



KAJIADO COUNTY EMBRACES PRIVATE-SECTOR PATENTED INNOVATION DUBBED M-RIZIKI TO SCALE-UP DIGITAL FOOD DISTRIBUTION TO VULNERABLE GROUPS

Context and Challenge

According to a World Food Programme (WFP) Situation Report as of 15th April 2020, Kajiado County was among the COVID-19 hot-spot Counties in Kenya. Others include, including Busia, Garissa, Kiambu, Kilifi, Kisumu, Machakos, Migori, Mombasa, Nairobi, Nakuru, Siaya, Uasin Gishu and Wajir¹. Kajiado County is especially, a food security “hot spot” since it is affected by multiple pre-existing crises resulting from more frequent extreme weather events (extended severe droughts and back-to-back failed harvests before hordes of desert locusts descended on its crops and pastures in late December/early January 2020), and resulting in loss of incomes. The vast majority of Kajiado’s population lives in rural areas and depends on agricultural production, seasonal jobs in agriculture, or pastoralism. The population, therefore, has very little to fall back on, materially speaking.

Dozens of Kajiado County residents, mainly in rural areas, have been going hungry following prolonged drought coupled with effects of the coronavirus pandemic². According to the Daily Situation Report, SITREP 104 by Ministry of Health, as (at of 30 June 2020, Kajiado County had reported 255 COVID-19 cases, representing 4% of the 6366 total cumulative cases reported nationally. Most affected areas are Mailua (Kajiado Central), Torosei (Kajiado West), and Ilkilunyeti in Kajiado East Sub-county³. In a bid to immediately respond to a crisis-within-a crisis, the County Government of Kajiado needed to provide food to the hunger-stricken residents as effectively and efficiently possible.

Distribution of relief food, especially during the Covid-19 pandemic has brought more suffering than relief to a majority of Kenyans. As witnessed in the [media](#) recently residents of Mathare and Kibera slums in Nairobi, for example, experienced a [much-publicized scramble for relief food](#) which resulted in a stampede caused by those outside the gate. This led to the unfortunate injury and even death of residents. Police fired tear gas and injured several people, including women and children.

In Mathare, a group used a physical card voucher system given to pre-selected beneficiaries to enable them to access food from pre-selected shops in their localities, and beneficiaries would be escorted by the financier’s team to the shops to witness the delivery of food support to the beneficiaries, for accountability purposes. Thereafter, the financier’s team would pay for the food provided by the shops. This process, while laudable, was time-consuming, quite public, and could only reach a small number of beneficiaries at a time. Most distribution methods used in Kenya to reach and support vulnerable people, by government officials and humanitarian agencies have entailed crowding of hungry people, in one location, to receive the free handouts, which are often sourced from large monopolies as suppliers outside the rural areas, so the struggling local small and medium enterprises lose out on business.

¹ <https://reliefweb.int/report/kenya/wfp-kenya-covid-19-situation-report-1-18-april-2020>

² <https://www.nation.co.ke/dailynation/news/covid-19-167-more-test-positive-46-leave-hospital-548710>

³ <https://www.nation.co.ke/lifestyle/A-digital-innovation-to-streamline-food-aid-delivery/1190-5563242-y07nofz/index.html>

Elsewhere in Kwale County, media reports have pointed to corruption allegations where government administrators⁴ charged with distributing food support during COVID-19 were accused of denying vulnerable residents the food and allegedly colluding with shopkeepers to sell it⁵.

Response and Actions

The Kajiado government sought to do things differently and the private sector approached them with a tried solution at an opportune time.

Meanwhile, a few days after watching the Kibera slums incident in the news, a communications agency, *Empiris Creative Communication Ltd.*, realised there was a need for a better strategy and approached a software development company, *Fashionnaire Corporation Ltd.*, to help develop a virtually integrated system. When the system was completed, the agency dubbed it *M-Riziki*. The system innovation would remove the need for a gathering of large crowds for food. *M-Riziki* has web and mobile-enabled features that facilitate seamless flow of relief food and other items from donor to the beneficiaries through pre-selected shops. It is a virtually integrated innovation that enables vulnerable groups to get 'free' food, paid for by a financier (National Government or County Governments, organisations or individuals) through existing stores in the beneficiaries' locality and the e-commerce interaction is enabled, and the financial totals witnessed by all stakeholders back-end.

The system was used, under a Right of Use Contract from the Private Sector innovator, by the County Government of Kajiado to distribute relief food, having already been piloted with the Kiambu County using a small number (200) of beneficiaries in Ruaka. To upscale its use, the innovators marketed *M-Riziki* to Kajiado County for large-scale roll-out given the system's ability to enable individualised and dignified food distribution to thousands in record time, as well as acting as an economic stimulus to the flailing small and medium enterprises, through which the food is bought by the County for vulnerable beneficiaries.

"We surely don't need to parade people in need of humanitarian aid. We can protect their dignity through the use of digital solutions such as M-Riziki" — **Ms Lorna Sempele**, CEO of Empiris Creative Communication Ltd and innovator of *M-Riziki* Virtual System.

H.E Governor Joseph Ole Lenku and his team embraced the innovation seeing that it would help the County distribute food in a private and dignified manner to a large number of vulnerable people, and quickly. The *M-Riziki* distribution method was therefore launched in Kajiado North with plans to continue feeding approximately 30,000 of the hungry people throughout the County. So far 2,000 residents have benefited, with the next phase proposed to start from July.

The System which includes a mobile application, virtual PIN, back-end database integration to the financier, shops, and innovators, as well as enables e-commerce is integrated at the highest level of Business Process Re-engineering yet to be developed elsewhere, as opposed to a simple and lower-level cash transfer system, for example. The ICT developer enters data on beneficiaries, who are identified by the financier, into the system. This information is then used to prompt the beneficiary through a short message (SMS) sent to their mobile phones, on where to collect the food and its cost. The SMS contains a unique number (PIN) for each beneficiary alongside information on the specified shop from which to collect the food. The beneficiaries present the information to a pre-selected shop closest to their home, in exchange for food, at their convenience. In the process, the dignity of the beneficiaries is safeguarded since the system excludes gathering or queuing for the commodity. The system is secure and its features tamper-proof. With the system, financiers deposit the money to buy the food to a bank

⁴ <https://www.nation.co.ke/kenya/videos/news/shimo-la-tewa-slums-residents-accuse-area-chief-of-denying-them-relief-food-306280>

⁵ <http://thecoast.co.ke/2020/04/30/two-officers-sent-packing-as-relief-goes-missing/41/30/news/thecoast/2252/09/>

account of the innovator, and this is linked with the mobile money transfer platform M-PESA. The shopkeepers are later paid through M-PESA upon showing dispatch receipts commensurate to each food hamper collected by the beneficiary. This is to ensure transparency and accountability of the entire process. Once that PIN expires, the system automatically bills the innovator, on behalf of the shopkeeper and payment is made to shopkeepers shortly thereafter. This avoids the long-term problem of waiting for the Government to release funds to suppliers and therefore acts as an economic stimulus during an economic recession.

Outcomes and Results

Kajiado County, which is the first County to use the privately-owned M-Riziki on a large-scale basis, reaching thousands, plans to continue partnering with the M-Riziki innovator to feed at least 30,000 vulnerable households to cushion them against COVID-19, and in record time. The Kajiado County project launched on Friday, May 22 in Ngong town by Governor Joseph ole Lenku will cover thousands of families, with the rest being considered in due course.

The system saves the County the logistical nightmare of hiring transportation and physically packaging the food into individual Hampers and distributing them physically to beneficiaries in dispersed locations. It also eradicates cases of corruption since it simultaneously sends automatic reports to the shopkeeper, the County and the System administrator. The County can view the daily distribution status, and the equivalent cost of the food Hampers released from the pre-selected shops. The new system is also meant to boost the local economy by promoting local shopkeepers who are promptly paid. More than 100 local shops have been enlisted across the County to 'sell' the relief food.

The support to beneficiaries in Kajiado County includes: 8 kgs of maize flour, 3 kg of Beans, 2 litres of cooking oil, 4 kgs fortified porridge flour, 5 face masks made by the County's Vocational Training Centres and 1 small bottle of sanitiser. The package is worth approximately KES 1,500. Daily payments are possible through the system because every shop has its bill reflecting in the backend. However, for effective logistics, the innovator collects invoices weekly and pays the shopkeepers every Friday through M-PESA.

Donors can easily track their money from the system. They can see how much was spent on a particular day and who the beneficiary was. Furthermore, we provide them with the receipts we collect from the shopkeepers to show that their money was indeed used. So, there are no loopholes for corruption — Joshua Nderi Wanjugu, of the M-Riziki team.

M-Riziki virtually converges the donor, beneficiaries and shopkeepers onto one platform, thus, minimising physical interaction. The shopkeepers sign a contract to work with the innovator to deliver the hamper items and quantities to beneficiaries, to limit the cost to a certain ceiling in Kenyan currency, and to download the mobile application that is part of the system. This application is then used by the shopkeeper to verify and validate beneficiaries, dispatch the items agreed by the County, and raise invoices for payment to the innovator, who pay using monies invested by the financier, in this case, the County Government of Kajiado.

Generally, with the system, the donors, who can be the National Government or County Governments, organisations or individuals, only identify beneficiaries and pre-selected shops in the neighbourhood from where the food is picked. The virtual system is also capable of generating shopkeeper invoices and quotations.

The strict procedures eliminate the chances of fraud and malpractice regarding funding for the support of

"M-Riziki eliminates the stigmatisation of people in need of relief food. Once a beneficiary receives the message, he or she can walk to a pre-selected shop without anyone noting that they are

vulnerable groups while ensuring efficiency in relief distribution.

They use the system to activate payments thus keeping an electronic record of the quantity of food bought and its cost, shops that have distributed the food and the people who have received the food. Delays occur in case of erroneous data. Good data means speed in delivery through the system; bad data means heavy call-centre use and delays in delivery of items due to the need to triangulate verification of beneficiaries. Bad data cases arise when one beneficiary's mobile number is used by 4 other beneficiaries who don't own phones. The system only recognises the first ID number entered against a corresponding name as shown in the ID and generates the PIN. Most beneficiaries come from the Mathare and Gichagi slums and many do not own phones, yet they require food aid. Again, some beneficiaries delay going for their free food hampers and this too can delay the distribution process despite a fully working ICT system.

Lessons Learned

The experience of large-scale roll-out in Kajiado County has revealed the following:

- The system works 24/7 and 100 % without any problem so long as the beneficiaries' data (ID number, name as per the ID and phone number) provided by the stakeholders is accurate. Inaccurate data causes a delay due to the need to triangulate verification and validation of beneficiaries, through a call-centre set up by the innovator.
- The County is talking to the Area Chief so that even if beneficiaries are using the same number, the administration officers acting as data collectors can indicate different names for the same phone number to the innovators. Lack of a mobile number is evidence of poverty. The innovator has already developed different functionalities to enable different means of verification of beneficiaries for future food distribution, even if many use one phone.
- Additionally, the County data collectors must ensure that the individual beneficiaries selected are truly vulnerable to ensure quick collection of the support (e.g. food, medicine, special aids, and cash transfers) from the outlets so as not to delay the project.
- Beneficiaries and users of the M-Riziki system attest to its accountability, dignity, speed, and the scale of beneficiary support.
- The success of the project points to the need to appreciate local solutions by financing their research, design, patenting, roll-out and marketing to encourage more innovators. The M-Riziki innovator faced financial challenges in getting a prototype ready for piloting in Kiambu, and afterwards, they quickly patented it due to the threat of Intellectual Property theft. Thankfully, they had proof of concept.
- In the case of Kajiado North, Kajiado County used the Emergency Fund to support the roll-out of the food distribution project.
- Integration of the three groups (donor, shopkeeper and M-Riziki innovator) to distribute required items by vulnerable groups is crucial.
- County involvement has enabled up-scaling and helps meet the grassroots need.
- ICT-enabled models like M-Riziki facilitate dignified and convenient food distribution to vulnerable households while stimulating local economy, especially small enterprise growth since the food is bought from local retail shops.
- The M-Riziki platform can assist in creating a database of the most vulnerable households that can be updated progressively for better targeting during various emergencies, while triggering demand for and use of mobile-phones by small businesses and communities. Such models also serve to stimulate local innovations.
- Counties should support innovators to protect their patents in order to safeguard innovations that provide solutions to local challenges and to inspire upcoming innovators.

Recommendations

National Government and County Governments should partner with local researchers and digital entrepreneurs to develop timely local solutions to key challenges for sustainable intervention. In fact, with such support, M-Riziki can easily turn into a global brand, through which the poor will be helped quietly, without stripping them of their dignity through public display of their poverty, while lifting Kenya's name as an innovative society.

Governments and humanitarian agencies that provide food aid to communities affected by climatic shocks like droughts and other crises should adopt M-Riziki to fast-track food distribution in a dignified and convenient manner to all kinds of beneficiaries, while at the same time, boosting local business. The system is, however, not limited to food distribution. Those seeking to support other vulnerable groups, for example, women and girls with sanitary towels; persons with disabilities with assistive equipment; and HIV and AIDS patients with anti-retroviral drugs, can also have a Right of Use contract with the innovator to distribute the donation in privacy.

To cure the challenge of incorrect data, M-Riziki innovator and County officials must together be involved in data collection training and assessment before receiving any beneficiary data. It is important to train data collectors at the outset to ensure good data of beneficiaries to enable a quick turn-around of support.

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