WORLD ENVIRONMENT DAY

"35 Million People. Limited Resources. Consume with Care".



Statement of the United Nations in Uganda

hese two themes serve as a wake-up call for us to take better stewardship of our natural resources to insure our survival and that of future generations. The well-being of humanity, the environment, and the functioning of the world's economy ultimately depend upon the responsible management of the planet's natural

There is mounting evidence that we are increasingly consuming far more resources than what the planet can produce sustainably. This is putting humanity at risk of hunger (food insecurity), drought, disease and death.

Currently, the majority of the population in Uganda depends on subsistence and rain-fed agriculture. 90 percent of them also rely on wood fuel as a source of energy. At an average annual growth rate of 3.03 per cent, Uganda's

population is projected to increase to 35.0 million in 2015 and to 47.4 million in 2025. This projected population growth is bound to exert more pressure on the existing natural resources which calls for adoption of sustainable production and consumption patterns. A number of multilateral environmental agreements (MEAs) have been signed by Government of Uganda to strengthen environmental protection. These include, among others, the United Nations Framework Convention on Climate Change, the Convention to Combat Desertification and the Convention on Biological Diversity. These present enormous opportunities for a greener economy which can deliver numerous benefits in addressing food, energy and water security in order to achieve sustainable development.

Government has also put in place a number of policy, legal and institutional frameworks, to address environmental degradation and climate change. However, there is need for renewed commitment to effectively implement and translate these policies in to real action on ground. We need to protect the natural resources we enjoy – the wetlands, lakes, rivers, and forests; our wildlife habitats and abundant farmland.

We need also to promote home-grown solutions - more so, solutions that put people at the centre of environment and natural resource protection. One such great example, is **Uplift the Rural**



UN Resident Coordinator and UNDP Resident Representative, Ahunna Eziakonwa - Onochie

Poor. This Community Based Organization is one of 25 community initiatives UNDP's global Equator prize in September last year, in recognition its sustainable conservation efforts in South Western Uganda. They have been able to inspire communities to participate in tree plantina. rain-water harvesting and pursue alternative livelihoods that are not destructive to Bwindi and Maahinaa Gorilla National Parks-

the home to the Gorillas, and a major tourist attraction and revenue for the country. Their commitment and dedication to environmental protection is admirable as is their demonstration of the positive influence we can have as individuals

over our own lifestyles, to complement national-led efforts. By harnessing our homegrown solutions, and preserving the natural resources that make Uganda the Pearl of Africa, we can show that environmental policies can go hand-in hand with economic development. As the UN, our interventions over the past year have amplified efforts by government and other partners to support the country to climate proof its development, notably: Revision of the National Environment Management Policy to integrate climate change, disaster risk reduction, electronic waste management and oil and gas. A Biomass Energy Strategy, E- Waste Management Strategy have been developed, while a 24- hour National Emergency and Coordination Centre (NECOC), is place, under the leadership of the Office of the Prime Minister. Issues papers on ENR and Climate Change were prepared for the NDP II with our support, and a payment for ecosystem services fund established as part of promoting an Ecosystem Based Adaptation approach to climate change.



A modern weather station that has been installed by the GEF/UNDP-supported project on Strengthening Climate Information and Early Warning Systems (SCIEWS).

As we prepare for the post-2015 agenda, it is our hope that these efforts will propel us forward in attaining sustainable development and Vision 2040.

We are grateful for the excellent partnership with Government of Uganda, and especially, the National Environment Management Authority (NEMA) which is leading the National celebrations taking place in Rakai district. We are also appreciative of the collaboration of other development partners, the civil society, private sector, academia and most importantly, the people of Uganda – who are at the centre of our environmental efforts. The UN system in Uganda remains committed to ensuring that development is risk-informed, and to seeing that environmental

protection continues to be prioritised in national development. Ahunna Eziakonwa - Onochie **UN Resident Coordinator/**

UNDP Resident Representative in Uganda

Use of elephant dung to create art is protecting wildlife in in Queen Elizabeth National Park



Jovita Kyomugisha, the chairperson for Kataara Women's Poverty Alleviation Group shows off their elephant dung paper gift bags and some of their other products which include paper beads, handmade baskets. The improved cook stoves in the background are also made by the group. (Photo Credit: UNDP Uganda 2015)

appy faces welcome you to the small building that houses the Kataara Women's Poverty Alleviation Group in Rubirizi district. The women have taken a few minutes off their work to welcome visitors before resuming their duties. Theirs is a small-scale enterprise that makes handicrafts made with paper produced from elephant dung. The women's group which started in 2005 with 10 people has now grown to 30 members, four of whom are men. Moses Agaba, who founded the group, says the main purpose was to fight poverty by providing a source of livelihood for the women, as most of them are widowed. The group also aims to conserve the environment by rallying the community to protect the animals in the Queen Elizabeth National Park which is within their neighborhood. "The idea of making paper from elephant dung came from turning a difficult situation into an opportunity", Agaba explains. "Elephants walk into our gardens all the time, destroying crops and incensing the locals so we decided to get what they left in our gardens and make something productive, by turning their dung

He adds that this has enabled the women in the group and the rest of the community to see elephants as contributing to their welfare instead of taking away from. The elephant dung paper is used to make gift bags, cards, menus, signature/visitors books that are sold to tourists visiting the national parks in the area. The group also makes energy-efficient cook stoves which are marketed locally as well as elephant briquettes – all of which provide a much needed income for the members of the group. The group has made over 6million Uganda shillings so far from the sale of elephant dung paper products. "Having this extra source of income means that the group members and their families do not have to go inside the park to hunt for animals for meat or other resources," Agaba says. Jovita Kyomugisha, the chairperson of group who takes us through their small showroom displaying the items they've made, says the group has changed her life.

"After my husband died, I used to depend on farming, I would work in my garden, then go and work in other people's gardens just to get some money for my six children. Now with the group, I know I can get that extra income I need so I work in my garden first, then come here to work too," Kyomugisha says. Kyomugisha, whose husband died twenty years ago, is now able to pay school fees for children, and also provide for their needs. The members get 25 percent on every item they make that is sold, out of which 5 percent goes to take care of orphans whose parents were killed while hunting animals in the park to support their families. 20 percent is re-invested in the group's on-going projects while 50 percent goes to the groups saving and credit scheme where members can save and also get small loans at low interest rates when they need them. We are encouraging more people particularly women to join the group, and now with the funding support, we have been able to go to homes and train others in making handicrafts which we help them to sell," Kyomugisha said. She adds that already, three other

groups have been formed through this training - one for youth, women and for the men whose group is focused on making elephant

"All these activities keep people busy and they have no time to go into the park looking for animals," Kyomugisha adds.

"They've made this a central attraction for tourists who want to see more than just the landscapes but also to interact with the communities," says Isaac Mubasaliwa from the Uganda Community Tourism Association. The group has twice received small grants from a UNDP project on Strengthening Sustainable Environment, Natural Resources Management, Climate change Adaptation and Mitigation (SENRMCAM). In 2013, they received Sh30million which kick started the enterprise. Together with the Uganda Wildlife Authority which also manages Queen Elizabeth National Park, they were able to raise awareness on the need to conserve and protect the elephants from being killed or poisoned by locals, in retaliation for destroying their crops.

In 2014, they again received Shs21.3million which enabled them to build a bigger showroom where they now display and sell their items. A backroom in the same building houses a machine that transforms the elephant dung in to paper.

In 2014, the group received, the global Seed Initiative award – an annual recognition of the most promising, innovative and locallyled start-up social and environmental enterprises which the potential to make real improvements in poverty eradication and environmental sustainability while contributing to a greener

UNDP's SENRMCAM project, which ends in June, has piloted initiatives in biodiversity and ecosystem management, sustainable land management, efficient energy technologies and reduction in Green House Gas emissions. These aim to reduce widespread poverty and improve livelihoods especially for the poorest and vulnerable sections of society who depend on these natural resources. The project is being implemented by World Wide Fund for Nature Uganda (WWF) in collaboration with various government ministries, local governments and CSOs.

■ Integrating environmental concerns in to national and local development plans

the past year, the UN's collective interventions in environmental protection have aimed at amplifying efforts by government and other partners to address environmental risks, manage ecological resources, reduce carbon emissions and weather crisis and other natural catastrophes.

As part of the efforts to strengthen environmental management, the National Environment Management Policy was revised to integrate emerging issues on climate change, disaster risk reduction, electronic waste management and oil and gas.

A number of strategies have been prepared including a Biomass Energy Strategy, an E-Waste Management Strategy, and a National State of Environment Report. A baseline data collection tool and pilot data analysis for the Environment Natural Resources Sector Performance Monitoring Framework was finalized as part of the 15 major undertakings for the Energy and Natural Resources (ENR) sector and Environment Impact Assessment guidelines for energy, mining, fisheries and agriculture produced. To ensure

that issues of environment, natural resources and climate change are fully integrated in the national development planning framework, ENR and Climate Change issues papers were prepared to inform the new National Development Plan (NDP II).

In addition, issues of sustainable land use and soil management, restoration of degraded forestry and wetland ecosystems, climate monitoring, integrating environmental sustainability and climate change policy, all of which were integrated in the NDP II with UNDP's financial and technical contribution

To promote bio-diversity, the UN and its partners also have established a payment for ecosystem services fund as part of promoting an Ecosystem Based Adaptation approach to climate change in Mt. Twelve Climate change adaptation action plans have also been developed together with communities based on the Vulnerability Impact Assessment report produced

Lowering the risk of vulnerability to **Disaster Risk Management**

n the area of disaster risk reduction, the UN supported the establishment of a 24- hour National Emergency and Coordination Centre (NECOC) under the leadership of the Office of the Prime Minister. The NECOC was informed by hazard and vulnerability assessments of the Mt. Elgon, Rwenzori, Teso, Lango, Acholi, West Nile and Karamoja regions.

Additionally, the National Policy for Disaster Preparedness and Management, and the disaster and climate proofing of Uganda's Building Control Regulations have been finalized as is the mainstreaming of drought resilience following the approval of the Country Programming Paper. We have also provided the resources to establish a national knowledge management platform and digital library to increase awareness of resilience and Disaster Risk Management. Supporting development of a low carbon emission strategy Under climate mitigation, the UN, through UNDP, has also supported Government to embrace a low emission development strategy, under which, eight Nationally Appropriate Mitigation Actions (NAMAs) concepts were developed and uploaded to the UNFCCC registry and internationally recognized during COP 20 in Lima, Peru.

In addition, a Greenhouse Gas (GHG) Inventory system was institutionalized to increase effectiveness and efficiency in preparing national communications to UNFCCC as a contracting party. The developed NAMA concepts have enabled government to attract financial resources towards climate change mitigation from GEF6 STAR and EU/Germany.

Unfired bricks are reducing deforestation and providing income to communities in Sironko



oanita Gumonye, a farmer, is happy to 🕻 have a roof over her head. For fifteen years, she has been living in a one bedroom mud house with her husband and seven children in Bumanza 'B' town council in Sironko district, In a few months' time however. she'll be moving into a four bedroom house which she's been building with the help of her

group, the Sangansana Women's group.

This group however, is unlike any other. What sets it apart is their determination to protect the environment by encouraging their community to use unbaked bricks to help reduce the indiscriminate cutting down of trees. The group's thirty members, five of them men. first adopted the idea of using the technology

Caption: xxxxxxxxxxxxxxxxxxxxxxxx

after many of its members were displaced from the Mount Elgon National Park area where they had derived much of their livelihoods harvesting forest products such as poles, firewood, bamboo and timber which they used to build their houses.

After being displaced, they could no longer access these forest products after the Uganda Wildlife Authority restricted their access to the Park. The unbaked bricks, which are made from a mixture of mud and sand, have proven to be the perfect alternative. In 2012, UNDP's Ecosystem Based Adaptation (EBA) project, provided Shs13.9million to enable them repair their brick-making machine which had broken down. The support was also meant to help the group to raise awareness in their communities on the use of unfired bricks to trigger wider action to protect the environment. As a result of the funding, the group has started construction of three model houses for its members to demonstrate the environmental benefits of the technology. Joanita is one of three members, set to benefit from this initiative. "This is a dream come true for us since it would have taken us a life time to save and construct such a modern and spacious house," Joanita says in gratitude. The four bedroom house has so far cost nearly two million out of her savings, which she had earned from petty trade and subsistence farming. The house is only left with a coat of plaster, and some windows and doors before the family can move in. The labour was provided free of charge by the group members. "My family and I will be comfortably settled in the new house by the end of the year," adds Joanita. The unfired brick technology is not only able to reduce the consumption of biomass fuels, it is also cost friendly as it requires fewer bricks and cement. Most of all, no trees are cut down to burn the bricks. As the demand for the bricks increases, the group hopes to buy a motorized brick making machine from their collective savings to meet the local demand and also expand their market.

'With this new technology, our forests in the region will be conserved since these bricks dry without the aid of baking compared to the ordinary ones which need firewood for baking before they can be used," Catherine Nabutsale, the Chairperson Sangasana Women's group says. The EBA project aims at strengthening the capacities of Uganda to promote resilience and to reduce the vulnerabilities of the communities to climate change. It is focusing on addressing climate change and environmental impacts in the mountain Elgon region in the districts of Sironko, Kween, Bulambuli and Kapchorwa.

The Ministry of Water and Environment in partnership is implementing the project in partnership with the United Nations Development Programme (UNDP), International Union for Conservation of Nature (IUCN), and United Nations Environment Programme (UNEP). It is funded by the German Government through the International Climate Initiative of the Federal Ministry for the Environment, Nature conservation and Nuclear Safety (BMUB).



Joanita Gumonye with some of her children stand in front of their new house built with the unbaked bricks. On the right side is their old house (Photo: UNDP Uganda 2014).

■ Key upper air sounding facility launched in Uganda



Prof. Ephraim Kamuntu, the Minister for Water and Environment releasing an air balloon into the air as he launches the upper air sounding facility in Entebbe, besides him on the immediate right is Mr. Onesimus Muhwezi, the UNDP Energy and Environment Team Leader (UNDP/EWS Photo).

s part of efforts to improve the quality of weather data that is generated from weather stations, a newly renovated upper air sounding facility in Entebbe has been launched after one year of interrupted service. The upper air sounding is a unique facility where real time wind, temperature and humidity profiles are captured using balloon and radiosondes that communicate with the base station.

This captured data is useful for prediction and control of landing locations at the airport. "With the launch of this facility, it is expected that the upper air parameters will improve the quality of weather data that is generated from the weather stations and improve the confidence of the public in the weather forecasts," Professor Ephraim Kamuntu, the Minister of Water and Environment said while launching the facility as part of celebrations to mark both the World Meteorological Day and World Water Day on 23rd March, 2015 in Entebbe.

The Government of Uganda renovated the facilities for upper air sounding, and the United Nations Development Programme (UNDP) donated a stock of 366 balloons with radiosondes, 177 new thermometers for all the weather stations across the country. These were handed over to the Ministry of Water and Environment's Uganda National Meteorological Authority in order to enhance the collection of weather data from the atmosphere.

Handing over the items on behalf of UNDP, Mr. Onesimus Muhwezi, the Team Leader for Energy and Environment who represented the Country Director, said that UNDP is glad to be a part of the Government's efforts to ensure climate resilience and sustainable environment management through proper collection of weather data. He said that UNDP through the Strengthening Climate Information and Early Warning Systems (SCIEWS) Project, with funding from the Global Environment Facility (GEF) will continue to support the Government of Uganda in improving their weather and climate monitoring systems.

"We hope that through this partnership, we are able to increase both the short-term and long-term weather prediction accuracy which will in turn assist both the Government and the population to plan better for sectors like agriculture and also for issues of disaster preparedness," Mr. Muhwezi added. Over the next four years, this US\$4m project will refurbish existing infrastructures including various meteorological and hydrological stations throughout the country, many of which have become obsolete.

This will include refurbishment, equipping and establishment of; 25 Automatic Weather Stations, 16 Automatic Water Level Stations, and 366 upper air balloons with the radiosondes, thermometers and barometers among other input. In addition 40 manual hydrological stations and 32 manual weather stations will be repaired within the next one year, as well as all the systems upgrade for optimum connectivity and data transfers, that will be upgraded to match the current digital land-scape in the East African region.

It is anticipated that these investments in the meteorology sector from various development partners including UNDP/GEF in partnership with the Government will be key in capturing the required weather and climate data which can be used to plan better for various economic sectors.

■ Strengthening climate information and early warning systems in Uganda

ver the past three decades, increasing temperatures, shifting rainfall patterns and increases in the intensity and frequency of climate hazards – in particular droughts, floods and severe storms. These have undermined social and economic development in Uganda and negatively affected the livelihoods of about 150 000 people. Furthermore, droughts, floods, landslides, windstorms and hailstorms – which contribute to over 70% of the natural disasters in Uganda, destroy about 800,000 hectares of crops annually. According to the National Development Plan assessment in 2010, these damages were estimated to be in excess of UGX 120 billion.

The lack of capacity in the meteorology and hydrology sectors, combined with acute shortage of skilled personnel, in addition to the inadequate and obsolete equipment, has constrained planning for long-term climate changes in economic development and compromised risk reduction efforts. With support from the Global Environment Facility (GEF), UNDP and UNEP, Uganda has developed a National Adaptation Programme of Action to climate-proof its development. This has been rolled out nationally under the project on Strengthening Climate Information and Early Warning Systems (SCIEWS) which started in March 2014.

The objective of the project is to establish a functional network of meteorological and hydrological monitoring stations improve provision of reliable and timely climate and weather information to support development planning. Ministry of Water and Environment (MWE) through the Uganda National Meteorological Authority (UNMA), the Directorate of Water Resource Management (DWRM), the Department of Relief, Disaster Preparedness and Management (DRDPM)/Office of the Prime Minister (OPM), the Ministry of Agriculture, Animal Industries and Fisheries (MAAIF), the Ministry of Local Government, The Ministry of Finance Planning and Economic Development (Liaison), and the Uganda Communications Commission (UCC). The project will result in to two main outcomes: (1) Enhanced capacity of the Uganda National Meteorology Authority (UNMA) and Department of Water Resource Management (DWRM) to monitor and forecast extreme weather, hydrology and climate change; (2) Efficient and effective use of hydrometeorological and environmental information for making early warnings and long-term development plans.

Project Geographical Location:

The project is being implemented nationally in terms of the installation and rehabilitation of infrastructure for climate/weather early warning. However, the main focus will be in Elgon, Karamoja, Teso and Lango sub-regions in the Eastern and Northern Uganda (especially in areas around the Kyoga Water Management Zone.

Key achievements

A cost benefit and marketing analysis study of UNMA was commissioned and has successfully enabled the Authority to negotiate with the aviation industry for a current rate of pricing meteorological products. The study has also informed the Public Sector on the justification for investing in improved meteorological equipment that is critical for national weather profiling. A batch of thermometers have been procured and are being distributed to all the weather stations under UNMA across the country. And a stock of 366 upper air balloons with the radio sondes have been delivered to UNMA to resume the daily observation via the upper air sounding services, which had been interrupted for about a year due to renovation work by the Government. Procurement of key critical equipment are at bidding stage and are expected to be installed by end of 2015. These include: 25 new Automatic Weather Stations (AWSs), 16 new Automatic Water Level Stations (AWLSs), rehabilitation of existing 32 Weather Stations and 40 Water Level Stations, including a modern Acoustic Dopler Current Profiler (ADCO). In terms of synergy, there is a close collaboration between the SCIEWS project with the Disaster Management Project in the Office of the Prime Minister, Department of Disaster Preparedness and Management, with the National Emergency Coordination Center (NECOC) that disseminates regular early warning data to vulnerable communities.

In early March 2015, the Government of Uganda and UNDP held an International workshop in the Golf Course Hotel in Kampala, aimed at building sustainable climate change adaptation and economic development plans. The workshop enhanced the National Hydrological and Meteorological Services (NHMS) in Africa to create value added weather and climate services by engaging with the private sector and developing innovative public private partnerships.

■ SWITCH Africa Green: Promoting sustainable production and consumption

chieving sustainable development requires adoption of more sustainable consumption and production patterns, while generating growth, creating decent jobs and reducing poverty. This is the underlying objective of the new SWITCH Africa Green (SAG) 3-year initiative which started earlier this year to support 6 countries in Africa (Burkina Faso, Ghana, Kenya, Mauritius, South Africa and Uganda) to transition towards a private sector-led inclusive green economy, based on sustainable consumption and production (SCP) patterns. In Uganda, the project, will support the formulation of sound policy and regulatory frameworks; incentives structures and tax; and market-based instruments in targeted sector. It will also ensure that micro and small and medium sized enterprises (MSMEs) are better equipped to apply SCP practices, as well as inform public and private consumers of the multiple benefits of sustainable, resource-efficient products.

Priority areas will include agriculture, integrated waste management and manufacturing. Other crossing cutting areas include energy efficiency, labeling and standards, water efficiency and eco innovations.

The initiative is expected to realize the following results:

- Support policy makers to be better informed and equipped with relevant scientific information and appropriate tools and instruments such as policies, regulatory frameworks, incentives structures, tax and market - based instruments that promote private sector led inclusive green growth.
- Support Private sector to identify opportunities for green business development and markets (domestic and export) for sustainably produced goods and services.
- 3. Facilitate knowledge development and dissemination, including lessons learned and good practices from the projects nationally and through regional and Africa-wide networks and programmes to create broader awareness, and increase understanding, buy-in and uptake of Green Economy and Sustainable Consumption and Production ideas among key stakeholders in private sector, governments and the public

SWITCH Africa Green is jointly supported by financial and technical contribution from the United Nations Development Programme (UNDP) and the United Nations Environment Programme (UNEP).



