

Annual Review

September 2008 - August 2009



Step Change



Welcome to our Annual Review for 2008/9 – covering what has been an incredibly rewarding year to be involved. There is, in fact, no way for us to report on everything that has taken place. We struggle to even capture it! What we present to you here, therefore, is an attempt at a scrapbook - a collection of our ideas, pictures and stories.

Our movement is now receiving better support from our organisation: Engineers Without Borders UK (EWB-UK) has changed rapidly over the last year. The biggest change has been for us to welcome permanent staff; Fran Talavera and Catherine Hill started in June last year, Alexis Glazer started in September and I joined in December. The capacity of the organisation has grown significantly and our reputation in the development, engineering and academic communities has flourished. EWB-UK fills the gaps between these communities, just as it is able to bring people, projects and funding together to mobilise tremendous value - and to make a difference.

Our programmes have grown and expanded. We have invested in our organisation's systems. We're bigger, better and brighter. However, the real test of our progress will be in the coming year. The drastically changed economic context is just one of the challenges we face. Another is to ensure that the passion of our movement is not lost in the need to develop our organisation. I also think that – now that the engineering community is 'waking up' to international development – we need to work hard to wake up the international development community to engineering once more.

The last year has been about step change. I think the next will be about maintaining that to achieve something much more valuable: generational change.

Thank you, sincerely and deeply, to all those who have volunteered with and supported our organisation over the last year.

Andrew Lamb





People

Engineers Without Borders UK is a community of skilled and enthusiastic people who are committed to the idea of removing barriers to development through engineering. Our Board of Trustees - below - are responsible for the charity, its work and its future. The work itself is lead by a team of co-ordinators that we call the 'National Executive' team - shown on the opposite page - who support teams of volunteers in our university branches and in our Professional Network in achieving EWB-UK's aims.

Board of Trustees 2008/9



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Sustainable
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Engineering Design
undergraduate at
University of
Bristol and former
Research
Co-ordinator



Stephen Jones
PhD student
researching
govenance in
water and
sanitation in Mali
at Royal Holloway

Board of Advisors

We are delighted to welcome the first members of our new Board of Advisors. They have kindly agreed to help to inform and support EWB-UK in its work.

- Professor Paul Jowitt President, Institution of Civil Engineers 2009/10
- Tahani Youssef Executive Director, World Federation of Engineering Organisations
- Professor Sir David King Director, Smith School of Enterprise & Environment, Oxford
- Edward Bickham former Vice-President at Anglo American and its Group Foundation
- Professor Robert Chambers Institute of Development Studies, Sussex University

People Branches Professional Network Placements Bursaries Research

Branches

We've been delighted to welcome lots of new university branches this year. Most university branches have expanded their memberships as the quantity and quality of their activities has grown significantly – we cannot even begin to capture all the exciting things that have taken place!

EWB-UK does not directly manage branch activities and their work is largely self-motivated. We are putting ever-greater effort into supporting them in their own initiatives in line with our aims. The communication between branches and with EWB-UK has improved and more and more branches are getting involved in EWB-UK programmes. Within each of the programme areas there are examples of where branch activities and individual branch members have innovated, raised higher standards and introduced new ideas. We're going to attempt, here, to represent and recognise the extent of the work of branch members and their commitment. We want to highlight their success, and the dedication that has made that success possible.

Getting the word out

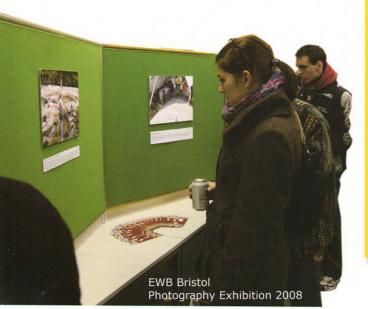
The greatest single task of a branch committee is the time spent motivating and inspiring people, providing opportunities for people to develop their interests and to get involved. This involves exploring ideas and opportunities with, say, academics, freshers, finalists, student's union staff and often local community organisations. Their enthusiasm is very infectious!

Publicity is vital. But it's most often about peer-publicity – the idea that the person involved in these activities is the person sat next to you in the lecture theatre. It is often the day-to-day conversations in the pub, in the lab or at branch socials that provide the greatest impact.

Getter better - inside and out

This year, branch committees have worked hard to define and manage their activities. Several have produced professional printed materials, detailed 'termcards' listing their planned activities, agreed annual objectives, delivered on projects and held structured handover workshops – in many ways, branch committees are operating successful development organisations themselves. Branches are able to consolidate detailed local knowledge and drive continuous year-on-year improvements to their work.

Branches have also built on their external relationships. The efforts of students to network in their universities has helped to substantially increase respect for EWB-UK's work at departmental levels. The hosting of our 2009 National Conference at the University of Bristol – with both financial and logistical support from the faculty – is a perfect example. More branches are successfully taking on grant funding as well as more regular corporate donations. Examples include the 'Active Community Fund' and 'Wales for Africa' initiative of the Welsh Assembly Government. The majority of branches now work closely with one or more organisations in their local communities.



Getting involved in EWB-UK's future

The growth of the network and improved communications has meant that branch members can get more involved with in the strategic and operational decisions of EWB-UK. As well as contributing to content and programme delivery, branch members have contributed to, for example, the organisation, facilitation and delivery of the Outreach Conference (hosted by EWB-Oxford), the Research Conference, the Training Ideas Day (hosted by EWB-Birmingham) and the Placements Ideas Day. These forums have brought in the experience, interests and thinking of the branches to inform the future direction of the whole organisation.



Media

Member Stories

Finances

Thank You

The twelve new branches in 2008/2009 are:

- Heriot Watt
- UCL
- Leeds

Education

Training

Outreach

- Kings, London
- Liverpool
- · City University
- Manchester
- Swansea
- Warwick
- Plymouth

• Bath

Exeter

Of these, five existed in previous years but have been revived by entirely new committees, and seven are newly registered societies. We're thrilled to welcome them to EWB-UK!

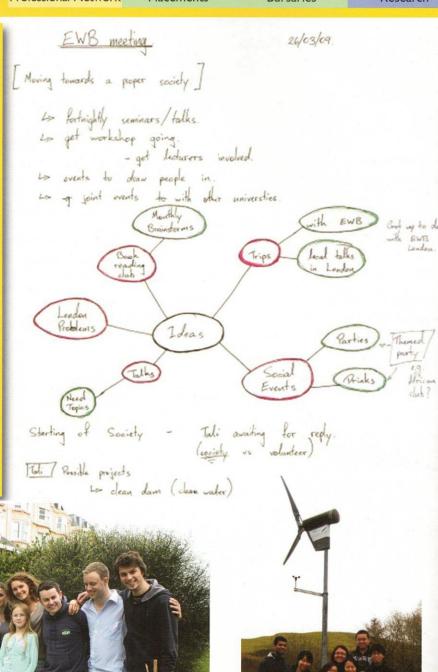
People Professional Network **Placements** Bursaries Research

Getting started

The establishment of new branches relies on the determination of students to create and promote a local group of Engineers Without Borders UK. The character of the growing success of EWB-UK draws fundamentally upon the energy of its newest members. Members at existing branches in other parts of the country, however, are vital in helping new branches to get started. For example:

- Members of Imperial College branch opened their activities to new branches in London.
- The Birmingham branch hosted members of new branches in the midlands region.
- The attendance of a Swansea University student at an EWB-Cardiff event last year helped to re-ignite the establishment of EWB-Swansea, and they are now regularly in touch and even share funding.
- Committee members at Edinburgh University actively sought the establishment of two branches at other universities in the city.

These instances of support and mentoring by existing branches are just a few examples of this principal force that allows Engineers Without Borders UK to involve more people.







Branch Projects

Many members are now using their branches as platforms from which to devise and manage a range of innovative projects. Branches across the country have conducted design-and-build projects focusing on appropriate technologies such as wind turbines, solar cookers and shelters made from recycled materials. Branches have also developed links with organisations in the UK and in developing countries and have been working hard with them, gaining direct experience engineering for international development. These have included, for example:

- **EWB Edinburgh:** The 'Developing Intermediate Educational Materials' (DIEM) project works to develop materials for schools in developing countries to teach young people about engineering and its relevance.
- EWB Imperial College & EWB City: A rainwater harvesting project in Tanzania working directly with a series of communities, set up by an undergraduate at Imperial last year. The project also gave university students from London an opportunity to learn about the realities of engineering and international development. The team fundraised over £10,000 for their project.

Education Training Outreach Media Member Stories Finances Thank You

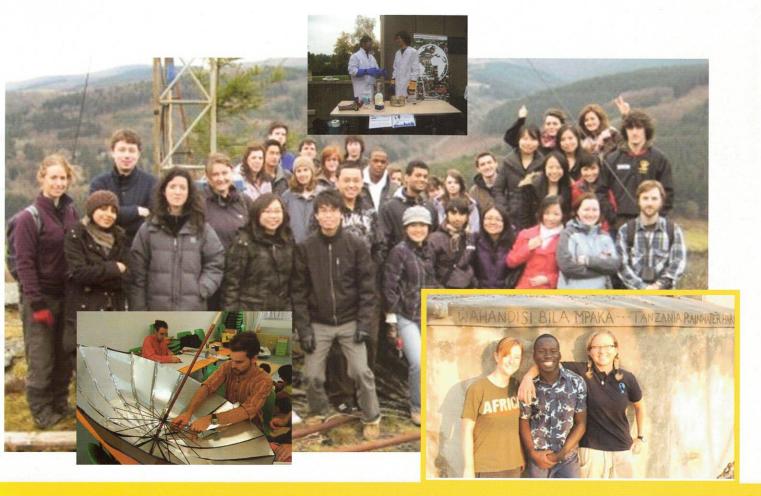
Presidents' Event

In February, all EWB-UK branch presidents were invited to participate in our annual summit designed to help them in their work. This year, the event was hosted by EWB Glasgow members at the University of Strathclyde – thank you!

The delegates represented a thorough mixture of experience. Nottingham, Edinburgh, Herriot Watt, Imperial and Cambridge branches gave detailed presentations on the major achievements and the major setbacks in the course of their activities. The recently-established branches at City University, Sussex, Bath and Manchester sent delegates who brought their experience from other organisations they had been part of, as well as the important critical perspective of new members.

Following the discussion and evaluation of specific activities, the conference gave the opportunity to

generate a snapshot of the activities of the organisation and the overall capacity of the branch network. Delegates scrutinised the accessibility of the national programmes, their access to local and national support channels, the fostering of leadership at a branch level and the prospects for the expansion of the network. The proceedings of the weekend form an invaluable exploration of EWB-UK's purpose and the needs of the branch network's members. Vision, inspiration and determination are in high supply amongst the members and they placed a great deal of importance on having high standards, clear aims and good accountability. The principal aim expressed was that work of branches should be fun and should support the vibrant and resourceful community that EWB-UK represents. Thank you to all who participated!



- **EWB Swansea:** Researching and delivering appropriate irrigation methods with a group of farmers in the Gambia, focusing heavily on existing local knowledge and materials.
- **EWB Southampton:** The branch has been working with Tools for Self Reliance, which is an existing charity that collects, repairs and refurbishes broken tools for the use of artisans in sub-Saharan Africa.
- **EWB Sheffield:** The project, called Mobility Sheffield, is about collaborating with the local Children's Hospital to adapt and manufacture orthopaedic therapy devices for children with rare or complex conditions.
- **EWB Cambridge:** The branch has been working on the grounds of a friendly Cambridgeshire resident to experience the practicalities of a small scale irrigation project.
- **EWB Nottingham:** Designing and building water filters and water pumps for the use of a local ecological project, drawing on the work of university academics and former members.
- **EWB Edinburgh & EWB Heriot Watt:** A project with the Cambodia HOPE organisation which provides care and education to orphans. The problem that needed to be addressed was the provision of energy, and the team designed and built a biogas system to provide enough energy to cook hot meals for all the children and helpers twice a day using fuel from their pig farm.

Professional Network

The EWB-UK Professional Network (PN) is a forum for practising engineers, other professionals and researchers to support and augment the work of EWB-UK. It takes the form of a UK-wide network of professionals who interact with the EWB-UK branches at universities across the country. It also helps establish links with companies, engineering institutions and development organisations. Those involved include recent graduates with previous involvement in EWB-UK, those with an interest in development work and experienced professionals of various backgrounds.

By running events and distributing information about EWB-UK activities and opportunities to professional members, the Professional Network seeks to engage the membership.

What's Next

Over the last year, the Professional Network has continued to grow. With the imminent appointment of the first national Professional Network Committee, the Professional Network is set to expand even further over the next twelve months. The importance of having more members and volunteers in the network cannot be understated. Increasing the ability to support the work of EWB-UK efficiently and effectively, across all programme and support areas, is the primary aim for the coming year.



Education Training Outreach Media Member Stories Finances Thank You



Many Professional Network members have helped EWB-UK by taking part in sponsored activites such as marathons and endurance activities, raising both thousands of pounds and awareness of EWB-UK in their workplaces.

10th - 26th March

London Festival

The inaugural PN London Festival held this past year to coincide with National Science and Engineering Week. It was a very successful venture which included a talk series and a number of other events, attracting lots of new people. The festival is sure to be repeated again this year as a platform for increasing awareness of the PN amongst professionals.



People Branches Professional Network Placements Bursaries Research

Placements



Caroline Cage, volunteer with REDES El Salvador

I went on an EWB-UK placement in summer 2008, visiting communities in rural El Salvador to evaluate several projects that REDES had implemented.

It was a really valuable experience working with communities. It gave me an important insight for my masters course in Development and Emergency Practice at Oxford Brookes University. I have since helped to develop a training course on participatory techniques for Architecture Sans Frontieres, which we ran for the pre-departure course this year.

My EWB-UK placement really consolidated my interest in working with communities in Latin America. I will shortly be starting a PhD in London researching the use of public space in slums in Lima, Peru. The skills and experience I gained from going on the EWB-UK placement will be very useful.



Over my past two years experience with EWB volunteers, I have found them highly professional and dedicated to their work. They have completed their tasks in minute detail, and their contributions have helped in planning new, larger projects for rural communities.

During 2008 [volunteer] Siobhan designed and put in place a de-silting device for a water filtration tank which is now working very efficiently and has high potential for replication in high silt prone areas. During 2009 Volunteers Marie and Lisa assisted in the execution of a model rain water harvesting project for Shayaghat village and prepared a plan for another project which could store as much as 157,700 litres of rain water for Shyamaghat and Bhogpur; two remote villages in the lower Himalayan belt of North India where water is scarce.

Thanks to EWB UK for choosing the right volunteers and helping us work for an important cause.



Back in 2002 EWB-UK sent its first two placements volunteers out to a rural community project in India. Now, seven years later, the number of volunteers has increased to 40 and we work in a wide range of places. Our aims are:

- Reduce poverty by contributing to the delivery of appropriate development projects
- Give young people experience of working in the development sector
- Increase the capacity of our Partner Organisations

What we do

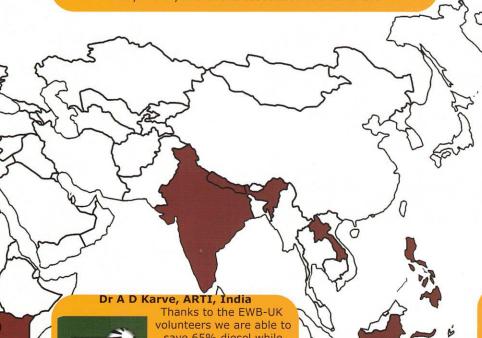
2009 saw a record number of approximately 250 full applications for the 33 placements launched in March. They brought their energy, enthusiasm and engineering skills to 20 partners working on projects including the construction of much needed water-supply systems, cold stores for farmers groups, sanitation facilities, community-based renewable energy systems and programmes to expand the use of improved cooking stoves and biomass engines. Together, our partners will receive approximately 575 weeks of volunteer engineering time this year - a significant contribution to their work

Pratima Joshi, Executive Director, Shelter Associates, Pune, India:

On behalf of shelter associates I would like to convey our deep appreciation to EWB-UK for sending us volunteers over the last 3 years to assist with our work



here. They have all made a qualitative difference to our work especially on the use of GIS. Every subsequent batch of volunteers have added new inputs to managing spatial data effectively. We look forward to many more years of this association with EWB-UK.



volunteers we are able to save 65% diesel while operating a 10 kW electricity generator on our campus by using biogas as a part of the fuel.

How we do it

The Placements Programme depends on generously donated time and expertise from many sources. The programme is run by a core of around 25 young professionals and students who freely give their time to work with our partners to define the work of the volunteers, prepare and support the volunteers and build relationships with the partner organisations. A wider circle of volunteers help with other tasks such as reviewing placements, grading volunteer applications and helping with volunteer interviews.

Partner organisations who would like our assistance contact us throughout the year, and during the Autumn we work with them to define what work they would like volunteers to do. We

then carry out a review process in Winter, and advertise for volunteers in Spring. We carry out interviews, train the volunteers to prepare them work working in development, and they depart for their placements primarily in the Summer.

A number of external organisations support the programme, including NGOs and companies. The disaster relief organisation RedR supports the programme by funding an administrator as part of the Future Relief Workers scheme where, for example, RedR patron MWH covers the entire cost of a placement won by a member of their staff. Another example is that Newton Industrial Consulting carry out short field visits to relevant projects to help the volunteers to achieve more during

Nicolas Jeambrun and Jacquie Kiggundu, ACTED Indonesia



Following a successful experience with two EWB-UK volunteers in 2008, ACTED welcomed two more in 2009. Charles Perry was assigned to our road and school construction projects where he is contributing to project follow up and helping to ensure engineering standards are met. Charles' collection and analysis of data is greatly improving programme planning and reducing the risk of unanticipated problems.

Our community-based disaster risk reduction project is benefiting from the input of Nigel Vaz. Nigel is participating in the general development of the project strategy and will soon be an essential technical asset for the planning and follow up of disaster mitigation activities. For ACTED, it is clear that the input of the 2009 EWB-UK volunteers has been very valuable.

SIBAT: Jove Benosa & Charlene Tan:

Our volunteers from Engineers Without Borders UK have always immersed themselves into the life and culture



of SIBAT. Our memories range from their sharing their experience of wind energy technology, facilitating our teamwork and systematisation of project development, working and learning with us in the field to smiling over beers and karaoke. We shall always be grateful for their partnership and for their friendship.

The future

The continuing increase in the number of applicants has led to an ever more competitive volunteer selection process, which means that the level of development and engineering experience that EWB-UK can provide its partners is higher than ever. That is a trend that is likely to continue into the future as the programme becomes more popular. In the future the programme aims to increase both the number of partners we assist and also the effectiveness of our assistance. As the programme continues to mature would like to take on more challenging placements and continue to adapt to the needs of our partners.

People Branches Professional Network Placements Bursaries Research

Bursaries

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The Bursaries Programme provides small grants for students and recent graduates to undertake their own projects and learning opportunities so that they can apply their individual skills in engineering and international development. More recently, we have also taken on research project bursaries.

This year we have awarded 30 bursaries with an average award of around £325. The recipients of these bursaries have travelled to 20 different countries to get involved with activities such as a conference on water and sanitation held in Mali or a project to improve the structural strength of buildings in Nepal.

Bursary applications are peer-reviewed by panels of students from EWB-UK branches supported by members of the Professional Network. This model exposes the young reviewers to a wide range of engineering related international development projects as well as giving valuable feedback to the

applicants. This year's review panels have been based at Birmingham, Bristol, Cambridge and Imperial College branches. To encourage more diverse applications, the review process now takes place all year round with at least one review panel meeting every month. This is a big improvement for both awardees and for involving more people.

This year's difficult financial climate meant that bursary awards were suspended for two months early in the year. In response to this, and to secure the future of the programme, we sought out and have been awarded the first restricted funding for the Bursaries Programme. Next year a Special Award from the 'Royal Commission for the Exhibition of 1851' will fund half of the total budget of the programme - an wonderful step forward. This funding, along with other smaller, more specific grants, will help to ensure the stability of the programme in 2009/10 even as it expands again.







Demonstration of how mesh reinforcement can be retrofitted to building reduce the chance of collapse during earthquakes. Josh Macabaug travelle Nepal to research how this technology could be implemented.





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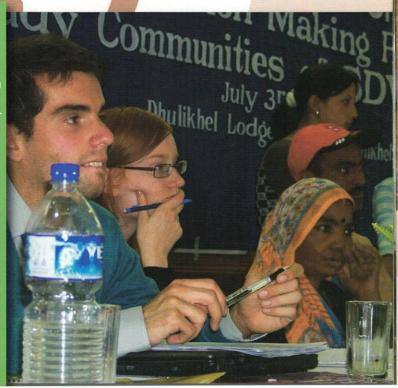
41-44

communities.

Alongside students from the Nepal Engineering College they also constructed and tested a manual de-sludging hand-pump for pit latrines.

Luca described the project as "a unique opportunity to understand better the necessities and the socio-economical constraints of each community".

The report they produced will be used as an part of a wider project to improve water provision for slum dwellers and squatters in Nepal.



People Branches Professional Network Placements Bursaries

Research

EWB-UK Research works by supporting relationships between development organisations all over the world and UK-based institutions of higher education. EWB-UK's Research Programme helps bridge the gap between universities, students, development organisations and communities.

The Research Programme works with a variety of stakeholders. We are currently partnered with 20 universities, 40+ academics and 13 development organisations. We have a network of professional engineers and over 150 students. The dissemination of our work reaches an audience broader still. The activity of the programme has increased dramatically in the last year. We have also expanded into research at the MSc and PhD level and formalised our knowledge-sharing strategy.

With many new research projects available and academic departments around the country becoming aware of our programme, we expect activity to surge yet again in 2009/2010!

October 2008

EWB-UK, Renishaw plc and the University of Bristol agree to work in partnership on a 4 year PhD on the topic of Pico Hydro Generators. The project will begin in October 2009.

November 2008

The University of Sheffield takes up EWB-UK research projects for the first time. Four students from Sheffield join the 40+ students doing EWB-UK projects around the UK.

February 2009

Research Conference at the Royal Academy of Engineering

March 2009

The Cranfield Water Management MSc programme formalises its relationship with EWB-UK Research and five students take on projects

Research

































September 2009

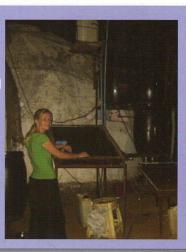
Alexis Glazer begins as EWB-UK's first full time Research Programme Manager.

January 2009

We have a meeting with Practical Action in Rugby to start working together on research. They put forward ten research projects.

Case Study: Biodiesel Plant englNdia, Hayley Weston - Bath

My biodiesel project in Pabal, Maharashtra began in October 2007 as part of the final year of my Mechanical Engineering Degree at the University of Bath. The aim was to design a biodiesel transesterification plant to run on locally available karanj or jatropha oil. In May 2008 I went out to Pabal to implement the final design at Vigyan Ashram. The biodiesel plant at Vigyan Ashram currently operates at 12,000 litres per year and the centre's plans are to introduce the design to local farmers in and around Pabal. Karanj and jatropha oils grow naturally and abundantly in the region, acting as a sort of hedgerow on farmers' land. As farmers are now able to obtain a sustainable source of fuel more cheaply and easily, it gives the community greater independence. Vigyan Ashram hopes to transfer the design and have 20 farms producing their own fuel by the end of 2010.



Education Training Outreach Media Member Stories Finances Thank You



Objectives

Our research has the following objectives:

- to provide interesting and engaging research opportunities for students,
- to offer development organisations an inlet to UK academic institutions
- to create awareness of engineering for development, and
- to facilitate existing engineering for development research.



Rapid Response

EWB-UK has recently won a grant to implement a Rapid Research Response Secondment Scheme, set to begin in the coming academic year. In the first year of the project the University of Edinburgh, Imperial College London and the University of Nottingham will each have one PhD student participating in the scheme. The scheme seeks to overcome the communication and general structural barriers of engagement between humanitarian organisations and institutions of higher education. The project will be funded by a grant administered through the Enhanced Learning and Research for Humanitarian Assistance scheme, under the auspices of Save the Children.

April 2009

Two masters students at Imperial and Cranfield each conduct UK based research for HINT and later it follow it up with work in the field.

June 2009

EWB-UK participates in the selection of our first PhD student. Sam Williamson will undertake the Renishaw funded PhD at Bristol.

August 2009

Grant obtained for Rapid ´ Research Response Secondments for PhD students through ELRHA

Imperial College London





Southampton













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May 2009

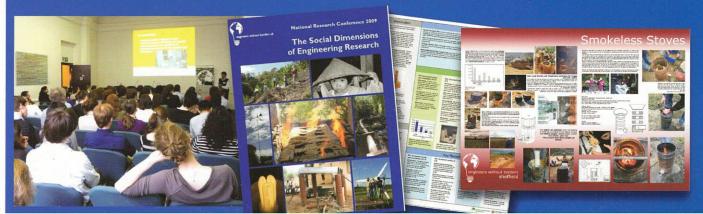
Liverpool becomes a research hub with four new students signing up to take on projects in the coming year.

Sept 2009

Katie Cresswell-Maynard replaces Alexis as Research Programme Manager.

Research Conference & Proceedings

The 2009 Research Conference was held at the Royal Academy of Engineering. It is a clear example of the programme's development. The conference was called 'The Social Dimensions of Engineering Research' and it brought together academics, students, professional engineers and development organisations to discuss thematically organised research related to engineering for development.



Education

The EWB-UK Education Programme expands the coverage of global issues in undergraduate engineering curricula. We do this by supporting universities to develop course material that engages, motivates and challenges students on global issues. Backed by a network of professionals, academics and committed students, we are becoming an invaluable resource in both developing and delivering course material.



2008/09 has been a formative year for the Education Programme. We have made new links with educational institutions overseas such as the Centre for Science and the Environment (CSE) in New Delhi, Centre for Science and Technology school in Cape Town, and a school called Vigyan Ashram in Pune, India. This is part of our exploration of making the Education Programme more international as we develop plans to support engineering education in developing countries.

We look forward to another very exciting year for Education, where key highlights will include:

- Summer school to be held at CSE in India in July (visit www.ewb-uk.org/challenge)
- Three more workshops at the Royal Academy of Engineering
- The further development of the Education Programme at branches across the country.





3-4
National Executive

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Training

The EWB-UK Training Programme provides opportunities for young people to enhance their understanding and awareness of issues faced and skills needed in international development work. It motivates many young engineers to pursue careers in this field and provides important stepping stones along the way. Training courses allow participants to get their hands on appropriate technology and to meet experienced professionals.

The programme recently entered its third year of a Development Awareness Fund grant from the Department for International Development. It has grown considerably, most notably in the number of events, the diversity of content, geographical coverage and its reputation within the sector.

This year 3,200 people have attended more than 120 events around the UK. These events range from evening or lunchtime talks held in universities to practical workshops and longer residential courses. They have all raised awareness of engineering and its role in international development.

We have started a consultation process with international development professionals to explore ways to make the training programme more valuable for participants and agencies alike.

Training Ideas Days are quarterly gatherings that bring volunteers from every branch to share ideas and to provide support for organising training activiites. The first of these was held in June 2009 and brought together over twenty representatives from student branches and Professional Network groups.



Small Is... Festival

In September 2009, EWB-UK and Practical Action co-organised their first festival!!! The event was held over two days in the beautiful grounds of Practical Action and attracted 250 people who came to celebrate and discuss the ideas put forward by E F Schumacher in his landmark work 'Small is Beautiful'. It included practical workshops, talks and discussions which received very positive feedback. Most people camped for the weekend and EWB-UK installed improved pit latrines for the festival-goers. It was our first family event and proved to be an exciting and fun way to reach a new audience during the summer.



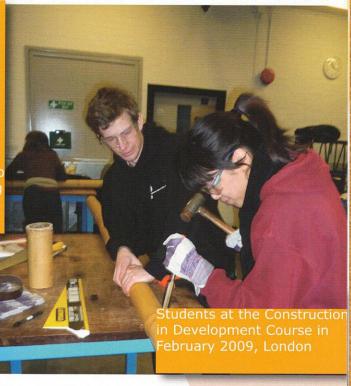
Education Training Outreach Media Member Stories Finances Thank You

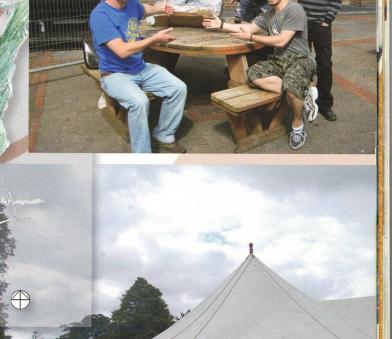
Construction in Development

In February 2009, EWB-Imperial hosted a packed weekend of workshops around the theme of Construction in Development. The course included practical workshops on mud bricks, rammed earth and bamboo. There were also talks about working in the field, the theory behind traditional materials and innovative solutions to technical challenges. The weekend was heavily oversubscribed and was a brilliant opportunity for participants to learn both practical and theoretical skills. It challenged participants to consider approaches to construction projects in developing countries and the unforseen issues involved in this.

Engineering for a Better World

In June 2009, EWB-Birmingham ran their annual weekend course for the second time. This weekend provided a good excuse for unwinding after exams and was, again, a great weekend filled with activities. It included a variety of sessions and provided a balance of technical content and 'softer' skills fundamental to sensitive development work. Building on the success of the previous years' course, this was a very popular weekend attracting participants from around the country along with many local people.



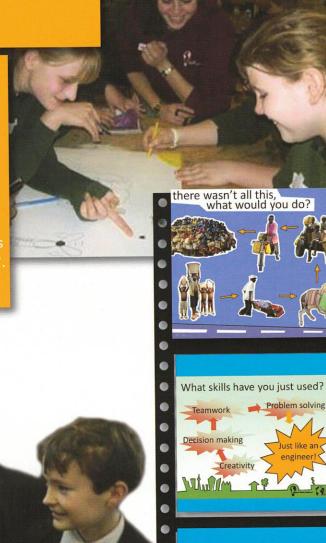


Outreach

Introduction

The Outreach Programme is our way of supporting our members who want to engage a younger generation in global development issues. Schools and local groups (such as Scouts and Guides) have shown great interest in educating their pupils and members about international development.

EWB-UK members can run workshops in local schools on topics including water, transport, shelter and renewable energy- each with a global focus. The hands-on workshops have engaged and inspired pupils from the ages of 7 to 17.

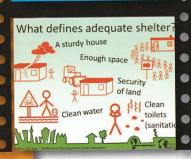


Outreach this Year

The main objective of Outreach Programme this year was expansion! By the end of the year, at least 10 branches were involved in running and developing workshops, which led to about 30 workshops being delivered. Three new workshops were developed by our branches:

- Shelter for the World
- Bridging the Gap
- Solar Vehicle Challenge

The second annual Outreach Conference, in January, was a run way to bring branches together to share ideas. Shelter for the World was in fact a cross-branch collaboration that was brought together by the Outreach summer intern. Hopefully, in the coming year, Outreach will continue to expand to include more branches, resulting in more school visits and more workshops to offer.



LET'S PLAY ANOTHER GAME!







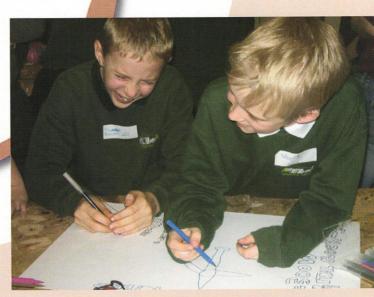
Thank You

Case Study:

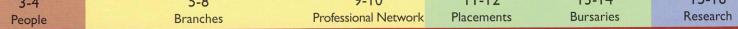
Water for the World

Report by Dimitrios Kandiakis





today's youth to engineer a fairer future





Press & Publications

EWB-UK has now established a dedicated Press and Publicity team. With three reporting interns volunteering during the summer vacation, we are nowbetter able to publish numerous articles in local and national press as well as online. Over the past year we ar e glad to have published a number of articles including the following:

- Article in The Independent Engineering supplement on Richard Cunliffe and his EWB-UK bursary-funded project to create a rainwater harvester in Tanzania
- Story in Engineering Designer on Andy Murfin and his project in Laos with the Lao Institute for Renewable Energy through EWB-UK
- Column in the IET's magazine where Andrew Lamb comments on the possibilities of a global crisis by 2030
- Article in the NCE about Josh Macabuag winning first prize int he ICE Graduates & Students papers competition for his research paper with EWB-UK





Education Training Outreach Media Member Stories Finances Thank You

ANNA LEA:

Anna Lea did her degree at Oxford in Engineering, Economy and Management she won the Royal Academy of Engineering 'Engineering Leadership' Award. This enabled her to travel to India where she got involved with EWB-India, attending a workshop on technologies for sustainable rural livelihoods. Upon her return she got involved with EWB Oxford, and the National Training team, where she was one of the people who set up the course on Water and Sanitation, Shelter and Infrastructure and Alternative Energy.

When she completed her degree, she got a job at Mott MacDonald, where she now works as a Hydraulic Engineer, whilst doing a part-time MSc at Cranfield University in Community Water Supply and Sanitation. As a part of her MSc, Anna is soon taking off to Benin, where she will be working with GTZ, the German development organisation, who work there on behalf of the German Federal Ministry for Economic Co-operation and Development.

"As part of my MSc, we can do a six week research project overseas. The University provides us with a list of places and organisations where we can go, or we can submit our own project. Benin was suggested to me as I'm learning French, so that's where I will be going" she says.

Anna's task is to look at how the decentralisation of water supply is going. "Recently, Benin's government decentralised the rural water supply service, transferring responsibilities to the local municipalities. One of the initial transfers is for social intermediation, which is normally done by facilitators or trainers of contracted organisations. The problem is that this is not working well in all municipalities and improvements of the system of social intermediation will be needed. This includes work such as supporting the villagers in their

application for water supply systems and supporting management of them, including ensuring people pay for water and maintenance. So my task will be the assessment of problems being faced and to see how different organisations are approaching them and to also work out if there is a bias towards more easily accessible areas. My work will go towards my MSc and, I hope, will provide some recommendations "





EDDIE MATOS

Eddie Matos studied Design Engineering at the University of Bristol where he was heavily involved with EWB Bristol before becoming a trustee of EWB-UK.

His idea started life as a dissertation project. "Through my involvement with EWB-UK, I'd had the idea of doing international development projects in a commercially viable manner. We were given an academic assignment that could involve this, somebody suggested biogas and we stumbled on some papers that suggested biogas would be successful in Tanzania. But in 2002, the literature appeared to stop and it turned out that the reasons for this were silly – but significant. For example, they simply didn't have enough engineers."

Eddie's idea is to create a social enterprise, named Shamba Technologies, in Tanzania to provide polyethylene biodigesters to rural households. Eddie is aiming is to train people to make and repair the biodigesters, then supply them with high-quality materials at affordable prices (by buying in bulk) to generate revenue. These people could then set up their own businesses installing digesters in rural households so the technology would be disseminated.

"There are a lot of small scale biodigesters being used in Tanzania, which is positive, and the average household would only need about two or three cows do generate enough biogas to support their cooking needs. But the digesters they're using are an order of magnitude more expensive than the design we've been working on."

3-4 **)-0** 7-10 11-14 13-17 13-10 Professional Network **Placements** Bursaries Research **Branches** People Accounts to 31st March 2009 2007/8 Seven month period ending Statement of 31st March 2009 **Financial Activities** Total For the 7-month period £ Total Unrestricted Restricted 1st September 2008 to 31st March 2009 185,156 (including an income and 110,829 154 expenditure account) 78,187 460 576 Incoming resourced from generated funds 32,642 265 460 7,394 154 36,338 Voluntary income: Activities for generating funds: 111 193,280 29,838 147,892 6,500 Investment income: Incoming resources from charitable activities: 108,179 39,713 6,513 11,753 Total Incoming Resources: 482 11,209 460 544 168,465 Costs of generating voluntary income: Costs of generating funds 128,142 Fundraising trading - costs of goods 460 2,703 79,501 sold and other costs: 1,909 48,641 18 178,163 1,891 142,264 Charitable activities: 90,728 15,117 51,536 5,628 Governance costs: 20,930 17,451 Total Resources Expended: (11,823) 36,047 16,599 0 19,448 0 Net Movement in Funds: 36,047 41,675 Funds brought forward: 34,050 7,625 Transfer between funds: Funds Carried Forward: 2008/9 2007/8 **Balance Sheet** £ £ 31st March 2009 Current Assets 450 Stock: 17,257 Debtors: 5,428 58,484 79,420 Cash at bank and in hand: 64,362 **Total Current Assets:** 96,677 (60,630)(22,687)Creditors: Net Current Assets: 41,675 36,047 36,047 **Total Net Assets:** 41,675 **Funds** 7,625 Unrestricted fund: 19,448 Restricted fund: 34,050 16,599 36,047 41,675 Total funds

Professional Network Research People Branches **Placements** Bursaries

Accounts to 31st March 2009

Statement of **Financial Activities** For the 7-month period 1st September 2008 to 31st March 2009 (including an income and expenditure account)

		2	007/8
Seven month	period endi	ng	
Seven months 31st Ma	rch 2009	rotal	Total £
Unrestricted Res	tricted	£	
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	78,187	110,829 460	
32,642 460	U	265	
111	154	36,338	

Incoming resourced from generated funds Activities for generating funds: Voluntary income: Investment income: Incoming resources from charitable activities:

Total Incoming Resources:

Costs of generating voluntary income: Costs of generating funds Fundraising trading - costs of goods

Sold and other costs:

Charitable activities:

Governance costs:

Total Resources Expended:

Net Movement in Funds:

Funds brought forward:

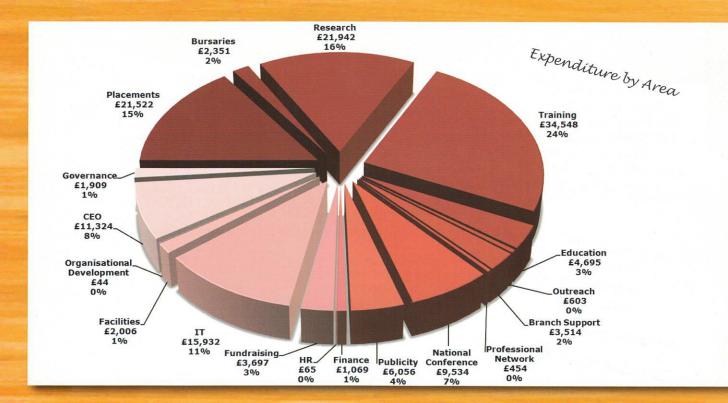
Transfer between funds: Funds Carried Forward:

31st March 2002	Total
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32,642 0 265 460 154	7,394
111 26 338	
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39,713	6,513
11,209	482
547	160
460 128,	142 168,465
70 501	
18 641	,909
18	478 163
1,091	2,264
51,536 90,728 ¹⁴²	15.11/
17 451	5,628
	36,047
	0
19,448	36.047
0	41,675
34,050	
7,625	
2008/	9 2007/8

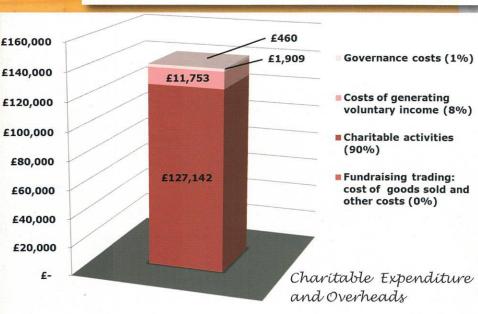


Balance Sheet 31st March 2009	2008/9 £	2007/8 £			
Current Assets					
Stock:	450	0			
Debtors:	5,428	17,257			
Cash at bank and in hand:	58,484	79,420			
Total Current Assets:	64,362	96,677			
Creditors:	(22,687)	(60,630)			
Net Current Assets:	41,675	36,047			
Total Net Assets:	41,675	36,047			
Funds					
Unrestricted fund:	7,625	19,448			
Restricted fund:	34,050	16,599			
Total funds	41,675	36,047			









These summarised accounts may not contain sufficient information to allowfor a full understanding of the financial affairs of the charity. For further information the full accounts and the independent reviewer's report on those accounts should be consulted. Copies can be obtained from our office address, from our website or from the Charity Commission. The independent reviewer's report did not raise any matters to the attention of the trustees.

Thank You

Our work over the last year would not have been possible without the generous support of the following companies and organisations. We are delighted to be associated with them. Our grateful thanks for their enthusiasum! Hundreds of individuals have also donated to us - thank you so much for all your efforts!

























EWB-UK was also grateful to receive donations from:

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Pembroke College, Cambridge
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Royal Academy of Engineering
Salesforce Foundation
Selwyn College, Cambridge
St. John's College, Cambridge

Training Education Outreach Media Member Stories **Finances** Thank You

We are a member of



1/-10





23-20



21-20

We have thousands of people to thank, people who have given their time and expertise to support our work. We are grateful to all the members of EWB-UK branch committees and regional Professional Network committees. Though there is a very high risk of leaving somebody out, we would like to recognise the following people for volunteering their time to support us:

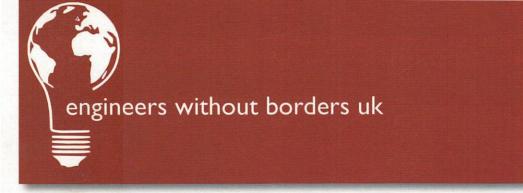
Adri Kerciku, Afshin Ostovari, Alan Tripp, Alistair Hung, Ana Vergine, Andre Steele, Andrew Hodgson, Andrew Hunt, Andrew Scott, Andrew Smith, Anna Blake, Anna Lea, Ashley Kacha, Barnaby Flynn, Ben Crowe, Ben Kyriakou, Ben Kyriakou, Ben Murthy, Beth Waterhouse, Bill Flinn, Blanche Cameron, Bob Reed, Bobby Lambert, Brian Bromwich, Brian Reed, Bridie Tooher, Bruce Lankford, Camila Garbut, Caroline Cage, Catherine Owens, Cathy Owens, Catriona Rust, Charles Bennett, Charlotte Kershaw, Cheryl MacDonald, Chris Croft, Chris Howard, Chris Johnston, Ciaran Malik, Colin Younge, Craig Summers, Dalerjon Hakimov, Daniel Smith, Danny Chan, Daphne Guthrie, Darren Clark, Dave Howey, David J Fulford, David Price, David Rouane, David Tan, David Trujillo, David Woollcombe, Diana Schumacher, Dimitrios Kandylakis, Dipti Hingorani, Dominic Lenton, Ed Murfitt, Edward Sauven, Elizabeth Parker, Ella Sprung,

And a huge thank from the Placements Team to all our many supporters, who shared their expertise with us and gave up their valuable time to help us review the placement proposals, select our volunteers and train them. Thank you everyone!

Emma Wenborn, Erik Forman, Fiona Boyce, Florian Kuhnt, Gino Henry, Gordon Browne, Haroon Junaidi, Harriet Kirk, Harriet Stone, Hayley Weston, Hertha Taverner-Wood, Hilda Lee, Ian Ball, Ian Neal, Ian Sanderson, Ian Steed, James Brown, James Clark, James Smith, Jan Davis, Jane Wilson-Howarth, Janis Lewis, Jeff Patmore, Jignesh Parekh, Joanne Lambert, Jocasta Clark, Joe Rowley, John Alarcon, John Chance, John Howard, Joseph Ashmore, Joseph Corcoran, Josh Macabuag, Julia Wright, Justine Tordoff, Karolis Kairelis, Kate Baker, Kate Barnard, Kath Pasteur, Kathryn Isaksen, Ken Banks, Ken Lewis, Kim Waterhouse, Laura Cranney, Lawrence Coates, Lesley Patterson, Linus Mofor, Liz Bates, Lorraine

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Our Mission: To facilitate human development through engineering

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