

# IES NEWS

The Mission of the institute is "to contribute to stakeholders' sustainable utilization of natural resources, poverty alleviation and prosperity through education, research, advisory services and networking on the environment".

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## EXPANSION OF THE INSTITUTE'S RESEARCH AND DEVELOPMENT SERVICE

The start of the year 2005 saw the Institute expand its research and development service as it was awarded four research grants, two grants from the African Forestry Research Network (AFORNET) and one each from the United Nations Environmental Programme (UNEP) and United Nations Global Environmental Facility (GEF). This issue of the IES News focuses mainly on the new research projects.

## Linking Knowledge and Practice: Assessing Options for Effective Community-Based Management of Mopane Woodlands in Zimbabwe and Namibia.

The project "Linking knowledge and practice: assessing options for effective community-based management of mopane (*Colophospermum mopane*) woodlands in Zimbabwe and Namibia" seeks to add value to research work conducted on mopane woodlands by developing effective community-based mopane woodland management regimes that are based on both local and scientific knowledge in Zimbabwe and Namibia. It is a collaborative research project between the Institute of Environmental Studies and the University of Namibia. Financial support is being provided by the African Forestry Research Network (AFORNET).



### Mopane scrub in southern Zimbabwe

Mopane is a widespread and important tree species over much of sub-tropical Southern Africa, being found from coast to coast between the tropic of Capricorn and 10° South. In some locations it forms almost mono-species woodlands. Mopane woodlands are key resources to rural communities being a source of wood for various uses, medicines, gum, tannins, graze, edible caterpillars and other products. Common property resource management regimes dominate the management of these woodlands and other natural resources in Zimbabwe and Namibia.

Traditional institutions are at the core of supervision of common pool resources and management is largely implemented through a system of norms, taboos and mores. The woodlands are declining in both Zimbabwe and Namibia due to increasing use and competition for their resources. Community management strategies based largely on local knowledge are evidently unable to cope. There has been research on mopane woodlands in southern Africa over the last two decades. Findings from this research have

been used to manage mopane woodlands in commercial settings but not in communal areas.

A wide range of participatory and other approaches are being used to assess and analyse the state of mopane woodlands, evaluate research findings and identify those that can be adopted and/or adapted for local woodland management and to explore mechanisms for blending the identified findings with current management practices to arrive at practical management strategies based on the state of woodlands and the goals and visions of communities. The project is therefore employing participatory action research approaches to enhance the adaptive management capacity of communities through improving four key skills, that is, the ability to:

- establish commonly agreed goals and objectives;
- identify current conditions and constraints;
- establish causality; and
- select and test appropriate responses.

The envisaged products are expected to be adaptable and flexible mopane woodland management frameworks applicable to Zimbabwe and Namibia. The project is being implemented in Matobo and Omusati districts in Zimbabwe and Namibia respectively.

For more information on the project, please contact the project coordinator, Dr. C. Musvoto on email address [connie@ies.uz.ac.zw](mailto:connie@ies.uz.ac.zw) or telephone number 263-4-302603.

**Assessment of the Biophysical Factors Influencing Vegetation Characteristics in Mafungautsi State Forest, Gokwe District, Zimbabwe**

The Institute of Environmental Studies is the lead Institute in a study to assess the biophysical factors influencing vegetation characteristics in Mafungautsi State Forest, Gokwe District, Zimbabwe. The Institute is collaborating with the Chemistry Section of the Department of Agricultural Research and Extension, Ministry of Agriculture and the Tropical Research Ecology Programme at the University of Zimbabwe to

conduct this study. Funding is being provided by the African Forestry Research Network (AFRONET).

Mafungautsi State Forest, a Kalahari sand forest in Gokwe District, northwestern Zimbabwe, is a popular ground for testing and promoting 'resource-sharing' forestry management approaches. These people-centred approaches have not been accompanied by comprehensive biophysical assessments, although such assessments can potentially guide and enhance the sustainability of the management regimes. The aim of the project is to provide biophysical knowledge that will guide future research on Mafungautsi Forest.

Kalahari sands are being mapped and the soils developed within each type of sand are also being characterized in a 25 km<sup>2</sup> study area. Vegetation characteristics will be explained in relation to type of sand, soil parameters and influence of underlying rock. Soil samples have been collected on a grid across the study area and are being subjected to full textural and fertility analysis for comparison with vegetation patterns. Existing surface and down-hole geological data coupled, where necessary, with new field evidence will help define the extent to which different types of bedrock influence properties of overlying Kalahari sands and vegetation. The quality of water collected from selected localities is being determined to help identify and characterise hydrogeochemical environments associated with particular vegetation patterns.

For more information on this project please contact the project coordinator, Antony Mamuse, Tel: +263-4-332039, Fax: 263-4-332853, E-mail: [mamuse@science.uz.ac.zw](mailto:mamuse@science.uz.ac.zw)

**Global Environment Facility Small Grants Programme Ex Post Project Study**

The Institute of Environmental Studies in partnership with the Zvishavane Water Project conducted an ex-post study for the Global Environment Facility Small Grants Programme (GEF/SGP) in Zimbabwe during January – February 2005. Four Projects were assessed with IES assessing two projects in Manicaland Province

while Zvishavane Water Project assessed two projects in Matabeleland Province.

The objectives of the ex-post study were to:

- assess the sustainability of the outputs of the selected SGP projects
- describe the direct and indirect impacts of the SGP Projects
- identify (and where possible quantify) those impacts that contribute to achieving global environmental benefits
- explore elements of project design that address land degradation and reduce the vulnerability of communities to the adverse effects of climate change.

In addition to conducting the ex-post study, IES coordinated the whole Zimbabwe ex-post study incorporating the four projects.

The four projects sought to improve livelihoods while maintaining environmental integrity. The outputs of all four projects were sustainable as infrastructure developed by the projects was still being utilised ten years after the projects were completed. Environmental awareness also increased among beneficiaries of the projects. Projects in Manicaland were negatively affected by Cyclone Eline which hit the area in the year 2000 and damaged some of the infrastructure.



**A gully which resulted from Cyclone Eline induced floods on one of the projects plots.**

For more information on the project, please contact the project coordinator, Dr. C. Musvoto on email address [connie@ies.uz.ac.zw](mailto:connie@ies.uz.ac.zw) or telephone number 263-4-302603.

### **The United Nations Environment Programme (UNEP) Poverty and Environment Project**

This project is a spin-off of the Southern African Millennium Ecosystem Assessment (SAfMA), which IES coordinated (2002-2005).

The project is part of UNEP's *Strengthening Environmental Policy and Management Capacity at the National and Local Levels as a contribution to Poverty Alleviation and Sustainable Development in Africa Project*. The project will be implemented in Kenya, Mali, Mauritania, Mozambique, Rwanda, Tanzania and Uganda. Phase I of the project is running from March to December 2005.

The aim of the project is to build capacity to undertake and use integrated ecosystem assessments among individuals and institutions in the seven countries. IES is collaborating with UNEP (Division of Policy Development and Law); the SAfMA; Rhodes University and United Nations University (UNU) to execute this project.

Outputs and activities under this project are:

- **Preparation of baseline reports and identification of country training needs:** the reports will identify potential contributions that project partners can make to the countries.
- **Development of training materials:** training modules for use in training sessions on environment/poverty integrated assessments in the seven selected project countries will be developed using the SAfMA experiences.
- **Training workshop:** A one week-long train the trainers workshop will be conducted to train a small number of selected individuals from each country in assessment concepts and approaches. The trained people would then

facilitate training and capacity building in their countries.

- **Advisory:** project partners will provide advisory assistance for the integrated assessments conducted in the seven countries using experience gained from SAFMA.

For more information on the project, please contact the project coordinator, Dr. C. Musvoto on email address [connie@ies.uz.ac.zw](mailto:connie@ies.uz.ac.zw) or telephone number 263-4-302603.

Randburg Towers Hotel in Johannesburg, South Africa from 14 to 15 July 2005.

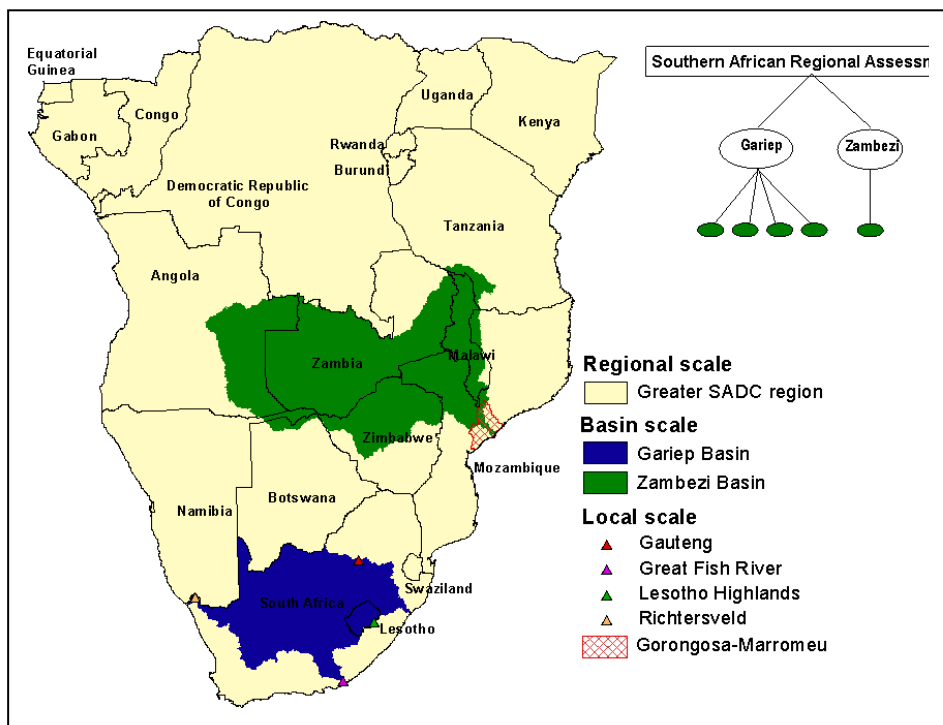
APINA is a component of the RAPIDC programme that is being carried out in Asia and Africa and is funded by the Swedish International Development Cooperation Agency (Sida) and coordinated by the Stockholm Environment Institute (SEI).

The overall objective of APINA is to ensure that existing impacts of air pollution in southern Africa are tackled and emerging risks from air pollution are prevented. The purpose of these activities may be described as “to fill gaps in knowledge on air pollution in southern Africa and ensure that currently available information and concerns are articulated to policy makers in the region”. The network aims to form a strong link between the air pollution scientific community and policy makers at national and regional levels.

The network held consultation exercises and developed a proposal for Phase III of the RAPIDC programme during September to December 2004 which was submitted to Sida and has received approval for funding. The Phase III proposal is to continue to promote the establishment of a scientific base for prevention and control of transboundary air pollution in southern Africa and to encourage and facilitate coordinated interventions of all stakeholders on air pollution at national and regional level.

Proposed activities include:

- Developing and/or enhancing technical capacity in air pollution assessment such as capacity in emission inventory preparation; monitoring of air pollution; atmospheric



## UPCOMING EVENTS

### The Air Pollution Information Network Phase III Start-up Meeting 14 – 15 July 2005

The Air Pollution Information Network for Africa (APINA) will be holding a start-up meeting to come up with an Action Plan for Phase III of the Regional Air Pollution in Developing Countries (RAPIDC) Programme (2005 – 2007) at the

transfer modeling and integrated assessment; and rapid urban air quality assessment.

- Strengthening capacity in impact assessments of air pollution on human health, crops, natural ecosystems and on corrosion.
- Enhancing stakeholder participation in air pollution issues at national level.
- Enhancing decision support information on air pollution issues for policy formulation and mitigation.
- Promoting awareness about air pollution in Africa and providing information on air pollution for decision making.
- Enhancing international cooperation on air pollution in Africa.

The meeting at Randburg Towers Hotel will bring together 50 people comprising APINA members and regional and international air pollution experts to discuss the various activities in the programme with the aim of harmonizing all existing activities in the region for each APINA activity area and ensure that synergies are identified and duplication of work is avoided. The output of the workshop will be an APINA workplan for Phase III of the RAPIDC Programme.

For more information on APINA please visit our web pages which are found on [www.rapidc.org](http://www.rapidc.org), or contact the APINA Secretariat at [felie@ies.uz.ac.zw](mailto:felie@ies.uz.ac.zw) or the APINA Coordinator at [ssimukanga@mines.unza.zm](mailto:ssimukanga@mines.unza.zm).