

UN COMMISSION ON SUSTAINABLE DEVELOPMENT
16th Session, New York, 5 – 16 May 2008

Highlights of Side Events

5 May 2008

Against the Odds: Sustainable Community Farming in Zambia/ Mexico

Local communities in developing countries are playing an active role in finding sustainable solutions within their own capacity. Two successful stories from Zambia - Bakhita Women on Harnessing Rainwater for Agriculture and Mexico - a farmer's cooperation, have been presented.

In Zambia, water scarcity has tremendous consequences to the daily existence of local people, especially on agricultural productivity. The limited number of dams and deep wells has largely restricted the capacity of local populations to collect and store water.

In the village of Kalomo, Presentation Sisters, a women organization, formed a group of women called Bakhita, with the belief to work with their own hands to eradicate extreme poverty even against all odds. These women initiated a water facility project on their own, to harness rain water for agriculture. They started establishing a rolling fund through selling their knitting articles, and used this profit to build a weir dam. Most of the manual work was done by themselves! Water that is harnessed is being used for drinking purposes, agriculture, fish farming and various other interrelated projects. This project has demonstrated the value of cooperation, self-reliance, persistence and greatest determination of these African women on their way to meet the MDGs.

The land in Mixteca region of Oaxaca has one of the highest rates of soil erosion in the world, due to grazing, agriculture and deforestation. In 1980 a democratic local farmer-led organization, the Center for Integral Small Farmer Development in the Mixteca (CEDICAM), was formed in Oaxaca, to transform this highly eroded area into rich and arable land. These farmers have planted nearly three million trees in the past decades, and built hundreds of miles of ditches to retain water and prevent soil from eroding. The efforts are paying off as the regional ecosystem has been largely restored through their practices.

Our Future Flies on the Wings of Pollinators

Pollinators are essential for the sustainability of agriculture and ecosystem. Nearly 80% of the world crops require pollination. Of 115 leading global food crops, 87 are dependant on animal pollinators. Pollinators are declining at an alarming rate around the world, due to biodiversity threats such as land development, pollution, and pesticide poisoning. In the US, the annual average loss of pollinators has reached 35% in 2008. The major stresses on pollinators are from invasive species and loss of habitat.

Greater awareness and global action are required to change this trend before more ecological crises appears. Presently the information to assess and monitor the status and trends at global level is not completed yet. Conservation of pollinator calls for broader international participation, from baseline data collection to the implementation of management plans, as the issue is characterized by its habitat boarder, rather than the national boarder.

6 May

The Use of LADA (Land Assessment Degradation in Drylands) for sustainable land management, reducing vulnerability and adapting to changes

LADA Partnership was presented by Ms. Sally Bunning from FAO. The presentation focused on the partnership and stakeholder-involvement of the development and use of LADA. The development of LADA toolkit, collection of information and assessment of status and impacts were all through a participatory approach, that land users and policy makers at all levels were involved. She also highlighted the importance of considering all disciplines of land use and the effects on the functioning of ecosystem and services. Sustainable Livelihoods analysis can capture effects of land degradation on peoples' coping strategies, risk aversion and mitigation. Visual Soil Evaluation function allows simple and cheap tests in the field that farmers can easily learn and use. "Farmer Field School" approach is introduced as onsite education for adaptive management to farmers.

Case Study of LADA Senegal was presented by Déthié Soumare Ndiaye from Centre de Suivi Ecologique (CSE), focusing on the potential of using LADA to address national objectives and supporting policy-making process in Senegal, in response to the increasing pressure from diminishing rainfall and growing population.

Case studies and lessons learned from South Africa was presented by Lehman Lindeque. He introduced the use World Overview for Conservation Approaches and Technologies (WOCAT) programme for assessment and monitoring of best practices in sustainable land management. The feature of WOCAT approach is highlighted as 1) fully documented success stories and failures in conservation on a global database, and 2) selected successful generic approaches and technologies and Decision Support Systems to enable implementation.

Linking Local Level Monitoring and Sustainable Land Management was presented by Constance Neely, focusing on the strategies and practices of encouraging local communities participate in monitoring progress and changes and effectively use of this information in supporting the decision-making for land management. Global Water Watch is introduced as a global reporting and monitoring initiative serving this purpose.

China - GEF Partnership LADA Project was presented by Dr. Zhang Kebin. The first phase of the partnership is a 10 year (2003-2012) Country Programming Framework, with objectives of combating land degradation, reducing poverty; rehabilitating dryland ecosystems, and conserving biodiversity in drylands in China. Best practices from this project have been documented in the WOCAT.

The presentation was followed by group discussions around two key questions: 1) How to uplift importance of assessment and monitoring for improved management and decision- making, and 2) How to scale up and out Assessment and SLM at country and regional level. The needs for broader education and knowledge sharing, and incentives for farmers for maintaining ecosystem were discussed.

Agriculture and Sustainable Development in Africa: Trends, Challenges and Prospects

With a panel comprising David Le Blanc (UN-DESA), Chantal Line Carpentier (UN-DESA), Romain Perez (UN-DESA), Professor Uphoff (Cornell University) and David O'Connor (UN-DESA) as Chairman, the key issues being addressed were the emerging trends in Africa with respect to agricultural productivity, the production and use of bio-energy and the application of the System of Rice Intensification (SRI) in African agriculture. Innovations for Sustainable Development (comprising of local case studies) were also discussed.

Presentations made by David Le Blanc focused on the trends in agriculture in Africa; reasons for low productivity of African agriculture as compared to other regions and how climate change, rainfall variability and drought would impact agricultural production in the future.

Chantal Line Carpentier's presentation on the production and use of bioenergy in Africa addressed the potential benefits of biofuels in helping to supplement energy requirements in the African region, along with analyzing the risks associated in the production and use of biofuels. She highlighted the advantages of certain crops as potential feedstocks for biofuels production in Africa, notably sweet sorghum, and also considered the food-vs-fuel debate in an African context.

The presentation of Romain Perez highlighted the innovative projects being implemented in Africa to promote sustainable development. The case studies examined cover a broad range of sectors. In his presentation, he focused on two: Honey Care Africa Ltd., where bee-keeping and honey production have become a valuable source of income for poor farmers in Kenya, and the Village of Andavadoaka (Madagascar), where villagers organized themselves to enforce a no-take-zone to replenish and protect octopus stocks.

Professor Uphoff focused on the specific case of the System of Rice intensification (SRI) which has been introduced on an experimental basis in a number of locations in Asia, Africa and Latin America. He explained SRI as a set of six simple, science-based ideas designed to boost productivity not just of rice but of other crops. SRI relies on use of young seedlings, careful management of soil moisture, avoidance of trauma to roots, frequent aeration of soils, and enhancement of soil organic matter without use of chemical fertilizers. The yield improvements achieved on experimental plots have been very impressive. At first the approach is labour-intensive. Farmers reduce their input costs and raise their incomes significantly.

The presentations were followed by a lively question-and-answer period covering the biofuels question and food security, the risk to farmers of specializing in biofuels if prices were to fall back, the impact of biofuels production on small holder agriculture, and the need for pre-impact assessment of the social and environmental impacts of large biofuels projects.

Organic Farming

Exploiting the benefits of Organic Farming in the EU, presented by Mr. Leonard Mizzi (DG Agriculture, EU Commission). Organic farming is a rapid growing sector in the EU. The presentation highlighted the real opportunities revealed by organic farming and integrated farming on several levels contributing to vibrant rural economies through sustainable development. The new employment opportunities, market opportunities, as well as environmental advantages are the significant benefits from these farming systems.

Food, Fairness & Ecology-- a Vision for an Organic Food and Farming Research 2025, was presented by Anamarija Slabe (Institute for Sustainable Development, Slovenia). The vision of future organic farming consists of four parts, namely the ethical value systems for guiding technology development and innovation, viable concepts for the empowerment of rural economies in a regional and global context, efficient approaches to ecological intensification, and demands for high quality food. The vision will guide the future technology and research work in this sector.

Ecologica – online learning in organic farming was introduced by Martina Bavec (University of Maribor, Slovenia). CORE organic – Joining resources to improve research in organic food and farming, presented by Henry Lanng (Ministry of Agriculture, Denmark). He highlighted the recent finding from FAO, “yields do decline initially when converting to organic agriculture from high-input systems, but almost double when converting from low-input systems”. Therefore promoting organic agriculture in smallholder farms can be a viable way to increase local food availability. Two recent reports also confirm that large scale conversion to organic agriculture may improve

sustainable food security especially in the south. Denmark expressed the interest in investigating the potential of organic agriculture and production in developing countries.

The presentations were followed by active discussion. Questions were around consumer perspectives on organic products, in terms of pricing and awareness, and integrated planning of organic farming in the bigger agricultural system.

7 May

Biomass production: social and economic sustainability and impact on the other resources

The event started with a presentation by Nienke Smeets (Dutch Ministry of Environment), putting the question of how to make the production of biofuel more sustainable. The proposal from the Dutch government is to set and implement “Sustainable Criteria of Biomass for Energy”, to take into account the impacts of biofuel on GHG emissions, competition with food and other local purposes, biodiversity, environment, economic prosperity and well-being. Yet there exist three main challenges for setting and implementing such criteria, including consensus on the sustainability of biofuels, real-life application and monitoring.

The debate was around the question on the sustainability of biofuels. Many participants agreed that biofuel should not be seen as a substitute to fossil fuels, or even as a solution before the problem could be properly defined. Nnimmo Bassey (Environmental Rights Action) and Neth Daño (Third World Network) cautioned that the production of biofuel was highly invasive to the ecosystem as it caused changes in land use and biodiversity. The socio-economic impacts should not be neglected, for even the “marginal land” has special value to support the livelihoods of the local poor. Reactions to the “sustainable criteria” focused on the needs for adequate consultation with all stakeholders, particularly the local communities in biofuel producing countries, and effective monitoring by independent parties other than biofuel producing companies.

Renewable Energy and Pollution

Dr. Mildred Dresselhaus (Massachusetts Institute of Technology, US) presented the outcomes and findings from 2008 Washington International Renewable Energy Conference (WIREC), focusing on the growing motivation for renewable energy, development potential and prospects in a global context. The WIREC 2008 conveyed a strong sense of optimism internationally about the future of renewable energy. One significant outcome is the consensus on the strategies for investment in R& D: establishing an international fund contributed by developed countries to enable developing countries to participate in R& D, and calling all renewable energy industries worldwide committing 3% of their total investment into R& D activities to sustain innovation.

Dr. Dresselhaus also highlighted the findings on the relations between renewable energy and human resource development: the new employment opportunities from growing renewable energy sectors; the importance of capturing the high enthusiasm of young people; the effective use of interdisciplinary educational approaches; and the needs for distributing R&D workforce world-wide on an equitable basis.

She emphasized the importance of science and technology for the future of renewable energy, “discovery science is needed, incremental advances is not sufficient”. Also, as concluded in the WIREC 2008, transition to renewable energy is not one-dimensional, but a “big complex system”, requiring confluences from all elements of science, technology, industry, to economics, politics and sociology.

8 May

Policy Options for Promoting Alternative Livelihoods in Drylands

The Sumamad project (Amman, Jordan) focused on the development of dry-lands and how to ensure sustainability; strengthen livelihood security of the inhabitants of these dry-lands; how to develop wise management practices with relation to their economic activities and the future challenges that are faced by the people living in Dry-lands.

With a panel comprising of Dr. Thomas Schaff (UNESCO), Dr. Brigitte Schuster(UNU-INWEH), Professor Boshra Salem(University of Alexandria, Egypt) and Mr. Donald Gabriels (UNESCO chair on eremology, University of Ghent(Belgium), The particular case of the implementation of the Sumamad project in Omayed, Egypt was highlighted, along with the various measures that were taken to improve the livelihood of the citizens of Omayed.

Dr. Brigitte Schuster initiated the discussion by outlining the motivations of the Sumamad project and the policies that were determined and integrated within it to have successful implementation of the key issues which were outlined during the discussion, namely: Ensuring Sustainability; Development of wise management practices, development of livelihood security, Spreading the message to upscale the chances of success and the future challenges faced by the marginal dry lands.

Professor Boshra Salem focused on the policies and implementation of the Sumamad project in the case study of Omayed(Egypt) and the different project sites within Omayed. Also highlighted during the presentation were the fish farming practices in Pakistan where instrumental in increasing the incomes of the local communities along with cases of water reservoirs vegetable farming and rearing of livestock.

Mr. Donald Gabriels presentation addressed the issues of research priorities on desertification focusing on the questions in relation to desertification as an irreversible process; weather it was a typical African problem or was faced in marginal dry lands in other continents and the actions that were being undertaken by local as well as international communities to tackle this problem. The cases of Tunisia and Equador were also used as examples to bring to light the problem of desertification and the steps that were taken to resolve this issue.

The presentations were followed by a lively question and answer session wherein Professor Boshra Salem aired a short film on how the Sumamad project was able to develop a mechanism to provide drinking water using solar distillers to families in the Omayed region.

The Global Public Policy Network on Water Management

Global Public Policy Network (GPPN) highlighted the recommendations for CSD 16 on water issues. In terms of governance, it is recommended that the principle of one single global monitoring report co-ordinate by one body. In addition to indicators, case studies should be necessary to complete the information where the indicators do not reveal. Focus on the stakeholder engagement should include indigenous people. Regarding water efficiency, greater attention is needed for the consumption side. Stockholm International Water Institute presented the emerging issues and future challenges in water and sanitation: water and climate change, right to access water and sanitation, virtual water and transboundary waters. WWF highlighted the obstacles for transboundary water management is from poor governance, therefore recommendation to urge states to implement UN Water Convention should be included in the outcome document of CSD16. FANMex presented its activities in conveying the CSD message to the local people in Mexico, but the main challenge is language. There is a need for further integration of water and sanitation discussion with other CSD issues.

9 May

Land for Sustainable Urbanization in Africa

The panel discussion was around the critical issues caused by the fast urbanization in Africa, which are related but also beyond the land. Priscilla Achakpa (WEP, Nigeria) pointed out that the majority people who are affected by the loss of land are women and children, and for the poor, the access to the land should mean not only for shelter, but also for agriculture and other economic activities to sustain their livelihood. Patricia Hajabakiga (Rwanda) highlighted main challenges from urban-rural migration in Rwanda, including impacts on ecosystem caused by the informal settlement which are occupying the wetlands, vulnerability of dwellers to heavy rains, pressure on deforestation from the inefficient use of charcoal as cooking energy, expansion of urban area force more rural inhabitants “urbanized”, transport and security also become critical issues in those areas. Others also raised the challenges that the infrastructures and job opportunities in the urban area are not adequate to accommodate the rapid growing rural migrants, and investment in rural development does not help those emerging urban areas.

The solution is not stopping migration, but balance must be kept. Josue Dione (ECA) said that urbanization is an economic engine in Africa, but only when it is sustainable, i.e. should happen in the way pulled by improved economic situation in urban area, other than pushed by the poverty of the rural area. As a participant said, in Benin people in rural area do not migrate as they can sustain their livelihood on cotton production.

Biofuels, Food Security and Rural Development

Peter Mann (World Hunger Year) discussed the issue from the agrofuel production scale. He noted that the expansion of industrial- scale agrofuel production is a significant element to the steeply rising food prices and threatens food security and the right to food. The growth of agrofuel production leads to increasing violation to workers’ rights, including “slave” wages, child labor, and increased incidences of sickness and deaths resulting from dangerous plantation work. He also noted that industrial-scale agrofuel worsen corporate concentration and simply selling agrofuels will not bring lasting prosperity to rural communities. Current agrofuel production practices also pose environmental pressure, including deforestation, GMO contamination, water depletion and pollution, soil erosion. The speaker stressed that “fuel should not be a priority over food”.

During the interactive discussion speakers from the audience expressed different views presenting the problem as a policy issue. It was emphasized that right policy should promote growing biofuel on the non- (food) production land, to avoid fuel competing with food. Challenges and opportunities from small- scale biofuel production for rural development and gender equity were also discussed through cases in South Africa and Ghana.

12 May

Sea Level Rise, Climate Change and its impacts on Food Security in SIDS: Challenges and Opportunities

To further enrich the discussions of the 16th session of the CSD SIDS Day and as follow-up to the Special Ministerial Event on Food Security and Sustainable Development in Small Island Developing States n 2005, the UN-DESA SIDS Unit with the Sea Level Rise Foundation, brought together SIDS representatives to explore links between climate change and the emerging crisis of global food security and how this will affect SIDS.

The event focused on the impacts of rising energy and food prices, as well as how climate change and sea level rise will affect the SIDS' ability to produce food. The side-event also focused on issues highlighted in the 2005 Ministerial event, including the need to strengthen existing regional programmes for food security; capacity building; mainstreaming disaster risk management and climate change adaptation into agriculture and fisheries policies; and improving the performance of agriculture and agriculture-related activities by promoting agro-enterprises.

The side-event was chaired by Dr. Rolph Payet, Special advisor to the President of Seychelles and representative of the Sea-level Rise Foundation.

Are OECD Policies Contributing to Global Agricultural Sustainability?

The debate focused on whether the policies of OECD countries are enhancing the economic, environmental and social sustainability of global agriculture. Four speakers from OECD, IFAP, IUCN and Trade Union presented their viewpoints on this issue.

The speaker from OECD highlighted the key findings from the research and policy advisory work done by OECD. The policy challenges identified are: domestic policies need to respond better to the market signals; policies in international market need to ensure that trade and aid generate greater benefits; R& D needs to be refocused, and policy coherence needs to be improved.

The speaker from IFAP commented that the OECD policies were "slow in changing" and caused the food production surplus in 1980s; no enough attention is given to the role of farmers' organizations; agriculture issues in developing countries are not adequately addressed. The speaker from IUCN said more efforts are needed for getting the market signals right, and for correcting market failures in addressing environmental costs of agricultural activities. He emphasized the multi- functionality of agriculture and the reason why food cannot be simply treated as a commodity. He also underscored importance of public involvement in setting market regulation, in order to avoid market distortion from very concentrated power of large corporations. The speaker from Trade Union emphasized the missing of social aspects in the OECD policies, and it is critical because working conditions in agricultural sectors, particularly during harvest seasons, are very harsh, child labour and transnational migration are also serious problems that need to be addressed. At the end of the discussion, OECD representative cautioned that the policy response to the current food prices should be based on a long-term strategy, and taking counter-measures based simply on symptoms that may lead to regrets in the future, should be avoided.

Role of Water in Addressing the Challenges of Poverty and Food Security

The linkage between water, food and poverty was highlighted at the opening speech by ICID. It was noted that agriculture, which addresses poverty and food security, is the largest user of water. The challenge from global increasing food demand requires improving the access to water and land for the rural poor. The future roles of water and agriculture comprise the developmental goals in household food security and rural livelihoods, and more productive use of natural resources to bring economic and social benefits.

The new challenges for irrigated agriculture are, as pointed out by the speaker from FAO, from the rising food prices and tighter commodity markets, increasing environmental concerns, aging irrigation infrastructures, climate change, and growing demands for bioenergy. The rapid changing context causes increasing scarcity of water resources and affects the poor. The speaker from World Water Council (WWC) illustrated that if water productivity and diet pattern remain unchanged, additional need for annual water supply will reach 5600 km³ by 2050.

Various solutions to the water challenges were discussed at the panel. WWC highlighted the key to the future of food and water is increasing productivity of small-scale farmers. IFAD discussed poverty reduction strategy through targeted interventions in water and rural livelihoods. Multiple-use of water services can bring financial and non-financial benefits in addressing multiple dimensions of poverty, as presented by Winrock International. The speaker from Israel elaborated on the use of treated wastewater for irrigation to increase food production in arid areas, and emphasized that it could be a feasible solution for all sizes, from big metropolitan areas to small villages.

13 May

The MDG Water and Sanitation Target: Refining the monitoring tools”

Pasquale Steduto, the Chair of UN-Water gave a brief introduction of the work of UN-Water and its three major assessment reports: (1) The triennial World Water Development Report, (2) the WHO/UNICEF Joint Monitoring Programme (JMP), providing country data on water supply and sanitation coverage and (3) The Global Annual Assessment on Sanitation and Drinking Water (GLAAS), which will be presented for the first time in 2008. Muhammad Aslam Chaudhry, UN-DESA, gave an introduction to the *Global Initiative for Rationalizing Water Information (GIRWI)*, which will (i) provide an independent assessment of the implementation of policy actions decided at CSD-13 in 35 countries and (ii) strengthen capacities in countries to monitor the whole water sector. Clarissa Brocklehurst, UNICEF, introduced the findings of the 2008 JMP Report, indicating that the world is on track to meet the MDG target on access to safe drinking water but is lagging behind on the sanitation target.

Highlighting the limitations of a global assessment in terms of data, the JMP provides the best estimate based on different national surveys and gives in the 2008 report a differentiated picture of different levels of service. The Global Annual Assessment on Sanitation and Drinking Water (GLAAS), introduced by Federico Properzi, WHO, will analyze (i) the institutional and financial capacity of countries to reach the water supply and sanitation MDG targets and (ii) the effectiveness of external support agencies to facilitate this process. Peregrine Swann, EUWI, highlighted how these complimentary efforts have already helped to reduce the reporting burden of countries in an analysis carried out in cooperation by EUWI and GLAAS to assess the aid flows for water support and sanitation by donors. Hon. Bruno Jean-Richard Itoua, AMCOW President, stressed the importance of coordinating the efforts of the various activities to monitor the water supply and sanitation sector and pointed to the readiness of AMCOW to coordinate the efforts in close coordination with UN-Water.

Participants commented on the ownership of data, the need to show in country disparities and viewed the step taken by the JMP to differentiate by different levels of service as a positive development. The steps taken by UN-Water to develop key indicators for the whole water sector were pointed out as further efforts to avoid duplication and enhance coordination.

Sanitation : A Human Rights Imperative

The event focused on the new approach of human rights to sanitation. A draft publication *Sanitation: A human rights imperative* was presented by the panel speakers from WaterAid and Center on Housing Rights and Evictions, UN-HABITAT and Swiss Development Co-operation. It was highlighted that sanitation “are not only about hygiene and disease, they are about dignity too.” The impacts of a lack of sanitation on health, education and economic growth are profound, particularly on the poor. However, the crisis has been neglected by both donors and governments. It was recognized that sanitation is not a crisis of scarcity, but an issue of inequality, of poverty and

politics. The publication underlined that, to meet the human rights requirements, sanitation must be safe, physically accessible, affordable and culturally sensitive.

The panel reviewed the legal basis of the right to sanitation from the existing legally-binding international treaties, political declarations, national laws and the UN human rights report on drinking water and sanitation. Government obligations, as well as the priority actions for the civil society and international organizations were also discussed. Many comments were received through an interactive discussion, including the needs for clearly defining government responsibilities, addressing security issues in using sanitation facilities, putting human rights to sanitation in a broader scope other than just dignity.

Water in a Changing World—Emerging Trends in the Third World Water Development Report

Speakers from UN-Water, WWAP and FAO shared key messages and preliminary findings from The Third United Nations World Water Development Report (WWDR-3), which is currently under preparation at a joint effort of 25 UN agencies and to be launched at the Fifth World Water Forum (5WWF) in March 2009 in Istanbul. The report is addressed to decision-makers and those who are involved in the decision-making process. Conclusions of the report will be an input to the political process of 5WWF.

One conclusion of the report is the need for broader framework and partnership, particularly among business, civic and government leaders outside the water sector, as it is recognized that more and more decisions in sectors such as food, energy and others have great impact on water. The report recommends three-level approach, namely the sound management of water resources, cross-sectoral partnerships and holistic frameworks. Dynamics of drivers caused by emerging issues in a changing world, such as climate change, food prices, etc are reflected in the report.

The presentations were followed by interactive discussion. The importance of remaining high scientific credibility and objectivity of this report was emphasized.

14 May

Sustainable Development in China- Agriculture, Rural Development, Land, Drought and Desertification

The side event was chaired by Ambassador Liu Zhenmin, Deputy Permanent Representative of China to the UN with a panel comprising of government officials from China's National Development and Reform Commission (NDRC) and experts in agriculture and desertification.

Du Ying, the Vice Chairman of NDRC, presented China's challenges, progress, and its particular efforts in policy implementation and monitoring towards its sustainable development goals.

Ren Tianzhi (Chinese Academy of Agricultural Science) highlighted the fast agricultural industrialization, improvement in productivity, changes in agricultural structure, rapid development in farmer's specialized cooperative associations, and significantly improvement in rural livelihoods. From 2000 to 2007, the rural poverty has decreased by 53.9%; farmers are benefited from greater social welfare, including education, infrastructure, and medical services. The "Village Cleaning Project" has demonstrated growing environmental attention in rural area. Zhang Kebin (Beijing Forestry University) highlighted China's achievements and on-going efforts in combating droughts and desertification. Laws and regulation systems have been initially established and a number of key national projects are implemented.

The presentations were followed by an interactive question-answer session. Regarding the question on how the fast growing rural economies can minimize waste generation, the panellists elaborated the integrated waste management approach and use of waste for biogas in rural areas. To the challenge of growing water demands in the fast industrialized agriculture, the response was that 70% of investment in agriculture is addressing this issue, and China is making efforts in changing irrigation systems and improving water efficiency from consumption side. Regarding the impacts from urbanization, it was noted that the challenges are on both rural and urban areas, industrialization of agriculture could be part of the solution to the shortage of agricultural laborers; meanwhile, there is a need for large-scale capacity building for farmers and rural migrants.

Saving Water from Field to Fork

The message from this side event is “make food chain more efficient to save water”. Panel speakers from the Stockholm International Water Institute (SIWI) presented the key findings in the report *Saving Water: From Field to Fork*, launched at the CSD 16. SIWI, using a graphic model, illustrated changes in food consumption patterns driven by economic growth, and potential decrease of agricultural yields influenced by climate change. It was highlighted that a hidden problem of food crisis is the wasteful habits of consumers. The losses and wastage of food between field and fork may be as high as 50%, as indicated in the report. Agriculture and food production is the biggest water user, and the linkage between food wastage of water wastage is obvious. It is noted that enhancing water efficiency only in food production will not be sufficient, as the complicated food chain opens more possibility for food and water wastage. Therefore, in addition to supporting farmers, recommendations also include engaging business and sensitize consumers, to minimize water wastage through reducing food wastage in their processing, transport and diets.

In the question and answer session, the use of GMO and traditional agricultural methods to enhance agricultural productivity was discussed. Some also suggested the use of water- labelling approach to raise consumers’ awareness.

15 May

Life in the Balance - Food security ad environment in a changing landscape

UNEP addressed multiple factors contributing to the food crisis, and stressed that one should not expect singular and simplest solutions to resolve this complex issue. Regarding the call for responding to the food crisis with a sense of urgency, the speaker emphasized that the fundamental principle is to ensure the sustainability of agriculture as well as meeting people’s needs. He expressed concerns about possible side-effects from those short-term solutions being propagated, “we need to look for more intelligent answers”. He called attention that agricultural production has its physical constraints and its future relies on the sustainable use of resources, “farmers should not be viewed only as producers of agro-products, but as resource managers to the ecosystem”.

Several components to the food security and sustainable agriculture were discussed in the panel. Science Council of the CGIAR highlighted the importance of “ecological literacy” to the future of agriculture. WMO discussed the impacts from climate change to agriculture, and evoked the best use of weather information, climate prediction on seasonal changes and risk management from using early warning systems. Costa Rica shared its climate change strategies. ECA analyzed the problems in Africa, including the lack of investments in agriculture, impacts from international trade, low productivity due to the lack of technologies, and land degradation associated with poverty.

Partnerships for Gender Equality in Sustainable Development

The speaker from Millennium Challenge Corporation (MCC) introduced the gender policy of this U.S. government entity, and its implementation through various partnerships. The U.S. government is devoting significant resources through MCC-funded Compact and Threshold programs to help African countries in poverty reduction through economic growth. To date, MCC Compacts with a total value of \$ 3.8 billion have been signed with 9 African countries.

MCC integrates its gender policy and supports the involvement of local women in those programs through a variety of partnership initiatives. MCC works with recipient country governments to ensure buy-in and capacity for implementing gender policy. It also engages NGOs (e.g. the Women Thrive) and other donors to improve practice. Partnerships with civil society provided on-going, participatory and meaningful consultation. The gender policy of MCC is renowned as “the best and most practical gender policy in the U. S. government”, according to a leading advocacy agency.

16 May

Deepening Extractive Industries Transparency Initiative: Land Use and Sustainable Development for Host Communities in the Extractive Sector

The founder of Family Reorientation, Education and Empowerment (FREE)- a NGO in Nigeria, presented the efforts and achievements of the FREE to empower thousands of women who are living in the extractive sector through providing community-based free education programmes. She highlighted the notable contribution of these activities is to bring the Extractive Industries Transparency Initiatives (EITI) to the community level. The most important entry point for engaging communities in a policy dialogue, as she said, is the “functional literacy”.

The presentation was followed by a documentary video of FREE’s education programme and a lively discussion. A participant from Nigeria commented that EITI, though a good policy tool, has not brought much good to the people on the ground yet, and highlighted the need for independent assessment of implementation. He also stressed that environmental costs should be considered in the planning and management in extractive sector. Particularly, gas-flaring in Nigeria causes \$2.5 billion economic loss per year, and has tremendous negative impacts on human health and climate. Participants also discussed the vast potential for Nigeria to improve its social welfare if good policies on taxation and revenue- reallocation can be explored.