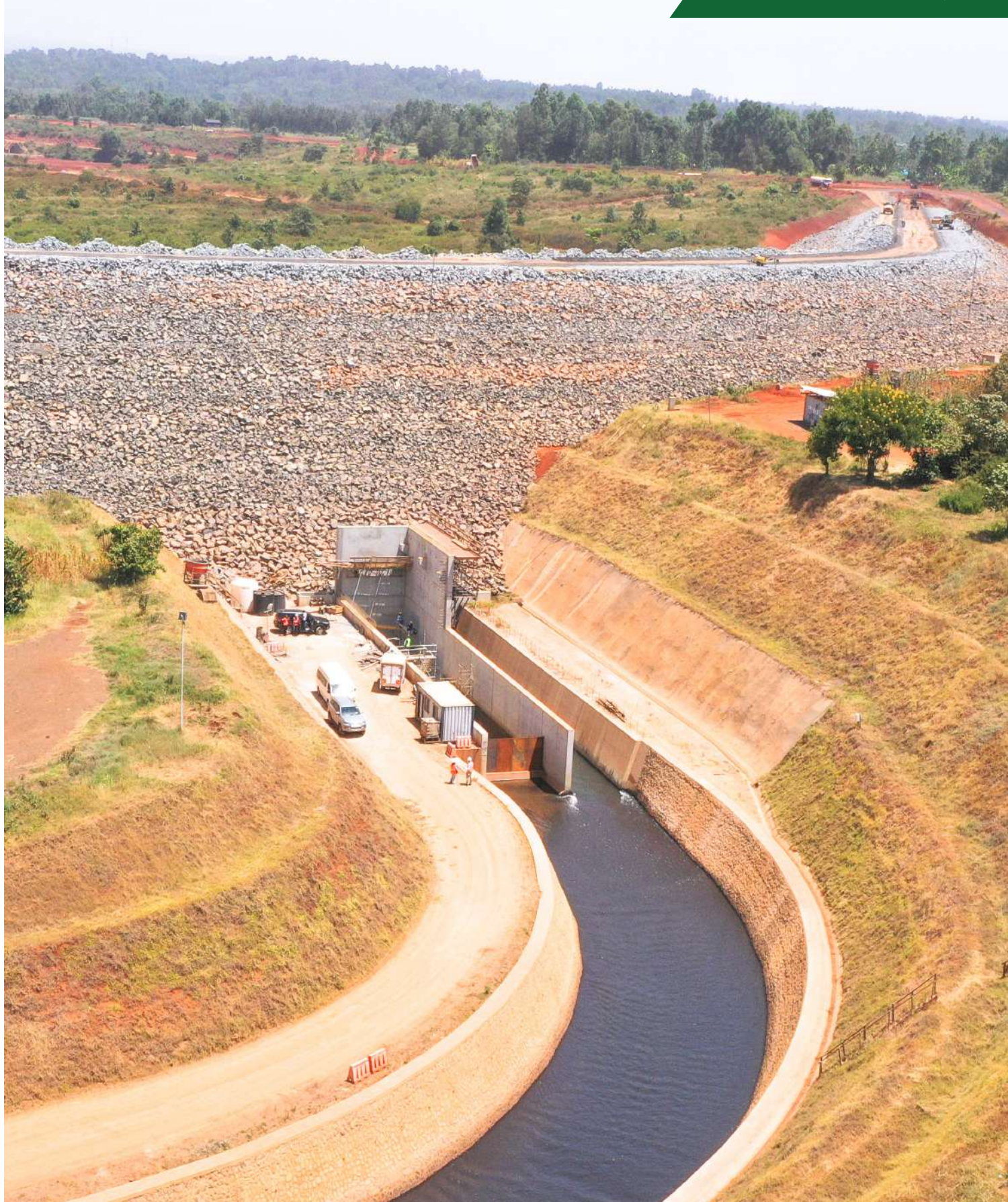




UNYUNYIZI NEWS

Water to every irrigable Acre

Chief Executive Officer
Mr.Gitonga Mugambi,EBS

Chief Editor
Mr.Daniel M. Nzonzo

Editor
Ms.Rhoda Mbuvi

Writers
Ms.Florence Ndai
Ms.Rhoda Mbuvi
Ms.Brendah Rajwayi
Mr.George Maina
Mr.Johnbosco Obonyo
Ms.Lorna Makena

Photographers
Ms.Brendah Rajwayi
Mr.George Maina
Mr.Johbosco Obonyo
Ms.Lorna Makena

Graphic Designer
Mr.George Maina

The Editor welcomes feedback from readers. To download a copy visit our website; www.irrigation.go.ke/Newsletter/

CONTENT



Authority builds firm networks at international conferences

pg.4



How Usuni Irrigation Scheme will make Lower Eastern food-secure

pg.10



How the Authority designs projects to cater for today, tomorrow

pg.13

One on One with the Scheme Manager Mwea Irrigation Scheme, Mr. Innocent Ariemba



pg.15

Word from the Editor



Mr. Daniel M. Nzonzo
Head of Corporate Communication

This publication has, for three years now, been a vehicle of delivering timely and thoughtful information and opinions on irrigation. Its production is an exercise worth the effort, partly with the gains so far recorded.

I thank our authors and everyone who has contributed to the success. For this reason, we gladly welcome comments and critique from readers. Letters to the editor are highly encouraged and we will continue publishing them to enrich debate on irrigation and growth of the Kenyan economy. Together with your support, we see bright prospects. Ultimately, we will continue to inspire, improve lives and, consequently, our communities.

In this issue, we profile persons who have turned to farming as a source of income as a result of irrigation opportunities provided by the National Irrigation Authority. We are still decoding irrigation terminologies, and this time we are looking at 'Dam'. On National Cohesion and Values, we discuss Sustainable Development. In our interview segment, we speak with Mr Innocent Ariemba, the Manager of Mwea Irrigation Scheme.

Last but not least, you are welcome to solve our crossword puzzle which I believe you will find entertaining and enriching.

Enjoy.

Word from the CEO

In Kenya, agriculture is the backbone of the economy. It's a sector that establishes the industrialisation framework through the supply of raw materials, for example cotton for cloth manufacturing from Bura Irrigation Scheme. The National Irrigation Authority is increasing the acreage under irrigation to ensure the whole country is food-secure.

In the third quarter of the Financial Year 2021/2022, the Authority launched four irrigation projects, namely Gwa Kiongo Dam in Nyandarua County, Githembe, Boboti Kiamande and Nyanjigi in Murang'a County with the aim of promoting food security. Upon completion, the projects will benefit 2,300 households by putting 1,100 acres under irrigation. The projects are expected to inject more than half a million into the economy of Kenya through irrigated farming of high value commercial crops.



Mr. Gitonga Mugambi, EBS
CEO National Irrigation Authority

In the quarter, I hosted the Authority's Board of Directors and Vision 2030 Secretariat at Thiba Dam to acquaint themselves with its key components. I also hosted Ministry of Water, Sanitation and Irrigation Cabinet Secretary Mr James W. Macharia, E.G.H and Principal Secretary Dr. Eng. Joseph K. Njoroge, CBS at Thiba Dam as they inspected and confirmed its completion for commissioning by H.E the President of the Republic of Kenya and the Commander-in-Chief of the Kenya Defence Forces,

Hon Uhuru Kenyatta, C.G.H. They were pleased and confirmed the construction of the dam is complete and ready for commissioning.

The Authority took part in three forums between January and March this year to attract more investors and new donor partnerships in irrigation development. They included the Dubai Expo 2020, in which the Authority participated in the Kenya week celebration from High-level business forum, World Water Forum and Blue Economy Forum, where the Authority showcased the irrigation investment and business opportunities in Kenya.

The completion of Thiba Dam is a game-changer in the irrigation sector. The Authority will continue implementing more irrigation projects geared towards increasing acreage under irrigation.

Authority builds firm networks at international conferences



Photo: courtesy

National Irrigation Authority Director Ms. Fatma El-Maawy addressing the participants during Dubai Expo 2020 which took place between February 14th to 18th, 2022 in Dubai



By Ms. Florence Ndai
Senior Economist/Resource
Mobilization Officer at NIA

3

Number of forums the Authority participated in the period of January to March, 2022 in an effort to mobilize resources for irrigation development.

January-March this year was a rich harvest quarter for the National Irrigation Authority. The NIA participated in three forums aimed at attracting investors and new donor partnerships in irrigation development. They were the Dubai Expo 2020, where the Authority participated in the Kenya Week celebration from February 14 to 18, high-level business forum, and Blue Economy where the Authority showcased the irrigation investment

and business opportunities in Kenya. The World Water Forum 2022 in Dakar from March 22 to 26 was a knowledge sharing platform on global water challenges and solutions.

In the water forum themed 'Water Security for Peace and Development', the Authority participated in various panel discussions, including innovative financing,

water productivity; climate change resilience and the water-food-energy nexus.

Among other gains, the Authority established contacts with the African Development Bank (AfDB) on blended financing for irrigation, private sector engagement models and multi-sectoral projects approach. It engaged the United States Agency for International Development (USAID) and Food and Agriculture Organisation (FAO) of the United Nations on irrigation data application and knowledge sharing, capacity building on uptake of technologies, livelihood programmes and operation and maintenance of infrastructure for impactful interventions; and, water-food energy approach in project conceptualisation.

During the Dubai Expo, the Authority made pitches for investment in irrigation for uptake by the Middle East Region, Europe and other global investors in irrigation infrastructure, technology; irrigation water management and innovations; agro-processing, contract farming and marketing.

The Authority successfully established a network with various countries (Kuwait, UAE, Saudi Arabia, Iran, Oman, Qatar, Norway, France, Denmark, Sweden, Poland, Belgium, Germany, Switzerland and Netherlands) and information on funding organisations (Abu Dhabi Fund, Saudi Fund) for potential partnerships between Kenya and various countries in irrigation development and management.

The NIA held follow-up and technical meetings with country representatives of Norway, Iran, Kuwait, and the Netherlands during the third quarter and mutual areas of interest established.

Consultations with Norway and its development agency in Nairobi (Innovation Norway) introduced the NIA to the Norwegian Institute of Bio economy Research for collaboration and research. Both parties agreed to forge partnership to develop joint research programmes especially in water management, water use, agronomy/crop production, pest and disease management, surveillance and modelling, climate smart agriculture, carbon monitoring and innovative technology transfer and extension approaches. The Authority also participated in the Norwegian delegation agri-tech roundtable meeting and ongoing meeting for possible collaboration in deep groundwater exploration and renewable energy solution programmes.

Further consultations with the Embassy of the Netherlands assessed the upscaling of the Dutch food security irrigation interventions with the Laikipia Isiolo Samburu Transforming the Environment through Nexus (LISTEN) programme team. Linkage with KIFFWA Foundation for investment in Kenya's irrigation, possible capacity building in water use, geo-data application, and follow-up on water productivity (WaPro) technology by FAO, partnership on irrigation-oriented research with the Think and Do Tank team, and partnership on climate change resilience intervention in ASALs for food security and conflict management (peace dams) have been captured.

Engagements with the Islamic Republic of Iran that are well versed in irrigation in the desert, groundwater exploration, desalination and solar pump systems were successful. Notably, Iran is keen on agro-processing for

cotton and palm oil value chain investment by the Iranian private sector

Already there are ongoing consultations with Tana River County on cotton ginnery and the Authority is following up on incorporation of Hola and Bura Irrigation schemes in the joint programme.

The Sultanate of Oman representatives expressed interest in livestock sector-oriented projects, building on the Kenya-Oman memorandum of understanding (MoU) on livestock and welcomed proposals for irrigated pastures and Public Private Partnerships (PPP) in livestock value chain development.

Consultations with Kuwait through the Embassy looked at the implementation progress of the Bura Irrigation Development Project (Korakora gravity canal) and identified opportunities for other areas of collaboration and partnership with Kuwait Fund. Food security tops Kuwait's interests among other areas of cooperation, including Health, Education, Agro-Forestry and Climate Change financing. The Authority intends to advance proposals for projects in the arid and semi-arid lands (ASALs) for consideration and participation in meetings for the inaugural Kenya-Kuwait joint commission for cooperation.

At the Kenya-Saudi Arabia joint commission for cooperation, the NIA engaged with representatives of the Ministry of Environment, Water and Agriculture. The NIA is finalising the proposed areas of collaboration with the Kingdom of Saudi Arabia towards development of an MoU on irrigation and partnership with the Saudi Fund for Development.

The Authority has also held talks with the France Agency for Development (AFD) on food security and climate resilience interventions.

Through these engagements, the Authority seeks to implement what has been agreed, follow up to develop joint programmes and officially submit areas of collaboration and project proposals to the Ministry of Foreign Affairs and National Treasury for action, among them enhanced funding for various projects.

History of Mwea Irrigation Scheme

By Rhoda Mbuvi & George Maina

acres in 1960.

Mwea Irrigation Scheme (MIS) is one of the seven public schemes under the management of the National Irrigation Authority (NIA). It is situated in Mwea East and West Sub-counties of Kirinyaga County, about 100Km North East of Nairobi. The scheme was started as a detention camp for Mau Mau detainees during the height of the state of emergency.

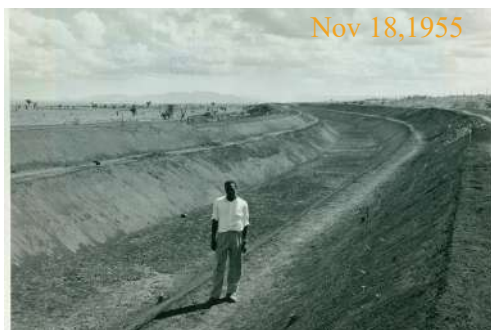
The scheme is developed on gazetted land where the farmers were settled as tenants each with a holding of at least 4 acres. This acreage was based on minimum economic acreage sufficient for the full time upkeep of the farmers. Due to the increase in population, most of the holdings have been subdivided among family members and in other cases transferred to new farmers.

In order to establish whether rice crop could be cultivated, the colonial government carried out the first rice trial (research) in 1953. This was mainly because the whole scheme area was used as a common grazing ground and hence there was need to set trials for rice crop production in order to find its viability. The trials yielded positive results and in 1954 actual rice growing started in Tebere 2 (T2) picking momentum in 1956. The initial acreage in T2 was 65 acres but grew to 2478

Currently the scheme has 25, 000 acres under rice production which are expected to increase to 35,000 acres with the completion of thiba dam. The dam which has a capacity of 15.6 million cubic meters aims to stabilize water supply in the scheme which will enable farmers practice double cropping to increase rice production from 114,000 to 200,000 metric tonnes thus increasing the countries GDP by Kes 8 billion.



Workmen digging small furrows which was to carry water to the test plots in the pilot scheme.



The start of the main canal in Mwea Tebere Irrigation Scheme.



Experts receiving a summary of the works done from a young agricultural officer.



A complete secondary branch canal



Levelling of rice fields in by detainees



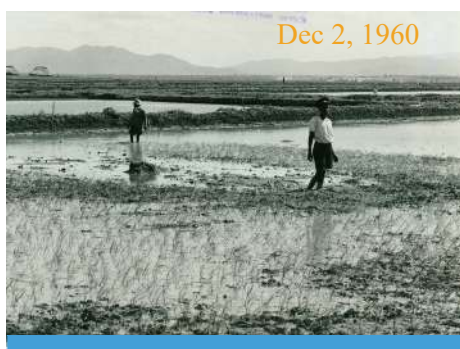
The intake works at Nyamindi River which was to supply water to the Mwea Tebere Irrigation Scheme



Flooded intake works.



Detainees working in the seedling nursery



Planting rice seedlings



Dec 2, 1960

Ng'ang'a Muguti stands at his four acres of rice which is almost ready for harvesting



March 20, 1961

A general View of the scheme and the main canal



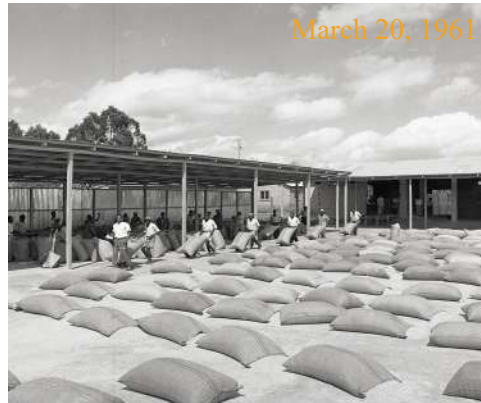
March 20, 1961

Detainees Harvesting the rice



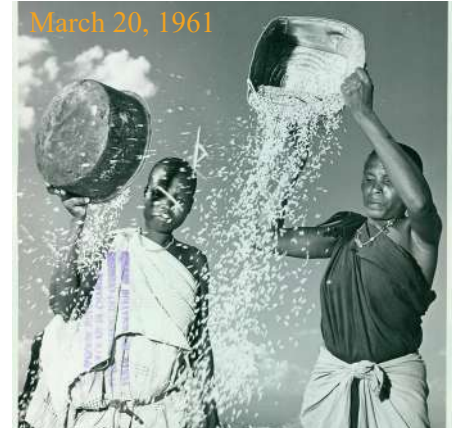
March 20, 1961

Laboures putting rice in bags



March 20, 1961

Rice drying M



March 20, 1961

Rice winnowing

CURRENT



Nyamindi river intake



Lined canal



Rice fields



Rice harvesting with a combine harvester

Pictorial



1. Water, Sanitation and Irrigation Cabinet Secretary James W. Macharia E.G.H (in red cap), Irrigation Secretary Aboud Moeva (left) Water, Sanitation and Irrigation Principal Secretary Dr. Eng. Joseph K. Njoroge, CBS, senior officials from National Irrigation Authority (NIA) and officials from County Government of Kirinyaga during an inspection tour of Thiba Dam on March 31, 2022.
2. Water, Sanitation and Irrigation Cabinet Secretary James W. Macharia E.G.H (red cap), Irrigation Secretary Aboud Moeva (left), senior officials from National Irrigation Authority and officials from County Government of Kirinyaga on a tour of the Thiba Dam on March 31, 2022
3. Vision 2030 Secretariat led by one of the directors Ismail Maaruf (third right) and National Irrigation Authority's Eng. Stephen Mutinda (centre) during an inspection tour of Thiba Dam on February 14, 2022.
4. National Irrigation Authority CEO Mr. Gitonga Mugambi, EBS appreciates a courtesy call paid by State House Spokesperson Ms Kanze Dena Mararo on January 25, 2022 at the NIA headquarters in Nairobi.

Staff news.



Congratulations
Irene A. Oburu, on
the delivery of your
baby boy! The
biggest gifts of life
come in the
smallest packages.

Condolence message

To all those who lost their loved ones, it is our prayer that
God will continue comforting you. May the light of His
presence be a continual source of consolation.

How Usueni Irrigation Scheme will make Lower Eastern food-secure



By **George Maina**

Wikithuki/Usueni Irrigation Scheme sits in Usueni location of Mwingi North in Kitui County on the banks of River Tana. The National Irrigation Authority started the scheme in 2011 to enhance food security, boost income generation among farmers and create employment. The scheme has an irrigation potential of 10,000 acres.

The scheme was divided into phases of 500 acres each to guide its implementation. Implementation of the first 500 acres is complete and is under irrigation with maize as the main crop while the second 500 acres in Phase Two is ongoing. Phase One covers construction of intake works, installation of pumps, establishment of water conveyance pipelines, construction of canals, installation of infield irrigation systems, construction of offices and building an electric fence.

According to Chris Opondo, the Officer In-Charge of Usueni Irrigation Scheme, farmers in the first phase are now at the third season of maize production and other crops such as green grams,



Farmers harvesting maize in Usueni Irrigation Scheme, Kitui County



Maize crop in Usueni Irrigation Scheme, Kitui County

“
Chris Opondo

The first phase of 500 acres under production now at the third season benefiting 400 households directly and phase two of 500 acres to benefit another 400 households directly once complete

watermelon and fruit trees such as mangoes and avocados.

The phase is benefiting 400 households directly. Farmers in the last season harvested 4,000 metric tonnes of grains. The estimate production of maize was 7,500 ninety-kilogramme bags with each acre producing 15 such bags that are sold at Sh3,500 each. The revenue from an acre hits Sh105,000 annually. Upon hitting the full potential of 10,000 acres, the project will generate about Sh1 billion yearly.

Mr Opondo estimates the second phase will benefit another 400 households directly. A 10,000-acre maximum potential, it is expected to benefit 80,000 households directly,

helping to alleviate hunger that perennially gives Kitui County sleepless nights.

People will no longer rely on relief food. The project will increase food security in Kitui and Kenya at large. It will also improve nutrition, increase incomes, and enhance standards of living.

Farmers in the scheme, the Officer In-Charge says, have faced challenges of high cost of pumping water to the farms, lack of extension services and access to farm inputs. To reduce the burden for farmers, the Authority is bringing on board the County Government of Kitui and Usueni Corporative Society so that farmers can benefit from extension services, tame soil erosion and enjoy good farming practices, get inputs subsidy, and prepare land at affordable rates.

Also in the pipeline is a deal with investors through organisations such as International Crop Research Institute for the Semi-Arid Tropics (ICRISAT) and Kenya Agricultural and Livestock Research Organisation.

Irrigation demystified: Dam



By Eng. Andrew K.
Mutua (Thiba Dam)

What is a dam?

A dam is a structure or barrier constructed across a river or a stream to store water on its upstream side, forming a reservoir or a lake. The reservoir or lake created by dams not only suppress floods but provide water for various needs, including irrigation, water supply, hydropower generation, recreation and navigation. The side where water is stored is called upstream side while the other is the downstream. When the

structure is 15 metres or more in height, it is referred to as a large dam, while small ones are less than 15 metres in height.

Types of Dams

Dams are majorly classified by the materials they are made of as described below::

Fill or Embankment Dams

The construction materials are basically soil (sand, loam, clay, and so on) and rocks, with a trapezoidal or nearly trapezoidal cross section. The dam is built by compacting successive layers of earth/rock using the most impervious materials to form a core and placing more permeable substances on the upstream and downstream sides. Fill dams are further categorised as shown below depending on the materials used for construction:

Category	Type	Description
Earth fill Dam	Homogenous	The embankment is constructed using homogenous earth material and is usually economical and rapidly constructed but usually low strength
	Zoned Type	The embankment is zoned using different earth materials that are available at the site
Rock fill Dam	Earth Core	Earth material is used for the centre of the embankment, sandy filter materials and rock fill materials are used for the upstream and downstream sides
	Concrete Faced	Embankment consisting of only rock materials is covered with concrete face slab on the upstream slope
	Asphalt Faced	The upstream slope of the rock fill dam is covered with an asphaltic membrane

Concrete Dams

The construction materials are mainly concrete made by the conventional method of placing concrete in blocks or by the recent developed methods where slumpless concrete is compacted with vibratory compactor, and covered with conventional concrete. Concrete dams are further categorised with reference to the behaviour of the structure in resisting the forces imposed on it and the main categories are summarised below:

Type	Description
Gravity Dam	These are solid concrete structures that maintain their stability against design loads from and the mass/strength of the concrete and its geometric shape
Buttress dam	This is usually an upstream structure or wall constructed with a sloping concrete slab supported on a number of buttresses on the downstream side.
Arch Dam	An arch dam is a curved concrete dam which has convex portion facing upstream. It resists major portion of water pressure by arch action which transmits most of horizontal water thrust behind them to the abutments by the arch action.

Other structures necessary for dams?

River Diversion –This structure is constructed to enable satisfactory handling of the stream flow during construction and is vital to the success of the work. The different types of diversion systems involve the construction of tunnels, concrete culverts, steel pipeline and open channels.

Spillway – This structure is provided to dispose of surplus floodwater safely which cannot be stored in the reservoir. Spillways are invariably provided in all the dams and often called safety valve for the dam. It is necessary to provide a spillway of sufficient capacity so as to avoid water from overtopping the dam. Overtopping may lead to failure of dam resulting in serious damage to the property.

Outlet Works –This structure is necessary to make provision for the discharge of water as and when it is required for irrigation, water supply, hydropower etc. It is normally constructed by providing a pipe passing under or through the dam, with discharge controlled by valves.

Studies necessary for dams?

Hydrological studies to evaluate the long and short

term stream flows, rainfall and storage reservoir characteristics of the proposed dam and its catchment;

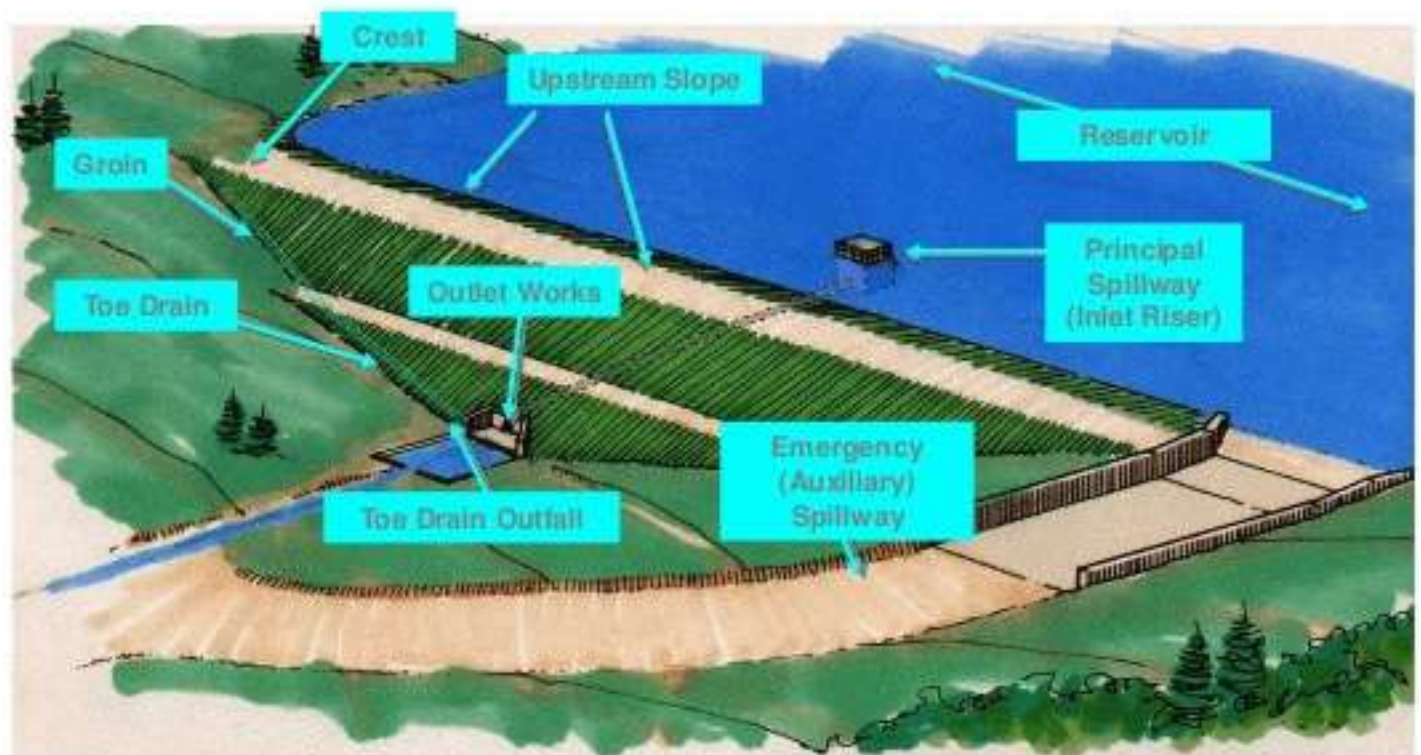
Geological studies to determine the effect the location and construction of the foundations, abutments, dam itself, and spillways. Investigations are carried out to determine the degree of permeability of the rock formation on which the dam is to be placed which may affect the hydrostatic uplift pressures as well as to determine the degree of grouting necessary to control any possible foundations seepages;

Geotechnical studies to evaluate the availability of earth and rock materials and their suitability for dam construction or as concrete aggregates;

Environmental studies to evaluate the short and long term effects of the proposed reservoir and the construction operations on the region aesthetics, plant and animal, ecology, fish preservation and public amenity of the reservoir and downstream reaches; and

Studies to identify of ideal sites for the auxiliary structures for the dam such as the diversion system, spillway and outlet works.

Parts of an Embankment Dam



Typical illustration with mention of Toe Drain

How the Authority designs projects to cater for today, tomorrow



Construction of Bura Irrigation Development Project in Tana River County



By **Lorna Makena**

Sustainable development is the pattern of resource use that meets the needs of the present without compromising the ability of future generations to meet their own needs as defined in the National Values and Principles of Governance booklet.

This national value is realised through implementation of organising principles designed to realise development goals without depleting natural resources. The desired result is a society where living conditions and resources continuously meet human needs without jeopardising the integrity and stability of the natural systems.

The National Irrigation Authority is mandated to provide and co-ordinate sustainable development and management of irrigation services in Kenya. This is achieved through its Strategic Plan, which is

anchored in Sustainable Irrigation Development, Sustainable Irrigation Water Harvesting and Storage, Sustainable Irrigation Management and Irrigation Oriented Research.

Some of the projects the Authority is implementing to achieve sustainability are Bura Irrigation Development project in Tana River County, Mwea Irrigation Development Project (Thiba Dam) in Kirinyaga County, Turkana Irrigation Development Programme, public irrigation schemes, Household Irrigation Water Storage Project and National Expanded Irrigation

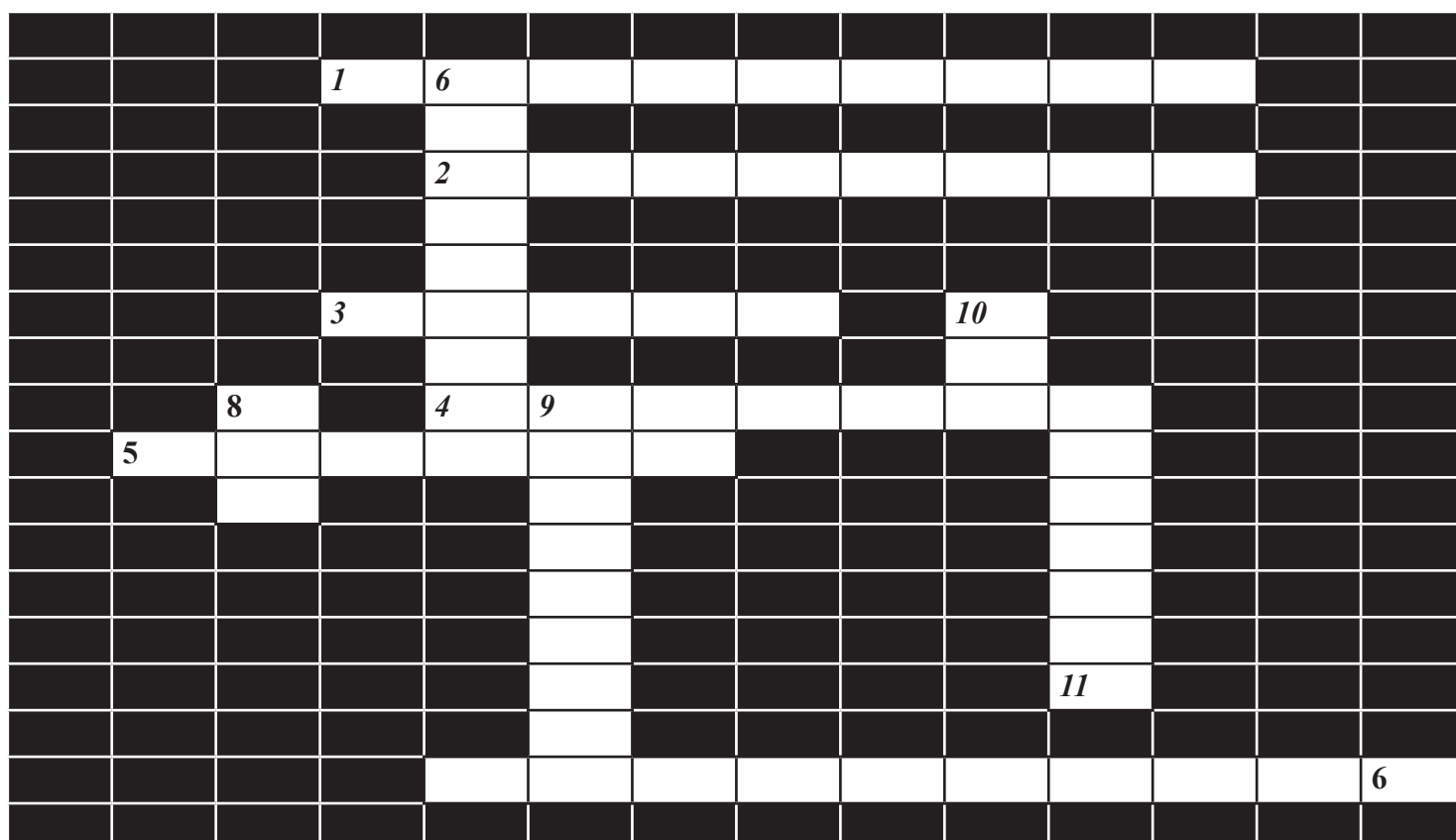
Programme. The Authority is doing this by embracing gravity fed irrigation system, piping water and lining of canals among others.

This is in an effort to increase productivity and contribute to the Big 4 Agenda on Food Security and Nutrition through manufacturing, affordable healthcare and proper housing. As an individual, group or company, what are you doing to ensure sustainable development in Kenya?



Thiba dam in Kirinyaga County

Cross word puzzle



ACROSS

1. A region having little rainfall
2. Weather conditions prevailing in an area over a long period
3. Colorless and odorless liquid
4. Financial state
5. A structure that retains water above and below ground level
6. Per unit of population (reads from the right)

UP/DOWN

7. Dig out
8. A structure developed through excavation to retain water
9. Build
10. Water reservoir
11. Days of old



**Do you have any
complaints about our
services? Worry not
because we got you!**

**Send them to complaints@irrigation.go.ke
We will act.**



www.irrigation.go.ke





Mr.
Innocent
Ariemba
Ateka

Ariemba: Engineer who rises early to transform irrigation



By Johnbosco Obonyo

Mr Innocent Ariemba Ateka is the Manager at Mwea Irrigation Scheme. He has a Bachelor of

Science in Soil Water and Environmental Engineering, a Diploma in Agricultural Engineering and is pursuing a Master's in Environmental Engineering, all from Jomo Kenyatta University of Agriculture and Technology (JKUAT). Mr. Ariemba has more than 20 years of experience in irrigation engineering.

How would you describe yourself?

I am a team-player who respect authority and driven by the desire to make change and a positive impact in the lives of people.

How was it growing up?

I grew up in a settlement scheme, Ekerubo sub-location, Kahawa village, Nyamira County in a family

of five. I am the first-born. We stayed in Kahawa until I was in Form Two, then moved to Mukomini because of cattle rustling.

I came from a relatively well-off family. My father was a high school teacher and my mother a primary school teacher. They were also farmers and had allocated every one of us farm duties.

A cow was assigned to each of us, hence every morning we would wake up and milk them before leaving for school. In the evening, we would do some weeding and other farm duties such as plucking tea, which I really disliked.

Best memories growing up?

Playing football in the rain. I also loved sneaking to go swimming. This would sometimes land us in trouble, especially when we came back home late and we'd get a thorough whipping.

Tell us about your schooling...

I partially schooled at Kahawa Primary School from Class One to Five then transferred to Kiabonyoru Primary School where I sat for my KCPE. My performance earned me a space at St. Paul's Gekano Boys High School where I equally did well enough to qualify for a spot in JKUAT to undertake a Diploma in Agricultural Engineering. I was finally going to set foot in the city.

How was your first journey to Nairobi?

It was very exciting (smiling)! I did not sleep on the night to departure. Growing up in the village, I had never boarded a bus. We used matatus where people sat facing one another.

The streets of Nairobi were fascinating. I was amazed by the sceneries, the tall buildings and at some instances I would stop, stare and scan the environment. It was all new. "Young man, keep walking," my dad would tell me. He had accompanied me for registration.

“

Mr. Innocent Ariemba

Strive to make some impact by transforming the country. Make it an individual responsibility. Let the change begin with you.

How was your experience in JKUAT?

JKUAT was like a village. (He pauses to reminisce) I gradually adapted and could stay the entire semester without setting foot in Nairobi City Centre. My pocket money was limiting; I had to manage it wisely. During my free time I would take evening walks with friends and occasionally played basketball.

How has your experience growing up moulded you into the person you are today?

Growing up, I wanted to be an aeronautical engineer, but as nature has it, I found myself in agricultural engineering. As time went by, I have come to love it and I think it's because I was brought up in a family that loved farming. My parents are very strict. Hard work, honesty and discipline were some of the virtues they instilled in us. These values have built the person I am today. I am passing it down to the next generation.

How did you join the job market?

I secured my first employment in 2000 at a flower farm under James Finlay Company in Kericho, worked there for about

a year then moved to a sister company in tea processing as a technical staff. I worked there for another one year before moving to Delamere Estates in Naivasha where I was in charge of irrigation. I was there from late 2002 to 2005.

In 2005 August, I joined the National Irrigation Authority (NIA) as a Water Management Technician and was posted to Perkerra Irrigation Scheme. Come December that year, I was transferred to Bunyala Irrigation Scheme as the Officer in Charge. I worked there until 2010. I then took a study leave for four years to study a Bachelor of Science in Soil Water and Environmental Engineering. After completion, I came back and was stationed at the Head Office in the beginning of 2014. I worked at the Head Office for 5 months after which I was posted to Mwea as the Scheme Manager in July 2014.

For the better part of my career, I have been in the NIA. This is as a result of the constant growth I have gotten through the support of my colleagues. The staff are very committed towards transforming this country. Let us keep the spirit.

Describe your typical day.

On Mondays, I wake up at around 4:00am, study for an hour, get ready for work and leave the house at around 5.30am to report to work at the head office. Later in the day, I travel to Mwea.

From Tuesday to Friday, I wake up at around 3:00am, take around 30 minutes going through my daily programme, then start my work (design and technical issues) in my home office



Farmers in Mwea Irrigation Scheme rice farms

to around 7:00am. I then take a shower and walk to the office. On Tuesdays and Thursdays, I dedicate time to farmers and handle their issues. I spend Wednesdays and Fridays tending to scheme activities. In the evening, I get to socialise with friends and retire to bed at around 8:00pm. During farmers' days, we have the arbitration committees chaired by the Deputy County Commissioners.

What is your biggest accomplishment?

I have been able to achieve quite a number of milestones; I pioneered irrigation expansion in the schemes. When I was

posted to Bunyala Irrigation Scheme, the area under irrigation was around 530 acres and when leaving in 2010, it was at 1,700 acres. This was achieved despite having a limited budget. I worked with Eng. Vincent Kabuti, OGW, the Deputy General Manager (Planning and Strategy) at the Authority, in the expansion of the schemes when he was in Western Kenya schemes.

I have also done irrigation expansion in Mwea Irrigation Scheme from 20,000 acres to around 28,400 acres and introduced a second cropping season. This seemed unachievable because of the scheme being a water-deficit scheme.

I have also reengineered the Mwea Guest House to become a viable enterprise. I have been able to uplift the image of the National Irrigation Authority in Mwea by upgrading the infrastructure and facilities, creating harmony between the key stakeholders especially the Irrigation Water Users Association (IWUAs) and Mwea Rice Growers Multipurpose Co-operative Society (MRGM). I have been able to cultivate a

sometimes tedious.

Most interesting thing encountered in the line of work?

That has to be the kind of infrastructure I saw in Japan in 2016 during a work trip. The way they do their dams for water harvesting to satisfy their water requirements, the way their roads are done...they are very organised.

Secondly, the overwhelming support from the CEO Mr Gitonga Mugambi, EBS, and his dedication to push staff to the best version of themselves.

Advise to the young professionals entering the job market?

At work, you have no choice but to be outstanding. Stay dedicated to your work and always seek fresh knowledge to sharpen your skills and, most importantly, respect authority. Your seniors play a huge role in your growth. No effort goes unrewarded.

How do you manage your personal and professional life?

I believe I have not been able to balance that aspect very well. I am more inclined to work, and personal and family projects. I have very limited time with my family given that I am away from them five days a week and sometimes travel to attend to personal and family projects during the weekends. I believe what I am doing is good for the family. I also try as much as I can to be with my family during the weekend. My wife has played a key role by filling the parenting gap whenever I am away. Just so you know, I'm happily married and a father of four boys.

Any remarks on retirement?

We should prepare and be ready that at one point we will exit. Time flies, so work every day like you are retiring tomorrow. To ensure you survive during the retirement period, you need to find a way of ensuring you are able to get at least a minimum of half of what you earn as an employee. Early retirement is better so that you start doing your things when you still have the energy.

Do you read?

I do. A lot. Professional and motivational material. I like the work of Robin Sharma, especially *The Monk Who Sold His Ferrari*. My best read is *Think and Grow Rich* by Napoleon Hill.

Do you believe in giving back to the society?

I believe that the hand that giveth is the hand that receiveth. Personally, I support needy students in Mwea. Currently, I am sponsoring a girl through her secondary education in Karoti Girls High School in Kirinyaga. She was not able to go to school in her first year because of lack of school fees. I took her up and requested the principal to allow her to go in the following year; she is doing very well. I also support needy cases in my village in a similar manner. I am supporting five students in their education.

Parting shot

Strive to make some impact by transforming the country. Make it an individual responsibility. Let the change begin with you.



Thiba dam in Kirinyaga County

motivated and dedicated team especially the IWUAS, MRGM and the staff to work in mutual respect unlike before. This has enabled us to achieve a lot together.

I have also successfully steered the Settlement Implementation Unit for the Mwea Irrigation Development Project, under my leadership, and operations have been running smoothly.

Additionally, I have designed and supervised the construction of Unyunyizi Annex (a new building in the Head office) successfully to its completion.

What does the completion of Thiba Dam mean for Mwea Irrigation Scheme?

Mwea is a water-deficit scheme. The completion of Thiba Dam will enable us to adequately supply water to the existing acreage as well as the 10,000-acre expansion underway and ensure double cropping effectively. It is a step in the right direction.

Any challenges encountered along the way?

Resources have always been limited but we have managed to fully use what we have been allocated, sometimes with very strict timelines. Political interference in the scheme is also



VISION

“Water to every irrigable acre”

MISSION

“Provide and Coordinate Sustainable Development and Management of Irrigation Services in Kenya.”

CONTACTS

Unyunyizi House, Lenana Road,
P.o Box30372-00100,
Nairobi, Kenya.

Mobile No: 0711 061 000, 0711 061 140

Click <https://www.irrigation.go.ke/newsletters/> to download a copy

 ceo@irrigation.go.ke, communication@irrigation.go.ke

 www.irrigation.go.ke

 National Irrigation Authority



@irrigation_Auth



National Irrigation Authority