

2021 ANNUAL REPORT

GHANA BOUNDARY COMMISSION Motto: Service, Vigilance and Partnerships





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ABBREVIATIONS

AUAfrican UnionAUBPAfrican Union Border ProgrammeAUCAfrican Union CommissionCAGDController and Accountant-General's DepartmentCEMLAWSCentre for Maritime Law and SecurityCSOsCivil Society OrganisationsECCASEconomic Community of Central African StatesECOWASEconomic Community of West African StatesEEASEuropean External Action ServiceEEZExclusive Economic ZoneEUEuropean UnionGAFGhana Armed Forces		
AUCAfrican Union CommissionCAGDController and Accountant-General's DepartmentCEMLAWSCentre for Maritime Law and SecurityCSOsCivil Society OrganisationsECCASEconomic Community of Central African StatesECOWASEconomic Community of West African StatesEEASEuropean External Action ServiceEEZExclusive Economic ZoneEUEuropean Union		
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EEZExclusive Economic ZoneEUEuropean Union		
EU European Union		
-		
GAF Ghana Armed Forces		
GGSA Ghana Geological Survey Authority		
GhBC Ghana Boundary Commission		
GIFMIS Ghana Integrated Financial Management Information System	1	
GIS Ghana Immigration Service	Ghana Immigration Service	
GIZ German Agency for International Cooperation		
GNPC Ghana National Petroleum Corporation		
GNSS Global Navigation Satellite System		
HRMIS Human Resources Management Information System		
IBL International Boundary Line		
IEC Information, Educational and Communication		
ITLOS International Tribunal for the Law of the Sea		
MDAsMinistries, Departments and Agencies		
MLNR Ministry of Lands and Natural Resources		
MMDAsMetropolitan, Municipal and District Assemblies		
MNS Ministry of National Security	Ministry of National Security	
MoFARIMinistry of Foreign Affairs and Regional Integration	Ministry of Foreign Affairs and Regional Integration	
NGOs Non-Governmental Organisations		
NID National Intelligence Dunger		
NIB National Intelligence Bureau	nent	
NIBNational Intelligence BureauPECoGEFPlatform for Exchange and Coordination on Border Manager		

MESSAGE BY THE NATIONAL COORDINATOR



I present to you the Ghana Boundary Commission's (GhBC) 2021 Annual Report. The Commission, established by Act 795 of Parliament, began full operations in 2021 and has focused on managing Ghana's international boundaries. The year 2021 was challenging, particularly in the wake of the COVID-19 pandemic: nonetheless, the Commission ensured the safety and wellbeing of the workforce and achieved key successes. This report details the Commission's activities in 2021, capturing the unrelenting efforts of the management and staff of the Commission across all levels along with strategic projections for 2022 towards the proper and better management of Ghana's international boundaries.

In Africa, boundary issues remain a great concern given the inherent security implications for sovereign states. Poorly demarcated boundaries have led to disputes and loss of lives and property between neighbouring countries. The defect in the demarcation and mapping of African states inherited from the colonial powers has contributed to boundary disputes given that families, communities, lands, property, and natural resources were arbitrarily cut off from groups of the same backgrounds. In view of such defects and disputes, the African Union (AU) established the African Union Border Programme (AUBP) and the African Union Convention on Cross-Border Cooperation (the Niamey Convention) to promote peace, security and stability through the proper delimitation and demarcation of boundaries. Ghana, being a long-standing member of the AU and in sustaining commitment to the regional bloc. established the GhBC to demarcate and delimit the country's land and maritime boundaries in accordance with international laws and to facilitate the amicable settlement of boundary disputes with neighbouring countries.

The Commission, in the first year of full operation, undertook key activities towards achieving the Commission's mandate and developing into an agile and effective organisation responsible for securing Ghana's international land and maritime boundaries. Accordingly, a Five-Year Strategic Plan (2021-2025) aimed at directing the Commission's strategic focus, while responding to current and emerging realities regarding the security of Ghana's international boundaries, was developed and operationalised. In addition, the Commission undertook several operational assessments and mapping surveys along

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"The support of stakeholders and partners from various Ministries, Departments and Agencies (MDAs), regional institutions and development partners was vital to the Commission's successes in the year 2021."

land boundaries. Ghana's international communities prioritising border faced with boundary disputes. The GhBC further facilitated several joint technical maritime negotiation meetings between Ghana and Togo in a bid to resolve the maritime dispute between the two neighbours rather than resort to arbitration. The Commission is confident the series of negotiations rooted in accepted principles of international law and good neighbourliness conducted so far will lead to a mutually accepted conclusion that will strengthen the bond of relations between Ghana and Togo.

The GhBC values institutional collaboration and partnerships towards achieving a desired common end goal, hence, the Commission engaged several national, regional, and partners as relates to international the Commission's The mandate. support of stakeholders and partners from various Ministries, Departments and Agencies (MDAs), regional institutions and development partners was vital to the Commission's successes in the year 2021. The GhBC is particularly grateful to the Ministry of Lands and Natural Resources,

the Ministry of Foreign Affairs and Regional Integration, the Ministry of Finance, the Ministry of National Security, the Ministry of Justice and Attorney-General's Department. Ministry of Interior. the the Ghana Immigration Service, the Customs Division of the Ghana Revenue Authority, the Ghana Armed Forces, the Ghana National Petroleum Corporation, the Lands Commission, the Minerals Commission, the Ghana Geological Survey Authority, the GIZ/African Union Border Programme, neighbouring Boundary Commissions of Togo, Burkina Faso, Côte d'Ivoire and Nigeria: Border Security Agencies: Metropolitan. Municipal and District Assemblies (MMDAs) of various border towns, and the traditional authorities and people of all border communities visited in the year. The Commission will continue to collaborate with the aforementioned stakeholders and partners to enhance relationships for mutual benefits and also forge new partnerships particularly in 2022 towards achieving the Commission's targets.

Despite the many challenges, 2021 was an exciting and rewarding year for the Commission. I wish to express my sincerest appreciation to the President of the Republic, H.E. Nana Addo Dankwa Akufo-Addo and the Governing Body of the GhBC, chaired by the Minister for Lands and Natural Resources, Honourable Samuel A. Jinapor, for the continuous support and strategic guidance. I am exceedingly grateful to the Executive Committee and entire staff of the Commission for their diligence and hard work.

MK

Emmanuel W. Kotia, PhD Major General National Coordinator Ghana Boundary Commission

Section One INTRODUCTION

1.1 BRIEF OUTLOOK OF BORDER/ BOUNDARY ISSUES IN WEST AFRICA

A key characteristic of a state is the presence of a clearly defined boundary. Hence, without boundaries, a state cannot exist. In defining statehood, well-defined boundaries are essential; boundary demarcations are catalyst for border security and the promotion of good governance, good neighbourliness, political stability. human rights, integration, and development. There would be no national borders to protect if clearly demarcated sovereign boundaries were not affirmed. Borders are, therefore, vectors for harnessing amongst others, the mutual socio-economic and political benefits of all stakeholders. The variables stated above indicate that ensuring security in border areas remain a key concern.

However, in many parts of Africa and around the world, interstate boundary disputes have led to wars and the loss of lives and property between nations. A contributory factor is that, many African countries' international land boundaries inherited at independence were as results of inter- and intra-colonial boundary commissions which have been concurrently marred with lingering tensions, conflicts and near disputes amongst several states.¹ Within the West African sub-region for instance, border insecurities are exacerbated mainly by porous and complex border² with such concomitant effects as drug trafficking, human trafficking, violent extremism, small arms proliferation and human rights violations. Between 2007 and 2019, West African countries witnessed 42% of violence within approximately 100km of land border. Such violations have further been worsened by the COVID-19 pandemic especially due to increase in seizures of illegal goods, terrorist attacks and internally displaced persons.

Whereas properly demarcating and delimiting boundaries is crucial to safeguarding territorial interests, poorly demarcated boundaries result in the emergence of conflicts and/or insecurities. It is therefore disconcerting that only 35% of Africa's 17,000km of boundaries, representing one-third of Africa's borders, have been concisely demarcated and delimited.³ Boundary delimitation and demarcation have national security implications for sovereign states; hence, nations must therefore have mechanisms and structures to resolve, manage, and control their land, maritime, and air boundaries to avert disputes with neighbours. Accordingly, boundary commissions in the region have become critical avenues for the resolution of related boundary conflicts, the prevention of boundary disputes and the enhancement of border cooperation border for the development of areas. Nonetheless, the commissions are confronted with the practicality of applying political decisions to define boundaries to local human and physical landscapes.⁴ Moreover, many boundary commissions are threatened by poor coordination, limited data, lack of political will as well as inadequate and unsustainable financial support especially by central governments.

Against this background, the African Union (AU) specifically championed the African Union Border Programme (AUBP) to advocate unity and joint governance of African interstate borders to prevent structural conflicts in the continent. The AU Convention on Cross-Border Cooperation

¹ Commission of the AU (2016). African Border Dispute Settlement: User's Guide. Department for Peace and Security. Addis Ababa.

² West Africa Brief (2019). Borders, security and development in West Africa.

³ African Union Commission (2020). Border Governance in Africa: an African Union Strategy. Department for Peace and Security. African Union, Addis Ababa.

⁴African Union Commission (2013). Creation and Operation of Boundary Commissions in Africa: User's Guide. Department for Peace and Security. Addis Ababa.

Figure 1.1: Border Point (Adel Bagrou Border Post) between Mauritania and Mali.



Source: Suzanne Duranceau, 2002.

Figure 1.2: The Ntereso Community Along the Ghana-Cote d'Ivoire Border, separated by the Black Volta.



Source: Ghana Boundary Commission, 22 January 2021.

(commonly referred to as the Niamey Convention) is a reference point for the establishment of cross-border cooperation among AU Member States through peaceful settlements of disputes and, thus, Member States are entreated to ratify the Convention.⁵ This notwithstanding, only 17 African countries including Ghana have signed, with 5 having gone ahead to ratify the Convention.⁶

1.2 OVERVIEW OF THE GHANA BOUNDARY COMMISSION

Ghana has clearly defined 2163 km approximate land boundary with her neighbouring countries; 590 km on the northern corridor with Burkina Faso. 906 km with Togo to the east and 667 km with Côted'Ivoire to the west. Over the years, there have been increasing reports on the movement and displacement of land boundary pillars used as markings for the demarcation of land boundaries. Similarly, there have been incidents and reports of boundary pillars shifted or destroyed in some border towns. On the maritime domain, Ghana shares a maritime boundary with Côte d'Ivoire, Togo, Benin, and Nigeria with a total Exclusive Economic Zone (EEZ) of 235,391 km². The discovery of oil deposits in the eastern and western maritime spaces of Ghana brought in disputes and other developments with national security implications between Ghana and neighbours, thus, necessitating the need for proper demarcation/delimitation, management and documentation of international boundaries and the sensitisation or education of populations along border communities in adherence to the laws and sovereignty of states to avoid potential disputes.

In view of the above, among other considerations, the GhBC was established by Act 795 of Parliament in 2010 as part of interventions to address the increasingly complex nature of Ghana's international boundary issues. The Commission is, therefore, the mandated body charged with the responsibility to implement existing legislations and regional conventions on determining, demarcating and delimiting Ghana's international land and maritime boundaries in accordance with acceptable principles of international law to ensure Ghana's territorial sovereignty is secured at all times. Map 1.1: Map Indicating Ghana's Land and Maritime Boundaries.



Source: Ghana Boundary Commission, 22 January 2021.

The Commission's mandate is achieved through enhanced internal capacity and effective local and international collaboration with neighbouring countries and local actors.

In light of the growing boundary issues and challenges, namely, removal or displacement of international boundary pillars and disputes over trans-boundary resources, the establishment of the GhBC stands as a necessary architecture for the transformation of boundary zones and crossborder areas into spaces conducive for regional and continental integration and cooperation.

The GhBC, as part of efforts at implementing the Commission's strategic priorities. undertook several field exercises, activities and negotiations to secure Ghana's international land and maritime boundaries. The Commission further engaged various stakeholders and potential partners; initiating processes towards establishing sustainable alliances to strengthen the Commission's position in fostering effective boundary management with boundary commissions from neighbouring countries. Hence, the Commission gained noteworthy achievements within the year under review which will be leveraged to achieve greater successes in

⁵ Niamey Convention. Ex.CL/726 (XXI), Annex III, May, 2012, Article 13 (1) and 13 (2).

⁶ The 17 countries that have signed the Niamey Convention are Benin, Chad, Comoros, Congo, Gabon, Ghana, Guinea Bissau, Guinea Conakry, Mali, Mozambique, Mauritania, Namibia, Nigeria, Niger, Sao Tome & Principe, Togo and Zambia. The 5 that have ratified the Convention are Benin, Burkina Faso, Mali, Niger, and Togo

the future. Significant strides were equally made in key stakeholder engagements to institute common processes towards pacific boundary dispute resolution. For instance, Ghana and Togo collaborated bilaterally towards negotiating a peaceful resolution of the maritime dispute between the two nations. The ability of the two countries to resort to an amicable bilateral dispute settlement mechanism was a high point in the role of the boundary commissions of Ghana and Togo.

1.2.1 VISION

The vision of the Ghana Boundary Commission is to ensure Ghana's land, maritime and air boundaries are secured and managed within the framework of international law, peace and security, and the African Union and the Economic Community of West African States protocols of African and regional integration.

1.2.2 MISSION STATEMENT

The Commission's mission is to demarcate, delimit and manage Ghana's international and internal boundaries, including settling boundary disputes through the implementation of national legislations, and Regional and International Conventions on boundary management and cross-boundary cooperation in Africa.

1.2.3 OVERALL GOAL

The overall goal of the GhBC is to act as a trustee in partnering Ghana's neighbours to secure the territorial interest of Ghana, ensuring international boundaries with Ghana are protected and respected based on international best practice in demarcating and delimiting boundaries.

1.2.4 FUNCTIONS OF THE GHANA BOUNDARY COMMISSION

The functions of the Commission are as follows:

- Lead in negotiations with a neighbouring country concerning a land, maritime or air boundary issues between Ghana and that country;
- Collaborate with relevant security agencies to secure Ghana's boundaries to safeguard the territorial sovereignty of Ghana at all times;
- Undertake the physical demarcation and survey of land boundaries and the delimitation of maritime boundaries;
- Place buoys or other maritime markers along some or all of the courses of Ghana's maritime boundaries as and when determined by the Board;
- Advise government on the most appropriate strategy for the negotiation of land or maritime boundaries;
- Determine cross-boundary matters among communities through negotiations;
- Encourage negotiated settlement of border disputes in preference to litigation;
- Promote trans-border cooperation and local community development;
- Advise government on international conventions in relation to the borders of Ghana and the signing and ratification of treaties related to land, maritime and air boundaries;
- Address issues related to the use of natural resources that straddle land and maritime boundaries;
- Formulate policies and programmes on international boundaries including land, maritime and air boundaries; and
- Perform any other function ancillary to the objects of the Commission

1.2.5 STRATEGIC OBJECTIVES

The Strategic Objectives of the Commission for the period 2021 to 2025 are as follows:

1	INSTITUTIONAL CAPACITY BUILDING OF GhBC To build the institutional capacity of GhBC as an agile and effective national security organisation responsible for securing Ghana's international land and maritime boundaries
2	SECURING GHANA'S LAND & MARITIME BOUNDARIES To demarcate, delimit, secure, maintain and manage Ghana's sovereign land and maritime boundaries in collaboration with neighbouring countries and demarcate and manage internal land boundaries
3	BOUNDARY DISPUTE RESOLUTION To lead Government processes for the settlement and resolution of outstanding and emerging boundary disputes and issues of boundary security in accordance with international law and good neighbourliness
4	CROSS-BORDER GOVERNANCE To improve cross-border governance, and border community development through bi-lateral cooperation and joint programmes with neighbouring countries
5	STRATEGIC POLICY FRAMEWORK To provide research- and evidence-based policy advice and support to government on appropriate policy, strategic positioning towards the management and

on appropriate policy, strategic positioning towards the management and maintenance of Ghana's land and maritime boundaries

1.2.6 GOVERNANCE OF THE GHANA BOUNDARY COMMISSION

The Commission, as part of the governance structure, has a 15-member inter-ministerial Governing Body which provides oversight and strategic policy direction for the Commission. Being the Commission's highest decision-making structure, the Body was sworn into office by the President of the Republic of Ghana, H.E. Nana Addo Dankwa Akufo-Addo. on 15 October 2021. Chaired by the Honourable Minister for Lands and Natural Resources, Mr. Samuel A. Jinapor, the reconstituted Governing Body is responsible for approving annual workplans and reviewing the overall performance of the Commission in the context of agreed objectives and performance targets set in the Commission's Strategic Plan, workplans and accompanying budgets.

At the next level of the Commission's organisational and governance structure is the Executive Management Committee which assists the National Coordinator in the implementation of the Commission's strategic focus. The 10-member inter-departmental committee comprises the National Coordinator as Chair, the Deputy National Coordinator, the Chief of Staff; and the Directors of the five departments namely Boundary Operations, Survey and Delimitation, Research, Policy, Plans and Programmes, and Administration. The other members are the Heads of the Finance and Legal units.

⁷The Governing Body of the Commission comprises representatives from: Ministry of Lands and Natural Resources; Ministry of Foreign Affairs and Regional Integration; Ministry of Justice and the Attorney-General's Department; Ministry of Defence; Ministry of Energy; Ministry of Transport; Ministry of Local Government and Rural Development; Ministry of Food and Agriculture; National Security Council; Ghana Revenue Authority; Ghana Institute of Surveyors; Ghana Institute of Geoscientists; and Ghana Boundary Commission.

Figure 1.3: The President of the Republic, H.E. Nana Addo Dankwa Akufo-Addo in a Group Picture with Members of the Governing Body of the Ghana Boundary Commission.



Source: Office of the President of the Republic of Ghana, 15 October 2021.

1.2.7 DEPARTMENTS AND KEY UNITS OF THE GHANA BOUNDARY COMMISSION

- Office of the National Coordinator (comprising the Legal and Finance units)
- Boundary Operations Department
- Survey and Delimitation Department
- Policy, Plans and Programmes Department
- Research Department
- Administration Department

1.3 CONCLUSION

Governance of Ghana's boundaries has become important due to the associated national security implications. Ghana's international land boundary spans an approximate length of 2163 km and is physically defined by pillars, teak (trees), rivers, streams, mountain ranges and gorges. However, over the years, some boundary markers have been shifted, destroyed, or disturbed, thereby making ambiguous the exact locations of boundary lines separating Ghana and her neighbours. Such ambiguities have further paved the way for contestations among border communities aside from illegal and ignorant activities along the borders posing serious national security threats. In recent years, such threats have become pronounced due to the discovery of natural resources along Ghana's international boundaries. Hence, to ensure Ghana's territorial sovereignty, Government of Ghana established the GhBC through an Act of Parliament (Act 795) to address the increasing complex nature of Ghana's international boundary matters. The Commission is tasked with the responsibility of implementing existing legislations and regional conventions on determining, demarcating and delimiting land and maritime boundaries of the country in line with acceptable principles of international law.

In the Commission's first year of full operationalisation, several key structures, policies, and processes were formulated and implemented to enable the Commission to undertake the Commission's mandate effectively and efficiently. Such structures and policies include the establishment of a Governing Body to provide oversight and strategic direction, development of a 5-year strategic plan, the acquisition of an office space and the recruitment of staff.

Section Two LAND BOUNDARY ACTIVITIES

2.1 INTRODUCTION

The GhBC in 2021 undertook numerous land boundary activities including physical land boundary pillar inventory, mapping surveys of international boundaries. negotiations. and bilateral meetings with neighbouring countries on common land boundaries, and the establishment of joint land technical committees. The activities were carried out to promote cross-border cooperation at the regional and sub-regional levels; facilitate the demarcation and reaffirmation of interstate borders; and transform border areas into catalysts for growth, socio-economic and political integration of the continent, among others. Land boundary operations mostly centred on field assessments on border areas with latent and active boundary disputes across the international boundary lines with Ghana's neighbours. To secure Ghana's international land boundaries and to avert any international land boundary disputes with the country's land boundary neighbours Togo, Côte d'Ivoire, and Burkina Faso, the Commission undertook several activities pursuant to the Commission's mandate.

2.2 THE LAND BOUNDARY TECHNICAL COMMITTEE

The Ghana Boundary Commission (GhBC) established а Land Boundarv Technical Committee to perform assigned functions for the Commission as stipulated in Act 795. The Committee has the mandate to handle all land boundary related disputes, with the view to settle the disputes: define and demarcate boundaries in accordance with international and national laws: proffer solutions to any land boundary dispute; and promote the development and effective management of land boundaries. Membership of the Committee was drawn from the GhBC, with the National Coordinator being the Chairperson, the Survey and Mapping Division of the Lands Commission, the Ministry of Justice and Attorney-General's Department, the Ghana Immigration Service, the Ministry of National Security, Ministry of Defence, Ministry of Foreign Affairs and Regional Integration, the Customs Division of the Ghana Revenue Authority, and Civil Society Organisations.

Figure 2.1: Commercial Activities in Buffer Zone at Paga - Boundary Pillar 453 (left) and Boundary Pillar 454 (right), on the Ghana-Burkina Faso Border.



Source: Ghana Boundary Commission, 13 July 2021.

2.3 OPERATIONAL ASSESSMENTS AND MAPPING SURVEYS

Key among the Commission's land boundary operations were a number of Operational Assessments and Mapping Surveys undertaken with respective neighbouring counterparts and other critical national stakeholders to assess the state of international boundary pillars along Ghana's eastern, northern, and western boundaries. Specifically, the GhBC's field team in 2021 conducted field visits to border communities namely, Dollar Power, Aflao, Leklebi Kame, Pulimakom, Sapelliga, Paga, Pusiga (Belitanga, Gariki) and Kpoeta Achem: covering approximately 105.4km of international land boundary with neighbouring countries. During the assessment missions, international boundary pillars were inspected, inventory and orthophotos were taken and surveys were conducted. The team further ascertained the extent of breaches along the country's international boundaries and evaluated complaints and contentions over lands along Ghana's international boundary line for amicable settlement with the authorities of neighbouring countries. Additionally, the operations sought to fact-find border-related security issues on the ground and how such issues impacted on the boundary, the pillars or any other markings used. Overall, 75 boundary pillars were flagged and surveyed and a total of 30.3km of orthophoto mapping along the boundaries at various locations was carried out using drones. Map 2.1 shows the border towns visited while Table 2.1 details the cumulative field assessments for 2021.

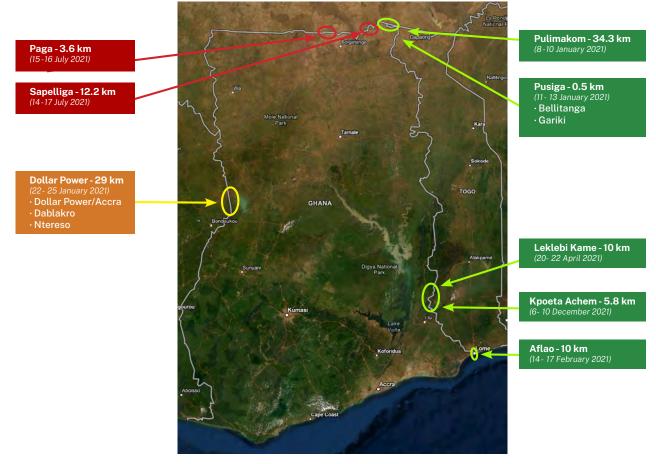
Figure 2.2: GhBC Field Survey Team setting up Drone Base Station at Ntereso on the Ghana-Côte d'Ivoire Boundary.



Source: Ghana Boundary Commission, 23 January 2021.

⁸ The primary composition and specific functions of the GhBC field team are as follows: (1) Boundary Operations Department to provide leadership, liaison and coordination with all stakeholders involved, and to initiate the pillar inventory; (2) Survey and Delimitation Department to carry out inventory of the international boundary pillars, flag or mark them for identification on the map, survey them with a GNSS equipment and drone flight the corridor for Orthophoto Map Production; (3) Research Department and the Policy, Plans and Programmes Department to carry out research, engage the border community and identify community needs for intervention; (4) Ghana Air Force provide air transport and reconnaissance flights to boundary areas since a lot of the boundary areas are not easily accessible by road; (5) Ghana Army to provide security to the team on site; (6) Ghana Immigration Service to provide both guidance and security during the operation; (7) National Intelligence Bureau to provide intelligence on border security situations to facilitate operation in the field.

Map 2.1: Land Boundary Exercises Conducted with Dates.



Source: Ghana Boundary Commission, 20 December 2021.

Table 2.1: Cumulative Field Assessments for 2021.

Border Town	Length of Boundary worked on (in km)	Total Boundary Pillars surveyed	Pillars in Good Condition	Pillars Disturbed, Removed or Defaced	Pillars GNSS Surveyed	Length of Boundary Orthophoto (km)
Dollar Power	29	16	10	6	4	5 km x 200 m
Aflao	10	14	8	5	8+4+3	2.8 km x 200 m
Pulimakom	34.3	3	2 (River Bdry)	1	3+9	7.6 km x 400 m
Pusiga	0.5	0	0 (River Bdry)	0	5	0
Paga	3.6	16	9	7	16	3.8 km x 200 m
Sapelliga	12.2	20	5	15	20	1.6 km x 1 km 3. 7km x 400 m
Leklebi Kame	10	0	3	1	0	0
Kpoeta-Achem	5.8	6	0	6	6	5.8 km x 400 m
Total	105.4	75	34	41	75	30.3km x 200m, 400m, 1000m

Source: Ghana Boundary Commission, 20 December 2021.

2.4 MULTI-AGENCY RECONNAISSANCE AT DOLLAR POWER

The Commission, in line with the strategic objective to secure Ghana's sovereign land boundaries, organised a multi-agency reconnaissance to the Dollar Power general area to address a number of human security issues such as lack of schools, health facilities, and road networks, which was observed during an earlier operational assessment and mapping survey. The team comprised personnel from the Ministry of National Security; Ministry of Foreign Affairs and Regional Integration; Ministry of Lands and Natural Resources; Ghana Armed Forces; Ghana Immigration Service; Ghana Police Service; Ghana Geological Survey Authority; Lands Commission; Forestry Commission; and Minerals Commission. The following findings were made:

- a. Identification of possible deployment sites for security agencies
- b. Identification of illegal surface mining sites within the Bui wildlife reserve for possible block for community mining
- c. Identification of removed, relocated, and disturbed boundary pillars
- d. Existence of a gold belt within the area
- e. Discovery of the abduction, trial, and imprisonment of one Ghanaian national for his crusade against Ivorians tampering with boundary pillars

2.5 RESOLUTION OF LAND BOUNDARY DISPUTES

The GhBC is mandated to negotiate and facilitate the settlement of boundary disputes with neighbouring countries. In line with this, the Commission through various communitybased joint stakeholder platforms and backed using existing legacy documents, engaged with neighbouring boundary commissions, Metropolitan, Municipal, District Security Councils, local authorities, and traditional leaders of international border communities to discuss modalities for amicable resolution of existing boundary disputes among neighbouring border communities. Notable among the land boundary dispute resolution efforts were those in Leklebi Kame in the Volta Region (bordering Togo). Dollar Power in the Bono Region (bordering Côte d'Ivoire), Pulimakom, Bellitanga, and Bimpela all in the Upper East Region (bordering Burkina Faso) and Kpoeta-Achem in the Volta Region (bordering Togo). In July 2021, a joint Ghana-Togo Commission, intervened to peacefully resolve a boundary dispute between local authorities and traditional leaders over

the international boundary line between Ghana (Pulimakom) and Togo (Cinkasse). In 2020, Togo was reported to have trespassed the country's boundary at the Kolpelig river, a tributary to the White Volta, claiming ownership of parts of Gariki, a suburb of Pulimakom. However, after a joint evaluation of the disputed boundary areas, the two commissions unanimously agreed the pre-existing boundary demarcation from the 1929 Legacy Document using River Pulimakom as the International Boundary Line between Ghana and Togo should be respected which meant the disputed territory was indeed in Togo's territory and not Ghana's. Moreover, the commissions agreed Ghana's border security agencies could undertake operations to the banks of River Pulimakom and site forward operation bases along the river to cover entry points along the International Boundary Line. In charting the way forward, the commissions discussed plans to carry out joint community sensitization programmes both in Pulimakom (Ghana) and Cinkasse (Togo) to educate the population on the decisions taken and the need to respect the demarcated boundaries. The joint technical committee of the two commissions will further undertake a technical assessment and reconstruction of disturbed and missing boundary pillars in the near future.

2.6 CONSULTATIVE MEETINGS ON COMMON LAND BOUNDARIES

The GhBC, guided by the principle of good neighbourliness, held a series of consultative meetings with the boundary commissions of Togo and Burkina Faso to deliberate on, and address issues of boundary pillars and markers along the International Boundary Line between the countries. The consultative meetings brought understanding and clarity to boundary-related issues between neighbouring border communities and brought on the desire for continuous collaboration between the boundary commissions of all parties to foster peace and better boundary management. The GhBC and the Burkina Faso National Boundary Commission engaged in a maiden consultative meeting on 16th July 2021, at Paga (Ghana) to address issues on the operations of Youga Gold Mining Company, a Burkina Faso-based gold mining firm which impacted negatively on Ghana (Sapelliga in the Bawku West District of the Upper East Region) and to evaluate encroachment on the international boundary pillars along the International Boundary Line in Ghana (Paga in Kasena Nankana West District).

The commissions agreed to establish a Joint Land Border Technical Committee to assess the mining activities of the mining company and the deteriorating nature and disappearance of the international boundary pillars at the Paga border in the Kassena-Nankana West District to preserve the territorial integrity of the two countries. The joint committee agreed to schedule biennial meetings, with the next meeting to be hosted by Burkina Faso. The commissions resolved to use pragmatic approaches to amicably resolve all boundary disputes between the two countries.

2.7 CONCLUSION

Within the period under review, the Commission undertook major land boundary activities in line with the Commission's mandate to secure Ghana's territorial interest and lead government's process to facilitate the resolution of outstanding and emerging land boundary disputes. The Commission established a Land Boundary Technical Committee to advance solutions to land boundary disputes and promote the development and management of land boundaries. Additionally, the GhBC carried out several field operations to assess the state of boundary pillars and other markers along Ghana's international boundaries with Togo, Burkina Faso, and Côte d'Ivoire. In all. 105.4km of international land boundary was covered, with 75 boundary pillars identified and assessed. The field exercises further revealed illegal activities bordering on national security. Such activities included the encroachment within buffer zones, the identification of illegal mining and sand winning sites, and the tempering of boundary pillars. Furthermore, the Commission began processes and discussions towards the amicable settlement of land boundary disputes with neighbouring countries. A case in point is the joint effort of the boundary commissions of Ghana and Togo at successfully resolving a dispute between the border communities of Pulimakom in Ghana and Cinkasse in Togo. In 2022, the Commission will follow up and continue discussions and processes towards resolving disputes with neighbouring countries.

Figure 2.3: Personnel of the Ghana and Burkina Faso Boundary Commissions during a joint inspection of boundary pillars along the Ghana/Burkina Faso border, Paga.



Source: Ghana Boundary Commission, 16 July 2021.

Section Three MARITIME BOUNDARY ACTIVITIES

Figure 3.1: Co-Chairpersons of the Joint Ghana-Togo Technical Committee Exchanging a Communique.



Source: Ghana Boundary Commission, 25 June 2021.

3.1 INTRODUCTION

Ghana shares maritime boundaries with Côte d'Ivoire, Togo, Benin, and Nigeria. In 2021, the Commission's focus in terms of maritime boundary operations centred on negotiations with the Republic of Togo on a long-standing maritime dispute between the two countries. Additionally, in the spirit of good neighbourliness and cross-border cooperation, GhBC and the Nigerian counterpart held an introductory meeting on the countries' common maritime boundary.

3.2 THE MARITIME BOUNDARY TECHNICAL COMMITTEE

GhBC established a Maritime Boundary Technical Committee in the first quarter of 2021 to perform assigned functions for the Commission as stipulated in Act 795. The Committee is responsible for dealing with matters affecting

the maritime boundary of Ghana, participating in the delimitation of international boundaries in accordance with the delimitation instrument or documents for that purpose, proffering solutions to any international maritime boundary dispute involving Ghana, and making recommendations to the Governing Body of the Commission on maritime boundary issues. The Committee, composed of experts from the GhBC and various Ministries, Departments and Agencies, is tasked to promote trans-border cooperation and boundary area development. Specifically, the Committee consists of representatives from the Ministry of Defence, Ministry of Foreign Affairs and Regional Integration, the Ministry of National Security, the Ministry of Justice and Attorney-General's Department, the Ghana National Petroleum Corporation, the Lands Commission, the Ghana Maritime Authority, the Petroleum Commission, and the Centre for Maritime Law and Security, Africa. The Committee held series

of meetings in 2021 to deliberate on issues related to the Commission's mandate.

3.3 RESOLUTION OF MARITIME BOUNDARY DISPUTES

With the aim of resolving a long-standing maritime dispute between Ghana and Togo, the GhBC in 2021 re-initiated negotiations with Togo which began in 2018. A resolution of the dispute requires the determination of a common delimited maritime boundary between the two countries guided by the principle of international law and best practices. The maritime dispute between Togo and Ghana led to the halting of Ghana's fishing and oil exploration activities and operations in the disputed area which is near the boundary line. However, the joint technical maritime negotiation meetings held in Accra and Lomé in 2021, paved the way for continuous cross-border cooperation activities between the parties, fostered good relations between the parties, and resulted in a jointly agreed roadmap to resolving the dispute.

As part of the process of delimiting the two countries' common maritime boundary, the countries consensually formed the Joint Ghana-Togo Maritime Boundary Technical Sub-Committee comprising both Ghanaian and Togolese officials to be responsible for collating and preparing all technical inputs required to direct deliberations at Joint Maritime Technical Committee Meetings. In all, 12 meetings were held between the two sides which resulted in several critical decisions and agreements including the coordinates of the Land Boundary Terminus (Pillar 1), an important pillar for the delimitation of maritime boundary; the Nautical Chart and the baseline and starting point for the delimitation of the boundary between the two countries.

3.4 INTRODUCTORY MEETING WITH NIGERIA

Ghana shares 8 to 10 nautical miles of maritime boundary with Nigeria. As a result, the National Boundary Commission of Nigeria invited the GhBC for an introductory meeting at Abuja, Nigeria from 25th to 27th October 2021, to discuss issues related to joint processes towards the delimitation of the common maritime boundary between the two countries. The following decisions were agreed upon:

- That a Joint Ghana-Nigeria Technical Maritime Negotiation Committee be established to negotiate and amicably resolve all future common maritime disputes between the two countries.
- An eight-member Joint Technical Sub-Committee was constituted and scheduled to meet in Accra, Ghana in February 2022 to work on the technical details for the delimitation of the Ghana-Nigeria Maritime Boundary with the following terms of reference:
 - To determine the common maritime boundary between Ghana and Nigeria using the following:
 - •Type of Map/Charts: UKHO Admiralty Charts.
 - •Datum: WGS 84.
 - Projection: Mercator.
 - •Methodology: Equidistance.
 - To evaluate the exact extent of the Ghana-Nigeria maritime boundary line.
 - To determine any other technical issues related to the Ghana-Nigeria maritime boundary line.
 - To submit a proposed maritime boundary line to the Joint Ghana-Nigeria Technical Committee for approval.

3.5 CONCLUSION

Towards the realisation of properly delimiting Ghana's international maritime boundaries, the Commission in 2021 established a Maritime Boundary Technical Committee to facilitate the resolution of outstanding and emerging maritime disputes with neighbouring countries, namely, Togo, Côte d'Ivoire, Nigeria, and Benin. Specifically, the GhBC initiated processes and activities to resolve a long-standing maritime dispute between Ghana and Togo. As part of the resolution process, several Joint Ghana-Togo Maritime Negotiation meetings were held in Accra and Lomé. A major outcome of the meetings was the mutual agreement on the coordinates of the Land Boundary Terminus (Pillar 1) providing a good basis for resolving the maritime dispute the two countries. Particularly between important was the initial engagement with the National Boundary Commission of Nigeria to jointly establish cooperation frameworks on the two countries' common maritime boundary.

⁹ To promote peace and good neighbourliness, the Heads of State of Ghana and Togo agreed in 2018 that a peaceful and coordinated joint effort rooted in international law and standards should guide the delimitation of the maritime boundary.

Section Four STRATEGY DEVELOPMENT, IMPLEMENTATION AND VISIBILITY ACTIVITIES

4.1 INTRODUCTION

The Commission in 2021 developed and operationalised processes for strategic direction. The processes included the development of a strategic plan, an annual work plan and the Sector Medium-Term Development Plan; the establishment of a management system to guide the running of the Commission; and the development and dissemination of communication materials to enhance visibility, awareness, and knowledge of the Commission.

4.2 FIVE-YEAR STRATEGIC PLAN

The Commission, with the support of an external consultant, developed a Five-Year Strategic Plan (2021-2025) to provide strategic and policy direction. The Plan was developed based on both internal and external extensive engagements, and highlights the vision and mission of the Commission, key strategic priority areas and strategic objectives for the period, together with management and operational structures among others.

Additionally, the plan presents a results framework detailing clear action plans and outcomes the Commission envisions. The strategic priority areas the Commission seeks to focus on for the period are as follows:

- 1. Institutional Capacity Building of the Commission;
- 2. Securing Ghana's Land, Maritime, and Air Boundaries;
- 3. Resolution of International Boundary Disputes;
- 4. Cross-Border Cooperation; and
- 5. Strategic Policy Framework.

Towards the implementation of the Strategic Plan, the Commission;

- Established an efficient governance structure anchored on a result-based performance management system which allows for the continuous review of plans to achieve set targets. In view of this, the Commission put in place a Monitoring, Evaluation, and Learning System to support knowledge management and decision-making processes.
- Leveraged cooperation capacity to carry out operations. The work of the Commission cuts across the remit of many Ministries, Departments, and Agencies of Government. For this reason, the GhBC collaborated with government Agencies and Departments to achieve the mandate.
- Established a multi-faceted workforce that appreciates and leverages best performance to build a dynamic/agile work culture.

4.3 DEVELOPMENT OF WORK PLANS AND BUDGET

To guide the successful implementation of the Commission's strategic priorities and objectives within the context of the Strategic Plan, the Commission developed an annual work plan and budget. The work plan serves as a framework to assess and evaluate progress or otherwise of set targets. The 2021 work plan outlined the following key desirable outcomes and outputs:

Srl	Outcomes	Outputs		
1.	Efficient, effective, and responsive system of the	Organisational structure and governance and management systems in place		
	Commission enhanced to ensure corporate governance, resource management (financial, human, asset), institutional learning and impact, strategic communication and visibility, sustainability, and	Relevant policies, plans, and process developed and operationalised		
		Communication strategies, tools, and products designed, developed, and produced		
	digitisation	Staff capacity strengthened		
2.	Ghana's international land and maritime boundaries properly demarcated/delimited	Digital images and database for locations of all land Boundary Pillars and the conditions of such, produced and updated		
		Land boundary demarcations physically marked and surveyed		
		Maritime boundary surveys and delimitation between Ghana and neighbouring countries established		
		Land and Maritime Boundary Technical Committees established		
3.	Ghana's international land and maritime boundaries within disputed areas established in	Capacity of legal experts and technical committee members in negotiations and adjudication increased		
	accordance with international law and best practice	Disputed boundary areas identified		
		Joint negotiation processes between Ghana and Togo on disputed common boundaries in place		
4.	Collaborative and coordination mechanisms in advancing boundary management	Frameworks for cross-border, regional, and continental boundary management arrangements developed		
	enhanced through strategic partnerships	Resource mobilisation and stakeholder engagement strategies and policies developed		
		Multi-sectorial coordination platforms established and operationalised/functionalised		
5.	Evidence-based knowledge on issues of boundary/ border	Border community risk and vulnerability assessment conducted		
	management developed to inform policy and discourse	Reports produced and disseminated		
		Relevant maps and legacy documents defining the boundaries between Ghana and neighbouring countries identified		

Source: Ghana Boundary Commission, 20 December 2021.

Further, in 2021, the Commission drafted and submitted to the MLNR a 2022-2025 Sector Medium-Term Development Plan to guide the operations of the Commission, focusing on the accelerated development of the boundary management sector of the economy. The overall purpose of the Plan is to enhance operational effectiveness and efficiency towards the achievement of stated sector policy objectives and time-bound targets.

4.4 INFORMATION, EDUCATIONAL AND COMMUNICATION MATERIALS FOR VISIBILITY

To enhance visibility and corporate branding efforts, the GhBC in 2021 produced and disseminated several Information. Educational. and Communication materials. including brochures, banners, press releases, flyers, reports, and notepads. Recognising the Commission is a relatively new entity, the materials and media engagements aimed at promoting visibility and making readily available accessible. background and information about the Commission and the Commission's mandate. Additionally, the Commission designed and successfully launched an official cloth/ Friday Wear for Staff in July 2021. The official cloth has the imprints of the GhBC logo and the 'Eban' or 'Fence', an Adinkra symbol for security and safety, to depict the Commission's mission and vision. The official cloth uplifted

 $\label{eq:Figure 4.1: GhBC Staff Outdooring the Official Cloth of the Commission.$

the corporate image and visibility of the GhBC brand. For the purposes of enhancing internal communication and information dissemination to staff and visitors, appropriate channels and processes such as staff durbars, Daily Newsfeed through LED TVs stationed at vantage points, and departmental meetings among others were employed and established.

4.5 CONCLUSION

The GhBC established, developed, and implemented strategic processes for full operationalisation, including the development of a Five-Year Strategic Plan which clearly outlines the Commissions' vision, mission, overall goal, and functions. Based on an external and internal environmental scan, analysis of the strengths, weaknesses, opportunities, and threats, in addition to an assessment of stakeholders and intervention logic, the Plan provides a clear picture of where the Commission intends to be in five years. Further, the GhBC developed an annual workplan detailing activities for the year within the context of the Strategic Plan. Another key strategic development process was the drafting and submission of the 2022-2025 Sector Medium-Term Development Plan to the MLNR, focusing on the accelerated development of the boundary management sector of the economy to enhance operational effectiveness and efficiency towards the achievement of stated sector policy objectives and time-bound targets.



Source: Ghana Boundary Commission, 20 July 2021.

Section Five STAKEHOLDER ENGAGEMENTS AND PARTNERSHIP ACTIVITIES

5.1 INTRODUCTION

The work of the GhBC is multifaceted and the execution of the Commission's mandate has national, regional, and international dimensions, as such, collaborative efforts and partnership arrangements with different stakeholders and institutions is critical. Hence, the GhBC within the year, engaged stakeholders at various levels to initiate partnerships vital to the effective fulfilment of the Commission's mandate and collaboration. Further, given the Commission is a relatively new institution, the stakeholder engagements served to introduce the GhBC to stakeholders and potential partners.

5.2 ENGAGEMENT WITH MINISTRIES

The Commission engaged with several Ministries, Departments, and Agencies (MDAs) in pursuance of the Commission's duties. Worth noting is the support and contribution from the Ministry of Lands and Natural Resources (MLNR), under which the Commission functions. The MLNR provided policy direction to the GhBC, and the Lands Commission provided technical support during mapping and operational surveys conducted throughout 2021. As a further display of support for the Commission, the Deputy Minister for Lands and Natural Resources, Mr. Benito Owusu-Bio, paid a courtesy visit to the management and staff of the Commission.

The Commission in 2021 also engaged with a number of other Ministries who supported GhBC in diverse way. Following the submission of the GhBC's budget, the Ministry of Finance released funds via the MLNR for goods and services as well as compensation for employees; the Ministry of Justice and Attorney-General's Department among others things reviewed the Act establishing the GhBC; and the Ministry of Foreign Affairs and Regional Integration (MoFARI) offered advice and direction on the Commission's relations with counterparts of other states and development partners. The Commission further engaged with the MoFARI to initiate the process for the ratification of the Niamey Convention by Ghana. A meeting on the Ghana Boundary Commission Bill was organised with external stakeholders from the Lands Commission, Cabinet Secretariat and the Ministry of Justice and Attorney-General's Department. The Bill is currently before Parliament pending passage and assent from the Executive. Since the inception of the GhBC. the Ministry of National Security (MNS) has also provided support in diverse areas vital to the operations of the Commission. The support includes assistance received in setting up the GhBC office space, acquisition of vehicles for the Commission, and health/medical arrangements allowing staff of the Commission to utilise the National Security Clinic.

5.3 COLLABORATION WITH THE GHANA ARMED FORCES

The Ghana Armed Forces (Army, Navy, and Air Force) were all brought on board to support and execute specific crucial functions in line with the Commission's mandate. The Ghana Armed Forces (GAF) helped beef up the staff strength of the GhBC by seconding a number of officers from the Army, Navy, and Air Force to the Commission. Beyond the secondment of Officers to the Commission, GhBC collaborated with each of the three arms of the Service who all provided specific functions in support of the Commission's mandate.

The Ghana Army in 2021 supported the Commission in diverse ways, providing logistical support from army bases and intelligence support as well as providing security escort for GhBC personnel and joint patrols during all boundary survey operational exercises. The Ghana Army also provided technical support and advice during field exercises. The Ghana Navy provided maritime boundary intelligence to build the capacity of the Commission in border surveillance, especially in the eastern maritime frontier on cross-boundary violations and activities at sea that affect Ghana's territorial integrity. The Commission cooperated with the Ghana Navy to obtain technical support in the acquisition of surveillance drones for operations in the maritime domain.

Additionally, delegation from the Ghana Navy, Ghana Air Force, and GhBC embarked on a working visit to Slovenia on an invitation from the Pipistrel Aircraft Manufacturing Company. The visit, which was facilitated by LEDing Ghana Limited, was to showcase certain products and solutions for Maritime Surveillance delivered by Pipistrel Aircraft Manufacturing Company using the Company's range of Unmanned Aerial Systems and Aircraft. The visit enabled the team to explore partnership opportunities and experience first-hand alternative products and solutions that can be used by the three institutions. In addition to providing the Commission with an Air Liaison Officer, the Ghana Air Force facilitated movement during GhBC's operational surveys and air reconnaissance exercises to various parts of the country's international borders. Given that a number of these places are inaccessible by road. the Commission could not have undertaken most boundary operations. Hence, the Commission initiated a collaboration with the Ghana Air Force to support boundary operations. The first such collaboration or support was in January 2021 when the Commission undertook her maiden field exercise to the Dollar Power Area in the Bono Region on the Ghana-Côte d'Ivoire boundary which is inaccessible by road. The Ghana Air Force has since provided tremendous support to the Commission in all boundary operations for aerial reconnaissance to inspect the International Boundary Line, to insert and extract personnel in the field and to undertake medical evacuation. The Ghana Air Force in 2021 conducted 29 flights covering 64 hours of flight time using helicopters.

Figure 5.1: GhBC Staff and Ghana Air Force Helicopter Crew during a Mapping Assessment Exercise at Dollar Power, on the Ghana-Côte d'Ivoire Boundary Line.



Source: Ghana Boundary Commission, 25 January 2021.

Table 5.1: Details of Flight Support Provided by the Ghana Air Force for GhBC Operations.

DATE	ACFT REG	ROUTE	PURPOSE	HRS
22-01-21	GHF 690	AA-BUI-DOLLAR PWR-BUI-SI	SURVEY IN DOLLAR PWR	03.20
23-01-21	GHF 690	SI-BUI-DOLLAR PWR-BUI-SI		02.10
24-01-21	GHF 690	SI-BUI-DOLLAR PWR-BUI-SI		02.15
25-01-21	GHF 690	SI-BUI-DOLLAR PWR-BUI-SI-AA	SURVEY IN DOLLAR PWR	03.30
25-01-21	GHF 631	AA-SI-AA	SURVEY IN DOLLAR PWR	01.20
17-02-21	GHF 696	AA-AFLAO-AA	PERS	01.45
09-03-21	GHF 695	AA-BUI-DABLAKURO-DOLLAR PWR-BUI-SI	SURVEY & MAPPING	04.15
23-03-21	GHF 695	AA-AFLAO-AA	PRE DEPLOYMENT RECCE	01.30
18-06-21	GHF 632	AA-TK-AA	PERS	01.45
08-07-21	GHF 693	LE-BIANKORI-PULMAKOM/SAPELLIGA/PUSIGA-LE	PERS	02.20
15-07-21	GHF 695	AA-LE	PERS	02.10
15-07-21	GHF 695	LE-PULMAKOM-BAZUA-BOLGA-PAGA-LE	DEL	01.25
16-07-21	GHF 695	BOLGA-PAGA-LE	DEL	01.00
17-07-21	GHF 696	LE-AA		02.20
27-07-21	GHF 690	AA-AFLAO-AA	DEL	01.25
30-07-21	GHF 690	AA-AFLAO-AA	PERS	01.30
18-08-21	GHF 690	AA-AFLAO-AA	PERS	01.20
21-09-21	GHF 632	ΑΑ-ΗΟ-ΑΑ	PERS	03.45
14-11-21	GHF 551	AA-LE-AA	PERS	05.10
14-11-21	GHF 696	LE-ZEBILLA-LE	PERS	01.35
14-11-21	GHF 551	AA-LE-AA-SI-AA	PERS	03.45
19-11-21	GHF 550	AA-LE-AA-HO-LE-AA	PERS	05.10
19-11-21	GHF 633	LE-SAPELLIGA-LE	PERS	01.35
19-11-21	GHF 696	LE-NALERIGU-BOLGA-TUMU-SAPELLIGA- BOLGA-TUMU-WA-BOLGA-LE	PERS	05.35
7-12-21	GHF 690	ΑΑ-ΑΚΥΕΜ ΚΡΟΕΤΑ-ΑΑ	PERS	02.25
10-12-21	GHF 696	ΑΑ-ΑΚΥΕΜ ΚΡΟΕΤΑ-ΑΑ	COORDINATOR	01.35
16-12-21	GHF 632	AA-HO-AA (2 X SORTIES)	CORDINATOR AND DEL	01.18

Source: Directorate of Air Operations, Ghana Air Force, 20 December 2021.

5.4 COLLABORATION WITH THE GHANA IMMIGRATION SERVICES

The Commission collaborated with the Ghana Immigration Service (GIS) in 2021 in diverse ways including the secondment of a senior officer to the Commission and ground support by GIS Officers during field operational mapping surveys in the various border communities. The GIS furnished the Commission with situational reports on violations along the international boundaries, the state of boundary pillars and other land boundary information. During boundary operations undertaken in 2021, the GIS assisted with data gathering and drone flights along the International Boundary Line (IBL) to produce orthophotos and to assess the security situation in identified communities along the boundaries of Ghana, Togo, Burkina Faso, and Côte d'Ivoire. Other joint activities with the GIS included joint patrols to locate and assess boundary pillars, boundary intelligence, and support to conduct community engagement. The collaboration enhanced the reach of the Commission and enabled GhBC to address lowintensity disputes among communities along the International Boundary Line.

5.5 COLLABORATION WITH THE NATIONAL INTELLIGENCE BUREAU

Further, the Commission collaborated with the National Intelligence Bureau (NIB) for intelligence on the border security situation to facilitate the Commission's operations on the field. The Bureau supported the GhBC in some border communities with the capacity to undertake field operations concerning security issues or disputed boundaries, including Dollar Power in the Banda District and environs in the Bono Region (bordering Côte d'Ivoire), the Aflao general area (bordering Togo), Kame in the Afadzato South District of the Volta Region,

Pulimakom in the Pusiga District of the Upper East Region, Paga in the Kassena Nankana West District, and Sapelliga in the Bawku West District in the Upper East Region. Operation Conquered Fist, a joint security operation made up of personnel from the Ghana Army, the Ghana Police Service, the GIS, and the NIB provided information to the GhBC during field visits.

5.6 COLLABORATION WITH OTHER NATIONAL AGENCIES/INSTITUTIONS

As a public institution, the Commission received support from the Public Services Commission (PSC) in GhBC's recruitment processes. The PSC further contributed to the establishment of the Commission by facilitating the development of the Scheme of Service and Staff Appraisal System and provided policy direction to the Commission in terms of Human Resource Management.

Additionally, in line with the Commission's Strategic Plan to build partnerships with key state departments and agencies to help the efficient delivery of GhBC's mandate, the Commission forged a strong and mutually beneficial strategic partnership with the Ghana National Petroleum Corporation (GNPC), resulting in great outcomes during the year under review. Notable among the outcomes was the significant strides made with respect to the negotiation on the delimitation of the maritime boundary between Ghana and Togo. Further, the

Figure 5.2: The GhBC and GIZ/AUBP Team with Staff of the Lands Commission, Accra.

GNPC supported the Commission with funding for maritime boundary meetings and maritimerelated capacity building among others.

The Commission conducted a multi-agency reconnaissance with the Ghana Geological Survey Authority (GGSA) and certain agencies in Dollar Power in March 2021 to assess the extent of damage to the environment caused by illegal surface mining. Also, the two prior mentioned institutions together with the Minerals Commission conducted a joint assessment of mining activities in the Sapelliga general area in the Bawku West District, Upper East Region pursuant to their respective mandates.

5.7 ENGAGEMENT WITH THE GIZ/AFRICAN UNION BORDER PROGRAMME

The GhBC in 2021 applied to be admitted into the African Union Border Programme (AUBP) through the Ministry of Foregin Affairs and Regional Integration (MoFARI). The request, routed through the Ghana Embassy to Ethiopia and the AU, received a positive response. With GIZ supporting the implementation of the AUBP, a request for additional support was made through the German Embassy in Ghana, German Foreign Office agreed to direct some funds of the current project phase to support the implementation of the Commission's new action plan on border governance and related activities with neighbouring countries. Premised



rce: Lands Commission, 3 November 2021.

¹⁰ Launched by the AU as a direct response to the risks that come with ill-defined borders, the AUBP was adopted in 2007 as an instrument for member states and regional economic communities (RECs) to cooperate on border management issues.

Figure 5.3: Participants at the AUBP Regional Workshop and Annual Planning Meeting at Ouagadougou, Burkina Faso.



Source: African Union Border Programme, 23 November 2021.

on the positive outcomes of the requests and the Commission's acceptance into the AUBP, a three-member delegation from the GIZ/AUBP office in Addis Ababa visited the Commission from 2 - 4 November 2021, to ascertain the Commission's areas of need and support, to share information on the Programme, and to inform the Commission on the modalities for accessing the support and implementing the AUBP. The GIZ/AUBP support covers three broad areas: (1) Delimitation and Demarcation, (2) Cross-Border Cooperation, and (3) Capacity Development. The AUBP team had further engagements with key partner institutions of the Commission within the border management and governance space to dialogue and explore areas of cooperation, coordination, and collaboration. Specifically, the delegation, together with the GhBC visited the Lands Commission, the MoFARI, the Ministry of Finance and the MNS.

Within the context of cross-border cooperation and the Commission's AUBP membership, the GhBC partook in several AUBP regional workshops on border management on the continent. One such engagement was the Regional Workshop for the Joint Review and Annual Planning of the African Union Border Program (AUBP) Implementation and Assessment of the Platform for Exchange and Coordination on Border Management (PECoGEF) Activities in West Africa held in Ouagadougou, Burkina Faso from 23 – 26 November 2021. The workshop brought together 61 participants from regional blocs and West African national border management institutions. Specifically, the meeting was attended by representatives from Benin, Burkina Faso, Cameroon, Côte d'Ivoire, Gambia, Ghana, Guinea Bissau, Niger, Nigeria, Sierra Leone, Senegal, and Togo; together with representatives from the AUC, ECOWAS, ECCAS, the West African Economic and Monetary Union (UEMOA), GIZ/AUBP and the Integrated Management of Border Areas programme in Burkina Faso among others.

The programme, organised under the umbrella of PECoGEF with support from GIZ, provided a forum for border management actors to review and plan actions in light of the AU strategy for better integrated border governance, to review achievements and to share best practices in (joint) border management. The overall objective of the regional meeting was, thus, to strengthen synergies between national border management structures and provide a collaborative platform for joint planning and implementation by neighbouring countries on the countries' common international borders in order to make the borders "open, better managed and to establish peace, security and development in border areas".

The Commission participated in the AUC/ ECOWAS Regional Technical Awareness held in Accra in November 2021 to create greater ownership of the AU Better Integrated Border Governance Strategy which seeks to "put in place a new form of pragmatic border governance aimed at promoting peace, security and stability, in order to facilitate the integration process and sustainable development in Africa". The AU Border Governance Strategy is based on the five pillars tabulated in Figure 5.3.





Source: African Union Commission, AU Department for Peace and Security, June 2020.

Personnel from various border management institutions across the continent attended the AUBP/ECOWAS workshop to strengthen synergies between national border management structures and to provide a collaborative platform for joint planning and operations along the international borders. Additionally, the platforms offered the GhBC a great opportunity to hold and engage in bilateral and multilateral planning sessions with respect to common land and maritime boundaries with neighbouring boundary commissions from Togo, Burkina Faso, Côte d'Ivoire, Benin, and Nigeria.

5.8 COMMEMORATION OF THE AFRICAN BORDER DAY

In line with the African Union Border Programme (AUBP) Strategic Plan, the Boundary Commission of the mandated body for leading the celebration of the African Border Day. Thus in 2021, the Commission commemorated the 11th African

Border Day under the theme: "Arts, Culture and Heritage: Levers for Building the Africa we Want", with a press release on the need for African states to embrace their arts, culture, and common heritage as assets for border relations and security management. The Day is commemorated annually on 7th June to sensitise member states, Regional Economic Communities (RECs), and relevant stakeholders on border issues, the importance of continental, regional integration, and cross-border cooperation. The Day further aims at highlighting the role of the AUBP and the AUC on Cross-border Cooperation (the Niamey Convention) as frameworks to facilitate and support the demarcation and delimitation of African boundaries and the cross-border development/promotion of cooperation among states, while encouraging additional efforts for the implementation of the frameworks.



Recognising the key role of Africa's rich culture, arts, and heritage as catalysts for integration, resilience, and socio-economic development of the African continent and in helping to promulgate the AU Agenda 2063 of "a continent of seamless borders and management of cross-border resources through dialogue", the Commission called for "a re-examination of the role of the Cultural and Creative Arts industry in boundary management. More so, with the signing and coming into force of the African Continental Free Trade Area (AfCFTA) which is aimed at accelerating intra-African trade and boosting Africa's position in the global market, investing in the Creative Arts, and employing it as tools for conflict prevention and cross-border cooperation is a creative, forward-looking, and innovative way of bridging and rebuilding African economies across borders in the midst of this COVID-19 pandemic". The Commission used the platform to encourage Government of Ghana to ratify the Niamey Convention and to make visible the Commission's work in ensuring the territorial integrity of the country.

Figure 5.5: Aerial Photo of the River Boundary between Ghana and Togo in the Pulimakom Area.



Source: Ghana Boundary Commission, 22 January 2021.

5.9 ENGAGEMENT WITH DEVELOPMENT PARTNERS

The Commission engaged several partners at the international level who expressed openness to supporting the Commission's mandate. GhBC met with the European External Action Service (EEAS), and the European Union (EU) delegation in Accra to outline the level and type of cooperation to source from the EU. Furthermore, the Commission received courtesy visits from the Canadian High Commissioner to Ghana, the German Ambassador to Ghana, and a team from the British High Commission.

The visits provided a platform to deliberate on areas of collaborations and possible areas of support related to the work of the Commission. The areas of support and potential collaboration deliberated upon included capacity building of GhBC staff; support for the conduct of crossborder engagements with neighbouring boundary commissions; field research to identify the needs of deprived border communities; implementation of social intervention programmes and projects for deprived border communities; logistical support; as well as knowledge and experience sharing.

5.10 CONCLUSION

In 2021, the Commission relied on strategic partnerships to advance its mandate and leveraged on such partnerships to carry out assigned functions. The Commission worked closely with the Ministry of Lands and Natural Resources and collaborated with other critical Ministries, Departments and Agencies including the Ministry of Finance, the Ministry of Justice and Attorney-General's Department, the Ministry of Foreign Affairs and Regional Integration. the Ministry of National Security, the Ghana National Petroleum Corporation, the Minerals Commission, the Public Service Commission and the Ghana Geological Survey Authority to mention a few. For field operation exercises, the Commission relied on the support of the security agencies including the Ghana Armed Forces, the Ghana Immigration Service, and the National Intelligence Bureau among others. Another key partnership was with the African Union Border Programme (AUBP) which admitted the Commission into the Programme. The Commission initiated processes with the AUBP for funding the GhBC's activities. Additionally, the GhBC engaged with development partners as part of processes to attract the needed support in carrying out the mandate of the Commission.

Section Six RESEARCH-FOCUSED BORDER COMMUNITY ENGAGEMENTS

6.1 INTRODUCTION

The Commission undertook field research in selected border communities along the Ghana-Burkina Faso and the Ghana-Togo boundaries. The research aimed primarily at identifying and assessing the needs of communities along Ghana's boundary to serve as a baseline and recommend relevant social interventions. The scope of the research study was four (4) border communities in the Upper East Region (bordering Burkina Faso), namely Agatuse, Kowmaka, Sapelliga and Widnaba; and three (3) communities in the Volta Region (bordering Togo): Kpoeta-Achem, Kpoeta-Ashanti, and Kpoeta-Kpodzi.

6.2 IDENTIFIED HUMAN SECURITY NEEDS OF VISITED BORDER COMMUNITIES

The research in the seven communities exposed the human conditions of border communities. The findings grouped the identified human security needs into five main areas which cut across all the communities:

- 1. Education,
- 2. Healthcare,
- 3. Environment,
- 4. Socio-Economic Infrastructure and Development, and
- 5. Security.

The themes in the data analysis pointed to certain security issues and key human developmental conditions and needs including issues of internal/international security, human development, community development challenges, environmental pollution, and priority community needs for intervention.

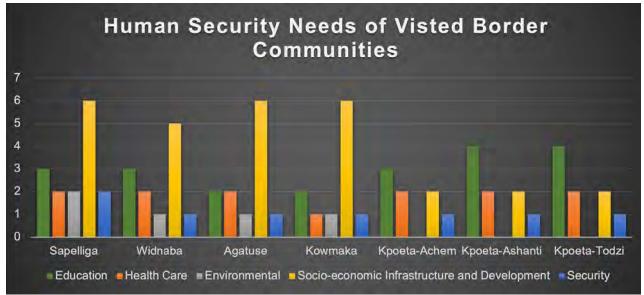
Regarding the identification of priority projects for intervention, majority of the residents interviewed across the communities mentioned the construction/ rehabilitation of school blocks and hospitals, given that many of the conditions in the communities were affecting the development of the people, especially the education of children and the health of the youth. The Commission's research also revealed environmental and security challenges in certain border communities. The specific needs of each community under the various clusters are summarised in Table 6.1.

SRL	COMMUNITY	CLASSIFICATION OF NEEDS	SPECIFIC NEEDS
1	Sapelliga, Upper East Region (on the Ghana-	Education	 Construction of a six-unit school block Provision of school furniture Provision of teaching and learning materials
	Burkina Faso Boundary)	Healthcare	 Provision of basic health equipment (modern labour bed, oxygen machine) Provision of medical consumables: gauze, disposable medical gloves, gowns, masks.
		Environment	 Sensitization programme on best mining practices Engagement with the Burkinabe authorities to avert the impact of blasting at the Youga Mines in Burkina Faso to prevent buildings in the community from developing cracks
		Socio-Economic Infrastructure and Development	 Construction of a mechanized borehole Desilting of dams and connected canals in the community Provision of streetlights 20 market stalls and 40 open shades Rehabilitation of community roads Vocational skills training
		Security	 Establishment of a police post Surveillance along unapproved routes
2	Widnaba, Upper East Region (on the Ghana- Burkina Faso Boundary)	Education	 Provision of school furniture Provision of teaching and learning materials Vocational skills training
		Healthcare	 Provision of basic health equipment: modern labour bed, oxygen machine Provision of medical consumables: gauze, disposable medical gloves, gowns, masks.
		Environment	• Sensitization on dangers of illegal mining
		Socio-Economic Infrastructure and Development	 Construction of mechanized boreholes Reconstruction and expansion of community KVIP Rehabilitation of community roads Extension of electricity Provision of streetlights
		Security	Construction of police and immigration posts
3	Agatuse, Upper East Region (on the Ghana- Burkina Faso Boundary)	Education	 Provision of school furniture Provision of teaching and learning materials
		Environment	• Sensitization on dangers of illegal mining
		Healthcare	 Provision of basic health equipment: modern labour bed, oxygen machine Provision of medical consumables: gauze, disposable medical gloves, gowns, masks.
		Socio-Economic Infrastructure and Development	 Rehabilitation of community roads Extension of electricity Provision of streetlights Reconstruction/expansion of community KVIP Construction of mechanized boreholes Vocational skills training
		Security	Construction of police post

SRL	COMMUNITY	CLASSIFICATION OF NEEDS	SPECIFIC NEEDS
4	Kowmaka, Upper East Region (on the Ghana- Burkina Faso Boundary)	Education	 Provision of a school furniture Provision of teaching and learning materials
		Environment	• Sensitization on dangers of illegal mining
		Healthcare	Provision of ultra-modern health facility
		Socio-Economic Infrastructure and Development	 Rehabilitation of community roads Extension of electricity Provision of streetlights Reconstruction/expansion of community KVIP Vocational skills training Construction of mechanized boreholes
		Security	Establish Immigration and Police Posts
5	Kpoeta - Achem, Volta Region (on the Ghana- Burkina Faso	Education	 Provision of school furniture Provision of teaching and learning materials Vocational skills training
	Boundary)	Healthcare	 Provision of basic health equipment: modern labour bed, oxygen machine Provision of medical consumables: gauze, disposable medical gloves, gowns, masks.
		Socio-Economic Infrastructure and Development	 Construction of a six-unit ablution facility for the community school Construction of mechanized boreholes Expansion of community public toilet
6	Kpoeta – Ashanti, Volta Region (on the Ghana- Burkina Faso Boundary)	Education	 Provision of a school block Provision of furniture Provision of teaching and learning materials Construction of a library and ICT laboratory
		Healthcare	 Basic health equipment: modern labour bed, oxygen machine Medical consumables; gauze, disposable medical gloves, gowns, masks.
		Socio-Economic Infrastructure and Development	 Mechanized boreholes Expansion of community public toilet
		Security	Establishment of immigration and police posts
	Kpoeta – Todzi, Volta Region (on the Ghana-Togo Boundary)	Education	 Provision of a school block Provision of furniture Provision of teaching and learning materials Construction of a library and ICT laboratory
		Healthcare	 Provision of basic health equipment: modern labour bed, oxygen machine Provision of medical consumables; gauze, disposable medical gloves, gowns, masks.
		Socio-Economic Infrastructure and Development	 Construction of mechanized boreholes Expansion of community public toilet
		Security	Establishment of immigration and police posts

Source: Ghana Boundary Commission, 20 December 2021.

Figure 6:1: Classification of Identified Human Security Needs of Border Communities.



Source: Ghana Boundary Commission, 20 December 2021.

Figure 6.1 describes the needs of visited border communities in the Upper East and Volta regions. The graph, generated based on field visits to the communities, reveals a high number of socio-economic infrastructure and development needs and education needs in border communities visited in the Upper East Region and the Volta Region respectively. While the socio-economic infrastructure and development needs rank highest in the Upper East regional border communities, educational needs come first in border communities in the Volta Region. Another key need as depicted in the graph, and which cuts across visited border communities in both regions are healthcare and security. The striking difference between the needs of border communities visited in

Figure 6:2: State of Educational Facility in Sapelliga.

both regions was environmental concerns. While the environment was of much concern to communities in the Upper East Region, that did not feature in concerns raised by communities in the Volta Region. This could be explained by the increasing illegal mining activities observed in communities visited in the Upper East Region.

6.3 CONCLUSION

In 2021, the GhBC undertook research and community engagements with the objective of identifying human security needs for intervention. The field research brought to the fore key socio-economic infrastructure and development, healthcare, and security concerns.



Source: Ghana Boundary Commission, 15 November 2021.

Section Seven ADMINISTRATIVE MATTERS

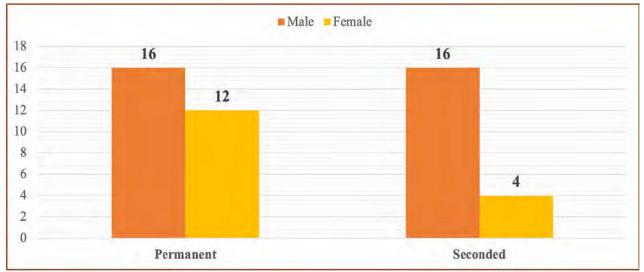
7.1 INTRODUCTION

An efficient and well-resourced administrative and financial system is critical in the exercise of GhBC's mandate. Hence, the Commission established efficiency in the administrative and financial systems to ensure the development of relevant policies and procedures, enabling smooth operations towards managing performance and supporting continuous learning and staff development. The Commission's key administrative activities embarked upon in 2021 have been captured under Human Resource Management, Policies and Procedures, Staff Training and Capacity-Building, Health and Safety, Staff Welfare, General Office Administration. Security and Facility Management, Procurement of Goods and Provision of Logistical Services, Information and Communications Technology, Creation of a Geo-Database, and Financial Matters.

Figure 7.1: Categorisation of Staff by Component and Gender.



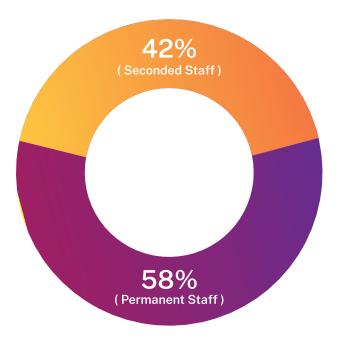
The effective and efficient running of the Commission is dependent on the recruitment and selection of an agile and effective workforce ready to achieve the Commission's objectives. The Commission, therefore, ensured departments and units were manned by competent and knowledgeable staff to execute the Commission's mandate and objectives. The Commission started out with a high number of seconded staff sourced from the various security agencies in addition to other institutions already mandated by Government to secure and monitor the movement of people and goods along the borders of Ghana. This fostered a seamless collaborative working environment that has been a strong foundation for the Commission. The total staff strength of the GhBC was 48 at the end of December 2021, of which 19 were seconded staff from various state institutions and 28 were permanent staff. In terms of gender composition, there were 16 female and 32 male staff.



Source: Ghana Boundary Commission, 20 December 2021.

¹¹Seconded staff of GhBC are from the Ghana Armed Forces (Army, Navy and Air Force); Ghana Immigration Service; National Intelligence Bureau; Ministry of National Security, Ministry of Gender, Children and Social Protection; and the Controller and Accountant-General's Department.

Figure 7.2: Staff Categorisation by Component.



Source: Ghana Boundary Commission, 20 December 2021.

7.3 POLICIES AND PROCEDURES

The Commission drafted a range of policies and procedures in line with the Public Services Commission and Civil Service Administration The guidelines. policies and procedures included the GhBC Scheme of Service, the Human Resource Performance Appraisals, and Service contracts. Furthermore, as part of the Commission's recruitment and on-boarding processes, the Commission organised an orientation and induction sessions for new staff to brief the new staff on the Commission's core mandate and business. Given the Commission is relatively new, the activities and policies were instrumental in ensuring a solid foundational setup and a robust and efficient working environment.

Furthermore, periodic staff durbars were held in the year during which the National Coordinator interacted with staff and reiterated policy guidelines, highlighting achievements chalked by the Commission and areas requiring improvement and the setting of future goals. The durbars served as a platform to encourage and appreciate staff for the hard work and efficiency towards achieving the 2021 targets.

7.4 STAFF DEVELOPMENT, TRAINING, AND CAPACITY-BUILDING

Training, learning, and development take place in different forms and fields and are relevant in maintaining morale amongst staff and improving performance levels while increasing job satisfaction. To ensure effective knowledge transfer and an environment where competencies are sharpened and capacities are enhanced. GhBC in 2021 sought opportunities to train employees and equip the employees with the requisite knowledge, tools, and skills to enable the employees to discharge duties creditably. In line with the Commission's strategic objectives and plans relating to building the Commission's institutional capacity, a section of the staff participated in various training and workshop programmes organised both internally and externally. The training and capacity-building sessions the staff participated in within the year are as listed below:

- Initial induction and orientation sessions for all staff to get the staff acquainted with roles and specific job responsibilities.
- Training and inauguration of the GhBC Fixed Assets Coordinating Unit (FACU).
- Virtual Human Resource Information Management System (HRMIS) training workshop organised by the MLNR.
- Salary validation training organised by the Controller and Accountant-General's Department (CAGD).
- Administrative Assistants and Receptionists Training.
- Training on the Ghana Integrated Financial Management Information System (GIFMIS).
- Training on Survey, Geographic Information Systems (GIS) and drone usage.
- Training on budget preparation organised by the Ministry of Finance.

7.5 HEALTH, SAFETY, AND WELLBEING OF STAFF

To improve the health and wellbeing of staff, GhBC promoted a health and safety culture, prioritising the wellbeing of employees. The Commission, as part of measures for protecting workers from exposure to the COVID-19 virus, provided a Hand Washing Station at the entrance of the office for staff and guests to wash hands before entry entering the premises; supplied hand sanitizers to staff and guests, and implemented the mandatory "'no mask, no entry' policy. Furthermore, the Commission organised COVID-19 vaccination for staff who were yet to be vaccinated, encouraged routine testing to ascertain the COVID-19 status of staff; ensured strict enforcement of COVID-19 safety protocols in the GhBC office space, and instituted a flexiwork system where staff could work from home to minimise social interaction and avoid the possible spread of the virus. Additionally, free breast cancer and prostate cancer screenings were organised for all staff. Temporary arrangements were made for staff to secure medical attention at the Ministry of National Security (MNS) Clinic while the Commission explored own health plan.

7.6 STAFF WELFARE

A responsible organisation creates synergy at the workplace when the organisation consciously develops a sense of family and esprit de corps. In this regard, an in-house Welfare Executive Committee Council was launched to help cater for the social needs of staff. The Committee consists of a Chairman, Vice-Chairman, General Secretary, Assistant General Secretary, Treasurer/Financial Secretary, and four (4) other ordinary members who carry out assigned duties.

7.7 GENERAL OFFICE ADMINISTRATION, SECURITY AND FACILITY MANAGEMENT

A six-member Fixed Assets Coordinating Unit (FACU) was established in November 2021 to ensure proper and effective management of the Commission's asset register. The Unit's key function is to ensure the Commission's register of all legacy documents or assets is populated and channelled to the MLNR for oversight responsibilities. The Committee ensured proper labelling of all items, including vehicles and general office equipment, both in use and in stores. In terms of security, the office premises are equipped with Closed-Circuit Television (CCTV) coverage to augment physical security at all times.

7.8 FINANCIAL MATTERS

In compliance with the Public Financial Management Act (2016 Act 921) and as part of processes to access government funds, the Commission enrolled on to the Ghana Integrated Financial Management Information System (GIFMIS) in the third quarter of 2021. A total amount of GH¢7,618,567 was approved for employee compensation and payment of goods and services. However, the Commission received GH¢3,578,418.14 of the total approved budget with the breakdown as follows: GH¢2,800,000 and GH¢778.418.14 for goods and services and employee compensation respectively. The Commission was not allocated any budget for capital expenditure (CAPEX) items. Quarterly Budget Releases were done from the Ministry of Finance and expenditure conducted within the Public Financial Management structure.

Additionally, as part of establishing proper internal financial systems and processes, the GhBC initiated and enrolled all permanent staff onto the Controller and Accountant-General's Department (CAGD) payroll. The Commission further prepared and submitted the 2022 budget and the 2022–2025 Medium-Term Development Plan to the Ministry of Finance through the Ministry for Land and Natural Resources.

ECONOMIC CLASSIFICATION	APPROVED BUDGET 2021 (GH¢)	AMOUNT RELEASED (December 2021) GH¢	ACTUAL EXPENDITURE (GH¢)	VARIANCE	REMARKS
Employee Compensation	4,618,567.00	778,418.14	778,418.14	3,840,148.86	16.9%
Goods & Services	3,000,000.00	2,800,000.00	2,800,000.00	200,000.00	93.33%
CAPEX	-	-	-	-	
Total	7,618,567.00	3,578,418.14	3,578,418.14	4,040,148.86	

Source: Ghana Boundary Commission, 20 December 2021.

7.9 INFORMATION AND COMMUNICATIONS TECHNOLOGY

While setting up an office, the GhBC in 2021 put up an agile and efficient Information and Communications Technology (ICT) infrastructure to meet the Commission's needs with the support of a third-party ICT company. The Commission's ICT setup included a server room as a control point for data, Voice over Internet Protocol (VoIP), Access Control, CCTV services, and a Private Automated Branch Exchange (PABX) system for internal voice communications. The Commission further established a cable and wireless Local Area Network system and had the Zimbra mail server installed on the domain www. ghanaboundarycommission.org for official email communications. Vodafone Ghana is the primary internet service provider while the Bureau of National Communication provides backup services. This infrastructure has the appropriate firewall device, a 6000VA and several 700VA Uninterrupted Power Supply (UPS) systems.

The Commission's PABX intercommunication system is connected with IP phones and Polycoms. CCTV cameras and biometric access control systems have been installed at the main entrance and relevant offices to augment security in the facility. Additionally, the Commission acquired and set up two innovative 75" interactive boards for conferences, training, and meetings. The details of the Commission's ICT setup are summarised in Table 7.2.

SRL	CATEGORIES	DESCRIPTION
1	Network Devices	Switches, Router, Wireless Access Points, and a Firewall
2	Servers	HPE Server and DELL Tower
3	Workstations	All-in-One desktop and laptops
4	Telephony System	IP Phones, 2 conference call devices and IP PABX
5	Security System	Cam CCTV and Access Control system
6	Uninterrupted Power Supply (UPS)	1~ 6KVA and 15~ 700VA
7	Multi-functional Printers	HP and Konica Minolta BizHub

Table 7.2: Details of ICT Infrastructure of the Commission.

Source: Ghana Boundary Commission, 20 December 2021.

7.10 CREATION OF GEO-DATABASE

In seeking to achieve the Commission's objective to compile, generate, manage, analyse, and keep accurate data on Ghana's international boundaries, the Commission initiated the process of developing a Geo-Database system hosted on ESRI ArcGIS online software. The conceptual design for the Geographic Information System (GIS) technology was completed and tested awaiting full implementation. Following the implementation of the database, a field data application will be developed to collect the inventory information in the field, including boundary pillars, river lines, teak (trees) serving as boundary buffers, fence lines, and orthophotos.

For fieldwork, the application will be installed on mobile devices to collect inventory information on Ghana's boundaries to be stored on the database for remote access. This Geo-Database will include a Geodetic Survey Coordinates of Boundary Pillars and a 100m Orthophoto corridor astride Ghana's international boundaries using mapping drones. The orthophotos shall serve as visual evidence of the boundary corridor at the time of capture. Legacy maps and documents such as treaties, demarcations, and boundary descriptions which define Ghana's international boundaries shall be scanned, georeferenced and indexed into the Geo-Database.

7.11 CONCLUSION

The GhBC developed and established processes, procedures, and policies in line with the Public Service Commission and the Civil Service Administration Guidelines. The Commission in 2021 recruited staff to carry out the mandate and procured relevant logistics. Regarding the COVID-19 pandemic, a flexible work schedule was put in place as a precautionary measure in response to the pandemic. Further, the Commission built capacities of staff to enhance skills in key areas of operations. Concerning financial management, the Commission enrolled onto the Ghana Integrated Financial Management Information System in line with the Public Financial Management Act (2016 Act 921) and developed and submitted the 2022 budget and the 2022-2025 Medium-Term Development Plan in line with acceptable standards.

Figure 7.3: Outline Design of the ArcGIS (Geo-database) Software for Boundary Pillar Inventory.



Source: Ghana Boundary Commission, 20 December 2021.

Section Eight CHALLENGES

8.1 INTRODUCTION

The GhBC came into full operation in 2021 and, like any infant organisation, faced challenges in the setup phase. The major challenges the Commission was confronted with were lack of funds for both capital expenditures and field operations, inadequate field and office tools, as well as inadequate skilled human resources.

8.2 INADEQUATE SURVEY TOOLS AND EQUIPMENT

The Commission has equipment and tools such as a mapping drone (DJI Phantom4 RTK), A0 Plotter Scanner Combo (Epson SureColor T5000 MFP), and pick-ups for fieldwork. However, the Commission lacks the following essential tools:

- A vehicle-mounted electronic communication system with tracking capabilities. Most boundary areas have high levels of insecurity and have no mobile telephony network. In most cases, the available network is that of neighbouring countries. Thus, the absence of vehicle-mounted Very High Frequency (VHF)/Ultra High Frequency (UHF) radios with tracking capabilities endangers personnel in the field during operations. Acquisition of such equipment will enhance the Commission's operations.
- Geodetic Grade Global Navigation Satellite System (GNSS) receivers with accessories and processing software for accurate survey of boundary markers in the field. In 2021, the Commission rented the GNSS receivers for all field surveys. There is the need to procure such tools and equipment to improve efficiency and to reduce cost of fieldwork.
- Field-handheld GNSS and tablets for documenting boundary pillars/markers. Coordinates of boundary pillars/markers which have been extracted from legacy documents and accompanying boundary maps are to be loaded into handheld the GNSS equipment for field navigation to help locate the boundary pillars. The field tablets would

be used to take inventory/data on boundary pillars/markers, geotagged photos, recording boundary rivers and stream courses, trails/ paths leading to boundary pillars among others. Lack of such equipment makes field survey planning and execution difficult and time-consuming as there is no pre-existing information to rely on.

- Geographic Information System and Photogrammetric Computer workstations. The desktop and laptop computers currently used by the Commission's Survey and Delimitation Department are unable to host the software used for processing field data, making processing of large aerial photographs into accurate orthophotos and Geographic Information System mapping time-consuming and inefficient. The Commission, therefore, needs to acquire and install Geographic Information System and photogrammetric workstations for data processing.
- Geospatial Data Storage and Geographic Information System software. Geospatial data (survey data of boundary pillars/markers, orthophoto maps, digital maps) acquired during field operations and related information must be stored in an enterprise Geographic Information System environment for effective datastorage, management, and dissemination. This process requires the procurement of a Geographic Information System software for data analysis and cloud/local server's storage services. The Commission is currently using trial versions of the software with limited and outdated functionalities. The absence of a Geographic Information System software, photogrammetric software, and storage servers impacts negatively on the effective geospatial data processing, management, storage, and Geographic Information System best practices. There is the need to procure such accessories to enhance communication, data acquisition, and storage for future boundary dispute resolution.

Figure 8.1: Border Crossing at Ntereso, Along the Ghana-Cote d'Ivoire Boundary.



Source: Ghana Boundary Commission, 22 January 2021.

8.3 ABSENCE OF PRE-COLONIAL AND POST-INDEPENDENCE BOUNDARY MAPS OF GHANA

Geospatial information such as maps and legacy documents defining and describing the boundaries between Ghana and neighbouring countries is unavailable except the 1929 Ghana-Togo boundary legacy documents and maps. The absence of legacy documents on the boundaries would have a dire consequence for Ghana, should there be a dispute with a neighbouring country where there are no boundary markers at the disputed locations. The Commission will, therefore, need to search for and collate legacy documents and maps from the archives of relevant state institutions such as the Public Records and Archives Administration Department (PRAAD), the Balme Library of the University of Ghana and the Ordnance Survey Library in the United Kingdom.

8.4 INADEQUATE INTELLIGENCE AND INFORMATION GAPS

Boundary operations are intelligenceled. Unfortunately, there is a lack of timely information flow from frontline security services to the Commission on boundaryrelated developments along the boundary line, hampering rapid response to boundary issues. Hence, there is the need for the setting up of a countrywide Integrated Border Surveillance Systems to integrate and facilitate information by the Military, Police, Ghana Immigration Service, National Intelligence Bureau, Customs Division-GRA and other security agencies for early warning and appropriate intervention.

8.5 ACCESSIBILITY TO BOUNDARY AREAS

Ghana's international boundary areas are largely inaccessible. Unlike Ghana's francophone neighbours who have constructed patrol routes along their boundary lines, Ghana's boundary lines do not have accessible routes and are either flood-prone or heavily forested belts with fast flowing streams. Consequently, boundary operations are restricted to the dry season and periods of less rainfall, affecting the ability of the Commission to conduct all-year-round operations. Furthermore, to access certain routes, the Commission rented motorcycles from border communities and was supported with quadbikes from the forward operating bases of the GAF and the GIS. Imperatively, the construction of patrol routes along Ghana's boundary areas must be considered to facilitate incidence response.

8.6 INADEQUATE FUNDING FOR FIELD OPERATIONS

Ghana has a land boundary of approximately 2163 km on which the Commission must conduct a systematic inventory, survey existing pillars, and produce orthophoto mapping of a 100m corridor astride the international boundary line. In 2021, the Commission started a systematic, detailed inventory and survey of the international land boundary pillars but could not do much of this fieldwork due to inadequate budgetary allocation. Hence, work done focused on areas with dispute and problems along the boundary. In the ensuing years, there is the need to carry out an initial detailed inventory of all existing boundary pillars/markers, followed by a survey and orthophoto mapping to serve as first-hand baseline information. The data, when collected, will be stored in a Geospatial Database Environment for management in the Geographic Information System.

8.7 INADEQUATE ESSENTIAL SKILLED HUMAN RESOURCE

The mandate of the Commission requires skilled personnel in areas of field operations, survey, land boundary demarcation, and maritime boundary delimitation. Currently, the Commission lacks essential staff such as Cartographers for operations, however, attempts to recruit such skilled personnel have been unsuccessful. As a temporary measure, the Commission relies heavily on available staff to provide such skills. Moreover, as a new institution, most of the staff need to be trained in alignment to the strategic orientation of the Commission.

8.8 CONCLUSION

The GhBC in 2021 faced challenges in the areas of lack of relevant equipment, unavailability of legacy documents, inaccessible boundary areas, and inadequate funds to support the Commission's mandate. The challenges affected the full realisation of the GhBC's targets for the year. Thus, to address the identified gaps and ensure targets are met, the Commission continues to seek collaboration and build relevant partnerships with stakeholders towards mobilising the needed resources.



Source: Ghana Boundary Commission, 17 February 2021.

Table 8.2: Orthophoto of Aflao Boundary Area.

Section Nine FORECAST OF MAJOR ACTIVITIES FOR 2022

9.1 INTRODUCTION

In 2021, the GhBC focused on the administrative and operational structures for the smooth functioning of the Commission while executing a few boundary operations in problem areas along the international boundary with neighbours. In 2022, the Commission intends to shift focus a notch higher to implement activities in line with the five building blocks of the Five-Year Strategic Plan and the 2022 Annual Work Plan. The areas of focus are institutional capacity-building, security of boundaries, dispute resolution, cross-border governance, and strategic policy framework. The details of the major activities to be undertaken are indicated below.

9.2 INSTITUTIONAL CAPACITY-BUILDING

The GhBC in the formative stage has critical requirements for institutional capacity-building which is the first pillar of the Five-Year Strategic Plan and the Africa Union Border Governance Strategy. The strategies are in the areas of training new staff to orient the staff to the Commission's goal, developing competencies in technical and organisational skills in addition to developing institutional structure and competencies. The specific areas are as follows:

- Operationalise the Commission's Monitoring and Evaluation System to track the progress of activities, identify impact, recognise gaps, and aid adequate activity reporting.
- Develop and implement relevant policies, manuals, and Standard Operating Procedures for the GhBC to enhance efficiency and achievement of objectives.
- Formulate communication strategies and plans including the development of a website for the Commission to enhance visibility and make relevant information available to stakeholders.
- Organise training programmes for building the capacity of staff in respective job areas

to enhance knowledge, skills, values, and capabilities required to perform tasks.

• Organise capacity-building programmes for members of the Land and Maritime Boundary Technical Committees to enhance the members' skills in negotiations and adjudication of boundary disputes.

9.3 LAND, AIR AND MARITIME BOUNDARIES OF GHANA

The second pillar or strategic priority of the Commission's Five-Year Strategic Plan outlines the demarcation of land boundaries, delimitation of maritime boundaries, and the security and management of Ghana's sovereign land, air, and maritime boundaries in collaboration with neighbouring countries. To achieve this core mandate, series of activities as outlined below will be part of the essential focus of the Commission's activities in 2022:

- Construct Land Boundary Terminus (Pillar 1) between Ghana and Togo at Aflao to be the basis for maritime boundary delimitation between the two countries.
- Conduct mapping and operational surveys in selected border communities along the eastern, western, and northern international boundaries to assess the status of boundary pillars.
- Conduct maritime boundary patrols to map out marker buoys along the Ghana/Togo and Ghana/Côte d'Ivoire maritime boundary to monitor Ghana's maritime domain and gather data for further studies.
- Place marker buoys on the Ghana-Côte d'Ivoire maritime boundary to aid oceanographic studies.
- Collaborate with stakeholders to conduct data surveys on mapped out and existing natural resources that straddle Ghana's International Boundary Lines.
- Design Geographic Information System geodatabase and accompanying applications

for inventory of land boundary pillars, orthophotos, legacy documents and maps to create an updated database for boundary information.

 The Commission will deepen collaboration with relevant stakeholders to jointly mobilise resources for boundary operations and other areas of mutual benefits to achieve the respective mandates of the two organisations.

9.4 RESOLUTION OF BOUNDARY DISPUTES

Resolution of boundary disputes feeds into Pillar 3 of the Commission's Five-Year Strategic Plan and Pillar 2 of the African Union Border Governance Strategy. To achieve this, the Commission will undertake boundary operations using joint operations, survey and delimitation and research teams to gather information on the field towards data gathering to form the basis for boundary negotiations, management, and dispute resolution. The key activities to facilitate the resolution of boundary disputes include:

- Hold regular Land Technical Committee meetings to provide mutually accepted technical criteria and evidence for demarcation of the international land boundaries with neighbouring countries.
- Hold Land Boundary and Maritime Boundary Negotiation meetings with Togo to ensure peaceful resolution of land and maritime boundary disputes and facilitate joint crossborder activities.
- Hold Consultative/Negotiation meetings with the boundary commissions of Togo, Côte d'Ivoire, Benin, Burkina Faso, and Nigeria on the common land and maritime boundaryrelated issues to establish frameworks for joint cross-border activities.
- Hold meetings with the National Boundary Commission of Côte d'Ivoire to discuss and adopt implementation frameworks for the 2017 ITLOS ruling and also for joint crossborder activities.

9.5 CROSS-BORDER COOPERATION

The AU focuses on member states undertaking boundary activities aimed at transforming borders and border spaces from barriers to bridges through cooperation and integration. Favourably, most international border communities share the same cultural and ancestral lineages and see themselves as the same communities despite existing international boundaries. To this end, Pillar 4 and Pillar 5 of the African Union Border Governance Strategy and Pillar 4 of the Commission's Five-Year Strategic Plan focus on cross-border cooperation aimed at drafting common development plans for border communities and managing resources that straddle international boundaries. The Commission's key activities for the pillars include:

- Facilitating Ghana's ratification of the African Union Convention on Cross-Border Cooperation (Niamey Convention) in consultation with the Ministry of Foreign Affairs and Regional Integration.
- Engaging with relevant partners to leverage expertise, funding, and other relevant resources to support key activities.
- Jointly commemorating the 12th African Border Day with Côte d'Ivoire in June 2022 to foster cross-border cooperation.

9.6 STRATEGY DEVELOPMENT, IMPLEMENTATION, AND COLLABORATION

In the Commission's efforts to develop the strategic outlook in line with Pillar 5 of the Five-Year Strategic Plan and to achieve the target in the African Union Border Governance Strategy, the Commission intends to focus on a range of activities to align the strategy with key partners and stakeholders. Below are some key stakeholder engagements and field activities to improve the Commission's visibility.

- Undertake working visits to key stakeholders including the African Union (AU) and the Economic Community of West African States (ECOWAS) to establish and deepen collaboration on regional and continental border/boundary management arrangements.
- Deepen collaboration with the Ghana Armed Forces, the Ghana Immigration Service, the National Intelligence Bureau, and other relevant MDAs, MMDAs, and NGOs/CSOs for field operations.
- Collaborate with other stakeholders to design and implement programmes to address border community security concerns.
- Conduct field research in border communities to identify human security needs to influence policy direction and intervention.
- Generate and disseminate periodic analysis to report on emerging boundary-related issues.
- Conduct research to collate legacy boundary documents, maps, and treaties from relevant institutions.
- Facilitate the passage of the amended bill for the Ghana Boundary Commission

9.7 COLLABORATION WITH THE GHANA ARMY

The Ghana Army in 2022 will continue to support the Commission in diverse ways including providing logistic support from army bases and intelligence support, providing security for the escort of GhBC personnel and joint patrols during land boundary operations. In 2022, the Commission will also collaborate with the 48 Engineer Regiment of the Ghana Army, the Ministry of National Security, the Ministry of Roads and the Department of Feeder Roads to undertake feeder road constructions to Dollar Power and Sapelliga general areas which includes the construction of a 13km feeder road from Ntereso to Dollar Power, a 200m span of steel bridge over the Black Volta River at Ntereso and a road from Zebilla to Sapelliga in the Upper East Region. Given that operations by security agencies deployed to dominate and ensure deterrence of intruders using unapproved routes to the country are constrained as a result of unmotorable patrol routes and lack of bridges over rivers across the existing roads, these road projects in the border communities and along the border are very key. The Commission will also cooperate with the Ghana Army to enhance the Commission's capacity in conducting boundary operations along the land borders of Ghana.

9.8 JOINT OPERATIONS WITH THE GHANA NAVY

The Ghana Navy has been a close partner to the Commission in the maritime domain. The Ghana Navy provides maritime boundary information for the Commission in border surveillance, in the eastern and western maritime frontiers to check on cross-boundary violations and activities at sea that affect Ghana's territorial integrity. The Commission has cooperated with the Ghana Navy to obtain technical support in the acquisition of surveillance drones for operations in the maritime domain. In 2022, the Commission intends to undertake four Joint Maritime Patrols along the eastern and western maritime frontiers with the Ghana Navy using Ghana Navy Patrol vessels. During the patrols, the two institutions will jointly operate the maritime drones provided by the GhBC in an exercise. The objectives of these joint maritime patrols are to assess cross-boundary violations and activities at sea that affect Ghana's territorial integrity, ensure the safety and security of Ghana's maritime boundaries, and as well the protection of Ghana's oil fields from interference among others.

9.9 JOINT OPERATIONS WITH THE GHANA AIR FORCE

Following the maiden collaboration between the Commission and the Ghana Air Force in January 2021 to the Dollar Power Area on the Ghana-Côte d'Ivoire boundary which is inaccessible by road. the Ghana Air Force has been of tremendous support to the Commission in the conduct of all subsequent boundary operations undertaken by the Commission. Without the support of the Ghana Air Force, the Commission could not have undertaken most boundary operations given that most places are inaccessible by road. In 2022, the Commission intends to deepen collaboration with the Ghana Air Force to jointly mobilise resources for boundary operations and other areas of mutual benefits to achieve the respective mandates of the two organisations. The Ghana Air Force will continue to provide support to the Commission in various aspects of all boundary operations including aerial reconnaissance to inspect the International Boundary Line, insertion and extraction of personnel in the field as well as medical evacuation. Additionally, there are plans to jointly acquire various surveillance and survey equipment for the Ghana Air Force to be used on the Fixed Wing Diamond aircrafts and helicopters for boundary operations in the year 2022 and beyond. The Air Force would also be requested to support the Commission's joint surveillance along the eastern and western maritime boundaries of Ghana with the Ghana Navy.

9.10 COLLABORATION WITH THE GHANA IMMIGRATION SERVICE

The Ghana Immigration Service (GIS) has been one of the key collaborative partners of the Commission especially with regards to field operations along the International Land Boundary. The GIS provides land boundary information to the Commission on violations along the international boundaries. The Commission's collaboration with GIS has enhanced the reach of the Commission and enabled the Commission to address potential low-intensity disputes among communities along the International Boundary Line. The Commission in 2022 will deepen this engagement and explore other areas of collaboration for mutual benefit. The GIS in 2022, will continue to support the Commission in joint operations to locate and assess boundary pillars and also support in border community engagements.

9.11 COLLABORATION WITH THE NATIONAL INTELLIGENCE BUREAU

The National Intelligence Bureau (NIB) has also been instrumental to the success story of GhBC in terms of providing appropriate intelligence with regard to our international boundaries with Ghana's neighbouring countries during the 2021 year cycle. The Commission in 2022, will continue to collaborate with the Bureau in the pursuit of its mandate for the year 2022 and beyond. In line with this, the Commission will seek continuous support from the Bureau to update existing dossier as well as bring on board emerging boundary-related threats of international dimensions that affects Ghana's national interests. The Commission will engage the Bureau to provide appropriate intelligence that will help the Commission to reduce or resolve boundary related disputes that continue to pose security threat to Ghana.

9.12 COLLABORATION WITH GHANA GEOLOGICAL SURVEY AUTHORITY

The Commission in 2022 will undertake a multiagency assessment with the Ghana Geological Survey Authority (GGSA) on specific border communities along the international boundary areas to further assess mining activities and the extent of damage to the environment caused by illegal surface mining activities within the communities. Border communities to be visited include the Dollar Power general area in the Bole area and the Sapelliga general area in the Upper East Region. The Commission will also collaborate with the GGSA in other areas to enhance operations to achieve respective mandates. The Commission will leverage this engagement to explore other areas of collaboration for mutual benefit.

9.13 COLLABORATION WITH MINERALS COMMISSION

The Commission will conduct a follow up multi-agency assessment with the Minerals Commission to jointly assess illegal mining activities in the Sapelliga and Dollar Power general areas pursuant to the institutions' respective mandates. This is to ensure that illegal mining activities does not distort and damage international boundary pillars. Furthermore, the two institutions in 2022 will collaborate to assess mining activities in the Dollar Power area and further explore other areas of collaboration.

9.14 CONCLUSION

Guided by the Strategic Plan, the GhBC in 2021 chalked several successes with the collaboration of relevant stakeholders. In 2022, the Commission would therefore leverage on these collaborative engagements and partnerships to undertake key activities within the scope of the Commission's Five-Year Strategic Plan. In executing the mandate of the GhBC, the Commission would continue to engage and collaborate with all relevant stakeholders including Ministries, Departments, Agencies, Security Services, regional organisations and development partners to achieve set targets for the 2022 working year.

Section Ten CONCLUSION

10.1 INTRODUCTION

The year 2021 marked the full operationalisation of the GhBC with the establishment of a functional machinery to run the affairs of the Commission. The Commission initiated several processes and took steps towards achieving the Commission's mandate and developing the institution into an agile and effective organisation responsible for securing Ghana's international land and maritime boundaries. Guided by the Five-Year Strategic Plan developed in 2021, the Commission worked tirelessly towards ensuring the demarcation and delimitation of the country's land and maritime boundaries in accordance with accepted principles of international law while protecting Ghana's interest. All the activities and processes were aimed at directing the strategic focus of the Commission, advancing cross-

Figure 10.1: A Boundary Pillar at Sapelliga on the Ghana/Burkina Faso Boundary.

border cooperation, expanding community engagements, border community development programmes, and enhancing conflict resolution and cooperative boundary management.

10.2 LAND AND MARITIME BOUNDARIES

With respect to Ghana's land and maritime boundaries, the Commission undertook several operational surveys and pillar inventory exercises covering an approximate length of 105.4km, 75 surveyed boundary pillars and 30.3km of Orthophoto mapping of various locations along the country's International Boundary Line, with priority over border communities grappling with boundary-related disputes. Further, in line with the objective of leading government processes



Source: Ghana Boundary Commission, 11 July 2021.

related to the settlement and resolution of boundary disputes, the Commission established the Land Boundary Technical Committees with the mandate to address and settle land boundaryrelated disputes, define, and demarcate boundaries in accordance with international best practices among other functions. One key outcome of the Commission during the year was the amicable resolution of the dispute over the international land boundary between Ghana (Pulimakom) and Togo (Cinkasse). In the maritime domain, the Commission established the Maritime Boundary Technical Committee to address delimitation and other related issues affecting the maritime boundary of Ghana. The work of the Joint Ghana/Togo Maritime Technical Committee was reflected in the range of processes initiated towards the successful resolution of the existing maritime boundary dispute with Togo. A major outcome of the joint Ghana-Togo Maritime Boundary Technical Committee meetings was the identification of the Land Boundary Terminus (Pillar 1) which forms the basis for maritime boundary delimitation between the two countries.

10.3 COOPERATION CAPACITY

Leveraging cooperation capacity for operations, the Commission established and maintained close collaborations with several national, regional, and international institutions including

MDAs to achieve set objectives. The Ministry of Lands and Natural Resources (MLNR) provided strategic direction through the Chairmanship of the Inter-Ministerial Governing Body while the Ministry of Foreign Affairs and Regional Integration (MoFARI), the Ministry of Justice, the Ministry of Defence and the Attorney-General's Department provided such support as reviewing the Act establishing the Commission (Act 795. 2010), boundary negotiations with Togo, and providing direction on the Commission's relations with neighbouring countries. The Ministry of Finance supported the Commission by approving the Commission's funding requirements. As part of collaborative efforts, the Commission received further support from the security agencies including the Ghana Armed Forces. the Ghana Immigration Service, and the National Intelligence Bureau. Another key partnership the Ghana Boundary Commission established was with the Ghana National Petroleum Corporation (GNPC) which resulted in notable achievements such as the initiation of joint negotiation meetings with Togo on the maritime dispute between the two countries and the subsequent discovery and agreement of the Land Boundary Terminus (Pillar 1). At the regional level, the Commission was admitted as a member of the African Union Border Programme (AUBP) and engaged with the boundary commissions of Togo, Burkina Faso, Côte d'Ivoire, and Nigeria to establish frameworks for joint cross-border cooperation relating

Figure 10.2 : Traditional Leaders and the Local Population of Kpoeta Akyem in the Volta Region during a Ghana Boundary Commission Sensitisation Programme in the Area.



Source: Ghana Boundary Commission, 10 December 2021.

to common land and maritime boundaries. The Commission will continue to strengthen collaboration with regional, institutional, developmental, governmental partners, the private sector Civil Society Organisations and Traditional Authorities.

10.4 INSTITUTIONAL ADVANCEMENT

As part of the Commission's institutional advancement, a range of management and administrative processes and structures were put in place to support the Commission's core functions. To ensure the implementation of the Commission's strategic objective on institutional capacity building, the Commission enhanced capacities of staff and established systems towards enhancing the health, safety, and wellbeing of staff, particularly in the wake of the COVID-19 pandemic and attendant challenges. Key among the policies or systems was the institutionalisation of a flexi-work schedule for staff.

10.5 SUMMARY OF CHALLENGES

Notwithstanding the successes that were achieved, the Commission was beset with challenges within the year. The challenges include.

- Inadequate survey tools and equipment such as vehicle-mounted electronic communication system, Global Navigation Satellite System (GNSS) receivers with accessories and processing software for accurate survey of the boundary markers in the field, Geographic Information System and Software and Photogrammetric Computer workstations and Geospatial Data Storage.
- Absence of geospatial information such as maps and legacy documents. The unavailability of the stated documents, particularly in situations where no boundary markers existed, limited the work of the Commission regarding dispute resolution with neighbouring countries.
 - Inability to conduct all-year-round operations along Ghana's international boundaries due to inaccessible patrol routes to boundary areas which are either flood-prone or heavily forested with fast flowing streams. Consequently, boundary operations were restricted to the dry season and periods of less rainfall.

Inadequate funding and delays in budgetary support to achieve set targets. The setting up of the institutional machinery and operations of the Commission requires substantial funding. However, the insufficient budgetary allocation and untimely release of funds to the institution hampered the full implementation of set targets.

10.6 ROLE OF THE GHANA AIR FORCE

In 2021, all boundary operations undertaken by the Commission were made possible with the support of the Ghana Air Force. The Commission will require the support of the Ghana Air Force in various aspects of land and maritime boundary operations. The Commission will deepen collaboration to jointly mobilise resources for boundary operations and other areas of mutual benefits to achieve the respective mandates of the two organisations. There are plans to jointly acquire various surveillance and survey equipment for the Ghana Air Force to be used on the Fixed Wing Diamond aircrafts and helicopters for land, maritime and air boundary operations in the year 2022 and beyond.

10.7 CONCLUSION

Overall, 2021 was fulfilling and positioned the Ghana Boundary Commission as an agile institution mandated with the security and management of Ghana's international boundaries. Further, the Commission facilitated the resolution of boundary disputes within the framework of acceptable principles of international law to ensure the territorial sovereignty of Ghana. The Commission looks forward to leveraging on the achievements made within the year to undertake statutory functions effectively and efficiently as outlined in GhBC's mandate. In 2022, the Commission will focus on deepening strategic partnerships to enhance implementation of the strategic priorities and ensure successful execution of the Commission's mandate. It is also anticipated that the draft Bill of the Commission will be passed by the Parliament of Ghana. This will help to enhance the mandate of the Commission and also set the stage for a Legislative Instrument to be adopted for the smooth administrative running of the Commission.

ANNEX A

Summary of Major Activities and Achievements for 2021

Srl	Activity	Month/ Date	Observations	Achievements/Outputs
1	Operational Assessment and Mapping Survey at Dollar Power Area (Ghana- Côte d'Ivoire boundary)	22 nd -25 th January, 2021 9 th March, 2021	 Identification of large-scale surface illegal mining sites, disturbed boundary pillars and removed teak (trees) boundary plantation Discovered the abduction, trial, and imprisonment of a Ghanaian national for his crusade against Ivoirians tempering with boundary pillars 	 Inventory and survey of 29km of boundary pillars along the International Boundary Line Orthophotos of 5.9km x 100m x 100m along the International Boundary Line. Coordination with the Ministry of Foreign Affairs and Regional Integration for the release of Ghanaian national
2	Operational Assessment and Mapping Survey at Ketu South Area (Ghana-Togo boundary)	14 th -17 th February, 2021	 Identification of Land Boundary Terminus (Pillar 1) and disturbed boundary pillars Identification of several unapproved border crossing routes Discovered KOLOGAN foreigner community within the territory of Ghana 	 Inventory of 26.0km of Boundary Pillars and survey of 10.8km along the International Boundary Line Orthophotos of 3.0km x 200m along the International Boundary Line Location of Land Boundary Terminus (Pillar 1) which forms the basis for maritime boundary negotiation with Togo.
3	Operational Assessment and Mapping Survey at Kame Tornu (Ghana-Togo boundary)	20 th -22 nd April, 2021	 Identification of the territorial status of Kame Tornu as being part of Togo and not Ghana 	 Inventory of 16km along the International Boundary Line Identification of Kame Tornu as a Togolese territory
4	Operational Assessment and Mapping Survey at Pulimakom and Pusiga areas, Upper West Region	8 th -12 th July, 2021	 Identification of large-scale sand winning in White Volta and disturbed boundary pillars and markings Identification of the status of Ghanaian territories claimed by Togolese. 	 Inventory of 34.9km of boundary pillars Survey of 8.1km along the International Boundary Line (IBL) Orthophotos of 7.6km x 400m and 500m along the International Boundary Line (IBL) Agreement reached by boundary commissions of Ghana and Togo on the location and status of the IBL in the Pusiga District

Srl	Activity	Month/ Date	Observations	Achievements/Outputs
5	Operational Assessment and Mapping Survey at Sapelliga and Paga Areas	12 th -14 th July, 2021 14 th -21 st November, 2021	 Determination of whether activities of the Youga Gold Mine in Burkina Faso crosses into Ghana's territory. Identification of large-scale surface illegal mining sites Massive construction of settlements within buffer zone at Paga border area Introductory meeting between boundary commissions of Ghana and Burkina Faso 	 Inventory of 15.8km of Boundary Pillars Surveyed 9.3km along the International Boundary Line to generate orthophotos of 3.8km x 200m;1.6km x 1km; 3.7km x 400m along the International Boundary Line One successful meeting held between Ghana and Burkina Faso boundary commissions to establish a framework agreement for future cooperation Agreement on Biennial Meetings between the two commissions
6	Dispute Resolution	12 th -14 th July, 2021 14 th -21 st November, 2021	 Address Encroachment of Buffer Zone Resolve dispute over territorial claims at Pulimakom, Bellitanga, Bimpela 	• Resolved dispute over territorial claims at Pulimakom, Bellitanga and Bimpela with Land Boundary Commission of Togo
7	Operational Assessment and Mapping Survey at Kpoeta- Achem area	4 th -12 th December, 2021	• Boundary Pillar Inventory, Survey and orthophotos of Kpoeta area to ascertain disputed farmlands	 Inventory of 5.8km of Boundary Pillars Surveyed 5.8km along the International Boundary Line Orthophotos of 5.8km x 400m along the International Boundary Line
8	Maritime boundary delimitation negotiations between Ghana and Togo and Ghana and Nigeria	January -December 2021	 Resumption of Ghana- Togo Maritime Negotiation Meeting Introductory meetings between the boundary commissions of Ghana and Nigeria 	 4 successful negotiation meetings held between Ghana and Togo Setting up of Joint Technical Committee for Delimitation of Joint Maritime Boundary Location and establishment of Land Boundary Terminus (Pillar 1) which is the basis of Maritime Boundary Delimitation with Togo One successful meeting held between Ghana and Nigeria to establish a framework agreement for future cooperation
9	Institutional Capacity- Building	January - December 2021	 Setup of GhBC office Building the skills and competencies of staff to undertake mandate 	 Acquisition of office and completion of office setup for GhBC (i.e., setup of IT infrastructure and furnishing) Employment of 28 permanent staff to fill existing vacancies in the Commission Orientation and induction training for staff Pilot of geodatabase for Ghana's international boundary information Procurement and delivery of 16 assorted vehicles for the operations of the Commission
10	Strategic Issues and Partnership	January- December 2021	 Establishment of strategic direction and strategic partnerships 	 Development and implementation of GhBC's Five-Year Strategic Plan (2021-2025). Admission of GhBC as member of the AUBP Wide consultations and drafting of Ghana Boundary Commission Amendment Bill, 2021 Inauguration of GhBC Governing Body

