

## CONFERENCE REPORT

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**The ISAE Environment Day Conference**  
**ISAE Busogo Campus in Musanze District, Northern Province**  
**14<sup>th</sup> December 2009**

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The ISAE Environment Day conference was held at ISAE Busogo Campus in Musanze District, Northern Province on 14<sup>th</sup> December 2009. The importance of the theme was to discuss about Climate Change issues and its impact on the development of developing countries especially in Rwanda.

The conference met the participation of the ISAE Academic staff members, ISAE Administrative staff member, a specialist from the National Forestry Authority (NAFA), a representative from the University of Agriculture, Technology and Education of Kibungo (UNATEK), and a Researcher from the Rwanda National Agricultural Research Institute (ISAR).

### **Conference progress**

The conference opened formally by the Vice Rector for Academics and Research of the Higher Institute of Agriculture and Animal Husbandry (ISAE). In his words of introduction, he wished welcome to the participants and ask them *to bring their efforts* to find solutions to Climate Change.

### **The presentation session**

In *this session* Mr. Patrice HAKIZIMANA, the Vice Rector for Academics and Research of the Higher Institute of Agriculture and Animal Husbandry (ISAE), to ISAE Research Community, addressed effects of a changing climate in vulnerable sectors such as agriculture (increased temperatures for plants, floods and drought, increasing of leaf-feeding insect species) and livestock (availability and price of crops used for animal feeding, health and productivity of livestock negatively affected by temperatures that cause stress to animals). He asked to the participants to think and to give short and long term solutions by involving ISAE Research Community in helping local communities to improve their agricultural practices and promoting changes in national agriculture and environment policies that will reduce vulnerability to climate change.

Summary of interventions made during the exchange of views and ideas:

Problem	Situation	Causes/ Responsible	Solution /Recommendation
Global warming is a reality, very critical. Climate change, drought in our region	It is warm, atmospheric disturbance	<ul style="list-style-type: none"> <li>• Academic, industrial</li> <li>• All of us contribute to Global warming.</li> <li>• Using of technology which affects climate.</li> <li>• Emission of greenhouse gases (GHGs) such as carbon dioxide, nitrous oxide, methane and fluorocarbons.</li> </ul>	<ul style="list-style-type: none"> <li>• To improve reforestation and agro forestry practices to sequestrate carbon.</li> <li>• Reduction and eradication of greenhouse gases.</li> <li>• Use of renewable energies.</li> <li>• To make research on carbon sequestration by the vegetation.</li> <li>• Gathering information on carbon market.</li> </ul>
	Insufficient forests	<ul style="list-style-type: none"> <li>• Deforestation of natural reserves for human activities.</li> <li>• Insufficient funds for reforestation.</li> </ul>	<ul style="list-style-type: none"> <li>• To look for funds, especially from carbon market and other partners.</li> </ul>
Food production is projected to decrease.	Everyone is affected by climate change.	<ul style="list-style-type: none"> <li>• Ignorance of people on climate change impacts.</li> </ul>	<ul style="list-style-type: none"> <li>• Creation of environment clubs.</li> <li>• Implantation of environment programs in education institutes.</li> <li>• To provide information on climate change and consequences to local communities.</li> <li>• To elaborate manual to help farmers.</li> <li>• Training farmers.</li> </ul>
Lack of data on climate evolution in our region	Impossibility to control and plan climate effects.	<ul style="list-style-type: none"> <li>• No link between research centers.</li> <li>• Lack of exchanges of data</li> </ul>	<ul style="list-style-type: none"> <li>• Regional observation and survey with other partners.</li> <li>• To create awareness and do research on climate change.</li> <li>• Agriculture, environment and climate change researches.</li> <li>• To create a necessary meteorological database for our country and region</li> <li>• To do survey on effects of climate change in Rwanda</li> <li>• ISAE have to build a team of environment researchers.</li> <li>• It is best for academic and research staff of ISAE to make a proposal to investigate on the situation of global warming in Rwanda to see the effects of climate change on agriculture and livestock in our country.</li> </ul>

Forests destruction	Degraded land, erosion. Soil and water problems.	Human needs; overpopulation.	<ul style="list-style-type: none"> <li>• To make promotion of reforestation and agro forestry.</li> <li>• To create nurseries for trees, to plant and maintain trees.</li> <li>• To reduce firewood by performing domestic stoves (alternative energy research).</li> <li>• To create a center to develop agro forestry trees in ISAE.</li> <li>• To see how we can make ecosystem restoration in Rwanda.</li> <li>• Researches on resistant tree species.</li> <li>• Erosion control.</li> </ul>
Urbanization accelerates climate change	Need of land	High population rate	<ul style="list-style-type: none"> <li>• Land use management.</li> <li>• Global population rate control.</li> </ul>
Abuse of burning fossil fuels.	Emission of greenhouses gases in atmosphere.	Human activities.	<ul style="list-style-type: none"> <li>• Research on Bio fuels.</li> <li>• Other alternatives for energy use.</li> <li>• Biogas researches are doing.</li> <li>• Study on Jatropha fuel.</li> </ul>

The film “hope in a changing climate” produced by the Environmental Education Media Project (EEMP) was projected to the participants in order to give them the idea on the current degradation of the environment and its consequences on human being and the biodiversity and to encourage them that it is not too late to make real changes in ecosystem restoration, their ideas and actions were welcome in that regard.