



# **REPORT ON THE CLIMATE CHANGE**

## **ROUNDTABLE**

### **KADOMA HOTEL AND CONFERENCE CENTRE**

#### **KADOMA**

**15 - 16 APRIL 2009**

# ZIMBABWE

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## ACRONYMS

ACCID	– Africa-wide Civil Society Climate Change Initiative for Policy Dialogue
AD	– avoided Deforestation
AFOLU	– Agriculture, Forestry and Other Land Uses
AMCEN	– African Ministerial Conference of the Environment
AU	– Africa Union
AWG-KP	– Ad Hoc Working Group on the Kyoto Protocol
AWG-LCA	– Ad Hoc Working Group on Long-term Corporative Action
BCI	– Bio-Carbon Initiative
CA	– Conservation Agriculture
CBO	– Community Based Organisation
CDM	– Clean Development Mechanism
CFC	– Chlorofluorocarbons
CIFOR	– Centre for International Forestry Research
COMESA	– Common Market for Eastern and Southern Africa
COP	– Conference of Parties
CSO	– Civil Society Organization
DEM	– Digital Elevation Model
GHG	– Greenhouse Gases
HCFC	– Hydro-Chlorofluorocarbons
IPCC	– Inter-Governmental Panel on Climate Change
KP	– Kyoto Protocol
LULUCF	– Land-use, Land-use Change and Forestry
MENRM	– Ministry of Environment and Natural Resources Management
NDVI	– Normalized Difference Vegetation Index
NPP	– Net Primary Production
REDD	– Reducing Emissions from Deforestation and Degradation
SOFECSA	– Soil Fertility Consortium for southern Africa
SRTM	– Space Shuttle Radar Mission
UNFCCC	– United Nations Framework Convention on Climate Change

## *Executive Summary*

Climate change is one of the biggest threats facing mankind today. Science has clearly demonstrated that there is extreme urgency in taking real action to avoid irreversible damages to our planet. Reports of the Inter-governmental Panel on Climate Change (IPCC) state that Africa will suffer the most from the impacts of climate change. The serious under-development of the continent signifies high vulnerability to climate change impacts.

The global nature of climate change requires the widest cooperation and participation in an effective and appropriate international response comprising mitigation and adaptation measures based on the principles of the Convention. Irrespective of a country's contributions to the problem we shall all be affected and must therefore act now to combat climate change. The international community, in the spirit of the United Nations Charter and strong believe in multilateralism, has responded by adopting the United Nations Framework Convention on Climate Change (UNFCCC). The UNFCCC provides an international framework for mitigating the cause of climate change and its effects at both international and national level. Indeed it commits countries to integrate climate change issues into their national planning process, sub regional or regional programmes. Climate change is a global problem that requires solutions at both global and local scales.

Climate change is widely recognized and accepted as a reality and that it poses serious problems with far reaching social, political, economic and environmental consequences, particularly in most vulnerable countries. Climate change is a serious risk to poverty. Major impacts of adverse effects of climate change include declining water resources, reduced agricultural productivity, spread of vector-borne diseases to new areas, high risks to forests (outbreaks of fires), drop in fish population and increased flooding from sea level rise and heavier rainfall.

Natural disasters in Zimbabwe are gradually increasing in number and frequency. Preliminary evidence, though not as yet conclusive, suggests that the high frequency of the occurrence of droughts and floods is linked to global climate change. With predictions that agricultural productivity in Zimbabwe could decrease by up to 30 % this century and marked by severe droughts, climate change poses one of the most serious food security challenges of the 21st century in the country. The high prevalence and intensity of poverty may amplify the negative impacts of climate change, particularly among rural and peri-urban populations, with unprecedented consequences on an already degrading environment.

In view of the magnitude changing climate, world nations agreed to the formulation of the United Nations Framework Convention on Climate Change (UNFCCC) with the main objective to achieve "... stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system." The Kyoto Protocol is a protocol to the United Nations Framework Convention on Climate Change (UNFCCC). The Kyoto Protocol is a legally binding agreement under which industrialized countries will reduce their collective emissions of greenhouse gases by 5.2% compared to the year 1990. The goal is to lower overall emissions from six greenhouse gases - carbon dioxide, methane, nitrous oxide, sulfur hexafluoride, HFCs, and PFCs - calculated as an average over the five-year period of 2008-12.

It is worthwhile to note that the lifespan of the Kyoto Protocol of the United Nations Framework Convention on Climate Change (UNFCCC) comes to an end in 2012. Under the

Kyoto Protocol, developing countries can benefit through direct investments for Clean Development Mechanism (CDM) projects from developed countries that have obligations of reducing their emissions of greenhouse gases. The CDM assists developed countries reduce their emissions through investment in developing countries of cleaner/renewable/low carbon emitting technologies. In view of the approaching 2012, parties have agreed to discuss a post 2012 climate change agreement that will ensure the sustenance of the current efforts to address climate change. In 2007, Parties agreed to shape an ambitious and effective international response to climate change, to be agreed at Copenhagen. 2009 is therefore a crucial year in the international effort to address climate change, culminating in the United Nations Climate Change Conference in **Copenhagen, 7-18 December**, where a new post 2012 agreement has to be reached.

The levels of awareness of the climate change issue in Zimbabwe are low, with most of the people knowing climate change in the most generalized way. Climate change is currently not an issue in the Parliament of Zimbabwe and thus it is not factored into development plans of the country.

## **CHAPTER 1: INTRODUCTION**

### **1.1 BACKGROUND**

The Government of Zimbabwe views *global climate change* as a serious issue. Zimbabwe was one of the first countries to sign and ratify the United Nations Framework Convention on Climate Change at the United Nations Conference on Environment and Development, held in Rio de Janeiro in June 1992. Zimbabwe has accepted ratification of the Kyoto Protocol. The Challenge for the country is how to develop adaptation strategies that can mitigate the diverse and complex impacts of climate change. The issues of climate change are included in the National Environmental Policy of Zimbabwe.

However, climate change has not attracted enough attention from a wide cross-section of our society, including political leaders. Public awareness for policy and decision-makers is therefore an important element for effective implementation of the Convention and its Kyoto Protocol. While climate change is global its adverse effects are local and most felt by poor people and poor countries because of their low adaptive capacity. This therefore makes adaptation to adverse effects of climate change a priority, demanding policy direction at the highest level.

The Ministry of Environment and Natural Resources Management (MENRM) in conjunction with the Common Market of Eastern and Southern Africa (COMESA) Secretariat with financial support from the Norwegian Embassy organized a two-day Climate Change Round Table during the period 15 – 16 April 2009 at Kadoma Hotel and Conference Centre in Kadoma. This meeting was a follow-up to a regional consultative meeting which was held in Nairobi, Kenya from 3 to 5 February 2009, which recommended that COMESA countries hold National Round Table Consultative discussions with stakeholders to come up with their countries' position on elements of negotiations, particularly with regards to issues related to Reducing Emissions from Deforestation and forest Degradation (REDD) in developing countries as well as the broader Agriculture and Forestry Land Use (AFOLU). These individual country positions will be fused into the African position in order to strengthen Africa's negotiating position on this important issue prior to the Copenhagen Conference in December 2009.

The announcement of this Round Table was well received by various institutions and was attended by a number of stakeholders including government officials, private sector, universities, farmers' organizations, FARNPAN, civil society, COMESA Secretariat staff as well as a representative from the Norwegian Embassy; the full list of participants is reflected as Annex 2 to this report.

### **1.2 OBJECTIVES OF THE ROUND TABLE**

The main purpose of this climate change roundtable, funded by COMESA, is to raise awareness on the climate change issue and the consequent climate change negotiations as well as the development of a national position on climate change which will feed into the unified African climate change position. The national position paper will be presented at the AMCEN regional meeting on climate change.

By consolidating the positions of different African countries, COMESA thrives to ensure that the region will eventually speak with one voice in the international negotiations, very important particularly this year, 2009, as nations of the world will be meeting in Copenhagen to agree on a new Climate Change regime.

The meeting was also meant to broaden stakeholder participation in developing the country's position on elements of negotiations related to Reducing Emissions from Deforestation and forest Degradation (REDD) in developing countries as well as the broader Agriculture and forestry Land Use (AFOLU).

### **1.3 WORKSHOP FORMAT**

The workshop was divided into four sessions, namely:

- SESSION I: OFFICIAL OPENING CEREMONY
- SESSION II: CLIMATE CHANGE SESSION
- SESSION III: TOWARDS BUILDING A POSITION ON CLIMATE CHANGE
- SESSION IV: OPEN DEBATE

In the first session, the participants introduced themselves followed by speeches by Dr M. Kanyangarara on behalf of the Executive Secretary of COMESA, Mr Tok Kubberud, Counsellor, Royal Norwegian Embassy, Harare and finally the welcome address by Mrs M. Sangarwe, the Permanent Secretary, Ministry of Environment and Natural Resources Management, who also said the vote of thanks for the invited guests.

The second session was characterized by presentations on the climate change issue and the bio-carbon issues, including the REDD and AFOLU. FARNPAN also presented on the ACCID programme. In this session, Mr Zhakata outlines the objectives of the workshop.

In the third session, the forestry issues were presented. The negotiation process under the UNFCCC was introduced and two breakout groups were set up to discuss issues of the REDD, AFOLU, Adaptation and Mitigation in one group, and Awareness and Advocacy in the other.

The fourth session was dedicated to the building of a country position on climate change.

The overall facilitator was Mr Zhakata, who was assisted by Mr Chipindu.

### **1.4 EXPECTED OUTPUTS**

The roundtable was expected to raise awareness on the climate change issue as well as the status of current climate change negotiation and come up with a set of recommendations for the country position which would be forwarded to the AMCEN for inclusion in the African Climate Change Position in preparations for the Copenhagen Climate Change Conference scheduled for the end of December.

## **CHAPTER 2: SUMMARY OF WORKSHOP PROCEEDINGS**

### **2.1 Official Opening Session**

The Roundtable Workshop was officially opened on Wednesday, 15 April 2009 by Mrs. Margaret Sangarwe, Permanent Secretary, Ministry of Environment and Natural Resources Management who is also the National Focal Point for the United Nations Framework Convention on Climate Change (UNFCCC).

Mrs Sangarwe reiterated the aim of the workshop i.e. to create awareness and initiate dialogue on climate change in the country with full participation of legislators, the industrial and insurance sectors, bankers, and other players. She highlighted the need for the country to harmonise concern on climate change, and for Africa to speak with one voice at the World Climate Change Negotiations Conferences (The Conference of Parties to the Convention and the Kyoto Protocol). This would strengthen Africa's position in negotiations.

The Permanent Secretary made it clear that the year 2009 is a crucial year as the nations of this world will be meeting in Copenhagen in December to agree on a new Climate Change regime earmarked to commence immediately after the expiration of the Kyoto Protocol in 2012. To this end, she emphasized the importance of inclusion of the interests of Africa, that is, issues of adaptation, the inclusion of both Agriculture Forestry and Land Use (AFOLU), Reduced Emissions from Deforestation and Land Degradation (REDD), provision of technological and financial support for Adaptation and Mitigation in the post Kyoto process.

In her speech, she also talked of the need for Africans to look at elements of commonality as we develop a common position, remembering the importance of forging some partnerships and alliances with other parties or regions of the world with similar positions.

She further outlined the chronology of the Climate Change Convention and the consequent Kyoto Protocol, which came with emissions targets for the developed nations. She informed the participants that as the lifespan of the Kyoto Protocol comes to an end in 2012, our voices as Africa need to be heard as a new agreement is being negotiated. We should suggest practical issues that will realistically assist Africa to adapt to climate change whilst at the same time playing a role in mitigation. The Bio-carbon initiative could be one of those areas that we should focus on. This concept, despite being an adaptation issue, projects of bio-carbon nature could be included in CDM.

Mrs Sangarwe reminded the participants that our main challenge in Zimbabwe is to develop adaptation strategies that can mitigate the diverse and complex impacts of climate change. We need to lure investment to support adaptation projects that include strengthening of early warning system, disaster preparedness and management, water harvesting and many others.

The other speech was given by the Dr Mclay Kanyangarara on behalf of the Secretary General of COMESA, Mr. Sindiso Ngwenya. Dr. Kanyangarara informed the participants that COMESA takes the issue of climate change very seriously and explained that COMESA was the largest regional economic bloc aimed at promoting regional integration in Eastern and Southern Africa. He highlighted that it is in this spirit that COMESA is organizing these Round Tables to share ideas among stakeholders to come up with a strong unified African position and make certain that it is recognized and is part of the final agreement that will come out of the UNFCCC negotiations in Copenhagen later this year.



Dr Kanyangarara further touched on the unity of the Africans, and that it should be recognized that there is more that unites us than that which separates us. This, he said is supported by the fact that the African and solidarity spirit exists at the highest political levels as declared at the last AU Summit that Africa must speak with one voice. He emphasized that irrespective of whether we are in dry forests, deserts, islands, tropical forests, oil producing, mining territories, we face the common challenges of poverty; low levels of awareness; insufficient resources and capacities for negotiations, adaptation and mitigation; weak scientific understanding coupled with low access to, and utilization of technology, and we jointly bear the brunt of the consequences of climate change. Africa has to overcome these challenges to successfully respond, adapt and mitigate climate change. No one is going to come and do it for us, he hinted. The participants were further informed that the developed world's focus is more on what Africa can do to mitigate climate change as opposed to what they can do to help Africa adapt to climate change.

Recognizing the important role that Africa can play in responding to climate change and commitment to partner with the rest of the world, Dr Kanyangarara said that the African position should not be difficult to arrive at. Bearing in mind that some African countries have common interests with others outside of the continent such as the equatorial/rain forest countries, oil producing countries, island states, we can only respond to climate change to the extent resources and capacities allow and according to our priorities. He highlighted the need for adaptation and mitigation to be considered and tackled together for Africa.

Dr Kanyangarara explained that whilst Africa accepts REDD, this initiative must be extended to all types of forests and land cover. In this regard he explained COMESA's Bio-Carbon Initiative which was launched in Poznan, Poland in December 2008 during the Fourteenth Conference of the Parties to UNFCCC and its linkage to the round table discussion. He informed of COMESA's vision of seeing all forms of terrestrial carbon included in the future climate change regime, and that COMESA commits itself to putting together the scientific evidence for this in Africa. We want a user friendly carbon market that compensates fairly for carbon credits. Mitigation projects in Africa should yield sufficient resources for meaningful adaptation. He emphasized the need for harmonising different country positions on the issue of REDD and AFOLU to ensure that Africa speaks with one voice at the Copenhagen Conference and maximize its benefits from the agreement to be reached. Dr. Kanyangarara also emphasized the importance of scientific evidence to strengthen Africa's position as speaking without facts would not help the continent's negotiating position on this important agenda. He called for mainstreaming climate change into the school curricula in order to ensure a green society.

In his concluding remarks, he informed of the need to vigorously support and defend the African Position. The many initiatives on the continent should feed into the unified African position through AMCEN and the AU. That is precisely what will happen to the results of these Round Tables. He informed participants of the existence of the Africa-wide Civil Society Climate Change Initiative for Policy Dialogues (ACCID) at the political level, tasked to link up these initiatives with the AMCEN, Civil Society, Business, etc.

He further informed that the gathering of scientific evidence to support the African position is being spearheaded by the World Agro-forestry Centre (ICRAF) supported by the Centre for International forestry research (CIFOR).

Dr Kanyangarara also highlighted that Africa is committed to shifting towards a low-carbon, climate-conscious economy through managing our own emissions but are not yet able to commit to any specific targets until measurements and quantification is completed, resources are mobilized and capacity is built.

On the Zimbabwe issue, he said that coal is the major primary source of commercial energy and there is so much of it. The country should thrive to adopt clean coal technologies and other energy conservation technologies. Coal bed methane (GHG) was said to be leaking into atmosphere in the western part of the country. This gas should be used as an alternative and cleaner form of energy.

Emissions from deforestation, land use and degradation can be tackled by improving agricultural productivity and lowering costs through conservation agriculture, agro-forestry as has happened in Zambia. Because of its relatively developed and integrated industrial base, Zimbabwe has better chances for making profitable business out of climate change. Conscious efforts to build a green society create a market for green products, technologies and waste recycling.

He finally said that the country has a vibrant stock market which is a stepping stone for a similarly vibrant carbon market.

Dr Kanyangarara's presentation was followed by the presentation by the representative of the Government of Norway, which has provided funds for this roundtable workshop on climate change.

The representative of the Government of Norway, Mr Tok Kubberud informed the participants that the Government of Norway was deeply concerned about climate change. He said that Norway provided funds to COMESA to assist some countries during the preparatory period for the World Climate Change Conference to be held in Copenhagen, Denmark in December 2009. He further said that Norway has the visions of reducing greenhouse gases (GHG) and reducing temperature increases by 2°C compared to the pre-industrial times. He also said that Norway was eager to see a 50 – 80% reduction of GHGs by 2050, and 25 – 40% by 2020.

Mr Tok Kubberud said that whilst all OECD countries were to take quantified emission reduction targets, emerging economies should also do like wise in a new vision of the long-term corporative action. The reductions should be measurable, reportable and verifiable, in all the cases. He emphasized the need of technology transfer to least developed countries to create low carbon economies. As emissions from the forestry sector contribute about 20% of the annual global emissions, he said that the Government of Norway had availed US\$500 million a year to developing countries to reduce emissions from deforestation and forest degradation (REDD), among other initiatives. He also highlighted the need to consider Carbon Capture and Storage as one of the activities that could also reduce emissions of the GHGs substantially.

After the opening ceremony the actual round table discussions commenced.

## **2.2 Summary of Presentations**

### **2.21 The Climate Change issue - Mr. W. Zhakata**

Mr Washington Zhakata, the Coordinator of Climate Change in Zimbabwe presented the first paper of the roundtable discussion and started by also welcomed participants to the discussion and outlined the purpose of the meeting. He gave the background to the discussion in relation to the Nairobi Regional Consultative meeting held earlier in the year and emphasized the importance of the forthcoming Climate Change Conference in Copenhagen. The Coordinator also reiterated government's commitment in making a contribution in the global fight of climate change.

The paper laid foundation of the discussion by outlining the threat of climate change, its causes, why discuss about it, the associated current and future changes and implications for Zimbabwe. The paper also outlined the negotiation process under the United Nations Framework Convention on Climate (UNFCCC) and pointed out the difficulties of smaller delegations to attend sessions. The below is a summary of his presentation.

*What is known?*

Atmospheric composition is changing because of increased greenhouse gas (GHG) emissions mainly from energy generations, manufacturing, fossil fuel burning, land use and other sources, causing global warming.

*Why discuss climate change?*

The adverse effects it has on livelihoods i.e. increase in frequency of disasters e.g. droughts, storms and floods; causing human suffering.

*What are the noticeable changes associated with climate change?*

Temperature increases of between 0.3° – 0.6°C globally have been observed in the last 100 years, global sea level rises of between 10-23cm in the last 100 years, and 1.5° – 5°C projected temperature increase in the next 80 to 100 years. Furthermore, sea level is projected to rise by 100cm in the next 100 years.

Southern Africa may experience a 2-4°C temperature rise with doubling of CO<sub>2</sub> atmospheric concentration from current values, decrease in precipitation of 10-15% and consequently, reduced maize production.

*Implications for Zimbabwe*

This may result in increased length and frequency of dry spells (drought), shortening of the growing season, increased intensity of storms, reduced water availability and increased rate of deforestation as people will be looking for alternative means of survival.

*Response to Climate change*

UNFCCC/Kyoto Protocol – Countries of the world congregated in 1992 and crafted the Climate Change Convention. The Climate Change Convention is aimed at stabilising GHG concentrations to levels that do not interfere with the climate change. The Kyoto Protocol was agreed upon in 1997 with quantified emission targets for developed countries. The Protocol outlined actions to be taken to achieve the above by 2012. The lifespan of the Kyoto Protocol stretches up to 2012.

Mr Zhakata also touched on the Bali Road Map and its Action Plan as the major outcome from the Thirteenth Session of the Conference of Parties (COP-13) which was held in Bali,

Indonesia in December 2007. It was explained that the Bali Road Map consists of five elements or building blocs; namely, a shared vision, enhanced action on mitigation, enhanced action on adaptation, enhanced action on technology development and transfer as well as enhanced action on financing and investment. It was explained that the five blocs provide the foundation for an international framework of addressing climate change. The shared vision sets the goal that the international community should aim at stabilizing greenhouse gas emissions as well as ensuring adaptation to the adverse effects of climate change while technology and financing are the means that will help the achievement of that goal.

### *Zimbabwe's response*

Zimbabwe is signatory to the UNFCCC. The country established the Climate Change Office to deal with the climate change issues. Zimbabwe Parliament has ratified the Kyoto Protocol.

### *Beyond 2012*

As we approach 2012 when the Kyoto Protocol expires, the Parties to the Convention and the Protocol are engaged in discussions of a future climate change regime under the Ad Hoc Working Groups on Long-Term Cooperative Agreement (AWG-LCA) and the Kyoto Protocol (AWG-KP). These negotiations have a lot of huddles associated with demands by the developed world for developing country Parties to join in the emissions reduction targets, and developing country Parties' reluctance to adhere to this call. The negotiations on the future regime are scheduled to be concluded in December 2009 at COP 15 in Copenhagen, Denmark. Many countries in European Union have pledged to reduce emissions substantially after 2012 provided the rest of the world cooperates.

## **2.22 Introduction to the REDD and AFOLU – Dr Davison Gumbo**

Dr Gumbo started by discussion issues of forestry that are covered by the Kyoto Protocol(KP), in which he said that KP only addresses afforestation and reforestation (A/R) to enhance the sink of GHG emissions. Avoiding deforestation (AD) was not included because countries have different circumstances in LULUCF sector, hence equity was an issue. In this regard, A/R through CDM has not been very promising. Avoided Deforestation was said to have a potential of addressing 20% of the global emissions which is equivalent to 1.6 billion tons of carbon per year (1.6 Gt C/y).

He later gave a brief history of REDD and gave an indication that full REDD implementation would be after the First Commitment Period, i.e. from 2012 onwards. Dr Gumbo then went on to discuss the current state of negotiations with reference to REDD. He made reference to Decision 1/CP.13 – The Bali Action Plan that includes adaptation, mitigation, technology transfer, and financial mechanisms, Decision 2/CP.13 – in which REDD is taken as a way of mitigation measure. Demonstration activities are encouraged under this concept and indicative guidance has been said to be provided.

The indicative guidance was said to contain the following elements:

- Demonstration activities should be undertaken with the approval of the host Party;
- Estimates of reductions or increases of emissions should be results based, demonstrable, transparent, and verifiable, and estimated consistently over time;

- The use of the methodologies is encouraged as a basis for estimating and monitoring emissions;
- Emission reductions from national demonstration activities should be assessed on the basis of national emissions from deforestation and forest degradation;
- Sub-national demonstration activities should be assessed within the boundary used for the demonstration, and for associated displacement of emissions;
- Reductions in emissions or increases resulting from the demonstration activity should be based on historical emissions, taking into account national circumstances;
- Sub-national approaches, where applied, should constitute a step towards the development of national approaches, reference levels and estimates;
- Demonstration activities should be consistent with sustainable forest management and considers the relevant provisions of the United Nations Forum on Forests, United Nations Convention to Combat Desertification and the Convention on Biological Diversity;

The following definitions were provided by the presenter:

**Forest** is defined structurally on the basis of crown cover percentage, minimum height and minimum area of stand: Forest area between 0.05 and 1 ha with a potential to reach a minimum height at maturity in situ of 2 to 5 m, and tree crown cover (or equivalent stocking level) of 10 to 30 % (*Decision 19/CP.9*).

**Deforestation** is defined as the direct, human-induced conversion of forested and to non-forested land (*Decision 11/CP.7*).

**Degradation** is defined as a direct, human-induced, long-term loss (persisting for X years or more) or at least Y% of forest carbon stocks [and forest values] since time T and not qualifying as deforestation. The parameters X, Y and T have not been defined (IPCC, 2003).

Other issues discussed in this presentation were options for scale of REDD, reference level, measurement and monitoring, leakage and permanence. It was also highlighted that REDD has the potential to deliver large cuts in emissions at low cost within a short time frame and, at the same time, contribute to reducing poverty and sustainable development.

The issues of financial arrangements for REDD, REDD readiness, Capacity building and technology transfer, and methodologies were still on the table under review.

### **2.23 Estimation of above-ground carbon stocks – Dr Murwira**

Dr Murwira presented the next paper on ‘Estimation of Above-ground Carbon Stocks in Zimbabwe’. The summary of his paper is presented below.

In his opening remarks, Dr Murwira highlighted that one of the most important activity in Global Environmental Change research is to quantify the spatial variation in the terrestrial sinks of carbon. Estimation of carbon sinks has mainly been based on few experimental plots which are localized without a wider application in larger landscapes, and thus, there is need to develop methods that lead to fast and robust assessments of carbon fixation and storage.

He defined Net Primary Production (NPP) as the amount of Carbon fixed per unit area per unit time and is a useful proxy for measuring carbon sequestration by terrestrial ecosystems. He further informed the participants that measurement of NPP has normally been done on weather stations and that data is sparse. As a result, remote sensing (RS) methods are being developed with intent on estimating “continuous field” with simpler measures based on xanthophyll cycle.

Dr Murwira then presented some results of Satellite-based quantification of above-ground carbon stocks. The data that was used is as follows: DEM for Zimbabwe produced via the Space Shuttle Radar Mission (SRTM) and is archived at the Department of Geography and Environmental Science GIS laboratory, MODIS satellite data downloaded from the MODIS website, NOAA AVHRR Normalized Difference Vegetation Index (NDVI) data obtained from the FewNet website.

From the computations it was found out that NPP over Zimbabwe’s terrestrial ecosystems has a mean of 5.99 ton-1 ha-1 yr-1. NPP ranges from 1 ton-1 ha-1 yr-1 in communal lands to 11 ton-1 ha-1 yr-1 in forest estates and national parks. We also conclude that remotely sensed data is useful in providing a robust and quick estimate of above ground carbon stocks in terrestrial ecosystems.

Dr Murwira concluded by saying that robust and quick ways of estimating carbon stocks would help Zimbabwe meet its environmental management and reporting obligations. He however said, it is important to note that in this study, they did not estimate standing biomass but rather biomass or carbon fixation. Work is in progress of estimating standing biomass.

#### **2.24 The potential role of the forests and agro-forests in carbon sequestration in Zimbabwe - M. Mushongahande**

An overview of the forestry situation was given first in this presentation, and outlined below. The participants were informed that Zimbabwe is 39 million ha in extent (landlocked). The forestry resources cover approximately 66% of the total land area (257, 783km<sup>2</sup>). The Forestry Sector in Zimbabwe is divided into two broad groups the Commercial and the Indigenous forestry. Of the above 39 million ha >100 000 ha is under commercial plantations. The area runs along the Eastern Highlands (about 250km long). The main species grown include Pines (65.5%), Eucalyptus (24.8%), Wattle (9.6%) and Poplar (0.10%). Commercial is dependent on Pines. Commercial Pine species grown include: *P. patula*, *P. taeda*, *P. elliottii*. *P. kesiya*, *P. tecunumanii* & *P. maximinoii* are up-coming.

The Indigenous forestry sector covers less than 27 million hectares. This sector comprise of the following: Miombo, Teak, Mopane, Acacia and Terminalia/Combretum woodlands.

Miombo Woodlands: Are the most extensive woodlands in Southern Africa & Zimbabwe. These cover 9, 493, 533 ha (24.3%).

Teak woodlands: These cover 1, 941, 741 ha (5%) and are exclusive to the Kalahari sands and are predominantly found in the gazetted forests of western Zimbabwe.

Mopane Woodlands: Are widespread in Zimbabwe and are associated with low altitudes and hot areas. They cover a total of 7, 343, 044 ha or 18.8% of Zimbabwe.

Acacia Woodlands: These cover a total of 3, 080, 801 ha or 7.9% of Zimbabwe. They are important in pastoral systems of the drier areas of Zimbabwe.

Terminalia/Combretum Woodlands: These are often found as tree-shrub combinations. They cover a total of 4, 761, 107 ha or 12.2% of Zimbabwe.

The factors affecting forest resources in Zimbabwe and forest trends were said to be as follows:

- The area of indigenous woodlands in Zimbabwe has shown a continuous decline in the past two decades.
- This is driven by deforestation, fuelwood consumption, fires, disease and browsing by wildlife. Opening up of forestland for agriculture expansion tied to resettlement has led to the major losses of forest resources.
- Overall biomass depletion: 47 million tones per annum while additions remained at 44.34 million tones per annum.

Below is a table which was presented by Mr Mushongahande, showing the variation of forest area with time.

<b>Year</b>	<b>Pine</b>	<b>Eucalyptus</b>	<b>Wattle</b>	<b>Others</b>	<b>Total Area</b>
<b>1998</b>	<b>80 087</b>	<b>23 812</b>	<b>13 627</b>	<b>578</b>	<b>118 104</b>
<b>1999</b>	<b>80 989</b>	<b>23 910</b>	<b>13 434</b>	<b>288</b>	<b>118 621</b>
<b>2000</b>	<b>79 082</b>	<b>29 036</b>	<b>11 789</b>	<b>275</b>	<b>120 182</b>
<b>2001</b>	<b>78 007</b>	<b>29 314</b>	<b>11 529</b>	<b>280</b>	<b>119 130</b>
<b>2003</b>	<b>72 914</b>	<b>25 371</b>	<b>10 410</b>	<b>278</b>	<b>108 973</b>
<b>2006</b>	<b>68 550</b>	<b>26 010</b>	<b>10 039</b>	<b>106</b>	<b>104 705</b>
<b>2007</b>	<b>70 946</b>	<b>26 654</b>	<b>9 906</b>	<b>134</b>	<b>107 641</b>

He also outlined the importance of forest resources in Zimbabwe including contribution to GDP, watershed management and further defined carbon sequestration as the process of removing excess carbon dioxide from the atmosphere. On the carbon cycle, it was said that the natural carbon cycle is balanced by a number of sources and sinks and that the exchanges of Carbon between forests and the atmosphere are influenced by Human induced and natural disasters.

It was further mentioned that the potential for forests to sequester carbon is large and that globally, forest ecosystems are the largest terrestrial Carbon pool since they store >80% of all terrestrial above ground Carbon and > 70% of all soil organic Carbon. It is important to note that net-growing forests cause sequestration of carbon. Thus the first and most significant option to enhance Carbon sequestration potential of forests lies in the establishment of new

forests (afforestation or reforestation). The second option would be to foster the slow formation of a stabilized soil Carbon pool.

It was made clear to the participants that the Carbon sequestration potential in forest soils is large although smaller than that of agricultural soils (see next table). Research has also estimated that the Carbon sequestration potential of the world's soils lies between 0.4 – 1.2 Giga tons of C per year. The potential of forests in carbon sequestration is provided below.

Land use	Area (ha)	Annual C sequestration potential (Giga tons C/yr).
Cropland soils	1.35 x 10 <sup>9</sup>	0.40 – 0.80
Rangeland, Grassland soils	3.70 x 10 <sup>9</sup>	0.01 – 0.30
Irrigated soils	275 x 10 <sup>6</sup>	0.01 – 0.03
Degraded soils, forest soils	1.10 x 10 <sup>9</sup>	0.20 – 0.40

Planting new forests or managing existing forests or agricultural land more effectively can capitalize on nature's ability to act as a carbon sink. New research shows that although planting trees alone is unlikely to solve our climate problems, large scale plantations could have significant benefits in the longer term. Above research has also proved that on average each ha (100 x 100 m) of apparently mature, undisturbed African forest was increasing in tree Carbon stocks by an amount equal to the weight of a small car.

Factors affecting the potential of forests in Carbon sequestration in Zimbabwe are discussed below. To some extent the role of forest management in Carbon sequestration is determined by factors that are under Human control like Silviculture practices (species, rotation), disturbances such as pest infestation and fire, and availability of land for afforestation or reforestation.

There is also emerging knowledge about forests which need to be given attention. Although forests have been known to act as sinks of excess Carbon the effects of species composition on the process of Carbon sequestration is largely unknown. Research in Hawaii has shown that Carbon sequestration is significantly boosted when the composition of tree stands included nitrogen fixing trees.

The major challenge for forestry was said to be to find a viable compromise between potentially conflicting demands of society such as supplying wood and non-wood forest products simultaneously with sequestering large quantities of Carbon in forest ecosystems,



conversion of forestry land into other land uses and the challenging task of determining, through inventories, the carbon in our natural forests and trees.

In conclusion, Mr Mushongahande the presenter highlighted that Zimbabwean forests and agro-forestry have a potential role in Carbon sequestration. Our forests and trees underpin key sectors of the economy by providing energy needs, supporting crop and livestock agriculture, wildlife and tourism, water resources and livelihoods. He emphasized the need to introduce incentives for Communities to do active forestry management, otherwise through the Carbon Markets. The diversity of forest types requires that for each forest type and condition, we generate accurate data on forest cover, deforestation, degradation, biomass productivity and forest utilization that would guide policy formulation.

### **2.25 UNFCCC process – M. Sangarwe (Ms)**

Mrs Sangarwe explained the UNFCCC from the history of the convention up to the current negotiations as presented below.

The international political response to climate change began with the adoption of the UNFCCC in 1992. The UN Framework Convention on Climate Change (UNFCCC) sets out a framework for action aimed at stabilizing atmospheric concentrations of greenhouse gases to avoid “dangerous anthropogenic interference” with the climate system.

The UNFCCC entered into force on 21 March 1994, and now has 192 parties. In December 1997, delegates at the third Conference of the Parties (COP 3) in Kyoto, Japan, agreed to a Protocol to the UNFCCC that commits industrialized countries and countries in transition to a market economy to achieve emission targets. These countries, known under the UNFCCC as Annex I parties, agreed to reduce their overall emissions of six greenhouse gases by an average of 5.2% below 1990 levels between 2008-2012 (the first commitment period), with specific targets varying from country to country. The Kyoto Protocol entered into force on 16 February 2005, and now has 180 parties.

The first Conference of the Parties serving as the Meeting of the Parties to the Kyoto Protocol (COP/MOP 1) took place in Montreal, Canada in 2005. This meeting established the *Ad Hoc* Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol (AWG-KP), to consider commitments by Annex I countries after the Protocol’s first “commitment period” concludes in 2012. In addition, COP 11 agreed to consider long-term cooperation under the Convention through a series of four workshops constituting a “Dialogue” until COP 13. COP 13 and COP/MOP 3 took place in December 2007, in Bali, Indonesia. The focus of the Bali conference was on long-term issues, and negotiators spent much of their time seeking agreement on a two-year process, or “Bali Roadmap,” to conclude negotiations by COP 15 in December 2009 in Copenhagen, Denmark. This roadmap includes “tracks” under the Convention and the Kyoto Protocol. Negotiations on the follow-up to the Convention Dialogue resulted in agreement on a Bali Action Plan that established the AWG-LCA, which was mandated to launch a comprehensive process on long-term cooperative action under the Convention.

The Bali Action Plan identifies four key elements: mitigation, adaptation, finance and technology. The Plan also contains a non-exhaustive list of issues to be considered under each of these areas and calls for articulating a “shared vision for long-term cooperative action.” The first session of the AWG-LCA and fifth session of the AWG-KP took place

from 31 March to 4 April 2008, in Bangkok, Thailand. Further sessions were held in June 2008 in Bonn, Germany and in August 2008 in Accra, Ghana. For additional history of the process, see [http://www.iisd.ca/process/climate\\_atm-fcccintro.htm](http://www.iisd.ca/process/climate_atm-fcccintro.htm)

On the concerns of Zimbabwe at these negotiations, the participants were informed that the main challenge of Zimbabwe is to develop adaptation strategies that can mitigate the diverse and complex impacts of climate change. We need to lure investment to support adaptation projects that include strengthening of early warning system, disaster preparedness and management, water harvesting and many others.

### **2.26 ACCID Programme – Dr. L. Sibanda (FANRPAN)-COMESA Civil Society**

Dr Sibanda explained the role of Africa-Wide Civil Society Climate Change Initiative for Policy Dialogues (ACCID). COMESA, being keen to ensure that the position taken by governments in the climate change policy negotiations incorporates the interests of all stakeholders: farmers, agri-business; research community; business community; ordinary citizens, has established ACCID (which is coordinated by FANRPAN) to ensure that African civil society and governments collaborate in CoP 14 and CoP 15 global platform negotiations.

The ACCID and African Climate Solution feed into the NEPAD CAADP Pillar One: Sustainable Land and Water Use Management. ACCID is Africa-wide and has the following objectives:

- To mobilise space for civil society to speak with one voice in partnership with government
- Link adaptation and mitigation agenda to on-going negotiations leading to CoP 15
- To equip Civil Society Organisations (CSOs) and government with research evidence (scientific and anecdotal) for policy development
- Ensure that funds generated from carbon trade and other financial instruments for funding climate adaptation programmes benefit the poor and help Africa towards the attainment of the MDGs

Along the climate change lines, ACCID has managed to bring together CSOs to draw up a paper on Africa's position on climate change, facilitated engagements on the REDD- Agriculture, Forestry and Sustainable Land Use [AFOLU] Bio-Carbon Coalition under the Africa Climate Solution in Poznan, Poland, lobby the international community, governments and Climate Change negotiators to endorse REDD and AFOLU in the main text to be adopted for the CoP 15 in Copenhagen in November 2009. ACCID has also managed to raise awareness on the central role of Africa's forest and agricultural activities in climate change mitigation and adaptation through media coverage and lobbying.

On the road to Copenhagen for the crucial climate change conference that is going to determine the future of the climate change regime, ACCID intends to lobby the UNFCCC to formally recognise special interest groups (farmers, women, youth, researchers, business, trade unions and NGOs) and give them a seat on the global negotiations table. E.g. UNCSO, work closely with African Ministerial Conference on the Environment (AMCEN) to ensure that the African position incorporates issues of concern to ordinary citizens to be taken forward into global negotiations.

ACCID would also want the African Union to be visible in the climate change process and at CoP15 in particular, and to ensure that key messages and documentation on the African position are disseminated to all delegations (All, African & non African) at least 3 months prior to the Copenhagen meeting.

ACCID will cover events and dialogues at the forthcoming COP 15, produce features and opinion articles, will conduct Q & A's with key participants from various regions and will produce a diary to guide stakeholders on events and key topics for them, among other activities.

### **2.27 Climate change adaptation - Dr Mapfumo, SOFECSA**

Dr Mapfumo gave an outline of the project currently being undertaken by UZ and SOFECSA which is aimed at increasing options available to fight food security challenges by managing soil fertility for small holder farmers. The main objective is to manage the resource base (soil) that drives poverty. With the changing climate communities need to change their crop variety, management options, farming technologies and enhance their capacity as well as for those participating institutions.

The main pillars of the project are to;

- generate evidence on state of resilience
- defining vulnerable groups and the technical options to be used through building of expertise
- enable households to produce sufficient staple food
- increase household capacity to store food

The Soil Fertility Consortium for Southern Africa (SOFECSA) is a multi-institutional and interdisciplinary non-profit making organization founded in 2005 to:

- *Develop and promote technical and institutional innovations that enhance contributions of integrated soil fertility management (ISFM) research and development to sustainable food security and livelihood options in Southern Africa ...in the wake of climate change and variability*
- *.....With a deliberate focus on improving the capacity of individual scientists and national agricultural research and extension (NAREs) institutions to conduct quality research at different levels...*
- *Promote use of science-based knowledge in decision making*

SOFECSA is hosted by CIMMYT at its Southern African Offices in Harare.

### **2.28 Conservation issues in Zimbabwe – Dr Mharapara, ARC**

In his introduction to the topic under discussion, Dr Mharapara explained the various linkages within the natural systems, highlighting the facts of the balance/equilibrium of natural resources (soil, water, plants and animals), their stability and sustainability through the continuity of cycles (clean, degradable +regeneration) and their self correcting nature.

He informed the participants that the problems of unsustainable utilization of resources begin with the human being. Misplaced dominance over all resources, ignorance of the implications of some actions, cause and effect appreciation – poor (fires, etc), inability to comprehend slow changes over long periods, selfishness in the use of common property –air, water, vegetation, etc (want over need - profit), are some of the root causes of nature's degradation. He further explained the consequences of misuse of natural resources.

On the links between conservation and climate change, Dr Mharapara explained the aims of conservation within the agriculture sector which are associated with soil and water retention, maintenance/improvement of soil fertility and condition for climate change adaptation. Once proper conservation measures are put in place, this would result in increase in productivity – ensuring food security and wealthy creation. Carbon sinks would also be enhanced, resulting in clean and cool environment.

He further explained some conservation components in agriculture that are outline below.

- Soil and Water – land forms

Contour bunds are constructed at gradients to collect and drain water with limited erosion. These tend to reduce moisture in dry years. Infiltration Pits along contours collect water and promote infiltration whilst enhancing moisture and fertility retention. Tied-ridges/furrows retain moisture in-field.

Other conservation components are Infield puddles, Wells, Rivers, Pools, Dams and Lakes.

Dr Mharapara defined Conservation Agriculture (CA) as agricultural (crop management) system based on three principals that include; Minimum soil movement (no soil inversion/tillage); Soil surface cover by crop residues or live plants; Crop rotation (pest and diseases control). He further elaborated on the principles of Conservation Agriculture.

He outlined the benefits of Conservation Agriculture as follows:

- Increased soil water infiltration due to soil surface protection – less moisture stress
- Reduced water run-off and soil erosion
- Reduced evaporation from soil surface
- Reduced demand on labour and traction for land prep
- Increased soil organic matter - better soil structure, higher CEC, better nutrient availability, better water holding capacity
- Better biological activity in soil - improved soil fertility
- Reduced production costs, higher crop yields

Challenges to use of Conservation Agriculture include the mind set, changing from usual habits, residue retention in mixed farming systems, weed control – herbicides, manual, cover crops (ensure weeds do not seed), Nitrogen and soil organic carbon turn over slower under CA – availability slower and may need to add some in the early stages of adoption.

He further explained the performance and impact lines that include loss of gains due to fires, poor implementation of policies, lack of internalization of concepts, and short memory spans. In order to realise the gains from this approach, there is need to accept and assume climate change is on, conserve information and experience (document) on response and use this for further development incorporating IKS into conventional science. There is need to reduce/eliminate fires by mobilising local levels to by-into to programmes, there is need for participatory approaches, and the use of appropriate policies that are policeable. There is also need to encourage program approach vs project, carry issues through and deal with constraints, allow modification and support/refine modified output, scale up and out. Also, communication is vital – analyze, appreciate need, package and deliver simplified, clear and targeted messages. Create/use feedback mechanisms.

In conclusion, Dr Marapara highlighted the following points:

- Conservation with wise use is key
- Beneficiation and incentives keep players interested and focused
- Conservation agriculture is the current best practice in both rainfed and irrigated systems
  - Keep fields greener and enhance contribution
  - Agro-forestry is one way
  - Agro-biodiversity also has potential
  - Intensification – irrigation (micro)
- Need to consider catchments, wetlands and drainage areas as a continuum – better management
- Technologies need to be user friendly – this is dynamic (human and environmental conditions)
- Participation by users has to be stepped up to get more buy-ins and common visioning and purpose – farmers, civil society, policy makers, private sector, etc.

## **CHAPTER 3: TOWARDS BUILDING A POSITION ON CLIMATE CHANGE**

### **3.1 Introduction**

After listening to the presentations, the participants needed to proceed with work, now working on coming up with a consolidated Zimbabwe position that would be forwarded to the Africa Group during the AMCEN meetings which were scheduled for May 2009. Africa Group needed to consolidate all the positions of various African countries into one African position that would strengthen African's voice in the negotiation process. To achieve this, the last session of the roundtable was divided into two parts, break-out group discussions and the open debate towards a Zimbabwe position.

One group was to discuss the issues of Reducing Emissions from Deforestation and Degradation (REDD), Agriculture, Forestry and Other Land Uses (AFOLU), as well as the Bio-carbon Initiative (BCI), in the context of adaptation and mitigation, technology transfer, etc – Group 1. The other group was to look at Climate Change Awareness and Advocacy – Group 2.

The basic or guiding questions for group 1 break-out group were as follows:

- What are the issues?
- Where are we?
- Relevance of these issues to Zimbabwe
- Where does the country fit?
- What can we do to assist the negotiation process?
- Is the issue of inclusion of AFOLU in Climate Change Negotiations worthwhile?
- What are the needs for Zimbabwe to effectively participate in the UNFCCC negotiation process?
- What are the climate change needs of Zimbabwe and for what area?
- Way forward/Recommendations

The basic or guiding questions for group 2 break-out group were as follows:

- How can Civil Society in Zimbabwe play a more effective role in climate change?
- Who are the knowledge partners?
- What role can the Climate Change Office play to bring the civil society to work with government?
- Why is the civil society generally silent on climate change?
- How can awareness on climate change be raised in Zimbabwe?
- What support is needed?
- Way forward/Recommendations

Afterwards, the groups made their presentations in plenary and the discussions that followed resulted in recommendations as well as a way forward.

### **3.2 Break-out Groups Presentations**

#### **3.2.1 Group 1 – REDD, AFOLU and BCI**

The challenges for this group included the fact that all the issues under discussion were not very familiar. However, the following is a summary of the deliberations in this group.

The group agreed that AFOLU was a very necessary concept to supplement REDD. It was felt that REDD should not be spatially explicit. But it should be multi-scale, local, national and regional. REDD should not focus on key forestry cover types but encompass tropical and dry forests.

There is need for a demonstration of the importance of these forests for carbon sequestration, livelihoods and others (quantifying), in order to assess how acceptable the REDD issues would be to the various communities.

Questions were raised on what baseline year to use for REDD activities and the associated methods to use on carbon quantification and value to recognize efforts done in the past. The issue of how to value small portions of land (forest patches) for example urban and household trees and fruit trees – to be included under AFOLU needed clarification. Also asked was the issue of the forests managers' benefits (i.e. communities) especially for dry forests.

It was agreed in the group that a bio-carbon fund should be established with visible benefits to the communities as this would increase the value of forests and intensify agricultural production on available land. In this case, there is need for development of nested approaches in developing frameworks and mechanisms to benefit our local communities.

The need for appropriate financial support in preparation for REDD and other mechanisms (including capacity building, quantification, reporting etc) was emphasized. The funds would also cover research to demonstrate the importance of AFOLU in increasing terrestrial carbon sinks (agricultural plants and horticultural trees).

The need for creating an enabling policy environment to implement projects, including demo CDM projects, REDD, etc should encouraged. The group felt that the Government should take a leading role in demonstrating political will to support these at all levels.

As for issues to be addressed at the negotiations, the group felt that capacity development (skills, tools, finances methods etc) should among the priorities for Africa since Zimbabwe needs this addressed. Prioritization of technology transfer for adaptation and mitigation can also assist the country as it is already experiencing climate change. The Adaptation Fund needs to be enhanced by developed countries putting more funds into it. However, resources for adaptation and mitigation should be easily and readily available. Mechanisms should simple and apolitical with limited conditions.

### **3.2.2 Group 2 - Climate Change Awareness and Advocacy**

The group felt that the issues of awareness and advocacy were very pertinent and required urgent attention if the country is to effectively address the issues of climate change adaptation and mitigation. Awareness and advocacy should look at different levels, from policy makers, to Community Based Organisations, business people, civil societies, researchers, communities, etc.

It was agreed that across the levels of the society, awareness was low and needed to be enhanced. The group felt the issues of climate change awareness could be stratified and tackled in the following way:

Level 1: Policy Makers

- Parliamentary Portfolio Committee on Environment
  - Train them on science and impacts of climate change
  - Produce simplified tools on Climate Change literature - Mass media approach
  - To encourage Parliamentarians to effectively participate in commemoration of environment days
  - To encourage the development of a climate change national strategy and the strengthening of coordination at ministry level through the climate change office

#### Level 2: CBO, Business, Civil Societies, Researchers, media

- Training e.g. establishment of farmer schools and more focused field days
- Incentives for climate change initiatives
  - A National Strategy developed,
  - Strengthening the Coordination Office
  - Generation of a database of climate change practitioners
  - Documenting and showcasing success stories
  - Capacity building in climate change reporting
- Encourage inclusion of climate change in curriculum at all levels
- Dialogues on climate change should be increased at various levels in the society
- Talk shows initiated with inclusion of representatives from all levels
- The roundtables should be done more often and these could be used as awareness platforms.
- Climate change materials should be developed. Currently there are no materials of climate change in Zimbabwe that are available.

#### Level 3: Communities

Communities can participate in climate change through:

- Field days
- Drama groups and exhibitions
- Print and Electronic media (Materials need to be developed and disseminated)
- Community radios, etc

Regarding advocacy, there is need for political commitment at the highest level (e.g. the ratification of protocols, development of Climate Change policies and strategies, creation of an enabling environment to meet donor requirements e.g. on funding.

Capacity building for negotiators and their support teams, including civil societies should be encouraged. Civil Society should be incorporated into the negotiations on Climate Change, especially at country level before the Conference of Parties. There is need for continuity on climate change dialogue in the country. This needs to be supported as the various players may need to be congregated from various places around the country. Training of media and technocrats is very vital in addressing the climate change issue. If the coordination office is strengthened, harmonization of research activities on climate change issues in the country could be achieved.

On the requirements to achieve the above, it was agreed that there is need to formulate climate change strategic plans for the country, mobilize finances and ensure technical backstopping in climate change in the country.



## **CHAPTER 4: CONCLUSIONS AND RECOMMENDATIONS**

### **4.1 Conclusion**

It was generally agreeable amongst the participants that climate change is one of the biggest threats facing mankind today. From the presentations by experts it became clearer that science has clearly demonstrated that there is extreme urgency in taking real action to avoid irreversible damages to our planet. Reports of the Inter-governmental Panel on Climate Change (IPCC) state that Africa will suffer the most from the impacts of climate change. The serious under-development of the continent signifies high vulnerability to climate change impacts.

It became also apparent that climate change has not attracted enough attention from a wide cross-section of our society, including political leaders. While climate change is global its adverse effects are local and most felt by poor people and poor countries because of their low adaptive capacity.

Zimbabwe at the Kadoma roundtable fully endorsed the idea of inclusion of Agriculture, Forestry and Other Land-Uses (AFOLU) in the climate change debate as this would answer the question of the bias of REDD towards wet forests. There were calls by the participants to mobilize research data to establish baselines and other relevant data for REDD and AFOLU implementation. Participants also requested UN-REDD or any other organizations with vested interest to organize a knowledge based symposium on REDD and AFOLU. The Bio-carbon initiative was well received by the participants.

The civil society organisations were also called upon to mobilise themselves and work with Government to address the climate change issue.

It was also felt that there is need to capacitate legislators to comprehend climate change issues through targeted awareness campaigns and workshops. This would assist in the identification of legislative gaps in existing policies and develop policies tuned along climate change.

### **4.2 Recommendations**

The following recommendations came out of the roundtable deliberations.

- Climate change awareness for the public, policy and decision-makers is therefore an important element for effective implementation of the Convention and its Kyoto Protocol.
- Climate change materials on Zimbabwe should be developed and widely disseminated across the country.
- The Climate Change Office should, resources permitting, create a website that will be accessible to all, loaded with information on climate change in Zimbabwe and the world over.

- For Zimbabwe to address the issues of climate change effectively, awareness campaigns on climate change should be increased.
- Adaptation to adverse effects of climate change is a priority, demanding policy direction at the highest level.
- There is need for the strengthening of the coordination unit in the Ministry of Environment and Natural Resources Management.
- Technical support ( information and resources including human) should be provided especially for adequate representation at the UNFCCC negotiation fora.
- Funding should be sought for pre-UNFCCC negotiation meetings in the country to assist the focal point gather enough information.
- There is need for mobilizing more funds for more representatives to participate at the International Climate Change negotiations.
- There is need for promotion of continuity for the negotiators and working groups that should be created in the country to look at various climate change components. The team of negotiators should be united coming from both Civil Society Organisations and Government.
- A review of how climate change should be incorporated in the curricula should be done.
- Schools should be targeted as climate change awareness pathways.
- There is need to promote climate change research and also to enhance and broaden the involvement of key sectors at the highest level including Forestry, Wildlife, Environment and agriculture- by collating available data from these sources.
- The Climate Change Office should also create a network of climate change stakeholders.

At the end of the deliberations, Mrs Margaret closed the meeting and thanked COMESA for the support they had rendered as well as the participants for sparing their time to attend the discussion and their efforts in the deliberations.

## ANNEXES

### Annex I Workshop Agenda

<b><u>MINISTRY OF ENVIRONMENT AND TOURISM</u></b> <b><u>(CLIMATE CHANGE OFFICE)</u></b>	
<b><i>CLIMATE CHANGE ROUNDTABLE - ZIMBABWE</i></b>	
<b>Sponsor/s:</b>	<b>COMESA/GOVERNMENT OF NORWAY</b>
<b>Host:</b>	<b>Ministry of Environment and Tourism</b>
<b>Venue:</b>	<b>Kadoma Rainbow Hotel, Kadoma</b>
<b>Date:</b>	<b>15 - 16 April 2009</b>
<b>AGENDA</b>	
<b>DAY 1</b>	
<b>REGISTRATION</b>	08:15-08:45
<b>SESSION I: OFFICIAL OPENING CEREMONY (Facilitator: Permanent Secretary)</b>	
1. Introductions	08:45-0900
2. Statement by Secretary General – COMESA	09:00-09:20
3. Statement by Government of Norway	09:20-09:35
4. Welcome address by Host ( <b>Minister – MENRM</b> )	09:35-09:55
5. Vote of Thanks ( <b>Permanent Secretary – MENRM</b> )	09:55-10:00
<b>TEA/COFFEE BREAK</b>	
<b>SESSION II: CLIMATE CHANGE SESSION (Facilitator: W. Zhakata)</b>	
6. The Climate Change issue - <b>Mr. W. Zhakata</b>	10:30-10:45
<i>Discussion</i>	
7. COMESA Climate Change Initiative (COMESA)	10:55-11:10
<i>Discussion</i>	
8. Introduction to the REDD and AFOLU      Dr. Gumbo	11:20-11:40
<i>Discussion</i>	
9. ACCID Programme – Dr. L. Sibanda (FANRPAN)-COMESA Civil Society	11:50-12:05
<i>Discussion</i>	
10. Estimation of above-ground carbon stocks – Dr Murwira	12:15-12:30
<i>Discussion</i>	12:30-13:00
<b>LUNCH BREAK</b>	
<b>SESSION III: TOWARDS BUILDING A POSITION ON CLIMATE CHANGE (Facilitator: W. Zhakata/B. Chipindu)</b>	
11. The potential role of the forests and agro-forests in carbon sequestration in Zimbabwe – M. Mushongahande	14:10-14:30
12. UNFCCC process – M. Sangarwe (Ms)	14:30–15:00
<ul style="list-style-type: none"><li>• What are the processes and practices?</li><li>• Negotiations structure for African participation</li><li>• Issues of concern to Zimbabwe and Africa</li></ul>	

- Where are we?
- What are prospects of Africa benefiting from the process?
- What support is needed?

**END OF DAY**

**DAY 2**

- |   |             |
|---|-------------|
| 13. Climate change adaptation - Dr Mapfumo, SOFECSA     | 08:30-08:45 |
| 14. Conservation issues in Zimbabwe – Dr Mharapara, ARC | 08:50-09:05 |
| 15. Discussion  | 09:05-09:30 |

**Breakout Groups**

- |                     |             |
|---------------------|-------------|
| 16. Breakout Groups | 09:30-10:30 |
|---------------------|-------------|

Introduction to Breakout Groups *W. Zhakata*

Group 1 (REDD + AFOLU + BCI, Adaptation and Mitigation, Technology Transfer, etc)

- What are the issues?
- Where are we?
- Relevance of the these issues to Zimbabwe
- Where does the country fit?
- What can we do to assist the negotiation process?
- Is the issue of inclusion of AFOLU in Climate Change Negotiations worthwhile?

Group 2 (Climate Change Awareness and Advocacy) *S. Zvigadza to lead discussions*

- Engaging Civil Society
- Knowledge partners
- Climate Change Office
- What can be done
- What support is needed?

- |                                    |             |
|------------------------------------|-------------|
| 17. Report back of breakout groups | 11:00-11:30 |
| 18. Discussion                     | 11:30-12:00 |

**TEA/COFFEE BREAK**

**SESSION VI: Open Debate (Facilitator: W. Zhakata/L. Unganai)**

- |                     |             |
|---------------------|-------------|
| 19. Open Debate on: | 11:00-11:45 |
|---------------------|-------------|

- **Adaptation – What are the issues to be taken to Copenhagen?**
- **Mitigation – What can we do or offer to do?**
- **Bio-Carbon Initiative (As an add-on to other post Kyoto suggestions)?**

- |  |             |
|--|-------------|
| 20. Way forward and Recommendations (Country's position) | 11:45-12:30 |
| 21. Closing remarks (Permanent Secretary)                | 12:30-12:45 |

**LUNCH**

**END OF WORKSHOP**

## ANNEX 11: LIST OF PARTICIPANTS

### LIST OF PARTICIPANTS FOR ZIMBABWE CLIMATE CHANGE ROUND TABLE 15-16 APRIL 2009

KADOMA HOTEL AND CONFERENCE CENTRE, KADOMA, ZIMBABWE  
FUNDED BY: COMESA/ GOVERNMENT OF NORWAY

NAME	ORGANISATION/INSTITUTION	CONTACT NO.	EMAIL
1. Mclay Kanyangara	COMESA	+260211 255110 +260 211 229725/32 +260 966 740854	<a href="mailto:mkanyangarara@comesa.int">mkanyangarara@comesa.int</a>
2. Mrs. Margaret Sangarwe	Permanent Secretary	04-701681-3	<a href="mailto:climate@ecoweb.co.zw">climate@ecoweb.co.zw</a>
3. Washington Zhakata	Climate Change	04-701681-3	<a href="mailto:climate@ecoweb.co.zw">climate@ecoweb.co.zw</a>
4. Mercy Machona	Climate Change	04-701681-3	<a href="mailto:climate@ecoweb.co.zw">climate@ecoweb.co.zw</a>
5. Veronica Gundu	Ministry of Environment and Natural Resources	04-701681-3 0912 496 626	<a href="mailto:verogundu@yahoo.co.uk">verogundu@yahoo.co.uk</a> <a href="mailto:verogundu@gmail.com">verogundu@gmail.com</a>
6. Morleen Mupandawana	Ministry of Agriculture, AGRITEX	011322913	<a href="mailto:morleenmupandawana@yahoo.com">morleenmupandawana@yahoo.com</a>
7. Evelyn Mtetwa	Agriculture, Seed Services	023 366 950	<a href="mailto:seedserv@mweb.co.zw">seedserv@mweb.co.zw</a> <a href="mailto:evymt@classicmail.co.za">evymt@classicmail.co.za</a>
8. Milward Kuona	Ministry of Energy and Power Development	0912 751 536 011 884 804	<a href="mailto:milwardk@yahoo.co.uk">milwardk@yahoo.co.uk</a>
9. Zvikomboreo Manyangadze	Ministry of Water Resources Development and Management	04-793914 011873 959	<a href="mailto:manyangadzez@yahoo.com">manyangadzez@yahoo.com</a>
10. Edson T. Mazarire	Ministry of Industry and Commerce	04-793461 0912 709 071	<a href="mailto:etmazarire@yahoo.co.uk">etmazarire@yahoo.co.uk</a> <a href="mailto:akaturuza@healthnet.org.zw">akaturuza@healthnet.org.zw</a>
11. Francis Mugabe	Midlands State University	0913 210 577	<a href="mailto:mugabeft@msu.ac.zw">mugabeft@msu.ac.zw</a>
12. Amon Murwira	University of Zimbabwe, Geography and Environmental Science	0912 415 052	<a href="mailto:murwira@arts.uz.ac.zw">murwira@arts.uz.ac.zw</a>
13. Barnabas Chipindu	University of Zimbabwe, Dept. of Physics	0912 364 036	<a href="mailto:chipindu@science.uz.ac.zw">chipindu@science.uz.ac.zw</a>
14. Norbert Nziramasanga	Southern Centre for Energy and Environment	04-795242 0912 422 668	<a href="mailto:scentr@ecoweb.co.zw">scentr@ecoweb.co.zw</a>
15. Dingane Sithole	ZFC Limited	698066-9 0912425 928	<a href="mailto:sitholed@zfc.co.zw">sitholed@zfc.co.zw</a> <a href="mailto:dinganessithole@yahoo.com">dinganesithole@yahoo.com</a>

16. Davison Gumbo	CIFOR	+260955552301	<a href="mailto:d.gumbo@cgiar.org">d.gumbo@cgiar.org</a>
17. Jabulani Gwaringa	Zimbabwe Farmers Union	04-251861-7	<a href="mailto:jgwaringa@zfu.org.zw">jgwaringa@zfu.org.zw</a> <a href="mailto:jabugwaringa@yahoo.co.uk">jabugwaringa@yahoo.co.uk</a>
18. Thandiwe S. Sithole	ZESA (c/o ZETDC)	0912 421467 04-78682312	<a href="mailto:stsithole@zesa.net">stsithole@zesa.net</a> <a href="mailto:thandiss@yahoo.co.uk">thandiss@yahoo.co.uk</a>
19. Mr. Collen Mutasa	Meteorological Services	011 870 888 0912 249 730	<a href="mailto:colinmutasa@yahoo.co.uk">colinmutasa@yahoo.co.uk</a> <a href="mailto:cmutasa@weather.utande.co.zw">cmutasa@weather.utande.co.zw</a> <a href="http://www.weather.utande.co.zw">w</a>
20. Chemist M. Gumbie	Forestry Commission	04-498943 496878/9 0912 223 910	<a href="mailto:cgum@frchigh.co.zw">cgum@frchigh.co.zw</a>
21. Isaiah Mharapara	Agricultural Research Council	011 631 078 309574-6 300012	<a href="mailto:mharapara@mango.zw">mharapara@mango.zw</a>
22. Mzondiwa Shoko	Energy and Environment Programme	04-701548 0912 903976	<a href="mailto:mshoko@ecoweb.co.zw">mshoko@ecoweb.co.zw</a>
23. Nxolisi Sibanda	WWF-SARPO (Miombo Ecoregion Prog)	0912 516 403 252530-3	<a href="mailto:msibanda@wwfsarpo.org">msibanda@wwfsarpo.org</a>
24. Mufaro Masuka	WWF-SARPO	04-252530-3 0912 415 744	<a href="mailto:mmasuka@wwfsarpo.org">mmasuka@wwfsarpo.org</a>
25. Shepard Zvigadza	ZERO Regional Environment Organization	700030 / 706998 0912 347 769	<a href="mailto:szvigadza@gmail.com">szvigadza@gmail.com</a> <a href="http://www.shepard@zeroregional.com">Shepard@zeroregional.com</a>
26. Osmond Mugweni	Africa 2000 Network	741573 0912738474	<a href="mailto:omugweni@a2ngefsgp.org">omugweni@a2ngefsgp.org</a> <a href="mailto:mugweni@zol.co.zw">mugweni@zol.co.zw</a>
27. Khethiwe Mhlanga	UNDP - GEF/SGP	741570, 011 431 821 011 438 549	<a href="mailto:kmhlanga@a2ngefsgp.org">kmhlanga@a2ngefsgp.org</a>
28. Dr. Paul Mapfumo	CIMMYT/SOFECESA/UZ	011803971	<a href="mailto:p.mapfumo@cgiar.org">p.mapfumo@cgiar.org</a>
29. Rodreck Dick	Environment Africa	0912 911 439	<a href="mailto:environmentafrica@utande.co.zw">environmentafrica@utande.co.zw</a> <a href="mailto:chakari-ko@hotmail.com">chakari-ko@hotmail.com</a>
30. Lasten Mika	Practical Action	776631-3 011 444 937 0912 469 248	<a href="mailto:lastenm@practicalaction.org.zw">lastenm@practicalaction.org.zw</a> <a href="http://www.practicalaction.org.zw">w</a>
31. Member Mushongahande	Biodiversity/Forestry Commission	0912 372 660 496878/9	<a href="mailto:mmember@frchigh.co.zw">mmember@frchigh.co.zw</a>
32. Victor	New Ziana - Media	251750-2	<a href="mailto:newsroom@africaonline.co.zw">newsroom@africaonline.co.zw</a>

<b>Nyamwanza</b>			<a href="mailto:nyamwanza@yahoo.com">nyamwanza@yahoo.com</a>
<b>33. Clifton Madzongwe</b>	<b>Ozone</b>	<b>04-701681-3 011 233 330 0913 020 811</b>	<a href="mailto:ozone@ecoweb.co.zw">ozone@ecoweb.co.zw</a> <a href="mailto:c.madzongwe@yahoo.co.uk">c.madzongwe@yahoo.co.uk</a>
<b>34. Francis Hale</b>	<b>FANRPAN</b>	<b>+27128459100 +27725852522</b>	<a href="mailto:f.hale@cgiar.org">f.hale@cgiar.org</a> <a href="mailto:policy@fanrpan.org">policy@fanrpan.org</a>
<b>35. Busani Bafana</b>	<b>FANRPAN</b>	<b>0912 755 553</b>	<a href="mailto:bafana@netconnect.co.zw">bafana@netconnect.co.zw</a>
<b>36. Rumbidzai Sangarwe</b>	<b>CCP</b>	<b>011 263 141</b>	<a href="mailto:climate@ecoweb.co.zw">climate@ecoweb.co.zw</a>
<b>37. Lindiwe Majele Sibanda</b>	<b>FANRPAN</b>	<b>+27128459100</b>	<a href="mailto:l.sibanda@cgiar.org">l.sibanda@cgiar.org</a>
<b>38. Ben Mahaka</b>	<b>FANRPAN (Media)</b>	<b>0912 560 401</b>	<a href="mailto:ben@mahakamedia.co.zw">ben@mahakamedia.co.zw</a>
<b>39. Ransom Mahaka</b>	<b>FANRPAN (Media)</b>	<b>011 808 182</b>	<a href="mailto:ransom@mweb.co.zw">ransom@mweb.co.zw</a>