



Women Leaders: Shaping the Future of Africa



WINROCK
INTERNATIONAL

Winrock International is a nonprofit organization that works with people in the United States and around the world to empower the disadvantaged, increase economic opportunity, and sustain natural resources.

Winrock is proud to have played a role in empowering African women through the **AWLAESM** program. The stories shared here give a face and a voice to the many women who, as a result, have emerged as leaders creating positive change for their families and communities.



Frank Tugwell
President & Chief Executive Officer
Winrock International



Winrock International recognizes the generous support of the many individuals, agencies, and organizations that have supported the African Women Leaders in Agriculture and Environment (**AWLAESM**) program and related projects across the continent. That assistance has enabled Winrock to provide life changing programs to thousands of women and girls.

Major contributors to the African Women Leaders in Agriculture and Environment (**AWLAESM**) program:

Robert D. and Elizabeth Havener and contributors to the Havener Scholarship for African Women
Banbury Fund
Herbert & Ann Lucas (Elbridge and Evelyn Stuart Foundation)
David Rockefeller
Laurance Rockefeller
Neva R. Goodwin
Benjamin Spencer Fund
Conrad N. Hilton Foundation
Cornell University
Ford Foundation
International Institute of Tropical Agriculture (IITA)
Joseph P. Sullivan
McKnight Foundation
Penn State University
Rockefeller Brothers Fund
University of Missouri
Whitney and Betty MacMillan (WEM Foundation)
Winthrop Rockefeller Charitable Trust
United Nations Development Programme (UNDP)
United States Department of Agriculture (USDA)
Education for Development and Democracy Initiative Ambassadors' Girls' Scholarship Program (EDDI-AGSP)
U.S. Agency for International Development (USAID)
Technical Centre for Agricultural and Rural Cooperation ACP-EU (CTA)
International Development Research Centre
Netherlands Minister for Development Cooperation
Karsten Foundation
International Center for Research on Women (ICRW)

Special thanks are extended to Herbert Lucas, whose interest as a Winrock International Board member and dedicated supporter of programs for African women has made this book possible.



*Knowledge is like a garden:
If it is not cultivated, it cannot be harvested.
- African proverb*

A bold, new story is emerging. It's a story of courage and perseverance. It's a story that begins with recognizing the enormous role that women play in producing 80 percent of Africa's food and their potential to transform Africa's agriculture and growth. Most of these women are small-scale farmers who toil long hours under difficult conditions.

Change often starts slowly. When a few of us in the early 1990s started making an economic case for promoting women professionals and supporting women farmers, the argument was not easily embraced. Today, gender is increasingly being recognized as a major missing link in transforming Africa's agricultural sector and stimulating national economic growth.

Winrock International, because of its focus on agricultural development, knew the plight of women farmers. In 1989, it took bold steps to address their needs through the African Women Leaders in Agriculture and the Environment (**AWLAESM**) program. Through this pioneering effort, women farmers and aspiring agricultural professionals received the support they needed to be successful and share their knowledge with others.

Here you will read the stories of ten such women. I feel a special bond with these women, for we have walked a similar road. Most grew up on small farms. They excelled at school; yet without help, the door to higher education would have been closed. After they completed their degrees, many experienced discrimination at work. Some were labeled rebels for calling attention to the needs of women. Yet they persevered and eventually their voices were heard.

As a result, many institutions have mainstreamed gender into their policies and programs; women



occupy senior positions within agricultural ministries; students are learning about gender issues in schools; and small-scale farmers, both men and women, are accessing the knowledge and tools they need to increase their productivity – and incomes.

These women teach us that true leadership begins within. To lead change, we must first believe in ourselves. Through the support and training they received they began to view themselves – and their role in society – in new ways. They learned that to make change, you must find your voice, and not be afraid to speak your truth. Now, each is modeling an inner strength and a dedication to service that inspires those around them.

Nature also teaches us that we are all inter-connected; that comprehensive solutions work best. Winrock understood this. As a result, **AWLAESM** works at many levels. Its reach extends from small-scale farmers to agricultural professionals, from primary schools to universities, from grassroot organizations to political institutions.

AWLAESM also realized the importance of engaging men in its efforts. Lasting changes in the lives of rural women cannot occur in a vacuum. Men need to be partners in achieving goals we all share: an end to hunger, environmental sustainability, and the right of all people to a secure livelihood.

Thank you Winrock for enabling this story to unfold. Thank you to those African governments that supported and welcomed this program. Thank you to the African women who helped design and implement **AWLAESM**'s activities. And thanks to each of the women described here who persevered and now share their personal journeys with us.

Victoria Sekitoleko
Food and Agriculture Organization (FAO)
Representative to China, DPR Korea, and Mongolia;
former FAO sub-regional representative to Eastern
and Southern Africa

"AWLAESM impressed in our hearts that wherever we are, we must make change. We must act."

— Dr. Chinyere Aniedu, Research Scientist; Head of Women in Agriculture, National Root Crops Research Institute, Nigeria

"If you educate a woman, you can change a whole society."

— Dr. Janet Edeme, Policy Officer for Rural Economy and Agriculture Development,
African Union Commission, Ethiopia



"You need to ask both men and women what their problems are and let them express what they want to do, respecting local wisdom. Only then can you develop solutions that really work."

— Dr. Magdalena Ngaiza, Senior Lecturer, IDS, University of Dar es Salaam, Tanzania

"I no longer saw myself as purely an academic. I had a responsibility to be an agent of change in society."

— Dr. Margaret Mangheni, Senior Lecturer, Makerere University, Uganda

"I learned decision-making skills, how to 'read' people, and persuade them to embrace new ideas. It was a real eye opener."

— Federica Nshemereirwe, Senior Agricultural Officer, Ministry of Agriculture, Uganda

More than two decades ago, it became clear that rural women held a vital key to boosting Africa's food production and feeding its people. Robert Havener, Winrock's first President, and his wife Elizabeth recognized this need and together became the principal architects of the African Women Leaders in Agriculture and the Environment (**AWLAESM**) program.

Launched in 1989, **AWLAESM** had an ambitious mandate. At the macro level, it sought to change policies and programs affecting women farmers. At the grassroots level, it equipped women farmers with much-needed technical know how and skills.

Winrock launched **AWLAESM** as part of a strategy to address food security in Africa. We recognized women as engines for change and supported them. We accepted that even though investment in women's higher education might be a long-term proposition, it would yield significant impact on rural development. And it has!

Among its achievements, **AWLAESM** has provided 570 women with scholarships for advanced studies; equipped over 1,500 women with leadership skills; enabled more than 50,000 disadvantaged girls to pursue their educations; and provided training to some 100,000 women farmers in new technologies. In several countries, national gender policies have been instituted and women now hold senior positions in ministries



of agriculture and the environment. Today, a regional network connects and strengthens the efforts of independent **AWLAESM** associations in ten countries.

The stories you are about to read offer a timely endorsement of investing in women's and girls' education and leadership development in Africa. Such investments are critical to achieving the Millennium Development Goals on gender equity, poverty reduction, and education. Yet women, and especially rural girls in Africa, are still far less likely than men to get an education. In many countries, girls are pulled out of school to do household and farming chores. Often, women are unable to own land, have limited access to credit, and

are excluded from training opportunities and decision making.

AWLAESM has emerged as a successful model for addressing these urgent needs. Indeed, Winrock has adapted elements of **AWLAESM**'s approach to support the development of girls and women in China and Eastern Europe. We are extremely grateful to the many funding partners that have turned **AWLAESM**'s vision into a reality. Looking ahead, we hope to engage local, regional, and international organizations in strengthening and scaling up **AWLAESM**'s approach to benefit thousands more women and girls in Africa.

Herbert Lucas
Board member, Winrock International



*"I knew I had something to contribute but no one gave me a chance until **AWLAESM** helped me get my master's degree. Now, everyone is happy in my place of work with what I'm doing."*



“Through training, I realized there was nothing stopping me from doing what I needed to do.”

Solange N'Guessan

Combining the efforts of small-scale farmers to reap larger gains

Solange N'Guessan never expected to see her name and photo on the pages of *Fraternité Matin*, the largest newspaper in Côte d'Ivoire. Yet she has made headlines through forming the Union des Coopératives Agricoles (UCAS) de San Pedros. Made up of twenty-five farming cooperatives in the country's southwest, the Union boasts over 12,000 members. While similar efforts to develop the region's collective farming clout failed, UCAS has steadily grown under N'Guessan's leadership.

N'Guessan describes her mission as leading small-scale farmers into a better future. With a natural affinity for management and entrepreneurship, she could have excelled in the business world. Instead, she was drawn to addressing the plight of subsistence farmers. N'Guessan knew that when such farmers combine their efforts, resources, and agricultural output, they can negotiate better prices. Incomes rise. More children go to school. Healthcare improves.

With support from **AWLAESM**, N'Guessan obtained her master's degree in Cooperative Enterprise Management. She knew she was entering a challenging field. "People found the area complex and farmers hard to deal with," she says.

Yet N'Guessan has a knack for diplomacy. When she started working in the cocoa-growing village of Touih, the community was mired in conflict over land ownership and animal grazing rights. To nurture an environment where a cooperative

could take root, N'Guessan moved temporarily to the area – teaching farmers how to work together, refining their techniques, and mediating disputes. Six months later, a cocoa cooperative was established.

"You need to raise people's awareness of what's possible," believes N'Guessan, who convinced local citizens that they could reap far greater results through collaborating. N'Guessan attributes her skills as a peacemaker and public speaker to **AWLAESM**'s *Leadership for Change* training. "Through training, I realized there was nothing stopping me from doing what I needed to do," she says.

N'Guessan recognizes that leadership sometimes requires coaxing people into new ways of thinking. To address the issue of child labor in the region, she conceived of a "cocoa tree" celebration to coincide with Christmas. During the daylong event, first held in Touih, children opened gifts and people feasted on specially prepared foods. Invited guests offered talks on health and hygiene, education, and HIV/AIDS prevention. A subtle message reinforced throughout was the importance of childhood – and of education.

Next year, N'Guessan plans to expand the *Arbre de Noël* celebration to ten villages.





"The training encouraged me to help other women. I became more biased toward them in all my professional activities, and more assertive as an individual."

Mary Opoku-Asiama

Nurturing the next generation of agricultural professionals

Imagine a room filled with more than fifty secondary school students, many just starting to think about their future goals. On this particular day, students in Accra, Ghana are learning about careers in agriculture. Contrary to what many in the room think, it's not just about farming. Rather, they might become forestry experts, wildlife conservationists, food scientists, or agronomists. The list goes on.

Sponsored by the Association of Women Leaders in Agriculture and the Environment-Ghana (AWLAE-Ghana), the career day was designed to pique students' interest – particularly that of girls – in agricultural degrees and jobs.

"It's important to get young people interested in agriculture," asserts Mary Opoku-Asiama, Chair of the event and Deputy Director of Agriculture in Ghana's Ministry of Food and Agriculture. "Supporting young women in pursuing agricultural careers today is the best way of ensuring that women farmers' needs are met – and family incomes increased – in the future," she says.

Opoku-Asiama, an expert in pest management, received support from **AWLAESM** to pursue a master's degree in plant protection, which she uses to teach farmers how to use alternative pest control methods.

Through AWLAE-Ghana, she offers support to women's farming groups, especially those involved in processing agricultural produce. "Farmers use pesticides to increase their production and achieve better livelihoods, but are they using them safely?" she asks, citing examples of health and environmental dangers from farmers who fail to store or apply pesticides in a sound manner.

Over the years, Opoku-Asiama has helped women's groups in central Ghana improve their ability to process fish, palm oil, and cassava. In the village of Okyereko, fifty kilometers west of Accra, she encouraged local farmers to develop a cooperative and introduced them to like-minded groups so they could exchange ideas and strategies. As a result, local farm families are far more productive today.

Opoku-Asiama learned about the importance of empowering others through **AWLAESM's** *Leadership for Change* training. "The training encouraged me to help other women," she says. "I became more biased toward them in all my professional activities, and more assertive as an individual."

Today, Opoku-Asiama enjoys mentoring young girls and encouraging them to take their academic work seriously so they can make meaningful contributions.



Education & Empowerment

Lack of education limits the earning power of women and girls and their ability to participate in the development of their communities and countries. Scholarship and mentoring programs across Africa are reaching the next generation of women executives, educators, and entrepreneurs. It is critical to encourage greater school attendance and develop alternative education programs for girls and boys.







"At the training, they taught us that we could achieve anything."



Fridah Mugo, Ph.D.

Training rural women to conserve energy and increase incomes

In the 1950s, trees covered a third of Kenya. Today, less than two percent of the nation's land is forested. Soil erosion. Reduced rainfall. Malnutrition. Hunger. All are devastating consequences of deforestation, explains Dr. Fridah Mugo, an environmental and energy consultant who has devoted much of her career to finding and implementing solutions to Kenya's tree crisis.

With rural communities traditionally dependent on wood for cooking, Mugo trains women farmers about alternatives, teaching them how to conserve energy and improve their livelihoods.

"Women hold their families and country together," she says. "The problem is they have no decision-making power and lack access to resources and education. Those who do have resources can make a huge difference."

In the rural village of Kibiku, Mugo recently taught a women's cooperative how to make and use fireless cookers. The cookers are reed baskets lined with plastic and insulated with cotton. Meals started over a fire are transferred to the basket and covered; the food continues to cook in its own steam. The cooker saves up to fifty percent of the energy used by cooking over a coal or wood fire.

By training women to make and sell the stoves, Mugo strives to boost the incomes of families who struggle to survive on less than a dollar a day.



Through selling the stoves, group members hope to earn an additional \$350-\$400 per family, per year. At the same time, they'll be protecting the environment and conserving trees.

In Kiswahili, a native language of Kenya, Mugo is known as *shujaa*, a real dynamo. One of 14 children born to a farming family, she could have become lost in the sea of her siblings. Instead, she grew up hard working and tenacious.

Herself the mother of three, Mugo balanced childrearing with pursuing her education. In 1999, she completed her Ph.D. in Natural Resources Policy and Management. Mugo credits **AWLAE**SM's *Leadership for Change* training with

giving her the courage to go after her dreams. "Women are brought up to listen," she says. "You're not supposed to talk. At the training, they taught us that we could achieve anything."

Among her achievements, Mugo trained thousands of women agricultural extension officers in new and renewable energy technologies. She's lobbied for women's participation in agricultural development projects in Kenya and other African countries. She has even self-financed her own girl-child education initiative, enabling dozens of disadvantaged young girls to complete primary school.



Agriculture & Food Security

African women produce up to eighty percent of the food the continent consumes. They are responsible for children, family nutrition and health care, and meeting household needs for energy and water. Improved agricultural practices, technologies, and access to information are enabling women to produce more food and spend fewer hours in the field. Greater production is leading to increased household income as well as a year-long supply of food.







"If both men and women worked together to achieve improved results,
we'd be in a better place."



Grace Mitoko

Advocating gender awareness among policy makers

In Kenya, as in many African countries, gender is a loaded term. So says Grace Mitoko. "When people hear it they get defensive. Some think it's about women's liberation. It's really about empowering women to do their job better."

Mitoko is distinguished as the first National Gender Coordinator ever appointed within Kenya's Ministry of Agriculture, a post she held from

subject," she says. Then came an opportunity in 2003 for her to lobby the country's newly elected Agriculture Minister. When she called to set up an appointment, he responded: "Mrs. Mitoko, do you want to engender me?"

Among the issues the two eventually discussed was the glass ceiling women agricultural professionals experienced in the Ministry.

case carefully," she says. For Mitoko, the case for rural women's empowerment rests on economic grounds. When such women have access to training and resources, they produce more and can better meet their families' needs. Everyone benefits. Also critical is engaging men as part of the process.

Mitoko wasn't always passionate about gender issues; rather, her knowledge deepened through her involvement in the Kenya Professional Association of Women in Agriculture and Environment (KEPAWAE). At first reluctant to ally herself with a controversial issue that people associated with "rebellious women," her commitment crystallized after participating in *AWLAESM's Leadership for Change* training. The training sparked a sense of what she could achieve for women in agriculture – from the grassroots to the policy-making arena.

Now Assistant Director of Livestock Production at the Ministry, Mitoko maintains her passion for gender issues, mentoring and supporting a new generation of women agricultural professionals. "If both men and women worked together to achieve improved results, we'd be in a better place," she says. "We'd have adequate production. We wouldn't have so much poverty."



1998 to 2004. During that time, she transformed attitudes within the Ministry on what gender is all about and how it could be mainstreamed.

When Mitoko first assumed her role, people made jokes about gender issues. "It was always a light

Today, as a result of Mitoko's advocacy efforts, women in the Ministry occupy senior positions as managers, directors, district managers, and agricultural board members. "When you're talking about an unknown issue like gender, you have to be pushy and build your



"AWLAESM impressed in our hearts that wherever we are, we must make change. We must act."

Chinyere Aniedu, Ph.D.

Teaching income-generating strategies to rural women

On Thursday nights, viewers of *The Farmer*, a TV show broadcast across the Nigerian state of Abia, tune in as Dr. Chinyere Aniedu transforms root vegetables – cassava, sweet potatoes, yams – into nutritious meals and marketable food products. On past shows, Aniedu has turned sweet potatoes into flour, muffins, salads, stews, and wedding cakes. She even co-authored a cookbook on the subject.

Celebrity status came only recently to Aniedu, a research scientist by training. As Head of Women in Agriculture at the National Root Crops Research Institute, Aniedu has devoted much of her career to teaching income-generating strategies to more than 5,000 women farmers. In her native language of Igbo, she is known as *Ochi ora*, one who takes care of others.

Aniedu credits **AWLAESM** with providing her with greater opportunities to contribute to the world. In 1994, she received an **AWLAESM** scholarship to pursue her master's degree in Agricultural Extension at Reading University in England.

"In Nigeria, you have to be educated to speak out," she affirms. When she returned, Aniedu became "someone big" in her place of work. "Now when I speak, people listen," she says.

Aniedu participated in several **AWLAESM** leadership trainings, developing skills in management, teamwork, and negotiation. She learned to use a computer to analyze data and



present research findings. On a deeper level, she assumed responsibility for achieving big results.

"**AWLAESM** gave me the boldness to do things and speak in public," she says. "It impressed in our hearts that wherever we are, we must make change. We must act."

Today, Aniedu applies her knowledge and creativity in support of vulnerable women farmers. "Women and children have a lower status than men," she explains. "A woman's job is to make sure everyone is well fed and cared for. You are expected to marry, raise a family, and take care of your husband and children."

As a young woman, Aniedu rebelled against the status quo, postponing marriage until the age of 27 and committing herself to higher education. Today, she is outspoken on issues of gender equality. Among her achievements, she rallied her female peers at the Institute to demand the same compensation as men, who were paid twice as much for doing the same job. Their request was eventually granted.

"If enough women were empowered with the idea of doing positive things for themselves and society, you would see Africa becoming a developed region," she says.

From the start, **AWLAESM** sought to engage men as partners in promoting gender equity in Africa. Male partners served as crucial advisors and advocates – helping to define priorities, develop strategies, and encourage recognition and support for women’s leadership in agriculture. Here, we pay tribute to three of these men.

Falle Diabagate Ministry of Agriculture Côte d’Ivoire

Falle Diabagate, Directeur General of the Ministry of Agriculture in Côte d’Ivoire, was one of a handful of men who participated in the establishment of AWLAE-Côte d’Ivoire (AWLAE-CI) in the early 1990s. They began with identifying priorities for the new organization’s work, including advocating for the increased participation of women in leadership positions and empowering women farmers.

Looking back, Diabagate notes that AWLAE-CI played an important role in bringing certain issues – e.g., the importance of gender in agriculture – to the attention of government officials. In some instances, the organization helped make the job of government easier, he says, pointing to AWLAE-CI’s track record in educating women and young girls and providing technical assistance to women farmers.

At the time it was created, AWLAE-CI helped set the bar for the country’s emerging NGO sector, he adds. Its credibility was rooted, in large part, in the caliber of members it attracted, including women professionals in



academia, science, engineering, and medicine. By involving government officials in its activities from the start, AWLAE-CI kick-started the process of transforming public sector attitudes toward gender issues. Still, Diabagate notes that

it can take time to fully sensitize people to a new way of thinking. Now the focus is on convincing each Ministry to establish a committee to address gender issues.

Raphael Achola Kapiyo, Ph.D. Maseno University, Kenya

"Men have traditionally made fun of gender issues in Kenya, believing gender relates only to women," says Dr. Raphael Achola Kapiyo. An environmental scientist, Kapiyo understands the connection between the empowerment of Kenya's women farmers and addressing the nation's development needs.

Invited to participate in **AWLAESM**'s work in Kenya from the beginning, Kapiyo helped shape its national agenda and, in particular, its outreach to male policymakers. "We felt that if men came out to advocate for gender issues, then maybe more men would care."

A native of the Lake District in western Kenya, Kapiyo worked with **AWLAESM** in stimulating dialogue among local villagers about gender issues. A Women Elders Forum held in 2001 brought together 30 women – and men – to



discuss issues ranging from land ownership to the division of labor on small farms.

The meeting proved a watershed event. More forums followed, bringing to the surface a controversial issue: the sexual exploitation of local women by fishermen on Lake Victoria. Poor female farmers, desperate for supplementary income,

were often forced to exchange sex for access to fishing areas and boats. Prompted by the AIDS crisis and the growing voice of women, government authorities took steps to halt the practice.

"**AWLAESM** enlightened women about their rights," Says Kapiyo. "It gave them the strength and courage to contest things."



Paul Ongugo Kenya Forestry Research Institute

Paul Ongugo played a key role in launching **AWLAESM**'s activities in Kenya. "Important events were happening in Kenya at the time [KEPAWAE was created]," says Ongugo. "The forestry sector was gaining a lot of prominence. The education

sector was undergoing transformation. Resource distribution was being looked at. The input of women in all these processes is critical. For all these reasons, programs like **AWLAESM** that invest in leadership are important."



"If you educate a woman, you can change a whole society."



Janet Edeme, Ph.D.

Fighting hunger through empowering women farmers

How do you feed the more than 200 million Africans who are hungry? It's a question that deeply disturbs and motivates Dr. Janet Edeme, a Policy Officer with the African Union Commission.

One place to start is with empowering women farmers, emphasizes Edeme. "Women are the backbone of agriculture in Africa, but we don't hear much about them. They remain a silent majority in the background."

Making rural women visible – and giving voice to their needs – lies at the heart of Edeme's advocacy efforts. "My greatest achievement,"

she says, "has been to work at the continental level to promote decisions and actions that could have a positive impact on rural women."

Edeme grew up in Nigeria, the only daughter in a family of five boys. In recent years, she's made Addis Ababa, Ethiopia – the African Union's (AU) headquarters – her home. A research scientist by training, Edeme spends up to forty percent of her time on the road. At meetings in Africa and around the globe, she confers with scientists, policymakers, and grassroots activists about how to maximize the role of women in boosting the continent's agricultural production.

While the concept of gender parity is widely embraced within the AU, the challenge is ensuring that gender issues are incorporated into policies and programs at the local level, explains Edeme. Part of the reason the Green Revolution failed in Africa a decade ago is because women weren't brought on board, she adds. Edeme and her colleagues are working to provide women farmers with access to better seeds and new technologies, such as drought-resistant crops.

Edeme feels a responsibility to give back to other women some of what she has received. With support from **AWLAESM**, she attended Texas A&M University, completing coursework toward her Ph.D. She also took part in **AWLAESM**'s *Leadership for Change* training. "As a result of the training, I learned to be more patient, understanding, and open to other people's ideas," she says. "The training helped me in working within complex systems."

Now, Edeme and other Winrock scholars are working to raise funds to register **AWLAESM** as an independent NGO in Nigeria. "A formal organization would give us visibility – and a forum to encourage girls to stay in school," she says. Lack of access to education at the primary, secondary, and university levels is the greatest challenge facing women, notes Edeme. "If you educate a woman, you can change a whole society."





"You need to ask both men and women what their problems are and let them express what they want to do, respecting local wisdom. Only then can you develop solutions that really work."

Magdalena Ngaiza, Ph.D.

Promoting gender-based, participatory development

"When you give your light to someone else, the whole space becomes brighter," says Dr. Magdalena Ngaiza. In living her philosophy, Ngaiza, a Senior Lecturer in Development Studies at the University of Dar Es Salam, has devoted much of her career to empowering Tanzania's farmers – both men and women.

Raised in a large family that grew bananas and coffee near Lake Victoria, Ngaiza became interested in agricultural development at a young age. She pursued her passion in the academic world, completing a Ph.D. in Gender and Poverty, with financial support from Winrock, that allowed her to study for a year at Cornell University.

Ngaiza sees gender issues and poverty in Africa as inextricably linked. Until rural women are educated, own land, and have access to financial resources, it will be difficult to break the cycle of poverty so many face, she explains.

As her career progressed, Ngaiza's interest in gender turned personal. "Women were invisible," she says, in the male dominated university environment in which she worked. "It was a challenge for a young educated woman of my caliber."

Then, in 1994, she participated in **AWLAESM's Leadership for Change** training. "It opened my eyes to an appreciation of what leadership is," says Ngaiza, who grew more empowered herself as a result of the training.

Unaccustomed to appearing before the media, she started accepting interviews to promote ideas and projects she was passionate about.

One of those projects was the Tanzania Association of Women Leaders in Agriculture and

Development Programme for support to help local villagers build a storage facility and promote their goods to outside markets.

"It's critical to involve villagers in decision making every step of the way," notes Ngaiza,



Environment (TAWLAE), which Ngaiza helped establish in 1995. Over the years, Ngaiza and other TAWLAE members have lent their technical expertise to dozens of local communities. In the coastal area of Mkuranga, for example, TAWLAE members taught women farmers how to process and sell fruits and vegetables. Villagers learned how to dry cassava and turn paw-paw fruit into jam. TAWLAE tapped the United Nations

emphasizing the importance of engaging men in efforts to empower women farmers.

"You need to ask both men and women what their problems are and let them express what they want to do, respecting local wisdom," she says. "Only then can you develop solutions that really work."

Entrepreneurs & Enterprises

With greater access to information, training, and credit, more women are entering the world of small business. These budding entrepreneurs add a new dimension to local economies and diversify family income sources. Their micro enterprises create jobs and illustrate that women can be successful outside the home. The additional income they earn creates new educational opportunities for their children.







"I no longer saw myself as purely an academic.
I had a responsibility to be an agent of change in society."

Margaret Mangheni, Ph.D.

Enabling disadvantaged rural women to pursue higher education

Dr. Margaret Mangheni grew up on a three-acre farm in rural Uganda, far from the bustling 30,000-student campus where she now teaches.

"Students see me as someone who excelled against the odds," says Mangheni, a Senior Lecturer at Makerere University in Kampala. As a young girl, Mangheni excelled in science and was encouraged by her teachers to pursue her passion, despite it being a male-dominated field. Mangheni persevered and succeeded. Now, she's helping other women realize their dreams of a college education.

An important milestone in Mangheni's career was her decision to pursue a Ph.D. In 1992, she received an **AWLAE**SM scholarship to attend the University of Minnesota in the U.S. At the time, she had been married only two months. She and her husband, a math professor at Makerere, lived apart for much of the three years it took to complete her degree. "I'm not sure how I was able to do it," says Mangheni, now the mother of three.

Within the university, gender is considered a 'Margaret' issue. "People associate gender with women's activism," says Mangheni, who is well respected in her field, even if her advocacy efforts have sometimes met resistance.

Mangheni credits the leadership training she received through **AWLAE**SM with opening her eyes to the importance of gender. "Before the training, I looked at farmers as farmers," she recalls. "I had

little idea how fundamental gender was to rural development." She also came to view her role differently. Teaching students was not enough. "I no longer saw myself as purely an academic," she says. "I had a responsibility to be an agent of change in society."

For four years, Mangheni led a team effort to integrate gender into the curriculum at Makerere, successfully raising funds to revise course descriptions, create a gender handbook, and train teachers.

Of all of her accomplishments, Mangheni is proudest of securing university scholarships for

25 women from disadvantaged backgrounds. "These were very poor women who could never hope to afford a university education," says Mangheni.

While she may never know the cumulative impact of her efforts, Mangheni is clear that educating students about gender – and giving more women the chance to pursue agricultural careers – are critical steps in tackling the challenges of hunger and poverty.

"These students will be leaders in our country," she says. "Through supporting them, we can create a more equitable society."





Building Capacity

Strengthening the ability of individuals to address challenges and respond to change lies at the heart of **AWLAESM**'s approach. In Kenya, **AWLAESM** scholars felt so strongly about sharing what they learned and helping others that they formed their own organization, **KEPAWAE**. This independent organization offers assistance and reaches more women and girls with education and mentoring programs.





"The scholarship helped me get promoted personally and professionally. After the training, I had greater confidence in my own abilities and my ability to help others."



Rose Nakamya

Connecting women farmers to each other – and opportunities

Rose Nakamya grew up on a small farm in Uganda where her family grew coffee, bananas, corn, and beans. As a young girl, she excelled in school. Yet when her father died unexpectedly, she put any hopes of a higher education on hold.

Then she found out about the agricultural scholarships available through the Association of Uganda Professional Women in Agriculture and Environment (AUPWAE). Nakamya applied and was accepted.

“The scholarship helped me get promoted personally and professionally,” she says.

“Alone, I never could have raised the money.” With only three percent of young women in Uganda able to pursue higher educations, Nakamya is one of the lucky ones. Now, with her bachelor’s degree in Agricultural Extension Education, Nakamya has a fulfilling job and is able to contribute to the lives of other women who grew up like she did.

Through her work for the National Agricultural Advisory Services in the district of Wakiso, just outside Kampala, Nakamya teaches farmers – most of them women – how to save money so they can purchase higher yielding seed varieties. She shows them how to improve

the soil and reduce insect damage to crops. The goal: to move women farmers beyond subsistence-level production to being able to sell part of what they grow.

To show farmers what’s possible, Nakamya sets up demonstration projects so that those who succeed in boosting their production can share their strategies with others.

Nakamya also volunteers her time through AUPWAE. She’s currently mentoring young girls at a vocational training institute about careers in agriculture. “Many young people grow up disliking farming because they were punished with chores like digging,” she says.

Nakamya nurtures young women’s interest in the agricultural profession, knowing that when more like her are trained to support women farmers, productivity will rise, livelihoods will increase, and children will have a greater chance to advance within the educational system. Currently, only fifteen percent of Ugandan youth enroll in secondary school.

The training Nakamya received through AUPWAE in leadership skills, writing, time management, and communication has increased her effectiveness at work and strengthened her advocacy efforts. “After the training, I had greater confidence in my own abilities and my ability to help others,” she says with a self-assured smile.





"I learned decision-making skills, how to 'read' people,
and persuade them to embrace new ideas. It was a real eye opener."



Federica Nshemereirwe

Transferring skills and new technologies to women farmers

Small plastic bags filled with sprouting mushrooms hang in a corner of Federica Nshemereirwe's lush backyard on the outskirts of Kampala. Well versed in the science of mycology – the study of fungi – Nshemereirwe shares her mushroom-growing techniques with women farmers around the country.

Some are reluctant at first, owing to superstitions about mushrooms and witchcraft. Their hesitation doesn't last for long. A Senior Agricultural Officer in Uganda's Ministry of Agriculture, Nshemereirwe educates small-scale farmers about the nutritional, medicinal, and financial value of mushroom production.

"They're delicious and can be grown year round," she says, adding that mushrooms can be used to treat everything from skin diseases to high cholesterol.

Early in life, Nshemereirwe displayed a healthy, nonconformist streak. Born one of thirteen children, she grew up on her family's banana plantation in the village of Bunyarigi. At twelve, with support from her mother, she packed her suitcase and headed to a Catholic boarding school. "In those days, not many girls could go past primary school," Nshemereirwe recalls.

Today, Nshemereirwe continues to pave the way for others. In the early 1990s, her understanding of gender issues deepened through her involvement with **AWLAESM** in Uganda.



Participating in the *Leadership for Change* training was life changing. "I learned decision-making skills, how to 'read' people, and persuade them to embrace new ideas. It was a real eye opener," she says.

Her commitment to gender issues led Nshemereirwe to play a lead role in creating the Association of Uganda Professional Women in Agriculture and Environment (AUPWAE). Over time, she and scores of AUPWAE members like her have trained more than 22,000 women farmers in how to maximize their productivity.

In the Hoima district, Nshemereirwe and others taught farmers how to prune leafy vegetables

so that plants produce more and don't go to seed. They introduced farmers to the practice of "double digging," through which organic matter is buried beneath the topsoil to produce healthier plants. "Today you can see a big improvement in how families there live," she says.

Nshemereirwe also serves on AUPWAE's scholarship committee, which provides support to disadvantaged young women to pursue agricultural degrees. One of those women is Rose Nakamya (see profile, page 35). "Rose was overlooked in her village," says Nshemereirwe. "With support from AUPWAE, she and other scholars are exposed to new ideas and are able to work together as part of a network."

The ten women described in these pages offer moving testimony of **AWLAESM**'s impact; yet they represent only a fraction of the more than 2,000 women to benefit from this pioneering program over nearly two decades. What has been **AWLAESM**'s overall impact on individuals, institutions, policies, and communities? What lessons have emerged? What does **AWLAESM**'s future look like?

To answer these questions, in 2007 Winrock conducted an assessment of **AWLAESM**'s work. More than 160 program graduates in eight countries – Côte d'Ivoire, Ethiopia, Ghana, Kenya, Nigeria, Senegal, Tanzania, and Uganda – were surveyed about their professional lives before and after participating in **AWLAESM**-sponsored activities. Respondents had either received scholarships, participated in leadership trainings, or both.

What did we learn? First and foremost, the assessment affirmed that investing in women's education nets far-reaching results for women and their communities. The majority of respondents were promoted to higher positions in their respective fields (82%), receiving increased responsibilities and salaries (87%). They, in turn, exerted greater influence over policies and priorities in their respective institutions and nationally. In Kenya, for example, program graduates succeeded in mainstreaming gender within the Ministry of Agriculture and the

Environment and its programs. In Tanzania, **AWLAESM** scholars paved the way for the increased participation of their female peers within government Ministries. And in Uganda, a program graduate integrated gender into the agricultural curriculum of a major university. All of this has resulted in more programs effectively integrating women farmers into local development efforts.

The assessment revealed that women scholars reaped the most benefits at the bachelor's degree level. In fact, women who received bachelor's degrees with support from **AWLAESM** experienced proportionately greater professional advancement than those who pursued master's or doctoral degrees. Another positive finding was that **AWLAESM** scholars who studied abroad nearly all returned to their respective communities, with the exception of one. This is attributed to **AWLAESM**'s rigorous selection process and on-going support of participants.

AWLAESM's *Leadership for Change* training, often offered in tandem with scholarship support, was found to improve professional women's managerial efficiency (69%), innovativeness (61%), assertiveness (63%), relationship with colleagues (70%), networking capacity (55%), negotiation skills (80%), and ability to influence change (62%). On a personal level, the training helped women overcome societal attitudes that held them back, empowering them to have a greater voice in public life. The assessment concluded that combining scholarships with leadership training offers a powerful means of

enabling women to view themselves and their roles in society in new ways.

The assessment underscored the importance of involving men, particularly those in senior positions within their respective fields, in gender advocacy efforts aimed at strengthening rural development. It also identified the establishment, in ten countries, of local **AWLAESM** associations as a vital outcome since alumni are able to continue to share technical information, advocate for rural women, and deliver programs to rural women and their communities. A major challenge, however, has been enlisting the active involvement of more program graduates. Strengthening the sustainability of **AWLAESM** associations and generating greater in-country support for their work have emerged as key priorities for the future.

Looking Ahead

Where does **AWLAESM** go from here? With support from Winrock, in 2006 **AWLAESM** was transformed into a pan-African association with headquarters in Nairobi. Its mission is to transform the lives of rural women in Africa and address food security through developing outstanding women leaders in agriculture, the environment, and gender.

The Network is governed by an 11-member Board of Directors and currently operates in Benin, Côte d'Ivoire, Ethiopia, Ghana, Kenya, Mali, Nigeria, Senegal, Tanzania, and Uganda.

AWLAE-Net will pursue many of the same goals established by its predecessor: the professional advancement of women, policy advocacy, support of girls' education, and empowering women farmers.

As set forth in its three-year strategic plan, AWLAE-Net's next steps include developing the capacity of its member organizations, implementing projects that demonstrate the benefits of gender mainstreaming, and contributing to Africa's agriculture and environment agenda. A key priority is making gender a central theme among regional political and development organizations. Toward that end, AWLAE-Net has forged partnerships with the Africa Union Commission and United Nations Economic Commission for Africa. Already, AWLAE-Net has served as an advisor on implementation of the Comprehensive Africa Agriculture Development Program (CAADP) and in developing the Agricultural Gender and Development Index (AGDI). AWLAE-Net also continues to provide university scholarships to emerging women leaders from rural areas.

With initial support from Winrock and the Dutch Ministry of Foreign Affairs, AWLAE-Net is actively pursuing funding for these and other initiatives. For further information, and to find out how you can support AWLAE-Net's activities, contact: awlaenet@winrock.or.ke.





Photography: (excluding cover and page 3): Neemah A. Esmaeilpour

Text: Sheila Kinkade

Cover photo: Jon Stewart, volunteer, Agricultural Market & Enterprise Development project, Rumbek, Sudan.
Hellen, pictured, was a media training participant.

Photo on page 3: Winrock International



WINROCK
INTERNATIONAL

**2101 Riverfront Drive
Little Rock, Arkansas 72202
501.280.3000**

**2121 Crystal Drive, Suite 500
Arlington, Virginia 22202
703.302.6500**

www.winrock.org