ISSUE BRIEF

Co-management and Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security (VGGT) (VGGT Principles) and the Volta Clam Fisheries in Ghana

Purpose of the Brief

The purpose of this brief is to demonstrate how fisheries co-management and the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security (VGGT) are linked in practice and how clam fishers and communities at the Volta river estuary in Ghana are actualizing these concepts on their own without the intervention of government. With funding support from the European Union and UN Food and Agriculture Organisation (FAO), Hen Mpoano Environmental Justice Foundation (EJF) under the Far Dwuma Nkodo Project have been working with clam fishers at the estuary using novel approaches to support and secure the tenure rights of the clam fishery.

Overview of Ghana's Fisheries

The fisheries sector plays a significant role and contributes to the socio-economic development of Ghana by providing employment, livelihood, foreign exchange earnings, food security and poverty reduction. The fish industry is estimated to employ 10% of the country's population representing over 2.7 million people.

Ghana's capture fisheries comprise the marine and inland fisheries (particularly the Volta lake fisheries). However, much attention has not been paid to the contribution of other small scale but significant fisheries of estuaries and lagoons. One such fishery is the clam fishery within the Volta estuary.

Co-management and VGGT

In 2020, the Government of Ghana approved a Fisheries Co-management Policy to guide how the fisheries resources of the country are managed, both marine and inland including lagoons and estuaries. Fisheries co-management is a strategy for managing fisheries resources through shared responsibility among government, resource users and other key stakeholders. Globally viewed as an accepted best practice, it is considered an effective approach to enhancing community participation in decision making and adherence to rules and regulations. Co-management provides opportunities for fisheries management options that are precautionary, adaptive and flexible.

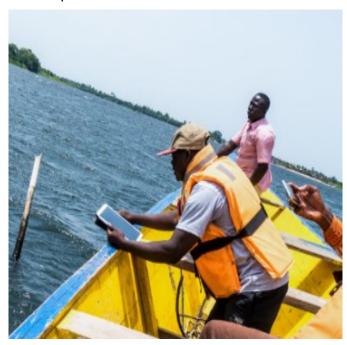
The Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security (VGGT) were endorsed by the Committee on World Food Security (CFS) in 2012. VGGT provides comprehensive guidance to governments, civil society and the private sector on how to promote responsible governance of tenure of fisheries, land and forest resources. Tenure, in the context of the VGGT, is defined as the way land, fisheries and forests are held or owned by individuals, families, companies or groups. The rules of tenure define how access is granted to use and control these resources with associated responsibilities and restraints. VGGT is based on the principle of recognition and respect for all forms of "legitimate tenure rights" whether formal or informal.



The Volta clam (Galatea paradoxa) ©Hen Mpoano

The Volta Clam

One important fishery peculiar to the Volta river estuary in Ghana is the Volta clam (*Galatea paradoxa*) fishery. Clams are sedentary and thrive optimally in weak brackish water environments. The limit of clam distribution within the Volta estuary in recent decades was the approximate limit of penetration of saline water from the Atlantic Ocean. However, climate-induced sea-level rise and associated increase in salinity and saltwater intrusion are pushing the frontiers of saline water further upstream.



Mapping farms using Open Tenure tools ©Hen Mpoano

Clam Fishing Communities

The main communities actively involved in clam fishing at the estuary are Kponkpo, Agorkpo and Tsatsukope located in Ada East District; and Agave, Agorme, Agordome, Sogakope and Sokpe (South Tongu District). When salinity of estuary increases at Ada, farmers move their clam farms to locations upstream within the nearby South, Central and North Tongu Districts.

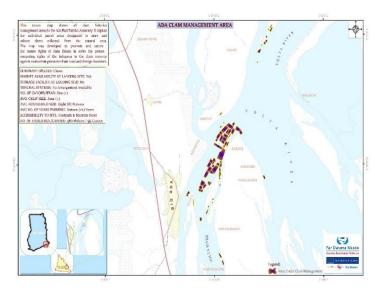


An 80-year-old female clam miner wearing a diving mask ©Hen Mpoano

Clam Fisheries, Tenure, Culture and Access

Clam fishery is open access and mined at the bed of the river by hand. Men dominate while women are generally restricted to shallow areas. The need to farm juvenile clams to acceptable market size has compelled miners from Ada to adapt a hookah system (locally manufactured air compressor and tubes) which allows them to stay underwater for longer periods. River-bed farming of clams as an adaptation is becoming a fast-growing enterprise as farmed clams are allowed to grow to larger sizes and yielding higher profits, compared to small and medium-sized ones collected from the wild. Matured clams are delivered to landing sites where women buy them for processing. The meat is packaged fried or dried. The shells are accumulated and sold to nearby processing mills. Clam landing sites are generally under communal access. Oral permission is usually required to allow canoes from other areas to dock at a community landing site. Processing sites are, however, privately owned. The clam fishery economically supports a large riparian population, providing rural jobs for over 700 men and women; and indirectly over 3000 dependents. The clam fishery has great potential to transform livelihoods, generate incomes and reduce poverty around the Volta estuary.

While the meat is an important source of dietary protein, the shell with high calcium content has potential for micronutrition in children, pregnant and lactating mothers as well as a source of industrial raw material for the production of paint, gypsum, poultry feed and milk. However, the economic importance of the clamshell for industrial use is currently undervalued.

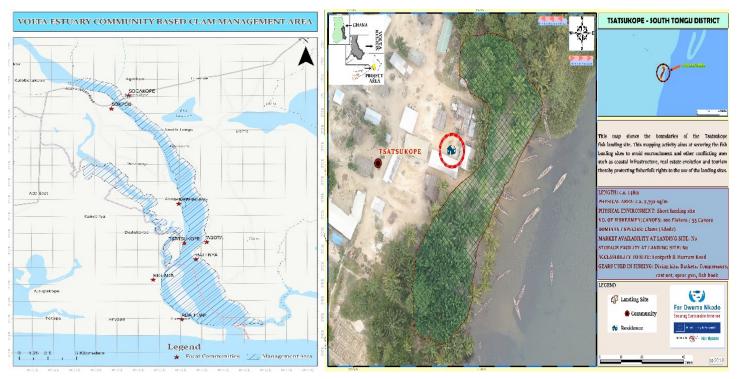


Clam farms on the river bed ©Hen Mpoano

Traditional Management of the Clam Fishery

The management of the clam fishery is purely by traditional management and neither the Fisheries Commission nor the District Assembly are involved. Access to the fishery is regulated by well developed, but yet undocumented, traditional norms and practices. Some notable practices include:

Fishing grounds are open six days a week.
Tuesdays are observed as a fishing holiday and landing clams are not allowed



The Volta clam management area ©Hen Mpoano

Map of Clam landing site at Tsatsukope ©Hen Mpoano

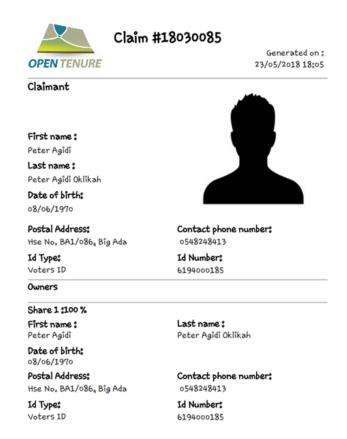
- The period December to March is observed as a closed season during which fishers could only tend their farms or harvest clams for home consumption
- Permission is required from the traditional authority to establish and operate a clam farm
- Natural clam harvesting grounds (common pool areas) are separate from individual farms and trespassing is forbidden

Securing Tenure and User Rights of Clam Fishers – A Novel Approach

Since 2017, and under the Far Dwuma Nkodo project, Hen Mpoano and Environmental Justice Foundation (EJF) have worked with clam fishers to document the traditional management arrangements that regulate the fishery and ensure these rights are secured in the context of increasing competition

from other uses of the estuary. A novel approach using participatory mapping of the clam farms and fishing grounds using the Open Tenure mapping tool developed by FAO, to document the extent of individual underwater farms. The approach has included:

- Analysis of current traditional tenure rights arrangements in the clam fishery
- Spatial mapping of clam fishing areas, farming distribution, landing sites and other competing uses
- Record of claimant details, capture of boundary information and documentation (akin to landed property or indenture) with photos to support the claim
- Key information about the rights holder, including name, gender and use type
- Disseminate lessons learned to other stakeholders including the traditional authority to inform the devolution of powers to smallscale clam fishers



Sample of claimant's attributes generated on the OpenTenure application ©Hen Mpoano

Challenges

Management and use of common-pool resources are not devoid of challenges or conflicts. Around the estuary, several communities depend on the clam resources by mining from the wild. Farming of clams may be close to natural mining grounds and moving clams to farms in other locations (considered as territories for other communities) all come with potential conflicts (e.g. ownership of the water territory, clams as a communal resource, theft of farmed clams) and competing uses of the river for other forms of fishing, water transport, water sport, landing sites and waterfront use for hospitality or residential purposes.

Opportunities

Reduction in conflicts through multi-stakeholder negotiations (including the traditional and district assembly authorities) is important development of а vibrant clam industry. Management structures (men/women associations, Village Savings and Loans Associations (VSLA), etc. and other co-management arrangements are being established to ensure effective and conflictfree management of the estuary resources. These associations are being registered with the District Assembly towards securing their tenure and user rights. This is expected to result in economic empowerment, creation of diverse job opportunities, livelihoods and new income streams for the youth of the area, especially in value addition to the clam meat and shell.

Way forward

Work with traditional authorities, district assemblies and the Fisheries Commission to secure the tenure of clam farmers and their landing sites

- Work with the Fisheries Commission and the District Assemblies to assume their oversight roles in the management of the Volta clam fishery as proposed in the new Fisheries Comanagement Policy for Ghana
- All communal landing sites are protected to prevent encroachment by private development.
- Safeguard legitimate tenure rights of clam fishers, processors and traders against infringements and provide opportunities to deal with legitimate tenure rights
- Train farmers to monitor the transition between fresh and saline water as a basis for improving the siting of clam farms
- Educate the youth and communities to value the estuarine resources and conflict avoidance
- Map the competing uses of the estuary to minimise use conflicts
- District Assemblies be assisted to provide technical support to youth interested in starting alternative businesses around the clam industry

This is the first time that the application of Open Tenure tools has been used in a fisheries context and provides a promising basis for future work



Hospitality industry along the Ada estuary front. ©TourGhana

This publication is made possible by the generous support of the Food and Agriculture Organisation of the United Nations. The contents are the responsibility of the author as part of the on-going support for co-management in the Clam Fishery of the Lower Volta River Estuary.

This publication is available electronically on the Hen Mpoano website at http://www.henmpoano.org

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Project Implemented by:





Funding support from:

