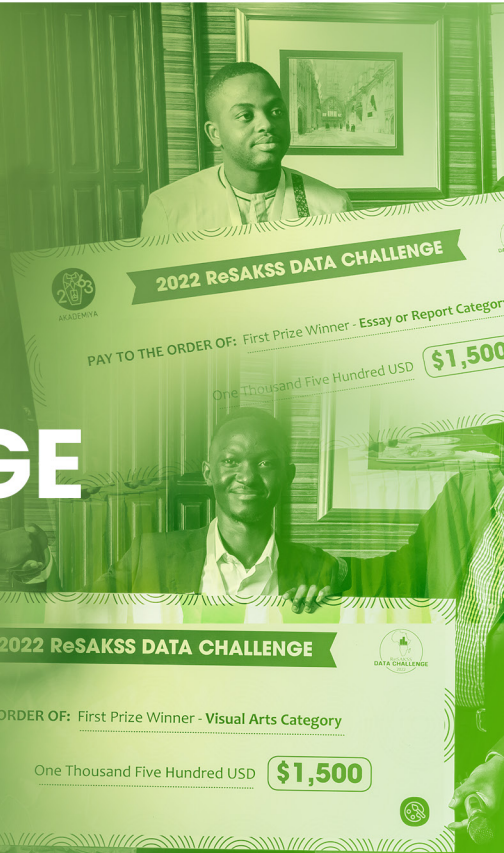




# 2022 ReSAKSS DATA CHALLENGE MEET WINNERS!



## Background

AKADEMIYA2063, through the Regional Strategic Analysis Knowledge Support System (ReSAKSS), launched the [third edition](#) of the ReSAKSS Data Challenge in 2022 to drive data innovation in the international development sector. The ReSAKSS Data Challenge is a competition for enthusiastic data users to showcase their creativity and analytical skills by using data and other resources on the [ReSAKSS](#), [eAtlas](#), and [Africa Agriculture Watch \(AAgWa\)](#) websites to develop innovative knowledge products that address development challenges in Africa. Competing under four main categories, namely, [Essay and Report](#), [Visual Arts](#), [IT Products and Services](#)/[Predictive Modeling](#), and [High School Project](#), contestants will explore a wide range of resources, data, reports, reviews, and publications on the digital platforms, using the knowledge to hack solutions relevant to any given sector and win prizes for innovative discoveries.

The challenge is open to analysts, graphic designers, high school students, IT specialists, researchers, university students, and anyone else in Africa (and the Diaspora) passionate about using data to communicate and address development challenges faced by Africa. For the 2022 edition, AKADEMIYA2063 awarded the most innovative projects under each category, with eight (8) winners emerging from the competition. First-prize winners were awarded during the 2022 ReSAKSS Annual Conference, which took place on October 25–27 in Harare, Zimbabwe.



# 2022 ReSAKSS Data Challenge Highlights



**8**  
Winners



**34**  
Applicants



**1000+**  
Website Hits

## Awards



**US\$ 1,500**  
First Prize



**US\$ 1,000**  
Second Prize



**US\$ 500**  
Third Prize

## Essay or Report

For the Essay or Report category, participants are challenged to use their imagination to write engaging pieces. More precisely, contestants must showcase their creativity and analytical skills using data and other resources on the [@ReSAKSS](#), [@eAtlas](#), and [@AAgWa](#) websites to develop a written piece or project addressing a development challenge faced by Africa.



**François Sagna, Senegal**  
1<sup>st</sup> Prize Winner

**@Project:** “La mise en place de banques Alimentaires d’ Adansonia digitata (baobab) comme solution à la sécurité alimentaire au Sahel et à la réduction d’exploitation de cette espèce emblématique: cas du Sénégal et du Mali”.

I am a Labor Engineer specialized in Agricultural Sciences, Water, and Forestry. Using data from the ReSAKSS Data Challenge, we improved this project to establish a Baobab food bank as a solution to food security in the Sahel and to reduce the exploitation of this iconic species. It is also a project written in collaboration with Amadou Diallo, Ibrahima Ndong, and Nourou Sy.

### Motivation

We saw it as our responsibility as foresters to figure out how to use the baobab tree to increase the food security of millions of Africans since it is a forest species that can be found throughout many African nations and serves as a dietary supplement that is high in nutrients (calcium, vitamins, etc.). We have improved the solution using ReSAKSS data through our study of the Baobab food bank to find ways to spread awareness of it across Africa.

### Contribution to Africa’s Development Goals

Families in remote regions who are accustomed to utilizing baobab as a food supplement will be able to do so, thanks to these baobab banks. Typically, women traveled to the bush and climbed heights of up to 10 meters to get baobab leaves, exposing them to danger and risk of injury. This project suggests a method through which women can conveniently have access to baobab leaves, which can be turned into a powder and used as a vitamin and calcium-rich food supplement.

It is an inexpensive initiative that should be widely publicized throughout Africa. We must act now because the baobab is a critically endangered species whose extinction is imminent. It is essential to reveal its solutions at African summits so that states understand the challenge of turning to baobab food banks for African food security.

## Lessons

I encourage my peers to apply more for the ReSAKSS Data Challenge since the potential exists. There are many competent young people with innovative ideas. It will be necessary to focus on raising awareness in universities and research institutes. I see state officials, researchers, and young people trying to contribute to Africa's future development; encouraging Africans to propose solutions that benefit them and, why not, the entire world is beneficial.



**Koudjo Espoir Gaglo, Togo**  
3<sup>rd</sup> Prize Winner

**@Project:** "Mitigation of Environmental degradation and salinization impacts in Fatick, Senegal: a remote sensing-based approach"

A PhD student at Cheikh Anta Diop University, I am an agricultural engineer with a background in plant production, ecology, and agroforestry. I use historical climate event data coupled with flux tower and remote sensing data to assess a land surface model's ability to represent heterogeneous ecosystems and the trade-offs needed to simulate their

functioning in the Sahel.

## Motivation

We wanted to find a way to add value to the data produced by institutions and contribute to better land planning in Senegal.

We worked with data from Fatick, which is undergoing rapid environmental degradation due to a combination of rainfall variability, land degradation, and soil salinity, all of which impact biomass production and crop yields. Many projects have been launched in Fatick to mitigate the effects of salinization and climate change but have had limited success, resulting in environmental degradation for farmers in some cases. One of the reasons for these results is a lack of information on the spatial and temporal dynamics of land use. In Fatick, we quantified and analyzed the spatial and temporal dynamics of land use and land cover. The findings of this study could help policymakers plan more effectively for land use.

## Lessons

In this challenge, we learned how to convert a database into useful information for a better society. The ReSAKSS platform contains a wealth of data, particularly on agriculture. We also learned how to present data analysis results in a simple and understandable manner as a result of this experience.

We strongly encourage our peers to apply for the ReSAKSS Data Challenge because it is a stimulating exercise that allows us to bring out information that can help develop tools for better land planning in Senegal.

## Visual Arts

Participants are asked to use their imagination to create engaging projects for this Visual Arts category. More precisely, participants are required to showcase their creativity and analytical skills using data and other resources on the [@ReSAKSS](#), [@eAtlas](#), and [@AaGWa](#) websites to develop audio-visual projects that address a development challenge faced by Africa.



**Tumwebaze Alex, Uganda**  
1<sup>st</sup> Prize Winner

**@Project:** Growing and Sustaining Africa's Agricultural GDP

I am a Ugandan filmmaker with over four years of experience making visual content. I am also passionate about technology and development.

### Motivation

I was motivated to apply for the ReSAKSS Data Challenge because one of its categories involved visual content, which I am well versed in and passionate about as a content creator. I saw the competition as a chance to put my skills to the test while creating content about the continent's current agricultural status.

I submitted a video that portrays Africa's annual agricultural GDP using the exact figures and numbers from the data sources.

Further, I indicate the problems hindering agricultural growth, and how we can make gradual improvements in this sector to feed the African population and grow the economy while making the continent a better place for everyone.

In this video, I use relevant stock footage, images, and infomatic graphics to visually show and represent the data from ReSAKSS and eAtlas. The images, graphics, and motion pictures are also supported by a voice-over and subtitles. In a bid to fight food insecurity and grow the continent's economy, I created a video that raises awareness in the agriculture sector because it transmits emotions and tells the status of the agriculture sector in its truest form. I believe the best way to make an impact is through the use of pictures, and this video can surely provide vivid information to create a gradual impact on the agriculture sector in Africa.

### Lessons

From this experience, most importantly, I have learned to use my creativity to think forward about vital issues concerning sustainability, especially agriculture. I have gained a lot of knowledge and skill during the course of the challenge, from doing research about the data in the video to interacting with experts and decision-makers at the ReSAKSS Annual Conference in Harare.

I strongly encourage my peers and young Africans to apply for the ReSAKSS Data Challenge because, just like in school or in any other field, this challenge will assess their creativity. Furthermore, this is another opportunity for young creative Africans to gain exposure for their talents while also earning money to fund their ambitions.



**Okecha Willy, Uganda**  
2<sup>nd</sup> Prize Winner

**@Project:** “Reducing Poverty Headcount Ratio in Uganda and Africa”

I am a Kampala (Uganda) native who has been practicing art since the age of seven with the Okecha Brothers, a group of four brothers. I studied computer science at Ndejje University in Kampala after dabbling in technology. While finishing my undergraduate degree in 2019, I rediscovered my love for visual arts. I began by using technology to create digital illustrations of art, then moved on to teaching painting to street kids in Kampala’s outskirts and have now transitioned into storytelling with the camera. My day-to-day work revolves around using technology and the environment to tell African stories, while my visual art reflects my passion for nature and science.

## Motivation

As a visual artist and filmmaker, I’ve always been inspired by creative projects, research, and the ability to connect my efforts and affect positive change in the people around me. One of the things I liked about the challenge was the Visual Arts category; it piqued my interest and gave me the opportunity to use my artistic talent to show the world how one of Africa’s problems, “poverty,” can be reduced. One of the reasons I was so motivated to apply for the ReSAKSS Data Challenge was because of this.

Reducing Poverty Head Count Ratio in Uganda and Africa.

A very large percentage of the African population still lives below the poverty line. Corruption, inequality, unemployment, natural disasters, conflicts, and political instability are some of the major causes.

These alarming numbers are a wakeup call to raise awareness, act, and make an impact to change the livelihoods of Africa’s population. And this can be realized through effective use and involvement of our young population in skilled and non-skilled activities, utilizing Africa’s rich natural resources and fertile soil, proper planning, and service delivery, and financing our lucrative entities. With this put into action, Africa’s development goals can be reached.

## Lessons

The challenge has helped me learn the purpose of data and research and how we can use them to raise awareness about some of Africa’s challenges. The ReSAKSS Data Challenge has provided a platform

for analyzing and addressing Africa's problems through the use of data.



**Philip Lugoolobi, Uganda**  
3<sup>rd</sup> Prize Winner

**@Project:** "Climate Smart Agriculture"

I recently graduated with a Bachelor of Medicine and a Bachelor of Surgery from Makerere University. Currently, I am an intern doctor at Mulago National Referral Hospital. I am highly interested in and always engage in technological innovations and bioinformatics. Additionally, I design graphics and make videos from time to time.

### Motivation

My strong interest in tech innovation and the advertisement for the ReSAKSS Data Challenge via social media motivated me to dive in. The call had a visual arts category where I could apply my videomaking skills embedded with the tech innovation.

The project advocated for the development of a weather guide app that uses ReSAKSS downloadable precipitation CSV data files to help farmers in various regions of Africa predict future rainfall patterns and thus plan for their next season.

### Lessons

I discovered that ReSAKSS has vast amounts of data and tools that hold the key to evidence-based decision-making and development in Africa. The challenge can help individuals accomplish their objectives such as mine, and that is to create a weather guide app. Additionally, the factually evident data and information from ReSAKSS is worth exploring for Africa's vital development.

## IT Products & Services or Predictive Modeling



**Najiib Kateregga, Uganda**  
1<sup>st</sup> Prize Winner

**@Project:** "Investment Eye Africa"

I am a dependable and goal-oriented IT enthusiast with web and app development experience. I also dabble in forex trading.

### Motivation

I've always wanted to create an app that advises investors on whether their investment is viable or not. I came across the ReSAKSS Data Challenge on LinkedIn and did additional research on the organization's website. I noticed that Re-



SAKSS had a broad set of data and reasoned that I could use it in an app to help guide agricultural investments in Africa. I proposed a project to create an application that would analyze ReSAKSS data and make investment recommendations to its users in various African locations. This app (Investment Eye Africa) will help bridge the knowledge gap about agricultural investment opportunities.

### Lessons

I learned how to use ReSAKSS data tools, such as eAtlas and AAgWa, to obtain evidence-based data and information. ReSAKSS tools contain a wealth of data and information that can help guide Africa's development.

## High School Project

For this High School Projects category, participants are asked to use their imagination to create engaging projects. High school students are invited to showcase their creativity and analytical skills using data and other resources on the [@ReSAKSS](#), [@eAtlas](#), and [@AAgWa](#) websites to develop a project that addresses a development challenge faced by Africa.

### Motivation

I was scrolling through my Twitter news feed and saw an advertisement for the ReSAKSS Data Challenge. In general, I adore children, and it is always a pleasure to watch them develop in a safe environment. Many innocent children, however, are still at risk of malnutrition, which includes stunted growth and being underweight. Currently, nutritious porridges are mostly found in urban areas, making them out of reach for many rural families. As a result, I felt obligated to create a low-cost, nutrient-rich porridge product that was accessible to even the most remote families.



**Vanessa Nalugya, Uganda**  
2<sup>nd</sup> Prize Winner

**@Project:** "Reducing Child Malnutrition in Africa"

I entered the competition as a senior six student at Mumsa High School in Mityana, Uganda. Currently, I work for Mityana District Local Government, assisting in the administration of its daily operations.

Visiting the ReSAKSS Data Challenge website for more information and seeing previous winners convinced me that ReSAKSS could assist me in scaling up such an entrepreneurial venture, which motivated me to apply.

### Lessons

My project was about starting a business that makes highly nutritious porridge that is affordable and accessible to even the most remote families. In terms of accessibility, I'm thinking about partnering with both rural and urban

health centers to sell this porridge product to undernourished children and pregnant women. This will aid in proper early childhood growth and, as a result, future human capital accumulation. Furthermore, I am convinced that this initiative will aid in reducing child malnutrition in Africa, beginning in my community.

I discovered that the ReSAKSS platform has a wealth of data that can be used as evidence in advocating for African development projects. I have already touched two birds with one stone: 1) using their data to help contribute to Africa's development; and 2) using the data challenge award to scale up my entrepreneurial venture.



**Livingstone Ssekimpi, Uganda**  
3<sup>rd</sup> Prize Winner

**Project:** "Engulfing Poverty and Food Insecurity through Urban Farming"

I recently graduated from Stafford High School in Kiteezi. I do graphic design and video editing.

## Motivation

My friend, who was one of the 2019 ReSAKSS Data Challenge winners, encouraged me to participate in this year's challenge. Furthermore, I am a visual arts enthusiast, and such a category was readily available in the challenge for me to participate in and put my skills to use in an innovative manner.

The visual arts project advocated for an efficient structure (suitable for urban farming) that allows for short root crop cultivation as well as poultry or rabbit rearing on a small square area. This was done with the goal to engage youth in agriculture and thus contribute to food security all while earning money for themselves.

## Lessons

I've learned how to use eAtlas, a ReSAKSS data tool. I was captivated by the tool, the data it contained, and the visualization. The data and tools provided by ReSAKSS have revealed evidence-based facts that can be used to guide any development project.



# ReSAKSS

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