Energy for Poverty Alleviation in Sahel

Intelligent Energy Project

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Report of the First Regional Workshop of Intelligent Energy for Sahel - PART 2

From the 3rd to the 6th of October 2006 the first Workshop of the IE4Sahel has been held in Niamey, at the centre Agrhymet.The workshop involved around 36 participants from eight African countries and four European countries, representing government, electricity utilities, academia and research institutions. This report is a summary of the themes covered during the workshop:

- Sahel energy poverty situation
- Energy and poverty reduction strategies
- Low cost technologies
- Renewable energies mapping potential
- Sustainable energy buildings
- Needs assessment methodologies
- International, regional and national energy policies,
- Energy and the Millennium Development Goals
- Energy and gender
- Electricity reforms

This issue of the newsletter reports the discussions held during the last two days of the Workshop.

Day 3 - Thursday 5th October 2005
The third day of the Workshop looked at policy analysis and elaboration, and to the understanding of the underlying forces and interests that shape the elaboration of energy policies.

Mr. Giorgio Gualberti, from Instituto Superior Técnico (IST), started the day with a presentation on the role of energy policies in achieving the Millennium Development Goals. As a matter of fact, even if energy is not one of the eight MDGs, the role of energy in achieving the MDGs is central. This link has been formalized with the Johannesburg Plan of Implementation and later reaffirmed by United Nations, World Bank and academicians, researchers and policy makers all around the world, in several policy and scientific works. Mr. Gualberti analysed the role of energy in achieving each MDG and the priority actions and policy alternatives recommended by the Millennium project of the UN to help the poor reach their energy needs as an important step to break poverty trap. Discussions developed between workshop participants on the space that energy has in national poverty reduction strategies and in the Millennium Development Goals framework.

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After this, **Mr. Giorgio Gualberti,** from Instituto Superior Técnico (IST), analysed in more detail the relation between **gender and energy.** Gender issues are an important part of any strategy aimed at reducing the poverty, not only because often women and girls are the poorest and more vulnerable between the disadvantaged classes, but also because cooperation projects specifically designed at addressing women and girls needs are beneficial to the entire community and often very successful. The evidence of the gender aspect is now mainstream in cooperation and development initiatives, especially after the works initiated by Grammen Bank in Bangladesh and other organizations all around the world. Specifically for the energy issues, and specifically for Africa, various studies clearly indicate how much energy (and water) scarcity affects women and girls, that may spend several hours a day carrying fuelwood and water for the family (several tonnes/km per year). This greatly affects school attendance, results and health. The use of traditional biomass in inefficient stoves is also responsible for many health problems and premature deaths for women and children, due to the toxicity of the smoke of interior. Finally, together with the participants, the well-known project of Multi Functional Platforms in Mali was analysed. MFPs have a strong gender component (they have to be managed by existing women cooperatives) and have been highly successful, not only as a source of decentralized energy production for rural villages, but they also had very strong gender advantages, in particular with scholar results of girls and incomes of women. Discussion took place on the role that gender has in the participants' respective countries', poverty reduction policies and energy policies, and if specific gender related energy projects have been developed.

In the second part of the morning **Mr. Giorgio Gualberti** (IST) introduced the theme of **International Energy Policies**. In particular the theme of the energy policies advocated by the International Organizations has been treated. International Organizations have played and continue to play a very important role in shaping the internal energy policies of developing countries, and between all IOs, Bretton Wood institutions have a prominent role. The World Bank Group has by far the most important role in international energy policies, through its research, advocacy, policy support and financing activities. The policies adopted by the World Bank have been analyzed, with particular attention to the policy for the electricity, fossil fuels and mining, and renewable sector. Specifically for electricity the Bank has been the main actor leading to the electricity reforms in almost 80 developing countries in the last decade. The Bank policy line has been, before 1993, to support state owned monopoly, and after 1993 private participation, commercialization and privatization (and unbundling) of the electricity sector. After 2001, the Bank had a stronger focus on the energy needs of the poor and on the effects of policy reforms. Regarding the fossil fuel sector, in the period 2001-2003, an important independent review of the Bank financing for extractive industries took place. The central point of the policy review was to what extent extractive industries might contribute to sustainable development and poverty reduction and so be justifiable for the bank's financing. The review final report, named "striking a better balance" contained a set of recommendations to the World Bank management, in particularly on the principle of affected communities, on pro-poor public and corporate governance, on more strict social and environmental policies, and on the respect of human rights. EIR also recommended the Bank to concentrate its financing on renewable energy sources and to halt financing to oil extraction by 2008. The World Bank management accepted the majority of recommendations (but not to halt financing to oil extractions). Regarding the renewable energy sources, the World Bank Group declared in 2004 at the Bonn Conference on Renewables, to increa-

se of 20% annually its portfolio in renewable energies and energy efficiency. The other important international player shaping energy policies in developing countries is the United Nations. A great number of UN Agencies deals with energy issues, including UNDP, FAO, WHO, UNIDO, UNFCCC and UNEP. To coordinate all this work, a new UN Inter-Agency has been created, UN-Energy, whose first works are some policy papers on the importance of Energy in order to achieve the MDGs. Extensive discussion has been carried out by participants on the impact and influence that international organizations have in shaping national energy policies.

After having analyzed the main pillars of international energy policies, **Mr Giorgio Gualberti (IST)** introduced the theme of **Regional Energy Policies.** Regional approaches are particularly important nowadays and the African political scene has seen many initiatives addressing the relation between energy and poverty, and the urgent needs for investments in energy infrastructures. Two important initiatives are the NEPAD Energy Agenda and the Forum of Energy Ministers of Africa (FEMA), which together with the African Energy Commission (AFREC), are aimed to enhance coordination and information between African States. More specifically for the Sahel Region, the 29th Conference of the Heads of State of ECOWAS/UEMOA in Niamey on the 12th of January 2006, with the decision A/DEC.24/01/06, adopted an ECOWAS/UEMOA regional policy on access to energy services for populations on rural and peri-urban areas for poverty reduction in line with achieving the MDGs in Member States. The regional ECOWAS/UEMOA policy is summed up in the **White Book for a Regional Policy**, probably the most ambitious initiative on energy and poverty in the continent, that has been developed with the collaboration, between others, of UNDP and the Millennium Project. The White Book starts from the principle that, in order to reach the MDGs, the poor have to obtain access between other factors to certain energy services. There is, in each country, an energy gap that must be fulfilled to reach the Millennium Development Goals. The white book for a regional policy fixes certain targets of energy access that are necessary to reach in urban and rural areas and estimates the cost of providing the services and the cost for the investments in infrastructure. The general objective of the regional policy is to provide half of the populations of members countries with access to modern energy services by 2015, that means to increase fourfold the share of people with access to modern energy in 2005. In the ECOWAS/UEMOA plan, there is also the creation of a specialized regional agency with the role of coordination and investment promotion (financed through a leverage on the additional investments mobilized).

The workshop participants' discussion centered on the role of CILSS and of CRA in the ECOWAS regional policy, and the importance of coordination between regional institutions, academia, and policy makers.

After international and regional policies, **Mr Giorgio Gualberti,** from Instituto Superior Tecnico (IST) introduced the theme of the national policies and **reforms in the sector of electricity.** Firstly, a general overview of the more common structures and reform paths in the sector of electricity was discussed, in particular referring to the different options of property, management, vertical integration and concurrence. The main regulatory options have been discussed with the participants, subsidy policies and design, and the problem of the most appropriate sequencing of electric sector reforms. After this general introduction, the electric power reforms in the 9 Sahelian countries were briefly analyzed. All the countries started some reform process. The vertical structure of the marked has been subject to few changes, but all the countries started some form of privatization or private participation in the electric market and half of the

countries now have an independent regulatory commission. The particularity of the electric utilities privatization process in Sahelian countries is that all the countries that moved faster and completed privatizations or external management contract, at a certain point reversed the process and the state regained control or the ownership of the electricity sector. This occurred, with different modalities, in Cape Verde, Senegal, Mauritania and Chad. The U-turns in privatization in these countries were attributable to the contrast of interests and conflicts between the state and the privatized utility, especially on two points: tariffs fixation and readjustment and contractual obligations. In the other countries the process of privatization is still formally active but the research of technological partners and/or buyers is made even more difficult by the failure experience in neighboring countries.

As seen in the previous section, one of the reasons for the failure of the electric utility privatisation in the Sahel, are the conflicting interests and points of view between the different stakeholders, the state, the citizens and the private sector. To better explore this concept, **Mr. Giorgio Gualberti**, of Instituto Superior Técnico (IST), proposed a **Role-Playing Game on Energy Policies Formulation.** The participants were introduced to the reality of an imaginary country, the "Sahterre", with all detailed data on economy, demography, energy characteristics, poverty etc, and were divided into four groups, the government, the private sector, the middle-higher class, and the poorest part of the population. The role-play began with the Government calling for a national conference with all the groups, in order to shape a new energy policy and undertake energy reforms. Each group set its priorities and requested the government that later took some decisions that were furthermore analyzed and judged by the groups and the public opinion. The game clearly highlighted the difficulties of "squaring the circle" in a situation of great needs and few budgetary resources, and the legitimate different visions and priorities between the various groups (and even within the same group, as the government was divided on which solution to undertake).

Day 4 – Friday 6th October 2006

The last day of the workshop started with a presentation made by **Dr. OUEDRAOGO,** Director of the Institut d'Application et Vulgarisation des Sciences (IAVS) of Burkina Faso, on **The Household Renewable Energies in OUAGADOUGOU city: potential axes of action in a context of fight against poverty and desertification.** Firstly, the general elements of the Burkina Faso energy and poverty were explored, and later more details were given on the domestic energy system of Ouagadougou, characterised by a very high percentage of fuelwood usage. The research showed a strong correlation between revenue and fuel choice, and the share of income spent in energy is much higher for low income families. Moreover there is a correlation between type of habitation and type of fuel. The fuel choice is not only a pure economic choice but also something that depends on cultural and social factors, like food habits, prejudices and religious beliefs. After the main national energy policies were analysed, especially referring to the production and distribution of fuel wood, and three alternative policy scenarios were discussed and analysed. The three alternative scenario discussed were: 1) total fuel substitution of fuel wood with gas, electricity and solar energy; 2) sustainable use of fuel wood, creation of new exploitable forests and transform it in a source of national wealth; and 3) Expand the integrated management of forests, production of technologies and substitution fuels.

The Workshop Participants discussed the similarity between the Ouagadougu case and the other situations in Sahel and especially the alternative policy option scenarios.

The last session of the workshop, **the round table,** was coordinated by **Dr. Matheu Badolo,** of the Agrymeth Center. Dr. Badolo focused on the next steps of the IE4Sahel project, on the collaboration and networking between the workshop's participants and their respective institutions and on the preparation of the second IE4Sahel Workshop.
The results of the discussions were as follows:

1. validation of the draft documents already prepared by the project
2. preparation of the second workshop for February - March 2007
3. maximum development of linkages and synergies between the IE4Sahel and PREDAS projects.
4. networking activities, through: a) a network of experts coordinated by CRA on the theme "energy and poverty in Sahel"; b) Virtual Network of Sahelian Institutions of research and education; c) organisation of a little committee between ARC, IST, PREDAS and CONACILSS to effectively coordinate all the actions.

At **The Closing Ceremony Mr. Faustin Gnoumou from ARC and Dr. Luis Alves from IST** thanked the workshop participants for their active participation and contribution.

A Workshop Evaluation Questionnaire was given to participants and returned back with comments and suggestions.

Project Schedule

The project is scheduled to be developed until mid-2007, with the realisation of two main Workshops, from where the project team already ask for interested parties to mark in your agenda.

1st Workshop - October 2006 – Niger

2nd Workshop - March 2007

Besides these two Workshops the project is also committed to involved institutions to build a permanent network between the professionals

Istituto Superior Tecnico RGESD - IST Portugal	ESD - Energy for Sustainable Development ltd UK	CRES - Center for Renewable Energy Sources. Greece	ARC - AGHRYMET Center Niger
Long experienced research team in the field of energy planning and renewable energy systems.	Consultant firm with experience in energy policy and regulation.	The Greek national centre for Renewable Energy Sources, Rational Use of Energy and Energy Saving.	Specialised institution committed with the food security and to help the management of natural resources in the CILSS region..

The Project Team
How to contact the Project Team

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to contact the staff, receive the newsletter, contribute with papers or for informations and comments **ie4sahel@energyprojects.net**

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