

enda tiers monde

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Linking climate adaptation project LCA (DFID/IDRC)

This project in which Enda has been partner, aims to advance work on climate change adaptation by African based institutions. Reducing vulnerabilities and enhancing the resilience of communities to climate impacts is an urgent task. Africa is one of the most vulnerable continents to climate change which poses a serious risk to poverty reduction and threatens to undo decades of development. A wide range of African based researchers, policy makers and civil society organizations worked on how to:

• Increase assessments of climate impacts, vulnerability and adaptation by African based scientific institutions;

• Enhance the capacity of African policy-makers and stakeholders to incorporate such assessments in decision-making; and

• Support action research and community led adaptation by rural and urban communities.

Enda LCA activities

Case study: Adaptation to Climate Changes The Sebikotane farming system case study (Senegal) – February 2005

Context

The recurring droughts of the 1970s and 80s in the Sahel embedded the idea that the climate had really changed. This realization altered a lot of the preconceptions on which populations had hitherto based their management of natural resources, especially in rural areas. Sahelian countries, who already had little rain fall yet of whom 95% of the agricultural systems were dependent on rain, had to come up with alternatives. But drought led to a whole slew of disasters (deforestation, erosion, desertification, etc.), so adapting to climate change meant embarking on a complex adventure.

Results

In Senegal, people in the Niayes region decided to invest in irrigation. These production systems were incorporated into a program entitled "Le Sénégal Agricole: for modern and competitive agriculture." This will be applied across 300,000 hectares on 33 sites through the country and in co-operation with development partners. This example of adaptation, combining natural resource management, agricultural development, carbon sequestration, anti-desertification and anti-poverty measures, is undoubtedly a sound model for sustainable development and can undoubtedly be applied in similar situations elsewhere.

Lessons learned

Perennial windbreaks planted in linear fashion delineate crop plots and became the passage ways and contours of farms. These trees created a micro-climate that enhanced production and offset wind and hydric erosion. In addition, the windbreaks served to produce wood while helping farmers produce vegetables and fruits. It was so successful that the news spread (by the radio and television) and hundreds of farmers were attracted to join the venture. The use of the system spread so quickly that dignitaries and decision-makers came from far and wide to see the success story for themselves; these included the Director General of the FAO, the President of the World Bank, the President of the Sustainable Development Commission, the President of Senegal, and the Organization of the First Wives and Spouses of Heads of State. Moreover, as debates continued on the relative merits of carbon sequestration and reduction, measurements of the amount of CO2 trapped in these farms showed that they were in fact genuine carbon sinks that could hold up to 15 tons of carbon per hectare. The need to spread use of these carbon sinks and simultaneously boost farmers' income lead to the calculation of an operational model for fossil and nonfossil carbons whose conclusion was the following: that the industrialized countries of the North, who are massive polluters, must reduce their emissions of fossil carbon, while the countries of South, whose emissions are primarily non-fossil, should sequester carbon by implementing agricultural and forestry programs that at the same time alleviate poverty.

Climate change Capacity Development (C3D)

Project objectives

At its core, the Climate Change Capacity Development (C3D) project seeks to build the capacity of Southern centers of excellence to provide timely, targeted training workshops and materials on issues pertinent to developing country participation in and implementation of the UN Framework Convention on Climate Change (UNFCCC) and its Protocol. This project began in late 2003. In the initial phases of the project, partners undertook the internal measures necessary to begin such capacity building activities. These included recruiting and training staff, acquiring the necessary technical resources, identifying the pressing training needs of stakeholders in the climate arena; as well as beginning to implement these capacity building measures by developing generic training tools on a number of issues relating to climate change. A number of training of trainer workshops where also held. This project will continue with support from other funding institutions such as the European Commission.

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The primary objectives of this action were to:

- Maintain the momentum created during the first phase of the project;
- Incorporate the feedback and suggestions for training material on vulnerability and adaptation (V&A) from the V&A training of trainers workshop (held in Dakar in July 2005) into the draft material that had been produced for that meeting;
- Finalize a V&A training manual, with case studies, in French and English;
- Initiate a training workshop series for 'Local Decision Makers';
- Participate in C3D outreach activities and internal coordination meetings; and
- Undertake the internal organizational and technical steps necessary to ensure the successful implementation of the next phase of the project, including accessing ICT and staff resources and preparing for the implementation of distance learning programmes.

Project Milestones – 2006 to 2007

Project milestones covered are summarized below:

Training of trainers programme	<i>Training of trainers (TOT) workshop- TOT1 held in July 2005; TOT2 planned for August 2007</i>
Training of policy makers and other climate change stakeholders	Undertaken, June 2006 and March 2007- ongoing
C3D/UNITAR partners invited meetings:	November 2007 (Nairobi, Kenya), at COP12 With the European Commission for new project proposal formulation.
Identification of training needs for ENDA: specifically, in vulnerability mapping	Continued: need for training of ENDA staff on vulnerability analysis using Awhere tool. Training session held
Launch of a e-bulletin of information on CC issues	Since August 2006 – On going. Nine e- bulletins produced
Development and translation of ENDA strategic plan for Vulnerability and Adaptation to Climate Change	Between August and October 2006; an updated version planned
Production of a CD-ROM on Vulnerability and Adaptation training material	October 2006
Use of AIM (Action Impact Matrix) tool in a workshop for a west African francophone audience (Senegal)	December 2006
Production of set of five climate change fact sheets with emphasis on gender, business and trade for use in awareness raising with private sector	January – Feb 2007
Enda and partners Held local-decision makers workshop	March 2007 Bamako-Mali; second workshop planed in Dakar for decision makers manual (mainstreaming climate change in local decision processes) validation
Enda's contribution (climate change and human development) to UNDP Human	April 2007

Development Report	
ENDA and partners held an inception workshop of the Climate Change Adaptation in Africa (CCAA) Program, a joint program of Canada's International Development Research Centre (IDRC) and the United Kingdom's Department for International Development (DFID)	16-20 April 2007 Addis Ababa, Ethiopia
Launch of the C3D fellowship programme	Call launched January 2007; course commences April 2007; ends in October 2007
Launch of ENDA West Zambia case study on climate, vulnerability and adaptation	March 2007 – indeterminate period

Assessment of results – 2006 to 2007

Project Logical Framework	Actual Implementation	Activities	Comments
Network and coordinate with other regional trainers, international experts and institutions to assist in undertaking its task	ENDA is a member of the National Comity of Climate Change (NCCC) and Subcommittee of Carbon (SCC) in Senegal and continues collaboration with African negotiators	Regular attendance of NCCC and SCC meetings. ENDA is a member of CCAA Program.	Networking was successful not only with the NCCC members, but also with other networks, particularly one on desertification (Drynet)
Conduct internal human capacity development activities within its organization, including, but not limited to: reviewing staffing needs; hiring new staff, if necessary; and training/building the capacity of staff through internal peer- to-peer seminars or external training activities.	Capacity enhancement on AWHERE tool and HTML web writing	AWHERE and HTML training for C3D members to be implemented	HTML and Awhere trainings done internally by Enda's member were a success. Further plans for internships are being developed to provide a solid structure for human capacity development at ENDA.
Produce applied case studies	Ongoing	Enda is working on three case studies in: • Senegal; • Niger; and • Zambia	
Prepare and hold a	Two workshops	Logistics for a third	First workshop

workshop for local West African decision makers on climate change, poverty and development.	conducted In Dakar(Senegal) and Bamako (Mali)	workshop for West African Decision makers in process	conducted, June 2006, Dakar, the Second workshop was held in Bamako (Mali). The third workshop (planned) should build on work achieved by the previous two
Prepare and hold a Vulnerability and Adaptation Training of trainers' workshop.	TOT2 process Ongoing	Looking for potential participants for the workshop	Workshop will be held in Dakar in August 2007

2. Other Selected Outputs / Activities

2.1 Production of set of five climate change factsheets with emphasis on gender, business and trade for use in awareness raising with private sector.

During Jan-Feb 2007, five factsheets were produced for distribution among other orgs., dissemination at meetings and workshops, and use in training and capacity building work. These factsheets feature, in summary form, climate change process and impacts and implications for existing gendered inequalities, business and trade. They are entitled:

- 'What is climate change and what are its causes and agents'
- 'What are the impacts of climate change in Africa?'
- 'The gendered implications of climate change in Africa'
- 'What are the implications for business of climate change in Africa?'
- 'What are the implications for trade of climate change in Africa?'

Each factsheet comprises definition, context, specific concerns, and recommendations

2.2 Production of set of system charts showing interrelationships between human and physical processes in the production of vulnerability and the way that adaptation feeds into the cycle (November-December 2006) – for development in 2007 into a booklet.

During November and December 2006, a set of charts was produced showing the different sets of social and biophysical relations and processes that take pace in relation to human development. Climate change is featured as one of these processes, itself the product of anthropological and biophysical inputs, it impacts on human and ecological networks that have interacted in a complex web to produce human and environmental vulnerability and resilience that enhanced or speeded up climate change and variability now impacts on. The purpose here is to identify all the processes in play, including climate change, that are affected or take part in the production of vulnerability, to show

these operating within a system with inputs, processes and outputs (one of which is social and ecological vulnerability) and to demonstrate how adaptation then feeds back into the same system.

These charts are currently being used in training modules and will later be incorporated into either a set of factsheets or a booklet to be used as a pedagogic tool.

2.3 Development and translation of ENDA strategic plan for vulnerability and adaptation to climate change

The ENDA strategic Plan for Climate, vulnerability and adaptation was written between August and October 2006 with several drafts in order for the ENDA vision, mission and strategy to be concisely articulated. This document is of value to ENDA Energy itself, to other ENDA partner organisations, other institutions and organisations including the donor community. It is used in avariety of for a to explain ENDA's position, standpoint and agenda. It is not a static document as adaptation theory and practice themselves are shifting within a dynamic evolving process. However, the basic principles that guide all ENDA's work can be seen at the helm throughout the document.

2.8 ENDA Fellowship programme (See <u>http://www.endaenergy.org/fellowship1.htm</u>)

The ENDA-C3D Fellowship programme entitled 'Building Africa's Capacity; Understanding Vulnerability to Climate Change and Preparing for Adaptation' was developed during December-January 2007. The fellowship programme addresses Africa's need for capacity development, knowledge sharing and education in the field of human and environmental vulnerability and adaptation to the impacts of climate change. The emphasis is on contributing to a growing reservoir of African knowledge and expertise in the stated theme of the fellowship which is:

Socio-economic and Ecological Vulnerability and Adaptation in the Arena of Climate Change, with a Focus on Livelihoods

The fellowship represents one component of ENDA's work in C3D and harmonises with a central plank of ENDA's <u>Strategic Plan</u> for work in vulnerability and adaptation.

The first fellowship course lasts for 6 months commencing on 23rd April 2007. It comprises three basic elements:

- 1. Two weeks of intensive targeted capacity development in Dakar, the home of ENDA's headquarters, in the form of teaching seminars, practical field visits, discussion forums, skills input and a workshop session;
- This will be followed by five months development of individual projects that speak to the central theme of the fellowship located at the institution of origin of each selected fellow;
- 3. Two final weeks at the end of the fellowship, at ENDA in Dakar to work individually with fellows to finalise and evaluate their project's results.

In Element 1, there are nine modules and these feature intensive training in contemporary theory and conceptual analysis, and how to assess vulnerability and map

it, and how to assess adaptive capacity and integrate this into a process of adaptation action from entry point with community consultation to exit point after completion of implementation, evaluation. Action research is featured heavily and field visits form part of the training session. Further heavy emphasis is given to effective communications strategies and the idea of social learning. Finally, each project is refined and appropriately budgeted during this period so that fellows can go away from the course and commence activities immediately.

<u>Objectives</u>

The fellowship aims to:

- Extend the knowledge and understanding of the fellows selected in the fields of identification and assessment of vulnerability and identification, assessment of capability and planning for adaptation with a focus on livelihoods;
- Identify, articulate, plan and execute a piece of action research on the above theme in a limited time-frame using an agreed methodology;
- By so doing, develop the knowledge and skills of the home institution of the selected fellows in the stated themes;
- Produce research projects, together with working papers that will be of contemporary practical value to the home country/organisation of the fellow as well as to the fellow in his/her future career development and could form the basis of concrete proposals for action.
- Address the outflow of skills and knowledge on vulnerability and adaptation to non-African institutions and organisations

Projected Outcomes

- A pool of knowledge about the differential way in which climate dynamics and their impacts are interpreted on a variety of scales from local to government in Africa and the way that people adapt to climate variability.
- A reservoir of knowledge and skills located in individuals and institutions throughout Africa, competent of identifying and accurately assessing social and environmental vulnerability, and accomplished at devising strategies to enhance existing capacity to reduce and adapt to such vulnerability with new adaptive skills and technologies
- African mentors and institutions capable of mentoring, teaching and nurturing new African expertise
- For ENDA and other institutions appointed by ENDA to supply teaching/mentoring/evaluation resources, the implementation of successful fellowships will enhance existing capacity and professionalism in the genre 'African training of African trainers'. By this we mean that the experience gained by specialists involved in training at ENDA and its partner organisations around Africa will add to the strengths and capacity building resources of those organisations themselves.

Course outline

Day 1	Welcome	Climate and	Sustainable	Vulnerability (3
	speech;	Development	livelihoods	hours)
	Objectives of the	(2 hours)	(1 hour)	

	training (1 hour)			
Day 2	Vulnerability (2 hours)	Sustainable livelihoods (2 hour)	Climate and Development (2 hours)	
Day 3	Searching the Web (3 hours)	Individual research projects (2 hours)	Sustainable livelihoods (1 hour)	
Day 4	Climate and Development (2 hours)	Film and Panel Discussion (2 hours)	Sustainable livelihoods (1 hour)	Individual research projects (1 hour)
Day 5	Vulnerability (1 hour)	Adaptation (3 hours)	Presentation of Individual research projects followed by discussions (2 hours)	
Day 6	Field Visit		· · ·	
Day 7	Free			
Day 8	Vulnerability (2 hours)	Sustainable livelihoods (2 hours)	Adaptation (2 hours)	
Day 9	International Labour Day			
Day 10	Individual research projects (2 hours)	Adaptation (3 hours)	Individual research projects (1 hour)	
Day 11	Individual research projects (1 hour)	Climate and Development (1 hour)	Sustainable livelihoods (2 hours)	Field Visit
Day 12	Individual research	projects / MOUs		

The fellowship got underway with the first element on April 23rd 2007

2.9 Support to LDCs experts for National Communications and NAPAs

Enda provided support to LDC expert teams to work on their NC and NAPA documents. The Enda C3D members provide input on guidelines and vulnerability and adaptation assessment related to different sectors: agriculture, health, water resources, forestry and coastal zones. The concerned countries include: Mauritania, Zambia, Gambia, Tanzania, Lesotho, Ethiopia, Mozambique, etc.

2.10 ENDA participation to COP12, Nairobi, Kenya

The 12th Conference of the Parties (COP12) to the United Nations Framework Convention on Climate Change (UNFCCC) and the Second Meeting of the Parties to the Kyoto Protocol (COP/MOP 2) that took place in Nairobi, Kenya (6 – 17 November 2006) was the first to be held in sub-Saharan Africa. On this occasion, ENDA TM with its "Energy, Environment and Development" Programme happened to be the only Africabased international non-governmental organization of its kind to hold an exhibition and showcase its activities and publications with a view to mobilizing civil society actors around the issues at stake for the continent. In addition to the exposition, which was ENDA's main attraction, other initiatives included two teleconferences, several sideevents and the publication of an e-bulletin entitled "Environment and Development".

- The exhibition focused on the general theme of 'How to integrate climate and 0 development? Background case study experiences for LDCs, in particular in the field of adaptation in agriculture, health, human settlements and energy; and presentation of training materials on vulnerability and adaptation (V&A)' and featured the various publications, reports, projects and initiatives that are carried out by the Energy, Environment and Development Programme of ENDA in the field of climate change and development. ENDA's booth became the meeting point for many participants and delegates who could watch thought-provoking films on 'Gender, Energy and Poverty', 'Vulnerability and Adaptation in sub-Saharan Africa', and 'a community carbon forestry project'. The publications on V&A, especially the CD containing training tools as well as the case studies on community-carbon forestry, were the most appreciated by visitors. The exhibition also featured the publications and activities of ENDA's partners and like-minded organisations including the University of Twente (The Netherlands), ENEFIBIO (ITEBE, France and CRAW, Belgium), GNESD, (Global Network on Energy for Sustainable Development), C3D (Climate Change Capacity Development), AREED (African Rural Energy Enterprise Development), and the Sahara and Sahel Observatory (OSS).
- In order to allow those NGO and civil society representatives who could not travel to Nairobi to personally participate in the COP events due to financial constraints, ENDA convened two teleconferences on the challenges and opportunities of this international negotiation session. The first teleconference took place on 8 November. Participants were updated on the debates that took place on the Adaptation Fund, Financial Mechanism, capacity-building and awareness-raising and were invited to share their views with ENDA representatives and negotiators attending the COP12. The second teleconference took place on 15 November to appraise the status of the negotiations and the various issues at stake. Both conferences provided participating civil society representatives from Benin, Mali and Senegal with the opportunity to be directly updated, from their respective countries, on the progress made over the two weeks of negotiations.
- ENDA representatives were invited as panelists at a number of side-events organised by partner institutions in parallel to the COP. These include the African Development Bank (AfDB) that organised a side-event on its 'Strategy for clean energy and climate change'; the Netherlands Environment Assessment Agency (MNP) on 'Integrated development and climate policies: how to realise benefits at national/international level', and the International Institute for Environment and Development (IIED) that held its usual and well-known 'Development and Adaptation Days'.
- During the four months preceding the Nairobi Conference, ENDA set out to raise awareness and sensitize African civil society organisations on the issues at stake through the launch of its monthly e-bulletin 'Environment and Development'. Four issues were published and distributed targeting the Least Developed Countries (LDCs). Two other issues were published during the COP in Nairobi and a summary issue will appear soon. ENDA's active participation and strong mobilisation at COP12 accounts for the organisation's clearly expressed desire to

direct all relevant stakeholders towards concrete action on climate change adaptation for African populations. For this first Conference of the Parties to be held in sub-Saharan Africa, that was billed 'the Africa COP', the issue of adaptation to climate change by LDCs was of vital concern and it is rewarding that the Parties have adopted the Five-Year Programme of Work on Impacts, Vulnerability and Adaptation to Climate Change. Yet even this result is far from meeting total expectations, -- the agreement covers the next two years only and no concrete action is expected to be launched, meanwhile the financial aspects of the agreement (Adaptation Fund) have been postponed to the next COP. Still, it is clear at least that this COP has managed to win the recognition of the international community on the issue of climate change adaptation which is of paramount importance to African populations. It is ENDA's hope that African negotiators as well as civil society will endeavour to take this recognition one step further.

2.11 Case studies

During March 2007, the Zambian case study work got underway. In essence, this responds to an identified example of vulnerability to new climate issues in a region where climate variation has always been a central issue for local lives and livelihoods. In terms of applicability, Zambia has been a core research country of one of the ENDA vulnerability and adaptation team for some ten years and many links have been built up during that time.

The direct objectives of this study are:

- 1. To improve the choices and options for a community suffering extreme social and ecological vulnerability where the main adaptation action in times of exigency, up to now, has been migration
- 2. To build the capacity of a local organization that ENDA is partnering with throughout the case study work period in the handling of issues regarding climate-related vulnerability and adaptation, including assessment and mapping of vulnerability in all its social and biophysical dimensions, methods of identifying adaptation strategies, assessment of adaptation capacity
- 3. To test the theories and practices that ENDA espouses and teaches in training workshops, fellowship schemes, conferences and other fora, in 'real life' day-today contemporary case-study work in partnership with local communities, their representative bodies and local decision makers and local researchers.
- 4. To review and enhance ENDA's existing knowledge base and skills on the same climate, vulnerability and adaptation issues.
- 5. To engage policy makers in Zambia and elsewhere on these same climate issues with the benefit of local experiential knowledge (this will take place towards the end of the initial project cycle)

In January 2007, a pilot study among local communities was carried out in three separate clusters of villages around the eastern edge of the Bulozi floodplain. The study was aimed at contextualizing the way that local people interpreted climate and its impacts on local lives and livelihoods. The results have been used both in the preparation of material that ENDA has used in multifarious fora and for the preparation of the first stage of the West Zambia project.

In March 2007, an ENDA climate, vulnerability and adaptation specialist went to Zambia to meet representatives from all the potential stakeholder groups. These included the Zambian Minister for Environment and Tourism, the Zambian Deputy Foreign Minister, the Permanent Secretary for Zambia's Western Province, the Litunga (or King) of Barotseland (the local name for the region in question), the chief council chamber of the local traditional authority (the Barotse Royal Establishment [BRE], the local representatives of Zambia's Meteorological Department, Agriculture, Livestock and Fisheries departments, local communities to confirm the interest already expressed, the Director of the Institute of Economic and Social Research at the University of Zambia, members of staff at Barotseland.com the local organization ENDA will be partnering with, and the manager of a community radio station, based in Mongu, the chief town of Western Province.

The outcomes of this visit were/

- 1. A raised awareness of ENDA, its mission and purpose in government and across all stakeholders in the region concerned
- 2. Legitimacy gained and enthusiasm expressed by the Zambian Minister of the Environment for ENDA's aims and stated methodology. Particular enthusiasm was expressed for the idea of building on to and adding to indigenous knowledge networks and not replacing them, and also for the principles of community ownership that began with the pilot survey and capacity building
- 3. Enthusiasm for project partnership expressed by: traditional authority which has most influence with rural people in the region; Barotseland.com; national and regional government; and the University of Zambia.
- 4. Agreement among all parties to participate in a local decision makers workshop which will be held in late October 2007 organised by ENDA and the local org which will take place under the ENDA-C3D banner at which local people from a variety of interest groups will be invited to present 'real life stories' of local lives and livelihoods under the influence of changing climate. This will also be an opportunity to sensitise local decision makers and representatives of livelihood groups to the very real variations likely to take place in the future. This workshop will be held in Mongu, in the heart of the region concerned.

ENDA is now engaged in the next stage of the project which is preparation for the aforementioned workshop at which it is hoped at least two ENDA specialists will participate.

Other case studies on climate change vulnerability and adaptation are planed in other West African countries.

WRITESHOP on Water Management Adaptation to Climate Change in West Africa February 2007 (ETC / NCAP)

Background

West Africa is already a region where water management challenges are felt by water managers and water users alike. In the Maghreb and the Sahel, aridity, and associated water scarcity, is a common feature of river basins. In the more humid coastal regions to the south, many river basins are shared with Sahelian countries to the north, creating the potential for transboundary disagreement. The prospect of climate change in West

Africa has the potential to exacerbate water management challenges and constrain livelihood enhancement. There is a need for a document that lays out the potential magnitude of these challenges and constraints and identifies actual strategies that can be employed in West African river basins in order to adapt to climate change. The WRITESHOP endeavours to produce such a synthesis document. The synthesis document is not being prepared to serve as a reference for future research. Instead the key feature of this document will be its focus on concrete actions that can be taken in the region. The description of these concrete actions contained in the synthesis document should be sufficiently detailed to serve as the foundation for project documents that could be used to seek financing for specific climate adaptation funding requests in the West African region.

A total of five (5) technical background documents are planned for preparation in advance of the WRITESHOP, as outlined below.

- 1. Climate change and Variability and Impacts on West African River Basins Water Resources, What Prospects?
- 2. Potential Concrete Actions for River Basin Scale Water Management Adaptation in West Africa, the OMVS Case
- 3. Potential Concrete Actions for Water Management Adaptation at the Community Scale in West Africa
- 4. Potential Concrete Policy and Institutional Actions for Facilitating Multi-Scale Water Management Adaptation in West Africa
- 5. Potential Concrete Capacity Building Actions for Integrating Multi-Scale Water Management Adaptation in West Africa.

The ACCCA Project (Advancing Capacity to Support Climate Change Adaptation)

The specific purpose of this initiative is to bring together stakeholders and scientific communities of the developing world to enable and support effective adaptation decisions that would reduce vulnerability to climate and environmental change while also promoting sustainable development. In 2006, the ACCCA team accepted proposals for projects in Africa and in Asia (see <u>www.acccaproject.org/</u>). In this project, ENDA is a managing partner and will mentor/supervise four of the original Africa projects activities.