GENDER AND SUSTAINABLE ENERGY

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NEWSLETTER OF THE NETWORK FOR GENDER AND SUSTAINABLE ENERGY

Contents

Women digging a canal for a micro-hydro scheme in Nepal. Although micro-hydro has gained a reputation of being gender sensitive, large micro-hydro schemes may have an uneven involvement of women in the intervention process. (Photo: Courtesy of REDP)

The Asia Perspective:

Integrating Gender into the Energy Sector

Women in rural areas of Asia suffer from excessive workloads and drudgery, and face day-to-day problems in managing household energy and water needs. These issues were well articulated in the keynote speech by Mieko Nishimizu[1] delivered at the Regional Workshop on Household Energy, Indoor Air Pollution and Health, held in May 2002 in India, as below:

"It is dark inside.
The Shape of a woman emerges.
We can barely see her, but for the dim glow and flicker of a wood fire.
At a glance she seems awfully efficient – "multitasking" we might say.
She squats deeply – a baby on her back, an eye and a gentle word to a toddler nearby.
She is pummelling dough and slapping a flat round of it onto the mud wall of her stove.
She stirs a sizzling pot, hushes the baby as he begins to cry.
The baby coughs, and she pats his little back.
She turns to us - and smiles ambiguously.
Her eyes squint water."

The situation depicted above not only entails drudgery but is often hazardous for women's health and lives. Women are travelling longer distances to fetch water, fodder and fuel as the quality and quantity of natural resources such as forest and water are being depleted faster than they regenerate, with environmental consequences. This situation is further aggravated by the inefficient use of fuelwood and the significant loss of agriculture productivity due to the diversion of crop and animal wastes from fertilizer to cooking and heating functions. This has increased health problems associated with indoor air pollution; as well as resulting in other social and economic impacts arising from fuel

collection and use, many of which fall disproportionately on women and children.

The ill-effects of headloading, manually grinding grains, and hazardous cooking methods are evident in the poor health of women. Increased poverty and the migration of men from rural areas to towns in search of cash income add to women's burdens.

New technological and institutional interventions that are being introduced under various programmes demand active participation by women. These increase their workload, and in many cases women's participation becomes a 'token' given their lack of time to spend training and in meetings due to the lack of any interventions to reduce their already heavy workload. Technological interventions to reduce women's drudgery and improve their health have often led to decreased control by women over the very technologies and a shift in decision-making power to male members of the households due to them being ill thought-out. Energy and water interventions for women should, therefore, aim to:

- reduce hours spent working;
- reduce drudgery;
- minimise hazards and risks to health and life;
- increase productivity;
- enhance equity in sharing of work and benefits; and
- expand options for productive work through the saving of time and energy.

Some international and regional organisations such as the FAO-Regional Wood Energy Development Program (RWEDP), the Asia Regional Cookstove Program (ARECOP), the International Center for Integrated Mountain Development (ICIMOD), and the Regional Community Forestry Training Centre for Asia and the Pacific (RECOFTC), have made efforts to place gender on the agenda of energy policy makers through various activities.

***ENERGIA* is also** trying to stimulate networking on gender and energy in Asia and is planning to hold a regional workshop in New Delhi, India later this year for the countries that have demonstrated a commitment to developing national networks in this field. Further, the Centre for Rural Technology in Nepal is holding a National Consultative Workshop on Gender, Energy, and Water in Nepal as we go to press, which it is hoped will lead to the establishment of a National Network on Gender, Energy and Water in Nepal.

Despite these efforts, there have been no tangible policies on gender in energy in any Asian country. This is a challenging situation requiring consistent advocacy and lobbying. Similarly, demonstration of gender in energy through various activities needs to continue to provide proof that gender in energy can make a difference.

This special issue of **ENERGIA News** highlights work and activities being carried out at the regional and national levels. Strategies, methodologies, as well as cases studies and reports, are presented to help us understand efforts in Asia to integrate gender in the energy sector.

An appropriate approach called the "solar basket fund", described in the article "Making a World of Difference in the Homes of a Few", shows how renewable energy technology can increase women's roles, position, and opportunities within their society. In China, a case study based in the Baima Snow Mountain Nature Reserve has shown that in introducing biogas technology, the role of women quite significantly contributed to the success of the project even though women were not the direct target group. Had a gender approach been applied from the beginning, the project could have been even more successful. Another interesting effort to put women into decision-making positions and to become active members of their community while at the same time helping to conserve energy is well described in the article "Creating Awareness of Energy Conservation in Vietnam, Lao PDR, and Cambodia".

Yet, despite the number of interventions involving renewable energy technologies, their impact on women is still doubted. In a Nepalese case study, described in an article here, it is argued that women remain the silent victims of renewable energy technologies. If this is true then we need to review project approaches and strategies.

The Methodology for Participatory Assessment (MPA) is a comprehensive social assessment technique that links sustainability with demand-responsiveness and gender and poverty sensitive approaches. It is a participatory methodology producing qualitative and quantitative information that can be used for designing, monitoring and evaluating a project. This methodology was originally developed by the IRC and the World Bank's Water and Sanitation Program. In the biomass energy and improved cookstove field, the need for a dissemination strategy that is more gender and poverty sensitive, and that will ensure greater sustainability, has led ARECOP to adopt and adapt the MPA. The field-testing of the MPA application is discussed in the feature on ARECOP's Cookstove Program. A similar type of initiative is being developed by Winrock International in collaboration with the World Bank ASTAE/EnPoGen, Mallika Consultants, and *ENERGIA* but with a focus more on rural electrification.

The growing awareness of gender and energy in Asia is evident in the interesting interview with Ishara Mahat, a PhD student researching this very subject. ■

[1] *Vice President, South Asian Region, World Bank.*

◆ Ms Aristanti was born on 10 April 1955, and in 1980 she joined the appropriate technology group, Yayasan Dian Desa, based in Yogyakarta, Indonesia, as the assistant to the director. From 1982 – 1986 she was a member of the Executive Committee of SATIS (Socially Appropriate Technology Information Service), a worldwide network providing information on appropriate technology. Her experience in networking led her to join the Asia Regional Cook Stove Program (ARECOP) in 1990, and since 1992 she has been its manager. Ms Aristanti can be contacted at: **ARECOP, P.O. Box 19, Bulaksumur, 55281, Yogyakarta, Indonesia; Tel: +62.(0)274.885 247, Fax: +62.(0)274.885 423, Email:arecop@ydd.org**

◆ Dr Rijal holds a PhD in energy economics and planning from the Indian Institute of Technology, New Delhi, India, and a Masters Degree from the Energy Division of the Asian Institute of Technology, Bangkok, Thailand. He has coordinated a number of projects funded by CIDA, FAO, World Bank, ESCAP, and UNDP, in the fields of renewable energy, water, rural development, and environment. In 1993, he led a team of professionals preparing the 25 Years Perspective Energy Plan for Nepal. In August 1995, Dr Rijal joined ICIMOD as Renewable Energy Specialist and he serves as a member of Nepal's Engineering Council. Dr Rijal can be contacted at: **ICIMOD, G.P.O. Box 3226, Kathmandu, Nepal; Tel: +977.(0)1.525 313/525 314, Fax: +977.(0)1.524 509, Email:krijal@icimod.org.np**

News from the Secretariat

The *ENERGIA* Secretariat is delighted to inform you that Sheila Oparaocha, coordinator of *ENERGIA* Phase 2, has given birth to Wanjiku, a healthy baby girl. Congratulations Sheila and Henk!

We would also like to take this opportunity to welcome Ir Anita Vlasveld as interim *ENERGIA* coordinator while Sheila is on maternity leave (1 May to 8 August 2002). Anita studied Social Sciences of Human Nutrition at the Wageningen Agricultural University, the Netherlands and has over ten years experience in the field of energy, environment, natural resource management, and water with a focus on the South –including 5 years of work experience in the South. She has two daughters (6 and 10 years old) and is an active soccer player!

Since, on her return, Sheila will be mainly involved in preparing for, and attending, the World Summit on Sustainable Development, Anita will continue her activities at the *ENERGIA* Secretariat until the end of October this year.

ENERGIA Phase 3 Proposal

As a follow-up to the Strategic Planning Meeting for *ENERGIA* Phase 3, held in February 2002 in the Netherlands, a proposal for Phase 3 was developed by the *ENERGIA* Secretariat, with an Advisory Committee consisting of representatives from the regions (selected during the planning meeting) providing comments on, and input to, the draft proposal. Based on these inputs, the proposal is currently being finalised and will be submitted to several donors, including the Netherlands Directorate General of International Cooperation (DGIS), and the Swedish International Development Cooperation Agency (SIDA).

Participation at WSSD

***ENERGIA* is pleased** to announce that, with financial support from DGIS, Gail Karlsson was able to represent *ENERGIA* at the Fourth Preparatory Committee meeting for the World Summit on Sustainable Development (WSSD), held in Bali, Indonesia from 27 May to 7 June 2002. Gail spoke about the importance of gender and energy issues at meetings of the Women's Caucus and the Energy Caucus, and at a press conference and a televised briefing on sustainable energy. A report on Gail's participation is posted on the *ENERGIA* website.

***ENERGIA* has also** received support from SIDA for participation in the WSSD itself, which will be held in Johannesburg, South Africa from 26 August to 4 September 2002. In addition to Sheila Oparaocha and Gail Karlsson, a number of other *ENERGIA* members will be attending the WSSD including Tieho Makhabane (South Africa), Jyoti Parikh (India), Rachel Polestico (Philippines), and Adélia de Melo Branco (Brazil). They will team up with other members representing their own organisations including Fatma Denton (ENDA, Senegal), Feri Lumampao (APPROTECH, Philippines), Lalita Balakrishnan (AIWC, India), and Khamarunga Banda (MEPC, South Africa).

For the WSSD, *ENERGIA* is preparing a special informational brochure, as well as regional papers on gender and energy issues in Africa, South Asia, Southeast Asia, and Latin America. The papers look at best practices for gender-sensitive energy projects and programmes, and are aimed at influencing the development of energy initiatives undertaken to implement the WSSD plan of action.

On 23 August 2002, just before the WSSD, *ENERGIA* will hold a strategic planning session for those attending the Summit. As part of their advocacy work, *ENERGIA* members will make presentations at the Implementation Conference (24–26 August), sponsored by the Stakeholder Forum for Our Common Future, and at a special event on gender and sustainable energy which will be held in the Women's Tent on 29 August. A special issue of **ENERGIA News**, in December 2002, will highlight *ENERGIA*'s participation in the WSSD and the outcomes of the Summit with regard to gender and energy.

ENERGIA Africa Focal Point Meeting

The *ENERGIA* Africa Focal Point Meeting was held in Nairobi, Kenya, on 13 and 14 June 2002 and was hosted by the East Africa regional focal point, Intermediate Technology Development Group-Eastern Africa (ITDG-EA) on behalf of the *ENERGIA* Secretariat. The objective was to chart a way forward in the area of Gender and Energy Networks in Africa. This meeting was an important follow-up to the Regional Workshop on Women and Sustainable Energy in Africa[1], and the Strategic Planning Meeting for *ENERGIA* Phase 3.

Participants in the *ENERGIA* African Focal Point Meeting were drawn from West Africa (ENDA-Senegal, Friends of the Environment-Nigeria, GEDA-Ghana), East Africa (ITDG-EA, WYOCC, Winrock International), and South Africa (MEPC, SAGEN). Joy Clancy participated on behalf of the *ENERGIA* Secretariat.

Goals of the meeting were to:

- Discuss ways of networking between the *ENERGIA* Africa Focal Points, focusing on recommending a suitable structure for the Africa network after examining the strengths and limitations of the existing structure, and on reviewing, and making recommendations over, the roles and functions of the different levels within the structure.
- Develop an action plan for the network for 2003 and discuss: how to put into operation the Regional African Proposal originally developed by the Environmental Liaison Center International (ELCI); ways of capacity building with members in the African region; and mainstreaming Gender and Energy in the WSSD, and any initiatives arising from the Summit.

Outcomes of the meeting included:

- Formalising the new Africa focal points structure, brainstorming on possible locations, and key milestones, prior to holding an African network meeting preferably in October or November 2003.
- Discussions on how to enhance capacity building among the African focal points centred around the development of a database of potential members of the national focal points network, and strengthening of some of the activities already started by the focal points.
- Revisions and amendments to the WSSD proposal, the *ENERGIA* Phase 3 proposal, and the African region proposal developed by ELCI.

Participants to the ENERGIA African Focal Point Meeting. (Photo: Courtesy of Martha Mathenge)

• Based on experiences gained from participating in the preparatory process leading up to WSSD, there was a presentation on Type 2 partnerships, that are expected to form part of the outcome of WSSD, and a discussion on how *ENERGIA* could become involved in them. ■

◆ This brief meeting report was kindly contributed by: **Martha Mathenge, Energy Programme, ITDG-EA, P.O. Box 39493, Nairobi, Kenya; Tel: +254.(0)2.713 540/719 413, Fax: +254.(0)2.710 083, Email: martha@itdg.or.ke**

[1] *Held in March 2000, in Nairobi, Kenya. The meeting was instrumental in establishing a gender and energy network in Africa.*

Meeting *ENERGIA* Members

Ishara Mahat

PhD Student in Gender and Energy

Interview by Khamarunga Banda, Minerals and Energy Policy Centre, South Africa

Please tell us about yourself, and how you came to choose Gender and Energy as your PhD topic?

My basic degree is an MBA from Nepal; and I also have an MSc in Regional Development Planning and Management from AIT, Bangkok, following a Postgraduate Diploma on the same subject from the University of Dortmund, Germany.
I have a rich experience of women and children, and gender and development, issues from working with different government, non-government, and international agencies in Nepal. My major tasks have been assessing and developing feasible projects for women, assessing the organisational capacity of implementing units, assisting them in implementation and the monitoring and evaluation of projects. My previous research involved women and credit, women and child health, and small women's enterprises. My experience with rural women indicated that they have very limited time for economic, social and community activities, though they were very sincere and active in saving and credit activities. Whenever I had a meeting with women's groups, they always had to rush saying: "I have to cook", "I have to go to bring fodder/firewood", and "I have to go to fetch water" etc. Their worries were concentrated around these topics. This suggested that it would be worthwhile focussing on Gender and Energy in my PhD research.

What motivated you to choose REDP sites for your PhD?

I chose REDP sites, since REDP had come up with a new paradigm (a holistic approach with six basic principles: organisation development, capital formation, skill enhancement, technology promotion, environment management, and women empowerment) for ensuring sustainable rural energy systems. I wanted to explore if REDP with its holistic approach is appropriately contributing towards the challenges (ownership, sustainability, and empowerment) that have always existed in the rural energy sector. More specifically, I wanted to examine how far REDP has been successful in terms of its gender focus within its decentralised energy planning framework.

How is progress, and could you share with us some of the problems you have encountered so far?

It is a few months since I arrived back from doing fieldwork, and I am presently analysing my field data. I think I am halfway towards my PhD. The major problems I faced were finding enough literature on relevant issues, selecting appropriate tools for analysing the issues, and organising the time with my research participants for interviews and discussions during the fieldwork.
With the present civil conflict in Nepal, I was initially very nervous about carrying out my fieldwork. Once, I nearly lost my confidence when I saw a truck carrying 16 dead bodies. I have been really lucky that I could continue my work and collect information from the villages without facing any violence.

The application of methodology and tools can vary in Gender and Energy research, and most tools are biased towards plains. The treatment required in hill and mountain contexts may be very different. Share with us these challenges and how you overcame them?

Yes, this is true. I used the activity profile as one tool for analysing the work burden of women. However, it was not accurate in representing women's workload and working hours. In the mid-hill area of my research, their activities vary significantly during different seasons. In order to more accurately calculate working hours, I obtained the time spent on extra activities apart from the regular daily activities. I think the revised working hours provide a better indication of the true working hours.
It was also difficult to depict the gendered base information (such as access to technology and resources, or household head) on my social map as there was much general information to cover in such a map with scattered settlements within a village. I had to analyse separately, in focused group discussions, gender access and control over resources and technologies.

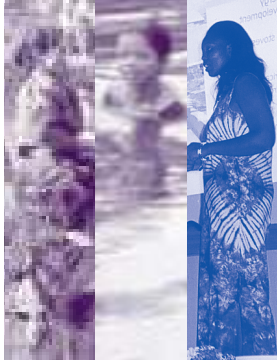
Some people would argue that gender and energy is not a pressing need for Nepal - what is your comment?

Really, I completely disagree. It is very important in my context, where more than 80% of people living in rural areas depend on biomass for their cooking needs, which is mostly managed by women. Rural Nepalese women in general, and mountain women in particular, are greatly involved in managing the household energy system. Rural mountain women still walk for four or five hours to collect firewood and wake up around 4 a.m. to hull and grind grain.
With the growing attention from donors and the government to the rural energy sector, there is a great opportunity to reduce women's workload and improve their health. Further, women's empowerment through rural energy-based enterprises has a large potential for rural development of the country, although this has yet to materialise. I thus feel gender and energy deserves attention in order to improve the quality of rural Nepalese women's lives and combat poverty.

How did you find the status of gender and energy in Asia?

I think gender and energy is a hidden issue in Asia. I hear, read, and see, little on gender and energy in our context. As elsewhere in developing countries, gender roles in energy production, management and utilisation, within and beyond the household, are still to be recognised in an Asian context. There is no gender-disaggregated information available in the energy sector to provide a strong base for developing gender indicators and applying the appropriate gender tools in

see page 20 ❯



International Programmes: Focus on

ARECOP - The Second Phase

Christina Aristanti

Improved cookstove programmes have been around since the 1940s and address issues surrounding the use of biomass energy. As a component of integrated approaches, improved cookstove programmes have been implemented as a means to improve health, reduce workloads, and protect the environment, with auxiliary benefits such as income generation, improvement of women's social standing, and empowerment of marginal communities.

The Asia Regional Cookstove Program (ARECOP) was initiated in 1991 as a network of NGOs in the Asia region with its main focus on improved cookstoves (ICS) and sustainable biomass fuel use. After four years of reduced activities, ARECOP is back and has been active again since early 2000 as a network in Asia. ARECOP has been mainly financed by DGIS, but also has other funding and other resource support from its partners around the region.

From the very beginning, ARECOP has recognised the interdisciplinary nature of improved cookstove programmes (ICP) and aims for integration with complementary programmes on health, environment, food technology, small-scale industries, kitchen management, etc. Gender and poverty have also become a focus of ARECOP activities, as its sensitivity will enhance ICP sustainability.

The ARECOP network covers 14 countries in Asia: Bangladesh, Bhutan, Cambodia, China, India, Indonesia, Laos, Myanmar, Nepal, Pakistan, Philippines, Sri Lanka, Thailand, and Vietnam.

ARECOP's Goals and Objectives

ARECOP aims to enhance the sustainability and adoption rate of improved cookstove programmes through integration with related issues. A strong approach for enhancing the sustainability and adoption rate, promoted through the ARECOP network, is the Methodology for Participatory Assessment of Improved Cookstove Programmes that links demand-responsive gender and poverty to sustainability.

ARECOP also aims to create a strong network for communication and cooperation to ensure that the needs of biomass fuel users will continue to be addressed in the future. This is to be achieved through facilitating the development of a strong regional network, skill and capacity building, support and recognition for biomass energy and improved cookstoves and related issues, as well as by promoting biomass fuel resources and improved cookstoves as integral components of sustainable development to stimulate the integration of improved cookstove technology into the agendas of organisations in other sectors with complementary objectives.

ARECOP Secretariat

The ARECOP Secretariat is hosted by Yayasan Dian Desa, an NGO based in Yogyakarta, and consists of:

- Manager: Christina Aristanti
- Programme Officers: Aryanto Sudjarwo and Syahri Ramadhan
- Publication Officers: Edwin Sudjarwo and Erwan Kow
- Secretary: Wahyunarsih

ARECOP Regional Partners

Particularly crucial to the effectiveness with which ARECOP meets its objectives is the maximisation of programme resources through coordination with its international counterpart organisations. The development of such relationships sheds some light on how they can lead to stronger programmes and enhanced achievements. Some of ARECOP's international partners are: FAO-RWEDP (unfortunately closed down in December 2001), LUND Center for Habitat Studies (LCHS), GTZ-HEP, ITDG, HEDON group, *ENERGIA*, and APPROTECH ASIA

Proactive Networking

To meet the basic needs of improved cookstove programmes to access information, the skills and the opportunities necessary to effectively address the issues the network faces in doing its work, the network actively follows up and ensures continuity in addressing pertinent issues, hence the term 'proactive':

- Publications, such as Letter from the Secretariat -a news bulletin of the activities and developments of ARECOP and regional partners-; GLOW Magazine; bi-annual dossier of recommended publications; and other publications, such as manuals and case studies.
- Information Centre, including a database on ICS technology and programmes; information on ARECOP member countries, reference materials, roster of experts; and the ARECOP website.
- Support for skills and capacity building available through training and exchange of

Some of the publications of the Asia Regional Cookstove Programme: GLOW Magazine and the Samaki Stove Manual on CD-Rom. (Photo: Courtesy of ARECOP)

experts as well as financial support for innovative programmes.
- Stimulate the recognition and understanding of ICS at an international level through bridge building for popular and integrative approaches, by developing relationships with international agencies and NGOs.
- Organise Technical Advisory Meetings to ensure that the network is used as a sounding board for developing new programmes and ideas, and that the members have a voice in deciding ARECOP's future directions.

Decentralisation: Establishment of National Networks on ICP

Networking at the international level is necessary and important. However, ARECOP recognises that, in order to reach all the stakeholders in ICPs, there are obstacles faced related to diversity in language, sociocultural aspects, as well as to the geographic situation in each country and region.

In the interest of encouraging activities and programmes that have a strong potential to impact on the long-term effectiveness of ICPs through the coordination and involvement of stakeholders in improved biomass fuel consumption, ARECOP's strategy is to decentralise its activities to national level initiatives.

Through the provision of ARECOP's guidance and assistance, the national networks will become focal points of future initiatives from diverse organisations and sectors to address biomass fuel issues, especially improved cookstoves, within their respective countries and, it is hoped, in the Asian regions. It is a strategy for greater overall effectiveness of ICPs, as a group and individually. ARECOP's role in the respective networks will gradually decrease reflecting heightened local independence.

ARECOP at present has established seven national ICP networks, each coordinated by a strong organisation:

- **Bangladesh:**
Village Education Research Centre (VERC), Yakub Hossain, G.P.O. Box 2281, Dhaka, Bangladesh; Tel: +880.(0)2.771 0779, Fax: +880.(0)2.811 3095, Email: verc@bangla.net

- **Cambodia:**
Wood Energy Network of Cambodia (WENetCam), Centre d'Étude et de Développement Agricole, #1 Street 223, Psar Depot I, P.O. Box 1118, Phnom Penh, Cambodia; Tel: +855.(0)23.880 916, Fax: +855.(0)23.880 916, Email: Cedac@camnet.com.kh

Gender and poverty have become a focus of ARECOP activities, as its sensitivity will enhance ICP sustainability.
(Photo: Courtesy of ARECOP)

- **Indonesia:**
Yayasan Dian Desa - Jaringan Kerja Tungku Indonesia, Feri Iskandar, Jl. Kaliurang km. 7, Jurugsari IV/19, Yogyakarta, Indonesia; Tel: +62.(0)274.885 423/885 247, Fax: +62.(0)274.885 423, Email: diandesa@ydd.org

- **Nepal:**
Centre for Rural Technology Nepal (CRT/N), Moon Shresta, P.O. Box 3628, Tripureswor, Kathmandu, Nepal; Tel: +977.(0)1.260 165/256 819, Fax: +977.(0)1.257 922, Email: crt_net@ntc.net.np, or crt@wlink.com.np

- **Philippines:**
APPROTECH ASIA, Feri Lumampao, Philippine Social Development Center Building, Magallanes Cor. Real St., Intramuros, Manila 1002, Philippines; Tel: +63.(0)2.527 6514, Fax: +63.(0)2.527 3744, Email: aptech@edsamail.com.ph, or fglumampao@yahoo.com

- **Sri Lanka:**
Integrated Development Association (IDEA), Abayawardhana, 20 Hantana Place, Kandy, Sri Lanka, Tel: +94.(0)8.232 007, Email: idea@sltnet.lk

- **Vietnam:**
Research Centre for Architectural and Climatology and Environment (RCAICE), Le Van Thong, KM. 9 Nguyen Trai Street, Thanh XuanHanoi, Vietnam; Tel/Fax: +84.(0)4.854 2374/854 2073, Email: pth@hn.vnn.vn

Regional Development Initiatives

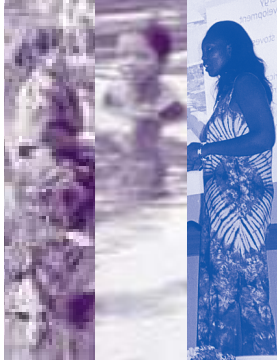
To address common issues and obstacles faced by existing improved cookstove programmes, ARECOP has developed a number of regional activities. One of the pertinent issues addressed by ARECOP is the incorporation of gender into the energy sector, especially in the field of improved cookstoves and biomass energy use and applications. ARECOP's concerns with the incorporation of gender have led ARECOP to work on a gender and poverty sensitive approach for improved cookstove programmes.

Regional initiatives include workshops, training, and publications that address common regional needs and issues, including:
- Incorporation of gender considerations in ICS: development of guidelines both for planning and monitoring and for evaluation of methodology for participatory assessment (MPA) of improved cookstoves - linking gender and poverty to sustainability in ICPs (see box).
- Training at the national and regional levels on technical and programmatic ICS skills.
- Small Scale Industries.
- ICS commercialisation. ■

Methodology for Participatory Assessment in Improved Cookstove Programmes - Linking Gender and Poverty to Demand and Sustainability

In the interest of creating a more sustainable, yet gender and poverty sensitive ICP, ARECOP has adopted the Water Supply and Sanitation manual on Methodology for Participatory Assessment (MPA) developed by the World Bank Water and Sanitation Group and IRC. ARECOP has developed and worked on some field trials on both the planning and monitoring and the evaluation MPA on ICP. The MPA planning guidelines were tried in Indonesia through a training session attended by six NGOs who had shown great interest in applying the MPA approach. At present, two organisations have applied the MPA on ICP and are in the process of implementing the ICS project as planned by the community. In May 2002, after improving the planning manual based on the experience of an Indonesian colleague, ARECOP trained six NGOs in Cambodia who had also shown interest in applying the MPA in ICP in their ICS project.

◆ For contact details of ARECOP, please refer to: The Asia Perspective: Integrating Gender into the Energy Sector.



International Programmes: Focus on

ICIMOD on Gender, Sustainable Energy and Water

Kamal Rijal

ICIMOD was established in 1983, with the mission to help promote the development of economically sound mountain ecosystems and to improve the living standards of mountain populations in the Hindu Kush – Himalayas[1] (HKH).

ICIMOD is an independent international centre governed by a Board of Governors consisting of one representative from each of the eight Regional Member Countries (RMCs) and seven independent members who are nominated by the ICIMOD Support Group (ISG) based on their HKH-specific expertise and experience.

Problems of poverty, soil degradation, deforestation, and overgrazing are common, while desertification in the arid and semi-arid western areas and soil degradation under shifting cultivation in the humid eastern areas of the HKH are examples of location-specific problems. Within the overall mandate of poverty alleviation and environmental conservation, ICIMOD's statutes include four specific tasks:

- To be a multidisciplinary centre for documentation on integrated mountain development;
- To be a focal point for the mobilisation, implementation and coordination of applied and problem-solving approaches;
- To be a focal point for training on integrated mountain development; and
- To be a consultative centre for providing expert services on mountain development to the countries of the HKH Region.

Gender and the ICIMOD Programme

From the start of ICIMOD activities, gender issues have been considered in most of the projects, realising that mountain women suffer most from drudgery, not only from the collection of fuelwood, fodder, and water (including their large contribution to farming land) due to the topography, but also due to the increasing number of female-headed households due to the relatively high migration of men to earn cash income compared to their counterparts on the plains.

Besides this, women in hill and mountain areas are subject to various risks and hazards associated with the fragile eco-systems and the rapid deforestation and desertification. In terms of participation in decision-making, there are various experiences in the hills and mountains across Hindu Kush - Himalayas. For example, in countries such as Bhutan, matrilineal systems prevail rather than a patriarchal society such as in India or Nepal. Similarly, access to and control over resources, technologies, and information varies across the HKH Region (Gurung, 1999).

Highlights of Gender, Renewable Energy, and Natural Resource Management

ICIMOD embarked on an ambitious four-year (1995-1998) Regional Collaborative Programme (RCP-1), with distinct objectives, outputs, and activities. It changed its style of operations from a project-driven to a programme and demand driven one. This provided an opportunity to systematically integrate gender issues into all ICIMOD programmes. The main foci were:

- farming households and privately owned land;
- natural resources owned/managed by governments and/or communities;
- diversifying mountain economies;
- geoinformatics for sustainable development; and
- sharing new knowledge and information.

The highlights of selected programmes related to mainstreaming gender in various programmes are as follows:

- Mainstreaming gender in programme activities by ICIMOD and partner institutions: ICIMOD has developed a strong programme for mainstreaming gender with 14 partner institutions in the region, and made proactive attempts to incorporate gender issues in various ICIMOD programmes.
- Himalayan Grassroots' Women in Natural Resources' Management Network (HIMAWANTI): This network is a response aimed at closing the organisational gap regarding the needs of women resource managers, primarily in forest and fuelwood, and fodder management.
- Renewable energy and gender: Concerted efforts have been made through workshops and seminars to influence policy and decision makers to integrate gender issues in the dissemination of different renewable energy technologies.
- Improvements in the conditions of women in mountain farming: A number of review studies were carried out based on the selection of aspects of the conditions affecting women in mountain areas and in agriculture. This has provided many valuable findings that have been disseminated through publications (e.g. Searching for Women's Voices in the Hindu Kush – Himalayas) and meetings.

The main focus during RCP-I was primarily on women issues, but given the situation in the mountain areas of the developing countries, it was realised that gender issues could probably be appropriately tackled by looking at both the male and female members of the community since the 'hidden' resistance of male members had been noticed. It was therefore thought appropriate to look at both male and female members; and in many cases sensitise male members with regard to gendered needs and roles, and how these relationships are unequal, and then allow them to identify gaps and appropriate interventions to reduce existing gaps.

The lessons learned during RCP-I (1995-1998) were enormously valuable in helping the Centre to design programme activities for the second Regional Collaborative Programme (1999-2002), particularly in relation to gender issues. The second Regional Collaborative Programme

(RCP-II) identified the following gender-related programme with a specific thematic focus on 'Gender Balanced Mountain Development', besides other thematic areas such as poverty reduction and sustainable livelihoods, sustainable management of mountain commons, and capacity building for mountain development.

- Mainstreaming gender: integration of gender in decision-making process and organisational development related to natural resource management and social development.
- Children and mountain development: exploring opportunities for improving their future.
- Improved labour saving options for mountain women: reducing drudgery and workloads in mountain areas.
- Women entrepreneurs and professionals in mountain areas: promoting and facilitating the expansion of professional skills among mountain women and also their entrance into positions of professional importance and in the commercial sector.

Besides this, the Gender Policy of ICIMOD requires each programme formulation and implementation to address gender issues, which are then reviewed by the Gender and Development Committee, where the ICIMOD gender specialist takes the role of member secretary. The focused approach on relevant gender issues in the context of mountain areas, as well as the integration of gender issues into the various programmes of ICIMOD, will be instrumental in providing impetus for the successful implementation of the programme and policies by the development stakeholders in the HKH region. The highlights of the one of the major programmes relating to the Gender Balanced Mountain Development Programme are provided in the box.

Efforts were made to integrate gender issues in various programmes of ICIMOD. For example, action research on community-based energy planning and management gave special emphasis to addressing women's issues in a holistic manner. The approach was based around participatory action research to help identify communities' needs and the most appropriate way of satisfying them, with priority given to addressing women's issues with appropriate sensitisation programmes for the male members of the communities. Action research exercises were carried out with local communities and NGOs in Nepal, China, India, and Pakistan from 1999 to 2001 through national partner institutions.

The experiences and lessons learnt resulted in designing a programme on Incorporating Needs and Roles of Women for Energy and Water Management Practices in the Himalayas, and was supported by UNEP (for further details refer to **ENERGIA News** 5.1). The Tata Energy Research Centre is implementing this programme in selected districts of Uttaranchal and Himachal Pradesh in India. The Centre for Rural Technology is implementing it in the Palpa and Dhankuta Districts of Nepal, and the Royal Society for Protection of Nature is implementing the programme in Wangdi and Ha Districts of Bhutan.

The programme on sustainable water harvesting technologies and management systems implemented twelve rooftop water-harvesting systems, which were built with the participation of nine households, in villages in the Kavre Palanchowk district of Nepal. Six months after installation, the programme commissioned a study on the effectiveness of the systems. Before they were installed, women and girls spent many hours each day fetching water. They worked an average 17 hours a day, whereas in comparable areas with easy access to water the women worked for only about 11 hours a day.

The women in the participating households were found to work about six hours more than their male counterparts and had little leisure time. Only about 25% of them had basic literacy skills. The installation of the rooftop rainwater harvesting systems had considerably reduced the women's workload during the six months of the monsoon and other rainy periods. Women now took only five minutes to fetch a bucket of water, rather than an hour as previously. The women were extremely pleased with the new systems. Above all, the women said that the main benefit was that they no longer had to get up as early as 4 a.m. to fetch water. ■

Highlights of the Improved Labour Saving Options for Mountain Women Programme

ICIMOD has commissioned a series of studies on women and improved labour saving options in the hill and mountain areas of China, India, Nepal and Pakistan. The purpose of these studies was to explore options which would not only reduce their workload and save time and energy, but also provide alternative economic and productive activities. The synthesis of the studies concludes that women's wellbeing in the hills and mountains depends to a large extent on the wellbeing of the mountain eco-system. The workload of women is crucially dependent upon the health of the eco-system. The more robust and healthy the linkages between the subsystems of the mountain economy are, the easier it is for women to perform their everyday functions, both productive and reproductive ones. At the same time, unless work is done with sectors other than forestry, forest degradation cannot be contained. Development interventions, since most mountain characteristics are interlinked due to their broadly common causes and externalities, must be looked upon as an integrated system and not dealt with in isolation. This is now being realised by many NGOs within the HKH Region who are advocating integrated programmes and projects rather than technology-based interventions targeted at a particular sector.

Source: Soma Dutta, 2001, Programme Development in the Areas of Improved Labour Saving Options for Mountain Women, Draft Report, prepared for ICIMOD, Kathmandu.

Further Reading

- Gurung, J (1999), 'Searching for Women's Voices in the Hindu Kush – Himalyas', Kathmandu: ICIMOD.
- ICIMOD (March 1999), 'Partnerships in Sustainable Mountain Development 1995-1998: Highlights of the Implementation of the First Regional Collaborative Programme for the Sustainable Development of the Hindu Kush – Himalayas', Kathmandu: ICIMOD.
- ICIMOD (April 1998), 'Mountains 2000 and Beyond: Second Regional Collaborative Programme for the Sustainable Development of Hindu Kush – Himalayan Region (RCP-II, 1999-2002)', Kathmandu: ICIMOD.
- ICIMOD 2001, 'ICIMOD Annual Report 2000', Kathmandu: ICIMOD.

◆ For contact details of ICIMOD, please refer to: **The Asia Perspective: Integrating Gender into the Energy Sector.**
Contact person ICIMOD gender programme: **Ms Phuntshok Tshering, Gender Specialist.**
Contact person ICIMOD energy programme: **Dr Kamal Rijal, Renewable Energy Specialist.**

[1] *The Region consists of hill and mountain areas of Afghanistan, Pakistan, India, Nepal, China, Bhutan, Bangladesh, and Myanmar, extending 3500 km from the west to the east and sustaining approximately 150 million people.*

Networking Around the World

Four gender and energy events, held in recent months, are briefly described within this section. These are a panel on Indoor Air Pollution, Gender and Health in Sweden; a Regional Workshop on Household Energy, Indoor Air Pollution and Health in India; a meeting on Gender, Energy and Water in Nepal; and the ARECOP Phase 2 Planning Technical Advisory Meeting in Nepal. *ENERGIA*, represented by Elizabeth Cecelski, participated in all four events.

Martha Mathenge presenting her paper on the role of women in reducing indoor air pollution in Kenya at the panel on IAP, Gender, and Health.
(Photo: Courtesy of Elizabeth Cecelski)

Panel on Indoor Air Pollution, Gender and Health

A special panel on Indoor Air Pollution (IAP), Gender, and Health was held at the Third International Conference on Women, Work and Health. The conference was organised by the Institute for Working Life, took place at the City Conference Centre in Stockholm from 2-5 June 2002, and had three main aims:

- To collect and formulate a shared knowledge base on the working conditions and health of women around the world.
- To highlight issues concerning the working conditions and health of women which require further research.
- To take knowledge of the working conditions and health of women and convert this into practical action.

The subjects dealt with at the conference were very diverse, with most papers focusing on areas such as working conditions and stress.

The panel on IAP, gender, and health was organised by *ENERGIA* in joint collaboration with Dr Jyoti Parikh, senior professor at the Indira Gandhi Institute of Development Research (IGIDR, India). The panel was co-chaired by Elizabeth Cecelski and Dr Parikh, who made short introductions, including the role of *ENERGIA*, after which the following four papers were presented:

- Nigma Tamrakar - IUCN/Nepal: Women in Nepal: An Energy and Health Perspective;
- Martha Mathenge – ITDG-East Africa/Kenya: A Breath of Fresh Air: The Role of Women in Reducing Indoor Air Pollution in Kenya - the Case of Maasai and West Kenya Communities;
- Nguyen Thi Hoai Duc - Director of the Center for Reproductive and Family Health in Vietnam: Rural Vietnamese Women's Health Related to Cooking Stoves; and
- Jyoti Parikh: Women's Work on Energy and Health Impacts in India.

Participants at the panel appreciated the information on IAP, gender, and health at this development-themed conference, and considered it would be worthwhile for *ENERGIA* to organise similar sessions at other such conferences, in order to bring gender and energy issues to the fore.

Regional Workshop on Household Energy, Indoor Air Pollution and Health

A regional workshop on Household Energy, Indoor Air Pollution and Health was held from 9-10 May 2002 in New Delhi, India. The workshop was organised by the World Bank and the Tata Energy Research Institute (TERI)[1]. The workshop attracted over 150 participants, including government officials from health, environment, energy and rural development agencies, practitioners (representing NGOs, the private sector, community groups), and researchers working in the area of household energy, indoor air pollution, and environmental health.

The workshop aimed to disseminate recent studies, findings, and practical lessons, and provided a forum for discussing current activities and future needs in addressing IAP issues in India and the rest of Asia. The objectives of the workshop were to:

- Exchange information on recent developments, successes, and challenges in reducing IAP, and the associated burden of ill-health, arising from the use of solid household fuels.
- Strengthen the commitments of various stakeholders to addressing these issues and implementing mitigation measures.
- Facilitate future action programmes.

The workshop was linked to the completion of a multi-sectoral study, India: Household Energy, Air Pollution and Health, undertaken by the World Bank with the support of the joint UNDP/World Bank Energy Sector Management Assistance Programme (ESMAP). The focus was on assessing the exposure to IAP from solid fuels, health impacts, mitigation measures, enabling policy framework, multiple benefits of improving rural energy services (including global co-benefits), gender issues, and awareness raising.

***ENERGIA*, through Elizabeth** Cecelski, contributed to the inclusion of a gender perspective through presentations at a panel on gender and community development, and to the plenary discussion. In the presentations, gender and energy health issues, other than IAP, which are also related to women's status were addressed, as well as the need for an intersectoral approach that would also address issues of women's economic and sociopolitical empowerment.

The outcome of the workshop consisted of a set of recommendations, which include:
- Improvements in cooking and heating technology.
- Simple changes in kitchen configuration and ventilation.
- The use of cleaner fuels such as liquefied petroleum gas (LPG).

Changes in government policies concerning subsidies for LPG cylinders and/or kerosene, and in terms of regulatory frameworks, may be required to achieve the third recommendation. Governments can also play an important role by bringing IAP and related issues into mainstream policies and programmes, such as those involving women's and children's health, hygiene, water and sanitation, nutrition, family planning, and women's welfare. Further, increasing women's roles in decision-making concerning household matters, such as the choice of fuel and stove, will directly benefit their families' health.

Innovative ways of delivering services to the poor, commercialising the design and marketing of stoves, and providing less-polluting biomass fuels, could also be promoted. Improved measures to monitor the exposure of household members to pollutants will help in assessing the magnitude of the problem. If the local and global (relating to climate change, for instance) benefits of IAP mitigation are linked, opportunities for the funding of projects on cleaner household energy can be tapped. *(Source: TERI website)*

The full text of the recommendations will be published as an Annex to the report of the World Bank study, India - Household Energy, Air Pollution and Health, and is also available in PDF format on the TERI website at: http://www.teriin.org/indoor/iap.htm

Meeting on Gender, Energy and Water in Nepal

On 18 March 2002, an informal meeting on gender, energy, and water in Nepal was held at the Center for Rural Technology in Nepal (CRT/N). The 22 participants were drawn mostly from regional and national stakeholders, including representatives from the government of Nepal, research institutes, field offices of international development organisations, NGOs, and CBOs.

The objectives of the meeting were:
- To share experiences regarding gender issues in energy and water management (household and community level).
- To provide an overview of *ENERGIA* and its programme.
- To discuss and judge the interest in the establishment of a national network on gender and energy in Nepal.
- To determine required future actions.

Presentations were given on gender issues relating to energy and water, and on the *ENERGIA* network. These were followed by the presentation of the 'Proposal for the Organisation of a National Consultative Workshop to establish a National Network on Gender and Energy in Nepal'. It is envisaged that this national network would be closely linked to the international *ENERGIA* network, and that *ENERGIA* could provide resources in terms of information, knowledge, and contacts. Having discussed the proposal, it was agreed to organise a national consultation workshop to establish such a network. A working group of seven, representing various organisations from Nepal, was formed to plan the workshop. The workshop is planned to be held before the end of this year, with seed fund support from *ENERGIA*[2].

ARECOP Phase 2 Planning Technical Advisory Meeting

The Asia Regional Cookstove Program (ARECOP) is a networking programme addressing issues in improved cookstove programmes and related biomass issues. The programme is now entering the third year of its second phase. In response to the dynamics of the region, and to plan for ARECOP Phase 3, a Planning Technical Advisory (PTA) Meeting involving network stakeholders was convened. The meeting was held from 13-16 March 2002 in Dhulikhel, Nepal, and jointly organised by ARECOP and CRT/N.

Objectives of the meeting were:
- To provide the network members with an update on the status and directions of ARECOP, as well as the previous years' outcomes.
- To provide the network members with an update on the status of improved cookstove programmes (ICPs) in each of the ARECOP member countries represented.
- To discuss ARECOP's vision and direction for ICPs, and its plan of activities to match ICP development trends in the region.

The meeting involved 30 participants from 10 countries in the region (Bangladesh, Cambodia, India, Indonesia, Lao PDR, Nepal, The Philippines, Sri Lanka, Thailand, and Vietnam), as well as international stakeholders. Participants were drawn from different sectors: NGOs, CBOs, government organisations, research institutes, and community development and energy professionals.

The first day of the meeting focused on providing updates of the status of ICPs in the region. On day two, the focus lay on identifying common issues that need to be addressed in Asia. Gender balance and sensitivity was one of the issues identified by the participants. Others included:
- Policy issues (advocating for energy as a basic right, for putting energy high on the policy-making agenda, and for integrated national biomass energy plans).
  Networking (ARECOP to focus on the applications for improved cookstoves (ICS) in households, household-based industries, and institutions; active involvement of all stakeholders and active information sharing; identification of donor support; and inter-national and inter-regional networking).
- Support for research and development of modern, clean, biomass stove technologies.
- Commercialisation of ICS (increased entrepreneurship and promotional activities, and quality control).
- Health issues (improved health and indoor environment by increased use of ICS; kitchen improvements; and the need to study financial and social benefits of ICS).
- Building capable local institutions.
- Application of participatory methodology in ICPs.
- Integration of ICS into other programmes.

The meeting concentrated on formulating the goals and objectives, activities, and networking structure, for the remainder of Phase 2, as well as for Phase 3 of the ARECOP programme. The final day of the meeting was spent in working groups, subdivided by country or organisation, developing plans of activities based on the identified common grounds.

More detailed information regarding the outcome of the meeting will be available in the proceedings of the meeting. Please contact the ARECOP Secretariat to obtain copies of the proceedings (for contact details, please refer to The Asia Perspective: Integrating Gender into the Energy Sector). ■

[1] *The workshop was co-sponsored by the UNDP/World Bank Energy Sector Management Assistance Programme (ESMAP), the Clean Air Initiative for Asian Cities (CAI-Asia), Norwegian Trust Fund for Environmentally and Socially Sustainable Development, and United States Agency for International Development (USAID).*

[2] *This seed funding is part of ENERGIA's recent focus on initiating national and regional gender and energy networks in Southeast Asia and the Pacific*

"Three Sisters"

Women's Organisations in Vietnam, Lao PDR, and Cambodia Conserve Energy and Empower Women

Lisa Surprenant
Do Hoang Le Cam

Energy conservation and renewable energy have been the entry points for the "three sisters" women's organisations, in Vietnam, Lao PDR, and Cambodia, to strengthen women's expertise and status in a Dutch and Swedish financed project since 1999. In the case of Lao PDR, industrialisation had eroded women's authority in household decisions, finance, and leadership in this formerly matrifocal society. Through new roles as energy experts, Lao women have been able to find respect in the community and assist other women to do the same. Moreover, by joining Vietnam and Cambodia to become the "three sisters", they have found that individual strength - like a bundle of sticks- is stronger when it is united.

Families in Vietnam, Lao PDR, and Cambodia's rural, remote, and hill tribe regions are largely reliant on wood energy. They are among the world's poorest, with annual incomes averaging less than $300. Some remote provinces in Vietnam, Lao, and Cambodia report illiteracy rates upwards of 90% amongst women and girls. In areas of all three countries, women, girls, and the elderly, exhibit the negative health impacts of inefficient use of household fuels.

The three sisters project aims to increase household energy awareness in women as a means of empowerment. Locally, this is partly achieved through reducing the drudgery of collecting firewood, such as these girls dragging wood across a stream. (Photo: Courtesy of Lisa Surprenant)

During the project described below, one rural Vietnamese kitchen in Ninh Binh province had measured concentrations of gases and particulates *forty five times* the WHO recommended maximum. Project researchers found illnesses in the young women ranging from chronic respiratory infection to premature blindness. The status of Vietnamese, Lao, and Khmer women has -until now- been mirrored by the low priority given to projects to raise women's awareness of household energy practices and their consequences.

The Project

The project *"Creating* Awareness of Energy Conservation and Renewable Energy Among Women in Vietnam, Lao PDR, and Cambodia" was initiated by the Foundation for Energy Development and Planning (Foundation EDP, Netherlands) with funding support from the government of the Netherlands for Phase I (1999-2000) and from the Swedish International Development Agency and Foundation EDP for Phase II (2001-2002).

The project's aim is to increase household energy awareness in women as a means of empowerment, using a three-tiered concept:

- Locally: a reduction in women's and children's drudgery and increased access to income generation (through conservation) would encourage women to gain literacy and numeracy skills, generate income, socialise, or improve child-rearing - any of which could lead to increased equality.
- Nationally: capacity building through *mass organisations* such as women's unions (vestiges of socialism and communism) would be a robust activity since these agencies have extensive experience - making them well-suited for becomming in-country project managers.
- Regionally: active *"south-south"* cooperation among developing countries with similar economic characteristics and development trajectories would enhance regional expertise, making this project more sustainable.

Project Approach

The Vietnam Women's Union (VWU), the Lao Women's Union (LWU), and the Cambodian Women for Peace and Development (CWPD), were brought together by Foundation EDP to form three country teams who:

- Viewed women as key "motivators" in the delivery of energy improvements (in conservation, technologies, or techniques);
- Considered energy systemically (even though it is often integrated with other social services) and regarded household energy revisions as entry points for increased gender equity; and
- Illustrated a willingness to pioneer non-hierarchical and non-didactic ways to educate and communicate with stakeholders about fuel-use efficiency.

Since energy conservation and efficient use of renewable energy resources are relatively new concepts in all three countries, each organisation had limited energy expertise at the project's inception. The Vietnam Women's Union acted as the vanguard since their members had already been trained through the Vietnam Energy Conservation Programme (VECP) of the Ministry of Science Technology and Environment (MOSTE) in Hanoi.

The VWU began capacity building (with assistance from the VECP) to train a cadre from the LWU and CWPD staff in energy conservation. These trained individuals then formed the core of their in-country working groups. Each country team developed a range of brochures, women's "motivator" manuals, children's books on energy and the environment, radio and television programmes, undertook surveys, provided training in energy conservation awareness, and participated in study tours to their "sisters" countries.

A South-South Cooperative Project must be able to:

- Gauge the rigours and hazards of travel for project implementers and participants;
- Gain feedback from remote regions lacking telephone systems, email, fax, electricity;
- Use trained local experts *wisely* to avoid depleting a valuable and limited human resource;
- Flex its framework to respond dynamically to the needs of stakeholders and situations;
- Ascertain the "implied needs" of disenfranchised stakeholders from differing cultures; and
- Respond to the diverse cultures of each country while maintaining a unified whole.

Needs Assessment Survey

Before suggesting changes to operations at the household level, it was critical that each country's working group understood the stakeholders' daily lives. A survey questionnaire was designed with input by Foundation EDP, the Food and Agriculture Organisation's Regional Wood Energy Development Programme (RWEDP, UN-FAO Bangkok), the Asia Regional Cookstove Programme (ARECOP, Indonesia), and the "three sisters" teams. More than 9,000 households in Vietnam, Lao, and Cambodia were surveyed. The surveys took place in eight urban provinces in Vietnam, Lao, and Cambodia during Phase I, and in 15 rural, remote, and hill tribe provinces in Vietnam, Lao, and Cambodia during Phase II.

The survey queried the beliefs, biases, motivations, delimiting factors, and a range of aspects that might affect a woman's ability to effect changes in her household or community. These parameters were later addressed in the produced materials and public relations campaigns. For example, if the majority of women stated *"I would not change how I do things if my husband would not like it"*, the brochure promoting such a change would illustrate how that change would also be acceptable to men.

The needs assessment gave project implementers the rationale with which to suggest changes to women's household habits *relevant to their milieu*. The results illustrated such nuances as a *"belief in the kitchen gods"* (which should influence future enhanced cookstoves programmes if this belief were known by programme planners). In Cambodia, when asked *"what would upset the kitchen gods the most?"* the majority of women in Kampot province stated that *moving the stove* would upset the gods more than changing the type of stove, fuel-switching, failing to honour them, cooking in another fashion or location, or even disbelieving in them. Therefore, the brochure developed for rural cooking in Cambodia avoided suggesting moving the stove since this belief represented a religious conviction.

An Effective Strategy

The correctness of the strategy of working through women's mass organisations was shown by their thoroughness in distributing documents through their organisations, and their effective mobilisation of other entities with equally broad community outreaches. An additional benefit was that each of the "three sisters" organisations had the support of their government, and was trusted within political frameworks in transition. Since these mass organisations also change (for example, the Cambodian Women for Peace and Development is an NGO); their project handling capacity needs to increase so that they are able to generate projects and access operating capital.

The creation of new roles for women in the "three sisters" project was therefore on two levels. The first was at the village level, to enable local women to become community leaders; and the second was at the national level, to assist the mass organisations to assume regional roles as experts. Today, project team leaders from all three organisations participate in regional conferences as skilled presenters and are active spokeswomen for regional cooperation.

Through study tours, the "three sisters" gained first-hand knowledge of the implementation impediments and advantages of each other's country. Also, given that these countries had been at war with one another in recent decades, ethnocentricity was quickly overcome and remaining "cultural myths" shattered as each learnt about the past and present situations of their counterparts.

To lay the groundwork for changes in household energy use, each country team trained stakeholders as trainers. Women from the village to the provincial level became "primary motivators" accepting the responsibility for training others, and assuming the roles of energy experts. Those who felt they could not become trainers became "secondary motivators" agreeing to train another individual, thus increasing the multiplier effect. Although training for men was not promoted, the percentage of men attending training sessions was not insubstantial. This perhaps illustrates the prestige of the project at the central and local levels, the lack of viable training for men in other moneymaking endeavours, or a combination of factors. The survey addressed the concerns of both men and women, paving the way for men's engagement in subsequent initiatives (such as cookstove enhancement or kitchen redesign kits) in which they could participate.

Results and Feedback

Stakeholders' feedback indicated that women want additional information about daily routines related to energy conservation, and the use of renewable energy resources, *that are achievable by poor households*. They also requested more-detailed information on techniques to save energy along with rapid calculation methods. The latter request implies that women will use their mathematical skills *as a result of their desire to gain the benefits promised* by energy conservation as introduced through this project. Therefore, the theory that increased numeracy may result from increased awareness of household energy-use has been upheld.

Women who have implemented the suggested changes *are* increasing their available time and money, as their testimonials in the training sessions showed. Their "word of mouth" recommendations have encouraged other women to change habits and attitudes. The training sessions also gave increased opportunity for social conviviality (an activity found in the survey to be lacking yet highly desirable by rural, remote, and hill tribe women).

Nearly 1,000 "primary motivators" in three countries have been trained along with another 5,000 "secondary motivators". Upon project completion, an estimated task force of approximately 11,000 women will have received advice, representing a large pool of human resources available for this and other development initiatives. More than five million households have been directly contacted while another 50 million have heard radio broadcasts, read newspaper

articles, or seen the television broadcasts produced under this project. All three women's organisations have experienced numerous requests for further information on subjects covered by these programmes and articles. This was one of the strongest measurement indices of the project to raise awareness: an *"information pull"* from the stakeholders. However, it was not the only indicator of change.

In Vietnam, an indicator of increased awareness is that householders can understand their electricity bills, read their meters, and are voluntarily reducing household energy demand. After training in Hai Phong, Vietnam, women were so sure they could immediately implement the strategies suggested by the motivator that they drew up "conservation contracts" committing their households to achieve as much as $8 savings in their monthly electricity bills.

Partnerships with Other Stakeholders

Statistics do not accurately characterise the grassroots response to a project. The "three sisters" project led to the spontaneous creation of the Lao Energy Conservation Programme (LECP) and the Energy Conservation Programme of Cambodia (ECPC). These nascent energy conservation programmes have a chance to flourish, enabled by local energy experts with regional experience from the "three sisters" project.

Another sign of the project's effectiveness was the high level of cooperation by the local government agencies and electricity companies who joined the in-country project teams. In Vietnam, the programme had the strong support of the Ministry of Science, Technology and Environment, the Vietnamese electricity provider (EVN), the Institute of Energy, and many other mass organisations such as the Vietnam Consumers Association and the Vietnam Youth Union.

In Lao, the project gained strong support from the Science Technology and Environment Agency, Électricité du Lao, and other organisations such as the Lao Youth Union. In Cambodia, the project had the active participation of the Ministry of Mines and Energy, Électricité du Cambodge, and entities such as the Girl Guides. In all three countries, the television, radio, and news media exhibited keen interest in airing or publishing materials developed by the teams. Altogether, the support from this diverse range of participants encouraged awareness of, and engagement in, the project.

Three Conclusions

Business, social, and equality opportunities for poor rural women in all three countries remain limited. However, opportunities do spring from household energy use which are within each culture's notions of "what constitutes a good woman" and what is considered to be a "woman's domain". These may be considered as harbingers of the need for relevant non-threatening structures through which women, in these circumstances, can gain self-esteem, knowledge, and more control of their lives through increased time, health, and money.

The strength and scale of requests by other programmes (to share deliverables, project documents, outputs, and the strategies of the "three sisters") may be considered illustrative of the lack of comparative information and coordination among other developing country teams and regional project implementers. While parallel programmes and project implementers must be encouraged to share/compare information; new "regional energy experts" (such as the "three sisters") have a need for guidance from seasoned professionals as they learn how to develop "follow on" or "spin off" projects and contracts, and properly "value" their newly found roles as energy experts.

Future Plans

Projects that raise awareness, rather than apply technological solutions, are difficult to establish, manage, and fund. Additionally, verifiable indicators for awareness-raising or capacity-building projects are often elusive, so that such projects are funded only by the most visionary donors. Project creators and donors must be encouraged to value hundreds of squatting women at least as much as hectares of trees, if non-defeatable measures against climate change are to occur.

In the case of the "three sisters", no single system of implementation could be used by all, regardless of their mutual "red thread". Each women's union had its own diverse in-country agenda and each represented a singular culture, language, and sociopolitical system. Nevertheless, through this project, the "three sisters" have helped many women attend to their basic needs, enhance their life-skills, and stimulate energy conservation using *strategies the stakeholders themselves helped design*. Future directions for the "three sisters" being planned with the Foundation EDP, and for which additional funding is being sought, are initiatives in barter-based micro-finance, kitchen design kits, and trades using women's knowledge of technologies or training. Just as with a bundle of delicate sticks tied together, the "three sisters" of Vietnam, Lao, and Cambodia have found strength in their common bond of cooperation.

More than forty books, brochures, and other materials in English, Vietnamese, Lao, and Khmer languages have been produced under this project. For a complete listing, or more information about this or other projects of the Vietnam Energy Conservation Programme, please contact Lisa Surprenant at the address below. ■

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◆ Do Hoang Le Cam is the Public Relations and Marketing Coordinator for the Vietnam Energy Conservation Programme under Vietnam's Ministry of Science Technology and Environment. She has coordinated the "three sisters" project working groups and has become specialised in media relations. Her main area of interest is innovative methods for reaching women, consumers, youth, and various target groups and other stakeholders in developing countries. Before joining the VECP, she was a reporter and responsible for public relations liaison to the Deputy Editor-in-Chief of the Vietnam Economic Times, an English language magazine covering social and economic issues relevant to Vietnam's transition to a market economy.

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Using Integrated Biogas Technology to Help Poor Communities - China

Yin Chuntao

Baima Snow Mount Nature Reserve is located in Northwest Yunnan Province, China, and has a population of more than 8000 people, mostly Tibetans who cultivate the limited lands in this nature reserve. Their traditional lifestyle depends heavily on forest resources.

An average family with eight members consumes ten tonnes of naturally grown fuelwood per year. It was estimated that one third of this is used for cooking, one third for heating, and one third for cooking livestock feed. The people's major source of cash income is the collection and sale of mushrooms and herbs.

Since commercial logging was banned in 1998, the use of firewood has become the major problem, leading to major deforestation. Illegal logging is also common. Commercial logging (before 1998) destroyed the nearby forest, and thus firewood is scarce. Timber is the predominant material in Tibetan house construction. House construction consumes a lot of timber and further the low energy efficiency results in a large amount of firewood being used to warm the houses in winter.

Project Summary

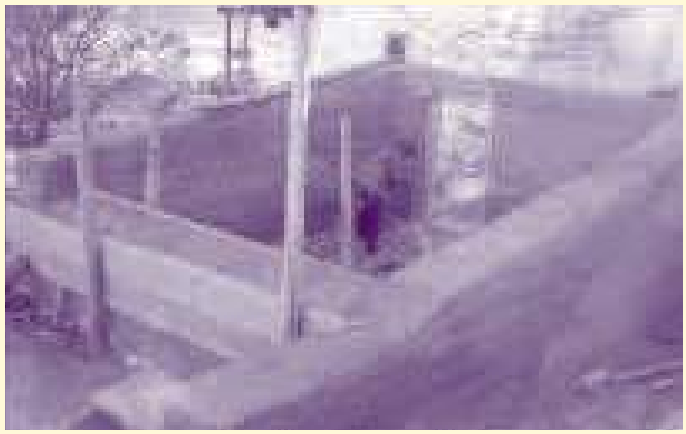
With financial support from the Shell Foundation, the South-North Institute for Sustainable Development (SNISD) has, since November 1999, undertaken a two-year project entitled Integrated Biogas System for Poverty Afflicted Community and Natural Resources in Baima Snow Mt. Nature Reserve, Yunnan Province. The project objectives were to:

- Provide alternative energy sources for family cooking and reduce the consumption of natural firewood by local residents; and
- Improve family health, income, and environmental conditions through the application of integrated biogas technology.

Women and Energy

Shusong village was the selected pilot project site. It is about 2,800 metres above sea level with an average winter temperature of 3.8° C below zero. In this area, wood is the major energy resource for families. Most families have several stoves: one for cooking family meals, one for cooking livestock feed, and one for heating water and warming the house in winter. Women are responsible for most of the housework and fuelwood collection. It is estimated that generally housewives spend at least three hours per day on cooking meals for the family and livestock. Their frequent exposure to a smoky environment seriously damages their health. On top of this, they have to spend considerable time collecting wood for cooking. Local families estimate that women can collect two backloads per day, each weighing 75kg and taking three 3 hours to gather and carry home. So, this task of gathering fuelwood for one year consumes the equivalent of two months.

Farmer Aqi's family consists of seven people; parents, himself and his wife, and three daughters. His wife reported that during the busy agricultural season she goes with her husband to carry out agricultural activities such as planting and harvesting, while in the slack farming season she is busy collecting firewood, grazing bulls and yaks, cutting grass for animal food, digging ditches, collecting leaves for fertilizer. Her husband goes to an alpine pasture in the summer to take care of their yaks.



A woman in Baima Mountain Nature Reserve constructing her own 3-in-1 biogas system. Though there was no specific gender focus, women contributed significantly to the success of the project.
(Photo: Courtesy of Yin Chuntao)

Household Biogas Technology

The biogas technology we chose to introduce to the nature reserve had been fully developed in Pulandian in northeast China. It integrates a biogas digester, a greenhouse, a pigpen, and a toilet into one system. From this it gets the name '4-in-1'. The biogas digester is placed in the greenhouse, so that it can produce biogas even in the cold winter. If a greenhouse is not included, then the system is called the '3-in-1'. In the 3-in-1 system, there are back and gable walls, plus a plastic cover and straw bales, to protect the digester from the cold weather.

Women's Participation

Although we did not have a gender focus in this project, we soon found that women were very active in this project! In the initial stage, SNISD supported the Nature Conservancy in constructing the first 4-in-1 system for demonstration purposes in the nature reserve. An on-site training course was given to the residents during its construction, and many female labourers participated. The women were interested to learn about the 4-in-1 system and, at the same time, it offered them an opportunity to earn some extra money for their families.

Once the Nature Conservancy Reserve began to use biogas for cooking, many farmers came to visit, especially women farmers. They were deeply impressed and very excited. It was at this point that

the local farmers became interested in this technology. However, the relatively high investment costs, and the uncertainty of being able to sell products at the local vegetable market, limited the farmers' willingness to opt for the 4-in-1 technology. They were more interested in the 3-in-1 alternative. As of May 2001, 48 families had sought to build a 3-in-1 system, more than half of these requests were made by women. They have all successfully constructed 3-in-1 units near their houses with part of the investment costs being met with a loan by the local bank, a subsidy from the government, and a grant from the project.

Generally, three or four pigs can produce enough biogas, using the 3-in-1 system, for cooking three meals a day. It is not difficult to run the system. The pig manure should be fed into the digester input port each day. The biogas fertilizer should be taken out from the outlet regularly, and it is a good fertilizer for crops and fruit bushes.

To ensure that farmers could operate the system well, SNISD organised a training course for local residents on how to manage and operate the 3-in-1 system. Unfortunately, no women attended this training course. One reason was that we did not insist that women should attend, and women were usually too busy with their work and so the families sent the husband or a son on the course. Later they would explain to their wife/mother how to use the biogas system but this did not work well. Some information would always get lost. Then, when we went to visit farmers to see how their system was working, the wife would ask us to give them further training on how to operate the 3-in-1 system. With the help of technicians from Baima Snow Mt. Nature Reserve Conservancy, additional training for women was held in each village. As a result, 45 units are now in good condition, the remaining three units need some maintenance.

Women have also been the leaders in scientific experimentation with biogas fertilizers. After group discussions among farmers, it was the women who were interested in exploring the utilisation of biogas residue as a fertilizer. Some of them told me that they were carrying out some experiments with biogas fertilizer. They used biogas residue to fertilize part of their fields, and they found that the crops fertilized with biogas residue grew better than those that were not.

Following the project, Yunnan Baima Snow Mt. Nature Reserve staff are increasingly active in undertaking joint projects because they can see that the projects have had a positive impact on farmers' livelihoods. They also see such projects as a way of improving their relationship with local residents, for whom they were previously seen only as forest 'guards'. During 2001, they cooperated with the World Wildlife Fund (WWF) to provide fifty 3-in-1 biogas systems to Yeri village in the nature reserve, which is a remote village a considerable distance from Shusong.

Impact on Women

Women have benefited greatly from the 3-in-1 integrated biogas systems since they can use biogas for preparing meals for the whole family. However, the family still has to use firewood for warming the house in the winter season. One reason is that the system cannot produce enough biogas to warm the house; to a large extent because the traditional Tibetan house is spacious and has a poor energy efficiency. Cold air easily enters the house, and the hot air leaks out through the roof. If we could find a way to resolve the problem of house heating, the consumption of firewood could be greatly reduced and thus the need for women to collect fuelwood.

Overall, women clearly do benefit from the biogas system. It is more convenient and clean. It is really good for their health. It has also saved them a lot of time, not only time spent cooking, but also time collecting wood. It is estimated that they now use half as much wood as before, and thus save half of the labour input spent collecting fuelwood. Pigs kept in 3-in-1 systems grow faster, given reduced movement and warmer conditions. It is estimated that pigs raised in traditional style have to be kept for at least one year before they are fully grown, whereas pigs raised in the 3-in-1 system only need to be kept for four-five months. Thus, both time and pig feed are saved. Women can spend more time engaged in other income-generating activities such as collecting mushrooms and herbs.

Farmer Nanji constructed the first and only 4-in-1 system in the nature reserve. His wife reported that she and her daughter now spend more time on taking care of the vegetables in the greenhouse and selling them at the market in Benzilan, a small town close to the nature reserve.

Lessons Learnt

This project has shown that integrated 3-in-1 biogas technology can help the local community, benefiting especially women. However, if we had recognised the close relationships between women and energy at the initial stage, we would have better designed and implemented the project.

Professor Zuo Ting, from the Rural Development School of the Agricultural University, evaluated the Demonstration Project in July 2001. His report highlighted that the pilot project had achieved good results in the following aspects:

- Replacement of conventional energy;
- Improving the economic conditions of local households;
- Enhancing the household environment and the health of family members;
- Improving local living habits and reducing the workload of local inhabitants, especially the local women; and
- Promoting cooperation between the Nature Reserve Conservancy and local communities.

At the same time, he suggested that the project should have a more female focus. Given that women are playing the major role in managing and utilising the biogas systems, more training projects should be focused on women. In order to provide local women with the necessary training, there needs to be more female personnel who are able to speak Tibetan in the Conservancy to make communication easier. Furthermore, manuals mainly consisting of sketch maps and drawings should be developed to enable illiterate villagers to understand.

see next page ❯

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Since biogas cannot replace all the fuelwood consumption (for house heating); introducing, developing, and utilising other energy technologies should be considered. If this project were to be replicated in other areas, I believe that it would be beneficial to first carry out a survey about women and energy. This survey would help in understanding further energy-related issues and their impacts on local life. In addition, it would be important to try to involve women participants in the project design and implementation from the very beginning. They could provide valuable advice on the whole project and make it more successful since their lives are so closely linked with energy-related issues. ■

Understanding Gaps for a Gendered Intervention in RETs in Mountainous Areas of Nepal

Kavita Rai

A majority of women in Nepal's hill and mountain villages have continued to silently accept their increasing productive roles in addition to their reproductive ones. Their routines remain mundane, and the tasks onerous.

In the western district of Accham, AIDS is on the rise as men return to their villages for a month or two from menial jobs abroad. In the tiny eastern village of Ghunsa, women take over farms while the men are away for eight to ten months a year working as trekking guides or looking for temporary work. In the absence of alternatives, their dual responsibilities increase. The burden has increased dramatically: it was shown that, in 1995-96, agriculture was the focal economic domain for 96% of women in the hill and mountain areas compared to 79% of men (Acharya, 2000).

Despite the great leap that development and modernity professes to bring, women continue to face social and cultural taboos. In Accham, they have to stay curled up in tiny spaces overnight when their menstrual cycle begins. Their dual roles do not allow them to stay away from their homes, even if an opportunity occurs. Women continue to be paid half as much as men for comparable work, and decision-making roles are restricted. In high mountain areas, oil seeds are processed manually and tree bark burnt on dark cold nights. Development efforts have not been strong in these areas, and the silent majority remain silent.

Renewable Energy Technologies (RETs) is one possible intervention, often professed to be gender friendly, especially to hill and mountain women where access to energy technologies is limited. This article looks critically at this issue, focusing on three prominent RETs in Nepal: micro-hydro power (MHP), improved cook stoves (ICS), and biogas technologies. It will show that the gaps lie more in the intervention process and strategy, rather than with the technologies, and suggest some ways to bridge them.

Renewable Energy Technologies; Gendered Intervention and Gaps

In Nepal, NGOs and international donors, rather than the State, have driven the development of RETs over the past four decades. The Agriculture Development Bank of Nepal, which has played a crucial role in channelling subsidies, has been an exception. Support came through subsidy and grant provisions, training, research, and, in the case of biogas, quality control. Over the years, numerous actors have emerged, including an important government institution, the Alternative Energy Promotion Centre, responsible for promoting the RET sector. Although the technological impacts may look minimal, the cumulative effect has been tremendous. By 2000, micro-hydro alone served approximately 368,000 households for agro-processing and lighting (Pandey, 2000); biogas an additional 70,000 for cooking; 5000 solar lighting units were in use, and since 1982, over 140,000 cookstoves have been disseminated (AEPC, 2000).

The benefits of RETs as 'technology' should not be underestimated while access to conventional forms of energy remains limited; and they have generally proved to be gender friendly. Agro-processing using micro-hydro has reduced the laborious traditional manual techniques; while ICS, biogas and lighting technologies have cut down the inhalation of noxious smoke and fumes. The current challenge lies in the process of interventions and strategies that create differences in the adaptation and adoption of the technologies.

However, a strategic consolidated gender intervention policy does not exist despite the successes that RETs have generated. A good intervention entails analysing all the conditions that women, with their various constraints and possibilities, face, not only in relation to men but also within a wider socioeconomic, cultural, and environmental framework. The integrated conservation approach by the Annapurna Conservation Area Project (ACAP), and the UNDP-Rural Energy Development Programme (REDP), have been instrumental in initiating some gendered interventions. However, such lessons have yet to be translated into a single national strategy. Only a weakly developed 'Guidelines for incorporation of gender issues in the water and energy sectors' issued in 1995 by the Water and Energy Commission Secretariat exists.

While an overall strategy is required, field experiences show other gaps that need to be bridged and incorporated. RETs have so far been unable to capture how decision-making factors impact on the adaptation or adoption of a technology. Intervention strategies often ignore the capacity of women to make decisions. A recent study in Nayagaun found that lower caste women saw using the installed biogas as an additional burden, not only due to a lack of knowledge and awareness, but more importantly because the installation was chosen by the ward chairperson (Mahat I, personal communication). However, women can reap large benefits if the technology fits well with their family size, as was found with a female-headed household in Sarkuwa, Baglung (REDP, 2000).

Similar cases abound in the training of women. Often, village elders, mostly men, take the responsibility for recommending trainees. While it is important to select women to be trained, the location of training and the trainees themselves need to be considered. ICS training is often conducted far from the women who will use the stoves, and this provides little motivation for the majority who are untrained in the use of the technology. The increasing duality of women's roles makes it difficult for women to do much beyond their own household. Those who are trained loose their zeal after installing a few stoves, especially since 'asking for a fee' is not prevalent in village societies. Further, weak planning and follow up results in knowledge being lost (personal communication with women trainees).

As the scale of technology increases, the specificities in gendered intervention lead to more complexities. Micro-hydro technology has gained a reputation of being gender sensitive, particularly as mechanised milling has proved a boon for women, saving an average of 1-2 hours a day. The technology has always lived up to this 'truth' and survived many gender inquiries. However, with larger micro-hydro schemes that distribute electricity, the story changes. In community owned and managed schemes, some women have increased their knowledge and involvement through compulsory participation mechanisms. At the same time, closer observations show negative impacts on people's livelihood patterns, particularly for the poorer women, female-headed households, and the elderly who live alone. The intervention processes often fail to take into consideration the fact that there are multiple conditions leading to women being unevenly involved. Such interpretations have yet to be incorporated in formalised intervention rules.

Filling the Gaps in a Gendered Intervention

The creation of a gendered intervention strategy for RETs requires more time-driven and analytical research than at present. Apart from the need to have a strong national level policy and strategy for intervention, there are specific process considerations:

- Use participatory feasibility assessments: It is essential that the potential of both men and women to participate, use, and access the technology be well understood within a specific sociocultural milieu. What might work best in Solukhumbu might not work at all in Accham. As an example, in Ghunsa, after the installation process and financial plans were explained to both men and women, the villagers decided not to install a plant. The women were not keen to have an additional burden, and would not risk the technology on their own.
  Further, feasibility assessments are often completed within a couple of days, with meetings that attract a selected few. It is important that assessments use a combination method, perhaps a triangulation of general participatory meetings, specific group meetings of men and women separately, and household assessments. Motivation to use the technology has to come from a combination of specialist knowledge and participation in the village itself, detailed and repetitive exhibits of the pros and cons of the technology, and measures to ensure that the users fully know the positive impacts of a technology. Unless qualitative and lengthy intervention assessments are conducted, no programme will be fully successful. This needs a budget, seldom considered in interventions.

- Enhance qualitative research and results: RETs generally depend on donors whose target-based approaches need quantitative installation figures. Within this, gendered intervention is equated to 'project reduces drudgery of women' or 'all women participated' in the process. However, qualitative results should be actively sought. These could include indicators such as determination to participate through a change in traditional norms and rules for women depending on their economic and domestic status, participation in decision-making, and adjustments to the changing roles of women. To obtain these results, adequate sociocultural and economic research on the needs and priorities of men and women should be identified at the local level.

A community meeting attended by women in Nepal. However, RETs have so far been unable to capture how decision-making factors impact on the adaptation or adoption of a technology. Intervention strategies often ignore the capacity of women to make decisions. (Photo: Courtesy of REDP)

- Discern differential status, groupings, and knowledge of women: It is important to recognise that women have differential statuses and knowledge. Women from different ethnic groups may have different cultural vulnerabilities and strengths. These facets need to be actively recognised to integrate women into programmes and policies to create a win-win situation.

- Seek to integrate women with technology: In Nepal, women and technology are dissociated from each other, even in the professional field. It is important to recognise that women play an important role and can be part of technology intervention. There have been a few cases where women have owned, managed and maintained their own agro-processing micro-hydro schemes, or have assisted their husbands. It is important that this potential be not only recognised but also sought out while training people, especially women, for intervention. The Butwal Training Institute already trains women in electrical and mechanical work. End use activities, through which women can be empowered, should be integrated.

- Set up special financial interventions for vulnerable women: Special financing mechanisms could be set up for expensive technologies such as biogas or household grid connection for female-headed households and women's groups. The women's group in the village of Harichour was provided with a battery charger by the hydro entrepreneur to help light their health clinic in an emergency (personal communication).

- Integrate RETs with other development programmes: Integration of RETs with other programmes has been rare. The rise of community forestry in villages has often had an interesting impact on RET adoption patterns. With an increasing focus on conservation, people are extremely keen on alternatives such as electric low wattage cookers, ICS, and biogas. There is a need for RETs to be more widely integrated with other similar programmes, conservation being but one option. Integration will not only reduce investor costs but also help women to be effectively involved in programmes, thereby enhancing their knowledge and potential in carrying out their dual roles.

- Create decision-making rules: Rules and regulations have often been shown to be effective strategies for involving women. Decision-making capacity should be enhanced in formal rule formation as a

first step in challenging women to be more active in technologies that largely affect them. For example, in far western Nepal, cultural barriers stopped women coming forward to participate in public functions. Following REDP's social mobilisation compulsion rules, they are now active participants in decision-making (REDP, 1998). This has had a positive effect on awareness building, that the technology (MHP) is not a 'male domain' as it is perceived in other areas. However, it is crucial that such rules be explained and agreed before intervention, not after.

There are critical questions for a gendered technological intervention. It is important to realise that technology comes with a huge risk, that of financial investment. Therefore, crucial questions are:

- Do women have a chance to be heard and make decisions? If not, how can this be overcome?
- Could they bear the cost and burden of the technological intervention in areas where they have economic responsibilities?
- Do women have the appropriate knowledge, capacity and time to integrate the technology? If not, can this be provided or found?
- What are the cultural contexts under which they live, and with which an intervening strategy has to fit?
- How can RETs help in the socioeconomic empowerment of women?

There are other pertinent questions that need to be asked. Similar reasoning and questioning can fulfil the goals of technological intervention in a gender-balanced way. Strategies for gendered intervention could probably be developed for women in other rural places enabling them to access and enjoy benefits that most urban women take for granted. ■

References:

- Alternative Energy Promotion Centre (2000), 'An introduction to Alternative Energy Technology in Nepal: Alternative Energy for Rural Development', Kathmandu, Nepal.
- Acharya M. (2000), 'Labour Market Development and Poverty: With Focus on Opportunities for Women in Nepal', Tanka Prasad Acharya Memorial Foundation in cooperation with Friedrich Ebert Stiftung, Kathmandu, Nepal.
- His Majesty's Government of Nepal, Water and Energy Commission Secretariat (1995), 'Guidelines for the Incorporation of Gender Issues in the Water and Energy Sectors', Singha Durbar, Kathmandu, Nepal.
- ITDG (1996), 'Socio-Economic Feasibility Study for a Micro-hydro in Ghunsa, Solukhumbu for Coleraine Ventures, UK', unpublished report, Kathmandu, Nepal.
- Mahat, Ishara (2002), personal communication.
- Pandey B. (2000), 'Small Hydropower Today and Tomorrow: Case study of Nepal', Presentation at Village Power Conference, Dec 4-8, 2000, Washington DC.
- Rural Energy Development Programme (1998), 'URJA Energy for Development', Vol. 4. UNDP/HMGN, Kathmandu, Nepal.
- Rural Energy Development Programme (2000), 'Draft Impact Study', unpublished report, Kathmandu, Nepal.

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Internet Resources

WWW

The Regional Network of Women and Sustainable Energy in Africa has launched a website where information can be found about the principles of the network, contacts within the network, useful links, and a membership subscription form. The site is currently hosted by the Environment Liaison Centre International (ELCI) at: **http://www.elci.org/energy/Homepage.htm**

SPARKNET, an interdisciplinary knowledge network focusing on energy for low-income households in Southern and East Africa, has recently launched a new online resource on poverty and energy: **http://sparknet.info**

The Asia Development Bank (ADB) has published the series of Country Briefing Papers on the ADB website. This series provides information on the status and role of women in developing member countries, and also assists ADB staff in country programmes, project design, and implementation. Countries included in this series are: Bangladesh, Malaysia, the Republic of the Maldives, Nepal, Pakistan, Sri Lanka, Tajikistan, Thailand, and the Republic of Uzbekistan. The series can be accessed through the ADB website at: **http://www.adb.org/Documents/Books/Country_Briefing_Papers/default.asp**

The HEDON Household Energy Network has recently launched a new training and courses database with information about training courses taking place throughout the world on subjects related to household energy, poverty alleviation, and development. The database is freely accessible and users may add their own training courses and events. To view the database, visit the HEDON website at: **http://ecoharmony.net/hedon** and click on 'Training courses' in the top menu. To add new entries, click on 'submit item'.

The Rapid Environment and Development International Timetable (READIT) is an online events database offered as a free service in the lead up to the World Summit on Sustainable Development in Johannesburg in August-September 2002. However, the calendar is not limited to WSSD related events and is intended to be used well beyond 2002. Events from all over the world from local to global level, so long as they directly or indirectly relate to environment and/or development, human rights, peace, etc. The database allows users to enter their own events. Please visit the database at: **http://www.readit2002.net/**

Making a World of Difference in the Homes of a Few

Anita Khuller

Two solar lights in each house in the tribal village of Pavur, Kerala, could change the life of these rural poor immensely. These are the views of Father George Arimpoor sdb, Secretary of the Bangalore Salesian Society, Don Bosco[1] -a charitable institution registered in Karnataka.

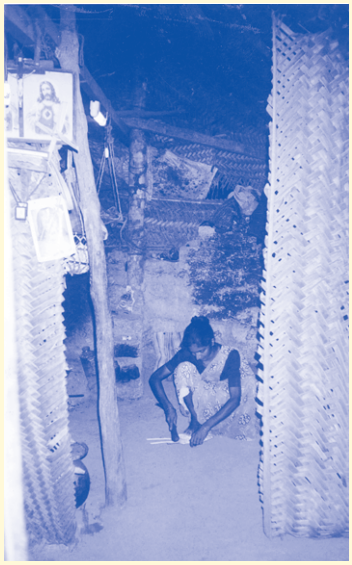
The Society had begun by helping the tribal people of Pavur to market their handmade baskets in urban areas. The tribal people are primarily impoverished ethnic groups who tend not to mix or intermarry with other segments of Indian society. As women are the main breadwinners in the tribal families through their cottage industries, such as basket weaving, Don Bosco decided to aim for better conditions for the village by increasing the economic stability of its women.

Don Bosco has been active in many areas of urban and rural community development work since 1979. Some of its activities include rehabilitation of street children, beggars and rag pickers, the empowerment of fisherfolk and tribal people, vocational and technical training for poorly educated and unemployed youth, and income generation activities for economically backward communities.

Low Productivity

Although there was a market for large baskets, after gathering wild creepers from the nearby forest all day, the women of the village did not have enough daylight hours left to make them. Kerosene lamps were the only lighting in the village, and the women could only engage in the less profitable industry of rolling raw tobacco cigarettes, which could be accomplished under the inadequate lighting. Many of the older women had very poor eyesight after straining to work under kerosene lights for so many years. Father Thomas Myladoor sdb observed that the main cause of this, and other problems, was the fact that the village had no electricity.

Many of the houses in Pavur are connected to "the grid" and are thus officially declared electrified. However, they have no power since it is not being supplied to this area. Household electrification in this village, under the Government's *Bhagya Jyoti* scheme, has proved futile since heavy power cuts are experienced in rural feeders and the voltage dip can be very high (120V against 220V). Relatively rich families that use voltage boosters in their houses further compound the problem. As a result, people living in the tribal areas spend enormous amounts of money on radio batteries, car batteries to run TVs, kerosene lamps and kerosene.



Solar PV has generated a number of benefits for Pavur tribal women basket weavers, including an increase in household income.
(Photo: Courtesy of Anita Khuller)

The women's low incomes have precluded them from sending their children to school. Even where children have had schooling, the quality of kerosene lighting made it extremely difficult for children to study at home. The villagers also had health problems due to inhalation of smoke from kerosene lamps; and most of the older women suffered from severe eye problems having worked under poor lighting conditions for decades.

The Solar Basket Fund

Don Bosco was familiar with PV electrification. In the provincial town of Bangalore, it had installed a 2kWp PV system, which supplied power to an oxygen concentrator, a life-saving machine. The tribal people, with annual household incomes ranging from Rs 2,000-20,000, could not afford to buy solar home systems outright. However, with appropriate credit mechanisms, the Pavur people would be able afford previously unaffordable PV systems.

Although Don Bosco could not act as a purely commercial entity, borrowing money and lending it to finance PV systems, it was able to create a revolving fund –the Solar Basket Fund– which could be used to finance PV systems on a commercial credit basis. The beneficiaries of the lighting systems would pay back the money in instalments, which would be put back into the revolving Solar Basket Fund.

With the fund in place, Don Bosco, in partnership with SELCO India, and using its own money and seed funding provided by Winrock International India/USAID, was able to offer villagers PV systems that could be installed on a commercially sustainable basis. This revolving Fund would be used to lend out PV systems to other tribal people as well. If the credit could keep revolving, the total amount would be recovered in just seven years, and the whole area transformed!

The SELCO approach utilised what is now commonly known as the 'Energy Services Model', depending on the concept of providing

Table 1. Technical Specifications of the Solar PV Systems

Solar Panels	20Wp (2 x 10 Wp each)
Compact Fluorescent Lamps	18 W (2 x 9W each)
Battery Size	12V/40AH
Autonomy	2.7 days

Source: SELCO India

added value to customers through quality product supply and installation, and effective after-sales service.

After seeing the potential benefits of the proposed PV lighting systems, the tribal people authorised the Society to supply them with lighting systems and deduct the monthly instalments from the basket sale proceeds. Don Bosco is already marketing the baskets and has established a mechanism for collecting the instalments from the sale proceeds.

Women's Influence

When the project began, there were no special efforts made to involve women because the project initiators did not perceive of any cultural barriers that would influence women's and men's participation in the project. However, the women's perceptions of the benefits of the project differed from the men's, and women's leadership became the key factor in the project's success. Women speak out most strongly about the benefits, and they take on a leadership role in popularising the technology.

In addition, women who do not presently own solar systems are influencing cost recovery through what project implementers call the 'social pressure' factor. Non-owners believe that unless the existing owners repay their loans, there will be no money in the fund to finance additional systems. The women are applying this pressure very publicly because the benefits will most directly affect them.

Preliminary Project Results

The project has clearly had social and economic impacts, both expected and unexpected:

- The average household income has increased from Rs 900/month to Rs 1500/month.
- More women are putting their children into school. The women themselves pay the fees, which was never done before, indicating that the women have attained significant new financial independence.
- According to project follow-up reports, the women have "heaved a sigh of relief" because the PV lights (equivalent to 40W incandescent bulbs) have turned out to be an ideal solution to their children's inability to study in the evenings.
- The village is experiencing better health conditions.
- Most importantly, the 'Solar Basket Fund' beneficiaries are able to pay monthly instalments of Rs 150 out of their increased income. The recovery rate in the initial three months of the project was 94%. The non-recovery from a few households was attributed to the drinking habits of the men in these households.
- Lastly, although hard to directly quantify, one unexpected result of the project is that a large social problem –the drinking habits of the men in the village– has decreased due to the ability to undertake productive activity during evening hours.

Other Lessons Learnt

- User perception of a project's benefits is the driving force behind project success.
- Financing has to be appropriate for potential users' needs and conditions.
- Users should be involved in the pre-planning stage of a project.
- Economic benefits are essential for the commercialisation of PV products.
- Appropriate uses of product/service delivery, financing and recovery, etc., induce trial purchases, and encourage early adoption of products and large-scale use of renewable energy products. ■

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[1] *The Bangalore Salesian Society was founded by Don Bosco and the members of this congregation are called the Salesians of Don Bosco (sdb).*

› *from page 4*

project designs and plans. Energy plans and policies are virtually gender-blind. A few research and academic institutions such as ICIMOD/Nepal and TERI/India, and donors such as UNDP and the World Bank, have lately been advocating gender issues in the energy sector, but that has yet to be institutionalised. There is a lack of institutional networking to nurture the idea of gender and energy.

What are the most pressing needs to enhance gender and energy?

Gender and energy issues are not much different in Asia from other developing countries. These are the hard-hitting needs that should be targeted:

- Create a gender disaggregated energy database for developing gender indicators in the energy sector and designing gender-based energy plans and programmes.
- Focus on research and development which communicates and reveals the importance of gender-based energy plans and programmes both at macro and micro levels.
- Strengthen the capacity of institutions by increasing the awareness and knowledge of experts in developing gender-oriented energy plans and policies, and the human skills in using gender tools in energy planning and programming.
- Develop a strong institutional network of gender and energy organisations that lobbies on gender and energy needs, reviews, coordinates, monitors and evaluates the gender and energy activities of different sectors, and documents information and case studies. ■

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Methodology for Participatory Assessment in Improved Cookstove Programmes

Linking Demand Responsiveness with Gender and Poverty

Prianti Utami

In the past two decades, a lot of effort has been put into disseminating improved cookstove programmes. In the past, the approach had been mainly technical, and the adoption rate was very low since, whenever technical matters were concerned, men would always be the actors. There have also been some participatory approaches applied in improved cookstove (ICS) programmes, but the results have not been as expected.

Improved cookstove programmes (ICSP) may sound simple but they are a complicated type of project or programme to implement. In ICSP, all aspects related to the activities, such as the sociocultural aspects, habits, beliefs, locally available resources, household size, the economic conditions, and the type of cooking, will affect the adoption of any new design.

Table 1. Perceived Problems with Existing Mud Stoves

Rich men	Poor men	Rich women	Poor women
Stove Acquisition			
Takes a long time to order	Takes a long time to order	Have to buy the stove	Have to buy the stove
Have to go a long distance	Have to go a long distance	Have to ask husband as the place to buy the stove is far from the village	Husband usually asks neighbours, then they go together to purchase the stove to minimise transport cost
Heavy to carry	Heavy to carry	It is too heavy for women to carry	Take a long time to buy the stove
	Costly, sometimes when the stove breaks cannot buy new one at once	Expensive	Expensive
	Have to ask neighbours before being able to buy one due to high transport costs		
Stove Use			
Consumes a lot of fuel	Consumes a lot of fuel	Needs a lot of fuel, have to buy fuel	Smoke
Smoke	Lot of smoke	Smoke	Back pain
Heat		Can cause fire	Tired feet (due to long periods squatting)
		Back pain	Dangerous if not attended
		Watery eyes	

The Indonesian ICS network, in collaboration with ARECOP, realised that a more gender-sensitive approach was needed to enhance ICSP sustainability. In 2001, the Methodology for Participatory Assessment (MPA), developed for sustainable water supply and sanitation systems, was adopted and developed for application with ICSP.

The Methodology for Participatory Assessment is a comprehensive social participatory assessment technique that can be used for planning and monitoring a project or programme. It looks at sustainability by applying a demand-responsive and gender-sensitive approach. The gender sensitivity will help women partake in decision-making, and they are given the chance to voice their choice of an ICS technology in accordance with their needs and habits as well as the sociocultural and economic conditions.

The methodology is applied using a number of tools. The first two are very important tools and are the basis for all other activities and also help ensure that the planning is both gender and poverty sensitive.

Example of the Application of MPA in the Village of Sambeng

General Village Conditions

Sambeng village covers 88.7 ha with a total population of 708, consisting of 340 males and 368 females. There are 179 families in Sambeng, living in 156 houses with 23 families still sharing with parents. Sambeng is in a hilly area that is generally not accessible by vehicle, not even by motorbike, and only those living near the main street have vehicles.
The main source of income is palm sugar. All of the households still use wood stoves for both family cooking and for preparing palm sugar (small-scale industry).

The wealth classification tools produced four different socioeconomic classes in the Sambeng community. The classification used the local terms, and each classification has its own characteristics as defined by the community themselves.

Community Map

Once the community had made their socioeconomic classification, they were asked to draw their own village map and put on the houses using whatever colours they choose for each classification.

The map is an important tool as it is then used as a basis for sampling when working with focus groups, in order to ensure gender and poverty sensitivity. For example, the facilitators can take a cluster of poor women and carry out an activity with them. A specific focus group is especially needed when it concerns practices and decision-making since, in most cases, women's opinions

differ from men's, and the opinions of the poor differ from those of the rich.

An example of the importance of sensitivity towards poor and rich could be seen during the pocket voting and transect walk exercise. During the pocket voting exercise, there were four types of stoves given as being used by the Sambeng community, the kerosene stove, the three-hole mud stove, the two-hole mud stove, and the one-hole ceramic stove. However, during the voting with the rich group, no-one chose the two-hole stove. The result was quite different with the poor focus group, some used the two-hole stove, and no-one used the kerosene stove. This situation was further checked during the transect walk. The reasons given by those who use the two-hole stove (mainly the poorer households - as can be seen/checked on the map) is because it is cheaper and the fact that they do not cook palm sugar since they are poor and do not have palm trees. The richer members need more holes and larger stoves since they not only cook food for the family but also cook palm sugar and cattle feed.

Problems with Stoves

That gender sensitivity is clearly needed when identifying problems with the stoves used is shown by the differences between the problems stated by the men's focus group and those given the women's group. The answers on this issue from the rich and the poor were more or less the same. These gender differences are also seen when discussing the stove options, as the wishes of the women are somewhat different from those of the men. Women are especially concerned with details, while men with cost and fuel consumption. Problems reported related to the acquisition and use of the mud-stove (three-hole and two-hole) and given in Table 1.

This part of the whole process is important as when both men and women are given the chance to voice their opinions, and make their choices, these can be combined and so enrich each other such that the stove design adopted will better fulfil everyone's wishes. Thus, we can claim that any resulting stove design is both programmatically and technically gender sensitive, and therefore, hopefully, will be more sustainable as it is a design based on the demands of the community - the rich, the poor, the men, and the women.

Based on the various wishes arising from the focus group discussions, the facilitators introduce two types of stove design by showing drawings and explaining what each stove is made of, how it is made, the advantages and disadvantages, as well as the costs based on the material used.

After making a stove choice, the community can start working on their plan, based on the results of the earlier activities (see Table 2). The facilitators ensure that during the action plan development there is a good representative balance in participation between the rich and the poor, and also in the number of men and women involved. The facilitators also have to be sensitive that during the focus group discussions that the voices of the women and the poor are heard.

So far, based on their action plan, the community, facilitated and trained by the Energy Section of Yayasan Dian Desa, have built a demonstration stove and, in a kitchen performance test, have compared the performance of the traditional stove and the improved stove. Both women and men are actively involved in the process as part of their commitment when developing the action plan. ■

Table 2. Community Action Plan

Priority Problems to be addressed	Reasons	How to overcome	Plan activities	Need assistance	Local contribution
Smoke – difficult to breathe, watery eyes	The stove design, the wood is wet	Non-smoky stove design	Ask for stove expert	Yes	
Back pain	Stove too low	Adjust stove height or adjust the bench.	Demonstration of the chosen stove	Yes	Yes: local materials and labour
Consumes a lot of fuel	Maybe the stove design	Stove that uses less fuel	Look for the appropriate soil to make stove	Yes	Yes
Difficult to obtain stove – too far to buy and requires a long time and a lot of energy	No local supplier, need to go together with neighbours	Can make own stove	Make a sample stove: Collect materials Training stove cadres to make the stove	 Yes Yes	 Yes Yes
Kitchen is dirty – black from the smoke	The stove and the wood fuel	Non-smoky stove	Make family stove		Yes
Expensive	Cost of stove and cost of transport	Train how to make stove using locally available resources			

◆ Prianti graduated from the Faculty of Psychology of Gajah Mada University in 1992. She started working with Yayasan Dian Desa (Light of the Village Foundation) at its Eastern Nusa Tenggara Province Office in 1993. In 1996, after participating in the Asia Regional Kitchen Improvement Programme, and also in training on skills improvement for Programmatic and Technical Skill Development on Improved Cookstoves, she started an ICS project in West Timor focusing on small-scale salt making industries. Her interest in gender led her to learn the MPA methodology which she is now applying in the ICS project.

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The Bulletin Board

CONFERENCE INFORMATION

Incorporating Needs and Roles of Women in Energy and Water Management Practices, 24-27 September 2002, Dhulikhel, Nepal

The International Center for Integrated Mountain Development (ICIMOD) is organising this regional stakeholders meeting. It is being held under the United Nations Environment Programme's (UNEP) supported programme on Incorporating Needs and Roles of Women for Energy and Water Management Practices in the Himalayas. This programme aims at increasing the capacity of women in the rural areas of the Himalayas, through training and the implementation of pilot projects in energy and water management.

Case studies are being carried out in various hill and mountain districts in Bhutan, India, and Nepal to analyse the current position of women's water and energy needs, and the constraints they meet. The regional stakeholders' consultation meeting is being organised to discuss the identified needs and constraints in each country, so as to:

- reach a consensus on the identified needs and constraints in terms of water and energy at the household/community level;
- reach a consensus on priority sites in each country for implementation of the programme;
- set up and agree on implementation priorities; and
- explore funding options for small-scale energy and water related infrastructure.

◆ For more information, please contact: **Dr Kamal Rijal, Energy Specialist, ICIMOD, G.P.O. Box 3226, Kathmandu, Nepal; Tel: +97.(0)1.525 313/525 314, Fax: +977.(0)1.524 509; Email: krijal@icimod.org.np**

PUBLICATIONS

Fernando, Priyanthi

Balancing the Load: Women, Gender and Transport, April 2002

This publication presents case studies undertaken in 15 countries across Asia and Africa. The aim was to investigate how gender, and gender relationships, affect men's and women's access to transport in general and transport provision in particular. The publication looks at what steps can be taken at community, provider, and policy levels to improve the situation. The proposed steps resulted from two seminars held in Sri Lanka and South Africa where 150 policymakers, transport practitioners, and professionals working at the community level, shared experiences, debated issues, and identified specific interventions that would bring about greater integration of gender into transport activities.

◆ For more information, please contact: **Priyanthi Fernando, Executive Secretary, IFRTD Secretariat, 2 Spitfire Studios 63-71 Collier Street, N1 9BE, London, UK; Tel: +44.(0)20.7713 6699, Fax: +44.(0)20.7713 8290; Email: ifrtd@gn.apc.org**

ITDG

Power to the People: Sustainable energy for the world's poor

This is a report of the multi-stakeholder seminar that ITDG hosted on 17 July 2002, and which examined visions to deliver sustainable energy solutions to the world's poor. The seminar was held at the School of Oriental and African Studies, University of London, UK.

Speakers to the seminar were invited to present four key visions –from government, the private sector, environmental, and development NGOs- in response to the question: *"How can we deliver sustainable energy solutions to help achieve the UN millennium goal of halving the number of people living in absolute poverty by 2015?"*

◆ The report can be downloaded from: **http://www.itdg.org/html/advocacy/docs/p2p_report.pdf**

Oxfam

Gender and Development Journal, Vol.10, No.2, July 2002

This latest issue of the Oxfam Gender and Development Journal is focusing on the theme of climate change and contains contributions from some of the key feminist activists in the field and provides key source material for lobbying at the WSSD in Johannesburg, 2002. A number of *ENERGIA* members contributed to this issue, being Fatma Denton, Margaret Skutsch, and Tieho Makhabane.

◆ For more information, please contact: **Ruth Evans, Editorial Assistant Gender and Development, Oxfam Publishing, 274 Banbury Road, Oxford OX2 7DZ, UK; Email: revans@oxfam.org.uk**

NEW INITIATIVE

Global Village Energy Partnership

The Global Village Energy Partnership (GVEP), formerly known as the Village Power Partnership, will be launched at the World Summit on Sustainable Development in Johannesburg, South Africa, during a high level event which is tentatively planned for 2-3 September 2002.

The GVEP aims to reduce poverty and enhance economic and social development through the accelerated provision of modern energy services to those unserved or underserved. GVEP, in a ten-year implementation-based programme, wants to:

- catalyse country commitments to village power projects and programmes, and guide policies and investments in this area;
- bridge the gap between investors, entrepreneurs, and customers in the design, installation and operation of replicable energy-poverty projects;
- serve as a market place for information, best practices, and lessons learnt on effective development and implementation of energy-poverty projects/programmes; and
- create and maintain an effective GVEP coordination mechanism amongst stakeholders and partners committed to addressing energy-poverty needs.

Stakeholders that GVEP will bring together include both Southern and Northern country governments, public and private sector organisations, multilateral institutions, and consumers.

◆ For more information, please contact: **GVEP Technical Secretariat, Energy Sector Management Assistance Programme (ESMAP), 1818 H Street NW, 20433 Washington DC, United States; Email:judy@energyandsecurity.com, dlallement@worldbank.org, susan.mcdade@undp.org**

VACANCIES

Two openings at IT Power India

IT Power India is an independent renewable energy engineering consultancy company based at Pondicherry, India. The company is now seeking to expand its team of renewable energy consultants to assist on a wide range of new projects and is looking to fill the following positions:

- Assistant Energy Engineer
- Climate Change/CDM Specialist

IT Power India is an equal opportunities employer and is keen to encourage applications from women and members of minorities.

◆ For more information, please contact: **S. Gajendiran, Administrative Manager, IT Power India Pv Ltd., 6 Rue Romain Rolland, Pondicherry-605001, India; Tel: +91.(0)413.227811/342488 (ext 22), Fax: +91.(0)413.340723, Email:gs@itpi.co.in**

Next Issue

ENERGIA News 5.3, due out in November 2002, will be a special issue focusing on EnPoGen, the Energy, Poverty, and Gender project managed by the Asia Alternative Energy Unit of the World Bank. The objective of the EnPoGen project is, specifically in rural areas of Asia, to increase the beneficial impacts of ASTAE's alternative energy projects on poverty alleviation and gender equity by qualifying and quantifying the linkages between alternative energy projects, poverty alleviation, and gender equity.

ENERGIA would very much welcome your contributions on gender and sustainable energy -articles, and/or case studies (1500-2000 words)- for future issues of **ENERGIA News**. Please remember to send photos and/or other illustrations to accompany your features.

ENERGIA is an international network on Gender and Sustainable Energy, founded in 1995 by a group of women involved in gender and energy work in developing countries. *ENERGIA*'s objective is to "engender" energy and "empower" women, through the promotion of information exchange, training, research, advocacy and action aimed at strengthening the role of women in sustainable energy development.

ENERGIA's approach is to seek to identify needed activities and actions through its membership, and then to encourage, and if possible assist, members and their institutions to undertake decentralised initiatives. **ENERGIA News** is the principle vehicle for this approach.

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