REREC
A Green Energy Driven Nation

Jul - Sep 2020 Issue #1

The Highlight

COUNTY NEWS

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@ REREC

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REREC to take over Energy Centres from MOE

Cover photo: Lokichar Substation

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From The Editor

I am delighted to welcome you to the 1st issue of the REREC newsletter for financial year 2020/21. This year has been exceptional and will be archived in annals of history for centuries to come as the year of the dreaded Corona Virus Disease or COVID-19 pandemic.

COVID-19 struck the world in 2019 ushering unprecedented global health, work and economic implications and with it, a new normal. Social distancing, wearing of facemasks and regular sanitisation is now a way of life.

Like all other institutions, REREC was quick to adapt to the new way of doing business. The 'E' word has become the norm; E-meetings, E-Board, E-Procurement, E-Evaluation, E-newspapers, E-recruitment. Despite COVID-19 affecting our work dynamics, the Corporation has managed to continue delivering on its mandate.

It is also during this period that the organisation unveiled its new and fresh logo that reflects the Corporation's boldness in its march to make Kenya a Green Energy Driven Nation.

As the financial year starts, there is renewed hope, great anticipation, expectations, sense of triumph, fresh ideas and initiatives. There is resolve to make the year better, all recharged and set for the race.

This year, we intend to electrify 600 public facilities (National Electrification Enhanced –Public Facilities; GoK and BADEA), install 17 new hybrid mini-grids (KOSAP/KEMP), install 273 transformers in constituencies, connect 4,500 new customers to electricity and undertake solar maintenance in 120 primary schools.

In this issue, we bring you updates on activities that took place in the last 3 months and look forward to receiving your feedback as we strive to make the newsletter informative, educative and entertaining.

Enjoy the read!

A New Era.

REA transitions to REREC

The Energy Act, 2019 brought about major changes in the Energy sector in the country. Key among them, was the birth of the Rural Electrification and Renewable Energy Corporation (REREC), a successor to the Rural Electrification Authority (REA).

Under the new dispensation, REREC has an expanded mandate of spearheading Kenya's renewable energy drive, in addition to implementing rural electrification projects.

This change, however, did not happen overnight. It has been a long and meticulous process spanning through a number of years with changes that reflect the perceived energy needs of the country.

REREC traces its roots to 1973, when the government established Rural Electrification Programme (REP) for purposes of subsidizing electricity supply in the rural areas and in an effort to support the socio-economic development of the country.

By 2002, the programme had achieved little coverage despite having been in place for more than thirty (30 years). Only about 4% of the rural population in Kenya had electricity supply in their homes. Due to the low connectivity, the Government, through the Economic Recovery Strategy of 2003 and Sessional Paper No.4 of 2004 on Energy, undertook to create a special purpose agency to enhance rural electrification in the country. Rural Electrification Authority (REA) was then created in 2006 through the Energy Act of 2006 and became operational in 2007.

Rural Electrification Programme (REP)
1975

↓

Rural Electrification Authority
2007

↓

Rural Electrification & Renewable Energy Corporation
2019

REREC's expanded mandate now enables the Corporation to promote and develop Kenya's abundant renewable energy resources. Investment in renewable energy generation will also bring about diversification in Kenyan energy generation sources to meet the ever increasing energy needs of the country. This will also ensure that Kenyans can access clean, sustainable, affordable, reliable and competitively priced electricity.

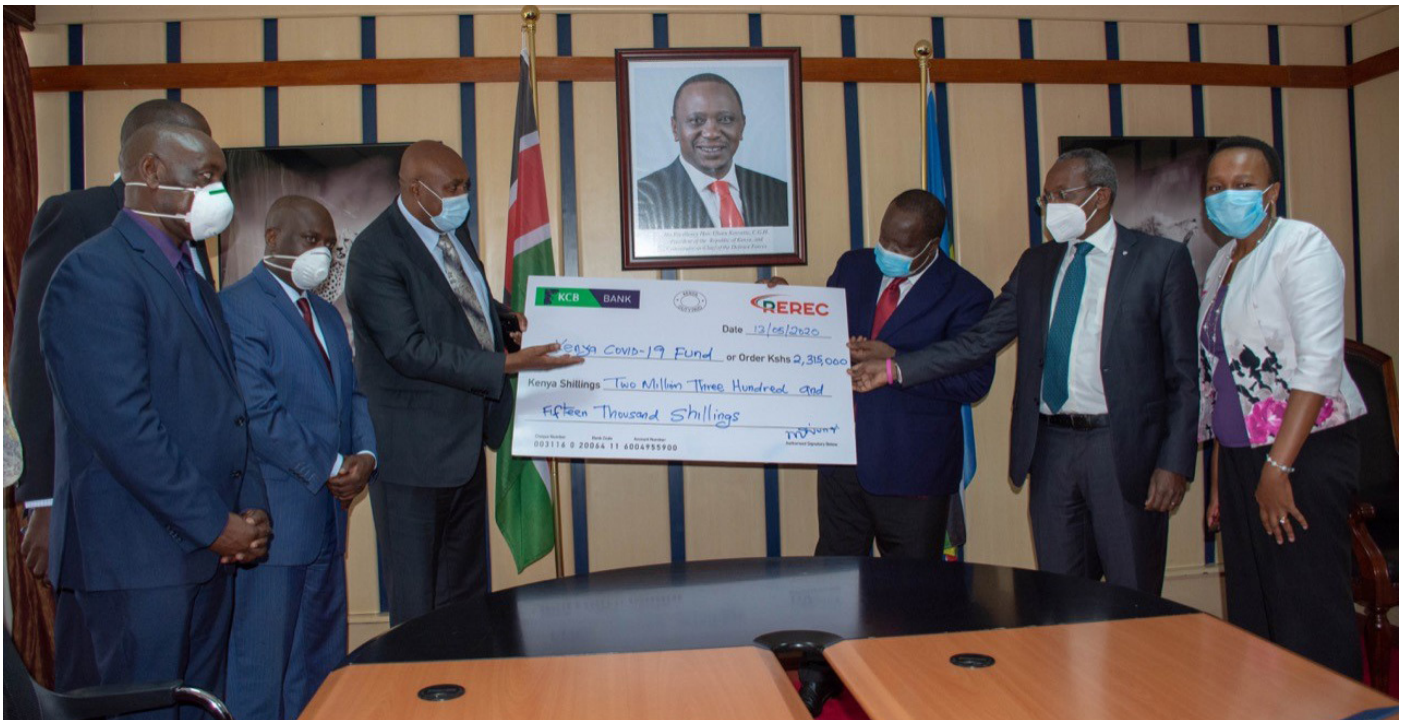
The Corporation is currently putting in place a vibrant organizational structure, as well as a Strategic Plan to guide the organization to take up the new mandates and achieve the new mission and vision.

The transition has also come with a new, fresh and vibrant logo that reflects the Corporation's boldness in its march to make Kenya a Green Energy Driven Nation.

REREC's functions under the new mandate follow link bellow to the full Energy ACT.[1]

1 http://kenyalaw.org/kl/fileadmin/pdfdownloads/Acts/2019/EnergyAct__No.1of2019. PDF

REREC contributes Ksh. 2.3 million to COVID-19 Emergency Response Fund



Chairman of the COVID -19 Emergency Response CS Dr. Fred Matiangi receives the donation from Board Chairman Prof. Simon Gicharu

REREC Board of Directors and Management led by Chairman Prof. Simon Gicharu, CBS has presented a cheque of Ksh. 2,315,000 to the Kenya COVID-19 Emergency Response Fund. The donation was received by the members of the COVID-19 Emergency Response Fund Board led by Cabinet Secretary, Ministry of Interior Dr. Fred Matiangi, E.G.H.

The money was raised by REREC staff members, in support of the Government efforts as it continues to put in place measures aimed at controlling the spread and minimizing the effects of COVID-19 in the country.

The resources will be used to support the supply of medical supplies and equipment and to support the vulnerable communities with their immediate needs, including food.

Dr. Matiangi, in appreciating the contribution made by REREC members of staff said, "We thank you for the sacrifices that you have made, and feel very encouraged by the level of sacrifice that everyone is making across the country and most importantly proud to be Kenyan." He added that this is a time when Kenyans should stand together as a family.

The Cabinet Secretary also assured REREC members of staff and all Kenyans that every shilling given will be used for the intended purpose.

Prof Gicharu, REREC Chairman indicated that the Corporations Board of Directors is happy to contribute to alleviating the pain and suffering of Kenyans, noting that the Corporation has strengthened its capacity and continues to offer services especially at this challenging time because provision of electricity is categorized as an essential service.

Speaking during the event, the Secretary of the Kenya COVID-19 Emergency Response Fund, Mr. Kennedy Kihara said that Kenyans have to come together as a country that is facing a common enemy and such causes have a way of uniting people. He also assured the REREC family that their contributions will be put into good use, "Everything will be done above board; every coin will be accounted for." He said.

The Kenya COVID-19 Emergency Response Fund Board was appointed on March 30, 2020, by President Uhuru Kenyatta and commissioned on April 2, 2020. The principal objective of the Board is to mobilize resources for emergency response towards containing the spread, effects and impact of the COVID-19 pandemic.

SAP S/4HANA now Project RIDS

REREC management staff attending an S/4 HANA training in Naivasha

The Corporation is in the process of implementing a data management system that will enhance service delivery to the public as well as efficient operational processes within the organization. The system, dubbed REREC Integrated Data System (project RIDS), is a SAP S/4HANA business suite that allows companies to perform transactions and analyze business data in real-time.

Project RIDS further aims to upgrade the current SAP system by automating and making business processes straightforward, in order to achieve operational efficiency, transparency, accountability, and improved transactional processing.

The project implementation has been aligned to SAP Activate Methodology which divides the project into four distinct phases:

Each phase will be comprised of a work stream, task and key deliverables. The project is currently at the tail-end of the Explore phase before finalizing on the solution design and sign-off.

REREC Project RIDS

Project RIDS has a timeline of twenty-four months and is anticipated to bring about the changes required to boost productivity by improving efficiency and effectiveness.

With these improvements, REREC should be better placed to deliver quality services for the country's benefit.

REREC

RURAL ELECTRIFICATION & RENEWABLE ENERGY CORPORATION

PROVIDING SUSTAINABLE GREEN ENERGY SOLUTIONS

A green energy driven nation

Busia County allocates Ksh. 39 million in matching funds

REREC and Busia County Govt. sign an MOU to implement Rural Electrification Projects

REREC has signed a Memorandum of Understanding (MOU) with the County Government of Busia for the implementation of rural electrification projects. The MOU strengthens the existing cordial relations between the two parties.

During the signing ceremony held at KAWI house in Nairobi, the Busia County Governor, H.E Sospeter Ojamong said that the County will allocate Ksh. 39 million during this financial year, to be used for the implementation of electrification projects through the Matching Funds Programme.

The matching funds facility is a strategy through which the Corporation works together with Constituencies and County Governments to identify and implement electrification projects that don't require a large capital outlay by matching a shilling for a shilling.

Governor, H.E Sospeter Ojamong and REREC CEO Mr. Peter Mbugua during the signing ceremony held at Kawi House on 26/8/2020.

Naromoru gets solar powered boreholes

Commisioning of the solar powered borehole in Naromoru - Kiamathaga ward in Nyeri County.

On 31st September 2020, REREC commissioned two Solar Powered Boreholes in Naromoru- Kiamathaga ward, Nyeri County. The ceremony was officiated by The Governor of Nyeri County Hon. Mutahi Kahiga. The Solar powered boreholes are among 17 boreholes which are currently being electrified by REREC in collaboration with the County Governments. The projects, Gitero and Kabati have a capacity of 18kW and 10kW respectively.

The solar powered borehole in Naromoru - Kiamathaga ward in Nyeri County.

Electrification of Buna Town in Wajir

Community representatives and REREC officials during a consultative meeting on 13/05/2020 in Buna town, Wajir

Rural Electrification and Renewable Energy Corporation (REREC) intents to set up an off-grid solar PV-Diesel hybrid plant in Buna trading Centre, in Wajir County. The 280 kW power plant is envisioned to supply power to Buna Trading Centre and its environs.

The project will supply power to 2000 households, 40 business enterprises, 4 boreholes and 30 public facilities.

The plant shall comprise of solar modules, battery inverter charger (battery control unit), solar batteries for back-up, dc-ac grid tied inverter with a capacity not less than 280kW, intelligent controller/manager, mounting support, electrical controls, protection and instrumentation, a diesel generator backup of not less than 75kVA and Step up substation (0.415/11kV) associated works.

The solar PV power plant shall be equipped with a diesel generator, which will be used as reserve power.

Some of the benefits for the local community in Buna include creation of employment opportunities during construction, operational and decommissioning phases. The community will be prioritized for unskilled and semi- skilled employment opportunities, therefore creating an income source especially for the youth. Businesses in the area will also thrive as a result of local sourcing of services and goods.

Access to electricity will lead to both socio and economic benefits for the region. For instance, learners will now be able to study for longer hours; leading to improved academic performance, businesses will be able to operate for longer hours, health centers can operate for 24 hours and the residents can now also be able to use electric appliances such as televisions, fans, among others. Generally, the community will also be able to diversify their businesses hence creating alternative livelihood opportunities.

The Tender for the design installation, testing and commissioning of the Buna power plant was advertised in May this year and construction of the plant is projected to take around 6-8 months.

A social and environmental screening was undertaken in Buna on 13th May 2020 to ensure that the project is designed and implemented in an environmentally and socially sustainable manner as required by law.

Transfer of Energy Centres to REREC

Mtwapa Energy Centre, Mombasa County

Energy Centres were established under the Ministry of Energy following the recommendations of a study on Fuelwood, by the Beijer Institute in 1981. The study noted a growing imbalance on wood supply and demand.

At that time, six energy centres were established in Nyeri, Bukura, Kisii, Kitui, Mtwapa and Jamhuri to serve the major agro-ecological zones of the country. The main objective at that time was to promote agro-forestry as a strategy to alleviate woodfuel supply crisis and arrest deforestation.

In 1992, the original mandate of the Centres was revised to focus more on the demonstration and training on the various Renewable Energy Technologies (RETs) for demand side management. The number of Energy Centres has over the years increased to the current sixteen (16).

The functions of the Energy Centres have also progressively changed to incorporate renewable energy technology demonstrations, training, promotion and Technical Assistance (TA) to prospective users. Various technologies are demonstrated at the Energy Centres including;

- Agroforestry (seedling nursery and demonstration farms)
- Biogas and support services (field and on-station activities)
- Solar Energy applications and;
- Improved cookstoves.

Mandate for Rural Electrification Authority was expanded to incorporate a wider mandate on Renewable Energy and hence its change of name to Rural Electrification and Renewable Energy Corporation.

Functions transferred to REREC under the Energy Act 2019

Pursuant to Section 44 (1) of the Energy Act 2019, the following functions relating to renewable energy and which were earlier performed by the Ministry of Energy, were transferred to REREC:

i. Support the establishment of energy centres in the counties;

ii. Establish framework for collaboration with County Governments in the discharge of its mandate;

iii. Undertake on-farm and onstation demonstration of wood-fuel species, seedling production and management;

iv. Undertake feasibility studies and maintain data with a view to availing the same to developers of renewable energy resources;

v. Formulate, in conjunction with the Agency, a national strategy for coordinating research in renewable energy;

vi. Undertake, in conjunction with the Agency, research, development and dissemination of appropriate renewable energy technologies;

vii. Provide an enabling framework for the efficient and sustainable production, conversion, distribution, marketing and utilization of biomass, solar, wind, small-hydros, municipal waste;

viii. Promote, in conjunction with the agency responsible for forests, the use of fast maturing trees for energy production including bio-fuels and the establishment of commercial woodlots including peri-urban plantations;

ix. Promote, in collaboration with other agencies, the development of appropriate local capacity for the manufacture, installation, maintenance and operation of renewable technologies such as bio-digesters, solar systems, turbines and other renewable energy technologies;

x. Promote international co-operation programmes focusing on renewable energy sources;

xi. Harness opportunities offered under clean development mechanism (CDM) and other mechanisms including, but not limited to, carbon credit trading to promote the development and exploitation of renewable energy sources;

xii. Promote the development of electricity generation through co-generation by sugar millers.

This transfer is expected to be finalised by the end of this financial year 2020/2021 when REREC will fully take over the operations of the Energy Centres, including all the staff and assets.

Existing Energy Centres In The Country:

No.	Energy Centre	County	No.	Energy Centre	County
1	Bukura	Kakamega	9	Lodwar	Turkana
2	Busia	Busia	10	Marsabit	Marsabit
3	Garissa	Garissa	11	Migori	Migori
4	Homa Bay	Homa Bay	12	Mitunguu	Meru
5	Jamhuri	Nairobi	13	Mirangine	Nyandarua
6	Kericho	Kericho	14	Mtwapa	Kilifi
7	Kisii	Kisii	15	Wajir	Wajir
8	Kitui	Kitui	16	Wambugu	Nyeri

REREC Chairman, Prof. Simon Gicharu during a tour of the Mtwapa energy centre

Objectives

The current objectives of the energy centres are to:

- Promote the development, adoption and wider use of renewable sources of energy available in the various areas within the Centre's jurisdiction;
- Demonstrate, train and offer other technical support on the application of various renewable energy technologies and energy conservation techniques to various user groups (individuals, community groups, institutions and private sector, among others);
- Demonstrate and provide technical support in the production and management of on-farm wood fuel production;
- Monitor the quality of improved stoves being produced and disseminated by the various producers within the areas of the Centre's jurisdiction;
- Disseminate information on renewable energy through extension visits, field days, exhibitions, brochures, posters, media articles and any other appropriate communication tools;
- Undertake periodical customer satisfaction surveys in order to capture and incorporate customer expectations in the formulation of appropriate intervention strategies; and
- Undertake applied research and development to resolve known and perceived barriers against accelerated adoption of the various renewable energy options.

Under the new strategic plan 2018/2023, the Corporation intends to establish thirty one new energy centres in the remaining counties. The activities in the energy centres are anticipated to grow to include being centres of excellence for clean energy technologies and creating an enabling environment for innovation, development and promotion of renewable energy, energy efficiency and conservation.

Meanwhile members of the Board of Directors and Management have undertaken familiarization visits to various energy centres to understand how they operate.

New Biometric System to be installed at REREC's HQ in Kawi

Plans are under way to install a state of the art Biometric Access Control System at all REREC facilities in the country. The new system will replace the current stand-alone attendance and biometric access control system which has been operational at KAWI offices over the last few years.

The current system is limited to access control only and does not capture employee time and attendance. The new platform is capable of providing time and attendance control through absence and leave management, attendance management and has capacity for both access cards and fingerprint readers. The system can also support multiple time attendance devices such as hand geometry and Radio Frequency Identification (RFID) chips.

It shall also have an integrated time and attendance tracker to allow for clocking in/out as well as online leave application and the ability to send reports to authorised personnel through email.

Advantages

The new system has various security advantages including;

- Biometric access systems which prevents unauthorised entry for unknown visitors and also entry of staff to restricted rooms, floors or premises where they do not have security clearance. The system also keeps indelible records thus enabling the operator to identify who accessed a premise and at what time.
- Spoof-proof – Biometrics are difficult to fake or steal.
- Convenient and fast, a single reader can process many requests in a minute
- Non-transferrable – Everyone has access to a unique set of biometrics.
- Biometric security automates Time and Attendance (T&A) records and thus increases efficiency for employers HR department.
- Increased productivity through reduced absenteeism and enhanced time management by employees. Personnel cannot clock in without

A staff member presses thumb to a fingerprint reader at REREC offices KAWI House, Nairobi

coming to work, or employees calling their workmates to sign the attendance register for them on time as they arrive hours late or fail to arrive at all will be a thing of the past.

- Reduced fraud - only permitted staff members are able to clock in, using details that cannot be replicated.
- Increased efficiency- no manual attendance registers which are time consuming and can be altered.
- Employees cannot clock in or out for one another thus preventing time theft.

How It Works

Biometric systems utilize technology to accurately measure and analyse a person's physiological or behavioural traits (Biology + Metrics = Biometrics). It is on this basis that the systems grant authentication and access.

Use of biometric verification is very common in our daily lives e.g. in hospital when you are required to run your insurance card and place an index finger on the scanner in order to access medical services. Modern mobile telephony has also embraced it and you can unlock your phone using hand geometry, face shape, fingerprints, eyes (Iris) and even voice recognition.

The reason for using biometrics is to determine that a user seeking access is who they claim to be by comparing their biometric input with the biometric data of themselves that was previously stored. If it matches, access is granted but in case of discrepancy, it is denied.

Once the system is installed, fingerprints of all the personnel to be granted access to the premises will have to be captured and stored in the database. The system shall achieve this by scanning the ridge patterns and other elements of the fingerprint and converts the information into a digital data. After this enrolment period, every time the employee places his or her finger on the scanner, the fingerprint is compared to the stored data and access is granted or denied.

The new platform shall be capable of providing absence and leave management, attendance management, have capacity for both access cards and fingerprint readers.

On reporting to work:

- The employee will place his/her finger printer on the reader access following which access shall be granted or denied. If granted he/she shall clock in with the biometric time clock after which the door will open granting them access to the premises. This function can also be undertaken using the employee ID card with an embedded radio-frequency chip. When the ID card comes into close proximity of an RFID reader, the radio frequency will be detected and the person is allowed access into the building and clocked-in for work. The person does not need to scan the card directly on the reader or even take it out of a wallet or bag.
- The clock then records all of the time worked, until such a time that the employee clocks out, either for lunch, for a break or to leave for the day. If the employee had clocked out for a break, on returning he/or she will need to clock in again.
- The time and attendance System software shall automatically sum up the time worked and upload that time to the employee's virtual time card.
- At the end of the month or designated period, the software shall import each employees work hours to the designed platform.
- Depending on how it is configured the system has the inbuilt capability to send real time employee attendance reports to the management or other authorised personnel through email.
- Not only does the biometric time clock tally working hours, but it will also track, missed clock in or clock out, breaks including time spend out for meals, sick off days and leave days.

AutoCAD software for design

REREC has acquired 18 AutoCAD licenses to be used by Design Department. AutoCAD is a drafting software and its procurement is intended to automate the drawings for REREC projects. The software allows automatic configuration power lines thereby reducing the time taken in drawing projects. The Corporation has been having all the project maps in hard copy and the acquisition of this software will enable drawings to be stored

AUTOCAD®

in softcopy.

One of the specialized features of the new CAD software is that users are able to edit, create, and view drawings from wherever they are using the AutoCAD web app. The CAD software will help cartographers and designers as it allows incorporation of GIS and CAD data from different sources thereby speeding up the process of project designs.

The implementing partner is ADCC International East African Ltd who are also assisting ICT department with the installation and basic user training.

REREC staff trained on job evaluation

Staff representing all departments at Rural Electrification and Renewable Energy Corporation (REREC) have undergone a one-week training on job evaluation. The training which was conducted by the Salaries and Remuneration Commission (SRC) took place from 21st to 25th September 2020 at the Kenya School of Government, Kabete Campus.

During the 5-day intensive training, the participants were taken through the process and its objectives, the mandate of the SRC and the processes guiding salary increments in the civil service.

Job Evaluation (JE) is a systematic way of determining the value/worth of a job in an organization relative to other jobs in the same organization and/or other organizations. It makes a systematic comparison between jobs so as to assess their relative worth for the purpose of establishing a rational pay structure.

SRC is conducting job evaluations for purposes of achieving an equitable and harmonized job grading criteria in public offices which shall form the basis for pay determination and ensure that comparable jobs of equal value are remunerated equitably.

Job evaluation is one of the activities the commission is undertaking as it prepares to launch the 2021/2022-2024/2025 salary review cycle. The previous reviews were in the financial years 2017/2018-2020/2021 and 2013/2014 - 2016/2017.

The outcome of the job evaluation will be used in developing job grading structures. The commission will also carry out a salary survey in order to collect data which, together with the job evaluation grading results, will inform the salary structures for the 2021/2022 -2024/2025 remuneration review cycle.

REREC officers and other public sector officials in a group photo, at the end of training on J.E at the Kenya School of Government in Nairobi

REREC distributes furniture to schools

Hon. James Githua Wamacukuru, officials from REREC, Kenya Prisons, together with teachers and pupils from Nyathuna Primary School during the event on the 9th of July 2020

Partnering For A Noble Cause

As part of its Corporate Social Responsibility, REREC has distributed school furniture worth Kshs 800,000/- to three schools in Kiambu, Marsabit and Samburu counties. The furniture was produced by the Kenya Prisons Service who partnered with the Corporation in efforts to raise the standards of education in areas where it operates.

The handing over ceremony was officiated by Kabete MP. Hon. James Githua Wamacukuru, and Inspector Nicholas Wandeto from Kenya Prisons. The furniture was received by the Head teacher, Mr. Robert Maina, PTA Chairperson, Board members, teachers and pupils. The school fratenity expressed their gratitude to the Corporation as the furniture will assist in their bid to maintain social distance in the classroom.

The REREC team was led by Eng. Jonathan Mbutu who is also chairs the interdepartmental Corporate Social Responsibility Committee in the Corporation.

Donation of furniture by REREC officials to the Dukana Boys Primary School in Marsabit County on the 28th of September 2020

Enhancing Quality Education

Dukana Boys Primary School in Marsabit County and Lorrok Primary School also benefited from the donation of school furniture worth over Ksh. 250,000 each. These schools were selected as part of the Corporations' initiative to raise education standards for children from nomadic communities in Arid and Semi-Arid areas.

Donation of furniture by REREC officials to Lorrok Primary School in Marsabit County

Samarch Water Project

Sarmach water tank in Sarmach village, Pokot County

Some 514 kilometres from Nairobi, lies a village called Sarmach in West Pokot County.

In efforts to touch the lives of residents where it is implementing projects, REREC constructed a Kshs 1.5 million water project comprising of a 50 cubic metres raised steel water tank for the people of Sarmach Village in West Pokot County. The water project is part of REREC's CSR initiative for the community living along the 66kV Turkwel-Lokichar Power line.

To further enhance utilization of the water from the project, the Corporation intends to construct a 1.2 km distribution network from where the tank is located to Sarmach trading centre and the local primary school. Water supply points will be located at various points within the trading centre to enable members of the public benefit further from the water project.

Solar Mini Grid

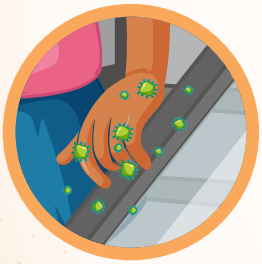
CORONAVIRUS:

REREC
A GREEN ENERGY DRIVEN NATION

MAJOR REASONS WHY COVID 19 IS SPREADING RAPIDLY

"This mask is uncomfortable and I can't breath."

"I'm sure my workmates, are responsible enough & they are COVID 19 free."



"It's hard to keep washing or sanitizing my hands."

"I trust my relatives are COVID 19 free"

"These are my friends I know them well. Besides, it's a small party and we only live once."

SAVE YOURSELF & OTHERS

Always wear your mask properly & observe social distance

Stay safe, observe MOH Guidelines

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