



The World Bank

KENYA WATER SECURITY AND CLIMATE RESILIENCE PROJECT ADDITIONAL FINANCING (P181345)

Combined Project Information Documents / Integrated Safeguards Datasheet (PID/ISDS)

Appraisal Stage | Date Prepared/Updated: 09-Aug-2023 | Report No: PIDISDSA36522

**BASIC INFORMATION****A. Basic Project Data**

Country Kenya	Project ID P181345	Project Name KENYA WATER SECURITY AND CLIMATE RESILIENCE PROJECT ADDITIONAL FINANCING	Parent Project ID (if any) P117635
Parent Project Name Kenya Water Security and Climate Resilience Project	Region EASTERN AND SOUTHERN AFRICA	Estimated Appraisal Date 24-Jul-2023	Estimated Board Date 22-Sep-2023
Practice Area (Lead) Water	Financing Instrument Investment Project Financing	Borrower(s) Republic of Kenya	Implementing Agency Ministry of Water & Sanitation

Proposed Development Objective(s) Parent

The project development objectives of KWSCR-1 are to: (i) increase availability and productivity of irrigation water for project beneficiaries; and (ii) enhance the institutional framework and strengthen capacity for water security and climate resilience for the country.

Components

- C1: Water Resources Development
- C2: Effective Water Sector Institutions
- C3: Support for Project Implementation
- Project Preparation Advance
- Unallocated

PROJECT FINANCING DATA (US\$, Millions)**SUMMARY**

Total Project Cost	30.00
Total Financing	30.00
of which IBRD/IDA	30.00
Financing Gap	0.00

DETAILS

**World Bank Group Financing**

International Development Association (IDA)	30.00
IDA Credit	30.00

Environmental Assessment Category

A-Full Assessment

Decision

The review did authorize the team to appraise and negotiate

B. Introduction and Context

1. Kenya is the third largest economy in Sub-Saharan Africa and has ambitions to be an upper middle-income country by 2030, for which it needs to address its challenges in water security and climate resilience. Water security and climate resilience are critical issues for Kenya, given that its people and economy are highly vulnerable to climate change impacts. Over the past 50 years, changes in temperature and rainfall patterns have resulted in more frequent weather-related disasters such as floods, droughts and dry-spells, and landslides with a profound impact on Kenya's economy and people's well-being. Kenya's agriculture sector is primarily rainfed, which exposes a large part of Kenyan economy and society to exogenous climate risks. To build resilience against flood and drought and the resulting agricultural and food security risks – the National Irrigation Services Strategy (NISS, 2022) sets high ambitions for irrigation expansion nationally – from 248,000 ha of currently managed area (irrigation and drainage), up to at least 600,000 ha by 2030. These irrigation plans support high level government goals of economic, natural capital, and human capital development, and empowerment particularly to trigger private capital investment in irrigation.

2. The Lower Nzoia Irrigation Scheme Phase 1 (LNISP-1) is a flagship Government of Kenya (GoK) infrastructure investment in Western Kenya, between Busia and Siaya counties included in the Kenya Agricultural Sector Development Strategy (ASDS) and Kenya's Vision 2030. It is expected to contribute to achieving the country's goals in food security, economic growth and enhanced climate resilience for farmers. Since 2013, the Kenya government has been implementing the Water Security and Climate Resilience Program (KWSCR). LNISP-1 is one of the main investments under the program, supported by the World Bank through a series of project, which also has Mwache Dam in the Coastal Region as a flagship investment (under a separate project). The program addresses the urgent need to invest in priority infrastructure while at the same time aiding GoK to establish the requisite enabling institutional and legal foundation to improve the performance and sustainability of the water sector. To date, the KWSCR-1 has achieved its institutional and policy objectives, while the LNISP-1 investment has faced delays in implementation and is now advancing towards completion. LNISP-1 will constitute an important contribution to integrated expansion and intensification of irrigated agriculture in Kenya building the resilience of farmers in Busia and Siaya counties.

3. Gains of the already completed infrastructure for flood mitigation structures will help strengthen the resilience of communities living in Busia and Siaya counties towards climate shocks, especially floods. The Lower Nzoia Basin is one of the ten most flood prone areas in Kenya. Recent



flooding in some of the most heavily populated areas of the basin led to massive displacement of local communities, loss of life and property, disease outbreaks and an influx of land-based pollutants into the lake during the floods. In line with the GoK objective to strengthen resilience to climate change threats in the lower Nzoia Basin, the Kenya Water security and Climate Resilience Project financed the construction of 34km of northern and southern dykes downstream Busia and Siaya Counties resulting in protection of an estimated 66,700 people from floods. In addition, the project supported improvement of the Flood Early Warning Systems (FEWS) and communications and provision of technical support to the ministries involved in Flood Risk Management (FRM), in the Operations and Maintenance (O&M) of the FEWS and enhancing community preparedness. The irrigation is designed to absorb rainfall shortages and shocks based on long-term trend analysis and projected climate variability, through Nzoia river runoff.

4. **The project remains a GoK priority, and the Additional Financing and the Parent Program are aligned with the World Bank Group Country Partnership Framework (CPF) for Kenya (FY2023-FY2028, Report No. 172255-KE).** The overarching goal of the CPF is to support Kenya's transformation into a middle-income economy that achieves inclusivity and resilience. The three higher-level outcomes of the CPF are: (i) faster and equitable labor productivity and income growth; (ii) greater equity in service delivery outcomes; and (iii) greater resilience and sustainability of Kenya's natural capital. The program directly contributes to these outcomes, particularly supporting objective 7 on reducing Kenya's water insecurity. The Additional Financing is intended to close the financing gap for completion of the LNISP-1It will enable full delivery of project targets. Finishing the works as originally targeted will mean providing access to irrigation services to 11,133 farmers and over 3,905 ha of arable land. It will additionally enhance project sustainability for the farmers and scheme management. Also, it provides the opportunity to support government in adopting lessons learnt into an irrigation investment framework and approach, and to prepare a smarter pipeline of investments.

C. Proposed Development Objective(s)

Original PDO

The project development objectives of KWSCR-1 are to: (i) increase availability and productivity of irrigation water for project beneficiaries; and (ii) enhance the institutional framework and strengthen capacity for water security and climate resilience for the country.

Current PDO

(a) increase access to irrigation water for project beneficiaries and (b) enhance the institutional framework and strengthen capacity for water security and climate resilience in certain areas of the territory of the Recipient.

Key Results

Finishing the works as originally targeted will mean achieving 11,133 farmers and over 3,905 ha of arable land, versus the current projection of target of 800+ farmers and 300+ ha, as well as addressing institutional sustainability and quality of irrigation service delivery. All other key results are as before.

D. Project Description

5. **This proposed AF addresses the US\$ 30 million financing gap to fully complete the LNISP-1 and continue the support provided to Irrigation Water User Associations and farmers through the agricultural activities under component 1 as originally envisioned by the project through an 18- month extension.** The financing gap is the result of delays, significant cost escalations, and exchange rate losses.



The AF would allow the project to achieve its PDO through completion of all the 14 irrigation blocks, fully delivering the LNISP-1 as envisioned at appraisal and will also finance the pending land and assets awaiting compensation required to complete this infrastructure. Therefore, at the end of the entire project period, a total of 11,133 farmers would be provided with irrigation and drainage services, and the irrigation project will result in over 3,905 ha of arable land. These new targets will be reflected in the updated results framework. Completing the LNISP-1 will also entail incorporating and converting the existing Bunyala pump-based scheme to the gravity water supply under LNISP-1, reducing fossil fuel-based energy use and providing major operational cost savings for the Government of Kenya.

6. Specifically, the proposed AF would (i) finance works (including contingencies and provisional sums), engineering and other consulting costs, and operational cost associated with the completion of LNISP-1; (ii) extend the project closing date by 18 months from September 30, 2023 to March 28, 2025 to allow sufficient time for the completion of the activities under the additional financing; (iii) include provision for cash compensation for land acquisition for lands affected by works under the AF; and (iv) reinstate the targets in terms of beneficiaries of LNISP-1. No changes are envisioned in the implementation arrangements or in the scope of the project. The project is keeping the same Project Development Objective. Table 1 below shows the current and AF costs by component and the revised total project costs and financing. Below is a brief description of the AF activities.

Table 1: Revised Project Costs

	PARENT PROJECT (US \$ M) After restructuring						AF (US \$ M)			GRAND TOTAL
	IDA ¹	GoK	KFW	KWTF	Beneficiary	Total	IDA	Other	Total	
1: Component 1: Water Resources Development	78	13.90	16.44	3.5	0.90	112.24	27	-	27	139.24
2: Component 2: Effective Water Sector Institutions (equivalent)	15.74	-				15.74	-	-	-	15.74
3: Support for Project Implementation	16.9	0.50				17.41	3	-	3	16.9
Project preparation advance	0.67					0.67				0.67
Totals	111.33	13.90	16.44	3.5	0.90	146.07	30	0	30	168.5

Component 1: Water Resources Development (total AF US \$ 27 million equivalent).

7. The component will finance the remaining civil works, and the continuation of the supervision engineering services for the completion of the LNISP-1. The works include the completion of about 9km of the main canal and associated secondary canals, tertiary canals and field canals that were not completed under the parent project due to funding constraints. Irrigation would be gravity fed thus mitigating climate change and reducing current and potential emission from pumping energy demand. The component will finance cash compensation under the RAP 3 related to the land acquisition affected by the works under the AF. The component will continue to support agricultural support and value chain activities for the farmers.

¹ The current IDA net commitment is US \$ 129.60 M, with US \$ 112.2 M disbursed, and US\$ 5.28 M pending disbursement.

**Component 2: Effective Water Sector Institutions (no additional financing proposed).**

8. The Additional Financing will not support any activity under Component 2, which has been substantially completed and objectives achieved under the parent project.

Component 3 - Support for Project Implementation (Total AF US\$ 3 million equivalent)

9. This component will finance project management costs, which will continue under the AF. The support includes (i) PMU support consultancies for contract management, procurement, financial management, safeguards management, monitoring, and evaluation; and (ii) incremental operating costs associated with the overall coordination of project activities; (iii) the cost of managing and mitigating the environmental and social impacts. This component will also (iv) finance studies and technical assistance to assess and improve the quality of the irrigation investments, contributing to the development of lessons learned and supporting development of a program of evidence-informed investments and pathways for irrigation development in Kenya as proposed under the National Irrigation Sector Investment Plan (NISIP). It will support a thorough final project ICR development.

E. Implementation

10. The project's institutional and implementation arrangements remain unchanged. The MoWSI will continue as the lead implementation agency. A competent, well-staffed PMU is currently in place, with offices in both Kisumu and Nairobi. The PMU operates under the oversight of a project steering committee chaired by the Principal Secretary, MoWSI. Various consultants and experts provide technical, project management, and E&S risk management support to the PMU. The AF will make it possible for these critical support services to continue throughout the project extension period.

F. Project location and Salient physical characteristics relevant to the safeguard analysis (if known)

The AF will finance civil works, and supervision engineering services for the completion of the Lower Nzoia Irrigation Scheme Phase 1, which is located in Busia and Siaya counties in Western Kenya. This would finish the works as originally targeted, achieving 11,133 farmers and over 3,905 ha of arable land. These include, mainly the completion of about 9km of the main canal and associated secondary canals, tertiary canals and field canals to irrigate 2,912ha in Blocks 6 to 14 and the completion of field canals and farm leveling in blocks 1-14. A total of 53 hectares and 1652 PAHs have been awarded and are pending compensation.

G. Environmental and Social Safeguards Specialists on the Team

Sangeeta Kumari, Social Specialist

Adrian Howard Cutler, Social Specialist

Alidu Babatu Adam, Social Specialist

James Chacha Maroa, Environmental Specialist



SAFEGUARD POLICIES THAT MIGHT APPLY

Safeguard Policies	Triggered?	Explanation (Optional)
Environmental Assessment OP/BP 4.01	Yes	
Performance Standards for Private Sector Activities OP/BP 4.03	No	
Natural Habitats OP/BP 4.04	Yes	
Forests OP/BP 4.36	No	
Pest Management OP 4.09	Yes	
Physical Cultural Resources OP/BP 4.11	Yes	
Indigenous Peoples OP/BP 4.10	Yes	
Involuntary Resettlement OP/BP 4.12	Yes	
Safety of Dams OP/BP 4.37	No	
Projects on International Waterways OP/BP 7.50	Yes	
Projects in Disputed Areas OP/BP 7.60	No	

KEY SAFEGUARD POLICY ISSUES AND THEIR MANAGEMENT

A. Summary of Key Safeguard Issues

1. Describe any safeguard issues and impacts associated with the proposed project. Identify and describe any potential large scale, significant and/or irreversible impacts:

Similar to the parent project, the Environmental Assessment Category of the AF has been determined as Category A. Based on the anticipated environmental and social risks, the following Safeguard Policies have been triggered to serve as guiding frameworks for managing the risks: Environmental Assessment OP/BP 4.01, Indigenous Peoples OP/BP 4.10, Involuntary Settlement OP/BP 4.12, Pest Management OP/BP 4.09, Physical Cultural Resources OP/BP 4.11, Natural Habitats OP/BP 4.04, and Projects on International Waterways OP 7.50. It should be noted that OP/BP 4.01 was triggered for the parent project and considered unrelated to the AF. Social analysis carried out as part of the ESIA found no indigenous and/or marginalized and vulnerable groups in the Lower Nzoia project area.

The AF is expected to extend positive benefits through investments that increase water storage and distribution for productive use and increase resilience to floods and droughts. Along with these benefits, works on the Lower Nzoia Flood Protection infrastructure may cause some adverse environmental and social impacts; namely loss of land, structures and displacement of people, loss of critical habitats and disruption of migratory patterns, disruption and loss of livelihoods, and public safety issues. For the Nzoia Flood Control Infrastructure, Environment and Social



Impact Assessment (ESIA) and a Resettlement Action Plan (RAP) were prepared, consulted upon and disclosed. Further, the original project ESMF, RPF, and VMGF have also been updated to include activities in Mombasa County, and re-disclosed both in country and at the Bank Infoshop.

2. Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area:
N/A

3. Describe any project alternatives (if relevant) considered to help avoid or minimize adverse impacts.
No alternatives were considered. This is an AF to cover a financing gap due to cost overrun and it is to complete an irrigation scheme financed under the parent project.

4. Describe measures taken by the borrower to address safeguard policy issues. Provide an assessment of borrower capacity to plan and implement the measures described.

Overall, Lower Nzoia Irrigation Scheme Phase 1 is expected to have positive social benefits by improving the livelihoods of farmers through enhanced agricultural production. This AF is expected to directly benefit over 11,000 people, including smallholder farmers who are currently engaged in rain-fed subsistence agriculture (primarily maize and beans) and livestock rearing. Nonetheless, Lower Nzoia Irrigation Scheme Phase 1 will also have some adverse impacts.

The AF does not trigger any new safeguard policies (as the project scope remains the same), will retain the Category A rating of the parent project its safeguards instruments will remain applicable. MoWSI prepared and disclosed Environmental and Social Impact Assessments (ESIA), Environmental Management Plan (ESMP), and several Resettlement Action Plans (RAPs) for the Lower Nzoia Irrigation Scheme as the project has adverse and significant environmental impact, including on the social and biophysical environment.

Besides the above mentioned, prior to contractor mobilization and commissioning of works, the contractor prepared Construction Environmental and Social Management Plans (C-ESMPs) that were reviewed and cleared by the supervising engineer, the client, the independent panel of expert and the Bank. These E&S instruments and tools are in place and are being used to manage any emerging and ongoing E&S risks which are limited to normal site specific and temporal civil works.

In terms of social instruments, the implementation of RAP 1 and RAP 2 are far advanced and planned to be completed and disclosed by September 30, 2023. The implementation of RAP 3 will extend through the AF project period as it affects main and secondary canals from blocks 6 to 14. The compensation for the remaining 53 hectares is pending for the Lower Nzoia Irrigation Scheme. The mitigation measures in RAP3 will be implemented to cover additional impacts (land, assets, and project-affected persons) resulting from the AF activities; primarily impacts from the cross drains in Blocks 1-4. Moreover, RAP 4 (covering tertiaries) needs to be revised and redisclosed in order to extend to blocks 6-14, the same tertiary approach that was used in blocks 1-5. All these PAHs compensations have been already awarded by the National Land Commission (NLC) following Kenyan law and the provisions and procedures of the associated RAP approved by the Bank, and are pending execution of payment by NLC following the allocation of budget. The expenditures related to land compensation are those associated to land and/or assets on it, which are referred to as improvements. Such assets include properties, such as residential and non-residential structures, crops and trees, boreholes / shallow wells, graves, fences, among other assets

All compensation payments will be processed by the NLC through a bank account for each PAP to ensure traceability



and transparency. The RAP implementation Consultant is supporting PAPs to relocate, access training for income enhancement, access compensations and its utilization under the supervision of the Project Management Unit (PMU). The PMU is conducting internal and external audits to ensure proper flow, use, and management of project funds.

The Grievance Management Procedure is now expanded to all components of the project in addition to the irrigation component, and has proved to work well with proactive resolution of grievances raised by PAPs. Community sensitization and awareness on SEA/SH and Violence against Children is ongoing and a necessary budget is allocated. Conflict Management Committees and Gender focal point are present in all 14 blocks. A Gender Compliance Committee Team has also been constituted at project level.

The client has a strong National PIU and a site supervising engineer both of whom are resourced with experienced environmental, social and communication specialists. Besides, the project will retain services of other consulting firms who support the client with pre-land acquisition processes and RAP implementation.

5. Identify the key stakeholders and describe the mechanisms for consultation and disclosure on safeguard policies, with an emphasis on potentially affected people.

Potential stakeholders are found at national, regional and catchment levels, including WRUAs, farmers, municipalities, county governments, national ministries, civil society, and others. The ESIA, RAP and the frameworks detail the stakeholder consultation process for their preparation, disclosure and implementation.

As reflected above, RAP 3 implementation will extend through the AF project period as it affects main and secondary canals from blocks 6 to 14. The compensation for the remaining 53 hectares is pending for the Lower Nzoia Irrigation Scheme. All these PAHs compensations have been already awarded by the National Land Commission (NLC) following Kenyan law and the provisions and procedures of the associated RAP approved by the Bank, and are pending execution of payment by NLC following the allocation of budget. The expenditures related to land compensation are those associated to land and/or assets on it, which are referred to as improvements. Such assets include properties, such as residential and non-residential structures, crops and trees, boreholes / shallow wells, graves, fences, among other assets.

Moreover, additional consultations and sensitization for the tertiaries in blocks 6 to 14 will be needed as part of the revision of RAP 4 to extend RAP revision conducted in blocks 1-5 to tertiaries in blocks 6-14. .

B. Disclosure Requirements (N.B. The sections below appear only if corresponding safeguard policy is triggered)

Environmental Assessment/Audit/Management Plan/Other

Date of receipt by the Bank

Date of submission for disclosure

For category A projects, date of distributing the Executive Summary of the EA to the Executive Directors

"In country" Disclosure

**Resettlement Action Plan/Framework/Policy Process**

Date of receipt by the Bank

Date of submission for disclosure

"In country" Disclosure**Indigenous Peoples Development Plan/Framework**

Date of receipt by the Bank

Date of submission for disclosure

"In country" Disclosure**Pest Management Plan**

Was the document disclosed prior to appraisal?

Date of receipt by the Bank

Date of submission for disclosure

"In country" Disclosure**C. Compliance Monitoring Indicators at the Corporate Level (to be filled in when the ISDS is finalized by the project decision meeting) (N.B. The sections below appear only if corresponding safeguard policy is triggered)**



CONTACT POINT

World Bank

Pieter Waalewijn
Lead Water Resources Management Specialist

Irene Rehberger Bescos
Water Resources Management Specialist

Borrower/Client/Recipient

Republic of Kenya
Dr. Chris Kiptoo
Principal Secretary, National Treasury
pstnt@treasury.go.ke

Implementing Agencies



Ministry of Water & Sanitation
Eng.Vincent Kabuti
Project manager, NPMU
vkabuti@kwscrp.org

FOR MORE INFORMATION CONTACT

The World Bank
1818 H Street, NW
Washington, D.C. 20433
Telephone: (202) 473-1000
Web: <http://www.worldbank.org/projects>

APPROVAL

Task Team Leader(s):	Pieter Waalewijn Irene Rehberger Bescos
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Approved By

Safeguards Advisor:	Martin Henry Lenihan	10-Aug-2023
Practice Manager/Manager:	Fook Chuan Eng	10-Aug-2023
Country Director:	Anne Margreth Bakilana	14-Aug-2023

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