

SWITCH AFRICA GREEN

STORIES FROM BENEFICIARIES

Ghana, Kenya and Uganda



Quarterly Report (October - December 2016)

WHERE WE ARE IN AFRICA

The overall objective of SWITCH Africa Green is to support 6 countries in Africa to achieve sustainable development by engaging in transition towards an inclusive green economy.

COUNTRY PROJECTS

UGANDA

- Upscaling Generation, Commercialization and Utilization of Biomass Waste-based Green Energy Sources in Uganda
- Demand-side Management of Water Use in Micro, Small, Medium-sized Enterprises in Uganda Through Promotion of Water Use Efficiency Techniques and Practices
- Demand-side Management of Energy Use in Micro, Small and Medium Enterprises (MSMEs) In Uganda Through Promotion of Energy Efficiency Techniques and Practices
- Eco-agriculture-sesame Livelihoods and Organic-green Business Opportunities for Young Rural People
- Promoting Inclusive Green Business Practices in the Tourism Sector
- Promoting Sustainable Product Innovation and Energy Efficient Practices Among Small Scale Industries in Uganda

KENYA

- Greening SMEs Leather Clusters and Leather Tanning Industry
- Enhancing Sustainable Tourism Innovation for Community Empowerment In Kenya
- Up-Scaling Sustainable Commercial Production Of Medicinal Plants by Community-Based Conservation Groups at Kakamega Forest In Kenya
- Capacity Enhancement for Green Business Development and Eco-Entrepreneurship in Agricultural Sector

MAURITIUS

- Greening the Mauritian Tourism Industry
- A Model for Sustainable Production and Consumption Practices and Ecoentrepreneurship Development
- Increase Capacity Building of The Fisher's Community of Rodrigues Through Training for The Bio Cultivation of the Combava Lime Plants and Its Chili Paste
- Promoting Sustainable Local Agriculture Through Green Retail and Green Hospitality (Sus-Agri)
- National Energy Efficiency Program - PNEE
- Developing Capacity Amongst Rodriguans to Adopt Green Businesses Through Training To Key Stakeholders and the Development of a Green Business Guidebook

SOUTH AFRICA

- Awareness Creation and Capacity Building on Eco Labelling for the Agricultural Sector
- Meat Naturally Initiative: Embedding Sustainability in South Africa's Emerging Red Meat Sector
- Collaborating to Facilitate Investments And Shifts To A Green Economy that Can Improve Social Wellbeing and the Provision of Ecosystems Services in the Port Elizabeth Western Catchment Areas
- Sustainable Production And Commercialization Strategies in The Agrifood Sector In South Africa
- Management of Sustainable Energy Production from Integrated Waste Management and Agricultural Processing Systems
- Promoting SCP in South African Agricultural Value Chains

GHANA

- Hanisa E-Waste Model (Hemod)
- Implementing Industrial Symbiosis and Environmental Management Systems for SMEs in Three Regions in Ghana
- Promotion of Biogas Technologies
- One-Stop Business And Policy Centre For The Establishment of Eco Innovative MSMEs and Supporting Policies in the E-Waste and End-Of-Life
- Improved Institutional Biomass Cook Stoves and Ovens for Small and Medium Scale Agro-Processing Industries in Ghana (Renewable Energy Project)

BURKINA FASO

- Groupe De Recherche Et D'analyse Appliquées Pour Le Développement
- Valorisation Des Déchets De La Filière Anacarde Comme Une Source D'énergie Renouvelable Pour Les Pmes Au Burkina Faso (Cashew As A Source Of Renewable Energy For Smes in Burkina Faso)
- Enabling Burkinabe Smes To Start Solar Energy Production
- Transformation Des Dechets Menagers En Fertiliz Agricole (Transformation of Household Wastes into Fertilizer)

MULTI COUNTRY

Enhancing Resource Productivity And Environmental Performance Of Msmes In 6 African Countries Through The Concept Of Industrial Symbiosis (Is)

Empowering Business Development Agencies & Nsas To Advocate Sustainable Consumption & Production Practices And Support Eco Entrepreneurs In Their Development & Transition Towards Green Inclusive Businesses

Promoting Eco-entrepreneurship In Africa

PRIORITY SECTORS

- MANUFACTURING**
- INTEGRATED WASTE MANAGEMENT**
- TOURISM**
- AGRICULTURE**

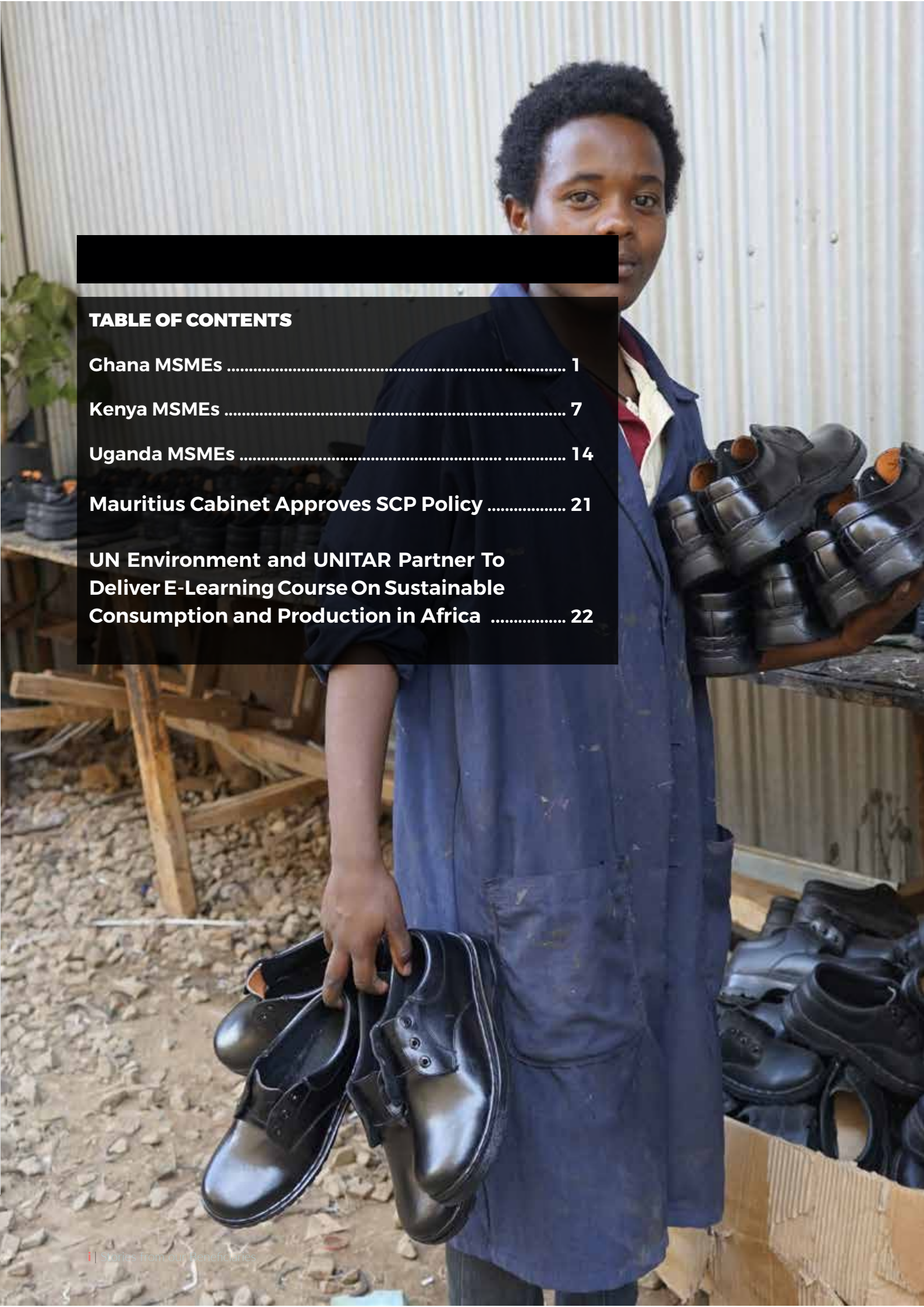


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PREAMBLE

In this quarter the SWITCH Africa Green project carried out technical monitoring of projects in three countries: Ghana, Kenya and Uganda. Technical Monitoring involves review, monitoring and assessment of the uptake of SCP practices by the Micro Small and Medium Enterprises (MSMEs) who are the final beneficiaries of the project.

The technical monitoring team comprised of UNEP, UNDP, UNOPS and a representative of the National Technical Coordination Committee. The team visited 39 MSMEs out of a possible 1,407 MSMEs across the three countries. The MSMEs visited were selected randomly taking into account all the project grantees, the time allocated for the monitoring in each country as well as the location of the MSMEs in the various parts of the countries.

This report highlights the progress in greening the business in some of these MSMEs. The SCP practices implemented by the MSMEs include energy efficiency, water efficiency, product innovation, record keeping, better product pricing, standards and certification to name a few. In some cases this has led to increased incomes, cost savings, job creation, improved time efficiency, improved health and increased productivity. Some of the common challenges include lack of financing to implement the SCP practices.

GHANA MSMEs



Map showing the towns that were visited and the number of MSMEs visited in each town

In Ghana, a total of 11 MSMEs were visited in Accra, Ekumfi Narkwa - Central Region, Cape Coast, Kumasi, Tema and Adaklu - Volta Region.

The selected priority areas for Ghana are Manufacturing, Integrated Waste Management and Tourism. In addition to that, the following cross-cutting themes have also been identified as critical: Energy-efficiency, Labelling and Standards, Water efficiency, Eco-innovation, Sustainable trade.

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Number of MSMEs visited in Ghana out of a possible 500 MSMEs

Start-up doubles by constructing biogas plants

MSME: Ambrose Tsekpo - Biogas Mason
Grantee: Ghana National Cleaner Production Centre (GNPCPC)
Project Title: Promotion of Biogas Technologies



Ambrose showing his workmanship in the construction of Biogas plants

Photo | SWITCH Africa Green

Ambrose Tsekpo deals in the construction of biogas plants for residential and commercial facilities. He was previously a mason specialising in the construction of houses. He heard about the SAG training by GNPCPC on biogas construction by word of mouth and applied to participate. The project has re-skilled this entrepreneur who is now concentrating on construction of biogas plants in Tema region of Ghana.

100%

Percentage increase in Ambrose's income after going through SAG training in biogas construction

He has undergone training on construction of biogas plant and participated in the construction of the biogas digesters for demonstration at GNPCPC compound.

He has also trained and acquired skills in using the biogas calculator to determine the size of the required biogas digester, possible savings from alternatives and required capital. He also participated in the training on Occupational standards for biogas digesters and trained on biogas business development model.

As a result, his monthly income has increased from 1,000 cedis to 2,000 cedis with business prospects being good in the construction of biogas digesters - he already has orders for six other plants in the pipeline.

SAG project's efficient cookstove is replicated by other development partners

MSME: Gari processors – Volta Region, Ghana
Grantee: Association of Ghana Industries (AGI)
Partner: Ghana National Cleaner Production Centre (GNPCPC)
Project Title: improved Institutional Biomass Cookstoves and Ovens for Small and Medium Scale Agro-processing Industries in Ghana (Renewal Energy Project)



The cooking stove constructed after SAG intervention has been replicated by other development organisations and funding partners
 Photo | SWITCH Africa Green

Cassava is one of the major foods consumed in Ghana. It is a major contributor to food security and livelihood in rural areas. Cassava is normally processed to flour using thermal energy before it is consumed or traded. In addition, the consumption of this product in schools, urban and rural areas across the country coupled with recent high demand of the product in other West African countries, makes the product a viable business venture. The community in Adaklu produces and cooks cassava (gari) for their own consumption and for sale. They cook the gari and sell it as a processed product. They have been using traditional cook stoves but SAG introduced more efficient community stoves.

Through SAG intervention, AGI has built one efficient cook stove in this community in which multiple benefits were noted. The quality of the gari produced was better as reviewed by the consumers. The women explained that they do not suffer from smoke related diseases anymore as the introduced stove mitigated the excessive smoke emissions. Significantly, the time spent making gari has reduced by more than 50% which has freed up more time for the women to perform other chores. From taking two days to process 105kg of gari, they now take two hours to process a similar amount. They have also seen an increase in their profit margins as they now spend 25 cedis to process 150kg of gari, down from 60 cedis. This cooking stove has performed so well that it led to a replication by the West African Agricultural Productivity Programme (WAAPP) programme funded by the World Bank, where they installed two similar stoves to ensure everyone can process gari when required, noting that when market day approaches, demand rises necessitating the extra stoves.

Community in need of presser and slicer for processing gari

MSME: Gari processors Volta Region – Adaklu District (Sofa Area)
Grantee: Association of Ghana Industries (AGI)
Partner: Ghana National Cleaner Production Centre (GNPCPC)
Project Title: Improved Institutional Biomass Cookstoves and Ovens for Small and Medium Scale Agro-processing Industries in Ghana (Renewal Energy Project)



TOP: Traditional way in which women conduct pressing to extract water in the processing of gari
 BOTTOM: Improved method of pressing to extract water in the processing of gari in a neighbouring village
 Photo | SWITCH Africa Green

The community in Adaklu produces and cooks cassava (gari) for their own consumption and for sale. They cook the gari and sell it as a processed product. They have been using traditional cook stoves until SAG introduced more efficient community stoves emitting less smoke. This has resulted in better quality gari while making smoke-related diseases a thing of the past. Notably, the cooking time has also significantly reduced.

With these improvements, some of the challenges they still have include the absence of a presser and slicer. The presser used is time consuming and very inefficient. The slicer comes on a request basis.

Efficient stove mitigated excessive smoke emissions reducing smoke related diseases

Multiple benefits experienced by community on introduction of efficient stove for drying fish

MSME: Fish Processing at Ekumfi Narkwa District
Grantee: Association of Ghana Industries (AGI)
Partner: Ghana National Cleaner Production Centre (GNPCPC)
Project Title: Improved Institutional Biomass Cookstoves and Ovens for Small and Medium Scale Agro-processing Industries in Ghana (Renewal Energy Project)



BEFORE: The stove previously for drying fish
 AFTER: The stove introduced by SAG
 Photo | SWITCH Africa Green

Fishing is one of the main economic activities in this area as fish is a major contributor to food security and income for the community. The members of this community smoke fish for preservation mainly for sale to the local market. Two demonstration stoves for fish smoking have been constructed in this area covering 4 women groups with a total of 350 persons. During smoking of the fish, about 4 trays of fish are stacked on the stove. The new stove is an improvement to the previous one as it has a dispenser to stop oil from going back in the smoking fish. This has reduced the smoking time and ensured uniform heat distribution during smoking of the fish.

The stove, introduced by SAG, is faster than the traditional stove taking 2 hours to dry the fish from 4 - 5 hours using the traditional stove. The main difference between the introduced stove and the traditional stove is the heat distribution, with the traditional stove burning the fish at the bottom tray while the introduced stove evenly distributes the heat. According to the consumers, the taste and texture of the smoked fish has also improved.

Multiple revenue streams created after implementing SAG training on E-waste

MSME: Atlantic Electronics, Accra
Grantee: Environmental Protection Agency
Project Title: Hanisa E-waste Model (HEMOD)



The proprietor of Atlantic Electronics in his workshop, where training on E-Waste recovery takes place
 Photo | SWITCH Africa Green

Atlantic Electronics specialises in selling mobile phone appliances and accessories. They have just introduced dismantling of e-waste. The MSME is used as a centre for training on E-waste recovery focusing on Mobile phones, laptops and computers. There are many companies now buying back the dismantled materials in Ghana. This has now become the main business for this entrepreneur.

The centre acts as a Training of Trainers hub and a demonstration centre. First training accommodated 20 MSMEs with 40 technicians undergoing the training. The next phase of training will take place in first week of February 2017 targeting 20 technicians. Local refurbishing is mainly for screens while other parts are used for other purposes. Significantly, the company signed a contract with Vodafone to do their buybacks with the buyback centres in the process of being established and accredited.

After undergoing SAG training, the entrepreneur has now increased knowledge and has diversified his business revenue streams, with the dismantling of E-waste becoming the main revenue stream. This has led to increased profits due to this new line of business with client perception feedback improving especially on repairs of screens.

SAG training has also enabled the dismantling process to be faster for the business. The dismantling of a laptop, initially took one week to complete, now it takes three hours. Training on costing of different parts of electronics was done to enable the technicians cost the waste appropriately.

New revenue stream created from Training of Trainers (ToT)

MSME: Mana Electronic Repair Shop, Accra
Grantee: Environmental Protection Agency
Project Title: Hanisa E-waste Model (HEMOD)



The proprietor of Mana Electronic Repair Shop in his workshop
Photo | SWITCH Africa Green

Mana Electronic repair shop is a member of the Ghana Electronics Servicing Technicians Association. They repair about 5-6 TVs in a day and rely on word of mouth for advertising business services.

1 hour to 45 min

Reduction in the amount of lead time for dismantling a TV-set using the step-by-step dismantling procedure

They received training from SAG through EPA on dismantling E-waste during the Training of Trainers (ToT) workshop. Since undergoing the training, 15 other technicians have been trained using the training manual and pamphlet from the e-waste training. This has had the effect of increased revenue from training as they now charge 500 cedis per training up from an initial charge of 200 cedis. The Council for Technical and Vocational Education and Training (COTVET) students normally come to do practicals at this establishment and get training in the process. An e-waste collection centre will be set up in the area.

After undergoing SAG training, they have recorded increased revenues from sale of e-waste. They have also been able to reduce the lead time for dismantling a TV set using the step-by-step dismantling procedure learnt during training, from 1 hour to 45 minutes. The business premise has also been de-cluttered while business planning and record-keeping has also improved.

MSME improves efficiency in managing E-waste

MSME: Mystery Technology, Accra
Grantee: Environmental Protection Agency
Project Title: Hanisa E-waste Model (HEMOD)



Mystery Technology proprietor in his workshop
Photo | SWITCH Africa Green

Mystery Technology is a Member of Ghana Electronics Servicing Technicians Association and is the current secretary to the organization. The MSME deals in Repair and dismantling of TVs, computers, fridge components, music key boards, mobile phones and other electronics. They also sell the dismantled parts. The company has an e-waste register where e-waste is collected from technicians in the area and taken to collection points/centres in East Lagon. E-waste is sold in weight so everyone takes their weight and a log on deliveries is kept.

Before undergoing training, they used to burn/dump the e-waste; after the EPA training they now take to the collection center. EPA is currently working on the buyback centers. They have also improved on their business planning and record keeping.

The working atmosphere has also changed – before the training people used to leave their equipment in the shops for about 3years without collecting. After training, they developed a contract that is signed by the client where they agreed to dispose of the equipment after 3 months and 3 calls of warning to the owners, after which the equipment is disposed. This has led to de-congestion of the shop.

MSME enjoys the benefits of improved methods of managing E-waste

MSME: Oforikrom Dagambaline Association, Kumasi
Grantee: University of Cape Coast (UCC)
Sector: Waste - electronics



The e-waste that the team is working to de-congest by dismantling and recovering valuable components for resale
Photo | SUITCH Africa Green

This 500 member association operates from the Dagambaline area of Kumasi which is a slum area. They primarily use wheelbarrows to transport the waste to their area of work.

Previously, to get the waste, they smashed the equipment. The SAG intervention has improved this to step-by-step dismantling ensuring recovery of more e-waste and fewer physical injuries. They can now effectively recover copper, aluminium and other parts from a monitor and other electronics.

They can now effectively recover copper, aluminium and other parts from a monitor and other electronics

The training has also helped in identifying the value of the various components and in estimating how much would be recovered from dismantling particular equipment. Importantly, 16 people were trained from this area - they have in turned trained about 90 people since the training.

Secondary school enjoys benefits of installing biogas plant for lighting

MSME: St. Johns Grammar School, Accra
Grantee: Ghana National Cleaner Production Centre (GNCPC)
Project Title: Promotion of Biogas Technologies



Part of the biogas facility at the learning institution
Photo | SUITCH Africa Green

The SAC proposal encouraged the Government of Ghana to put up biogas plants in 10 schools in Ghana. Currently, the project has constructed 10 biogas digesters in 8 schools.

With 28% of the student population utilizing the boarding facilities, the secondary school has limited boarding facilities for both boys and girls. The school has two main classroom blocks - a 16--classroom 2-storey junior block and a 12-classroom 3-storey senior block. The school also has 3 laboratories, with an air-conditioned computer laboratory with about fifty functioning desktop computers. A 120-capacity laboratory is also present with a book stock of about 700 books relating to the various subject offered at the school.

The biogas in St. Johns is used for lighting for the girls'

The biogas in St. Johns is used for lighting for the girls' section of the school which, on full capacity, runs for 6 hours

section of the school which on full capacity runs for 6 hours. The country has lots of power blackouts thus this is a welcome sustainable solution to give the students lighting. The biology and agriculture department are taking up the technology and incorporating it in training the students. There are two labourers in the school trained for maintenance of the biogas digester.

MSME identified as suitable for industrial symbiosis

MSME: Sokoban Wood Village, Kumasi
Grantee: Ghana Chamber of Commerce and Industry, Kumasi Region
Partner: International Symbiosis Limited (ISL)
Project Title: Implementing Industrial Symbiosis and Environmental Management Systems for SMEs in Three Regions in Ghana



Section where timber is stored at Sokoban Wood Village, showing the busy activity at the business premises
 Photo | SWITCH Africa Green

Sokoban Wood Village, a carpenter village in the Kumasi metropolis, produces about 100-150 metric tons of sawdust per day. Most of the sawdust is burned, causing respiratory illnesses and other medical problems, as well as environmental damage. This establishment has been identified as suitable for industrial symbiosis with Kwamoka Energy Company. Kwamoka Energy Company would produce energy for the region while Sokoban produce the waste (sawdust mainly). Kwamoka would sign an agreement with the association of carpenters at Sokoban.

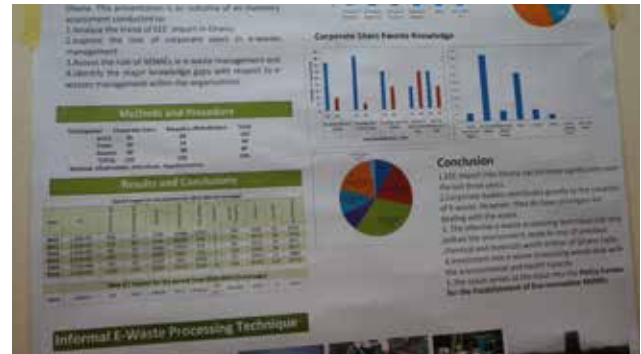
Currently, Members of the association have participated on training on waste exchange.



Stored timber at Sokoban Wood Village
 Photo | SWITCH Africa Green

Establishment of a One-Stop Eco-innovative Business and Policy Center (ECO-BPC) in progress

MSME: One Stop Business and Policy Center, Cape Coast
Grantee: University of Cape Coast (UCC)
Project Title: One-Stop Business and Policy Center for the Establishment of Eco-innovative MSMEs and Supporting Policies in the E-waste and End-of-life Vehicles Sector (EcoBPC)



A wall poster shoeing different elements of the project in Ghana
 Photo | SWITCH Africa Green

The project objective is to establish a One-Stop Eco-innovative Business and Policy Center (ECO-BPC). The development of this center is still on paper and is yet to be realized. The grantee has also developed an online knowledge platform, which is not yet operational.

They have collected, reviewed and analyzed data on MSMEs in the selected pilot area. They have also conducted a survey to map the e-waste generated and the anticipated waste required. They are also developing an e-waste inventory assessment report focusing on the types, quantities and locations of e-wastes in the selected areas of study.

A survey to map the e-waste generated and anticipated waste has been conducted

KENYA MSMEs



Map showing the towns that were visited and the number of MSMEs visited in each town

In Kenya, a total of 14 MSMEs were visited in Nairobi, Thika, Kiambu, Nakuru and Kakamega Forest.

The selected priority areas for Kenya are Agriculture, Manufacturing and Tourism. In addition to that, the following cross-cutting themes have also been identified as critical: Energy-efficiency, Labelling and Standards, Water efficiency, Eco-innovation, Sustainable trade.

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Number of MSMEs visited in Kenya out of a possible 497 MSMEs

MSME improves solar drier after SAC training

MSME: PAMAT Foods, Nairobi
Grantee: Kenya Private Sector Alliance (KEPSA)
Partner: Kenya Agribusiness Agroindustry Alliance (KAAA)
Project Title: Capacity Enhancement for Green Business Development and Eco-entrepreneurship in the Agriculture Sector



PAMAT staff explains a process that takes place in the solar drier that was installed after SAC intervention
 Photo | SWITCH Africa Green

Pamat Foods is a company incorporated under Matpal Enterprises Limited. Located in Kiambu county, the company specializes in production organic food flour from banana, amaranth, arrowroot and sweet potato. They source raw banana from farmers and clean, slice and peel at the enterprise. The MSME has invested in a 400kg capacity solar drier for drying banana cuttings. On waste management, the MSME converts its by products into manure. In future, they hope to produce briquettes.

As a beneficiary of the SWITCH Africa Green project two members of the association have been trained on SCP practices. The company is making significant progress on record keeping, employee recruitment, water & energy efficiency as well as waste management as a result of the SAC supported training. PAMAT Foods has five employees in the processing section.



PAMAT staff explains a process during the technical monitoring visit
 Photo | SWITCH Africa Green

Tannery earmarked for Resource Efficiency Assessment and adoption of cleaner production

MSME: Nakuru Tanners Ltd, Nakuru
Grantee: Comesa-Leather and Leather Products Institute (COMESA/LLPI)
Partner: Kenya Leather Development Council (KLDC)
Project Title: Greening SMEs Leather Clusters and Leather Tanning Industry in Kenya



Dr. Isaack Noor (far right), The CEO of KLDC sharing a light moment at the Nakuru Tanners store during the technical monitoring visit
 Photo | SWITCH Africa Green

The establishment specializes in production of wet blue (semi processed leather) and finished leather from 2015. About 60% of the finished leather is vegetable tanned and highly popular in production of sandals. The wet blue is exported to China, Italy, India and Pakistan and finished leather is sold locally and also exported to Rwanda and Tanzania. The firm has 100 employees.

Capacity building on transformation & clustering has increased the orders from leather manufacturers drawn from Nakuru, Nairobi and Kisumu clusters. Through SAG the training tailored for tannery owners, they now have a better understanding of the type and quality of leather required by the different manufacturers and now improving the tanning process to meet the customer's needs.

Capacity building on transformation and clustering has increased orders from leather manufacturers

Through SAG the tannery has been earmarked for Resource Efficiency Assessment and adoption of cleaner production by Kenya National Cleaner Production Center (KNCPC). This will transform the tannery into a cleaner, more environmentally friendly enterprise.

MSME makes additional revenue from leather off-cuts

MSME: Palm Prints African Arts, Thika
Grantee: COMESA and Leather Products Institute (LLPI)
Partner: Kenya Leather Development Council
Project Title: Greening SMEs Leather Clusters and Leather Tanning Industry in Kenya



Some of the products made by Palm Prints African Arts from leather off-cuts
 Photo | SWITCH Africa Green

This is a leather goods manufacturer specialising in African art. The company's products include; key holders, bracelets, pencil and pen holders, belts, stools and bags. Most of the products are made from Kips, which is vegetable tanned leather.

Since involvement in SAG, the company has had improved market access through networking with other SAG beneficiaries, improved record keeping and product costing and pricing. The company also adopted optimum utilization of leather through best practices in cutting leading to reduction in solid waste. They have also reduced idle time for the clicking machine in which the entrepreneur has been able to allow other MSMEs to utilize the machine at a fee thereby increasing revenues.

7
 Number of youth employees: 4 women, 3 men

They have also been able to access quality leather from tanneries through clustering with other MSMEs for better bargaining power. Their product range has undergone testing by Kenya

Bureau of Standards (KEBS) and assessment by a leather expert. Palm Prints African Arts has seven employees, all youth: 4 women and 3 men.

Testing of products by Kenya Bureau of Standards (KEBS) and leather expert leads to improved quality of products

MSME: Shoe Storm, Nakuru
Grantee: COMESA and Leather Products Institute (LLPI)
Partner: Kenya Leather Development Council
Project Title: Greening SMEs Leather Clusters and Leather Tanning Industry in Kenya



TOP: Shoe Storm proprietor displaying her certificate from SAG training
 BELOW: Some of their products
 Photo | SUIITCH Africa Green

Shoe Storm is a female-led enterprise with five employees. The workshop deals in production of various types of footwear including Gent's shoes, Safari Boots and Back to School Shoes. All the operations are conducted manually.

From the Resource Optimization training facilitated by SAG, the organization has improved practices in cutting such as proper mapping, patterns design. Training of artisan has improved productivity.

The Costing and pricing training has helped improve record keeping hence the entrepreneur can now track production costs, sales and revenue. They have recorded increased earnings from footwear through better pricing of footwear.

Through the Capacity Building on Transformation and Clustering, the entrepreneur is now able to access quality leather from Nakuru Tannery through clustering with other MSMEs achieving better bargaining power. Through bulk buying, the prices are lower resulting in increased profits. Testing of products by Kenya Bureau of Standards (KEBS) and assessment by a leather expert has also helped improve the quality of the products.

Group enjoys increased income from adopting better farming practises

MSME: Shabwali 20th Women Group, Kakamega
Grantee: International Centre of Insect Physiology and Ecology (ICIPE)
Partner: Muliru Farmers Conservation Group (MFCG)
Project Title: Up-scaling Sustainable Commercial Production of Medicinal Plants by Community-based Conservation Groups at Kakamega Forest in Kenya



A farmer passionately explaining how he was able to purchase a cow from the extra income earned
 Photo | SUIITCH Africa Green

The group was founded in 2013 by 20 women and 5 men, current membership now stands at 35. The group started with keeping poultry. The group's current major activity is growing Ocimum.

Through SAG intervention, the members have had training on making seedbeds, mulching, spacing, inter-cropping and land maximization. On seedbeds, they use banana stocks for keeping the sides firm. They also use organic manure and grass for the seedbed shade.



Their income has increased from KES 15,000 to KES 20,000 per harvest (every 4 months). A farmer passionately explained how he was able to purchase a cow from the extra income. (Photo above)

SAG also introduced the use of secateurs for harvesting Ocimum as opposed to machetes, these ensure the stems left are not damaged and protect the next season's harvest. On inter-cropping, they now have vegetables including cabbages – these mature faster securing a more frequent source of income for the farmers.

Increased productivity from improved farming techniques

MSME: Kasali Wajane Farmers, Kakamega
Grantee: International Centre of Insect Physiology and Ecology (ICIPE)
Partner: Muliru Farmers Conservation Group (MFCG)
Project Title: Up-scaling Sustainable Commercial Production of Medicinal Plants by Community-based Conservation Groups at Kakamega Forest in Kenya



Photos contrasting results after SAG intervention - from planting one crop to inter-cropping
Photo | SWITCH Africa Green

The group is mainly comprised of widows, the group began with 11 members, which increased to 28 after SAG support. The group grows *Ocimum Kilimandscharicum* that is supplied to Muliru distillation centre. The farmers are paid KES 10 per 1 Kg based on the weight of wet leaves.

Before SAG intervention, the group was using traditional methods in their operations e.g. broadcasting method of planting; they have now adopted better methods where they use a seedbed. The seeds are now planted in rows with specified spacing, this has improved output from 80-100kg of *Ocimum* to 300 kg of osmium harvested per period.

There has also been improved seedbed preparation; improved Planting and transplanting techniques; and established water storage measures for irrigation. One member has bought gutters and a water tank and collects water when it rains.

Data and record keeping have also improved which has been key in analysis of profit and losses. Having undergone training, the members are also capable of training others. They have also implemented inter-

cropping of *Ocimum* with cowpeas, onions, and local vegetables, resulting in increased productivity and income diversification. The group was also trained on making compost for organic fertilizer, which they now make and are training others to replicate the process. Time spent on going to the river has also been cut down by the water harvesting and storage techniques.

With this positive impact, more people have joined the group since SAG started, because they saw the group's productivity improving and wanted to also benefit. The group contributes to the conservation of the forest by introducing nursery tree planting resulting in wood harvest from their farms instead of the forest.

Business enjoys benefits of investing in a solar drier

MSME: Maisha Bora (Marrut Enterprises), Kiambu
Grantee: Kenya Private Sector Alliance (KEPSA)
Partner: Kenya Agribusiness Agroindustry Alliance (KAAA)
Project Title: Capacity Enhancement for Green Business Development and Eco-Entrepreneurship in the Agriculture Sector



Staff member explaining a process in the making of one of their products which is banana flour (Bapros multipurpose flour)
Photo | SWITCH Africa Green

Maisha Bora Marrut Enterprise is a small-scale business operating from Ting'ang'a, Kiambu County. Established in 2011 as a self-help group, the enterprise initially ventured in detergent making and table banking but has since moved on to production and processing of bananas into different banana products including flour and banana crisps. Key target customers include individuals, schools, and hospitals. The enterprise sources raw materials (bananas) from its members and local farmers.

The MSME has invested in a solar drier for drying banana cuttings and intends to purchase own grinder for increased efficiency. As a beneficiary of the SAG project, two members of the association have been trained on SCP practices. The enterprise has registered their product (Bapros multipurpose flour) and switched to paper packaging from plastics. Notably, they are also in the process of securing KEBS certification. They have also improved their waste management, record keeping and product costing.

Group enjoys lower production costs from changing to solar water heating

MSME: Muliru Enterprise, Kakamega
Grantee: International Centre of Insect Physiology and Ecology (ICIPE)
Partner: Muliru Farmers Conservation Group (MFCG)
Project Title: Up-scaling Sustainable Commercial Production of Medicinal Plants by Community-based Conservation Groups at Kakamega Forest in Kenya



Dr. Lwande from ICIPE explaining the oil extraction process to the technical monitoring team from SWITCH Africa Green
Photo | SWITCH Africa Green

The organization was started in 1997 as Muliro Conservation group on agroforestry – tree planting, beekeeping, organic farming, and conserving Kakamega forest. It has a membership of 30 persons – 10 men and 20 women, most of whom are widows. Name changed in 2013 to Mulio enterprise with the commercial planting of Ocimum and Mondia Whytei medicinal plants. With support from ICIPE they got a distillation machine to extract oil from Ocimum. The oil is used to make various products including Naturub (ointment for aches and pains), colds and flu balm, etc. which generates income for its members.

The SAG training on record keeping has been instrumental in assisting in keeping track of their expenses. Before the training they used to determine the cost of osmium based on value of tea. This was because tea was the other commercial crop grown in the area. After training they now use the costs of inputs to determine the price of the osmium. This has ensured they also price the products appropriately.

Production costs have also significantly reduced after changing to solar water heating for the distillation process. Training on cleaner production has resulted in more productivity from fewer losses as the store is now well organized and easier to get the required inputs. Spillages and wastage in the store area have also reduced.

SAG project helps business in Testing & Assessment of Products by the Kenya Bureau of Standards (KEBS)

MSME: Champion Shoes, Nairobi
Grantee: COMESA - Leather and Leather Products Institute (COMESA/LLPI)
Partner: Kenya Leather Development Council (KLDC)
Project Title: Greening SMEs Leather Clusters and Leather Tanning Industry in Kenya



Champion Shoes staff putting final touches to some of their shoe products
Photo | SWITCH Africa Green

Champion Shoes engages in production of various types of shoes including but not limited to back to school shoes, gents shoes and sandals. It is based in Thika, with an employee base of 25 youth.

The SAG intervention led to significant benefits including: capacity building in transformation and clustering; improvement in record keeping and product costing; utilization of offcuts from shoes therefore adding value and reducing wastage; use of idle machines by other clients at a fee thus ensuring resource optimization and reducing machine idle time.

Use of idle machines by other clients at a fee ensures resource optimization and reduction of machine idle time

Notably, through clustering, the MSME has partnered with others to ensure bargaining power and access to quality leather from Nakuru, Thika and Sagana Tanneries.

The entrepreneur has also been facilitated in Testing & Assessment of Products by the Kenya Bureau of Standards (KEBS). This has helped improve the quality of products hence increased sales and access to more markets including supermarket networks across Kenya, Uganda and Tanzania.

Good pricing strategy after SAG training results in increased revenue for business

MSME: Leemax Shoes, Nakuru
Grantee: Comesa-Leather and Leather Products Institute (COMESA/LLPI)
Partner: Kenya Leather Development Council (KLDC)
Project Title: Greening SMEs Leather Clusters and Leather Tanning Industry in Kenya



A Before and After photo showing improved shoe products after SWITCH Africa Green training
Photo | SWITCH Africa Green

Leemax Shoes specializes in production of various types of shoes including: gents Shoes, safari boots and back-to-school shoes. The enterprise has employed six persons who are all youth. All the operations conducted at the enterprise are manually executed.

After SAG intervention, there has been improved record keeping and product costing, better utilization of raw material through proper cutting thus reducing waste by using off-cuts to make sandals. They have also been able to access quality leather from Nakuru Tanners through clustering with other MSMEs. They have been able to negotiate for lower prices through bulk buying leading to increased profit margins.

Through suitable pricing, they have been able to increase their revenues

Through suitable pricing they have been able to increase their revenues. Their product range has been tested by Kenya Bureau of Standards (KEBS) after assessment by a leather expert. This has helped improve the quality of shoes produced.

Hot spot analysis helps curb theft in enterprise

MSME: Alive and Kicking, Nairobi
Grantee: COMESA - Leather and Leather Products Institute (COMESA/LLPI)
Partner: Kenya Leather Development Council (KLDC)
Project Title: Greening SMEs Leather Clusters and Leather Tanning Industry in Kenya



A staff member showing some of the products from Alive and Kicking
Photo | SWITCH Africa Green

Alive and Kicking specializes in making of balls for both domestic and international markets. The Balls are exported to the East Africa Community, USA, Germany, Gabon and Britain. The firm has employed 77 employees of which 17 are women and 40 are youth. Waste from leather are given to slum dwellers for making of sandals and other products. They also use waste to make their products (e.g used leather seats)

The SAG project has initiated capacity building in transformation & clustering. From the training, they have implemented new processes with significant outputs being seen in reduction in solid waste and increased sales through networking with other project beneficiaries.

From hot spot analysis facilitated by SAG, they identified theft as the biggest problem, they then built metal cages and enhanced job cards to ensure minimal theft and accountability by staff. This has significantly reduced losses for the enterprise.

Strawberry processors implement energy efficiency measures

MSME: Kiambu Strawberry Growers and Processors Association, Kiambu
Grantee: Kenya Private Sector Alliance (KEPSA)
Partner: Kenya Agribusiness Agroindustry Alliance (KAAA)
Project Title: Capacity Enhancement for Green Business Development and Eco-Entrepreneurship in the Agriculture Sector



TOP: A section of the greenhouse with strawberries.
BELOW: A strawberry fruit
Photo | SWITCH Africa Green

Kiambu Strawberry Growers and Processors Association was established in June 2012 by a group of 34 farmers from Kiambu county who's aim was to add value to strawberries for better returns. The association currently has 10 members who have benefited from various agricultural and processing trainings organized by Jomo Kenyatta University of Agriculture and Technology (JKUAT).

The Association processes 20kg of 100% real fruit strawberry jam per month and about 40 litres of yoghurt per week. The association also produces tomato sauce and chutney from raw pawpaw. These products are sold within the community and local shops and continues to get very good feedback from clients majorly because their products are healthy

and without chemical preservatives.

As a beneficiary of the SWITCH Africa Green project, two members of the association have been trained on SCP practices. This has directly impacted the organization with recorded improvement in record keeping and product costing, waste management and energy management. They now use briquettes and LPG, reducing their electricity bills. The organization has started rain water harvesting to supplement the already existing water sources. Notably, they are in the process of acquiring KEBS certification for their products.

Their main challenge, however, is access to affordable credit and access to proper equipment and machinery for production.

UGANDA MSMEs



Map showing the towns that were visited and the number of MSMEs visited in each town

In Uganda, a total of 14 MSMEs were visited in Kampala, Jinja, Fort Portal, Hoima, Pakwach and Lira.

The selected priority areas for Uganda are Agriculture, Manufacturing and Tourism. In addition to that, the following cross-cutting themes have also been identified as critical: Energy-efficiency, Labelling and Standards, Water efficiency, Eco-innovation, Sustainable trade.

14

Number of MSMEs visited in Uganda out of a possible 410 MSMEs

Business enjoys multiple benefits from employing better strategies after SAG training

MSME: Aloesha, Kampala
Grantee: Uganda Small Scale Industries Association (USSIA)
Partner: Uganda Cleaner Production Centre (UCPC)
Project Title: Sustainable Product Innovation and Energy Efficiency (SPIN & EE) in Small Scale Industries in Uganda



Staff dressed in appropriate personal protection gear in line with good occupational health and safety best practise
 Photo | SUIITCH Africa Green

Aloesha deals in the manufacturing of nutritional food supplements, cosmetics products and spices. The enterprise supplies high quality organic healthcare and wellness products; which are effective and affordable to all.

Aloesha successfully participated in SAG training on improved energy and material productivity in small scale industries; Improved record keeping on material and energy consumption; improved energy and material use practices, reduced cost of production; reduced stress on resources; reduced industrial pollution; housekeeping and increased incomes.

Before SAG intervention, Aloesha used to pile bags on the floor leading to high spillage and wastage. They have incorporated different storage equipment and labelling of inputs enhancing final productivity. This has improved the storage of wood from being kept outside leading to reduced wood quality (due to wetness) to being stored in an enclosure. This also led to more accurate monitoring of utilized wood.

Aloesha has also installed an energy efficient cooking stove for boiling water for processing; significantly reducing the amount of wood fuel used. This has resulted in reduced sick offs by employees which initially happened due to smoke inhalation.

Aloesha currently has 66 members of staff, 21 staff involved in the production process. They also work closely with out growers.

Incubatee earns income to provide for his family from making charcoal briquettes

MSME: Joseph Bihuru (Start-up), Kampala
Grantee: Afribanana Products Ltd
Partner: Centre for Research in Energy and Energy Conservation (CREEC)
Project Title: Up-scaling Generation, Commercialization and Utilization of Biomass Waste-based Green Energy Technologies in Uganda



Joseph explains how his equipment works
 Photo | SWITCH Africa Green

Joseph, a start-up who initially had no place to operate, is currently being incubated by Afribanana Products (ABP). He makes briquettes from banana waste. ABP has supported him through continuous capacity building in briquette making and providing him with working space.

Joseph has undergone training in making briquettes from banana waste. After the training, he went ahead and started his business. For every 100 Kg of briquettes he produces, he uses about UGX 40,000 for inputs and gets about UGX 100,000 in revenue. He has partnered with his colleague who makes paper from banana waste which he uses to package the briquettes for selling. The paper products are also marketed for packaging wine. This has enabled Joseph to have enough income to provide for his family.

UGX 60,000

Amount of profit Joseph generates for every 100 kg of charcoal briquettes he produces

Afribanana Products also provided him with better equipment for briquette making,

mainly the hollow briquette making machine which produces the briquettes more efficiently due to improved air circulation. He is also able to use the mixing machine at the demonstration site which is an improvement from what was being used earlier.

Business changes energy source from diesel to biomass after SAG training

MSME: Upland Rice Millers, Jinja
Grantee: Africa Roundtable on Sustainable Consumption and Production (ARSCP)
Partner: Uganda Cleaner Production Centre (UCPC)
Project Title: Enhancing Resource Productivity and Environmental Performance of Micro, Small and Medium Enterprises in Uganda through the Concept of Industrial Symbiosis



A section of the wall that fell due to the waste being piled there
 Photo | SWITCH Africa Green

Upland Rice Millers processes rice on behalf of farmers in the region who execute the marketing and selling. They package the processed rice as per farmer's specifications. The company also acts as a training centre for rice growing in Africa where they train farmers and stakeholders in the whole value chain on Resource efficiency and Cleaner Production (RECP). From previous projects, thirty thousand out growers have been trained and provided with basic machinery training including weeding machines, moisture monitoring machines, weighing scales, shears, etc. This has led to an increase in production figures over the years from 1,000 tons to 10,000 tons.

In the SAG project, Upland Rice Millers participated in bilateral meetings with 35 other enterprises in Eastern Uganda and local district officials in July 2016 on Industrial Symbiosis. During these meetings, synergies among trained enterprises were identified (Upland rice was one of the identified companies for synergies).

After SAG training, the management replaced the boiler in the drying machine from diesel to biomass based i.e. rice husks.

Rice husks have also been marketed after training in the Industrial Symbiosis project. The husks were initially considered a waste and disposal was a problem where they were piled outside the milling room which broke the fence due to the large volume (see photo). After the Industrial Symbiosis project training, the management has been able to sell the husks and also use some of them for the new boiler. This has led to significant energy savings.

Business benefits from Industrial Symbiosis

MSME: East Africa Packaging Solutions, Jinja
Grantee: Africa Round-table on Sustainable Consumption and Production (ARSCP)
Partner: Uganda Cleaner Production Centre (UCPC)
Project Title: Enhancing Resource Productivity and Environmental Performance of Micro, Small and Medium Enterprises in Uganda through the Concept of Industrial Symbiosis



TOP: Unloading Waste paper from main factory
BOTTOM: Egg trays, a product from the waste paper
Photo | SWITCH Africa Green

East Africa Packaging Solutions produces customized corrugated box packaging meant for local distribution and exports. This company has benefited from 2 years of improvement on Resource Efficient and Cleaner Production (RECP) with Uganda Cleaner Production Centre (UCPC) which formed the basis of being incorporated in the Industrial Symbiosis (IS) project. The company invested in a section for producing paper egg trays processing to tackle the waste paper menace achieving a production capacity of 1,000 tons per month. To minimise the paper waste, the employees were trained on resource efficiency measures resulting in waste reduction from 7% to 2%. The company now has records of waste allowing accountability on waste generation.

Before SAG intervention, the loading section was not conducive as it was always flooded. They have consequently corrugated the area and the image of the company has changed since then. Some of the company's customers require calculation of carbon footprint which they now have as records are being authoritatively kept. They have also changed their primary energy source from furnace oil to biomass, having installed a biomass boiler, which uses coffee husks, rice husks, etc.

Business creates new revenue stream from waste

MSME: Sky Fat Ltd, Jinja
Grantee: Africa Roundtable on Sustainable Consumption and Production (ARSCP)
Partner: Uganda Cleaner Production Centre (UCPC)
Project Title: Enhancing Resource Productivity and Environmental Performance of Micro, Small and Medium Enterprises in Uganda through the Concept of Industrial Symbiosis



Dried bull parts exported to China for 'soup number 5'
Photo | SWITCH Africa Green

Established in 2016, Sky Fat Ltd specializes in processing hides and skin.

This company has benefited from three years of improvement on Resource Efficient and Cleaner Production (RECP) with Uganda Cleaner Production Centre (UCPC), which formed the basis of being incorporated in the Industrial Symbiosis (IS) project. The company has had a big headache with waste, as 40% of skins and hides received result to waste either from splits or from off cuts. The disposal was a problem with NEMA. In addition, the waste was very expensive since it was purchased as part of production.

Before the SAG intervention, the company used landfills for waste disposal; since the IS training, they are now producing dog chew for export from the off-cuts (before processing the hides).

In addition, splits are now sold to South Africa to a gelatin processing company with 1 ton of skins and hide bringing in USD 200 in revenue. The company gets between 80 - 220 tons of splits and off cuts depending on orders. This is not only new revenue stream for the company but also saves on the challenges of disposal with NEMA and the local community. The company also discovered that the bulls' parts are thrown as waste in this region. This is now collected, cleaned and dried and exported to China for 'soup number 5' - an exceptional soup in some parts of the world including Philippines and China.

Tea factory saves on energy after implementing energy efficiency techniques

MSME: Buzirasagama Tea Factory, Fort Portal
Grantee: Ministry of Trade Industry and Co-operative (MTIC)
Partner: Uganda Cleaner Production Centre (UCPC)
Project Title: Demand Side Management of Energy Use in MSMEs in Uganda through Promotion of Energy Efficiency Techniques and Practises



The staff take SAG's Technical Monitoring team through their storage which has improved after SAG intervention
 Photo | SWITCH Africa Green

This is a tea processing factory which also forms part of the Ruwenzori Commodities Company. Ruwenzori Commodities Ltd operates in Kabarole and Kyenjojo districts, where it rehabilitated and planted 2,556 hectares of tea out of 5,700 hectares of land. It has four tea factories namely, Buzirasagama, Hiima, Munobwa and Kigumba with a capacity of 200,000 Kgs of green leaf or 47,000 Kgs made tea per day.

18 Watt energy saving bulbs replaced 40 Watt bulbs resulting in enormous energy savings

Since involvement with SAG, the company introduced transparent iron sheets, which has led to energy savings. 18 Watt energy saving bulbs replaced 40 Watt bulbs resulting in enormous energy savings. Motors are now cleaned and serviced regularly ensuring efficiency. Sub-metering has also been introduced and extra meters have been procured.

Youth group increases income through production of organic pesticide

MSME: Adwoa Youth Group, Lira
Grantee: Plan Foundation International (PFI)
Partner: National Organic Agricultural Movement of Uganda (NOGAMU)
Project Title: Eco-Agriculture Sesame Livelihoods and Organic-Green Business Opportunities for Young Rural People



A member of the Adwoa Youth Group explains a process in the production of organic pesticide
 Photo | SWITCH Africa Green

The Adwoa Youth Group concentrates on growing sesame, sunflower and chillies. It has 30 members and was founded in 2013. It operates in an area with many child mothers. The group started as a drama and acting self-help group and has previously worked with Plan International on previous projects on child mothers.

Since involvement with SAG, the group has successfully eliminated the pink ball worms in August 2016 using organic pesticide, compared to the previous year when the whole crop was lost. There has since been a reduction in the use of inorganic pesticides and a significant increase in average yield per acre. Soil conservation practices have also been implemented including trenches, mulching, etc.



Some members of the Adwoa Youth Group explain a process in the production of organic pesticide
 Photo | SWITCH Africa Green

Company plans to install solar boiler to enjoy benefits of reduced energy expenditure

MSME: Otis Seeds, Lira
Grantee: Ministry of Trade Industry and Co-operative(MTIC)
Partner: Uganda Cleaner Production Centre (UCPC)
Project Title: Demand Side Management of Energy Use in MSMEs in Uganda through Promotion of Energy Efficient Techniques and Practises



A staff member direct the SAG Technical Monitoring team through the business premises
Photo | SWITCH Africa Green

Otis Seeds deals in agribusiness including processing and selling of seeds, mainly, early germination seeds. The company buys seeds from MSMEs then processes the seeds and sells them. Otis works with various partners including the National Agricultural Research Organisation (NARO), local government, Plan international and WFP among others.

On Value addition, the company also processes seeds for export. On sustainable agriculture Otis looks at water efficiency seeds and early maturity seeds. They work mainly with extension workers. In addition, the company distributes Super grain bags, silos and containers on the Feed the future project with WFP. Otis supplied the sesame seeds to PLAN international MSMEs in Lira.

SAG has worked with Otis Seeds to conduct Rapid Energy audits, Energy management and conservation training and detailed energy audits

SAG has worked with Otis Seeds to conduct Rapid Energy audits, Energy management and conservation training and detailed energy audits. This has led to improved planning and good governance in resource management. The company is now interested in installing a solar boiler.

Company creates awareness on efficient use of water among employees

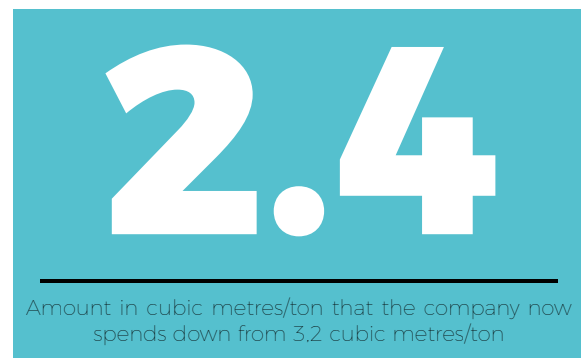
MSME: AK Oils & Fats (U) Ltd, Lira
Grantee: Directorate of Water Resources Management (DWRM) - Ministry of Water and Environment
Partner: National Organic Agricultural Movement of Uganda (NOGAMU)
Project Title: Demand Side Management of Energy Use in MSMEs in Uganda through Promotion of Energy Efficient Techniques and Practises

AK Oils and Fats (U) Ltd produces sunflower and soya bean crude oil from sunflower and soya bean seeds respectively. It's a subsidiary of Mukwano Industries (U) Ltd, a private limited company located in the Upper Nile Water Management Zone.

On engaging with SAG, water efficiency was an eye opener to the Operations manager who realized the need to participate in the program. This resulted in the company conducting daily monitoring for leakages throughout the entire company.

The company has also initiated development of awareness raising posters to sensitize all of the 140 employees on efficient use of water.

Other structural developments have also been achieved with another bathroom being constructed. Requisitions for the push button taps have also been made as water efficient taps have been installed. All Staff have been provided with gloves and nose masks. The company has also undertaken to the re-building of soak pit and the expanding of the septic tank. Treatment tanks have been constructed. Plumbing works and the blowers will be finalized in 2017. Notably, the company conducted post impact



assessment on water and records show significant savings from 3.2 cubic meters/ton of production to 2.4 cubic meters/ton of production.

Start-ups achieve better network access with other beneficiaries

MSME: Taxfad, Kampala
Grantee: Afribanana Products Ltd (ABP)
Partner: CREEC
Project Title: Up-scaling Generation, Commercialization and Utilization of Biomass Waste-based Green Energy Technologies in Uganda



An incubatee demonstrates how his equipment operates
Photo | SWITCH Africa Green

ABP supports incubatees (Micro Small and Medium Enterprises [MS&MEs] and start-ups) and stake holder farmers to commercialize and upscale innovations along the banana value chain. ABP also supports students to obtain hands on experience through internships and industrial attachment opportunities.

After getting involved in the SAG project, there has been notable improved market access through networking with other beneficiaries, improved record keeping, product costing and better store keeping. They have also been able to implement various strategies to improve energy and water efficiency.

They have been innovative in their product design reducing the inches between weaving mats from 3 to 2 inches.

They have had challenges in access to markets in Uganda and the East Africa region. They have also had difficulty in obtaining financing to procure more efficient equipment and improve on marketing.

Grain milling business to plan for funds to implement SCP practises

MSME: Kabarole Grain Millers, Fort Portal
Grantee: Uganda Small Scale Industries Association (USSIA)
Partner: Uganda Cleaner Production Centre (UCPC)
Project Title: Sustainable Product Innovation and Energy Efficiency (SPIN&EE) in Small Scale Industries in Uganda

Kabarole Grain Millers buys grains (mainly maize) from local farmers and mills it for sale in Fort Portal as well as other surrounding towns. The business premises has two rooms: one for the milling which contains the sorting and milling equipment; the other has the finished product and the office space.

They participated in the SAG training on improved energy and material productivity among small scale industries: improved record keeping on material and energy consumption; improved energy and material use practices; reduced cost of production, reduced stress on resources; reduced industrial pollution; housekeeping and increased incomes.

Notably, they indicated that the training received from SAG was good but there was no financial capacity to implement the training.

Company saves energy by installing energy efficient bulbs

MSME: Vetcare, Hoima
Grantee: Uganda Small Scale Industries Association (USSIA)
Partner: Uganda Cleaner Production Centre (UCPC)
Project Title: Sustainable Product Innovation and Energy Efficiency (SPIN&EE) in Small Scale Industries in Uganda

Vetcare in is the business of milling grain for human consumption and animal feed. There has been improved standard of cleanliness, health and safety since their involvement in the SAG project. Motors are cleaned regularly making them more efficient. Higher processing efficiency has also been achieved by aligning machine belts that were misaligned. They have also installed energy efficient bulbs achieving energy savings. They have organized their store better, separating various items and properly labelling them.

Tourist lodge installs cook stove and ceramic water filter

MSME: Fort Murchison lodge, Pakwach
Grantee: B-Space
Partner: Uganda Cleaner Production Centre (UCPC)
Project Title: Promoting Green & Inclusive business practices in the Tourism Industry in the Albertine Nile region



Fortmunchsen proprietor at a waterpoint in the lodge
Photo | SWITCH Africa Green

Fort Murchison is a tourist lodge set in the savannah landscapes in northern Uganda in the Murchison Falls National Park; it has 12 en suite units for guests. The lodge is 5km drive from the Tangi gate and lies along the Karuma – Pakwach road; it offers mid-range accommodation with provision for budget travelers on Uganda safaris.

The demonstration cook stove, ceramic water filter and the plastic water bottles recycling is being appreciated by the staff at the lodge

The SAG eco solutions and technologies training has helped create awareness on the various options available e.g. the solar water pumps as well as efficient use of energy and water in the lodge. The demonstration cook stove, ceramic water filter and the plastic water bottles recycling is being appreciated by the staff at the lodge.

Company records improved good governance in resource management after SAG training

MSME: Guru Nanak Mills (U) Ltd, Lira
Grantee: Directorate of Water Resources Management (DWRM)-Ministry of Water and Environment
Partner: Uganda Cleaner Production Centre (UCPC)
Project Title: Demand-side management of water use in micro, small and medium- size enterprises (MSMEs) in Uganda through promotion of water use efficiency techniques and practices.

Employing 40 people, Guru Nanak Mills (U) Ltd produces certified organic Shea butter, pure natural Shea butter and pure natural sunflower cooking oil and sesame oil. The company sources shea butter from own farms as well as other out growers in Uganda. The company is involved in protecting the environment in Kidepo valley in Uganda through conservation of shea butter trees. The company also indirectly employs about 400 farmers in the region.

After undergoing SAG training on resource management, good governance in resource management is evident in the company

After undergoing SAG training on resource management, good governance in resource management is evident in the company. They have installed one extra water meter. Other measures to be installed include: Energy efficiency, efficiency in inputs and occupation health and safety.

The company is involved in protecting environment in Kidepo valley in Uganda through conservation of shea butter trees

MAURITIUS CABINET APPROVES SCP POLICY

SWITCH Africa Green policy component achieved a major milestone in 2016 when on 28th October 2016, the Cabinet in Mauritius agreed to the implementation of the recommendations made in the Country Implementation Plan formulated under SWITCH Africa Green. As a major milestone, this will increase government support for SCP in Mauritius, having identified the key priority sectors, namely, Agriculture, Manufacturing, Tourism with Energy, Water, Eco-innovation, Eco-labelling and Sustainable Trade as cross-cutting issues. In addition to the important government commitment and support, the scope of operation within the country is set to increase, as is the ease of measuring impact. This decision by the cabinet in Mauritius is also advantageous due to the fact that it increases visibility, setting up momentum for similar decisions in the other countries within the region.

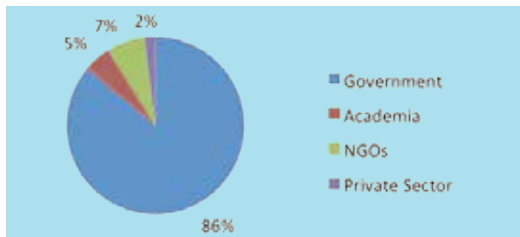
‘Cabinet has agreed to the implementation of the recommendations made in the Country Implementation Plan formulated under the SWITCH Africa Green Programme, an initiative designed and funded by the European Union to facilitate the transition of African countries to sustainable development. The Report details the findings of the Policy Support Component with regard to identified priority sectors, namely, Agriculture, Manufacturing, Tourism with Energy, Water, Eco-innovation, Eco-labelling and Sustainable Trade as cross-cutting issues. The main recommendations pertain to gaps in the enabling legal, regulatory and institutional frameworks, and the potential for more economic incentives to drive the desired shift towards green businesses.’

Official Statement from Republic of Mauritius Cabinet



Sustainable diversified agri-food strategy in Mauritius

UN ENVIRONMENT AND UNITAR PARTNER TO DELIVER AN E-LEARNING COURSE ON SUSTAINABLE CONSUMPTION AND PRODUCTION



Participants' sector of employment

Through the SWITCH Africa Green project, UN Environment and UNITAR partnered to deliver for the first time an interactive e-learning course especially tailored to the regional context of Africa.

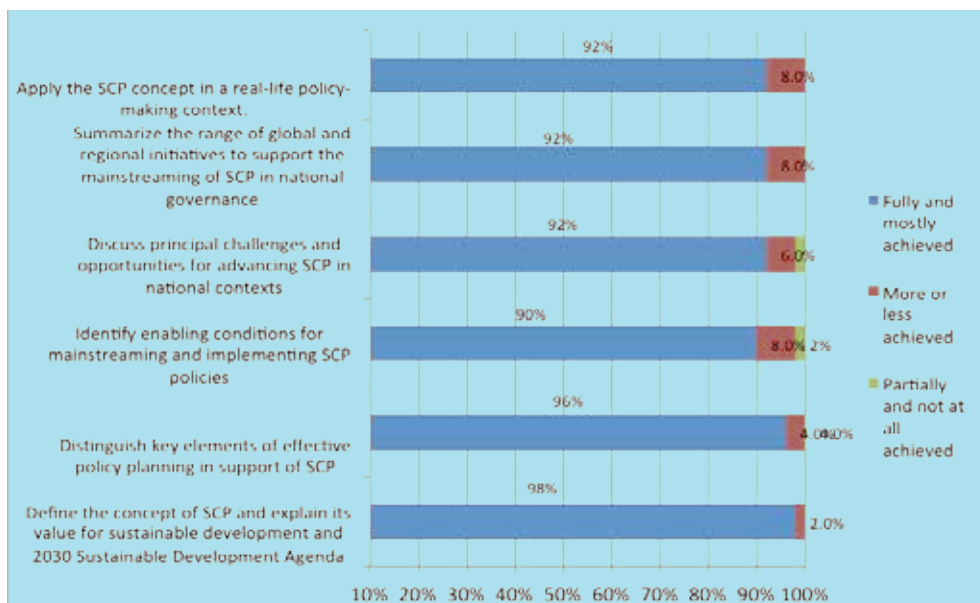
The course aimed to assist high- and mid-level civil servants in the

African region (e.g. 10YFP and SWITCH Africa Green National Focal Points) in developing, implementing, monitoring and evaluating policies supporting a transition towards Sustainable Consumption and Production (SCP).

Participants learnt about different concepts and facets of SCP, as well as regional, national and sector-specific challenges and opportunities to advance low-carbon, resource efficient and socially responsible production and consumption. Additionally, participants developed basic skills for applying the SCP concept in a real world economic, policy and/or personal context.

The English course had a total of 65 participants from 18 African countries, while the French course had a total of 43 participants from 19 African countries. A majority of the participants came from the government sector.

On participants' satisfaction, 100% of the respondents rated the course as very or mostly useful and 98% stated that the course fulfilled their interest and expectations. In terms of achievement of specific learning objectives, respondents ranked highest their ability to "Define the concept of SCP and explain its value for sustainable development and 2030 Sustainable Development Agenda" (98% responded with "fully or mostly achieved"), followed by "Distinguish key elements of effective policy planning in support of SCP" (96%)



Achievement of specific learning objectives



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