

*“We owe it to ourselves and to the next generation to conserve the environment so that we can bequeath our children a sustainable world that benefits all.” Wangari Maathai*

## **Introduction**

When Prof. Wangari Maathai founded the Green Belt Movement in 1977 she sought to respond to the needs of rural Kenyan women who reported that their streams were drying up, their food supply was less secure, and they had to walk further and further to get firewood for fuel, building and fencing. The everyday hardships that communities faced: poverty, unemployment, environmental degradation, water scarcity, deforestation, and food insecurity, were, Wangari Maathai recognized, symptoms of deeper issues of disempowerment, disenfranchisement, poor governance, inequities and loss of values. She believed that if those working closely with the grassroots were better equipped with the skills, tools and values to influence and change attitudes and practices they would bring about transformation in their communities.

In sub Saharan Africa over 72% of urban and 98% of rural households use wood-fuel for energy and kerosene for lighting. Inefficient lighting and cooking technologies contribute to climate change and degradation of natural resources. This is because trees are cut to provide fuel for cooking and kerosene is used to provide light. They harm human health when indoor air pollutants increase respiratory problems and exacerbate poverty, mostly affecting women and children. The inefficient production and use of biomass for household fuel contributes to deforestation and natural resource degradation, which further exacerbates climate change. Ultimately the livelihoods of millions of families who live near forests and who rely on them for subsistence and incomes is affected.

be trained in transformative leadership, environmental stewardship, and clean sustainable energy entrepreneurship. This training will equip women leaders with the tools to be able facilitate the delivery of clean sustainable energy

To promote women’s critical role in solutions to these problems, the Department of State launched the Partnership on Women’s Entrepreneurship in Renewables (“wPOWER”) in January 2013. wPOWER aims to empower more than 8,000 women clean energy entrepreneurs in Eastern Africa (Kenya, Tanzania, Uganda, and Rwanda), Nigeria and India who will be trained in transformative leadership, environmental stewardship, and clean sustainable energy entrepreneurship.. This training will equip women leaders with the tools to be able facilitate the delivery of clean sustainable energy to more than 3.5 million people over the next three years. To work towards this goal,, the US Department of State partnered with several organizations, and created the the wPOWER Hub at the Wangari Maathai Institute (WMI) at the University of Nairobi. The late Nobel Laureate Professor Wangari Maathai founded the WMI in 2009. The new wPOWER Hub will build the evidence base on women, energy access and climate solutions; hold train the trainer (ToT) workshops; facilitate African and Indian women entrepreneur and leadership exchanges to build a network of women climate leaders, and build public awareness.

In order to create and empower women clean energy entrepreneurs, the wPOWER Hub at the Wangari Maathai Institute has developed this **Training of Trainer's Course on Sustainable Clean Energy Entrepreneurship**. This course is aimed at nurturing change agents and equipping them with the skills and tools they need to bring about, as Wangari Maathai hoped, community transformation in clean energy, environmental stewardship and livelihood improvement. This training program is unique for its holistic and experiential focus. It contains lessons that will engage the participants through field excursions, class activities (lectures, exercises), brainstorming, case-based group work, and individual assignments. The participants will also benefit from guest-speakers and practitioners who will reinforce the classroom learning. Some lessons will be offered in the field to allow interaction with communities and the associated technologies.

This course has four objectives, to:

- Instill knowledge and values on linkages between sustainability, clean energy, livelihoods, environment, climate change and gender
- Enhance agency and skills in women-led entrepreneurship in sustainable clean energy markets
- Develop trainers who can catalyze change, inspire, empower, transform and create champions of sustainable clean energy
- Equip trainers with knowledge and skills on effective communication and training skills

### **Development of the Program**

The training program was developed through a consultative process that included a series of stakeholders' consultations, with background information from wPOWER partners through a needs assessment tool (gap analysis). The needs assessment and recommendations for areas of focus for hub training and field exchange visits was done in consultation with wPOWER partners Care International in Rwanda, Tanzania and Kenya, and Swayam Shikshan Prayog (SSP) in India.

The first stakeholders' consultation was held in April 2014 at the Green Belt Movement Training Center in Lang'ata, with 31 participants drawn from the energy, natural resource management, empowerment and entrepreneurship sectors, World Agroforestry Centre (ICRAF), the Green Belt Movement (GBM), New Course and the University of Nairobi. This was followed by a curriculum development workshop involving a group of experts drawn from the stakeholders meeting. The meeting was held in Naivasha. It is through this meeting that the trainer's course title, objectives, target groups, modules and parameters were finalized and the course developed. Anchors were then identified to lead in the development of the training manual.

### **Target group**

This course is targeted towards values-driven (and mostly women) community leaders working at the grassroots who are, interested in sustainable clean energy and involved in natural resources management. It aims at empowering trainees for more sustainable

and clean energy utilization and natural resource management for healthy and improved livelihoods.

## Course Delivery

The course will be delivered through participatory learning, lectures, case-based group work discussion, field excursions and individual assignments, guest speakers and interaction between students and practitioners. The program is structured into four modules:

- Empowering and Developing Transformative Leaders,
- Sustainable Clean Energy Entrepreneurship,
- Environmental Stewardship, and
- Developing and Delivering Content

The module on **Empowering and Developing Transformative Leaders** will be taught first in order to inspire and reinforce the transformative and leadership skills of all the participants. This is meant to motivate all the learners to appreciate their role as leaders and as agents of change in the community. The Leadership module will be followed by the module on **Sustainable Clean Energy Entrepreneurship**. This is a technical module and is designed to provide the participants with a clear understanding of the various small-scale home-based technologies while also equipping them with the tools and skills for doing business along the sustainable clean energy value chain. Participants will learn about access to and economic opportunities associated with, markets for some of the most appropriate small-scale clean technologies like biomass energy, solar lighting and clean cook stoves

The third module will address the role that these leaders can play in safeguarding the environment and in unlocking women's potential as sustainable natural resource managers. This module, **Environmental Stewardship**, will build skills on environmental governance, climate resilience, forest rehabilitation, the protection of water sources and environmental stewardship. Through field visits to indigenous forests participants will have a deep understanding and appreciation for the importance of forests and their intricate linkage to livelihoods and energy.

The last module which will be taught to the participants is **Developing and Delivering Content for Community Transformation**. This module is motivated by the fact that all the participants will be expected to conduct community training when they return to their communities and countries. It is expected that the context of these trainings will differ from community to community in line with the geographic, situational, and cultural diversity of the participants and hence each trainer will be expected to develop training materials that are relevant to the target community. It is often assumed that after a Training of Trainers exercise, trainers will know how to deliver the training. This is not always the case. This module will thus equip the participants with the tools they require to both develop training content and deliver the training.

The wPOWER hub will provide all the participants with the full complement of the course content used in the Training of Trainers course. The participants will be free to review and contextualize the materials as necessary.

## **Acknowledgements**

The development of this Training of Trainers course has been made possible through the generous support of the US Department of State, Bureau of Oceans & International Environmental & Scientific Affairs under grant number S-LMAQM-13-CA-1146 with parallel support from the MacArthur Foundation through their funding to the Green Belt Movement. Their support has enabled the creation and scaling up of the wPOWER hub at the Wangari Maathai Institute for Peace and Environmental Studies (WMI) at the University of Nairobi, Upper Kabete Campus. The opinions expressed herein are those of the authors and do not necessarily reflect the views of the US Department of State or the University of Nairobi.

We would like to convey our sincere gratitude to the anchors of the course modules who took the leadership in ensuring the modules were developed into strong lessons for teaching. Their roles in analyzing the outputs of the consultative processes, developing content and packaging it into the four training modules are greatly appreciated. The Anchors were:

**Empowering and Developing Transformative Leaders:** Ms. Njoki Njoroge Njehu (Executive Director, Daughters of Mumbi Global Resource Center, Kenya) and Ms. Ayla Schlosser (Executive Director, Resonate, Rwanda);

**Sustainable Clean Energy Entrepreneurship:** Dr. Mary Njenga (Post-Doctoral Fellow, Bioenergy/Woodfuel at the World Agroforestry Centre (ICRAF) & Adj. Asst. Professor Dept. of Geography at North Illinois University), Roshan Paul, Ilaina Rabbat, & Peter Fella (President, Executive Director and Operations Manager, respectively, Amani Institute),

**Environmental Stewardship:** Dr Thenya Thuita (University of Nairobi) and Mrs. Lilian Njehu (Board Member & Food Security Expert, the Green Belt Movement)

**Developing and Delivering Content:** Prof. David Mungai (University of Nairobi)

We are equally grateful to all who spent a whole day at the GBM Training Centre Langata to review and harmonize all the modules: The Leadership and Empowerment Module was reviewed by Ms. Njoki Njehu, Mr. Stephen Kinyanjui Kiuno, Mr. Kahuho Mathai, Ms. Lilian Muchungi, Dr Kiemo Karatu, and Hulda Ouma.. The module on clean energy entrepreneurship was reviewed by Dr Mary Njenga, Peter Fella, Monica Opole, Benard Muthiani, Morris Nzele, Cyrus Kimamo , Dr Kithinji while the Environmental Stewardship module was reviewed by Dr Thenya Thuita, Ms. Wanjira Mathai, Ms. Mariam Osman, Ms. Teresa Muthoni , Mr. Peter Ndunda, Mr. Charles Mwangi, Ms. Mercy Karunditu , Ms. Terry Githinji and Ms. Lilian Kong'ani. The module on Developing and Delivering Content for Community Training was reviewed by Prof. David Mungai, Prof.

Musangi, Mr. Munene Kabengi and Dr John Mworira. The review was facilitated by the Academic Director, Prof. Kiama Gitahi and the Project Director Ms. Wanjira Mathai.

In addition, the roles played by all stakeholders and partners in identifying the gaps the wPower hub needed to consider in the course were invaluable and are much appreciated. Those who participated were Prof. Peter Blaze Corcoran, Fulbright Professor (Wangari Maathai Institute), Dr. Mary Njenga (ICRAF), Prof. Patrick Thuita Thenya, (University of Nairobi), Mr. Munene Kabengi (Development Management Consultant), Mr. Karl Morrison (New Course), Prof. Karanja Njoroge (Center for Environmental Action), Ms. Mary Alice Onyura (ESVAC), Prof. Raphael Wahome (University of Nairobi), Mr. Paul Thiongo (GBM), Mr. Bernard Muthiani (CARE), Ms. Ayla Schlosser (Resonate), Mr. Peter Fella (Amani Institute), Mr. Thomas Elliot (New Course), Ms. Lillian Muchungi (GBM), Ms. Njoki Njehu (Daughters of Mumbi Global Resource Center), Dr. Jamie Bechtel (New Course), Ms. Cecilia Sundberg (Student, SLU), Mr. Charles Mwangi (GBM), Mr. Stephen Kinyanjui Kiuno (Farmer/Community Mobilizer), Mr. Kahuho Mathai (GBM), Ms. Monica Opole (GBM Board), Dr Jones Agwata (University of Nairobi), Ms. Mercy Karunditu (GBM), Judy Kimamo (GBM), Mahesh Pradhan (UNEA), Mr. Peter Ndunda (GBM Board), Dr Maurice Onzere (GVEP), Dr Grace Msangi (GBM) Ms. Lilian Njehu (GBM), Dr. John Mworira (University of Nairobi), Prof. Vertistine Mbaya (University of Nairobi/GBM Board) , Dr Kiemo Kiratu (University of Nairobi), Dr Jacob Kithinji (University of Nairobi), Hulda Ouma (UN Women), Ms. Mariam Osman (UNEP), Ms. Teresa Muthoni (GBM) and Cyrus Kimamo (GBM Board).

We are also grateful to all our partners who diligently completed the needs assessment and recommendations for hub training and field exchange. This work helped us to develop the course to meet their diverse needs. The partners who completed the needs assessment: Care International in Rwanda, Tanzania and Kenya and Swayam Shikshan Prayog (SSP) in India.

None of this would have been possible without the heroic support of the entire wPOWER staff team: Prof Kiama Gitahi, Ms. Wanjira Mathai, Mr. Benson Ochiel Ng'ielia, Ms. Terry Kariuki Githinji, Ms. Lillian Kong'ani, Ms. Janet Ngoro and Ms. Rosemary Kadali.

The overall leadership, guidance, facilitation and support for this curriculum development process was provided by Prof. Stephen Kiama the wPOWER Academic Director and Ms. Wanjira Mathai the wPOWER Project Director. This has led to the successful compilation and writing of the training course materials.

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