

# RESPONDING TO COVID-19 BY PROVIDING DIGITAL INFORMATION SERVICES TO SMALLHOLDER FARMERS

**FO4ACP Success Story : The Kenyan National Farmers' Federation implements an USSD system to serve members and farmers in Kenya**



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## FO4ACP

Farmers' Organizations for  
Africa, Caribbean and Pacific

**Digital Solutions  
in Agriculture**

## Farmers' organizations and agri-agencies join forces to respond better

Access to accurate and timely information remains crucial for farmers' all around the world, and even more so since the Covid-19 pandemic started. With the restrictions in movements and the even higher need for information on health and market access, KENAFF decided to put in place a mobile phone-based information service, making use of the simple USSD technology, to respond to the crisis and to better inform the farmers, also in the long term.

*“With everything closed and everyone in lockdown we needed to find a way to reach out to our members and the farmers in general. As early as March, we started thinking about a solution and a very simple technology like USSD was put forward”, explained Dr. Mwendah M'Mailutha, CEO of KENAFF, “and we joined forces with our partner agri-agency, Andreas Hermes Akademie (AHA), to make this a reality as soon as possible.”*

With overall mobile phone ownership of 95 percent among the Kenyan population and the popularity of mobile money (MPESA), almost all farmers from all over the country are able to receive information messages on a basic mobile phone. However, ICT avenues for supporting smallholder farmers are still patchy and, in some cases, non-existent. KENAFF has set out to change this picture by planting the seed through the KENAFF USSD Code Platform.

## KENAFF's USSD Code Platform

The KENAFF USSD-system offers information to non-smartphone mobile phones on a wide range of topics from Covid-19 mitigation, adaptation, and resilience building, to markets and technical advisory as well as weather information for farmers. First discussions were held in March and KENAFF and AHA started working on the system in June before it was operationalized in October 2020. Currently, the system reports about 72.000 registered users across 47 Kenyan counties, and the number is increasing rapidly. KENAFF estimates to register 500,000 farmers by June 2021 and over a million by December 2021.

For now, the KENAFF USSD code \*501# is available on the Safaricom network in Kenya but plans are underway to set up two more codes the Airtel and Telkom networks to broaden the reach of the service among even more farmers.

For updates on Covid-19, KENAFF signed a Memorandum of Understanding with the Kenyan Ministry of Health, which shares regular updates and information with KENAFF, that turn passes on the information through the USSD code to the farmers in a timely manner. For technical advisory services, KENAFF also relies on its own technical specialists, and for market data, KENAFF has its field offices throughout the country that provide KENAFF with up-to-date market information every second day and the in-house capacities are strengthened with external partnerships.

## What is USSD?

Unstructured Supplementary Service Data (USSD), sometimes referred to as quick codes or feature codes, is a communications protocol for mobile phones to communicate with the computers of the mobile network operator. When a user sends a message to the phone company network, it is received by a computer dedicated to USSD. The computer's response is sent back to the phone, generally in a basic format that can easily be seen on the phone display. A well-known example is a code you have to send to receive a message with the balance of your phone's credit.

Apart from the agreement with the Ministry of Health KENAFF needed to engage with many other stakeholders in order to make this possible and Apart from the agreement with the Ministry of Health KENAFF needed to engage with many other stakeholders in order to make this possible and operational. The system brings together the Kenya Agricultural Observatory Platform (KAOP) for weather data, Kenya Agricultural and Livestock Research Organization (KALRO) for research outputs, the Agriculture Information Resource Centre of the Ministry of Agriculture, Livestock, Fisheries and Cooperatives for technical information, the Egerton University for research and technical information, Affirm Kenya for farm produce market data and the Warehouse Receipt Council WRC for grain market data.



There are a total of 50 value chain choices available on the KENAFF USSD platform. These include value chains identified by counties as priority value chains in the Agriculture Sector Transformation and Growth Strategy (ASTGS, 2019—2029) as well as others. Information is adapted and specific up to the sub-county level to make sure it is accurate for the different localities in the country, which is particularly important for accurate weather prediction or information on markets and prices that can vary widely across different areas.

*"It is important that we simplify the information and translate it in a language that the farmers will understand to make the platform more accessible and the information more adapted for the farmers", Mwendah M'Mailutha explains, "and this requires time and resources."*

While the platform is now operational and ready to be upscaled, the process to get there was therefore not an easy one. The CEO from KENAFF explained how the testing phase was particularly challenging. While KENAFF and AHA envisaged the USSD Code Platform in a certain way, ensuring that it would function as such for the users required a thorough process of testing adapting, and re-testing. The next step was to make the code known among the farmers, which was also challenging due to the Covid-19 restrictions on movements. As there were travel restrictions, this process needed to be done digitally, and meetings were organized with KENAFF members at all levels on virtual platforms to explain and promote the services so the information could be shared with the farmers at the local level. Later on, this effort was strengthened with media and social media campaigns.

So far, most questions that KENAFF receives are on market information, Covid-19, and technical advisory services. On the platform the most sought information is in order of importance: agricultural commodities market, Covid-19, food handling, personal safety, online market, preventive measures, weather updates, planting practices, animal welfare, feed management between flocks, certification of export, nutrition, social-economic management, organic farming, land management, crop diversity, and crop rotation. Covid-19 related topics are high in the list, but farmers also clearly continue to search for information on agricultural practices throughout the current crisis.

*"We receive so many questions from farmers that we now have to start to rethink the system we have put in place and see how we can make our service more cost and time effective. If KENAFF can get upfront support over the next three years for the development of the USSD code, it is envisaged that KENAFF can monetize the platform, and it's expected that we will be able to develop spin-offs, like mobile applications, by the 4th or 5th year. Monetization will be easy as with the expected 3 million members by the 3rd or 4th year, a lot of businesses that deal with farmers for inputs and services will have a captive audience. The upfront is critical and necessary and KENAFF is counting on her partners like AHA, for the same", said Mwendah M'Mailutha.*

With further support, KENAFF hopes to grow this platform into a formidable avenue through which to offer a wide range of services to members and farmers in general. Through the increased promotion of the USSD Code Platform KENAFF hopes to soon reach the target of 1 million subscribers and grow further over the years so with time all farmers are aware of this information service.



## How to access the KENAFF USDD Code Platform?

Joining the KENAFF USSD Code Platform is easy. Send the code \*501# on the Safaricom network in Kenya and you will receive information and be able to request information on specific topics. Once you have sent the code, Safaricom charges a very little amount of 1 Shilling (= 0,0076 EUR) for the service but the rest of the service is free of charge. Messages are actively pushed out on weather data, Covid-19, market information and technical advisory services.

Once subscribed the farmer will receive four push-messages per week, coming from the system to the subscriber. Farmers can request to receive more information using specific codes. When at the county level many farmers have a particular question, KENAFF will make sure we find the answer and share this information with all the subscribers in that county. On the other hand, individual farmers can also ask very specific questions to KENAFF's advisory services and receive specific personalized answers or search for information on the platform.

## Farmers have their say!

Denis Kariuki a poultry farmer from Kikuyu in Kiambu County testified: *"I was introduced to KENAFF's USSD service by other farmers and I now have access to information. When there is for example an outbreak of a disease, we will be warned but also receive information on how to prevent or treat it."*



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## KENAFF USSD CODE PLATFORM



### DID YOU KNOW?

Kenya National Farmers' Federation (KENAFF) has developed a USSD code platform to inform farmers on Covid-19, markets, weather updates and technical advisory services. This platform enables even farmers in hard-to-reach rural areas stay connected and informed.



With support from Andreas Hermes Akademie, Agricord, IFAD and the European Union.

**#STANDWITHFARMERS**

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## Kenya National Farmers' Federation - KENAFF

The Kenya National Farmers' Federation (KENAFF) is a non-political, non-profit, and democratic member-based umbrella organization of farmers in Kenya and a member of the regional apex farmers' organization Eastern African Farmers' Federation (EAFF).

KENAFF aims at representing the interests of over 2 million farm families with the objective of articulating, representing, promoting, and protecting issues affecting them through the focused lobby, advocacy, and policy action and targeted capacity-building as the ultimate Sauti ya Mkulima (Farmers' Voice) in Kenya. KENAFF also offers many other member services including market facilitation and linkages, provision of value chain-based technical advisory services, and facilitating farmer to farmer learning through exchange programmes. Currently, KENAFF counts with the membership of 42 commodity associations, 34 county farmers' associations, and 28 cooperative societies, representing a total of about 800,000 individual members as of December 2020. The federation, currently active in 34 counties seeks to expand its operation to 42 Kenyan counties.

Since the start of the Covid-19 pandemic, the KENAFF membership increased significantly from about 620,000 members to 800,000 members in one year time in the 12 counties currently supported by AHA. In this unprecedented global crisis, farmers need farmers' organizations more than ever. Farmers' organizations extended their services and their roles to respond to the increased needs of smallholder farmers' ability to respond to the pandemic.

For more information visit: [www.kenaff.org](http://www.kenaff.org)  
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## The AHA-KENAFF partnership within the FO4ACP programme

The development of the USSD-system by KENAFF was supported by Andreas Hermes Akademie (AHA), an agri-agency member of AgriCord and partner in the implementation of the FO4ACP programme. AHA has provided KENAFF with support for organizational strengthening throughout the devolution process of the agricultural sector Kenya has undergone since 2016. With more responsibilities at the county level, AHA and KENAFF also focused on the capacity development and the professionalization of the organization at the county level and 6 county coordinators were designated to each cover 2 counties (12 of a total of the 34 counties with county farmers' associations member of KENAFF) supported by a county-designated budget. The development of the USSD-system was supported with the financing of the repurposing exercise done under the FO4ACP programme to enable the implementing partners to better respond to the Covid-19 pandemic.

The Andreas Hermes Akademie (AHA) ([www.andreas-hermes-akademie.de](http://www.andreas-hermes-akademie.de)) is a German institution for further education in the agricultural and food industry, also providing services in the international context. AHA develops tailor-made concepts for its clients to accompany them in their development and change process. AHA became a member of AgriCord in 2014 and started activities to strengthen farmers' organizations in Africa and Asia since 2008.

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