





POLICY BRIEF

ECONOMIC, SOCIAL AND ENVIRONMENTAL IMPACTS OF IUU FISHING IN AFRICA

Main points

- This advocacy paper has been developed based on the detailed report by AU-IBAR on the Impact of IUU fishing in Africa and is meant to create awareness amongst decision makers on the social, economic and environmental impacts of IUU in the continent.
- A key policy area of the policy framework and reform strategy for fisheries and aquaculture in Africa is the promotion of conservation and sustainable use of fisheries resources towards supporting development of the blue economy on the continent
- Therefore one of the expected outcomes of this policy area is to ensure effective and sustainable regional Monitoring, Control and Surveillance (MCS) systems are operating in all regions.
- Africa is surrounded by some of the most productive waters on earth. Marine resources in Africa provide food, nutrition and livelihoods for millions of people.
- Marine fisheries in Africa provides direct employment to about 2.8 million persons and indirectly to over 14 million people (1).

- Africa is the poorest continent in the world. Coastal nations on the west and east coasts of Africa have a low human development index and over 50% of the population live on less than \$2/day.
- Eight years ago the view was that global IUU fishing amounted to about 20% of reported catches with a value of \$10 billion to \$23 billion (2).
- Recent estimates by the Sea Around Us project (3) paints a much more serious picture the global IUU catch could be as much as 51% of reported catches, a staggering 40 - 45 million tons, and a value of close to double previous estimates.
- Africa's share of the global IUU catch has recently been estimated at 4.7 million tons of fish at a conservatively estimated value of \$10 billion (4), some 80% of reported catches.
- Eliminating IUU and realising the benefits of IUU catches could make a significant contribution to GDP, increase job opportunities, support livelihoods, increase social protection and reduce food insecurity and poverty in many of Africa's poorest countries.



If all of the estimated IUU catch could be realized as new economic activity it could add more than 1% to the GDP of coastal economies in Africa (5).

- Weak governance is a strong factor promoting the % of IUU fishing in coastal states.
- The bulk of the IUU catch in Africa is taken by non-African foreign fleets. Recent studies indicate that the dominant origin of non-African IUU fishing fleets is China, Spain, Russia, Japan and Poland (3, 4).
- A conservative estimate of lost opportunities and the cost of stock rehabilitation for target species since 1980 is \$326 billion for Africa as a whole.
- Despite many international instruments, numerous studies, recommendations and action plans, hundreds of conferences and workshops on the topic, IUU fishing in Africa is growing, with far reaching and devastating social, environmental and economic consequences. Increasingly, the link between IUU fishing and transnational organised crime is being exposed (6).
- These findings create a new urgency to deal effectively with IUU fishing in Africa.
- This document sets out an action plan for the fight against IUU fishing,. For coherence, the action plan and measures are consistent with the relevant areas of the policy framework and reform strategy for fisheries and aquaculture in Africa.

Key characteristics of IUU fishing in Africa

 Key contributors to the level of IUU fishing in Africa are distant water fleets (DWFs) from developed nations and Asia. The following figure shows which African states are particularly vulnerable to IUU fishing by foreign fishing vessels:

The Chinese DWF is estimated to catch a total of 2.8 million tons of IUU fish in the African EEZ (7), although some estimates put the value lower at some 0.8 million tons. The following graph shows that other foreign fleets are implicated in IUU fishing in Africa.

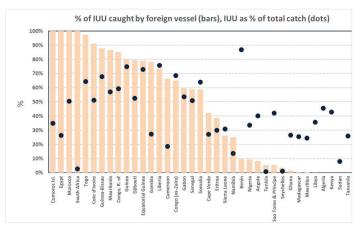


Figure 1: A comparison between the % of IUU caught by foreign vessels in the EEZ of a member state (in salmon bars) and the IUU as a % of the total catch (dots). The relevance is the countries which are high on both of these measures are particularly vulnerable to IUU perpetrated by foreign fishing vessels (3,4).

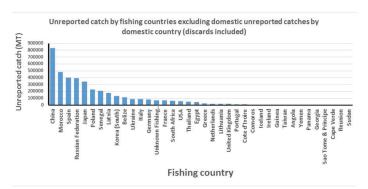


Figure 2: The unreported catch by fishing countries excluding unreported catches caught by domestic vessels with discards included, based on the Sea Around Us data (Zeller and Pauly 2015)

- A substantial IUU contribution is made by domestic artisanal fleets
- IUU fishing vessels often encroach into the nearshore IEZ and exclusive artisanal zones, competing directly with small scale fishers, overfishing the resources that sustain their lives, and damaging their boats and gear, leading in some cases to injury and deaths.
- Extremely high discard rates of >70% in industrial shrimp fisheries on both sides of the African continent, leading to substantial losses to the economy and reduced availability of fish for local artisanal fishers
- Use of dynamite, poison and beach seine techniques to fish on coral reefs, with devastating impacts on valuable marine habitats, incurring losses.
- Linkages with organized crime networks and other criminal activities including human trafficking, drug dealing and smuggling, trade in illicit wildlife and

wildlife products, money laundering and tax evasion.

 Some forms of IUU fishing e.g. unreported domestic artisanal fishing already bring socio-economic benefits to poor coastal communities and cessation of these activities could result in negative socioeconomic consequences.

Economic impacts

- One of the main economic impacts of IUU fishing is the lost fishing opportunities in African coastal states
- Total IUU fishing catch excluding discards is estimated at 4.7 million tons.
- The socio-economic value of lost fishing opportunities due to IUU is estimated at at least \$10 billion.
- Economic multiplier effects from this amount exceeds \$30 billion, over 1% of the GDP of African coastal states

Social impacts

IUU fishing creates negative impacts on

- Food security and nutrition
- Existing and potential employment opportunities
- Local livelihoods
- Safety and security
- Women and gender relations
- Human rights

Along the coast of Africa there are few alternatives to fishing and fishery related activities such as boat building and net making. Fishing provides an important 'safety net' for the poor especially in times of hardship

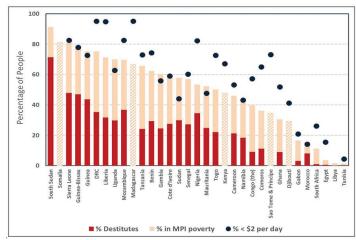


Figure 3: Three different measures of poverty for selected African coastal states, based on data made available at the Oxford Poverty and Human Development Initiative website (8 and 9). Patterned bars indicate that there were no data for "% Destitutes" but that data were available for "% in MPI poverty".

Environmental Impacts

The associated impacts on lost ecosystem services and habitat destruction is very considerable.

A conservative estimate of lost opportunities and the cost of stock rehabilitation for target species since 1980 is \$326 billion for Africa as a whole. Regionally this breaks down as illustrated in the box below (5).

Central Africa: \$24.9 billion

Eastern Africa: \$19.3 billion

Northern Africa: \$81.2 billion

Southern Africa: \$62.8 billion

Western Africa: \$137.9 billion

Table 1:A regional summary of IUU catches estimated from the Sea Around Us data (3,4)

	Tonnage Unreported	% Breakdown out of Africa	IUU as % of IUU +	IUU / Reported
		wide IUU estimate	Reported	
Central Africa	342090.885	7%	44.4	0.798
Eastern Africa	173354.1706	4%	31.6	0.462
Northern Africa	1425485.635	30%	47.4	0.901
Southern Africa	76941.88931	2%	7.1	0.076
Western Africa	2664174.316	57%	52.6	1.108
Grand Total	4682046.896	100%	44.7	0.807

Motivating Factors for IUU fishing

- Foreign vessels seeking profit/high volumes
- Richness of resources and product value
- · Local vessels seeking profit
- · Low Risk High Rewards
- Poverty and livelihood needs
- Meeting the requirements of criminal networks
 - » Various mechanisms within these networks actively promote IUU. This includes money laundering, and payment for high value products such as abalone with drugs or drug precursors.
 - » For example, Equatorial Guinea has been linked with acting as a staging post for drug operations where cargos are received from the high seas (10).

Factors making Africa vulnerable to IUU fishing

- Weak and corrupt governance
- Weak and ineffective MCS
- institutional corruption
- existence of excess fishing capacity and perverse fishing subsidies for DWFs
- low penalties for IUU fishing crimes
- the availability of flags and ports of convenience
- weak port inspections
- perverse subsidies
- inadequate legal and justice systems
- failure to patrol the EEZ or identify it
- absence of political will and necessary diplomatic action to facilitate regional cooperation
- inadequate data and capacity for MCS and inadequate regional sharing of such data
- the absence of policies and legislation grounded in sustainability and precautionary principle
- absence of the necessary platforms from which to launch MCS operations
- lack of transparency and data sharing around foreign fishing arrangements

Forms of support required to strengthen the capacity of African coastal countries to effectively curb IUU fishing

1. Strengthening MCS capacity and resourcing

- Strengthen capabilities, procedures and routines for MSC
- Extending the use of technology and innovation in support of MCS
- 2. Strengthening regional and international cooperation and coordination
 - Strengthening the Role of RFMOs, RFBs and regional initiatives
 - Enhance co-ordination across agencies leading fisheries management and development initiatives, strategies and plans
 - Improving collection and sharing of data and information, the adoption of standards, and the promotion of transparency
 - Improve international information sharing and co-ordination
 - Improve national level responsibilities and coordination
 - Promote Africa wide reconciliation of IUU catches
- 3. Rolling out awareness raising, training and capacity building programmes
 - · Design and implement raising campaigns
 - Develop and deliver training programmes and courses
- 4. Promoting greater civil society involvement in fighting IUU fishing
- 5. Developing the specialisation and professionalization of activities and skills for combatting IUU fishing
- Launching media and education campaigns to highlight the nature and negative impact of IUU fishing
- 7. Innovation around the acquisition of funding
- 8. AU member states to ensure coherence of their national fisheries policies on MCS with the relevant provisions of the policy framework and reform strategy for fisheries and aquaculture in Africa
- A guide for the implementation of the policy framework and reform strategy for fisheries and aquaculture in Africa would assist member states in developing coherent policies for effective combating IUU

Technical measures for combatting IUU fishing

- I. Promoting compliance with international instruments and agreements
 - Strengthen UNCLOS in relation to IUU fishing
 - Adoption of United Nations Fish Stocks Agreement (UNFSA)
 - Adoption of International Plan of Action (IPOA-IUU) and development and implementation of a NPOA-IUU
- Fast track adoption and implementation of Port State Measures
- 3. The development and adoption of a global registration of fishing vessels using a UVI (unique vessel identifier) system via IMO
- 4. Addressing the problem of "Irresponsible" Flags of Convenience (FoCs)
- 5. Establishing penalties for transgressions commensurate with the economic scale of the crime.
- 6. Publication of both positive (authorised) and negative (IUU) vessel lists
- 7. Imposing market and trade sanctions
- 8. The promotion of traceability and eco-labelling schemes
- 9. Curbing or reducing perverse subsidies
- 10. Controls on fishing effort and fishing capacity commensurate with resource productivity
- II. Development of Lacey Style Legislation to allow for compensation for IUU fishing
- 12. Nations to implement ongoing and comprehensive assessments of IUU fishing in their EEZ

Action Plan

- I. Strengthen the MCS working group established under the African Fisheries Reform Mechanism to galvanise and facilitate co-ordination between regional bodies in the fight against IUU fishing.
- 2. Establish "IUU Regional Network" comprising RFMO, REC and LME bodies, with IUU regional working groups in each of these.
- Convene a high level policy dialogue on IUU fishing with key actors (IMO, FAO, the International MCS Network, INTERPOL, IOC-UNESCO, UNEP, UNDOC etc.) to raise awareness at political level

- on the impacts and economic losses associated with IUU and the options to curb IUU fishing including the implementation of relevant international instruments;
- 4. Design, and implement targeted training and capacity development programmes (including on use of new and appropriate MCS technology) based on country specific needs assessments.
- Enhance regional co-operation, and the adoption and implementation of regional and intra-regional minimum terms and conditions for fisheries access for FFAs.
- 6. Strengthen the capacity of regional institutions in combating IUU, especially for shared stocks
- Fast-track the adoption of a Global UVI to vessels smaller than 100 GT, and explore the cost effectiveness of using regionalised vessel detection systems.
- 8. Include issues of IUU in the African position at WTO negotiations.
- 9. Develop a detailed IUU Strategy and Action Plan ("IUU SAAP") for Africa, and mobilize resources for its implementation.

Support member states for implementation of relevant provisions of Pan African fisheries policy framework and reform strategy as well as relevant international instruments in combating IUU.

Sources

- de Graaf, G., and L. Garibaldi. 2014. The value of African fisheries. FAO Fisheries and Aquaculture Circular. Rome, Italy.
- Agnew, D. J., J. Pearce, G. Pramod, T. Peatman, R. A. Watson, J. R. Beddington, and T. J. Pitcher.
 2009. Estimating the worldwide extent of illegal fishing. PLoS ONE 4:e4570.
- Pauly, D., and D. Zeller. 2016. Catch reconstructions reveal that global marine fisheries catches are higher than reported and declining. Nature Communications 7:9.
- **4.** Pauly, D., and D. Zeller (Eds). 2015. Sea Around Us Concepts. Design and Data. www.seaaroundus. org.

- 5. Bergh, M.O., Sowman, M., Rampartab, C., Leach, K. and P. Lallemand. 2016. A review and assessment of the economic, social and environmental impact of illegal, unreported and unregulated fishing in Africa. Report prepared by OLRAC SPS and University of Cape Town for AU IBAR Project LOT 6, 2016.
- 6. Phelps Bondaroff, T. N., W. van der Werf, and T. Reitano. 2015. The illegal fishing and organized crime nexus: Illegal fishing as transnational organized crime. The Global Initiative against Transitional Organised Crime and The Black Fish:82.
- Pauly, D., D. Belhabib, R. Blomeyer, W. W. L. Cheung, A. M. Cisneros-Montemayor, D. Copeland, S. Harper, V. W. Y. Lam, Y. Mai, F. Le Manach, H. Österblom, K. M. Mok, L. van der Meer, A. Sanz, S. Shon, U. R. Sumaila, W. Swartz, R. A. Watson, Y. Zhai, and D. Zeller. 2014. China's distant-water fisheries in the 21st century. Fish and Fisheries 15:474–488.
- 8. Oxford Poverty and Human Development Initiative, 2015. MPI Country Briefings 2015. Oxford University. Available Online: http://www.dataforall.org/dashboard/ophi/index.php/mpi/country_briefings.
- Alkire, S., and G. Robles. 2015. Multidimensional poverty index 2015: Brief methodological note and results. Oxford Poverty and Human Development Initiative, University of Oxford, Briefing 31.
- 10. Wood, G. 2004. Business and politics in a criminal state: The case of Equatorial Guinea. African Affairs 103:547-567.

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