



*World Student Community for Sustainable
Development*

“10 YEARS AFTER RIO”



Report on the
World Summit on Sustainable Development
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I. Foreword

In June 2002, the Alliance for Global Sustainability graciously agreed to support the AGS partner school's student members in attending the World Summit on Sustainable Development (WSSD) in Johannesburg, South Africa. This unique opportunity allowed student delegates to view how the United Nations function "first-hand".

From our point of view, involvement in the WSSD proved to be a great success. Our objective was to observe and then report on our experiences, as well as to network and make the World Student Community for Sustainable Development (WSC-SD) known on an international platform. In this regard, we feel satisfied well beyond our original objectives and expectations. Having attended countless lectures and having actively participated in numerous discussions and events at the WSSD have enriched our understanding and appreciation of issues surrounding the sustainable development discourse. (As written in our charter, enriching lengthy debates about sustainable development with useful advice has always been one of the main aims of the WSC-SD.)

We have good reason to be proud of our accomplishments at the WSSD as we co-organised the *only* officially recognized side-event for youth at the WSSD. We also presented the information on the WSC-SD by displaying an attractive set of posters at the NGO Forum at NASREC. We further promoted the WSC-SD and our mission by handing out an informational flyer which advertised our upcoming 2003 Annual Meeting in Tokyo, Japan. The Climate Ticket (an initiative of the Student Community Zurich) was extremely active throughout the event and was featured as a panellist within the main plenary in addition to running an informational booth at the NGO forum.

The AGS gave us plenty of leeway to fill this report with life and creativity. We agreed on the following concept: every student had to choose a topic of his/her personal interest and thus was able to tailor the experience to meet his/her needs and interests. This approach enabled us all to participate in the WSSD with pleasure and interest, resulting in this very unique report.

The report documents the group's variety of interests and reporting styles and combines personal impressions with facts we learnt at the WSSD.

Finally, I want to thank the whole group for their good work and the AGS for their generous support.

Peter Wotschke, Chairman WSSD Committee

II. Introduction

*By Tourane Corbière-Nicollier, EPF Lausanne, Switzerland &
Jose Canga Rodriguez, Chalmers Gothenburg, Sweden*

The World Student Community for Sustainable Development (WSC-SD) was at the last World Summit on Sustainable Development (WSSD), which took place in Johannesburg, South Africa, from 26 August until 4 September 2002. The main goal of the attendance of the WSC-SD delegation at the WSSD was to allow inexperienced students to participate at an event of these proportions. Members from different WSC-SD communities gathered together and discovered how UN summits work. They had the opportunity to be first-hand witnesses of the main events and side events of the WSSD, which led to the negotiating process at the end of the summit.

The outcome of the WSC-SD participation at the WSSD has been compiled in the following report. Several articles were written by different participants at the summit. The present document aims to be an outlook upon relevant issues, which specially motivated WSC-SD delegates.

One main problem for a successful implementation of solutions for sustainable development at the current situation was identified to be the existing gap between the scientific & technological community and society. There is a need to link Science & Technology (S&T) with the real needs of the people. There is a need to encourage S&T to seek for solutions to these needs. There is a need for a "New Contract".

It is clear that S&T are "recognised to be central both to the origins of sustainability challenges and to the prospects for successfully dealing with these challenges" ^[1]. Hence our need for a New Contract that will push S&T to "forge effective and comprehensive responses" to sustainability-related issues ^[2].

This New Contract should include the following components:

1. Improvement of Education and Capacity Building. Improvements in scientific teaching at the primary and secondary education levels are needed for scientific and technological capacity building and for a better understanding of the public on sustainable development issues. There are three critical components in enhancing capacity for sustainable development: skilled individuals, efficient institutions and active networks ^{[2][3]}.
2. Bridging the North-South Divide in Scientific and Technological Capacity. North-South collaboration should be fostered by partnerships complemented by both knowledge and technology sharing. Developing countries have to increase their investment in higher education and S&T capacity building. Donors and other funding mechanisms should increase assets allocated to help governments in developing countries to achieve these goals ^{[2][3]}.
3. Cleaner Technologies and Sustainable Production and Consumption Patterns. More private and public funding is needed to spur the development of new clean technologies and more efficient production and manufacturing processes. Less energy- and material-intensive industries and services can become an increasing source of progress in shifting production and consumption patterns ^{[2][4]}.
4. Governance for Sustainable Development. The link between the S&T community and decision-makers is poorly supported by current institutional structures. Therefore, new governance systems are needed at local, national, regional and global levels ^[2].
5. Long-Term Perspectives and Data Needs. Long-term perspective monitoring systems are needed to collect proper and relevant data. New indicators are needed to improve policy-making towards developing appropriate strategies for sustainable development ^{[2][5]}.
6. Increase of Financial Resources for S&T with regard to Sustainable Development. Current investment in S&T for sustainable development is far too low. Strategic partnerships should be forged between the public and private sector to increase assets allocated for S&T funding ^{[1][2][4]}.

For a future strategy towards sustainable development, the S&T community has identified specific new partnership initiatives. These are steps which were foreseen as crucial to the implementation of important recommendations included in several Agenda 21 chapters ^[2].

S&T for Sustainable Development.

1. International S&T Capacity Building.
2. The Role of Food Security in Sustainable Development.
3. Health as an Integral Component of Sustainable Development.
4. Blending Traditional and Scientific Knowledge for Sustainable Development.
5. Demonstrating Applications of the Global Environmental Observing Systems.

WSC-SD communities are sited mainly at universities with a strong technological background. Therefore, it was crucial to identify the gap, which hinders technological solutions to be fully implemented and accepted by society. Science must break on through the barriers between the research

community and people's needs in order to address sustainability issues most efficiently.

Keeping this main idea in mind, the following report is constituted of eight articles, which offers new approaches to several issues related to Sustainable Development:

1. General Information.
2. Urban Development.
3. Biodiversity.
4. Cultural Diversity.
5. Local Governance.
6. Water.
7. Children.
8. Trade.

^[1]Consensus Report of the Mexico City Synthesis Conference, 20–23 May, 2002 (ICSU, International Council for Science)

^[2]Science and Technology as a Foundation for Sustainable Development. Dialogue Paper by the Scientific and Technological Community for the Multi-Stakeholder Dialogue Segment. WSSD PrepCom IV, 28–29 May, 2002 (ICSU, International Council for Science)

^[3]Series on Science for Sustainable Development No.5. Science Education and Capacity Building for Sustainable Development. (ICSU, International Council for Science)

^[4]Series on Science for Sustainable Development No.1. Report of the Scientific and Technological Community to the WSSD. WSSD PrepCom II, 28 January – 8 February, 2002 (ICSU, International Council for Science)

^[5]Series on Science for Sustainable Development No.8. Making Science for Sustainable Development More Policy Relevant: New Tools for Analysis. (ICSU, International Council for Science)

III. General information about the WSSD and its outcomes

By Peter Wotschke, Committee Chairman, ETH Zurich, Switzerland

It was the world's largest conference ever. More than 40,000 participants from 190 countries came together to discuss the world's development. 104 heads of states, 7118 members of governments, 737 accredited NGOs and 2932 admitted journalists had a critical look at the past – and also at the future.

On the one hand, it was an opportunity to look at the past, reflecting back on the improvements made since Rio 1992. It was clear long before Johannesburg, that a number of aims, defined in Rio, were not reached (e.g. reduction of greenhouse gas emissions, termination of desertification, abolition of poverty etc.). The lack of success leads many critics to doubt the whole convention.

On the other hand the many people of the world came together to have an optimistic look at the future. It is necessary to keep faith in the future – to hope for a change. Simply the fact that 190 peoples (more than ever!) sat together and tried to find solutions for our common future is enough to define a success.

Destinations

Hosting a conference of this size is a logistical challenge. The city of Johannesburg and the Republic of South Africa managed this challenge very professionally. We felt welcome and attended to during the whole stay. The only interference to a smoothly running agenda was the mere distance between various conference locations.

The Convention Centre Sandton (CCS) was the main location. The plenary sessions took place in here, as well as briefings and press conferences. Approximately a dozen Hotels (e.g. Hilton, Balalaika, Saxon, Courtyard...) surround the CCS and turned out to be attractive hosts for illustrious orators.

A colourful and entertaining area was Ubuntu Village. Heart of this area was the world's biggest tent in which different UN organisations and many nations presented their activities towards sustainable development.

Participation of civil society was an important aspect at the WSSD. This was reflected in an unlimited accreditation of NGOs and in a capacious NGO forum at NESRAC, an abandoned exhibition centre. NESRAC offered enough space for each and every NGO but was located about an hour away by car from all the other destinations. This gave the impression that NGOs should be left in the "offside".

Important outcomes

During the convention it was quite difficult to find out which of the topics were important. The multitude of different interests resulted in an array of different events, presentations and publications. The WSSD affirmed two official products:

1. The political Johannesburg Declaration.

2. The Plan of Implementation.

All-embracing summaries of WSSD outcomes were published in the press ^[1]. With this article I would like to give a personal assortment and a personal conclusion.

Poverty and development aid

- By 2015, half the number of people worldwide living with less than \$1 per day (cp. Millennium Development Goal, 2000).
- Installation of a world solidarity fund for poverty eradication on voluntary basis (cp. Rio Declaration, 1992).
Actually, such a fund already exists. In terms of "Type 2" agreements the increase of this fund was declared.
- Encourage developed countries to make concrete efforts to increase their Official Development Assistance (ODA) to 0.7% GNP.
This claim was rephrased a couple of times in the past, e.g. in Rio 1992. However instead of increasing their ODA most developed countries decreased it successively. The OECD member states spent six times the amount of ODA for agricultural subsidies in 2001 ^[2].

Health

- Reduce, by 2015, the mortality rate of infants and children by 66% and the maternal mortality rate by 75% (cp. Millennium Development Goal, 2000).
- Reduce globally, by 2010, prevalence of HIV/AIDS among 15-24 years olds by 25 % (cp. Millennium Development Goal, 2000).
The way to reach this aim is not to heal infected people (which is not possible today) but to prevent healthy people from infection. UNAIDS terms today's 4-14 years old people the "window of hope" because the percentage of HIV/AIDS in this age group is enjoyably low.
- Strengthen capacity of health care systems with respect to human rights and fundamental freedom.
(e.g. no female genital mutilation, no discrimination, prevention right).

Water

- Half, by 2015, the number of people without access to safe drinking water (cp. Millennium Development Goal, 2000).
Keeping in mind that an estimated 1.2 billion are affected by this, indicates that 600 million people will still be lacking safe drinking water in the future. There is an urgent need for action.
- Half, by 2015, the number of people (2.4 billion at the moment!) without access to basic sanitation.

Climate

- Appeal with emphasis to the nations that have not yet ratified the Kyoto Protocol to ratify the protocol (cp. Kyoto Protocol, 1997).
Canada and the Russian Federation announced their intentions to ratify the protocol by the end of 2002. This would increase the pressure on the US and raise hope that the protocol may soon come into action.

Chemicals

- Minimise, by 2020, negative effects of chemicals on human health and the environment.
This is a weak result. At the moment there are conventions that go further in strictly banning dangerous chemicals (cp. Stockholm Convention, 2001).
- Establish, by 2008, a fully operating global system for the classification and labelling of chemicals.

Energy

- Increase the proportion of renewable energy sources globally and improve access to reliable and affordable energy services, sufficiently to achieve the Millennium Development Goals.
This topic was heavily discussed and the agreement is much weaker than many Europeans hoped. To increase the proportion of renewable energies to 15 % was a main point of EU activity.
- Remove harmful subsidies and restructure taxes to the energy market. In addition, improve transparency of energy markets to increase market stability and safety.

Biodiversity

- Reduce, by 2010, the rate of loss of biological diversity in applying the Cartagena Protocol more efficiently.
- Maintain or restore, where possible by 2015, exhausted fish stocks. Additionally prevent and eliminate illegal, unreported and unregulated fishing so that the maximum sustainable yield can be reached.
- Establish, by 2012, marine protected areas, including representative networks.

Corporate responsibility

- “Actively promote corporate responsibility and accountability through the full development and effective implementation of intergovernmental agreements and measures, international initiatives and public-private partnerships, and appropriate national regulations.”
This aspect was discussed long and controversially. It is the first time that corporate responsibility has been included in any such conventions. Hence, it can be called a success - even without concrete results.

Conclusion

From my point of view, the most important achievement is that representatives from 190 countries came together to discuss common problems and to work on joint solutions. The Johannesburg agreements reflect a consensus of a never before seen breadth.

The price for this consensus was the weakness of wording and the lack of concrete timetables. It reflects a kind of “lowest common denominator”.

Aside from official commitments, more than 220 “Type 2” agreements were made. “Type 2” means not-binding agreements between different governments,

institutions or NGOs. An assessment of these contracts is difficult because regulations and monitoring instruments do not exist so far.

Contrariwise, two important disappointments need to be pointed out:

First, it is disappointing to see a single state preventing a real breakthrough by its blockade position. My understanding of democracy lets me think that there can not be a single player upending negotiations of the majority. I wished the world had more courage.

Second, no arrangements about monitoring and sanctions were made. Looking back on the last decade, it becomes clear that states often move quite slightly when they know that there is no pressure on them. It needs to be understood that the full implementation of the Johannesburg stipulations are very questionable.

Even after Johannesburg there is still a need for institutions like us, pleading for changes.

^[1]Find the full text in exact terms on the official WSSD website: www.johannesburgsummit.org

^[2]Rhein-Zeitung 22 August 2002

IV. Urban observations in Johannesburg

By DeWayne Anderson, University of Tokyo, Japan

Introduction

I was privileged to have been chosen as one-of-three students from the University of Tokyo to attend the World Summit on Sustainable Development (WSSD) to be a representative of the World Student Community for Sustainable Development (WSC-SD). I had a wonderful experience and further expanded my understanding of, and concern for, the difficult problems facing our world in regards to sustainability.

Each day was extremely busy and challenging. My colleagues within the group were very engaged and as usual, inspiring to work and collaborate with. The conference was extremely large in both scale and scope. At first it was a bit intimidating in orienting oneself to the issues and complex dynamics of the event.

I quickly discovered that one could not begin to effectively follow the entire event and instead would do best to focus on an issue of personal interest. As someone interested in urbanism as it relates to sustainability, I found no lack of events related to this topic over the length of the summit. I was able to piece together a full schedule of events everyday. This made the summit an extremely fulfilling and valuable experience for me. I have included the following thoughts in this regard.

Urbanism

With approximately half of the world's population now living in urban areas and the other half increasingly dependent upon cities for its economic, social and political development, the time has come to take a closer look at the phenomenon of rapid urbanization. Without proper investment, the issues of urban poverty and environmental degradation have increasingly become more urgent, with a larger numbers of people living in urban slums. Cities have created and or inherited a frightening legacy of pollution, soil contamination, dirty production techniques, and high waste consumption patterns.

The term "ecological footprint" describes the impact of urban agglomerations beyond their own administrative boundaries, in terms of the consumption of natural resources and environmental disruption. The challenge lies in the adoption of urban planning and management approaches which embody the principles of sustainable development. Over the past fifty years, largely as a result of economic forces, many cities have been transformed from concentrated and identifiable towns into amorphous urban areas. Although the contribution of cities to the national economy of both developed and developing countries is crucial, the forces of urban growth often destroy the very social, cultural and environmental fabric they were intended to improve.

Changes accompanying urban growth frequently involve the destruction of distinctive and meaningfully built elements as well as of natural elements, eradicating the physical expression of former indigenous ways of life that are very much part of the settlement culture. Issues of cultural identity are of profound social significance in a rapidly changing world. Culture is intrinsic to development, making

economic and social gains sustainable. Considerations of conservation in development should thus be seen not only in the light of preserving the built and natural environment, but equally also the fundamental elements of the social environment.

There can be little or no socially sustainable development without preserving cultural continuity. The cultural identity of cities and nations is an essential element in helping present and future generations retain their natural and constructed patrimony, as well as in aiding to build a better and sustainable, people-centred culture in the future.

In a rapidly urbanizing world there remains, without doubt, an anti-urban bias or at least a longing for old values and landscapes. When cities first begin to take off, as in 19th century America or 20th century sub-Saharan Africa, this prejudice is strongest because national economies and livelihoods – and therefore politics – are still largely agrarian. With a moral righteousness politicians extol the virtues of village life and rural values. In the most urbanized regions of the world, however, where they have evolved from centres of trade into expressions of culture, cities have become objects of national respect, pride and even affection.

The Local Context

Johannesburg is unquestionably the most powerful commercial centre within the African continent. Johannesburg generates 16% of South Africa's GDP and employs 12% of the national workforce. It has a financial, municipal, roads and telecommunications infrastructure that matches that of first world cities. Johannesburg has a population of about 2.5-million people, in a country of 46.5-million. The national capital, Pretoria, is a 35-45 minute drive north of Johannesburg.

During the apartheid era, the greater Johannesburg region was divided into 11 local authorities, seven white and four black. The white authorities were 90% self-sufficient, spending R600 per capita (approx. \$60); the black authorities were only 10% self-sufficient, spending R100 per capita (approx. \$10).

Today's city council is responsible for seven times the population it carried under apartheid, and around two-thirds of those are poor. Some 20% of Johannesburg residents live in abject poverty, in informal settlements that lack proper roads or electricity or any kind of direct municipal services. Another 40% live in inadequate housing, with insufficient municipal services. The poor are largely black (72%), earning less than R25,000 per annum. Johannesburg is also a magnet for illegal immigrants from other African countries, in sufficient numbers to put a major strain on city and provincial services, which are allocated on the basis of the legal population;

- 16% of households lack municipal sanitation.
- 15% do not receive municipal electricity.
- 3.6% do not have water supplies.
- Unemployment is at 30%, up from 27% three years ago.
- Some 116,827 families live in informal settlements.
- Some 108,000 families live in illegal backyard dwellings.
- There are some 4,500 homeless "street people".

The city intends to build 200,000 houses for the poor over the next 10 years. It is estimated that the city will spend R136-million on housing projects this year. These include:

- Adaptive-reuse of 15 storey buildings in the inner city to provide housing.
- Release of 8,000 serviced units of land per annum for self-built homes.
- Upgrading of services to 8,775 homes per annum in informal settlements.
- Up-grading of 2,500 existing rental units over three years.
- Up-grading of seven hostels by June 2002.

The City of Johannesburg plans to reverse the urban sprawl by demarcating a fixed urban boundary, encouraging denser suburbs, and implementing zoning regulations more strictly. The Spatial Development Framework (SDF) unveiled by the head of Development Planning and the Environment aims to delineate a boundary around the city, beyond which no bulk services will be provided. The framework proposes to contain the horizontal spread of Sandton (the area where most of the WSSD event was held), Melrose Arch, Rosebank, Fourways, Parktown, Sloane and Striydom Park and to stimulate development in the Johannesburg CBD, Baralink, Woodmead / Sunninghill, Randburg, Wynberg and City Deep, while creating a new node in Jabulani (Soweto).

Local governments are putting substantial resources into turning around the troubled central business district (CBD), a victim of capital flight to the northern suburbs in the 1990s. Crime rates are down due to intensive policing; occupancy rates are slowly inching due to the existing stock of quality properties and “rock bottom” rents; investment is increasing as confidence improves; and general cleanliness has returned thanks to the city’s waste collection efforts. Johannesburg CBD has 217,000 residents in 37,000 dwelling units, 800,000 commuters entering the city every day, and 300,000-400,000 migrant shoppers visiting the city each year. The Johannesburg CBD has approximately 7-million m² of floor space, 3-million m² of office space with office buildings representing a R19-billion investment, a R1.2-billion capital investment in housing, and a R3.75 billion investment in a 2.5 km² radius of core area.

Townships

During the time between World War I and World War II, rapid industrialization in South Africa sparked a massive migration of rural Africans to Johannesburg, which was the centre of the country’s mining industry. Many of the migrant workers lived in camps outside of town. In part due to white population’s fears of black self-rule in the squatters’ camps, the South African government set aside 65 sq km (25 sq mi) of land to accommodate the workers in 1948. They built thousands of two-room houses and named the new township Soweto, an abbreviation of the words “**South-Western Townships**”. Its population grew quickly as the result of continued voluntary migration and the new policies of the Afrikaner-dominated National Party government, which forcibly resettled blacks into townships.

After apartheid was dismantled, South Africa’s township residents anticipated a peace and development dividend. But as the African National Congress prepared for its second term in office (1999-2004), the cities had degenerated further into impoverished, polluted, under-serviced zones of blight and despair.

Indeed in many respects, with regard to unemployment, municipal cut-offs of water and electricity, substandard housing, and crime, the townships and inner-cities were worse off than when the ANC took power. Redistribution of urban resources was not seriously on the agenda, as wealthy white suburbanites successfully defended their privileges. The ANC's adoption of neo-liberal (free-market) economic and social policies (at the urging of the World Bank, US AID and local financial institutions and business consultants) during a period of volatile global capital flows through financial and real estate markets can be blamed for the current worsening of South Africa's uneven urban development.

Poverty, overcrowding, and oppression characterized life in Soweto under apartheid. The former Archbishop Desmond Tutu, who lived there in the mid-1970s, recalled that at the time more than one million residents shared a single swimming pool. The schools were ill-equipped and under funded, and increasingly staffed by teachers who had not completed university degrees. The typical house, a home for 12 to 15 people, lacked both internal plumbing and, until the 1980s, electricity.

By 1976, the year of the uprising, political protest had become an established part of township life, and students were among the most active participants. That year, the government's ruling that half the classes in the nation's secondary schools were to be taught in Afrikaans, which many Africans considered the language of the oppressor, led student groups to organize a protest march on June 16th, 1976. Estimated 15,000 schoolchildren attended. Most observers now agree that the demonstration was peaceful until police fired a teargas canister into the crowd, and the children retaliated by throwing rocks. The police opened fire, killing and wounding hundreds of Soweto residents, including many children. The incident set off rioting throughout the country, leading to more than 575 deaths. Soweto, home to Desmond Tutu, Winnie Mandikazela-Mandela, and, after his release, Nelson Mandela, continued to be the epicentre of anti-apartheid action. Protests continued even after P. W. Botha cracked down on opposition groups in the 1980s. The political atmosphere became so tense that some Soweto residents suspected of working as informants for the South African government were assaulted or killed, a situation decried by Mandela and others. Since the end of apartheid and Mandela's election as South Africa's president in 1994, conditions in Soweto have improved somewhat, although poverty and crime are still pressing problems. One of the most dramatic signs of change is that Soweto is now a popular tourist destination, with several local entrepreneurs guiding visitors through a post-apartheid Soweto.

Conclusion

Despite the many obstacles facing urban Johannesburg, the city has many assets upon which to capitalize, and thus reposition itself to better serve its citizens and the business community. It is indeed bewildering to drive through the central business district only to find office tower after tower, completely vacant. White flight to suburbia has left a tremendous investment (energy, materials and money) in infrastructure shamefully underutilized. As mentioned, some of these towers have been adaptively reused and now serve the black population as housing. From my understanding, although these developments serve community demands (they are close to places of employment, comparatively higher standards, affordable), they are poorly implemented, and are characterized by blacks and whites alike as centres of crime. With the fall of government sanctioned apartheid, white businesses (and with them, most foreign multi-internationals) moved to suburban Johannesburg,

building low-rise, sprawling campuses, gated and guarded by armed men; to separate, instead of engage the new paradigm with which the country was faced is short-sighted at best. Apartheid does indeed still exist in Johannesburg, but now in an ugly form of economic apartheid. What most of these businesses don't realize is that their physical isolation will not solve the bigger issues which they face in running successful and sustainable businesses in South Africa. What these businesses must do is better engage the whole community, and to do this they must be supported by the public sector. Such partnerships are often fraught with difficulties and conflicting interests and agendas, although it is in everyone's interest to find more holistic approaches of living together. No amount of barbed wire and high walls will keep these forces at bay. One can only hope that politicians, city planners, business leaders and civil society can begin to work together to find a more integrated and balanced approach to supporting Johannesburg's business environment and citizenry. A start would entail encouraging the more efficient use of existing building stock and then reducing the negative effects of urban sprawl.

V. Biodiversity

By Eri Saikawa, University of Tokyo, Japan

Introduction

In the 1992 Rio Earth Summit, the term “sustainable development” came to be used for the first time in history. This was also a particularly memorial event with regard to the participation of over 100 countries: the biggest international conference that had ever taken place. There, everybody came to realize that developed countries have made mistakes in the past, causing too much pollution on the way to the modernization, and all, both rich and poor, agreed to take their responsibility in maintaining the earth to be sustainable, concluding the summit by adopting, what was labelled, Agenda 21.

In this agenda, there is a chapter on conservation of biological diversity, and here, it is stated that, “Our planet’s essential goods and services depend on the variety and variability of genes, species, populations and ecosystems. The current decline in biodiversity is largely the result of human activity and represents a serious threat to human development.” It could be easily realized that biodiversity was already at the centre of discussion then.

Ten years have passed, and contrary to our beliefs, we have found out that the situation around the globe is actually worsening day by day. The World Summit on Sustainable Development (WSSD) which took place in Johannesburg, South Africa, 2002 was to mark a turning point.

Outputs of WSSD

Main output of WSSD -Plan of Implementation-

At the WSSD, it was re-recognized that biodiversity plays a critical role in maintaining sustainable development and also in eradicating poverty. It was stated that biodiversity is essential to our planet, human well-being, and to the livelihood and cultural integrity of people. There was also a statement of a warning that biodiversity is being lost at an alarming rate because of various human activities, and the necessity of bringing this trend backward was agreed upon. To be more specific, it was noted that local people have to benefit from conservation and sustainable use of biological diversity, especially those in countries of origin of genetic resources, as mentioned in article 15 of the Convention on Biological Diversity. It is stated in the Plan of Implementation to “achieve by 2010 a significant reduction in the current rate of loss of biological diversity.”

Another output that came from the WSSD was that the U.S. announced \$53 million for forests in 2002-2005, and also that the UN received 32 partnership initiatives with \$100 million in resources.

I remember very well the situation when the representative of the U.S. government stated the safety of genetically modified (GM) food at the WSSD. They clearly indicated that they had not yet found any problems that occur as a result of these

GM foods, and that, because of this absence of knowledge at the moment, they felt it was safe to eat them.

We, however, still lack large amounts of information to decide what kind of effects those living modified organisms would have on a global scale, and the risks and benefits of these GM foods need to be clarified. I believe that it is really important to discuss the details rather than only big framework in order to prevent it from happening, so although it is not my intention to deny the meaning of the summit, I cannot help thinking that without an exact target and methods with which almost all the countries agree, the same thing that happened after Rio will occur. Similar to ten years ago, everybody will leave conscious of the issue, but no measures will actually be taken. Often the summit was too vague and ambiguous about solutions.

Output of IUCN -The World Conservation Union-

IUCN focused on biological diversity as the very foundation of human welfare. They were more down to earth and were exploring several strategies of linking livelihoods with biodiversity conservation such as investing the sustainable use of natural resources, without overestimating that improved livelihoods and enhanced conservation are coincidental. They wrote in the IUCN 2001 brochure: "One of the main challenges for IUCN is to find means to ensure the equitable sharing of costs and benefits arising from the conservation of species and ecosystems from local to global levels."

Output of IUCU -International Council for Science-

IUCU mainly focused on how biodiversity is affected by agricultural biotechnology, specifically discussing genetically modified organisms (GMOs). Representatives mentioned that the issues related to the impact of living modified organisms on the environment are about the risks and benefits of direct ecological effects and indirect environmental effects (Johnson 2000). Great concern when considering the direct effects is directed simply at biodiversity itself, including that of non-target species. The council's mission consists of identifying and addressing major issues of importance to science and society, using their scientific knowledge to understand the environmental risks and benefits posed by gene technology in a greater depth, and trying to lead to the better design of biotechnology.

Output of an NGO -Greenpeace-

Greenpeace is opposed to what its members call genetically engineered (GE) plants, meaning the same as GMOs. They find GE plants to be a serious threat to our centres of diversity, especially to wild plants and local crop varieties, due to the intense move towards crop uniformity. Given the fact that the necessary knowledge to measure the possible adverse effects of GMOs is lacking, they believe that any irreversible release of GMOs into the environment is irresponsible. They also believe that there is already sufficient evidence that GMOs may cause destruction of the environment through genetic pollution. They demand urgent national and international measures to be taken in order to protect the global heritage of diversity for future generations.

Conclusion

As I have mentioned in this report, there is not only one point of view to the alarming loss of biodiversity; some are radical and some are more optimistic. I believe that whether or not this summit could serve a role of a point of change depends on how seriously each country, and moreover, how seriously each individual will take each matter.

For me personally, the WSSD was a great opportunity with regard to broadening my perspectives on sustainable development, especially on biodiversity issues. I am now very much interested in how genetic resources in the least developed countries could be used within the international markets as a mechanism to support their sustainable growth.

I realized through this summit that strengthening their economic and political power without causing needless damage to the environment and without allowing their being exploited by developed countries is what we have to focus on in order to truly achieve sustainable futures.

I could not possibly thank AGS UT and AGS International enough for giving me such an awesome experience, and I would like to conclude my report by promising that I promise to seek my own way of contributing to sustainable development for a better future. Thank you.

VI. The theme of cultural diversity at WSSD

By Silvia Bottinelli, University of Pisa, Italy

Nine different official languages coexist in South Africa; as many as the peoples who generated them and who now have the uneasy task to coexist. The rainbow nation, as Nelson Mandela used to call it, must be a strong example for those who put respect for cultural diversity in the picture of global needs.

WSSD took place in Johannesburg, the business capital of this state, a significant site, when considering this matter. Delegates from every part of the planet came here to discuss on a common ground. As the UNESCO Universal Declaration on Cultural Diversity reads, "tolerance, dialogue and cooperation, in a climate of mutual trust and understanding are among the best guarantees of international peace and security".

Nonetheless, not everyone is happy with the results, even if WSSD seemed to be more orientated on Social and Human Sustainability than on just environmental issues, as was the case in Rio in 1992.

Robby Romero (North America), member of the Indigenous Caucus, has clear ideas: "Globalisation exports goods and models which are the same for everyone all around the world; this can help multinational trades, but not local communities. It threatens diversity and the beauty that comes from it." Traditional activities, crafts, rituals and knowledge tend to disappear, erased by illusions of welfare.

"Economic globalisation constitutes one of the main obstacles for the recognition of the rights of Indigenous peoples. Transnational corporations and industrialized countries impose their global agenda on the negotiations and agreements of the United Nations system, the World Bank, the International Monetary Fund, the World Trade Organization and other bodies, which reduce the rights enshrined in national constitutions and in international conventions and agreements", (Kari-Oca Declaration, Brazil, 30 May 1992). Since this statement was made in 1992, Indigenous Peoples have acquired consciousness of globalisation as one of the causes of their loss of identity. They tried to make their voices loud at Johannesburg.

What do they require? "Indigenous don't want to be homologated to poor people. They want a recognition of their language, education and knowledge", declared Josi Carino (Tebteeba Foundation) on the stage at the meeting on "Indigenous Peoples: Affirming diversity for Sustainable Development", held at Hilton Hotel, Sandton, on August 28th.

"Linking Traditional and Scientific Knowledge" is a fundamental issue in order to improve interchanges among cultures and it's one of the strongest points of the Kimberly Declaration^[1]. For this reason, UNESCO, Tebteeba Foundation, ICSU^[2] and ICC^[3], co-organised a whole day^[4] conference on this theme, at the Science Forum, Ubuntu Village. Indigenous knowledge provides the basis for local level decision-making about many essential aspects of daily life; for instance, as Prof. P. Kanani^[5] explained, meteorological predictions of a short-range nature, made by indigenous in specific regions of India, seem to be more attainable for farmers than the long-range calculations of the Department of Meteorology^[6]. The role of science, therefore, needs to recognize the precious contribution of traditional knowledge, thus increasing the general level of respect for indigenous cultures.

What indigenous peoples vehemently advocate is the right to self determination. They are ready to collaborate, but they don't need anyone else to rule their future. We cannot organize development for them. They must create networks among different peoples, as many minorities can make the majority. Many international organisations are trying to do their bit, in order to let indigenous peoples preserve their cultures. For instance, IUCN is promoting "There's another way that works", funding communities who rely on their private enterprise to create sustainable livelihoods in Southern Africa. To survive, marginal cultures must be economically independent. It is too easy to disguise business interests as humanitarian efforts. For example tourism, usually indicated as a solution to create autonomy, can be dangerous: traditions and rituals can easily become fake, to match western visitors' expectations. "Indigenous peoples are not objects of tourism development." [7]

Indigenous peoples are highly threatened by non-sustainable development. That's the reason why they announced their fight a long time ago. It is important however to consider that every national culture may be at risk: globalisation too often means loss of identity and diversity. Nevertheless, it also offers a tool of interaction, "creating conditions for renewed dialogue among civilizations" [8]. Let us take advantage of the good part of it. Let us conserve our cultures, trying to respect different ones. Voltaire suggested that three centuries ago. Not many listened to him. Will somebody listen to us?

[1]The Kimberly Declaration was written during the International Indigenous Peoples Summit on Sustainable Development, Koi-San Territory, Kimberly, RSA, 20-23 August 2002.

[2]International Council for Science

[3]International Chamber of Commerce

[4]"Linking Traditional and Scientific Knowledge for Sustainable Development", 29 August

[5]Gujrat Agricultural University, India

[6]As Prof. Kanani's 12 years of experience of participatory metrological assessment and prediction with farmers of Saurashtra shows.

[7]Kimberly Declaration

[8]UNESCO Universal Declaration on Cultural Diversity

VII. Local governance: from the Mtomtbele's hands to the UN partnership for training

By Diego Puppin, MIT Boston, USA

Just a few miles from the fancy business area of Sandton lies Soweto, a mostly black township where some hundred thousand people live, many of them in slums, in temporary shelters, or in hostels originally designed for the miners of Johannesburg. The problems for the poor include lack of access to education and health services, poor hygienic conditions, and lack of proper sewage treatment.

But in the middle of a degraded landscape, due to anthropogenic pressure and lack of public service, some people slowly started to clean up the mountain of Tshiawelo Koppie. The mountain, covered with trash, hiding dead bodies, and a meeting point for drug dealers and addicts, had been abandoned and left to its destiny for years, when the people started working at it.

The project involved removal and recycling of the trash. Mtomtbele, a girl whose name means "Beautiful woman" in Zulu, and other youth created beautiful artwork with tires and recycled cardboard. They built a house by cementing together all the bottles they found. They restored the surface, using cow dung as in the local tradition. They took care of trees and vegetation. They created a centre for the arts. The Soweto Mountain of Hope (SoMoHo) was born and opened to the community.

The problems of the urban poor are becoming larger and more difficult every day. Uncontrolled population growth is creating enormous challenges for central authorities.

In Lusaka, Zambia, 75% of the population lives in poverty, in unplanned settlements^[1]. The central government has little capacity to address the rapid growth: it is estimated that 50,000 babies are born there every year. The pressure for land and shelter is extremely high. Freedom is an isolated corner of Lusaka. The first squatters moved to an abandoned farm there.

Now 8,000 people live there. They took private initiative to remove the rubbish, to clean up the site, to destroy some of the houses to restore the main road. They are hoping for the financial support of the government, but resources are extremely scarce. The hope lies in a partnership with the government, which would "steer, not row". The rowing is still for the arms of Lusaka's residents, but luckily rowers are not a scarce resource in this crowded neighbourhood.

In Dhaka, Bangladesh, the population is growing at astonishing speed, too. People are moving in from poor rural areas, where there is no land for them. Even more people are born every day in the informal settlements. In 2015, Dhaka will be the fourth largest city in the planet^[2].

Dhaka is the house for these poor: there is no place for them to return to. People in those areas do not have political, economical or social power. The hope again is in the enterprise of poor dwellers that constantly show creativity and strength. The plan to make Dhaka slum-free is centred on giving legal land titles to poor dwellers, providing basic services and developing credit schemes for building and renovation in poor areas. There is growing interest in local initiatives. Policy-makers and

stakeholders are more and more aware that the people are the most important resource in any poor neighbourhood. Their initiative and good will can create amazing results, with little financial input.

The United Nations are coordinating the effort to improve and boost local initiative. In particular, UNITAR, the United Nations Institute for Training and Research, is promoting a series of regional fora, led by towns with a record of sustainable development, to promote the training of local officers to act locally. At the present time, the steering committee is composed by the mayors of the following four towns:

- Curitiba, Brazil, that has promoted initiatives for public transportation and social inclusion for 30 years ^[3];
- Durban, South Africa, for its successful water program;
- Lyon, France, for the results in social housing and public health;
- Shanghai, for its advanced project of e-governance;

Kuala Lumpur will join the initiative shortly, offering its expertise in planned housing for the poor. The partnership has created a series of training centres on the issues of HIV, e-governance and waste management, with the goal of creating a knowledge network for the cities of the world ^[4].

After the disillusionment that followed the results of the WSSD, there is growing interest for local enterprises for development. The examples showed how the effort of the poor can be directed towards a sustainable development. So let's think globally, and act locally.

^[1]CARE International UK, Make Lusaka Count, in Business as Usual?, available at www.careinternational.org.uk

^[2]CARE International UK, Make Dhaka Count, in Improving the atmosphere?, available at www.careinternational.org.uk

^[3]For more information about Curitiba, visit their comprehensive web-site at www.curitiba.pr.gov.br

^[4]UNITAR, Local capacity-building and training for sustainable development, a Public-Private partnership, available at www.unitar.org/cifal

VIII. Water: A diverse and vital theme

By Atsuko Terazono, University of Tokyo, Japan

“Water” as a theme

In the WSSD, there were a lot of water related conferences and events held by diverse organizations. This indicates that the interest in water is growing as human beings continue to gain prosperity.

How could we contribute to such water issues from a research-related viewpoint? On the following pages, I report on the discussions on water issues conducted during the WSSD, on the outlines or schemes of these discussions, and assemble the roles that the stakeholders played and could play. I will then consider the situations to give an answer to the above-mentioned question.

What I saw in the WSSD, related to water issues

NGO forum

In the Conference on Sustainable Development by the Greens European Free Alliance, there was one session on water transportation named “Thirsty Work - Water and Public Services”. Public and private sectors were compared in terms of democracy, comfort, and capacity. There it was said that, in general, the public sector is more affordable and efficient if it is managed in a democratic way, but that the situation differs from country to country, region to region. It is partly because the preparation and management of safe water have different levels of importance.

Side Events

In water related side events by the UN-related organizations such as “Water For African Cities (by UN-HABITAT)” and “Women and WASH (by WASH)”, people said that privatization of water management is a global movement at present but that government and public sectors are important especially with regard to sanitation. Job creation for the poor and women was said to be fundamental at the same time.

In another water related side event by ICLEI named “Water, Climate and Agenda 21”, one spoke generally of Agenda 21, its role and the problems of implementing it. Participants also raised good examples of implementation on water and climate issues in Africa and Australia. Talking about further implementation, they raised three essential issues:

1. The capacity building of people and cities during the next decades,
2. Technological and economical tools available for every level and
3. Round tables with decision makers, interested stakeholders, and academics, possibly involving the leaders and citizens of local communities.

Plenary Sessions

In a Plenary Session on Water and Sanitation conducted by the UN, we could listen to speeches by UN members, the opinions and discussions of representatives of UN-related organizations and nine major groups, and the statements made by national governments. The UN members remarked on the scarce water resources and the ongoing depletion of surface water and insisted on the importance of water management. The remarks were followed by the discussions among the UN-related organizations and major groups on various aspects of water issues. The contents varied but focused mainly on water management, on infrastructure especially for poor people and on public involvement. During one discussion, a representative of the scientific field stated an availability of improvements in science and technology. In the statements by nations, there was an agreement that water is a commodity and water is a human right. The majority of these statements, however, which emphasized lack of access to water and sanitation, were made by developing countries. There were few statements on the problems in developed countries such as industrial pollution and urban sprawl.

Politicians

There was one water session named “Water/People/Sustainability” managed by the Japanese Government and held in the Japan Pavilion in Ubuntu Village. There, the former Prime Minister Ryutaro Hashimoto spoke mainly on the cases in Japan from the end of the Second World War. In the speech, he said that the post-war reconstruction including the infrastructure improvement related to water supply was Japan’s experience, and that, for example, tackling environmental pollution and its results such as Minamata Disease in the 1960s should be a painful lesson. Now with these experiences, Japan could/should help developing countries by making use of what it learned. On the occasion of such partnerships, politicians could contribute to making networks and establishing dialogues among countries and sectors.

I also had the chance to attend the Parliamentary Workshop on Clean Air and Clean Water organized by PGA (The Parliamentarians for Global Action). The main concerns there were how to allocate power to different levels and how to implement policy decisions. In addition, some invited academics made scientific reports on water supply and sanitation. Regarding the means for implementation, they emphasized the importance of making a global network among politicians and of monitoring and reporting the situations in each region.

Science and Technology Forum

In one scientific forum, Forum on Science, Technology and Innovation for Sustainable Development conducted by ICSU (International Council for Science), there was also a session on water named “Fresh Water Challenge”.

In the session, a scheme of research cooperation was discussed roughly at first. Then two key tasks of the international research organizations were debated: the one was an assessment of the current state, and the other was a future development plan considering the availability of specific factors and the variability of nations. There should be a feedback system such that the determination of criteria and indicators in scenarios, the multidisciplinary impact analysis for each scenario, and the evaluation of results as well as the improvement of the model itself resulting in those scenarios would lead to the making of scenarios for future development. As a fundamental premise to realize such feedback, the analyses of the state should be concrete and

utmost accurate. Science should play a role of creating knowledge and paying attention to underlying factors.

Water Dome

I also visited the Water Dome designed by the African Water Task Force which contained water related exhibitions and water workshops by water related organizations. Regarding the very many exhibitions, such organizations giving their opinions and future prospects based on terre-a-terre analyses of the current state seemed to have a considerable amount of persuasive power.

There were two impressive things in water workshops. The one was that the UN Millennium Development Task Force insisted on the importance of applying past efforts and ongoing processes and commitment. The other was that there were people discussing the regime of international laws to support appropriate water trade and privatization. In this case, laws could play an important role to set a global frame.

Players on water issues

Although there are clearly many stakeholders that I have failed to mention, I think that the following examples show a kind of structure of people around water issues:

- Local leaders and citizens who raise and explain one example.
- Researchers and academics that raise many examples and compare them.
- Academics who raise and create new ideas and schemes for solutions, give suggestions and concepts, and think of regimes generally; technological development done by engineers, economical ones by economists.
- Academics, especially scientists, who examine the current state and provide the base knowledge.
- Policy-makers, politicians, and international organizations that drive practical implementation and push good ideas.
- People or organizations working in the practical fields that do the practical implementation.
- Politicians and governments who make the actual decisions.

It is important to connect these different roles by providing roundtables among the many stakeholders in order to share and implement great ideas.

Roundtables can vary in size, but it is essential to make the informational circulations of knowledge, ideas, and practical potential. A roundtable must be interdisciplinary and intersectoral. In addition, global networks within each sector, each unit, are also necessary.

To go ahead with the experiences

I end with the final example in the last Plenary Session where the final declaration of the WSSD was adopted. As a representative of the scientific field, the former president of the University of Tokyo, Dr. Hiroyuki Yoshikawa stated as follows:

“Knowledge society must be an international leadership. It’s necessary to share the achievements, to remove the uncertainty of science, and to address issues through education. Local and regional partnerships among other stakeholders such as social, economical societies are needed. As the link between governance and science is weak at present, we would have to keep up our efforts for capacity building in order to strengthen the link and to continue turning out informed and educated people.”

So, let’s move on step by step, doing research with the broadest of views!

IX. Why should the world act sustainably?

*By Vera Becker, University of Hamburg, Germany &
Peter Wotschke, ETH Zurich, Switzerland*

There is only one answer to this question which is not egocentric: it is our responsibility for the next generation. It is for our children who will inherit this world from us. If we do not just want to survive on this planet but want to ensure that following generations have the opportunity to enjoy breathing fresh air, drinking clean water and experiencing the huge variety of creatures and living beings – just like we do – we need to change our behaviour and need to act in a sustainable manner.

Children are especially vulnerable to the impact of environmental degradation, pollution, mismanagement of natural resources and unhealthy consumption patterns. They are also most affected by hazards in and around the home^[1].

This leads to two main consequences. On the one hand we have to change our own behaviour to stop the destruction of the only earth we have. We should assure that our children's life on earth is privileged to the quality of life we enjoy today. On the other hand we need to make sure that our ideas for sustainability are realised sustainably. This means that our children will have to understand these ideas and will be able to put them into action.

John Hillary^[2] names the children's major problems:

- 1) Poverty,
- 2) Food & Water,
- 3) Health,
- 4) Education.

Several linkages and interactions between these four major aspects make it difficult to focus on them separately.

A short example should illustrate that: Worldwide ca. 12 Million 15- to 24-years old people are infected with HIV/AIDS. Poverty, unemployment, rate of illiteracy and migration abet the spreading of the disease. Many children in the developing world have to leave school to earn money to care for their infected family members.

AIDS victims very often lose their jobs and are isolated and stigmatised. In these cases children evolve into bread-earners. The lack of education prevents their ever earning a decent wage to break out of this poverty cycle. Such circumstances do not lead to sustainable thinking and to environmentally friendly actions. The goals of sustainable development can only be achieved by a healthy society. Advances in health for the whole population require poverty eradication and clean and sufficient food and water.

To give an overview of the topics and how they are dealt with in the Johannesburg documents, the Plan of Implementation (PoI) and the Johannesburg Declaration (JoDec), this paper is written in short-form and is not entitled to completeness.

Poverty

The majority of the people in the world who live in poverty are children and women. Poverty harms vulnerable children, alters the social status and breaks bounds between children and society and leads to street life, violence and prostitution. There are an estimated 100 million homeless children worldwide ^[3]. Children need the protection of a family; they need the experience of a warm and caring environment and need to grow up with prospects for their life. Without family bonding they are lost and forced to live in the streets. They easily fall victim to child abuse, child labour and child trafficking. Traumatizing experiences like these are formative influences and cause the victims to lose their faith in human beings. This is not a basis for a sustainable future and needs to be fought.

According to PoI point 6, poverty eradication is the greatest global challenge facing the world today and an indispensable requirement for sustainable development ^[4]. By the year 2015 the world should halve the proportion of the world's people whose income is less than \$1 a day. The PoI does not include many concrete dates and limiting values but here is one, indicating the importance of this topic.

How this goal could be reached is not laid down in detail. Furthermore, one important aspect was left out altogether. Reducing poverty depends strongly on the creation of new jobs. These new jobs need to be created in a sustainable manner – environmentally and socially friendly.

Food & Water

An estimated 2 million children die of thirst every year, some 3 million children die of infections that are caused by factors related to unsafe water and inadequate or non-existent sanitation ^[5].

An inestimably high number of children sustain physiological effects of insufficient nutrition. The immune system of a young, growing body is more responsive to malnutrition or infested water than an adult's. In addition, impairments grow with the child and the effects are lifelong.

The connection between poverty and water is well-known. Therefore PoI's poverty fighting point 6 defines the goal to halve, by the year 2015, the proportion of the world's people who suffer from hunger and, by the same date, to halve the proportion of people without access to safe drinking water.

Furthermore, point 7 defines that the provision of clean drinking water and adequate sanitation is necessary to protect human health and the environment. In this respect, the aim to halve, by the year 2015, the proportion of people who are unable to reach or to afford safe drinking water (as outlined in the Millennium Declaration) and the proportion of people who do not have access to basic sanitation, is defined again.

Health

At the moment, the world's most dangerous illnesses are Malaria and HIV/AIDS. Between 300 million and 500 million people suffer acute cases of malaria in 100 developing countries each year, and the majority of these victims are children. Each year, the disease claims some 750,000 children under the age of five ^[6].

An estimated 11.8 million young people aged 15-24 are living with HIV/AIDS, with around 3,000 new infections added daily^[7]. The majority of them will die within the next 15 years. Some of the most affected countries also face a human resource crisis as the 15-24 age group will have the most influence on our society over the next decade. Today's young grown-ups are the decision makers, the labourers and employers of tomorrow. The PoI implements this fact in point 48. This paragraph emphasises the importance of reducing the percentage of HIV/AIDS infected young men and women aged 15-24 quickly. In addition to HIV/AIDS it is necessary to combat malaria and tuberculosis as they are also dangerous diseases. In the most affected countries these diseases need to be reduced by 2005 and globally by 2010. Among other things, a special assistance program to help children orphaned by HIV/AIDS, will be implemented.

Fighting the aforementioned diseases is by far not the only aim the PoI couches in terms of the health sector. Children, as a vulnerable group of society, would benefit from strengthened health-care systems and basic health services. An example is given in point 47 of the PoI. By the year 2015, mortality rates for infants and children under 5 should be reduced by two thirds.

In addition, respiratory diseases and other health impacts resulting from air pollution, which particularly affect women and children, should be reduced. This can be done by lessening the dependence on traditional fuel sources for cooking and heating.

Education

Education for sustainable development is more than environmental education. In contrast to environmental education and development education, it takes a broader and more comprehensive approach that integrates environmental, economic and social aspects^[8]. People should learn to play an active role in shaping an ecologically sustainable, economically efficient and socially just environment.

Currently, 120 million children are not in class and countless more do not receive a good quality education^[9]. For that reason it is necessary to ensure, as the PoI puts it, that children everywhere, boys and girls alike, will be able to complete a full course of primary schooling and will have equal access to all levels of education^[2].

But it needs more to make everybody in the future think and act sustainably than just to make sure that every child gets a basic education. Children, as agents of behavioural change, all over the world need to learn about sustainable development. Hence, this addresses not only developing countries but industrialised countries too.

To promote education as a key agent for change, integration of sustainable development into curricula is needed. This is manifested in PoI point 114.

Conclusion

From a formal point of view the WSSD can be classified as a success. The comparison of the Draft Plan of Implementation, written 26 June 2002, with the final Plan of Implementation, written 4 September 2002, shows that the United Nations agreed in all topics concerning children. One might say that this is evidence of the agreement's weakness but in comparison to the agreements on other subjects like climate change or renewable energies this can be called a real success.

On the other hand there are still many child related problems that remain unsolved. Topics like rights of the child, children in armed conflicts, selling of children, child prostitution and child pornography do not only affect children in developing countries but in the whole world.

The “Convention on the Rights of the Child” was finalised in 1989 but till this day a leading global power did not ratify it. In 2002 an “Optional Protocol” was developed to govern the aspect of children in armed conflicts but it will take a few more years until it becomes legally applicable. These subjects were briefly discussed in Johannesburg but more discussions are needed.

Surprisingly, peace and war in general were not discussed at the WSSD. In contrast to the Rio conference 1992, peace was not named to be a basic principle for sustainable development.

^[1]WHO, Fifty-fifth World Health Assembly; The World Summit on Sustainable Development, 2002

^[2]John Hillary, Save The Children, 28 August 2002, WSSD Side Event, Johannesburg

^[3]Ulrich Toetze, Terre des Hommes, 29 August 2002, NESRAC Side Event, Johannesburg

^[4]UN, Plan of Implementation, 4 September 2002, Johannesburg

^[5]Carol Bellamy, UNICEF exec. Director, 30 August 2002, WSSD Side Event, Johannesburg

^[6]UNICEF, Rolling back Malaria, 2000

^[7]UNAIDS, Report on the Global HIV / AIDS Epidemic 2002

^[8]BMBF, Report of the Federal Government on Education for a Sustainable Development, 2002

^[9]Carol Bellamy, UNICEF exec. director, Development Outreach Vol.4, No.1, 2002

X. Sustainable Development and trade – global or local?

By Rol Reiland, ETH Zurich, Switzerland

After the last preparation committee for the World Summit on Sustainable Development (WSSD) in Bali in June 2002, about 27% of the Draft Plan of Implementation (one of the two main outcome documents of the WSSD) remained bracketed, which means that the parties did not reach an agreement over the proposed text sections and at least one country was adverse to its concept and its wording. Almost every contentious paragraph included at least one proposed alternative formulation, showing often completely opposing positions. Most of the contentious paragraphs were in Chapter V on “Sustainable development in a globalising world” and in chapter IX on the “Means of Implementation” and among the most contentious issues, were “international trade” and “finance”.

Although during the negotiations on the plan of implementation any language that appeared to portray the effects of economic globalisation as “negative” was objected by major developed countries, economic globalisation and its effects on livelihoods in the South and in the North were broadly discussed at numerous side and parallel events organized by civil society groups, scholars and other stakeholders in various venues during the time of the WSSD.

A major question voiced was the one about which development paradigm to follow (by developing nations in particular), in order to achieve economic growth without thereby depleting the existing stock of natural resources and polluting the natural environment. The main goal expressed was to allow for the populations affected to be well nourished, educated and cared for medically.

While some describe sustainable development as “the great race between development and degradation”¹ and others even condemn the concept of sustainable development as being “a perverted notion”², many in Johannesburg discussed the opportunities and the risks of international trade to contribute – beside other means – to sustainable development.

Out of the various options debated in Johannesburg, two major paradigms became apparent and were controversially discussed.

These include:

- 1) The so-called “globalist” paradigm, which advocates a further integration of developing countries into the world economy and claims a better access for producers of the South to the markets of industrialized countries.
- 2) The so-called “localist” paradigm which considers that sustainable development requires a local/regional approach and calls for local/regional economies to be protected from external competition so that people only refer to the global market for those products or services not available at home.

In this contribution, discussions of the two paradigms shall be summarized, analysing past experience and paying special attention to aspects of sustainable development, such as their potential to preserve natural resources and limit environmental pollution as well as their contribution to aspects of social and cultural development.

Sustainable Development and Trade: an antagonism?

Although trade and sustainable development are perceived by many so-called “localists” as an antagonist couple, participation in world trade has figured prominently in many countries of the most successful cases of poverty reduction – and, compared to aid, it has had far more potential to benefit the poor. According to Oxfam ³, if African countries would for instance manage to raise their share of world exports by just one percent, the continent would gain about US\$ 70 billion, which is about five times the amount provided to the region through aid and debt relief.

Export success of developing countries however remains highly concentrated geographically: East Asia accounts for more than ¾ of manufactured exports and an even larger share of high-technology exports. South Asia and sub-Saharan Africa – the regions with the highest rates of people earning less than US\$ 1 per day – account for less than 2 percent of world trade and Latin America’s share is shrinking. Experts say, that this trend could be reversed, if developing countries had better access to markets in rich countries.

Trade restrictions in rich countries cost developing countries around \$ 100 billion a year – twice as much as they receive in aid. Sub-Saharan Africa, the world’s poorest region, loses some \$ 2 billion a year, India and China more than \$ 3 billion ⁴. These are only the immediate costs. The longer term costs associated with lost opportunities for investment and the loss of economic dynamism are much larger. Moreover, trade barriers are often targeted at labour-intensive agricultural goods and manufactured products of developing countries.

Whereas developing countries reduced their trade barriers to a large extent – many as a requirement for international aid in response to macroeconomic crises in the 1980s and the 1990s, their industrialized brothers and sisters did far less in that respect: the World Bank reports that in Latin America, average tariffs fell from 50% of value in 1985 to 10% in 1996; non-tariff barriers which had affected 38% of goods imported before reform, affected only 6% by 1996 ⁵.

By contrast, in the late 1980s, the U.S., Europe and Japan pushed voluntary trade restraints on certain exports, such as agriculture, steel and textiles, in order to protect their domestic industries ⁶ and have since systematically reneged on their

commitments to improve market access for poor countries. Worse even, they have installed mechanisms of subsidies to their agriculture which – contrary to their pledges and commitments – have even been increased over the last years and months. Having pledged for instance, to phase out the Multi Fibre Agreement, which restricts imports of textiles and garments, they have liberalised fewer than one quarter of the products for which they had agreed to open their markets.

According to “globalists”, improved market access could however provide a powerful impetus to poverty-reduction efforts, especially if linked to domestic strategies for extending opportunities to the poor and overcoming gender-based barriers to market access.

Sustainable Development and economic localisation: an anachronism?

So-called “localists” strongly doubt that increased trade could be a major route to escape poverty, as a better market access for developing countries to markets in the North, would necessarily lead to a further liberalisation of world trade rules and a stronger dependency of developing economies on markets outside their borders and therefore outside their political and economic control.

As most developing countries are exporting more or less the same commodities (mostly agricultural commodities and raw materials) South-South competition for open Northern markets would result in an increased pressure on commodity prices. Export dependent economies of the South would see a further deterioration of their terms of trade.

Over the last 5 years for example, the value of coffee exports has fallen by US\$ 4 billion⁷, due to the offer of coffee on the world market exceeding its demand⁸. The World Bank estimates, that resulting price drops have driven out of business some 600,000 coffee growers in Latin America over the last months alone⁹.

Local and regional economies meanwhile, are much more stable due to the fact that producers and consumers are closer to each other and shifts in production or demand do not affect a whole country.

International trade theory further predicts that poor people in developing countries will benefit from integration through trade, but the theory has been confounded by reality. In Latin America, rapid growth in exports has been associated with rising unemployment and stagnating incomes. Real minimum wages in the region were lower at the end of the 1990ies than at the start of the decade. Oxfam says that in particular the rural poor are losing out¹⁰.

Moreover “localists” reckon that complete market access for low-income countries to rich-country markets “fits in very nicely with the profit-maximising agenda of big business”¹¹. Concerns are voiced that a large part of the world’s trade is controlled by a few trans-national corporations, which might absorb the far larger share of the benefits of an increased world trade. This is particularly true for the food sector (seeds, fertilizer, pesticides and trade of agricultural commodities) where 10 trans-national corporations control 60% of the market¹².

An increase in long-distance trade also means an increase in greenhouse gas emissions. Considering that the transport sector in general and trade related transport in particular is responsible for an increasing share of greenhouse gas emissions, a further increase of North-South trade is very sensitive in terms of

climate change, the adverse consequences of which again affect the world's poor hardest.

In terms of cultural sustainability, indigenous peoples' representatives claim that increased South-North trade also means globalising inventions, patents and standards which are universally protected by intellectual property rights in order to allow researchers and developers to pay off developing costs. Intellectual property rights however, do neither recognize nor remunerate traditional knowledge that has often been at the origin of new inventions, particularly in the sector of crop development biotechnology.

Local AND global trade?

Following the debate between so-called globalists and localists, one may distinguish two main perspectives:

- 1) The globalists argue mainly out of a more institutionalised "country" based position (distinguishing between Southern and Northern countries or economies), seeking more fair play in international (trade) relations and at the negotiating tables within the WTO (and the Bretton Woods Institutions), where issues of market access are decided
- 2) The localists, often concerned by the direct effects of economic globalisation on their (local) communities, argue out of a "community" based perspective. Seeking to preserve their livelihoods from negative exogenous factors and looking for more self reliance on their local/regional economies, they neither want their structures to be disturbed nor destroyed by other competitors in a global market.

Taking into account the different ecological and socio-economic effects of either paradigm, it's a tough job to choose one side or the other. Some people advocate for a concept they call "glocalisation", without clearly defining what they are talking about.

A huge problem of these "fundamental" debates that seek a global order to fit the demands of country delegations as different as Argentina or DRC or to meet the needs of people as different as a Peul sheep breeder leading his herd through the plains of the Sahelian Savanah (or what's left of it) and an Austrian mountain farmer whose production costs are so high that he relies almost entirely on EU agricultural subsidies. A global trade order needs to integrate so many factors and is expected to address so many problems, that it becomes an easy target for powerful lobbies to influence.

What could be a solution to that complex problem?

I admit, I do not have any suggestions, and I am afraid that no solution was found in Johannesburg. I wonder however, whether a solution could not be found in a diversity of agreements between different groups of countries, similar to the "Lomé Convention". The "Lomé Conventions", which are to be followed and replaced by the "Cotonou Agreement", consist of a legal framework between the former European Community (nowadays European Union) and to date 77 ACP countries¹³. Apart from regulating and organizing overseas development assistance (ODA) as

well as overall economic cooperation between the EU and the ACP countries, the Lomé Conventions provide for ACP countries to export fixed quotas of agricultural commodities such as sugar cane (and formerly bananas¹⁴) into the European common market at EU internal market prices (which are considerably higher than world market prices). These preferential terms have allowed ACP countries to benefit of stable export proceeds as world market prices were plummeting.

The question that strikes me personally, looking at this example of economic cooperation between the North and the South, is to what extent it could be extended to a whole range of manufactured goods and other products. Moreover, what are the potentials of such a partnership to support environmentally friendly food production in the South and the North while promoting stable incomes and sustainable livelihoods and preserving biodiversity and natural resources?

To what extent, do you think, similar partnerships between various groups of countries could be found in order to promote sustainable development in the South and the North?¹⁵ Reactions and further discussion are very welcome. Please write to: rol.reiland@gmx.net

¹ The Economist, 6th July 2002: *The great race in A survey of the global environment* p. 3

² Aga Khan, S.: *Le développement durable, une notion pervertie* in *Le Monde Diplomatique*, Dec 2002

³ Oxfam, 2002: *Rigged Rules and Double Standards: trade, globalisation and the fight against poverty*. www.maketrade-fair.org

⁴ Oxfam, 2002: *ibid*.

⁵ World Bank, 2000: *World Development Report*, p. 63

⁶ Eichengreen, B. & Kenen, P., 1994: *Managing the World Economy under the Bretton Woods System: an Overview* in Kenen, P. (ed.), 1994: *Managing the World Economy*, Institute for International Economics

⁷ Oxfam, 2002 : *Mugged : Poverty in your coffee cup*. www.maketrade-fair.com

⁸ The world's coffee production increased over the last ten years mainly due to Vietnam joining in the market as a new and powerful competitor and higher yields in Brazil and Kenya.

⁹ DIE ZEIT, 49/2002 : *Kaffee ist ihr Schicksal*. www.zeit.de

¹⁰ Oxfam, 2002: *Rigged Rules and Double Standards: trade, globalisation and the fight against poverty*. www.maketrade-fair.org

¹¹ Colin Hines in *The Ecologist*, issue June/July 2002: *The Oxfam debate*

¹² Aga Khan, S. *Le développement durable, une notion pervertie* in *Le Monde Diplomatique*, Dec 2002

¹³ The Lomé Convention I was signed in February 1975 between 46 African, Caribbean and Pacific (ACP) countries and the then 9 CEE member countries. Lomé I was followed by Lomé II (1980 – 1985), Lomé III (1985 – 1990), Lomé IV (1990 – 1995) and Lomé IV^{bis} (1995 to date); the Lomé Convention is to be followed and replaced by the “Cotonou Agreement” signed 23rd June 2000, but not yet ratified by 2 EU member countries.

¹⁴ The banana protocol of the Lomé Convention was condemned three times by the WTO court for being non-compliant with WTO rules

¹⁵ I ask this question being aware of the fact that such trade agreements are said to be not entirely compliant with WTO rules.

XI. Conclusion

*By Tourane Corbière-Nicollier, EPF Lausanne, Switzerland &
Jose Canga Rodriguez, Chalmers Gothenburg, Sweden*

This report highlights relevant issues, which specially motivated the World Student Community for Sustainable Development (WSC-SD) delegates at the UN World Summit for Sustainable Development (WSSD) in Johannesburg. These closing lines summarize all articles presented in the document.

The most noticeable common point is the need to realize how complex sustainable thinking is. Each of the authors became aware of the existing linkages between the chosen specific topic of the article and a variety of new factors. The importance of communication and understanding among the different stakeholders was also identified as crucial in order to reach a more sustainable world.

On Johannesburg urban questions, DeWayne Anderson outlined the necessity of finding solutions together. "Despite the many obstacles facing urban Johannesburg, the city has many assets upon which to capitalize... One can only hope that politicians, city planners, business leaders and civil society begin to work together to find a more integrated and balanced approach to supporting Johannesburg's business environment and citizenry. A start would entail encouraging the more efficient use of existing building stock and then reducing the negative effects of urban sprawl."

Eri Saikawa focused on biodiversity. She clearly pointed out the necessity of analyzing the situations in detail "considering all the interlinkages between the fields and going further than the traditional boundaries." She realized through this summit that when considering developing countries "strengthening their economic and political power without causing needless damage to the environment and without allowing their being exploited by developed countries is what we have to focus on in order to truly achieve sustainable futures."

In Silvia Bottinelli's analysis of the cultural minorities' precarious situation, the keywords are those of the UNESCO Universal Declaration on Cultural Diversity, "tolerance, dialogue and cooperation, in a climate of mutual trust and understanding are among the best guarantees of international peace and security".

Diego Puppini focused on local partnership and governance. He pointed out the fact that the "hope lies in a partnership with the government, which would "steer, not row". There is growing interest in local initiatives. Policy-makers and stakeholders are more and more aware that the people are the most important resource in any poor neighbourhood. Their initiative and good will can create amazing results, with little financial input."

Atsuko Terazono concentrated on water problems and on the role of the concerned persons to solve them. She states that "it is important to connect these different roles by providing roundtables among the many stakeholders in order to share and implement great ideas... Roundtables can vary in size, but it is essential to make the informational circulations of knowledge, ideas, and practical potential. A roundtable must be interdisciplinary and intersectoral. Local and regional partnerships among other stakeholders such as social, economical societies are needed."

Vera Becker and Peter Wotschke asked themselves what the problems are that children are facing today. The children's major problems were identified as:

- 1) Poverty,
- 2) Food & Water,
- 3) Health,
- 4) Education.

Several linkages and interactions between these four major aspects make it difficult to focus on them separately. As an example, they presented the following case: "AIDS victims very often lose their jobs and are isolated and stigmatized. In these cases children evolve into bread-earners. The lack of education prevents their ever earning a decent wage to break out of this poverty cycle. Such circumstances do not lead to a sustainable thinking and to environmentally friendly acting. The goals of sustainable development can only be achieved by a healthy society. Advances in health for the whole population require poverty eradication and clean and sufficient food and water."

Rol Reiland focused on the following two paradigms in his contribution

- 1) The so-called "globalists" who advocate a further integration of developing countries, and
- 2) The so-called "localists" who consider that sustainable development requires a local/regional approach and calls for local/regional economies.

He summarized the paradigms and paid attention to aspects of sustainable development, such as their potential to preserve natural resources and limit environmental pollution as well as their contribution to aspects of social and cultural development.

Our personal experience attending the WSSD left us with a better insight of the current state of the world. All the WSC-SD delegates became more aware of the ability of governments to promote real and proper solutions towards sustainable development and of the need for finding a path forward. It is clear to us that all the students gathered in Johannesburg had at least one thing in common – a commitment to ensure that sustainability be fully integrated into our lifestyle.

Our participation at the WSSD has caused this commitment towards action to grow stronger inside each one of us.

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We would like to thank the AGS for sending us to the WSSD and supporting our stay in Johannesburg. It was a great experience and a golden opportunity to join a conference of such relevance. During the two weeks in South Africa we met countless interesting people and had endless lively and open discussions as well as a short but close insight into the work of the United Nations. May this experience help us to better understand the needs and claims of the South and the North and to contribute to developing a path towards sustainable development!

Thank you!