ASSESSMENT OF RIVER JETTIES THEIR CAPACITY FOR TOURISM AND OPTIONS FOR DEVELOPMENT

Main Report 21.03.2025

TOURISM DIVERSIFICATION AND RESILIENCE IN THE GAMBIA PROJECT

BUILDING RESILIENCE AND UNLOCKING THE GAMBIA'S TOURISM TAPESTRY

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TABLE OF CONTENTS

TABLE OF FIGURES

TABLE OF TABLES

1

INTRODUCTION

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INTRODUCTION

Tourism plays a pivotal role in the economy of The Gambia, contributing significantly to its Gross Domestic Product (GDP) and providing numerous employment opportunities. The country's picturesque beaches have long been a magnet for tourists, but the potential for tourism extends far beyond the coastline.

The River Gambia, with its rich biodiversity and cultural heritage, presents an opportunity to diversify and expand the tourism sector. This is particularly important in the face of climate change, which poses a threat to coastal regions worldwide. Rising sea levels and increased coastal erosion could impact beach tourism, underscoring the need for diversification.

The idea of developing the inland water transport sector has been on the drawing board for a long time. By developing infrastructure along The River Gambia, tourists will be attracted to the inland areas, offering them unique experiences such as bird watching, dolphin spotting, and exploration of cultural heritage sites. This not only broadens the scope of tourism in The Gambia but also helps mitigate the risks associated with over-reliance on beach tourism.

Moreover, the development of inland water transport will facilitate connectivity up to Basse in the East of the country, opening new areas for tourism and trade. This project, therefore, represents a strategic investment in the future of The Gambia's tourism sector, ensuring its resilience and sustainability in the face of environmental changes (Ministry of Tourism and Culture, 2023).

1.1 OBJECTIVES OF THE STUDY

OBJECTIVES OF THE STUDY

The overall aim of this assignment, as described in the Terms of Reference, is to help develop a more competitive, inclusive and resilient tourism sector by enhancing access to the interior of The Gambia through improvements in the transport potential of The River Gambia. The particular focus of the study is on existing, but underdeveloped or at-risk tourism areas.

The success of a tourism destination or experience depends not only on the ease of access, but on the range of indirect systems and services (enabling infrastructure) that are vital in supporting the tourist's interaction and enjoyment of whatever particular special feature or features exist at that location. These support systems include service quality levels, environmental integrity, general maintenance and upkeep, and tourism related infrastructure such as transport, accommodation, hospitality, roads, signage, information, and IT infrastructure, as well as authenticity and accessibility of products. To achieve this, it is vital to understand the current situation regarding jetties and landings and their use along the river, and the limitations or constraints to their wider implementation within an integrated sustainable river transport strategy. Progress towards this aim will be achieved through (1), developing an improved knowledge of existing jetties and associated or surrounding tourism or related infrastructure, and (2), assess the current usage, potential usage, and future improvements required to increase the level of sustainable access for tourism (and other sectors), resulting in a healthier more productive and valuable tourism industry.

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1.2 METHODOLOGY

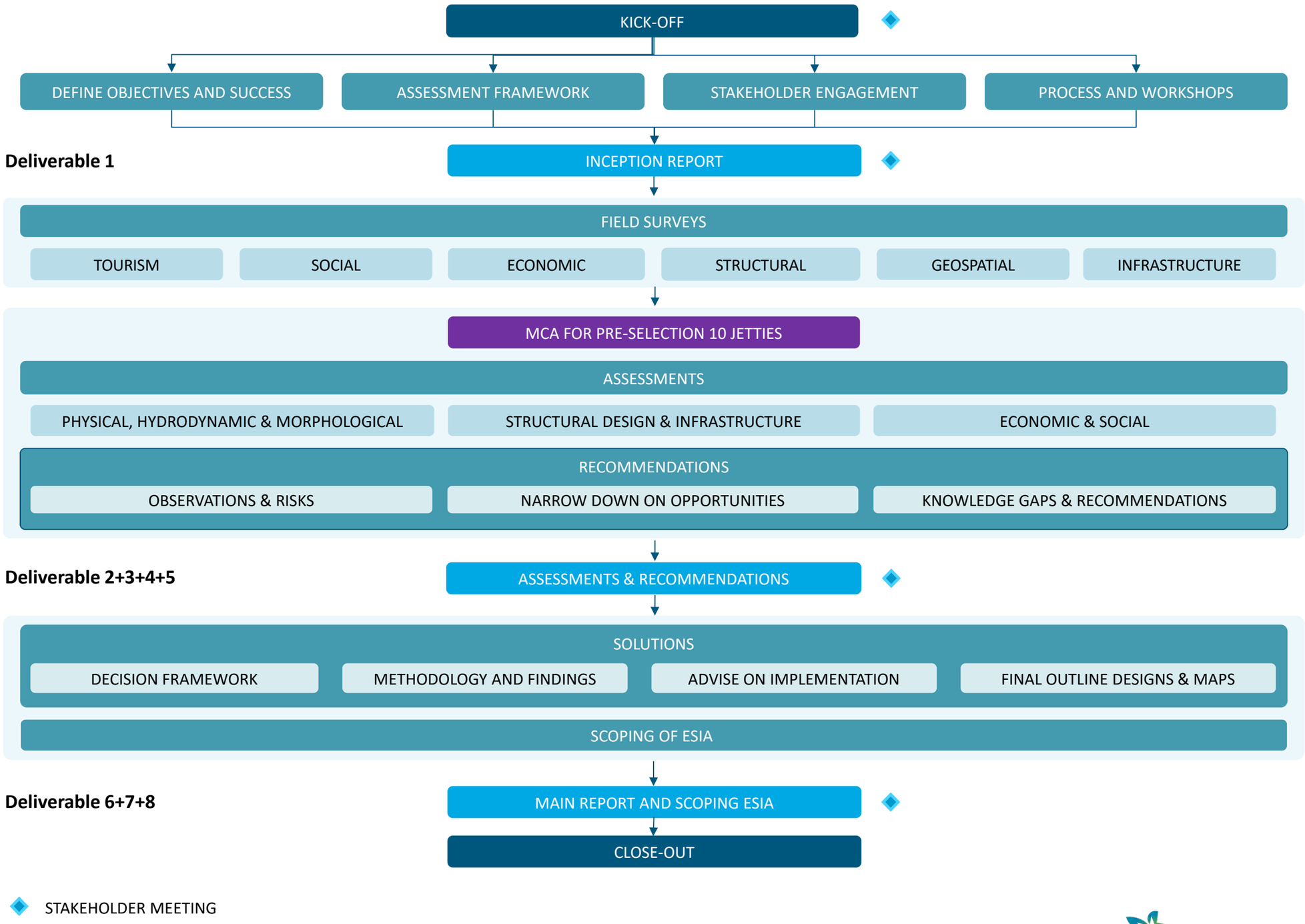
METHODOLOGY

PHASE 1:
INCEPTION

PHASE 2:
ASSESSMENT

PHASE 3:
RESULTS

PHASE 4:
DELIVER



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1.3

ASSESSMENT OF RIVER JETTIES

ASSESSMENT OF RIVER JETTIES

Figure 1. Map of 10 jetty locations

This assessment considers the ten (10) jetty locations which were selected based on their potential for development: Albreda, Kartong, Bintang, Basse, Barra, Kuntaur, Tendaba, Bansang, Kerewan and Kaur. The selection was made from a longlist of 21 locations using a multi-criteria analysis with tourism, socio-economic, engineering, financial and environmental criteria related to impacts of the jetties. The longlist was based on a longer list of 33 sites that had been assessed by a GTB working group. For more information regarding the selection, please refer to report *BJ4644-RHD-XX-RJ-RP-Z-0001-Qualitative MCA to shortlist Jetties*.

Nine of the ten jetty locations are spread evenly along The River Gambia from Barra at the river mouth to Basse 400 kilometres upstream, while one location (Kartong) is located on a separate river, of which the far bank forms The Gambia's southern border with Senegal. The locations are shown in Figure 1.

The jetty locations and (re)development were assessed on four different fields:

1. Hydrodynamic and morphological
2. Structural engineering & infrastructure
3. Socio-Economic
4. Environmental and Social Impact

The outcomes of these assessments are recapped in a short and concise manner in this section. For more details, the reader is referred to the reports in the appendix:

- *BJ4644-RHD-D2-RJ-RP-HE-0001-Hydrodynamic and Morphodynamic Assessment*
- *BJ4644-RHD-D3-RJ-RP-SE-0001-Engineering Assessment*
- *BJ4644-RHD-D4-RJ-RP-EC-0001-Economic and Social Assessment*
- *BJ4644-RHD-D8-RJ-RP-EV-0001-Scoping Report River Jetties The Gambia*

ASSESSMENT OF RIVER JETTIES

HYDRODYNAMIC AND MORPHODYNAMIC ASSESSMENT

The hydrodynamic and morphodynamic assessment was to provide a quantitative analysis of the hydrodynamic and morphodynamic conditions at the jetty sites, based on available data, survey data, GIS analysis and numerical modelling.

For more details, please refer to the full report *BJ4644-RHD-D2-RJ-RP-HE-0001-Hydrodynamic and Morphodynamic Assessment*.

RECOMMENDATIONS

It is important to consider the effects of climate change in further design of the jetty structures. A map that illustrates this can be found attached to this report, BJ4644-RHD-D2-RJ-DG-LM-0002 - Flood mapping of project area. For the concept and detailed design of the jetties it is suggested to perform a modelling effort. This requires collection of river bathymetry, rainfall data and forecasts and water level measurements, as well as flow velocity measurements for validation purposes. Also sufficiently long historical time series of upstream discharges and measured water levels along the river between Basse and the coast would be required.

With such overall river model, more detailed models near each of the jetties could be constructed, utilizing detailed bathymetry measured over a stretch of approx. 1 km upstream and downstream of the river. Such information is scarce and it is not feasible to collect it during the timeframe of the present project. Also a significant investment is involved with such data-collection. Such information would be of value for the next stages of the project – preliminary and detailed design of jetties, plus there are ample other study cases and practical applications that could benefit from such data-collection effort.

We would therefore urge the Government of the Gambia, in particular GPA, GMA, MOTC and Department of water resources, to convene and discuss how to initiate this large scale bathymetric and hydrological data-collection effort.

An alternative can be sought in fast flood modelling which relies on publicly available information. It is less accurate but would provide a reasonable indication of flood levels near the jetties.

When flood modelling is conducted, the design of the to be built jetties and adjacent infrastructure can be adjusted to cope with these high water levels. The implications of jetties built in flood-prone areas on supporting infrastructure, as well as on tourism hotspots, can be significant. This should be assessed in conjunction with the decision-making process for which jetties to further develop.

ASSESSMENT OF RIVER JETTIES

HYDRODYNAMIC AND MORPHODYNAMIC ASSESSMENT – CONT.

Table 1 summarizes the erosion, navigation and flood risk of each jetty, and proposed (preliminary) mitigation measures to those risks.

LOCATION	EROSION RISKS	NAVIGATIONAL RISKS	FLOOD RISKS	MITIGATION MEASURES
01. ALBREDA	HIGH: large tidal range, observed erosion, sandy banks and lack of vegetation	MEDIUM: There is a relatively large tidal range which indicates there is some current. This influences the safety of mooring and unmooring on the rather long and exposed jetty. Wave attack is also a risk when vessels are moored.	LOW risk of river flooding	Proper mooring plans should be designed to limit risk for moored vessels exposed to currents and waves.
02. KARTONG	LOW: low flow velocities, vegetated banks, gentle slope and stable observed banks	HIGH: Shallow river. Lot of (fishing) traffic and transport of people / goods across the border with Senegal.	MEDIUM risk of river flooding	Only suitable for local boat-tours, with smaller type of vessels. This should be seen as a separate design effort from the other jetties that are on the Gambia River
03. BINTANG	LOW: No significant flow velocities, gentle slope and stable banks.	LOW: no specific navigational risks	MEDIUM risk of river flooding	No particular measures advised.
04. BASSE	MEDIUM: Nearby structures, moderately exposed banks near jetty and observed bank changes	HIGH: no bathymetric data available the 50km before Basse, this is considered a risk by (international) operators on the river	HIGH risk of river flooding	Bathymetric survey to be conducted between Bansang and Basse, navigation charts to be updated. Bank protection and monitoring.
05. BARRA	HIGH: exposed location at coast, exposed to both tides and waves, sandy banks, no vegetation and observed bank change. Jetty could potentially block sand transport (on top of the ferry terminal) which can increase erosion rates upstream.	HIGH: Next to ferry terminal, which can cause hazardous situations when different traffic modes cross each other. Vicinity of Banjul Port also introduces the risk of additional traffic around Barra. Also, there are several shallow areas when approaching Barra.	LOW risk of river flooding, however very exposed to coastal flooding.	Limit upstream erosion by designing an open structure on poles to allow currents and sand to pass through. Shallow areas should be clearly marked with buoys and navigational regulation should be adopted to manage traffic around Barra
06. KUNTAUR	HIGH: moderate bank slope, lack of vegetation near jetty and structures on banks. Banks are eroding due to seasonal flooding	LOW. No specific navigational risks.	VERY HIGH risk of river flooding. Bank near jetty floods on regular basis	Bank protection should be implemented. Road leading to jetty should be elevated in order to allow year-round access.
07. TENDABA	MEDIUM: Exposed sandy banks due to reclamation	MEDIUM. The jetty sees high traffic due to fishing boats, so moderate risk of collision but with low consequences. There is a wreck in the vicinity of Tendaba that is a hazard to navigation	HIGH risk of river flooding	Bank protection should be monitored and maintained. Designate specific area of the jetty for tourism to limit interface with other traffic. The hazardous wreck in the vicinity of Tendaba should be either clearly marked by buoys or removed.
08. BANSANG	MEDIUM: moderate bank slope and observed erosion near jetty	MEDIUM: very little bathymetric data available around Bansang, can be considered a risk by (international) operators on the river	VERY HIGH risk of river flooding	Bathymetric survey to be conducted between Bansang and Basse, navigation charts to be updated. Bank protection and monitoring.
09. KEREWAN	MEDIUM: erosion at exposed banks near jetty.	HIGH: shallow shoal (sandbank) on the approach into Kerewan. Risk of running aground	MEDIUM risk of river flooding	Update the bathymetry around the entrance of the Kerewan river on navigational charts. Indicate shallow by installing buoys.
10. KAUR	MEDIUM: Steep bank slope, minor erosion observed.	MEDIUM: risk of traffic crossing due to vicinity of ferry terminal and adjacent GCA jetty.	HIGH risk of river flooding	navigational regulation should be adopted to manage traffic. No movements after dark

Table 1. Summary of hydrodynamic and morphological assessment results

ASSESSMENT OF RIVER JETTIES

ENGINEERING ASSESSMENT

An Engineering assessment was carried out based on field surveys results. On the water side the jetties were considered.
In addition, on the land side the other relevant infrastructure (access roads, water supply, sewage system, electricity) was also assessed to determine the type and condition of the various systems and assets.

For more details, please refer to the finalized full report *BJ4644-RHD-D3-RJ-RP-SE-0001 Engineering Assessment*.

Basic visual assessment on the various jetty locations has been carried out on the existing jetties. Condition of structures and defects has been determined on the structural elements organized in groups as follows.

1. Critical elements (load bearing elements)
   a. Piles or columns
   b. Longitudinal beams
   c. Transverse beams
   d. Decking or walkway slab (without longitudinal beams will act as longitudinal elements)

2. Non-critical elements (elements needed for public safety or structural elements more easily replaced and which failure does not result in structural collapse)
   a. Handrails
   b. Kerbs
   c. Stairs or ramps
   d. Pontoons

MATERIALS USED
The jetties assessed were either reinforced concrete or timber. Steel elements were used for the stairs, wrapping the top of the piles (at the connection between the pile and the pile cap), and mooring hardware (bollards).

TYPES OF JETTIES
Most of the jetties still in use were either T-shaped jetties, quays and one location had a finger jetty.

REINFORCED CONCRETE DEFECTS
The reinforced concrete elements showed signs of damage from impact or from corrosion of the reinforcement, which caused delamination or spalling of the cover concrete.

HANDRAILS
Handrails were not found in any of the jetties assessed. International standards recommend handrails to be provided on the sides of access trestles and quays (where fouling of mooring ropes does not occur).

TOE KERBS
Toe kerbs are usually installed at the stairway recess to prevent water from the deck falling on the public using the stairs.
Only ladders were used at two jetty locations (Albreda and Tendaba) and stairways were not found in any assessed locations. Perhaps for that reason no toe kerbs were found.

STAIRS OR RAMPS
No access stairways were found in the assessment. International standards recommend providing stairways when the tidal range exceeds 1.0 meter to enhance comfortable and safe (dis)embarking of the vessel.

ASSESSMENT OF RIVER JETTIES

ENGINEERING ASSESSMENT – CONT.

OUT OF THE 10 ASSESSED LOCATIONS, 6 OF THEM EXCEED 1.0M OF TIDAL RANGE:

- Albreda – Ladder used to climb from the boat to the finger jetty and vice-versa (1.62m tidal range).
- Bintang – No jetty in place (1.53m tidal range).
- Barra – No jetty in place (1.92m tidal range).
- Tendaba – Ladder used to climb from the boat to the finger jetty and vice-versa (1.40m tidal range).
- Kerewan – No ladder, ramp or stairway found (1.49m tidal range).
- Kaur – No ladder, ramp or stairway found (1.08m tidal range).

In addition, international standards require emergency ladders at all jetties and quays, to allow a person who is in the water to climb onto a structure, or for access onto a structure.

PONTOONS

Pontoons are a preferred means of access from small passenger vessels, fishing boats and leisure boats to the shore. No locations had pontoons.

MOORING BOLLARDS

Most jetties in use had mooring hardware (steel bollards) and in overall good condition.

FENDERS

Two types of fenders were identified in the jetties in use. One type consists of wooden square beams attached to the riverside of jetty heads, and the type consists of rubber cylinders or tyres suspended at the riverside of jetty heads or quays (aligned with the position of longitudinal beams). Fenders were in bad condition and in need of replacement.

RECOMMENDATIONS FOR JETTIES:

- A new jetty should be constructed at locations without a jetty.
- For jetties in use but with extensive damage and defects, where the structural integrity is compromised, a new jetty should be constructed (next to existing jetty or after demolition of the existing jetty).
- For jetties in use and where the structural integrity is not compromised, and where repairs are only to portions of the jetty, it is recommended that repairs take place.

It is recommended that either the new jetties to be constructed or existing to be repaired are subject to detailed design in the phase of the project. The general dimensions of the jetties are summed up in Table 2 below.

#	LOCATION	GENERAL JETTY DIMENSIONS (m)			
		ACCESS LENGTH	ACCESS WIDTH	HEAD LENGTH	HEAD WIDTH
1	ALBREDA	130	5	10	30
2	KARTONG	15	5	10	30
3	BINTANG	0	5	10	30
4	BASSE	10	4.5	8.2	25.6
5	BARRA	70	5	10	30
6	KUNTAUR	0	0	15	25.6
7	TENDABA	60	5	10	30
8	BANSANG	10	4.2	11	25.6
9	KEREWAN	50	5	7	15
10	KAUR	0	0	15	100

Table 2. General jetty dimensions

ASSESSMENT OF RIVER JETTIES

ENGINEERING ASSESSMENT – CONT.

Various elements were assessed for the landside infrastructure, focusing on what was in place and not a detailed assessment of the condition of the various elements.

THE FOLLOWING WAS ASSESSED:

- Installation and if in working condition, for electricity supply, water supply, safety & security equipment, communications, fuel supply, lighting.
- Type of water supply and Treatment of water on site.
- Main source of electricity.
- Type and condition of access roads.
- Type of buildings on site.
- Main use of the jetty.

Focus was into utilities (electricity, water and sewage), facilities (toilets and shade area), access roads. The summary of these assessments can be found in *BJ4644-RHD-D5-RJ-RP-Z-0001 Recommendations for River Jetties*.

RECOMMENDATIONS FOR THE LAND SIDE:

- Although in most of the locations there are utilities, these will need to be modernized and improved
- The facilities will need to be designed and implemented to better cater for the Tourism need.
- In general, access roads exists but in bad or medium conditions to be upgraded.

The cost overview of these upgrades is shown in Table 3 below.

NO	LOCATION	DISTANCE (KM)	ROAD UPGRADE (GMD)	SHADE BUILDING (GMD)	TOILETS (GMD)	SOLAR SYSTEM INSTALLATION	TOTAL (GMD)
1	ALBREDA	0.461	14,982,500	170,000	1,920,000		17,072,500
2	KARTONG	0.436	14,170,000	170,000	1,920,000	2,100,000	18,360,000
3	BINTANG	0	0	170,000	1,920,000		2,090,000
4	BASSE	0.275	8,937,500	170,000	1,920,000		11,027,500
5	BARRA	0.308	10,010,000	170,000	1,920,000		12,100,000
6	KUNTAUR	2.313	75,172,500	170,000	1,920,000		77,262,500
7	TENDABA	0.082	2,665,000	170,000	1,920,000		4,755,000
8	BANSANG	0.083	2,697,500	170,000	1,920,000		4,787,500
9	KEREWAN	0.57	18,525,000	170,000	1,920,000	2,100,000	22,715,000
10	KAUR	2.019	65,617,500	170,000	1,920,000		67,707,500
		TOTAL	212,777,500	1,700,000	19,200,000	4,200,000	237,877,500

Table 3. Cost to upgrade supporting infrastructure

ASSESSMENT OF RIVER JETTIES

ENGINEERING ASSESSMENT – CONT.

RESULTS OF ENGINEERING ASSESSMENT:
in Figure 2 and Table 4 the results of the engineering assessment are summarized

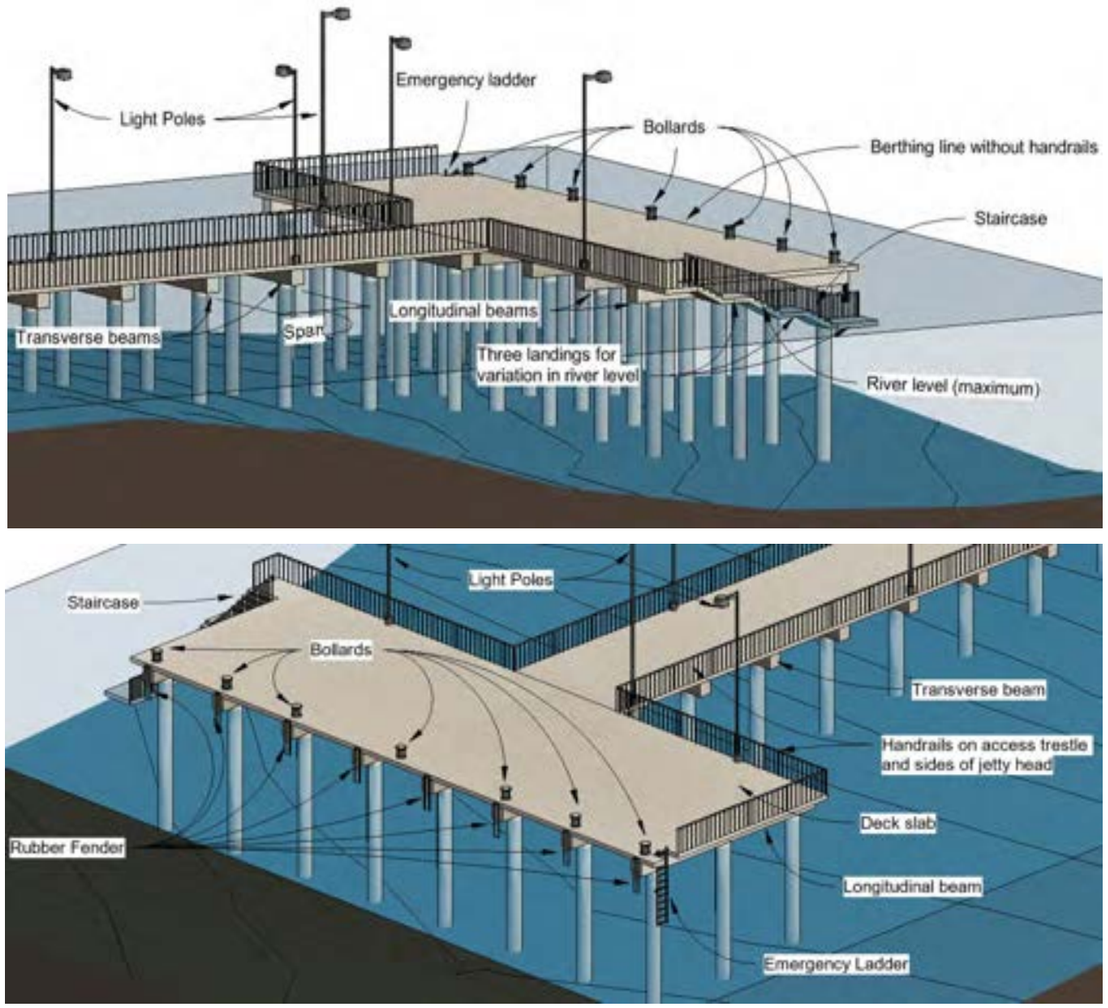

Figure 2. Proposed jetty type with main structural elements and furniture. (Source: RHDHV)

#	LOCATION	COST ESTIMATE SUMMARY (USD)			
		JETTY REPAIR / REBUILD	JETTY REPAIR / REBUILD COSTS	INFRASTRUCTURE	TOTAL
1	ALBREDA	Rebuild	1,725,000	239,000	1,964,000
2	KARTONG	Rebuild	651,000	257,000	908,000
3	BINTANG	Rebuild	520,000	29,000	549,000
4	BASSE	Repair	318,000	154,000	472,000
5	BARRA	Rebuild	1,134,000	169,000	1,303,000
6	KUNTAUR	Repair	85,000	1,082,000	1,167,000
7	TENDABA	Rebuild	1,047,000	67,000	1,114,000
8	BANSANG	Repair	326,000	67,000	393,000
9	KEREWAN	Repair	1,975,000	318,000	2,293,000
10	KAUR	Repair	304,000	948,000	1,252,000
	TOTAL		8,085,000	3,330,000	11,415,000

Table 4. Summary of costs estimated for all ten locations

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ASSESSMENT OF RIVER JETTIES

ECONOMIC AND SOCIAL ASSESSMENT

The socio-economic assessment highlights current and potential activities linked to the river jetties, quantifying economic benefits where possible and providing a qualitative cost-benefit analysis.

Currently, agriculture and fisheries dominate, with some tourism generating around USD 1 million annually. In larger towns, business and salaried jobs are also significant.

Future activities are expected to focus on tourism, as the potential for shipping goods is limited. Jetty repair or development may improve incomes and market access. However, economic benefits from river jetties alone are minimal without investments in accommodation, vessels, and attractions, as shown in Table 5. For more detailed information on this cost summary, please refer to report *BJ4644-RHD-D4-RJ-RP-EC-0001-Economic and Social Assessment* .

ITEM	COST (USD)*
New jetty construction and jetty repair, road upgrades, shaded areas and toilets	14.2 million
Accommodation development, assuming doubling current capacity from about 300 to 600 rooms with eco-lodges	7.2 to 9.5 million
Fleet of vessels, assuming 10 vessels	6.6 million
Development of attractions	24.6 million

Table 5. Indicative overview of jetty (re)development and complementary investment costs for river tourism and transportation

* Costs are estimated for the period between 2025-2028

On top of the costs shown in Table 5, operational and maintenance costs, estimated at USD 328,000 per year for the jetties, should be covered by additional revenues. This is crucial for tourism investments to meet safety and comfort standards.

Quantifying benefits of river jetties is challenging, but costs can be contextualized with tourism benefits. Assuming jetty repairs and construction span 3 years, with a 10% discount rate, a 30-year lifespan, and starting in 2025, full benefits are reached in 5 years, increasing 20% annually from 2026 to 2030. The project needs annual benefits of USD 1.7 million from 2030 to achieve a positive NPV, which seems feasible compared to current revenues of USD 1.3 million from tourism. Enhanced facilities could boost tourist spending. With 4,900 tourists staying 7 days and spending about USD 50 each, this revenue goal is attainable. This excludes all other tangible and intangible benefits of developing river jetties, such as the potential for transportation of goods and access to new and improved services for the communities near the jetty. However, also complementary investments in accommodation, vessels and development of attractions are required, which would also need to be covered by additional tourism revenues.

To assess the potential per site, the current spending (= benefits) on accommodation (being the relatively most reliable indicator of tourism potential) is compared to the required benefits. This potential is expressed as a ratio between current benefits and required benefits.

Bintang, Kartong and Basse are the sites with the lowest ratio, which means that redeveloping jetties at these jetty sites is potentially more viable.

ASSESSMENT OF RIVER JETTIES

ECONOMIC AND SOCIAL ASSESSMENT – CONT.

NO.	LOCATION	CURRENT SPENDING ON ACCOMMODATION	ANNUAL BENEFITS REQUIRED (USD) BETWEEN 2030-2055	RATIO
1	ALBREDA	107,730	282,000	2.62
2	KARTONG	410,067	135,000	0.33
3	BINTANG	264,096	77,500	0.29
4	BASSE	198,580	71,000	0.36
5	BARRA	71,484	187,000	2.62
6	KUNTAUR	39,710	198,000	4.99
7	TENDABA	105,904	157,000	1.48
8	BANSANG	79,430	57,000	0.72
9	KEREWAN	74,470	330,000	4.43
10	KAUR	33,090	205,000	6.20
	TOTAL	1,384,561	1,699,500	1.23

Table 6. Ratio of required benefits and current spending on accommodation, a low ratio indicates more viable development

Another way of looking at the required benefits for the project as a whole, In that case, the incremental benefits from tourism and other economic activities as mentioned before should be around USD 1.7 million annually (from 2030 onwards) to make the project viable. That means that an annual benefit of USD 1.7 million per year is the break-even point to reach a positive Net Present Value (NPV).

The investment (Capex), operational costs (Opex) and annual benefits in present values are shown in Figure 3.

COSTS AND "BREAK-EVEN" BENEFITS OF JETTIES
(present values @ 10% discount rate, NPV = 0)

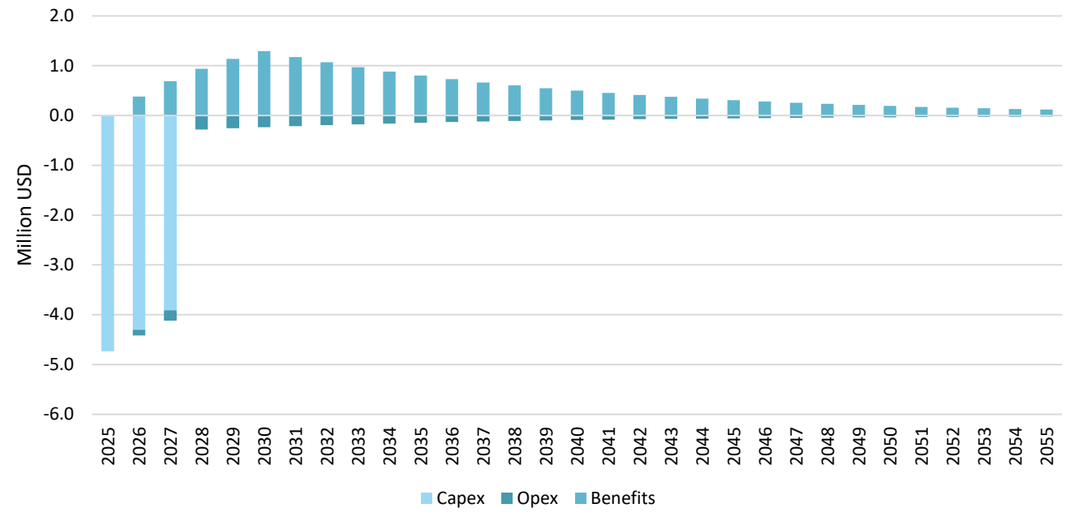

Figure 3. Overview of costs and benefits where the benefits from tourism cover the costs of jetty repair and development.

SCOPING ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT

This section provides an overview of the key findings and activities undertaken in *BJ4644-RHD-D8-RJ-RP-EV-0001-Scoping Report River Jetties The Gambia*. The Environmental and Social impact scoping process sets the stage for a thorough and focused full ESIA, guiding the development of sustainable and resilient tourism infrastructure along the River Gambia. The project aims to balance economic growth with environmental preservation and social well-being, contributing to The Gambia's long-term development goals.

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ASSESSMENT OF RIVER JETTIES

SCOPING ENVIRONMENTAL AND SOCIAL IMPACT – CONT.

SITE SELECTION AND DESCRIPTION

The ESIA scoping report encompasses the assessment of ten selected river jetties along the River Gambia. Each site was meticulously chosen based on its potential to foster tourism activities while minimizing environmental and social impacts. Key locations include the Kerewan and Kaur areas, which are rich in biodiversity and cultural heritage. The specific sites were documented through detailed maps and figures, highlighting their geographical and infrastructural attributes. The selection process aimed to ensure a comprehensive understanding of existing conditions, facilitating accurate impact predictions for the full ESIA.

CURRENT USAGE AND INFRASTRUCTURE

the present utilization and infrastructure of the selected jetties was evaluated. The analysis identified variations in the extent and nature of use, ranging from local transportation to tourism-related activities. Existing infrastructures, such as docking facilities, access roads, and ancillary services, were assessed for their capacity and condition. The findings underscored the necessity for upgrades and expansions to support increased tourism and economic activities, particularly in inland regions. Enhancing these facilities is pivotal for stimulating local economies and promoting sustainable tourism practices.

ENVIRONMENTAL AND SOCIAL BASELINE

The baseline study established the environmental and social context of the targeted areas. This involved evaluating the ecological characteristics, including flora and fauna diversity, water quality, and land use patterns. Social aspects considered community demographics, livelihoods, and cultural heritage.

The assessment revealed significant biodiversity along the River Gambia, with several protected species and habitats. Socially, the regions are marked by vibrant communities with strong cultural ties to the river. Potential impacts of the project on these environmental and social components were preliminarily identified, forming the basis for detailed investigations in the full ESIA.

POTENTIAL ENVIRONMENTAL AND SOCIAL IMPACTS

A range of potential impacts were identified that the proposed jetties and associated tourism development could have on the environment and local communities. Key environmental concerns include habitat disruption, water pollution, and biodiversity loss. Social impacts encompass changes in local livelihoods, cultural heritage preservation, and community health and safety. Mitigation measures were proposed to address these issues, focusing on minimizing negative effects while enhancing positive outcomes. Stakeholder consultations played a crucial role in identifying these impacts, ensuring that local perspectives and concerns are integrated into the ESIA process.

STAKEHOLDER ENGAGEMENT AND CONSULTATION

Involving stakeholders was a key part of the Scoping assessment. The process involved consultations with government agencies, local communities, NGOs, and other relevant parties. These interactions aimed to gather insights on environmental and social issues, identify stakeholder expectations, and foster collaborative solutions. The scoping report documented the methods used for engagement, the feedback received, and how this input shaped the scoping outcomes. Transparent and inclusive stakeholder engagement is essential for the project's success, ensuring that the ESIA addresses all pertinent issues effectively and comprehensively.

2

FRAMEWORK FOR DEVELOPMENT OF SUSTAINABLE RIVERINE TOURISM

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2.1

INTRODUCTION RIVERINE TOURISM DEVELOPMENT

INTRODUCTION RIVERINE TOURISM DEVELOPMENT

The overall Tourism Diversification and Resilience in The Gambia Project (TDRGP) has a clear development objective to "Support the diversification and climate resilience of the tourism sector at selected destinations", and the Assessment of River Jetties, their Capacity for Tourism and Options for Development project is required to make "recommendations that address needs by embracing emerging market trends in sustainable international tourism". This section of the report therefore sets out a framework approach for the sustainable development of riverine tourism in The Gambia that can be applied to the ten shortlisted jetty sites and to other sites in the future. The aim is to establish a network of accessible riverine destinations with attractive and sustainable tourism products and quality services that meet market needs and achieve market penetration through responsible investment and community engagement and leadership.

Breaking down the "recommendations" requirement can provide a useful foundation.

RECOMMENDATIONS THAT ADDRESS NEEDS

Thus, "recommendations that address needs" emphasises a needs-based approach. But whose needs? There are three primary groups here, who to some extent have different needs; it is our task to work out how needs and responses can be aligned to maximize benefits and to mitigate risks and minimize negative impacts.

CUSTODIAN/HOST COMMUNITIES

Ultimately, the purpose of tourism is to deliver sustainable social and economic development. Riverine communities in The Gambia are only minimally involved in the country's visitor economy, which is focused on the long-established tourism development area (TDA) on the coast, and they are losing young people, especially men, to the coast through an accelerating process of urban migration. As well as alternative livelihoods and market access, practical needs include connections to public services, including potable water, sewerage and waste systems, electricity, internet, transport, as well as education and healthcare.

INTRODUCTION RIVERINE TOURISM DEVELOPMENT

TOURISTS
However significant assets, such as heritage sites and accommodation options, might be, unless they are packaged into products that meet tourist needs, tourists will not come in meaningful numbers. Tourists also need a range of essential visitor infrastructure, such as toilets, internet services, healthcare and transport infrastructure, all of which will typically be provided (or at least facilitated) by the public sector. In the case of riverine tourism, transport infrastructure of course also includes jetties. Packaging assets into coherent clusters that will satisfy diverse market needs will deliver benefits for all stakeholders.

INVESTORS/OPERATORS
Whether the entity is commercial profit-making, a social or community enterprise, or entirely philanthropic, any investor or operator needs to generate a surplus, which means that proposed developments must have the potential to be commercially successful. Investors need to be confident that the investment and operating environment will be supportive of their needs. Some investors and operators will be communities themselves, sometimes working in partnership with the public or private sectors or civil society organizations (CSOs). At the same time, whilst investment is always necessary, it is never sufficient to achieve the transformational impact required of tourism. The needs of investors must never be placed above those of host communities, especially since an investor-led strategy is unlikely to produce authentic community-led products and experiences that tourists are increasingly looking for.

EMBRACING EMERGING MARKET TRENDS

Similarly, “embracing emerging market trends” speaks to the need for a market-led approach.

Incremental emerging tourism markets of relevance to The Gambia include:

- Academic partners for SAVE (“Scientific, Academic, Volunteer, Educational”) tourism
- African Americans with Mandinka/Wolof heritage (evidenced by DNA tests and/or oral history) for ancestral/dark tourism
- European adventurers seeking slow travel by bike and boat, and ecotourism experiences, including wellness and spiritual retreats
- European and Middle Eastern Muslims for Halal tourism
- European and North American digital nomads for houseboats and homestays
- European and North American expats, including diplomatic corps, seeking short breaks
- European birders and “culture vultures” exploring natural and cultural heritage experiences
- Gambian diaspora in Europe and North America as influencers and ambassadors for Gambian heritage tourism
- Gambian and West African aspirational middle class seeking adventure and nature-based tourism
- North African, Senegalese and Eastern Mediterranean Sufis seeking pilgrimage

INTRODUCTION RIVERINE TOURISM DEVELOPMENT

SUSTAINABLE INTERNATIONAL TOURISM

Finally, “sustainable international tourism” has been identified by almost all commentators as necessary for the travel and tourism industry to respond to the Climate Emergency, which globally generates 10% of greenhouse gas emissions and has a disproportionate impact on low-income countries (World Bank: GNI per capita in 2024/5 = $1145 or less), especially in sub-Saharan Africa, which cumulatively and recently bears very little responsibility for the anthropogenic climate change the world is experiencing. Of the world’s 26 low-income countries, 22 are in sub-Saharan Africa, including The Gambia, which is in the bottom quartile (ranked 37th) of 48 countries in sub-Saharan Africa.

As a result of climate change, the Gambia’s tourism assets are being harmed, including:

- Beaches and associated visitor infrastructure eroded by rising sea levels with erosion accelerating and more frequent flooding
- Biodiversity reduced by rising water and land temperatures and expanding human-wildlife conflict
- Cultural heritage sites damaged by changing weather patterns and increased flooding
- Intangible cultural heritage preservation threatened by emigration and urban migration due to increased salination impacting agriculture and aquaculture

The Glasgow Declaration on Climate Action in Tourism[1] was launched on 4 November 2021 at the UNFCCC’s COP26 in Scotland and united travel and tourism behind a shared set of pathways for climate action:

- Measure
- Decarbonize
- Regenerate
- Collaborate
- Finance

In relation to the development of River Jetties, the five pathways can be expressed by considering the following questions, recording the results and formulating specific and measurable objectives.

MEASURE

Compared to other rural areas along the river, on which social and economic indicators is statistically significant variations in performance observed in communities where a jetty is being (re)developed to support riverine tourism?

DECARBONISE

In communities where a jetty is being (re)developed to support riverine tourism, how can the use of carbon be minimized for energy generation (gas, oil, peat, charcoal, wood), packaging (plastic) and construction (concrete, steel)?

INTRODUCTION RIVERINE TOURISM DEVELOPMENT

REGENERATE
Is the population size and gender balance improving in communities where a jetty is being (re)developed to support riverine tourism? Are household incomes improving and poverty levels reducing? Is biodiversity being conserved? Is intangible cultural heritage being preserved?

COLLABORATE
In communities where a jetty is being (re)developed to support riverine tourism, has a destination management organization (DMO) been established and how many stakeholder organizations are actively participating in the DMO? Is there a growing number of operators actively operating? Is there an increasing number of tourism and hospitality enterprises registered locally? How many of these are owned/led by women? How many local residents are employed in tourism and hospitality activities?

FINANCE
What is the economic value of riverine tourism to communities where a jetty is being (re)developed? How much investment is coming into from private investors and public agencies?

[1] https://www.unwto.org/the-glasgow-declaration-on-climate-action-in-tourism

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2.2

FRAMEWORK

FRAMEWORK

The development framework aligns these three elements of the "recommendations that address needs by embracing emerging market trends in sustainable international tourism". A plan is therefore required for each proposed site that provides "recommendations that address needs" of custodian/host communities, investors/operators and tourists by "embracing" emerging market trends" and delivering "sustainable international tourism". The building blocks of the framework are elaborated in the next paragraphs, their relationship to each other is depicted in Figure 4 below.

NEEDS
Idenfitication of stakeholder needs, for hosts and investors

CLUSTERS
Identification of tourism clusters, both thematic and geographical

RISKS AND OPPORTUNITIES
Identification of risks and opportunities, with special attention to introducing tourism in less established destinations

SYNERGY WITH OTHER PROJECTS
Identification of synergy with ongoing or finished projects, as well as identifying promising future developments

IMPLEMENTATION METHODOLOGY
Appreciation of market needs and value chains, and how these can managed to deliver enduring benefits to stakeholders

Figure 4: Building blocks of Tourism development Framework.

NEEDS

AS THE RESULT OF A SUCCESSFUL TOURISM INTERVENTION, CUSTODIAN/HOST COMMUNITIES NEED:

- Sustainable social and economic development. Essentially, this means demonstrably advancing the SDGs, all of which can benefit for sustainable tourism interventions.
- Climate resilience and adaptation.
- Alternative livelihoods. Youth employment. Reduced urban migration. Affordable housing. Secure tenure.
- Public services (education, health, internet, power, sewerage, transport, waste, water, etc).
- Market access. Transport networks.
- Tourists enabled to spend more time and money, primarily by encouraging overnight stays, since approximately 70% of tourism spend accrues in the places that tourists stay overnight, and this is maximized when tourism and hospitality products are community owned and managed.

FRAMEWORK

NEEDS – CONT.

SIMILARLY, INVESTORS/OPERATORS NEED:

- Political commitment. Clear roadmap. Market confidence. Unless they are confident that the Government of The Gambia and public agencies are committed to the revitalization of the River Gambia as a focus of tourism and transport diversification, they are unlikely to invest.
- Level playing field. Efficient and transparent regulatory framework. It's all very well having rules about building regulations and standards, but the system needs enforcement and consistency.
- Reliable financial/banking systems. Most will operate in a stable convertible currency, typically USD, EUR or GBR, and it is desirable for them to be able to hold funds and make payments locally in a secure currency account. Operators also want to be able to receive digital payments in both GMD and convertible currencies at fair exchange rates, but this is often not possible due to financial infrastructure and limited internet connectivity.
- "Last mile" connectivity, ensuring that new developments can efficiently and promptly connected to relevant services, including transport, power, sewerage, etc, preferably at the same time delivering connectivity to the adjacent community. Achieving connectivity for both groups of stakeholders is an indication of successful intervention and implementation.
- Understanding of the European Package Travel Directive[2]. Everyone involved in tourism and hospitality needs to appreciate the necessity of having clear operating procedures and risk management protocols. Tour operators registered in the European Union (EU) and/or working with customers from the EU are liable for everything that happens to their customers overseas, and they need to be confident that their customers will be safe. Similar rules apply for tour operators in the UK, and those in the most litigious markets in the United States of America. This means that local enterprises active in tourism and hospitality must anticipate and prepare for all the potential problems that might arise.
- Commitment to sustainability and a just transition to NetZero. Climate change is an existential threat, not just to tourism in The Gambia, but to our entire planet. It therefore makes absolute sense for the Gambia Tourism Board (GTB) to sign the Glasgow Declaration on behalf of The Gambia, but the country also needs to ensure that the transition to NetZero is just and does not alienate or marginalise those in poverty, especially women.

FRAMEWORK

NEEDS – CONT.

The recommendation is to address the needs of stakeholders, as set out above. In terms of "recommendations that address needs by embracing emerging market trends in sustainable international tourism", these are summarized below, as recommendations that must be delivered to meet the needs of all stakeholders:

POLITICAL WILL.
Strategic priority. Holistic vision. Clear timetable. Integrated plan. Transport network. Overtourism strategy. Elements are emerging from the TDRGP, but they all need to be integrated with a clear implementation plan and timetable, which requires political will.

REGULATORY FRAMEWORK.
Enabling environment. Policy cohesion. "Last mile" connectivity. This is about facilitation and consistency.

ENVIRONMENTAL STANDARDS.
Building regulations. Design excellence. Conditional approvals. Inclusive access. Enforcement capability. Nothing should be permitted that doesn't also clearly advance the SDGs, delivering sustainable social and economic development for custodian/host communities.

SUSTAINABILITY COMMITMENT.
Glasgow Declaration.

COMMUNITY FOCUS.
Community benefits. Community expectations.

OPERATING ENVIRONMENT.
European operators. Package Travel Directive*. Legal liability.

GATEWAY.
Riverine tourism requires a suitable gateway, and this means a transformation of Denton Bridge. A parallel project has produced a compelling plan, and it has been suggested that this could be implemented by the Millennium Challenge Corporation. This needs to be delivered soon, if stakeholders are to believe and invest in riverine tourism.

As long as the needs of custodian/host communities and investors/ operators are met, then tourists simply need tourism products that meet their needs. This means a market-led approach to product development, so that visitor the visitor experience, including transport, accommodation and attractions are packaged in a practical way that is attractive and marketable to tourists, and tourists will consequently choose to spend time and money on those products in the chosen destinations. Meeting tourist needs completes the circle of satisfying the three stakeholder groups, so that their needs are all collectively satisfied, and they all benefit.

*https://www.cbi.eu/market-information/tourism/how-work-new-2018-european-package-travel-directive,
https://commission.europa.eu/law/law-topic/consumer-protection-law/travel-and-timeshare-law/package-travel-directive_en

FRAMEWORK

CLUSTERS

Tourism clusters are an established approach to product development and marketing. For both operational and marketing efficiency, there is merit in devising clusters around the proposed sites, both individually and in combination, and there are several cluster concepts that are interrelated. The clusters also bring the needs of the stakeholders, namely the communities, investors and tourists together.

A TOURISM CLUSTER
is a group of related assets that can be packaged in a way that meets a particular market need.

A SUSTAINABLE TOURISM CLUSTER
is a group of related assets with sufficient critical mass that can be packaged in a way that meets a particular market need, delivering enduring social and economic benefits and positive environmental impacts to a host community.

A GEOGRAPHIC TOURISM CLUSTER
groups assets in an area that can be conveniently accessed within a reasonable time from an accommodation or jetty. Typically, this might be bounded by radii on foot (30 mins) and by boat.

A THEMATIC TOURISM CLUSTER
groups assets within a larger area that are associated with identifiable themes relevant to special interest groups. Some will be very specific and extremely niche with narrow market appeal, and others more generalist with broad and extensive market reach. Crucially, every individual asset at each location can be packaged into different products, participating in multiple overlapping clusters for different markets.

Table 7 illustrates how certain jetty sites fit in the thematic tourism clusters.

#	SITE	ARTS & CRAFTS, CULTURAL HERITAGE	BIRDS, NATURAL HERITAGE	DARK/ COLONIAL HERITAGE	FOOD HERITAGE	LEISURE FISHING	ASSOCIATED SITES (KEIOS, 2024)
1	ALBREDA	**X**		**X**	X	X	Albreda-juffureh complex Kunta Kinteh island
2	KARTONG	X	**X**		X	X	Kenye Kenye Janago Holy site
3	BINTANG		**X**		X	X	Bintang Bolong Tributary
4	BASSE	**X**			X		Basse Community craft centre area
5	BARRA	**X**	X	X	X		Fort Bullen Regional Museum Fort Bullen, Jinack island Niumi National park
6	KUNTAUR	**X**			X		Wassu Stone Circles (Museum) Wassu Stone quarry Kuntaur village
7	TENDABA		**X**		X	X	Kiang West national park Bao Bolong Wetland reserve
8	BANSANG	**X**	X	X	X		Historic Georgetown Janjanbureh Museum Kunkilling Forest Park King Musa Molloh Tomb
9	KEREWAN		**X**		X	X	Bao Bolong Wetland reserve
10	KAUR		**X**		X	X	

Table 7. Indicative tourism themes per jetty location (leading theme in bold)

If all the jetties cannot be developed in parallel, then development should be phased to support the most marketable and beneficial clusters.

FRAMEWORK

RISKS AND OPPORTUNITIES

With any development involving tourism and hospitality, there are risks and opportunities, especially in emerging and less established destinations. This therefore applies to hinterland villages becoming more involved in the visitor economy through the development of riverine tourism. In The Gambia, it will be important to maximize the opportunities and positive impacts, whilst also safeguarding against risks and minimizing negative impacts.

Potential opportunities and positive impacts from the development of jetties and riverine tourism, all of which should be maximized, include:

- Enhanced local income during development and operational phases
- Employment and alternative livelihoods, especially for women and young people
- Reduction in urban migration
- Access to new and improved services (e.g. transport, water, waste, electricity, internet)
- Celebration and monetization of local heritage, leading to protection of culture and biodiversity
- New markets for local producers and suppliers of products (food, crafts, agricultural produce, etc)
- New markets for local suppliers of services (accommodation, activities, hospitality, transport, etc)
- Opportunities to establish new supply chain businesses, including maintenance of boats, jetties, accommodation and other visitor facilities
- Reduction in transportation costs of goods
- Reduction in emissions from transportation (shifting from road to river, but also potentially negative due to growth)
- Reduction in traffic congestion near port of Banjul if a modal shift to river transportation of freight materializes
- Reduction in accidents and injuries due to development of jetties that currently pose safety hazards
- Enhanced fisheries from safer and more convenient landing and handling of fish due to new or improved jetties

Any potential opportunity or positive impact that is not embraced can rapidly become a risk and negative impact. For instance, in the case of maintenance enterprises that can provide essential maintenance to river and visitor services, there is an opportunity for them to also provide services to other local businesses and households. At the same time, if maintenance enterprises and other supply chain services do not emerge, then the development of tourism and associated investments can become a liability.

A particular consideration is the maintenance of jetties. Gambia Ports Authority (GPA), for instance, has legal responsibility for river jetties, but it has no capacity (financial and human) allocated to their maintenance and development, whilst Gambia Marine Authority (GMA) has responsibility for licensing commercial operations at jetties. Therefore, whilst it would be desirable to enhance the GPA's budget in this area, it is likely that interventions will depend on private sector investment, together with local community participation. It will however be critical that public institutions, such as Gambia Tourism Board (GTB), GMA and GPA are also involved in setting, maintaining and enforcing standards. Otherwise, investors will not have the confidence to invest, and communities' expectations of tourism will be failed.

FRAMEWORK

Risks and potential negative impacts that should be minimized and require safeguards include:

- Neglect, undermining/jeopardizing existing livelihoods (farming, fishing, etc)
- Growth in sex tourism, including prostitution
- Child abuse and exploitation of young people, especially women and girls
- Exploitation of workers and lack of job security due to low margins and extreme seasonality
- Increased inequality between those in tourism and those in other sectors
- Excess consumption and poor waste management, damaging environment
- Human-wildlife conflict
- Cultural conflict between visitors and hosts, including alcohol consumption and sexual relations
- “Overtourism”

It might seem surprising to be thinking about “overtourism” when there is currently hardly any tourism at the majority of sites and it will take time for tourism to develop. However, it can be argued that overtourism is actually a symptom of undermanagement, and the appropriate mitigation is good planning and management. When riverine tourism takes off in The Gambia, growth will accelerate. It is incumbent on those stakeholders responsible for tourism to ensure that there is a plan to distribute diversified new products throughout the country and to avoid a small number of sites becoming inundated with tourists whilst others miss out. Intentional diversification and broad distribution is a function of resilience.

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FRAMEWORK

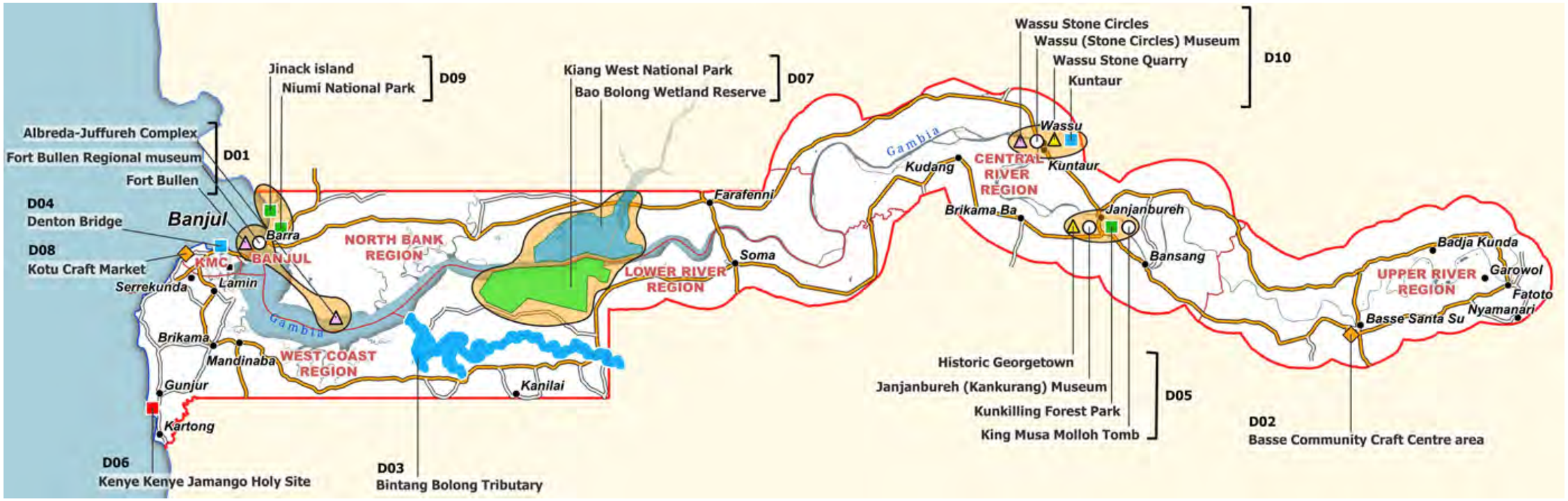


Figure 5. Map of tourism assets packaged in ten clusters (KEIOS Development Consulting, 2024)

SYNERGY WITH OTHER PROJECTS

The most notable project with high level of synergy is the Destination Assessment executed under the TDRGP, by KEIOS (KEIOS development consulting, 2024). Eighteen assets have been packaged into ten destination clusters across the country, and the need to expand accommodation provision in each destination has been identified.

There is a high level of synergy between the ten destination clusters and the ten jetty sites prioritized by the current project.

The destination clusters represent the foundation of the heritage at the majority of sites, whilst the development opportunity lies in the market-led expansion of accommodation provision, ranging from homestays and hostels to luxury lodges and houseboats, and the creation and curation of community-led products. There is considerable capacity building required, which has also been identified and addressed by the clusters study.

FRAMEWORK

SYNERGY WITH OTHER PROJECTS – CONT.

There are other parallel projects within the TGRCP, including the West Coast/Kuntah Kinteh coastal protection project, marketing and destination assessment, all of which relate to some of the areas in the current project. There is also an FAO project that involves two of the jetty sites (Bintang, Kartong), whilst other projects, such as one by the Millennium Challenge Corporation (currently suspended) focused on river transport has implications for riverine tourism, including the Denton Bridge gateway. Another project that was launched in beginning of 2025 is 'The Gambia Infrastructure Project' by the Worldbank, of which one of the aims is too upgrade and maintain rural and urban roads to improve transport connectivity with lower carbon modes (river transport and urban public transport). This project is in the beginning of concept stage but some overlap with the road improvements suggested in this project might occur in the future.

The feasibility of the proposed network of jetties had been assessed as both realistic and desirable in support of the TDRGP objectives. However, in the light of recent political decisions by the new US administration, including an immediate 90 day suspension of funding for USAID and review of funding for other international agencies such as the World Bank, FAO and Millennium Challenge Corporation, finance available to support implementation must be considered less certain. Whilst the feasibility assessment was not predicated on the availability of US ODA, there has already been a knock-on effect across the Global South with other donor agencies and philanthropic foundations, especially in Europe and North America, indicating that they will step in to at least partially fill the gaps resulting from US policy decisions.

Meanwhile, European governments are also diverting ODA funds to defence budgets, reducing the amount of alternative ODA funds available through bilateral and multilateral agencies; this is particularly true of the UK, which in February reduced its ODA budget from 0.5% to 0.3% of GNI, and as the former colonial power, had historically been a major funder of development projects in The Gambia. It is therefore likely that implementation will become more dependent on private sector finance, making the role of public sector regulation and policy cohesion even more critical.

The EU-funded Gambia Youth Empowerment Project (YEP), which "takes a market-led approach to improve the skills and employability of potential and returning migrants according to the demands of the job market and simultaneously creating employment opportunities along Gambian value chains" and could help build capacity by addressing "the economic root causes of irregular migration by supporting youth employment and entrepreneurship". However, this project was initially only funded for 5 years (2017-2022), and the continuation of all such interventions must now be considered at risk.

Across the TDRGP programme and more widely, it is therefore even more important to maximize synergies between projects to optimize efficiencies and avoid duplication.

FRAMEWORK

IMPLEMENTATION METHODOLOGY

This section sets out an approach based on international best practice of tourism development in less established destinations, especially in rural and more marginalised and disadvantaged areas, where there is a commitment to deliver enduring social and economic benefits through the sustainable development of tourism. It recognises that all stakeholder needs must be satisfied, and that the desired outcomes require community empowerment and leadership. The idea of tourism diversification and resilience is highly desirable, but it cannot be achieved through a top-down approach. The proposed approach therefore suggests ways to work with existing entities and to build their capacity to become functioning destination management organisations (DMOs).

Figure 6. Tourism development framework

Many tourism development plans fail, because they focus either on the needs of communities or, more often, the needs of investors, and fail to take a market-led approach to the needs of tourists. The proposed framework is a call to focus on the needs of all three stakeholder groups. Essentially, the needs of the first two groups are the same, especially when the investor is the community itself. Both the community and investor groups need connectivity and clarity, benefiting side by side. As long as their needs are satisfied, then the products to be developed simply need to meet market needs, which are sustainable and reflect local distinctiveness.

Thus, implementation requires an appreciation of market needs and value chains, and how these can be managed to deliver enduring benefits to the three stakeholder groups. It is therefore not a linear process, but it can be described in the following way.

The framework involves assessing and aligning the needs of the three stakeholder groups, whilst giving consideration to a range of levers that can help to engage and motivate stakeholders to address these needs. In terms of implementation, the challenge is two-fold: who or what is the delivery agent, and what can public agencies do to support and facilitate delivery?

Typically, the “delivery agent” will be a destination management organization, that has a focus on tourism as a driver of sustainable social and economic development. However, with the exception of Kartong, there is a lack of effective DMOs in The Gambia.

Given the national commitment to develop riverine tourism and without an institutional infrastructure to deliver it, there is a need to create a network of DMOs along the river.

FRAMEWORK

IMPLEMENTATION METHODOLOGY – CONT.

A DMO can have a tourism focus, but this isn't essential. It can simply be an extension of an existing organization that delivers for the local community and has substantive community participation. The DMO can be formed from a community council, local youth group, or a loose collective of community-based homestays and/or fisherfolk; it can also be a new organization established by tourism investors and/or tour operators with a demonstrable commitment to community development. Through the TDRGP, there is an opportunity for the GTB to create a method for either formally or informally designating a local entity as the representative DMO for each jetty site.

Each DMO should be focused on managing tourism for the sustainable social and economic development of the host community. This means understanding how to develop tourism products that meet market needs and how to work with tourism investors and tour operators to link local supply chains for goods and services to tourism products. It also means insisting on conditionality of development, whereby the delivery of public infrastructure for investors and the local community is aligned. Each DMO should include representation of the host community, investors and tour operators.

As each jetty restoration or development is being planned, GTB with the PIU should work with each stakeholder community to establish and designate a DMO. This does not require any new statute or regulation; it is simply a reflection of The Gambia's commitment to develop sustainable community-led riverine tourism and is a practical approach to ensure that the ambition to deliver diversification and resilience in this sector can be achieved.

Importantly, the effort (time and cost) of designating local entities as DMOs and building their capacity to become effective is marginal compared to the cost of building the physical infrastructure and it is likely to deliver better outcomes.

Leadership is an important consideration. This might be a respected person from the community, or it might be someone from outside that has a demonstrable commitment to community development along with expertise in tourism management and development that they want to share with the community. They must be passionate about delivering social and economic development for the host community through tourism.

FRAMEWORK

SUMMARY OF KEY RECOMMENDATIONS

- For each site at which a jetty is being built/renewed through the TDRGP program, there should be an **ENTITY DESIGNATED AS THE LOCAL DMO** to be consulted by GTB and other relevant public agencies on tourism development and management plans. PIU should explain this to the custodian/host community at each site.

- In consultation with the community council and GTB, PIU should **IDENTIFY AN ORGANIZATION BASED IN THE COMMUNITY** that has a clear commitment to community development and an interest in riverine tourism as a driver of sustainable social and economic development in the area. The foundation of the DMO might be the community council itself, and otherwise a youth group, women's group fishing or farming association, business association, heritage group, or a combination thereof. The leader of the DMO can come either from within the community or from outside, as long as they have secured community approval and support. Sometimes, a well-connected leader from outside can add value, but this should never lead to marginalization of community needs.

- The DMO should **ESTABLISH A MECHANISM TO ENGAGE AND INVOLVE INVESTORS AND TOUR OPERATORS** in its planning processes. Additionally, investors and tour operators should be required to engage and involve the DMO in their own plans to ensure mutual benefit.

- **BUILD THE CAPACITY OF DMOS** by providing training (including train the trainers) workshops and courses on product development, marketing and customer satisfaction. Product development should include pricing, particularly to take account of depreciation costs, a margin for investment, and intangible costs. For instance, it might be possible to deliver a homestay experience for less than $10 per night, but this doesn't take account of the tremendous value of staying in an exceptionally beautiful place (perhaps even a UNESCO site) and eating local gastronomic heritage made from locally sourced ingredients from the river and the land. "Culture vultures" can willingly pay more than $50 a night for a simple homestay experience, as long as it is authentic and they can see that part of the "profit" is being reinvested in the community. This is how tourism can become transformational in more remote and less established destinations.

- Encourage the DMOs to establish a **NETWORK TO SHARE BEST PRACTICE AND LESSONS LEARNT.**

KART (The Kartong Association for Responsible Tourism) is a useful DMO model for The Gambia, as it is well established and has achieved commercial success. Apart from (modest) membership fees from local tourism enterprises, it runs cultural festivals and events, is developing development partnerships with private sector operators, and earns significant revenue conducting social and environmental surveys and delivering mangrove restoration projects. There is certainly scope for KART to share lessons learnt.

FRAMEWORK

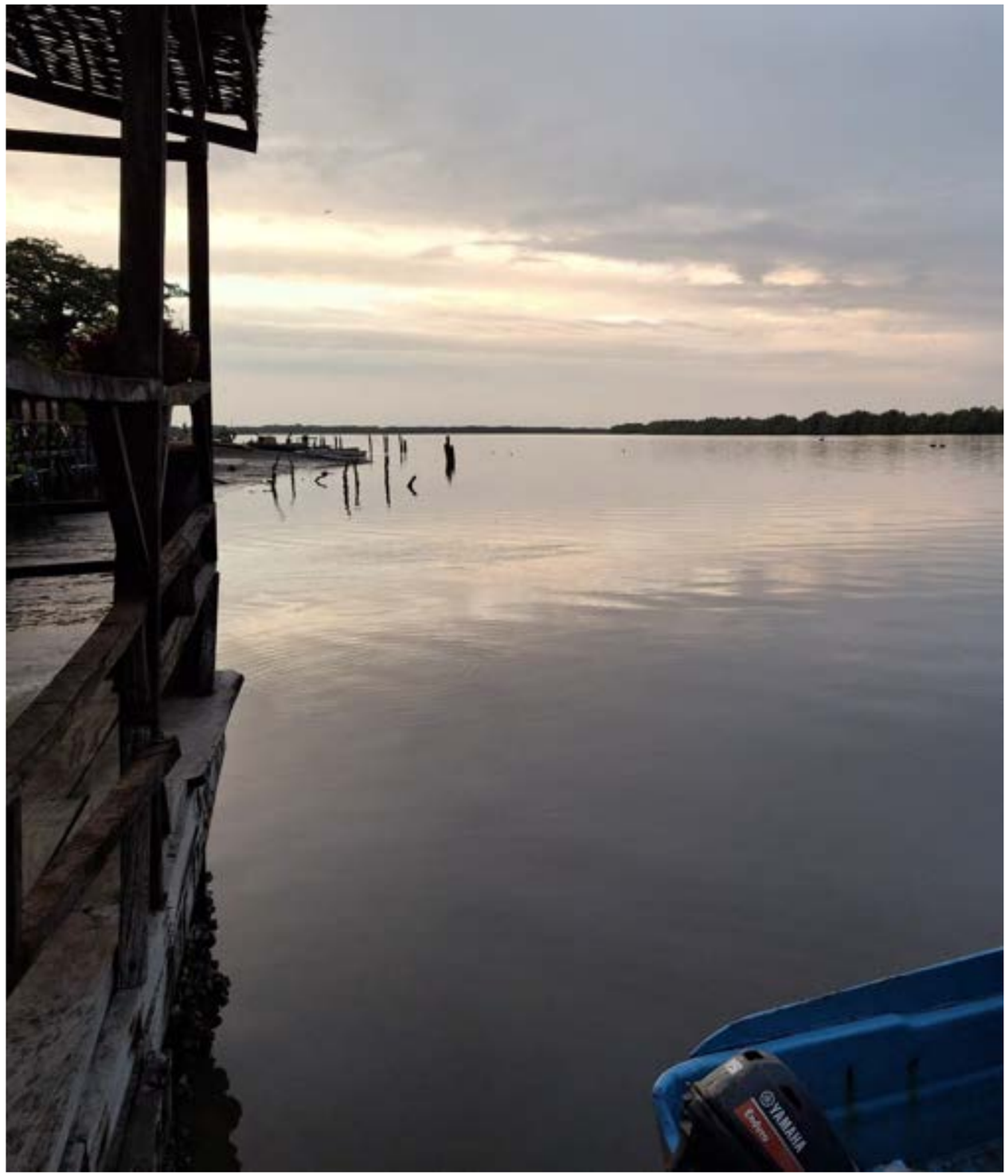
SUMMARY OF KEY RECOMMENDATIONS – CONT.

In terms of supporting and facilitating delivery, it is necessary to promote policy cohesion between government ministries, local councils and public agencies to ensure that riverine tourism becomes a driver of sustainable social and economic development for host communities at jetty sites. This can be guided by the PIU through its implementation of the TDRGP.

This means, for instance, ensuring that there are clear maintenance plans for the jetties. The fact that, despite having legal responsibility, the GPA has no budget for restoration and maintenance of jetties upriver means that the Government needs to find a way to ensure that is a mechanism to fund ongoing maintenance. Whether built with public or private funds, the approval of any jetty development should require a long-term maintenance plan.

Regulations for safety and building control, as well as environmental management and sustainability standards is a public responsibility, as is enforcement. For all stakeholders to have confidence in the development of riverine tourism, it is incumbent upon the Government to ensure that there are appropriate standards and regulations in place, along with enforcement capacity. Without relevant standards and enforcement, investors will not have confidence and responsible tour operators will not come.

Sustainable tourism development is not a checklist, but a mindset that requires a shared vision to meet the needs of all stakeholders and delivering for them all.



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2.3

TOURISM DEVELOPMENT OPPORTUNITIES

TOURISM DEVELOPMENT OPPORTUNITIES

The annual value of riverine tourism is estimated to be worth between $2m and $3m, with $1.4m currently being spent on existing accommodation at the ten proposed jetty sites and the balance spent on activities and hospitality by overnight visitors and day trippers to these and other sites. In the socio-economic assessment it was estimated that there are currently 520 rooms of variable standard across the ten sites, achieving average revenue of $16 PPPN (“per person per night”) and RevPAR (“revenue per available room”) of $7, reflecting low levels of occupancy and duration. It is important to remember that economic impact can be improved through enhanced marketing to achieve higher levels of occupancy and duration. Community benefit does not necessarily require immediate investment in lots of additional accommodation, and can be achieved through product diversification, including, where necessary, the development of homestays. The (re)development of jetties at the ten proposed sites will unlock the potential for social and economic transformation through tourism.

This section sets out a summary vision for the ten proposed sites, with further detail for each individual site in Section 4. However, since success is a function of the level of community leadership and participation, it may be that communities will conceive alternative approaches. As long as these reflect market needs and deliver for both investors and the local community, then these are possible. There must however be an overall vision that avoids homogeneity and embraces the local distinctiveness and autochthonous identity of each site. As well as curating local natural and cultural heritage and associated attractions, each site must celebrate its own distinctive intangible cultural heritage, which might include music and crafts, and will certainly involve local gastronomy. All visitors need to eat, and food is inevitably the simplest way of projecting local distinctiveness to define the destination’s uniqueness.

The enhancement of tourism on the River Gambia area is poised to bring substantial social and economic benefits and diversification options that will deliver resilience to hinterland communities and to the country’s visitor economy. The development of modern jetties and their surrounding areas will be crucial in this transformation. These jetties will not only serve as docking points but will be integrated with accommodation, attractions, and amenities to provide a comprehensive visitor experience.

KEY FOCUSES INCLUDE:

- Establishment of high-quality jetties equipped with comfortable waiting areas, restrooms, and information centers.
- Development of nearby accommodation such as hotels, lodges, houseboats, hostels and homestays that cater to a range of budgets and preferences.
- Creation of attractions around the jetties, including cultural centers, local markets, restaurants, and recreational facilities.
- Training programs for local staff to ensure excellent customer service, navigation skills, safety protocols, and emergency response readiness.
- Improvement of hygiene standards, particularly in food services, to ensure the health and satisfaction of visitors.
- Enhanced visitor satisfaction due to the convenience and comfort provided by well-developed jetty areas.
- Economic opportunities for local businesses through tourism and hospitality services and products.
- Boosted international reputation of the River Gambia as a premier sustainable tourism destination.

2.4

RIVER TRANSPORT NETWORK

RIVER TRANSPORT NETWORK

River Gambia and the (re)development of jetties along the river provide an excellent opportunity for the development of a tourist service, providing the required access to tourist destinations along the river, as well as being a tourist activity in itself. Our recommendations with regards to this river transport system development are twofold; First an elaboration of the network and associated services is provided. Secondly, the type of fleet required to provide these services is defined.

Although the station locations are spread rather evenly along the river Gambia, a large variety exists in the destination quality each location has. For example, Bintang, Kerewan and Kaur are more oriented towards nature-tourism, whereas Barra, Albreda, Kuntaur and Basse are more culture-oriented. To provide tourists a fitting river transport service, different routes should be established. Additionally, some tourists may be looking for a day trip, whereas others rather embark on a multiple day's trip. Given the distance between Banjul and Basse being over 400 km, this destination can only be reached over the course of two days of travel (14 hours sailing at 15 knots).

It is noted that the base station for river services is the marina at Denton Bridge, near Banjul, which is also the main starting point for tourist travels on the river. Further, it is noted that not all stations are ready for tourist arrivals at the same time. As the funding and partnerships required come available, more stations (and supporting developments) may be realized. It is important to strategize the network so that the routing is flexible enough to accommodate the temporal variation in destination development. Also, existing jetties that require less investment may be easier to redevelop and bring into operation than new jetties.

Given the variety in destinations and tourist interests, a variety in service offerings is required. The main offerings identified are as follows:

1. One- or two-day excursions, as optional add-on to travel package for tourists staying on the coast ("River excursions")
2. One- or two-week river excursions, being the principal travel package ("River cruises")
3. Tourists spend their holidays in one of the ten locations, exploring from there

Further, it is assumed that, given the distances between stations, all routes may call at jetties along the route that match the focus of the trip. For example, a culture-oriented trip from Banjul to Basse, would also stop at Albreda and Kuntaur.

- **NATURE-TOURISM**
- **CULTURE-TOURISM** (Heritage or Dark/Colonial)
- **FISHING-TOURISM**

See Figure 5 on page 36 for a map of tourism assets, packaged in ten clusters. These clusters are used to help define the hub stations from which excursions can be organized. In addition, all jetties are classified according to the above themes in Table 7.

RIVER TRANSPORT NETWORK

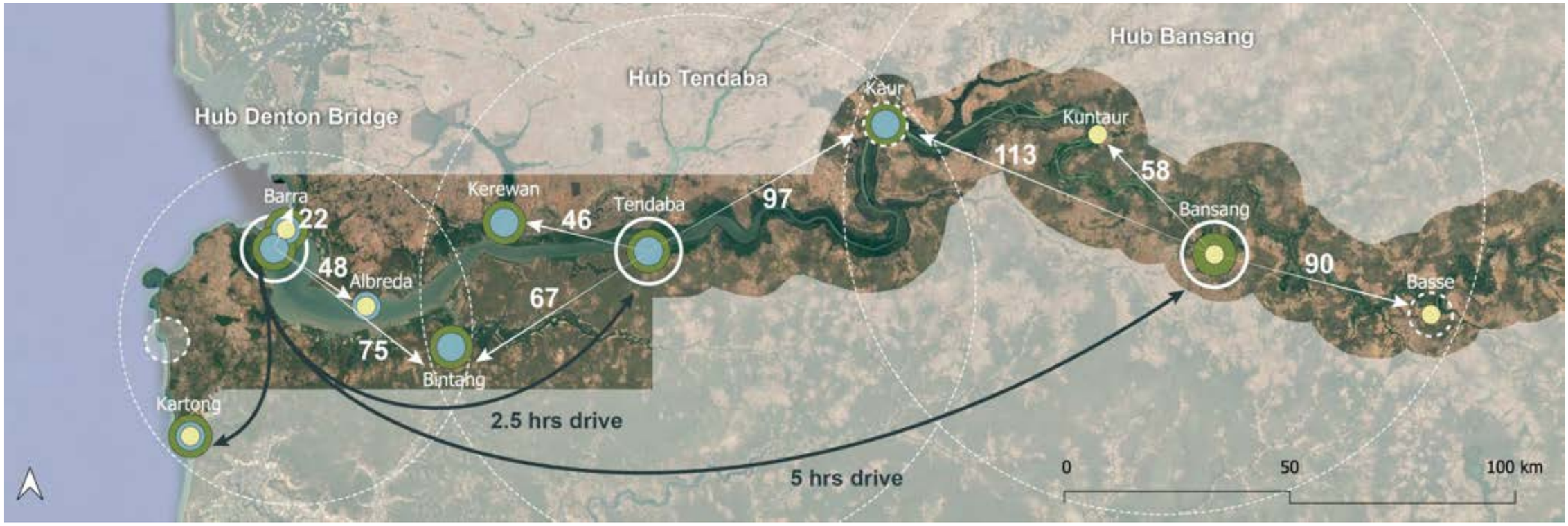

Figure 7. Geographic clusters with themes per transport hub station

RIVER EXCURSIONS

In this tourism service, it is assumed tourists will travel to the hub stations (Denton Bridge, Tendaba, Bansang) by car. From a hub station, various routes are possible that are suited for 1 or 2-day river excursions. Accommodation facilities are (expected to be) available at all stations, so overnight stays at either a cluster station or excursion destination is possible.

The network of hubs for river excursions – assuming development of all stations and destinations – could be visualized as above.

LEGEND:

- Culture tourism
- Fishing tourism
- Natural tourism
- Main port
- Future port development

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RIVER TRANSPORT NETWORK

Three operational hubs are identified, covering the spectrum of stations along the river Gambia, and allowing for optimal flexibility in terms of which stations are developed first:

THE DENTON BRIDGE HUB
has a diversity of tourism attractions within its range. Cultural destinations include Barra and Albreda, further supported by Kartong (accessed by car). Nature tourism is available at Kartong, Bintang and to a lesser extent at Barra.

THE TENDABA HUB
is characterized by good access to nature-oriented tourism destinations like Bintang, Kaur and Kerewan, which is located near the Kiang West and Bao Bolong National Parks. Also access to fishing waters may be offered through the Tendaba hub. Cultural destinations are less pronounced in this area along the river Gambia.

THE BANSANG HUB
provides access to more culture-tourism destinations, with highlights at Kuntaur (Wassu Stone Circles), Basse and Bansang itself. Also Kaur (nature destination) may be reached from Bansang, at a sailing time of approx. 4 hrs.

HUB STATION	DESTINATION	DISTANCE [km]	TRAVEL TIME [hrs:min]
DENTON BRIDGE	BARRA	33	1:11
	ALBREDA	48	1:43
	BINTANG	75	2:59
TENDABA	BINTANG	67	2:44
	KEREWAN	46	1:39
	KAUR	97	3:28
BANSANG	KAUR	113	4:02
	KUNTAUR	58	2:05
	BASSE	90	3:13

Table 8. Distances and travel time from hub stations to destinations

RIVER TRANSPORT NETWORK

Figure 8. Longer river cruise itineraries, based on theme

RIVER CRUISES

The river cruises-service is a full river-based network, assuming all movements will be by the river. Three routes are identified, which have the distinct themes of culture-tourism, nature-tourism or fishing tourism. The cruise may be extended through the network as demanded, ranging from a single day trip to a multi-day trip up and down the river.

The themed river cruise routes are visualized in the map.

LEGEND:

- Culture tourism
- Fishing tourism
- Natural tourism
- Main port
- Future port development

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RIVER TRANSPORT NETWORK

THE GREEN ROUTE
in the network diagram connects the nature-oriented destinations and shows a good spread of destinations along the network with average distances between stations around 45 km up until Tendaba. Beyond Tendaba distances increase to 113 km between Kaur and Bansang, which is a significant distance to cover.

THE YELLOW ROUTE
is the culture-destinations route and reaches all the way to Basse. The culture destinations are predominantly located at the beginning and end of the river, which introduces a large distance between the Albreda and Kuntaur stations. For that reason, the hub station of Tendabe was included, as this may act as a suitable stop-over location.

THE BLUE ROUTE
connects the 6 most westerly destinations, as the river waters up until this point upstream are suitable for fishing (brackish waters). It is noted that fishing may actually not take place at the destinations but would rather take place along the route.

ROUTE	A	B	DISTANCE [KM]	TRAVEL TIME [HRS:MIN]
GREEN ROUTE - NATURE	DENTON BRIDGE	BARRA	30	1:05
	BARRA	BINTANG	60	2:09
	BINTANG	KEREWAN	40	1:26
	KEREWAN	TENDABA	46	1:39
	TENDABA	KAUR	97	3:28
	KAUR	BANSANG	113	4:02
YELLOW ROUTE - CULTURE	DENTON BRIDGE	BARRA	30	1:05
	BARRA	ALBREDA	33	1:11
	ALBREDA	TENDABA	70	2:30
	TENDABA	KUNTAUR	152	5:26
	KUNTAUR	BANSANG	58	2:04
	BASANG	BASSE	90	3:13
BLUE ROUTE - FISHING	DENTON BRIDGE	BARRA	30	1:05
	BARRA	ALBREDA	33	1:11
	ALBREDA	BINTANG	27	0:58
	BINTANG	KEREWAN	40	1:26
	KEREWAN	TENDABA	46	1:39
	TENDABA	KAUR	97	3:28

Table 9. Travel time between destinations, assuming a cruising speed of 15 knots

RIVER TRANSPORT NETWORK

Figure 9. Example of wooden longboats currently operating for tourism

FLEET

Currently, wooden vessels are used for river tourism. These pirogues – a local narrow boat, designed to navigate the creeks of the Gambia river delta – travel at a too low speed, making it impossible to travel meaningful distances within reasonable time. Moreover, some of the boats to transport tourists are often poorly maintained and therefore not so safe, and well-maintained lifejackets are rarely available.

To make river tourism suitable for a larger proportion of tourists, including those booking with large tour operators, a different type of vessels would be required, and (because of corporate liability regulations and consumer insurance requirements in Europe and North America) it is essential that any boat operator can demonstrate risk management arrangements, including holding public liability insurance and carrying appropriate lifesaving equipment.

A fleet of modern passenger vessels designed for tourism river transport on the River Gambia would consist of boats with a capacity to comfortably accommodate between 20 to 40 passengers. These vessels would be equipped with a range of utilities to ensure a pleasant journey, such as air-conditioned inside areas, reclining seats, shaded view-decks, clean restrooms, and possibly a small onboard café offering refreshments and snacks. Additionally, providing free Wi-Fi and charging ports for electronic devices would enhance the travel experience for passengers.

The vessels would need to maintain an average cruising speed of 15 knots (~28 km/hour), which is suitable for comfortable river cruising while allowing for time-efficient travel between destinations. The recommended type of boat for such a fleet would be catamarans, as they offer stability, spaciousness, and fuel efficiency. Catamarans are also known for their shallow drafts, making them suitable for navigating the varying depths of the River Gambia.

RIVER TRANSPORT NETWORK

FLEET – CONT.

The dimensions of the design vessel would range from 15 to 20 meters in length, 4 to 5 meters in width, and a maximum draft of 1.5 meters.

Regarding fuel, a combination of diesel and electric propulsion systems would be ideal. Diesel engines are reliable and provide the necessary power for longer journeys, while electric motors can be used for quieter, shorter trips and are more environmentally friendly. Hybrid systems combining both diesel and electric power would offer the flexibility to switch between modes depending on the journey's requirements and environmental considerations.

Implementing advanced waste-water treatment systems on board these vessels is crucial for minimizing their environmental footprint. By treating waste-water directly on the vessels, the volume of waste needing to be managed at docking locations will be significantly reduced. This onboard treatment not only ensures that the discharged water meets environmental standards but also alleviates the burden on local waste management infrastructure.

An example of such vessel is shown in Figure. The specification sheet of this type of vessel is added as an appendix in *BJ4644-RHD-D5-RJ-RP-Z-0001 - Recommendations for River Jetties*.

The goal of this project is sustainable tourism development, which includes to enhance community involvement and profit from the tourism sector. Therefore we do not advise cruise-boat tours where tourists stay on board for lodging. In addition to the vessels themselves, supporting infrastructure and services are essential to the successful operation of a fleet on the River Gambia.

VESSEL REQUIREMENTS	
CAPACITY	20-40 passengers
DIMENSIONS	15-20 m length 4-5 m width 1,5 m draft (max)
CHARACTERISTICS	Diesel/Electric propulsion International safety standards Low maintenance
UTILITIES	Airconditioning Seating (inside & outside) Shaded view-deck Restrooms Café for refreshments/snacks Wifi/charging stations
ESTIMATED COSTS PER VESSEL* (2025)	
CAPEX	660,000 USD
MAINTENANCE & INSURANCE	10,000-20,000 USD/year

Table 10. Summary of vessel requirements and estimated costs

*Other costs, including fuel, crew and docking fees are highly dependent on actual use and therefore not estimated at this stage.

Adequate **DOCKING AND MAINTENANCE FACILITIES** for the vessels must be established to ensure regular servicing and safety checks. Additionally, the provision of **REFUELING STATIONS** that support both diesel and electric propulsion systems is critical to the operational efficiency of the fleet.

WORKFORCE TRAINING PROGRAMS should also be instituted to ensure that crew members are knowledgeable in navigation, safety protocols, customer service, and emergency response.

RIVER TRANSPORT NETWORK

Figure 10. Example of a vessel suitable for river transport (Source: www.seaboats.net)

Furthermore, an **OPERATIONAL CENTER** should be established to oversee the entire fleet. This center would monitor all vessels in real-time, ensuring their adherence to schedules and tracking their locations for safety and efficiency. It would serve as the hub for coordinating staff assignments, scheduling routine maintenance, and managing emergency responses. Additionally, this center would act as a primary contact point for tour operators and holiday providers, facilitating bookings, handling inquiries, and ensuring seamless communication and coordination for all tourism-related vessel movements on the River Gambia.

The implementation of a reliable and efficient river transport system on the River Gambia will significantly enhance the connectivity between key tourist destinations. The proposed fleet of catamarans, with their stability, spaciousness, and fuel efficiency, will serve as the backbone of this system.

KEY OUTCOMES INCLUDE:

- Increased accessibility to various tourism sites along the river, encouraging exploration and engagement.
- Fast travel time between destinations due to an average cruising speed of 15 knots (~28 km/hour), compared to traditional wooden crafts.
- Geographical clusters were grouped in three transport hubs, being Denton Bridge, Bansang and Tendaba.
- Environmental sustainability through the use of hybrid diesel-electric propulsion systems.
- Advise on Improved safety and operational efficiency with modern docking and maintenance facilities, as well as enhanced coordination and management of river transport through a centralized operational center.

FOR THE SUCCESSFUL IMPLEMENTATION OF THE RIVER TRANSPORT SYSTEM, THE FOLLOWING ACTIONS ARE RECOMMENDED:

- Deploy a fleet of catamarans with hybrid diesel-electric propulsion systems to balance power needs and environmental considerations. In the longer term strategy of fleet should be to go full-solar, and phase out the need for diesel driven vessels.
- Construct adequate docking and maintenance facilities to ensure the operational reliability of the fleet.
- Install solar energy and environmentally friendly waste systems, with clear maintenance plans.
- Install refueling stations that support both diesel and electric systems, ensuring uninterrupted service.
- Establish an operational center to oversee fleet management, coordinate schedules, and handle emergencies.

3

DECISION FRAMEWORK

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DECISION FRAMEWORK

To ensure the strategic development of The Gambia's tourism sector, particularly with the aim of enhancing access to the interior regions via The River Gambia, a comprehensive decision framework has been developed. This framework is designed to evaluate various investment opportunities and potential benefits and prioritize those that are deemed to have the greatest attraction for investors and to deliver the greatest impact for the host community by enabling the sustainable development and diversification of tourism products and associated infrastructure offer the greatest potential benefits in terms of both economic returns and sustainability.

THE DEVELOPMENT WILL BE VIEWED FROM FOUR ANGLES:

1. Infrastructure development
2. Economic viability
3. Tourism product development
4. Environmental implications

The framework considers several key criteria, weighted to reflect their relative importance in supporting a competitive and resilient tourism industry.

THESE CRITERIA INCLUDE:

- Infrastructure to be developed
- Total capital costs
- Anticipated benefits
- Expected return ratio
- Potential to derisk and attract additional responsible investment
- Ability to function and attract incremental visitors and markets even without the proposed investment
- Capacity to transform and diversify the tourism product
- Requirement for environmental and climate adaptation strategies

Scoring of 'Potential to Derisk and Attract Investment' is an assessment of the centrality and ease of investment for each site. A high score is where we assess a compelling investment opportunity within the national diversification strategy; a lower score reflects a lower level of confidence in the site's centrality to the national strategy. At the same time, there is an important caveat set out as a footnote (**) below the table, emphasizing that investment in riverine tourism depends on the development of an entire network. The diversification objective will not be achieved by taking a cherry-picking approach and only developing a small number of unconnected jetty sites.

Scoring of 'Potential to transform' is an assessment of potential impact. A high score is where we assess the proposed development to be transformational for all stakeholders by changing the tourism narrative; a lower score reflects the fact that there is less impact anticipated either because there are already positive activities or because the scale of impact is unlikely to be as substantial.

In order to appropriately emphasize the importance of the tourism criteria 'capacity to transform and diversify the tourism product', this criterium is scored on a scale from 1-10, where other criteria are scored on a scale 1-4. This implies a 2.5x higher weighing of this criteria, which aligns with the objectives of this project and TDRGP program as a whole.

Each project or initiative is scored based on these criteria, leading to a total score that allows for the ranking of opportunities. This structured approach ensures that the investments made are those most likely to drive substantial progress towards a sustainable and prosperous tourism sector in The Gambia.

DECISION FRAMEWORK

	CRITERIA	SCORE
INFRASTRUCTURE TO BE DEVELOPED (JETTY AND OTHER)	Only small adjustments needed to existing infrastructure	4
	Large adjustments / repairs needed to be functional	3
	New jetty and large-scale secondary developments	2
	Jetty to be demolished and rebuilt, large scale secondary developments	1
TOTAL CAPITAL COSTS	< $0.5 million	4
	$0.5 - $1 million	3
	$1 - $1.5 million	2
	> $1.5 million	1
EXPECTED RETURN RATE RATIO; CURRENT SPENDING / ANNUAL RETURN RATES REQUIRED*	Ratio under 1	4
	Ratio between 1 and 2	3
	Ratio between 2 and 3	2
	Ratio >3	1
POTENTIAL DERISK AND ATTRACT INVESTMENT**	Highly attractive investment	4
	Attractive investment	3
	Somewhat speculative investment	2
	Highly speculative investment	1

	CRITERIA	SCORE
ABILITY TO STILL FUNCTION AND ATTRACT VISITORS WITHOUT THE PROPOSED INVESTMENT	Impossible without investment	4
	Short term investment highly desirable	3
	Investment would have tangible impact	2
	No immediate need for investment	1
POTENTIAL TO TRANSFORM AND DIVERSITY GAMBIA'S TOURISM PRODUCT	Transformational	10
	Substantial	7
	Significant	4
	Limited	2
	Negligible	1
REQUIREMENT FOR ENVIRONMENTAL AND CLIMATE ADAPTATION STRATEGIES	No particular measures needed for climate adaptation and/or environmental impact (flooding or erosion)	4
	Minor measures foreseen to counter erosion	3
	Moderate measures expected to counter erosion and/or floodrisk	2
	Large scale measurements needed and very prone to climate change (large floodrisk and erosion)	1

Table 11. Decision framework criteria

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DECISION FRAMEWORK

	INFRASTRUCTURE DEVELOPMENT		ECONOMIC VIABILITY		TOURISM PRODUCT DEVELOPMENT		ENVIRONMENTAL IMPLICATIONS	TOTAL SCORE	RANKING
	Infrastructure to be developed (jetty and other)	Total capital costs	Expected return rate ratio; Current spending / annual return rates required*	Potential to derisk and attract investment**	Ability to still function and attract visitors without the proposed investment	Potential to transform and diversify Gambia's tourism product	Requirement for environmental and climate adaptation strategies		
01. ALBREDA	1 - Jetty to be replaced. Road upgrades and secondary infrastructure like shade area and toilets to be constructed.	1 – direct costs at $1.96 million	2 – ratio is 2.62	4 – national priority for tourism diversification	3 – new jetty highly recommended but location functioning as is	10 – a sleeping giant, central to tourism diversification strategy and at the heart of The Gambia's heritage.	2 – HIGH erosion risk; large tidal range, ovserved erosion, sandy banks and lack of vegetation. LOW risk of river flooding	23	6
02. KARTONG	2 - Jetty to be constructed. Road upgrades and secondary infrastructure like shade area and toilets to be constructed, as well as a solar system for power supply.	3 – direct costs at $0.91 million	4 – ratio is 0.33	2 – key element in north-south corridor, and building on existing infrastructure. But isolated from main gambia river so will not profit from other jetty developments	4 – new jetty required	7 – crystalizing potential, building on existing activity	3 – LOW erosion risk: low flow velocities, vegetated banks, gentle slope and stable observed banks , MEDIUM risk of river flooding	25	5
03. BINTANG	2 - Jetty to be completely replaced. Secondary infrastructure like shade area and toilets to be constructed.	3 – direct costs at $0.55 million	4 – ratio is 0.29	4 – building on already established tourism infrastructure	4 – new jetty required	7 – crystalizing potential, building on existing activity	3 – LOW erosion risk: No significant flow velocities, gentle slope and stable banks. MEDIUM risk of river flooding	27	2
04. BASSE	3 - Jetty to be rehabilitated and furniture to be added. Road upgrades and secondary infrastructure like shade area and toilets to be constructed.	4 – direct costs at $0.47 million	4 – ratio is 0.36	3 – significant potential ROI if developed as part of national strategy	3 – opportunity limited without investment	10 – transformation through diversification	2 – MEDIUM erosion risk: Nearby structures, moderately exposed banks near jetty and observed bank changes HIGH risk of river flooding	29	1
05. BARRA	2 - Jetty to be constructed. Road upgrades and secondary infrastructure like shade area and toilets to be constructed.	2 – direct costs at $1.30 million	2 – ratio is 2.62	4 – key element in north-south corridor and multiple heritage clusters	4 – new jetty required	10– transformation through diversification	2- HIGH erosion risk: exposed location at coast, exposed to both tides and waves, sandy banks, no vegetation and observed bank change. Jetty could potentially block sand transport (on top of the ferry terminal) which can increase erosion rates upstream. LOW risk of river flooding, however very exposed to coastal flooding.	26	3

Table 12. Decision framework

* To assess the potential per site, the current spending (= benefits) on accommodation (being the relatively most reliable indicator of tourism potential) is compared to the required benefits. This potential is expressed as a ratio between current benefits and required benefits. a low ratio indicates more viable development.
** An important caveat is that, whilst individually some investments might be considered speculative, they become infinitely more compelling and attractive as part of an overall implementation strategy for the sustainable development of riverine tourism in The Gambia. Many sites do not have sufficient draw and critical mass in themselves as a tourism destination, but they can become a critical part of a wider network as a gateway to a geographical cluster or a key element of a thematic cluster. With the right investment, tourism can become transformational for custodian/host communities through the development of riverine tourism as part of the implementation of The Gambia's tourism diversification and resilience strategy.

DECISION FRAMEWORK

	INFRASTRUCTURE DEVELOPMENT		ECONOMIC VIABILITY		TOURISM PRODUCT DEVELOPMENT		ENVIRONMENTAL IMPLICATIONS	TOTAL SCORE	RANKING
	Infrastructure to be developed (jetty and other)	Total capital costs	Expected return rate ratio; Current spending / annual return rates required*	Potential to derisk and attract investment**	Ability to still function and attract visitors without the proposed investment	Potential to transform and diversify Gambia's tourism product	Requirement for environmental and climate adaptation strategies		
06. KUNTAUR	3 - Jetty to be slightly rehabilitated and furniture to be added. Road upgrades and secondary infrastructure like shade area and toilets to be constructed.	2 – direct costs at $1.17 million	1 – ratio is 4.99	3 – significant potential ROI if developed as part of national strategy	4 – major road upgrade necessary to enable repairs	4 – realizing potential through investment	1- HIGH erosion risk: moderate bank slope, lack of vegetation near jetty and structures on banks. Banks are eroding due to seasonal flooding VERY HIGH risk of river flooding. Bank near jetty floods on regular basis, limiting access to the river bank and jetty	18	9
07. TENDABA	2 - Jetty to be completely replaced, or new built in vicinity of old jetty. Secondary infrastructure like shade area and toilets to be constructed, and road to be slightly upgraded.	2 – direct costs at $1.11 million	3 – ratio is 1.48	3 – significant potential ROI if developed as part of national strategy	4 – new jetty required	7 – crystallizing potential, building on existing activity	2 – MEDIUM erosion risk: Exposed sandy banks due to reclamation, but already protected. HIGH risk of river flooding	23	7
08. BANSANG	4 - Jetty to be rehabilitated and furniture to be added. Road upgrades and secondary infrastructure like shade area and toilets to be constructed.	4 – direct costs at $0.39 million	4- ratio is 0.72	2 – potential entirely depends on investors' confidence in national implementation plans	3 – opportunity limited without investment	7 – crystallizing potential, building on existing activity	2 - MEDIUM erosion potential: moderate bank slope and observed erosion near jetty. VERY HIGH risk of river flooding	26	4
09. KEREWAN	3 - Jetty to be seriously rehabilitated and furniture to be added. Road upgrades and secondary infrastructure like shade area and toilets to be constructed, as well as a solar system	1 – direct costs at $2.29 million	1 – ratio is 4.43	2 – potential entirely depends on investors' confidence in national implementation plans	3 – repairs necessary to renew jetty, tourism development needed	10 – transformation through diversification	3 - MEDIUM: erosion at exposed banks near jetty. MEDIUM risk of river flooding	23	8
10. KAUR	3 - Jetty to be rehabilitated and furniture to be added. Road upgrade and secondary infrastructure like shade area and toilets to be constructed.	2 – direct costs at $1.25 million	1 – ratio is 6.20	2 – potential entirely depends on investors' confidence in national implementation plans	4 – major road upgrade necessary to enable repairs	2 – other development plans exist for inland port	2 - MEDIUM: Steep bank slope, minor erosion observed. HIGH risk of river flooding	16	10

Table 12. Decision framework

* To assess the potential per site, the current spending (= benefits) on accommodation (being the relatively most reliable indicator of tourism potential) is compared to the required benefits. This potential is expressed as a ratio between current benefits and required benefits. a low ratio indicates more viable development.

** An important caveat is that, whilst individually some investments might be considered speculative, they become infinitely more compelling and attractive as part of an overall implementation strategy for the sustainable development of riverine tourism in The Gambia. Many sites do not have sufficient draw and critical mass in themselves as a tourism destination, but they can become a critical part of a wider network as a gateway to a geographical cluster or a key element of a thematic cluster. With the right investment, tourism can become transformational for custodian/host communities through the development of riverine tourism as part of the implementation of The Gambia's tourism diversification and resilience strategy.

4

JETTY SPECIFIC INFORMATION

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JETTY SPECIFIC INFORMATION

In this chapter, we present the outcomes of our analysis for each jetty location in a visually attractive manner. The data is organized per jetty and presented in orderly tables, which highlight crucial information such as jetty specifications, tourism potential and existing infrastructure and financial details, ensuring a comprehensive understanding of each site. The coordinates for each jetty are presented in the WGS84 format, offering precise geographical references. Together with the Destination Assessment report (KEIOS 2024), these structured two-pagers should serve as a valuable resource for stakeholders looking to invest in the sustainable development of riverine tourism in The Gambia.

In the following pages the jetties are presented in order of ranking, resulting from the decision framework in the previous chapter as per Table 13.

RANK	JETTY
1	Basse
2	Bintang
3	Barra
4	Bansang
5	Kartong
6	Albreda
7	Tendaba
8	Kerewan
9	Kuntaur
10	Kaur

Table 13. Ranking of jetties according to score Decision Framework

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BASSE

[13.315256 , -14.2109]

SPECIFICATION OF THE LOCATION

Basse is located in the Upper River division, on the south bank of the Gambia River, at a distance of 400km from the river mouth. Basse has approximately 30,000 residents, average income is considered low-income. The main economic activities in Basse are business and some farming, with over 1,000 shops selling a wide range of goods. For the crops produced, the majority is consumed locally. Basse has relatively limited tourism infrastructure, but there are some hotels and guesthouses, and potential for home stays. The jetty in Basse is used for transporting groundnuts by NFSPMC. It is recommended to upgrade the existing jetty. There is no chandlery or other services such as fuel, maintenance, or ship building activity.

HEADLINE	THE CULTURAL HEART OF THE GAMBIA
Existing markets	Local business/trade, cultural explorers, trans-Africa adventurers
Incremental markets	Responsible travellers and cultural explorers form from Europe and North America, artisans, musicians and artists, craft buyers, digital nomads
New and enhanced products	Craft markets and arts festivals, art centres/schools, literary/artistic retreats, digital nomads, cooking classes, ecolodges, restaurants, gateway to/from trans-Africa adventures
Other comments	The clusters project has developed plans for a “Traditions of Basse” cluster, naming the Basse Community craft center area. This is consistent with our vision for the area.

ACCOMODATION OPTIONS

ESTABLISHMENTS	Triple K hotel, Happiness Guest House. Several other accommodation options, but few of international standard
ESTIMATED NO. OF ROOMS	120

FINANCES (USD)

JETTY REPAIR/REBUILD	318,000
INFRASTRUCTURE	154,000
TOTAL COSTS (USD)*	472,000
CURRENT SPENDING ON ACCOMMODATION (YEARLY)	199,000
ANNUAL BENEFITS REQUIRED**	71,000
RATIO	0.36

* Investments foreseen between 2025-2028
** Benefits between 2030 - 2055

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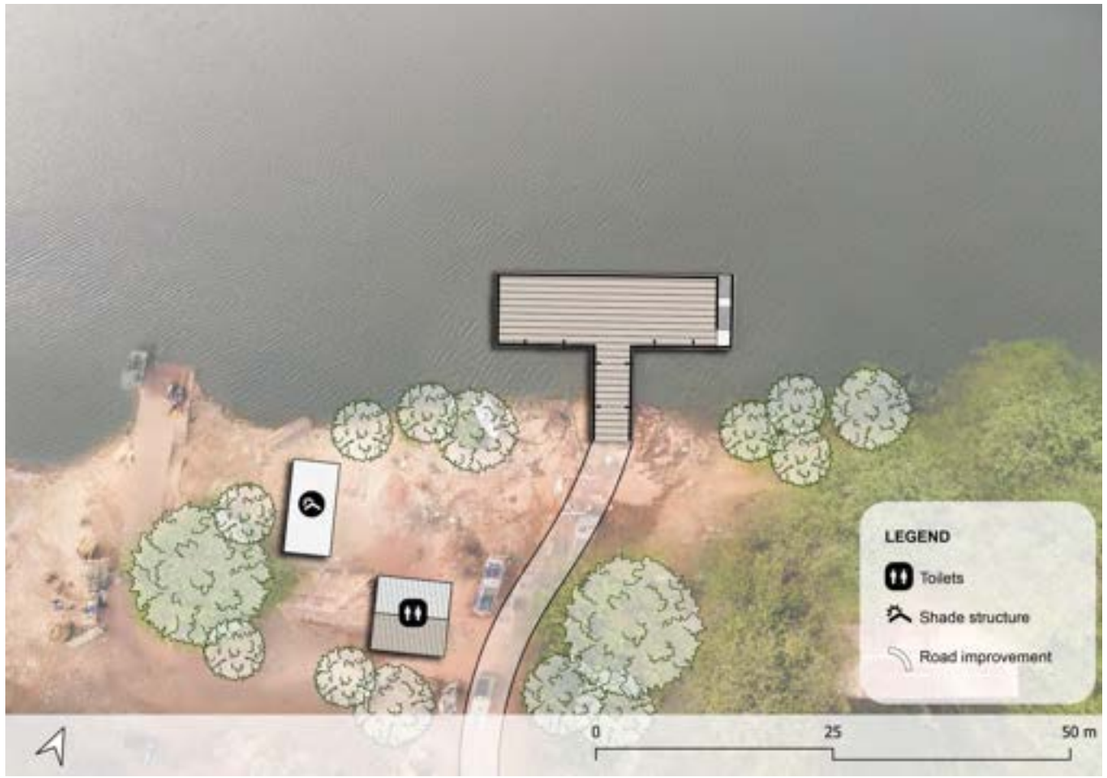
BASSE

[13.315256 , -14.2109]



TOURISM POTENTIAL

Gambia's cultural heart – products for all seasons. Basse is a long way from the coast and needs to become a destination in itself with products that involve extended dwell time.

HYDRODYNAMIC AND NAVIGABILITY

Medium erosion risk, high navigational risk due to lack of data on the higher part of the river and high risk of river flooding. Bathymetric survey to be conducted between Bansang and Basse, navigation charts to be updated. Monitoring and bank protection if needed.

TECHNICAL & COSTS

Jetty to be rehabilitated and furniture to be added. Road upgrades and secondary infrastructure like shade area and toilets to be constructed.
Development costs estimated at 34 million GMD

SOCIO-ECONOMIC*

No information on amount of visitors per year, but estimated to spend 20 USD/day. Community expects jetty rehabilitation will lead to economic benefits and employment opportunities and may lead to more tourist arrivals. Ratio between current spending by tourists and required annual benefits is estimated at 0.36.

*To assess the economic potential of development per site, the current spending on accommodation (being the relatively most reliable indicator of tourism potential) is compared to the required benefits. Bintang, Kartong and Basse are the sites with the lowest ratio, which means that redeveloping jetties at these jetty sites is potentially more viable. For more context please refer to report *BJ4644-RHD-D4-RJ-RP-EC-0001 Economic and Social Assessment.*

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BINTANG

[13.250801 , -16.210851]

SPECIFICATION OF THE LOCATION

Bintang is located in the southern part of Gambia along the Bintang Bolon, a tributary of the River Gambia, 60km from the river mouth. The town has approximately 3,000 residents who primarily rely on agriculture for their livelihood. The primary economic activities in Bintang are farming and fishing, with women involved in gardening, fish processing, oyster harvesting, and crafting. The jetty in Bintang is in a state of disrepair, consisting of wooden piles protruding from the water. The town has some tourism infrastructure, including two lodges and organized mangrove tours.. The jetty is recommended for demolition and reconstruction to support more boats and tourists.

HEADLINE	THE GAMBIA'S ESTABLISHED ECOLODGE DESTINATION
Existing markets	European and North American travelers, expats (diplomatic and INGO staff), serious birders
Incremental markets	More culturally engaged foreign travelers, aspirational African travelers, ecolux/spa seekers
New and enhanced products	Community-led tourism excursions on land and on water, community homestays, restaurants, spas houseboats, leisure fishing, specialist nature tours. Existing lodges are of high standards but can diversify their offerings. Bintang is the perfect point to enter the Bintang Bolong tributary by water.
Other comments	There is an FAO project with plans to construct a floating pontoon (10m x 2m) at the existing jetty site in 2026 for use by artisanal fishing boats (pirogues) with related infrastructure. It would be desirable to explore synergies between these two proposals to avoid conflict and to maximise the benefit for all river users. We do not see merit in combining the jetty structures itself, since they serve different target vessels and have different requirements for the users. Meanwhile, the clusters project (KEIOS, 2024) has also developed plans for Bintang Bolong, consistent with our thinking.

ACCOMODATION OPTIONS

ESTABLISHMENTS	Bintang Bolong Lodge, AbCa's Creek Lodge
ESTIMATED NO. OF ROOMS	38

FINANCES (USD)

JETTY REPAIR/REBUILD	520,000
INFRASTRUCTURE	29,000
TOTAL COSTS (USD)*	549,000
CURRENT SPENDING ON ACCOMMODATION (YEARLY)	264,000
ANNUAL BENEFITS REQUIRED**	77,500
RATIO	0.29

* Investments foreseen between 2025-2028
** Benefits between 2030 - 2055

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BINTANG

[13.250801 , -16.210851]

TOURISM POTENTIAL

New community partnerships for Gambia's ecolodges. Bintang has a solid foundation, but the area requires diversification to make the product resilient.

HYDRODYNAMIC AND NAVIGABILITY

Low erosion risk, low navigational risk and medium risk of river flooding. No particular measures advised.

TECHNICAL & COSTS

Jetty to be completely replaced. Secondary infrastructure like shade area and toilets to be constructed.
Development costs estimated at 39 million GMD

SOCIO-ECONOMIC*

10.000 visitors per year reported by local community(suspected overestimation), who spend an estimated average of 40 USD/day. The community expects development of tourism sector to increase after jetty construction, and i twill improve access tot he village and support the fishing industry. Ratio between current spending by tourists and required annual benefits is estimated at 0.29.

*To assess the economic potential of development per site, the current spending on accommodation (being the relatively most reliable indicator of tourism potential) is compared to the required benefits. Bintang, Kartong and Basse are the sites with the lowest ratio, which means that redeveloping jetties at these jetty sites is potentially more viable. For more context please refer to report *BJ4644-RHD-D4-RJ-RP-EC-0001 Economic and Social Assessment.*

BARRA

[13.483952 , -16.547697]

SPECIFICATION OF THE LOCATION

Barra is situated across the river mouth from Banjul, at the north bank of the estuary zone of Gambia. Barra has a single operational concrete structure jetty used for RoRo ferry operations. The town has approximately 6,000 residents who consider themselves of average income level. The main economic activities in Barra are fishing, retail, and tourism, with small-scale farming. The town has around 1,000 shops selling a wide range of goods1. Tourist attractions in Barra include Fort Bullen and Nuimi National Park. There is no jetty available for use of tourism boats, so a new-built jetty is advised.

HEADLINE	"AWAY FROM THE STRIP", AND GATEWAY TO NORTH COAST OF RIVER GAMBIA (AND TO/FROM NORTH SENEGAL!)
Existing markets	Local business/trade, day trippers
Incremental markets	Serious naturalists, cyclists, SAVE, cultural tourists, African Americans
New and enhanced products	Niumi Biosphere Reserve (inscribed by UNESCO, 2024), Fort Bullen, traditional lodges, ecolodges, community homestays and restaurants, jumping off point for North Coast road trips
Other comments	The clusters project has developed designs for developments at Barra as part of its "Reshaping Heritage Tourism at Gambia's First World Heritage Site", which also includes Kunta Kinteh. Also geographically related is the "Niumi National Park and Jinack Island" cluster, for which the clusters project has also developed plans. There are government approved plans for the construction of a commercial jetty near Fort Bullen, to accommodate a new ferry service for both goods and passengers between Banjul and Barra, operated by NEGMAR. This might mitigate the need for investment in a tourism-focussed jetty altogether. However, concerns were recently raised that the location of this jetty is interfering with the national heritage site of Fort Bullen.

ACCOMODATION OPTIONS

ESTABLISHMENTS	A number of small hotels, plus a GTB resort being developed
ESTIMATED NO. OF ROOMS	36

FINANCES (USD)

JETTY REPAIR/REBUILD	1,134,000
INFRASTRUCTURE	169,000
TOTAL COSTS (USD)*	1,303,000
CURRENT SPENDING ON ACCOMMODATION (YEARLY)	71,000
ANNUAL BENEFITS REQUIRED**	187,000
RATIO	2.62

* Investments foreseen between 2025-2028
** Benefits between 2030 - 2055

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BARRA

[13.483952 , -16.547697]

TOURISM POTENTIAL

Gambia's gateway – away from the Strip. Fort Bullen and Niumi National park. With a new jetty, Barra will become very accessible; the trick will be to keep visitors there overnight, reducing daytrips.

HYDRODYNAMIC AND NAVIGABILITY

Erosion risks are high, navigational risks are high due to vicinity of ferry terminal, river flooding risk is low. Limit upstream erosion by designing an open structure on poles to allow currents and sand to pass through. Navigational regulation should be adopted to manage traffic around Barra

TECHNICAL & COSTS

Jetty to be constructed. Road upgrades and secondary infrastructure like shade area and toilets to be constructed.
Development costs estimated at 93 million GMD

SOCIO-ECONOMIC*

No information on amount of visitors per year, but estimated to spend 20 USD/day. Local respondents report a great potential for tourism development in Barra. Ratio between current spending by tourists and required annual benefits is estimated at 2.62.

*To assess the economic potential of development per site, the current spending on accommodation (being the relatively most reliable indicator of tourism potential) is compared to the required benefits. Bintang, Kartong and Basse are the sites with the lowest ratio, which means that redeveloping jetties at these jetty sites is potentially more viable. For more context please refer to report *BJ4644-RHD-D4-RJ-RP-EC-0001 Economic and Social Assessment.*

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BANSANG

[13.434567 , -14.65246]

SPECIFICATION OF THE LOCATION

Bansang is located in the Central River Division of The Gambia, at 312km from the river mouth. It has approximately 16,000 inhabitants. The main economic activities in Bansang are business, farming, and fishing. Bansang has more than 200 shops and several lodges for visitors. The concrete jetty in Bansang is currently not used due to the collapsed access ramp. The Engineering Assessment Report recommends medium repair efforts to the jetty, and upgrade of infrastructure.

HEADLINE	BASE FOR EXPLORING HERITAGE
Existing markets	Local business/trade, basic lodges
Incremental markets	Homestay enthusiasts, rural tourists
New and enhanced products	A quiet base for exploring colonial/dark heritage at Janjanbureh and cultural heritage at Basse, luxury ecolodges. From Bansang the sites of Georgetown, Janjanbureh Museum, Kunkilling Forest Park and the King Musa Molloh Tomb can be accessed by water.
Other comments	The nearby “Historic Georgetown / Janjanbureh and surroundings” cluster has been developed as a concept by the clusters project (KEIOS Development Consulting, 2024), consistent with our vision.

ACCOMODATION OPTIONS

ESTABLISHMENTS	Margie’s Lodge, Samba Tako Lodge, Riverside Lodge
ESTIMATED NO. OF ROOMS	48

FINANCES (USD)

JETTY REPAIR/REBUILD	326,000
INFRASTRUCTURE	67,000
TOTAL COSTS (USD)*	393,000
CURRENT SPENDING ON ACCOMMODATION (YEARLY)	79,000
ANNUAL BENEFITS REQUIRED**	57,000
RATIO	0.72

* Investments foreseen between 2025-2028
** Benefits between 2030 - 2055

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BANSANG

[13.434567 , -14.65246]

TOURISM POTENTIAL

A base to explore Gambia's broad heritage. A new base for exploring a range of heritage sites whilst contributing to community development.

HYDRODYNAMIC AND NAVIGABILITY

Medium risk of erosion, medium navigational risk due to lack of river bathymetry and very high risk of river flooding. We advise a bathymetric survey to be conducted between Bansang and Basse, navigation charts to be updated. Potential need for bank protection and monitoring.

*To assess the economic potential of development per site, the current spending on accommodation (being the relatively most reliable indicator of tourism potential) is compared to the required benefits. Bintang, Kartong and Basse are the sites with the lowest ratio, which means that redeveloping jetties at these jetty sites is potentially more viable. For more context please refer to report *BJ4644-RHD-D4-RJ-RP-EC-0001 Economic and Social Assessment.*

TECHNICAL & COSTS

Jetty to be rehabilitated and furniture to be added. Road upgrades and secondary infrastructure like shade area and toilets to be constructed.
Development costs estimated at 28 million GMD.

SOCIO-ECONOMIC*

No information on amount of visitors per year, estimated spending at 30 USD/day. Community recognizes the potential for development of tourism, but also expresses concerns related to cultural clashes. The improvind of jetty and transport network could lead to increase in agricultural productivity and boost economy. Ratio between current spending by tourists and required annual benefits is estimated at 0.72

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KARTONG

[13.073471 , -16.743288]

SPECIFICATION OF THE LOCATION

Kartong is located along a small river on the southern border with Senegal, 5 km inland from the sea. The village has no active jetty, as the existing one is in a damaged condition, and people use the river beach for boat access. Kartong has a population of approximately 6,000 people, who consider having an average income level. The main economic activities in Kartong are farming, fishing, and tourism. Additionally, the village has lodges and restaurants that cater to tourists, and there are tourist spots like bird-watching areas, crocodile pools, and religious sites. The remains of the jetty are recommended to be demolished and reconstructed. The Kartong Association for Responsible Tourism (KART) is set up to manage tourism, and is an excellent example of a Destination Management Organization (DMO).

HEADLINE	FROM THE AIRPORT… HEAD SOUTH!
Existing markets	Budget travelers, expats, West Africa “overlanders”, surfers
Incremental markets	Responsible travellers, ecolux, Sufi pilgrims
New and enhanced products	Responsible community tourism, enhanced community-led arts festivals, ecolodges, restaurants, island retreats, spiritual retreats, halal tourism, yoga, leisure fishing, gateway to/from southern Senegal. Promote the Kartong annual festival. Kartong is in the vicinity of the Kenye Kenye Jamango holy site.
Other comments	There is an FAO project with plans to construct a floating pontoon (10m x 2m) near the existing commercial area in 2026 for use by artisanal fishing boats (pirogues) with related infrastructure.It would be desirable to explore synergies between these two proposals to avoid conflict and to maximise the benefit for all river users. We do not see merit in combining the jetty structures itself, since they serve different target vessels and have different requirements for the users. Meanwhile, the clusters project (KEIOS, 2024) has developed plans for Kenye Kenye Jamango Mosque.

ACCOMODATION OPTIONS

ESTABLISHMENTS	Tamba Kuruba Eco Lodge, Halahin Lodge and Monkey Sanctuary Eco Camp, Stala Lodge. There are plans to develop a resort on a nearby river island, and a leading Gambian hotel operator is planning to reinstate a large hotel complex.
ESTIMATED NO. OF ROOMS	118

FINANCES (USD)

JETTY REPAIR/REBUILD	651,000
INFRASTRUCTURE	257,000
TOTAL COSTS (USD)*	908,000
CURRENT SPENDING ON ACCOMMODATION (YEARLY)	410,000
ANNUAL BENEFITS REQUIRED**	135,000
RATIO	0.33

* Investments foreseen between 2025-2028
** Benefits between 2030 - 2055

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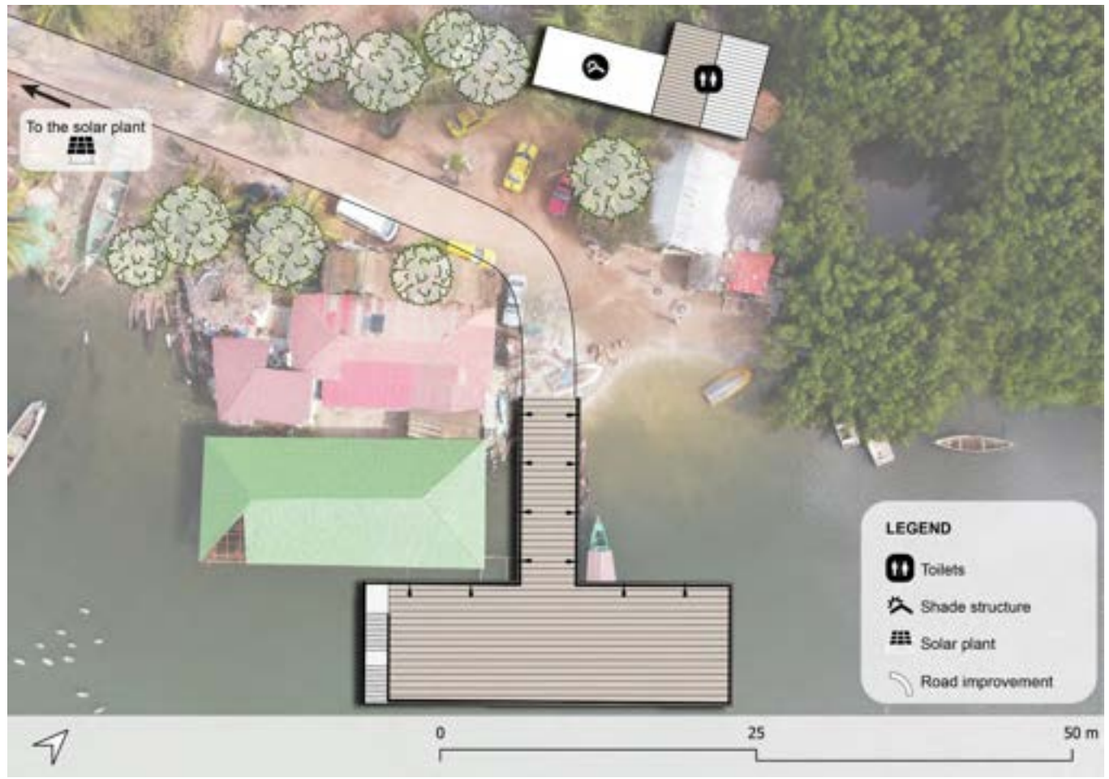
KARTONG

[13.073471 , -16.743288]



TOURISM POTENTIAL

Building on Gambia's leadership in responsible tourism. Kartong already has significant activity, but expansion is necessary for diversification and resilience.

HYDRODYNAMIC AND NAVIGABILITY

Low erosion risk, high navigational risk due to traffic and shallow grounds and medium risk of flooding. Only suitable for local boat-tours, with smaller type of vessels.

TECHNICAL & COSTS

Jetty to be constructed. Road upgrades and secondary infrastructure like shade area and toilets to be constructed, as well as a solar system for power supply. Development costs estimated at 65 million GMD

SOCIO-ECONOMIC*

2500 visitors per year, who spend an average of 22 USD/day. The community think the benefits of a new jetty would lead to more boats an tourists, increase in local income. Ratio between current spending by tourists and required annual benefits is estimated at 0.33.

*To assess the economic potential of development per site, the current spending on accommodation (being the relatively most reliable indicator of tourism potential) is compared to the required benefits. Bintang, Kartong and Basse are the sites with the lowest ratio, which means that redeveloping jetties at these jetty sites is potentially more viable. For more context please refer to report *BJ4644-RHD-D4-RJ-RP-EC-0001 Economic and Social Assessment.*

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ALBREDA

[13.331578 , -16.384416]

SPECIFICATION OF THE LOCATION

Albreda is situated on the north bank of the River Gambia, at 33 km distance from the river mouth. The village has a concrete jetty that is approximately 140 meters long. Albreda has a population of around 4,000 people, who consider themselves as low-income. The main economic activities in Albreda are fishing and farming, with major crops including rice, groundnuts, and cashew nuts. Additionally, the village has a lodge providing basic accommodation for tourists. The jetty is used for passenger boats, fishing boats, and barges from NFSPMC. The jetty is also a departure and landing point for boats to Kunta Kinteh Island, an important historical UNESCO Heritage site. There are concerns about the safety of the jetty, especially as it does not have railings, and is structurally severely compromised. The recommendation is to demolish the current jetty and construct a new one.

HEADLINE	CRITICAL TO SUCCESS OF TDRGP
Existing markets	School children, day trippers, some cruise visitors
Incremental markets	African Americans, Gambian diaspora, SAVE, heritage tourists
New and enhanced products	Ecolodges, restaurants serving World Heritage produce (farmed shrimps and oysters?), new museum/exhibition interpreting dark heritage of chattel slavery and trade in natural resources, sculpture park, “Door of No Return”, promenade, craft market, leisure fishing, sundowners. The Albreda jetty discloses the Albreda-Juffureh complex, as well as provides access to Kunta Kinteh Island.
Other comments	The clusters project has already produced detailed plans for the development of Albreda/Juffureh, whilst the parallel West Coast / Kunta Kinteh project has produced concept designs for Kunta Kinteh and Albreda. In this same project within TDRGP detailed design and construction of the Albreda jetty will be executed.

ACCOMODATION OPTIONS

ESTABLISHMENTS	Kunta Kinteh Roots Camp
ESTIMATED NO. OF ROOMS	31

FINANCES (USD)

JETTY REPAIR/REBUILD	1,725,000
INFRASTRUCTURE	239,000
TOTAL COSTS (USD)*	1,964,000
CURRENT SPENDING ON ACCOMMODATION (YEARLY)	108,000
ANNUAL BENEFITS REQUIRED**	282,000
RATIO	2.62

* Investments foreseen between 2025-2028
** Benefits between 2030 - 2055

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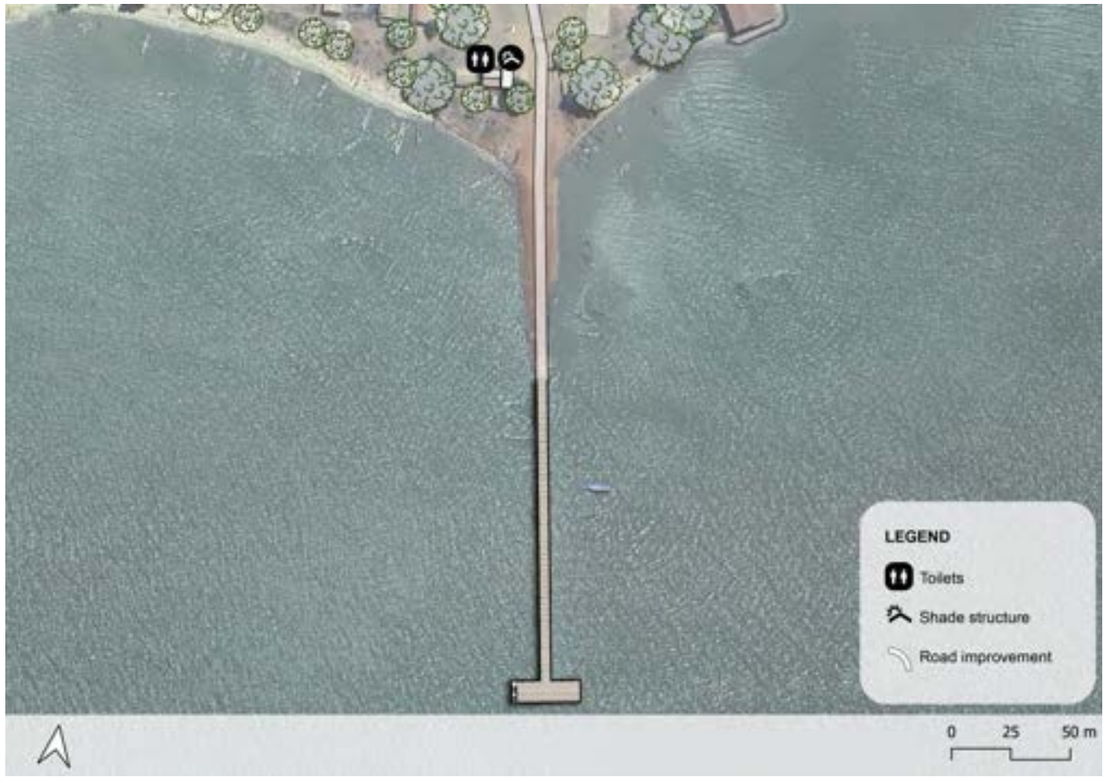
ALBREDA

[13.331578 , -16.384416]



TOURISM POTENTIAL

Renewal through resilience and reflection on Gambia's heritage. Development of this cluster is critical for the establishment of hinterland/riverine tourism in The Gambia.

HYDRODYNAMIC AND NAVIGABILITY

High erosion potential, medium navigational risk and low risk of flooding. Proper mooring plans should be designed to limit risk for vessels exposed to currents and waves.

*To assess the economic potential of development per site, the current spending on accommodation (being the relatively most reliable indicator of tourism potential) is compared to the required benefits. Bintang, Kartong and Basse are the sites with the lowest ratio, which means that redeveloping jetties at these jetty sites is potentially more viable. For more context please refer to report *BJ4644-RHD-D4-RJ-RP-EC-0001 Economic and Social Assessment.*

TECHNICAL & COSTS

Jetty to be replaced. Road upgrades and secondary infrastructure like shade area and toilets to be constructed.
Development costs estimated at 140 million GMD

SOCIO-ECONOMIC*

5400 day visitors per year, who spend an average of 7.5 USD in Albreda and Juffureh. Overnight visitors are estimated to spend 60 USD/day. The community think the benefits of a repaired/improved jetty and river transport would be an increase in income, more tourism and river cruises and better fishing. Ratio between current spending by tourists and required annual benefits to offset the costs of development is estimated at 2.62.

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TENDABA

[13.441086 , -15.80779]

SPECIFICATION OF THE LOCATION

Tendaba is located on the south bank of the Gambia River with around 1,200 residents. It is at 100km from the river mouth. The main economic activities in Tendaba are fishing and farming. Major crops include rice, groundnuts, and watermelon. The village has a small number of shops selling essential goods and one lodge that caters to tourists. Currently tourists are not interacting with the villagers. Tendaba has a concrete jetty used mainly for fishing boats, but it is in a state of disrepair and needs to be demolished and reconstructed. Alternatively the new jetty can be built at a safe distance from the current jetty, to separate use for fishing and tourism.

HEADLINE	GATEWAY TO GAMBIA'S UNSPOILT NATURAL HERITAGE
Existing markets	Intrepid naturalists and serious birders, especially from Europe, expats
Incremental markets	SAVE, more mainstream and less specialist naturalists
New and enhanced products	Bird hides, houseboats/liveaboards, retreats homestays, ecolodges, ecolux, wetland naturalist tours by boat
Other comments	Nearby is the "Kiang West National Park and Bao Bolong Wetland Reserve" cluster, for which the clusters project (KEIOS Development Consulting, 2024) has developed a design, consistent with our vision.

ACCOMODATION OPTIONS

ESTABLISHMENTS	Tendaba Camp
ESTIMATED NO. OF ROOMS	40

FINANCES (USD)

JETTY REPAIR/REBUILD	1,047,000
INFRASTRUCTURE	67,000
TOTAL COSTS (USD)*	1,114,000
CURRENT SPENDING ON ACCOMMODATION (YEARLY)	106,000
ANNUAL BENEFITS REQUIRED**	157,000
RATIO	1.48

* Investments foreseen between 2025-2028
** Benefits between 2030 - 2055

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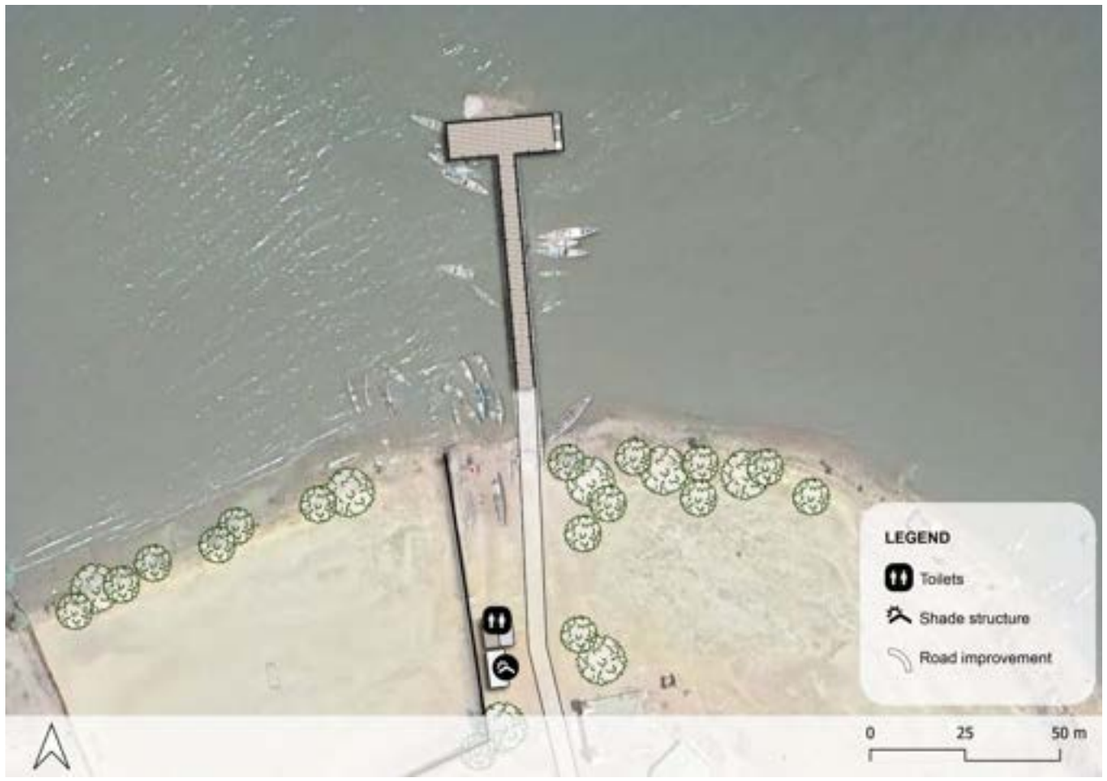
TENDABA

[13.441086 , -15.80779]



TOURISM POTENTIAL

Hanging out amongst Gambia's natural heritage. Opportunity to expand Tendaba as a centre for exploring Gambia's natural heritage.

HYDRODYNAMIC AND NAVIGABILITY

Medium erosion risk, but bank protection already in place. Medium navigational risk due to high traffic and nearby wreck, and high risk of river flooding.
Designate specific area for tourism to limit interface with other traffic. Wreck to be clearly marked or removed.

*To assess the economic potential of development per site, the current spending on accommodation (being the relatively most reliable indicator of tourism potential) is compared to the required benefits. Bintang, Kartong and Basse are the sites with the lowest ratio, which means that redeveloping jetties at these jetty sites is potentially more viable. For more context please refer to report *BJ4644-RHD-D4-RJ-RP-EC-0001 Economic and Social Assessment.*

TECHNICAL & COSTS

Jetty to be completely replaced, or new built in vicinity of old jetty. Secondary infrastructure like shade area and toilets to be constructed, and road to be slightly upgraded. Development costs estimated at 80 million GMD.

SOCIO-ECONOMIC*

About 6000 visitors reported per year, currently they only spend their money at the lodge. Average spending is estimated at 30 USD/day. Community reports jetty repair will bring more employment, support fishing and increase income. Although they recognize the potential for tourism development, there are social concerns regarding cultural differences and exploitation. Ratio between current spending by tourists and required annual benefits is estimated at 1.48

KEREWAN

[13.497751 , -16.102385]

SPECIFICATION OF THE LOCATION

Kerewan is located at the Miniminiyang Bolong river, about 60 kilometers from the capital Banjul. The main economic activity in Kerewan is farming and petty trading.. Major agricultural products include groundnuts, coose (millet), and rice. The town has about 50 shops and a groundnuts processing plant. Kerewan is connected to the North Bank Road. The village is equipped with communal facilities such as a clinic, hospital, ambulance service, police station, and primary school. The jetty in Kerewan is used by fishing boats and the NFSPMC barges, who mostly dock at the ground nut facility in the vicinity of the existing concrete jetty. The Engineering Assessment Report highlights the need for substantial repairs to the jetty, and the installation of a solar plant.

HEADLINE	RURAL TOURISM BASE
Existing markets	Intrepid tourists and expats
Incremental markets	Responsible tourists, fishing expeditions
New and enhanced products	Homestays, ecolodges, naturalist boat trips, retreats, fishing. From Kerewan the Bao Bolong Wetland reserve can be accessed.
Other comments	Relatively close to reach by road from Barra, however jetty is isolated from the community.

ACCOMODATION OPTIONS

ESTABLISHMENTS	A range of hotels and lodges, but little of international standard
ESTIMATED NO. OF ROOMS	45

FINANCES (USD)

JETTY REPAIR/REBUILD	1,975,000
INFRASTRUCTURE	318,000
TOTAL COSTS (USD)*	2,293,000
CURRENT SPENDING ON ACCOMMODATION (YEARLY)	75,000
ANNUAL BENEFITS REQUIRED**	330,000
RATIO	4.43

* Investments foreseen between 2025-2028
** Benefits between 2030 - 2055

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KEREWAN

[13.497751 , -16.102385]

TOURISM POTENTIAL

Exploring the River Bolon in Gambia's homestay haven, A new base for exploring natural heritage whilst contributing to community development.

HYDRODYNAMIC AND NAVIGABILITY

Medium risk of erosion due to exposed bank, high navigation risk since the access to the subsidiary river is very shallow. Medium risk of river flooding. Bathymetric charts should be updated around the entrance of Kerewan river, shallow areas to be marked with buoys.

*To assess the economic potential of development per site, the current spending on accommodation (being the relatively most reliable indicator of tourism potential) is compared to the required benefits. Bintang, Kartong and Basse are the sites with the lowest ratio, which means that redeveloping jetties at these jetty sites is potentially more viable. For more context please refer to report *BJ4644-RHD-D4-RJ-RP-EC-0001 Economic and Social Assessment.*

TECHNICAL & COSTS

Jetty to be seriously rehabilitated and furniture to be added. Road upgrades and secondary infrastructure like shade area and toilets to be constructed, as well as a solar system. Development costs estimated at 163 million GMD, dominated by jetty repair costs.

SOCIO-ECONOMIC*

No information on amount of visitors per year, estimated spending at 30 USD/day. Expectations from increased river transport are that it can boost agricultural output, facilitate trade with other towns and lead to more employment. Drawbacks of tourism development mentioned are cultural clashes. Ratio between current spending by tourists and required annual benefits is estimated at 4.43

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KUNTAUR

[13.672553 , -14.890673]

SPECIFICATION OF THE LOCATION

Kuntaur is a town situated in the center of Gambia with around 1,000 residents. It is situated about 250km from the river mouth. The main occupations in Kuntaur include farming, fishing, and salaried jobs. The government supports the agricultural sector by providing rice seeds and fertilizer to women through the ROOTS project. Kuntaur also depends on tourism for revenue, offering activities such as bird watching, boat tours to Baboon Island and Kunta Kinteh Island and cultural performances. The jetty in Kuntaur serves as a dock for passenger boats and barges during the dry season. Small repairs and upgrades to the jetty are advised to increase its potential for tourism development.

HEADLINE	WORLD HERITAGE
Existing markets	Mainstream tourists and day trippers staying on the West Coast, primarily from Europe and North America.
Incremental markets	Cultural tourists from across the globe in search of undervalued world heritage
New and enhanced products	Boat trips to Baboon Island, Ecolodges, homestays, SAVE. Kuntaur discloses access to the Wassu stone circles Museum, Wassu Stone quarry and of course, Kuntaur village itself.
Other comments	The “Wassu Stone Circles” cluster is nearby, and the clusters project has developed a design, consistent with our vision. Remote, so difficult to reach by road network.

ACCOMODATION OPTIONS

ESTABLISHMENTS	Limited local options, potential for homestays
ESTIMATED NO. OF ROOMS	24

FINANCES (USD)

JETTY REPAIR/REBUILD	85,000
INFRASTRUCTURE	1,082,000
TOTAL COSTS (USD)*	1,167,000
CURRENT SPENDING ON ACCOMMODATION (YEARLY)	40,000
ANNUAL BENEFITS REQUIRED**	198,000
RATIO	4.99

* Investments foreseen between 2025-2028
** Benefits between 2030 - 2055

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KUNTAUR

[13.672553 , -14.890673]

TOURISM POTENTIAL

Embracing Gambia's ancient heritage. Kuntaur is an opportunity to establish The Gambia as a gateway to Africa's ancient pre-colonial heritage.

HYDRODYNAMIC AND NAVIGABILITY

Erosion potential is high, navigational risks are low and there is a very high chance of river flooding. We advise that bank protection should be implemented. Road leading towards jetty to be elevated in order to allow year-round access.

TECHNICAL & COSTS

Jetty to be slightly rehabilitated and furniture to be added. Road upgrades and secondary infrastructure like shade area and toilets to be constructed.
Development costs estimated at 83 million GMD, which is dominated by road construction costs.

SOCIO-ECONOMIC*

1500 yearly visitors reported, spending estimated at 60 USD/day. Community reports there is a large potential for tourism development and they regard this as positive. Ratio between current spending by tourists and required annual benefits is estimated at 4.99

*To assess the economic potential of development per site, the current spending on accommodation (being the relatively most reliable indicator of tourism potential) is compared to the required benefits. Bintang, Kartong and Basse are the sites with the lowest ratio, which means that redeveloping jetties at these jetty sites is potentially more viable. For more context please refer to report *BJ4644-RHD-D4-RJ-RP-EC-0001 Economic and Social Assessment.*

KAUR

[13.692648 , -15.324296]

SPECIFICATION OF THE LOCATION

Kaur is located on the north bank of the Gambia River with around 12,000 residents. The main economic activities in Kaur are farming, salary-based businesses, and fishing. The village has around 100 shops selling essential goods, and a lodge providing basic accommodation services. Kaur is connected to the main road network and has access to electricity, though it is only available part of the day. The jetty in Kaur is mainly used for transporting goods, particularly groundnuts. The public section of the jetty is recommended for medium repair efforts, as well as the road leading to the jetty which is in state of disrepair.

HEADLINE	NATURAL HERITAGE RETREAT
Existing markets	Intrepid naturalists
Incremental markets	Responsible tourists, homestay enthusiasts
New and enhanced products	Fishing, homestays, houseboats/liveaboards, local food, naturalist boat tours
Other comments	Jetty is isolated from the community. There are plans (with GPA) to develop Kaur as an industrial inland port, which will influence its attractiveness as a river tourism destination

ACCOMODATION OPTIONS

ESTABLISHMENTS	Kauren Eco-lodge (no recent information available)
ESTIMATED NO. OF ROOMS	20

FINANCES (USD)

JETTY REPAIR/REBUILD	304,000
INFRASTRUCTURE	948,000
TOTAL COSTS (USD)*	1,252,000
CURRENT SPENDING ON ACCOMMODATION (YEARLY)	33,000
ANNUAL BENEFITS REQUIRED**	205,000
RATIO	6.20

* Investments foreseen between 2025-2028
** Benefits between 2030 - 2055

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KAUR

[13.692648 , -15.324296]

TOURISM POTENTIAL

Encountering Gambia's rich rural heritage in the middle of the country. A new base for exploring village life and contributing to community development.

HYDRODYNAMIC AND NAVIGABILITY

Medium risk for erosion, similar risk for navigation and high risk of river flooding. Navigational regulation should be adopted to manage traffic due to nearby ferry terminal and adjacent GCA jetty.

TECHNICAL & COSTS

Jetty to be rehabilitated and furniture to be added. Road upgrade and secondary infrastructure like shade area and toilets to be constructed. Development costs estimated at 89 million GMD, dominated by road upgrade costs.

SOCIO-ECONOMIC*

According to respondents, tourists are mainly transiting in Kaur and have not spend time in recent years. The community expects that benefits of jetty improvement are employment opportunities and increased income. They think that there is a good prospect
for tourism development. Ratio between current spending by tourists and required annual benefits is estimated at 6.20

*To assess the economic potential of development per site, the current spending on accommodation (being the relatively most reliable indicator of tourism potential) is compared to the required benefits. Bintang, Kartong and Basse are the sites with the lowest ratio, which means that redeveloping jetties at these jetty sites is potentially more viable. For more context please refer to report *BJ4644-RHD-D4-RJ-RP-EC-0001 Economic and Social Assessment.*

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CONTRIBUTING PARTIES

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CONTRIBUTING PARTIES

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Royal HaskoningDHV is an independent international consulting engineering firm, leading the way in sustainable development and innovation since 1881.

We take responsibility for having a positive impact on the world and we constantly challenge ourselves and our clients to develop sustainable solutions to local and global issues.

By combining engineering, design and consultancy with software and technology, we are delivering more added value to our clients. We do this with over 6,500 colleagues, from 60 offices around the world working in over 100 countries.
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CONTACTS:

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CAREY TOURISM

An award-winning consultant, Benjamin Carey (t/a Carey Tourism) has a focus on the sustainable development and environmental management of tourism with more than thirty years professional experience on six continents. With previous responsibility for managing and developing holiday programmes in The Gambia for Europe's leading tour operators, consulting assignments in West Africa include projects in The Gambia, Liberia, Nigeria, and Sierra Leone.

Experience includes national tourism master plans, product diversification strategies, ecotourism plans, safeguarding systems, investment promotion strategies, market development plans, benchmarking systems, policy development and institutional capacity building, working with governments, destination management organizations, community groups and private companies in tourism, heritage, hospitality, transport, and protected areas. International clients and partners include EBRD, EU, ICA, IDB, UNDP, UNEP, UNESCO, UN Tourism, and World Bank.

CITYSCAPE ASSOCIATES

Cityscape Associates is an engineering Consulting Firm established in 1997 and became operative in January 1998.

Cityscape Associates has in the previous years consulted with detailed exposure in various Engineering services including but not limited to: Engineering Surveys, Topographic Surveys, Urban and Regional Planning, Quantity Survey, Irrigation Surveys and Design, Feasibility and Environmental Impact studies including gender analysis, Land-use analysis, Architectural Design for Civil Works, Architectural Design for Road Construction, Supervision of Civil Works and Road construction.

Cityscape Associates is arguably the leading Engineering Consulting Firm in the Gambia with consulting experience in almost every sector of engineering and development Infrastructures.

Cityscape Associates has on its payroll seasoned engineers, technical experts and Associates.

ATTACHMENTS

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ATTACHMENTS

DRAWINGS, MAPS, PLANS:

BJ4644-RHD-D7-RJ-DG-GS-0002	Map of 10 river jetties
BJ4644-RHD-D8-RJ-DG-L-0001	Planview and Environment - Albreda
BJ4644-RHD-D8-RJ-DG-L-0002	Planview and Environment- Kartong
BJ4644-RHD-D8-RJ-DG-L-0003	Planview and Environments - Bintang
BJ4644-RHD-D8-RJ-DG-L-0004	Planview and Environment - Basse
BJ4644-RHD-D8-RJ-DG-L-0005	Planview and Environment - Barra
BJ4644-RHD-D8-RJ-DG-L-0006	Planview and Environment - Kuntaur
BJ4644-RHD-D8-RJ-DG-L-0007	Planview and Environment - Tendaba
BJ4644-RHD-D8-RJ-DG-L-0008	Planview and Environment - Bansang
BJ4644-RHD-D8-RJ-DG-L-0009	Planview and Environment - Kerewan
BJ4644-RHD-D8-RJ-DG-L-0010	Planview and Environment - Kaur
BJ4644-RHD-D8-RJ-DG-LM-0001	River jetty network: Geographic clusters
BJ4644-RHD-D8-RJ-DG-LM-0002	River jetty network: Itineraries of travel
BJ4644-RHD-D3-RJ-DG-SE-0001	Typical layout of jetties and furniture
BJ4644-RHD-D2-RJ-DG-GS-0001	Albreda Topo measurements
BJ4644-RHD-D2-RJ-DG-GS-0002	Kartong depth and topo measurements
BJ4644-RHD-D2-RJ-DG-GS-0003	Bintang Depth and topo measurements
BJ4644-RHD-D2-RJ-DG-GS-0004	Basse depth and topo measurements
BJ4644-RHD-D2-RJ-DG-GS-0005	Barra Depth and Topo measurements
BJ4644-RHD-D2-RJ-DG-GS-0006	Kuntaur depth and topo measurements
BJ4644-RHD-D2-RJ-DG-GS-0007	Tendaba depth and topo measurements
BJ4644-RHD-D2-RJ-DG-GS-0008	Bansang depth and topo measurements
BJ4644-RHD-D2-RJ-DG-GS-0009	Kerewan depth and topo measurements
BJ4644-RHD-D2-RJ-DG-GS-0010	Kaur depth and topo measurements
BJ4644-RHD-D2-RJ-DG-LM-0001	Obstacles for Navigation Drawing
BJ4644-RHD-D2-RJ-DG-LM-0002	Flood mapping of project area

Jetties

Navigation routes

Coordinates of Jetty locations
WGS84, decimal degrees

Name	Longitude	Latitude
01. Albreda	-16.384416	13.331578
02. Kartong	-16.743288	13.073471
03. Bintang	-16.210851	13.250801
04. Basse	-14.2109	13.315256
05. Barra	-16.547697	13.483952
06. Kuntaur	-14.890673	13.672553
07. Tendaba	-15.80779	13.441086
08. Bansang	-14.65246	13.434567
09. Kerewan	-16.102385	13.497751
10. Kaur	-15.324296	13.692648

Title
Map of 10 River Jetties

Project
BJ4644 - Gambia River Jetties

Client
Tourism Diversification and Resilience in The Gambia Project (TDRGP)

Drawing number
BJ4644-RHD-D7-RJ-DG-GS-0002

Date	*Scale*
25-02-2025	1:960
Checked by	*Number*
M. Kroon	P01

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Legend (main map)

- Toilets
- Shade structure
- Solar plant
- Road improvement

Title:
Planview and Environment - Albreda

Project:
BJ4644 - Gambia River Jetties

Client:
Tourism Diversification and Resilience in The Gambia Project (TDRGP)

Drawing number
BJ4644-RHD-D8-RJ-DG-L-0001

Date	*Scale (main map)*
2025-02-25	*1:1.600*
Checked by	*Number*
M. Kroon	*P01*

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Legend (main map)

- Toilets
- Shade structure
- Solar plant
- Road improvement

Title:
Planview and Environment - Kartong

Project:
BJ4644 - Gambia River Jetties

Client:
Tourism Diversification and Resilience in The Gambia Project (TDRGP)

Drawing number
BJ4644-RHD-D8-RJ-DG-L-0002

Date	*Scale (main map)*
2025-02-25	*1:300*
Checked by	*Number*
M. Kroon	*P01*

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Legend (main map)

- Toilets
- Shade structure
- Solar plant
- Road improvement

Title:
Planview and Environment - Bintang

Project:
BJ4644 - Gambia River Jetties

Client:
Tourism Diversification and Resilience in The Gambia Project (TDRGP)

Drawing number
BJ4644-RHD-D8-RJ-DG-L-0003

Date	*Scale (main map)*
2025-02-25	*1:600*

Checked by	*Number*
M. Kroon	*P01*

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Legend (main map)

- Toilets
- Shade structure
- Solar plant
- Road improvement

Title:
Planview and Environment - Basse

Project:
BJ4644 - Gambia River Jetties

Client:
Tourism Diversification and Resilience in The Gambia Project (TDRGP)

Drawing number
BJ4644-RHD-D8-RJ-DG-L-0004

Date	*Scale (main map)*
2025-02-25	*1:400*
Checked by	*Number*
M. Kroon	*P01*

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Legend (main map)

- Toilets
- Shade structure
- Solar plant
- Road improvement

Title:
Planview and Environment - Barra

Project:
BJ4644 - Gambia River Jetties

Client:
Tourism Diversification and Resilience in The Gambia Project (TDRGP)

Drawing number
BJ4644-RHD-D8-RJ-DG-L-0005

Date	*Scale (main map)*
2025-02-25	*1:800*
Checked by	*Number*
M. Kroon	*P01*

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Legend (main map)

- Toilets
- Shade structure
- Solar plant
- Road improvement

Title:
Planview and Environment - Kuntaur

Project:
BJ4644 - Gambia River Jetties

Client:
Tourism Diversification and Resilience in The Gambia Project (TDRGP)

Drawing number
BJ4644-RHD-D8-RJ-DG-L-0006

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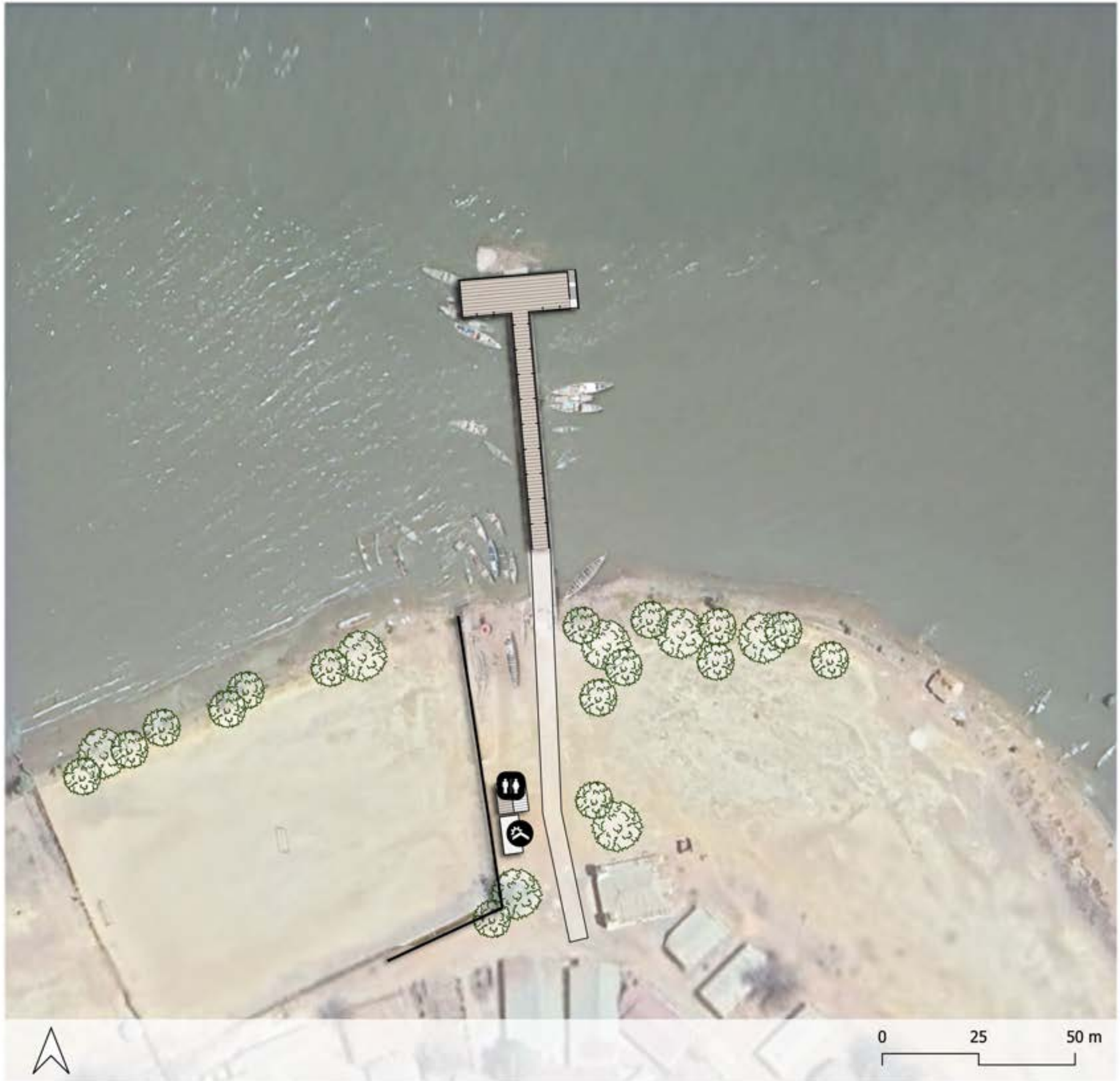

Legend (main map)

- Toilets
- Shade structure
- Solar plant
- Road improvement

Title:
Planview and Environment - Tendaba

Project:
BJ4644 - Gambia River Jetties

Client:
Tourism Diversification and Resilience in The Gambia Project (TDRGP)

Drawing number
BJ4644-RHD-D8-RJ-DG-L-0007

Date	*Scale (main map)*
2025-02-25	*1:800*

Checked by	*Number*
M. Kroon	*P01*

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Legend (main map)

- Toilets
- Shade structure
- Solar plant
- Road improvement

Title:
Planview and Environment - Bansang

Project:
BJ4644 - Gambia River Jetties

Client:
Tourism Diversification and Resilience in The Gambia Project (TDRGP)

Drawing number
BJ4644-RHD-D8-RJ-DG-L-0008

Date	*Scale (main map)*
2025-02-25	*1:400*

Checked by	*Number*
M. Kroon	*P01*

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Legend (main map)

- Toilets
- Shade structure
- Solar plant
- Road improvement

Title:
Planview and Environment - Kerewan

Project:
BJ4644 - Gambia River Jetties

Client:
Tourism Diversification and Resilience in The Gambia Project (TDRGP)

Drawing number
BJ4644-RHD-D8-RJ-DG-L-0009

Date	*Scale (main map)*
2025-02-25	*1:1.000*
Checked by	*Number*
M. Kroon	*P01*

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Legend (main map)

- Toilets
- Shade structure
- Solar plant
- Road improvement

Title:
Planview and Environment - Kaur

Project:
BJ4644 - Gambia River Jetties

Client:
Tourism Diversification and Resilience in The Gambia Project (TDRGP)

Drawing number
BJ4644-RHD-D8-RJ-DG-L-0010

Date	*Scale (main map)*
2025-02-25	*1:700*

Checked by	*Number*
M. Kroon	*P01*

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Legend

- Culture tourism
- Fishing tourism
- Natural tourism
- Main port
- Future port development

Title:
River jetty network: Geographic clusters and hub stations

Project:
BJ4644 - Gambia River Jetties

Client:
Tourism Diversification and Resilience in The Gambia Project (TDRGP)

Drawing number
BJ4644-RHD-D8-RJ-DG-LM-0001

Date	*Scale (main map)*
2025-02-25	*1:1.200.000*
Checked by	*Number*
M. Kroon	*P01*

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Legend

- Culture tourism
- Fishing tourism
- Natural tourism
- Main port
- Future port development

Title:
River jetty network: Itineraries of travel

Project:
BJ4644 - Gambia River Jetties

Client:
Tourism Diversification and Resilience in The Gambia Project (TDRGP)

Drawing number
BJ4644-RHD-D8-RJ-DG-LM-0002

Date	*Scale (main map)*
2025-02-25	*1:1.200.000*
Checked by	*Number*
M. Kroon	*P01*

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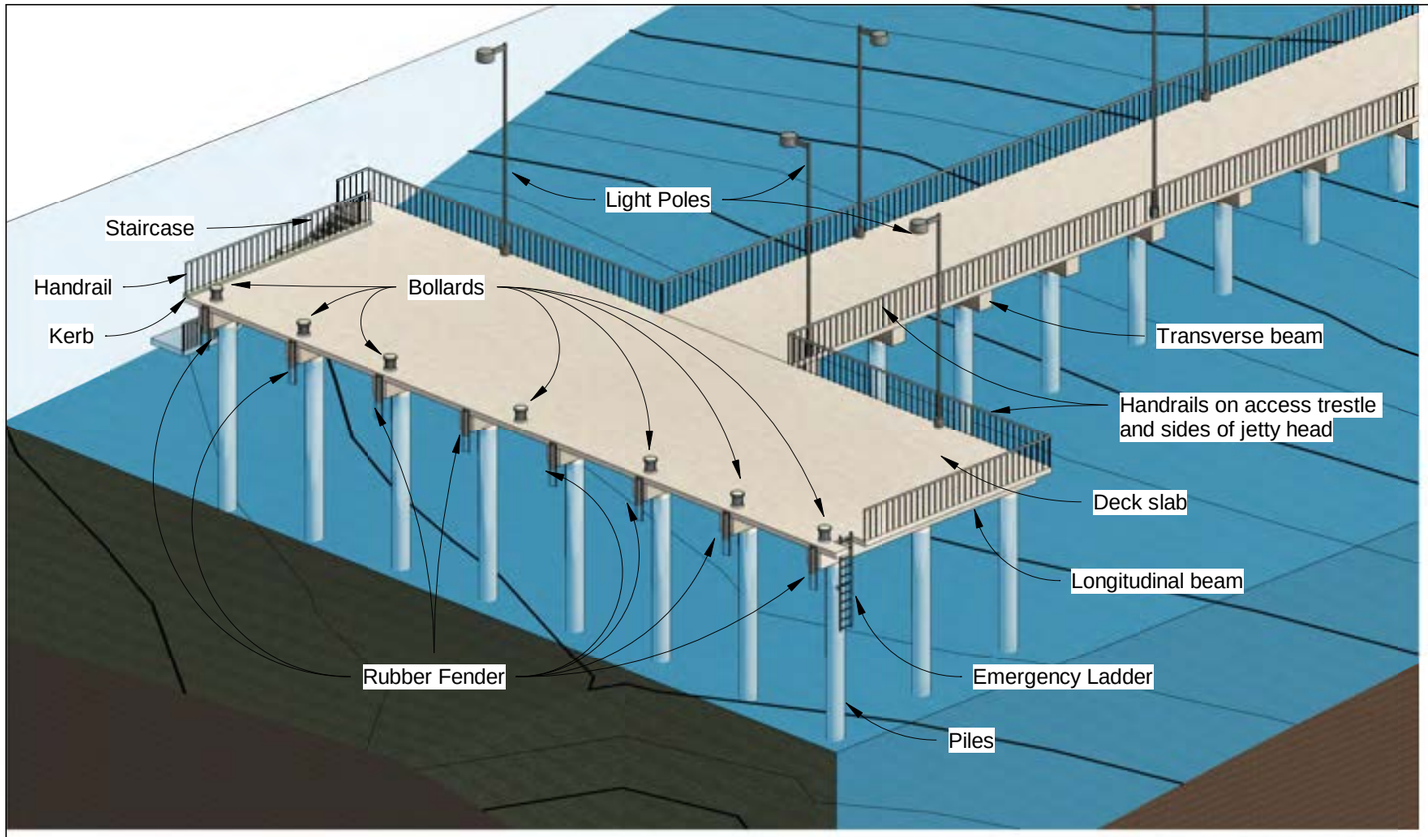
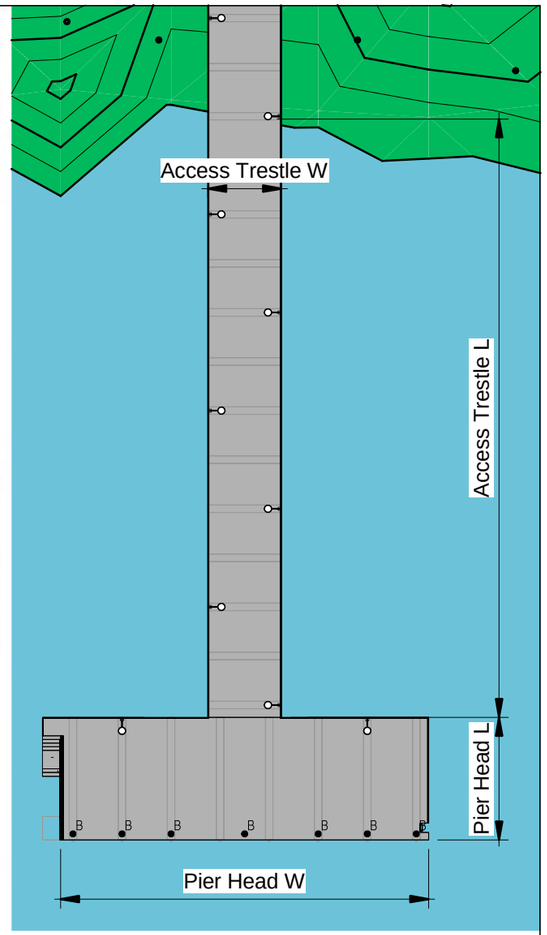
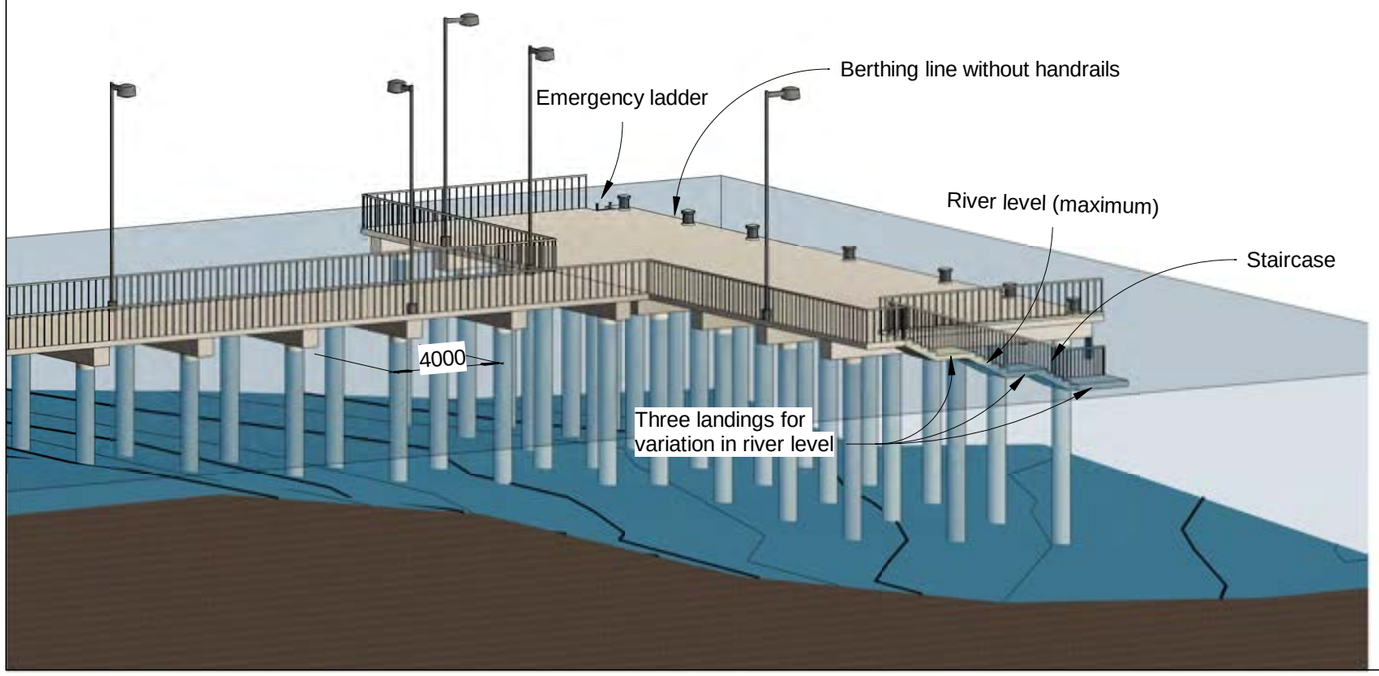




PLAN OF TYPICAL JETTY

SCALE 1 : 500



No.	Location	Jetty Dimensions				
		Access Trestle		Pier Head		Area
		L	W	L	W	
		m	*m*	*m*	*m*	*m²*
1	Albreda	130.0	5.0	10.0	30.0	950.0
2	Kartong	15.0	5.0	10.0	30.0	375.0
3	Bintang	0.0	5.0	10.0	30.0	300.0
4	Basse	10.0	4.5	8.2	25.6	650.0
5	Barra	70.0	5.0	10.0	30.0	600.0
6	Kuntaur	0.0	0.0	15.0	25.6	254.9
7	Tendaba	60.0	5.0	10.0	30.0	384.0
8	Bansang	10.0	4.2	11.0	25.6	323.6
9	Kerewan	50.0	5.0	7.0	15.0	355.0
10	Kaur	0.0	0.0	15.0	100.0	1500.0

Notes / Legend

Title
Typical layout of jetties and furniture

Project
BJ4644 - Gambia River Jetties

Client
Tourism Diversification and Resilience in The Gambia Project (TDRGP)

Drawing number
BJ4644-RHD-D3-RJ-DG-SE-0001

Date
26/02/2025

Scale
As indicated

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Number
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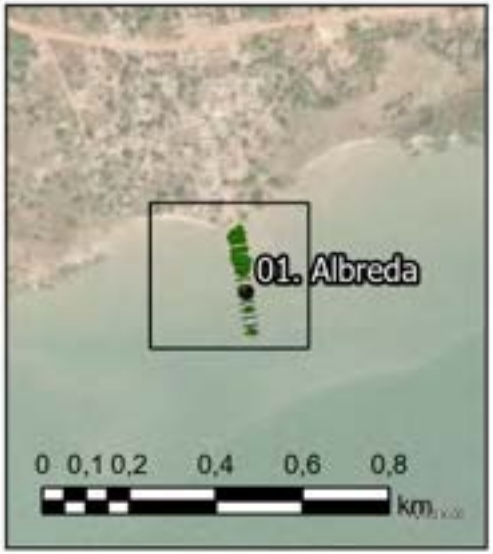

Title
01. Albreda depth and topo measurements

Project
BJ4644 - Gambia River Jetties

Client
Tourism Diversification and Resilience in The Gambia Project

Date
12-8-2024

Drawing number
BJ4644-RHD-D2-RJ-DG-GS-0001

Checked by	*Number*
Merel Kroon	P1

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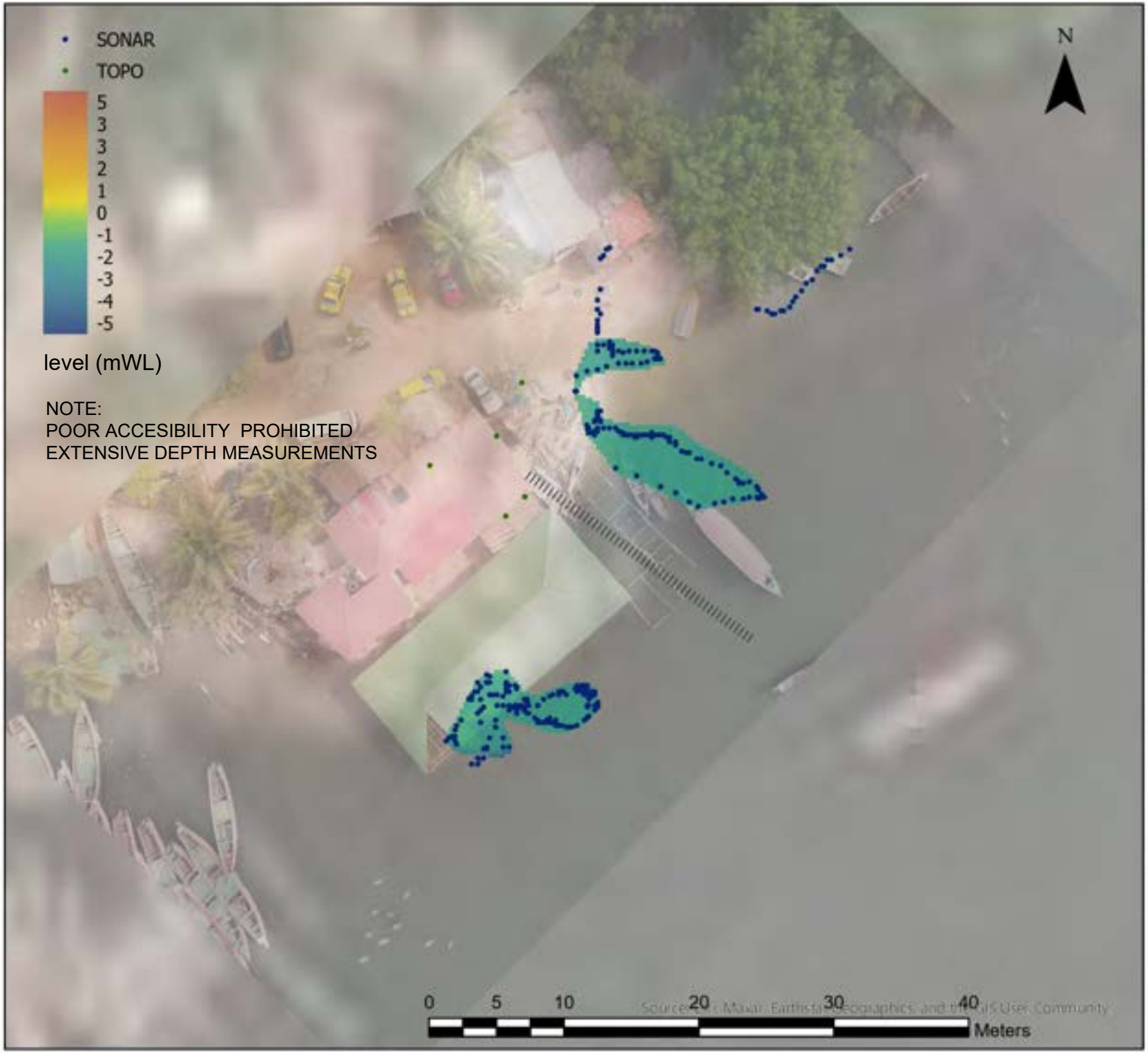

Title

02. Kartong depth and topo measurements

Project

BJ4644 - Gambia River Jetties

Client

Tourism Diversification and Resilience in The Gambia Project

Date

12-8-2024

Drawing number

BJ4644-RHD-D2-RJ-DG-GS-0002

Checked by	*Number*
Merel Kroon	P1

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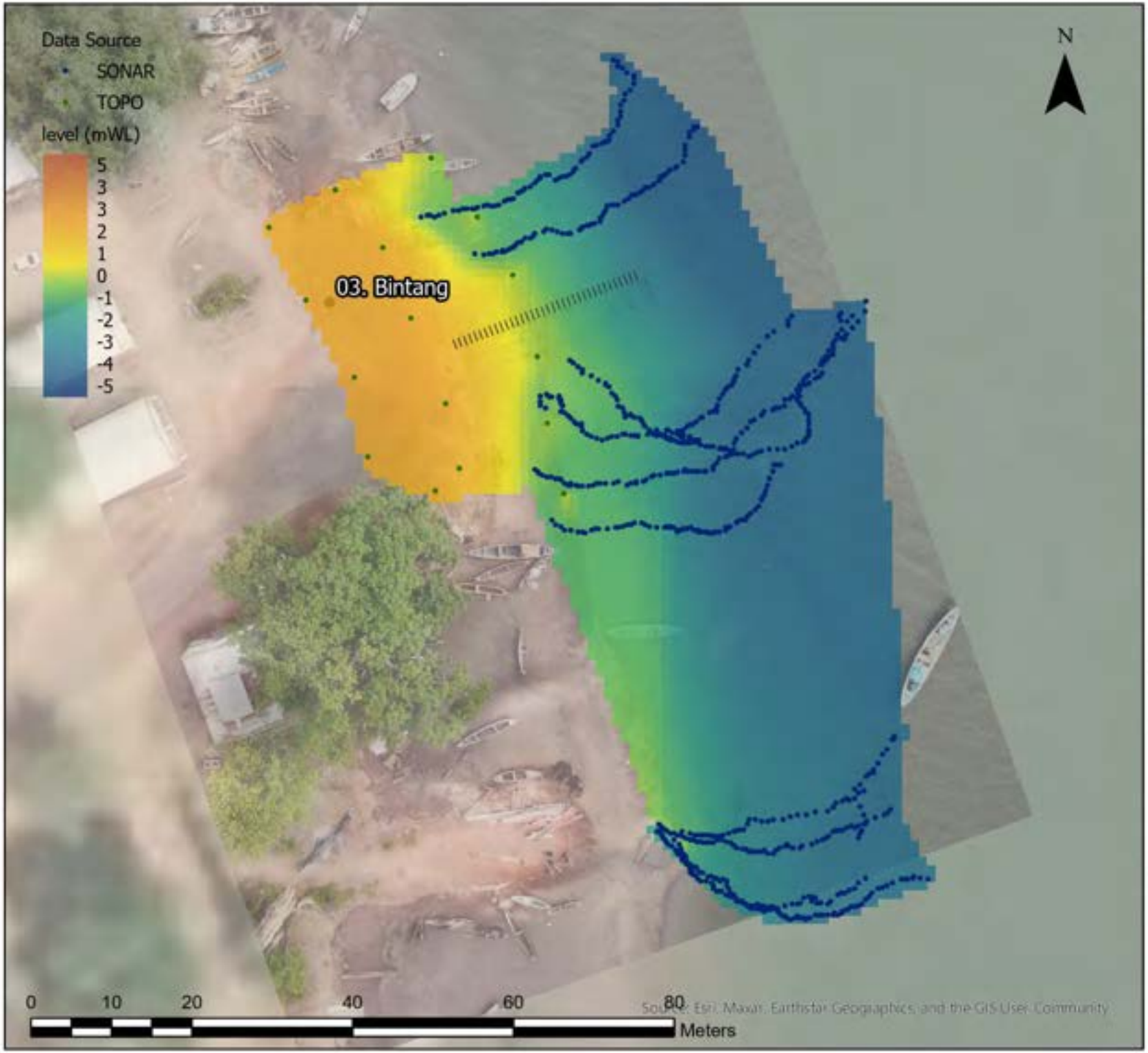

Title

03. Bintang Depth and topo measurements

Project

BJ4644 - Gambia River Jetties

Client

Tourism Diversification and Resilience in The Gambia Project

Date

12-8-2024

Drawing number

BJ4644-RHD-D2-RJ-DG-GS-0003

Checked by	*Number*
Merel Kroon	P1

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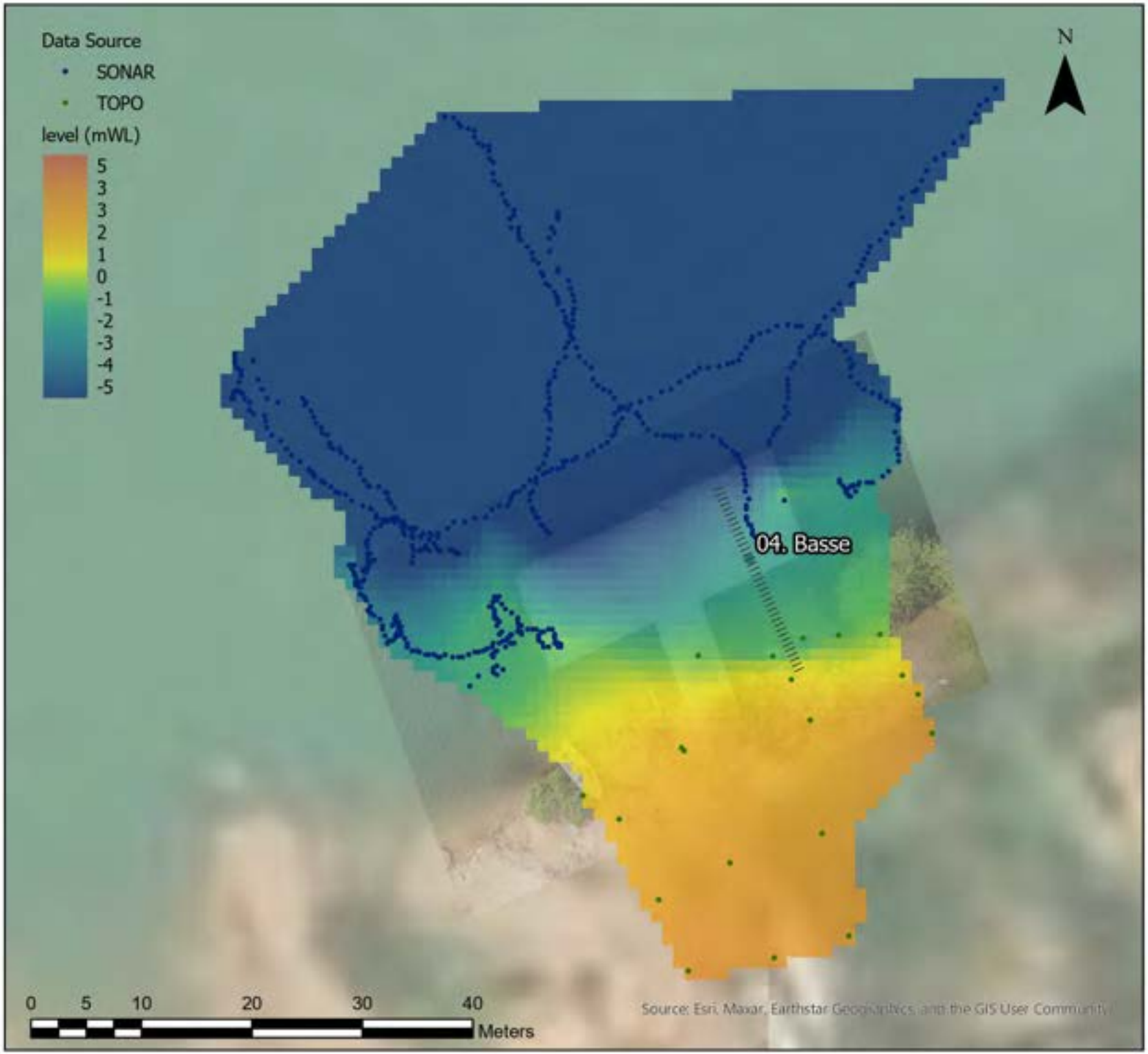

Title

04. Basse depth and topo measurements

Project

BJ4644 - Gambia River Jetties

Client

Tourism Diversification and Resilience in The Gambia Project

Date

12-8-2024

Drawing number

BJ4644-RHD-D2-RJ-DG-GS-0004

Checked by	*Number*
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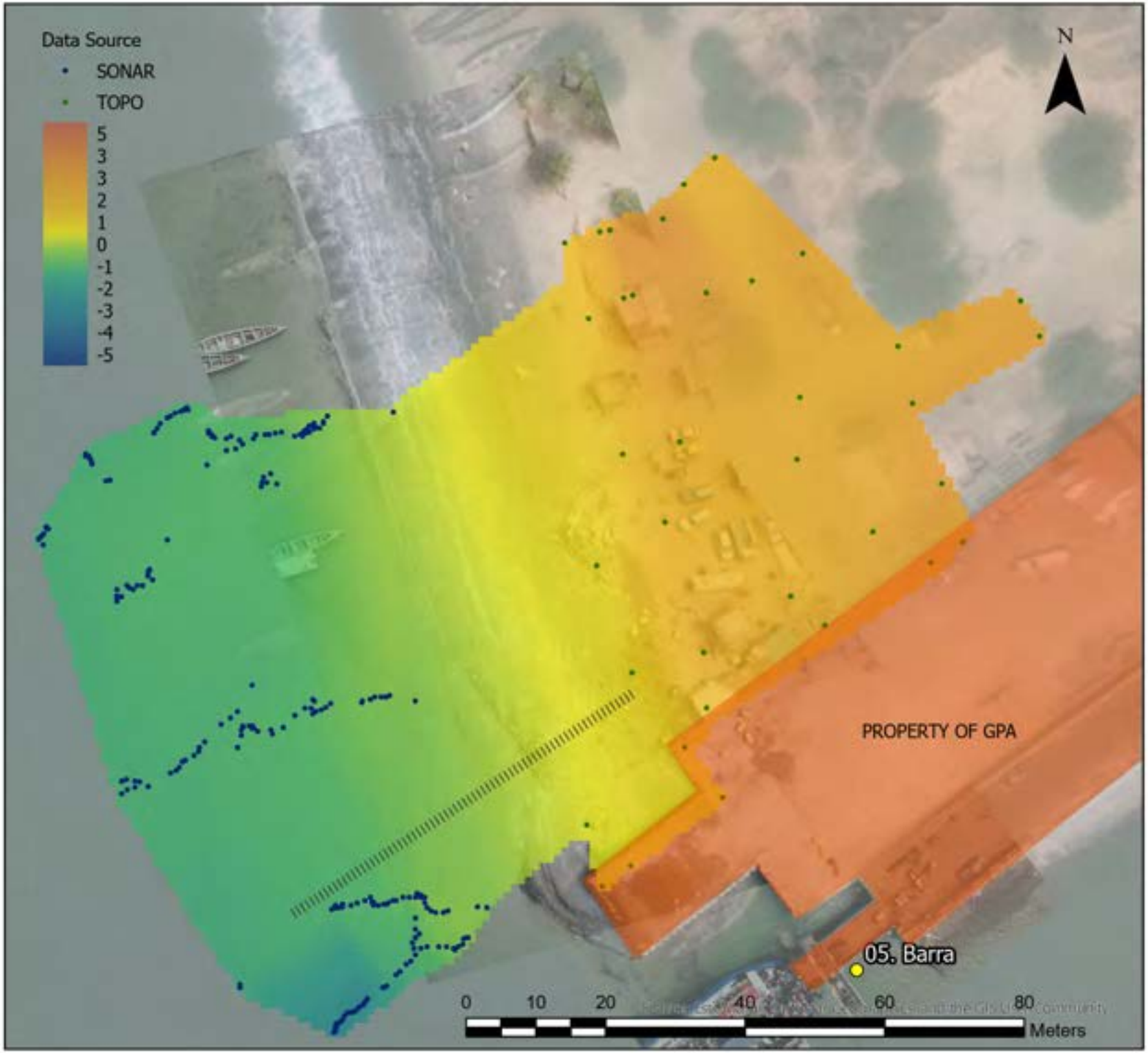

Title

05. Barra depth and topo measurement

Project

BJ4644 - Gambia River Jetties

Client

Tourism Diversification and Resilience in The Gambia Project

Date

14-8-2024

Drawing number

BJ4644-RHD-D2-RJ-DG-GS-0005

Checked by	*Number*
Merel Kroon	P1

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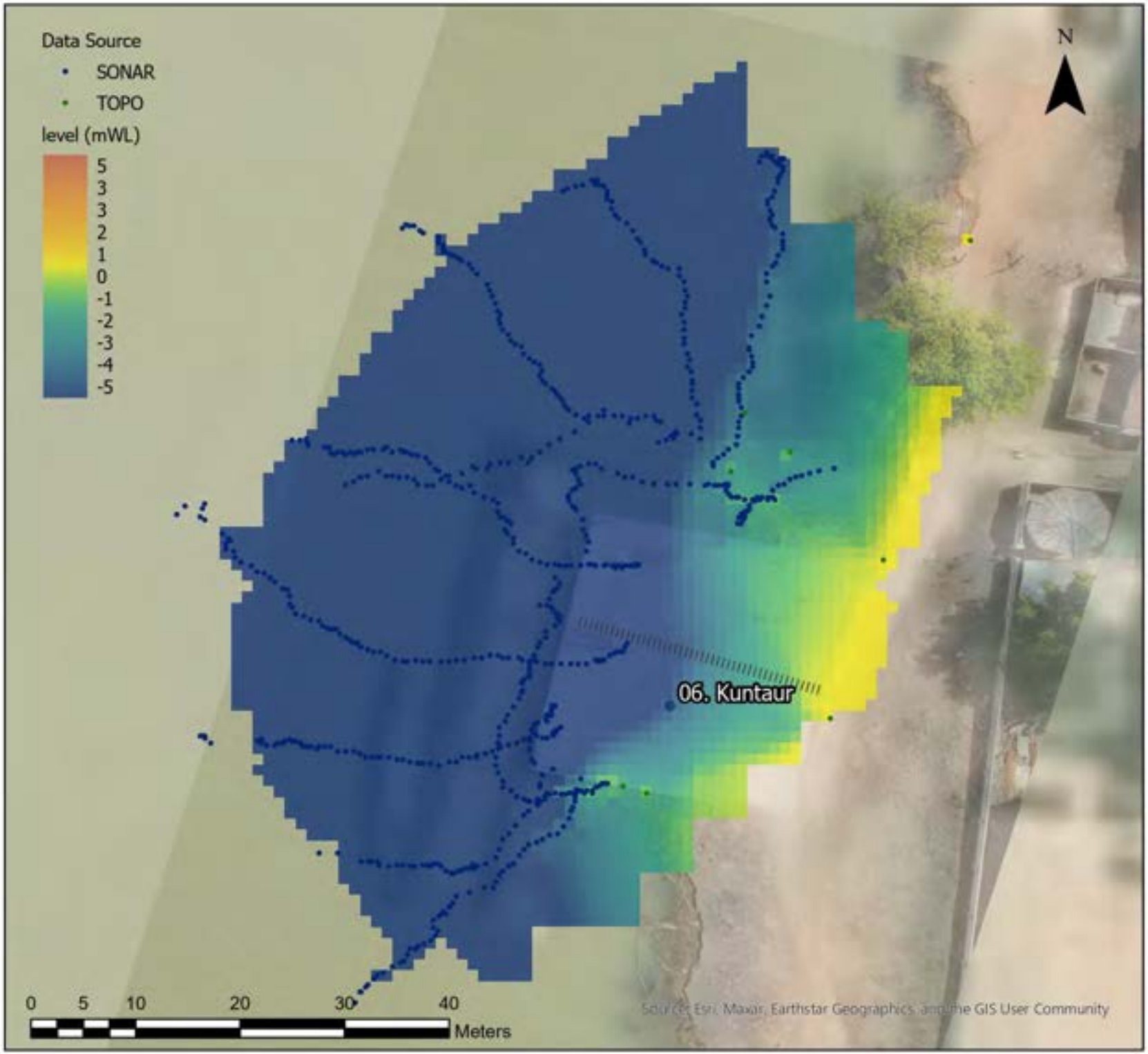

Title

06. Kuntaur depth and topo measurements

Project

BJ4644 - Gambia River Jetties

Client

Tourism Diversification and Resilience in The Gambia Project

Date

12-8-2024

Drawing number

BJ4644-RHD-D2-RJ-DG-GS-0006

Checked by	*Number*
Merel Kroon	P1

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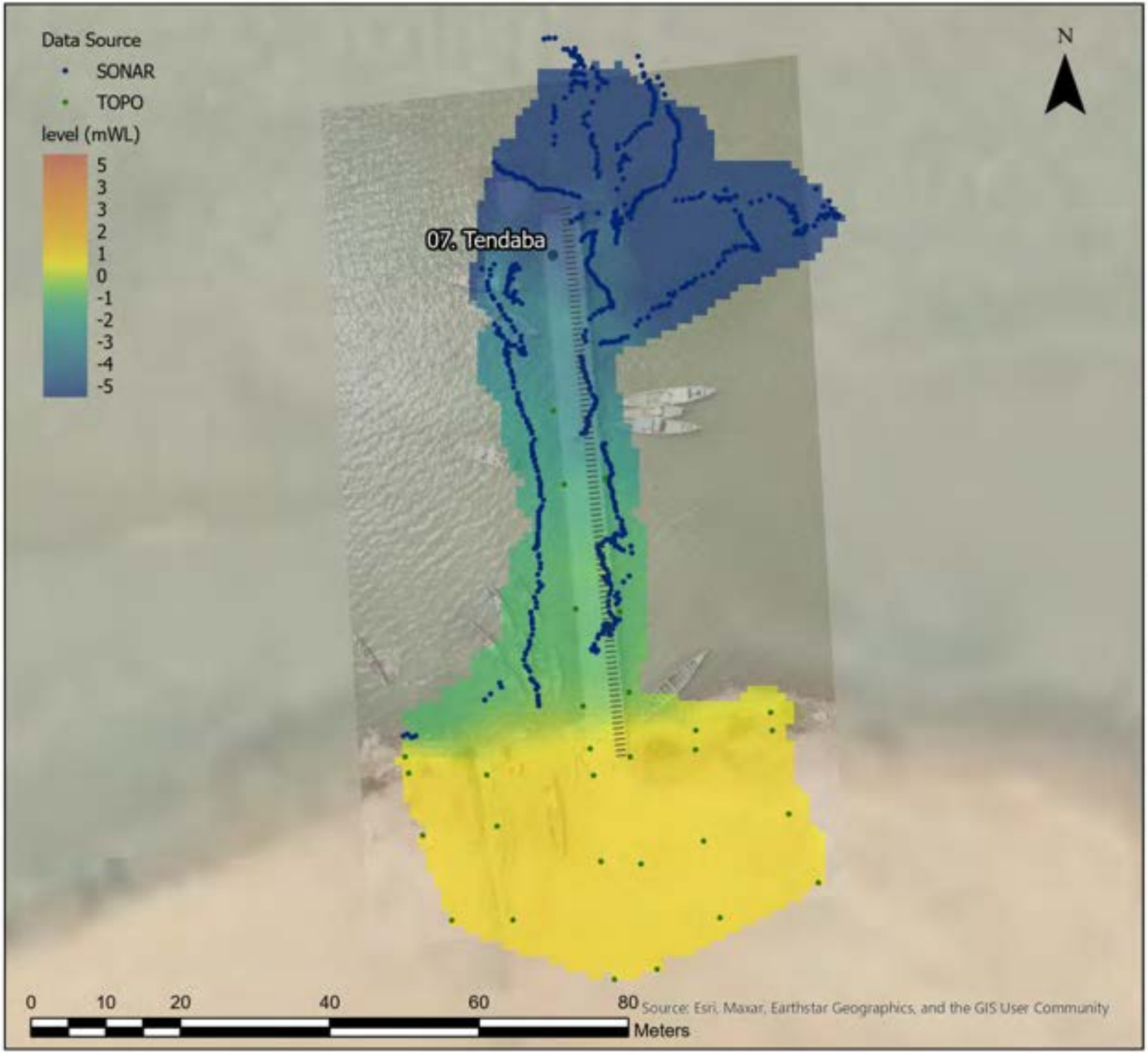

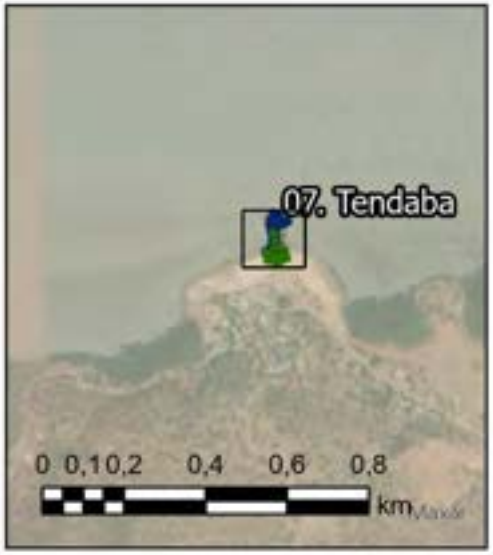

Title

07. Tendaba depth and topo measurements

Project

BJ4644 - Gambia River Jetties

Client

Tourism Diversification and Resilience in The Gambia Project

Date

12-8-2024

Drawing number

BJ4644-RHD-D2-RJ-DG-GS-0007

Checked by	*Number*
Merel Kroon	P1

Royal HaskoningDHV
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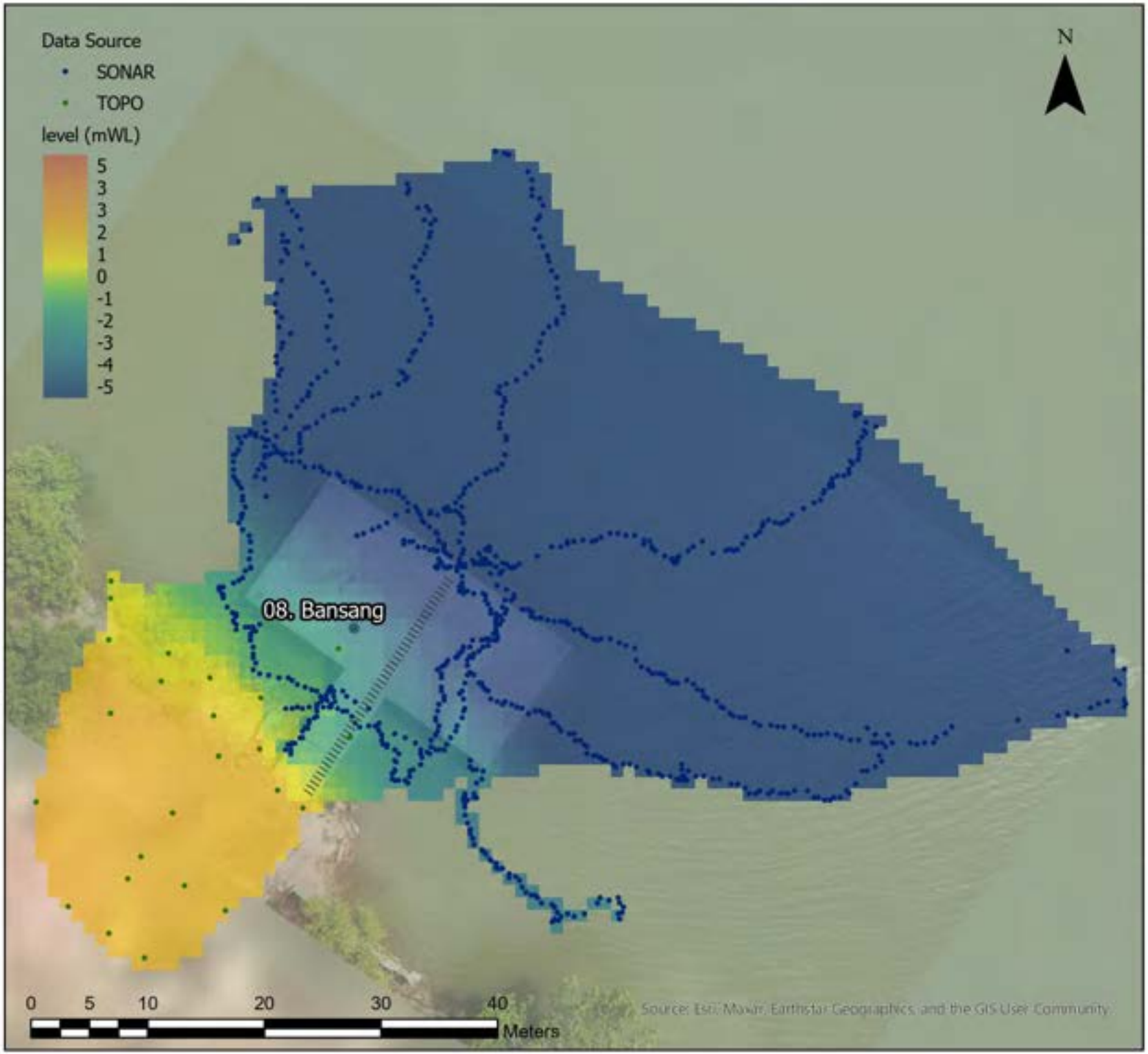

Title

08. Bansang depth and topo measurements

Project

BJ4644 - Gambia River Jetties

Client

Tourism Diversification and Resilience in The Gambia Project

Date

12-8-2024

Drawing number

BJ4644-RHD-D2-RJ-DG-GS-0008

Checked by	*Number*
Merel Kroon	P1

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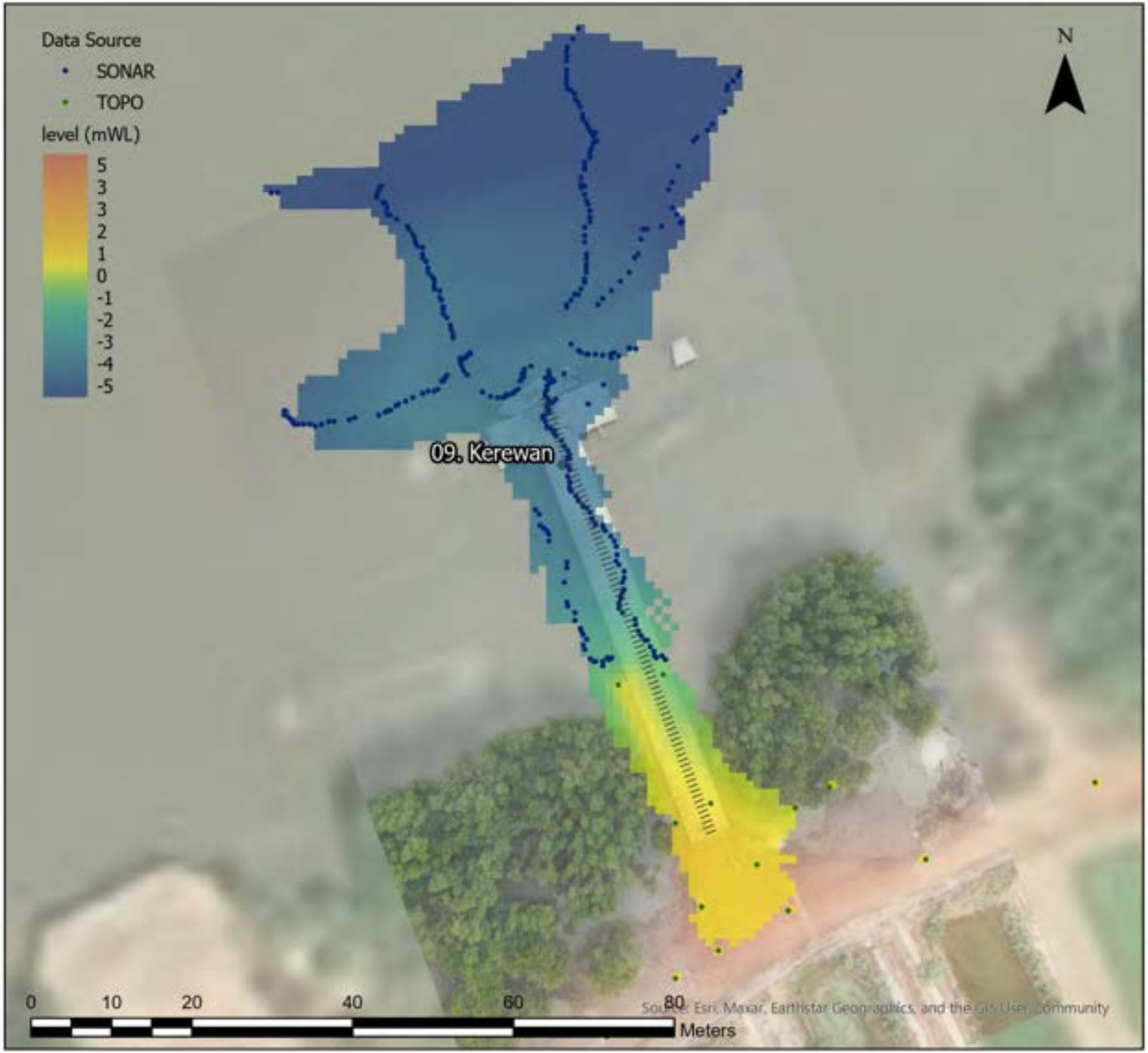

Title

09. Kerewan depth and topo measurements

Project

BJ4644 - Gambia River Jetties

Client

Tourism Diversification and Resilience in The Gambia Project

Date

13-8-2024

Drawing number

BJ4644-RHD-D2-RJ-DG-GS-0009

Checked by	*Number*
Merel Kroon	P1

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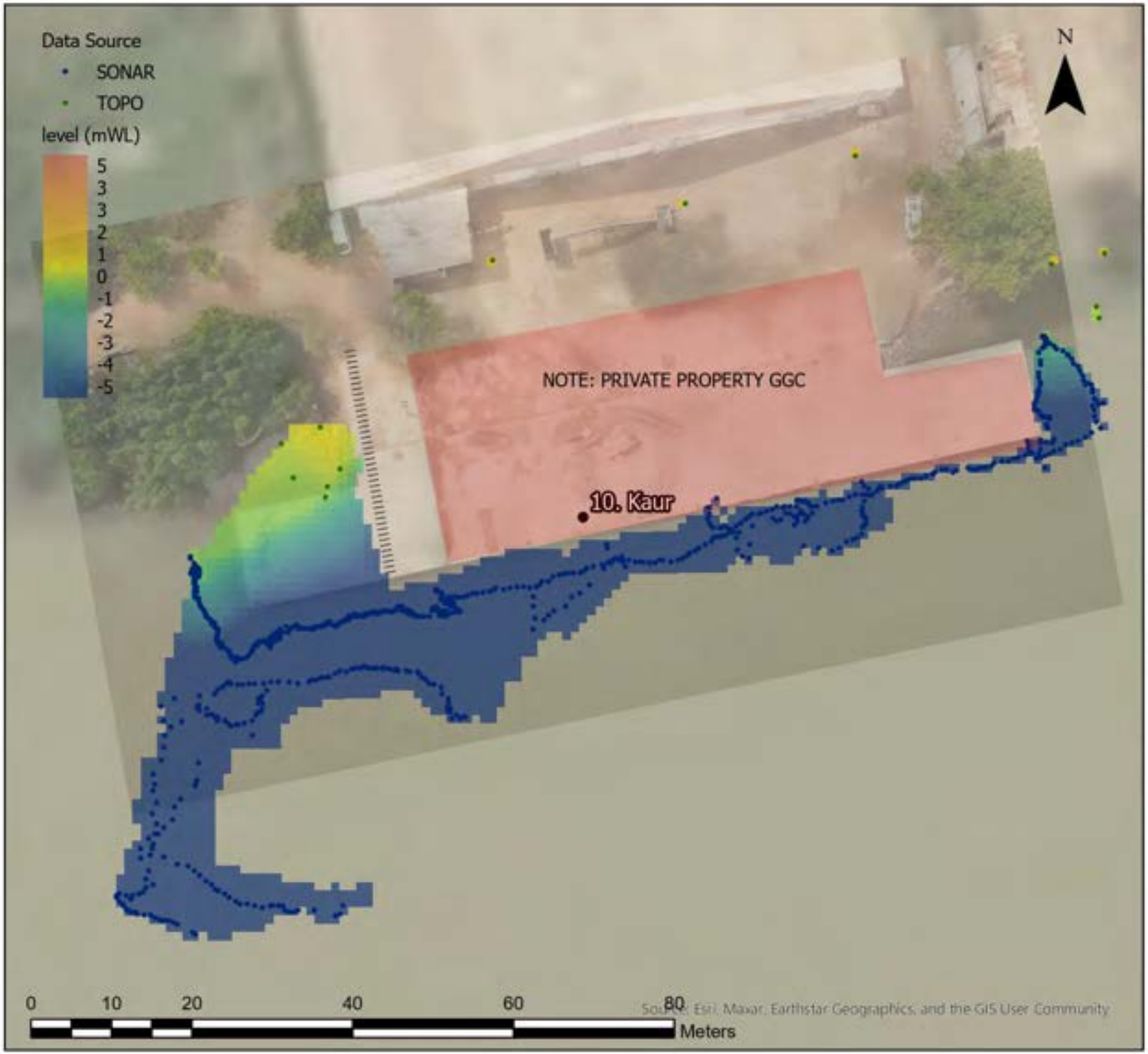

Title

10. Kaur depth and topo measurements

Project

BJ4644 - Gambia River Jetties

Client

Tourism Diversification and Resilience in The Gambia Project

Date

13-8-2024

Drawing number

BJ4644-RHD-D2-RJ-DG-GS-0010

Checked by	*Number*
Merel Kroon	P1

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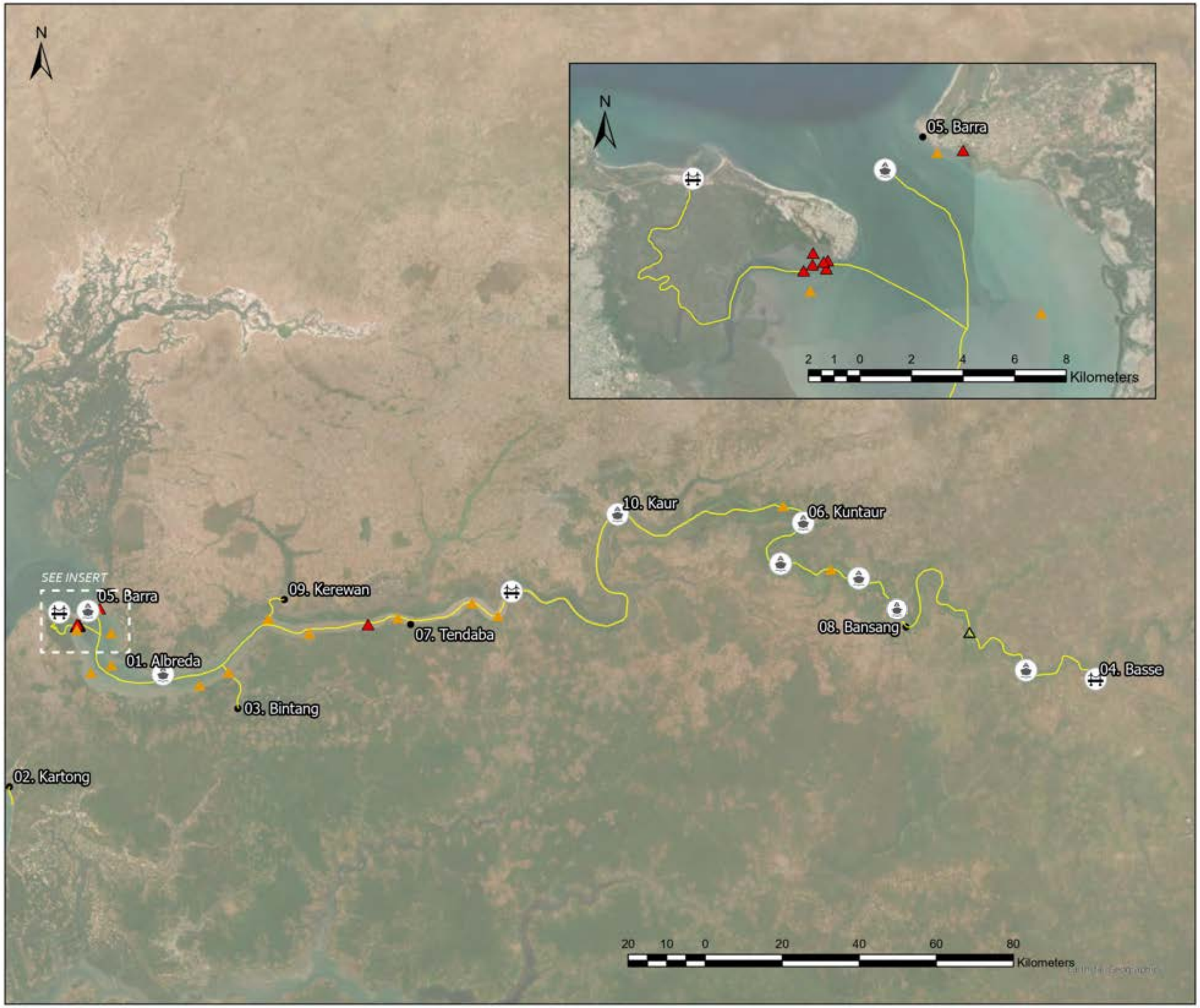

- Wreck
- Shallow
- No further data
- Bridge
- Ferry
- Navigation routes
- Jetties

Title
Obstacles for navigation

Project
BJ4644 - Gambia River Jetties

Client
Tourism Diversification and Resilience in The Gambia Project (TDRGP)

Drawing number
BJ4644-RHD-D2-RJ-DG-LM-0001

Date	*Scale*
12-8-2024	1:960
Checked by	*Number*
M. Kroon	P01

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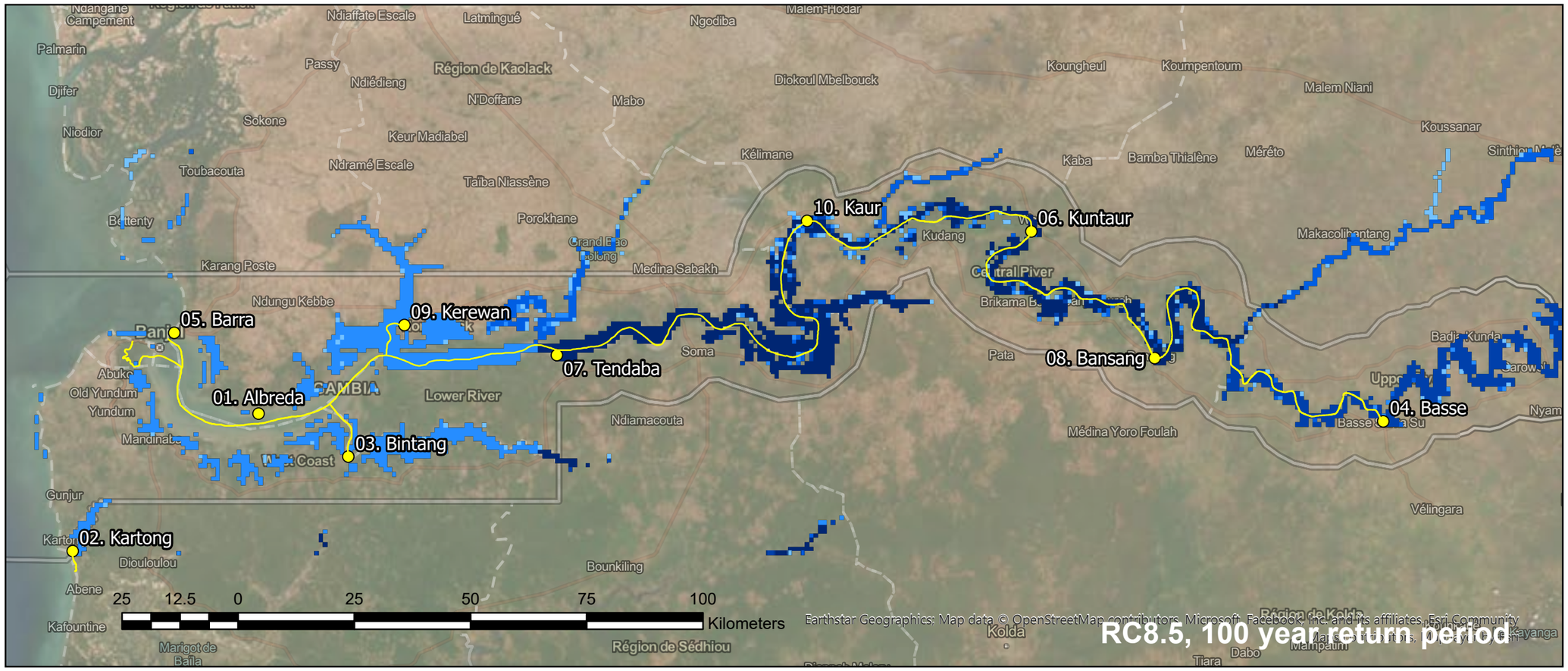

Inundation (m)

- >1.0
- 0.8-1.0
- 0.5-0.8
- 0.3-0.5
- 0-0.3
- 0

2030 = year of projected expected annual flood extent and depth

RC8.5 = Representative Concentration Pathway 8.5 (rising carbon emissions)

Source: World Resources Institute. Accesible at: https://www.wri.org/applications/aqueduct/floods

Title
Flood maps 10 and 100 year return period

Project
BJ4644 - Gambia River Jetties

Client
Tourism Diversification and Resilience in The Gambia Project (TDRGP)

Drawing number
BJ4644-RHD-D2-RJ-DG-LM-0002

Date	*Scale*
19-8-2024	1:1,000,000
Checked by	*Number*
M. Kroon	P01

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ATTACHMENTS

REPORTS:

BJ4644-RHD-XX-RJ-RP-Z-0001	Qualitative MCA to shortlist Jetties
BJ4644-RHD-D2-RJ-RP-HE-0001	Hydrodynamic and Morphodynamic Assessment
BJ4644-RHD-D3-RJ-RP-SE-0001	Engineering Assessment
BJ4644-RHD-D4-RJ-RP-EC-0001	Economic and Social Assessment
BJ4644-RHD-D5-RJ-RP-Z-0001	Recommendations for River Jetties
BJ4644-RHD-D8-RJ-RP-EV-0001	Scoping ESIA Report River Jetties The Gambia

Notice: *To maintain a manageable file size, the attachments referenced above are not included in this document. Should you require any of these attachments, please contact the owner.*

TOURISM DIVERSIFICATION AND RESILIENCE IN THE GAMBIA PROJECT

BUILDING RESILIENCE AND UNLOCKING THE GAMBIA'S TOURISM TAPESTRY

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