



APPROPRIATE ENERGY SAVING TECHNOLOGIES (AEST)



BOARDS & SENIOR
MANAGEMENT



EMPLOYEES



ENTREPRENEURS
/ CONTRACTORS



CONSUMERS



COMMUNITY
MEMBERS

Appropriate Energy Saving

Technologies (AEST) Ltd. markets, sells and distributes clean cookstoves and fuel. Women-founded and managed, AEST manufactures charcoal briquettes made from recycled agricultural waste and sells efficient cookstoves to households and institutions in urban and peri-urban areas of Northeastern Uganda. Previously, AEST was a for-profit arm of Teso Women Development Initiatives, a local non-profit, before becoming its own company.



AEST briquette producer using production machine.
Photo credited to AEST.

SUMMARY

YEAR ESTABLISHED: 2012

NUMBER OF EMPLOYEES: 18

COUNTRIES OF OPERATION: Uganda, planning expansion to Kenya

AREAS OF VALUE CHAIN & GENDER OPPORTUNITIES INTEGRATED:

Board/Senior Management/Employees

- CEO / leadership commitment to gender equity, which is clearly communicated to managers and staff.
- Involve women in the design of the company's products.
- Increase women's skills in the production of the company's products.
- Work with male employees to accept female co-workers and management.
- Increase male support (household and community) for women's involvement in in different points on the value chain.
- Institute gender sensitive policies and procedures to keep women engaged in the workforce.
- Create pipeline opportunities and promote from within, as makes sense.
- Train managers / supervisors on how to provide concrete and objective examples of feedback that are backed by facts from the performance log notes.
- Provide opportunity to reassignment to safer roles for pregnant women in production
- Provide support in transitioning back to work (for new parents - men and women).
- Support access to child and dependent care

Entrepreneurs/Contractors

- Identify qualities needed in women who can be potential marketers / sellers of products on commission, and engage them (acknowledging they may only engage for the short-term once exhaust current network).
- Increase women's access to inventory, particularly at startup.
- Provide opportunities for entrepreneurs and contractors to build their self-efficacy, communication skills, and sales/entrepreneurial knowledge
- Increase male support (household and community) for women's involvement in in different points on the value chain.

Consumers

- Employ female sales agents to market and sell products that have female end users (e.g., cookstoves)

BUSINESS IMPACTS:

- Improved retention and advancement of female management employees (90% retention for women, 70% for men)
- High levels of retention of both men and women in production (90% for full time workers, 70% for part time workers).
- Recognized by UN, USAID, Foundations and other NGOs as an example of a company that advocates and integrates gender across operations.

SOCIAL IMPACTS:

- Provides source of income for 56 women (employees and entrepreneurs).
- High percentages of women in production activities (60% of machine workers and 70% of briquette producers are female).
- Improves female entrepreneurs self-reported self-esteem and household bargaining abilities.
- Improves health of families and reduced time burden on women consumers as a result of clean cookstoves.

BACKGROUND ON GENDER STRATEGY

Recognizing that women are the primary end consumers of clean cookstoves and fuels, AEST works with women both as employees producing clean cookstoves and as micro-entrepreneurs in the distribution, marketing, and after-sales services of these stoves, as well as in the production of charcoal. In terms of production of the

charcoal briquettes, AEST sources the agricultural waste from farmers (male and female), and then engage women and men in the carbonization of agricultural waste to produce charcoal briquettes to use with the AEST stoves. AEST pays the individuals based on amount of charcoal briquettes produced.

GENDER OPPORTUNITIES IMPLEMENTED & RESULTS

Employees:

AEST currently employs 18 people (12 women and 6 men). 57% of management positions are currently held by women. AEST prioritizes a work environment that enables women to grow within the organization, and to pursue and obtain leadership positions. AEST trains men and women cookstove production staff on how to use all the machines in the factory. This was particularly important at first, as the male employees went on strike because they complained that women and men were receiving equal wages. Since the women were trained on all the machines, they were able to keep the production running while the men were on strike, providing a powerful bargaining tool for management to make the case for equal wages. AEST founder and CEO Betty Ikaleny says, “if men are the sole holders of specialized knowledge, this will come back to you as management. This will lead men to disrespect women.” Additionally, AEST has worked with male employees to sensitize them to women’s care burden so they could

Another challenge related to having more women

in management positions is that Ikaleny has received complaints from male employees who feel that women, including her, should not be correcting them for errors. AEST managers have found that using a strict and assertive but fair approach that treats male and female employees the same has helped build respect for female managers and allows male employees to receive feedback from them without losing face. Ikaleny also emphasizes to all employees that both men and women are capable of conducting the work and at good quality. She notes that women are often better producers as they are more willing to ask questions and learn.

AEST recognizes that not all of its female employees have the same needs, and treating women as one category leads to turn over. For example, mothers and married women have less free time and opportunity to make independent decisions than single, childless women. To offset this, AEST has instituted several policies, including:

- Maintaining women’s employment during pregnancy as long as possible by allowing pregnant women to shift to other work they can do safely (e.g., office work);
- Providing on-site childcare after child is 3 months old; and
- Providing a social worker to provide support for mothers, particularly mothers whose husbands work out of town and other single mothers.

Despite these policies, AEST still loses more female production employees than male production employees, and is trying to determine further ways to reduce this.

The bonuses and increased salary that managers receive at AEST also increase husbands support feel for women moving into these higher positions and can offset the reduced role they are able to take at home from the increased job responsibilities. This has improved retention of female management employees.

Entrepreneurs:

When AEST initially started training micro-entrepreneurs in distribution of cookstoves and fuels, there were more women (47 women versus 8 men). However, currently 85% of the micro-entrepreneurs working with AEST are women. This is because AEST found that generally male micro-entrepreneurs were less reliable in returning credit, whereas women would take their commission and return remaining credit to AEST. Currently, male micro-entrepreneurs working with AEST must own a business before beginning work with them, while female micro-entrepreneurs either already own/work with a business or have demonstrated skills and traits that AEST thinks will make them effective entrepreneurs.

AEST provides micro-entrepreneurs with training in interacting with customers, finding new customers and marketing. Practical skills such as how to separate and manage business and personal wallets are included as well. This is particularly valuable for women, as it helps them organize their money so business money is reinvested. It also helps protect the money so that it cannot be taken by their male family members, particularly husbands. Lastly, AEST incorporates agency-based empowerment and leadership training, which focuses on topics such as building self-awareness, self-confidence, problem solving, and setting goals and action plans. The trainings help build entrepreneurs confidence and resiliency, particularly women. As Ikalany puts it, the training has “helped women to believe in themselves. [Before the training, the women] were not confident, but after the training they became self-starters. The [Empowered Entrepreneur Training Handbook] is like a Bible to us.” Grant



AEST briquette producers posing with briquettes. Photo credited to AEST.

funding from the Global Alliance for Clean Cookstoves enabled AEST to train 47 female distribution entrepreneurs.

In addition to training, AEST provides “Entrepreneur Starter Packages” to micro-entrepreneurs in order to counteract women’s limited access to capital and credit. These packages include cookstoves and briquettes on credit in order for the women to generate capital to then purchase additional cookstoves and briquettes to sell. The packages also include marketing materials such as brochures, T-shirts and signs with promotional messaging. The marketing materials have increased product visibility, while the cadre of micro-entrepreneurs has enabled AEST to increase sales and access new markets. The entrepreneurs requested the promotional materials, as they found that these materials made it easier to compete with other people selling similar products in the market.

In addition to their work with micro-entrepreneurs in selling cookstoves and fuels, AEST has trained 20 women who carbonize agricultural waste into biochar, some of whom have gone on to begin their own businesses. These women are provided the materials and space to produce biochar briquettes and then earn a fee when providing the briquettes to AEST. AEST has found that household burdens reduce women’s time to do this work, so most of these production entrepreneurs

are young and unmarried or have supportive husbands.

Community dialogues & engaging men:

AEST has found that it’s important to engage men to gain buy-in for women to participate in entrepreneurial and employment activities. To do this, AEST hosted community dialogues with 61 men and 108 women in the districts of Kumi and Soroti. AEST engaged husbands, fathers and uncles of women working with AEST as well as male community leaders and female employees, entrepreneurs and their family members. From these conversations, AEST better understood the gender roles and dynamics of the communities and how they might impact women’s engagement in entrepreneurial activities. They found that many men felt insecure as they feared the women earning money would not respect them, that women might meet another man at work or that there might be conflicts over household spending. The dialogues allowed opportunities for women and men to understand each other’s concerns, and allowed opportunities to show how women’s working could contribute to the family and community. Oftentimes, this resulted in men accepting and supporting involvement of their female relatives with AEST, and increased women’s participation overall. Feedback from the community dialogues informed future practices around engaging men.

LESSONS LEARNED:

1. Steadfast CEO commitment to gender equity is critical – especially when engaging women in non-traditional gender positions.
2. If men are the sole holders of specialized knowledge it will make it difficult for management to justify equal pay, therefore ensuring widespread training is key.
3. Provision of childcare is important to support women employees.
4. Promotional materials can help add legitimacy to micro-entrepreneurs when selling products.
5. Women micro-entrepreneurs have limited access to capital and therefore need support in accessing products originally and have trouble paying up front for initial batch of products.
6. Women micro-entrepreneurs benefit from additional training – not just in business, but also agency-based empowerment and leadership which can increase their confidence and resiliency.
7. Men should be engaged in the communities – particularly husbands and community leaders – to enhance buy-in for women’s entrepreneurial activities.

IMPACTS:

Business impacts:

- ❑ Improved retention and advancement of female management due to gender sensitive policies.
- ❑ Reduced production issues as female employees more willing to ask questions and learn.
- ❑ Negatively, women have higher rates of absenteeism than men, 20% vs. 10% for management, 30% vs. 10% for production, mainly because women still have to take care of other family members when they fall sick.
- ❑ Recognized by UN, USAID, Foundations and other NGOs as an example of a company that advocates and integrates gender across operations.
- ❑ Source of income provided for 9 women as employees and 53 women as micro-entrepreneurs.
- ❑ Female entrepreneurs self-report increased self-esteem and household bargaining abilities.
- ❑ Improved health of families and reduced time burden on women consumers as a result of clean cookstoves.

Organizational impacts:

- ❑ Incentive structures can help improve women’s participation at the management level.
- ❑ Female managers develop feedback technique to mitigate pushback from male employees of female managers.
- ❑ Increased justification for equal pay because all production employees trained to use all machines, regardless of gender.

Social impacts:

- ❑ Shifted stereotypes of what women are capable of.

This case study was conducted through (1) a review of AEST program documentation from the Global Alliance for Clean Cookstoves’ Women’s Empowerment Fund, (2) interviews conducted with leadership at AEST.