnois – and in appreciation the trees have offered them shade, food, building material, humid soils, protection and clean air.

When one of the villagers, Amrita Devi, heard of the imminent danger, she hurried, followed by her relatives and neighbours, to the place of the tragedy, named Khejarli, which was a place where the Khejri trees grow. They tried to prevent the soldiers from doing what they had come to do. However, when all reasoning failed, she hugged the first tree to be cut in order to protect it. The soldiers beheaded the woman, whose last words were to become history: ***"Sir saanthe runkh reho to bhi sasto jaan"*** (If a tree is saved even at the cost of one's head, it's worth it).

The incident above led to what has later become known as the massacre of Khejarli (1730 A.D.). Although the soldiers had warned that anyone intending to come in their way would share the fate of Amrita, her three daughters followed her example and were also killed.

Men, women and children stepped forward, embraced the trees and let themselves

[1] The author is an activist with the South Asian Dialogues on Ecological Democracy ,where he has worked as a coordinator. He has studied the natural sciences and Islamic theology.

be axed to death one after the other: Andoji, Virto, Vanial, Chaboji and Udoji, followed by Kanhoji, Kishoji, and Dayarayaji.

The terrible message spread like wild fire, so that people from eighty-three different surrounding villages rushed in, ready for the extreme sacrifice to lay down their lives for the trees. When the Maharaja heard the cries of the witnesses of the massacre, who had run to his court, he himself went to Khejarli and stopped the tragedy.

However, by then it had already cost the lives of 363 Bishnois. The ruler was moved so deeply and was so impressed by the dramatic non-violent protest that he promised to honour the conviction of the Bishnois in future. He forbade hunting and woodcutting in their area by means of a law that is still in force today. The quiet village of Khejarli still exists and is situated about 30 km south of Jodhpur. A tarred road leads into the place, which consists of an accumulation of scattered huts and a pond. A small structure – which they call a temple – reminds us of the 363 Bishnoi martyrs who saved the Khejri trees, and whose demonstration of altruism still seems to inspire the India of today. Indian gazelles and blackbucks roam around this shrine of mass self-sacrifice, denoting the fact that animals and vegetation are safe in this region, for it is the Bishnois who reside here!

The Foundations of the Bishnoi Ethics

The question of such great motivation, which is even capable of overcoming the instinct of self-preservation, can probably only be understood in the context of an extremely strong and very stable moral foundation.

This extraordinary steel base was poured many centuries ago by someone who himself had just survived a famine. This person was to be called Guru Jambeshwar. His teachings are based on laws which stress the importance of virtues such as self-discipline and non-violence. These teachings and laws were the basis of the Twenty-nine Commandments from which the religion eventually derived its name (Bish-noi stands for 29).

The philosophy of the Bishnois also impresses us with its wisdom in wedding Hindu and Islamic elements. The Bishnois worship Jambeshwar as their only God, considering him to be the incarnation of the Hindu God, Lord Vishnu. However, they do not burn their dead like Hindus, but bury their dead like Muslims who return the bodies to the Holy Earth.

Eight out of the 29 Commandments exhort the community to protect and sustain the environment. One of these environmental commandments is *runkh lila nahi ghave* – not to fell green trees. The community has, therefore, been promulgating eco-friendly principles and the necessities of sustainable development centuries before they became known to the modern societies.

Bishnoi Relationship to Animals

For modern societies, it is unbelievable to find that the Bishnoi women feed milk from their own breasts to the babies of the black deer, caring for them as if the deer were their own children.

The Bishnois never kill any animal. The male animals are used for work. However, should there be too many, they have to be sold, preferably to other Bishnois. Even if the animals end up with outsiders, they still stand a reasonable chance of dying a natural death, unlike in the countries of the European Union. In the EU, farmers are paid special premiums to kill the 'waste by-product' calf as young as possible, in order to control the meat mountain.

Kiran Devi Bishnoi breastfeeds a baby orphan deer in a village in Jodhpur. The Bishnois are respected the world over for their compassion and their sacrifices made as they worship nature. (Photo Himanshu Vyas/Hindustan Times)

Bishnoi Life in Cities and Villages

The estimated population of Bishnois is approximately six million. Bishnois are found in India in Haryana, Punjab, Uttar Pradesh, Gujarat, Madhya Pradesh, Delhi and Mumbai. However, their major concentration is in Rajasthan, especially in the districts of Jodhpur and the adjacent Nagaur.

Major cities of Rajasthan like Jaipur, Udaipur, Jodhpur and many others, are colour coded. The local municipality does not provide clearance certificates to owners of shops and houses who do not paint the doors, windows and rooftop with a blue colour. Bishnois are exempted from following this rule because followers of the Bishnoi faith are strictly prohibited from wearing blue. The reason for this is that blue clothing would be dyed in indigo, requiring large amounts of indigo shrubs to be cut down to produce it. It is a telling comment on how the laws of rulers seem helpless before the laws laid down by faith.

The Indian caste system has no grip on the Bishnoi philosophy, in which generally equal rights between the sexes also prevail.

Sustainable Lifestyles Enabling Life in Desert Conditions

One would be intrigued and amazed, while crossing the great Indian Thar desert in Rajasthan, to find that even in the midst of this barren and vast landscape of sand dunes, the areas that are inhabited by Bishnois have well-functioning, traditional, water harvesting systems, even collecting dewdrops from the plants. There is normally no serious lack of food: despite the extremely difficult environmental conditions, millet, wheat, carrots, radishes and sesame oil are produced.

The Bishnoi cultivation methods are ingenious and perfectly adapted to the local conditions. Wild fruits and vegetables play an important role in the diet of the Bishnois. During periods of drought in Rajasthan, one can see carcasses of thousands of domestic animals who have died of thirst and hunger, forcing the non-Bishnoi villagers into ecological exile. Ecological experts are amazed to find that there has never been a single sighting of such tragedies in the Bishnoi areas, not even during the most difficult periods.

In the Bishnoi villages one does not witness horrific scenes, but rather a modest and peaceful routine. The Bishnois have a very simple explanation to this. They believe that if you care for the trees and animals, they will return the favour to you when you need it the most. The Bishnoi followers' tenets assert that the people should be willing to sacrifice their lives rather than allow the destruction of flora and fauna.

It is this determined adherence of the Bishnois to their values which has helped them survive and which also ensures the survival of the fragile desert ecosystem.

Sustainable Traditions – Surviving Amidst Modern Environmental Crisis?

There is a tremendous search today for solutions for the emerging, development-related environmental disasters. Although the reasons for such disasters, such as over-consumption, over-grazing, clear cutting of forests, and destructive agricultural practices, are known and understood perfectly, an effective healing process for environmental scars does not seem to have been initiated up to now.

The Bishnoi faith and its followers are islands of tradition which have been able to withstand the tide of modernity that still threatens to engulf their centuries-old belief system. For the Bishnois, the memory of Amrita Devi and other martyrs is still very much alive, and in the year 1973 even led to a similar, although fortunately less tragic incident, in Gopeshwar village in Uttarakhand. The incident laid the foundation of the famous resistance movement, Chipko (In English: "Hug").

If we could translate our obviously fast and globally growing uneasiness into consistent nature protection, there might be reason for more hope. The time for a new

ideology is here, along with a need for a different style of life, based on a desire for unity and not merely on economy-centric development models.

The Bishnois have understood this truth for a long time. Their conviction that each living being has the right to fulfilment, unimpaired in its individuality and spiritual destiny, can be an example for all of us. There is no better way into a peaceful and sustainable future.

Even though the Bishnois are presently protected by their very own wisdom, a disturbing question nevertheless remains unanswered: how will the fast spreading urbanisation in all corners of the world eventually affect any ideology of sustainability hitherto based on religious grounds?

Will such unique traditions as those of the Bishnois flow unchanged through the changing times or will they simply evaporate in this age of global warming?

Self-Reliant Irrigation Practices in Gaya, India

Vagish K. Jha[1]

The South Bihar Plain, comprising the districts of Gaya and parts of Patna, Shahabad, Munger and Bhalgalpur, has been the cradle of civilization in India. The Kingdom of Magadh arose in South Bihar as early as the 6th century BC, and was the start of the first Indian empire – the Mauryan Empire. Lying between the Chhotanagpur plateau and the Gangetic valley, the South Bihar Plain forms the southern part of the dry zone, with annual rainfall between 1,000 mm to 1,600 mm. It has mostly old alluvial soil with very little water retaining capacity. The area has a marked slope from south to north, resulting in the rapid flow of water. Overcoming this natural disadvantage, the farmers of the area devised a unique irrigation technique which uses natural land gradients to lead water from seasonal rivers to the fields. This is the indigenous technique of gravity irrigation called *Ahar* or *Pyne*.

Ahar and *Pyne*

An *Ahar* is basically a rectangular catchment basin with an embankment on only three sides. It stores water by raising an embankment one to two meters high on the lower ground, between the two other sides of the basin, which project towards the higher ground (south), gradually diminishing in height and ending at ground level so that water flows in through the fourth, open side from rainwater run-off or from river canals.

A *Pyne* is a man-made water channel leading from a river or an *Ahar*, through which water flows downhill, drawn by gravity into distant fields. It is a system designed to utilise water flowing from hilly rivers running south to north. *Pyne*s are devices to prevent wastage of water, and are used for agricultural purpose.

This traditional irrigation technique has a history of several millennia. We have references to it in ancient texts such as the 'Kunal Jataka' and the Arthsashtra, which mention practices like Ahar and Pyne, that were largely managed by the community.

In the medieval period, the responsibility of maintenance rested with the *Zamindar*, the landlord. Maintenance was mainly in terms of de-silting the channels and catchment basins. A system of *goam,* where every cultivator had to supply one man per plough to carry out maintenance/repair work, came into existence. A system of

[1] The author is a free-lance researcher, writer and cultural organiser based in New Delhi, India.

para-bandi, to regulate distribution of water among villages was put in place, where each village had a fixed quota of days/hours to utilise the water from the *Ahar* or *Pyne*. A written record was kept in the *Lal Bahi* (red register). There was a clear relation between the irrigation work and the mode of distribution of agricultural surplus. One of the systems which was worked out for this was called *Danabandi*, under which the rent was fixed by assessment of a crop in the field before harvesting. However, the system declined over a period of time, owing to various factors.

From Rain God to Borewells

According to the First Irrigation Commission (1901-03), out of a total of 1,670,000 acres, more than half of the land in the South Bihar Plain was irrigated in this ancient way. Gaya district, where this system of *Ahar-Pyne*s reached the highest level of development, remained practically immune to famines or floods.

However, after the famine of 1967, farmers of this area started opting out of the traditional irrigation in favour of borewell irrigation. But within 10-12 years, people started realizing that the ground water level was falling. The case of Gaya town explains the situation quite dramatically.

In 1995 in Gaya town, water was available at only 2-3 feet below the surface of the ground during the rainy season; this fell to below 200 feet by the year 2006. Borewell tubes dried up. The town saw one of the worst water crises of recent times. Roadblocks and demonstrations by the public became a daily routine in the town.

However, by the year 2008, the water was again available at 30 feet below the surface. There is enough drinking water for everyone in the town today. This dramatic turn-around in the availability of water in Gaya town has an equally dramatic story behind it.

Magadh Jal Jamat (MJJ)

In 2006, in the face of the unprecedented water crisis coupled with the apathy of the local district administration, some concerned citizens decided to take up the responsibility of de-silting the ponds of the city. To seek greater support from the public, an appeal was drafted. The following fortnight saw a 'festival' of "shram-daan" (literally, labour-donation) to de-silt the ponds of the city. They got support from various quarters and de-silting work started in as many as 15 ponds of the city simultaneously. It continues to be one of the most inspiring examples of a collective initiative for water conservation in the recent history of this area, or perhaps the entire country.

The force behind the movement was an open forum named *Magadh Jal Janmat (MJJ),* dedicated to water issues. It has representation from all the districts in the

Magadh area, and comprises individuals and representatives of many different institutions and organisations. It does not have any donor or funding agency to support its activities. The water policy of MJJ aims at protecting the rights of the weaker parties, and deciding on the priority of ownership of the rights to use water on humanitarian grounds. It opposes positions and initiatives that go against the interests of people by creating popular resistance and challenging them in the courts of law.

MJJ has been active in creating awareness to make the traditional irrigation methods of "*Pyne*" and "*Ahar*" functional again. It insists on motivating the community to take up the work while they provide material, technical and financial resource. Faced with the twin problems of drought and famine, the villages are also gradually being forced to realise the importance of the traditional irrigation methods.

Jamune-Dasain-Pyne

Inspired by the work of MJJ, the farmers unanimously elected 104 members drawn from 28 villages (four members from each village) to lead the '*Jamune-Dasain-Pyne Committee*', to revive the age-old natural irrigation techniques.

The *Jamune-Dasain-Pyne* originates 6 kilometres west of the city of Gaya at Orma Chaoardah village. This *Pyne* starts from the Jamune River and in most parts this is supported by natural seepage of water along the *Pyne* that keeps it alive all year long. This *Pyne* is over 28 kilometres long, and irrigates more than 32 villages. It has 10 main distributary channels (therefore, the name "Dasain" meaning ten) and many dozens of subsidiary channels. Taking together all the distributaries, the total length covered by this *Pyne* would be over 60 kilometres.

The first meeting of the *Jamune-Dasain-Pyne* Committee took place on 3rd February 2008, in which they agreed to revive the *Pyne* by undertaking *goam* (a traditional system of voluntary labour). The initiative soon caught the imagination and by the month of October an independent committee had come into existence, committing to undertake the task of reviving the age-old traditional irrigation system.

Today, out of over 32 villages on the *Jamune-Dasain-Pyne*, more than 28 villages have joined hands to come together. The committee has fixed a contribution equivalent to two litres of diesel per bigha (~1.5 bigha = 1 acre) i.e., Rs. 70/-. About 12 villages have already contributed their share. It is not just money that they ask as contributions. Those who cannot afford money are welcome to give 'labour'.

It is not an easy task to mobilise people for such a campaign, as people have become used to dependence on the government or NGOs. But MJJ is confident that people will soon realise the importance of being self-reliant.

Repairing and mending a pyne through voluntary efforts, in progress in Gaya district.

Lakshmipur – Keeping a Tradition Alive

Some of the villages continued the tradition of *goam* and prospered. Lakshmipur is one such village on *Jamune-Dasain-Pyne*. The village population of Lakshmipur is comprised mostly of Muslims. Previously they were primarily employed as *Sipahi* (police) for the Tikari Raj. The rule of the village is undertaken by each individual, without any exception. The village is divided into wards, and every ward has its own official in-charge, called a *Gardar*. Lakshmipur has a water committee which has two experts. For three months in a year, two salaried *barahils* are appointed; they have the responsibility to patrol on the *Pyne* to ensure no one violates the water rule. They report to the water committee every second or third day.

When the committee decides the date of *goam*, everyone above the age of 15 years must join in without exception. The old, sick, and women folk are exempted. Even those who do not own land have to join in. Work starts early on the 18-kilometer long stretch of the *Pyne* that is the responsibility of the village. The entire village transforms into an alert troop and works through the night. Right up to the present, Lakshmipur has never had a failed crop of paddy (rice).

Sustainable Livelihoods and Lifestyles in Uttarakhand, India

Ajay Mahajan[1]

Mountains worldwide are marked by diversity, remoteness and fragility. In these times of ecological crisis, it is likely that the greatest mountain range of them all, the Himalayas, and its inhabitants, have something to share with us about sustainability.

Agriculture and animal husbandry, or pastoralism, have long been and still are the mainstay livelihoods and occupations of the human communities in the Himalayan state of Uttarakhand. Closely and symbiotically interlinked, both the inhabitants and their livelihoods are deeply dependent on the neighbouring **forests** and ecosystem for sustenance and viability.

Agriculture in 87% of the hills in Uttarakhand is rainfed. It is distinguished by its organic cultivation methods and marked by exceptionally rich biodiversity. The farmers of Nahikalan, a village I have been closely associated with, grow up to 40 different crops in a year.

The following example illustrates the diversity, associated knowledge, and sustainability of traditional farming systems in this area.

Baranaja is a system of mixed farming and companion planting, a veritable community/society of crops that are planted together on the same terraced fields in the *kharif/chau masa* or monsoon season. The plants can include, for example:

- Grains: *mandua* (finger millet), *ramdana* (amaranthus), *kuttu/ogal* (buckwheat), *jwar* (sorghum) and *makki* (corn/maize).
- Pulses and beans: *rajma, lobia*, *bhatt*, *gehat*, *naurangi*, *urad* and *mung*.
- Oilseeds: *til*, *bhangjeer*, *sann* and *bhang*.
- Vegetables: *ogal*, *chollai*, *kheera* and *lobia*.
- Spices: *jakhiya* and *til* (sesame).
- Fibre plants: *sann* and *bhang*.

The vines of the pulses entwine around sturdier host crops like corn and millet, and thus can reach up to the sun; in exchange, they share with the grains the extra nitrogen nutrition that the legumes fix in the soil – which is mutually beneficial.

Since the plants grow and flourish at different levels/storeys much like a natural forest, they utilise multiple levels of space. This system implies more overall produc-

[1] The author is a free-lance writer and activist based in New Delhi, India.

tivity, meeting of diverse food needs and provision of nutritional security for both humans and cattle, while minimising risks due to climate and pests. It also guarantees sustained soil fertility.

Important and hard tasks, such as weeding, hoeing and harvesting, are still undertaken together by all the farmers, working on each other's fields in turns The sowing of paddy (rice) is also a communal project. The village folk typically go together to graze cattle, or fetch fodder and fuelwood. What is missing is the earlier music, song and dance, though they still talk and joke a lot.

Agroforestry: In between the rainfed agri-terraces are numerous trees of astounding diversity, which are also found all over the agricultural zone. Their numbers run into (even tens of) thousands of trees for a single village. Wild bushes, grasses and herbs too abound here. In the monsoon it is easy to mistake the agricultural zone for a forest.

Biodiverse organic farming with agroforestry on rainfed agri-terraces in the Indian Uttarakhand Himalayas. This system maximises the possibility of meeting diverse needs of humans and cattle in times of changing climate, even as it conserves the moisture and fertility of the soil.

This amazing, traditional, agro-forestry system importantly provides diverse fodders, foods, fuelwood, fibre, firelight, medicine, timber, and the list goes on and on. Besides minimising erosion on steep slopes, the terraces create wonderful nutrient

cycles and micro-climate for crops, and enhance livelihood security and accessibility.

Agriculture here is completely powered by **cattle.** The most critical component of organic manures is cowdung. All tilling of the land is done by bullocks. Along with their symbiotic link with agriculture, cow and buffalo provide humans with milk and milk products that are critical to food and nutritional security. The inclusion of cattle in the system also reduces livelihood risks and is climatically and ecologically a surer livelihood option, rather than rainfed agriculture alone.

Perhaps the single most important feature that determines water availability for the mainstay agricultural livelihoods, as well as determining where habitations are located, is **forests**.

Forests here provide critical livelihood requirements such as fodder for cattle (resulting in cowdung for manure), leaf mulches for crops, quality fuelwood, wild food, medicines for humans and cattle, wood for housing, furniture and implements, and most importantly a congenial micro-climate for several special hill crops. Forests are the critical factor in sustained water availability through the springs, streams, rivers, pools, and ponds maintained by the forest ecosystem.

The well-being and quality of human and animal life in the Uttarakhand mountains is directly linked to the health and diversity of the mountain forests, especially those above villages. Little wonder then that forests have a special place in Garhwali folk music and culture.

For centuries, dozens of wild food plants, including flowers/buds, fruits/berries, leaves, and wild tubers, constituted a very crucial part of the food supply and particularly the nutritional security of local communities.

Threats and Challenges to Sustainability

However, these mountains are no Shangri-la; despite their inherent strengths, there have been and are several challenges to the continued sustainability of the forests and the way of life of the people there.

The earliest modern challenge was attempts to take over control of forests by the British, followed by the Indian State – often leading to alienation, forest felling, attempted commercialisation, and local resistance movements and initiatives.

Application of the dominant, industrial development paradigm to these Himalayan regions through government policies, especially in the sectors of energy, mining, agriculture, road building and other construction, had created huge challenges. According to this paradigm, even these, the world's greatest mountains, and their forests and rivers, are merely natural resources to be exploited. The effect of such exploitation on local communities and livelihoods, and on the local environment and ecosystems all the way downstream, is underplayed and ignored. It is doubtful that such indus-

trial development exploitation could ever contribute to the sustainability of all the life in the Himalayas, or for the life now sustained by the mighty rivers that originate in the mountains.

At the same time as the natural resources of the Himalayas were being exploited by industry and the State, local livelihoods, lifestyles, folk knowledge (significantly of agriculture and forests) and cultures were singularly neglected, ignored and regarded as backward. This led to economic, social and cultural devaluation of the area. The number of economically viable livelihood options shrank, and the aspirations and expectations of the people, especially in regard to their monetary economy, changed and grew. Added to this was the woeful neglect of the health and quality education needs of the local inhabitants of villages and small towns, the cultural influences of television and films,. and the lure of the big cities. The result has been widespread migration from the hills.

At the local level, rainfed farming communities across Uttarakhand today are struggling with the vagaries and unpredictability of a changing climate, caused by factors to which they have made virtually no contribution.

Over the last two decades, forest fires have become the most widespread local threat to forests: forest fires are increasing in frequency, range, and severity. Climate change has induced frequent long dry spells and severe heat spells. Communities have been alienated by government forest policies, and removed from their role as keepers of the forests. The result is enormous eminently avoidable harm to forests and communities. The forest fires release massive pollutants and stored carbon, even as carbon sinks are destroyed, adding significantly to global warming and climate change.

Nonetheless, despite all these challenges, organic biodiverse agriculture, natural forests, and the communities dependent on them, have changed far less in the hills of Uttarakhand, especially Garhwal, than in other western Himalayan states. **The evident sustainability of the primary livelihoods of the people of Uttarkhand, with their so-called 'backward' lifestyles, have enabled the sustainability, integrity and perhaps even the survival of these mountain ecosystems over centuries.**

Significantly, the last four decades have seen several remarkable efforts by local communities to protect their forests, mountains, water sources, agriculture and linked livelihoods. They often end up fighting apathetic Governments, corrupt politicians, and the timber mafia with its money and muscle power. Perhaps the hardest fight, however, is against the arrogance of modern science and industrial economics.

The Tradition of Sacred Groves among the Mari People in Central Russia

Ulla Valovesi[1]

Sharing of bread in a sacred grove ceremony in Mari El, Russia.

The limits of our natural resources have become visible, be they energy, metal, land, or water. However, the problem is not only that we are running out of resources, but that the main products we are producing today are toxic: super poisons as radioactivity or PCB, dangerous amounts of metals such as lead or mercury in the wrong places, greenhouse gases, and runaway genetically modified species of plants that are spreading around the globe.

We have actually come to a crossroads: if we continue this way, all life on this earth is seriously under threat. If we want to have any future on this planet, we have to unlearn our destructive ways of life and actively relearn sustainable ways for a whole society.

At this point, we do not have any more time for centuries of social or scientific experiments. Nevertheless, we can still learn from those real, still existing societies that continue to have sustainable cultures. The oldest sustainable cultures are those of the indigenous peoples. To be defined as an indigenous culture, a society has to have a long history in that area, in other words, roots. Those indigenous cultures that have lost some of their traditions are right now working hard to root their cultures again. Often this happens by reviving their old sacred places: these are places where they maintain their history as a people and their mythology as the worldview that is guiding their everyday lives.

One distinctive feature in indigenous cultures is that they tend to be more democratic than the dominant cultures. The respect indigenous cultures have for Nature also includes respect towards other people. This can be seen as a key element in pre-

[1] The author is an anthropologist and activist living in the village of Fiskars in Finland.

serving a sustainable way of life. When any people are denied real democracy, equality and dignity, they will continue to fight that deprivation by any means available – from subjugating other people to subjugating Nature. Such a situation is disharmonious, and easily leads to destruction.

For the Finnish people, there are living examples of sustainable cultures whose cultures and language are similar to our own: the Finno-Ugric people in Russia. They are also some of the very few people in Europe who have kept a Nature religion alive to this very day. For the purpose of becoming acquainted with their culture of sacred groves, let us make a short excursion to the Republic of Mari El in Central Russia.

The Mari People in Russia

The Mari live pretty much within the same ecological environment as do the Finns: there is, however, no sea in Central Russia to balance the extremes of the seasons. Consequently the winter is colder and the summer warmer. The Mari are the oldest known culture in that area, their history dates back at least 8,000 years. This means that for the last 8,000 years they have tested and developed a very delicate balance with Nature and created a sustainable way of life.

The origins of their culture are in gathering, fishing and hunting societies with a shamanistic tradition. This means a very keen sense of Nature, since their life is directly dependent on their environment. The Mari have gone through a slow transition from hunter-gatherer to agricultural societies in which traditional gathering, fishing and hunting have remained as supporting sources of livelihood. They have also experienced a gradual shift from the shamanistic culture to a culture based on the knowledge of special sages, or wise people, who are chosen to learn the traditions and keep them alive. In the Mari language, these sages are called *kart*, which is often translated as priest. In Finnish they are called *tietäjät*, those who hold knowledge. Their task is to learn the traditional oral texts such as prayers, charms and songs, as well as the history and mythology of the people, and to organise the ceremonies where these teachings are kept alive.

In the Mari worldview, Nature is alive: every tree has a spirit, so does the forest, every lake, the sea, stones, even things made by people, have spirits and are alive. The sustainable way of life of the Mari derives from their connection to this living environment: Nature. Their way of life starts with a respectful attitude towards Life: towards Nature with all the living creatures in it, towards other people, towards ourselves, and towards the gift of Life that we have all been given.

The Nature Mothers who date back to the oldest levels of civilisation are still alive and well in Mari culture. The Mari give respect to, for example, Mother Water, Mother Moon, Mother Star, Mother Sun, Mother Wind, Mother Mist, Mother Frost, Mother

Fire, and of course the most respected of all, Mother Earth. We can still recognise the names of some of these in the Finnish language, we know *maaemo*, Mother Earth, for example. The name intuitively resonates with some collective subconscious memory inside Finns, and possibly creates warm feelings, but we have lost any concrete associations with it. In western industrialised countries, the Earth has been changed: first from a mother to a maiden, then to something that can be hunted and explored, as for example in the earlier metaphors of western science. Finally 'earth' became just the dead matter of today that can be dug or destroyed or utilized in any way. Ironically, the Latin origin for matter, *materia*, means mater, mother. However, this mother is already almost dead for most of us.

From neighboring cultures the Mari have borrowed gods (*jumala*, god, is a borrowed word in the Finno-Ugric languages) to supplement their agricultural needs. Among the Mari the gods still often appear in families, with a grandmother, father and mother god/dess, along with their children and grandchildren. Although the Sky God is elevated as a main God to compete with the gods of neighboring, dominating cultures, he still has no control over the nature spirits. Actually, it is Nature that is understood as God; and the Mari consider themselves as the daughters and sons of Nature.

Sacred Groves

In the countryside, the Mari live for the most part in sustainable villages. Every household has its potato field, vegetable garden, hens and ducks, maybe even sheep and goats and a cow or two. The village is relatively egalitarian. The village or family group cooperates in the larger and more difficult tasks of agriculture, such as ploughing or haymaking, or harvesting grains. In soviet times many of these tasks were organised through collective farms or *kolkhoz*, and this is often the case even today, though the role of the collective farms has somewhat changed. The elimination of villages forced many people to move to the cities; but now when there is again freedom of movement and the money has considerably lost its value, the people have started returning to the countryside.

The Nature religion of the Mari is linked with economic survival, be that successful hunting or successful harvesting. This is expressed in ceremonies that are usually held in the sacred groves. These ceremonies follow the rhythm of Nature. They call people together several times a year, e.g. before ploughing in the spring. This is a time to pray to the ancestors and the Mothers, at least the Mother Earth, and probably several other spirits and gods as well, for their help in successful ploughing and planting. It is interesting to note that even in soviet times when the ceremonies were officially forbidden, some leaders of the collective farms actually encouraged them, since these

ceremonies had proved in practice to enhance the agricultural output.

This kind of ceremony has many aspects. It often brings together the whole village and/or all related people and creates a spirit of community: they belong together as one group. It orients the participants by letting them know that now is the time to prepare together for a big and crucial effort. It binds this group of people to a certain place: this is where our ancestors have roamed, we belong to this place, and this is where the future of our children lies. Thus, there is a strong social meaning in addition to the meanings associated with economic survival.

There is also a strong connection with everyday life at home, with raising children and transmitting the tradition. The ceremonies publicly recognise individual cycles of life and the changed status of a person, e.g. adulthood or marriage or widowhood. This way every person is given a certain place in a society. For the Mari people, these ceremonies give them the feeling of belonging to somewhere, and provide meaning and direction to their life.

Since the groves where the ceremonies are held are sacred, these places are protected in a special way. They have often turned out to be places of great biological importance to the surrounding area: they have a high density of biodiversity, they are the last reserves of rare species of plants and animals, and they protect the water table. When these groves are destroyed, the result is often erosion. Furthermore, when they are left alone and abandoned, destruction will often follow. They have been the first and are often the last Nature preserves.

This deep emotional, social, spiritual and practical unity has made the Mari very strong as a people, it has made them capable of defending their sacred places and traditions against formidable forces through centuries. Sacred groves can be seen as a very delicate technique to preserve the connection of a whole society with Nature, thereby ensuring a sustainable future.

Some conclusions

The tradition of sacred groves has kept the distinctive Mari culture alive and sustainable to this very day. This sustainable way of life is a very holistic process. It is not a technical fix. It starts from a respectful attitude towards nature and other people. Its main arena is the everyday life of a family.

Women have a central role in maintaining and passing the Mari culture onwards. Their role culminates in organising the celebrations held in the sacred groves, where the whole society comes together to share and continue their traditions. The central beliefs of the Mari contradict the western assumption that Nature is best preserved when left alone: the Mari believe that, on the contrary, Nature is best preserved when people are connected to it and know how to live in it. The tradition of the sacred

groves is also an important political issue in Mari El: the Mari dare to claim their groves, their culture and their way of life, and protect them against the continual threats from the dominant culture. By their mere existence, the sacred groves question the dominant destructive way of life as the only viable way to continue.

Do we dare to change our mind-set and move away from compromised technical fixes to building families, communities and societies with respect for Nature and other people? Are we able to find and build on those roots in our own culture that support real democracy and sustainable ways of life, and separate them from those roots that have led to destruction? Are we able to hold our decision-makers responsible for the policies they are executing in our name? Are we going to be part of the problem or part of the solution?

Destruction of Sustainable Livelihoods

Conspiracy by the State: Destruction of Cultures and Livelihoods by Megaprojects in Orissa, India

Mamata Dash[1]

The Indian State seems to be in a hurry to protect India Inc. from the recent economic crisis. This sentiment was reinforced by the actions taken by the State after the financial capital of India, Mumbai, was rocked by terrorist attacks on 26 November 2008. This provides a situation of paradox in the country as we witness the same Indian State that rushed to protect Mumbai, turning around and perpetrating violence and exploitation on the *adivasis*, the *dalits* and farmers, to make way for corporate expansions in the name of development – let alone not providing protection to communities in crisis. The mad rush for 9% growth in GNP seems to be engulfing the State as it blindly signs agreements with other countries and multi-national corporations. Who benefits from these agreements? This remains a much-contested issue, as the impacts of such pacts have been the most severe on various marginalised communities as they are robbed of their life-sustaining resources and identities.

There is no doubt that the onslaught of the State on natural resources and people dependent on them, in the name of development, has led to more and more marginalisation of people and exclusion from their otherwise self-sufficient, socio-cultural and economic lives. These communities have reacted to the forced grabbing of their resources by braving severe repression by the State and standing up to untold violence by companies. It is important to understand why people are protesting: we should try to understand what it is that they want to cling to and protect, and why is it so very primary to their existence.

This paper focuses on the lives of two communities in Orissa who, along with many others, are facing the threat of destruction as the corporate take-over of their land, life and environment is pushed vehemently by the State. Two things played a role in choosing the State and the Orissa communities for discussion in this paper: (1) Despite the fact that the local government of Orissa has signed a very large number of MoUs with corporations to facilitate extraction of natural resources, voices at grassroots on the ground have reflected a much broader socio-political spectrum and are

[1] The author is a human rights activist and an independent researcher based in Delhi, India.

loud in their resolve to keep. most of the projects at bay; (2) My engagements with many campaigns in Orissa have allowed me to see some of these communities very closely, often leaving me wondering how the State can be so blind to the symbiotic existence of communities with Nature. This is why I feel the urge and the need to share what makes these communities stand firm on their feet and protect what they have, despite all the attempts by the State and the conniving corporations to silence their voices of dissent.

Orissa is a land of immense natural resources and rich mineral reserves. This has often been cited by the State when inviting corporations to invest for greater returns. The corporations – both domestic and foreign – have seen this invitation as a golden opportunity to get the raw materials at throw-away prices, as though on a platter. This phenomenon is not new: Hitler had once said that "...those who own the minerals of Keonjhar, will have the capacity to rule the world." With the mineral reserves of Orissa all mapped out way back in the 1920s by Cyril Fox, a geologist with the British, it seems that the plans made then are being executed now with vigour and urgency.

In recent times, Orissa has been in crises of all kinds: floods affecting more than 200,000 people primarily because of the 'presence' and mismanagement of dams; 50,000 people forced into relief camps following communal violence by Hindu fundamentalist groups; and hundreds and thousands of people facing the threat of displacement due to several megaprojects undertaken in the name of prosperity. There are huge outdoor advertisements in the capital showing how corporatisation of the country is taking place, as Vedanta, Jindal, Mittal and other corporations are shown to have brought smiles to the faces of the people of Orissa. What is the State doing if the corporations are asked and expected to fulfil the fundamental responsibilities of the State? Devastating measures are cooked up in the corridors of power, and the chief minister Naveen Patnaik states on TV, "No one – I repeat no one – will be allowed to stand in the way of Orissa's progress."Despite all this, millions of small-scale farmers and *adivasis* have shown great resolve to stand up against these brutal tactics.

Sustainable Culture and Livelihoods – The Impending Threat

Most of the 'development' projects in Orissa are situated in resource-rich areas, be they forest, fertile agricultural land, or river systems, causing destruction to sustainable livelihoods and distinctive cultures. Post-independence has been a phase of devastation, as the foundation of a modern India was laid in Orissa by Jawaharlal Nehru with the Hirakud Dam. The statement made by the first Prime Minister of independent India is as harsh today as it was then: "If you have to suffer, you must suffer in the interest of the nation."(1948) Today, hundreds and thousands of people are suffering

as projects such as dams and mining of bauxite, iron, chromite, coal and other minerals, are sanctioned in the name of development. So far, more than 49 MoUs have been signed for large-scale extraction of minerals and mega-dam projects in Orissa, and the number continues to increase. Each MoU carries with it a concrete formula to destroy various sustainable cultures and livelihoods.

In this paper, we will discuss two distinct communities in Orissa, one is a very traditional tribal community, and one is a small-scale farming community. Both are confronted with huge projects proposed by the multinational companies.

Dongria Kondhs of Niyamgiri Mountains

The *Dongria Kondhs,*[2] one of the most traditional *adivasi* communities, reside in the Niyamgiri Mountain Range spread across Rayagada and Kalahandi districts of Orissa. *Dongria* literally means 'resident of the hill'. The *Dongrias* lead a secluded but sustainable life, drawing all sustenance from the Niyamgiri Mountains. For them, Niyamgiri is *Niyam Raja* – Lord of the Laws – and they worship Nature as the sole provider of life and sustenance. They consider themselves as the descendents of Niyam Raja, and thus live as kings of the jungle. The *Dongrias* consider the mountain sacred and thus believe it to be a sin to cut trees in Niyamgiri. That is the reason why Niyamgiri is still covered by virgin forest at a time when most other forests have shown massive depletion by the forest department.

Living in more than 100 villages spread across the expansive Niyamgiri Range in Orissa, the more than 15,000 *Dongrias*,[3] who speak a unique language, *Kui*, have very little contact with the outside world. They essentially depend on the thick, primary forests for everything. They engage in subsistence agriculture, although the elders in the community do not completely deny them the practices of hunting and gathering. Numerous streams originating in the mountains provide them the water required for cultivation and other usages.

Each and every single act of the *Dongrias* starts and ends with Nature at centre stage, making it an inalienable component of their existence. For example, before a village is set up, they seek guidance from the earth goddess, *Dharni Penu,*[4] by locating a place they feel is conducive to cultivating and animal rearing, and placing a few grains on the ground overnight. The popular belief is that if the grains are disturbed in the morning, then the *Dharni Penu* has supposedly given permission for them to settle there. A typical *Dongria Kondh* settlement, usually a linear and clustered pat-

[2] A tribe listed on government records as 'primitive' – a terminology many human and democratic rights discourses have abandoned, but which in many ways means they are on par with any world heritage and need to be protected and preserved.
[3] The government records show a figure of 8,000 Dongrias in the Niyamgiri Mountains, which the Dongrias themselves have refuted.
[4] For the Dongrias, Dharni Penu is the Mother and Niyamgiri is the Father. They thus give supreme authority to them and consult them before any important decision is taken in the community.

The Niyamgiri Mountain Range in Orissa.

tern of houses with very low thatched roofs, is surrounded with thick forest and has a stream nearby. The rites for a permanent settlement are not complete until a *Meria*[5] puja/festival is organised.

The *Dongria Kondh* believes in the existence of supreme deities sharing the same environment with them. "We have stayed on these mountains for thousands of years and nurtured them, preserving their pristine characteristics, which, in turn, would feed us for another thousand years." This is a standard saying of every *Dongria. Dharni Penu* is considered to be very powerful and occupies a very high position among all deities. A typical *Dongria* village always has its *Dharni Penu* in the middle of the village, put there in the belief that she protects the village from all evils. A few wooden planks and stones are placed together, often a structure is built to demarcate the site of *Dharni Penu*. People show respect to *Dharni Penu* by observing the *Meria* festival. Various sources suggest that earlier there used to be human sacrifice during the *Meria* festival. Now, they practice buffalo sacrifice, providing meat which is then shared

[5] Meria is the most important cultural practice of the Dongria Kondh. It is a festival which is held in every village to pay respect to Mother Earth Dharni Penu and Father Mountain Niyam Raja.

among the villagers equally. Sacrifice of living beings, small or large, is integral in *Dongria* culture during festivals and rituals as a mark of respect to Nature, which gives them everything. Both women and men perform the rituals, as the *bejuni* (priest) is always a woman and the *disari* (healer) a man. Each of them has a specific role to play in festivals, and each festival is observed to pay respect to the Nature gods.

The entire village engages in the production process in their demarcated area for cultivation. The demarcation of land is usually done in a collective process and is primarily based on the needs of each family. Mostly, the production is for the *Dongrias'* subsistence economy, and any surplus is sold in the market.

The *Dongrias* depend on the outside market primarily for three things: salt, oil and cloth. The market is where they are most exploited in the hands of the traders. Their integration with the market economy has led to the indebtedness of *adivasis* in some villages – a concept alien to their culture. This is usually propagated by the *Doms*, a non-*adivasi* community, which co-exists with the *Dongrias*. History suggests that the *Doms* entered the *Dongria* territory in search of trade, and introduced the external markets to the *Dongrias*. The impacts are proving most severe in recent times, since the *Doms* are the connecting factors for allowing the market forces to come into the lives of the *Dongrias*, and thus facilitating the outside exploitation of natural resources.

The *Dongrias* are considered to be an aggressive community by the outsiders, something which can be used against them in this market-driven age. The *Dongrias* are equipped with bows, arrows and axe, primarily for hunting and because their existence of late has been that of a struggle. No *Dongria* man ventures out without an axe on his shoulder, and a miniature axe is always tucked in the hair of every woman as she sets out in the wilds. These tools are used for various purposes in the daily work of the *Dongria* in the wilds. Because they live in the wilds, this *adivasi* community has had to brave the wild animals and wild Nature, very often risking their lives. In the present day, the notion of their aggressive nature is conveniently used for all wrong reasons when they oppose the mining project proposed by Vedanta/Sterlite.[6] The history of the area shows how a secluded community like the *Dongrias* was forced to be aggressive to reclaim their lost resources from the hands of *Doms* who had grabbed and looted the resources of the *Dongrias* in the past.

The role of the State has been most devastating on this secluded community, as they are exposed to unfamiliar concepts and ideas. For example, the *Dongria Kondh* Development Agency (DKDA) under the aegis of ITDA, was set up almost three decades ago to provide the *Dongrias* with all assistance in 'improving' their lives. 'Improvement' was aimed at integrating them with the mainstream society – a concept which is very alien to the culture of the *Dongrias*. On obtaining admission in the DKDA

[6] The Supreme Court of India has granted permission to Sterlite Industries India Limited, a sister concern of Vedanta Alumina Limited, to mine the Niyamgiri Mountain, despite severe protests and a prolonged legal battle.

Getting ready to sell the leaves.

school, a child's name is changed to a so-called mainstream name, as they are given either Hindu or Christian names. This is a name which the children have no other option but to adopt. The curriculum that is followed in these schools is completely disconnected from their existence. During one of the informal interactions with a few girls in the Sakata school, it was learnt that the girls have been told that they would study in the school for five years, after which they would be sent to Bhubaneshwar, far from their homes. It is hard to think what could be more damaging than taking them away from Nature in the name of development. The DKDA schools are anything but helping the *Dongrias* to retain their unique culture.

The role of DKDA in providing the *Dongrias* with a much better negotiating capacity when they come in contact with the outsiders has been negligible, as we see the *Dongrias* being exploited in trading off their surplus production. For example, a *Dongria* woman sells a bundle of 30 *tendu* leaves for Re. 1 in the market. The trader makes a leaf plate and sells it for Rs. 3/- each. In those 30 leaves, he usually earns Rs. 30/- making a profit of almost three times. Now, this could be easily prevented by the DKDA schools, so that the *Dongrias* could have a better economy and the women would not have to trek down to the market and face exploitation at the hands of the traders. There are innumerable similar instances which illustrate the damaging impacts of DKDA's interventions and non-interventions on the sustainable culture and livelihoods of the *Dongrias*.

Now, this community is faced with the threat of mining as the State paved the way for Vedanta Aluminium Resources Limited (VAL) to mine the mountain way back in 2004. The Supreme Court of India finally gave permission to the company to mine. VAL is a British company and was listed in the London Stock Exchange on 5

The refinery in Lanjigarh has already displaced three villages completely and is affecting more than 26 villages with its pollution.

December 2003 with the help of J.P. Morgan (US) as sponsor and financial adviser. VAL also has other banks and numerous other financial institutions as sponsors. With a project worth Rs. 4,500-crore (a crore is a unit of ten million) investment (c. € 670 million or USD 940 million) , the company sought permission to mine the mountain and process bauxite in Lanjigarh for the next 25 years. The company has followed unethical measures to get its way, whether it is setting up of the bauxite refinery in Lanjigarh before getting the environmental clearances, or releasing factory effluent straight into the Bamsadhara river, badly polluting the river. It is worth mentioning here that the Bamsadhara originates in the Niyamgiri and is the lifeline for hundreds of villages not only in Orissa, but also in Andhra Pradesh. Mining Niyamgiri and cutting the forest down to do so will result in the drying up of streams and will also eventually dry up the Bamsadhara river, affecting people's lives and livelihoods.

The setting up of the refinery has already displaced 3 villages (only the factory is now on this land) completely, and as many as 22 villages in the surrounding area have and continue to face displacement, because it has become impossible for them to live in the area due to the pollution of the air and water severely affecting their livelihoods.

The company claims that mining in Niyamgiri will displace people from only three villages. Nothing can be more untrue than this, as the entire mountain range will be devastated with the mining. There will be no forest and no water source, which will force the *Dongrias* to move to new places. Since the *Dongria* have no knowledge of any other livelihood than that they get from the mountain, one can imagine what will happen to the *Dongria Kondhs* if Niyamgiri is mined. An entire civilisation will be lost to a development project which has very little to offer to the people of Orissa itself.

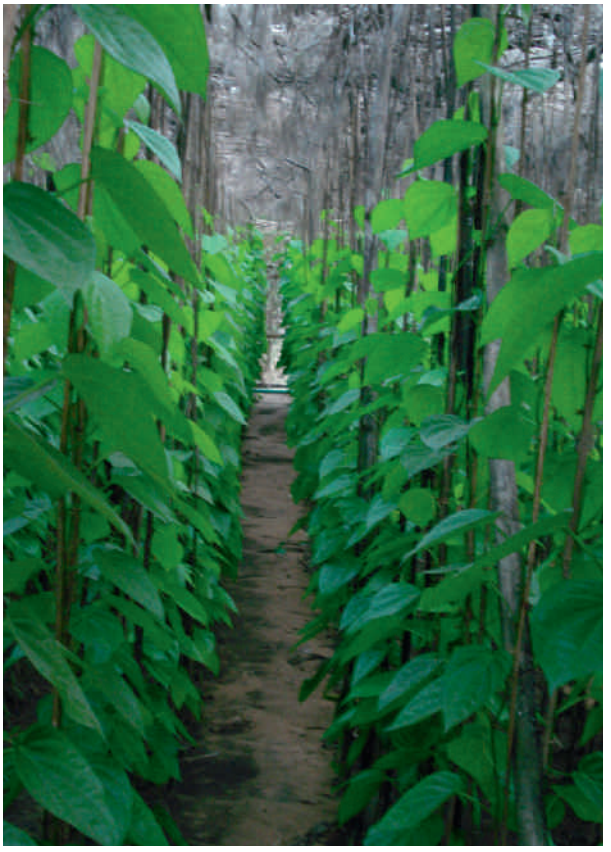
The *Dongrias* are fighting a valiant battle to protect their unique identity, culture and livelihoods. In an age when discourse on climate change is initiated in and carried out by the North, we in the South cannot allow this low-energy consuming community to bow down to the high-energy consuming aluminium industry.

Farmers of Jagatsinghpur

For the past three years, the farmers of three *panchayats* (local village government councils) in Erasama block in Kujanga *tehsil* (municipality) have been resisting against forceful land and resource grabbing by POSCO – a Korean multinational steel company. The State has been all for this project, as POSCO is said to have the highest direct foreign investment in the country. The total land sanctioned for the project is 4,004 acres, of which 3,566 acres is claimed to be government land, and the rest is private land. The figures quoted by the officials suggest that only 471 families would be affected by the project: this is an estimate that is rejected outright by the protesting farmers as a completely skewed number.

According to the 2001 census, there are 3,350 households with a population of 22,000 in the area in dispute. This is close to the estimates presented by the locals. The population is comprised of small and marginal farmers; and one-third of the population belongs to the Scheduled Castes. The proposed project consists of a steel plant and a captive port, which will destroy the traditional livelihood system of the people now living there, thereby damaging the sustainable existence of the community.

Why is it that people are opposed to the project with the highest direct foreign investment? The people who live there are not ready to let go a vibrant economy which has sustained many generations in the past and could continue to do so in future. This sustainable economy and community cannot be equalled to any amount of money, which is the form of compensation the Korean company and the State are offering. "This economy has survived the super cyclone of 1999 and has always provided us our sustenance. We are not poor that we need projects like POSCO to sustain us. Money can never substitute for land." says Suranana of Patana village. This is a sentiment echoed by each and every person living in these villages, barring a few who have fallen victim to the greed the company has shown.



Betel-vine in Patana village – a traditional crop and a vibrant economy, which engages people of all ages.

Jagatsinghpur is conducive for three kinds of cultivation: paddy (rice), betel-vine and fish (*dhana, paana, meena*). "This trinity is the essence of their life." says Dr. B.D. Sharma of *Bharat Jan Aandolan* (umbrella coalition for citizen's organisations). Despite being on the coastline, the area is blessed with fertile sandy soil that facilitates good crops, and has adequate water. There is sweet water available within two-three feet from the ground. This soil and water is nurtured by people in this area like a lifeline as they engage in agricultural practices.

Of the three cultivations, betel-vine is the most viable livelihood option for various reasons. The quality of betel leaf of this area still remains unparalleled in the world. This cultivation is unique in itself as it engages people of all ages in the work, which is why the whole family works in this. There is work for all ages – young children as well as septuagenarians. The usage of bamboo in betel-vine cultivation for the purpose of making shade also creates another economic opportunity. Betel-vine cultivation is the most widespread livelihood option in the area.

It is usual for a family to have multiple betel-vine plots with thousands of plants. One estimate shows that there are around 5,000 vines in the three panchayats looked after by about 10,000 cultivators. A standard betel-vine produces around 10,000 leaves every week year round. The average annual income is Rs.1 lakh (one hundred thousand) per acre, with another one lakh that is raised from ancillary employment. The landless work in the betel-vines to earn a wage, and also make and sell the baskets for transporting the betel leaves.

As well as betel-vine, which is the round-the-year cultivation, there are seasonal agricultural practices. The climatic conditions of the area provide an environment

Fish and prawn cultivation – a thriving economy.

conducive for extremely rich cashew cultivation in summer months.

Sprawling paddy (rice) fields in the area can hold anyone's attention as people draw their subsistence crops from these fields. People in the area vouch for very high quality paddy due to good availability of sweet water in the area.

Fish and prawn cultivation is practiced by more than 50% of the families in Jagatsinghpur and there are demarcated colonies, such as *Nalia Sahi,* where the entire population is engaged in this economy. The Jatadhari estuary offers the best conditions for catching fish; and rare varieties are found in this deltaic region. The catch is huge, and the average income of fishermen in *Nalia Sahi* ranges from Rs.100/- to Rs. 5,000/- per family per day. In addition to personal consumption and local selling, the fish is transported to other parts of Orissa and at times to other states as well.

One of the main components of dispute, as far as the government claims are concerned, is the land entitlement. The government considers the people of the area as encroachers, whereas the fact is that people in the area have been living there for many generations. Claiming of land as forest land by the government across the country has remained a subject of concern; especially since that claim is now used as an instru-

ment by the State to drive people away from their land, which they consider ancestral. The politics of paper work can never be so stark that the generations of cultivation of betel leaf, paddy and cashew are not shown in government records. The government has turned a blind eye to several applications for title claims by the local people. The settlement record of 1984 only recognises agricultural land under regular cultivation, eliminating other uses such as forest produce, cashew cultivation and fishing from the record. Ironically, these uses are the basis of the subsistence economy of the entire area that is facing the threat of land grabbing by the corporation.

For the people, the land is their life; and it is for this reason that they have been putting up a peaceful resistance. They also know that no amount of money in a rehabilitation package can equal what the land, the sand dunes, the estuary and the trees and animals have given them for ages. There is a thriving inter-dependence between those who have landholdings and those without land as they work in tandem with each other and have kept the thriving economy growing stronger.

In addition to a steel plant on the agricultural land, the project has also proposed a private, captive port at Jatadhari, for use by POSCO alone. This would essentially mean disturbing the nesting habitat of the endangered Olive Ridley turtles, besides destroying the local fish economy. Illegal mechanised fishing is already affecting the nesting beaches; and a captive port in this place would completely destroy the ecosystem that provides the appropriate condition for nesting. Thus, there will be double deaths in Jatadhari itself as the threats multiply around the loss of livelihoods of the fishing community and the nesting ground for the Olive Ridleys.

The only thing that the local people needed at Jatadhari was dredging, which was never taken up by the government. Finally, in August 2008, the villagers worked together and dredged the mouth of the river against the wishes of the company and the State. In fact, one of the active members of the local organisation fighting against the project fell victim to an attack by the goons as they opened fire on the people as they were returning to their villages after the work.

The steel mill, mines and port project, being touted as the largest ever FDI (foreign direct investment project) in the history of India, with an investment of Rs 51,000-crore (c. €7, 600 million or USD 10,700 million), will have large-scale, irreversible socio-economic and environmental impacts not only on the areas under the threat of immediate acquisition, but also over vast tracts of the State's forests and other lands. POSCO's assertion that its project will lead to the creation of 45,000 jobs, directly or indirectly, is meaningless in the face of the fact that the proposed steel plant, port, and mines will directly dispossess hundreds of thousands of people, apart from having very deleterious effects on the lives of many millions more. Further, an examination of the MoU signed by the Naveen Pattnaik government with POSCO establishes the fact that the government has agreed to transfer resources worth thou-

sands of billions of rupees for almost no returns to the State exchequer.

Given below are some glaring facts about the possible impact of the POSCO project on the people in this particular area, not to mention mining in Khandadhar (in another district) from where iron ore will be procured, which will have a separate set of hazards of its own affecting the local people.

Basic Facts about the proposed POSCO steel plant and port

The steel plant alone will displace more than 4,000 families, the port will displace more than 20,000 people.

POSCO will try to earn a profit of several tens of thousands of millions of Rupees, but would pay at a paltry 'fixed' rate of only Rs. 24/- per tonne as a royalty to the Indian government. POSCO will get more than 6,000 acres of land and 15,000-crore (150,000 million) litres of water per year practically for free, sucking from people's drinking water sources: a guaranteed water supply to the POSCO sites Naraj and Jobra will affect the availability of drinking water for neighbouring cities including Cuttack, Bhubaneshwar, Chaudwar, and others.

The POSCO project *is illegal and in direct violation of the Forest Rights Act of 2006*, under which no forest land can be handed over to any party without recognising the rights of forest dwellers in the area and, in the case of their community forests, without their consent. More than 3,000 of the 4,000 acres of land that POSCO is seeking for its steel plant is forestland which supports a large population of forest dwellers.

The POSCO project will have a devastating environmental impact. The planned captive port at Jatadhari river mouth will destroy the deltaic ecology of the Mahanadi, increase the problems of waterlogging of soil, clog the connecting rivers, adversely impact farming and fishing in the area, and result in the loss of large tracts of coastal vegetation due to felling, which will increase risks during cyclones.

The sustained livelihoods of the local people, whose resistance is centred on the call "*paana, meena, dhaana bachao*" (save the betel-vine, fish and paddy crops), will be destroyed. The area is presently characterised by highly fertile lands, a vibrant fish economy, and resourceful forests. The POSCO project will turn it into a wasteland.

POSCO has been granted Special Economic Zone (SEZ) status, meaning it will pay practically no taxes for the titanic profit it will make after decimating a prosperous economy and a rich socio-cultural ethos. An illegal project generating

> virtually no tax revenue, ensuring hardly any employment, seizing 15% of India's ore reserves, promising no benefits for the government or to the people, causing environmental devastation, and displacing tens of thousands...
>
> Is this development or plunder of people's common properties?
>
> *Excerpt from a leaflet circulated during a rally against the POSCO project held in Delhi on 15 November 2008.*

The peaceful resistance on the ground under the banner of the organisation leading the movement, POSCO Pratirodh Sangram Samiti (PPSS), has been gaining strength day by day. All the dirty tricks of the State and the POSCO company have not deterred the people from their resolve to protect their source of life as they organise themselves even better. "The government and company people think they will weaken our struggle by arresting Abhay Sahu,[7] the leader of PPSS. They do not know there are many more Abhay Sahus among us and nothing can deter us from fighting against POSCO. We want POSCO not only to leave Orissa but it should be driven away from this country.", This was the steely resolve of a woman from Dhinkia, shared with the media on 30 November 2008 after a rally against the POSCO project, held to condemn the arrest of Abhay Sahu and other activists.

Resilience in Resistance

Both the communities discussed earlier in this paper follow a culture and livelihood pattern worlds away from what is called 'mainstream'. It is very alien to the middle class and people of the upper echelon of India society. At a time when policies are framed to facilitate the market, these indigenous communities present a worldview inter-connected with Nature and rooted in a rich cultural ethos. Their everyday struggle to sustain themselves has led these communities to have wonderful resilience: this resilience is seen now even when they are required to fight against the giant capital forces. They have challenged the present 'development' concept which is measured by GDP growth, high technology invasion in daily lives, and other 'mainstream' factors.

For the *Dongrias*, keeping animals in cages is a sin, as some of them told us during their visit to Delhi Zoo. For them, animals are as equally important as human beings

[7] Abhya Sahu, the leader of PPSS, was arrested by the police in Orissa on 12 October 2008 when he was returning from a health check up and was unwell at the time of the arrest. As many as 32 illegal cases have been filed against him. Apart from him, the police had arrested 4 PPSS activists earlier and one more activist in November 2008.

Women in a rally in Jagatsinghpur.

in a natural habitat; and they are better when free. For these forest people, huge roads, cars zooming past, and the high-tech savvy lives of a city would do no less than choke them to death. Ranga, a *Dongria Kondh* of Daman Panga in Niyamgiri, candidly told us what freedom means for them: "People in the cities live a caged life as they only move in vehicles. Look at us, we can hop, jump and cross many mountains on foot and still do not feel tired. Niyamgiri gives us the strength and protects us in difficult situations." Freedom was spelt out by Ranga in such a beautiful manner! Yet, this is not understood by the market forces for whom only minerals, money and technology matter – at a very high cost of natural resources which sustain the indigenous people .

There has been massive displacement in the name of development in Orissa, leading to extinction of many traditional communities, forcing people to redefine their identities, while an unrecorded number of people are going into oblivion. For example, in Keonjhar no one knows where 50,000 odd people, mostly *adivasis*, have gone – they have fallen victims to the mining industries, which have ravaged an otherwise rich forest area.

For the traditional *adivasi* communities and those who have drawn life from traditional livelihood patterns, any kind of industry, be it aluminium or steel or chromite, only means de-linking them from their sustainable way of living. They are not let-

ting this happen without a struggle. Thus, the struggle continues amidst heavy State repression. The whole world has witnessed the killings of *adivasis* in Kashipur and Kalinganagar in Orissa, as they fought against forceful acquisition of their land by corporations. Although many lives have been lost, and many more lives are at threat, these communities are undeterred in their resolve to protect their traditions.

The ground-swelling resistance movement reflects that it is not only the resources that people want to protect: they are also very sure that along with the resources, their rich socio-cultural and political ethos will also be gone. Many have termed this process of 'development' cultural genocide, since it destroys the basic fabric of the society. Cultural genocide is perhaps the least recognised aspect of development, but perhaps the most painful aspect is the drastic drop in the quality of life of the people who are displaced. "*Ame ken ade jimu jadi aamarnu jangal nei jibe, puka machi bagir mari jibu*" (where would we go if they take our forest away, we will die like insects), is a frequent saying among the members of these communities. This does not refer only to physical death; it rather talks about a more serious death of civilisations which have evolved naturally over thousands of years. This echoes the decision to die rather than leave their land taken by many indigenous peoples in America, where physical genocide – meaning the extermination of all members of a tribe – often went alongside cultural genocide, the killing of cultures.

The struggle for these communities has shifted from dealing with the natural habitat to creating a whole world around it, so as to protect it from the 'development' dinosaurs. The people fight against money taking over the culture and network of relationships. They fight against losing their identity, they cling to their roots. Their egalitarian system of society is the essence of these communities. This equality is under threat from the imposition of the 'development' agenda on them. The 'development' process does not recognise them as integral entities; and they are being pushed to the periphery by taking their resources away for corporate benefit. Any form of alienation from their resources only leads to disempowering the communities: it becomes very hard for these communities to fight against the huge amounts of capital involved. Thus, for the local people the struggle continues – perhaps in a different form as they fight against the destructive agenda of other human beings. It is not a fight of intellectual theories; it is a fight between cultures and ethos.

Far away from the maddening rush for capital, the *Dongrias* and the farmers sing a different song – one of fulfilment, tranquillity, peace with Nature, and happiness. This is now being attacked and there is an eerie silence as one walks into these areas – it is like the silence before a storm. Let hope this storm passes without uprooting the essence of existence of these communities.

Mining and Displacement of Sustainable Livelihoods in Goa, India

Sebastian Rodrigues[1]

The indigenous peoples' movement in Goa has reached a critical stage. The villagers have been waging a relentless battle against the unsustainable mining industry. Large-scale extraction of iron ore has left Goa's environment with equally large-scale damage to its water sources, agriculture, air, forest, rivers and life forms in general.

For the past couple of years the indigenous people have been in the forefront of the movement to restore sustainability of their village economy and own indigenous culture. This is the situation in other parts of India as well, wherein indigenous and other peoples have waged glorious struggles in defence of their self-sustaining economies and cultures.

Sometime in the first week if November 2008, one of the family members of the protesting villagers of Colamb, Sanguem, Goa was called to the Quepem police station and warned by the police inspector on duty that if the 'troublemaker' family member did not give up protesting against the mining company in his village, then he would be sent ***tadi par***. This is a form of punishment administrable to the criminals who cannot be convinced to change their behavior in spite of the enforcement of other forms of disciplinary action by the state authorities. *Tadi par* is a Marathi term that means 'across the boundary'. The 'boundary' may be the village boundary, *Tehsil* (county) boundary, or even the district boundary. The judicial authorities of the State decide the nature of the boundary. The origin of this term seems to be in the ancient form of punishments reserved for the non-conformists of societies, a punishment which invoked the principle of ostracism – the most feared punishment, as it deprives the individual of familiar surroundings, familiar people and most importantly, familiar geography. *Tadi par* is a step ahead of the principle of ostracism. It is not just a social boycott of an individual by the community, but is a State enforced mechanism used to send a person into exile even against the wishes of the community.

This paper proposes initiatives towards including **metal sensitivity** as one of the necessary requirements of a transformative agenda for sustainable futures.

Tadi Par in the Context of Goa

The invocation of the threat of *tadi par* comes at a time when Goa is battling relent-

[1] The author is the coordinator of Mand, an adivasi rights resource centre, an initiative of the Gawda, Kunbi, Velip and Dhangar Federation (GAKUVED), based in Goa.

lessly against an imposed development pattern that is almost equivalent to the economic conquest of the State of Goa. Since its liberation from the Portuguese colonial regime in 1961, Goa has been battling a development model which was already in place. Goa has fought sometimes successfully, at times not so successfully, but the fight always continued. Lessons still to learn and fights still to be won were always there after every struggle.

One of the first struggles, soon after Goa's liberation in the late 1960s, was the heroic battle against the Ciba Company from Switzerland: people fought against the take-over of 200 acres of tribal land at Dulapi and Mangado villages in Tiswadi Taluka. The Ciba factory was set up by after police repression of the protesters. The agitation against the same plant resurfaced in 2008, when the Ciba company, after a series of mergers, was re-named Syngenta.

In the decade of the1970s, Goa fought the Indian corporate house of Birlas over the release of chemical effluents directly into the Arabian Sea from the industrial plant in Marmagoa Taluka, thereby causing large-scale fish mortality. In the decade of the 1980s, Goa witnessed a large-scale uprising of fishermen along the coast of the Arabian Sea against mechanisation of the fisheries sector and introduction of trawlers into the Arabian Sea. The disputed fisheries plant was forced to shut down for more than one month and compelled to install the necessary, precautionary environmental safeguards.

In the decade of the 1980s, the Progressive Student Union (PSU) was active in the struggles related to tourism. PSU carried with it into the struggles the ideas of the Left, including tools of class analysis, to understand and carry out their protests. Some of these students later on played an important role in forming an anti-tourism campaign group called *Jagrut Goenkaranchi Fauz* (JGF) in the late 1980s. In English this can be translated as 'Vigilant Goans Army'. JGF remained at the peak of its activities throughout the decade of the 1990s.

The new economic policy unveiled by the Indian government in 1991 had a direct bearing on the development projects proposed for Goa. There was an agreement of the local elites in Goa, as well as the global elites, to develop Goa as a pleasure-cum-commerce destination for the global rich. As a part of this agenda, a golf course, exclusive foreign nationality townships such as a Japanese township, and gambling spaces such as casinos, were proposed for Goa in the decade of the 1990s. Goa was to be re-designed as a tourist destination for the super rich of the world. Casinos started operating in 2008.

The American chemical plant, Du Pont, was thrown out of Goa in the 1990s after a prolonged struggle on the part of the people of Keri, Ponda. Goa's first martyr was Nilesh Naik, who was shot dead in police firing in these protests. The same Keri plateau is a source of inspiration to the movement against Special Economic Zones

(SEZs) in Goa, which protested vigorously in 2008. All the SEZs plans for Goa have been stalled due to these protests.

The development that has unfolded in the first decade after the turn of the present century demonstrates that the developers have again repackaged the same development model used in the last century, and are seeking to implement the same. The only difference between the 1990s and the 2000s is that in the 2000s the developers are working in a much more organised and sophisticated manner. The *modus operandi* adopted by the developers is formulation of Regional Plan 2011 that seeks to convert the entire state of Goa for the housing, pleasure and entertainment of the super rich of India and the world.

Local elites were given a free hand to further exploit the mineral wealth of the State of Goa. This exploitation continues amidst pitched battles against indigenous communities, as well as other communities in Goa.

The first decade of the 21st century also brought onto the public agenda the issue of the unscrupulous mining industry. Mining companies lost control over a couple of newspaper reporters, and that allowed media reportage of some of the aspects of the problems created by the mining industry. People living in Goa's mining belt began to get increasingly assertive and articulate on the issue of the ecological degradation of Goa's hinterlands. Agricultural losses also mean the loss of livelihoods. Tribal livelihoods were directly threatened with the drying up of every spring, and other people's livelihood options diminished with the drying up of traditional water wells. Goa's ecological genocide – ecocide – has begun.

Goa's ecocide would have several beneficiaries. One of the biggest beneficiaries – historically – of the past rape of Goa's environment has been the Japanese corporate sector that began importing Goa's iron ore from 1948 onwards. The rise of Japan from its crushed post World War II economy, destroyed by US nuclear bombings, is inversely related to Goa's under-development. Exports to Japan that began while Goa was still a Portuguese colony, have remained in the same format – dig and sell – for the past 60 years. The only change that has taken place is the mechanised nature of the mining sector over the past fifteen years.

In the 1980s and 1990s, Goa was the source of 50% of India's iron ore exports, which were mainly going to Japan. There were other countries of destination too, such as South Korea, Germany and the United States of America (USA). The Japanese corporate sector has been a major beneficiary of Goa exports for nearly 50 years, until the time the Chinese market opened up for iron ore exports.

At the turn of the century, China began importing Goa's iron ore. Chinese demand created a predatory race for mining in Goa's hinterland. This race is still on in 2008, although there are reports that Chinese demand has stopped amidst the global recession. This, however, has not changed the situation on the ground as far as the preda-

tory nature of open mining of iron ore in Goa is concerned. The mining industry in Goa, which consists of a number of local elites as well as the British company Vedanta that has bought the mining company Sesa Goa from the Japanese company Mitsui, continues to pursue its goal of mining without regard to the environment, sounding a death blow to Nature and people, to water and rivers, to fish and forests, to *adivasis* and sustainable agricultural communities. The mining companies are other beneficiaries in the ecocide process of natural resources extraction with its resultant capital accumulation.

Nothing explains the tremendous sense of urgency to tackle the problems of mining as the industry is gradually pushing the State of Goa towards *tadi par,* better than the following excerpt from a protest pamphlet:[2]

Stop Mining Terrorism In Goa!

Perhaps you are aware, perhaps you are not aware that mining poses a formidable threat to Goa's survival. Yet it is true; mining has been terrorising Goa over the past five decades. People of Goa have tolerated this all this while but they can no longer do so. Hence we share this message with you so that you can take it far and wide as a friend and well wisher of Goa and its People.

Due to rampant exports of iron ore to many countries in the World including China and Japan due to demand for steel, our villages in hinterlands – in the talukas of Bicholim, Sattari, Sanguem and Quepem – are facing terror attacks of the mining industry that is largely supported by the government in Power. The Goa's monstrous mining industry that took birth in the womb of Portuguese Colonialism has only flourished after Goa's liberation and integration with India. Today it constitutes Goa's number one enemy that is destroying our water bodies every day. Our majestic green mountains of Western Ghats are being chopped down for exports. Villages in the mining belt are becoming increasingly thirsty for water and ironically depending upon the very industry to quench their thirst. Pissurlem village in Sattari Taluka is only one example of this situation.

Mining has damaged agriculture – our paddy fields – and snatched food from our plates. It has silted our rivers so badly that fish no longer spawns, Kushavati River is only one example of this. Our villages are becoming increasingly poorer while a few mining companies are usurping the entire profits. A coterie of people has evolved

[2] Issued jointly by three mass based organisations, namely: 1. Gawda, Kunbi, Velip and Dhangar Federation (GAKUVED), 2. Ganv – Ghor Rakhan Manch (GGRM), and 3. Goa Federation of Mines Affected People (GOAMAP) in November 2008. http://mandgoa.blogspot.com/2008/11/stop-mining-terrorism-in-goa-now.html

as contractors of the mining industry and providing their services for the speedy destruction of Goa forever. Forever because none of them has ever created a Single Mountain that they are robbing today from our future generations.

Our water supply stands badly threatened due to mining activities taking place in the catchment areas of Selaulim, Opa and Assanora Dams.

Our two main rivers are taken over by the mining industry for loading and transportation of ore. Mandovi has 37 loading points with 1500 trips of barges per year while Zuari has 20 loading points with 1800 trips per year. Trips are from loading point to Marmagao Harbour from where the ore is exported in giant ships. Several big open cast iron ore mines operate in the catchment areas on Mandovi and Zuari Rivers leading to huge accumulation of silt. Each mine creates rejection dirt between 1,000– 4,000 tonnes!

Our protected Area forest too is targeted by the mining industry. After Supreme Court closed down nearly 150 large mines, miners have gone to Supreme Court, they are permitted to resume around 60 of these mining leases. Goa has forest cover of 1224 sq. km in addition to 200 sq. km of private forest.

Number of protest has erupted in Goa today because of mining. However mining companies in collusion with State Police force is involved in beating up and arrests of the protestors in routine manner. Colamb, Advalpal, Cavrem, Sirgao, Pissurlem, Mayem, Usgao, Maina, Khola etc are some of the villages that have rose to challenge mining industry and are constituting boiling points of directly affected Peoples' Protests in Goa. Number of tribal villages too is directly at the receiving end of the mining invasion and has challenged the industry.

We request you to take the message out from Goa that mining industry is terrorizing Goa – its people and nature – and we want mining terrorism to stop and Goa to remain prosperous without mining.

Mining companies are operating a large number of mining leases in forests declared as wildlife sanctuaries. Mining continues in Bhagwan Mahavir wildlife sanctuary, Mhadei wildlife sanctuary and Netravali wildlife sanctuary. At the behest of Goa Foundation, which petitioned the Supreme Court, around 80 mining leases inside the wildlife sanctuaries were stopped. Recently, however, the mining companies have gone to the Supreme Court asking for permission to resume 65 mining leases for mining inside the sanctuaries,.

Exploitation and usury are hallmarks of this industry that has created a concentration of the political power of Goa State in the control of a few handfuls of mining companies.

Below are a few photographs illustrating Goa's *tadi par* situation:

Fomento mine that people of Colamb, Sanguem are demanding be shut down. Opposition to this mine has attracted Tadi par warning from the state agencies. (Picture by Thirthraj Biruly)

Metal Sensitivity – The Need for Sustainable Futures

While there has been a considerable amount of disruption of life and life-supporting systems due to rampant, unsustainable mining activities, the issue of consumption patterns – particularly of metals – has remained largely unaddressed by protesters seeking to do away with the development model that keeps the mines in operation. The daily routine of protest has largely focused on countering the exploitative process at the source of mining activities *viz.,* stopping the operation of mines, campaigning against police repression of protestors, and so on. This is something that is extremely necessary. However, we need to become more sensitive to the amount of metal that

Colamb villagers that have decided to fight back for their dignified living and livelihood free from mining incursions in their self sustaining culture dependent upon agriculture. (Picture by Sebastian Rodrigues)

is in the many and various products made by different industries and bought by consumers.

In the dialogue of mining, those who are the consumers of the products made from the mined minerals, which include iron ore, magnesium, bauxite, gold, copper and all other types of minerals, are never questioned. There are many different classes and types of people that are involved in consumption of the metal products for various reasons. The poor need cooking pots, but the rich may engage in conspicuous consumption to make a status or fashion statement. Luxury and psychopathic greed also play a role. Today and also earlier, it has been a practice to own jewellery – gold, diamond, silver, etc. – as a symbol of wealth. Possession of these metals constitutes 'security' to some, a status symbol to some, statement of class to still others, fashion to the well-off classes, etc. There is a radical need to question these consumption classes. There is a need to reflect what amount of mining is needed to carry on to make these fine products which are used as class statements.

Consumption of costly cars is another fad of the burgeoning global middle class that is growing in leaps and bounds in India as well as in China. One peculiar habit of

Motesh Antao, one of the agitating villagers is being targeted by the Goa State agencies for his fight against mining industry in Colamb, Sanguem. In the background is the mine that is tormenting the village in several ways. (Picture by Sebastian Rodrigues)

this class of people is to buy cars as soon as they can. After acquiring one car, there is a trend to go in for second and third cars. The quantity of iron ore that gets concentrated in the manufacture of these cars is not only an enormous ecological scandal, but also a huge burden on the people in the global mining belts who are battling mining companies and state repressive mechanisms. The link between the consuming classes of the world and the mining companies-state nexus needs to be made more visible. This consumption pattern spearheaded by the upper and middle classes also needs to be targeted in development related resistance discourse, both in theory, as well as in systematic practical application, to address the unnecessary and irrational burden on the environment being created by the car consumption by the consuming classes.

There is also a need to be sensitive towards various everyday gadgets made from metal and dependent upon electricity, which are rapidly finding their way into global consumption patterns. Metal gadgets are entering the household consumption agendas in the same way that plastic entered household agendas. The advent of plastic destroyed India's well-known terracotta pottery industry which could not face the onslaught of the plastic industry.

Forest trees are buried alive by mining industry in Goa. There is hardly any check in pro active manner by State Forest department over mining industry. (Picture by Thithraj Biruly)

Large quantities and varieties of minerals are utilised for the manufacture of computers that have already become a household item in the global middle class and upper middle class. Communication systems that are evolving, such as e-mail and the World Wide Web, are largely dependent upon metal consuming gadgets for their use. Computers and mobile phones are necessary to make use of e-mail and the web, and the economics of profitability drive promotion of their sales. Evolution in communications technology has even evolved the term 'personal computer (PC)' as one of the very basic concepts of the functioning and appeal of modern communications. The underlying message that one be derived, is that the computer is meant for personal use. The term 'Personal' is distinctly different from 'Family', 'Neighbourhood' and 'Village'. The nature and ideology of these technological gadgets are reflected in their nomenclature itself. The new technology targets an individual and then transforms the individual into a consumer.

The construction industry also uses large quantities of metal in its processes. Moreover, construction as an industry – also known as the real estate industry – has transformed itself into a profit-driven market. This market 'develops' housing and luxury

hotel projects that are for the consumption of the high-spending upper and middle classes. There is a need for critical questioning of the entire matrix of the construction industry. There is a need to understand the magnitude of metal consumption at various levels by this industry.

There is also a need to be metal sensitive when it comes to the global war industry. The three-fold horrifying and humiliating aspect of this industry is that firstly, it is an industry that is designed to kill human beings in a variety of ways. Secondly, it is one of the largest industrial consumers of metals and thereby ensures a steady demand for ore, and the profitability of the mining industry. Thirdly, it is principally and legitimately financed through public funding by various state agencies. Consent is fabricated to legitimise this industry in the name of law and order and nationalism. A numbers of states are responsible for the creation and promotion of non-state actors to engage in violence so that the war industry continuously floats in profits through various kinds of conflicts all over the world. Peace and understanding are essential, valid options working in the interest of a sustainable future. Peace would mean that the abuse of metals by the war industry would be restricted. Metal sensitivity to the amount of metal used in the war industry is all the more needed here, for one additional reason as well: the number of countries that have been considering nuclear options in war. This has led to creation of large networks of nuclear mines, nuclear plants, nuclear military weapons and military nuclear science. The nuclear industry has managed to get itself state protection in a number of countries, and large amounts of public funding are directed towards building steady supply lines for the nuclear industry to ensure utmost preparedness for nuclear attacks on the so-called enemy country. This has been the case since the Second World War when the USA dropped atom bombs on Japan in August 1945.

Independent of the war industry, the nuclear industry must be targeted as a mining hazard even when the ore is destined for civilian purposes. Nuclear mining is one of the most dangerous of all mining industries because of the radioactive risks. The worst case of nuclear mining in India is in Jharkhand's Jadugoda Uranium mines. Due to the passing of the Indo-US nuclear compact, several nuclear reactors that are facing opposition from conscientious consumers of electricity in the West – Europe, America and Australia - are all set to relocate themselves in India. A couple of new uranium mining sites are also getting cleared in spite of the opposition in the states of Meghalaya and Andhra Pradesh in India. Some sites have already been identified for nuclear reactors in a number of Indian states, including Maharashtra. The State of Goa is going to be sandwiched between two nuclear reactors: Kaiga nuclear plant in Karnataka in the South, and Ratnagiri in Maharashtra in the North.

Metal sensitivity means being aware of one's choices of products for consumption, it means criticising and reflecting on the prevailing pattern of consumption related to

metals., We need to reach out and connect with all the consumer classes and begin a process of honest and frank communication about metal and mining., We need to be able to differentiate between need-based consumption and greed-based consumption, making serious efforts to search for alternatives and challenging the profit-based metal consumption to be replaced by need-based metal consumption.

Metal sensitivity means being able to connect to the loss of livelihood of the indigenous communities being caused by mining in Goa, Jharkhand, Orissa and other places in India, and in the Philippines, Bolivia, East Timor and in other parts of the world, These mines are operating in response to global consumption patterns based on overexploitation. Metal sensitivity also means being able to disconnect from the metal industry and connect with real people and real communities. It means being able to arrive at inner peace without greedy consumption of metals in various forms. It also means being able to find safer alternatives to nuclear power plants for electricity consumption. It means seriously re-thinking our aspirations and lifestyles, to also think about being more metal sensitive in the way we live. Most importantly, it means unlearning models of consumption based on greed. It means being willing to learn from various indigenous communities about their models of life that are based on non-exploitative behaviour, and integrating these models into the mainstream. It also means encouraging various societal and state agencies to push for metal sensitive development initiatives, and altering existing consumption patterns that are leading the planet towards catastrophes caused by nuclear radiation, industrial disasters and climate change.

Non-industrial, low ecological footprint communities, such as the *adivasi* communities, provide us with important lessons in peace, community spirit and non-metal consumption patterns. Metal sensitivity also means defending these communities. Such communities have inhabited the planet and used metals in a most sensible and non-exploitative manner, with care and respect towards Nature as well as other human beings. It is only modern organised societies that are intensely involved in creating an unsustainable future.

Paddy (rice) stored in baskets woven out of bamboo fibre. The mat below the baskets is also woven out of vegetable. This picture, taken in the adivasi village of Khotigao, Goa in 2008, is an example of metal sensitivity, not using metal containers for the paddy. (Picture by Devidas Gaonkar)

Pathways to Sustainable Futures

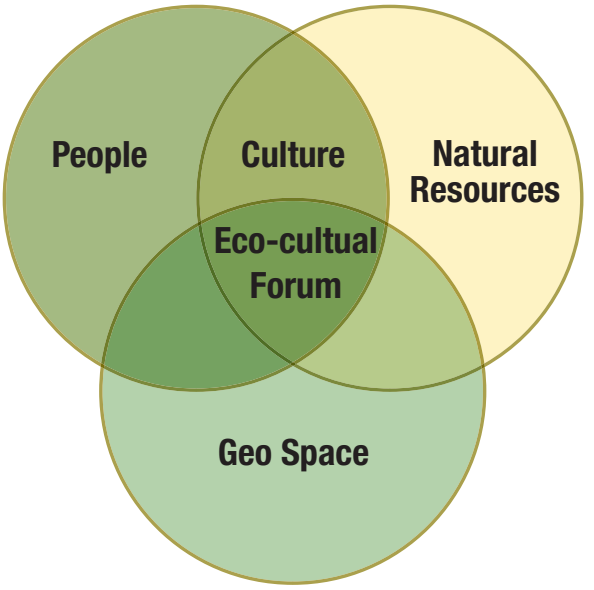
The Uhai Model: A Search For a Tool to Negotiate with Nature

Awori Achoka[1]

The Uhai Model is an attempt to understand and appreciate the African worldview and indigenous African cosmology in relation to the environment, Nature and human livelihoods. Uhai is a Swahili word which means 'Life'.

The relationship between people and the environment in indigenous African systems is holistic. These relationships are so interwoven that it is impossible to separate African spirituality, culture and livelihood from the natural environment. Thus, in most indigenous African cultures, the holy shrine is often located in Nature – it is a mountain, forest, river or lake.

The most notable attribute of indigenous systems of resource management is the organic link between the governance of resources, and the livelihoods that depend on them. It is this organic bond that forms the conceptual and philosophical basis of the Uhai Model.



Conceptual Basis of the Uhai Model

As the diagram above illustrates, the Uhai Model is based on the need to re-create a living organic link, between people, culture and Nature. The dynamic interaction between people, culture and Nature within a particular environment or community forms the (Uhai) Eco-cultural Forum.

[1] The author is associated with the Uhai Trust. He is the former Director of Kenya Energy and Environment Organizations, KENGO, Nairobi.

Functional Components of the Model

The Uhai Eco-Cultural Forum

- The (Uhai) Eco-cultural Forum is the principal functional unit of the Uhai Model. An eco-cultural forum is defined as: *"A distinct group of people, deriving their livelihood directly or indirectly, from a common pool of ecological and cultural resources, within a defined geographical area".* This 'area' could be a community, a region or a country.
- The mutually exploited pool of eco-cultural resources could be land, a river basin, forest, desert oasis, pasture land, wetland or ground containing mineral ores. In urban areas, such a pool of mutually exploited resources could be in the form of social and cultural amenities, such as public parks, sports facilities, community neighbourhoods, places of worship, public transport, markets, among others.
- The Model functions through dynamic interaction between neighbouring community Uhai forums, which organically mesh to form sub-regional, regional and national eco-cultural forums.
- Within the construct of the Uhai Model, each level is supposed to influence the other politically and/or ideologically, in a non-dominating manner. It is, however, expected that in an ideal state the community fora, due to their greater numbers and depth of understanding of local issues, would determine the ideological direction and content of sub-regional and regional policies.

Governance of the Uhai Eco-Cultural Forum

- Using the indigenous principle of African resource governance, each Uhai Eco-Cultural Forum is governed by a council of competent and respected community leaders, men, women and youth – all elected by the community.
- Membership in the Uhai Forum is a guaranteed right to all in a community. All those members of a community who exploit and use resources within the community are, by right, members of the Uhai Forum and will be bound by the codes, rules and principles of resource use and livelihoods, as set by the forum.

Principles of the Uhai Model

The Uhai Model is governed by a set of philosophical and value principles outlined below.

1. The Supremacy of Nature

Nature as the basis of life is supreme and all encompassing. All elements and beings

must, therefore, recognise and respect it as a sacred endowment to be conserved and sustained.

2. The Intrinsic Value of Nature

All of Nature's elements have intrinsic value, unknown or known. Therefore, exploitation and use must primarily be aimed at sustaining the livelihoods of all beings on earth. These elements of Nature are variously distributed in geographical space, creating a unique biological diversity, and habitats whose value must be equally recognised and respected.

3. Nature as a Sacred Shrine

In Africa, Nature is a cultural and spiritual shrine, as well as a museum of people's histories. As a sacred shrine, home, and a source of livelihood, Nature should be treated with utmost reverence.

4. Sacredness of Life and Rights to Livelihood

Life is sacred. Hence, all beings have a basic right to enjoy the abundance of Nature's resources (clean air and water, space, light and land) and to derive a decent livelihood from them. Humans, who are the only beings endowed with the power and capacity to manipulate the elements of Nature, have a moral obligation to do so in a manner that does not threaten the survival and livelihood of other beings.

5. People's Cultural Heritage

Culture defines the identity, dignity, integrity, pride and cosmology of a particular people. Therefore, its disintegration and disruption threatens the very existence of society. Africa's cultural diversity and uniqueness is the most valuable endowment of the continent. It must be valued, applied, researched, documented and advanced.

6. Stake-Holding in Nature

In the context of the Uhai Model, a stakeholder in Nature is any living being that has a vested interest in a particular resource in Nature, for the purpose of meeting its *basic* livelihood needs. In this regard, all living biological beings are stakeholders in Nature. Stakeholders are categorised as primary, secondary, or tertiary, depending on the degree of their dependence on a particular natural resource for their survival. Any being that uses natural resources purely for extra-material or social needs is an exploiter and not a stakeholder.

7. The Family Unit

The fundamental unit of human life is the family. The African family is the cultural

and spiritual hub of the community. It gives value and sustains the dignity of the African society. It recognises and maintains the dignity and the unique roles of every man, woman and child in the society. The unique bonding role of the African family must be safeguarded to ensure the survival of the African society.

8. Human Dignity (Utu)

Human dignity (Utu) and a dignified human life can only be attained when fundamental rights and freedom for all, including satisfaction of essential livelihood needs -food, clean and safe drinking water, shelter, peace and security – are guaranteed in a society.

Conclusion

When humans unsustainably exploit nature and natural resources to satisfy their greed and wants, so too do they accentuate their cultural, spiritual and social alienation from the tenets and provisions of Nature's laws and principles.

This disorientation is manifesting itself in the form of altered global climatic patterns, increased social disorder, stress related illnesses, material worship and idolatry, religious extremism, and conflicts. At the global level, we have large-scale environmental disasters, and disease pandemics. The Uhai Model is presented here as one way to re-orient ourselves and mitigate these problems.

Literature

Achoka, A.J.; A.R. Kapiyo & G.P. Karinge (1996). *UHAI: A Model for Sustainable Livelihood and Natural Resources Management in Africa.* KENGO, Nairobi.

Visions of Alternative Lifeworlds

Wahu Kaara[1]

Allow me to begin by positing that a dialogue on sustainable futures is in itself a discourse on alternatives. My thinking is informed by the fact that any outlook towards sustainability is hinged on a desire for the better. Having assumed so, it is important for us to go through the lessons learned of how we got here and where we are starting from, to be in a position to logically construct the idea, dream or identity of the future that we envision.

As a global social justice activist and social commentator, I have been engaged in numerous processes that are guided by the notion of seeking transformative change in our current way of ordering social relations. In essence, this means seeking ways of overcoming a set of contending forces that impede this undertaking.

We first need to understand the history that encompasses our past. We need to know where we came from; we need to understand our past experiences, the challenges, the gains and the losses. It is to this understanding that we depend on to inform our present, which is what we have, the reality obtaining today, and the central pursuits of our daily engagements. It is with the hindsight of history and the experiences/exposure of today that we can seek to dream for the future.

The Challenges of Today

Today, the world is at a crossroads. Things seem to be fast moving towards the worst case environmental scenarios. A sense of hopelessness prevails. War, disease, hunger, conflict, impunity and outright competition seem to be tearing the fabric of a global commonwealth apart.

International law and solidarity, which have been the bane of global governance, continue to fail at every opportune moment. And the resounding, albeit tragic, outcome is that it is the common people, and mainly the poor of the world, who bear the ultimate burden and sacrifice.

But has the world run out of answers?

I insist that the global crisis being witnessed today is a result of a crisis of the very system that we belong to and which dominates us and our thinking. Contemporary, global, political and economic architecture is founded on the perverse logic of capital-

[1] Wahu Kaara is the Executive Director of the Kenya Debt Relief Network (KENDREN) in Nairobi, Kenya.

ism. Under capitalism's attendant neo-liberal orthodoxy, the world today is conceived and conceptualised as one big market.

With the collapse of multilateralism and the ascendancy of the United States as the global cop, serious ramifications occur. A key result of this has been the global takeover of politics and economics by multinational corporations. The governance deficit is further compounded by the emasculation of the role of the state, which is at the mercy of private capital whims. Private capital's longterm goals, which cast the nation state as a facilitator for the onslaught of global corporate behemoths on all aspects of life, constitute a recurring blueprint for conflict. Market-based solutions and rigid neo-classical/neo-liberal approaches to underwriting social relations as economic variables, whose end goal is profit maximisation, control and domination, and hegemonic designs on people and the planet, are certainly the main ingredients in a recipe for an interest laden conflagration between sovereignty and self-determination. The scenario that is unfolding is one in which problems are arising that the dominant political/economic elite, even with the backing of the often-touted invincible military industrial complex, cannot control or contain.

By receding back to a parochial division of labour based on "spheres of influence", the world stands at the floodgates of a global society reflecting Thomas Hobbe's articulation, made in17th century Europe, about a time in which life was "nasty, brutish and short."

The sustainable cultures which we envision hold dear the connections between the environment and human social relations. Knowledge on the creation and maintenance of these connections is the wealth that indigenous communities and peoples across the world have continued to show that they have in abundance.

Striking a balance on how we relate to and utilise Nature as shared common wealth, with elaborately defined considerations of how to secure our shared common wealth for posterity, should be a lifelong pursuit if our futures are to be sustainable.

But are we pursuing it?

I have consistently argued that the greatest legacy of the defiled capitalist system is best captured by the contrasting groups represented in the Kiswahili definitions of the "Haves" and the "Have nots": the "*walalahai*" and the "*walalahoi*", respectively. These definitions reflect the concept that, in a world of abounding plenty, millions die due to over-consumption, and millions more die due to under-consumption. It is this precisely this consumption logic that pervades our contemporary interactions with Nature.

Trees will always be trees and rivers will always be rivers. The only change in kind occurs when we attach an economic variable to these naturally occurring resources.

When we dam rivers to generate electricity for the power industries in order to maintain our over-consumption habits, we encourage ecological disasters: floods, displacement of indigenous people, eco-genocide, pollution, and so on, for the purpose of maintaining our lifestyles.

Resource depletion is a dominant part of today's capitalist cycle and a dominant theme in capitalist discourse. In its wake, resource depletion triggers the movements leading to war and conflicts of unimaginable proportion. Resources are being depleted and wars resulting for the sole purpose of driving the wheels of robust stock markets and financial trading centres.

Discounting the ability of the people to assert their sovereignty in relation to the abundant resources in their lives is not only a perversion of justice, but is in itself a negation of democratic ideals and principles. A horrid limitation of life cycles on the basis of a manipulative racialised ideology that allows a small proportion of the world's population to freely pollute, exploit and harm Nature – land, water, wildlife and all flora and fauna – to support its hedonistic lifestyles, is sacrilegious at the least.

Take the example of the Niger Delta in Nigeria. Whereas Nigeria is the eighth largest supplier of oil in the world, the legacy of this wealth for the people of the Niger Delta is not only tears, but also an ecological disaster that has reached almost irreversible proportions. Anarchy reigns supreme as the competition for oil rent opens the revolving door of the country to global corporations like Shell. This oil wealth has created a compromised national leadership, and a brutal and menacing army to enforce the rape of the delta's natural resources. The Ogoni people and other local communities, whose only crime is to state an ancestral claim to a rich land, are not only brutalised, but their lives are far removed from any dignity and they can lay no claim to any share of their communal common wealth. Any resistance is met with brutal force: the hanging of acclaimed author Ken-Saro Wiwa was an effort to beat them into submission.

Any resistance and assertion from the people is criminalised with loose words like "terrorism" thrown in to justify extrajudicial killings and the continuation of low intensity warfare to secure oil at any cost. That is why I subscribe to the thinking that the thermodynamics of production that are hinged on finite natural resource exploitation pose a critical challenge to the future of global capitalism. In the meantime, *"Let's Keep the Oil in the Ground!"*

The Need for Alternatives

Having resoundingly articulated that the current development model is not sustainable, it becomes critical for us to proffer solutions, not only to change the currently obtaining reality, but also to actually conceptualize new alternative futures.

I call these alternative futures the new "lifeworlds". Nature offers us a unique opportunity to recreate the typologies around which we order our world. Whereas we may have a lingering feeling of the dominance of the capitalist system over our life sequences, it is important to note that pertinent struggles and sites of resistance to this model are not only evident across the world, in all continents, but are also continuously emerging and becoming stronger.

The World Social Forum process is not only about "Another world is possible", but actually a sign that this world is already in the making. Robust challenges to the dominant system of enclosures are arising across the board. From the "*maquiladoras*" of México to the slums of Kibera in Nairobi, and the rebuilding of shattered lives in the wake of Hurricane Katrina in New Orleans, the energy and commitment that is challenging this decadent system is swelling both on the ground and in numbers.

However, to envision new Lifeworlds, it is of the utmost essence that we create and recreate the cornerstones that guide our visioning:

- We must recreate our democratic ideals. We must support the democratisation of the people of the world along horizontal engagement levels and not use vertical, trickle down models.
- We must work for an inclusive and participatory decision-making process.
- We must speak the truth to power and challenge enclosures leading to dispossession, whatever the manner or form of the enclosure, or the creed or ideology on which it is based.
- We must work for a robust and communal approach that supports the ascendancy of the sovereignty of the people and eschews the sovereignty of the state.
- We must develop new value systems that are life-serving and not destructive to our norms, cultures and traditions.
- We must comprehensively aspire to build linkages between the environment and the economy in a sustainable way.
- We must push for dignity, respect and appreciation of all beings as actors in the global system.
- We must democratise the access, utilisation and relation to resources on the basis of the pillars of equality.
- We must shun conspicuous consumption, and its attendant hedonistic tendencies, for it has serious repercussions on our future sustainability.
- We must have aspirations to live in harmony with Nature, people and the planet.
- We must integrate into all our actions the principles of solidarity, subsidiarity to Nature, and a sense of a shared common future.

Most of all, we must resist, struggle and refuse the commodification of life values, cultural elements, and the people of the world as mere economic variables in the market paradigm. If we can do this and remain true to the ideals of global citizenry, then

we will have set in place the building blocks of a shared sustainable future. We can then look forward to a future that does not de-humanise people on the basis of their integration or non-integration into the power games of the global market.

Indigenocracy – Indigenous Community Rule of Forest, Land and Water

Ghanshyam[1]

Indigenocracy, meaning Indigenous Democracy, is a word yet to make it into the dictionary, although it is already in use. It is the praxis of a word that determines its acceptance, and as the praxis that the word 'indigenocracy' stands for becomes more widespread, the word will become standard. It is a praxis that may take the world and its people, especially the poor – who comprise three-fourths of the human beings on the face of the Earth – out of the mess created by the dominant classes and races.

Indigenocracy was there during our great grandparents' time and even further back. It was there before the empires of the North and the West spread their tentacles into the South and the East, aided by the local dominant castes and classes, to grab and commodify land, water, forests and everything contained therein.

The search for an alternate ideology to that of the commodification of everything in a world market began after more than a decade of work among adivasis in Jharkhand, West Bengal, Orissa and Chattisgarh. In addition to experiences with these indigenous people, information was gathered in other parts of the adivasi heartland in Eastern and Northeastern India. Activists in the region learned many lessons from the struggles of the *Adivasis* to retain their dignity, self-rule and communitarian lifestyle. The attempt here has been to portray these lessons and alternate policies on paper.

Following the collapse of the Soviet Union at the end of the 20th century, Capitalism in its new form has tried to take over the role of "Policeman of the World". It has driven developing nations into the corner by projecting consumerism into every part of the globe through the process of globalisation. This consumerism, which commodifies everything including human beings, isolates them to the extreme. To find an alternative, it becomes necessary to re-visit traditions which existed before the onslaught of so-called modernism.

Consumerism basically tries to master Nature. In this attempt it presents Nature and its resources as commodities to be processed into goods-This has broken down the old value systems in human society. Due to the avarice of the so-called 'science and technology' industry, human society has broken down and become a rat race to accumulate things and aggrandize yourself at any cost, leading to destruction rather than development.

[1] The author is the Executive Director of JUDAV in Madhupur, Jarkhand, India. He has studied, initiated and actively participated in the struggles of Jharkhand since the JP Movement of 1974 (The Movement for Total Revolution).

Indigenocracy's Principles of the Lifestyles of Indigenous Peoples

The basic framework of Indigenous Civil Society needs to be stressed. Indigenous societies are mainly concerned with relationships, including the following:

1. Relationship of human beings with Nature.
2. Relationship of human beings with other human beings.
3. Relationship between women and men.
4. Relationship between humans and other animals.
5. Relationship between individual human beings and the Community.

Relationships of Human Beings with Nature

Indigenous Civil Society accepts that human beings are a part of Nature. It keeps the relationship between human beings and water, forests and land, alive and active. It takes from Nature what is required for a sustainable living and returns to it what is required to conserve it and is necessary for its revival. When the forests were in their hands, the adivasis saw to it that Nature was conserved and its resources were used in a sustainable manner. However, when the forests were grabbed by the government under laws enacted by the British and still valid after their departure, destruction of the forests began in a way that literally can be called plundering.

Land, Forests and Water Are Not Commodities

The experiences gained while working among the adivasis gives us an understanding of what forests mean to them. For them, human dignity and creativity were first introduced into human society by the forests. Dignity is what separates human beings from other animals and creativity leads human beings towards self-reliance.

Indigenous Civil Society does not consider water and land as a means for quenching thirst and hunger. They are traditionally equated with life and what lives in Nature.

The Imperialist Civil Society is in India equated with the arrival of the British East India Company (EIC), which came into the Indian Sub-Continent more than 200 years ago. For the EIC, land was a means of production and, therefore, a commodity. They sought to change lands which were community resources into individual property. In response, the great leader of the indigenous civil society in Eastern India, Tilka Manjhi, said: "The land is given to us by Sing Bonga (the Sun God). There can be no tax on land nor can it be bought and sold!"

The indigenous philosophy indicates the precious responsibility that human beings have – as being stewards of Nature and not its masters.

As a result of the philosophy of linkages of human beings and other animals being

necessary for the conservation of nature and for sustainable development, the land is seen as belonging to the entire community of Nature and not to human beings alone. Ignoring this concept would be dangerous for the human society as a whole. The Indigenous Civil Society has similar views on water. It prefers water to run its own course. The quicker the flow of water, the faster it finds its direction; and this flow gets the rays of the sun all the way, which helps to keep it clean and pure.

Indigenous Democracy (Indigenocracy)

To understand this communitarian pattern of living, it is necessary to understand the values and lifestyles of indigenous peoples, since these do not necessarily conform to 'democracy' as understood by the elite of the North and West. For the people of the North and West, democracy is primarily concerned with individual freedom or with free movement of Capital; this is contrary to Indigenous Democracy, which rejects both these ideas. Indigenocracy asserts that societies should be established on the basis of a communitarian lifestyle, community labour, and egalitarianism.

Hence, indigenocracy is not merely a political system, but a social, economic and justice based lifestyle and community. Such a community and lifestyle not only accepts the diversity and differences existing among human beings, it also accepts the limitations the lifestyle sets on the development of communitarian living.

This lifestyle does not give government unlimited powers to exploit society. It does not limit individual freedom, nor can an individual prey on society and government. There is justice and equal access to forest, land and water for everyone, independently from caste, gender or religion. In Indigenous Civil Society there is self-rule, self-reliance of the family, and dignity of the individual.

In Indigenous Democracy, the issue of human development is defined by the following points:

Communitarian Adivasi Reality: Self-Rule and Self-Reliance

The concept of self-reliance among the indigenous communities can be looked at through the following concepts: Food, clothing, shelter, health, education, recreation, and economics (Indigenonomics).

Food

The indigenous peoples consume only as much as is required by the body to carry out labour, and nothing extra. The food consumed depends on the availability of materials in Nature and their sustainable use. Leftover rice is preserved in water for breakfast in the morning.

When cooking food, water is an important factor. Indigenocracy has developed different levels and areas of water resources. Each resource is used for a different pur-

pose, e.g., for growing crops, for cooking food or for washing. Rivers, streams, lakes, ponds and wells, all have their different uses decided by the community. Different cooking mediums are used for different foods and seasons. Fuelwood chopped has to be replenished.

In farming, emphasis is laid on traditional methods linked with life, contrary to modern practices which make farming a burden. For indigenous societies, food and life are interlinked, which brings out the best in their traditional knowledge systems. The basis of this traditional knowledge of the farmer is the cycle of seasons. They plant what grows best in a particular season. This knowledge is gained through hundreds of years of experience. It is said "Experience is knowledge."

Clothing

Among the adivasis, clothing has emerged from their communitarian lifestyle. The clothes they wear conform to climatic conditions and not to dress codes imposed by the imperialist civil societies of the North and the West, as copied by the elite and dominant castes and classes in the South and the East.

From the beginning of evolution of human beings in the South and the East, clothing among the adivasis has been dependent on their geographical and climatic conditions.

Shelter (Homes)

It would be meaningful to assert that indigenous people have homes and not houses. Home is where people live and where they lead a communitarian lifestyle. Houses are often mere structures imposed by various industrial, contractual and political leaders who are working overtime to get their schemes approved, with no concern for the people nor the geo-climatic conditions.

Homes of the adivasi are linkages between the universe, Nature and human life; they are also homes for the animals. The walls of homes are made of mud (earth) and the roofs are made of bamboo, wood and hay. For sleeping, cots made of wood are interlinked with ropes of coir or other natural grasses. The walls are painted and decorated with colours made from natural resources. Women maintain such homes based on their understanding of the changing of the seasons, the role of climate and the need for security of life.

Health

Indigenous Communities have always been concerned about health. Priority is given to the security of life. Precaution is taken for safety of food and water and of a clean home atmosphere. Efforts are made for healthy food intake by promoting a balanced diet. The food intake contains vitamins in the form of various green vegetables, fruits,

flowers and roots, picked according to seasonal cycles. Only things that cannot be consumed directly in the raw form are cooked, whereas all others are eaten raw. Picking and eating vegetables is done according to seasonal cycles. This is a way of preventive health care.

In case of ill health, emphasis is laid on herbal medicines, of which the indigenous communities have hundreds of years of experience. If the illness is beyond their understanding, they go to the indigenous medical practitioner.

Education

The processes of education begin with the effort to develop the function of senses. The educational means are related to Nature, and in the process the child begins to understand the surrounding world, learning to grow plants and feel safe in living with animals.

Recreation

Dance, music and recreation are a part of the life of the indigenous communities. For them art and science are cycles just as eternal as life and death. Festivals are held from time to time, e.g., to celebrate fertility.

Economics (Indigenonomics)

Indigenous communities do not believe in loans, interest and profits. In their weekly markets known as *Haat*, there is no buying and selling or accumulation of money. It is a place of bartering and exchanging each other's needs in a convention-like atmosphere. *Haat* is not 'making and accumulation of money'. This is exchange without any hassle.

Self-Respect and Dignity in Communitarian Lifestyle

Under indigenocracy, development is a community goal. Development processes envelop the entire community. The goals of development are based on a union of the diversities of the community.

Indigenocracy encourages hidden qualities and creativity because labour is not considered as a commodity. The individuals living under indigenocracy become creative and inter-dependent.

History has recorded that whenever forces from outside their homeland intruded and trod upon their human and community rights, indigenous people have united en masse to confront those who challenged and subjugated their dignity.

To understand indigenocracy, there is a need to look back into the historical events and also to the incidents of the 'defeated', mainly the common people like adivasis, dalits, other minorities, "backward" classes and women.

From Democracy to Swaraaj

Vijay Pratap & Ritu Priya[1]

Creating democracy, locally and globally, in all spheres of life comprehensively, is the call of the day. The call is for a collective struggle for wholesome well-being and beauty on the planet, encompassing *swaraaj* (self-rule), *swadharm* (each one's ethically bound duty), *swaabhiman* (dignity), *saadgi* (ecological lifestyle) and *swadeshi* (self-sufficiency).

Pursuing the Democratic Dream

People in South Asia have long cherished values which, in modern times, are best expressed under the rubric of 'universalism' and various dimensions of 'democracy'. Before the colonial interventions of the West, the distinctive features of our Indian socio-political system were cultural plurality, devolution of political power at all levels and a participatory mode of governance from the grassroots to the top.

We had our own failings, such as the obnoxious practice of untouchability, or the fact that communitarian principles manifested through the caste system degenerated into hierarchical fundamentalism. However, despite all kinds of failings, the sense of *Vasudhaiva Kutumbakam* (a Sanskrit concept, meaning 'the whole world is one family') has been part of our cultural sensibility since time immemorial. That is why our socio-cultural diversity is a source of strength and in fact, the primary defining force behind our unbroken identity. There have, of course, been brief phases of ideological or identity polarisations. But very soon, the pluralist perspective prevails. The basic premise of this worldview is that no sect, religion, ideological group, class, socio-political formation, nor the state or the 'church' can claim a monopoly on the truth. All truths have to start with the small letter 't' and, depending upon the vantage point, they are only able to capture some aspects of the Truth and not the Truth as a whole. This forms the basis for our democratic society.

Conventionally, democracy is taken to be a political system based on the separation of the three branches of governance: judiciary, executive and legislative. In this system, the legitimacy of governance is derived from the electoral process and the right to vote. Such a narrow definition reduces democracy to merely a political instrument.

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[1] The authors are associated with the Vasudhaiva Kutubakam Network and South Asian Dialogues for Ecological Democracy in New Delhi, India. Vijay Pratap is also a visiting fellow at the Centre for the Study of Developing Societies and Ritu Priya is Professor at the Jwaharlal Nehru University.

However, the last century has witnessed a series of transformations. They have generated an explosion of human energies never known before, devoted to redefining human life. The praxis of 'new' social movements embodies a much deeper and comprehensive meaning of democracy than that understood and practised in the mainstream political discourse. Never before in the history of humankind have such a large proportion of human beings worked for *swaraaj*. ('*Swa*' + *'raaj'* = self + rule, a term commonly used by Gandhi and the Gandhi-inspired movements in India.)

Our aspiration is to redefine democracy from being only a mode of governance to being a way of life. If democracy informs all levels and dimensions of life, this perspective of comprehensive democracy can be called *sampoorn swaraaj* (*sampoorn* = full, complete, comprehensive; *sampoorn swaraaj* = full realisation of self-rule).

To make the journey from the present liberal notion of democracy to that of *sampoorn swaraaj*, one looks toward the centre-left political processes, including social movement groups and parties with these inclinations. The extremist groups on the right and the left, who espouse violence as a political tool, are not part of this analysis.

The Contemporary Challenges Facing the Centre-Left Movements in India (as part of a larger South Asian identity)

Colonial rule, and the resultant hegemony of the modern western worldview, converted a large part of the Indian elite mindset to its monolithic, and completely anthropocentric, reductionist notion of universalism. However, a large section of the people of India still retained their basic worldview while adopting ideas and knowledge from the modern west. The State acted as a bearer of the benefits of modern science and technology to the 'marginalised majorities' while still providing some support to traditional and indigenous knowledge systems and practices. Gandhi's dialogues with leaders of other political streams, the pressure of popular democratic politics, and the basic pluralist worldview allowed us to retain our moorings. The last twenty years have, in many ways, created a break with this legacy, while the processes of globalisation of the 1980s-1990s hastened several transitions. India has become one of the globally most vibrant economies in a time of worldwide recession, but we are not yet a stabilised economy. We are also in flux as regards our social institutions, cultural choices and the alliances of diverse political streams and formations. Retaining our moorings and yet gaining our place in the world, maintaining/regaining a quiet self-confidence that allows space for others, these are the challenges before us today.

On a broader level, we are one with the South Asian or even global South, as a large section of India's citizens remain bereft of the benefits of economic growth. Our centre-left political streams have to address the issues of basic needs, while simultane-

ously preserving our cultural moorings. The divisions within these streams arise from this dual challenge. Some espouse a statist position, attempting to balance economic growth and the welfare state. As a result, divergent streams have emerged: there are those wanting to rely entirely on modern science and technology, and considering traditional indigenous worldview and practice 'backward'; then there are other streams that emphasise the contemporary relevance of indigenous knowledge and life patterns. Both are confronting their ideological and practical limitations. The welfare state has not having delivered very well on fulfilling its promises to the majority in the past century; and the ecological consequences of modern development are bringing the promises of the first stream, which relies on science and technology, into question. However, ensuring minimum basic needs in the present, with the currently changing natural resource base, based on the current knowledge, life patterns and aspirations of the majority, is a challenging task for the second stream, which looks back to the indigenous peoples. These challenges have led a section of this 'indigenous' stream to denounce modern science and technology as well as social organisation, including modern democracy, as demonic and unsuited to our context. The radical Gandhian/indigenous Socialist stream attempts to bridge the divide through a praxis of (i) engagement with state and non-state efforts at meeting the basic needs of the marginalised majority, (ii) generating dialogue on issues relevant to democratic social development, and (iii) non-violent resistance to ideologies, policies and actions that are seen as anti-democratic and tending to destroy the resource base, deny access to basic needs, and demean the worldview and cultural confidence of the marginalised majorities.

The Marxist-left in India has remained limited by its general inability to recognise and align with the indigenous radical idiom and symbols, thereby not relating to the Indian majority on a cultural plane. The radical liberals, as well as the Marxists, could not understand the severity of caste oppression including the practice of untouchablity among all religious communities in India/South Asia. Gandhi and his followers like Ram Manohar Lohia, were among the first ones who attempted to tackle this challenge of untouchability head-on, working besides the leadership from among the Dalits (untouchables) themselves, including such men as Jyotiba Phule and Baba Sahib Ambedkar.

Similarly, the high degree of participation of women in the nationalist movement was a breakthrough of sorts. Unfortunately, the gains of these women were not adequately consolidated in the post-independence period. There has been a strong women's movement in India in the 1970s and 1980s, resulting in assertions by women at all levels, and adoption of legal provisions ensuring their social and political rights. This women's movement arose out of the several political streams of the centre-left, with a recognition of the need for a specific focus on women's issues. In the last two

decades or so, there has been, however, a regression in the women's movement, with a more apolitical, north-driven, 'gender issues' agenda taking a place in articulating women's rights, without adequate interrogation of the patriarchal structures. Nonetheless, the future scenario is more optimistic, as there are places now reserved for women in the grassroots democratic institutions. This training of women at the grassroots level is going to express itself at the provincial and national levels in the not too distant future. However, a greater and deeper engagement is necessary, to fight the continuing patriarchal structures and values as well as their backlash through cultural conservatism (as seen in aberrations like female foeticide, increasing suicides among young women, and the community's violence perpetrated on those choosing to enter marriage against the traditional norms of exogamy), and to move towards non-patriarchal gendered democracy. The challenge is to internalise the values of feminism and *swaraaj* in the basic units of family and community. In the spirit of *vasudhaiva kutumbakam*, it is to be hoped that the 'global family' will then also reflects these values, and re-tailors its institutions, polity and economy accordingly.

Comprehensive Democracy or *Sampoorn Swaraaj*

The idea of 'self-rule' goes much beyond the political. It encompasses life itself in a comprehensive manner that makes our lives more meaningful. *Swaraaj* relates to all dimensions of human life and applies to relationships at all levels, from the individual to the global, including:

(1) the relationship between nature and human beings,
(2) the dynamic of 'the individual' and 'the community',
(3) the dynamic inter-relationship of 'the self' and 'the other',
(4) the relationship of individuals and various types and levels of collectivities with governance structures, and
(5) the relationship of individuals and collectivities with the market.

The striving for democracy within these relationships can be respectively termed 1) ecological democracy, 2) social democracy, 3) cultural democracy, 4) political democracy and 5) economic democracy.

There is a comprehensive democratic revolution in the making: humankind is striving to redefine all the basic relationships of human life. No single ideology or region can be identified as the vanguard in terms of striving for the above five dimensions of democracy simultaneously.

Issues of self-rule, related to the dynamics of the relationships between Nature - human beings, have given rise to "Green" political parties, groups, movements and intellectual trends all over the world. These green movements are increasing rapidly

even in those parts of the world where, according to the conventional development indices, standards of material life are very high. In the societies of material affluence, there is an attempt to recover the 'green consciousness' and to address the challenges of ecological degradation. In most of these countries, green movement groups are engaged in defensive action aimed at saving the natural livelihood support systems, along with revitalising of ecological and cultural sensibility. Since these energies aim at greater participation of local communities in resolving the Nature-human dynamic, we could call this the age of striving for **ecological democracy**.

Similarly, there is phenomenal human energy on this earth trying to redefine the individual-community dynamic. Issues of dignity are on the central agenda of many groups working for human rights, including the gender justice, anti-caste and anti-apartheid movements. There is an almost global clamour for redefining social relationships, what we could term **social democracy**. The response to the World Conference against Racism (held in Durban, South Africa in 2001) is an indicator of the revolutionary energies we are talking about. The women's movement now has a gender perspective on all issues, it is no longer just a women's rights movement. From this standpoint, this is an age of strivings for social democracy.

If we analyse the dynamics of the Self and the Other, and systems of meaning, an entire set of issues emerges under the broader rubric called 'culture'. The human activity on this front is also of an unprecedented kind. There has been an explosion of new ideas and ideological confrontations, both violent and non-violent. The varied strivings of a **cultural democracy** are many: critiques of the culture of industrialised societies and modernity, attempts at revitalising indigenous knowledge systems, emphasising the importance of the plurality of ideas and ways of life, and loosening the controls of orthodoxy, are all part of it.

After the majority of the colonised states were liberated from colonial rule, they acquired greater control over their economies. The standard of living started rising, even though very slowly for some. Now, indigenous peoples with natural resource-based economies, and small and marginal farmers are in search of dignified ways of earning their livelihood. This is being done through two methods of searching and striving: the first is to emulate (and even blindly imitate) the rich and prosperous North, the other is to recover their control over indigenous natural resources as well as indigenous knowledge systems in agriculture, medicine, food, water management, and so on. Both these methods represent the pervasive desire for an **economic democracy**.

The anti-colonial struggles in the majority of the former colonial nations have constructed new political identities. A desire for self-rule is pervasive. The people are re-examining and redefining the transplanted colonial instruments. Sometimes there is regression, as the firmly established elite imposes some form of authoritarianism. Fortunately, the participation of people in the political institutions has acquired a

tremendous legitimacy. (This explains why many dictators have had to undertake a legitimatisation exercise through some form of election, howsoever partial or imperfect.) This constitutes **political democracy**.

The imperative of democratic revolution requires that we recognise and relate to the positive dimension of all these energies and contribute in forming them into a definable worldview and a dream for the future. This is our vision of a universal humanistic globalisation.

The Democratic Agenda

In a phase of phenomenal upsurge of democratic aspirations, new norms have to be agreed upon at various levels of human collectivities. That has to be done through a process of participatory dialogue, even with the opponents. (Let us say, two neighbouring Nation States who are at loggerheads with each other, or two ideological adversaries in a single Nation State, or between and within communities and families.) One has to recognise the complementarity of each other's 'truth' and consciously avoid being judgemental regarding the other's viewpoint. The critical evaluation of other's viewpoints has to be in an idiom that encourages moderation.

In discussions that have taken place at various national and international forums, people have started to develop ideas about building a global network of individuals and organisations sharing similar values and goals. Such an initiative could also be seen as an effort to engage the international civil society in organising global or regional dialogue processes about a number of issues that are of crucial importance at this juncture.

It is, admittedly, somewhat uncomfortable to discuss democracy – which, as a process of constructive self-engagement of humanity, should be indivisible – in such small bits and shreds. However, if the complexity of democracy is approached through the five dimensions mentioned above, this should bring forward a wider and richer spectrum of problems and possibilities. One possible articulation of these dimensions as thematic perspectives is suggested below.

i) ***Empowerment of the Daridranarayan, the 'Last Person' (Economic Democracy)***

All the greatest teachers of humankind including Gandhi, Muhammad, Christ and the Buddha, have emphasised the importance of empowerment of the weakest and the poorest persons in a society: the *Daridranarayan*. Many people probably consider such a concept either patronising, elitist or naïve. Despite that, perhaps the most important single test for any kind of democracy is whether it works so that it can protect the needs and rights of the poorest, most oppressed and least influential people in the society. What this means in each society and in each historical period will differ, because poverty and deprivation will be created and regenerated repeatedly through

widely varied means. But the issue or goal is clear and remains the same. One of the main problems is how to relate to the needs and concerns of the Daridranarayan in a way that is empowering and not patronising.

With the *Daridranarayan* at the centre of all thinking, all issues concerning transactions of goods and services, technological choices and mode and relations of production can be seen as always having been part of human engagement. All such issues can be considered as the economic dimension of democracy, called '**economic democracy**' for convenience.

ii) ***Ecological Regeneration and People's Control over Natural Resources (Ecological Democracy)***

Environmental degradation – pollution of air, water and soil, loss of species and biodiversity, destruction of the ozone layer, destabilisation of the climate, loss of trees and vegetative cover, soil erosion and desertification – is one of the most serious issues of our times. It should be a high priority for any movement. However, the ecological discourse of the West and among the westernised organisations in the South is often very alienating for the majority of the (rural) people.

This discourse may result in programmes and measures neither understood nor owned by the people. In the long run, such programmes can backfire. A better approach is to concentrate on people's control over natural resources, and integrate the various environmental and conservational concerns in such an approach. Humankind's relationship with Nature, with humans as a consumer, controller, nurturer, destroyer, or as a small component of Nature, are all issues to be dealt with under the rubric of **ecological democracy**.

iii) ***Ensuring Human Dignity (Social Democracy)***

There is no doubt that the neo-liberal economic policies and other measures pursued by the 'New Right' will be causing extreme poverty on a scale that could be unsurpassed in human history. In many cases the problems should be seen in the framework of empowering the *Daridranaryan*, and as issues of acute economic survival. However, in most instances, issues such as unemployment or underemployment, temporary employment, workers' rights and the meaning and nature of the available working opportunities are issues of human dignity across the globe. Even in cases where the crumbs falling from the table of the neo-liberals are more than enough to satisfy the basic material needs of the people, human dignity is sacrificed in a most harmful way.

The hegemonic neo-liberal policies create identities of greed, promote consumerism and materialism, and prevent people from making good moral choices and pursuing their spirituality. They sacrifice human dignity for profit.

The struggle for dignity and social equity has to be the principle issue among the

Dalits. This way they will be well equipped to contribute from their perspective and experience in the struggle against satanic globalisation. It is the actual situation among the Dalits that forced a large number of ideologues, including Baba Sahib Ambedkar, to emphasise the importance of a caste annihilation movement in India. (In the rest of South Asia, due to the peculiar local situation of India, it is not even being recognised as an important source of inequity). In the past two decades there has been a regression of the upper caste from their earlier acceptance of empowerment of the ex-untouchable castes. Further, the increasing voice of women in the social sphere is being accompanied by new forms of perversions and violence against them, manifested e.g., by the declining female sex ratio among 0-6 year-olds in India. These issues have to be viewed with their wider linkages under the rubric of **social democracy**.

iv) ***Strengthening Plural Coexistence (Cultural Democracy)***

The issue of plural coexistence – and of the prevention of communal (or racial) violence – has a profound significance for every part of the world at the beginning of this millennium. When the world's economic and cultural crises deepen, the threat of communal violence increases. In areas suffering from acute environmental degradation, the undermining of the natural resource base can aggravate such problems.

In South Asia, there is a living tradition of peaceful coexistence of various ethnic and religious groups, and of sects within religions. This tradition is under great strain and needs to be revitalised in the present context. A judicial pronouncement in Bangladesh in January 2001 banning fatwa (religious edicts) is an authentic illustration of **cultural democracy**. Among the Hindus, vesting of adequate dignity in the folk practices not conforming to Brahmanical scriptural norms should be a priority item.

A campaign for cultural democracy should also be a mobilising act against attempts to distort history now occurring in almost all countries of the world, including those in Europe and America. In Europe, the Muslims are being projected as a fundamentalist or non-pluralist segment of the society. The increasing polarisation between the Islamic countries and the West (the European Union and the United States of America) has been deepened by instances like the Gulf War in 1990, which created anti-West feelings throughout the 'Islamic world'. The European integration – all the old colonial powers being fused into one new super-power – is worsening the situation because it is considered as a potential and powerful, adversarial supra state by the Islamic states. The conflict will be further aggravated if the European Union becomes a real Federal State and if it develops a joint defence policy and a joint army. In that case all the EU Member States, including the Nordic countries, will become integral parts of a major military super-power with a large arsenal of nuclear weapons.

Plural coexistence, however, should not be viewed from a negative viewpoint, but only through the scenarios of conflict that need to be prevented. It should be seen as

richness, where new things are being created and recreated continuously through the interaction of differences. All of human history has developed through cultural interaction, diffusion and adaptation. Diversity in ways of life provides complementary ways of fulfilling the need for expression of diverse human tendencies in any society, and therefore must be nurtured.

v) ***Nurturing and Deepening of Democracy (Political Democracy)***

Political democracy, if not constantly cared for and defended, can be greatly undermined. All the possible checks that can be built against the un-democratising thrust of social systems can only be effective if the people actively guard democratic structures and norms. Democracy – defined in terms like participation, representation and rule of law, protection of cultural, linguistic, religious and political minorities, and transparency of political decision-making – is to be nurtured and deepened. However, at present only one model of such democratic processes is being adopted by all the countries with different cultures, institutions and traditions: the western liberal or market democracy, whose specificities have evolved in a small cultural-historical zone of the globe.

So far, the most important institutional framework for negotiating a society incorporating universalistic-humanistic values is political democracy, based on a multiparty system, adult franchise and separation of the executive, judiciary and legislative powers. Even this comes under threat when other forms of democracy are not realised. The principle of subsidiarity of power, i.e., allowing the people to exercise self-rule at the grassroots level, is crucial to ensure participatory democracy. District, provincial and national political power should not be treated as higher levels of power, but as different spheres of power.

The big wave of indigenisation and anti-westernisation – which is a partial explanation for the Islamic Resurgence, the growth of the *Hindutva* movements and the economic and cultural rise of China – cannot be wished away lightly. If issues such as democracy, human rights or women's rights get labelled as "western values" by various oppressive forces in the South, there is a real danger that these values will be seriously undermined during the first century of the new millennium.

Directions of Search

In the bottom-up view of participatory democracy, in which institutions, ideas and ideologies are worked out by the people themselves, there is a contradiction in terms to suggest institutions of governance. Instead of proposing a top-down solution, we would like to engage with the following questions with regard to the potential and direction which the present dissatisfaction will take. Our method of working towards

the ideal of *sampoorn swaraaj* is based on our belief ,faith, and hope in human beings and inclusive social processes.

Faith: We share a faith in fellow human beings, that selfishness and greed are only one part of the human journey and not the dominating, defining characteristic of human life. Wants can be fulfilled, and even indulged in, without being glorified. We insist that it is very degrading to define human beings as entities with material wants only. They have moral, spiritual and cultural orientations as well. Undermining these aspects is resulting in loss of meaning in life, generating a backlash in the form of religious extremism.

Hope: The faith in this notion of human nature creates a resource for perennial hope, a belief in human life being a constant struggle between good and evil. The task of building true democracy is now firmly linked with the global struggle to reform or transform capitalism without the imposition of a top-down, readymade version of socialism. It is a new project. However, it is based on the perennial human need to fight for the 'good' with values of compassion, justice, equality and freedom. It is based on understanding the spiral web of life and on nurturing life in its most holistic sense within the contemporary context.

The Method: The method for democratic struggles has three aspects. One is 'dialogue', basically to recognise the contours of the present times. Through dialogues we not only recognise our times, but also understand the callings of our times. Dialogue at all levels, including with the adversary, is possible only if we do not believe in the conspiracy theory, and do believe in the willingness of the human spirit for self-sacrifice in order to struggle against injustice. However, grasping the essence of the times will be incomplete if we do not simultaneously fight the injustice. For this, the second component is 'non-violent civil disobedience' that provides expression to the human struggle for 'good' over 'evil' and is an invitation to the power-wielding adversary to engage in dialogue. The third component of the method is 'constructive action' to create structures, activities and lifestyles in consonance with the vision of a democratic society, addressing all the various dimensions of comprehensive democracy or *sampoorn swaraaj*.

Proposals for Concrete Action

With the above approach, and the contemporary challenges to centre-socialist-green-feminist social action, we suggest the following possibilities for concrete action. These are only illustrative, since action agendas will have to be developed by mass organisations themselves in a bottom-up approach, and by advocacy campaign organisations,

keeping the various linkages of comprehensive democracy and levels of social organisation in mind.

Dialogue

• **Opening up spaces for multiple visions to evolve, flower and express themselves**. Dialogue, or in fact multi-logue across the diverse visions among the centre-socialist-green-feminist groups and between diverse strands within them, will enrich all human striving. This will strengthen each strand and sub-strand, giving us the confidence to address the urge for equality and justice of billions on the planet. With a vibrant *swaraaj* stream flowing, it should be possible to win over those engaged in violent struggle for justice and equality as allies in local and global *non*-violent civil disobedience movements. It will also make it possible to transform the adversary (the imperialist-capitalist, the mercenary terrorist, and the fascist) through a dialogic engagement and other democratic means.

• **Institutionalising quasi-permanent structures/networks for continuing 'dialogues on comprehensive democracy'**. We need to consciously and urgently cultivate peer groups, clubs, institutions, networks, movement groups and political parties to discuss the positive forms of intervention to deepen and strengthen democracy.

This can be the most strategic tool for global democratisation, with the caution that it should be informed by bottom-up processes. The space provided by the World Social Forum should be used for forging new global alliances. Conscious South-South dialogic interfaces must be ensured across Africa, Asia, Latin America and the Caribbean, and should include the poor of the global North.

Defending the Democratic Spaces and Life Patterns

• We urgently need to undertake some defensive actions as well. We need to evolve a defence strategy for preserving what the hegemonic forces have not so far destroyed. Southern civilisations have been practising for thousands of years a way of life based on what we now describe as 'green principles'. A careful look at their livelihood support systems will show that limiting their wants was a conscious choice for conservation and regeneration of Nature, and not always due to sheer technological 'backwardness'. But now, the present form of globalisation is destroying these communities at a very rapid pace. Global democratic forums need to set up a 'defence committee' to defend 'green communities' in the South. Otherwise, what has been preserved through thousands of years will be completely destroyed in the next couple of decades.

• We need an independent information, research and media network to identify the democratic practices, struggles, dreams and dramas being unfolded and enacted in

the family called Earth. We need to collect, collate and then share this information, especially with those who are still prisoners of the mirage of the American consumer paradise. We should resolve to set up such media centres all over the world and to disseminate this information in the people's languages as widely as possible, besides doing so in English.

• All these dialogues and building up of institutions and networks should culminate in building a global front for defending, deepening and expanding democracy. This front can be built through a combination of intellectual activism and organisation building. The organisation building cannot happen through intellectual activism alone. The evolution of ideological frameworks and building up of networks can happen effectively if we use the tool of civil disobedience and constructive action, as evolved by Gandhi.

Organising for Non-Violent Civil Resistance

• Those who believe in democracy have not only to shun violence themselves, but also have to de-legitimise violence as a method for social change. They have to sharpen the tools of non-violent civil disobedience. Gandhi believed that only those who are civil and obey the laws of the land have the right to fight the unjust laws.

• A campaign should be launched against all diversionary moves which, in the name of cultural nationalism and 'national sentiments', put issues such as the right to work and right to sustainable livelihood on the back-burner.

• Non-violent civil disobedience should be resorted to if other steps of dialogue fail. This should be the case for instance on issues such as: the agendas of boycotting genetically modified food-grains and biotechnology produced edible materials, of resistance to the setting up of Special Economic Zones (SEZs), mining and dam projects that displace large numbers of population. This needs prior adequate political and technical preparation, including sustainable land use planning.

• Existing global institutions should be democratised by sensitising them to the processes of non-violent civil disobedience and making them supportive towards the urges these actions represent. Civil disobedience will build pressure on existing institutions for their constant renewal by an interactive process.

A Sketch for Sustainable Human Economy

Hilkka Pietilä[1]

At present only feminist-ecological economists are making efforts to shape *a holistic picture of the human economy* including its three distinct components of *cultivation economy, household economy* and *industrial market economy*. In this paper we will closely studying the essence of the cultivation economy and household economies as the currently excluded components of the human economy. We will also investigate the consequences of imposing neoliberal mainstream economics on all three components of human economy.

The human economy is composed of these three basic components: cultivation, households and industrial production. In their interactions and relations, each of these three components operates differently, according to its respective logic and terms. At various levels there are many kinds of links and relations among these three components. Flexible collaboration among them is the prerequisite for sustainability in both the human economy and the creation of wellbeing.

It is a fact that the vital potential within living Nature is the basis for all life on this planet. Photosynthesis in plants is the foundation of plant and animal life on Earth. As Rosemary Radford Ruether has stated: "The more complex forms of life... are radically dependent on all the stages of life that go before them and that continue to underlie their own existence. The plant can happily carry out its processes of photosynthesis without human beings, but we cannot exist without the photosynthesis of the plants. Human beings cannot live without the whole ecological community that supports and makes possible our existence."[2]

One fundamental problem today is that economics as science is based exclusively on the logic and terms of industrial production, extraction, and manufacturing of lifeless elements, minerals and non-renewable energy resources. The only measure of value in economics is a fictional notion of money. When the logic of this economics is applied to the living production of the cultivation economy, and the demands of ever-increasing productivity and competitiveness are imposed on agriculture and animal husbandry, the resulting system is bound to run into difficulties.

Therefore, it is urgent that the permanent distinctions separating these three components of human economy are acknowledged, and each one of them is taken into consideration in economics on their respective terms. The interaction and dynamism among the three components has to be thoroughly studied and understood in order

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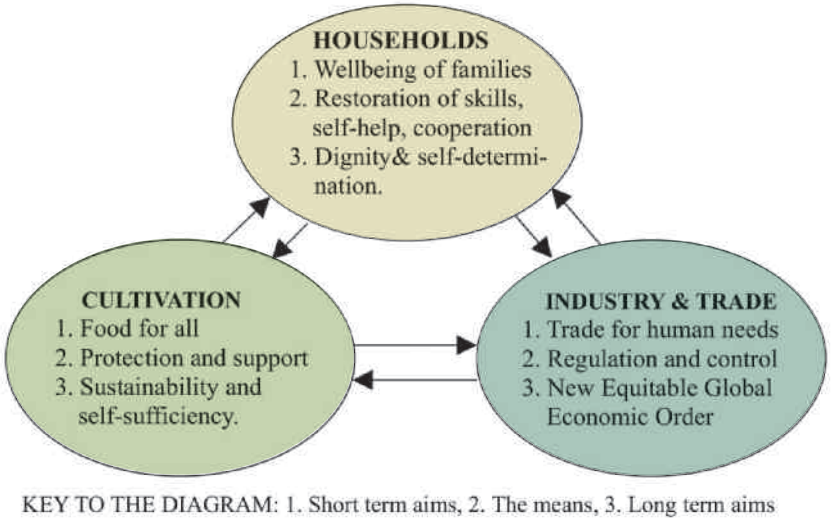
[1] The author is a senior researcher, and a former secretary-general of the Finnish United Nations Association. She lives in Helsinki, Finland.

to achieve a successful and harmonious interplay among them, which is the essential prerequisite for sustainable life on Earth.[2]

A Counterforce to Globalisation?

We could make households a counterforce to the unsustainable market forces. A human being and her wellbeing are the points of departure for the household; her dignity and integrity are its basic values. According to "household ideology", all work and production is done for people, to serve their physical, social and mental needs and aspirations. This should be the only justification of businesses and markets, too. According to this school of thinking, *every individual is indispensable as a dignified member of the family and the community, the subject of her own life, not an object of anonymous market forces.*

Figure 1. The triangle of human economy



Households, Cultivation and Industry & Trade are the basic pillars of the human economy. Each of these components has different foundations and terms of operations. This has to be taken into consideration in the organization of human economy in order to achieve sustainable exchanges and collaboration among all three.

We can turn economic transition the other way round and make the household again an asset in the hands of people. The richer the family is in practical skills and competencies of its members, the more independent they are together to decide their relationships with both the labour and the commodity markets. The richer the village,

[2] Pietilä, 1997.

the community or the cooperative is in skilful and multitalented people, the less dependent they are on the goods and services provided by the market. By gaining more control over their own household and economy, the more human beings will also gain insight into how to influence the economy of their society, along with the power to create change.

Perkins (1966) has put it this way: "As globalisation increasingly strips control over production and consumption from communities, consigning many of them to stagnation when cheaper sources of resources or labour power are found elsewhere, they lose wages and disposable income. If they are able, because of strong community ties, to begin producing locally for local needs, they may be able to remove themselves from the global trading system, at least in part. Community-based employment enables people to reduce dependence on large corporations for jobs and basic goods. Viewed broadly it limits the power and influence of the globalized economy."[3]

The question arises if the burdens of such increase in work at home would not yet again fall upon women. We do not need to let this happen. To prevent it, it is necessary to equalise the distribution of labour in the households between women and men, girls and boys. Even for the sake of men, it would be necessary to design a new division of labour at home. A more equitable division of household labour would once again give men a meaningful and rewarding role in the family. Since men can no longer be the single breadwinners anyway, they could become direct supporters of their families in practice[4].

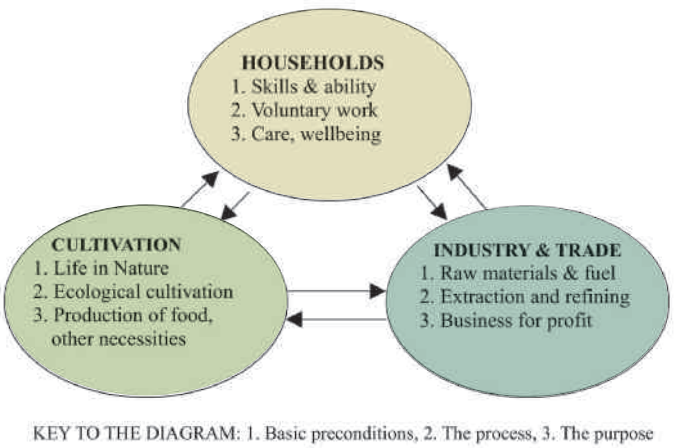


Figure 2. A sketch for sustainable human economy.
A sketch for Sustainable Human Economy with three main components and their principle features. The household should be rehabilitated and put back to its key position in the human economy. Due to very extremely different climates in various zones of the globe, the cultivation needs support and protection instead of being exposed to the market and merciless competition. The new Global Economic Order has to be established to regulate the industrial economy and trade to respect the limits of natural reserves of the globe and the terms of biosphere.

[3] Perkins, 1996.
[4] Pietilä, 2007.

Finally, we can redraw the Triangle of Human Economy according to this dream of sustainability, equity and wellbeing for each and everyone (Figure 2). In the new picture, the household has been rehabilitated and put back in its key position in the human economy. We argue here that, due to extremely different climates in various zones of the globe, the cultivation economy needs support and protection everywhere instead of being exposed to global market forces and merciless competition. We claim that a new and different Global and Equitable Economic Order needs to be established to regulate trade and the industrial economy. Such a new Economic Order would respect the limits of the natural reserves of the globe and operate under the terms of climate and the biosphere to ensure the survival of humankind.

In the present situation the households, subsistence cultivation and small cooperatives are the only economic actors which still retain unused potential power over the market. The more access to production forces – including knowledge, skills and know-how – that people in small communities have, the more options they will have to develop livelihoods of their own. It is important that people and consumers have the right to decide for themselves how much of their work, skills, know-how and time, they are willing to sell to the labour market, and how much they are willing to buy of the goods and services available from the commodity market.

No household in the industrialised societies is fully self-reliant any more, but even as consumer units, the households have options to decide on the amount and selection of goods they buy, and to regulate their degree of dependence on the market. The pivotal assets are skills and money, but skills are more important than money. We have to realise what enormous "hidden market forces" constituting potential leverage of power there are in the hands of individuals, families and households. The unpaid production of goods and services in households alone would constitute the biggest single contribution to human wellbeing and the national GNPs in each country – if it were counted.[5]

The situation today has also intimidated *democracy* even in the countries where democracy has been fairly functional. The consumer movements have tried to mobilise consumer power to substitute for political power. However, these movements have realised only part of the strength of consumer power, since they have only encouraged people to make conscious choices between different products. Even this small use of potential power has been enough on several occasions to counteract the policies of transnational corporations.

The really powerful choice in the hands of people is to buy or not to buy. The point is to learn to consciously reject the impact of advertising, fashions, marketing and other manipulation as much as possible. We need to defend our minds against these actors and decide independently by ourselves, what we need and what we do not need.

[5] Varjonen & Aalto, 2006.

In fact, the market economy today is only a new disguise for the old capitalism which continues to flourish unabated in globalised form. The market economy has rendered our democratically elected governments and political institutions almost powerless. From the point of view of individuals and citizens, this situation is paralysing, which also makes us feel powerless ourselves. Since there are no foreseeable restraints on this process, there is not much choice but to denounce the values and rules on which the market capitalism operates: constant economic growth, excessive consumption, maximisation of profits and competition by everybody with everyone in everything and everywhere.

In the end, the entire picture of the human economy should be turned upside-down to turn it the right side up: the industrial and commercial economy should be seen as an auxiliary existing to serve the needs of people and families instead of using them as a means of production and consumption. This turnaround of the economy will never be made by the market or our democratic governments in today's world, therefore we have to do it ourselves. The most powerful weapon of democracy in the age of the globalised neoliberal economy is *consumer disobedience* against the power of the market.

References

Perkins, Ellie (1996). *Feminist Ecological Economics in a Nutshell.* Part of a lecture series. York University, Canada.

Pietilä, Hilkka (1997). The Triangle of the Human Economy: Household – Cultivation – Industrial Production. An Attempt at Making Visible the Human Economy in Toto. *Ecological Economics*, The Journal of the International Society for Ecological Economics, 20 No. 2 (1997) 113-127.

Pietilä, Hilkka (2007). *The Unpaid Work in Households – A Counterforce to Market Globalization*. Matriarchy & The Mountain VII, Centre of Alpine Ecology, December 2007.

Ruether, Rosemary Ratford (1983). Sexism and God-Talk: Toward a Feminist Theology, Boston.

Varjonen, Johanna & Aalto, Kristiina (2006). *Household Production and Consumption in Finland 2001.* Household Satellite Account, Statistics Finland, Helsinki, 2006.

Gift Circulation and Sustainable Cultures of Life

Kaarina Kailo[1]

There is a matrix of attitudes, practices, rituals and ideas about social arrangements that is referred to now as the *Feminist Gift Economy*, the *Give Back Philosophy*, the *Gift Imaginary* or the *Indigenous Gift Economy/Episteme*. It has emerged recently as a hope-enhancing philosophy and ethos of eco-ethical community-building relations. The paradigm offers an alternative logic for the European identity and world view while also promising to bring together both indigenous and non-indigenous "bad subjects" of colonial politics, united by a shared agenda of resistance in an imaginary community of cross-cultural vision makers.

I believe that we can draw upon both Western and Indigenous world views and knowledge systems existing at the boundaries of new global cartographies. Such a combination could create a synergy of different conceptions of social relations, ecology and technology that could help bring about a more sustainable and responsible vision for Europe's future.

Jürgen Kremer includes the gift economy among the new paradigms providing the possibility of healing the rifts created by the reified separation of the mind and the body, humans and animals, and all the other binaries serving to create hierarchical differences. Indeed, Genevieve Vaughan, the initiator of the research/activist group, The International Network of Feminists for a Gift Economy, describes the gift economy as a submerged human logic for responding unilaterally to needs, of giving value to another, a form of the 'rationality of care' that has been made invisible by the masculinised exchange economy and its focus on *homo economicus*, ego-oriented transactions and a meta logic that does not value giving and the circulation of care.

What then does the third process – a '*resisterhood*' by non-subjects of neoliberalism – involve, in more concrete terms? I believe the gift economy offers a much-needed alternative, albeit by no means the only one, to the ethos of competitive and profit-oriented neoliberal colonialism and the split into of us/them. Today's arch-utilitarian ethos is epitomised in the neoconservative economy, where the rights of stockholders are placed above all other considerations, as a kind of modern "first principle." We need to circulate and institutionalise a new "first principle", one that, paradoxically, we can locate easily in the archaic seed-beds of our ancestral archives—our eco-my-

[1] The author is a Docent at the University of Oulu in Finland and a senior researcher in women's issues, ecofeminism and ecomythology, the gender impact of globalisation, indigenous women's issues and gendered violence. Her other areas of specialisation include Northern women writers and cultures, gift economies, and ecomythology.

thologies. In eco-myth, the heroic epics with their narratives of violence and conquest have been replaced with an ethos of human, animal and transcultural interdependency.

The linear understanding of history as moving from an organic to a mechanistic worldview does not do justice to developments in the indigenous communities which have in many ways succeeded in even today continuing to honour a more organic set of traditions. However, ensuring everyone becomes more aware of the differences in the two logics, organic and mechanistic, is vital for the survival of Earth. In gift-based societies. people were (and in many cases still are) related to their physical and natural surroundings through a particular land ethic, through genealogies, oral traditions, and complex rituals aimed at reinforcing social bonds, ecological balance, and sustainability. In many of these systems of knowledge, concepts do not stand alone, but are constituted of elements from other, related ideas. The Gift functions primarily as a system of social relations with various types of alliances, forms of solidarity, and communal activities binding the groups together in a locally situated ethos of mutual survival, which stresses local democracy, self-sufficiency and sustainable communal infrastructures and relations.

The Gift – or 'give back' – oriented philosophy represents a concretisation of several abstract, theoretical principles and discursive dimensions. Through the gift economy, humans perceive themselves as being one part of a large self-regulating system where what happens to one pearl in creation's necklace affects them all. Lewis Hyde has analysed the notion of an indigenous "return gift," called among the Maori a "nourishing *hau*," as interspecies feedback. Without the gestures of giving back, humans act through greed or arrogance of will, and the cycle of human/animal interdependency can be broken.

Ecological salvation should not be sought in women or indigenous peoples as reverse categories to be glorified (angels in the ecosystem); rather, the worldview and the social attributes coded as "feminine" or "Native" need instead to be extended as the human norm to include all subjects of European and globalised cultures.

The gift economy has many affinities with eco-feminist and eco-critical theories, particularly when we focus on the key differences between, on the one hand, the patriarchal, hegemonic, 'master' identity with its focus on hierarchical dualisms, and, on the other hand, the gift paradigm with its focus on honouring, creating ties with, and giving importance to "an Other." According to eco-feminist Ariel Salleh: "Both dominated and empowered, women and other colonized subjects are well equipped, at this historical conjuncture, to take up the case for the preservation and respect for life. This does not imply a simple-minded essentialist way that women or natives are somehow 'closer to nature'".

Self-Sufficiency for Sustainability

Lasse Nordlund[1]

Around the mid-1980s, I became interested in self-sufficiency. Self-sufficiency provided me with a solution when I was finishing my schooling and unable to find a place in the dominant society. A strong desire to take part in building society clashed with gnawing issues of conscience: could I participate in developing a society, if I felt it was built on nothing?

The country I lived in at that time was Germany, where our family had migrated to from Finland in 1972. For me, self-sufficiency became synonymous with liberty of conscience. Producing everything I need by myself meant an opportunity to choose from the bottom of my heart what to put my labour into. In 1990 I returned to Finland. After a few initial years of endeavour, I got confirmation that the myth of the superiority of technical development is severely distorted. Farming by hand, collecting firewood without machines, and the skill of using "primitive techniques" showed me the actual relationship between a labour input and its product. The use of resources changes dramatically, when one must acquire them by hand. I started theorising about my early experiences, and the result was a text: "*The Foundations of Our Life*" that has now been published in several languages.

For several years, I lectured around Finland in the wintertime, but then I wanted to become thoroughly self-sufficient and test my theory in practice. I was surprised by how little money one can get by with: my dependency on money would drop to 30-50 Euros a year. There were not many corrections I would have to make to the conclusions in my lecture. Since then I have spent my years farming, and I have also found time for hobbies and participation in society. At the moment my studies have shifted more towards community. At the outset, my project was an individual's project, and a rather stringent one. Currently, I am interested in how far it can be applied communally and to living within a family.

Experiences of Resource Use on a Self-Sufficient Farm

Considering both global and local events, I have concluded that the overall most effective force for change has to come from the grassroots level. It is not all-powerful, but neither is any other way or actor.

From 1992 through 2004 I lived a self-sustaining life in Valtimo, in the northern part of North Karelia in Finland. The way people work with self-sufficiency is simi-

[1] The author is a farmer and social thinker living in Valtimo, Finland, who occasionally trains people in matters of self-sufficiency.

lar all around the world. A single human being, buying no food whatsoever, needs surprisingly little arable land to feed himself throughout the year. Approximately 500 square metres (1/8th of an acre) is sufficient if one picks mushrooms and berries and can be thrifty. I consume about 200 kilos of mushrooms a year, most of which I dry. I pick about the same amount of berries, and I preserve them using a special method that employs no hermetic sealing and no additives – not even sugar. Inverting the jars regularly keeps the berries in excellent condition for years.

In running a self-sufficient economy, I aim to do things from beginning to end by hand as much as possible. To make cloth I wish to build a spinning-wheel to make yarn. If possible, I try to make the tools needed to make the spinning-wheel as well.

All food farming begins by composting the outhouse and house waste well. Land is tilled with a hoe and fertilised with compost, using a pitchfork. Firewood I collect with a human-pulled cart and a hand saw. To make clothes I begin by shearing sheep and cultivating flax. I go on to spin thread which I then weave into cloth. Linen thread I have mainly used to make fishing implements. Baskets I make from willow.

A spinning wheel made exclusively of wood by the author.

The working time needed to reach this level of self-sufficiency is about half a day, provided that working time is spread evenly across the whole year. Eating meat is not necessary. Over time I have returned to my vegetarian diet. Living near a lake, fishing is a more economical way to get food than keeping animals. Hunting might be in the order of energy input between fishing and keeping animals – depending certainly on circumstances.

Grazing animals utilises them for energy collection. They convert plant nutrients into meat, which we then eat. Animal husbandry, excluding indigenous reindeer

herding, is not necessarily advantageous in terms of energy collection, especially here in the north. The long season when animals must be fed indoors means that preparing the animal feed takes a lot of work. Given the amount of work that is needed to keep animals, one can collect more energy by farming than by eating meat. On the other hand, wool and leather are superior materials for making clothes, and replacing them with linen causes a lot of extra work. Keeping animals imposes a very regular working routine, making it more difficult to optimise other job complexes, which in turn reduces the efficiency of animal husbandry when compared to a livestock-free natural economy. Whether a natural economy prospers or not depends largely on weather conditions, and on one's ability to schedule tasks for the most suitable occasions.

In Finland, it is often taken for granted that horses are needed in a natural economy. However, the upkeep of a horse is no minor issue, and a horse can easily eat what its work is worth. In a natural economy one should minimise risks, and animal husbandry always means surprises one must be prepared for. In order to plough, a horse needs an already cleared field, and ploughed fields need machines and tools a vegetable gardener does not need. I have not found any reason to get a horse, but instead have found many reasons not to get one.

I believe horses became common on Finnish farms because the farmer was not free. Taxation in particular forced the people to produce goods that do not spoil, such as tar and cereals. The heavy logging needed for tar burning required horses, and once acquired, the horse could just as well be used for farming, too. A peasant's life was hard because the peasant's economy could not be organised simply, according to natural circumstances. The peasant is what keeps the society standing, so authorities have tried to control the peasant throughout history.

The conflict between the unknown paths travelled by our contemporary society, and the well-tried ways of a natural economy, is obvious. When will it be time to admit that only a natural economy, that has been practised throughout human history, offers us a reliable model of a sustainable coexistence of humans and Nature?

An inflexibility of the mind and the spirit, our ability to prove to ourselves anything we wish to believe, is the strongest obstacle on the way to understanding other possibilities. Our unlimited desire to make experiments favours the invention of wilder and wilder plans to solve our accumulating energy deficit problems. At times, these plans seem like sheer escape into fantasy. To slow down climate change, some researchers have considered separating carbon dioxide from the air in large industrial plants, and then pumping it underground. This plan would need energy and resources. A creeping uncertainty of our course will always push some people to labour even more frantically in the same direction as before. The fact that humanity has survived and even created advanced cultures without combustion engines is of no interest to these people.

Rapid Social Change as a Pre-Requisite for Preventing Global Climate Catastrophe

Olli Tammilehto[1]

Our ecological situation on Earth is very precarious. We are on the verge of a global climate catastrophe. Humanity has only a short period of time to change its metabolism to be in tune with the rest of Nature. According to leading climate scientists, if we do not decrease the emission of greenhouse gases very rapidly, a self-perpetuating climate change will start which will ultimately lead to the death of billions of people, the loss of half of the biodiversity of Earth, and to most of the planet becoming uninhabitable. For technical and political reasons, it is not possible to make the needed emission reductions through technical fixes alone. A rapid change in social structures, including changes in power relations, is needed. This paper tries to show that such change is within the bounds of possibility. The argument is based on analogous historical experiences, on the nature of social reality today, on the structure of human subjectivity, and on dissatisfying consumption.

Accelerating Climate Change

According to Intergovernmental Panel on Climate Change, a cut of 85% in carbon emissions is needed by the year 2050 if we are to keep the carbon dioxide concentration in the atmosphere below 400 parts per million, and the rise in average global temperature below 2°C.[2] Above those levels, it may not be possible to prevent some potentially catastrophic processes, such as the death of the Amazon rainforest and a rise in sea level of several meters. To attain such a target, the global North should reduce its emissions much more – by at least 95%.[3] Fairness demands this should be the case, because the old industrial countries are responsible for most of the historical emissions now threatening the planet through climate change.

However, the IPCC's target for emission cuts is probably too moderate. Many leading climate scientists say that the global climate is much more sensitive to greenhouse gas emissions and other radiative forcing than the IPCC's models estimate.[4] In fact, climate change during the last years has been more rapid than the IPCC predicted.[5]

[1] The author is a free-lance researcher and activist based in the village of Fiskars in Finland.
[2] Barker et al., 2007; IPCC 2007; Hawkins et al., 2008.
[3] Hawkins et al., 2008, p. 14.
[4] See e.g. (here and in the following) Hansen et al., 2007; Kerr 2007; Oppenheimer et al., 2007.
[5] On losing the Arctic sea ice, see Tin 2008; on the melting Arctic permafrost, see Monbiot 2008.

Accordingly, emission reductions should be even more drastic and rapid. In a few decades we should stop greenhouse gas emission altogether. Even that would probably not be enough: According to several leading climate scientists, even the present carbon dioxide level of 385 ppm is too much and should be reduced to 350 ppm or lower.[6] This means that a large part of the carbon assimilated from the air by green plants should not be used, instead it should be left to be stored by natural processes or by human efforts.

Mainstream Solutions

The mainstream response to the situation is to propose some technical fixes: capturing carbon dioxide from the coal power plants, building nuclear power stations, planting trees, increasing renewable energy, raising the efficiency of energy use, etc. However, there are many technical constraints that prevent the deployment of these technologies rapidly and extensively enough to combat climate change.

The present system of energy production and consumption has absorbed enormous investments for half a century or more. If you have enough time, you could replace or renovate it completely without difficulties: the components of the system wear out anyway and must be replaced. But to do so in a few decades – as would be necessary in a solely technical change model – is impossible: you cannot deploy enough skilled workers, materials and energy in time. In any case, a rapid replacement program would require so much energy that positive net energy to replace fossil fuels could only be achieved after many decades. Instead, such a programme would, for the time being, increase the use of fossil fuels.[7]

Even if some of the fixes could technically be realised very rapidly, the present social constraints forestall this. One of them is the existence of big oil companies which want to maintain their position and which have enormous political power to carry out their will. However, the most important constraint is the general character of the present economic system. No emission reduction programme will be allowed to take place that would increase the expenses of business companies too much or would stop economic growth.

The hopelessness of the mainstream solutions for the grave problems of climate change is underlined by the record for mitigation efforts up to now. Even though there have been many local successes in decreasing greenhouse gas emissions, they have not cumulated on the global level. Instead, emissions have grown recently at a faster pace than ever. Global carbon dioxide emissions grew 1.1% per year between 1990 and 1999, but more than 3% per year between 2000 and 2004. The emissions

[6] Hansen et al., 2008; Hawkins et al., 2008.
[7] Astyk 2008.

growth since 2000 was faster than in any of the scenarios used by the IPCC.[8]

This deadlock has created despair in many people who understand the precariousness of our ecological situation. When they see no prospect for rapid change of the human energy system, they instead want to embark on the ultimate technical fix: to change the physical characteristics of the planet Earth. Some scientists, in a state of panic, in cooperation with entrepreneurs who work with them, plan risky geo-engineering projects to avert the approaching climate catastrophe. Many of these – for example spreading a large amount of sulphates into the atmosphere – are very dangerous.[9]

Growth Imperative as a Stumbling Block

Yet an obvious solution to the climate change dilemma is to cut down production in general and reduce institutional consumption, as well as individual consumption of the global upper and middle class. This alternative is hardly mentioned in the mainstream discourse. The reason for the silence is the same as the reason for the social constraints slowing down the deployment of non-carbon technologies: practically all the nations on Earth are in the grip of the growth imperative.

Why is economic growth so important? One reason is that we live in societies in which the key units are profit-seeking corporations. But this alone does not explain the growth imperative because, besides seeking their own success and growth, companies are also after the death of their competitors. In this situation, net growth could also be negative. But negative or zero growth in capitalism means increasing unemployment and social instability.

On the other hand, economic growth functions as an ideology that promises better living and prosperity for all. It works as a surrogate democracy under which the enormous gaps in power and wealth generated by capitalism can be maintained.

This has been the case especially in Europe and North America since the beginning of the 20th century. To curb the rising tide of social change movements, the powers that be had to devise a new method of ruling. The new order, later to be called 'fordism', was invented. It was based on mass production of relatively cheap consumer items, the types and models of which were changed regularly, and the necessity of which was inculcated in people by a new propaganda system which worked on a subconscious level.[10] Consumerism has ever since been the key ideology used to maintain power relations; and consumerism needs economic growth to function.[11]

Accordingly, one – and possibly the only – way to avert climate catastrophe is to

[8] Tin 2008.
[9] Isomaki 2007; Fausel 2008.
[10] Carey 1997; Chomsky 1989.
[11] Sklair 2002.

get rid of the growth imperative, and dethrone corporations. This change would probably be accompanied by the birth of real democracy and a vast increase in social equality: if the surrogate democracy constructed ideologically by the prospect of everyone becoming rich would cease to exist, it would be very difficult to suppress people's centuries-old yearning for the real thing. However, the chances of this happening in the near future seem very slim. But there are reasons why we still have hope.

Social change movements exist, and there are historical experiences indicating that in dire situations these movements can change and grow rapidly. History also teaches us that the combination of ongoing social struggles and a sudden crisis can cause a rapid structural change in society.

Really Existed Revolutions

To take this possibility of rapid structural change seriously, and to learn lessons from history, we must first deal with several questionable assumptions. One of those is that all historical revolutions have been especially violent and that the violence was due to a small fanatic minority imposing the revolution on the rest of the population. This is, however, only one of the possible readings of the historical record. Another reading is that revolutions as people's uprisings, and starting points for the process of building new social structures, have often been rather non-violent. The violence associated with revolutions is caused most often by those forces within and outside the country that want to stop the revolution, and from the fact that these revolutions have happened during a war.[12]

For example, relatively little fighting was needed to overthrow the Batista regime in Cuba, because of the widespread dissatisfaction and the massive uprising of the people.[13] In Russia, only modest violence was required to topple the tsar and the following provisional regime, and to start to organise the economy democratically.. However, the Bolsheviks needed massive violence to stop the revolutionary people from hollowing out the basis of centralised power in the country.[14]

Parallel Society

Another hidden assumption making major social changes appear impossible is that people and society really are what you see in the official institutions. Society is defined as the state plus the official economy. From this perspective, society is by and large a well-functioning whole, which it is possible to change only modestly.

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[12] Bookchin 1996; Foran 2002; Graeber 2004.
[13] Paige 2002.
[14] Goldman 1970; Brinton 1975[1970]; Voline 1990[1947].

But underneath and parallel to the official structures and roles, there is another world of thought, activity and social relations. A consumer may curse the market-chain because she must again buy tomatoes from Spain sprayed with poison, and bread full of additives. A well-paid employee may hate his socially irresponsible employer and plan how he could use his inside knowledge to sabotage the company. An unemployed engineer may organise an exchange circle in her neighbourhood and feel that for once she is doing something important. An investor may read histories of revolutions and dream about a new social upheaval. A retired teacher may be an active member of a social justice group and learn to appreciate the views of young and radical fellow-activists.

A very important point is that the majority of these and other dutiful citizens, workers and consumers are also mothers and fathers. When their children are small, they produce an enormous amount of cooked food, house cleaning, childcare, and other essential services in their home, for which they are not paid. Usually the only thing preventing them from breaking down under the workload is the help given by informal circles of friends, relatives, neighbours and peers.

The informal unpaid work done by parents, the unemployed, retired pensioners and other people, as well as the social relations supporting this work, form a system so extensive that one can speak about an alternative economy existing in the middle of any modern society. It is not based on the logic of markets or capitalism, nor is it a planned economy. It resembles the gift economy recorded in many anthropological studies.[15] However, because barter, and informal, socially embedded market relations also occur in it, it is not a pure gift economy. Maria Mies and some other German anthropologists have started to call it a 'subsistence' economy.[16] In the global South this economy is of course even more important than in the North.

Common Wealth

In addition to subsistence economy and partly overlapping with it, there is another already existing alternative economy: that based on common wealth created by nature and cultures. Concrete manifestations of material common wealth are, for instance, the air that we breathe, the sun that warms us, the winds that cool us, the very climate we try to save, the ability of most women to give birth, wild animals and plants, rivers and most lakes, oceans, deserts and a large part of the forested areas, cities and villages, public libraries, schools, hospitals and cheap public transportation systems. Non-material examples are most of the genetic information and scientific knowledge, open-source software like Linux, local knowledge, folk wisdom and common sense,

[15] On gift economy, see Mauss 1970;Temple 1988.
[16] Alfredo L. de Romaña calls it "autonomous economy", Romaña 1989; Bennholdt-Thomsen & Mies 1999; Bennholdt-Thomsen et al., 2001.

folklore and a large part of popular and high culture.[17]

Accordingly, the informal sphere of the society is not at all of marginal importance: its proper functioning and continuing existence are often a matter of life and death. Therefore, people are often ready to fight if this economy is threatened. These conflicts are widespread because from the official perspective, the informal sector contains only poorly utilized resources that must be brought into productive use. In the fight to defend the informal economy, alternative forms of political organizing and democratic decision making develop.[18]

Thus, both in politics and in economy, a wide variety of such important activities are going on all the time., These activities include social interactions, group formations and other processes which are not integrated into the official institutions. The institutionalisation process of the society is incomplete and open. In a way, there exists a 'social surplus' that makes society more flexible and explains many phenomena which cannot be accounted for if one looks only at the institutional structures.

The same applies on the individual level to the formation of the individual as a subject. The personality of a woman or a man acting both in official and informal roles is not a unified, seamless whole, but has many fractures. This inconsistency is compounded by the fact that official institutions are full of internal contradictions, and often the dominant ideology is incapable of containing them.[19] For instance, the official doctrines and policies of states and companies are full of noble principles, the emptiness of which is obvious for many insiders. This "subjective surplus" is partly channelled into unofficial activities, partly it exists only as dreams and as potentiality for a future society. Thus, even under the polished face of the most loyal and diligent worker and citizen there may be a surprise waiting.

Furthermore, the official social institutions such as states and companies are not static formations but social processes that must be created anew all the time. They are full of internal cleavages and struggles. Workers and employees, on the one hand, and owners and employers, on the other hand, are often pulling strings in opposite directions and want to get rid of each other.[20]

This all means that when a major social change is happening, its motor is the social and subjective surplus, which comes more and more from the background to the fore. The primary front-line between the old order and the new horizon is not the one between 'them' and 'us'. Instead, it is a change that will divide almost every individual from the inside. In this perspective, the question of violence in major social changes can be seen in new light: You have no reason to kill a person if half of him is already

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[17] Berkes 1989; Lummis 1996; McMurtry 1999; Bollier 2002; Tammilehto 2003.
[18] Abramsky 2001; Graeber 2004; Solnit 2004.
[19] On fractured subject, see Foucault 1972; Henriques et al., 1984; Fairclough 1989.
[20] Holloway 2002.

on your side and the other half may follow. There is no need to violently impose a revolution on others if most of them are already partly in the movement for social change or on the threshold of joining it.

Consumption That Does Not Satisfy

The third assumption that makes it difficult to think beyond the present social arrangements is the idea about the positive correlation between high levels of consumption and improved human well-being. However, a great number of surveys and studies show that after a certain, rather low, threshold is reached, consuming more does not make people more satisfied or happier. For example, when asked in the beginning of 1990s whether people are happy, over 90% of the Indonesians, the Filipinos, the Malaysians and the residents of Hong Kong answered affirmatively, but only 64% of the rich Japanese regarded themselves as happy. In the USA people were happier in 1950 compared to 1990, although the GNP per capita doubled in that period.[21]

Even though these results on the relationship of consumerism and wellbeing may look like statistical aberrations, they have a simple explanation: While economic theory postulates humans as material beings, marketing – taught in another corner of institutes of economics – regards people as social and spiritual beings. In advertisements, commodities are made into symbols of the most varied things: strength, beauty, artistry, skilfulness, trustfulness, intelligence, social success, masculinity, femininity, sex, naturalness, Nature experiences, a social group, dominance. Commodities are bought because of their social, cultural and spiritual meanings and connotations, but usually they do not satisfy social, cultural and spiritual needs. Even if they do satisfy, they do it only for a short while: Soon meanings are shifted by advertisements from old products to new products. Yet you cannot buy the new things at once – or perhaps ever. The consequence is frustration and dissatisfaction.[22] Way back in the 1920s, Charles Kettering of General Motors stated: "The key to economic prosperity is organized creation of dissatisfaction."[23]

Meanings are also manipulated within a wider cultural arena in the commercial media. Leaders and public figures are made into idols of certain consumer lifestyles. Living according to the models is possible only for a few. The results of trying to live like the idols include eating disorders and the depression epidemic.[24]

[21] Easterlin 1997; Hansson 2006; Veenhoven 2008.
[22] Leiss 1978; McCracken 1988.
[23] Rifkin 1994.
[24] Cato 2006; Levine 2007.

Conclusion

To avoid climate catastrophe, humanity must decrease its greenhouse gas emissions very rapidly. This is not possible with technical fixes alone. What is defined as production and consumption in the official economy must be cut down. This, however, is not possible within the present social system because it is based on the growth imperative. Therefore, basic social structures must be rapidly changed by social movements. This may be possible, because analogous changes have occurred in history without large-scale violence. Social resources and the energy for such an upheaval could be tapped from the social and subjective 'surplus' created by the fractured nature of present societies and the corresponding cleavages in human psyches. In such a process of social change, abandoning the consumer society may turn out to be surprisingly painless, because modern consumption is inherently dissatisfying. Economic growth and the consumption utopia have been used as excuses and surrogates to prevent consumers from realising the values of democracy and equity shared by the majority of people. Hence, there is a chance that out of the transformation, in addition to a rescued climate, an equitable economy and a genuinely democratic polity would also emerge.

Bibliography

Abramsky, Kolya (ed.) (2001). *Restructuring and Resistance, Diverse Voices of Struggle in Western Europe.* Resres Books, London.

Astyk, Sharon (2008). *A New Deal or a War Footing? Thinking Through Our Response to Climate Change.* Casaubon's Book, Sharon Astyk's Ruminations on an Ambiguous Future. http://sharonastyk.com/2008/11/11/a-new-deal-or-a-war-footing-thinking-through-our-response-to-climate-change/

Barker, T.; I. Bashmakov; L. Bernstein; J. E. Bogner; P. R. Bosch; R. Dave et al. (2007). Technical Summary. In: Metz, B.; O. R. Davidson; P. R. Bosch; R. Dave & L. A. Meyer (eds.) *Climate Change 2007: Mitigation. Contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change.* Cambridge University Press, Cambridge.

Bennholdt-Thomsen, Veronika & Maria Mies (1999). *The Subsistence Perspective, Beyond the Globalized Economy.* Zed Books, London.

Bennholdt-Thomsen, Veronika; Nicholas Faraclas & Claudia von Werlhof (eds.) (2001). *There is an Alternative: Subsistence and World-Wide Resistance to Corporate Globalization.* Zed Books, London.

Berkes, Fikret (ed.) (1989). *Common Property Resources, Ecology and Community-Based Sustainable Development. Belhaven,* London.

Bollier, David (2002). *Silent Theft, The Private Plunder of Our Common Wealth.* Routledge, New York.

Bookchin, Murray (1996). *The Third Revolution: Popular Movements in the Revolutionary Era, Vol. I. Cassell*, London.

Brinton, Maurice (1975[1970]). *The Bolsheviks & Workers' Control 1917 to 1921, The State and Counter-Revolution*. Solidarity and Black & Red, London & Detroit. http://www.spunk.org/texts/places/russia/sp001861/bolintro.html

Carey, Alex (1997). *Taking the Risk Out of Democracy, Corporate Propaganda Versus Freedom and Liberty.* University of Illinois Press, Urbana.

Cato, Molly Scott (2006). *Market, Schmarket: Building the Post-Capitalist Economy.* New Clarion Press, Cheltenham, UK.

Chomsky, Noam (1989). *Necessary Illusions, Thought Control in Democratic Societies.* CBC Enterprises, Montreal.

Easterlin, Richard (1997). Will Raising the Incomes of All Increase the Happiness of All?. In: Goodwin, Neva R.; F. Ackerman & D. Kiron (eds.). *The Consumer Society*. Island Press, Washington DC.

Fairclough, Norman (1989). *Language and Power.* Longman, London.

Fausel, Claire (2008). *Techno-Fixes: A Critical Guide to Climate Change Technologies.* Corporate Watch, London. http://www.corporatewatch.org.uk/download.php?id=88

Foran, John (ed.) (2002). *The Future of Revolutions, Rethinking Radical Change in the Age of Globalization.* Zed, London.

Foucault, Michel (1972). *The Archaeology of Knowledge and the Discourse on Language.* Pantheon, New York.

Goldman, Emma (1970). *Living My Life, Vol. I-II.* Dover, New York. http://dwardmac.pitzer.edu/ANARCHIST_ARCHIVES/goldman/living/livingtoc.html

Graeber, David (2004). *Fragments of an Anarchist Anthropology.* Prickly Paradigm Press, Chigaco. http://www.prickly-paradigm.com/paradigm14.pdf

Hansen, J.; M. Sato; P. Kharecha; D.W. Lea & M. Siddall (2007). Climate Change and Trace Gases. *Philosophical Transactions of The Royal Society A, No. 365/2007,* 1925-1954. http://pubs.giss.nasa.gov/abstracts/2007/Hansen_etal_2.html

Hansen, J.; M. Sato; P. Kharecha; D. Beerling; R. Berner; V. Masson-Delmotte et al., (2008). Target Atmospheric CO_2: Where Should Humanity Aim?. *The Open Atmospheric Science Journal,* No. /2, 217-231. http://arxiv.org/pdf/0804.1126v3

Hansson, Malin (2006). *Economic Growth and Happiness in the Western World Today.* Department of Sociology, University of Lund. http://theses.lub.lu.se/archive/2007/11/13/1194978533-15483-261/Hansson_Malin.pdf

Hawkins, Richard; Christian Hunt; Tim Holmes & Tim Helweg-Larsen (2008). *Climate Safety.* Public Interest Research Centre, Machynlleth, Wales. .http://climatesafety.org/downloads/climatesafety.pdf

Henriques, Julia; Wendy Hollway; Cathy Urwin; Couze Venn & Valerie Walkerdine (1984). Changing the Subject: Psychology, Social Regulation and Subjectivity. Methuen, London.

Holloway, John (2002). *Change the World Without Taking Power, The Meaning of Revolution Today*. Pluto Press, London.

IPCC (2007). *Summary for Policymakers of the Synthesis Report of the IPCC Fourth Assessment Report.* Intergovernmental Panel on Climate Change. http://www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4_syr_spm.pdf

Isomaki, Risto (2007). *34 Ways to Stop Global Warming, From Reasonable Options to Mad Scientist Solutions.* South Asian Dialogues on Ecological Democracy (SADED)/Centre for the Study of Developing Societies (CSDS), New Delhi. http://www.luebbe.de/C1256E310032D713/Files/985087C269ED34BDC12574010032E16C/$File/34_Ways_to_Stop_Global_Warming.pdf

Kerr, Richard A. (2007). Pushing the Scary Side of Global Warming. *Science*, No. 5830/***316***, 1412– 1415.

Leiss, William (1978). *The Limits to Satisfaction, On Needs and Commodities.* Marion Boyars, London.

Levine, Bruce E. (2007). Mass Society and Mass Depression. *The Ecologist*, No. October/2007, 48-51.

Lummis, C. Douglas (1996). *Radical Democracy.* Cornell University Press, Ithaca.

Mauss, Marcel (1970). *The Gift Forms and Functions of Exchange in Archaic Societies*. Routledge & Kegan Paul, London.

McCracken, Grant (1988). *Culture and Consumption, New Approaches to the Symbolic Character of Consumer Goods and Activities.* Indiana University Press, Bloomington.

McMurtry, John (1999). *The Cancer Stage of Capitalism*. Pluto, London.

Monbiot, George (2008). One Shot Left. *Guardian*, No. November 25, 2008. http://www.monbiot.com/archives/2008/11/25/one-shot-left/

Oppenheimer, Michael; Brian C. O'Neill; Mort Webster & Shardul Agrawala (2007). The Limits of Consensus. *Science*, No. 5844/317, 1505–1506.

Paige, Jeffry M. (2002). Finding the Revolutionary in the Revolution: Social Science Concepts and the Future of Revolution. In: Foran, John (ed.) *The Future of Revolutions, Rethinking Radical Change in the Age of Globalization.* Zed, London, 19-29.

Rifkin, Jeremy (1994). Laid off! Computer Technologies and Re-Engineered Workplace. *The Ecologist*, No. 5/24, 182-188.

Romaña, Alfredo L de (1989). An Emerging Alternative to Industrial Society, The Autonomous Economy, Part 1: The Vernacular/Informal Sphere vis-à-vis the Formal/Industrial Sector. *Interculture*, No. 3/XXII, 79-169.

Sklair, Leslie (2002). *Globalization, Capitalism & Its Alternative.* Oxford University Press, Oxford.

Solnit, David (ed.) (2004). *Globalize Liberation, How to Uproot the System and Build a Better World.* City Lights Books, San Francisco.

Tammilehto, Olli (2003). *Globalisation and Dimensions of Poverty.* Ministry of Foreign Affairs, Department for International Development Cooperation, Helsinki. http://www.tammilehto.info/tammilehto_globalisation.pdf

Temple, Dominique (1988). The Policy of the 'Severed Flower', A letter to the Kanak. *Interculture,* No. 98/1988, 10-35.

Tin, Tina (2008). *Climate Change: Faster, Stronger, Sooner, A European Update of Climate Science, An Overview of the Climate Science Published Since the UN IPCC Fourth Assessment Report.* WWF European Policy Office, Brussels. http://assets.panda.org/downloads/wwf_science_paper_october_2008.pdf

Veenhoven, Ruut (2008). *World Database of Happiness, Continuous Register of Scientific Research on Subjective Appreciation of Life.* http://www1.eur.nl/fsw/happiness/

Voline (1990[1947]). *The Unknown Revolution*. Black Rose Books, Montreal.

What We Can Do to Prevent the Overheating of the Planet

Risto Isomäki[1]

Why is global warming a very serious issue? If the climate heats by a couple of degrees centigrade, the average strength of hurricanes and typhoons will increase by 50% or so. The annual number of cyclones might also increase. We might lose 15% of the world's rice crop with every degree of global warming. Up to five billion people might soon suffer from an acute lack of irrigation water, partly because of the global warming. The rise in sea level from global warming will probably become the most important single issue of the 21st century. Almost three-quarters of the human population lives in coastal zones which may be in danger from rising sea levels. Most of our fertile farmlands and large cities are located on these coastal lowlands.

Large tsunamis triggered by global warming may also become a serious issue.

What We Can Do to Stop the Warming

There are hundreds of different things that can and should be done as soon as possible to prevent a "greenhouse catastrophe". Below are seven of them:

1. ***Abstaining from Meat***

Meat production is responsible for about 20% to 50% of all human-made greenhouse gas emissions. While meat production is clearly a major cause for greenhouse gas emissions, it is also largely responsible for our present water crises, and might cause approximately one-half of all clearly premature human deaths on our planet.

2. ***Clean Cooking Energy for Everybody***

It has been estimated that between 2 and 7 million people die prematurely, every year, because of their exposure to small particles of pollution, which mostly come from cooking. Soot might already contribute more to the heating of the Arctic than the greenhouse gas emissions; it has been responsible for 33% to 94% of the warming of the Arctic.

In the Himalayas, soot is the most important factor contributing to the melting of the glaciers. If the melting of the Himalayan glaciers continues, the Indus, Ganges, Huang Ho and Yangtze could soon become totally dry during the dry season.

[1] Risto Isomäki is an acclaimed writer and senior activist associated with the Coalition for Environment and Development and several other environmental organisations.

In South Asia, most of the soot is produced by small, biomass-burning stoves and by the burning of biomass on the fields. Therefore, the most cost-effective way to reduce South Asia's contribution to global warming would be to distribute, to each family, a solar cooker and a so-called Anila stove. If produced in very large quantities, such a package of two different stoves would probably cost less than Rs. 5,000 (c. € 75 or USD 105).

3. *Ancient Ways of Absorbing Carbon from the Air*

In the Amazons there are patches of deep, dark, fertile soils which can contain up to two metres of soil rich in nutrients, humus and organic carbon. They are artificial creations known as *terra preta do Indio*, or the Amazonian dark soils.

The Amazonian people used to mix charcoal and all kinds of waste matter into the soil. The nutrients which stuck to the small charcoal particles did not get washed away nor drained into the deeper soil layers by the heavy rains. This resulted in enriched bacterial and fungal growth in the soil, and a gradual accumulation of humus which, in turn, increased the soil's moisture-holding capacity.

In recent field trials, the plots which received both charcoal and fertiliser yielded nine times larger crops than the patches which were treated with a similar dose of fertiliser only.

This is a highly significant finding, because the production of chemical fertilisers consumes a great deal of energy and causes large carbon dioxide emissions.

4. *Protecting and Regenerating the Mangrove Forests*

The world still has about 24 million hectares of mangrove forests. According to one estimate, Africa has lost at least 55% and Asia at least 58% of its mangroves. The prop roots of mangroves form very efficient and cheap natural breakers against tsunamis and flood waves (storm surges) caused by typhoons. Mangroves also act as the foundations of unique ecosystems. Even more important is the fact that mangrove forests are very, very efficient carbon sinks. The remaining mangroves may remove around 300 million tons of carbon from the atmosphere every year.

5. Planting Large, Food-producing Trees

One of the easiest ways of removing huge amounts of carbon dioxide from the air is to plant more trees, or to let the already existing trees grow larger.

The queen of all the world's carbon storage trees could be the African baobab, the wooden elephant. Baobabs do not burn in any kind of forest fires. Carbon stored in a baobab is carbon safely stored. African baobabs are, in many countries, considered the most useful of all trees. Planting more baobabs would be one way of helping stop global warming.

6. *Solar Electricity*

At present electricity is mostly produced by steam turbines. Most steam turbines are produced by a small handful of very large companies in Europe and North America. The larger the steam turbines, the more economical they are. The result is a highly centralised power grid and a highly centralised market for electricity. This means that individual households and small companies end up subsidising giant companies. This leads further to an extreme concentration of wealth and income into fewer and fewer hands.

However, solar power can be produced with either large or small units. If power can be produced in small units at the village level, small and middle-sized companies can become more profitable than giant factories. The large companies will then lose their subsidies.

A shift to a solar economy might be a way to create a more democratic and equal society, and to revitalise the Gandhian vision of Gram Swaraj (village self-rule), by involving several millions of semi-independent village republics or local economies.

A shift to solar power will also reduce the wealth and income differences between the various continents, because the continents that are now the wealthiest have much less solar energy than Asia, Africa and Latin America.

7. *Back to Propeller Planes, Airships and Wind-Powered Passenger Ships*

Air traffic currently produces only two or three percent of all manmade carbon dioxide emissions, but it is growing at a very rapid rate. Moreover, the condensation trails – the white, straight lines of ice crystals left in the sky by the jet planes – heat the planet at least three and possibly ten times more effectively than the carbon dioxide produced by air traffic.

We should demand a global return to propeller planes. Jet planes are a little bit faster than propeller planes; however, propeller planes produce only one-half of the carbon dioxide emissions of the jet planes. Above all, they do not produce condensation trails because they fly at a lower altitude. Thus, their combined global warming impact would probably amount to only 5% of the impact of the jet planes.

Besides the propeller planes, we could also use modern airships and wind-powered passenger ships. They would be, from the viewpoint of the environment, an even better choice than the propeller planes.

Our Green Socialist Feminist Century

Thomas Wallgren[1]

Every day, in every village and neighbourhood, at every workplace and school, in every forest and every field and even in every army barrack, people build dignity, justice and prosperity for all living beings. We must hold fast to this simple fact, despite the wars, the genocidal imperial capitalism and the ecological crisis. The most important forces for change are the daily struggles that engage billions of individuals in their common lives.

People everywhere are keeping alive the old cultural values and creating new ones that place solidarity, truth and joy ahead of competition and greed.

It is true that the present world order is such that our egoistic drives and aggressive impulses are often easier to realise than our desire for friendship and search for conviviality. The dream of a consumer paradise has invaded and shaped the imagination of almost all the people of the planet.

However, this is not the whole truth. We are also struggling to find ways to transcend this state of degradation. We are saddened and angry with ourselves and others, but we are also hopeful and creative.

Everywhere mothers hold on to their babies, men passing by extend their hand to strangers in need, there is love that overcomes all fears, millionaires secretly give way to their burning desire to serve the poor, the oppressed stand up together and fight, people celebrate their victories and share their grief in moments of defeat.

There is a culture of resistance, struggle, joy, solidarity, and change that makes a green, socialist, feminist century a reality, even if only in part, this very day.

Cultural struggle needs as its arms and legs common action and organisation, politics by the people, and technologies and economies in the service of democracy and self-reliance.

The politics we need are a non-hierarchical, multipolar politics of truth-force, *satyagraha,* organised as comprehensive democracy at all levels from family and neighbourhood to geographical regions and the entire globe. This politics should be evident in all dimensions of life, including democracy of gender, ecology, politics, economics, culture and knowledge. We see it emerging in the increasingly non-competitive relations between, on the one hand, new local and global movements, such as the political movements of peasants, landless rural workers, feminists, environmentalists, zapatistas, indigenous peoples, and the new movements of the old political organisa-

[1] The author is a philosopher and activist living in Helsinki, Finland.

tions such as the Confederation of Free Trade Unions, and the national socialist, communist, green, and agrarian parties.

This movement of movements has a common direction and many different answers. The answers do not form a coherent whole. Rather, an intense process of joint learning has started, for which the World Social Forum may be the single most important experiment so far. This new historical force is young and it is still unnamed. We should have no illusions about its strength. However, it may be growing, as can be seen on every International Women's Day (8th of March), every International Peasants' Day (17th of April), every International Workers' Day (1st of May), and on every September 11th, the day we commemorate the birth of *satyagraha*, Gandhi's civil disobedience, as a new political technology for our times, following the events that that happened in Johannesburg in South Africa on that day in 1906.

Welcome green, socialist, feminist century – we are eager to hear your real name.

Sustainable Futures presents the results of a worldwide search for sustainable cultures: past, present and future. A sustainable culture is understood as one that incorporates environmental sustainability and promotes human dignity for all.

The editors, Marko Ulvila and Jarna Pasanen, take an innovative look at the dynamics of environmental problems from a cultural class perspective. They define three cultural classes – over-consuming, sustainable and struggling – and describe different future scenarios for each of them. The growth imperative and hierarchic structures are defined as root causes for unsustainability, and sustainable alternatives are presented in the book.

Sustainable Futures also contains a thematic selection of commentary taken from eleven international dialogue workshops convened by the **Sustainable Futures Project,** as well as summaries or excerpts from articles commissioned by the Project. Commentators and authors include Petra Bakewell-Stone, Mamata Dash, Hilkka Pietilä, Vijay Pratap, Ritu Priya, Sebastian Rodrigues and Olli Tammilehto.

ELEMENTS for DISCUSSION

Development Communication
PO BOX 456
FI-00023 GOVERNMENT
FINLAND
Telephone: +358 9 1605 6370
Telefax: +358 9 1605 6375

internet: http://formin.finland.fi
E-mail:keoinfo@formin.fi

FORMIN.FINLAND.FI

MINISTRY FOR FOREIGN
AFFAIRS OF FINLAND