# GERES ANNUAL REPORT 2011







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### 3 questions to



Alain Guinebault General Director of GERES

# 1. What were GERES major endeavours and transformations in 2011?

It is always difficult to place more emphasis on one activity rather than another, but I would say that the major objective in 2011 was to control our development. GERES does not have a policy of two-figure growth. Our strong development in recent years is the result of our desire to enable the largest number of people to cope with the impact of climate changes and access innovation.

This has led us to rethink and diversify our modus operandi and explains why we instigated and set up the Nexus

platform, which became independent in early 2011. These changes will facilitate the scaling up of our best results, whilst we remain as close as possible to stakeholders on the ground. This also applies to the launch in 2012 of the Global Stove Programme, which seeks to roll out its activities simultaneously in South-East Asia and West Africa.

Controlling our development also means providing GERES permanent staff with a safe career path: integrating newcomers, training, building on and adding value to the work of those who have moved on. The scope of the exercise begun in 2011 will broaden with the arrival in 2012 of a human resources manager and a skills manager. Finally, we are also having to deal with the effects of the crisis in Europe. It seems legitimate to look again at how we co-operate with emerging economies, but the poorest communities in those countries run the risk of getting "left behind" by growth. The position of the Least Developed Countries (LDCs) is only improving very slowly, with acute disparities between the elites and the rest of the population. In this regard, I am greatly concerned at the threats that may arise from the rich countries drawing in on themselves.

«The key challenge is to contribute to widespread dissemination of efficient, costeffective solutions»

# 2. What does GERES see as the main challenges of sustainable energy for all?

After decades of energy appearing to be no more than a minor item on the development agenda, 2011 saw the emergence of the Global Alliance for Clean Cookstoves (GACC) under the aegis of the United Nations Foundation. Then

# «Energy is a means, its uses are the end on which we focus»

the United Nations General Assembly designated 2012 as the "International Year of Sustainable Energy for All". Of course, we feel deeply involved. GERES sees this as an opportunity to raise awareness of the importance of developing sustainable access to energy, energy efficiency and use of renewable energy sources at the local, regional and international levels. It is also an opportunity to gain recognition for GERES knowledge and skills, particularly as regards uses of energy. Energy is a means: its uses are the end on which we focus. Energy services really do impact on economic development, health, education, climate changes and food security. This is why lack of access to clean, affordable, reliable energy holds development back and represents a major obstacle to achieving the Millennium Development Goals.

# 3. Energy transition seems to be becoming a vital necessity. What does that mean for GERES?

Amongst the rich countries, Germany is already committed. The European Commission is preparing a directive on energy efficiency to complement existing measures, whereas the subject was only touched upon during the presidential elections in France. Although energy consumption in the North is presently stagnating, the challenge is to reduce it: the most enthusiastic campaigners are talking of cuts of between 55 and 80% by 2050. Whatever the case may be, energy prices will oblige governments to start moving towards restraint, the only way to avoid hampering their economic activities or further marginalizing those already suffering fuel poverty. The key challenge for GERES is to contribute to widespread dissemination of efficient, cost-effective solutions which are already known (although research must not be overlooked). In France, our Energy Information Centres are a tool which has proven its worth to private individuals and co-owners in preparing energy retrofitting projects. Other projects foster local production of hydro-electricity. Naturally, developing countries are also concerned and even doubly concerned, given the trend towards sharp rises in energy consumption to plug the "development gap"! This is an aberration which, in the end, undermines programmes encouraging efficient energy use. Here we have the challenge for GERES in a nutshell!

### **Message from the President**



Thierry Cabirol
Chairman of the Board of Directors

# On the need to get our values across

GERES has long been aware of the need to enshrine its vision and values in a charter which, gathering its ethical and operational principles together in a short document, would help to guide and frame its activities, as well as explain its approach to the outside world.

This led in 2009 to an in-house exercise involving lively debates and discussions, which resulted in an official document available in 2011 for distribution to all our audiences.

The final version of GERES Charter of Values was endorsed during 2011. For this reason, we think it important to bring it to you here, especially as one of the points in the Charter precisely stresses the imperative of transparency that must be reflected in our annual report.

The Charter says that the annual report "must make complete, transparent information, faithfully reflecting our activities, available to the public and our partners". This exercise is not always easy to carry out if full account is to be taken of the complexity of development, the geopolitical situation in some of the countries where we work and the scale of our activities. To ensure integrity, our projects are subject to very regular external audits in respect of both funding and operational procedures and results.

We also wanted to highlight our convictions in the Charter and set out the principles we consider fundamental, particularly from the perspective of ethics, to guide and explain our approach:

- Jointly developed energy solutions for economic and social development;
- A global, multidisciplinary approach to issues;
- Local control of innovations in the collective interest of the communities concerned;
- Mechanisms to ensure integration in local markets;
- Viable models that are sustainable in economic terms, disseminated by private stakeholders;
- Support enabling beneficiaries to grasp the issues.

In this way, GERES has reaffirmed its commitments and desire to develop on the basis of strong, clear values.

The Charter is not a final outcome but a stage, a rallying point for all our partners and particularly our administrators and teams who work tirelessly and strive daily to ensure the success of projects and long-term impacts on the ground.

I hope you all enjoy reading it.

### The Charter

This charter of commitment is aimed at formalizing a set of shared benchmarks to which everyone can refer under all circumstances. It presents our vision, as well as the organization's major principles of ethics and action. Allied to the sense of responsibility everyone shares, they are useful points of reference for members of the organization as a whole and all its partners. As they consolidate GERES image and positioning over time, these ethical principles enable it to develop and apply its blueprint independently in line with its values.

# GERES HAS BEEN BUILT AROUND THE FOLLOWING CONVICTIONS:

- The development of human societies is indissociable from care for their environment;
- Development is indissociable from the social inclusion of individuals, their access to energy, their financial independence and their participation in the future of their communities;
- Whatever their lifestyles, human societies are interdependent as regards access to natural resources and their environmental impacts;
- Climate changes will have a profound impact on how all societies, especially the most vulnerable, live their lives;
- Ordinary people, along with public and private stakeholders, must meet these challenges together, inventing and developing tomorrow's solutions.

### **Our vision**

A world of solidarity and justice, where the principles of sustainable development are reflected in a healthy, diverse, protected environment, where everyone can be respected and play an active role.

### Our mission

Helping to conserve the environment, limit climate change and its consequences, reduce fuel poverty and improve communities' living conditions. GERES offers energy solutions as both a vector of socio-economic development and an alternative to existing systems that harm the environment.

### **ETHICAL PRINCIPLES**

# 1. CARING FOR THE ENVIRONMENT AND IMPROVING LIVING CONDITIONS

GERES is committed, on a day-to-day basis, to working with communities who face precarious conditions and to implementing its projects in an environmentally friendly way. We seek to minimize our ecological footprint by looking carefully at the quality of our work, services and installations.

### 2. RESPECTING CULTURES AND LIFESTYLES

GERES gets involved as closely as possible with the community, taking care to show respect for the local lifestyles and cultures it seeks to preserve; and to take account of gender issues. Our teams work to build the capacity of beneficiary communities so that they can decide on, guide and take control of their own futures.

# 3. OBSERVING THE PRINCIPLES OF ACCOUNTABILITY AND TRANSPARENCY

Out of concern for its integrity, GERES refuses to compromise its approach and/or seek results through financial opportunism, rejecting corruption in all its forms.

Moreover, the principle of accountability means that complete, transparent information is made available to our partners and beneficiaries. GERES annual report faithfully reflects the organization's activities and accounts and is regularly subject to external audit.

### 4. RESPECTING LEGALITY AND EMPLOYEES' RIGHTS

GERES applies international conventions, as well as the laws, regulations and customs in force in each country where its representative offices operate. We take care to protect employees' rights and to treat everyone with dignity, fully respecting private life while ensuring dialogue between employer and employee.

### 5. OBSERVING THE PRINCIPLE OF SECURITY

GERES is committed to implementing an active health and safety policy in the field, particularly where its teams are working in conflict or war zones. It guarantees logistical support in the event of evacuation.

### PRINCIPLES OF ACTION

GERES takes account of the complexities of development issues through a comprehensive, multidisciplinary approach, laying the foundations for sustainable technical solutions, know-how and skills.

The primary objective of GERES activities is to identify and develop methods or practices that can be applied or replicated by others, whether they are beneficiaries or other development stakeholders. For us, fulfilling this objective means we must meet five conditions which constitute our principles of action.

### 6. JOINTLY DEVELOPING APPROPRIATE SOLUTIONS

Taking a given context and issue related to one of its themes, GERES primary aim is to design, develop, test, validate and implement technical solutions. These must be in line with the material, environmental, cultural and financial resources of the stakeholders and communities with whom we work.

### 7. ENABLING LOCAL CONTROL OF INNOVATIONS

GERES promotes the emergence of or strengthens local structures capable of managing, sustaining and controlling the solutions proposed and accepted. It chooses to capitalize and benchmark its techniques and to permit their dissemination. In addition, we avoid replacing local technical partners with external resources and we involve the local public authorities and relevant government bodies in our projects.

# 8. WORKING IN THE COLLECTIVE INTEREST OF THE TARGET GROUPS

GERES activities must pursue collective benefit rather than seek to strengthen particular interests or dominant groups. Where necessary, sticking to this principle means adopting complementary measures to ensure that the needs of vulnerable communities are not overlooked.

### 9. PUTTING FORWARD ECONOMICALLY VIABLE SOLUTIONS

GERES makes sure that all the economic criteria for the viability of the proposed solutions are fulfilled. This means ensuring that the final beneficiaries can afford our solutions. Moreover, our teams promote or support mechanisms to integrate the solutions in the local market so that the economic sector concerned can take charge of dissemination and become self-sustaining.

# 10. CONTRIBUTING TO RAISING AWARENESS OF SUSTAINABLE DEVELOPMENT ISSUES

Faced with the risks of deforestation, the disruption caused by climate changes and the increasing scarcity of natural resources, communities must be assisted to change their practices and adapt to new situations. Against this background, GERES carries out appropriate awareness-raising and training activities depending on the target groups concerned: public authorities, local partners, populations, communities, etc. We see it as a priority to make all stakeholders aware of the threats and challenges, because bringing in and accepting new solutions is one of the preconditions for a sustainable future and even survival itself.

«GERES aims to base its development on these values and principles. Its Board of Directors, management and teams put them into practice. They form the foundation of the relationship of trust between the organization, its partners and donors and the final beneficiaries.»

# 55 PROJECTS run in 13 countries

**9**Permanent
Representative
Offices

157 technical partners

Improved brick drying consisting of ground straw and clay, in Afghansitan

204 employees

**62** financial partners

+34% increase volume of activities in 2011

# 10 events hit the headlines for GERES in 2011

### **PCIA**

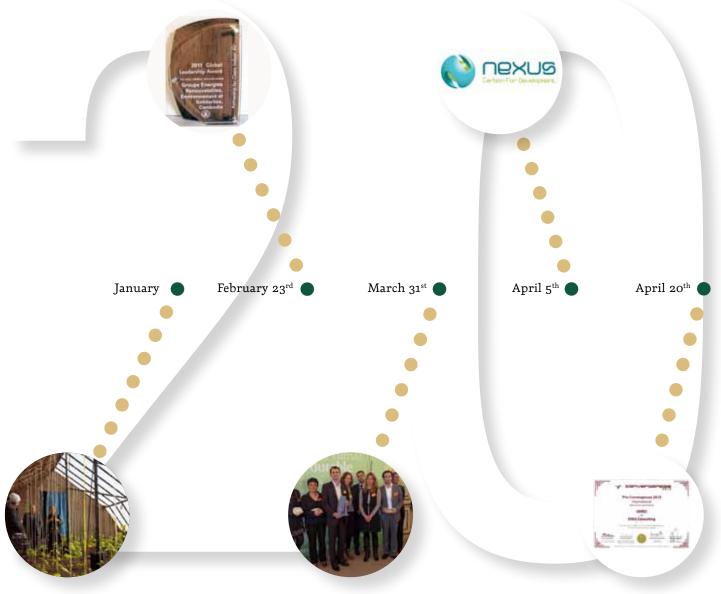
Partnership for Clean Indoor Air award (Lima, Peru)

GERES commitment to combating indoor air pollution through its improved cooking stove programme (New Lao Stove) in Cambodia is rewarded.

### NEXUS BECOMES INDEPENDANT (CARBON FOR DEVELOPMENT)

(Singapore)

GERES and Nexus announce the autonomy of the Nexus Project, which becomes a financially and legally independent organization.



# LAUNCH OF THE TADJIKISTAN PROJECT

Sustainable rural development

The project aims to improve the living conditions of 1000 rural households (in the districts of Ayni and Asht) by building bioclimatic storage cellars and solar greenhouses and henhouses and organizing two marketing co-operatives

# THE SPONSORSHIP TROPHIES

(Paris, France)

GERES wins the Special Jury Prize at the ceremony to award the first corporate sponsorship trophies for the environment and sustainable development, organized by the French Ministry of Ecology, Sustainable Development, Transport and Housing (MEDDTL).

# CONVERGENCE AWARD 2015

(Paris, France)

In partnership with Enea Consulting, GERES is one of the three nominees for the 2015 Convergence Award (International category) for its passive solar house project in the Indian Himalayas.

### **AFRICA CARBON FORUM 2011**

(Marrakesh, Morocco)

GERES sends a delegation to the Africa Carbon Forum to defend the idea that carbon finance should be a genuine development lever at the service of the poorest communities.





# **FINALIST AT THE WORLD HABITAT**

**AWARDS** (Aguascalientes, Mexico)

October 3rd

At the WHAs organized by the BSHF foundation and UN-HAB-ITAT, GERES India is named as a finalist for its passive solar house project in the Indian Himalayas.

### **COP17**

(Durban, South Africa)

An expert delegation goes to plead in favour of greater climate solidarity and increased commitment from industrialized countries towards the least developed countries.





December 20th



2012, THE INTERNATIONAL

Pending the launch of the "International Year of

Sustainable Energy for All", GERES shines a spot-

and South and continues to plead for the rights

light on field practices adopted in both North

YEAR OF SUSTAINABLE

of people experiencing fuel poverty.

**ENERGY FOR ALL** 



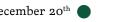
### **POWEO FOUNDATION PRIZE**

The Kpondeou group of 124 producers assisted by GERES and PlaNet Finance is rewarded for its efforts to process agricultural raw materials into food products.











2012 INTERNATIONAL YEAR OF SUSTAINABLE ENERGY

FOR ALL



### **Operational Themes**

Five operational themes underpin GERES work. These core themes ensure consistency between its intentions, skills and activities. They are transverse to the projects run by GERES and its areas of operation. GERES is striving to meet complex development challenges in the field, meaning that a comprehensive approach is essential.

### **CLEAN ENERGY PRODUCTION**

**INTENTION** In both North and South, access to energy is heavily dependent on fossil or fissile resources. Their use has a huge environmental impact (climate, waste, etc.). In addition, the increasing scarcity of these resources and concomitant price rises cause growing fuel vulnerability. GERES is supporting energy production that relies on local renewable resources and supports socio-economic development involving all stakeholders.

**ACTIVITIES** GERES is developing clean energy production solutions appropriate to each area of intervention. They take account of energy demand, environmental vulnerability and available resources: natural assets, skills, and equipment and support services. GERES supports the preparation of in-depth assessments, lifts technical and methodological constraints and helps local stakeholders to ensure territorial consistency.



### **ENERGY SAVING AND EFFICIENCY**

**INTENTION** In a global context of ever-increasing pressure on natural resources, GERES advocates a realistic, achievable approach, which preserves the environment and promotes human-centred development. It involves adopting and encouraging practices and activities that are not only low-energy but also energy-efficient. As a result, fuel vulnerability and poverty can be reduced whilst meeting a whole series of needs experienced by people in both North and South.

**ACTIVITIES** GERES raises the awareness of public authorities, companies and communities and helps them to improve their knowledge, methods and processes to reduce their energy consumption while maintaining the same level of service or comfort. It establishes strong partnerships with institutions and local stakeholders to ensure the sustainability of projects to reduce energy consumption and roll them out on a large scale.



### **LOCAL POLICY AND LAND USE**

**INTENTION** Faced with energy, climate and environmental issues, many different solutions can be developed in accordance with the specific features of each territory. Rolling them out means making trade-offs as close as possible to local communities. The long-term viability of these solutions depends on them being taken up by both communities and their elected representatives. GERES raises communities' awareness and empowers them to manage their environmental assets, as well as building local governance capacity around the chosen solutions.

**ACTIVITIES** GERES supports the emergence and builds the capacity of social structures capable of managing, sustaining and governing the chosen solutions. It promotes the transfer of know-how and skills, consolidates its partners' capabilities and avoids replacing local stakeholders with external resources. To do this, GERES works for, or with, the local public authorities and government agencies in fulfilling their remit.



### **ECONOMIC DEVELOPMENT**

**INTENTION** Developing productive activities is a key issue for vulnerable communities. The GERES approach focuses on local entrepreneurs with a view to sharing and redistributing benefits throughout the territory. It is designed to boost the competitiveness and development of local production, by disseminating good economic practice in the energy and environment fields. Private sector involvement helps to achieve more widespread impact and enhance the sustainability of the supported initiatives.

**ACTIVITIES** GERES works to support local initiatives and improve production factors, while promoting and assisting the sectors concerned and strengthening their institutional grounding. It ensures viability and redistribution by bringing together stakeholders promoting sustainable governance models. The proposed activities involve building entrepreneurs' capacity via training, support in strategy development and quality control, financial and technical support with market dynamics and the establishment of partnerships around technological innovation.



### **CLIMATE CHANGE**

**INTENTION** While the North now acknowledges its historic responsibility for climate change, people in the South are the first to suffer from the impact of change that increase their vulnerability. As a result, rethinking development models is now essential and societies need to change their ways. In the field, GERES strives to combat both poverty and climate change by promoting resilient low-carbon development of the territories where it works.

ACTIVITIES In the South, GERES helps communities to cope with climate changes through awareness-raising and information and enhancing local skills and technologies (artificial glaciers, agroforestry, etc.). It also supports the development of local strategies for the territories concerned (e.g. vulnerability analysis, energy assessment and geomatic analysis). Finally, it supports project developers in mobilizing funding to disseminate low-carbon technologies. In the North, GERES raises individual and corporate awareness of the need to reduce emissions. It also engages in advocacy at international level in favour of the inclusion of solidarity in climate policies and the associated funding mechanisms.



### The Board and Committee

GERES Board of Directors is made up of voluntary members, elected at the Annual General Meeting.

# Composition of the Board of Directors as at 31 December 2011:

#### **COMMITTEE**

Président : Thierry CABIROL Vice-président : Frédéric BOEUF Treasurer : Jean-Paul PRUVOST Assistant secretary : Sophie IBOS

Secretary: Éric BUCHET

### **OTHER MEMBERS ELECTED IN 2011**

Jacques AUTHIER
Kader BEKKAR
Robert CELAIRE
Dominique FICHBEN
René MASSE
Vincent PRIORI
Jean-Louis RUSSAC
Régine TEULADE-NESS
Bernadette VERRON
Noémie ZAMBEAUX

#### STAFF REPRESENTATIVES

Cyril JARNY Anne-Charlotte NIVOLLET

(deputies Marie-Maud GERARD and Owen BREUIL)

### **GERES** staffing

As at 31 December 2011, GERES has 204 direct employees

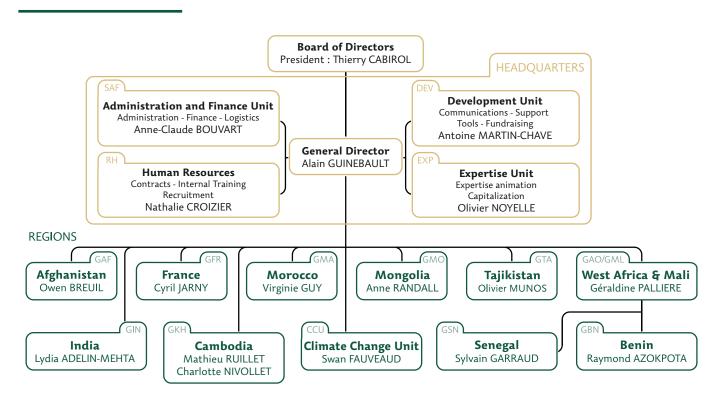
### 33 working in France, including

- 13 under head office contracts
- 14 under contract to GERES France
- 6 under contract to Climate Change Unit

### 171 working abroad, including

- 26 under expatriate contracts
- 127 under local contracts
- 10 under voluntary international solidarity contracts (VSI)
- 6 under internship agreements
- 3 permanent international consultants

### **Organization chart**





# Central Asia

### **Tajikistan**

Tajikistan, a country in the former Soviet bloc, is known to be one of the poorest in Central Asia. Its territory, 93% of which consists of mountain ranges, has very limited resources. There are few income-generating opportunities, with livelihoods essentially reliant on farming and migrants' remittances (50% of Tajik GDP in 2011). Having started work there in 2008, GERES is now introducing energy-efficient methods and technologies suited to the local context. Implementation draws on 10 years' experience in similar climatic conditions in India and Afghanistan. As the initiative in Tajikistan is relatively recent, GERES is working in a limited area while considering the possibility of later countrywide rollout.

TAJIKISTAN

**AFGHANISTAN** 

### **Afghanistan**

Despite years of social and political instability, Afghanistan is rebuilding. However, rural communities remain highly vulnerable, their poverty exacerbated by environmental degradation which affects both farming and the climate. GERES has been working in Afghanistan since 2002 to implement projects in the field of energy efficiency and rural development. In 2011, the team had 42 members, working with rural communities to improve storage of farm produce and energy efficiency in homes.

# MONGOLIA

### Mongolia

Mongolia faces substantial challenges in terms of food security and vegetable production, due to a very short growing season (100-120 days), long, cold winters (an average of below -20°C in December and January), poor soils and limited water resources. In addition, investment capacity is weak and knowledge of farming is limited due to the traditional semi-nomadic herding lifestyle. GERES started its activities in the country in August 2010, with a project concerning agriculture and food security.

entral Asia is a sub-region of Asia covering a vast area, encompassing more than 10 countries from Azerbaijan in the West to Mongolia in the East. Its climate is continental, very hot in the summer (>40°C) and very cold in the winter (<-20°C), whether on the desert or semi-desert steppes or in the high and medium-sized mountain ranges (with many summits over 7000 metres high). Living conditions are very difficult due to the rigours of the climate and all human activities, based essentially on exploitation of natural resources, have had to adapt to the local context. Increasing scarcity of resources, exacerbated by the effects of climate changes, is a common denominator for Central Asian countries, reflected in extensive deforestation, loss of farmland and growing exposure to natural disasters, leading to ever greater vulnerability for both rural and urban communities.

Present in Central Asia since the 2000s, GERES is working to organize supply chains and strengthen the private sector with a view to reducing consumption of biomass for heating and cooking and promoting efficient use of natural resources for agricultural production.

Owen Breuil, Director, GERES Afghanistan Anne Randall, contact person, GERES Mongolia Olivier Munos, Director, GER<mark>ES Ta</mark>jikistan

### **Dissemination of energy** efficiency techniques in private housing 🔎



In Central Afghanistan, fuel supply for heating is a major concern for rural households: remoteness of markets and the high costs of fuel are pushing families to gather bushes and dung from the pastures, with a significant impact on the environment. The Energy Efficiency in Private Housing Project has been implemented by GERES since 2009 in six districts of Bamyan Province, working with development organizations involved in sustainable natural resource management. Training of carpenters in passive solar energy techniques (attached greenhouse, improved insulation) resulted in significantly reduced fuel consumption for hundreds of families. Successful completion of the project is expected in June 2012.

subsidized passive solar houses **built by GERES carpenters** in Bamyan Province since the beginning of the project.

### **ACTIVITIES IN 2011**

In 2011, dissemination of passive solar houses (PSHs) has been consolidated in Bamyan Province, with 28 newly trained carpenters starting their activity under the supervision of GERES trainers. 264 additional subsidized PSHs were built and their beneficiaries received training in good usage and maintenance practices. The promotion of the tool was reinforced by the construction of 34 additional demonstration PSHs, while an awareness-raising campaign around the concept and techniques of energy efficiency targeted more than 2,500 people in rural communities and the network of partners. Research and development activities for the validation of a prototype improved stove went on, as a series of tests was conducted in Kabul.

### **PROSPECTS**

As the project is coming to its end, a capitalization process has been launched in order to assess the results, highlight lessons learned and prepare future activities. The team will focus on this for the first six months of 2012. Several proposals have been submitted to extend the area of PSH dissemination to other districts and to strengthen the professional organization of trained carpenters. Moreover, in order to assess the possibilities of further collaboration in the region, discussions are ongoing with partner organizations involved in sustainable natural resource management. An extension of the range of energy efficiency tools used is also being considered.



### FINANCIAL PARTNERS

- ► AFD (French Development Agency)
- Aga Khan Foundation

### **TECHNICAL PARTNERS**

- ▶ Solidarité Afghanistan Belgique
- ▶ Solidarités international
- ▶ Aga Khan Foundation



I have worked as a communications officer for GERES since 2009. My job is to create bridges between GERES and people. I have learnt a lot about communications and the proposed technologies. In my view, this project is very efficient in terms of household economy and environmental preservation. I hope it will be extended because I receive a lot of requests for PSH from the communities.

Masoma ATAEE, 25 years old, Communications Officer

### **Development of small-scale** storage facilities for Agricultural Produce 🤒



Although Kapisa Province is renowned in Afghanistan for its pomegranate production, fruit and vegetable producers in the region suffer from serious problems in selling their crops. If they sell early after the harvest, they have to accept very low prices, but they may experience 30-70% losses if they wait to sell at a higher price. In order to support agricultural production, GERES started implementation in 2009 of improved storage facilities. The initial project in 2009-2010 resulted in construction of 75 post-harvest cellars (PHC) and training for 31 local masons. GERES implemented a second phase of PHC development in 3 districts of Kapisa Province as of August 2010.



post-harvest cellars **built in Kapisa Province** by local masons trained by GERES

### **ACTIVITIES IN 2011**

In 2011, the second phase of PHC development was successfully implemented in Kapisa Province. While 31 formerly trained masons built the first cellars, 39 additional masons were trained. These 70 local craftsmen built 125 new cellars under the supervision of the GERES team. The owners were trained in the use of cellars and organization of storage in order to minimize losses. The proposed tool's adaptability to the local environment and its ease of construction met with beneficiaries' satisfaction. As a consequence, losses decreased from 50 to 2% of the harvest, whereas income from sales increased by 60% for potatoes and by 100% for pomegranates after three months' storage in PHCs. The project ended in September 2011.

### **PROSPECTS**

Good acceptance among the communities and characteristics adapted to the local context could allow for the development of further PHCs in the region. Cellars appear to be a sustainable solution for local business development and a counterweight to Pakistani competition in fresh produce. They are also suited to local co-operatives of pomegranate producers and allow them better control of prices. Nevertheless, no further projects have been planned to date, as uncertain security conditions pose substantial difficulties in the implementation of development projects in the area.

### **FINANCIAL PARTNER**

AFD (French Development Agency)

### TECHNICAL PARTNERS

Ministry of Agriculture, Irrigation and Livestock (GOA)

### **GERES**, a favoured reference point for the authorities

Following a substantial programme on the theme of energy efficiency in public buildings, which concluded with the construction of a school in December 2010, GERES remains a favoured reference point in Afghanistan. Despite the lack of opportunities, advocacy work is continuing with institutions (GERES is a member of the inter-ministerial sub-committee on renewable energies). We continue to run awareness-raising and training activities for NGOs and international organizations (conferences and training courses), as our aim is to provide high-quality support in the implementation of energyefficient techniques.



### Dissemination of passive solar greenhouses



In a country with extreme climatic conditions where local vegetable production meets only 50% of needs, GERES is providing technical support to a three-year project focusing on food security and sustainable farming practices. This project is implemented in partnership with Secours Catholique and Caritas Mongolia on the outskirts of the capital Ulan Bator and in the rural areas of Gobi-Altai province. It aims to develop, implement and integrate three farming approaches: passive solar greenhouses, post-harvest storage cellars and improved water and soil management techniques. In addition to looking after research and technical advice, GERES is helping to build its local partner's technical capabilities.



built their own passive solar greenhouses in 2011

### **ACTIVITIES IN 2011**

Two research and demonstration centres and nine experimental greenhouses have been built in Ulan Bator. Thermal and agronomic trials have been conducted and analysed.

In 2011, 72 vulnerable families were able, after receiving training in construction, to build their own greenhouses under the supervision of a local mason trained by GERES. The beneficiaries began production and improved their skills with training in vegetable growing, greenhouse management, dietetics and cooking. Nine family cellars were renovated, thereby improving storage conditions through better control of temperature and hygiene.

A pilot project has also been launched in Arkhangai province in partnership with a local NGO and the French NGO Agronomes et Vétérinaires Sans Frontières. Its aim is to introduce solar greenhouses to two groups of herders in order to diversify their income sources.

### **PROSPECTS FOR 2012**

2012 will see the end of GERES direct involvement in the "food security" project. The aim will be to consolidate and build on the expertise developed by GERES Mongolia through capitalization and the development of new projects. GERES will explore opportunities to disseminate solar greenhouses with NGOs or government agencies.

#### FINANCIAL PARTNERS

- ► European Union
- ▶ Secours Catholique Caritas France
- Principality of Monaco

### **TECHNICAL PARTNERS**

- ▶ Secours Catholique Caritas France
- Caritas Mongolia
- Ministry of Agriculture, Food and Light Industry
- ▶ Government of Gobi-Altai province
- ► Arkhangai Herders' Federation
- ▶ Agronomes et Vétérinaires Sans Frontières

Before this project, I had no experience of growing vegetables. This year, we built a greenhouse and our family began to harvest and eats fresh vegetables. We can cultivate until November, which really makes a difference in

comparison with the traditional greenhouses we used to have. In addition, I go out more often to meet the group we set up with the other beneficiaries. We share our experiences and this helps me to improve my gardening skills.

Tserenkhuu PALAM (Ulan-Bator region). A widow aged 63, with one daughter and two grandchildren, owner of a solar greenhouse



# Sustainable rural development Philippe



In Tajikistan, up to 74% of the population lives below the poverty line. The rural province of Sughd in the northern mountains (Pamir range) is one of the poorest regions of the country. Living conditions are extreme, with long, cold winters in which temperatures can go down to -15°C. It rains rarely with very low total rainfall (90 mm per year). Families spend between 20 and 40% of their budgets on fuel. This level of expenditure keeps them in a vulnerable position and restricts investment during the farming season. The areas where GERES works also experience substantial male migration towards Russia, resulting in a growing number of exclusively female-headed households.



savings in annual family expenditure on fuel, enhancing the budget by 30%

### **ACTIVITIES IN 2011**

Focusing on bioclimatic housing and agriculture, the project aims to provide concrete solutions to improve the living conditions of the 120,000 inhabitants of Ayni and Asht districts, in line with national poverty reduction targets. By promoting entrepreneurship, the project helps to improve conditions for 1000 vulnerable rural families. In 2011, six energy-saving technologies were adapted to the local context through production of more than 50 tools. In addition, a series of good sustainable land-use management practices has been identified and tests will be conducted in 2012. A study has also been conducted to assess rural families' position in social and energy terms. This has painted a complex, heterogeneous picture, with a wide range of fuels used (wood, charcoal, dung, etc.). The results in respect of the suggested low-energy solutions are encouraging, with a substantial response from women who account for 40% of requests for support.

### **PROSPECTS**

In 2012, the project will focus on disseminating the selected technologies. To ensure continuity, it will work to strengthen the private sector by training local entrepreneurs in the fields of agriculture and housing. In addition, local institutional stakeholders will be helped to determine policies on energy, agriculture and the environment. Finally, local communities will receive information and advice on managing natural resources and environmental assets. In the long term, the project will concentrate on supporting the entrepreneurs and putting them in touch with potential customers.

### FINANCIAL PARTNER

► European Union

### TECHNICAL PARTNERS

- ASDP Nau Agency for the Support of Development Processes
- Camp kuhiston

I decided to work with foreigners to improve my language skills and learn from other countries. GERES is the first NGO I've seen that really stays in my village, so everyone knows one another and that's really good. As regards field work, we like the way the developer was chosen because it was transparent. However, the requested contribution to the investment [Editor's note: 70% comes from the community] is too high and the poorest people can't have greenhouses, for example. Perhaps we should do fewer greenhouses with a greater share of the investment covered by the project.

> Zarina ABDUBANNOBOEVA, Field facilitator and beneficiary (Oshab village), Seamstress, two children, husband working abroad for 10 months per year



# Indian Himalayas

INDIA

### India

With its pioneering work in passive solar architecture and greenhouses, GERES has achieved a number of technical successes with considerable social and environmental impacts in Ladakh. The various local partners and families benefiting from the projects have, for example, understood how the exceptional levels of sunshine in the region can be harnessed for simple, affordable solutions that can considerably improve their living conditions (passive solar houses, solar greenhouses and henhouses, small-scale agricultural processing, developing craft production, etc.).

Institutional development is a vital need in the region and the local government has shown increasing interest in these techniques that it would like to disseminate on a wide scale. In this regard, GERES is now seeking to reinforce the network of local partner NGOs in liaison with local authorities to ensure post-project continuity.

overing around 600,000 km², the vast mountainous territory of the Himalayas separates the Indian subcontinent from the Tibetan plateau. At altitudes of between 900 and 8000 metres, vegetation is scarce and biomass resources very limited. In many areas, the few remaining shrubs are cut to meet heating and cooking needs, causing appalling erosion and desertification.

The landscape reveals cold, dry, high-altitude deserts, where temperatures can go down to -30°C in winter. From October to March, these areas are very isolated because they are so inaccessible, making living conditions even more difficult for local communities. To keep warm through these harsh winters, families spend a large part of their time collecting animal dung and local biomass during the summer months. In 1980, GERES began working in the states of Jammu and Kashmir to develop solar energy heating solutions.

Lydia Adelin Metha, Director, GERES India

# Scaling up Low Energy Consumption Buildings



The thematic programme on passive solar energy in the Western Indian Himalayas (WIH) currently focuses on scaling up LEC buildings in the cold regions.

The promotion of LEC technologies in WIH has so far made it possible to reach 782 households and 16 community centres in 126 villages in the Ladakh and Lahaul-Spiti regions. The three-and-ahalf-year experience of the current implementation phase has led to positive conclusions. Feedback from stakeholders and conclusions from impact studies performed by external consultants have confirmed the benefits of the integration of LEC techniques in housing (improved living conditions and health, fuel, biomass and time savings, gender considerations, education...). After capacitybuilding for the private sector (masons and carpenters), GERES launched the certification process in 2011. The final objective is to ensure availability of a good-quality supply chain for LEC housing. The building to house the Resource Centre in Leh has been fully completed and verified (winter  $\Theta$ summer thermal monitoring). It has already hosted several external visits and a few workshops as well. It acts as an effective marketing window for LEC technologies in Ladakh. Moreover, significant work is being done at policy level so as to mainstream energy efficiency in public buildings.

1307 tonnes of biomass saved each year



### **ACTIVITIES IN 2011**

Passive solar housing and energy-efficient techniques were integrated in 228 homes and seven community buildings. Activities focused on the training and certification of artisans in the private building sector. 456 families were involved in income-generating activities, following organization of 44 new training courses on handicrafts, contributing to an increase of more than 100% in their winter income. As regards monitoring and evaluation, the health impact study was completed and the environmental impact assessment was launched. Awareness of PS and EE techniques was raised in more than 130 villages, through the creation and display of several sets of 3D-models of LEC technologies and the production of eight technical films and a booklet of beneficiaries' testimonials. LEC building techniques have enabled each household to save an average of €50 per year and children's study time has doubled.

### **PROSPECTS**

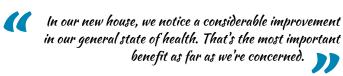
2012 is a key year for most of these activities: it will mark their final achievement. There will be a special focus on impact assessment and final evaluation of the project that will have lasted four years and ten months. However, endeavours to scale up LEC buildings will not stop next year. Development of the Resource Centre concept (goal, services, targets, resources, etc.) will be among the topmost topics on the 2012 agenda. At cluster level, information centres will also be established.

### FINANCIAL PARTNERS

- Furonean Union
- Environment and Energy Management Agency (ADEME)
- Ensemble Foundation
- Abbé Pierre Foundation
- Lord Michelham of Hellingly Foundation
- Macif Foundation
- ▶ Gaz et Electricité de Grenoble
- ▶ Legallais Foundation
- Indian Government (MNRE -Ministry of New & Renewable
- Synergie Solaire
- Crédit Coopératif

### TECHNICAL PARTNERS

- LEDEG Ladakh Ecological **Development Group**
- LEHO Ladakh and Health Organization
- ► LNP Leh Nutrition Project
- SECMOL Student Educational and Cultural Movement of Ladakh
- Ecosphere
- ▶ ENEA Consulting



Mohammad HASSAN, aged 65, father of three children (Barchey village)



# Building on Local Governance 💆



Institutional development has been an important issue for the programme. The current project, PSH (passive Solar House), is in its last year. With this perspective in mind, special attention is being given to strengthening the network of local NGO partners to ensure long-term post-project viability. The aim of institutionalizing the Ladakh NGO network has been confirmed. The local government has shown a growing interest in the LEC technologies and their integration into both domestic and public buildings; its collaboration with the NGO network has been significantly developed through workshops and technical advice on LEC designs for public buildings.



### **ACTIVITIES IN 2011**

The capacities of the five partner organizations have been reinforced. Grassroots-level networks representing one or several villages have been established and developed. Mostly comprising village heads, councillors, representatives of women's associations and masons, these networks' role consists of promoting and supporting initiatives on LEC housing and acting as a pressure group to advocate policy with the District authorities.

Eight additional training sessions were conducted to develop and enhance the skills of the local staff. Two new grassroots-level networks were set up (bringing the total to 16) to develop advocacy work and speed up legislation in this field. At policy level, steering committees, some of which are led by local authorities, have been set up and suggestions have been made for guidelines on LEC public buildings in Ladakh.

### **PROSPECTS**

Local governance is an increasingly important and ambitious theme among development programmes. The good rapport established between GERES India and key stakeholders in Ladakh will be an asset in further work on this issue. 2012 should see concrete progress with the proposed guidelines for LEC public buildings and on the institutionalization of the NGO network.

### FINANCIAL PARTNERS

- ▶ European Union
- ► Environment and Energy Management Agency (ADEME)
- ▶ Ensemble Foundation
- ▶ Abbé Pierre Foundation
- Lord Michelham of Hellingly Foundation
- ▶ Macif Foundation
- ▶ GEG Gaz et Electricité de Grenoble
- Legallais Foundation
- MNRE Ministry of New & Renewable Energy
- ▶ Synergie Solaire
- ▶ Crédit Coopératif
- 1+1=3

### TECHNICAL PARTNERS

- ▶ LEDEG Ladakh Ecological **Development Group**
- LEHO Ladakh and Health Organization
- ▶ LNP Leh Nutrition Project
- ▶ SECMOL Student Educational and Cultural Movement of Ladakh
- **Ecosphere**
- ▶ ENEA Consulting

## Adapting to Climate Changes 🙆

performed important work in documenting the project.

Awareness-raising on environment issues and climate changes has been an important activity in 2011, reaching out to a large audience in the WIH. In parallel, R&D on solutions for climate changes adaptation in Ladakh has been carried out in collaboration with GERES Climate Change Unit. Artificial glaciers had been identified in past years as a water management and conservation technique for high-altitude regions. In co-operation with the Leh Nutrition Project, the local partner organization, GERES has monitored the artificial glacier at Nang village to assess the efficiency of this technology. In 2011, an intern from the Polytech' Engineering School in Montpellier, France, helped the team to improve monitoring and to understand artificial glacier technology. He



800
film screenings,
in four different
dialects
in 17 schools
and 23 villages

### **ACTIVITIES IN 2011**

Awareness of the impact of climate changes was raised through media campaigns in 17 schools & 23 villages, reaching 4160 students and 3485 villagers. The Nang artificial glacier was monitored with a view to an artificial glacier project. Preliminary research is planned on potential adaptation solutions (better water management and farming practices) in Ladakh.

### **PROSPECTS**

Climate changes adaptation is one of the key issues in Ladakh. More specific progress will be made in identifying potential solutions for the region. A socio-economic perspective will be brought to bear on assessment of the artificial glacier solution (particularly in terms of cost-benefit analysis). A community-based assessment of climate changes vulnerability and resilience will be performed for the first time in Ladakh.

### **FINANCIAL PARTNERS**

- ► European Union
- ADEME Environment and Energy Management Agency
- Ensemble Foundation
- ▶ Abbé Pierre Foundation
- Lord Michelham of Hellingly Foundation
- ▶ Macif Foundation
- ▶ GEG Gaz et Electricité de Grenoble
- ▶ Legallais Foundation
- MNRE Ministry of New & Renewable Energy
- Synergie Solaire
- ▶ Crédit Coopératif
- ▶ 1+1=3

### **TECHNICAL PARTNERS**

- ► LEDEG Ladakh Ecological Development Group
- LEHO Ladakh and Health Organization
- ▶ LNP Leh Nutrition Project
- SECMOL Student Educational and Cultural Movement of Ladakh
- ▶ Ecosphere
- ► ENEA Consulting

# South-East Asia



### **Cambodia**

Since GERES Cambodia was established in 1994, its strategic objectives have been to enhance natural resource management and introduce good practice on a large scale with a view to the sustainable supply of biomass, particularly through the use of energy-efficient appliances. The 80 experienced specialists in the GERES Cambodia team help people to take informed decisions leading to better access to renewable energy, climate changes adaptation and improved livelihoods.

outh-East Asia covers an area of 4,000,000 km2. More than 600 million people live there, one-sixth of them on the Indonesian island of Java, the most densely populated island in the world. All countries in South-East Asia are affected by deforestation on a dramatic scale. However, each of these countries experiences the problem in a different way. Cambodia is one of the worst hit, given that 80% of domestic energy needs are covered by wood. In 1960, 73% of Cambodia was forested, but now forests cover no more than half the country. This is mainly due to illegal logging and the conversion of forest land for agriculture. Wood is the primary source of energy for cooking and heating for 80% of Cambodians. Annual charcoal production is estimated at 6 million m3, 50% of which comes from natural forests. Given its level of poverty and weak infrastructure, Cambodia is among the countries in the region that are most vulnerable to climate changes. The devastating flooding and periods of drought it experiences every year cause serious damage to farming, which still suffers from a lack of diversification.

> Mathieu Ruillet, Director, GERES Cambodia Anne-Charlotte Nivollet, Deputy Director

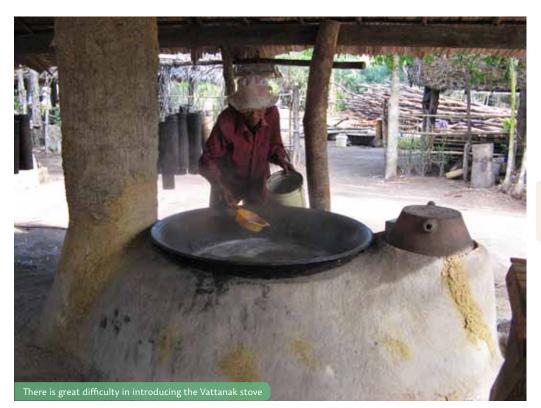
# Improving small-scale palm sugar production



Palm sugar production in Cambodia is heavily influenced by fuelwood supply and local market pricing. Rapid deforestation upstream has prevented palm sugar producers from accessing free fuelwood, while the palm sugar price is controlled downstream by a few traders in Phnom Penh.

Although the Vattanak stove developed by GERES reduces fuelwood consumption and is easy to use, supply chain constraints make producers quite reluctant to produce when the "floor" price for palm sugar is reached.

Recently, a number of industries have emerged in Kampong Chhnang (shoe and garment factories, brewery, etc.) and have drawn a large proportion of the labour force, particularly palm sugar producers, away from nearby villages in search of better paid work.



### FINANCIAL PARTNER

Activities in 2011 have been entirely self-financed by GERES

### **ACTIVITIES IN 2011**

Due to the uncertainties of the palm sugar market, introducing the Vattanak stove (costing USD 80 per unit) is difficult unless producers are offered financial support (credit facility). As a result, GERES Cambodia decided to restrict dissemination whilst keeping tabs on stoves already installed in the field to gather technical information and data on performance, durability and the need for a sustainable wood supply, as well as to obtain feedback from users.

### **PROSPECTS**

No special activities will be conducted in respect of the Vattanak stove, but a small team will gather and analyse information on the project's experiences - best practice, failures, lessons learned, innovative solutions, challenges and outstanding problems - so that it can then look into the possibility of obtaining financial facilities.

# Dissemination of efficient domestic cooking stoves lacktreent





Demand for the improved cooking stove developed by GERES, the New Lao Stove (NLS), remains high in urban areas and its average sales exceeded 30,000 units per month in 2011. To cope with this rapidly growing market, 35 production units, both large and small, are scaling up their activity in order to supply more than 200 private distributors throughout the country.

The Neang Kongrey Stove (NKS), a model developed by GERES and distributed at low cost in rural areas, has undergone various field trials, along with a pilot marketing stage involving

producers, distributors and users. A series of studies has also been commissioned in order to obtain their opinions. The information obtained during the pilot marketing stage and through the studies is encouraging producers and distributors, the Cambodian government (MIME, FA) and donors such as AUSAID, GEF, UNEP, the World Bank, etc. to pursue national-scale marketing.

357,080 **NLS** stoves sold and

117,016 **NKS** stoves produced in 2011

### **ACTIVITIES IN 2011**

The NLS distribution project's main activities in 2011 focused on providing technical support along the length of the production chain. A study on the micro-economic and financial sizing of NLS production was aimed at developing a simple and practical decision-making tool that producers could use to establish their monthly production plan and necessary support. Bearing in mind the trend in demand, this activity is in keeping with GERES' exit strategy from the NLS project. The project team has, in this regard, co-operated with its partner ICOPRODAC (Improved Cookstove Producers and Distributors Association of Cambodia) to build capacity with a view to enabling nationwide management of the project and guaranteeing uniform, standard, improved stove quality.

In terms of NKS stove distribution, an analysis and in-depth mapping of the market was a priority in order to validate the production decentralization plan. This will prioritize nine provinces, involving 42 production centres. Laboratory studies and tests on raw materials, primarily clay, were conducted in the established priority areas with the aim of defining technical benchmarks and determining the technical and economic viability of producing NKSs in some areas.

#### FINANCIAL PARTNER

blue moon fund

### **PROSPECTS**

The main activities of the NLS project in 2012 will be similar to those of 2011 but will give priority to transferring skills and knowledge to the members of ICOPRODAC's executive committee, who will take over GERES' role in the quality control of improved stoves. A set of quality control points is currently being developed and tested in the field. These points will need to be included in the "quality guidelines" for NLS production.

For the NKS, 2012 plans are focused on preparing to decentralize production (which currently only takes place in Kampong Chhnang Province) to four additional provinces: Kampong Cham, Kampong Speu, Pursat and Battambang. Finally, documenting the project's knowledge and experiences, best practice, failures, lessons learned, innovative solutions, challenges and outstanding problems is already under way.

> My family was quite poor but, since 2004, life has changed. The financial support and training from GERES has enabled me to become a producer. My centre functions well and I can now send my brothers and sisters to school. I am also helping my village by creating jobs

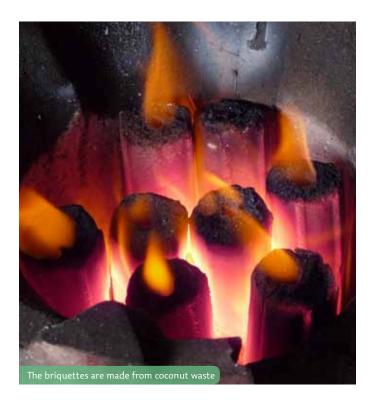
> > Tola VANN, aged 24, producer of improved stoves



# Recycling combustible waste to make charcoal briquettes



Charcoal production is a traditional activity in Cambodia which, unfortunately, contributes to the country's deforestation (illegal logging, inefficient charcoal stoves). The demand for charcoal in Phnom Penh is estimated at more than 100,000 tonnes per year. Moreover, many tonnes of waste are burnt, emitting harmful and polluting fumes. The natural decomposition of unburnt landfill waste produces methane, a highly significant greenhouse gas. Since 2004, Cambodia has been developing briquette production techniques using carbonized organic waste and carbonaceous residue from gasifiers. This project thus offers a sustainable alternative to traditional charcoal.



tonnes of briquettes produced by the SGFE factory every month

### FINANCIAL PARTNER

▶ The activities in 2011 have been entirely self-financed by GERES

### TECHNICAL PARTNERS

- MIME Cambodian Ministry for Industry, Mines and Energy
- ISC Institute of Standards of Cambodia

### **ACTIVITIES IN 2011**

The SGFE (Sustainable Green Fuel Enterprise) began producing sustainable charcoal briquettes in December 2009. Since then, GERES Cambodia has invested considerable time and resources in ensuring the profitability and independence of the young company. The recruitment in 2011 of a project leader from the private sector has led to improvements in SGFE's financial health: reduced production costs, increased productivity, enhanced quality of the finished product and increased sales. These measures were giving encouraging results by the end of 2011, with a significant decline in losses and interesting development prospects for the future.

### **PROSPECTS**

At the end of 2011, a businessman showed an interest in picking up the reins of SGFE, thereby offering GERES the golden opportunity of gaining the private partner it knows will be essential to the success of this project. In 2012, GERES will therefore hand over to Carlo Figá Talamanca, who is contributing numerous ideas with a view to ensuring the company's long-term viability: boosting sales by using existing charcoal distribution channels, reducing electricity costs by investing in a photovoltaic plant and exploring carbon finance opportunities in order to increase production capacity and diversify activities. GERES will continue to provide ad hoc support, and will monitor the company's development closely. In the long run, it hopes to be able to reposition itself as a provider of technical support to SGFE.

> Since I have been working for SGFE, I have been able to send my three children to school and I don't have to collect rubbish at the Phnom Penh landfill any more

> > Sreymao OUY, former rag dealer supported by PSE, employed at SGFE since the start of 2010



# Social forestry and manufacturing "green" charcoal



Wood fuels, including firewood and charcoal, constitute the main source of energy in Cambodia. As the cheapest energy sources, they represent a livelihood for thousands of families and a source of employment, particularly in rural areas. In spite of this indubitable role, wood energy suffers from a widespread lack of recognition in the context of national planning. As a result of past inaction, wood collection exceeds the regeneration capacity of the forests surrounding cities. Deforested land is irreversibly converted to agricultural use and wood is gathered from further and further afield.

The project is working with communities to guide and optimize biomass extraction in community forests (CF) with a view to sustainable production of wood fuels. An efficient kiln is used to produce



700 direct beneficiaries (4 communities) involved in the project

### **ACTIVITIES IN 2011**

Particular emphasis was placed on dialogue with community members and the provincial government. Special permits are legally required for the establishment of wood fuel production systems, which entails proper understanding amongst stakeholders upstream. We therefore focused on co-ordinating efforts to increase awareness of the project objectives and the proposed improved technology. On the ground, several preparatory activities were implemented to demonstrate and work towards biomass preservation: participatory community forest mapping, thinning trials and rehabilitation by means of planting seedlings at severely degraded forest sites.

### **PROSPECTS FOR 2012**

From 2012 to 2014, the Charcoal project will focus on wood fuel supply and the establishment of improved charcoal production centres. Eight efficient charcoal kilns are to be built in 2012. In supporting the local partner, GERES will develop a system of monitoring biomass supply and the sustainable rate of extraction, in order to strike the right balance between natural regeneration, harvest and use.

### **FINANCIAL PARTNERS**

- Ministry of Industry, Mines and Energy (World Bank funding)
- ▶ EEP Energy and Environment Partnership - Mekong

### TECHNICAL PARTNERS

- Forestry Administration, Cambodia
- MIME Ministry of Industry, Mines and Energy
- Local authorities, including the village and municipal development councils

I've understood the importance of safeguarding the forest. Planting techniques give us ways to exploit the forest without damaging it. Our community forest helps us a lot because it provides wood for our day-to-day needs, i.e. cooking, building and charcoal production, which improves our lives greatly.

> Seun MEN, aged 64, farmer, father of three children Toul Somrong village, Kampong Chhnang province



### Agroforestry and sustainable management of local biomass energy 🔯



The agroforestry project is centred on Samakki Meanchey district, Kampong Chhnang province, about 60 km northwest of Phnom Penh. As the area constitutes one of the biggest suppliers of fuelwood for Phnom Penh and the demand is continuously growing, local forests have been cleared and land degraded. The project's main objective is to improve villagers' capacity to adapt to climate changes in areas where deforestation is increasing their vulnerability, as well as impoverishing the soil and causing loss of biodiversity and lack of fuelwood. The project aims at achieving a sustainable balance between renewable fuelwood supply and demand through the adoption of agroforestry practices.



76,300 trees of 22 different species have been incubated and planted between 2008 and 2011

### **ACTIVITIES IN 2011**

Particular emphasis was placed on demonstrating and proving the technical feasibility and economic viability of each of the systems developed through applied research, which is still ongoing. An integrative approach takes account of the local context and dynamics at regional and household level, as well as the risks run by families. The validated models were disseminated through capacity-building and full implementation by farmers. Short practical training courses, an awareness-raising programme and field visits were organized to achieve this objective. In addition and with a view to enhancing the local economy, business incubators were set up in the region with a loan scheme to support enterprise creation.

### **PROSPECTS**

Based on stakeholders' field experiences, the project will focus on three key themes for the period 2012-2014: agroforestry, renewable energy and adaptation.

The project will contribute to improving food security, the continuous supply of biomass energy for cooking and the capacity of smallholder farmers in rain-fed farming and degraded land areas to adapt to climate changes.

The project is expecting on the one hand to continue its research and training activities on innovative and resilient techniques through the establishment of a showcase resource centre and, on the other, to pioneer a Farmer Field School through the application of a participatory methodology to enable peer learning and group support.

To carry these initiatives through in the long term, the project is endeavouring to facilitate a village-based tree seedling market and promote smallholder farmers' access. Finally, the project will focus on ensuring a continuous supply of renewable fuelwood for villagers as a result of implementing agroforestry systems.

### FINANCIAL PARTNER

CARF - Cambodia Agricultural Research Fund

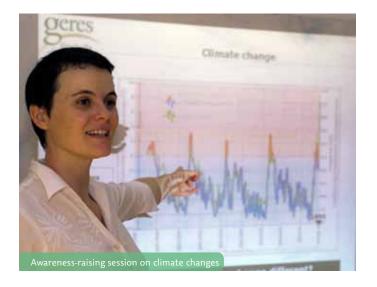
#### TECHNICAL PARTNERS

- Forestry Administration, Cambodia
- Ministry of Industry, Mines and Energy
- Local authorities, including Village and Municipal Development Councils
- RUA Cambodia's Royal University of Agriculture

# Carbon audits 🜀



Climate changes is threatening growth and development, and this has consequences for human life, the environment and the global production of goods and services. All countries, whether rich or poor, are in the firing line. Companies already committed to reducing their emissions and implementing energy-efficient technologies know that such measures will enable them to reduce their costs significantly, gain a competitive advantage and enhance their reputation. Many companies and organizations now want to limit their carbon footprint, even before regulations come into force. In order to respond to this demand, GERES has established a carbon audit service.



**1,200** people informed about climate changes since 2007

### **ACTIVITIES IN 2011**

Carbon audits were conducted in 2011 on behalf of the Siem Reap international airport, the International Finance Corporation in Cambodia and ANZ Royal. These audits include raising staff awareness of climate changes and calculating the carbon footprint according to the Greenhouse Gas Protocol methodology, but also making practical recommendations for reducing CO<sub>2</sub> emissions, saving energy and reducing costs. Finally, advice was provided on offsetting opportunities, focusing on social and environmental impacts. A carbon audit of GERES Cambodia was also conducted in 2011 in order to improve its energy saving and strengthen its CO<sub>2</sub> emission reduction measures.

### **PROSPECTS**

In 2012, carbon audits will be conducted for the French Embassy in Cambodia, the European Union delegation in Cambodia, Nexus-Carbon for Development, GERES Cambodia and major private sector operators. The challenge is, above all, to improve their environmental performance but also to reduce their energy bills. This will, in addition, help to build the capacity of the Carbon Audit team in respect of energy efficiency and cost-benefit analysis. Raising awareness of climate changes in universities and partner organizations may also be resumed in 2012 to ensure wider dissemination of the issue.

### **PARTNERS WITH A COMPLETED CARBON AUDIT**

- ▶ British Embassy in Cambodia
- Danish Embassy in Cambodia
- French Embassy in Cambodia
- ► FABS Group
- ▶ UNDP United Nations **Development Programme**
- ▶ Heinrich Boell Foundation
- ▶ British Embassy in Burma
- ▶ Phnom Penh International Airport ▶ Siem Reap International Airport
- ▶ International Finance Corporation in Cambodia
- ANZ Royal

"ANZ Royal would like to thank GERES for the efficiency with which it has guided us. We now know what our carbon footprint is and how to improve our environmental performance. In the context of our partnership, the Carbon Audit team provided us with highquality reports, including very clear and practical recommendations aimed at reducing our footprint and our overheads."

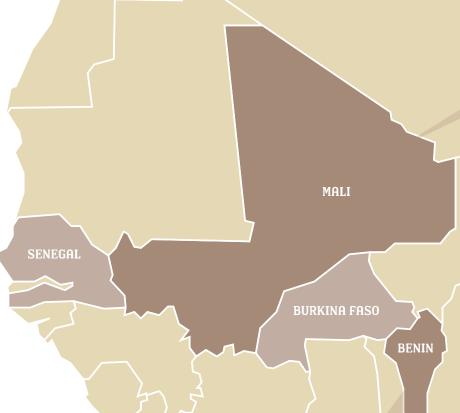
> John MCGINLEY, Head of Strategy and Business Development for ANZ in South-East Asia

# West Africa

f all the challenges facing West Africa, energy is becoming an increasingly dominant one. It affects food and environmental balances, as well as economic development. Fossil fuel dependency is having tragic consequences for economic activity and there is increasingly severe pressure on wood energy.

GERES has been working in West Africa for some ten years now. Initially involved in the field of food processing and preservation, the teams have been working since 2007 to establish alternative energy service and supply schemes in rural areas, applying an entrepreneurial approach. GERES is therefore implementing a sub-regional programme in Benin and Mali focusing on the production and marketing of a jatropha-based biofuel. More recently, in 2011, GERES has also been working with stakeholders in solid biomass energy in the region, adopting a two-pronged technical and financial approach which uses carbon finance as an innovative tool to fund development. A large improved cooking stove project has thus been established, offering financial innovations aimed at stepping up the fight against climate changes.

Géraldine Pallière, Director, GERES West Africa Raymond Azokpota, Director, GERES Benin



### Benin

With an area of 114,789 km<sup>2</sup> and 8.7 million inhabitants, Benin is a small West African country in which agriculture is the main occupation for 60% of the population and accounts for 32.3% of Gross Domestic Product (GDP). The rate of electrification is 51.8% in urban areas and 3% in rural areas. GERES has been working in Zou (an area in central Benin with a poverty rate above the national average) since 2003, in the field of food processing and small-scale industry, developing energy services and renewable energies.

### Mali

Mali is a Sahelian country with more than half its area covered by desert. It is currently facing multiple challenges, including the growing problem of energy access. Although the Sahel region is severely exposed to the impacts of climate changes and the consequences of desertification, wood forms the main source of energy for domestic cooking and small-scale industry. Moreover, the structural increase in the price of oil is becoming a major issue for already highly vulnerable communities.

GERES has been working in Mali since 2007, first in the cotton basin in the south-east of the country on the theme of improved access to energy and, since the end of 2010, in Bamako, focusing on cooking, through an approach aimed at the widespread distribution of clean technologies. Two projects are currently being implemented in Mali, employing a total of 29 people. GERES works out of two local offices, one in Bamako and one in Koutiala

# Small-scale jatropha supply chain and energy access



Based on two pilot experiments conducted in the field by GERES (the ALTERRE Mali and ALTERRE Benin projects) and on a joint skills-building network run by IRAM for stakeholders in this sector, the JatroREF programme - run by the GERES-IRAM consortium - aims to develop benchmarks for energy supply chains based on jatropha seed in West Africa.

In Benin, this programme is being implemented in seven districts in Zou, with 800 farmers directly involved in producing the seed, supervised by 30 specialist government agricultural extension workers.

### Local biofuels, Rural Territories and Energy (ALTERRE)

Given the lack of access to energy in West Africa, the development of short supply chains for biofuels produced on family farms can significantly contribute to energy access and socio-economic development in rural areas. Short supply chains have a good environmental record and can also contribute to mitigating climate changes. Two pilot projects are under way, one in the Sikasso region of Mali and the other in Zou, Benin.



### **ACTIVITIES IN 2011**

Structuring activities commenced for jatropha producers in Mali in 2011, with trials being run on joint management of harvest and post-harvest activities. A quality standard for pure jatropha vegetable oil as fuel was proposed to ANADEB and then finally adopted by the Malian government. An Energy Training and Demonstration Centre was also established at Koury.

In Benin, the programme has helped 365 new producers to plant 140,000 jatropha seedlings through Community Centres for Agricultural Promotion (CeCPA) and a production unit is now in operation at Zogbodomey. The first tests were encouraging and led to enhanced commitment on the part of the producers. This is a positive factor in developing innovation.

Finally, the two teams, Mali and Benin, in co-ordination with CIRAD, tested an innovative solution using jatropha oil in Lister-type engines.

### **PROSPECTS**

In 2012, ALTERRE Mali aims to establish a jatropha oil production unit in Yorosso, and to commence construction of a unit in Koury, with targeted support from local businessmen. The plantations and the joint operations managed by the producers' groups will continue with the aim of formalizing the governance of the local supply chains, bringing in all the various stakeholders.

In 2012, ALTERRE Benin will continue, through the CeCPA, to help producers plant around 105,000 more jatropha seedlings and will commence structuring operations for producers' groups. The support of a local businessman will result in the commissioning of a pure vegetable oil production unit in Zagnanando. An energy assessment of Zou will be conducted, which will enable the demand for fuel and additional local needs in terms of processing services to be pinpointed and defined.

1,800 producers have been supported through this project

### Benchmarks for sustainable biofuel supply chains (JatroREF network)

### **ACTIVITIES IN 2011**

The exchange network was established at sub-regional level to include Senegal, Burkina Faso, Mali and Benin. Following identification of stakeholders interested in collective action, thematic working groups were established to define an operational methodology and produce a network charter. GERES will be responsible for facilitating three working groups: pure vegetable oil production; use in engines; and jatropha and carbon finance. Thematic monitoring will enable the latest network updates to be sent to all members on a monthly basis. A monitoring, exchange and training website is under construction in this regard.

### **PROSPECTS**

The sub-regional thematic working groups will produce initial results for the priorities identified. The website will be up and running and carry the first reports in 2012.



#### **FINANCIAL PARTNERS**

- European Union (Energy Facility II)
- ► FFEM French Global Environment Facility
- World Bank
- ADEME Environment and Energy Management Agency
- ▶ IRAM Institute for Applied Research in Development Methodology
- Agentschaap NL Daey Ouwens Fund
- Prince Albert II of Monaco Foundation
- ▶ CFSI French International Solidarity Committee
- ▶ Synergie Solaire
- ▶ TATE Total Access to Energy

### **TECHNICAL PARTNERS**

- ▶ IRAM Institute for Applied Research in Development Methodology
- AMEDD Malian Association for Promoting Awareness of Sustainable Development
- ANADEB National Agency for Biofuel Development in Mali
- ▶ DGE Benin Directorate-General for Energy
- CeRPA Zou Collines Regional Centre for Agricultural Promotion
- CIRAD Centre for International Co-operation in Agronomic Research for Development
- ▶ Teriya Bugu
- ▶ IFP Vocational Training Institute
- ► IFP (Mali) Malian Institute for Professional training
- ▶ ULB Free University of Brussels

I spend more than a third of my mill income on diesel and it is getting more and more expensive. Jatropha oil is therefore a good opportunity. Following the tests I conducted, I want to participate actively in raising millers' awareness.

Oumou SAMAKE, dyer and owner of a mill, involved in the ALTERRE Mali project



### Climate and Energy in West Africa (CEnAO)



Biomass is the major source of domestic energy in West Africa (80% in Mali). This sub-Saharan region is exceptionally vulnerable to the impacts of climate changes. Projects to disseminate clean technologies encourage economic development and have substantial social consequences. They also help to reduce wood consumption, thereby limiting deforestation and CO2 emissions. However, Africa only accounts for 3% of credits generated by the Clean Development Mechanism (CDM) under the Kyoto Protocol.

In Mali and Benin, a dynamic sector is now producing low-energy domestic cooking stoves and experienced entrepreneurs have taken up production of fuel briquettes. However, these sectors lack access to existing efficient technologies and the resources to fund them. This is why GERES is developing an innovative approach aimed at large-scale dissemination of clean technologies and mobilization of carbon finance as a lever.



100,000 Seiwa-type stoves will be distributed over the project's lifetime

### **ACTIVITIES IN 2011**

The CEnAO programme, launched in Mali in January 2011, has two components:

- 1. FILECOB (FILière Energie domestique & COmbustibles Biomasse domestic energy and biomass fuel), which aims to professionalize and develop the domestic energy supply chain (low-energy domestic cooking stoves, renewable biomass fuels)
- 2. EthiCarbone, which seeks to facilitate scaling up of projects through carbon finance. During this first year's work, an audit of the domestic energy sector in Mali was carried out, leading to commencement of the following activities:
  - Improvement of production processes and establishment of specific quality control tools and methods for producers of the Seiwa low-energy stove;
  - Support and advice for local entrepreneurs in the domestic energy sector, dealing with the technical and organizational aspects of business modelling.

A platform was set up to support access to carbon finance, providing a full range of services. Adopting a programmatic approach, it is now helping two producers of low-energy domestic stoves in Mali with regard to carbon finance techniques. Assistance covers the entire project cycle from the CDM through to marketing the carbon credits, ensuring that carbon finance does have a knock-on effect on sustainable development. Training and awareness-raising activities were also carried out using a teaching kit comprising eight fact sheets.

### **PROSPECTS**

The work begun in 2011 is expected to expand with the launch of ad hoc support to the domestic energy sector in Benin. Several sub-regional information-sharing, capitalization and training workshops will be organized during 2012. The official launch of a carbon finance access programme at regional level is also planned, together with the conclusion of agreements with local institutional partners in Mali (CNESOLER and AMADER) to start up specific activity components.

### FINANCIAL PARTNERS

- ▶ AFD French Development Agency
- ► ADEME Environment and Energy Management Agency
- Nexus Carbon for Development

### **TECHNICAL PARTNERS**

- ► AMADER Malian Domestic **Energy and Rural Electrification**
- ▶ CNESOLER National Solar and Renewable Energy Agency
- ▶ Katéné Kadji Economic Interest Group
- ▶ Planète Bois
- Nexus Carbon for Development
- Réseau Carbone



### Advantages of the Seiwa stove

- ≥ 34% lower fuel consumption compared with traditional stoves
- ➤ Two-year lifespan (as against one year for traditional stoves)
- Description A price of €5.30 (as against €2.30 for traditional stoves)

# Rural Energy Services (SETUP)



In Benin, 60% of the population makes their living from farming. This country is still one of the poorest on the planet (with 37.4% of people living below the poverty line), partly because of shortcomings in the processing of farm produce on the national and subregional markets. In the absence of an effective strategy for preserving, processing or marketing farm produce, post-harvest losses sometimes amount to 50% of output, thereby compromising food security. To tackle this issue, GERES has been implementing a programme in Zou since 2008, aimed at mobilizing, organizing and energizing stakeholders in the post-harvest production chain through provision of food-processing equipment (22 multiservice platforms, 24 standalone machines, three groundnut-oil purification units, etc.)



### **ACTIVITIES IN 2011**

The capacity-building plan prepared in 2010 was implemented in 2011. It covers the provision of management tools and support in their use, training in optimum use of the equipment and mutual capacity-building through exchange visits between developers.

In terms of overall strategy, activities included:

- finalization of an appropriate marketing and sales plan for each developer;
- establishment of a business plan for 10 developers;
- support for 16 developers in putting together funding applications to micro-finance institutions;
- regular monitoring of developers' organization and integration in the supply chain;
- regular technical monitoring of the equipment.

### **PROSPECTS**

The programme aims to train developers to become genuine "rural entrepreneurs" capable of taking relevant decisions upstream and downstream of product processing. They need to be able to ensure the profitability and viability of their projects. To make this possible, it is important to capitalize on a few important themes in establishing and managing multiservice platforms for the post-harvest sector.

### **FINANCIAL PARTNERS**

- ► European Union
- ► ADEME Environment and Energy Management Agency
- MAEE French Ministry of Foreign
- ▶ POWEO Foundation
- Synergie Solaire

### **TECHNICAL PARTNERS**

- ABERME Rural Electrification and **Energy Management Agency**
- ▶ CEBEDES Environment and Socio-economic Development Centre
- ▶ PlaNet Finance

In 2012, when the platform is in place, the co-operative has set itself the target of multiplying the volume of palm fruit processed the previous year by seven, an increase from 20 to 140 tonnes. Obtaining the platform has also had an impact on the socio-economic environment and organizational dynamics of the co-operative, especially through job creation and a significant improvement in daily income in comparison with the usual rates in poor rural areas.

> Juliette KETEHOUNDJE President of the Kpondehou women's group, (Kodota village - Zakpota municipality)



# Europe Mediterranean

### **France**

Historically, the focus of GERES projects in France has been the Provence-Alpes-Côte d'Azur (PACA) region, where it has operated since its establishment in 1976. GERES advises and assists the public authorities and economic sectors. In the last few years, GERES France has also been building links at national and European level and organizing its activities around priority sectors: fuel poverty, energy in agriculture, hydro-electricity and waste management. It also takes part in pioneer initiatives, such as the creation of the Mediterranean Sustainable Building quality seal, the PREMIO smart grid project and regional facilitation of the biogas sector.

FRANCE SLOVENIA

ITALY

MALTA

Morocco

MOROCCO

In Morocco, the general public has little awareness of the potential to reduce consumption of energy from fossil sources through exploiting renewable energies and energy efficiency. Financial barriers to access hamper their dissemination on a large scale. However, the country has exceptional levels of sunshine and wood energy from sustainably managed forests represents a cheap energy source. This opens up an undeniable opportunity to develop small applications associated with renewable energies. Since the mid-1980s, GERES, a pioneer in decentralized co-operation in the PACA region, has been working in Morocco with a twofold strategic focus: developing agroforestry models and reducing firewood consumption through the development and dissemination of energyefficient appliances.





Egypt, which is an agrarian country, enjoys a high level of sunshine conducive to the development of solar power. Agricultural waste, for example, can be recycled in bio-methanation plants. Although low hydrocarbon prices were constraining the use of renewable energies, change is beginning to come due to the unprecedented energy crisis. The change in government has revealed the risk deriving from massive energy subsidies and the exhaustion of oil reserves. The upward revision of prices and the fall in imported volumes are creating shortages in some isolated areas. This is the context in which GERES is working to establish a bridge between the energy and micro-finance sectors, promoting the funding of energy-efficient equipment and small entrepreneurs in the sector.

**EGYPT** 

# Sustainable Hydropower in Alpine Rliver Ecosystems (SHARE)



SHARE is a European project launched in September 2009 in which five Alpine countries share the same objective: reconciling hydropower and protection of the aquatic environment in the Alps. To achieve this, SHARE has developed a scientific approach designed to aid impartial decision-making, balancing the needs of aquatic environments and hydropower. It can be adapted to transnational, national and local regulations and is conducted in permanent consultation with groups of local stakeholders and other experts. The three-year project ends in July 2012.



### **ACTIVITIES IN 2011**

In 2011, SHARE rolled out its scientific tools. Based on the multi-criteria approach, the SE-SAMO software entered the development phase followed by testing in 11 pilot cases. One of these tests was conducted by GERES in the lower Var Valley. The study is being developed with the Alpes-Maritimes Departmental Council, the local facilitator of the water planning and management scheme (SAGE). The SHARE network has also expanded through several presentation workshops organized for institutional, administrative and economic stakeholders in the water and hydropower sectors in the Provence-Alpes-Côte d'Azur and Rhône-Alpes regions. The success of these workshops demonstrates the relevance of our approach and our support tools. The project is entering the phase of consolidation and dissemination of its results.

### **PROSPECTS**

2012 will be the last phase of the project. The 11 pilot cases will report their initial results and analysis is planned to determine the value added by the SESAMO software in decisionmaking by administrators and other stakeholders. Communications tools, such as a guide presenting the SHARE solution, educational videos or a more ergonomic version of the software, will be developed with a view to facilitating use of the multi-criteria approach and thereby contributing to even more impartial decision-making.

The following phase will see the mass dissemination of the SHARE solution. A project proposal will be submitted to the European Union on setting up a network of outreach workers trained in using the SHARE tool.

Website: www.share-alpinerivers.eu

### FINANCIAL PARTNERS

- ► European Union Alpine Space
- ▶ GDF-SUEZ Foundation

### **TECHNICAL PARTNERS**

- Stuttgart University, Institut für Wasserbau (Germany)
- Graz Technical University (Austria)
- Innsbruck University (Austria)
- ► Government of Styria (Austria)
- AEM European Association of Elected Representatives from Mountain Areas (France)
- Joseph Fourier University, Grenoble (France)
- ARPA Aosta Valley Regional Environment Agency (Italy)
- ARPA Veneto -Veneto Regional **Environmental Protection Agency** (Italy)
- ▶ Piedmont Region (Italy)
- RSE S.p.A Energy Systems Research (Italy)
- E-zavod (Slovenia)
- Ljubljana University (Slovenia)

GERES participation in the working group on the future of hydropower in the lower Var Valley has enabled us to benefit from the methodology developed within the project and to organize a forum for debate with stakeholders.

Katia SOURIGUÈRE SAGE facilitator, lower Var Valley, Alpes-Maritimes Departmental Council



# Insulating homes in Eastern Europe and the Caucasus 🛍



GERES is contributing its skills in respect of energy-efficient buildings to a wider project run by WECF in Eastern Europe and the Caucasus to build capacities in rural areas. The climate in this region is particularly cold. Traditional houses have virtually disappeared, replaced with buildings from the Soviet era, which are more modern but not at all energy-efficient. With the huge rise in energy costs since those times, inhabitants are no longer able to cover the expenditure needed to obtain an acceptable level of comfort. There is a need to develop insulation techniques appropriate to the context, which are locally accessible and environmentally friendly, and then pass them on for use by residents and professionals.



### **ACTIVITIES IN 2011**

At the project launch conference, GERES had the opportunity to present European policies and the most suitable mechanisms for developing energy-efficient solutions. An initial reconnaissance mission then took place, followed by a workshop on adapting insulation techniques to the local context held in each of the countries involved, in which international technical experts, local officials and building professionals took part. Combined with the results of field surveys, these workshops helped to identify the techniques to be implemented and the training strategy to be rolled out.

### **PROSPECTS**

After conclusion of the first stages, local partners began to set up experimental production of insulating panels using reeds and straw. Experts from GERES will continue to support these initiatives. In 2012, they will design and produce awareness-raising tools for stakeholders, along with training modules for building professionals. It is expected that 50% of those attending the training courses will be women. The third phase of the project will involve disseminating these techniques in various countries in the Caucasus.

### FINANCIAL PARTNER

▶ European Union

- WECF Women in Europe for a Common Future
- ▶ RCDA Rural Communities **Development Agency**
- ▶ Greens Movement
- ▶ SEMA
- ▶ SDCA Social Development Centre, Akhaltsikhe
- ▶ Ecoclub
- NECU National Ecological Centre of Ukraine (Ukraine)
- Vozrozhdenie
- ▶ CDE Centre for Development and Environment
- ▶ EMAS Mobile School for Water and Sanitation

# Abergy efficiency in low-income holds



Europe has set itself ambitious energy efficiency targets for 2020, with a 20% reduction in energy consumption. Amongst the keys to achieving that objective is mobilization of the residential housing sector. The whole population needs to take part in the collective effort and also benefit from it. GERES is therefore getting involved at European level to promote the participation of low-income families in the movement. Following the completion of the FinSH project in 2010, GERES has been taking part since 2011 in two new European projects more specifically designed to improve the energy performance of low-income households' housing and appliances.

### ACtions in low income Households to Improve energy efficiency through Visits and Energy diagnosis (ACHIEVE)



**ACTIVITIES IN 2011** Based on the experience of Caritas in Frankfurt, the idea is to train people returning to work to carry out home visits to low-income households to help them reduce their energy and water consumption. In 2011, the methodology was developed at European level. Taking charge of the project in Marseille, GERES worked on an assessment of household needs and the establishment of a partnership with teams from the Politique de la Ville and Grand Projet de Ville initiatives and social housing landlords.

PROSPECTS In 2012, the first energy advisers will be trained. Home visits will be launched, initially in the 9th arrondissement of Marseille with a focus on the Hauts de Mazargues district. Evaluation tools will be developed. The second phase of the project, designed to extend the activity to structural solutions (buildings/large appliances), will start during the year and the project will end in mid-2014.

### **500 visits** planned to low-income households

### **FINANCIAL PARTNERS**

- European Union Smart Energy for Europe
- ▶ Abbé Pierre Foundation
- ▶ EDF (donation in kind)

### TECHNICAL PARTNERS

- ► CLER Renewable Energy Liaison Committee (France)
- ▶ IDEMU Urban Ecology Institute (France)
- SWEA Severn Wye Energy Agency (United Kingdom)
- FOCUS Društvo za sonaraven razvoj (Slovenia)
- CARITAS Caritasverband Frankfurt e.V (Germany)
- ► EAP Energy Agency of Plovdiv (Bulgaria)

### **Energy Efficiency in Low Income Housing** in the Mediterranean (ELIH MED)



**ACTIVITIES IN 2011** This Euro-Mediterranean programme is designed to test large-scale rollout of energy retrofitting in the homes of low-income families. Funding mechanisms and household involvement in the retrofitting process are the key aspects of the project. In 2011, the situation in five countries in the Mediterranean zone of the European Union was analysed, good financial and technical practice was identified and pilot sites were selected.

**PROSPECTS** Testing will be launched at the 10 pilot sites in 2012. On the one hand, collective and individual housing will be retrofitted in urban and rural areas and, on the other, methods of displaying and assessing energy consumption for low-income households will be tested. All the measures should help beneficiaries to reduce their energy bills. The project will end in April 2014.

**500 homes** will be retrofitted in five countries

### **FINANCIAL PARTNER**

▶ European Union - FEDER - MED Programme

- ▶ ENEA National New Technology, Energy and Sustainable Economic Development Agency (Italy)
- Mediterranean Institute France
- Languedoc Roussillon Region (France)
- CRPM Conference of Peripheral Maritime Regions (France)
- ► CSTB Construction Industry Science and Technology Centre (France)
- IVE Valencia Construction Institute (Spain)
- Municipality of Malaga (Spain)
- CEA Cypriot Energy Agency (Cyprus)
- ▶ CRES Centre for Renewable Energies and Energy Saving (Greece)
- ▶ OEK Workers Housing Organization (Greece)
- ▶ Eastern Macedonia and Thrace region (Greece)
- ISNOVA Institute for the Promotion of Technological Innovation (Italy)
- Laore Sardegna Regional Agency (Italy)
- ► Municipality of Genoa (Italy)
- Municipality of Frattamaggiore (Italy)
- MIEMA Maltese Energy Agency (Malta)
- Jozef Stefan Institute (Slovenia)

# Energy and housing 🛍



Reducing energy consumption in housing is now seen in Europe as one of the main levers to mitigate the effects of climate changes. GERES advises and assists local authorities, users and economic sectors on controlling energy expenditure. This involves promoting energy savings in the building industry, introducing innovative services and raising public awareness. These activities are carried out as part of the Energy Information Centre programme, together with pilot projects and capacity-building for the various stakeholders, leading to adoption of innovative solutions by users.

### The energy information centre programme



# Assisting users in intelligent networks (PREMIO)



**ACTIVITIES IN 2011** Personalized energy advice was given to 1730 project developers, most of them private individuals (85%). Two websites were launched. A self-assessment guide, with a print run of 600 copies, is available for volunteer families to assess their own consumption. Finally, 66 members of co-ownership management committees have been trained at workshops on "energy management for co-owners".

PROSPECTS FOR 2012 In 2012, efforts to mobilize and assist individuals with their thermal and energy renovation plans will be backed up by workshops. A new survey of professionals will be conducted to identify current practice and a new project on promoting wood energy will be set up. Finally, the self-assessment guide (eco-citizen project) will be put on line to ensure wider impact.

### **66** members of co-ownership management committees

trained in energy management in 2011

ACTIVITIES IN 2011 As part of the "energy management" component of PREMIO in Lambesc, GERES has helped to raise awareness and inform individuals to encourage them to adopt responsible behaviour in their homes, as well as all their day-to-day activities (travel, food, shopping, etc.). The involvement and commitment of the 36 project participants were maintained as a result of the activities carried out (24 energy assessments, four climate coaching sessions and six newsletters).

**PROSPECTS** The PREMIO project, the first smart grid operating in France, is being extended until the end of 2012. All the partners agreed that the project should be continued to build on the field trials and ensure better management of energy consumption at future peak periods. Discussions are ongoing between GERES and Capenergies to find ways to continue the "housing" component from which participants in the trials benefit.

24 home visits

geared towards energy performance

### **FINANCIAL PARTNERS**

- ▶ ADEME Environment and Energy Management Agency
- ▶ City of Marseille
- Marseille Provence Métropole Urban Authority
- ▶ Pays d'Aubagne et de l'Etoile Urban District Authority
- ▶ PACA Regional Council
- ▶ Bouches-du-Rhône Departmental Council

### TECHNICAL PARTNERS

- National EIC network (250 branches)
- Regional EIC network in PACA region (20 branches)
- ▶ Envirobat Méditerranée
- ▶ ARC Association of Co-ownership Managers
- ▶ ADIL Departmental Housing Information Agency
- ▶ BDM Mediterranean Sustainable Buildings

### FINANCIAL PARTNER

Capenergies cluster

- ▶ CPIE du Pays d'Aix Environmental Initiatives Centre
- ▶ TFC Conseil

# Energy and fuel poverty D



In France, more than 3.5 million households are affected by fuel poverty. On top of low income, these households also have to cope with the low energy performance of their homes at a time when energy prices are rising. To combat the inherent injustice of fuel poverty, GERES has been running projects since 2005 which directly link technical support providers with low-income households. GERES offers technical and methodological assistance on saving energy and water, financial aspects and household behaviour. Since 2010, GERES has been a member of the outreach team of the Regional Energy and Fuel Poverty Network in Provence-Alpes-Côte d'Azur. Three projects come under the energy and fuel poverty heading.

### Reviewing fuel poverty and mobilizing stakeholders in PACA (ELPE)



**ACTIVITIES IN 2011** Eight further housing units were the subject of a thermal study, with advice provided to occupants as appropriate. Owners received recommendations on improving planned work and three households received a second visit after work had been carried out. They were shown how to use their new appliances properly and manage energy consumption on a day-to-day basis.

PROSPECTS The ELPE project will come to an end in 2012 with the publication of a manual for regional stakeholders and the preparation of guidelines to improve regional public policy with a view to reducing fuel poverty. Mobilization and support will continue to be provided via the outreach team of the Regional Energy and Fuel Poverty Network in 2012.

### 80 stakeholders provided feedback on the regional review

### **FINANCIAL PARTNERS**

- ▶ ADEME PACA Environment and Energy Management Agency
- ▶ PACA Regional Council
- DREAL PACA Regional Environment, Development and Housing
- Rhône Mediterranean Water Authority
- ▶ Fondation de France

### **TECHNICAL PARTNERS**

- Écopolenergie
- Loubatas
- ▶ CEDER Centre for the Environment and Development of Renewable
- ▶ PACT Alpes de Haute Provence (voluntary housing sector network)

### Combating fuel poverty in pays d'Aubagne et de l'Étoile

**ACTIVITIES IN 2011** The results of the regional review (conducted in 2010) were submitted in February 2011. The team carried out four territorial assessments, with a view to getting a better idea of the target audience and stakeholders to be mobilized and identifying relevant existing or potential activities.

**PROSPECTS** The project will end in 2012 with visits to the households following completion of work. Co-operation with SAEMPA is planned this year, to continue initiatives with owners to improve the energy performance of private

### 3 households monitored after completion of energy performance work

### **FINANCIAL PARTNERS**

- ADEME PACA Environment and Energy Management Agency
- ▶ Fondation de France

### TECHNICAL PARTNERS

- Pays d'Aubagne et de l'Etoile Urban District Authority
- SAEMPA Pays d'Aubagne Semi-Public Development Company

### Trainning of outreach workers to support low-income households

ACTIVITIES IN 2011 GERES has been assisting local operators to include management of low-income households' energy bills in their activities. The Union of Federations of Social Welfare Centres (PACA) has asked for help from GERES. Volunteers from the Unis-Cité were trained in energy management.

**PROSPECTS** The two partnerships will continue in 2012. Training sessions combined with field visits will be offered to these local operators. It is also planned to continue a number of implementation activities following training.

**16 volunteers** trained in energy management

### FINANCIAL AND TECHNICAL PARTNERS

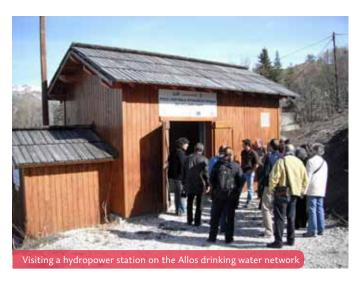
- ▶ Provence-Alpes-Côte d'Azur Union of Federations of Social Welfare Centres
- ▶ Bouches du Rhône Union of Federations of Social Welfare Centres
- Unis-Cité

# Clean energy production



In view of the now inevitable energy transition, finding new forms of energy production based on local resources is key. As a result, GERES is suggesting an approach which seeks to harmonize the development of renewable energies with better management by local communities of their energy resources and environmental assets. This approach has been rolled out in the hydro-electricity sector for some years and, more recently, the biogas sector. The aim is to ensure that all issues are properly taken into account and that these sectors are the subject of collaborative governance, receiving support through skill strengthening: assistance to pioneers, facilitation and provision of tools.

### Small-scale hydro-electricity and environment in the PACA région (PHéE)



**ACTIVITIES IN 2011** GERES has entered a capitalization phase, with an optimized toolbox: case study information sheets, second edition of the methodological guide and visits to operational power stations. In 2011, within the "assistance" component, around 20 assessments were carried out and assistance to local authorities began.

PROSPECTS In 2012, the challenge for the PHéE programme is to finalize the tools developed and have them taken forward by, for example, consultants and local authorities. The work will be carried out in close co-operation with all water and energy stakeholders in Provence-Alpes-Côte d'Azur, to encourage sharing of approaches in the field of hydro-electricity.

### **16 PHéE** compatibility assessments

### **FINANCIAL PARTNERS**

- ▶ ADEME PACA Environment and Energy Management Agency
- ▶ PACA Regional Council

### **TECHNICAL PARTNERS**

- MRE Regional Water Authority
- ▶ Rhône Méditerranée Corse Water Authority
- ▶ ONEMA National Water and Aquatic Environment Office
- DREAL PACA Regional Environment, Development and Housing Department

### Strengthening the biogas sector in the PACA région

**ACTIVITIES IN 2011** GERES, supported by the Solagro Association, started its efforts to strengthen the biogas sector through awareness-raising campaigns, by taking part in two events on methanation and publishing an information brochure. A targeting study of project opportunities was produced, together with a review of regional initiatives. At the same time, an assessment of landfill and sewage biogas development is in progress.

**PROSPECTS** The provision of assistance to project developers, some of them already identified, will materialize in 2012. Awareness-raising campaigns directed at the various local stakeholders will continue, coupled with organizationof a regional event on methanation. The review of biogas development will have been completed. The work of technical and regulatory monitoring, as well as information-gathering on existing initiatives, will be reinforced.

### **FINANCIAL PARTNERS**

- ▶ ADEME PACA Environment and Energy Management Agency
- ▶ PACA Regional Council

### **TECHNICAL PARTNER**

Solagro

We want to develop the production of local renewable energy in our territory and have commissioned PHéE compatibility assessments at three potential sites for small-scale hydro electricity schemes. This has led to a municipal project for which feasibility studies are currently under way. GERES willingness to provide support on technical and methodological aspects

and taking account of environmental issues enables small local authorities to develop benchmark projects despite limited human resources.

> Charlotte COLLEU Energy officer, local authority of Cians (Var)

# **Environmental Performance and climate**



All sectors of economic activity must now take account of environmental and climate issues. GERES France is helping local authorities to determine and implement public policies that are locally based and in harmony with all the sectors already involved. These approaches begin with territorial reviews and preparation of monitoring indicators, followed by pilot operations which enable us to try out and validate solutions worked out in consultation with all stakeholders. We can then launch further dynamic processes at local level.

### The regional agriculture-energyenvironment network



ACTIVITIES IN 2011 In order to ensure the long-term viability "agricultural energy advice", GERES has, together with the Solagro Association, begun its work of facilitation and co-ordination of the regional agriculture-energy-environment network, through a review of advisers' needs and a study of similar initiatives conducted in other regions.

**PROSPECTS** Support to the network is to continue through training activities at technical seminars (fertilization, cultivation practices, eco-building), pooling of experience (preparation of technical fact sheets and use of a joint platform) and communications, including organization of a regional event (model farm visits).

### FINANCIAL PARTNERS

- ▶ ADEME PACA Environment and Energy Management Agency
- ▶ PACA Regional Council

### **TECHNICAL PARTNER**

Solagro

### **Energy saving in senior school** canteens in the PACA region

ACTIVITIES IN 2011 With its partners, GERES conducted a study for the PACA region on direct and indirect energy savings that could be made in school catering services.

Following 10 assessments in pilot schools, recommendations were made to reduce consumption of energy used in cooking and as a result of procurement policy.

**PROSPECTS** The results of this study should feed into future projects, particularly in liaison with the regional agriculture sector. The development of links between farmers and mass catering services is key to the successful promotion of short supply chains in the region.

### FINANCIAL PARTNER

▶ PACA Regional Council

### **TECHNICAL PARTNERS**

- ▶ GESPER GEStion de Proximité de l'Environnement en Région (environmental association)
- ▶ Bio de Provence

### **Supporting eco-friendly festivals in the PACA region**

**ACTIVITIES IN 2011** GERES is continuing its efforts in respect of the Region's policy on the eco-responsibilities of cinemas and festivals, working specifically to help projection rooms move over to digital and facilitating debate around observation-capitalization of eco-responsible approaches by festivals displaying the "AGIR +"

PROSPECTS In 2012, more than half the cinemas in the region will still need equipment for digital projection and GERES well advise project developers on the expected energy performance of activities planned in connection with AGIR.

> **6 festivals** committed to an eco-responsible approach

### **FINANCIAL PARTNER**

▶ PACA Regional Council

- ▶ Eclosion
- ▶ Salima Badi

# Eco-friendly waste management 🔑



Within the general aim of promoting and supporting good waste management practice, four thematic projects have been developed in the region. Involving eight community gardens, the Garden Composting network seeks to promote the practice of composting in the Bouches-du-Rhône. The regional "Composting" team works to encourage the regional industrial waste management sector to adopt a quality approach. The "eco-friendly waste management in Bouches-du-Rhône middle schools" operation is designed to commit schools to controlling and managing their waste. Finally, the "composting kit", a complete teaching tool intended for use in environmental education in the region, helps to get the message across to all kinds of audiences in an entertaining way.



### **Eco-friendly waste management for** middle schools in Bouches-du-Rhône

ACTIVITIES IN 2011 Following posting of a guide on the Departmental Council website, several schools have applied to test the methodology and set up their own eco-friendly waste management projects.

PROSPECTS The "trial" schools will be helped to start a programme of waste management activities. Their feedback will help to improve the guide, with a new version planned for the school year beginning in autumn 2012.

> 4 middle schools committed to the guide testing and improvement phase

### **FINANCIAL PARTNERS**

- ▶ ADEME PACA Environment and Energy Management Agency
- ▶ Bouches-du-Rhône Departmental Council

### TECHNICAL PARTNERS

GESPER - GEstion de Proximité de l'Environnement en Région (Environmental association)

### **Facilitation of the composting** sector int the PACA région

**ACTIVITIES IN 2011** A two-year programme of action, based on information, training and exchange of experience between stakeholders in the sector, began in April. Two technical seminars were organized and a survey of composting platforms has been launched.

PROSPECTS The programme will be implemented with two technical seminars, a training session and two working groups. Finally, the survey findings will provide information on technical issues and scaling of a regional promotion approach.

**66** participants at the technical seminar on controlling sewage sludge quality

### FINANCIAL PARTNERS

- ADEME PACA Environment and Energy Management Agency
- ▶ PACA Regional Council

### **TECHNICAL PARTNERS**

- ▶ Echotechnologie
- Orgaterre

### **Promotion of local composting** in Bouches-du-Rhône

ACTIVITIES IN 2011 The Garden Composting network continued its activities (workshop, stands, events, etc.) with various audiences. Network partners are supporting composting projects at neighbourhood, block of flats, school and welfare centre level.

**PROSPECTS** As the process of developing local composting projects becomes more and more dynamic, the Garden Composting network must undertake an internal exercise to discuss moves towards professionalization of the composting sector.

### 80 households

involved in semi-collective composting

### FINANCIAL PARTNERS

- ▶ ADEME PACA Environment and Energy Management Agency
- ▶ Bouches-du-Rhône Departmental Council

### **TECHNICAL PARTNERS**

- Accueil et Rencontres (15th arrondissement Marseille)
- Centre d'Animation du Vieux Moulin (Salon de Provence)
- Comm'un Jardin de Mey (Meyrarques)
- ► CPIE Rhône Pays d'Arles (Arles)
- Crog'Jardin (La Roque-d'Anthéron)
- ► GESPER (Digne-les-Bains)
- ▶ Jardilien (Aubagne)
- Les Jardins de l'Espérance (La Ciotat)
- Naturoscope (8th arrondissement Marseille)

### Teaching tool on composting in the paca region

**ACTIVITIES IN 2011** After many months working to perfect the tool, dissemination of the "composting kit" began in October 2011. A campaign was launched to publicize the kit and promote its use.

**PROSPECTS** The first seminars for buyers of the tool are planned for February and April 2012, in two different parts of the region. Communications activities will continue to encourage the placing of orders for the tool.

# **500** composting kits

will have been put together and distributed by 2013

### **FINANCIAL PARTNERS**

- ▶ ADEME PACA Environment and Energy Management Agency
- ▶ PACA Regional Council

### **TECHNICAL PARTNERS**

▶ Graine PACA - Regional environmental education network

# Agroforestry and sustainable biomass management short energy supply chains 📔



The environmental degradation seen in farmland and forests in northern Morocco is mainly the result of clearance to replace eroded farmland and of fuel wood offtake. To remedy the problems, GERES has been developing adapted agroforestry models with a view to long-term energy independence for rural communities, whilst introducing a farming model suited to the context of soil erosion. Dissemination of energy-efficient appliances complements this reduction in offtake from forests.



### **ACTIVITIES IN 2011**

Activities in 2011 followed on from previous years and still have two main components. First of all, wood cutting and collection services in the North help to maintain and enhance the forest environment. The development of these services required raising awareness of pruning, building skills through training and, finally, equipping and encouraging the local communities. Secondly, a fruit-tree pruning service was set up, involving purchase of equipment, identification and training of six pruners, service trials, maintenance of the forest environment and, finally, development of the services. 383 tonnes of wood were used locally by the rural communities, 22 tonnes were sold directly by the farmers to urban centres and 20 tonnes are presently on the drying platform.

### **PROSPECTS**

Dissemination of the agroforestry model will be expanded to cover new local farmers. Evaluation of the fruit-tree pruning service has resulted in moves towards establishing a local purchasing chain. There are also plans to transport, store/dry and sell large logs to supply major urban consumers in the vicinity (e.g. hammams and bread ovens). This means that the firewood needs of people living both close to the orchards and in nearby urban areas can be met within the framework of an overall reduction in pressure on forest resources.

> The farming plots around my village used to be washed away by heavy rain and we had to replace them with plots taken from the forest. This has changed because the training and follow-up we have received means that we have been working the land differently for the last few years.



Farmer and beneficiary of the erosion control programme

# Dissemination of energy-efficient appliances for rural communities 🛍



Firewood represents 30% of the overall energy balance in Morocco and 90% of rural households use it for their daily activities: cooking meals and bread; and heating water and premises in the winter. The energy performance of the appliances used is poor and they emit harmful fumes. In rural areas, wood is still the predominant fuel for financial reasons despite its environmental impact, the time spent in gathering it and the health risks of the appliances used. Replacing wood with gas for cooking is an intermediate solution which helps to limit the impact on forest resources. Nevertheless, this option has to be backed by energy-efficient, safe appliances that are not harmful to the environment, disseminated according to methods and an economic model suited to rural areas.



### **ACTIVITIES IN 2011**

The development and dissemination of a gas-fired oven for cooking bread moved to a preindustrial stage (technical and acceptability validation). A regional manufacturer was selected to produce 50 ovens, together with one industrialist in Casablanca to manufacture the associated burners. At the same time, the multifunction wood-fired stove (domestic hot water, cooking and heating) was disseminated on a small scale. The R&D phase should therefore continue beyond the 2011 to come up with a simpler, easily reproducible model. Finally, the introduction of a collective bread oven was completed and it was monitored to analyse its cost-effectiveness. The savings made by the village in terms of wood were confirmed.

### **PROSPECTS**

Development of the gas-fired bread oven will rest on surveys of the market and potential manufacturers in northern Morocco with a view to mobilizing several industrialists and gradually ensuring the independent operation of this supply chain. Research and development on the multifunction wood-fired stove must be finalized so that a simplified version can be produced. Artisans can then be trained to handle the new model before moving towards larger scale production

> All the family is very pleased with the new stove. It means that we have a heated room for the winter where we can eat and the children can study. In addition, we have hot water for washing and we can easily cook tajines and couscous. And as it doesn't use much wood, I don't have so much work to do and can spend more time with the family or on other activities.

> > Fatima ZEKKARI Owner of a multifunction stove for the last two years

### FINANCIAL PARTNERS

- Prince Albert II de Monaco Foundation
- AFD French Development Agency
- ADEME Environment and Energy Management Agency
- ▶ PACA Regional Council
- ▶ POWEO Foundation
- MACIF Foundation
- UNDP Morocco Global **Environment Facility Micro-**Finance Programme
- Veolia Environment Foundation
- SCAC Morocco French Embassy Co-operation and Cultural Action Section

- GERERE Study and Research Group on Renewable Energies and the Environment
- ARDB Rif Association for local, sustainable development, Bellota
- Moroccan Ministry of Energy, Mines, Water and Environment
- Ouezzane Chefchaouen Provincial Agriculture Department



# Sustainable hammams 📠



Hammams are deeply rooted in Moroccan culture. They play a social and religious role and provide people from all social classes with comfort and cleanliness. Every neighbourhood, whether old or new, is built around its hammam where the inhabitants go once a week on average.

These establishments are therefore an extremely strong component of the Moroccan socio-cultural heritage which should be preserved. However, the survival of Moroccan hammams is now under threat: many have closed in recent years or will be obliged to do so if they do not modernize. They use extremely energy-intensive boilers to heat the rooms and water, as a result of which they are responsible for 10% of deforestation in Morocco. From the economic point of view, their profitability is seriously affected by constantly rising wood prices. Finally, the boilers seriously pollute their immediate surroundings.

GERES has been working for several years in Morocco to find solutions to reduce pressure from hammams on the environment and improve their economic viability. An initial study conducted in the 1990s showed the scale of consumption of wood fuel and water. Four years ago, GERES and its local partners launched a dynamic process in Chefchaouen in northern Morocco, which resul-

ted in the creation of an association of hammam owners and the organization of awareness-raising campaigns on water management. At the same time, with funding from ADEME, GERES co-ordinated the design of a high-performance boiler specifically adapted to the technical constraints of hammams.

Based on the encouraging results, an ambitious programme to remedy the problems of water and wood management and polluting emissions related to hammams is starting up and expected to last at least 10 years.



**65%** of wood saved by the new boiler

### **ACTIVITIES IN 2011**

After Planète Bois and Hierro had spent three years developing a high-performance woodfired boiler, a final model was validated in the factory. It only emits 50 ppm (parts per million) of carbon monoxide as against more than 2000 for traditional boilers. Its features meet the specifications established for hammams and it displays exceptional environmental qualities (exceeding the best European standards). A study was conducted by a forestry engineer on the operation of wood supply chains and recommendations were put forward to promote the supply of renewable, dry, clean wood for hammams. Finally, exchanges facilitated by GERES, cutting across cultural, sociological, religious, technical and economical aspects, between hammam owners and their representative associations have led to proposals to reduce water consumption.

### **PROSPECTS**

In 2012, the boiler will be installed in three pilot establishments to validate its environmental performance, functionality and ability to meet hammams' energy needs under real-life conditions. During this one-year pilot phase, managers will be helped to procure high-quality wood. The debate concerning water management will be extended beyond the hammam sector (to environmental associations, institutions and municipal environment services) with the aim of setting up a water awareness programme in 2013 at municipal level as a minimum.

### FINANCIAL PARTNER

SCAC Morocco - French Embassy Co-operation and Cultural Action Section

- Planète Bois
- ▶ Hierro
- Moroccan National Federation of Owners/Operators of Traditional Baths
- ARDB Rif Association for local, sustainable development, Bellota
- ARCBDT Casablanca Regional Traditional Bath and Shower Association

# Fostering renewable energy and energy efficiency through micro-finance (FreemE)



Morocco and Egypt have a number of characteristics in common with other countries in the region: serious regional disparities, a high level of poverty, heavy dependency on fossil fuels and a large number of micro-businesses. Although the sector is heavily subsidized, the energy bill exerts considerable pressure on consumers' budgets. In both Morocco and Egypt, the FreemE project seeks to support development, access and sustainable use of renewable energies and energy-efficient services for vulnerable groups in both urban and rural areas. To this end, the synergies between the micro-finance and energy sectors need to be exploited to a greater extent to improve the socio-economic conditions of the most vulnerable communities. Co-operation is of mutual benefit in various ways.

Access to micro-credit helps to facilitate renewable energy production systems, together with the production, distribution and purchase of energy-efficient appliances. Because of their strong local roots and the trusting relationship they foster with their clients, micro-finance institutions are an excellent vehicle for the dissemination of information to raise public awareness or provide specific training for the target audiences. Finally, reductions in their energy bills enable the clients of micro-finance institutions to increase their solvency, which should result in a better loan repayment rate.



### **ACTIVITIES IN 2011**

The operational launch of the project in Morocco took place in October 2011 at an "Energy Seminar" organized in Aïn Aouda (northern Morocco). More than 200 very enthusiastic micro-entrepreneurs attended a show and events around the energy theme. Studies were then conducted on various kinds of local appliances (gas hob, briquettes made from organic waste, energy-efficient refrigerators and freezers, electrical and lighting equipment) to identify their value chains and make recommendations for wider dissemination. The results fed into the support strategy for 2012.

In Egypt, a study was conducted in the two governorates covered by the project to establish the energy profile of small and micro-businesses assisted by the partner MFIs.

### **PROSPECTS**

In 2012, the project will train and raise the awareness of 400 producers and distributors in Morocco and Egypt. At the same time, it will continue to support the dissemination of appliances: energy-efficient refrigerators and freezers, improved gas ovens, low-energy lighting, solar water heaters, efficient electric motors, etc. A specific "energy" loan will help the 400 micro-entrepreneurs involved in the project to purchase some of these appliances. The project will continue to raise awareness of the benefits of renewable energies and energy efficiency amongst 4800 micro-entrepreneurs and low-income households by holding five further energy seminars in Morocco and Egypt.

### FINANCIAL PARTNERS

- ▶ Planet Finance (project developer)
- ADEME Environment and Energy Management Agency
- ADEREE National Agency for the Development of Renewable **Energies and Energy Efficiency**
- **ARDI** Foundation
- EACD Egyptian Association for Comprehensive Development (Egypt)
- DBACD Dakahlya Businessmen' **Association for Community** Development (Egypt)
- GERERE Study and Research Group on Renewable Energies and the Environment

### **TECHNICAL PARTNERS**

- European Union
- ▶ PACA Regional Council

The training seminar was very interesting and I would like to thank those responsible who invited us to take part, discover new things and meet other people. I found out about good practice and appliances that can help to reduce electricity and water consumption.

Kenza BENMAL

President of the "Traditional weaving" co-operative in Wazzanne



# Climate Change Unit

### Morocco

Conducting a study on the eligibility for carbon finance of hammam boilers as part of an overall debate on rural communities' adaptation to climate changes.

### France \

Monitoring and development of the CO<sub>2</sub>Solidaire programme, the national carbon offsetting platform. This programme promotes the spirit of responsibility amongst countries in the North towards countries in the South in combating climate changes.

### **West Africa**

Support in identifying a regional carbon programme for West Africa in liaison with the CEnAO project, working with the local improved stove sector.

### Senegal

Identification of a programme of support to five Senegalese regions in integrating climate issues within local policies.

he Climate Change Unit works on crosscutting themes and provides support to field projects coping with the challenges of climate changes. The Unit concentrates mainly on two pillars of activity, i.e. adaptation and mitigation, because it is vital for countries in the North to help those in the South to adapt to the effects of climate changes and to reduce or restrict their greenhouse gas emissions.

The Climate Change Unit is also developing innovative approaches to foster the emergence of clean, resilient development models in the least developed

In 2011, the team of 10 experts worked in eight countries: Afghanistan, Benin, Cambodia, France, India, Mali, Morocco and Senegal.

Swan Fauveaud, Director, Climate Change Unit

Collaboration in setting up a strategy of adaptation to climate changes for the benefit of communities in Ladakh.

### Afghanistan

Support in connection with monitoring the passive solar house project in Afghanistan to calculate the carbon credits generated by the project.

### Cambodia

Technical support to the improved stove (NLS) project in connection with calculating the carbon credits generated and their verification/ certification by the external auditors.

# $\mathsf{Co_2}\mathsf{Solidaire}$ programme $\blacksquare$



In 2011, the CO₂Solidaire programme has endeavoured to consolidate its presence alongside its partners and meet their expectations to the best of its ability: publicizing the principle of offsetting, getting feedback from the field, supporting communications and working within partner companies.

The first CO<sub>2</sub>Solidaire Forum represented a concrete expression of this support to projects developed by GERES. These gatherings are now one of the cornerstones of a future CO2Solidaire community which has taken shape naturally on the basis of the values enshrined in our climate solidarity principle. The team has been strengthened with the arrival of a partnership officer to ensure the continuity of the programme.

Finally, this year saw the first voluntary offsetting partnership with a French region. The Ile de France region chose CO<sub>2</sub>Solidaire in connection with a call for tenders to offset 4,000 TCO<sub>2</sub>e\*.

As the benchmark offsetting programme in France, CO₂Solidaire contributes to the growing visibility of GERES and remains at the service of its projects.

\* TCO₂e: tonnes of CO₂ equivalent - a unit commonly adopted to take account of all greenhouse gas emissions in accordance with their Global Warming Potential (GWP).



### **ACTIVITIES EN 2011**

CO<sub>2</sub>Solidaire counted 31 new partner organizations and 14 new partnership events in 2011. The programme received 353 donations from individuals and was able to offset 112,322 TCO₂e corresponding to €1,047,232 worth of project support.

CO₂Solidaire played a role in the following contexts in 2011:

- Conference promoted by the France-Tibet Association: "Hindu Kush Himalaya and H2O" at the French Senate
- Conference organized by Comité 21 : "How can efficient voluntary carbon offsetting be implemented?"
- Round table for the Côtes d'Armor Regional Council
- · Conference promoted by Bolivia INTI: "Funding projects to combat deforestation in Africa"
- Conference promoted by UNCED: "CDM and Africa: Status and prospects"
- Cycle of conferences at Sciences Po Paris
- Training session for the 3A school

### **PROSPECTS**

The programme aims to strengthen its position as opinion leader in France, particularly with the idea of extending the ethical parameters of projects to cover the notion of carbon offsetting. In addition, the second "CO<sub>2</sub>Solidaire forum" will take place in 2012.

112,322

tonnes CO, equivalent offset in 2011

### **FINANCIAL PARTNER**

▶ Enea Consulting (skills-based sponsorship arrangement)

### 1st CO<sub>2</sub>Solidaire Forum (January 2011)

The first CO<sub>2</sub>Solidaire Forum was held on 18 January 2011 in Paris at the Comptoir Général. We wanted to make the projects supported by our partners seem more real and give a human face to our dealings with our partners. Speakers from HQ were able to highlight the activities and prospects of GERES and its CO<sub>2</sub>Solidaire programme. Project officers then went on to report on day-to-day work in the field and the solutions offered by GERES through projects that partners can support. This morning forum with its vast potential for sharing and debate should become the key meeting place for stakeholders in climate solidarity.

Visit the CO₂Solidaire website to see the video of the Forum: www.co2solidaire.org



# Carbon finance as a vector of development 🙆



Developing carbon projects is the core activity of the Climate Change Unit, which works to convert reductions in CO<sub>2</sub> emissions into "carbon credits" for development projects in the field of energy efficiency and renewable energies. The project development team comprises three carbon finance experts deployed in Cambodia, Indonesia and Mali respectively. An expert in energy and economic development is based in West Africa. This means that the team works as close as possible to field reality.



345,676 TCO<sub>2</sub>e emission reductions verified in 2011 on the improved stove project in Cambodia

### **ACTIVITIES IN 2011**

The high points of 2011 were the verification of the "New Lao Stove" improved stove project in Cambodia and monitoring of the passive solar house project in India and Afghanistan. The Climate Change Unit team provided technical support to GERES field directors in connection with studies of standard reference scenarios and design of simplified methodologies for small-scale carbon projects. It also worked on developing new carbon finance programmes and fundraising for improved stove programmes in West Africa. With this in mind, the EthiCarbone project in Mali is aiming to assist project developers seeking to access carbon finance and to contribute to the emergence of a fair, transparent, ethical regional market.

### **PROSPECTS**

For 2012, several projects are well on the way to accessing carbon finance. The expansion of activities towards West Africa and Central Asia, as well as other sectors such as conservation agriculture and agroforestry, opens up new horizons and challenges. The project development team will continue to build the capacity of local teams in order to enhance carbon finance skills in the field and thereby ensure the continuity of the activity.

### FINANCIAL PARTNERS

- ▶ DFID UK Department for International Development
- CDC Climat Caisse des Dépôts et Consignations
- AFD French Development Agency
- ADEME Environment and Energy Management Agency
- blue moon fund
- Nexus Carbon for Development
- FFEM French Global Environment

### TECHNICAL PARTNERS

- Perspectives Gmbl
- Nexus Carbon for Development
- Initiative Développement
- Global Environmental Institute

### **Decision tool for CDM project developers**

Experts from the Climate Change Unit have worked with their technical partners to develop a tool to aid small project developers' decision-making, which will enable them to assess the prefeasibility of their projects on the basis of four methodologies. Known as the CDM Decision Tool, this tool, the final version of which is being finalized, was presented at a side event in connection with the 17th Conference of the Parties in Durban.



# Integration of adaptation within development projects 🧐



The inadequacy of the developed countries' emission reduction commitments is likely to result in an increase in the average global temperature of around 3°C by 2100 (source: GIEC). The most vulnerable countries, such as the least developed countries (LDCs) and small island states, will be the worst affected, particularly in view of the increase in natural disasters and desertification and in soil salinity caused by rising sea levels. In addition, there is a risk of resurgence of diseases such as malaria. Implementation of measures to adapt to the consequences of climate changes is, nevertheless, still hesitant. Although a vague and rather ineffective concept for people in the field, adaptation has given rise to considerable research and sharing of experience. It is genuinely difficult to plot routes to resilient development that take the constraints, particularly climate constraints, into account.

### Dissemination of good practice and capacity-building



ACTIVITIES IN 2011 GERES, a member of the Climate-Development Committee of Coordination SUD, facilitated the "Adaptation" component. In this regard, GERES conducted a survey amongst International Solidarity Organizations (ISOs) belonging to the committee concerning their technical knowledge and perceptions, as well as good practice in relation to issues of vulnerability and adaptation to climate changes in the South. This work led to the Good Practice Guide co-produced by GERES and Coordination SUD.

The Climate Change Unit also contributed to the advocacy documents and newsletters published on the negotiations during the Durban conference (COP17).

**PROSPECTS** The Good Practice Guide will be used in training for development stakeholders on integrating adaptation to climate changes. Training sessions will be offered by GERES in liaison with its partners in the South and within Coordination SUD.

### **FINANCIAL PARTNER**

AFD - French Development Agency

### TECHNICAL PARTNERS

- ▶ CARI International Action and Project Centre
- ▶ GRET Technological Research and Exchange Group
- Coordination SUD

### Analysis of vulnerabilities and local coping strategies

ACTIVITIES IN 2011 The Climate Change Unit launched a plan of internal training and support to strategic analysis on the issue of adaptation to climate changes. This resulted in two activities in 2011. A mission went to Chefchaouen in Morocco to analyse the vulnerabilities of the area where GERES works and identify the impact on adaptation of activities such as developing local agriculture or sustainable forest management. In Ladakh, the GERES India team began an analysis of the impacts of climate changes on several districts and, at the same time, put in place technologies (artificial glaciers) to address the water shortage related to the disappearance of natural glaciers.

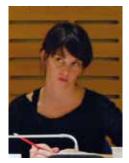
**PROSPECTS** The Climate Change Unit will continue its cooperation with GERES representative offices in the South and North, particularly as part of capacity-building and support in implementation of adaptation programmes.

> 11 fact sheets describing vulnerability and climate changes adaptation assessment methods

> > geres.eu/fr/ouvrages/219-guide-adaptation

In 2011, 4D worked with GERES on adaptation to climate changes : organizing workshops to exchange experience, helping with the study, organizing two side events for the Durban conference ... It was an opportunity to share

our know-how and compare our methods and analysis. This partnership proved to be an asset, enriching our collective thinking about this complex, poorly understood subject of adaptation.



Marie CHÉRON, Project co-ordinator, 4D association

# Strengthening the advocacy strategy 🧭 💆





2011 was a crucial year in negotiating the post-2012 regime for combating climate changes. The conferences of Copenhagen (COP 15) and Cancun (COP16) had failed to bring an ambitious agreement to the table or take into account the need for more solidarity and responsibility on the part of the North towards the South. GERES focused on the reform of the Clean Development Mechanism, taking its voice to key international events, and also joined forces with Coordination SUD, a group of which it is an active member, in advocacy work in France and Europe to call attention to the urgency of international funding for adaptation in vulnerable countries and a policy framework for implementation.

### Participation in key international events

**ACTIVITIES IN 2011** GERES co-ordinated the organization of a series of round tables with high-level experts at key international events, such as the Africa Carbon Forum held in Marrakesh in July and the 17th Conference of the Parties organized by the United Nations Framework Convention on Climate changes, which took place in Durban in November. GERES sent delegations to these two events to promote the climate solidarity message, take part in many round tables and technical debates and meet GERES partners working on climate changes issues.

PROSPECT GERES will continue developing its advocacy work through its participation in the next key events of 2012, among them the Africa Carbon Forum in Ethiopia and the 18th Conference of the Parties to be held in Doha in Qatar. These events will be new opportunities to present ongoing projects and build new partnerships.

### **FINANCIAL PARTNERS**

- ► CDC Climat (Caisse des Dépôts)
- blue moon fund

### Geres, leader of the Suppressed **Demand working group**

ACTIVITIES IN 2011 In 2011, GERES co-ordinated the activity of the "Suppressed Demand" Working Group. This group of high-level experts worked to provide constructive inputs to the Clean Development Mechanism Executive Board on the topic of Suppressed Demand, a notion that involves crediting emission reductions in the least developed countries on the basis of the projected future growth of their greenhouse gas emissions and helping them access cleaner technologies. The Group adopted a common position and publicly presented the results of its work during a round table organized by GERES at COP17 in Durban. A case study report, "Suppressed Demand and the carbon market", was presented during the Conference.

**PROSPECTS** Towards the end of 2011, the CDM Executive Board agreed to revise existing methodologies to take more account of the notion of Suppressed Demand. This success is now encouraging GERES to work on this topic, providing support to project developers on the voluntary market in liaison with the standard accreditation bodies and designated operational entities. Suppressed Demand can then move away from the realms of debate towards concrete application in the field.

### 19 organizations joined the Suppressed Demand Working Group in 2011

http://sdwg.wikispaces.com



### FINANCIAL PARTNER

CDC Climat (Caisse des Dépôts)

### **TECHNICAL PARTNERS**

Members of the Suppressed Demand Working group:

- CDC Climat (Caisse des Dépôts et des Consignations)
- ▶ CDM Watch
- ▶ GIZ Gesellschaft für Internationale Zusammenarbeit
- Manna Energy
- Nexus Carbon for Development
- **NIRAS**
- Perspectives Climate Change
- Pöyry
- South South North Africa

# **Eco-citizen guide**

### March 2011

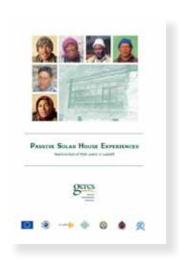
What effect can our behaviour have on our energy consumption, travelling habits and waste production? In co-operation with the Pays d'Aubagne et de l'Etoile Urban District Authority, the EIC was keen to use the "Self-diagnosis and advice" guide it had designed and produced to demonstrate how everyone can take easy everyday steps, with no loss of comfort, to lower energy consumption and waste production and choose other forms of transport.



# **Passive Solar House Experiences**

### August 2011

In this collection, beneficiaries/users of the passive solar conservatories/greenhouses constructed as part of the PSH project in the Himalayas talk about their experiences. Only available in English, this 12-page document highlights feedback, thoughts and criticism from Ladakhi residents who took part directly in the project, building or rehabilitating their houses. Their experience shows how passive solar architecture has become a solution for people living in this isolated, high-altitude desert.



# **Good practice guide, Adaptation**

### **23 November 2011**

The Good Practice Guide "Integrating adaptation to climate change within development projects" was published as part of the work of the Climate-Development Committee of Coordination SUD. GERES, with support from 4D, CARI and GRET, conducted a study to get a better understanding of French NGOs' perception of issues relating to adaptation and their own field practices in this respect.



### **Introduction to Carbon Finance**

### October 2011

Designed and produced as part of the EthiCarbone project in West Africa, this educational material gives an overview of carbon finance on eight thematic fact sheets. These fact sheets help readers to understand climate changes and the mechanisms set up by the Kyoto Protocol, providing a good introduction to the carbon markets. Aimed at project developers who may be eligible for carbon finance, they describe the various stages of the project cycle and deliver reliable information to ensure transparency in the sector, with a view to building the capacity of project developers and enabling them to deal on an equitable basis with other players on the market.



# The composting kit

### October 2011

The composting kit is an entertaining teaching tool to raise awareness of local composting and sustainable development. It is aimed at teachers who want to undertake activities with their pupils (from nursery through to senior school) in respect of composting or waste or, more broadly, sustainable development. The composting kit encourages project learning and offers many ways of creating schools' own educational activities (binder with activity sheets, knowledge catalogue, playing cards, magnifying boxes, seeds, etc.)



### **GERES** website



66,136
website visits
an increase of 18%
in relation to 2010.

www.geres.eu

### **GERES'** newsletter



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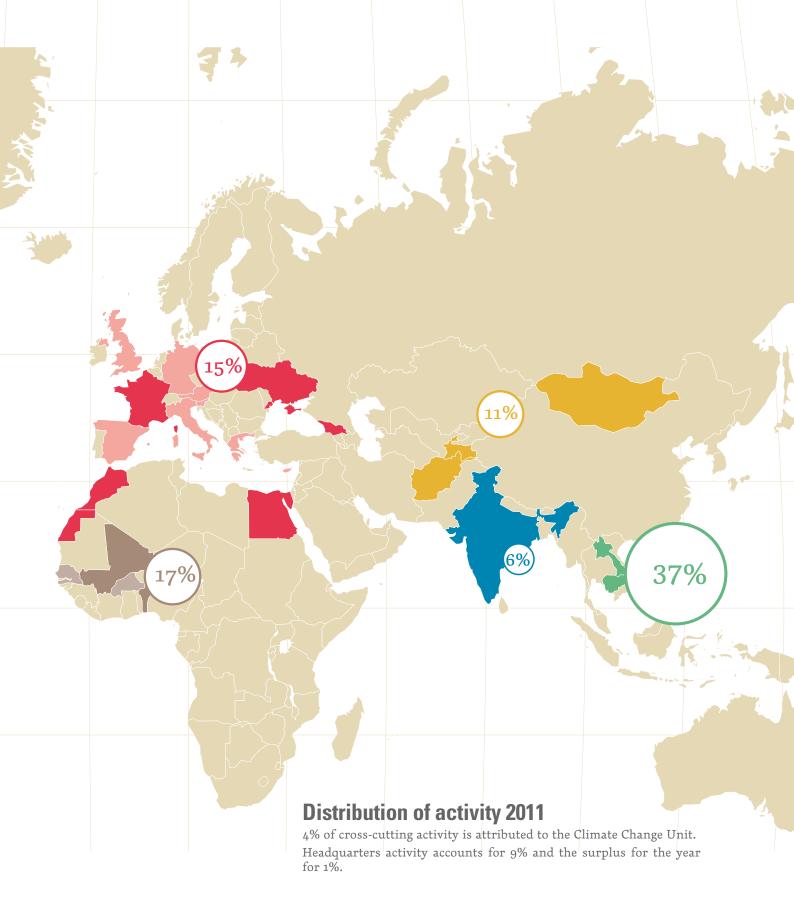


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# FINANCIAL REPORT

# **Financial Analysis**

The financial report describes GERES position as at 31/12/2011. In line with legal requirements, GERES financial statements for 2011 have been audited and certified by an external auditor.

### **Use of funds statement**

GERES total use of funds for 2011 or overall budget amounted to €8,612,309 in 2011, an increase of 34% in relation to 2010.

HQ expenses, totalling €811,000, have increased in absolute terms but reduced in volume, as they now represent 9% of the overall 2007 budget, as against 11% in 2010. Within the HQ budget, fundraising, communications and information costs remained stable, representing 0.4% and 1% respectively of total use of funds in 2011. Operating costs have been controlled as a result of deferral of several recruitments planned for HQ in 2011 which did not take place until 2012. The budget share allocated to operational activities and projects amounted to €7,745,000 in 2011, i.e. 90% of the overall budget, as against €5,648,000 and 88% in 2010. This increase reflects strong growth in activities, in both France and Europe (+42% in relation to 2010) and developing countries (+36% in relation to 2010).

**BY REGION** Within the budget for developing countries, considerable variations can nevertheless be seen at the level of individual regions:

- Steady expenditure in South-East Asia but recording of outstanding commitments in the amount of €1,838,000;
- Reduced budget and activities in West Africa and the Himalayas, as certain projects came to an end;
- Unchanged budget for the Central Asia region, within which the slowdown in activities in Afghanistan has been offset by the start-up of a new project in Tajikistan;
- Catch-up on delays accumulated in 2010 on projects in Morocco (included in the Europe-Mediterranean region).

**THE RESULT FOR THE 2011 FINANCIAL YEAR**, at + €57,000, is slightly down in relation to 2010. It is still inadequate in view of the overall budget and cash flow needs.

**TOTAL FUNDS FOR 2011**, excluding extraordinary income and writeback of outstanding commitments, amount to €8,326,614, an increase of 30% in relation to 2010.

**GRANTS INCREASED BY €183,000** to reach €5,008,000 in 2011, including €3,761,000 from public sources and €1,247,000 from private sources. The change in the distribution between public and private grants between 2010 and 2011 is due to both stepping up of work in partnership with other NGOs and increased fundraising, making it possible to rebalance the share of private funding within the project funding plan.

**INDIVIDUAL DONATIONS FELL BY 14%.** They amounted to €239,000 in 2011, as opposed to €279,000 in 2010; this trend is related to a sharp reduction in the number of donors.

THE SALE OF CARBON CREDITS deriving from the "Dissemination of efficient domestic cooking stoves" project in Cambodia is the funding source which increased most significantly in 2011, reaching €2,922,000, or 34% of total funds. Other sales of goods (sale of documents in France and sale of palm sugar in Cambodia) and services (various services in France or abroad) also progressed, bringing the total under this heading to €2,984,000 in 2011 as against €1,318,000 in 2010.

OTHER OPERATING income has increased significantly to reach €309,000 in 2011, with refunds of charges amounting to €33,000 (including €26,000 corresponding to partial coverage of a training course by our OPCA [accredited agency raising funds for training] and recognition of miscellaneous income amounting to €58,000. Extraordinary income amounted to €213,000 in 2011 and corresponds to recognition of income from earlier financial years. It includes €168,000 for Cambodia, €33,000 for the Climate Change Unit, €11,000 for Afghanistan and €1000 for Benin.

### **Dedicated funds or outstanding commitments**

The recording of dedicated funds in an amount of €1,837,992 for the "Dissemination of efficient domestic cooking stoves" project in Cambodia is justified by GERES commitment to the Cambodian government to devote all the income from carbon finance to its activities in Cambodia in general and biomass energy projects in particular. As a result, GERES allocates all these funds to supporting local producers of improved stoves, research and development on the next generation of stoves and investment in programmes of support to biomass supply (forest management and production of sustainable charcoal).

# **Use of funds statement**

USES	2011		2010	)	Variation 2011- 2010
		0/	0	000/	0/
Association's purpose	7 744 609	90%	5 647 730	88%	37%
France / Europe	1 110 496	13%	780 401	12%	42%
Developing countries	6 634 113	77%	4 867 329	76%	36%
Head office costs	810 688	9%	713 035	11%	14%
Fundraising costs	37 891	0,4%	27 573	0,4%	37%
Communication and information costs	110 727	1%	104 304	1,6%	6%
Operating costs	610 534	7%	506 178	7,9%	21%
Provision for depreciation	13 413	0,2%	13 001	0,2%	3%
Provision for expenditure	26 373	0,3%	53 296	0,8%	-51%
Financial expenditures	8 561	0,1%	8 683	0,1%	-1%
Extraordinary expenditures	3 189	ο%	-	о%	
Surplus of financial year	57 012	1%	67 950	1%	-16%
-					
TOTAL USES IN €	8 612 309	100%	6 428 715	100%	34%

RESOURCES	2011		2010	0	Variation 2011- 2010
Funds collected from individual donors	238 628	2,8%	278 972	4,5%	-14%
Individual donation CO <sub>2</sub> Solidaire	223 274	2,6%	249 634	4%	-11%
Other individual donation	15 354	0,2%	29 338	0,5%	-48%
Subsidies	5 007 953	58%	4 824 975	75%	4%
Public	3 760 608	44%	4 003 329	62%	-6%
Private	1 247 345	14%	821 646	13%	52%
Writing back of commitment on restricted grants	72 245	1%	-	ο%	
Production sold	2 984 358	34,6%	1 318 460	20,4%	126%
Goods	2 943 761	34,1%	1 310 439	20,3%	125%
Services	40 597	0,5%	8 021	0,1%	406%
Other income	309 125	3,6%	6 308	0,1%	4800%
Subscriptions	330	0%	220	ο%	50%
Reimbursment of expenses	33 704	0,4%	4 131	0,1%	716%
Other income	58 074	0,7%	748	о%	7664%
Financial income	3 566	о%	1 209	о%	195%
Exceptional income	213 451	2,5%	-	ο%	
TOTAL RESOURCES IN €	8 612 309	100%	6 428 715	100%	34%

# **Balance sheet**

NET ASSETS IN €	2011	2010	Variation 2011-2010
Tangible assets	56 723	24 546	131%
Financial Assets	5 981	4 477	34%
Total fixed assets in €	62 704	29 023	116%
Receivables	6 137 845	706 758	768%
Invoices to be issued	521 442	590 126	-12%
Invoices in advance	365 394	2 827	12826%
Short-term investments		-	
Cash	1 014 397	1 165 057	-13%
Total current assets in €	8 039 078	2 464 768	226%
TOTAL ASSETS IN €	8 101 782	2 493 791	225%

NET LIABILITIES IN €	2011	2010	Variation 2011-2010
Social Fund	366 146	298 197	23%
Operating result	57 012	67 950	-16%
Total associative funds in €	423 158	366 147	16%
Provision for end of service allowance	62 431	57 7 <sup>1</sup> 5	8%
Other provision	101 286	79 628	27%
Dedicated Funds	1 964 473	72 245	2619%
Total provision in €	2 128 190	209 588	915%
Financial liabilities	1 107	-	
Liabilities due to suppliers	223 409	206 481	8%
Tax and social security	344 885	241 953	43%
Deferred income	4 981 033	1 469 622	239%
Ttoal liabilities in €	5 550 434	1 918 056	189%
TOTAL LIABILITIES IN €	8 101 782	2 493 791	225%

The increase of 225% in the balance sheet total in 2011 in relation to 2010 is due to a new way of recognizing multiyear grants.

These are now entend in their entirety at the start of the funding agreement as receivables from donors (assets), while the share of grants not pertaining to the financial year is recognized as deferred income (liabilities).

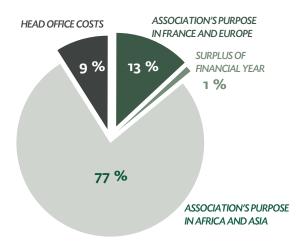
# **Profit and loss statement**

OPERATING EXPENSES IN €	2011	2010	Variation 2011-2010
Purchases and external services			
Non inventory purchases	50 067	275 074	-82%
External services	1 013 444	1 091 089	-7%
Taxation			
Taxation, registration fees	586	-	
Personnels costs			
Wages and salaries	1 331 580	973 968	37%
Social security	604 424	390 313	55%
Taxation on wages	88 199	63 622	39%
Other personnel costs	175 844	106 132	66%
Other management costs			
Transfers to projects	3 100 355	3 269 622	-5%
Miscellaneous equipment for projects	106 129	42 873	148%
Administrative costs	-	846	-100%
Provisions			
Provisions for depreciation	14 954	13 001	15%
Provision for operating costs	26 374	53 296	-51%
Commitment on restricted grants	1 964 473	72 245	2619%
TOTAL OPERATING EXPENSES IN €	8 476 429	6 352 081	33%

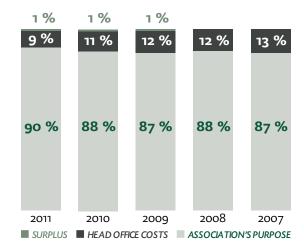
OPERATING INCOME IN €	2011	2010	Variation 2011-2010
Sales of goods and services	2 984 358	1 169 309	155%
Operating Subsidy	5 007 953	4 973 227	1%
Donations	238 628	278 972	-14%
Subscriptions	330	220	50%
Other income	91 778	5 777	1489%
Carry forward of unused funds from previous years	72 245		
TOTAL OPERATING INCOME IN €	8 395 292	6 427 505	31%
OPERATING RESULT IN €	81 136	75 424	-208%
Financial expenditures	14 028	8 683	62%
Financial income	3 566	1 209	195%
FINANCIAL RESULT IN €	-10 462	-7 474	40%
Extraordinary expenditures	213 451		
Extraordinary expenditure	213 451		
EXTRAORDINARY RESULT IN €	148 611	-	
CUMULATIVE RESULT IN €	57 012	67 950	-16%

# Use of funds in 2011

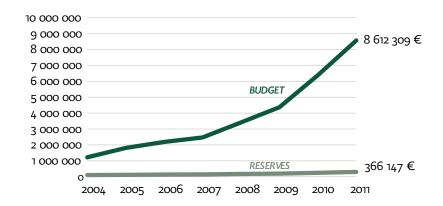
### Use of funds in 2011



### Changes in use of funds 2006-2011



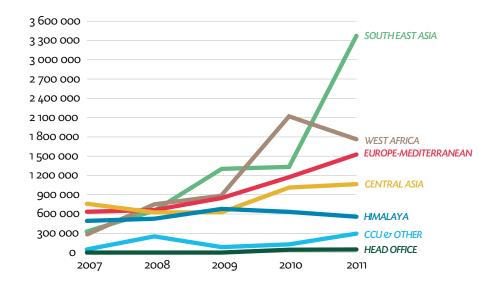
### Changes in turnover and reserves (in €)



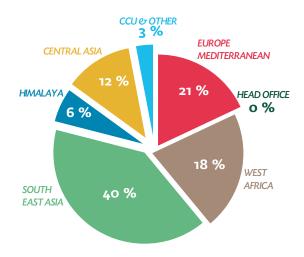
# Origin of funds per geographical area (in €)

	2011	2010	2009	2008	2007
Head office	35 800	32 030	0	0	0
Himalaya	557 581	632 831	679 115	526 340	492 603
Central Asia	1 064 034	1 011 756	626 055	624 492	759 678
South East Asia	3 372 474	1 332 795	1 302 089	646 839	315 154
West Africa	1 762 302	2 119 423	876 650	750 536	292 847
Europe Mediterranean	1 525 736	1 172 675	848 810	662 383	623 284
CCU & Other	294 382	127 205	84 372	251 723	36 285
TOTAL IN €	8 612 309	6 428 715	4 417 091	3 462 313	2 519 851

### Changes in funds per geographical area from 2007 to 2011 (in €)



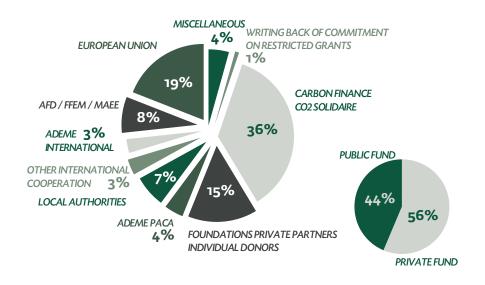
### Origin of funds per geographical area in 2011



# Origin of funds per source of funding (in €)

### Origin of funds per sources of funding in 2011

	2011	%	2010	%	2009	%	2008	%	2007	%
Public funds in €	3 760 607	44%	4 003 329	63%	2 273 566	51%	2 128 489	61%	1 749 987	69%
European Union	1 632 713	19%	1 509 586	24%	979 912	22%	947 670	27%	773 107	31%
AFD / FFEM / MAEE	655 363	8%	1 343 846	21%	617 549	14%	455 975	13%	379 557	15%
ADEME International	253 151	3%	139 815	2%	146 135	3%	237 010	7%	107 787	4%
Other international cooperation	288 051	3%	321 036	5%						
Local authorities	582 814	7%	432 634	7%	381 454	9%	350 942	10%	319 067	12%
ADEME PACA	348 515	4%	256 412	4%	148 516	3%	136 892	4%	170 469	7%
Private funds in €	4 851 702	56%	2 425 386	37%	2 143 525	49%	1 333 824	39%	769 866	31%
Foundations, Private partners, Individual donors	1 262 700	15%	862 944	13%	762 045	17%	1 333 824	39%	769 866	31%
Compagnies and fundations included	617 161	7%								
NGOs and similar	584 447	7%								
Awards and other private funds	61 092	1%								
Carbon Finance / CO <sub>2</sub> Solidaire	3 145 320	36%	1 559 549	24%	1 381 480	32%				
Writeback of commitments on restricted grants	72 245	1%								
Miscellaneous	371 437	4%	2 893	о%						
TOTAL IN €	8 612 309		6 428 715	100%	4 417 091	100%	3 462 313	100%	2 519 853	100%



GERES strategy and plan of action for 2012 were agreed at the strategic review seminar held in Cambodia in March 2012. This was attended by members of the Board of Directors, HQ management team, regional officers and managers of the various countries and units.

# Crosscutting strategic exercises :

### **Internal structuring of GERES**

At HQ: four separate sections are being established with the creation of two new units (Human Resources and Skills). They all have a role in support and co-ordination. In the regions: the decision-making power of country directors and units is being strengthened with changes in our governance principles in January 2012.

### Capitalization of know-how:

The "knowledge management" exercise is now facilitated by the manager of the "Skills" unit recruited to HQ in January 2012. This long-term process is designed to help GERES teams move over from information management to knowledge management. It includes the establishment of a community of experts, the improvement of documentary systems, the development of scientific partnerships and the strengthening of our analysis and forecasting capabilities.

### **Scaling up impacts:**

Work over the coming years will focus on mechanisms for disseminating tried and tested technical solutions, particularly on the theme of energy in cold regions and efficiency of cooking stoves in developing countries. In this regard, the creation of a cold regions co-ordinating committee is on the cards, while an overall biomass energy programme devoted to cooking stoves (Global Stove Programme in West Africa and South-East Asia ) is being set up.

In anticipation of the new challenges of adaptation to climate changes, it has been decided to launch several initiatives in areas where we have been working for many years, to assist local stakeholders in implementing measures to adapt to climate changes.

### In the regions

### In West Africa

The SETUP project in Benin, which supports investments that create economic activity (in sectors such as preservation of foodstuffs, efficient cooking appliances and production of high-quality groundnut oil), is continuing. It will enter its final year in 2012 but is likely to be extended. Implementation of the JatroREF project, which aims to establish benchmarks for sustainable biofuel supply chains in West Africa, is to continue in Benin and Mali, as well as Burkina Faso. The CEnAO project, aimed at large-scale dissemination of clean cooking technologies through using carbon finance as a medium-term lever, is beginning its second year of activity, mainly in Mali, with ad hoc support to the domestic energy sector in Benin. A new project in the field of adaptation to climate changes (CLIM-TERR), launched in Senegal in January 2012 on a one-year renewable basis, aims to build the capacities of regional officials of the Ferlo Inter-Regional Coalition to take more account of climate changes in local development strategies.

### In Europe-Mediterranean

**IN FRANCE AND EUROPE**. The theme of fuel poverty will form the core of various projects: result of participation in the European ACHIEVE and ELIHMED programmes, local activities in the PACA region of France, together with the housing project in Georgia and Ukraine.

Similarly, GERES expertise is growing on matters of energy efficiency (particularly in housing and agriculture). Housing activity is becoming much more structured with the recruitment of a programme officer to ensure co-ordination of the Energy Information Centres and specific programmes (co-ownership, Mediterranean Sustainable Building, etc.), by seeking to integrate supply and demand in response to the challenge of energy retrofitting in France. As regards agriculture, joining the restricted network of experts authorized to use ADEME's CLIMAGRI tool for energy/climate planning in agriculture has consolidated GERES expertise.

Regarding the waste management and recycling programme, it is planned to roll out the flagship activity on domestic and micro-collective composting; complement support for the composting sector by setting up a platform to share experience and disseminate good practice; and establish a methodology for waste management in middle schools.

Finally, the Clean Energy Production component should continue with the PHéE initiative, which is working towards a sustainable model, while the biogas initiative is continuing as this sector is obviously taking off. Following the end of the European SHARE project, GERES will offer training courses to reconcile hydro-electricity and protection of aquatic environments.

IN MOROCCO AND EGYPT The programme of support to the dissemination of energy-efficient equipment via microfinance in Morocco and Egypt will conclude at the end of 2012, having sown the seeds of projects to provide training and education on energy and to develop quality seals for efficient appliances. The pilot activity in hammams in Morocco is following its course and 2012 will see the first installation of boilers in a hammam, while the MNED programme in the region of Tanger Tétouan will enter its consolidation and continuity phase with activities relating to agroforestry, fruit-tree pruning and the production and dissemination of efficient cooking and heating appliances for rural households.

A wide-ranging programme is under consideration in a future national park in northern Morocco with a view to extending the work on wood energy developed in connection with the MNED programme.

### In Central Asia

IN TAJIKISTAN: The office opened in 2011 is focusing on current activities before considering rolling out new ones at the beginning of 2013. The large-scale development of a

market based on energy savings in homes offers considerable potential in view of the favourable local dynamics.

IN AFGHANISTAN: Activities in the field of housing will be extended. Following the success of the model in which artisans have built passive solar houses in rural areas, GERES is launching a similar programme in 2012 for urban areas. Research and development activity on improving heating and cooking stoves will be step up. GERES is working within the national framework of sustainable natural resource management, through carrying out socio-economic studies on energy practices and implementing partnerships. In the agricultural sector, GERES suggests solutions suited to local climatic conditions to improve communities' diet and income in the dry season. GERES continues to provide expertise and technical support to various operators in respect of building design, training and monitoring.

IN MONGOLIA: GERES direct involvement in the project to develop solar greenhouses for growing vegetables in partnership with Caritas Mongolia will come to an end, but technical support will continue to be provided. European Union funding has been agreed for a new project in the rural areas of Arkhangaï. GERES will look into the possibilities of large-scale dissemination of passive solar greenhouses in liaison with the government and local authorities.

### In the Himalayas

IN INDIA, the project to disseminate bioclimatic buildings in Ladakh and Himachal Pradesh will conclude at the end of 2012. Activities to strengthen local capacities and policies are already under way. Future plans include a resource centre for low-energy buildings, proposals for regulation to be discussed with the government and the formalization of the NGO network. The ongoing study on issues of adaptation to climate changes in Ladakh could result in a plan of action as of 2013, subject to funding. In Nepal, it is planned to launch a pilot solar conservatory/greenhouse project in the region of Khumbu

### **South-East Asia**

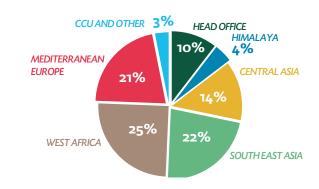
IN CAMBODIA, A study has been launched with a view to countrywide rollout of the improved cooking stove project in rural areas. The project to disseminate improved stoves in urban areas is continuing throughout the country. To facilitate these efforts and begin its exit from the programme, GERES is rolling out a programme to strengthen ICoProDAC, the co-operative of improved stove producers and distributors incubated by GERES, so that it can become independent and able on its own to maintain the improved stove supply chain in Cambodia. GERES will continue to work with ICoProDAC in a long-term partnership. Applications received by GERES from developers of stove dissemination projects throughout the sub-region for technical support and sharing of experience provide an opportunity to formalize the provision of expertise, whilst strengthening capacities. The agroforestry and sustainable charcoal production projects will be strengthened with funding from UNDP - Global Environment Facility.

### **Provisional Budget**

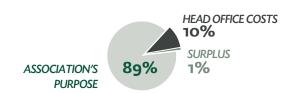
# Provisional 2012 Budget per geographical area (in €)

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	2012	%
Head office	921 991	10%
Himalaya (India)	370 655	4%
Central Asia	1 197 208	13%
Afghanistan	697 371	7,5%
Tajikistan	458 073	5%
Mongolia	41 764	0,5%
South East Asia (Cambodia)	1 979 091	22%
West Africa	2 197 081	25%
Benin	814 664	9%
Mali	1 219 107	14%
Senegal	163 310	2%
Europe-Mediterranean	1 875 016	21%
France	1 505 759	17%
Morocco	369 257	4%
Climate Change Unit	276 265	4%
France (CO <sub>2</sub> Solidaire)	143 232	2%
Multi-country	133 033	2%
Surplus of financial year	72 546	1%
TOTAL IN €	8 889 853	100%

# Estimted distribution of funds per geographical area in 2012



### Estimated distribution of use of funds in 2012



# **Financial partners**

Air France - Flying blue Pressade - Mon Jus d'ici These two partners are supporting the whole GERES mission and activities. Thus, there are not represented on our project pages. 1+1=3 23, 24, 25 Abbé Pierre Foundation 23, 24, 25, 42 ADEME PACA - Environment and Energy Management Agency 44, 45, 46, 47 ADEREE - National Agency for the Development of Renewable Energies and Energy Efficiency 51 ADEME - Environment and Energy Management Agency 23, 24, 25, 35, 36, 37, 43, 49, 55 AFD (French Development Agency) 18, 19, 36, 49, 55, 56 Agentschaap NL - Daey Ouwens Fund 35 Aga Khan Foundation 18 ARDI Foundation 51 Bouches-du-Rhône Departmental Council 43, 47 blue moon fund 28, 55, 57 Capenergies cluster 43 CARF - Cambodia Agricultural Research Fund 31 CDC Climat - Caisse des Dépôts et Consignations 55, 57 CFSI - French International Solidarity Committee 35 Crédit Coopératif 23, 24, 25 DBACD - Dakahlya Businessmen' Association for Community Development (Egypt) 51 DFID - UK Department for International Development 55 DREAL PACA - Regional Environment, Development and Housing Department 44 EDF 42, 44 EEP - Energy and Environment Partnership - Mekong 30 Egyptian Association for Comprehensive Development (EACD Egypte) 51 Enea Consulting (skills-based sponsorship arrangement) 54 FFEM - French Global Environment Facility 35, 55 Foundation de France 44 Ensemble Foundation 23, 24, 25 European Union 20, 21, 23, 24, 25, 37, 41 European Union - Alpine Space 40 European Union - Smart Energy for Europe 42 European Union (Energy Facility II) 35 European Union - FEDER - MED Programme 42 GDF-SUEZ Foundation 40 GEG - Gaz et électricité de Grenoble 23, 24, 25 GESPER - GEStion de Proximité de l'Environnement en Région (environmental association) 46 GERERE - Study and Research Group on Renewable Energies and the Environment 51 Indian Government (MNRE - Ministry of New & Renewable Energy) 23, 24, 25 IRAM - Institute for Applied Research in Development Methodology 35 Legallais Foundation 23, 24, 25 Lord Michelham of Hellingly Foundation 23, 24, 25 Macif Foundation 23, 24, 25, 49 MAEE - French Ministry of Foreign Affairs 37 Marseille Provence Métropole Urban Authority 43 Ministry of Industry, Mines and Energy (World Bank funding) 30 Nexus - Carbon for Development 36, 55 PACA Regional Council 43, 44, 45, 46, 47, 49 Pays d'Aubagne et de l'étoile Urban District Authority 43 Planet Finance (project developer) 51 POWEO Foundation 37, 49 Prince Albert II of Monaco Foundation 35, 49 Principality of Monaco 20 Rener 45 Rhône Mediterranean Water Authority 44 SCAC Morocco - French Embassy Co-operation and Cultural Action Section 49, 50 Secours Catholique - Caritas France 20 Solagro 46 Synergie Solaire 23, 24, 25, 35, 37 TATE - Total Access to Energy 35 UNDP Morocco - Global Environment Facility Micro-Finance Programme 49 Veolia Environment Foundation 49 World Bank 35

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# **Technical partners**

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